100 CLINTON AVENUE

TRAFFIC STUDY

Prepared for: Carmel Partners

Client Ref: 141.21074.00001

December 2022

September 26, 2022 **(Revised December 6, 2022)**

Mr. Todd Christensen
Carmel Partners
1330 Connecticut Avenue NW, Suite 320
Washington, DC 20036

Re: Traffic Impact Study
100 Clinton Avenue Development
Stamford, Connecticut
SLR #141.21074.00001

Dear Mr. Christensen,

At your request, SLR International Corporation (SLR) has undertaken this study to evaluate the traffic-related implications associated with the proposed development to be located at 100 Clinton Avenue in Stamford, Connecticut. The site consists of two properties that are bisected by Clinton Avenue. Block A is located on the east side of Clinton Avenue, and Block B is located on the west side. **Figure 1** displays the site location map. The proposed project plans to develop the two parcels on either side of Clinton Avenue, between Division Street and Richmond Hill Avenue, with two multifamily residential buildings, totaling 471 units. Access to the parking garages will be provided off Clinton Avenue, between Division Street and Richmond Hill Avenue.

The work comprising the study consisted of several tasks, including data collection, review of roadway and traffic conditions, estimation of site-generated traffic volumes, and assessment of future traffic operations. For this study, the following intersections were evaluated:

1. Greenwich Avenue at Tresser Boulevard (US Route 1)
2. Greenwich Avenue at Richmond Hill Avenue
3. Greenwich Avenue at South State Street
4. Clinton Avenue at Tresser Boulevard (US Route 1)
5. Clinton Avenue at Division Street
6. Clinton Avenue at Richmond Hill Avenue
7. Washington Boulevard at Tresser Boulevard (US Route 1)
8. Washington Boulevard at Division Street
9. Washington Boulevard at Richmond Hill Avenue
10. Washington Boulevard at North State Street and the I-95 westbound on ramp

Please note that we have also prepared a Transportation Demand Management Plan (TDMP)/Parking Management Plan (PMP) for this development under a separate cover.

EXECUTIVE SUMMARY

Based on the results of this traffic study, it is our opinion that the changes in traffic patterns resulting from the proposed development will be minimal and can be accommodated by the surrounding roadway system. Therefore, no offsite mitigation to the surrounding roadway system is required.

EXISTING CONDITIONS

Existing data and information on adjacent/nearby vehicle traffic volumes, transit, and crash history were collected to determine the existing conditions of the area around the proposed development.

Site Environs

Clinton Avenue is a local roadway that runs north/south from Main Street to Richmond Hill Avenue. Clinton Avenue generally has one lane in each direction with on-street parking permitted on the west side and sidewalks on both sides of the roadway.

Richmond Hill Avenue is a local roadway that runs east/west from West Main Street (US Route 1) to Washington Boulevard. Within the vicinity of the site, Richmond Hill Avenue generally has one lane in each direction and widens to provide turn lanes at Washington Boulevard. On-street parking is generally not permitted directly near the site, and sidewalks are present on both sides of the roadway.

Division Street is a local roadway that runs east/west from Clinton Avenue to Washington Boulevard. Division Street generally has one lane in each direction with on-street parking and sidewalks on both sides of the roadway.

Washington Boulevard is a principal arterial that runs north/south through Stamford from Cold Spring Road to Atlantic Street. Within the vicinity of the project site, Washington Boulevard generally has two lanes in each direction and widens to provide turn lanes at the signalized intersections. On-street parking is not permitted near the site south of Tresser Boulevard, and sidewalks are present on both sides of the roadway.

Tresser Boulevard (US Route 1) is a principal arterial that runs east/west through the City of Stamford, parallel to Interstate 95 (I-95). Within the vicinity of the site, Tresser Boulevard has three lanes in each direction and widens to provide turn lanes at the signalized intersections. On-street parking is not permitted, and sidewalks are present on both sides of the roadway.

Greenwich Avenue is a minor arterial that runs north/south along the west side of the Rippowam River from Tresser Boulevard (US Route 1), where it transitions to West Main Street, to Selleck Street, where it transitions to Southfield Avenue. Within the vicinity of the project site, Greenwich Avenue generally has

one lane in each direction and widens to provide turn lanes at key intersections. On-street parking is permitted within some areas, sidewalks are present on both sides of the roadway, and sharrows are painted on both travel lanes.

Existing Transit Routes

CTtransit is Connecticut Department of Transportation's (CTDOT) bus service, connecting with other services in Norwalk, the Metro-North Railroad New Haven Line, Amtrak service, the Metro-North Harlem Line, and with Bee-Line buses in Westchester County, New York. CTtransit Stamford bus routes 311, 312, 313, 321, 324, 328, 331, 333, 334, 335, 336, 341, 342, 344, and 345 have stops near the site along one or more of the following locations: Greenwich Avenue, Washington Boulevard, Tresser Boulevard (US Route 1), Clinton Avenue, Richmond Hill Avenue, and Division Street. The proposed redevelopment is also within walking distance (approximately 0.25 miles) from the Stamford Transportation Center, which provides access to both Metro-North Railroad and Amtrak services.

Crash Data Summary

Information on traffic crash statistics for the study intersections were obtained from the Connecticut Crash Data Repository for the roughly 3-year period of January 1, 2019, to September 7, 2022. The crash data collected for this period, shown in Table 1, is summarized by location.

A total of 223 crashes were reported at the study intersections during the roughly 3-year period. More than 70 percent of the total crashes resulted in property damage only. Approximately 14 percent of the total crashes resulted in suspected minor injuries, and approximately 11 percent resulted in possible injuries. One fatality was reported. According to the Connecticut Crash Data Repository, the fatality occurred at the intersection of Washington Boulevard and Tresser Boulevard (US Route 1) on November 13, 2019. The vehicle was traveling straight across the intersection when the pedestrian crossed the roadway at the marked crosswalk. The pedestrian failed to follow the pedestrian signal and was hit by the vehicle and killed. There were no other contributing circumstances documented. We also understand there was a second fatal crash, a hit-and-run, involving a pedestrian that occurred at the intersection of Washington Boulevard and Tresser Boulevard (US Route 1) in April 2021 that has apparently not yet made it into the Connecticut Crash Data Repository.

The most common collision type was rear-end collisions, comprising approximately 40 percent of reported crashes, followed by angle collisions at approximately 26 percent, and sideswipe (same direction) collisions at 19 percent of reported crashes. Nine pedestrian-related collisions were reported in the Connecticut Crash Data Repository: two at the intersection of Clinton Avenue and Tresser Boulevard (US Route 1), one at the intersection of Washington Boulevard and Tresser Boulevard (US Route 1), four at the intersection of Washington Boulevard and Richmond Hill Avenue, and two at the intersection of Washington Boulevard and North State Street. According to the Repository, in half of the collisions, the drivers failed to yield to the pedestrian when turning. In the other half of the collisions, the pedestrians failed to obey the traffic

signs or signals. One pedestrian was under the influence of medications, drug, or alcohol. No bicycle-related collisions were reported.

Table 1 Crash Data Summary

	Location	Crash Severity					Type of Collision													Total
		Property Damage Only	Possible Injury	Suspected Minor Injury	Suspected Serous Injury	Fatal Injury	Rear End	Angle	Sideswipe (Same Direction)	Hit Pedestrian	Hit Fixed Object	Head On	Sideswipe (Opposite Direction)	Overturn/Rollover	Fell/Jumped From Vehicle	Hit Curb	Hit Non-Fixed Object	Hit Tree	Other	
1	Greenwich Ave @ Tresser Blvd	20	2	5	1	-	6	13	4	-	1	-	-	1	1	-	-	-	2	**28**
2	Greenwich Ave @ Richmond Hill Ave	14	3	8	1	-	11	10	3	-	-	1	1	-	-	-	-	-	-	**26**
3	Greenwich Ave @ S State St	17	1	2	-	-	6	3	8	-	2	1	-	-	-	-	-	-	-	**20**
4	Clinton Ave @ Tresser Blvd	10	2	5	-	-	6	3	3	2	-	-	-	1	-	-	1	-	1	**17**
6	Clinton Ave @ Richmond Hill Ave	2	1	-	-	-	-	1	1	-	-	-	-	-	-	-	-	1	-	**3**
7	Washington Blvd @ Tresser Blvd	42	4	4	1	1	27	8	11	1	1	-	-	-	1	1	-	-	2	**52**
8	Washington Blvd @ Division St	7	1	-	-	-	4	-	2	-	1	-	-	-	-	-	-	-	1	**8**
9	Washington Blvd @ Richmond Hill Ave	15	2	3	2	-	5	6	5	4	2	-	-	-	-	-	-	-	-	**22**
10	Washington Blvd @ N State St	34	8	4	1	-	23	13	6	2	1	1	1	-	-	-	-	-	-	**47**
Intersection Totals		***161***	***24***	*31*	***6***	***1***	**88**	**57**	43	**9**	8	3	**2**	**2**	**2**	**1**	**1**	**1**	**6**	**223**

Source: Connecticut Crash Data Repository from January 1, 2019, to September 7, 2022.

Existing Traffic Volumes

Traffic monitoring data from August 2020 (collected during the COVID-19 epoch) for Greenwich Avenue south of US Route 1, Washington Boulevard south of US Route 1, and Tresser Boulevard west of Route 137 was obtained from CTDOT. The annualized average daily traffic (AADT) on Greenwich Avenue was recorded as 6,800 vehicles (3,800 northbound and 3,000 southbound). The AADT on Washington Boulevard was

recorded as 13,200 vehicles (6,000 northbound and 7,200 southbound). The AADT on Tresser Boulevard was recorded as 12,500 vehicles (6,400 northbound and 6,100 southbound).

At the time of this report, the intersection of South State Street at Greenwich Avenue was closed for the construction of the Stamford Station Parking Garage and traffic was detoured down to Richmond Hill Avenue. Because of this, multimodal traffic counts could not be conducted, and instead, 2022 balanced volumes obtained from CTDOT for the ongoing I-95 Exits 7-9 PEL Study were used at the study intersections along Greenwich Avenue and Washington Boulevard. For the study intersections on Clinton Avenue, counts conducted in March 2016 were adjusted using the 2022 balanced volumes at the adjacent intersections. The Baseline (2022) Conditions peak-hour traffic volumes were approved by CTDOT Bureau of Policy and Planning. The Baseline (2022) Conditions peak-hour traffic volumes are shown in **Figure 2**.

It is important to note that the intersection counts provided by CTDOT did not include pedestrian volumes, however, pedestrians were accounted for in the intersection capacity analysis. At every signalized intersection on Washington Boulevard, 30 pedestrian calls per hour were assumed for each pedestrian phase and for all other signalized intersections, 10 pedestrian calls per hour were assumed.

PROPOSED DEVELOPMENT

As stated previously, the proposed project plans to develop two multifamily residential buildings on either side of Clinton Avenue, totaling 471 units. Parking is proposed under each building. Access to the parking will be provided off Clinton Avenue, between Division Street and Richmond Hill Avenue.

Proposed Development Trip Generation

The proposed site-generated peak-hour trips were estimated using statistical data published by the Institute of Transportation Engineers (ITE).[1] **Table 2** summarizes the site-generated traffic estimates for the proposed development during the study peak hours.

The statistical data published by ITE is largely based on areas without the public transportation attributes and access to the train station of Stamford. The proposed redevelopment is approximately 0.25 miles from the Stamford Transportation Center. Given the proposed development's location within downtown Stamford and its proximity to the Stamford Transportation Center, and based on correspondence with CTDOT, a 20 percent Transit Oriented Development (TOD) reduction was applied to the site-generated traffic estimates. Because TODs reduce the need for residents and visitors to drive, TOD housing typically produces considerably less vehicle traffic than what is generated by conventional housing developments.

[1] *Trip Generation, 11th Edition*, Institute of Transportation Engineers, 2021

Table 2 Proposed Development Vehicle Traffic Estimates

Land Use	Units	A.M. Peak Hour				P.M. Peak Hour			
		Trip Rate	In	Out	Total	Trip Rate	In	Out	Total
Proposed Development									
ITE Land Use 221 – Multifamily Housing (Mid-Rise)	471 DU	0.37/DU	40	134	174	0.39/DU	112	72	184
TOD Reduction (-20%)	-	-	-8	-27	-35	-	-22	-14	-36
Estimated Total	**-**	**-**	***32***	***107***	***139***	**-**	***90***	***58***	***148***

Notes:
1. *Trip Generation*, 11th Edition, Institute of Transportation Engineers
2. DU = Dwelling Units

As shown in Table 2, the proposed development is estimated to generate around 139 new vehicle trips (32 vehicles entering and 107 vehicles exiting) during the morning peak hour and 148 new vehicle trips (90 vehicles entering and 58 vehicles exiting) during the afternoon peak hour.

Proposed Development Trip Distribution and Trip Assignment

The geographic distribution of the proposed development site-generated traffic was estimated based on review of the roadway traffic patterns in the vicinity of the site as well as review of census commuting data. **Figure 3** illustrates the distribution for the proposed redevelopment site-generated traffic through the study area.

Based on the proposed redevelopment trip generation and trip distribution, the proposed site-generated trips were assigned to the study area intersections. **Figure 4** displays the resulting proposed redevelopment trip assignment.

FUTURE (2025) CONDITIONS

The proposed development is anticipated to be completed by 2025. Future (2025) Conditions were evaluated with the proposed development site vacant and with the proposed residential development completed to determine possible traffic impacts.

Background Traffic Volumes

The background traffic scenario is reflective of Future (2025) Conditions if the proposed development was not built. Background (2025) Conditions also include traffic associated with other nearby expected upcoming developments as well as general traffic growth.

Based on correspondence with the City of Stamford, CTDOT, and based on our knowledge of proposed and pending developments in the area, the following development projects were included in Background (2025) Conditions. They are as follows:

1. Stamford Station Parking Garage (State Street Garage)
2. 406 Washington Boulevard – Gateway Tower Expansion
3. 885 Washington Boulevard – The Smyth
4. 245 Atlantic Street – True North
5. 677 Washington Boulevard
6. 154 Broad Street

Figure 5 displays the locations of the nearby planned developments. The anticipated future site-generated peak-hour trips from each planned development were obtained from their respective traffic studies and/or OSTA applications. Information on the nearby planned developments is included in the Appendix. The resulting total trip assignment from the nearby planned developments is shown in **Figure 6.**

There were also a few other development projects in the area that were identified by the City of Stamford but not by CTDOT. These were deemed relatively insignificant in relation to our study area, and any of their new traffic can be considered accounted for within the ambient traffic growth rate for the area at the advice of CTDOT. Based on correspondence with CTDOT, the existing traffic volumes were projected to Future (2025) Conditions using a growth rate of 0.7 percent per year. Background (2025) Conditions peak-hour traffic volumes were estimated by applying the growth rate to the Baseline (2022) Conditions peak-hour traffic volumes (shown in Figure 2) and then adding the anticipated peak-hour total trip assignment from the nearby planned developments (shown in Figure 6). The resultant Background (2025) Conditions peak-hour traffic volumes are shown in **Figure 7**. The Background (2025) Conditions peak-hour traffic volumes were approved by CTDOT Bureau of Policy and Planning.

Combined Traffic Volumes

The combined traffic scenario is reflective of Future (2025) Conditions once the proposed development is completed. Combined (2025) Conditions peak-hour traffic volumes were estimated by adding the proposed development trip assignment (shown in Figure 4) to the Background (2025) Conditions peak-hour traffic volumes (shown in Figure 7). The resultant Combined (2025) Conditions peak-hour traffic volumes are shown in **Figure 8**.

INTERSECTION CAPACITY ANALYSIS

Intersection capacity analysis was performed at the study intersections under Background and Combined (2025) Conditions to evaluate each intersection's ability to process traffic volumes. These evaluations were used to determine possible traffic impacts from the proposed development based on the comparison of background and combined traffic operations.

Intersection operation results are expressed as a level of service (LOS). LOS is used to provide a qualitative evaluation of the efficiency of operations of an intersection in terms of delay and inconvenience based on certain quantitative calculations. A description of the various LOS designations, A through F, is given in the Appendix. The study intersections were evaluated using *Synchro 11* (*Trafficware*) traffic analysis software package. **Table 3** summarizes the capacity analysis findings under Background and Combined (2025) Conditions. The full level of service table and the *Synchro* analysis worksheets are included in the Appendix.

Table 3 Capacity Analysis Summary - Future (2025) Conditions

Intersection/Lane Group	Overall Level of Service			
	A.M. Peak Hour		P.M. Peak Hour	
	Background	Combined	Background	Combined
Signalized				
1. Greenwich Avenue at Tresser Boulevard (US Route 1)	C	C	C	C
2. Greenwich Avenue at Richmond Hill Avenue	D	D	D	D
3. Greenwhich Avenue at South State Street	C	C	D	D
4. Clinton Avenue at Tresser Boulevard (US Route 1)	C	C	B	B
6. Clinton Avenue at Richmond Hill Avenue	C	C	B	C
7. Washington Boulevard at Tresser Boulevard (US Route 1)	D	D	D	D
8. Washington Boulevard at Division Street	A	A	A	A
9. Washington Boulevard at Richmond Hill Avenue	B	B	C	C
10. Washington Boulevard at North State Street/I-95 Westbound On Ramp	C	C	B	B
Unsignalized				
5. Clinton Avenue at Division Street				
Westbound Left/Right	B	B	A	B
Southbound Left	A	A	A	A
11. Clinton Avenue at Proposed Parking Garage Access				
Northbound Left		A		A
Eastbound Left/Through/Right		B		B
Westbound left/Through/Right		B		B
Southbound Left		A		A

Notes: LOS calculations were performed using *Synchro 11*.

It is important to note that LOS A to LOS D are generally considered acceptable conditions. However, in some areas, LOS E during peak hours is often deemed acceptable and can indicate an efficient tradeoff between traffic flow and the amount of land devoted to the movement of motor vehicles.

As shown in Table 3, the study intersections are expected to operate at acceptable overall LOS (LOS D or better) during both peak hours under Background and Combined (2025) Conditions. Additionally, the proposed parking garage access is expected to operate at acceptable conditions (LOS B or better) during both peak hours under Combined (2025) Conditions.

QUEUE ANALYSIS

The study intersection queues were also evaluated using *Synchro 11* (*Trafficware*) traffic analysis software package. For analysis, the average and 95th percentile queues are recorded. The *Synchro* analysis worksheets are included in the Appendix.

All study intersections are not expected to experience any significant increases in queues resulting from the proposed development. Additionally, all approach lanes within close proximity to the proposed development are expected to provide adequate storage length under Background and Combined (2025) Conditions during both peak periods.

MULTI-WAY STOP APPLICATION

The *Manual on Uniform Traffic Control Devices* (MUTCD) lists four criteria that should be considered with an engineering study for a multi-way STOP sign installation. After reviewing all criteria listed in Section 2B.07, it is not recommended to install a multi-way stop at the intersection of Clinton Avenue at Division Street. Only three crashes have been reported in the last five years and none have been recorded in the last three years. The intersection does not meet the minimum combined vehicular, pedestrian, and bicycle volume from the minor street approach criteria. Additionally, the average delay to the minor street vehicular traffic during the peak hours is considerably less than 30 seconds per vehicle. The westbound approach is expected to operate at a LOS B or better during both peak hours under Background and Combined (2025) Conditions.

INTERSECTION SIGHT DISTANCE

Intersection sight distance was measured at the proposed parking garage driveways. Intersection sight distance is determined through the creation of clear sight triangles. Each quadrant of the intersection should contain a triangular area free of obstructions. For the proposed garage driveways, and for vehicles on Clinton Avenue approaching each driveway, the length of the legs of the triangles should be long enough such that the driver can see any potentially conflicting vehicles departing the proposed garage driveways in sufficient time to slow or stop before colliding. For vehicles departing from the proposed garage driveways, the length of the legs of the triangles should be sufficient for a stopped driver to depart each driveway and turn onto Clinton Avenue safely.

Intersection sight distance was measured in accordance with criteria set forth in the 2003 CTDOT *Highway Design Manual*. For a speed of 25 miles per hour (mph), 280 feet of intersection sight distance is required. Looking north towards Division Street when exiting each driveway, a driver can see more than the 280 feet required for a speed of 25 mph. Looking south towards Richmond Hill Avenue, the required sight line extends into the signalized intersection of Clinton Avenue and Richmond Hill Avenue. At a conventional intersection, left-turning vehicles typically travel at a speed of 15 mph and right-turning vehicles typically travel at a speed of 9 mph. For a speed of 15 mph, approximately 165 feet of intersection sight distance is required. For a speed of 9 mph, approximately 100 feet of intersection sight distance is required. Looking south towards Richmond Hill Road when exiting each driveway, a driver can see more than the 165 feet required for a speed of 15 mph at the eastbound approach, more than the 100 feet required for a speed of 9 mph at the westbound approach, and more than the 280 feet required for a speed of 25 mph at the northbound approach at the signalized intersection of Clinton Avenue and Richmond Hill Avenue.

All vegetation within the clear sight triangles at the parking garage driveways must be kept trimmed, especially during the spring and summer, to ensure that sufficient intersection sight distance is provided throughout the year. On-street parking is currently permitted on the west side of Clinton Avenue. It is recommended to establish a no-parking zone along the west side of Clinton Avenue from approximately 50 feet north of the proposed garage driveway to Richmond Hill Avenue to improve the sight lines at the driveway.

Additionally, upon review of the study area, the vegetation within the median at Gateway Commons (the westbound approach at the intersection of Washington Boulevard and Richmond Hill Avenue) is very tall and restricts the sight distance of vehicles and more importantly pedestrians crossing the intersection. This vegetation should get trimmed to maintain the required sight distance at the intersection.

SUMMARY

This study was conducted to assess the traffic impacts of the proposed development to be located at 100 Clinton Avenue in Stamford. The proposed project plans to develop two multifamily residential buildings on either side of Clinton Avenue, totaling 471 units. Parking is proposed under each building. Access to the parking will be provided off Clinton Avenue, between Division Street and Richmond Hill Avenue.

To determine a profile of existing conditions, data assembly efforts were undertaken. Estimates of traffic that will be generated by the proposed development was developed based on statistical data published by ITE; and intersection capacity analysis and queue analysis were performed at the study intersections under Background and Combined (2025) Conditions.

With the proposed development, all study intersections are expected to operate at acceptable overall LOS during both peak periods. Additionally, all study intersections are not expected to experience any significant increases in queues with the proposed development. Based on the results of this traffic study, it is our opinion that the changes in traffic patterns resulting from the proposed development, can be

accommodated by the surrounding roadway system. Therefore, no offsite mitigation to the surrounding roadway system is required.

To improve roadway operations and sight lines at the proposed parking garage driveways, it is recommended to establish a no-parking zone along the west side of Clinton Avenue from approximately 50 feet north of the proposed garage driveway to Richmond Hill Avenue. Additionally, upon review of the study area, the vegetation within the median at Gateway Commons (the westbound approach at the intersection of Washington Boulevard and Richmond Hill Avenue) is very tall and restricts the sight distance of vehicles and more importantly pedestrians crossing the intersection. This vegetation should get trimmed to maintain the required sight distance at the intersection. We hope this report is useful to you and the City of Stamford. If you have any questions or need anything further, please do not hesitate to contact either of the undersigned.

Sincerely,

SLR International Corporation

Emily A. Foster, PE
Associate Transportation Engineer

Neil C. Olinski, MS, PTP
Senior Transportation Planner

Figures

- Figure 1 – Site Location Map
- Figure 2 – Baseline (2022) Conditions Peak-Hour Traffic Volumes
- Figure 3 – Proposed Development Distribution
- Figure 4 – Proposed Development Peak-Hour Trip Assignment
- Figure 5 – Nearby Planned Developments Locations
- Figure 6 – Nearby Planned Developments Total Peak-Hour Trip Assignment
- Figure 7 – Background (2025) Conditions Peak Hour-Traffic Volumes
- Figure 8 – Combined (2025) Conditions Peak Hour-Traffic Volumes

Appendix

- Information on the Nearby Planned Developments Included in Background (2025) Conditions
- LOS Designation Descriptions
- Full LOS Table
- *Synchro* Analysis Worksheets

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Figure 1
Site Location Map

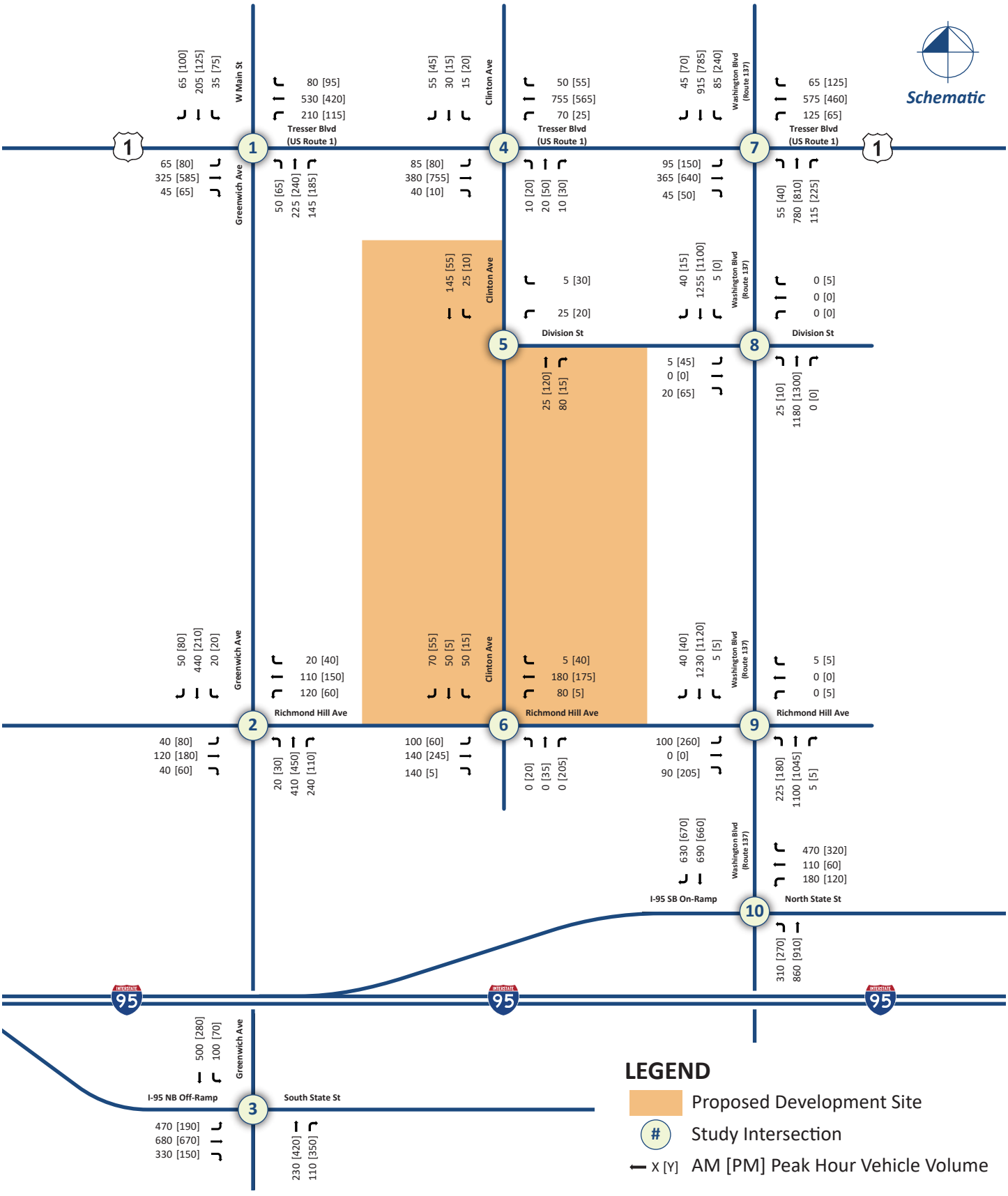


Figure 2
Baseline (2022) Conditions Peak Hour Traffic Volumes

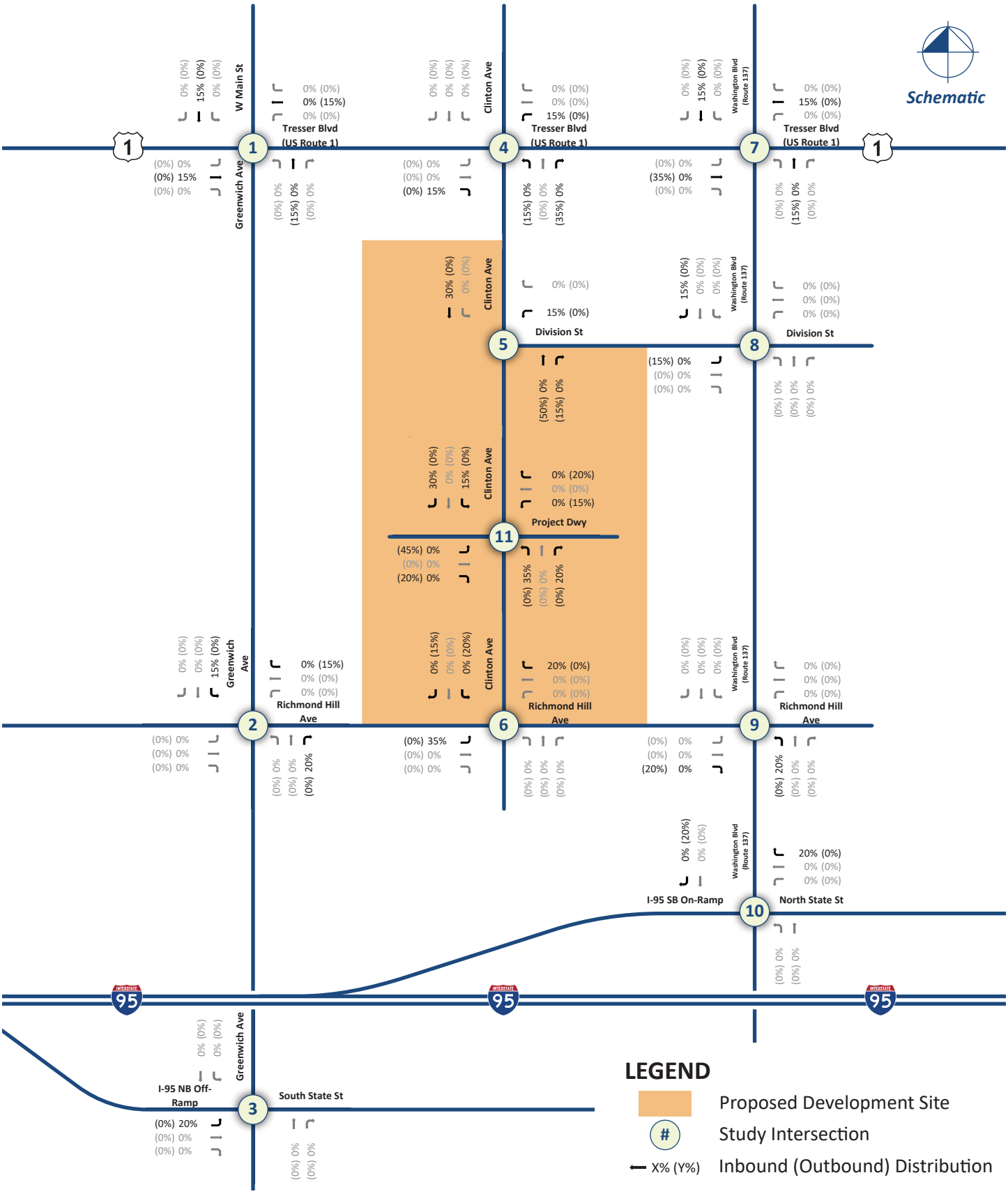


Figure 3
Proposed Development Distribution

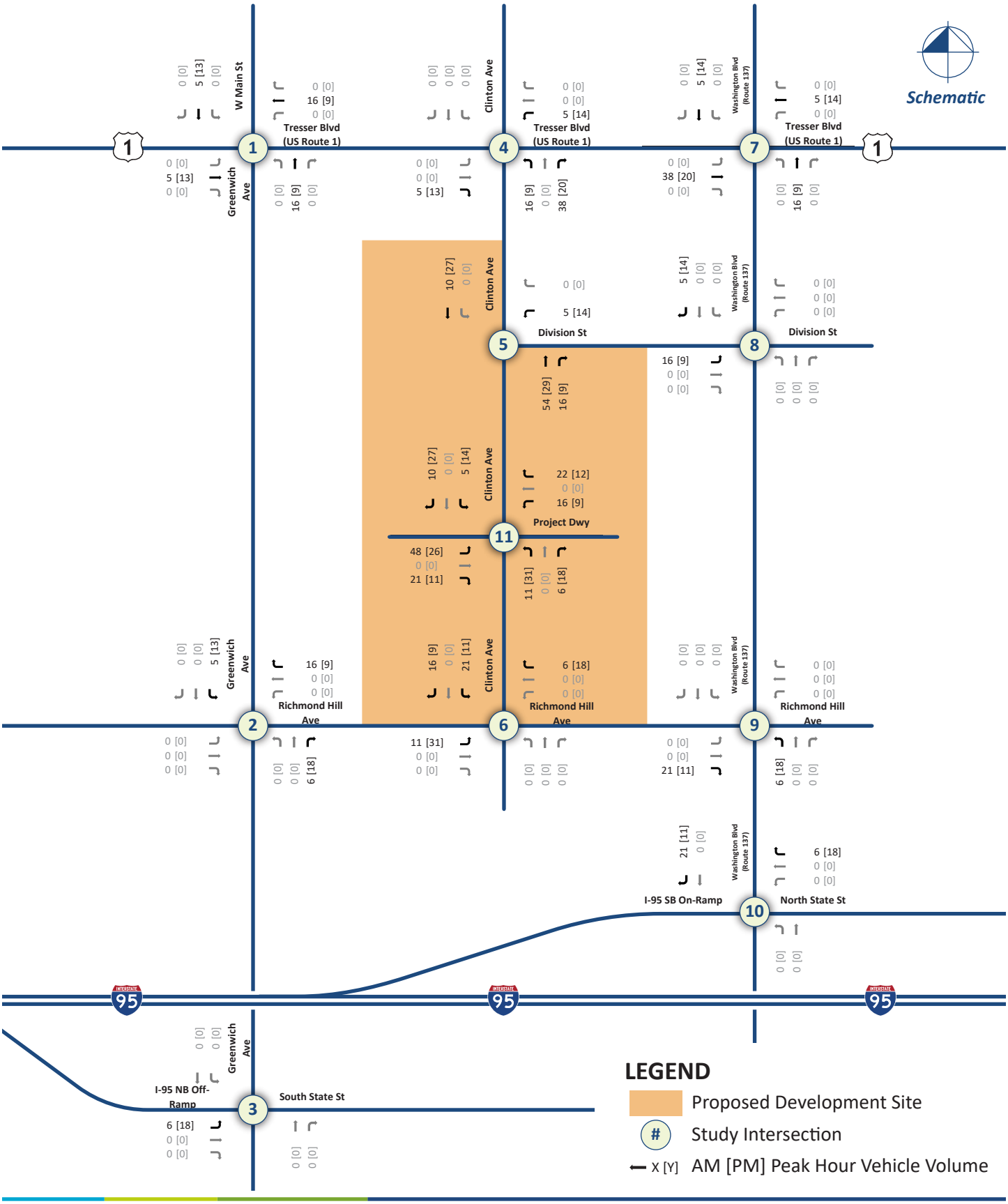


Figure 4
Proposed Development Peak Hour Trip Assignment

Nearby Planned Developments

1. Stamford Transportation Center
   Parking Garage Expansion
2. 406 Washington Boulevard
   Gateway Tower Expansion
   Office Development
3. 885 Washington Boulevard
   The Smyth
   Mixed-Use Development
4. 245 Atlantic Street
   True North
   Mixed-Use Development
5. 677 Washington Boulevard
   Mixed-Use Development
6. 154 Broad Street
   Residential Development

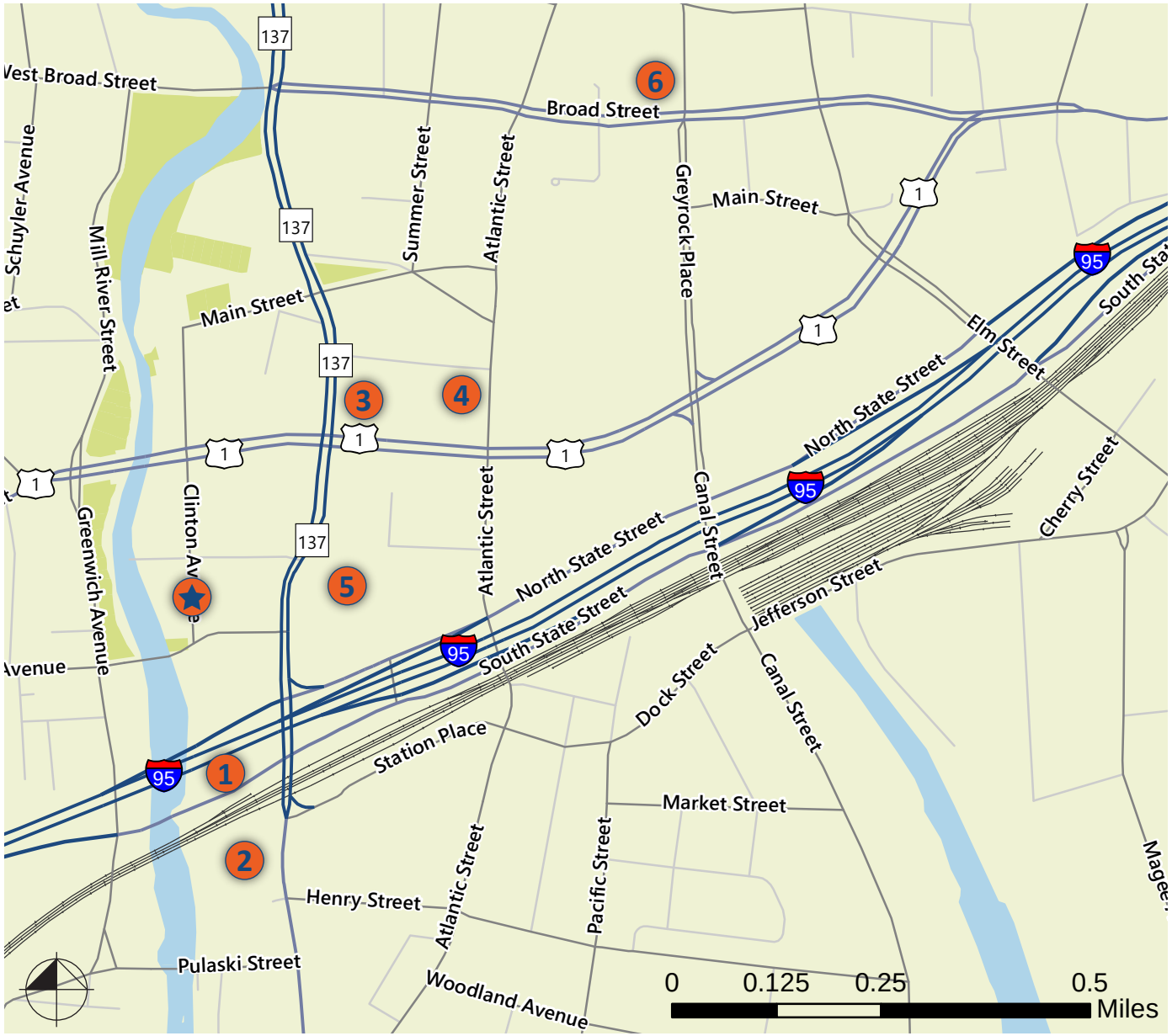


Figure 5
Nearby Planned Developments Locations

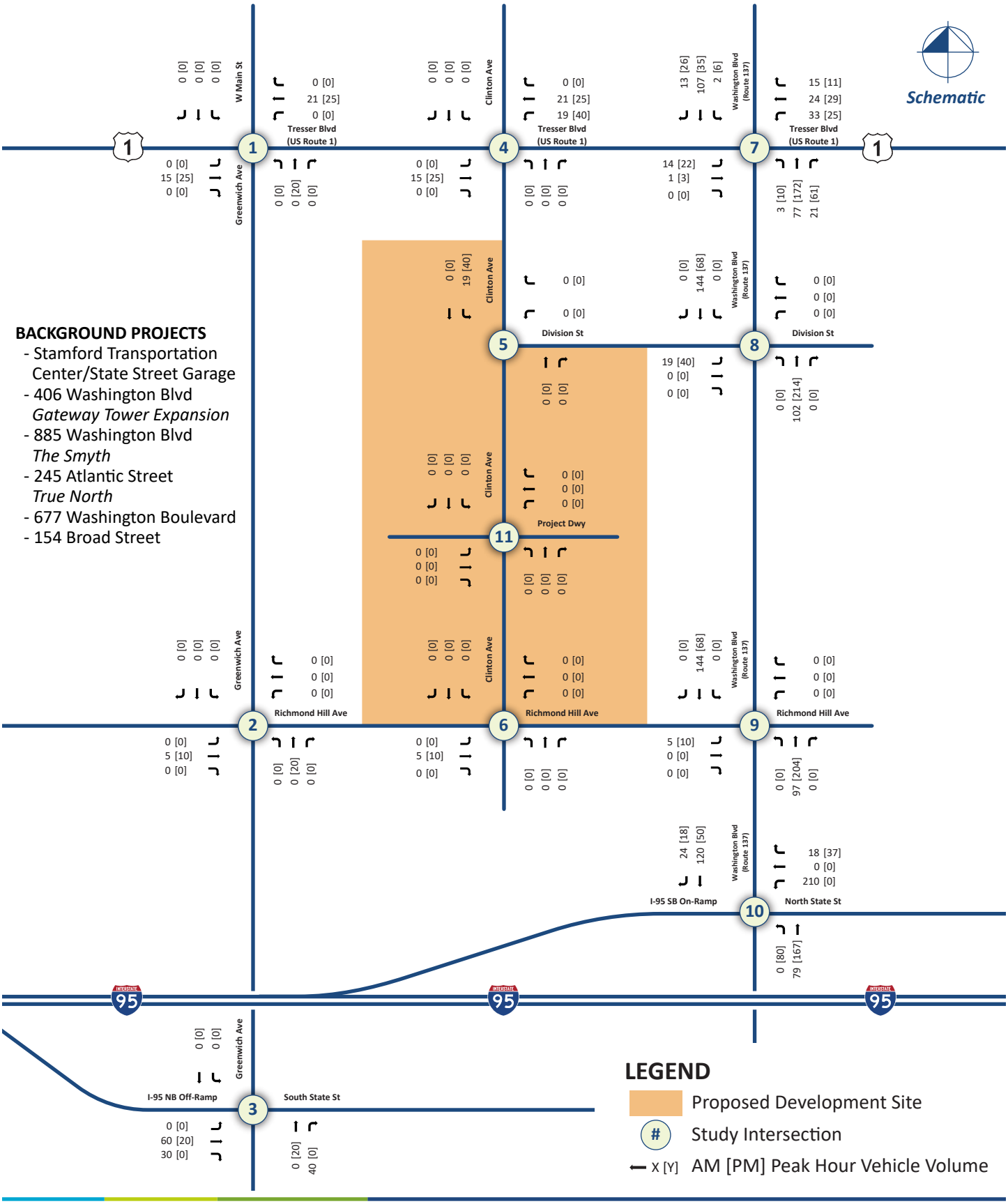


Figure 6
Nearby Planned Developments Total Peak Hour Trip Assignment

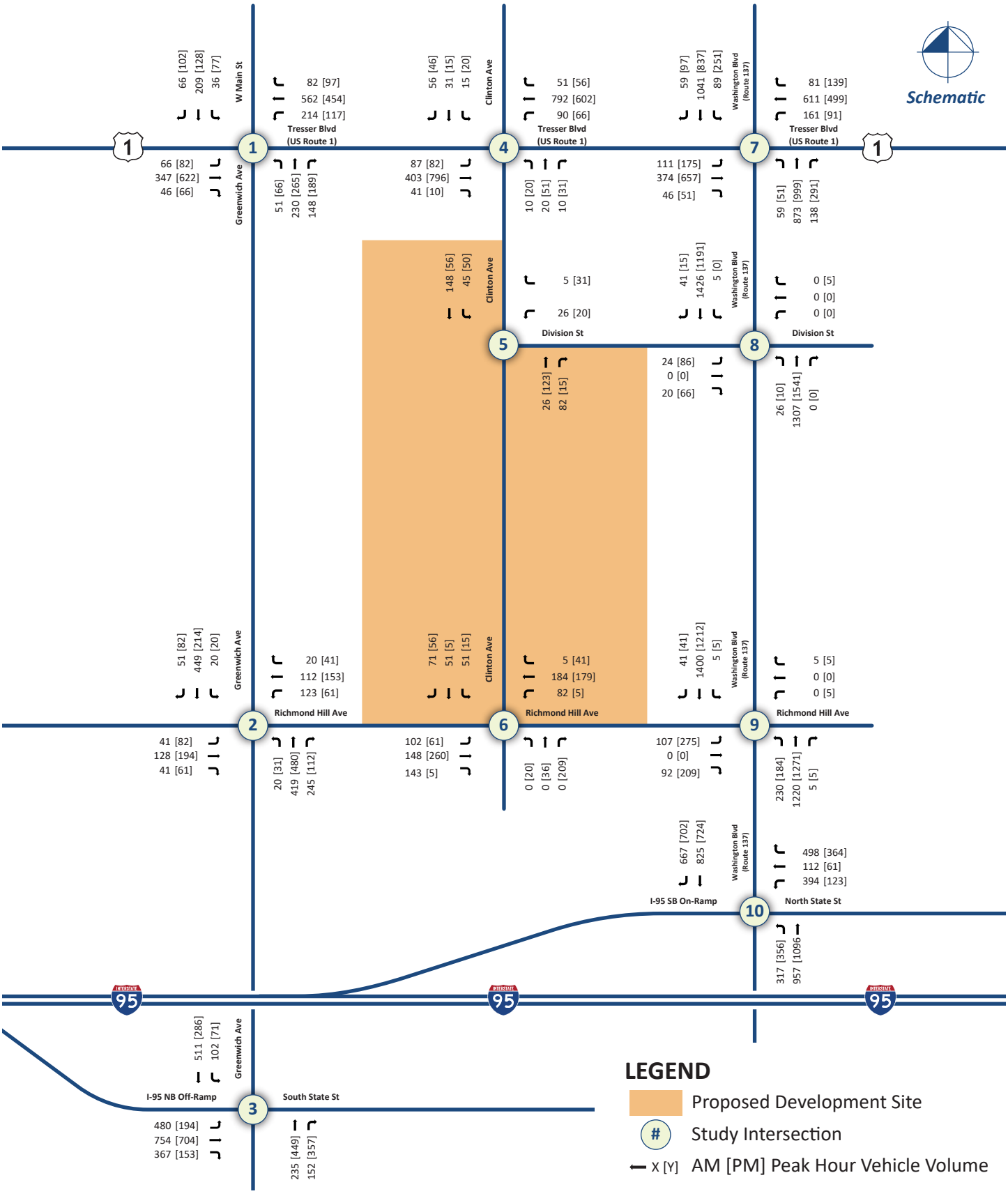


Figure 7
Background (2025) Conditions Peak Hour Traffic Volumes

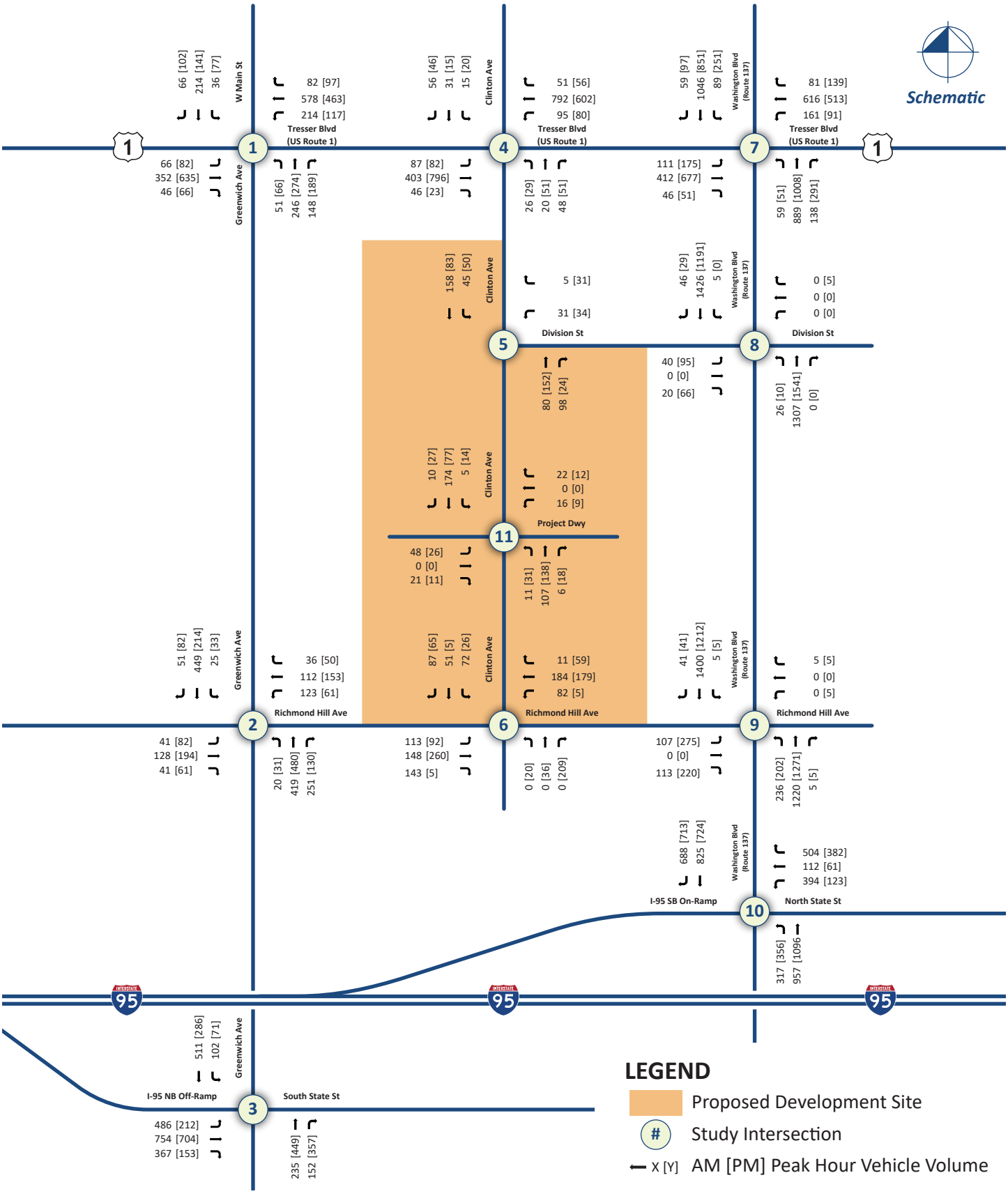
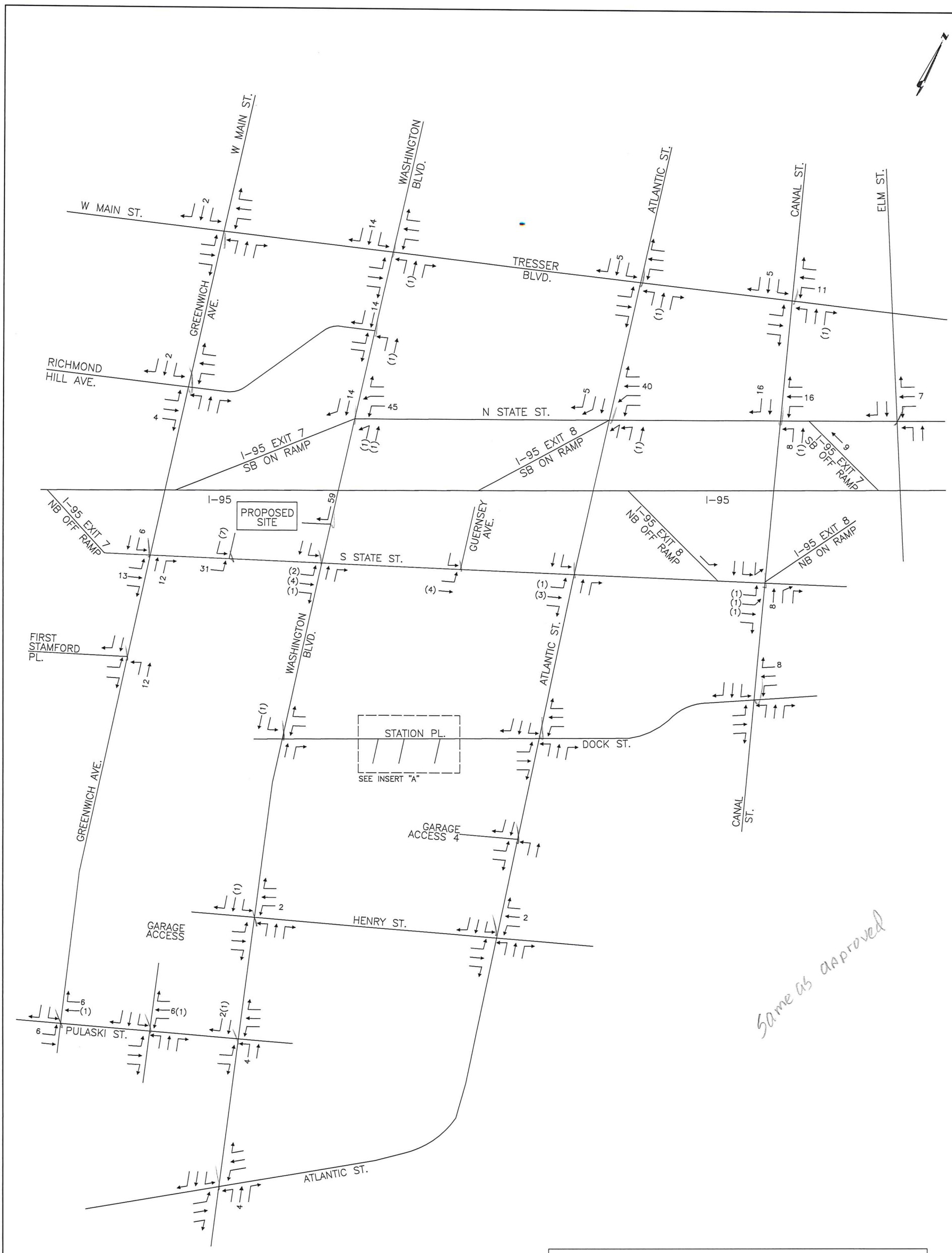


Figure 8
Combined (2025) Conditions Peak Hour Traffic Volumes

APPENDIX

Background Project List

1. **Stamford Transportation Center/State Street Garage** – STEP 1 MTG Pre-Certification Application Traffic Volume Data Requirements (April 26, 2018)
2. **406 Washington Blvd - Gateway Tower Expansion –** Administrative Decision Review (February 11, 2021) / Traffic Impact Study (February 2019)
3. **885 Washington Blvd – The Smyth** – OSTA Response to Comments (June 26, 2018)
4. **245 Atlantic Street – True North –** Site Generated Traffic Volumes
5. **677 Washington Boulevard –** Traffic Access and Impact Study (October 2020)
6. **154 Broad Street** – Traffic Impact and Parking Study (April 9, 2021)



Same as approved

CHA
200 Corporate Place, Suite 110
Rocky Hill, CT 06067
860.257.4557 • www.chacompanies.com

STAMFORD
NEW TRIPS FOR PROPOSED
STATE STREET GARAGE AM

STAMFORD
PARKING GARAGE

FIGURE
7

DATE: 4/18

W MAIN ST.
WASHINGTON BLVD.
ATLANTIC ST.
CANAL ST.
ELM ST.
TRESSER BLVD.
GREENWICH AVE.
RICHMOND HILL AVE.
N STATE ST.
I-95 EXIT 7 SB ON RAMP
I-95 EXIT 8 SB ON RAMP
I-95 EXIT 7 SB OFF RAMP
I-95
I-95 EXIT 7 NB OFF RAMP
PROPOSED SITE
I-95 EXIT 8 NB OFF RAMP
I-95 EXIT 8 NB ON RAMP
S STATE ST.
GUERNSEY AVE.
FIRST STAMFORD PL.
STATION PL.
DOCK ST.
SEE INSERT "A"
GARAGE ACCESS 4
HENRY ST.
GARAGE ACCESS
PULASKI ST.

Same as approved

STATION PL.
GARAGE ACCESS 1
GARAGE ACCESS 2
GARAGE ACCESS 3
INSERT "A"

LEGEND:
7 IN (90 OUT)

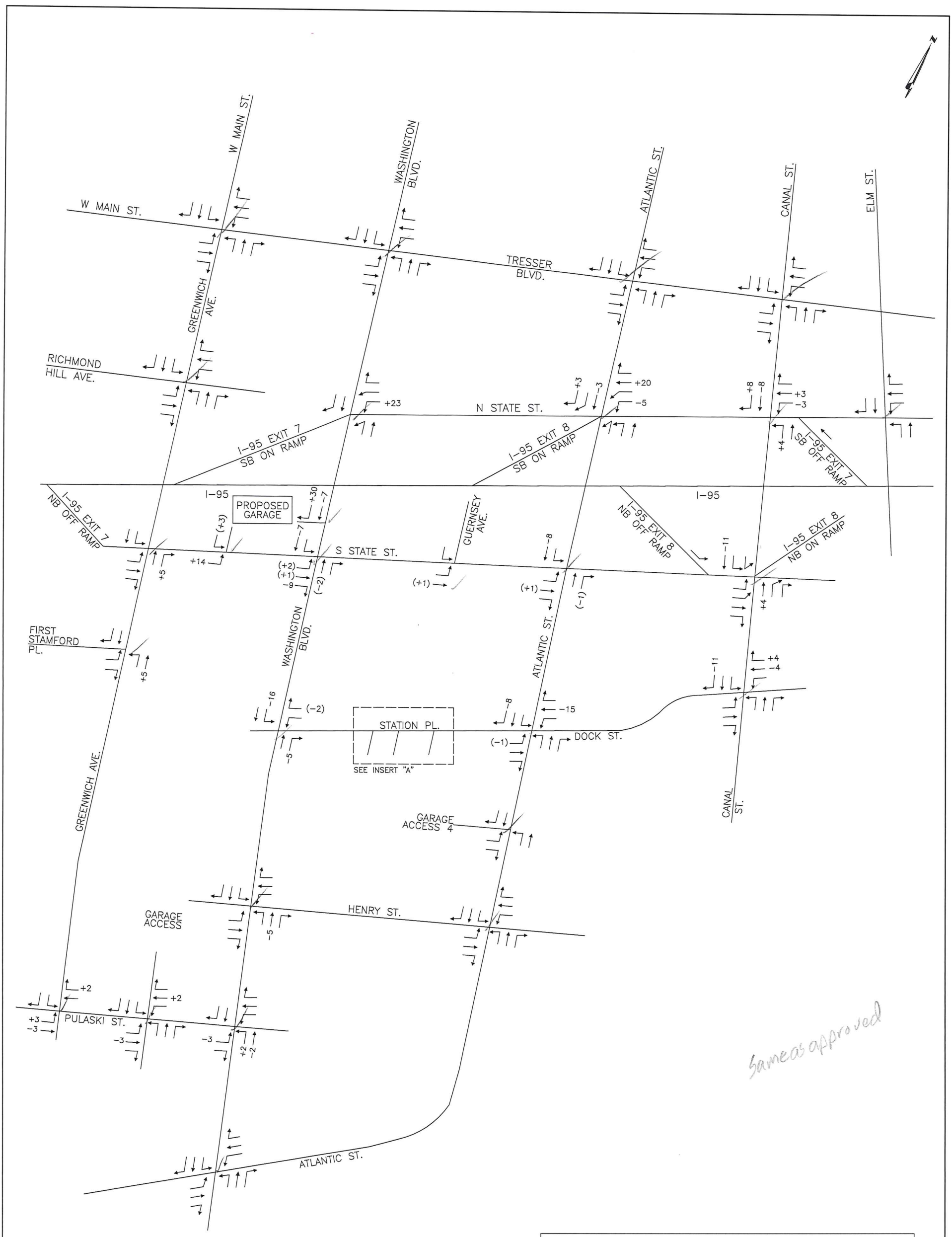
CHA
200 Corporate Place, Suite 110
Rocky Hill, CT 06067
860.257.4557 • www.chacompanies.com

STAMFORD
NEW TRIPS FOR PROPOSED
STATE STREET GARAGE PM

STAMFORD
PARKING GARAGE

FIGURE
8

DATE: 4/18



same as approved

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Rocky Hill, CT 06067
860.257.4557 • www.chacompanies.com

STAMFORD
STATION PLACE ORIGINAL GARAGE
RELOCATED TRIPS AM

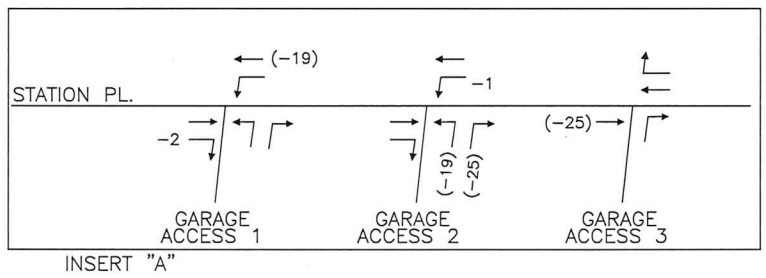
STAMFORD
PARKING GARAGE

FIGURE
9

DATE: 4/18

W MAIN ST.
WASHINGTON BLVD.
ATLANTIC ST.
CANAL ST.
ELM ST.
TRESSER BLVD.
GREENWICH AVE.
RICHMOND HILL AVE.
N STATE ST.
I-95 EXIT 7 SB ON RAMP
I-95 EXIT 8 SB ON RAMP
I-95 EXIT 7 SB OFF RAMP
I-95
I-95 EXIT 7 NB OFF RAMP
PROPOSED GARAGE
S STATE ST.
GUERNSEY AVE.
I-95 EXIT 8 NB OFF RAMP
I-95 EXIT 8 NB ON RAMP
FIRST STAMFORD PL.
STATION PL.
SEE INSERT "A"
DOCK ST.
GARAGE ACCESS 4
HENRY ST.
GARAGE ACCESS
PULASKI ST.
ATLANTIC ST.

LEGEND:
3 IN (44 OUT)



INSERT "A"

Same as approved

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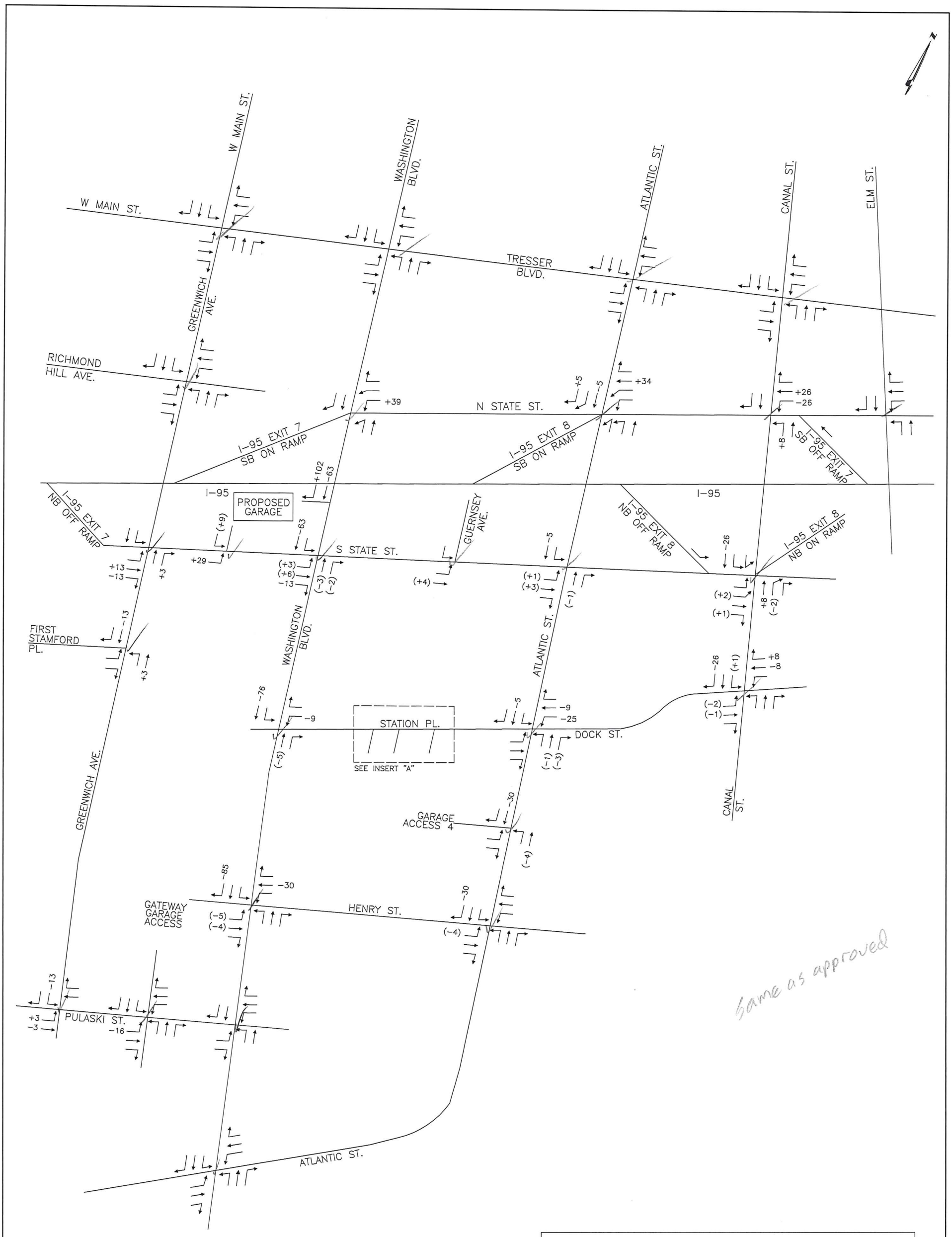
STAMFORD
STATION PLACE ORIGINAL GARAGE
RELOCATED TRIPS PM

STAMFORD
PARKING GARAGE

FIGURE
10

DATE: 4/18



LEGEND:
131 IN (9 OUT)

INSERT "A"

same as approved

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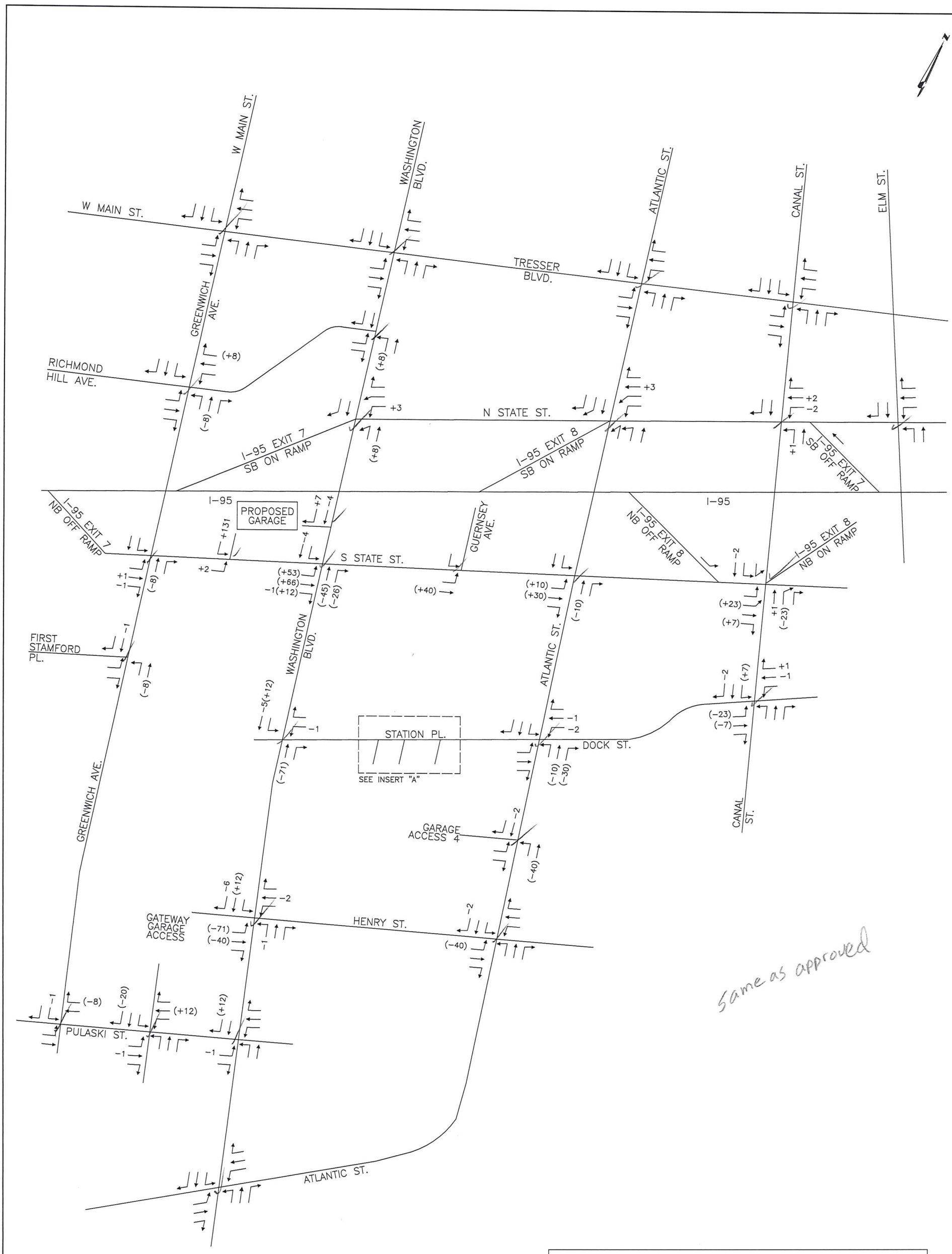
STAMFORD
GATEWAY GARAGE
RELOCATED TRIPS AM

STAMFORD
PARKING GARAGE

FIGURE
11

DATE: 4/18



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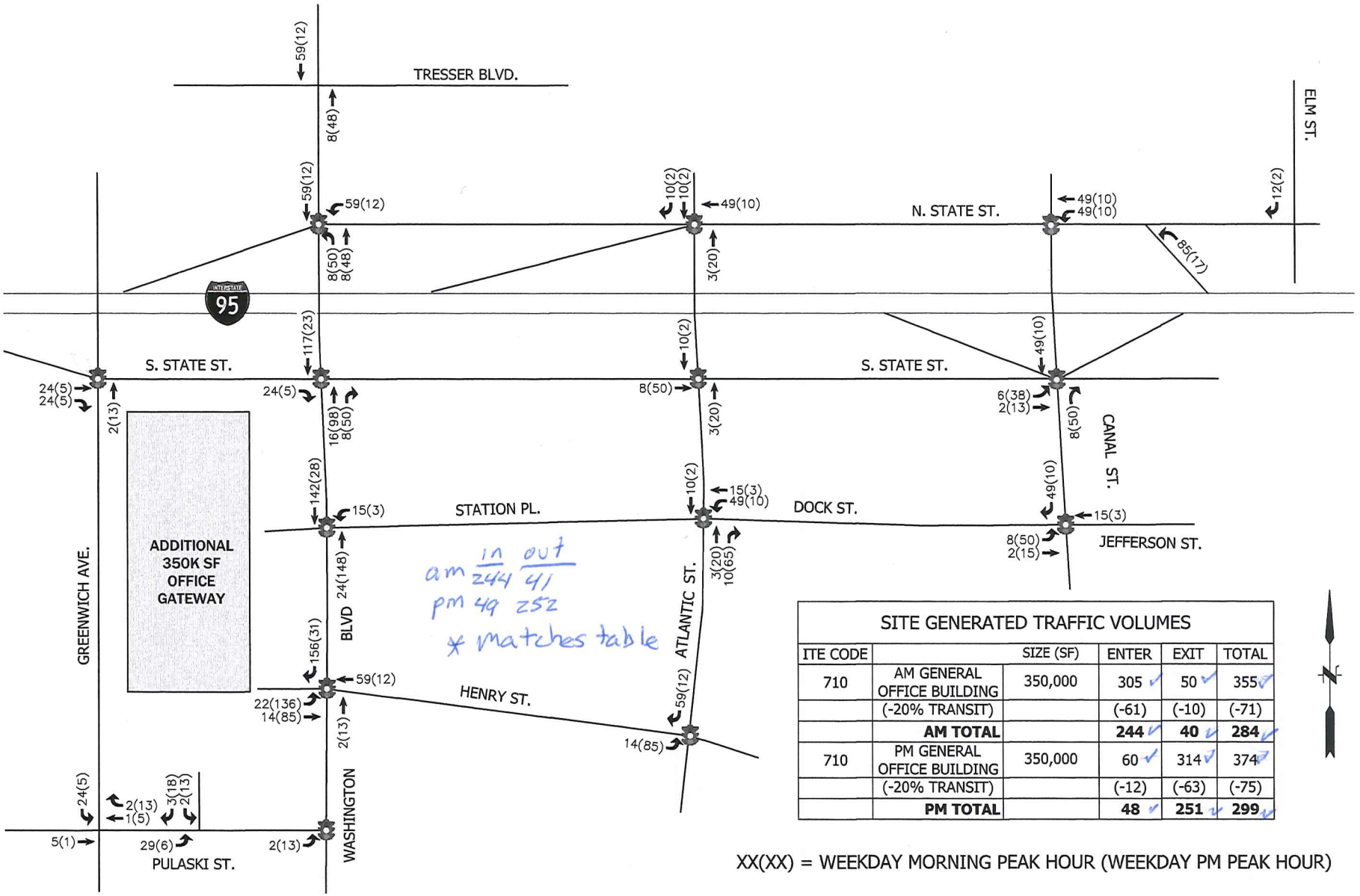
STAMFORD
GATEWAY GARAGE
RELOCATED TRIPS PM

STAMFORD
PARKING GARAGE

FIGURE
12

DATE: 4/18



am in 244 out 41
pm 49 252
* matches table

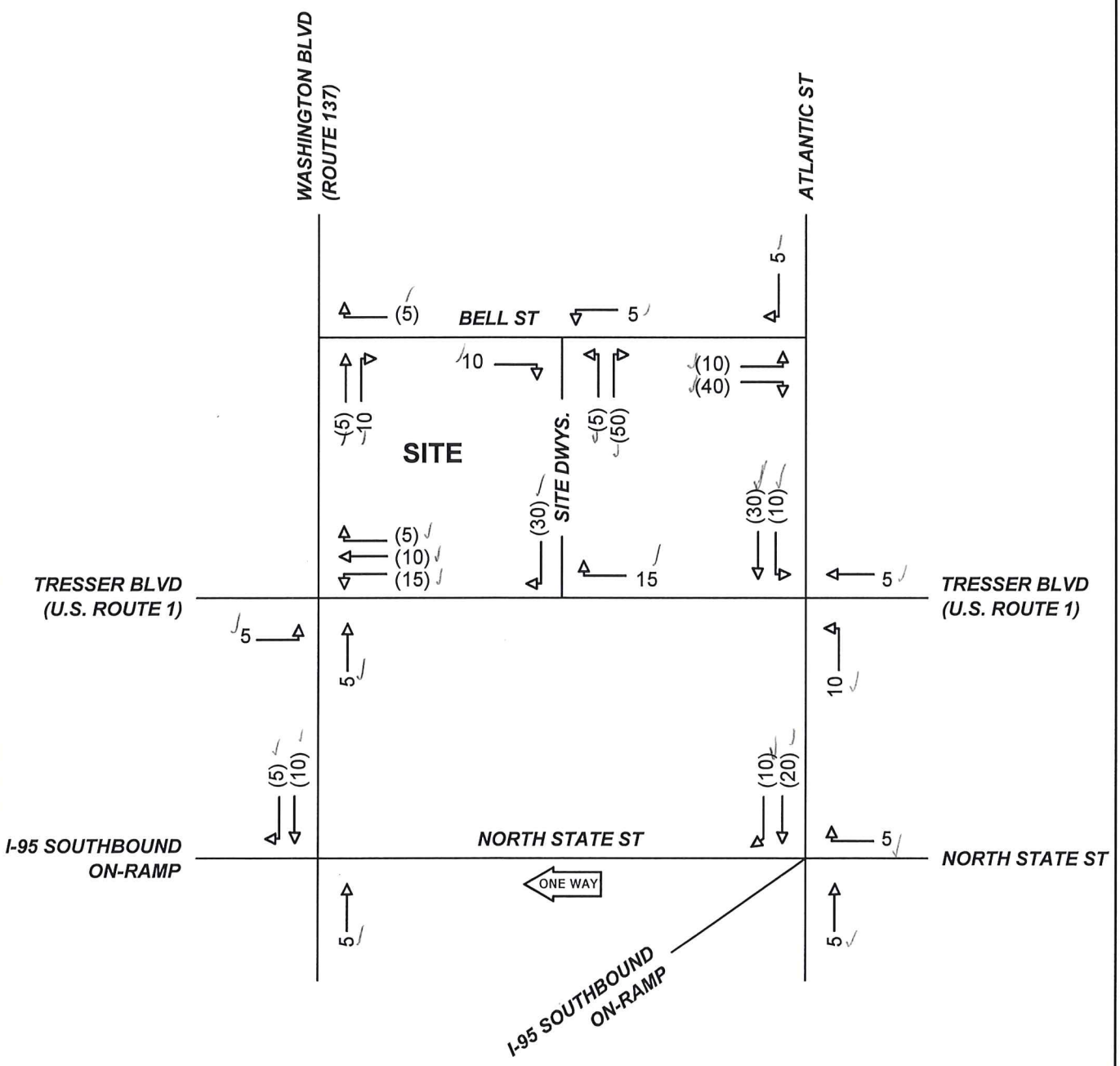
SITE GENERATED TRAFFIC VOLUMES					
ITE CODE		SIZE (SF)	ENTER	EXIT	TOTAL
710	AM GENERAL OFFICE BUILDING	350,000	305 ✓	50 ✓	355 ✓
	(-20% TRANSIT)		(-61)	(-10)	(-71)
	AM TOTAL		**244** ✓	**40** ✓	**284** ✓
710	PM GENERAL OFFICE BUILDING	350,000	60 ✓	314 ✓	374 ✓
	(-20% TRANSIT)		(-12)	(-63)	(-75)
	PM TOTAL		**48** ✓	**251** ✓	**299** ✓

XX(XX) = WEEKDAY MORNING PEAK HOUR (WEEKDAY PM PEAK HOUR)

FUSS & O'NEILL
146 HARTFORD ROAD
MANCHESTER, CONNECTICUT 06040
860.646.2469
www.fando.com

FIGURE 8: GATEWAY SITE GENERATED TRAFFIC VOLUMES

PROJ. NO: 20100591.T85 | GATEWAY TRAFFIC STUDY, STAMFORD, CT | February 2019



ANTICIPATED SITE TRAFFIC VOLUMES
WEEKDAY MORNING PEAK HOUR

Proposed Development at 885 Washington Blvd
Stamford, Connecticut

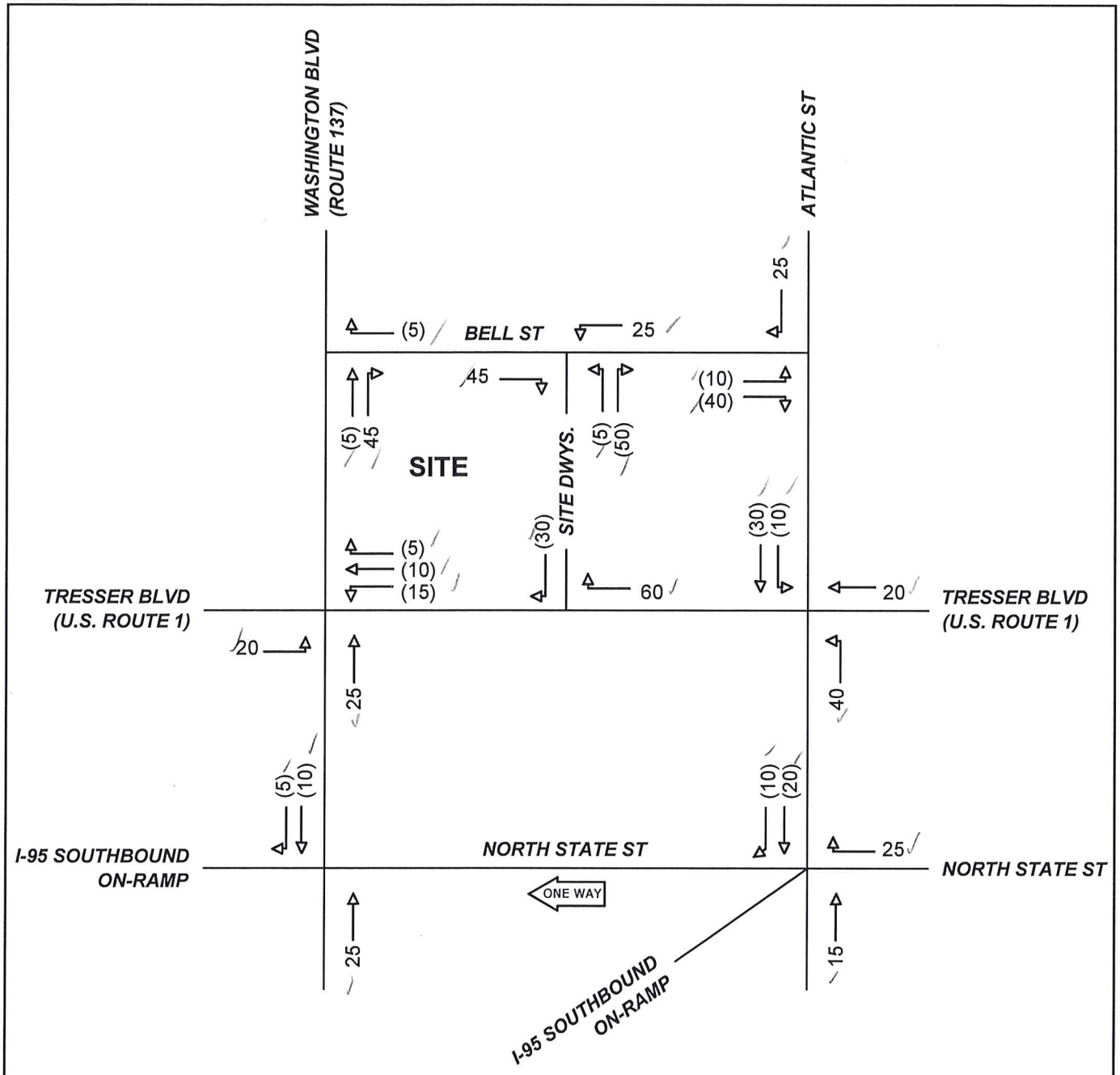
LEGEND
00 - ENTERING
(00) - EXITING

N

SCHEMATIC

MILONE & MACBROOM, Inc.

FIGURE 9



ANTICIPATED SITE TRAFFIC VOLUMES
WEEKDAY AFTERNOON PEAK HOUR

Proposed Development at 885 Washington Blvd
Stamford, Connecticut

LEGEND
00 - ENTERING
(00) - EXITING

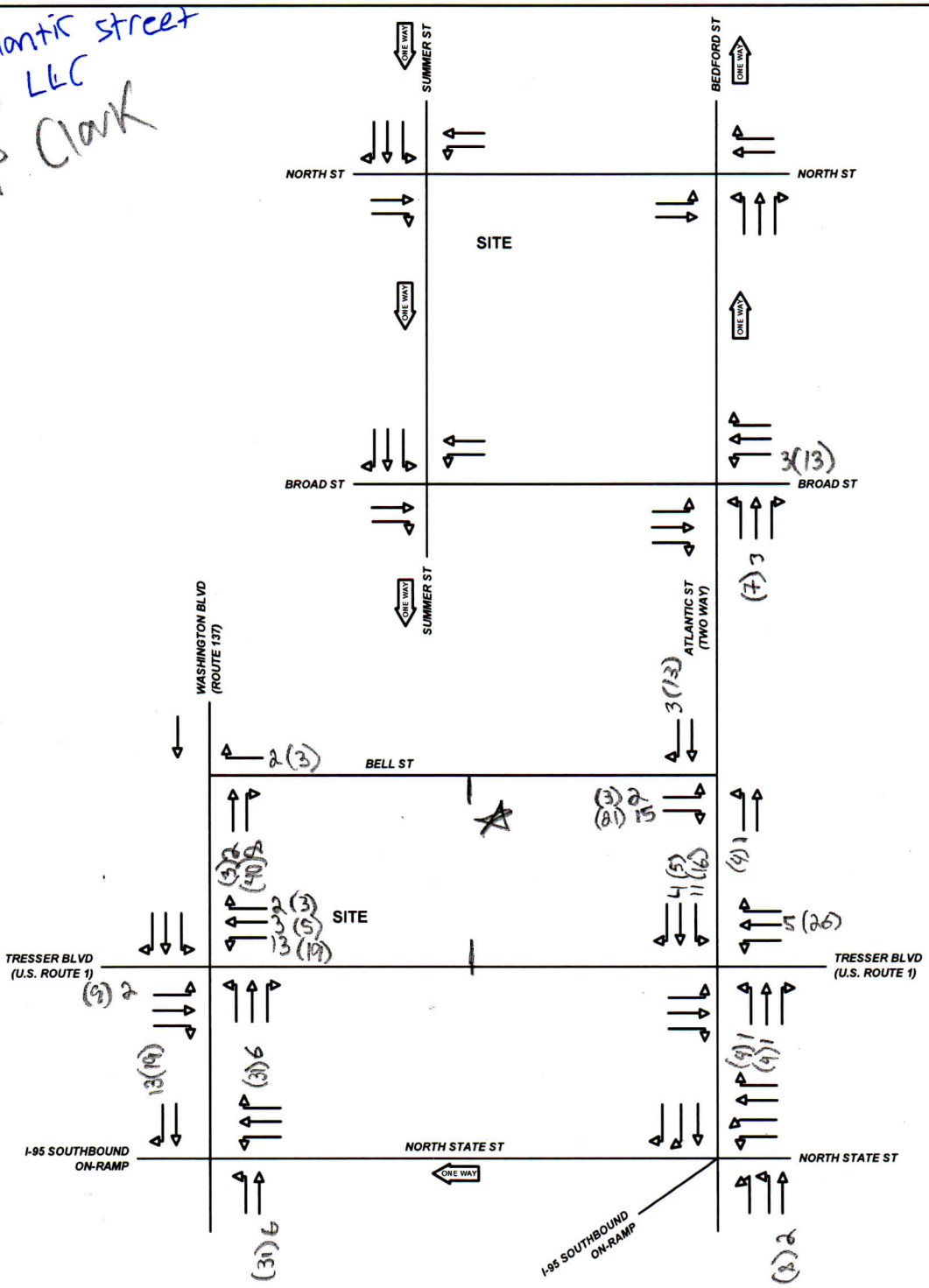
N

SCHEMATIC

MILONE & MACBROOM, Inc.

FIGURE 10

245 Atlantic Street
RoeCo LLC
FP Clark



_____ TRAFFIC VOLUMES

_____ AFTERNOON PEAK HOUR

Stamford, Connecticut

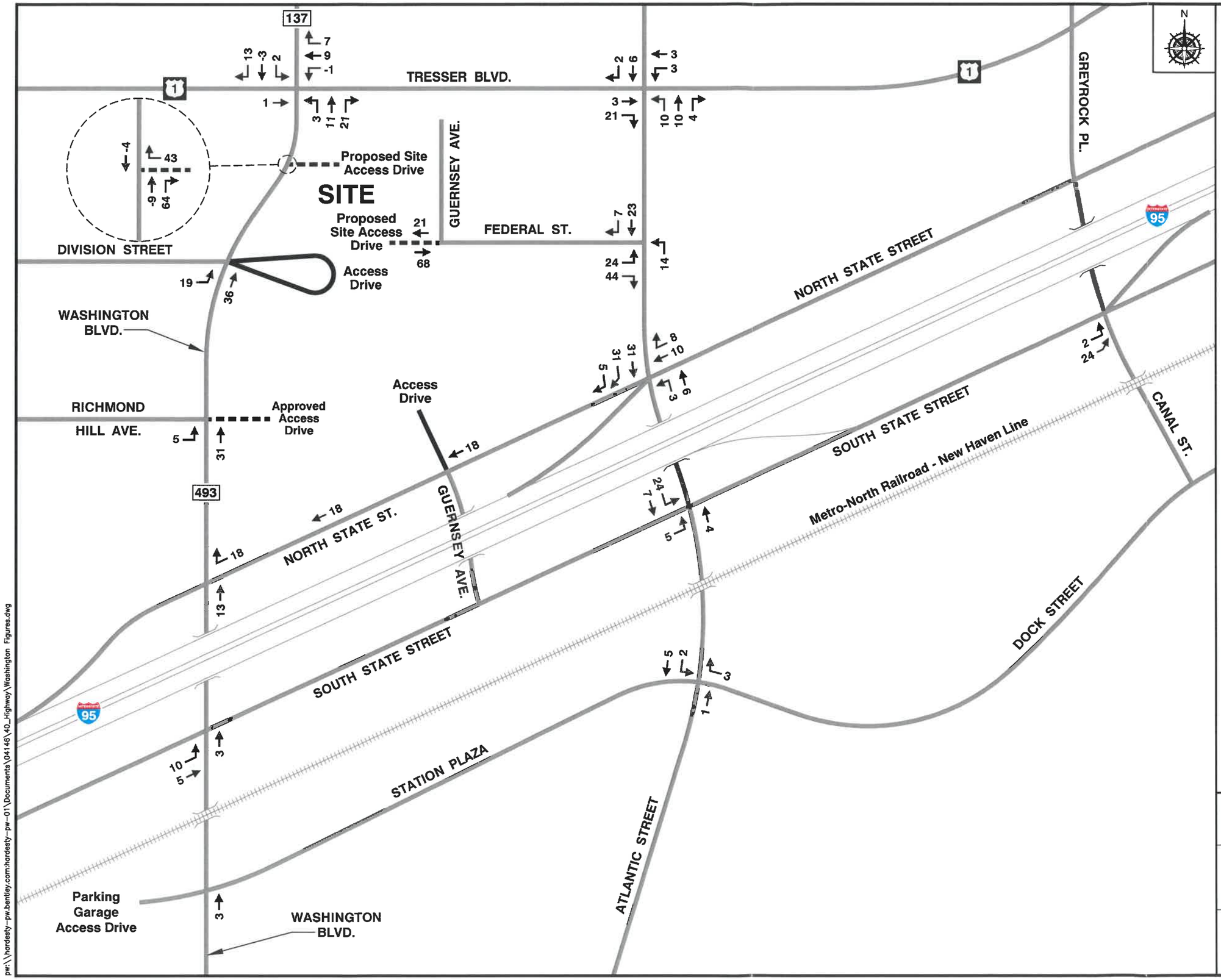
N

SCHEMATIC

MILONE & MACBROOM, Inc.

B-12

FIGURE 1



NOTE:
Total Site Traffic includes Residential Site Traffic and Retail Site Traffic.

TOTAL
SITE TRAFFIC GENERATION & ASSIGNMENT
WEEKDAY MORNING PEAK HOUR

MIXED-USE DEVELOPMENT
677 WASHINGTON BOULEVARD
Stamford, Connecticut

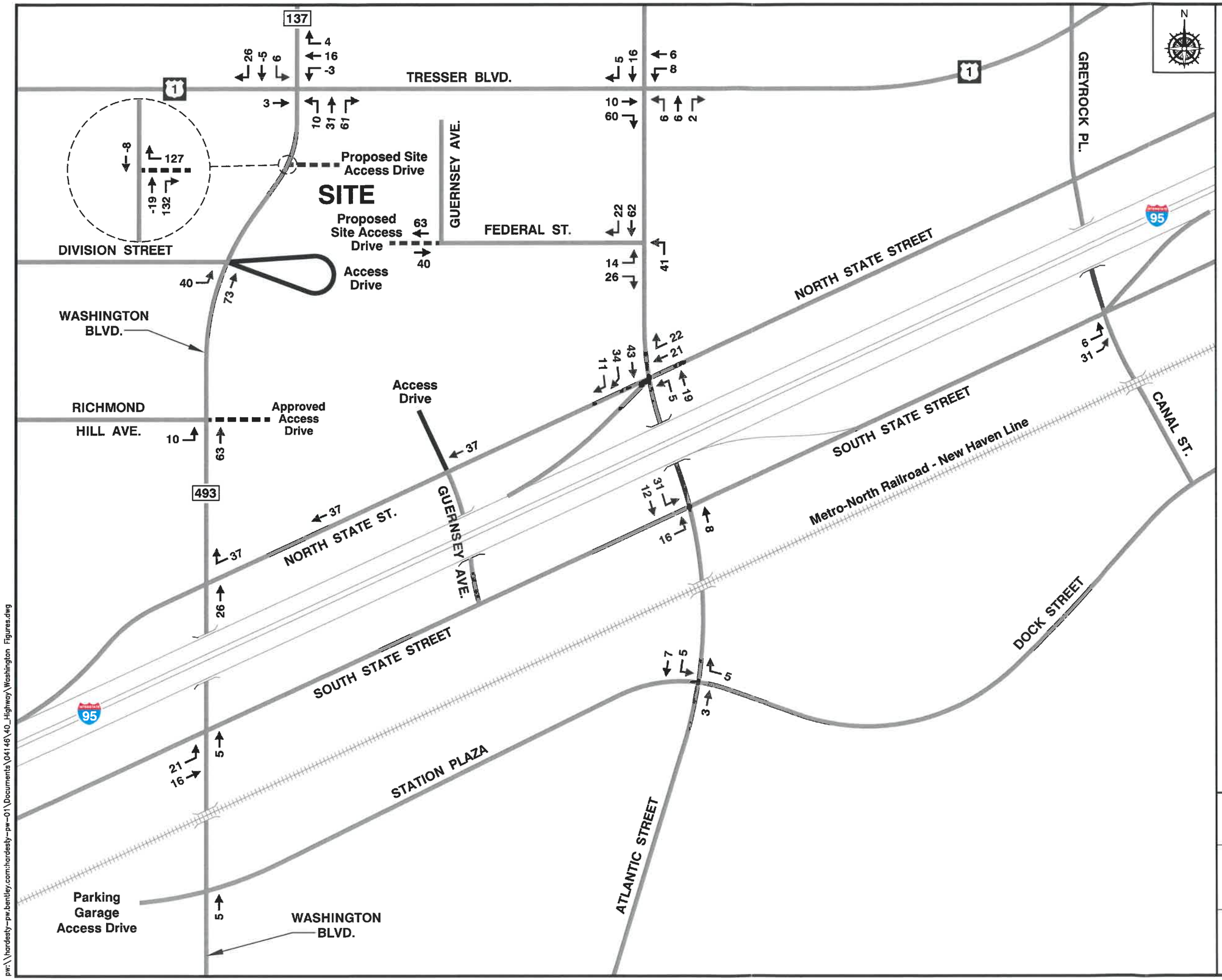
FREDERICK P. CLARK ASSOCIATES / Hardesty & Hanover

Not to Scale

27

8/31/20

pw:\\hardesty-pw.bentley.com:hardesty-pw-01\Documents\04146\40_Highway\Washington Figures.dwg



NOTE:
Total Site Traffic includes Residential Site Traffic and Retail Site Traffic.

TOTAL
SITE TRAFFIC GENERATION & ASSIGNMENT
WEEKDAY AFTERNOON PEAK HOUR

MIXED-USE DEVELOPMENT
677 WASHINGTON BOULEVARD
Stamford, Connecticut

FREDERICK P. CLARK ASSOCIATES / Hardesty & Hanover

Not to Scale

28

8/31/20

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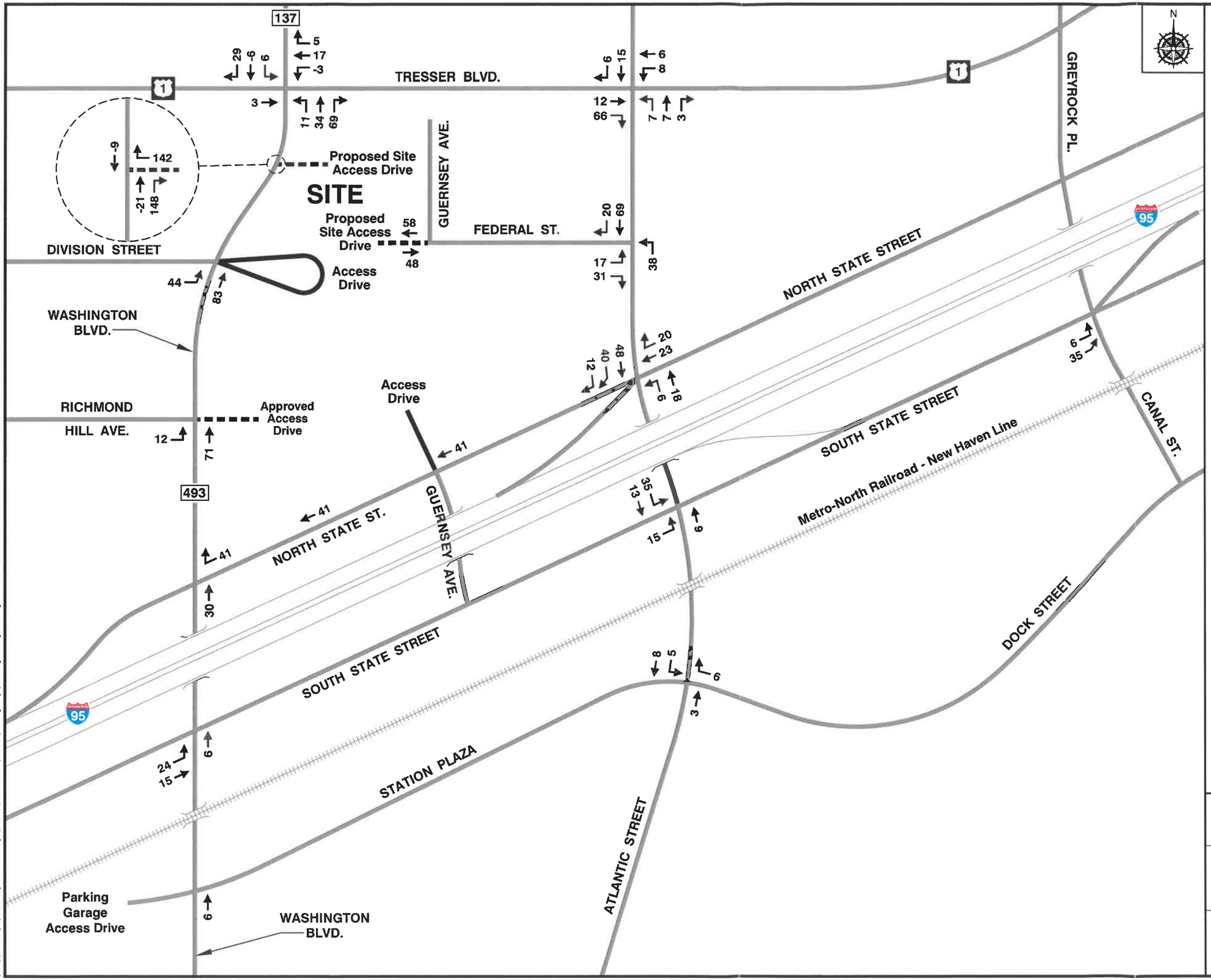


NOTE:
Total Site Traffic includes Residential Site Traffic and Retail Site Traffic.

TOTAL
SITE TRAFFIC GENERATION & ASSIGNMENT
SATURDAY MIDDAY PEAK HOUR

MIXED-USE DEVELOPMENT
677 WASHINGTON BOULEVARD
Stamford, Connecticut

FREDERICK P. CLARK ASSOCIATES / Hardesty & Hanover

Not to Scale

29

8/31/20

pw:\\hardesty-pw.bentley.com:hardesty-pw-01\Documents\04146\40_Highway\Washington Figures.dwg

SLR

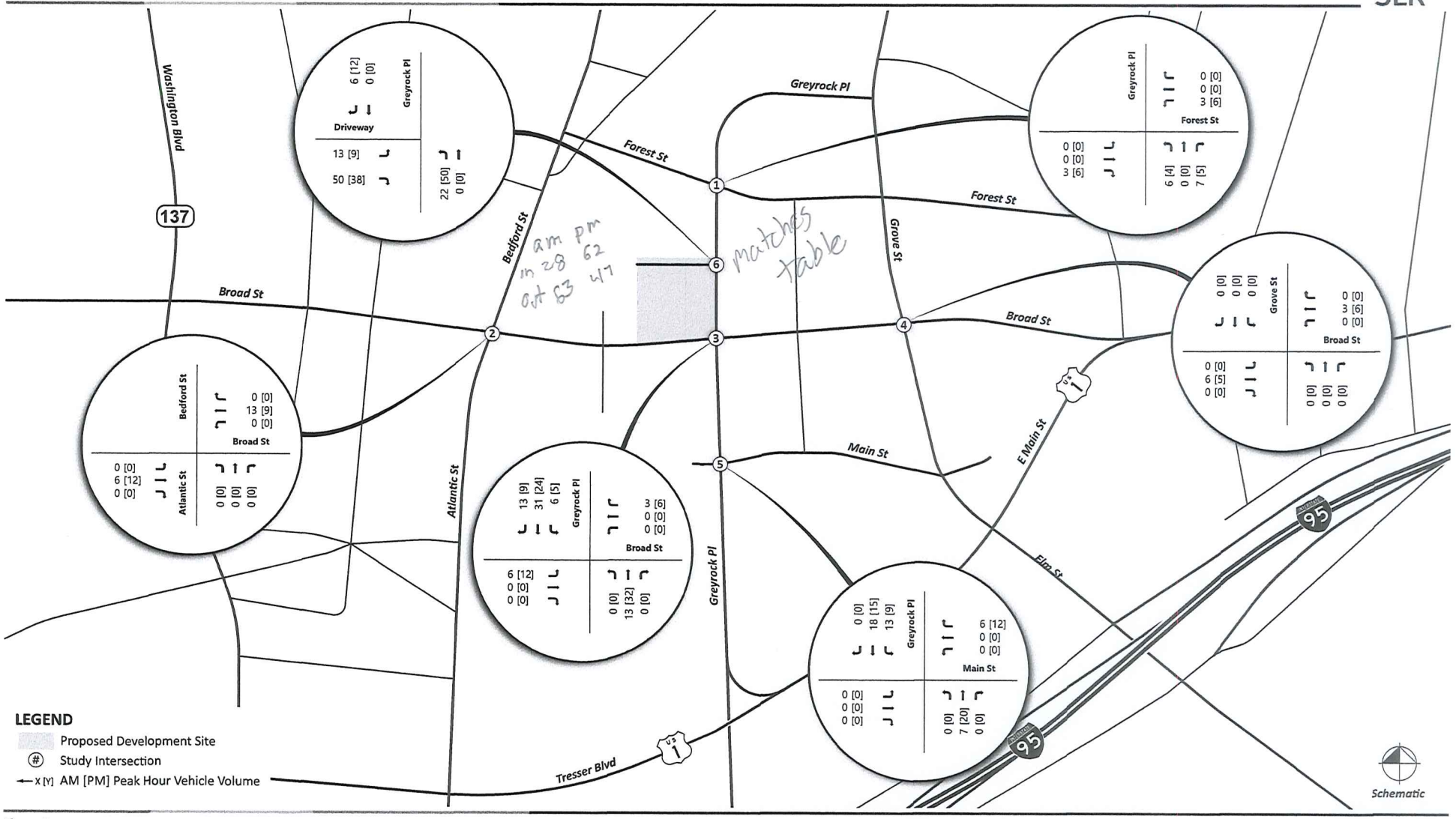


Figure 5
Proposed Development Peak Hour Trip Assignment

LEVEL OF SERVICE
FOR
SIGNALIZED INTERSECTIONS
(MOTORIZED VEHICLE MODE)

Level of service for signalized intersections is defined in terms of control delay, which is a measure of driver discomfort, frustration, fuel consumption, and increased travel time. The delay experienced by a motorist is made up of a number of factors that relate to control, geometrics, traffic, and incidents. Total delay is the difference between the travel time actually experienced and the reference travel time that would result during base conditions: in the absence of traffic control, geometric delay, any incidents, and any other vehicles. Specifically, LOS criteria for traffic signals are stated in terms of the average control delay per vehicle, typically for a 15-min analysis period. Delay is a complex measure and depends on a number of variables, including the quality of progression, the cycle length, the green ratio, and the v/c ratio for the lane group. The criteria are given below.

LEVEL-OF SERVICE CRITERIA FOR SIGNALIZED INTERSECTIONS
MOTORIZED VEHICLE MODE

LOS By Volume-to-Capacity Ratio[1]		CONTROL DELAY (s/veh)
v/c ≤ 1.0	v/c > 1.0	
A	F	≤ 10
B	F	> 10 AND ≤ 20
C	F	> 20 AND ≤ 35
D	F	> 35 AND ≤ 55
E	F	> 55 AND ≤ 80
F	F	> 80

[1] For approach-based and intersection-wide assessments, LOS is defined solely by control delay.

Specific descriptions of each LOS for signalized intersections are provided below:

Level of Service A describes operations with a control delay of 10 s/veh and 20 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is exceptionally favorable or the cycle length is very short. If LOS A is the result of favorable progression, most vehicles arrive during the green indication and travel through the intersection without stopping.

Level of Service B describes operations with control delay between 10 and 20 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is highly favorable or the cycle length is short. More vehicles stop than with LOS A.

Level of Service C describes operations with control delay between 20 and 35 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when progression is favorable or the cycle length is moderate. Individual *cycle failures* (i.e., one or more queued vehicles are not able to depart as a result of insufficient capacity during the cycle) may begin to appear at this level. The number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.

Level of Service D describes operations with control delay between 35 and 55 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high and either progression is ineffective or the cycle length is long. Many vehicles stop and individual cycle failures are noticeable.

Level of Service E describes operations with control delay between 55 and 80 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high, progression is unfavorable, and the cycle length is long. Individual cycle failures are frequent.

Level of Service F describes operations with control delay exceeding 80 s/veh or a volume-to-capacity ratio greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.

Reference: Highway Capacity Manual 6, Transportation Research Board, 2016.

LEVEL OF SERVICE
FOR TWO-WAY
STOP SIGN CONTROLLED INTERSECTIONS

The level of service for a TWSC (two-way stop controlled) intersection is determined by the computed or measured control delay and is defined for each minor movement. Level of service is not defined for the intersection as a whole. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. LOS criteria are given in the Table**.** LOS criteria are given below:

LEVEL-OF SERVICE CRITERIA FOR AWSC INTERSECTIONS	
LOS[1]	**CONTROL DELAY (s/veh)**
A	**≤ 10**
B	**> 10 AND ≤ 15**
C	**> 15 AND ≤ 25**
D	**> 25 AND ≤ 35**
E	**> 35 AND ≤ 50**
F	**> 50**

Note: LOS criteria apply to each lane on a given approach and to each approach on the minor street.
LOS is not calculated for major-street approaches or for the intersection as a whole.
LOS F is assigned to a movement if the volume-to-capacity ratio exceeds 1.0, regardless of the control delay

Reference: Highway Capacity Manual Version 6.0, Transportation Research Board, 2016.

Full Capacity Analysis Summary - Future (2025) Conditions

INTERSECTION/LANE GROUP	LEVEL OF SERVICE			
	A.M. PEAK HOUR		P.M. PEAK HOUR	
	BACKGROUND	COMBINED	BACKGROUND	COMBINED
Signalized				
1. Greenwich Avenue at Tresser Boulevard (US Route 1)				
Eastbound Left	B	B	B	B
Eastbound Through/Right	B	B	B	C
Westbound Left	B	B	B	B
Westbound Through/Right	B	B	B	B
Northbound Left	C	C	C	C
Northbound Through	D	D	D	D
Northbound Right	B	B	C	C
Southbound Left	C	C	C	C
Southbound Through	D	D	C	C
Southbound Right	A	A	A	A
Overall	***C***	***C***	***C***	***C***
2. Greenwich Avenue at Richmond Hill Avenue				
Eastbound Left/Through/Right	E	E	E	E
Westbound Left/Through/Right	D	D	C	C
Northbound Left/Through/Right	D	D	D	D
Southbound Left/Through/Right	B	B	C	C
Overall	***D***	***D***	***D***	***D***
3. Greenwich Avenue at South State Street/I-95 NB Off Ramp				
Eastbound Left	D	D	D	D
Eastbound Through	D	D	D	D
Eastbound Right	A	A	A	A
Northbound Through	C	C	D	E
Northbound Right	B	B	C	D
Southbound Left	C	C	B	C
Southbound Through	C	C	B	B
Overall	***C***	***C***	***D***	***D***
4. Clinton Avenue at Tresser Boulevard (US Route 1)				
Eastbound Left	A	A	A	A
Eastbound Through/Right	A	A	A	B
Westbound Left	B	B	B	B
Westbound Through	C	C	B	B
Westbound Right	C	C	B	B
Northbound Left/Through/Right	D	E	E	E
Southbound Left/Through/Right	E	E	E	D
Overall	***C***	***C***	***B***	***B***
6. Clinton Avenue at Richmond Hill Avenue				
Eastbound Left/Through/Right	D	D	B	C
Westbound Left	C	C	B	B
Westbound Through/Right	C	C	B	B
Northbound Left/Through/Right	A	A	C	C
Northbound Right	A	A	A	B
Southbound Left/Through/Right	B	B	C	D
Overall	***C***	***C***	***B***	***C***

Full Capacity Analysis Summary - Future (2025) Conditions (Continued)

INTERSECTION/LANE GROUP	LEVEL OF SERVICE			
	A.M. PEAK HOUR		P.M. PEAK HOUR	
	BACKGROUND	COMBINED	BACKGROUND	COMBINED
Signalized				
7. Washington Boulevard at Tresser Boulevard (US Route 1)				
Eastbound Left	E	E	E	E
Eastbound Through/Right	D	D	D	D
Westbound Left	E	E	D	D
Westbound Through/Right	D	D	D	D
Northbound Left	E	E	D	D
Northbound Through	D	D	D	D
Northbound Right	C	C	D	D
Southbound Left	E	E	F	F
Southbound Through	C	C	D	D
Southbound Right	C	C	C	C
Overall	***D***	***D***	***D***	***D***
8. Washington Boulevard at Division Street				
Eastbound Left/Through	D	D	D	D
Eastbound Right	B	B	B	B
Westbound Left/Through/Right	A	A	A	A
Northbound Left	A	A	A	A
Northbound Through/Right	A	A	A	A
Southbound left	A	A	A	A
Southbound Through/Right	A	A	A	A
Overall	***A***	***A***	***A***	***A***
9. Washington Boulevard at Richmond Hill Avenue				
Eastbound Left	E	E	E	E
Eastbound Through/Right	D	E	D	D
Westbound Left/Through/Right	D	D	C	C
Northbound Left	D	D	D	D
Northbound Through/Right	A	A	B	B
Southbound Left/Through/Right	A	A	B	B
Overall	***B***	***B***	***C***	***C***
10. Washington Boulevard at North State Street/I-95 Westbound On Ramp				
Westbound Left	D	D	D	D
Westbound Through	C	C	C	C
Westbound Right	E	E	E	E
Northbound Left	C	C	B	C
Northbound Through	B	B	B	B
Southbound Through	C	C	B	B
Southbound Right	C	C	A	A
Overall	***C***	***C***	***B***	***B***

Full Capacity Analysis Summary - Future (2025) Conditions (Continued)

INTERSECTION/LANE GROUP	LEVEL OF SERVICE			
	A.M. PEAK HOUR		P.M. PEAK HOUR	
	BACKGROUND	COMBINED	BACKGROUND	COMBINED
Unsignalized				
5. Clinton Avenue at Division Street				
Westbound Left/Right	B	B	A	B
Southbound Left	A	A	A	A
11. Clinton Avenue at Proposed Parking Garage Access				
Northbound Left		A		A
Eastbound Left/Through/Right		B		B
Westbound left/Through/Right		B		B
Southbound Left		A		A

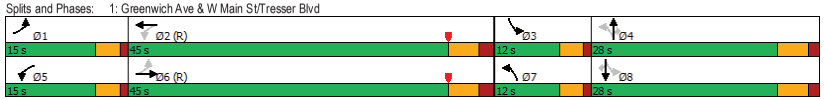
Notes: LOS calculations were performed using *Synchro 11*.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	66	347	46	214	562	82	51	230	148	36	209	66
Future Volume (vph)	66	347	46	214	562	82	51	230	148	36	209	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50		0	150		0	50		50	40		20
Storage Lanes	1		0	1		0	1		1	1		2
Taper Length (ft)	80			90			75			50		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	0.95	1.00
Frt		0.982			0.981				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3476	0	1770	3472	0	1770	1863	1583	1770	3539	1425
Flt Permitted	0.367			0.448			0.547			0.405		
Satd. Flow (perm)	684	3476	0	835	3472	0	1019	1863	1583	754	3539	1425
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		17			19				116			116
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		331			563			929			334	
Travel Time (s)		7.5			12.8			21.1			7.6	
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
Parking (#/hr)						0						0
Adj. Flow (vph)	72	377	50	233	611	89	55	250	161	39	227	72
Shared Lane Traffic (%)												
Lane Group Flow (vph)	72	427	0	233	700	0	55	250	161	39	227	72
Number of Detectors	1	1		1	1		1	1	1	1	2	1
Detector Template												
Leading Detector (ft)	40	50		40	50		40	40	40	40	100	50
Trailing Detector (ft)	-10	0		-10	0		-10	-10	-10	-10	-10	0
Detector 1 Position(ft)	-10	0		-10	0		-10	-10	-10	-10	-10	0
Detector 1 Size(ft)	50	50		50	50		50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)											94	
Detector 2 Size(ft)											6	
Detector 2 Type											Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)											0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6			2			4		4	8		8
Detector Phase	1	6		5	2		7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	4.0	20.0		4.0	20.0		4.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.0	32.6		8.0	32.6		8.0	36.2	36.2	8.0	36.2	36.2
Total Split (s)	15.0	45.0		15.0	45.0		12.0	28.0	28.0	12.0	28.0	28.0
Total Split (%)	15.0%	45.0%		15.0%	45.0%		12.0%	28.0%	28.0%	12.0%	28.0%	28.0%
Maximum Green (s)	11.0	39.4		11.0	39.4		8.0	22.8	22.8	8.0	22.8	22.8
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.7	3.7	3.0	3.7	3.7
All-Red Time (s)	1.0	1.9		1.0	1.9		1.0	1.5	1.5	1.0	1.5	1.5
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)	4.0	5.6		4.0	5.6		4.0	5.2	5.2	4.0	5.2	5.2
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.0	3.0		1.0	3.0		1.0	2.0	2.0	1.0	2.0	2.0
Recall Mode	None	C-Min		None	C-Min		None	None	None	None	None	None
Walk Time (s)		7.0			7.0			7.0	7.0		7.0	7.0
Flash Dont Walk (s)		20.0			20.0			24.0	24.0		24.0	24.0
Pedestrian Calls (#/hr)		10			10			10	10		10	10
Act Effct Green (s)	57.2	50.1		64.4	55.1		25.4	20.2	20.2	23.5	17.9	17.9
Actuated g/C Ratio	0.57	0.50		0.64	0.55		0.25	0.20	0.20	0.24	0.18	0.18
v/c Ratio	0.16	0.24		0.38	0.36		0.18	0.67	0.39	0.17	0.36	0.21
Control Delay	10.9	17.1		11.4	16.1		24.1	44.6	13.0	23.8	36.0	2.7
Queue Delay	0.0	0.0		0.0	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	10.9	17.1		11.4	16.1		24.1	44.6	13.0	23.8	36.0	2.7
LOS	B	B		B	B		C	D	B	C	D	A
Approach Delay		16.2			14.9			31.3			27.5	
Approach LOS		B			B			C			C	
Queue Length 50th (ft)	16	76		57	127		26	153	24	18	67	0
Queue Length 95th (ft)	48	152		137	243		43	196	67	34	86	11
Internal Link Dist (ft)		251			483			849			254	
Turn Bay Length (ft)	50			150			50		50	40		20
Base Capacity (vph)	545	1812		645	1955		326	458	477	273	864	435
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	0.13	0.24		0.36	0.36		0.17	0.55	0.34	0.14	0.26	0.17

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 75 (75%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.67			
Intersection Signal Delay: 20.5		Intersection LOS: C	
Intersection Capacity Utilization 59.6%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: Greenwich Ave & W Main St/Tresser Blvd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	41	128	41	123	112	20	20	419	245	20	449	51
Future Volume (vph)	41	128	41	123	112	20	20	419	245	20	449	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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
Frt		0.973			0.989			0.952			0.987	
Flt Protected		0.990			0.976			0.999			0.998	
Satd. Flow (prot)	0	1794	0	0	1798	0	0	1772	0	0	1835	0
Flt Permitted		0.869			0.507			0.976			0.959	
Satd. Flow (perm)	0	1575	0	0	934	0	0	1731	0	0	1763	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		371			483			829			929	
Travel Time (s)		8.4			11.0			18.8			21.1	
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
Adj. Flow (vph)	45	139	45	134	122	22	22	455	266	22	488	55
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	229	0	0	278	0	0	743	0	0	565	0
Number of Detectors	1	1		1	1		1	0		1	0	
Detector Template	Left			Left			Left			Left		
Leading Detector (ft)	20	52		20	52		20	0		20	0	
Trailing Detector (ft)	0	2		0	2		0	0		0	0	
Detector 1 Position(ft)	0	2		0	2		0	0		0	0	
Detector 1 Size(ft)	20	50		20	50		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm	NA		D.P+P	NA		Perm	NA		Perm	NA	
Protected Phases		4		3	3 4			2			2	
Permitted Phases	4			4			2			2		
Detector Phase	4	4		3	3 4		2	2		2	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0			15.0	15.0		15.0	15.0	
Minimum Split (s)	24.1	24.1		9.0			24.5	24.5		24.5	24.5	
Total Split (s)	30.0	30.0		20.0			70.0	70.0		70.0	70.0	
Total Split (%)	25.0%	25.0%		16.7%			58.3%	58.3%		58.3%	58.3%	
Maximum Green (s)	24.9	24.9		16.0			64.5	64.5		64.5	64.5	
Yellow Time (s)	3.3	3.3		3.0			3.3	3.3		3.3	3.3	
All-Red Time (s)	1.8	1.8		1.0			2.2	2.2		2.2	2.2	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		5.1						5.5			5.5	
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?	Yes	Yes		Yes								
Vehicle Extension (s)	2.0	2.0		2.0			3.0	3.0		3.0	3.0	
Recall Mode	None	None		None			C-Min	C-Min		C-Min	C-Min	
Walk Time (s)	7.0	7.0					7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	12.0	12.0					12.0	12.0		12.0	12.0	
Pedestrian Calls (#/hr)	10	10					10	10		10	10	
Act Effct Green (s)		20.1			36.7			69.8			69.8	
Actuated g/C Ratio		0.17			0.31			0.58			0.58	
v/c Ratio		0.87			0.70			0.74			0.55	
Control Delay		78.6			40.5			38.1			19.3	
Queue Delay		0.0			0.0			0.3			0.0	
Total Delay		78.6			40.5			38.4			19.3	
LOS		E			D			D			B	
Approach Delay		78.6			40.5			38.4			19.3	
Approach LOS		E			D			D			B	
Queue Length 50th (ft)		173			160			579			274	
Queue Length 95th (ft)		#260			231			721			400	
Internal Link Dist (ft)		291			403			749			849	
Turn Bay Length (ft)												
Base Capacity (vph)		326			449			1007			1025	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0			0			41			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.70			0.62			0.77			0.55	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 56 (47%), Referenced to phase 2:NBSB, Start of Yellow			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.87			
Intersection Signal Delay: 37.9		Intersection LOS: D	
Intersection Capacity Utilization 82.5%		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.			

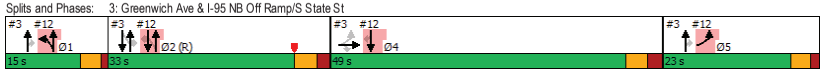
Splits and Phases: 2: Greenwich Ave & Richmond Hill Ave

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø1	Ø5
Lane Configurations														
Traffic Volume (vph)	480	754	367	0	0	0	0	235	152	102	511	0		
Future Volume (vph)	480	754	367	0	0	0	0	235	152	102	511	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Storage Length (ft)	225		225	0		0	0		50	75		230		
Storage Lanes	1		1	0		0	0		1	1		1		
Taper Length (ft)	200			25			25			50				
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00		
Frt			0.850						0.850					
Flt Protected	0.950									0.950				
Satd. Flow (prot)	1770	3539	1583	0	0	0	0	1863	1583	1770	3539	0		
Flt Permitted	0.950									0.601				
Satd. Flow (perm)	1770	3539	1583	0	0	0	0	1863	1583	1120	3539	0		
Right Turn on Red			Yes			Yes			Yes			Yes		
Satd. Flow (RTOR)			399						52					
Link Speed (mph)		30			30			30			30			
Link Distance (ft)		849			537			214			829			
Travel Time (s)		19.3			12.2			4.9			18.8			
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		
Adj. Flow (vph)	522	820	399	0	0	0	0	255	165	111	555	0		
Shared Lane Traffic (%)														
Lane Group Flow (vph)	522	820	399	0	0	0	0	255	165	111	555	0		
Number of Detectors	1	1	1					0	0	1	1			
Detector Template														
Leading Detector (ft)	16	16	16					0	0	15	15			
Trailing Detector (ft)	0	0	0					0	0	-5	-5			
Detector 1 Position(ft)	0	0	0					0	0	-5	-5			
Detector 1 Size(ft)	16	16	16					6	20	20	20			
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel														
Detector 1 Extend (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0			
Turn Type	Perm	NA	Perm					NA	Perm	Perm	NA			
Protected Phases		4						1 2 5			2		1	5
Permitted Phases	4		4						1 2 5	2				
Detector Phase	4	4	4					1	1	2	2			
Switch Phase														
Minimum Initial (s)	7.0	7.0	7.0							15.0	15.0		5.0	5.0
Minimum Split (s)	31.6	31.6	31.6							32.4	32.4		9.0	22.4
Total Split (s)	49.0	49.0	49.0							33.0	33.0		15.0	23.0
Total Split (%)	40.8%	40.8%	40.8%							27.5%	27.5%		13%	19%
Maximum Green (s)	43.4	43.4	43.4							27.6	27.6		11.0	18.6
Yellow Time (s)	3.3	3.3	3.3							3.3	3.3		3.0	3.0
All-Red Time (s)	2.3	2.3	2.3							2.1	2.1		1.0	1.4
Lost Time Adjust (s)	0.0	0.0	0.0							0.0	0.0			
Total Lost Time (s)	5.6	5.6	5.6							5.4	5.4			
Lead/Lag										Lag	Lag		Lead	
Lead-Lag Optimize?										Yes	Yes		Yes	
Vehicle Extension (s)	2.0	2.0	2.0							3.0	3.0		1.0	2.0
Recall Mode	None	None	None							C-Min	C-Min		None	None
Walk Time (s)	7.0	7.0	7.0							7.0	7.0			7.0
Flash Dont Walk (s)	19.0	19.0	19.0							20.0	20.0			11.0
Pedestrian Calls (#/hr)	10	10	10							10	10			10
Act Effct Green (s)	40.3	40.3	40.3					70.1	70.1	50.8	50.8			
Actuated g/C Ratio	0.34	0.34	0.34					0.58	0.58	0.42	0.42			
v/c Ratio	0.88	0.69	0.50					0.23	0.17	0.23	0.37			
Control Delay	54.1	37.4	4.9					13.6	9.2	24.1	22.6			
Queue Delay	0.0	0.0	0.0					6.5	2.4	0.0	0.0			
Total Delay	54.1	37.4	4.9					20.1	11.6	24.1	22.6			
LOS	D	D	A					C	B	C	C			
Approach Delay		34.9						16.8			22.8			
Approach LOS		C						B			C			
Queue Length 50th (ft)	371	281	0					93	38	37	102			
Queue Length 95th (ft)	#540	344	65					145	76	m88	190			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø1	Ø5
Internal Link Dist (ft)		769			457			134			749			
Turn Bay Length (ft)	225		225						50	75				
Base Capacity (vph)	652	1303	835					1080	940	473	1496			
Starvation Cap Reductn	0	0	0					764	655	0	0			
Spillback Cap Reductn	0	0	0					109	0	0	0			
Storage Cap Reductn	0	0	0					0	0	0	0			
Reduced v/c Ratio	0.80	0.63	0.48					0.81	0.58	0.23	0.37			

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 39 (33%), Referenced to phase 2:NBSB, Start of Yellow			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay: 29.4		Intersection LOS: C	
Intersection Capacity Utilization 64.0%		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: 3: Greenwich Ave & I-95 NB Off Ramp/S State St

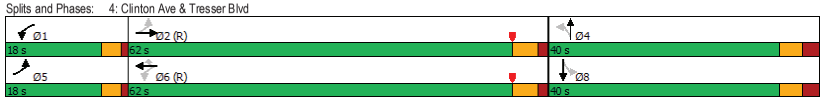


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	87	403	41	90	792	51	10	20	10	15	31	56
Future Volume (vph)	87	403	41	90	792	51	10	20	10	15	31	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	140		0	100		0	0		0	0		0
Storage Lanes	1		0	1		1	0		0	0		0
Taper Length (ft)	90			65			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.986				0.850		0.966			0.926	
Flt Protected	0.950			0.950				0.988			0.993	
Satd. Flow (prot)	1770	3490	0	1770	3539	1583	0	1778	0	0	1713	0
Flt Permitted	0.303			0.473				0.913			0.949	
Satd. Flow (perm)	564	3490	0	881	3539	1583	0	1643	0	0	1637	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		563			677			500			579	
Travel Time (s)		12.8			15.4			11.4			13.2	
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
Parking (#/hr)			0									0
Adj. Flow (vph)	95	438	45	98	861	55	11	22	11	16	34	61
Shared Lane Traffic (%)												
Lane Group Flow (vph)	95	483	0	98	861	55	0	44	0	0	111	0
Number of Detectors	4	1		4	1	1	1	1		1	1	
Detector Template							Left			Left		
Leading Detector (ft)	33	50		36	50	50	20	106		20	106	
Trailing Detector (ft)	-9	0		-6	0	0	0	100		0	100	
Detector 1 Position(ft)	-9	0		-6	0	0	0	100		0	100	
Detector 1 Size(ft)	6	50		6	50	50	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)	3			6								
Detector 2 Size(ft)	6			6								
Detector 2 Type	Cl+Ex			Cl+Ex								
Detector 2 Channel												
Detector 2 Extend (s)	0.0			0.0								
Detector 3 Position(ft)	15			18								
Detector 3 Size(ft)	6			6								
Detector 3 Type	Cl+Ex			Cl+Ex								
Detector 3 Channel												
Detector 3 Extend (s)	0.0			0.0								
Detector 4 Position(ft)	27			30								
Detector 4 Size(ft)	6			6								
Detector 4 Type	Cl+Ex			Cl+Ex								
Detector 4 Channel												
Detector 4 Extend (s)	0.0			0.0								
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2			6		6	4			8		
Detector Phase	5	2		1	6	6	4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0	15.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	9.0	27.3		9.0	27.3	27.3	39.9	39.9		39.9	39.9	
Total Split (s)	18.0	62.0		18.0	62.0	62.0	40.0	40.0		40.0	40.0	
Total Split (%)	15.0%	51.7%		15.0%	51.7%	51.7%	33.3%	33.3%		33.3%	33.3%	
Maximum Green (s)	14.0	56.7		14.0	56.7	56.7	34.1	34.1		34.1	34.1	
Yellow Time (s)	3.0	3.7		3.0	3.7	3.7	3.3	3.3		3.3	3.3	
All-Red Time (s)	1.0	1.6		1.0	1.6	1.6	2.6	2.6		2.6	2.6	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0			0.0	
Total Lost Time (s)	4.0	5.3		4.0	5.3	5.3		5.9			5.9	
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vehicle Extension (s)	2.0	3.0		2.0	3.0	3.0	2.0	2.0		2.0	2.0	
Recall Mode	None	C-Min		None	C-Min	C-Min	None	None		None	None	
Walk Time (s)		7.0			7.0	7.0	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		15.0			15.0	15.0	27.0	27.0		27.0	27.0	
Pedestrian Calls (#/hr)		10			10	10	10	10		10	10	
Act Effct Green (s)	91.9	84.3		92.1	84.4	84.4		14.1			14.1	
Actuated g/C Ratio	0.77	0.70		0.77	0.70	0.70		0.12			0.12	
v/c Ratio	0.19	0.20		0.14	0.35	0.05		0.23			0.58	
Control Delay	5.2	8.1		11.5	23.8	20.5		46.2			59.4	
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	
Total Delay	5.2	8.1		11.5	23.8	20.5		46.2			59.4	
LOS	A	A		B	C	C		D			E	
Approach Delay		7.6			22.4			46.2			59.4	
Approach LOS		A			C			D			E	
Queue Length 50th (ft)	10	52		19	305	31		32			86	
Queue Length 95th (ft)	48	142		m83	340	m56		55			116	
Internal Link Dist (ft)		483			597			420			499	
Turn Bay Length (ft)	140			100								
Base Capacity (vph)	591	2452		808	2488	1112		466			465	
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	0.16	0.20		0.12	0.35	0.05		0.09			0.24	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 69 (58%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.58			
Intersection Signal Delay: 20.5		Intersection LOS: C	
Intersection Capacity Utilization 46.2%		ICU Level of Service A	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 4: Clinton Ave & Tresser Blvd



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	26	5	26	82	45	148
Future Volume (vph)	26	5	26	82	45	148
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.980		0.897			
Flt Protected	0.959					0.988
Satd. Flow (prot)	1751	0	1671	0	0	1656
Flt Permitted	0.959					0.988
Satd. Flow (perm)	1751	0	1671	0	0	1656
Link Speed (mph)	30		30			30
Link Distance (ft)	511		390			500
Travel Time (s)	11.6		8.9			11.4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Parking (#/hr)		0		0		0
Adj. Flow (vph)	28	5	28	89	49	161
Shared Lane Traffic (%)						
Lane Group Flow (vph)	33	0	117	0	0	210
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 26.9%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	26	5	26	82	45	148
Future Vol, veh/h	26	5	26	82	45	148
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, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	28	5	28	89	49	161

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	332	73	0	0	117	0
Stage 1	73	-	-	-	-	-
Stage 2	259	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	663	989	-	-	1471	-
Stage 1	950	-	-	-	-	-
Stage 2	784	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	638	989	-	-	1471	-
Mov Cap-2 Maneuver	638	-	-	-	-	-
Stage 1	950	-	-	-	-	-
Stage 2	755	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.6	0	1.8
HCM LOS	B		

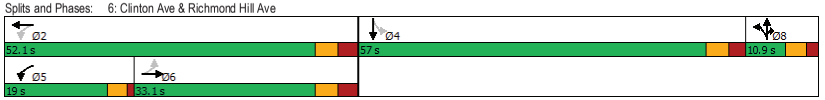
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	677	1471	-
HCM Lane V/C Ratio	-	-	0.05	0.033	-
HCM Control Delay (s)	-	-	10.6	7.5	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0.1	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	102	148	143	82	184	5	0	0	0	51	51	71
Future Volume (vph)	102	148	143	82	184	5	0	0	0	51	51	71
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	25		0	275		0	0		0	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	50			40			25			25		
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt		0.946			0.996						0.944	
Flt Protected		0.987		0.950							0.986	
Satd. Flow (prot)	0	3305	0	1770	1855	0	0	1770	1770	0	1734	0
Flt Permitted		0.809		0.309							0.950	
Satd. Flow (perm)	0	2709	0	576	1855	0	0	1770	1770	0	1671	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		85			1						37	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		483			426			296			390	
Travel Time (s)		11.0			9.7			6.7			8.9	
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
Adj. Flow (vph)	111	161	155	89	200	5	0	0	0	55	55	77
Shared Lane Traffic (%)									0%			
Lane Group Flow (vph)	0	427	0	89	205	0	0	0	0	0	187	0
Number of Detectors	1	0		1	1		1	1	1	1	1	
Detector Template	Left						Left			Left		
Leading Detector (ft)	20	0		48	48		20	40	40	20	45	
Trailing Detector (ft)	0	0		-2	-2		0	-10	-10	0	-5	
Detector 1 Position(ft)	0	0		-2	-2		0	-10	-10	0	-5	
Detector 1 Size(ft)	20	6		50	50		20	50	50	20	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Turn Type	Perm	NA		pm+pt	NA				Prot	Perm	NA	
Protected Phases		6		5	2		8	8	8		4	
Permitted Phases	6			2						4		
Detector Phase	6	6		5	2		8	8	8	4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		6.0	6.0	6.0	6.0	6.0	
Minimum Split (s)	31.4	31.4		19.0	31.4		10.9	10.9	10.9	29.7	29.7	
Total Split (s)	33.1	33.1		19.0	52.1		10.9	10.9	10.9	57.0	57.0	
Total Split (%)	27.6%	27.6%		15.8%	43.4%		9.1%	9.1%	9.1%	47.5%	47.5%	
Maximum Green (s)	26.7	26.7		15.0	45.7		6.0	6.0	6.0	51.3	51.3	
Yellow Time (s)	3.3	3.3		3.0	3.3		3.0	3.0	3.0	3.3	3.3	
All-Red Time (s)	3.1	3.1		1.0	3.1		1.9	1.9	1.9	2.4	2.4	
Lost Time Adjust (s)		0.0		0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)		6.4		4.0	6.4			4.9	4.9		5.7	
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?	Yes	Yes		Yes								
Vehicle Extension (s)	3.0	3.0		5.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	Min	Min		None	Min		None	None	None	None	None	
Walk Time (s)	7.0	7.0			7.0					7.0	7.0	
Flash Dont Walk (s)	18.0	18.0			18.0					17.0	17.0	
Pedestrian Calls (#/hr)	10	10			10					10	10	
Act Effct Green (s)		19.2		36.2	33.7						51.8	
Actuated g/C Ratio		0.20		0.37	0.34						0.53	
v/c Ratio		0.71		0.22	0.32						0.21	
Control Delay		37.1		20.6	24.0						12.1	
Queue Delay		0.0		0.0	0.0						0.0	
Total Delay		37.1		20.6	24.0						12.1	
LOS		D		C	C						B	
Approach Delay		37.1			23.0						12.1	
Approach LOS		D			C						B	
Queue Length 50th (ft)		111		36	91						50	
Queue Length 95th (ft)		165		68	146						102	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		403			346			216			310	
Turn Bay Length (ft)				275								
Base Capacity (vph)		809		397	876						903	
Starvation Cap Reductn		0		0	0						0	
Spillback Cap Reductn		0		0	0						0	
Storage Cap Reductn		0		0	0						0	
Reduced v/c Ratio		0.53		0.22	0.23						0.21	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 97.8			
Natural Cycle: 95			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay: 27.4		Intersection LOS: C	
Intersection Capacity Utilization 50.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 6: Clinton Ave & Richmond Hill Ave



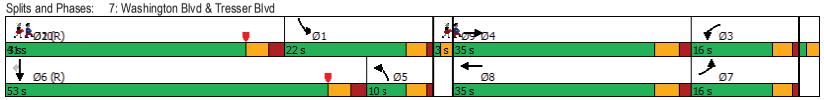
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø9	Ø10
Lane Configurations														
Traffic Volume (vph)	111	374	46	161	611	81	59	873	138	89	1041	59		
Future Volume (vph)	111	374	46	161	611	81	59	873	138	89	1041	59		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Storage Length (ft)	320		0	180		0	200		230	200		250		
Storage Lanes	1		0	1		0	1		1	1		1		
Taper Length (ft)	50			60			25			50				
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	0.95	1.00	1.00	0.95	1.00		
Frt		0.984			0.982				0.850			0.850		
Flt Protected	0.950			0.950			0.950			0.950				
Satd. Flow (prot)	1770	5004	0	1770	4994	0	1770	3539	1583	1770	3539	1583		
Flt Permitted	0.950			0.950			0.950			0.950				
Satd. Flow (perm)	1770	5004	0	1770	4994	0	1770	3539	1583	1770	3539	1583		
Right Turn on Red			No			No			No			No		
Satd. Flow (RTOR)														
Link Speed (mph)		30			30			30			30			
Link Distance (ft)		677			703			578			404			
Travel Time (s)		15.4			16.0			13.1			9.2			
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		
Adj. Flow (vph)	121	407	50	175	664	88	64	949	150	97	1132	64		
Shared Lane Traffic (%)														
Lane Group Flow (vph)	121	457	0	175	752	0	64	949	150	97	1132	64		
Number of Detectors	1	1		1	1		1	1	1	1	1	1		
Detector Template														
Leading Detector (ft)	40	45		40	45		40	45	45	40	45	45		
Trailing Detector (ft)	-10	-5		-10	-5		-10	-5	-5	-10	-5	-5		
Detector 1 Position(ft)	-10	-5		-10	-5		-10	-5	-5	-10	-5	-5		
Detector 1 Size(ft)	50	50		50	50		50	50	50	50	50	50		
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		
Detector 1 Channel														
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	Perm		
Protected Phases	7	4		3	8		5	2		1	6		9	10
Permitted Phases									2			6		
Detector Phase	7	4		3	8		5	2	2	1	6	6		
Switch Phase														
Minimum Initial (s)	5.0	10.0		5.0	10.0		5.0	15.0	15.0	5.0	15.0	15.0	1.0	1.0
Minimum Split (s)	9.0	30.4		9.0	30.4		9.0	30.6	30.6	9.0	30.6	30.6	3.0	3.0
Total Split (s)	16.0	35.0		16.0	35.0		10.0	41.0	41.0	22.0	53.0	53.0	3.0	3.0
Total Split (%)	13.3%	29.2%		13.3%	29.2%		8.3%	34.2%	34.2%	18.3%	44.2%	44.2%	3%	3%
Maximum Green (s)	12.0	29.6		12.0	29.6		6.0	35.4	35.4	18.0	47.4	47.4	1.0	1.0
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.3	3.3	3.0	3.3	3.3	2.0	2.0
All-Red Time (s)	1.0	1.7		1.0	1.7		1.0	2.3	2.3	1.0	2.3	2.3	0.0	0.0
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)	4.0	5.4		4.0	5.4		4.0	5.6	5.6	4.0	5.6	5.6		
Lead/Lag	Lag	Lead		Lag	Lead		Lag	Lead	Lead	Lag	Lead	Lead		
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes		
Vehicle Extension (s)	1.0	3.0		1.0	3.0		1.0	3.0	3.0	1.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None		None	C-Min	C-Min	None	C-Min	C-Min	None	None
Walk Time (s)		4.0			4.0			4.0	4.0		4.0	4.0		
Flash Dont Walk (s)		21.0			21.0			21.0	21.0		21.0	21.0		
Pedestrian Calls (#/hr)		30			30			30	30		30	30		
Act Effct Green (s)	14.0	20.5		17.9	24.5		6.6	48.6	48.6	14.0	57.8	57.8		
Actuated g/C Ratio	0.12	0.17		0.15	0.20		0.06	0.40	0.40	0.12	0.48	0.48		
v/c Ratio	0.59	0.53		0.66	0.74		0.67	0.66	0.23	0.47	0.66	0.08		
Control Delay	68.5	44.3		60.7	49.2		67.5	35.4	31.7	55.8	28.2	20.6		
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.2	0.0		
Total Delay	68.5	44.3		60.7	49.2		67.5	35.4	31.7	55.8	28.4	20.6		
LOS	E	D		E	D		E	D	C	E	C	C		
Approach Delay		49.3			51.4			36.7			30.0			
Approach LOS		D			D			D			C			
Queue Length 50th (ft)	98	119		129	200		48	216	56	69	394	30		
Queue Length 95th (ft)	159	151		204	236		m#121	323	116	123	473	58		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø9	Ø10
Internal Link Dist (ft)		597			623			498			324			
Turn Bay Length (ft)	320			180			200		230	200		250		
Base Capacity (vph)	222	1234		264	1231		99	1432	640	265	1703	761		
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0		
Spillback Cap Reductn	0	0		0	0		0	0	0	0	113	0		
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0		
Reduced v/c Ratio	0.55	0.37		0.66	0.61		0.65	0.66	0.23	0.37	0.71	0.08		

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 95
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.74
Intersection Signal Delay: 39.8 Intersection LOS: D
Intersection Capacity Utilization 68.5% 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: 7: Washington Blvd & Tresser Blvd



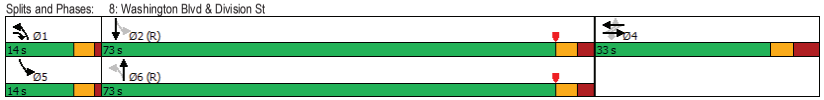
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	0	20	0	0	0	26	1307	0	5	1426	41
Future Volume (vph)	24	0	20	0	0	0	26	1307	0	5	1426	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		170	0		0	0		0	100		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25			25			25			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								0.996	
Flt Protected		0.950					0.950			0.950		
Satd. Flow (prot)	0	1770	1583	0	1863	0	1770	3539	0	1770	3525	0
Flt Permitted		0.757					0.102			0.153		
Satd. Flow (perm)	0	1410	1583	0	1863	0	190	3539	0	285	3525	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			27								4	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		511			252			356			578	
Travel Time (s)		11.6			5.7			8.1			13.1	
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
Adj. Flow (vph)	26	0	22	0	0	0	28	1421	0	5	1550	45
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	26	22	0	0	0	28	1421	0	5	1595	0
Number of Detectors	1	4	4	1	1		4	1		4	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	32	32	20	6		39	50		36	50	
Trailing Detector (ft)	0	-10	-10	0	0		-3	0		-6	0	
Detector 1 Position(ft)	0	-10	-10	0	0		-3	0		-6	0	
Detector 1 Size(ft)	20	6	6	20	6		6	50		6	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		2	2				9			6		
Detector 2 Size(ft)		6	6				6			6		
Detector 2 Type		Cl+Ex	Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)		0.0	0.0				0.0			0.0		
Detector 3 Position(ft)		14	14				21			18		
Detector 3 Size(ft)		6	6				6			6		
Detector 3 Type		Cl+Ex	Cl+Ex				Cl+Ex			Cl+Ex		
Detector 3 Channel												
Detector 3 Extend (s)		0.0	0.0				0.0			0.0		
Detector 4 Position(ft)		26	26				33			30		
Detector 4 Size(ft)		6	6				6			6		
Detector 4 Type		Cl+Ex	Cl+Ex				Cl+Ex			Cl+Ex		
Detector 4 Channel												
Detector 4 Extend (s)		0.0	0.0				0.0			0.0		
Turn Type	Perm	NA	pm+ov				pm+pt	NA		pm+pt	NA	
Protected Phases		4	1		4		1	6		5	2	
Permitted Phases	4		4	4			6			2		
Detector Phase	4	4	1	4	4		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	15.0		5.0	15.0	
Minimum Split (s)	32.2	32.2	9.0	32.2	32.2		9.0	21.0		9.0	35.0	
Total Split (s)	33.0	33.0	14.0	33.0	33.0		14.0	73.0		14.0	73.0	
Total Split (%)	27.5%	27.5%	11.7%	27.5%	27.5%		11.7%	60.8%		11.7%	60.8%	
Maximum Green (s)	25.8	25.8	10.0	25.8	25.8		10.0	67.0		10.0	67.0	
Yellow Time (s)	3.3	3.3	3.0	3.3	3.3		3.0	3.3		3.0	3.3	
All-Red Time (s)	3.9	3.9	1.0	3.9	3.9		1.0	2.7		1.0	2.7	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		7.2	4.0		7.2		4.0	6.0		4.0	6.0	
Lead/Lag			Lead				Lead	Lag		Lead	Lag	
Lead-Lag Optimize?			Yes				Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	3.0		2.0	3.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0						7.0	
Flash Dont Walk (s)	18.0	18.0		18.0	18.0						22.0	
Pedestrian Calls (#/hr)	30	30		30	30						30	
Act Effct Green (s)		17.1	27.2				93.5	91.5		90.6	85.8	
Actuated g/C Ratio		0.14	0.23				0.78	0.76		0.76	0.72	
v/c Ratio		0.13	0.06				0.13	0.53		0.02	0.63	
Control Delay		45.8	11.2				4.1	7.3		2.0	6.3	
Queue Delay		0.0	0.0				0.0	0.0		0.0	0.3	
Total Delay		45.8	11.2				4.1	7.3		2.0	6.6	
LOS		D	B				A	A		A	A	
Approach Delay		29.9						7.3			6.6	
Approach LOS		C						A			A	
Queue Length 50th (ft)		16	0				5	272		1	143	
Queue Length 95th (ft)		44	18				m6	305		m1	161	
Internal Link Dist (ft)		431			172			276			498	
Turn Bay Length (ft)			170							100		
Base Capacity (vph)		303	440				280	2698		347	2521	
Starvation Cap Reductn		0	0				0	112		0	351	
Spillback Cap Reductn		0	0				0	0		0	10	
Storage Cap Reductn		0	0				0	0		0	0	
Reduced v/c Ratio		0.09	0.05				0.10	0.55		0.01	0.74	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 36 (30%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay: 7.3		Intersection LOS: A	
Intersection Capacity Utilization 55.9%		ICU Level of Service B	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: Washington Blvd & Division St

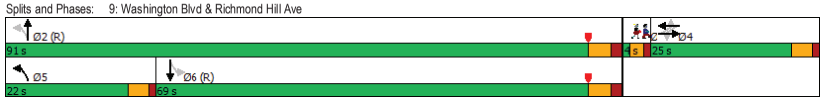


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø3
Lane Configurations													
Traffic Volume (vph)	107	0	92	0	0	5	230	1220	5	5	1400	41	
Future Volume (vph)	107	0	92	0	0	5	230	1220	5	5	1400	41	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	0		0	0		0	140		0	0		0	
Storage Lanes	1		0	0		0	1		0	0		0	
Taper Length (ft)	25			25			80			25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	
Frt		0.850			0.865			0.999			0.996		
Flt Protected	0.950						0.950						
Satd. Flow (prot)	1770	1583	0	0	1611	0	1770	3536	0	0	3525	0	
Flt Permitted	0.754						0.084				0.951		
Satd. Flow (perm)	1405	1583	0	0	1611	0	156	3536	0	0	3352	0	
Right Turn on Red			No			No			No			No	
Satd. Flow (RTOR)													
Link Speed (mph)		30			30			30			30		
Link Distance (ft)		426			205			326			356		
Travel Time (s)		9.7			4.7			7.4			8.1		
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	
Adj. Flow (vph)	116	0	100	0	0	5	250	1326	5	5	1522	45	
Shared Lane Traffic (%)													
Lane Group Flow (vph)	116	100	0	0	5	0	250	1331	0	0	1572	0	
Number of Detectors	1	1		1	1		1	1		1	1		
Detector Template				Left						Left			
Leading Detector (ft)	50	50		20	50		40	40		20	40		
Trailing Detector (ft)	0	0		0	0		-10	-10		0	-10		
Detector 1 Position(ft)	0	0		0	0		-10	-10		0	-10		
Detector 1 Size(ft)	50	50		20	50		50	50		20	50		
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		
Detector 1 Channel													
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0		
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0		
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0		
Turn Type	Perm	NA			NA		pm+pt	NA		Perm	NA		
Protected Phases		4			4		5	2			6		3
Permitted Phases	4			4			2			6			
Detector Phase	4	4		4	4		5	2		6	6		
Switch Phase													
Minimum Initial (s)	5.0	5.0		5.0	5.0		7.0	15.0		15.0	15.0		1.0
Minimum Split (s)	24.2	24.2		24.2	24.2		11.0	28.0		28.0	28.0		4.0
Total Split (s)	25.0	25.0		25.0	25.0		22.0	91.0		69.0	69.0		4.0
Total Split (%)	20.8%	20.8%		20.8%	20.8%		18.3%	75.8%		57.5%	57.5%		3%
Maximum Green (s)	20.8	20.8		20.8	20.8		18.0	86.0		64.0	64.0		1.0
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.3		3.3	3.3		2.0
All-Red Time (s)	1.2	1.2		1.2	1.2		1.0	1.7		1.7	1.7		1.0
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0			0.0		
Total Lost Time (s)	4.2	4.2			4.2		4.0	5.0			5.0		
Lead/Lag	Lag	Lag		Lag	Lag		Lead			Lag	Lag		Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes			Yes	Yes		Yes
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	3.0		3.0	3.0		3.0
Recall Mode	None	None		None	None		None	C-Min		C-Min	C-Min		None
Walk Time (s)	3.0	3.0		3.0	3.0			7.0		7.0	7.0		
Flash Dont Walk (s)	17.0	17.0		17.0	17.0			16.0		16.0	16.0		
Pedestrian Calls (#/hr)	30	30		30	30			30		30	30		
Act Effct Green (s)	16.0	16.0			16.0		95.8	94.8			74.6		
Actuated g/C Ratio	0.13	0.13			0.13		0.80	0.79			0.62		
v/c Ratio	0.62	0.48			0.02		0.73	0.48			0.76		
Control Delay	62.5	54.2			42.0		37.1	3.2			7.2		
Queue Delay	0.0	0.0			0.0		0.7	0.2			0.4		
Total Delay	62.5	54.2			42.0		37.8	3.4			7.6		
LOS	E	D			D		D	A			A		
Approach Delay		58.7			42.0			8.8			7.6		
Approach LOS		E			D			A			A		
Queue Length 50th (ft)	83	70			3		106	107			44		
Queue Length 95th (ft)	144	124			15		m168	m128			102		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø3
Internal Link Dist (ft)		346			125			246			276		
Turn Bay Length (ft)							140						
Base Capacity (vph)	243	274			279		384	2793			2082		
Starvation Cap Reductn	0	0			0		23	661			0		
Spillback Cap Reductn	0	0			0		0	111			142		
Storage Cap Reductn	0	0			0		0	0			0		
Reduced v/c Ratio	0.48	0.36			0.02		0.69	0.62			0.81		

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 28 (23%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay: 11.5		Intersection LOS: B	
Intersection Capacity Utilization 98.5%		ICU Level of Service F	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 9: Washington Blvd & Richmond Hill Ave



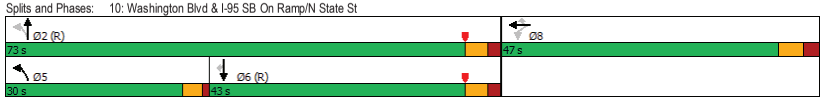
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	394	112	498	317	957	10	0	825	667
Future Volume (vph)	0	0	0	394	112	498	317	957	10	0	825	667
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Frt						0.850		0.998				0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	0	0	1770	1863	1583	1770	3532	0	0	3539	1583
Flt Permitted				0.950			0.151					
Satd. Flow (perm)	0	0	0	1770	1863	1583	281	3532	0	0	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						94		1				504
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		435			486			334			326	
Travel Time (s)		9.9			11.0			7.6			7.4	
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
Adj. Flow (vph)	0	0	0	428	122	541	345	1040	11	0	897	725
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	428	122	541	345	1051	0	0	897	725
Number of Detectors				1	1	1	1	1			1	1
Detector Template												
Leading Detector (ft)				40	40	50	40	50			50	50
Trailing Detector (ft)				-10	-10	0	-10	0			0	0
Detector 1 Position(ft)				-10	-10	0	-10	0			0	0
Detector 1 Size(ft)				50	50	50	50	50			50	50
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
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)				7.0	7.0	7.0	10.0	15.0			15.0	15.0
Minimum Split (s)				35.1	35.1	35.1	14.0	25.3			25.3	25.3
Total Split (s)				47.0	47.0	47.0	30.0	73.0			43.0	43.0
Total Split (%)				39.2%	39.2%	39.2%	25.0%	60.8%			35.8%	35.8%
Maximum Green (s)				40.9	40.9	40.9	26.0	67.7			37.7	37.7
Yellow Time (s)				3.7	3.7	3.7	3.0	3.3			3.3	3.3
All-Red Time (s)				2.4	2.4	2.4	1.0	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)				6.1	6.1	6.1	4.0	5.3			5.3	5.3
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)				2.0	2.0	2.0	3.0	3.0			3.0	3.0
Recall Mode				None	None	None	Min	C-Max			C-Max	C-Max
Walk Time (s)				7.0	7.0	7.0		7.0			7.0	7.0
Flash Dont Walk (s)				22.0	22.0	22.0		13.0			13.0	13.0
Pedestrian Calls (#/hr)				30	30	30		30			30	30
Act Effct Green (s)				38.4	38.4	38.4	71.5	70.2			44.8	44.8
Actuated g/C Ratio				0.32	0.32	0.32	0.60	0.58			0.37	0.37
v/c Ratio				0.76	0.21	0.95	0.79	0.51			0.68	0.80
Control Delay				45.8	29.8	60.2	34.4	16.2			20.9	17.9
Queue Delay				0.0	0.0	0.0	0.0	0.0			3.2	11.1
Total Delay				45.8	29.8	60.2	34.4	16.2			24.1	29.0
LOS				D	C	E	C	B			C	C
Approach Delay					51.1			20.7			26.3	
Approach LOS					D			C			C	
Queue Length 50th (ft)				287	66	339	159	253			207	393
Queue Length 95th (ft)				408	114	#555	267	310			346	#649
Internal Link Dist (ft)		355			406			254			246	
Turn Bay Length (ft)												
Base Capacity (vph)				603	634	601	490	2068			1320	906

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn				0	0	0	0	0			314	164
Spillback Cap Reductn				0	0	0	0	0			0	0
Storage Cap Reductn				0	0	0	0	0			0	0
Reduced v/c Ratio				0.71	0.19	0.90	0.70	0.51			0.89	0.98

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 33 (28%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.95
Intersection Signal Delay: 31.0 Intersection LOS: C
Intersection Capacity Utilization 77.6% 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: Washington Blvd & I-95 SB On Ramp/N State St

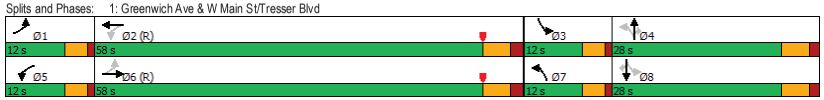


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	82	622	66	117	454	97	66	265	189	77	128	102
Future Volume (vph)	82	622	66	117	454	97	66	265	189	77	128	102
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50		0	150		0	50		50	40		20
Storage Lanes	1		0	1		0	1		1	1		2
Taper Length (ft)	80			90			75			50		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	0.95	1.00
Frt		0.986			0.974				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3490	0	1770	3447	0	1770	1863	1583	1770	3539	1425
Flt Permitted	0.397			0.294			0.664			0.274		
Satd. Flow (perm)	740	3490	0	548	3447	0	1237	1863	1583	510	3539	1425
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14			31				105			111
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		331			563			929			334	
Travel Time (s)		7.5			12.8			21.1			7.6	
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
Parking (#/hr)						0						0
Adj. Flow (vph)	89	676	72	127	493	105	72	288	205	84	139	111
Shared Lane Traffic (%)												
Lane Group Flow (vph)	89	748	0	127	598	0	72	288	205	84	139	111
Number of Detectors	1	1		1	1		1	1	1	1	2	1
Detector Template												
Leading Detector (ft)	40	50		40	50		40	40	40	40	100	50
Trailing Detector (ft)	-10	0		-10	0		-10	-10	-10	-10	-10	0
Detector 1 Position(ft)	-10	0		-10	0		-10	-10	-10	-10	-10	0
Detector 1 Size(ft)	50	50		50	50		50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)											94	
Detector 2 Size(ft)											6	
Detector 2 Type											Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)											0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6			2			4		4	8		8
Detector Phase	1	6		5	2		7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	4.0	20.0		4.0	20.0		4.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.0	32.6		8.0	32.6		8.0	36.2	36.2	8.0	36.2	36.2
Total Split (s)	12.0	58.0		12.0	58.0		12.0	28.0	28.0	12.0	28.0	28.0
Total Split (%)	10.9%	52.7%		10.9%	52.7%		10.9%	25.5%	25.5%	10.9%	25.5%	25.5%
Maximum Green (s)	8.0	52.4		8.0	52.4		8.0	22.8	22.8	8.0	22.8	22.8
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.7	3.7	3.0	3.7	3.7
All-Red Time (s)	1.0	1.9		1.0	1.9		1.0	1.5	1.5	1.0	1.5	1.5
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)	4.0	5.6		4.0	5.6		4.0	5.2	5.2	4.0	5.2	5.2
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.0	3.0		1.0	3.0		1.0	2.0	2.0	1.0	2.0	2.0
Recall Mode	None	C-Min		None	C-Min		None	None	None	None	None	None
Walk Time (s)		7.0			7.0			7.0	7.0		7.0	7.0
Flash Dont Walk (s)		20.0			20.0			24.0	24.0		24.0	24.0
Pedestrian Calls (#/hr)		10			10			10	10		10	10
Act Effct Green (s)	63.9	56.2		66.8	58.9		29.2	22.1	22.1	30.3	22.7	22.7
Actuated g/C Ratio	0.58	0.51		0.61	0.54		0.27	0.20	0.20	0.28	0.21	0.21
v/c Ratio	0.18	0.42		0.31	0.32		0.20	0.77	0.51	0.38	0.19	0.29
Control Delay	11.7	19.9		12.6	17.0		25.9	54.7	22.2	29.8	34.9	7.9
Queue Delay	0.0	0.0		0.0	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	11.7	19.9		12.6	17.0		25.9	54.7	22.2	29.8	34.9	7.9
LOS	B	B		B	B		C	D	C	C	C	A
Approach Delay		19.0			16.2			39.2			24.7	
Approach LOS		B			B			D			C	
Queue Length 50th (ft)	24	166		35	119		36	195	61	43	43	0
Queue Length 95th (ft)	59	284		80	208		60	261	121	67	63	41
Internal Link Dist (ft)		251			483			849			254	
Turn Bay Length (ft)	50			150			50		50	40		20
Base Capacity (vph)	520	1888		432	1936		376	420	438	240	809	411
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	0.17	0.40		0.29	0.31		0.19	0.69	0.47	0.35	0.17	0.27

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 105 (95%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay: 23.6		Intersection LOS: C	
Intersection Capacity Utilization 59.7%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: Greenwich Ave & W Main St/Tresser Blvd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	82	194	61	61	153	41	31	480	112	20	214	82
Future Volume (vph)	82	194	61	61	153	41	31	480	112	20	214	82
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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
Frt		0.976			0.978			0.976			0.965	
Flt Protected		0.988			0.988			0.997			0.997	
Satd. Flow (prot)	0	1796	0	0	1800	0	0	1813	0	0	1792	0
Flt Permitted		0.834			0.789			0.968			0.940	
Satd. Flow (perm)	0	1516	0	0	1437	0	0	1760	0	0	1690	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		371			483			829			929	
Travel Time (s)		8.4			11.0			18.8			21.1	
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
Adj. Flow (vph)	89	211	66	66	166	45	34	522	122	22	233	89
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	366	0	0	277	0	0	678	0	0	344	0
Number of Detectors	1	1		1	1		1	0		1	0	
Detector Template	Left			Left			Left			Left		
Leading Detector (ft)	20	52		20	52		20	0		20	0	
Trailing Detector (ft)	0	2		0	2		0	0		0	0	
Detector 1 Position(ft)	0	2		0	2		0	0		0	0	
Detector 1 Size(ft)	20	50		20	50		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm	NA		D.P+P	NA		Perm	NA		Perm	NA	
Protected Phases		4		3	3 4			2			2	
Permitted Phases	4			4			2			2		
Detector Phase	4	4		3	3 4		2	2		2	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0			15.0	15.0		15.0	15.0	
Minimum Split (s)	24.1	24.1		9.0			24.5	24.5		24.5	24.5	
Total Split (s)	36.0	36.0		16.0			68.0	68.0		68.0	68.0	
Total Split (%)	30.0%	30.0%		13.3%			56.7%	56.7%		56.7%	56.7%	
Maximum Green (s)	30.9	30.9		12.0			62.5	62.5		62.5	62.5	
Yellow Time (s)	3.3	3.3		3.0			3.3	3.3		3.3	3.3	
All-Red Time (s)	1.8	1.8		1.0			2.2	2.2		2.2	2.2	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		5.1						5.5			5.5	
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?	Yes	Yes		Yes								
Vehicle Extension (s)	2.0	2.0		2.0			3.0	3.0		3.0	3.0	
Recall Mode	None	None		None			C-Min	C-Min		C-Min	C-Min	
Walk Time (s)	7.0	7.0					7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	12.0	12.0					12.0	12.0		12.0	12.0	
Pedestrian Calls (#/hr)	10	10					10	10		10	10	
Act Effct Green (s)		31.6			46.8			59.7			59.7	
Actuated g/C Ratio		0.26			0.39			0.50			0.50	
v/c Ratio		0.92			0.46			0.77			0.41	
Control Delay		71.8			27.1			36.5			21.1	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		71.8			27.1			36.6			21.1	
LOS		E			C			D			C	
Approach Delay		71.8			27.1			36.6			21.1	
Approach LOS		E			C			D			C	
Queue Length 50th (ft)		261			127			510			184	
Queue Length 95th (ft)		#466			224			613			226	
Internal Link Dist (ft)		291			403			749			849	
Turn Bay Length (ft)												
Base Capacity (vph)		408			611			927			891	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0			0			3			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.90			0.45			0.73			0.39	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 8 (7%), Referenced to phase 2:NBSB, Start of Yellow			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.92			
Intersection Signal Delay: 39.5		Intersection LOS: D	
Intersection Capacity Utilization 75.0%		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.			

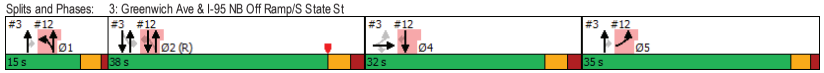
Splits and Phases: 2: Greenwich Ave & Richmond Hill Ave

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø1	Ø5
Lane Configurations														
Traffic Volume (vph)	194	704	153	0	0	0	0	449	357	71	286	0		
Future Volume (vph)	194	704	153	0	0	0	0	449	357	71	286	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Storage Length (ft)	225		225	0		0	0		50	75		230		
Storage Lanes	1		1	0		0	0		1	1		1		
Taper Length (ft)	200			25			25			50				
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00		
Frt			0.850						0.850					
Flt Protected	0.950									0.950				
Satd. Flow (prot)	1770	3539	1583	0	0	0	0	1863	1583	1770	3539	0		
Flt Permitted	0.950									0.486				
Satd. Flow (perm)	1770	3539	1583	0	0	0	0	1863	1583	905	3539	0		
Right Turn on Red			Yes			Yes			Yes			Yes		
Satd. Flow (RTOR)			158						24					
Link Speed (mph)		30			30			30			30			
Link Distance (ft)		849			537			214			829			
Travel Time (s)		19.3			12.2			4.9			18.8			
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		
Adj. Flow (vph)	211	765	166	0	0	0	0	488	388	77	311	0		
Shared Lane Traffic (%)														
Lane Group Flow (vph)	211	765	166	0	0	0	0	488	388	77	311	0		
Number of Detectors	1	1	1					0	0	1	1			
Detector Template														
Leading Detector (ft)	16	16	16					0	0	15	15			
Trailing Detector (ft)	0	0	0					0	0	-5	-5			
Detector 1 Position(ft)	0	0	0					0	0	-5	-5			
Detector 1 Size(ft)	16	16	16					6	20	20	20			
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel														
Detector 1 Extend (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0			
Turn Type	Perm	NA	Perm					NA	Perm	Perm	NA			
Protected Phases		4						1 2 5			2		1	5
Permitted Phases	4		4						1 2 5	2				
Detector Phase	4	4	4					1	1	2	2			
Switch Phase														
Minimum Initial (s)	7.0	7.0	7.0							15.0	15.0		5.0	5.0
Minimum Split (s)	31.6	31.6	31.6							32.4	32.4		9.0	22.4
Total Split (s)	32.0	32.0	32.0							38.0	38.0		15.0	35.0
Total Split (%)	26.7%	26.7%	26.7%							31.7%	31.7%		13%	29%
Maximum Green (s)	26.4	26.4	26.4							32.6	32.6		11.0	30.6
Yellow Time (s)	3.3	3.3	3.3							3.3	3.3		3.0	3.0
All-Red Time (s)	2.3	2.3	2.3							2.1	2.1		1.0	1.4
Lost Time Adjust (s)	0.0	0.0	0.0							0.0	0.0			
Total Lost Time (s)	5.6	5.6	5.6							5.4	5.4			
Lead/Lag										Lag	Lag		Lead	
Lead-Lag Optimize?										Yes	Yes		Yes	
Vehicle Extension (s)	2.0	2.0	2.0							3.0	3.0		1.0	2.0
Recall Mode	None	None	None							C-Min	C-Min		None	None
Walk Time (s)	7.0	7.0	7.0							7.0	7.0			7.0
Flash Dont Walk (s)	19.0	19.0	19.0							20.0	20.0			11.0
Pedestrian Calls (#/hr)	10	10	10							10	10			10
Act Effct Green (s)	31.7	31.7	31.7					78.7	78.7	52.7	52.7			
Actuated g/C Ratio	0.26	0.26	0.26					0.66	0.66	0.44	0.44			
v/c Ratio	0.45	0.82	0.31					0.40	0.37	0.19	0.20			
Control Delay	40.2	49.6	7.6					11.0	10.1	19.3	17.2			
Queue Delay	0.0	0.0	0.0					36.8	15.6	0.0	0.0			
Total Delay	40.2	49.6	7.6					47.8	25.8	19.3	17.2			
LOS	D	D	A					D	C	B	B			
Approach Delay		41.8						38.0			17.6			
Approach LOS		D						D			B			
Queue Length 50th (ft)	135	288	5					168	121	25	52			
Queue Length 95th (ft)	213	368	58					229	175	m56	m88			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø1	Ø5
Internal Link Dist (ft)		769			457			134			749			
Turn Bay Length (ft)	225		225						50	75				
Base Capacity (vph)	466	933	533					1215	1041	397	1553			
Starvation Cap Reductn	0	0	0					750	635	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	0.45	0.82	0.31					1.05	0.96	0.19	0.20			

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 115 (96%), Referenced to phase 2:NBSB, Start of Yellow			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay: 36.5		Intersection LOS: D	
Intersection Capacity Utilization 68.1%		ICU Level of Service C	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 3: Greenwich Ave & I-95 NB Off Ramp/S State St

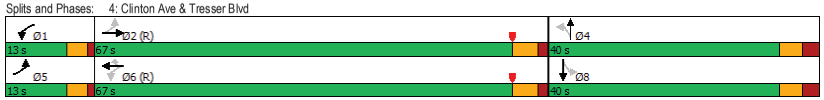


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	82	796	10	66	602	56	20	51	31	20	15	46
Future Volume (vph)	82	796	10	66	602	56	20	51	31	20	15	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	140		0	100		0	0		0	0		0
Storage Lanes	1		0	1		1	0		0	0		0
Taper Length (ft)	90			65			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.998				0.850		0.959			0.923	
Flt Protected	0.950			0.950				0.990			0.988	
Satd. Flow (prot)	1770	3532	0	1770	3539	1583	0	1769	0	0	1699	0
Flt Permitted	0.383			0.304				0.920			0.858	
Satd. Flow (perm)	713	3532	0	566	3539	1583	0	1643	0	0	1475	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		563			677			500			579	
Travel Time (s)		12.8			15.4			11.4			13.2	
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
Parking (#/hr)			0									0
Adj. Flow (vph)	89	865	11	72	654	61	22	55	34	22	16	50
Shared Lane Traffic (%)												
Lane Group Flow (vph)	89	876	0	72	654	61	0	111	0	0	88	0
Number of Detectors	4	1		4	1	1	1	1		1	1	
Detector Template							Left			Left		
Leading Detector (ft)	33	50		36	50	50	20	106		20	106	
Trailing Detector (ft)	-9	0		-6	0	0	0	100		0	100	
Detector 1 Position(ft)	-9	0		-6	0	0	0	100		0	100	
Detector 1 Size(ft)	6	50		6	50	50	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)	3			6								
Detector 2 Size(ft)	6			6								
Detector 2 Type	Cl+Ex			Cl+Ex								
Detector 2 Channel												
Detector 2 Extend (s)	0.0			0.0								
Detector 3 Position(ft)	15			18								
Detector 3 Size(ft)	6			6								
Detector 3 Type	Cl+Ex			Cl+Ex								
Detector 3 Channel												
Detector 3 Extend (s)	0.0			0.0								
Detector 4 Position(ft)	27			30								
Detector 4 Size(ft)	6			6								
Detector 4 Type	Cl+Ex			Cl+Ex								
Detector 4 Channel												
Detector 4 Extend (s)	0.0			0.0								
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2			6		6	4			8		
Detector Phase	5	2		1	6	6	4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0	15.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	9.0	27.3		9.0	27.3	27.3	39.9	39.9		39.9	39.9	
Total Split (s)	13.0	67.0		13.0	67.0	67.0	40.0	40.0		40.0	40.0	
Total Split (%)	10.8%	55.8%		10.8%	55.8%	55.8%	33.3%	33.3%		33.3%	33.3%	
Maximum Green (s)	9.0	61.7		9.0	61.7	61.7	34.1	34.1		34.1	34.1	
Yellow Time (s)	3.0	3.7		3.0	3.7	3.7	3.3	3.3		3.3	3.3	
All-Red Time (s)	1.0	1.6		1.0	1.6	1.6	2.6	2.6		2.6	2.6	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0			0.0	
Total Lost Time (s)	4.0	5.3		4.0	5.3	5.3		5.9			5.9	
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vehicle Extension (s)	2.0	3.0		2.0	3.0	3.0	2.0	2.0		2.0	2.0	
Recall Mode	None	C-Min		None	C-Min	C-Min	None	None		None	None	
Walk Time (s)		7.0			7.0	7.0	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		15.0			15.0	15.0	27.0	27.0		27.0	27.0	
Pedestrian Calls (#/hr)		10			10	10	10	10		10	10	
Act Effct Green (s)	93.1	86.6		91.8	84.5	84.5		14.1			14.1	
Actuated g/C Ratio	0.78	0.72		0.76	0.70	0.70		0.12			0.12	
v/c Ratio	0.15	0.34		0.15	0.26	0.05		0.58			0.51	
Control Delay	4.8	8.8		10.9	17.0	16.9		59.5			57.0	
Queue Delay	0.0	0.3		0.0	0.0	0.0		0.0			0.0	
Total Delay	4.8	9.0		10.9	17.0	16.9		59.5			57.0	
LOS	A	A		B	B	B		E			E	
Approach Delay		8.6			16.5			59.5			57.0	
Approach LOS		A			B			E			E	
Queue Length 50th (ft)	9	107		1	206	19		86			67	
Queue Length 95th (ft)	45	272		m76	303	m69		116			97	
Internal Link Dist (ft)		483			597			420			499	
Turn Bay Length (ft)	140			100								
Base Capacity (vph)	644	2548		537	2492	1115		466			419	
Starvation Cap Reductn	0	903		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	0.14	0.53		0.13	0.26	0.05		0.24			0.21	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 67 (56%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.58			
Intersection Signal Delay: 16.9		Intersection LOS: B	
Intersection Capacity Utilization 46.2%		ICU Level of Service A	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 4: Clinton Ave & Tresser Blvd



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	20	31	123	15	50	56
Future Volume (vph)	20	31	123	15	50	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.918		0.986			
Flt Protected	0.981					0.977
Satd. Flow (prot)	1678	0	1837	0	0	1638
Flt Permitted	0.981					0.977
Satd. Flow (perm)	1678	0	1837	0	0	1638
Link Speed (mph)	30		30			30
Link Distance (ft)	511		390			500
Travel Time (s)	11.6		8.9			11.4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Parking (#/hr)		0		0		0
Adj. Flow (vph)	22	34	134	16	54	61
Shared Lane Traffic (%)						
Lane Group Flow (vph)	56	0	150	0	0	115
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 26.4%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	31	123	15	50	56
Future Vol, veh/h	20	31	123	15	50	56
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, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	34	134	16	54	61

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	311	142	0	0	150	0
Stage 1	142	-	-	-	-	-
Stage 2	169	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	681	906	-	-	1431	-
Stage 1	885	-	-	-	-	-
Stage 2	861	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	654	906	-	-	1431	-
Mov Cap-2 Maneuver	654	-	-	-	-	-
Stage 1	885	-	-	-	-	-
Stage 2	827	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.9	0	3.6
HCM LOS	A		

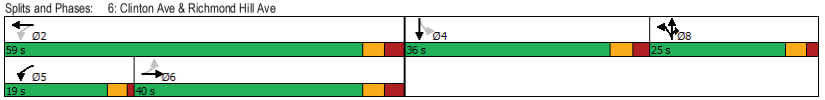
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	787	1431	-
HCM Lane V/C Ratio	-	-	0.07	0.038	-
HCM Control Delay (s)	-	-	9.9	7.6	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0.1	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	61	260	5	5	179	41	20	36	209	15	5	56
Future Volume (vph)	61	260	5	5	179	41	20	36	209	15	5	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	25		0	275		0	0		0	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	50			40			25			25		
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt		0.998			0.972			0.912	0.850		0.900	
Flt Protected		0.991		0.950				0.993			0.990	
Satd. Flow (prot)	0	3500	0	1770	1811	0	0	1603	1504	0	1660	0
Flt Permitted		0.841		0.445				0.993			0.379	
Satd. Flow (perm)	0	2971	0	829	1811	0	0	1603	1504	0	635	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			12			51	141		61	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		483			426			296			390	
Travel Time (s)		11.0			9.7			6.7			8.9	
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
Adj. Flow (vph)	66	283	5	5	195	45	22	39	227	16	5	61
Shared Lane Traffic (%)									38%			
Lane Group Flow (vph)	0	354	0	5	240	0	0	147	141	0	82	0
Number of Detectors	1	0		1	1		1	1	1	1	1	
Detector Template	Left						Left			Left		
Leading Detector (ft)	20	0		48	48		20	40	40	20	45	
Trailing Detector (ft)	0	0		-2	-2		0	-10	-10	0	-5	
Detector 1 Position(ft)	0	0		-2	-2		0	-10	-10	0	-5	
Detector 1 Size(ft)	20	6		50	50		20	50	50	20	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Turn Type	Perm	NA		pm+pt	NA		Split	NA	Prot	Perm	NA	
Protected Phases		6		5	2		8	8	8		4	
Permitted Phases	6			2						4		
Detector Phase	6	6		5	2		8	8	8	4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		6.0	6.0	6.0	6.0	6.0	
Minimum Split (s)	31.4	31.4		19.0	31.4		10.9	10.9	10.9	29.7	29.7	
Total Split (s)	40.0	40.0		19.0	59.0		25.0	25.0	25.0	36.0	36.0	
Total Split (%)	33.3%	33.3%		15.8%	49.2%		20.8%	20.8%	20.8%	30.0%	30.0%	
Maximum Green (s)	33.6	33.6		15.0	52.6		20.1	20.1	20.1	30.3	30.3	
Yellow Time (s)	3.3	3.3		3.0	3.3		3.0	3.0	3.0	3.3	3.3	
All-Red Time (s)	3.1	3.1		1.0	3.1		1.9	1.9	1.9	2.4	2.4	
Lost Time Adjust (s)		0.0		0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)		6.4		4.0	6.4			4.9	4.9		5.7	
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?	Yes	Yes		Yes								
Vehicle Extension (s)	3.0	3.0		5.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	Min	Min		None	Min		None	None	None	None	None	
Walk Time (s)	7.0	7.0			7.0					7.0	7.0	
Flash Dont Walk (s)	18.0	18.0			18.0					17.0	17.0	
Pedestrian Calls (#/hr)	10	10			10					10	10	
Act Effct Green (s)		18.9		23.7	20.9			10.3	10.3		10.3	
Actuated g/C Ratio		0.35		0.44	0.39			0.19	0.19		0.19	
v/c Ratio		0.34		0.01	0.34			0.42	0.35		0.48	
Control Delay		19.4		13.6	15.5			22.2	9.1		21.6	
Queue Delay		0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay		19.4		13.6	15.5			22.2	9.1		21.6	
LOS		B		B	B			C	A		C	
Approach Delay		19.4			15.5			15.8			21.6	
Approach LOS		B			B			B			C	
Queue Length 50th (ft)		40		1	49			25	0		5	
Queue Length 95th (ft)		150		8	152			125	55		57	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		403			346			216			310	
Turn Bay Length (ft)				275								
Base Capacity (vph)		2174		675	1633			737	744		443	
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		0.16		0.01	0.15			0.20	0.19		0.19	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 53.9			
Natural Cycle: 95			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.48			
Intersection Signal Delay: 17.5		Intersection LOS: B	
Intersection Capacity Utilization 51.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 6: Clinton Ave & Richmond Hill Ave

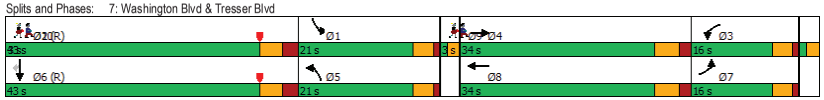


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø9	Ø10
Lane Configurations														
Traffic Volume (vph)	175	657	51	91	499	139	51	999	291	251	837	97		
Future Volume (vph)	175	657	51	91	499	139	51	999	291	251	837	97		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Storage Length (ft)	320		0	180		0	200		230	200		250		
Storage Lanes	1		0	1		0	1		1	1		1		
Taper Length (ft)	50			60			25			50				
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	0.95	1.00	1.00	0.95	1.00		
Frt		0.989			0.967				0.850			0.850		
Flt Protected	0.950			0.950			0.950			0.950				
Satd. Flow (prot)	1770	5029	0	1770	4917	0	1770	3539	1583	1770	3539	1583		
Flt Permitted	0.950			0.950			0.950			0.950				
Satd. Flow (perm)	1770	5029	0	1770	4917	0	1770	3539	1583	1770	3539	1583		
Right Turn on Red			No			No			No			No		
Satd. Flow (RTOR)														
Link Speed (mph)		30			30			30			30			
Link Distance (ft)		677			703			578			404			
Travel Time (s)		15.4			16.0			13.1			9.2			
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		
Adj. Flow (vph)	190	714	55	99	542	151	55	1086	316	273	910	105		
Shared Lane Traffic (%)														
Lane Group Flow (vph)	190	769	0	99	693	0	55	1086	316	273	910	105		
Number of Detectors	1	1		1	1		1	1	1	1	1	1		
Detector Template														
Leading Detector (ft)	40	45		40	45		40	45	45	40	45	45		
Trailing Detector (ft)	-10	-5		-10	-5		-10	-5	-5	-10	-5	-5		
Detector 1 Position(ft)	-10	-5		-10	-5		-10	-5	-5	-10	-5	-5		
Detector 1 Size(ft)	50	50		50	50		50	50	50	50	50	50		
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		
Detector 1 Channel														
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	Perm		
Protected Phases	7	4		3	8		5	2		1	6		9	10
Permitted Phases									2			6		
Detector Phase	7	4		3	8		5	2	2	1	6	6		
Switch Phase														
Minimum Initial (s)	5.0	10.0		5.0	10.0		5.0	15.0	15.0	5.0	15.0	15.0	1.0	1.0
Minimum Split (s)	9.0	30.4		9.0	30.4		9.0	30.6	30.6	9.0	30.6	30.6	3.0	3.0
Total Split (s)	16.0	34.0		16.0	34.0		21.0	43.0	43.0	21.0	43.0	43.0	3.0	3.0
Total Split (%)	13.3%	28.3%		13.3%	28.3%		17.5%	35.8%	35.8%	17.5%	35.8%	35.8%	3%	3%
Maximum Green (s)	12.0	28.6		12.0	28.6		17.0	37.4	37.4	17.0	37.4	37.4	1.0	1.0
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.3	3.3	3.0	3.3	3.3	2.0	2.0
All-Red Time (s)	1.0	1.7		1.0	1.7		1.0	2.3	2.3	1.0	2.3	2.3	0.0	0.0
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)	4.0	5.4		4.0	5.4		4.0	5.6	5.6	4.0	5.6	5.6		
Lead/Lag	Lag	Lead		Lag	Lead		Lag	Lead	Lead	Lag	Lead	Lead		
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes		
Vehicle Extension (s)	1.0	3.0		1.0	3.0		1.0	3.0	3.0	1.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None		None	C-Min	C-Min	None	C-Min	C-Min	None	None
Walk Time (s)		4.0			4.0			4.0	4.0		4.0	4.0		
Flash Dont Walk (s)		21.0			21.0			21.0	21.0		21.0	21.0		
Pedestrian Calls (#/hr)		30			30			30	30		30	30		
Act Effct Green (s)	18.5	24.6		17.3	23.4		15.7	42.1	42.1	17.0	45.2	45.2		
Actuated g/C Ratio	0.15	0.20		0.14	0.20		0.13	0.35	0.35	0.14	0.38	0.38		
v/c Ratio	0.70	0.75		0.39	0.72		0.24	0.88	0.57	1.09	0.68	0.18		
Control Delay	67.5	48.8		52.5	49.5		36.1	41.3	35.0	131.7	36.5	28.8		
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.4	0.0	0.0	0.0	0.0		
Total Delay	67.5	48.8		52.5	49.5		36.1	41.7	35.0	131.7	36.5	28.8		
LOS	E	D		D	D		D	D	D	F	D	C		
Approach Delay		52.5			49.9			40.0			56.0			
Approach LOS		D			D			D			E			
Queue Length 50th (ft)	129	219		70	182		35	320	170	~238	334	58		
Queue Length 95th (ft)	#279	247		131	220		m54	#538	294	#410	409	102		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø9	Ø10
Internal Link Dist (ft)		597			623			498			324			
Turn Bay Length (ft)	320			180			200		230	200		250		
Base Capacity (vph)	272	1206		254	1171		267	1241	555	250	1331	595		
Starvation Cap Reductn	0	0		0	0		0	19	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	0.70	0.64		0.39	0.59		0.21	0.89	0.57	1.09	0.68	0.18		

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 115			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.09			
Intersection Signal Delay: 49.0		Intersection LOS: D	
Intersection Capacity Utilization 79.8%		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: 7: Washington Blvd & Tresser Blvd



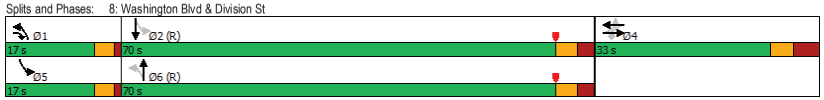
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	86	0	66	0	0	5	10	1541	0	0	1191	15
Future Volume (vph)	86	0	66	0	0	5	10	1541	0	0	1191	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		170	0		0	0		0	100		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25			25			25			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		0.865						0.998	
Flt Protected		0.950					0.950					
Satd. Flow (prot)	0	1770	1583	0	1611	0	1770	3539	0	1863	3532	0
Flt Permitted		0.754					0.153					
Satd. Flow (perm)	0	1405	1583	0	1611	0	285	3539	0	1863	3532	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			42		197						2	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		511			252			356			578	
Travel Time (s)		11.6			5.7			8.1			13.1	
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
Adj. Flow (vph)	93	0	72	0	0	5	11	1675	0	0	1295	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	93	72	0	5	0	11	1675	0	0	1311	0
Number of Detectors	1	4	4	1	1		4	1		4	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	32	32	20	6		39	50		36	50	
Trailing Detector (ft)	0	-10	-10	0	0		-3	0		-6	0	
Detector 1 Position(ft)	0	-10	-10	0	0		-3	0		-6	0	
Detector 1 Size(ft)	20	6	6	20	6		6	50		6	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		2	2				9			6		
Detector 2 Size(ft)		6	6				6			6		
Detector 2 Type		Cl+Ex	Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)		0.0	0.0				0.0			0.0		
Detector 3 Position(ft)		14	14				21			18		
Detector 3 Size(ft)		6	6				6			6		
Detector 3 Type		Cl+Ex	Cl+Ex				Cl+Ex			Cl+Ex		
Detector 3 Channel												
Detector 3 Extend (s)		0.0	0.0				0.0			0.0		
Detector 4 Position(ft)		26	26				33			30		
Detector 4 Size(ft)		6	6				6			6		
Detector 4 Type		Cl+Ex	Cl+Ex				Cl+Ex			Cl+Ex		
Detector 4 Channel												
Detector 4 Extend (s)		0.0	0.0				0.0			0.0		
Turn Type	Perm	NA	pm+ov		NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4	1		4		1	6		5	2	
Permitted Phases	4		4	4			6			2		
Detector Phase	4	4	1	4	4		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	15.0		5.0	15.0	
Minimum Split (s)	32.2	32.2	9.0	32.2	32.2		9.0	21.0		9.0	35.0	
Total Split (s)	33.0	33.0	17.0	33.0	33.0		17.0	70.0		17.0	70.0	
Total Split (%)	27.5%	27.5%	14.2%	27.5%	27.5%		14.2%	58.3%		14.2%	58.3%	
Maximum Green (s)	25.8	25.8	13.0	25.8	25.8		13.0	64.0		13.0	64.0	
Yellow Time (s)	3.3	3.3	3.0	3.3	3.3		3.0	3.3		3.0	3.3	
All-Red Time (s)	3.9	3.9	1.0	3.9	3.9		1.0	2.7		1.0	2.7	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		7.2	4.0		7.2		4.0	6.0		4.0	6.0	
Lead/Lag			Lead				Lead	Lag		Lead	Lag	
Lead-Lag Optimize?			Yes				Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	3.0		2.0	3.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0						7.0	
Flash Dont Walk (s)	18.0	18.0		18.0	18.0						22.0	
Pedestrian Calls (#/hr)	30	30		30	30						30	
Act Effct Green (s)		18.4	30.7		18.4		90.4	88.4			81.1	
Actuated g/C Ratio		0.15	0.26		0.15		0.75	0.74			0.68	
v/c Ratio		0.43	0.17		0.01		0.04	0.64			0.55	
Control Delay		54.0	19.7		0.0		3.6	5.0			3.9	
Queue Delay		0.0	0.0		0.0		0.0	0.1			0.2	
Total Delay		54.0	19.7		0.0		3.6	5.2			4.1	
LOS		D	B		A		A	A			A	
Approach Delay		39.1						5.2			4.1	
Approach LOS		D						A			A	
Queue Length 50th (ft)		64	18		0		1	189			65	
Queue Length 95th (ft)		116	58		0		m2	153			74	
Internal Link Dist (ft)		431			172			276			498	
Turn Bay Length (ft)			170									
Base Capacity (vph)		302	538		501		375	2606			2388	
Starvation Cap Reductn		0	0		0		0	208			262	
Spillback Cap Reductn		0	3		0		0	78			298	
Storage Cap Reductn		0	0		0		0	0			0	
Reduced v/c Ratio		0.31	0.13		0.01		0.03	0.70			0.63	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 22 (18%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay: 6.5		Intersection LOS: A	
Intersection Capacity Utilization 65.0%		ICU Level of Service C	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: Washington Blvd & Division St

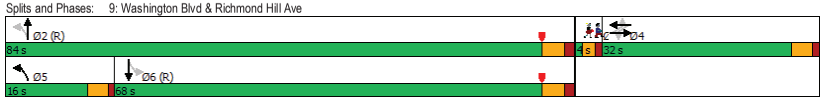


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø3
Lane Configurations													
Traffic Volume (vph)	275	0	209	5	0	5	184	1271	5	5	1212	41	
Future Volume (vph)	275	0	209	5	0	5	184	1271	5	5	1212	41	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	0		0	0		0	140		0	0		0	
Storage Lanes	1		0	0		0	1		0	0		0	
Taper Length (ft)	25			25			80			25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	
Frt		0.850			0.932			0.999			0.995		
Flt Protected	0.950				0.976		0.950						
Satd. Flow (prot)	1770	1583	0	0	1694	0	1770	3536	0	0	3522	0	
Flt Permitted	0.751				0.896		0.100				0.950		
Satd. Flow (perm)	1399	1583	0	0	1556	0	186	3536	0	0	3345	0	
Right Turn on Red			No			No			No			No	
Satd. Flow (RTOR)													
Link Speed (mph)		30			30			30			30		
Link Distance (ft)		426			205			326			356		
Travel Time (s)		9.7			4.7			7.4			8.1		
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	
Adj. Flow (vph)	299	0	227	5	0	5	200	1382	5	5	1317	45	
Shared Lane Traffic (%)													
Lane Group Flow (vph)	299	227	0	0	10	0	200	1387	0	0	1367	0	
Number of Detectors	1	1		1	1		1	1		1	1		
Detector Template				Left						Left			
Leading Detector (ft)	50	50		20	50		40	40		20	40		
Trailing Detector (ft)	0	0		0	0		-10	-10		0	-10		
Detector 1 Position(ft)	0	0		0	0		-10	-10		0	-10		
Detector 1 Size(ft)	50	50		20	50		50	50		20	50		
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		
Detector 1 Channel													
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0		
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0		
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0		
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		Perm	NA		
Protected Phases		4			4		5	2			6		3
Permitted Phases	4			4			2			6			
Detector Phase	4	4		4	4		5	2		6	6		
Switch Phase													
Minimum Initial (s)	5.0	5.0		5.0	5.0		7.0	15.0		15.0	15.0		1.0
Minimum Split (s)	24.2	24.2		24.2	24.2		11.0	28.0		28.0	28.0		4.0
Total Split (s)	32.0	32.0		32.0	32.0		16.0	84.0		68.0	68.0		4.0
Total Split (%)	26.7%	26.7%		26.7%	26.7%		13.3%	70.0%		56.7%	56.7%		3%
Maximum Green (s)	27.8	27.8		27.8	27.8		12.0	79.0		63.0	63.0		1.0
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.3		3.3	3.3		2.0
All-Red Time (s)	1.2	1.2		1.2	1.2		1.0	1.7		1.7	1.7		1.0
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0			0.0		
Total Lost Time (s)	4.2	4.2			4.2		4.0	5.0			5.0		
Lead/Lag	Lag	Lag		Lag	Lag		Lead			Lag	Lag		Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes			Yes	Yes		Yes
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	3.0		3.0	3.0		3.0
Recall Mode	None	None		None	None		None	C-Min		C-Min	C-Min		None
Walk Time (s)	3.0	3.0		3.0	3.0			7.0		7.0	7.0		
Flash Dont Walk (s)	17.0	17.0		17.0	17.0			16.0		16.0	16.0		
Pedestrian Calls (#/hr)	30	30		30	30			30		30	30		
Act Effct Green (s)	30.1	30.1			30.1		81.7	80.7			66.3		
Actuated g/C Ratio	0.25	0.25			0.25		0.68	0.67			0.55		
v/c Ratio	0.85	0.57			0.03		0.76	0.58			0.74		
Control Delay	65.4	45.2			32.7		36.4	10.2			14.7		
Queue Delay	0.0	0.0			0.0		0.1	0.1			1.3		
Total Delay	65.4	45.2			32.7		36.5	10.3			16.0		
LOS	E	D			C		D	B			B		
Approach Delay		56.7			32.7			13.6			16.0		
Approach LOS		E			C			B			B		
Queue Length 50th (ft)	215	150			6		55	320			558		
Queue Length 95th (ft)	#362	235			20		m#124	480			649		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø3
Internal Link Dist (ft)		346			125			246			276		
Turn Bay Length (ft)							140						
Base Capacity (vph)	360	407			400		285	2388			1858		
Starvation Cap Reductn	0	0			0		2	232			274		
Spillback Cap Reductn	0	0			0		0	0			34		
Storage Cap Reductn	0	0			0		0	0			0		
Reduced v/c Ratio	0.83	0.56			0.03		0.71	0.64			0.86		

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 47 (39%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay: 21.1		Intersection LOS: C	
Intersection Capacity Utilization 104.0%		ICU Level of Service G	
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: 9: Washington Blvd & Richmond Hill Ave



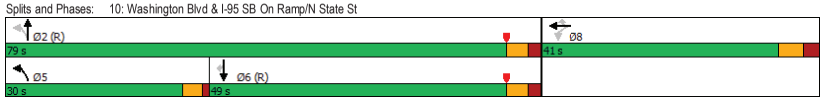
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	123	61	364	356	1096	0	0	724	702
Future Volume (vph)	0	0	0	123	61	364	356	1096	0	0	724	702
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt						0.850						0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	0	0	1770	1863	1583	1770	3539	0	0	3539	1583
Flt Permitted				0.950			0.255					
Satd. Flow (perm)	0	0	0	1770	1863	1583	475	3539	0	0	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						83						567
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		435			486			334			326	
Travel Time (s)		9.9			11.0			7.6			7.4	
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
Adj. Flow (vph)	0	0	0	134	66	396	387	1191	0	0	787	763
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	134	66	396	387	1191	0	0	787	763
Number of Detectors				1	1	1	1	1			1	1
Detector Template												
Leading Detector (ft)				40	40	50	40	50			50	50
Trailing Detector (ft)				-10	-10	0	-10	0			0	0
Detector 1 Position(ft)				-10	-10	0	-10	0			0	0
Detector 1 Size(ft)				50	50	50	50	50			50	50
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
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)				7.0	7.0	7.0	10.0	15.0			15.0	15.0
Minimum Split (s)				35.1	35.1	35.1	14.0	25.3			25.3	25.3
Total Split (s)				41.0	41.0	41.0	30.0	79.0			49.0	49.0
Total Split (%)				34.2%	34.2%	34.2%	25.0%	65.8%			40.8%	40.8%
Maximum Green (s)				34.9	34.9	34.9	26.0	73.7			43.7	43.7
Yellow Time (s)				3.7	3.7	3.7	3.0	3.3			3.3	3.3
All-Red Time (s)				2.4	2.4	2.4	1.0	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)				6.1	6.1	6.1	4.0	5.3			5.3	5.3
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)				2.0	2.0	2.0	3.0	3.0			3.0	3.0
Recall Mode				None	None	None	None	C-Max			C-Max	C-Max
Walk Time (s)				7.0	7.0	7.0		7.0			7.0	7.0
Flash Dont Walk (s)				22.0	22.0	22.0		13.0			13.0	13.0
Pedestrian Calls (#/hr)				30	30	30		30			30	30
Act Effct Green (s)				28.5	28.5	28.5	81.4	80.1			57.7	57.7
Actuated g/C Ratio				0.24	0.24	0.24	0.68	0.67			0.48	0.48
v/c Ratio				0.32	0.15	0.90	0.74	0.50			0.46	0.72
Control Delay				38.3	34.7	58.8	19.2	11.7			14.1	6.7
Queue Delay				0.0	0.0	0.2	0.0	0.1			0.7	0.9
Total Delay				38.3	34.7	58.9	19.2	11.8			14.8	7.6
LOS				D	C	E	B	B			B	A
Approach Delay					51.6			13.6			11.2	
Approach LOS					D			B			B	
Queue Length 50th (ft)				85	40	240	115	229			55	15
Queue Length 95th (ft)				134	74	350	209	322			211	109
Internal Link Dist (ft)		355			406			254			246	
Turn Bay Length (ft)												
Base Capacity (vph)				514	541	519	602	2362			1701	1055

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn				0	0	0	0	0			538	104
Spillback Cap Reductn				0	0	5	0	239			0	0
Storage Cap Reductn				0	0	0	0	0			0	0
Reduced v/c Ratio				0.26	0.12	0.77	0.64	0.56			0.68	0.80

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 35 (29%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.90
Intersection Signal Delay: 18.7 Intersection LOS: B
Intersection Capacity Utilization 81.9% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 10: Washington Blvd & I-95 SB On Ramp/N State St

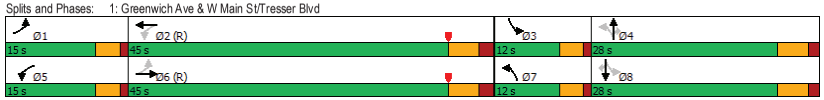


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	66	352	46	214	578	82	51	246	148	36	214	66
Future Volume (vph)	66	352	46	214	578	82	51	246	148	36	214	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50		0	150		0	50		50	40		20
Storage Lanes	1		0	1		0	1		1	1		2
Taper Length (ft)	80			90			75			50		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	0.95	1.00
Frt		0.983			0.981				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3479	0	1770	3472	0	1770	1863	1583	1770	3539	1425
Flt Permitted	0.356			0.444			0.539			0.376		
Satd. Flow (perm)	663	3479	0	827	3472	0	1004	1863	1583	700	3539	1425
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		17			18				116			116
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		331			563			929			334	
Travel Time (s)		7.5			12.8			21.1			7.6	
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
Parking (#/hr)						0						0
Adj. Flow (vph)	72	383	50	233	628	89	55	267	161	39	233	72
Shared Lane Traffic (%)												
Lane Group Flow (vph)	72	433	0	233	717	0	55	267	161	39	233	72
Number of Detectors	1	1		1	1		1	1	1	1	2	1
Detector Template												
Leading Detector (ft)	40	50		40	50		40	40	40	40	100	50
Trailing Detector (ft)	-10	0		-10	0		-10	-10	-10	-10	-10	0
Detector 1 Position(ft)	-10	0		-10	0		-10	-10	-10	-10	-10	0
Detector 1 Size(ft)	50	50		50	50		50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)											94	
Detector 2 Size(ft)											6	
Detector 2 Type											Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)											0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6			2			4		4	8		8
Detector Phase	1	6		5	2		7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	4.0	20.0		4.0	20.0		4.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.0	32.6		8.0	32.6		8.0	36.2	36.2	8.0	36.2	36.2
Total Split (s)	15.0	45.0		15.0	45.0		12.0	28.0	28.0	12.0	28.0	28.0
Total Split (%)	15.0%	45.0%		15.0%	45.0%		12.0%	28.0%	28.0%	12.0%	28.0%	28.0%
Maximum Green (s)	11.0	39.4		11.0	39.4		8.0	22.8	22.8	8.0	22.8	22.8
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.7	3.7	3.0	3.7	3.7
All-Red Time (s)	1.0	1.9		1.0	1.9		1.0	1.5	1.5	1.0	1.5	1.5
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)	4.0	5.6		4.0	5.6		4.0	5.2	5.2	4.0	5.2	5.2
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.0	3.0		1.0	3.0		1.0	2.0	2.0	1.0	2.0	2.0
Recall Mode	None	C-Min		None	C-Min		None	None	None	None	None	None
Walk Time (s)		7.0			7.0			7.0	7.0		7.0	7.0
Flash Dont Walk (s)		20.0			20.0			24.0	24.0		24.0	24.0
Pedestrian Calls (#/hr)		10			10			10	10		10	10
Act Effct Green (s)	56.9	49.7		63.8	54.7		25.9	20.7	20.7	24.0	18.3	18.3
Actuated g/C Ratio	0.57	0.50		0.64	0.55		0.26	0.21	0.21	0.24	0.18	0.18
v/c Ratio	0.16	0.25		0.38	0.38		0.18	0.69	0.38	0.17	0.36	0.20
Control Delay	11.1	17.3		11.7	16.5		23.7	45.5	12.8	23.6	35.7	2.7
Queue Delay	0.0	0.0		0.0	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	11.1	17.3		11.7	16.5		23.7	45.5	12.8	23.6	35.7	2.7
LOS	B	B		B	B		C	D	B	C	D	A
Approach Delay		16.4			15.3			32.1			27.4	
Approach LOS		B			B			C			C	
Queue Length 50th (ft)	16	80		58	134		26	163	24	18	69	0
Queue Length 95th (ft)	48	152		137	251		43	209	67	34	88	11
Internal Link Dist (ft)		251			483			849			254	
Turn Bay Length (ft)	50			150			50		50	40		20
Base Capacity (vph)	532	1795		635	1938		329	458	477	267	864	435
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	0.14	0.24		0.37	0.37		0.17	0.58	0.34	0.15	0.27	0.17

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 75 (75%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.69			
Intersection Signal Delay: 20.9		Intersection LOS: C	
Intersection Capacity Utilization 60.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: Greenwich Ave & W Main St/Tresser Blvd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	41	128	41	123	112	36	20	419	251	25	449	51
Future Volume (vph)	41	128	41	123	112	36	20	419	251	25	449	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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
Frt		0.973			0.982			0.951			0.987	
Flt Protected		0.990			0.978			0.999			0.998	
Satd. Flow (prot)	0	1794	0	0	1789	0	0	1770	0	0	1835	0
Flt Permitted		0.865			0.522			0.976			0.947	
Satd. Flow (perm)	0	1568	0	0	955	0	0	1729	0	0	1741	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		371			483			803			929	
Travel Time (s)		8.4			11.0			18.3			21.1	
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
Adj. Flow (vph)	45	139	45	134	122	39	22	455	273	27	488	55
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	229	0	0	295	0	0	750	0	0	570	0
Number of Detectors	1	1		1	1		1	0		1	0	
Detector Template	Left			Left			Left			Left		
Leading Detector (ft)	20	52		20	52		20	0		20	0	
Trailing Detector (ft)	0	2		0	2		0	0		0	0	
Detector 1 Position(ft)	0	2		0	2		0	0		0	0	
Detector 1 Size(ft)	20	50		20	50		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm	NA		D.P+P	NA		Perm	NA		Perm	NA	
Protected Phases		4		3	3 4			2			2	
Permitted Phases	4			4			2			2		
Detector Phase	4	4		3	3 4		2	2		2	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0			15.0	15.0		15.0	15.0	
Minimum Split (s)	24.1	24.1		9.0			24.5	24.5		24.5	24.5	
Total Split (s)	30.0	30.0		20.0			70.0	70.0		70.0	70.0	
Total Split (%)	25.0%	25.0%		16.7%			58.3%	58.3%		58.3%	58.3%	
Maximum Green (s)	24.9	24.9		16.0			64.5	64.5		64.5	64.5	
Yellow Time (s)	3.3	3.3		3.0			3.3	3.3		3.3	3.3	
All-Red Time (s)	1.8	1.8		1.0			2.2	2.2		2.2	2.2	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		5.1						5.5			5.5	
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?	Yes	Yes		Yes								
Vehicle Extension (s)	2.0	2.0		2.0			3.0	3.0		3.0	3.0	
Recall Mode	None	None		None			C-Min	C-Min		C-Min	C-Min	
Walk Time (s)	7.0	7.0					7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	12.0	12.0					12.0	12.0		12.0	12.0	
Pedestrian Calls (#/hr)	10	10					10	10		10	10	
Act Effct Green (s)		20.2			37.3			69.2			69.2	
Actuated g/C Ratio		0.17			0.31			0.58			0.58	
v/c Ratio		0.87			0.72			0.75			0.57	
Control Delay		78.2			41.6			39.9			20.0	
Queue Delay		0.0			0.0			0.5			0.0	
Total Delay		78.2			41.6			40.4			20.0	
LOS		E			D			D			B	
Approach Delay		78.2			41.6			40.4			20.0	
Approach LOS		E			D			D			B	
Queue Length 50th (ft)		172			167			589			290	
Queue Length 95th (ft)		#261			247			728			410	
Internal Link Dist (ft)		291			403			723			849	
Turn Bay Length (ft)												
Base Capacity (vph)		325			455			997			1004	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0			0			48			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.70			0.65			0.79			0.57	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 56 (47%), Referenced to phase 2:NBSB, Start of Yellow			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.87			
Intersection Signal Delay: 39.0		Intersection LOS: D	
Intersection Capacity Utilization 82.7%		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.			

Splits and Phases: 2: Greenwich Ave & Richmond Hill Ave

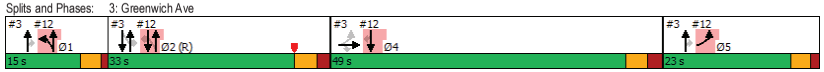
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø1	Ø5
Lane Configurations														
Traffic Volume (vph)	486	754	367	0	0	0	0	235	152	102	511	0		
Future Volume (vph)	486	754	367	0	0	0	0	235	152	102	511	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Storage Length (ft)	225		225	0		0	0		50	75		230		
Storage Lanes	1		1	0		0	0		1	1		1		
Taper Length (ft)	200			25			25			50				
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00		
Frt			0.850						0.850					
Flt Protected	0.950									0.950				
Satd. Flow (prot)	1770	3539	1583	0	0	0	0	1863	1583	1770	3539	0		
Flt Permitted	0.950									0.601				
Satd. Flow (perm)	1770	3539	1583	0	0	0	0	1863	1583	1120	3539	0		
Right Turn on Red			Yes			Yes			Yes			Yes		
Satd. Flow (RTOR)			399						52					
Link Speed (mph)		30			30			30			30			
Link Distance (ft)		787			542			204			803			
Travel Time (s)		17.9			12.3			4.6			18.3			
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		
Adj. Flow (vph)	528	820	399	0	0	0	0	255	165	111	555	0		
Shared Lane Traffic (%)														
Lane Group Flow (vph)	528	820	399	0	0	0	0	255	165	111	555	0		
Number of Detectors	1	1	1					0	0	1	1			
Detector Template														
Leading Detector (ft)	16	16	16					0	0	15	15			
Trailing Detector (ft)	0	0	0					0	0	-5	-5			
Detector 1 Position(ft)	0	0	0					0	0	-5	-5			
Detector 1 Size(ft)	16	16	16					6	20	20	20			
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel														
Detector 1 Extend (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0			
Turn Type	Perm	NA	Perm					NA	Perm	Perm	NA			
Protected Phases		4						1 2 5			2		1	5
Permitted Phases	4		4						1 2 5	2				
Detector Phase	4	4	4					1	1	2	2			
Switch Phase														
Minimum Initial (s)	7.0	7.0	7.0							15.0	15.0		5.0	5.0
Minimum Split (s)	31.6	31.6	31.6							32.4	32.4		9.0	22.4
Total Split (s)	49.0	49.0	49.0							33.0	33.0		15.0	23.0
Total Split (%)	40.8%	40.8%	40.8%							27.5%	27.5%		13%	19%
Maximum Green (s)	43.4	43.4	43.4							27.6	27.6		11.0	18.6
Yellow Time (s)	3.3	3.3	3.3							3.3	3.3		3.0	3.0
All-Red Time (s)	2.3	2.3	2.3							2.1	2.1		1.0	1.4
Lost Time Adjust (s)	0.0	0.0	0.0							0.0	0.0			
Total Lost Time (s)	5.6	5.6	5.6							5.4	5.4			
Lead/Lag										Lag	Lag		Lead	
Lead-Lag Optimize?										Yes	Yes		Yes	
Vehicle Extension (s)	2.0	2.0	2.0							3.0	3.0		1.0	2.0
Recall Mode	None	None	None							C-Min	C-Min		None	None
Walk Time (s)	7.0	7.0	7.0							7.0	7.0			7.0
Flash Dont Walk (s)	19.0	19.0	19.0							20.0	20.0			11.0
Pedestrian Calls (#/hr)	10	10	10							10	10			10
Act Effct Green (s)	40.7	40.7	40.7					69.7	69.7	50.3	50.3			
Actuated g/C Ratio	0.34	0.34	0.34					0.58	0.58	0.42	0.42			
v/c Ratio	0.88	0.68	0.50					0.24	0.18	0.24	0.37			
Control Delay	53.9	36.9	4.8					13.8	9.3	24.3	22.8			
Queue Delay	0.0	0.0	0.0					11.9	3.7	0.0	0.0			
Total Delay	53.9	36.9	4.8					25.8	13.0	24.3	22.8			
LOS	D	D	A					C	B	C	C			
Approach Delay		34.7						20.7			23.0			
Approach LOS		C						C			C			
Queue Length 50th (ft)	375	280	0					94	39	37	100			
Queue Length 95th (ft)	#551	344	65					145	76	m88	193			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø1	Ø5
Internal Link Dist (ft)		707			462			124			723			
Turn Bay Length (ft)	225		225						50	75				
Base Capacity (vph)	654	1308	837					1074	934	468	1482			
Starvation Cap Reductn	0	0	0					787	679	0	0			
Spillback Cap Reductn	0	0	0					175	0	0	0			
Storage Cap Reductn	0	0	0					0	0	0	0			
Reduced v/c Ratio	0.81	0.63	0.48					0.89	0.65	0.24	0.37			

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 39 (33%), Referenced to phase 2:NBSB and 6:, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.88
Intersection Signal Delay: 29.9 Intersection LOS: C
Intersection Capacity Utilization 64.3% 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: 3: Greenwich Ave

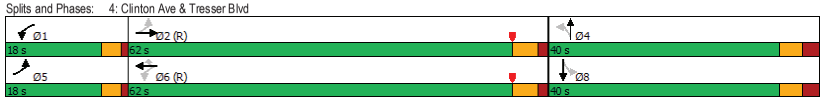


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	87	403	46	95	792	51	26	20	48	15	31	56
Future Volume (vph)	87	403	46	95	792	51	26	20	48	15	31	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	140		0	100		0	0		0	0		0
Storage Lanes	1		0	1		1	0		0	0		0
Taper Length (ft)	90			65			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.985				0.850		0.931			0.926	
Flt Protected	0.950			0.950				0.986			0.993	
Satd. Flow (prot)	1770	3486	0	1770	3539	1583	0	1710	0	0	1713	0
Flt Permitted	0.303			0.470				0.812			0.942	
Satd. Flow (perm)	564	3486	0	875	3539	1583	0	1408	0	0	1625	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		563			677			500			579	
Travel Time (s)		12.8			15.4			11.4			13.2	
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
Parking (#/hr)			0									0
Adj. Flow (vph)	95	438	50	103	861	55	28	22	52	16	34	61
Shared Lane Traffic (%)												
Lane Group Flow (vph)	95	488	0	103	861	55	0	102	0	0	111	0
Number of Detectors	4	1		4	1	1	1	1		1	1	
Detector Template							Left			Left		
Leading Detector (ft)	33	50		36	50	50	20	106		20	106	
Trailing Detector (ft)	-9	0		-6	0	0	0	100		0	100	
Detector 1 Position(ft)	-9	0		-6	0	0	0	100		0	100	
Detector 1 Size(ft)	6	50		6	50	50	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)	3			6								
Detector 2 Size(ft)	6			6								
Detector 2 Type	Cl+Ex			Cl+Ex								
Detector 2 Channel												
Detector 2 Extend (s)	0.0			0.0								
Detector 3 Position(ft)	15			18								
Detector 3 Size(ft)	6			6								
Detector 3 Type	Cl+Ex			Cl+Ex								
Detector 3 Channel												
Detector 3 Extend (s)	0.0			0.0								
Detector 4 Position(ft)	27			30								
Detector 4 Size(ft)	6			6								
Detector 4 Type	Cl+Ex			Cl+Ex								
Detector 4 Channel												
Detector 4 Extend (s)	0.0			0.0								
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2			6		6	4			8		
Detector Phase	5	2		1	6	6	4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0	15.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	9.0	27.3		9.0	27.3	27.3	39.9	39.9		39.9	39.9	
Total Split (s)	18.0	62.0		18.0	62.0	62.0	40.0	40.0		40.0	40.0	
Total Split (%)	15.0%	51.7%		15.0%	51.7%	51.7%	33.3%	33.3%		33.3%	33.3%	
Maximum Green (s)	14.0	56.7		14.0	56.7	56.7	34.1	34.1		34.1	34.1	
Yellow Time (s)	3.0	3.7		3.0	3.7	3.7	3.3	3.3		3.3	3.3	
All-Red Time (s)	1.0	1.6		1.0	1.6	1.6	2.6	2.6		2.6	2.6	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0			0.0	
Total Lost Time (s)	4.0	5.3		4.0	5.3	5.3		5.9			5.9	
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vehicle Extension (s)	2.0	3.0		2.0	3.0	3.0	2.0	2.0		2.0	2.0	
Recall Mode	None	C-Min		None	C-Min	C-Min	None	None		None	None	
Walk Time (s)		7.0			7.0	7.0	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		15.0			15.0	15.0	27.0	27.0		27.0	27.0	
Pedestrian Calls (#/hr)		10			10	10	10	10		10	10	
Act Effct Green (s)	91.8	84.2		92.1	84.3	84.3		14.1			14.1	
Actuated g/C Ratio	0.76	0.70		0.77	0.70	0.70		0.12			0.12	
v/c Ratio	0.19	0.20		0.14	0.35	0.05		0.62			0.58	
Control Delay	5.2	8.2		11.5	23.9	20.5		63.5			59.6	
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	
Total Delay	5.2	8.2		11.5	23.9	20.5		63.5			59.6	
LOS	A	A		B	C	C		E			E	
Approach Delay		7.7			22.5			63.5			59.6	
Approach LOS		A			C			E			E	
Queue Length 50th (ft)	10	53		21	305	31		79			86	
Queue Length 95th (ft)	48	144		m86	341	m56		110			116	
Internal Link Dist (ft)		483			597			420			499	
Turn Bay Length (ft)	140			100								
Base Capacity (vph)	591	2446		803	2487	1112		400			461	
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	0.16	0.20		0.13	0.35	0.05		0.26			0.24	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 69 (58%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.62			
Intersection Signal Delay: 22.3		Intersection LOS: C	
Intersection Capacity Utilization 48.8%		ICU Level of Service A	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 4: Clinton Ave & Tresser Blvd



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	31	5	80	98	45	158
Future Volume (vph)	31	5	80	98	45	158
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.983		0.926			
Flt Protected	0.958					0.989
Satd. Flow (prot)	1754	0	1725	0	0	1658
Flt Permitted	0.958					0.989
Satd. Flow (perm)	1754	0	1725	0	0	1658
Link Speed (mph)	30		30			30
Link Distance (ft)	511		160			500
Travel Time (s)	11.6		3.6			11.4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Parking (#/hr)		0		0		0
Adj. Flow (vph)	34	5	87	107	49	172
Shared Lane Traffic (%)						
Lane Group Flow (vph)	39	0	194	0	0	221
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 34.3%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	1.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	31	5	80	98	45	158
Future Vol, veh/h	31	5	80	98	45	158
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, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	34	5	87	107	49	172

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	411	141	0	0	194	0
Stage 1	141	-	-	-	-	-
Stage 2	270	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	597	907	-	-	1379	-
Stage 1	886	-	-	-	-	-
Stage 2	775	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	574	907	-	-	1379	-
Mov Cap-2 Maneuver	574	-	-	-	-	-
Stage 1	886	-	-	-	-	-
Stage 2	745	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.4	0	1.7
HCM LOS	B		

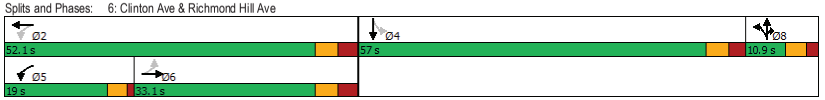
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	605	1379	-
HCM Lane V/C Ratio	-	-	0.065	0.035	-
HCM Control Delay (s)	-	-	11.4	7.7	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0.1	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	113	148	143	82	184	11	0	0	0	72	51	87
Future Volume (vph)	113	148	143	82	184	11	0	0	0	72	51	87
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	25		0	275		0	0		0	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	50			40			25			25		
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt		0.947			0.992						0.944	
Flt Protected		0.986		0.950							0.983	
Satd. Flow (prot)	0	3305	0	1770	1848	0	0	1770	1770	0	1729	0
Flt Permitted		0.799		0.302							0.950	
Satd. Flow (perm)	0	2678	0	563	1848	0	0	1770	1770	0	1671	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		79			3						37	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		483			426			296			230	
Travel Time (s)		11.0			9.7			6.7			5.2	
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
Adj. Flow (vph)	123	161	155	89	200	12	0	0	0	78	55	95
Shared Lane Traffic (%)									0%			
Lane Group Flow (vph)	0	439	0	89	212	0	0	0	0	0	228	0
Number of Detectors	1	0		1	1		1	1	1	1	1	
Detector Template	Left						Left			Left		
Leading Detector (ft)	20	0		48	48		20	40	40	20	45	
Trailing Detector (ft)	0	0		-2	-2		0	-10	-10	0	-5	
Detector 1 Position(ft)	0	0		-2	-2		0	-10	-10	0	-5	
Detector 1 Size(ft)	20	6		50	50		20	50	50	20	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Turn Type	Perm	NA		pm+pt	NA				Prot	Perm	NA	
Protected Phases		6		5	2		8	8	8		4	
Permitted Phases	6			2						4		
Detector Phase	6	6		5	2		8	8	8	4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		6.0	6.0	6.0	6.0	6.0	
Minimum Split (s)	31.4	31.4		19.0	31.4		10.9	10.9	10.9	29.7	29.7	
Total Split (s)	33.1	33.1		19.0	52.1		10.9	10.9	10.9	57.0	57.0	
Total Split (%)	27.6%	27.6%		15.8%	43.4%		9.1%	9.1%	9.1%	47.5%	47.5%	
Maximum Green (s)	26.7	26.7		15.0	45.7		6.0	6.0	6.0	51.3	51.3	
Yellow Time (s)	3.3	3.3		3.0	3.3		3.0	3.0	3.0	3.3	3.3	
All-Red Time (s)	3.1	3.1		1.0	3.1		1.9	1.9	1.9	2.4	2.4	
Lost Time Adjust (s)		0.0		0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)		6.4		4.0	6.4			4.9	4.9		5.7	
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?	Yes	Yes		Yes								
Vehicle Extension (s)	3.0	3.0		5.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	Min	Min		None	Min		None	None	None	None	None	
Walk Time (s)	7.0	7.0			7.0					7.0	7.0	
Flash Dont Walk (s)	18.0	18.0			18.0					17.0	17.0	
Pedestrian Calls (#/hr)	10	10			10					10	10	
Act Effct Green (s)		19.7		36.6	34.1						52.0	
Actuated g/C Ratio		0.20		0.37	0.35						0.53	
v/c Ratio		0.73		0.23	0.33						0.25	
Control Delay		38.6		20.5	23.7						13.3	
Queue Delay		0.0		0.0	0.0						0.0	
Total Delay		38.6		20.5	23.7						13.3	
LOS		D		C	C						B	
Approach Delay		38.6			22.8						13.3	
Approach LOS		D			C						B	
Queue Length 50th (ft)		117		36	94						66	
Queue Length 95th (ft)		173		67	150						130	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		403			346			216			150	
Turn Bay Length (ft)				275								
Base Capacity (vph)		793		395	871						900	
Starvation Cap Reductn		0		0	0						0	
Spillback Cap Reductn		0		0	0						0	
Storage Cap Reductn		0		0	0						0	
Reduced v/c Ratio		0.55		0.23	0.24						0.25	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 98.4			
Natural Cycle: 95			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay: 27.7		Intersection LOS: C	
Intersection Capacity Utilization 52.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 6: Clinton Ave & Richmond Hill Ave

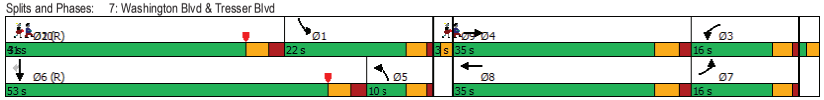


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø9	Ø10
Lane Configurations														
Traffic Volume (vph)	111	412	46	161	616	81	59	889	138	89	1046	59		
Future Volume (vph)	111	412	46	161	616	81	59	889	138	89	1046	59		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Storage Length (ft)	320		0	180		0	200		230	200		250		
Storage Lanes	1		0	1		0	1		1	1		1		
Taper Length (ft)	50			60			25			50				
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	0.95	1.00	1.00	0.95	1.00		
Frt		0.985			0.983				0.850			0.850		
Flt Protected	0.950			0.950			0.950			0.950				
Satd. Flow (prot)	1770	5009	0	1770	4999	0	1770	3539	1583	1770	3539	1583		
Flt Permitted	0.950			0.950			0.950			0.950				
Satd. Flow (perm)	1770	5009	0	1770	4999	0	1770	3539	1583	1770	3539	1583		
Right Turn on Red			No			No			No			No		
Satd. Flow (RTOR)														
Link Speed (mph)		30			30			30			30			
Link Distance (ft)		677			703			578			404			
Travel Time (s)		15.4			16.0			13.1			9.2			
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		
Adj. Flow (vph)	121	448	50	175	670	88	64	966	150	97	1137	64		
Shared Lane Traffic (%)														
Lane Group Flow (vph)	121	498	0	175	758	0	64	966	150	97	1137	64		
Number of Detectors	1	1		1	1		1	1	1	1	1	1		
Detector Template														
Leading Detector (ft)	40	45		40	45		40	45	45	40	45	45		
Trailing Detector (ft)	-10	-5		-10	-5		-10	-5	-5	-10	-5	-5		
Detector 1 Position(ft)	-10	-5		-10	-5		-10	-5	-5	-10	-5	-5		
Detector 1 Size(ft)	50	50		50	50		50	50	50	50	50	50		
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		
Detector 1 Channel														
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	Perm		
Protected Phases	7	4		3	8		5	2		1	6		9	10
Permitted Phases									2			6		
Detector Phase	7	4		3	8		5	2	2	1	6	6		
Switch Phase														
Minimum Initial (s)	5.0	10.0		5.0	10.0		5.0	15.0	15.0	5.0	15.0	15.0	1.0	1.0
Minimum Split (s)	9.0	30.4		9.0	30.4		9.0	30.6	30.6	9.0	30.6	30.6	3.0	3.0
Total Split (s)	16.0	35.0		16.0	35.0		10.0	41.0	41.0	22.0	53.0	53.0	3.0	3.0
Total Split (%)	13.3%	29.2%		13.3%	29.2%		8.3%	34.2%	34.2%	18.3%	44.2%	44.2%	3%	3%
Maximum Green (s)	12.0	29.6		12.0	29.6		6.0	35.4	35.4	18.0	47.4	47.4	1.0	1.0
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.3	3.3	3.0	3.3	3.3	2.0	2.0
All-Red Time (s)	1.0	1.7		1.0	1.7		1.0	2.3	2.3	1.0	2.3	2.3	0.0	0.0
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)	4.0	5.4		4.0	5.4		4.0	5.6	5.6	4.0	5.6	5.6		
Lead/Lag	Lag	Lead		Lag	Lead		Lag	Lead	Lead	Lag	Lead	Lead		
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes		
Vehicle Extension (s)	1.0	3.0		1.0	3.0		1.0	3.0	3.0	1.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None		None	C-Min	C-Min	None	C-Min	C-Min	None	None
Walk Time (s)		4.0			4.0			4.0	4.0		4.0	4.0		
Flash Dont Walk (s)		21.0			21.0			21.0	21.0		21.0	21.0		
Pedestrian Calls (#/hr)		30			30			30	30		30	30		
Act Effct Green (s)	14.2	20.9		17.9	24.5		6.6	48.5	48.5	13.8	57.5	57.5		
Actuated g/C Ratio	0.12	0.17		0.15	0.20		0.06	0.40	0.40	0.12	0.48	0.48		
v/c Ratio	0.58	0.57		0.67	0.74		0.67	0.68	0.23	0.48	0.67	0.08		
Control Delay	65.7	47.7		60.9	49.2		68.1	35.6	31.5	56.2	28.4	20.7		
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.2	0.0		
Total Delay	65.7	47.7		60.9	49.2		68.1	35.6	31.5	56.2	28.6	20.7		
LOS	E	D		E	D		E	D	C	E	C	C		
Approach Delay		51.2			51.4			36.9			30.3			
Approach LOS		D			D			D			C			
Queue Length 50th (ft)	98	131		129	202		48	239	57	69	397	30		
Queue Length 95th (ft)	152	166		204	238		m#123	342	117	123	476	58		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø9	Ø10
Internal Link Dist (ft)		597			623			498			324			
Turn Bay Length (ft)	320			180			200		230	200		250		
Base Capacity (vph)	221	1235		263	1233		99	1429	639	265	1695	758		
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0		
Spillback Cap Reductn	0	0		0	0		0	0	0	0	111	0		
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0		
Reduced v/c Ratio	0.55	0.40		0.67	0.61		0.65	0.68	0.23	0.37	0.72	0.08		

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.74			
Intersection Signal Delay: 40.3		Intersection LOS: D	
Intersection Capacity Utilization 68.8%		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: 7: Washington Blvd & Tresser Blvd



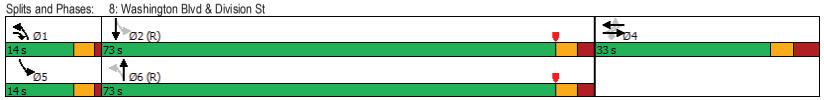
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	0	20	0	0	0	26	1307	0	5	1426	46
Future Volume (vph)	40	0	20	0	0	0	26	1307	0	5	1426	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		170	0		0	0		0	100		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25			25			25			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								0.995	
Flt Protected		0.950					0.950			0.950		
Satd. Flow (prot)	0	1770	1583	0	1863	0	1770	3539	0	1770	3522	0
Flt Permitted		0.757					0.100			0.153		
Satd. Flow (perm)	0	1410	1583	0	1863	0	186	3539	0	285	3522	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			27								4	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		511			252			356			578	
Travel Time (s)		11.6			5.7			8.1			13.1	
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
Adj. Flow (vph)	43	0	22	0	0	0	28	1421	0	5	1550	50
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	43	22	0	0	0	28	1421	0	5	1600	0
Number of Detectors	1	4	4	1	1		4	1		4	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	32	32	20	6		39	50		36	50	
Trailing Detector (ft)	0	-10	-10	0	0		-3	0		-6	0	
Detector 1 Position(ft)	0	-10	-10	0	0		-3	0		-6	0	
Detector 1 Size(ft)	20	6	6	20	6		6	50		6	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		2	2				9			6		
Detector 2 Size(ft)		6	6				6			6		
Detector 2 Type		Cl+Ex	Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)		0.0	0.0				0.0			0.0		
Detector 3 Position(ft)		14	14				21			18		
Detector 3 Size(ft)		6	6				6			6		
Detector 3 Type		Cl+Ex	Cl+Ex				Cl+Ex			Cl+Ex		
Detector 3 Channel												
Detector 3 Extend (s)		0.0	0.0				0.0			0.0		
Detector 4 Position(ft)		26	26				33			30		
Detector 4 Size(ft)		6	6				6			6		
Detector 4 Type		Cl+Ex	Cl+Ex				Cl+Ex			Cl+Ex		
Detector 4 Channel												
Detector 4 Extend (s)		0.0	0.0				0.0			0.0		
Turn Type	Perm	NA	pm+ov				pm+pt	NA		pm+pt	NA	
Protected Phases		4	1		4		1	6		5	2	
Permitted Phases	4		4	4			6			2		
Detector Phase	4	4	1	4	4		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	15.0		5.0	15.0	
Minimum Split (s)	32.2	32.2	9.0	32.2	32.2		9.0	21.0		9.0	35.0	
Total Split (s)	33.0	33.0	14.0	33.0	33.0		14.0	73.0		14.0	73.0	
Total Split (%)	27.5%	27.5%	11.7%	27.5%	27.5%		11.7%	60.8%		11.7%	60.8%	
Maximum Green (s)	25.8	25.8	10.0	25.8	25.8		10.0	67.0		10.0	67.0	
Yellow Time (s)	3.3	3.3	3.0	3.3	3.3		3.0	3.3		3.0	3.3	
All-Red Time (s)	3.9	3.9	1.0	3.9	3.9		1.0	2.7		1.0	2.7	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		7.2	4.0		7.2		4.0	6.0		4.0	6.0	
Lead/Lag			Lead				Lead	Lag		Lead	Lag	
Lead-Lag Optimize?			Yes				Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	3.0		2.0	3.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0						7.0	
Flash Dont Walk (s)	18.0	18.0		18.0	18.0						22.0	
Pedestrian Calls (#/hr)	30	30		30	30						30	
Act Effct Green (s)		17.4	27.4				93.2	91.3		90.4	85.6	
Actuated g/C Ratio		0.14	0.23				0.78	0.76		0.75	0.71	
v/c Ratio		0.21	0.06				0.13	0.53		0.02	0.64	
Control Delay		47.1	10.7				4.2	7.3		2.0	6.4	
Queue Delay		0.0	0.0				0.0	0.0		0.0	0.3	
Total Delay		47.1	10.7				4.2	7.3		2.0	6.7	
LOS		D	B				A	A		A	A	
Approach Delay		34.8						7.3			6.7	
Approach LOS		C						A			A	
Queue Length 50th (ft)		28	0				5	271		1	143	
Queue Length 95th (ft)		63	18				m6	312		m1	161	
Internal Link Dist (ft)		431			172			276			498	
Turn Bay Length (ft)			170							100		
Base Capacity (vph)		303	443				277	2691		346	2512	
Starvation Cap Reductn		0	0				0	101		0	349	
Spillback Cap Reductn		0	0				0	0		0	11	
Storage Cap Reductn		0	0				0	0		0	0	
Reduced v/c Ratio		0.14	0.05				0.10	0.55		0.01	0.74	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 36 (30%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay: 7.6		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: 8: Washington Blvd & Division St

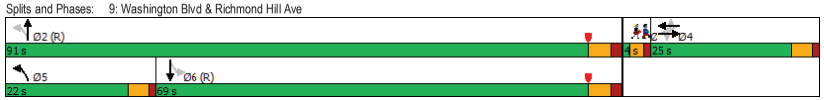


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø3
Lane Configurations													
Traffic Volume (vph)	107	0	113	0	0	5	236	1220	5	5	1400	41	
Future Volume (vph)	107	0	113	0	0	5	236	1220	5	5	1400	41	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	0		0	0		0	140		0	0		0	
Storage Lanes	1		0	0		0	1		0	0		0	
Taper Length (ft)	25			25			80			25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	
Frt		0.850			0.865			0.999			0.996		
Flt Protected	0.950						0.950						
Satd. Flow (prot)	1770	1583	0	0	1611	0	1770	3536	0	0	3525	0	
Flt Permitted	0.754						0.083				0.951		
Satd. Flow (perm)	1405	1583	0	0	1611	0	155	3536	0	0	3352	0	
Right Turn on Red			No			No			No			No	
Satd. Flow (RTOR)													
Link Speed (mph)		30			30			30			30		
Link Distance (ft)		426			205			326			356		
Travel Time (s)		9.7			4.7			7.4			8.1		
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	
Adj. Flow (vph)	116	0	123	0	0	5	257	1326	5	5	1522	45	
Shared Lane Traffic (%)													
Lane Group Flow (vph)	116	123	0	0	5	0	257	1331	0	0	1572	0	
Number of Detectors	1	1		1	1		1	1		1	1		
Detector Template				Left						Left			
Leading Detector (ft)	50	50		20	50		40	40		20	40		
Trailing Detector (ft)	0	0		0	0		-10	-10		0	-10		
Detector 1 Position(ft)	0	0		0	0		-10	-10		0	-10		
Detector 1 Size(ft)	50	50		20	50		50	50		20	50		
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		
Detector 1 Channel													
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0		
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0		
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0		
Turn Type	Perm	NA			NA		pm+pt	NA		Perm	NA		
Protected Phases		4			4		5	2			6		3
Permitted Phases	4			4			2			6			
Detector Phase	4	4		4	4		5	2		6	6		
Switch Phase													
Minimum Initial (s)	5.0	5.0		5.0	5.0		7.0	15.0		15.0	15.0		1.0
Minimum Split (s)	24.2	24.2		24.2	24.2		11.0	28.0		28.0	28.0		4.0
Total Split (s)	25.0	25.0		25.0	25.0		22.0	91.0		69.0	69.0		4.0
Total Split (%)	20.8%	20.8%		20.8%	20.8%		18.3%	75.8%		57.5%	57.5%		3%
Maximum Green (s)	20.8	20.8		20.8	20.8		18.0	86.0		64.0	64.0		1.0
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.3		3.3	3.3		2.0
All-Red Time (s)	1.2	1.2		1.2	1.2		1.0	1.7		1.7	1.7		1.0
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0			0.0		
Total Lost Time (s)	4.2	4.2			4.2		4.0	5.0			5.0		
Lead/Lag	Lag	Lag		Lag	Lag		Lead			Lag	Lag		Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes			Yes	Yes		Yes
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	3.0		3.0	3.0		3.0
Recall Mode	None	None		None	None		None	C-Min		C-Min	C-Min		None
Walk Time (s)	3.0	3.0		3.0	3.0			7.0		7.0	7.0		
Flash Dont Walk (s)	17.0	17.0		17.0	17.0			16.0		16.0	16.0		
Pedestrian Calls (#/hr)	30	30		30	30			30		30	30		
Act Effct Green (s)	16.0	16.0			16.0		95.8	94.8			74.1		
Actuated g/C Ratio	0.13	0.13			0.13		0.80	0.79			0.62		
v/c Ratio	0.62	0.59			0.02		0.74	0.48			0.76		
Control Delay	62.5	59.1			42.0		37.9	3.2			7.3		
Queue Delay	0.0	0.0			0.0		0.8	0.2			0.4		
Total Delay	62.5	59.1			42.0		38.7	3.4			7.8		
LOS	E	E			D		D	A			A		
Approach Delay		60.7			42.0			9.1			7.8		
Approach LOS		E			D			A			A		
Queue Length 50th (ft)	83	87			3		111	107			42		
Queue Length 95th (ft)	144	149			15		m174	m128			104		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø3
Internal Link Dist (ft)		346			125			246			276		
Turn Bay Length (ft)							140						
Base Capacity (vph)	243	274			279		384	2793			2069		
Starvation Cap Reductn	0	0			0		23	662			0		
Spillback Cap Reductn	0	0			0		0	113			147		
Storage Cap Reductn	0	0			0		0	0			0		
Reduced v/c Ratio	0.48	0.45			0.02		0.71	0.62			0.82		

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 28 (23%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay: 12.2		Intersection LOS: B	
Intersection Capacity Utilization 98.5%		ICU Level of Service F	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 9: Washington Blvd & Richmond Hill Ave



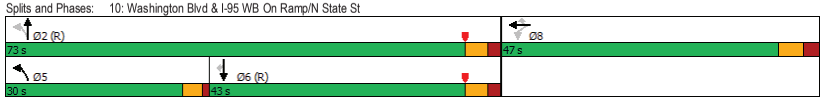
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	394	112	504	317	957	10	0	825	688
Future Volume (vph)	0	0	0	394	112	504	317	957	10	0	825	688
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Frt						0.850		0.998				0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	0	0	1770	1863	1583	1770	3532	0	0	3539	1583
Flt Permitted				0.950			0.150					
Satd. Flow (perm)	0	0	0	1770	1863	1583	279	3532	0	0	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						94		1				504
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		435			486			334			326	
Travel Time (s)		9.9			11.0			7.6			7.4	
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
Adj. Flow (vph)	0	0	0	428	122	548	345	1040	11	0	897	748
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	428	122	548	345	1051	0	0	897	748
Number of Detectors				1	1	1	1	1			1	1
Detector Template												
Leading Detector (ft)				40	40	50	40	50			50	50
Trailing Detector (ft)				-10	-10	0	-10	0			0	0
Detector 1 Position(ft)				-10	-10	0	-10	0			0	0
Detector 1 Size(ft)				50	50	50	50	50			50	50
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
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)				7.0	7.0	7.0	10.0	15.0			15.0	15.0
Minimum Split (s)				35.1	35.1	35.1	14.0	25.3			25.3	25.3
Total Split (s)				47.0	47.0	47.0	30.0	73.0			43.0	43.0
Total Split (%)				39.2%	39.2%	39.2%	25.0%	60.8%			35.8%	35.8%
Maximum Green (s)				40.9	40.9	40.9	26.0	67.7			37.7	37.7
Yellow Time (s)				3.7	3.7	3.7	3.0	3.3			3.3	3.3
All-Red Time (s)				2.4	2.4	2.4	1.0	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)				6.1	6.1	6.1	4.0	5.3			5.3	5.3
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)				2.0	2.0	2.0	3.0	3.0			3.0	3.0
Recall Mode				None	None	None	Min	C-Max			C-Max	C-Max
Walk Time (s)				7.0	7.0	7.0		7.0			7.0	7.0
Flash Dont Walk (s)				22.0	22.0	22.0		13.0			13.0	13.0
Pedestrian Calls (#/hr)				30	30	30		30			30	30
Act Effct Green (s)				38.7	38.7	38.7	71.2	69.9			44.4	44.4
Actuated g/C Ratio				0.32	0.32	0.32	0.59	0.58			0.37	0.37
v/c Ratio				0.75	0.20	0.95	0.80	0.51			0.69	0.83
Control Delay				45.2	29.7	60.9	34.9	16.4			21.5	19.6
Queue Delay				0.0	0.0	0.0	0.0	0.0			3.6	14.6
Total Delay				45.2	29.7	60.9	34.9	16.4			25.1	34.1
LOS				D	C	E	C	B			C	C
Approach Delay					51.3			21.0			29.2	
Approach LOS					D			C			C	
Queue Length 50th (ft)				287	66	346	160	253			210	486
Queue Length 95th (ft)				408	114	#567	268	310			350	#694
Internal Link Dist (ft)		355			406			254			246	
Turn Bay Length (ft)												
Base Capacity (vph)				603	634	601	488	2057			1308	902

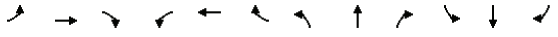
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn				0	0	0	0	0			312	152
Spillback Cap Reductn				0	0	0	0	0			0	0
Storage Cap Reductn				0	0	0	0	0			0	0
Reduced v/c Ratio				0.71	0.19	0.91	0.71	0.51			0.90	1.00

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 33 (28%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.95
Intersection Signal Delay: 32.3 Intersection LOS: C
Intersection Capacity Utilization 78.9% 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: Washington Blvd & I-95 WB On Ramp/N State St





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	48	0	21	16	0	22	11	107	6	5	174	10
Future Volume (vph)	48	0	21	16	0	22	11	107	6	5	174	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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
Frt		0.959			0.921			0.993			0.993	
Flt Protected		0.966			0.980			0.996			0.999	
Satd. Flow (prot)	0	1726	0	0	1681	0	0	1842	0	0	1848	0
Flt Permitted		0.966			0.980			0.996			0.999	
Satd. Flow (perm)	0	1726	0	0	1681	0	0	1842	0	0	1848	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		158			149			230			160	
Travel Time (s)		3.6			3.4			5.2			3.6	
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
Adj. Flow (vph)	52	0	23	17	0	24	12	116	7	5	189	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	75	0	0	41	0	0	135	0	0	205	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	24.4%	ICU Level of Service A	
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	48	0	21	16	0	22	11	107	6	5	174	10
Future Vol, veh/h	48	0	21	16	0	22	11	107	6	5	174	10
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	52	0	23	17	0	24	12	116	7	5	189	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	361	352	195	360	354	120	200	0	0	123	0	0
Stage 1	205	205	-	144	144	-	-	-	-	-	-	-
Stage 2	156	147	-	216	210	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	595	573	846	596	571	931	1372	-	-	1464	-	-
Stage 1	797	732	-	859	778	-	-	-	-	-	-	-
Stage 2	846	775	-	786	728	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	574	566	846	574	564	931	1372	-	-	1464	-	-
Mov Cap-2 Maneuver	574	566	-	574	564	-	-	-	-	-	-	-
Stage 1	790	729	-	851	771	-	-	-	-	-	-	-
Stage 2	817	768	-	762	725	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.4	10.2	0.7	0.2
HCM LOS	B	B		

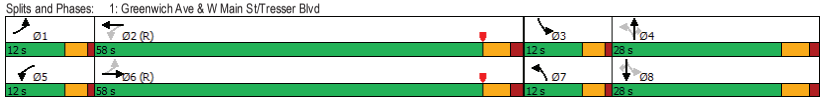
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1372	-	-	636	738	1464	-	-
HCM Lane V/C Ratio	0.009	-	-	0.118	0.056	0.004	-	-
HCM Control Delay (s)	7.6	0	-	11.4	10.2	7.5	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0.2	0	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	82	635	66	117	463	97	66	274	189	77	141	102
Future Volume (vph)	82	635	66	117	463	97	66	274	189	77	141	102
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50		0	150		0	50		50	40		20
Storage Lanes	1		0	1		0	1		1	1		2
Taper Length (ft)	80			90			75			50		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	0.95	1.00
Frt		0.986			0.974				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3490	0	1770	3447	0	1770	1863	1583	1770	3539	1425
Flt Permitted	0.391			0.285			0.655			0.265		
Satd. Flow (perm)	728	3490	0	531	3447	0	1220	1863	1583	494	3539	1425
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14			31				105			105
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		331			563			929			334	
Travel Time (s)		7.5			12.8			21.1			7.6	
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
Parking (#/hr)						0						0
Adj. Flow (vph)	89	690	72	127	503	105	72	298	205	84	153	111
Shared Lane Traffic (%)												
Lane Group Flow (vph)	89	762	0	127	608	0	72	298	205	84	153	111
Number of Detectors	1	1		1	1		1	1	1	1	2	1
Detector Template												
Leading Detector (ft)	40	50		40	50		40	40	40	40	100	50
Trailing Detector (ft)	-10	0		-10	0		-10	-10	-10	-10	-10	0
Detector 1 Position(ft)	-10	0		-10	0		-10	-10	-10	-10	-10	0
Detector 1 Size(ft)	50	50		50	50		50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)											94	
Detector 2 Size(ft)											6	
Detector 2 Type											Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)											0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6			2			4		4	8		8
Detector Phase	1	6		5	2		7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	4.0	20.0		4.0	20.0		4.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.0	32.6		8.0	32.6		8.0	36.2	36.2	8.0	36.2	36.2
Total Split (s)	12.0	58.0		12.0	58.0		12.0	28.0	28.0	12.0	28.0	28.0
Total Split (%)	10.9%	52.7%		10.9%	52.7%		10.9%	25.5%	25.5%	10.9%	25.5%	25.5%
Maximum Green (s)	8.0	52.4		8.0	52.4		8.0	22.8	22.8	8.0	22.8	22.8
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.7	3.7	3.0	3.7	3.7
All-Red Time (s)	1.0	1.9		1.0	1.9		1.0	1.5	1.5	1.0	1.5	1.5
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)	4.0	5.6		4.0	5.6		4.0	5.2	5.2	4.0	5.2	5.2
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.0	3.0		1.0	3.0		1.0	2.0	2.0	1.0	2.0	2.0
Recall Mode	None	C-Min		None	C-Min		None	None	None	None	None	None
Walk Time (s)		7.0			7.0			7.0	7.0		7.0	7.0
Flash Dont Walk (s)		20.0			20.0			24.0	24.0		24.0	24.0
Pedestrian Calls (#/hr)		10			10			10	10		10	10
Act Effct Green (s)	63.4	55.6		66.3	58.3		29.8	22.7	22.7	30.9	23.3	23.3
Actuated g/C Ratio	0.58	0.51		0.60	0.53		0.27	0.21	0.21	0.28	0.21	0.21
v/c Ratio	0.19	0.43		0.32	0.33		0.20	0.78	0.50	0.38	0.20	0.29
Control Delay	11.9	20.3		13.0	17.4		25.5	54.6	21.7	29.5	34.8	8.9
Queue Delay	0.0	0.0		0.0	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	11.9	20.3		13.0	17.4		25.5	54.6	21.7	29.5	34.8	8.9
LOS	B	C		B	B		C	D	C	C	C	A
Approach Delay		19.4			16.6			39.2			25.2	
Approach LOS		B			B			D			C	
Queue Length 50th (ft)	24	173		35	123		36	201	60	42	47	3
Queue Length 95th (ft)	59	291		80	212		60	270	121	67	68	45
Internal Link Dist (ft)		251			483			849			254	
Turn Bay Length (ft)	50			150			50		50	40		20
Base Capacity (vph)	510	1874		420	1922		378	422	440	239	815	409
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	0.17	0.41		0.30	0.32		0.19	0.71	0.47	0.35	0.19	0.27

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 105 (95%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay: 24.0		Intersection LOS: C	
Intersection Capacity Utilization 60.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: Greenwich Ave & W Main St/Tresser Blvd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	82	194	61	61	153	50	31	480	130	33	214	82
Future Volume (vph)	82	194	61	61	153	50	31	480	130	33	214	82
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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
Frt		0.976			0.975			0.973			0.966	
Flt Protected		0.988			0.989			0.998			0.995	
Satd. Flow (prot)	0	1796	0	0	1796	0	0	1809	0	0	1790	0
Flt Permitted		0.831			0.793			0.968			0.897	
Satd. Flow (perm)	0	1511	0	0	1440	0	0	1754	0	0	1614	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		371			483			803			929	
Travel Time (s)		8.4			11.0			18.3			21.1	
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
Adj. Flow (vph)	89	211	66	66	166	54	34	522	141	36	233	89
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	366	0	0	286	0	0	697	0	0	358	0
Number of Detectors	1	1		1	1		1	0		1	0	
Detector Template	Left			Left			Left			Left		
Leading Detector (ft)	20	52		20	52		20	0		20	0	
Trailing Detector (ft)	0	2		0	2		0	0		0	0	
Detector 1 Position(ft)	0	2		0	2		0	0		0	0	
Detector 1 Size(ft)	20	50		20	50		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm	NA		D.P+P	NA		Perm	NA		Perm	NA	
Protected Phases		4		3	3 4			2			2	
Permitted Phases	4			4			2			2		
Detector Phase	4	4		3	3 4		2	2		2	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0			15.0	15.0		15.0	15.0	
Minimum Split (s)	24.1	24.1		9.0			24.5	24.5		24.5	24.5	
Total Split (s)	36.0	36.0		16.0			68.0	68.0		68.0	68.0	
Total Split (%)	30.0%	30.0%		13.3%			56.7%	56.7%		56.7%	56.7%	
Maximum Green (s)	30.9	30.9		12.0			62.5	62.5		62.5	62.5	
Yellow Time (s)	3.3	3.3		3.0			3.3	3.3		3.3	3.3	
All-Red Time (s)	1.8	1.8		1.0			2.2	2.2		2.2	2.2	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		5.1						5.5			5.5	
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?	Yes	Yes		Yes								
Vehicle Extension (s)	2.0	2.0		2.0			3.0	3.0		3.0	3.0	
Recall Mode	None	None		None			C-Min	C-Min		C-Min	C-Min	
Walk Time (s)	7.0	7.0					7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	12.0	12.0					12.0	12.0		12.0	12.0	
Pedestrian Calls (#/hr)	10	10					10	10		10	10	
Act Effct Green (s)		31.5			46.7			59.8			59.8	
Actuated g/C Ratio		0.26			0.39			0.50			0.50	
v/c Ratio		0.92			0.48			0.80			0.45	
Control Delay		73.0			27.7			38.8			21.8	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		73.0			27.7			38.9			21.8	
LOS		E			C			D			C	
Approach Delay		73.0			27.7			38.9			21.8	
Approach LOS		E			C			D			C	
Queue Length 50th (ft)		265			134			538			195	
Queue Length 95th (ft)		#467			231			639			241	
Internal Link Dist (ft)		291			403			723			849	
Turn Bay Length (ft)												
Base Capacity (vph)		405			609			923			849	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0			0			5			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.90			0.47			0.76			0.42	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 8 (7%), Referenced to phase 2:NBSB, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.92
Intersection Signal Delay: 40.7 Intersection LOS: D
Intersection Capacity Utilization 73.9% 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.

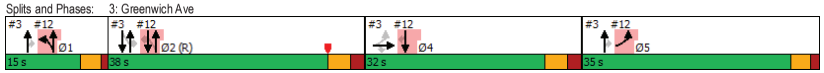
Splits and Phases: 2: Greenwich Ave & Richmond Hill Ave

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø1	Ø5
Lane Configurations														
Traffic Volume (vph)	212	704	153	0	0	0	0	449	357	71	286	0		
Future Volume (vph)	212	704	153	0	0	0	0	449	357	71	286	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Storage Length (ft)	225		225	0		0	0		50	75		230		
Storage Lanes	1		1	0		0	0		1	1		1		
Taper Length (ft)	200			25			25			50				
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00		
Frt			0.850						0.850					
Flt Protected	0.950									0.950				
Satd. Flow (prot)	1770	3539	1583	0	0	0	0	1863	1583	1770	3539	0		
Flt Permitted	0.950									0.486				
Satd. Flow (perm)	1770	3539	1583	0	0	0	0	1863	1583	905	3539	0		
Right Turn on Red			Yes			Yes			Yes			Yes		
Satd. Flow (RTOR)			158						24					
Link Speed (mph)		30			30			30			30			
Link Distance (ft)		787			542			204			803			
Travel Time (s)		17.9			12.3			4.6			18.3			
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		
Adj. Flow (vph)	230	765	166	0	0	0	0	488	388	77	311	0		
Shared Lane Traffic (%)														
Lane Group Flow (vph)	230	765	166	0	0	0	0	488	388	77	311	0		
Number of Detectors	1	1	1					0	0	1	1			
Detector Template														
Leading Detector (ft)	16	16	16					0	0	15	15			
Trailing Detector (ft)	0	0	0					0	0	-5	-5			
Detector 1 Position(ft)	0	0	0					0	0	-5	-5			
Detector 1 Size(ft)	16	16	16					6	20	20	20			
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel														
Detector 1 Extend (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0			
Turn Type	Perm	NA	Perm					NA	Perm	Perm	NA			
Protected Phases		4						1 2 5			2		1	5
Permitted Phases	4		4						1 2 5	2				
Detector Phase	4	4	4					1	1	2	2			
Switch Phase														
Minimum Initial (s)	7.0	7.0	7.0							15.0	15.0		5.0	5.0
Minimum Split (s)	31.6	31.6	31.6							32.4	32.4		9.0	22.4
Total Split (s)	32.0	32.0	32.0							38.0	38.0		15.0	35.0
Total Split (%)	26.7%	26.7%	26.7%							31.7%	31.7%		13%	29%
Maximum Green (s)	26.4	26.4	26.4							32.6	32.6		11.0	30.6
Yellow Time (s)	3.3	3.3	3.3							3.3	3.3		3.0	3.0
All-Red Time (s)	2.3	2.3	2.3							2.1	2.1		1.0	1.4
Lost Time Adjust (s)	0.0	0.0	0.0							0.0	0.0			
Total Lost Time (s)	5.6	5.6	5.6							5.4	5.4			
Lead/Lag										Lag	Lag		Lead	
Lead-Lag Optimize?										Yes	Yes		Yes	
Vehicle Extension (s)	2.0	2.0	2.0							3.0	3.0		1.0	2.0
Recall Mode	None	None	None							C-Min	C-Min		None	None
Walk Time (s)	7.0	7.0	7.0							7.0	7.0			7.0
Flash Dont Walk (s)	19.0	19.0	19.0							20.0	20.0			11.0
Pedestrian Calls (#/hr)	10	10	10							10	10			10
Act Effct Green (s)	31.7	31.7	31.7					78.7	78.7	52.7	52.7			
Actuated g/C Ratio	0.26	0.26	0.26					0.66	0.66	0.44	0.44			
v/c Ratio	0.49	0.82	0.31					0.40	0.37	0.19	0.20			
Control Delay	41.3	49.6	7.6					11.0	10.1	20.3	18.2			
Queue Delay	0.0	0.0	0.0					55.5	26.7	0.0	0.0			
Total Delay	41.3	49.6	7.6					66.5	36.9	20.3	18.2			
LOS	D	D	A					E	D	C	B			
Approach Delay		42.0						53.4			18.6			
Approach LOS		D						D			B			
Queue Length 50th (ft)	149	288	5					168	121	29	61			
Queue Length 95th (ft)	231	368	58					229	175	m56	m88			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø1	Ø5
Internal Link Dist (ft)		707			462			124			723			
Turn Bay Length (ft)	225		225						50	75				
Base Capacity (vph)	466	933	533					1215	1041	397	1553			
Starvation Cap Reductn	0	0	0					772	656	0	0			
Spillback Cap Reductn	0	0	0					18	0	0	0			
Storage Cap Reductn	0	0	0					0	0	0	0			
Reduced v/c Ratio	0.49	0.82	0.31					1.10	1.01	0.19	0.20			

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 115 (96%), Referenced to phase 2:NBSB, Start of Yellow			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay: 42.3		Intersection LOS: D	
Intersection Capacity Utilization 68.1%		ICU Level of Service C	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 3: Greenwich Ave

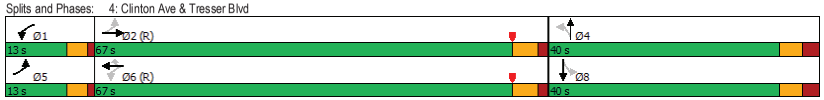


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	82	796	23	80	602	56	29	51	51	20	15	46
Future Volume (vph)	82	796	23	80	602	56	29	51	51	20	15	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	140		0	100		0	0		0	0		0
Storage Lanes	1		0	1		1	0		0	0		0
Taper Length (ft)	90			65			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.996				0.850		0.948			0.923	
Flt Protected	0.950			0.950				0.989			0.988	
Satd. Flow (prot)	1770	3525	0	1770	3539	1583	0	1746	0	0	1699	0
Flt Permitted	0.386			0.289				0.903			0.839	
Satd. Flow (perm)	719	3525	0	538	3539	1583	0	1595	0	0	1443	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		563			677			500			579	
Travel Time (s)		12.8			15.4			11.4			13.2	
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
Parking (#/hr)			0									0
Adj. Flow (vph)	89	865	25	87	654	61	32	55	55	22	16	50
Shared Lane Traffic (%)												
Lane Group Flow (vph)	89	890	0	87	654	61	0	142	0	0	88	0
Number of Detectors	4	1		4	1	1	1	1		1	1	
Detector Template							Left			Left		
Leading Detector (ft)	33	50		36	50	50	20	106		20	106	
Trailing Detector (ft)	-9	0		-6	0	0	0	100		0	100	
Detector 1 Position(ft)	-9	0		-6	0	0	0	100		0	100	
Detector 1 Size(ft)	6	50		6	50	50	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)	3			6								
Detector 2 Size(ft)	6			6								
Detector 2 Type	Cl+Ex			Cl+Ex								
Detector 2 Channel												
Detector 2 Extend (s)	0.0			0.0								
Detector 3 Position(ft)	15			18								
Detector 3 Size(ft)	6			6								
Detector 3 Type	Cl+Ex			Cl+Ex								
Detector 3 Channel												
Detector 3 Extend (s)	0.0			0.0								
Detector 4 Position(ft)	27			30								
Detector 4 Size(ft)	6			6								
Detector 4 Type	Cl+Ex			Cl+Ex								
Detector 4 Channel												
Detector 4 Extend (s)	0.0			0.0								
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2			6		6	4			8		
Detector Phase	5	2		1	6	6	4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0	15.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	9.0	27.3		9.0	27.3	27.3	39.9	39.9		39.9	39.9	
Total Split (s)	13.0	67.0		13.0	67.0	67.0	40.0	40.0		40.0	40.0	
Total Split (%)	10.8%	55.8%		10.8%	55.8%	55.8%	33.3%	33.3%		33.3%	33.3%	
Maximum Green (s)	9.0	61.7		9.0	61.7	61.7	34.1	34.1		34.1	34.1	
Yellow Time (s)	3.0	3.7		3.0	3.7	3.7	3.3	3.3		3.3	3.3	
All-Red Time (s)	1.0	1.6		1.0	1.6	1.6	2.6	2.6		2.6	2.6	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0			0.0	
Total Lost Time (s)	4.0	5.3		4.0	5.3	5.3		5.9			5.9	
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vehicle Extension (s)	2.0	3.0		2.0	3.0	3.0	2.0	2.0		2.0	2.0	
Recall Mode	None	C-Min		None	C-Min	C-Min	None	None		None	None	
Walk Time (s)		7.0			7.0	7.0	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		15.0			15.0	15.0	27.0	27.0		27.0	27.0	
Pedestrian Calls (#/hr)		10			10	10	10	10		10	10	
Act Effct Green (s)	90.1	82.5		90.1	82.5	82.5		16.0			16.0	
Actuated g/C Ratio	0.75	0.69		0.75	0.69	0.69		0.13			0.13	
v/c Ratio	0.15	0.37		0.19	0.27	0.06		0.67			0.46	
Control Delay	5.2	10.0		11.7	19.2	18.7		62.9			52.8	
Queue Delay	0.0	0.3		0.0	0.0	0.0		0.0			0.0	
Total Delay	5.2	10.3		11.7	19.2	18.7		62.9			52.8	
LOS	A	B		B	B	B		E			D	
Approach Delay		9.9			18.3			62.9			52.8	
Approach LOS		A			B			E			D	
Queue Length 50th (ft)	11	122		4	214	28		109			66	
Queue Length 95th (ft)	45	281		m90	304	m68		145			97	
Internal Link Dist (ft)		483			597			420			499	
Turn Bay Length (ft)	140			100								
Base Capacity (vph)	635	2424		508	2433	1088		453			410	
Starvation Cap Reductn	0	847		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	0.14	0.56		0.17	0.27	0.06		0.31			0.21	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 67 (56%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.67			
Intersection Signal Delay: 18.9		Intersection LOS: B	
Intersection Capacity Utilization 49.4%		ICU Level of Service A	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 4: Clinton Ave & Tresser Blvd



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	34	31	152	24	50	83
Future Volume (vph)	34	31	152	24	50	83
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.935		0.982			
Flt Protected	0.975					0.982
Satd. Flow (prot)	1698	0	1829	0	0	1646
Flt Permitted	0.975					0.982
Satd. Flow (perm)	1698	0	1829	0	0	1646
Link Speed (mph)	30		30			30
Link Distance (ft)	511		160			500
Travel Time (s)	11.6		3.6			11.4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Parking (#/hr)		0		0		0
Adj. Flow (vph)	37	34	165	26	54	90
Shared Lane Traffic (%)						
Lane Group Flow (vph)	71	0	191	0	0	144
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	30.4%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	2.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	34	31	152	24	50	83
Future Vol, veh/h	34	31	152	24	50	83
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, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	37	34	165	26	54	90

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	376	178	0	0	191	0
Stage 1	178	-	-	-	-	-
Stage 2	198	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	625	865	-	-	1383	-
Stage 1	853	-	-	-	-	-
Stage 2	835	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	599	865	-	-	1383	-
Mov Cap-2 Maneuver	599	-	-	-	-	-
Stage 1	853	-	-	-	-	-
Stage 2	801	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.7	0	2.9
HCM LOS	B		

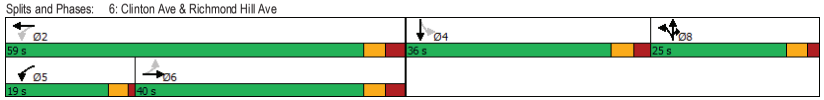
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	702	1383	-
HCM Lane V/C Ratio	-	-	0.101	0.039	-
HCM Control Delay (s)	-	-	10.7	7.7	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	92	260	5	5	179	59	20	36	209	26	5	65
Future Volume (vph)	92	260	5	5	179	59	20	36	209	26	5	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	25		0	275		0	0		0	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	50			40			25			25		
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt		0.998			0.963			0.912	0.850		0.908	
Flt Protected		0.987		0.950				0.993			0.987	
Satd. Flow (prot)	0	3486	0	1770	1794	0	0	1603	1504	0	1669	0
Flt Permitted		0.794		0.433				0.993			0.213	
Satd. Flow (perm)	0	2805	0	807	1794	0	0	1603	1504	0	360	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			18			51	141		71	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		483			426			296			230	
Travel Time (s)		11.0			9.7			6.7			5.2	
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
Adj. Flow (vph)	100	283	5	5	195	64	22	39	227	28	5	71
Shared Lane Traffic (%)									38%			
Lane Group Flow (vph)	0	388	0	5	259	0	0	147	141	0	104	0
Number of Detectors	1	0		1	1		1	1	1	1	1	
Detector Template	Left						Left			Left		
Leading Detector (ft)	20	0		48	48		20	40	40	20	45	
Trailing Detector (ft)	0	0		-2	-2		0	-10	-10	0	-5	
Detector 1 Position(ft)	0	0		-2	-2		0	-10	-10	0	-5	
Detector 1 Size(ft)	20	6		50	50		20	50	50	20	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Turn Type	Perm	NA		pm+pt	NA		Split	NA	Prot	Perm	NA	
Protected Phases		6		5	2		8	8	8		4	
Permitted Phases	6			2						4		
Detector Phase	6	6		5	2		8	8	8	4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		6.0	6.0	6.0	6.0	6.0	
Minimum Split (s)	31.4	31.4		19.0	31.4		10.9	10.9	10.9	29.7	29.7	
Total Split (s)	40.0	40.0		19.0	59.0		25.0	25.0	25.0	36.0	36.0	
Total Split (%)	33.3%	33.3%		15.8%	49.2%		20.8%	20.8%	20.8%	30.0%	30.0%	
Maximum Green (s)	33.6	33.6		15.0	52.6		20.1	20.1	20.1	30.3	30.3	
Yellow Time (s)	3.3	3.3		3.0	3.3		3.0	3.0	3.0	3.3	3.3	
All-Red Time (s)	3.1	3.1		1.0	3.1		1.9	1.9	1.9	2.4	2.4	
Lost Time Adjust (s)		0.0		0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)		6.4		4.0	6.4			4.9	4.9		5.7	
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?	Yes	Yes		Yes								
Vehicle Extension (s)	3.0	3.0		5.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	Min	Min		None	Min		None	None	None	None	None	
Walk Time (s)	7.0	7.0			7.0					7.0	7.0	
Flash Dont Walk (s)	18.0	18.0			18.0					17.0	17.0	
Pedestrian Calls (#/hr)	10	10			10					10	10	
Act Effct Green (s)		19.3		24.3	21.4			10.7	10.7		14.5	
Actuated g/C Ratio		0.31		0.39	0.35			0.17	0.17		0.23	
v/c Ratio		0.44		0.01	0.41			0.46	0.37		0.75	
Control Delay		24.3		16.8	19.6			25.8	10.0		45.6	
Queue Delay		0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay		24.3		16.8	19.7			25.8	10.0		45.6	
LOS		C		B	B			C	B		D	
Approach Delay		24.3			19.6			18.1			45.6	
Approach LOS		C			B			B			D	
Queue Length 50th (ft)		53		1	63			28	0		9	
Queue Length 95th (ft)		181		9	182			133	57		#116	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		403			346			216			150	
Turn Bay Length (ft)				275								
Base Capacity (vph)		1771		591	1530			644	662		237	
Starvation Cap Reductn		0		0	80			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		0.01	0.18			0.23	0.21		0.44	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 61.8			
Natural Cycle: 95			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.75			
Intersection Signal Delay: 23.5		Intersection LOS: C	
Intersection Capacity Utilization 53.3%		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.			

Splits and Phases: 6: Clinton Ave & Richmond Hill Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø9	Ø10
Lane Configurations														
Traffic Volume (vph)	175	677	51	91	513	139	51	1008	291	251	851	97		
Future Volume (vph)	175	677	51	91	513	139	51	1008	291	251	851	97		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Storage Length (ft)	320		0	180		0	200		230	200		250		
Storage Lanes	1		0	1		0	1		1	1		1		
Taper Length (ft)	50			60			25			50				
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	0.95	1.00	1.00	0.95	1.00		
Frt		0.990			0.968				0.850			0.850		
Flt Protected	0.950			0.950			0.950			0.950				
Satd. Flow (prot)	1770	5034	0	1770	4923	0	1770	3539	1583	1770	3539	1583		
Flt Permitted	0.950			0.950			0.950			0.950				
Satd. Flow (perm)	1770	5034	0	1770	4923	0	1770	3539	1583	1770	3539	1583		
Right Turn on Red			No			No			No			No		
Satd. Flow (RTOR)														
Link Speed (mph)		30			30			30			30			
Link Distance (ft)		677			703			578			404			
Travel Time (s)		15.4			16.0			13.1			9.2			
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		
Adj. Flow (vph)	190	736	55	99	558	151	55	1096	316	273	925	105		
Shared Lane Traffic (%)														
Lane Group Flow (vph)	190	791	0	99	709	0	55	1096	316	273	925	105		
Number of Detectors	1	1		1	1		1	1	1	1	1	1		
Detector Template														
Leading Detector (ft)	40	45		40	45		40	45	45	40	45	45		
Trailing Detector (ft)	-10	-5		-10	-5		-10	-5	-5	-10	-5	-5		
Detector 1 Position(ft)	-10	-5		-10	-5		-10	-5	-5	-10	-5	-5		
Detector 1 Size(ft)	50	50		50	50		50	50	50	50	50	50		
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		
Detector 1 Channel														
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	Perm		
Protected Phases	7	4		3	8		5	2		1	6		9	10
Permitted Phases									2			6		
Detector Phase	7	4		3	8		5	2	2	1	6	6		
Switch Phase														
Minimum Initial (s)	5.0	10.0		5.0	10.0		5.0	15.0	15.0	5.0	15.0	15.0	1.0	1.0
Minimum Split (s)	9.0	30.4		9.0	30.4		9.0	30.6	30.6	9.0	30.6	30.6	3.0	3.0
Total Split (s)	16.0	34.0		16.0	34.0		21.0	43.0	43.0	21.0	43.0	43.0	3.0	3.0
Total Split (%)	13.3%	28.3%		13.3%	28.3%		17.5%	35.8%	35.8%	17.5%	35.8%	35.8%	3%	3%
Maximum Green (s)	12.0	28.6		12.0	28.6		17.0	37.4	37.4	17.0	37.4	37.4	1.0	1.0
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.3	3.3	3.0	3.3	3.3	2.0	2.0
All-Red Time (s)	1.0	1.7		1.0	1.7		1.0	2.3	2.3	1.0	2.3	2.3	0.0	0.0
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)	4.0	5.4		4.0	5.4		4.0	5.6	5.6	4.0	5.6	5.6		
Lead/Lag	Lag	Lead		Lag	Lead		Lag	Lead	Lead	Lag	Lead	Lead		
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes		
Vehicle Extension (s)	1.0	3.0		1.0	3.0		1.0	3.0	3.0	1.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None		None	C-Min	C-Min	None	C-Min	C-Min	None	None
Walk Time (s)		4.0			4.0			4.0	4.0		4.0	4.0		
Flash Dont Walk (s)		21.0			21.0			21.0	21.0		21.0	21.0		
Pedestrian Calls (#/hr)		30			30			30	30		30	30		
Act Effct Green (s)	18.4	25.0		17.0	23.7		15.4	42.0	42.0	17.0	45.4	45.4		
Actuated g/C Ratio	0.15	0.21		0.14	0.20		0.13	0.35	0.35	0.14	0.38	0.38		
v/c Ratio	0.70	0.75		0.40	0.73		0.24	0.89	0.57	1.09	0.69	0.18		
Control Delay	70.7	47.7		52.9	49.7		36.6	42.3	35.4	131.7	36.5	28.6		
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.5	0.0	0.0	0.0	0.0		
Total Delay	70.7	47.7		52.9	49.7		36.6	42.8	35.4	131.7	36.5	28.6		
LOS	E	D		D	D		D	D	D	F	D	C		
Approach Delay		52.2			50.1			41.0			55.8			
Approach LOS		D			D			D			E			
Queue Length 50th (ft)	148	224		70	187		35	335	179	~238	336	58		
Queue Length 95th (ft)	#283	253		131	224		m53	#550	295	#410	417	102		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø9	Ø10
Internal Link Dist (ft)		597			623			498			324			
Turn Bay Length (ft)	320			180			200		230	200		250		
Base Capacity (vph)	270	1211		250	1173		262	1238	553	250	1338	598		
Starvation Cap Reductn	0	0		0	0		0	19	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	0.70	0.65		0.40	0.60		0.21	0.90	0.57	1.09	0.69	0.18		

Intersection Summary

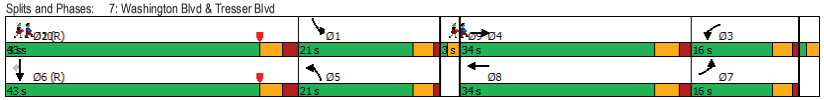
Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 115
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.09
Intersection Signal Delay: 49.2 Intersection LOS: D
Intersection Capacity Utilization 80.3% 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: 7: Washington Blvd & Tresser Blvd



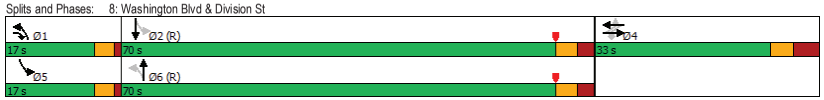
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	95	0	66	0	0	5	10	1541	0	0	1191	29
Future Volume (vph)	95	0	66	0	0	5	10	1541	0	0	1191	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		170	0		0	0		0	100		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25			25			25			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		0.865						0.996	
Flt Protected		0.950					0.950					
Satd. Flow (prot)	0	1770	1583	0	1611	0	1770	3539	0	1863	3525	0
Flt Permitted		0.754					0.149					
Satd. Flow (perm)	0	1405	1583	0	1611	0	278	3539	0	1863	3525	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			42		197						3	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		511			252			356			578	
Travel Time (s)		11.6			5.7			8.1			13.1	
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
Adj. Flow (vph)	103	0	72	0	0	5	11	1675	0	0	1295	32
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	103	72	0	5	0	11	1675	0	0	1327	0
Number of Detectors	1	4	4	1	1		4	1		4	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	32	32	20	6		39	50		36	50	
Trailing Detector (ft)	0	-10	-10	0	0		-3	0		-6	0	
Detector 1 Position(ft)	0	-10	-10	0	0		-3	0		-6	0	
Detector 1 Size(ft)	20	6	6	20	6		6	50		6	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		2	2				9			6		
Detector 2 Size(ft)		6	6				6			6		
Detector 2 Type		Cl+Ex	Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)		0.0	0.0				0.0			0.0		
Detector 3 Position(ft)		14	14				21			18		
Detector 3 Size(ft)		6	6				6			6		
Detector 3 Type		Cl+Ex	Cl+Ex				Cl+Ex			Cl+Ex		
Detector 3 Channel												
Detector 3 Extend (s)		0.0	0.0				0.0			0.0		
Detector 4 Position(ft)		26	26				33			30		
Detector 4 Size(ft)		6	6				6			6		
Detector 4 Type		Cl+Ex	Cl+Ex				Cl+Ex			Cl+Ex		
Detector 4 Channel												
Detector 4 Extend (s)		0.0	0.0				0.0			0.0		
Turn Type	Perm	NA	pm+ov		NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4	1		4		1	6		5	2	
Permitted Phases	4		4	4			6			2		
Detector Phase	4	4	1	4	4		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	15.0		5.0	15.0	
Minimum Split (s)	32.2	32.2	9.0	32.2	32.2		9.0	21.0		9.0	35.0	
Total Split (s)	33.0	33.0	17.0	33.0	33.0		17.0	70.0		17.0	70.0	
Total Split (%)	27.5%	27.5%	14.2%	27.5%	27.5%		14.2%	58.3%		14.2%	58.3%	
Maximum Green (s)	25.8	25.8	13.0	25.8	25.8		13.0	64.0		13.0	64.0	
Yellow Time (s)	3.3	3.3	3.0	3.3	3.3		3.0	3.3		3.0	3.3	
All-Red Time (s)	3.9	3.9	1.0	3.9	3.9		1.0	2.7		1.0	2.7	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		7.2	4.0		7.2		4.0	6.0		4.0	6.0	
Lead/Lag			Lead				Lead	Lag		Lead	Lag	
Lead-Lag Optimize?			Yes				Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	3.0		2.0	3.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0						7.0	
Flash Dont Walk (s)	18.0	18.0		18.0	18.0						22.0	
Pedestrian Calls (#/hr)	30	30		30	30						30	
Act Effct Green (s)		18.7	30.9		18.7		90.1	88.1			80.9	
Actuated g/C Ratio		0.16	0.26		0.16		0.75	0.73			0.67	
v/c Ratio		0.47	0.16		0.01		0.04	0.64			0.56	
Control Delay		54.4	19.1		0.0		3.6	5.0			4.0	
Queue Delay		0.0	0.0		0.0		0.0	0.2			0.2	
Total Delay		54.4	19.1		0.0		3.6	5.2			4.2	
LOS		D	B		A		A	A			A	
Approach Delay		39.9						5.2			4.2	
Approach LOS		D						A			A	
Queue Length 50th (ft)		72	18		0		1	185			65	
Queue Length 95th (ft)		127	58		0		m2	151			74	
Internal Link Dist (ft)		431			172			276			498	
Turn Bay Length (ft)			170									
Base Capacity (vph)		302	541		501		370	2598			2376	
Starvation Cap Reductn		0	0		0		0	225			242	
Spillback Cap Reductn		0	3		0		0	84			353	
Storage Cap Reductn		0	0		0		0	0			0	
Reduced v/c Ratio		0.34	0.13		0.01		0.03	0.71			0.66	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 22 (18%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay: 6.7		Intersection LOS: A	
Intersection Capacity Utilization 65.5%		ICU Level of Service C	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: Washington Blvd & Division St

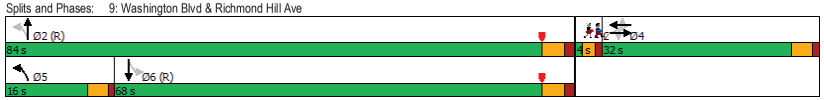


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø3
Lane Configurations													
Traffic Volume (vph)	275	0	220	5	0	5	202	1271	5	5	1212	41	
Future Volume (vph)	275	0	220	5	0	5	202	1271	5	5	1212	41	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	0		0	0		0	140		0	0		0	
Storage Lanes	1		0	0		0	1		0	0		0	
Taper Length (ft)	25			25			80			25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	
Frt		0.850			0.932			0.999			0.995		
Flt Protected	0.950				0.976		0.950						
Satd. Flow (prot)	1770	1583	0	0	1694	0	1770	3536	0	0	3522	0	
Flt Permitted	0.751				0.894		0.097				0.950		
Satd. Flow (perm)	1399	1583	0	0	1552	0	181	3536	0	0	3345	0	
Right Turn on Red			No			No			No			No	
Satd. Flow (RTOR)													
Link Speed (mph)		30			30			30			30		
Link Distance (ft)		426			205			326			356		
Travel Time (s)		9.7			4.7			7.4			8.1		
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	
Adj. Flow (vph)	299	0	239	5	0	5	220	1382	5	5	1317	45	
Shared Lane Traffic (%)													
Lane Group Flow (vph)	299	239	0	0	10	0	220	1387	0	0	1367	0	
Number of Detectors	1	1		1	1		1	1		1	1		
Detector Template				Left						Left			
Leading Detector (ft)	50	50		20	50		40	40		20	40		
Trailing Detector (ft)	0	0		0	0		-10	-10		0	-10		
Detector 1 Position(ft)	0	0		0	0		-10	-10		0	-10		
Detector 1 Size(ft)	50	50		20	50		50	50		20	50		
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		
Detector 1 Channel													
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0		
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0		
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0		
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		Perm	NA		
Protected Phases		4			4		5	2			6		3
Permitted Phases	4			4			2			6			
Detector Phase	4	4		4	4		5	2		6	6		
Switch Phase													
Minimum Initial (s)	5.0	5.0		5.0	5.0		7.0	15.0		15.0	15.0		1.0
Minimum Split (s)	24.2	24.2		24.2	24.2		11.0	28.0		28.0	28.0		4.0
Total Split (s)	32.0	32.0		32.0	32.0		16.0	84.0		68.0	68.0		4.0
Total Split (%)	26.7%	26.7%		26.7%	26.7%		13.3%	70.0%		56.7%	56.7%		3%
Maximum Green (s)	27.8	27.8		27.8	27.8		12.0	79.0		63.0	63.0		1.0
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.3		3.3	3.3		2.0
All-Red Time (s)	1.2	1.2		1.2	1.2		1.0	1.7		1.7	1.7		1.0
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0			0.0		
Total Lost Time (s)	4.2	4.2			4.2		4.0	5.0			5.0		
Lead/Lag	Lag	Lag		Lag	Lag		Lead			Lag	Lag		Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes			Yes	Yes		Yes
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	3.0		3.0	3.0		3.0
Recall Mode	None	None		None	None		None	C-Min		C-Min	C-Min		None
Walk Time (s)	3.0	3.0		3.0	3.0			7.0		7.0	7.0		
Flash Dont Walk (s)	17.0	17.0		17.0	17.0			16.0		16.0	16.0		
Pedestrian Calls (#/hr)	30	30		30	30			30		30	30		
Act Effct Green (s)	30.1	30.1			30.1		81.7	80.7			65.4		
Actuated g/C Ratio	0.25	0.25			0.25		0.68	0.67			0.54		
v/c Ratio	0.85	0.60			0.03		0.81	0.58			0.75		
Control Delay	65.4	46.3			32.7		43.0	10.2			15.3		
Queue Delay	0.0	0.0			0.0		0.2	0.2			1.7		
Total Delay	65.4	46.3			32.7		43.2	10.3			17.0		
LOS	E	D			C		D	B			B		
Approach Delay		56.9			32.7			14.8			17.0		
Approach LOS		E			C			B			B		
Queue Length 50th (ft)	215	159			6		70	245			570		
Queue Length 95th (ft)	#362	247			20		m#178	487			650		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø3
Internal Link Dist (ft)		346			125			246			276		
Turn Bay Length (ft)							140						
Base Capacity (vph)	360	407			399		287	2388			1845		
Starvation Cap Reductn	0	0			0		2	251			297		
Spillback Cap Reductn	0	0			0		0	0			35		
Storage Cap Reductn	0	0			0		0	0			0		
Reduced v/c Ratio	0.83	0.59			0.03		0.77	0.65			0.88		

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 47 (39%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay: 22.1		Intersection LOS: C	
Intersection Capacity Utilization 104.0%		ICU Level of Service G	
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: 9: Washington Blvd & Richmond Hill Ave

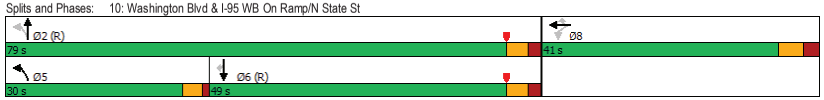


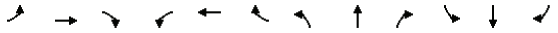
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	123	61	382	356	1096	0	0	724	713
Future Volume (vph)	0	0	0	123	61	382	356	1096	0	0	724	713
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt						0.850						0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	0	0	1770	1863	1583	1770	3539	0	0	3539	1583
Flt Permitted				0.950			0.249					
Satd. Flow (perm)	0	0	0	1770	1863	1583	464	3539	0	0	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						83						566
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		435			486			334			326	
Travel Time (s)		9.9			11.0			7.6			7.4	
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
Adj. Flow (vph)	0	0	0	134	66	415	387	1191	0	0	787	775
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	134	66	415	387	1191	0	0	787	775
Number of Detectors				1	1	1	1	1			1	1
Detector Template												
Leading Detector (ft)				40	40	50	40	50			50	50
Trailing Detector (ft)				-10	-10	0	-10	0			0	0
Detector 1 Position(ft)				-10	-10	0	-10	0			0	0
Detector 1 Size(ft)				50	50	50	50	50			50	50
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
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)				7.0	7.0	7.0	10.0	15.0			15.0	15.0
Minimum Split (s)				35.1	35.1	35.1	14.0	25.3			25.3	25.3
Total Split (s)				41.0	41.0	41.0	30.0	79.0			49.0	49.0
Total Split (%)				34.2%	34.2%	34.2%	25.0%	65.8%			40.8%	40.8%
Maximum Green (s)				34.9	34.9	34.9	26.0	73.7			43.7	43.7
Yellow Time (s)				3.7	3.7	3.7	3.0	3.3			3.3	3.3
All-Red Time (s)				2.4	2.4	2.4	1.0	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)				6.1	6.1	6.1	4.0	5.3			5.3	5.3
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)				2.0	2.0	2.0	3.0	3.0			3.0	3.0
Recall Mode				None	None	None	None	C-Max			C-Max	C-Max
Walk Time (s)				7.0	7.0	7.0		7.0			7.0	7.0
Flash Dont Walk (s)				22.0	22.0	22.0		13.0			13.0	13.0
Pedestrian Calls (#/hr)				30	30	30		30			30	30
Act Effct Green (s)				29.8	29.8	29.8	80.1	78.8			56.1	56.1
Actuated g/C Ratio				0.25	0.25	0.25	0.67	0.66			0.47	0.47
v/c Ratio				0.31	0.14	0.91	0.75	0.51			0.48	0.74
Control Delay				37.3	33.9	59.6	20.6	12.3			14.7	7.3
Queue Delay				0.0	0.0	0.2	0.0	0.1			0.7	1.2
Total Delay				37.3	33.9	59.9	20.6	12.4			15.4	8.5
LOS				D	C	E	C	B			B	A
Approach Delay					52.2			14.4			12.0	
Approach LOS					D			B			B	
Queue Length 50th (ft)				83	39	253	123	243			60	17
Queue Length 95th (ft)				134	74	#402	214	322			213	114
Internal Link Dist (ft)		355			406			254			246	
Turn Bay Length (ft)												
Base Capacity (vph)				514	541	519	592	2324			1655	1041

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn				0	0	0	0	0			514	107
Spillback Cap Reductn				0	0	5	0	230			0	0
Storage Cap Reductn				0	0	0	0	0			0	0
Reduced v/c Ratio				0.26	0.12	0.81	0.65	0.57			0.69	0.83

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 35 (29%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.91			
Intersection Signal Delay: 19.6		Intersection LOS: B	
Intersection Capacity Utilization 82.5%		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.			

Splits and Phases: 10: Washington Blvd & I-95 WB On Ramp/N State St





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	0	11	9	0	12	31	138	18	14	77	27
Future Volume (vph)	26	0	11	9	0	12	31	138	18	14	77	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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
Frt		0.959			0.924			0.987			0.969	
Flt Protected		0.966			0.979			0.992			0.994	
Satd. Flow (prot)	0	1726	0	0	1685	0	0	1824	0	0	1794	0
Flt Permitted		0.966			0.979			0.992			0.994	
Satd. Flow (perm)	0	1726	0	0	1685	0	0	1824	0	0	1794	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		158			149			230			160	
Travel Time (s)		3.6			3.4			5.2			3.6	
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
Adj. Flow (vph)	28	0	12	10	0	13	34	150	20	15	84	29
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	40	0	0	23	0	0	204	0	0	128	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	25.1%	ICU Level of Service A	
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	26	0	11	9	0	12	31	138	18	14	77	27
Future Vol, veh/h	26	0	11	9	0	12	31	138	18	14	77	27
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	28	0	12	10	0	13	34	150	20	15	84	29

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	364	367	99	363	371	160	113	0	0	170	0	0
Stage 1	129	129	-	228	228	-	-	-	-	-	-	-
Stage 2	235	238	-	135	143	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	592	562	957	593	559	885	1476	-	-	1407	-	-
Stage 1	875	789	-	775	715	-	-	-	-	-	-	-
Stage 2	768	708	-	868	779	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	567	542	957	570	539	885	1476	-	-	1407	-	-
Mov Cap-2 Maneuver	567	542	-	570	539	-	-	-	-	-	-	-
Stage 1	853	780	-	756	697	-	-	-	-	-	-	-
Stage 2	738	690	-	848	770	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11	10.2	1.2	0.9
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1476	-	-	645	716	1407	-	-
HCM Lane V/C Ratio	0.023	-	-	0.062	0.032	0.011	-	-
HCM Control Delay (s)	7.5	0	-	11	10.2	7.6	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	0.1	0	-	-