COURTROOM, CITY HALL
1 MUNICIPAL PLAZA
BEACON, NY 12508
THE ZONING BOARD OF
APPEALS WILL MEET AT 7:00
PM. A TRAINING WORK
SESSION WILL TAKE PLACE
AT 7:00 PM AND THE
REGULAR MEETING AND
PUBLIC HEARINGS WILL
BEGIN IMMEDIATELY
THEREAFTER, BUT NOT
LATER THAN 7:30 PM.

March 15, 2022
7:00 PM
Zoning Board of Appeals Agenda

Regular Meeting

1. Continue review and hold public hearing on application submitted by Rajan Kumar, 1 Iris Circle, Tax Grid No. 30-5954-43-822637-00, R1-7.5 Zoning District, for relief from Section 223-17(D) to construct a two-story addition with an 8.6 ft. side yard setback (20 ft. required)
2. Review and hold public hearing on application submitted by Jonathan Miller, 64 Beacon Street, Tax Grid No.30-5954-35-815855-00, R1-5 Zoning District, for relief from Section 223-10(B)(1) to extend a non-conforming use by creating a 552 sq. ft. home occupation/artist studio in an existing attached garage
3. Review and hold public on application submitted by Michael Isabell, 866 Wolcott Avenue, Tax Grid No. 30-6054-45-071581-00, R1-10 Zoning District, to construct an accessory structure (2 car garage) which requires relief from the following:Â Section 223-17(E) for a 6.7 ft. rear yard setback (15 ft. required); Section 223-17(E) for a 968 sq. ft. accessory structure (383 sq. ft. maximum permitted); and Section 223-17(E) to allow 1,017 sq. ft. of cumulative lot coverage (960 sq. ft. maximum lot coverage permitted)
4. Miscellaneous Business - 1113 Wolcott Avenue - SEQRA Review

City of Beacon Zoning Board of Appeals Agenda
03/15/2022

Title:

Continue review and hold public hearing on application submitted by Rajan Kumar, 1 Iris Circle, Tax Grid No. 30-5954-43-822637-00, R1-7.5 Zoning District, for relief from Section 223-17(D) to construct a two-story addition with an 8.6 ft. side yard setback *(20 ft. required)*

ATTACHMENTS

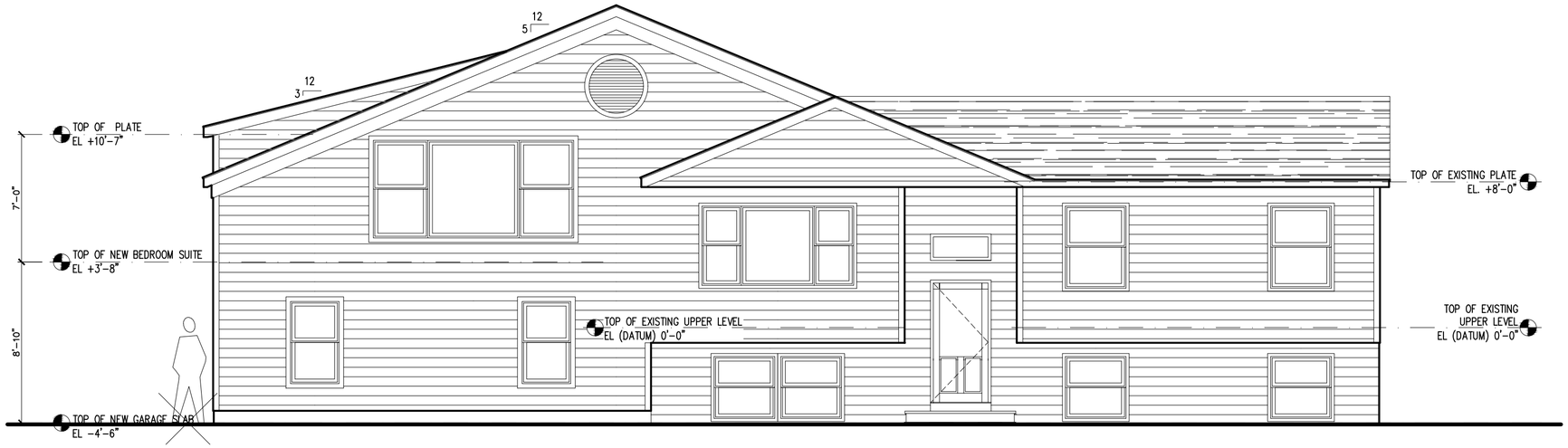
1 Iris Circle Proposed Exterior Elevations.pdf

1 Iris Circle Site Plan.pdf

1 Iris Circle Survey.pdf

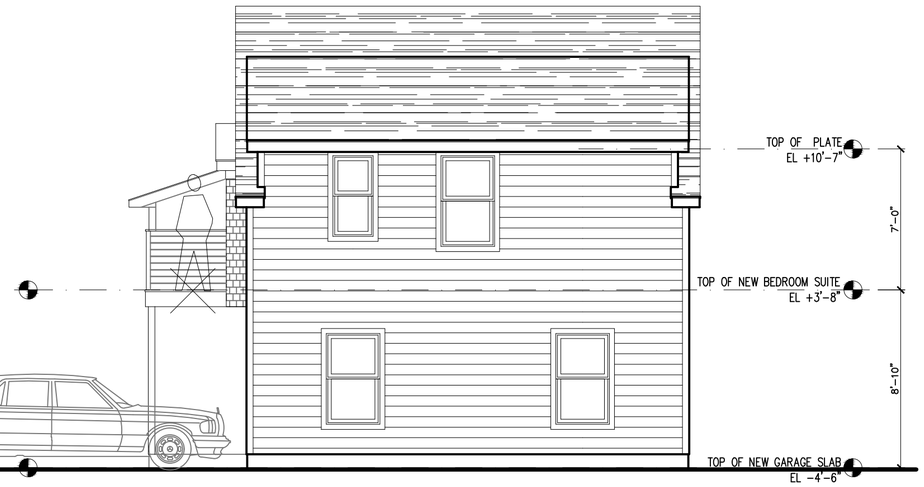
1 Iris Circle Application.pdf

1 Iris Circle Existing and Proposed Floor Plans.pdf



1 EXISTING NORTH (FRONT) ELEVATION w/ PROPOSED ADDITION

SCALE: 3/16" = 1'-0"



2 PROPOSED EAST (SIDE) ELEVATION

SCALE: 3/16" = 1'-0"



3 EXISTING SOUTH (REAR) ELEVATION w/ PROPOSED ADDITION

SCALE: 3/16" = 1'-0"

DESIGN AND DRAWINGS PREPARED BY:

J. SULLIVAN - associate a.i.a.
16 BARCLAY STREET
POUGHKEEPSIE, NY

PROPERTY OWNER:

RAJAN KUMAR
1 IRIS CIRCLE
CITY OF BEACON, NY

Date Issue
1.24.2022 ISSUED TO OWNER FOR REVIEW
1.25.2022 ISSUED TO CITY OF BEACON (ZBA APPLICATION)

Project Title

GARAGE
and MASTER SUITE ADDITION
Kumar Residence
1 IRIS CIRCLE
CITY OF BEACON, NY

Drawing Title

Proposed
Ext Elevations

Project No.	2201
Date	1.7.2022
Scale	AS NOTED
Drawing by	JVS
Checked by	

Drawing No.

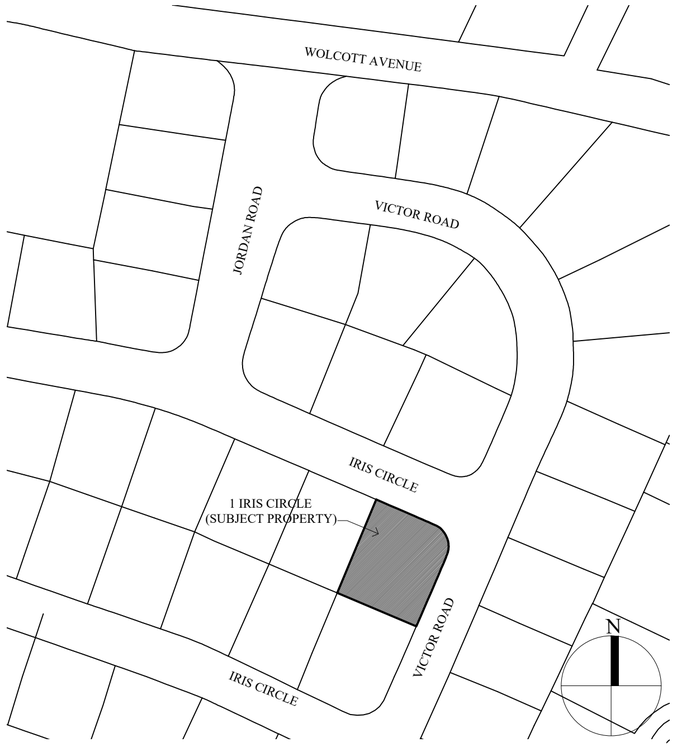
A-2.0

ZONING REQUIREMENTS

ZONING DISTRICT:	R1-7.5		
TAX MAP No's.	6658-09-015637		
LOT AREA :	(1 IRIS CIRCLE) 8,166 SQ. FT. (0.19 ACRES) +/-		
BULK REQUIREMENTS	REQUIRED	EXISTING SINGLE FAMILY RESIDENCE	PROPOSED SINGLE FAMILY RESIDENCE
MIN. LOT AREA	7,500 SQ. FT.	8,168 SQ. FT.	UNCHANGED
MIN. LOT WIDTH	75'	75'	UNCHANGED
MIN. LOT DEPTH	100'	100'	UNCHANGED
MAX. BLDG COVERAGE PERCENTAGE	30%	13%	19%
MIN. FRONT YARD	20'	32.4'	8.5' *
MIN. SIDE YARD (FEET)	10'	10'	UNCHANGED
MIN. REAR YARD (FEET)	25'	41.8'	UNCHANGED
MAX. HEIGHT (FEET)	2 1/2 STORY 35'	1 1/2 STORY < 18.5'	2 1/2 STORY < 23'

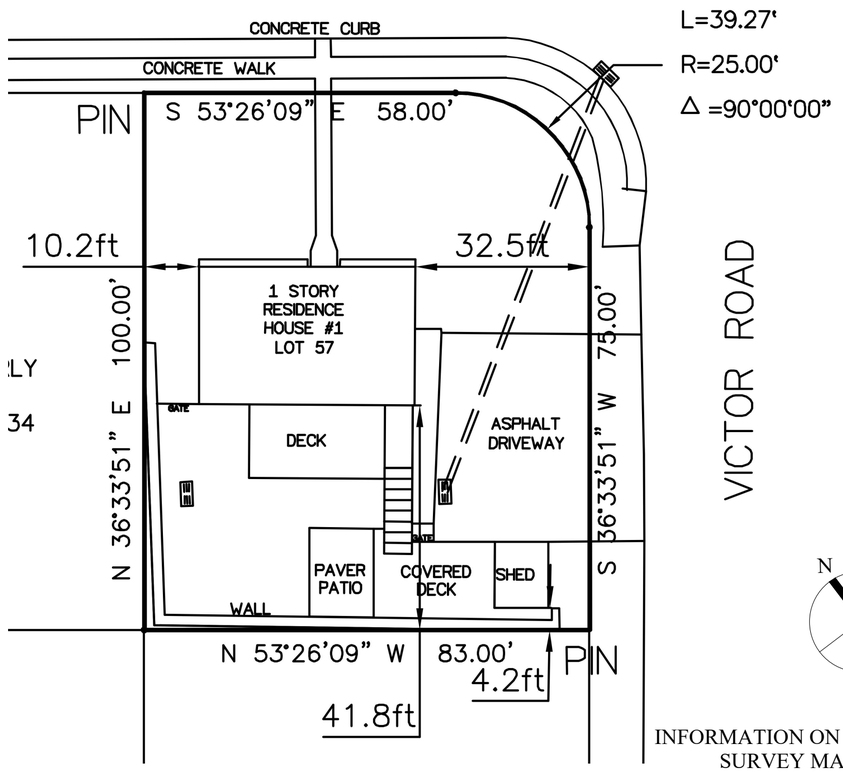
SOURCE: CITY OF BEACON ZONING ORDINANCE SC REGULATIONS

* PROPOSAL REQUIRES AREA VARIANCES



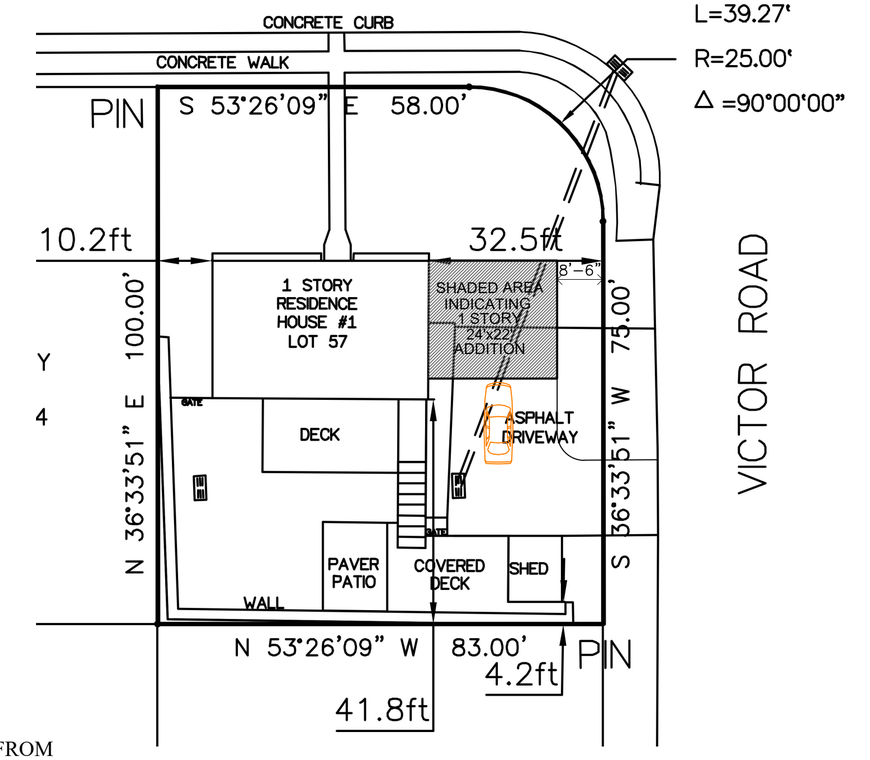
1 LOCATION MAP — SCALE: NONE

IRIS CIRCLE



1 EXISTING SITE PLAN — SCALE: 1" = 20'-0"

INFORMATION ON SITE PLAN TAKEN FROM SURVEY MAP COMPLETED BY:
JOHN J. POST JR., L.S.
DATED: OCTOBER 4, 2021



2 SITE PLAN with PROPOSED ADDITION — SCALE: 1" = 20'-0"

DESIGN AND DRAWINGS PREPARED BY:

J. SULLIVAN - associate a.i.a.
16 BARCLAY STREET
POUGHKEEPSIE, NY

PROPERTY OWNER:

RAJAN KUMAR
1 IRIS CIRCLE
CITY OF BEACON, NY

Date	Issue
1.10.2022	ISSUED TO OWNER FOR REVIEW
1.12.2022	ISSUED TO OWNER FOR REVIEW
1.20.2022	ISSUED TO OWNER FOR REVIEW
1.25.2022	ISSUED TO CITY OF BEACON (ZBA APPLICATION)

Project Title

GARAGE
and MASTER SUITE ADDITION
Kumar Residence
1 IRIS CIRCLE
CITY OF BEACON, NY

Drawing Title

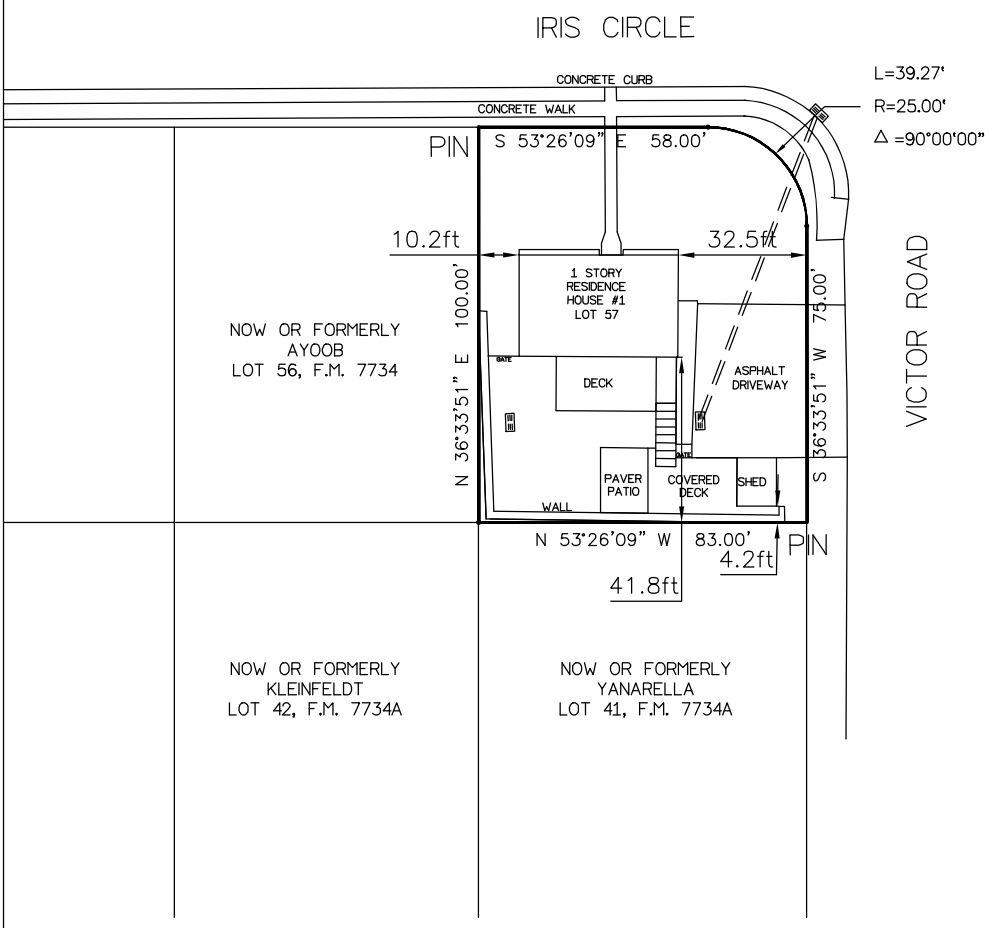
Zoning Chart, Location, Site Plan

Project No.	2201
Date	1.7.2022
Scale	AS NOTED
Drawing by	JVS
Checked by	

Drawing No.

S-1.0

8165.9 SQ. FT.
0.19 ACRES



Notes:

1. The parcel shown hereon is generally described as lot 57 on a certain map entitled "MAP OF SUBDIVISION RIVER KNOLLS, SECTION 1" filed in the office of the Dutchess County Clerk on September 15, 1986 as Map No. 7734
2. Subject to any easements and/or rights of way that an accurate up to date abstract of title may show.
3. Survey as per record deed, existing monumentation, recorded and unrecorded maps.

I hereby certify that the survey shown hereon is based on an actual field survey completed on October 4, 2021 and that this map was completed on October 4, 2021

Certified only to:

Rajan Kumar

STATE OF NEW YORK JOHN J. POST JR. No. 050643 LICENSED LAND SURVEYOR

By: John J. Post, Jr., L.L.S. N.Y. State Lic. no. 50643

The location of any subsurface easements, right of ways, encroachments and/or improvements, if any exist, are not certified or shown hereon.

Any alterations or additions to this survey is a violation of Section 7209 of the New York State Education Law, except as per Section 7209 Sub-division 2.

All certifications hereon are valid for this map and copies thereof only if said map of copies bear the inked or embossed seal of the surveyor whose signature appears hereon.

John J. Post Jr., Land Surveyor
P.O. Box 827, Stone Ridge, N.Y.

STATE OF NEW YORK JOHN J. POST JR. No. 050643 LICENSED LAND SURVEYOR

SURVEY OF

LOT #57, FILED MAP 7734

SITUATE IN THE

CITY OF BEACON

DUTCHESS COUNTY, NEW YORK

SCALE: 1in=30ft October 4, 2021

ZONING BOARD OF APPEALS

City of Beacon, New York

APPLICATION FOR APPEAL

OWNER: Rajan Kumar

ADDRESS: 1 Iris Circle - Beacon, NY

TELEPHONE: 518.229.4105

E-MAIL: Rajan.kumar@lpl.com

APPLICANT (if not owner): same as owner

ADDRESS:

TELEPHONE:

E-MAIL:

REPRESENTED BY: John Sullivan

ADDRESS: 16 Barclay Street - Pough., NY 12601

TELEPHONE: 914.456.1299

E-MAIL: jsullivan2@hvc.rr.com

PROPERTY LOCATION: 1 Iris Circle

ZONING DISTRICT: R1-7.5

TAX MAP DESIGNATION: SECTION 5954 BLOCK 43 LOT 822637

Section of Zoning Code appealed from or Interpretation desired:

223-17 Schedule of dimensional regulations (~~front~~ side yard setback requiring 20 feet requesting ~~11.5~~ 11.6 foot variance) Subject property is a corner lot.

Reason supporting request:

Property is a corner lot. Proposed garage addition is left side of existing residence where existing driveway is located & accessed off intersecting cross street. Not a self created hardship as other locations on property not realistic.

Supporting documents submitted herewith: Site Plan, Survey, etc. as required:

Survey, Existing and Proposed Site Plan, Proposed Exterior elevations.

Date: 01/20/22

Owner's Signature

Applicant's Signature

Fee Schedule

AREA VARIANCE	$ 250
USE VARIANCE	$ 500
INTERPRETATION:	$ 250

escrow fees may apply if required by Chairman

APPLICATION PROCESSING RESTRICTION LAW

Affidavit of Property Owner

Property Owner: Rajan Kumar

If owned by a corporation, partnership or organization, please list names of persons holding over 5% interest.

Not applicable

List all properties in the City of Beacon that you hold a 5% interest in:

None

Applicant Address: 1 Iris Circle, Beacon, NY 12508

Project Address: 1 Iris Circle, Beacon, NY 12508

Project Tax Grid # 5954-43-722637

Type of Application _____

Please note that the property owner is the applicant. "Applicant" is defined as any individual who owns at least five percent (5%) interest in a corporation or partnership or other business.

I, Rajan Kumar, the undersigned owner of the above referenced property, hereby affirm that I have reviewed my records and verify that the following information is true.

1. No violations are pending for ANY parcel owned by me situated within the City of Beacon — ~~NO~~ YES
2. Violations are pending on a parcel or parcels owned by me situated within the City of Beacon — NO
3. ALL tax payments due to the City of Beacon are current — YES
4. Tax delinquencies exist on a parcel or parcels owned by me within the City of Beacon — NO
5. Special Assessments are outstanding on a parcel or parcels owned by me in the City of Beacon — NO
6. ALL Special Assessments due to the City of Beacon on any parcel owned by me are current — YES

Signature of Owner

Title if owner is corporation

Office Use Only:	NO	YES	Initial
Applicant has violations pending for ANY parcel owned within the City of Beacon (Building Dept.)	✓		EG
ALL taxes are current for properties in the City of Beacon are current (Tax Dept.)		X	
ALL Special Assessments, i.e. water, sewer, fines, etc. are current (Water Billing)		X	

FOR OFFICE USE ONLY

Application #

CITY OF BEACON

1 Municipal Plaza, Beacon, NY

Telephone (845) 838-5000 • http://cityofbeacon.org/

INDIVIDUAL DISCLOSURE FORM

(This form must accompany every land use application and every application for a building permit or certificate of occupancy submitted by any person(s))

Disclosure of the names and addresses of all persons) filing a land-use application with the City is required pursuant to Section 223-62 of the City Code of the City of Beacon. Applicants shall submit supplemental sheets for any additional information that does not fit within the below sections, identifying the Section being supplemented.

SECTION A

Name of Applicant: Rajan Kumar

Address of Applicant: 1 Iris Circle, Beacon, NY 12508

Telephone Contact Information: 518. 229. 4105

SECTION B. List all owners of record of the subject property or any part thereof.

Name	Residence or Business Address	Telephone Number	Date and Manner title was acquired	Date and place where the deed or document of conveyance was recorded or filed.
Rajan Kumar	1 Iris Circle Beacon, NY 12508	518.229.4105	10/2019	10/2019 Dutchess County
Alok Kumar	298 Nevada Ave Columbus, OH 43215	614.578.7041	10/2019	10/2019 Dutchess County
Rosita Kumar	114 Lincoln Ave Cohoes, NY 12047	518.234.7335	10/2019	10/2019 Dutchess County

SECTION B. Is any owner of record an officer, elected or appointed, or employee of the City of Beacon or related, by marriage or otherwise, to a City Council member, planning board member, zoning board of appeals member or employee of the City of Beacon ?

☐ YES ☒ NO

If yes, list every Board, Department, Office, agency or other position with the City of Beacon with which a party has a position, unpaid or paid, or relationship and identify the agency, title, and date of hire.

Agency	Title	Date of Hire, Date Elected, or Date Appointed	Position or Nature of Relationship

SECTION C. If the applicant is a contract vendee, a duplicate original or photocopy of the full and complete contract of purchase, including all riders, modification and amendments thereto, shall be submitted with the application.

SECTION D. Have the present owners entered into a contract for the sale of all or any part of the subject property and, if in the affirmative, please provide a duplicate original or photocopy of the fully and complete contract of sale, including all riders, modifications and amendments thereto.

☐ YES ☒ NO

I, Rajan Kumar being first duly sworn, according to law, deposes and says that the statements made herein are true, accurate, and complete.

(Print) Rajan Kumar

(Signature) _____

Short Environmental Assessment Form
Part 1 - Project Information

Instructions for Completing

Part 1 – Project Information. The applicant or project sponsor is responsible for the completion of Part 1. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

Part 1 – Project and Sponsor Information

Name of Action or Project:
Proposed addition to single-family residence

Project Location (describe, and attach a location map):
1 Iris Circle

Brief Description of Proposed Action:
Addition to single family residence consisting of an attached garage ground level and second floor bedroom suite.

Name of Applicant or Sponsor:	Telephone: 518.229.4105
Rajan Kumar	E-Mail: Rajan.Kumar@lpl.com

Address:
1 Iris Circle

City/PO:	State:	Zip Code:
Beacon	NY	12508

	NO	YES
1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation? If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2.	☑	☐
2. Does the proposed action require a permit, approval or funding from any other government Agency? If Yes, list agency(s) name and permit or approval: City of Beacon Building Dept. - Zoning Board of Appeals	☐	☑

3. a. Total acreage of the site of the proposed action? 0.19 acres
   b. Total acreage to be physically disturbed? 0.06 acres
   c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 0.19 acres

4. Check all land uses that occur on, are adjoining or near the proposed action:

5. ☐ Urban ☐ Rural (non-agriculture) ☐ Industrial ☐ Commercial ☑ Residential (suburban)
   ☐ Forest ☐ Agriculture ☐ Aquatic ☐ Other(Specify):
   ☐ Parkland

	NO	YES	N/A
5. Is the proposed action,			
a. A permitted use under the zoning regulations?	☐	☑	☐
b. Consistent with the adopted comprehensive plan?	☐	☐	☑

	NO	YES
6. Is the proposed action consistent with the predominant character of the existing built or natural landscape?	☐	☑

	NO	YES
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area?		
If Yes, identify:	☑	☐

	NO	YES
8. a. Will the proposed action result in a substantial increase in traffic above present levels?	☑	☐
b. Are public transportation services available at or near the site of the proposed action?	☐	☑
c. Are any pedestrian accommodations or bicycle routes available on or near the site of the proposed action?	☐	☑

	NO	YES
9. Does the proposed action meet or exceed the state energy code requirements?		
If the proposed action will exceed requirements, describe design features and technologies:		
The proposed action will exceed the state energy code requirements through the use of high-efficiency mech. equipment and insulation that will exceed the minimum requirements.	☐	☑

	NO	YES
10. Will the proposed action connect to an existing public/private water supply?		
If No, describe method for providing potable water:	☐	☑

	NO	YES
11. Will the proposed action connect to existing wastewater utilities?		
If No, describe method for providing wastewater treatment:	☐	☑

	NO	YES
12. a. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places?	☑	☐
b. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory?	☐	☑

	NO	YES
13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency?	☑	☐
b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody?	☑	☐
If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres:		

14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check all that apply:

☐ Shoreline ☐ Forest ☐ Agricultural/grasslands ☐ Early mid-successional

☐ Wetland ☐ Urban ☑ Suburban

	NO	YES
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered? Atlantic Sturgeon, Shortnos...	☐	☑
16. Is the project site located in the 100-year flood plan?	☑	☐
17. Will the proposed action create storm water discharge, either from point or non-point sources?	☑	☐
If Yes, a. Will storm water discharges flow to adjacent properties?	☑	☐
If Yes, b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)?	☑	☐
If Yes, briefly describe:		
18. Does the proposed action include construction or other activities that would result in the impoundment of water or other liquids (e.g., retention pond, waste lagoon, dam)? If Yes, explain the purpose and size of the impoundment:	☑	☐
19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility? If Yes, describe:	☑	☐
20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste? If Yes, describe:	☐	☑

I CERTIFY THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE

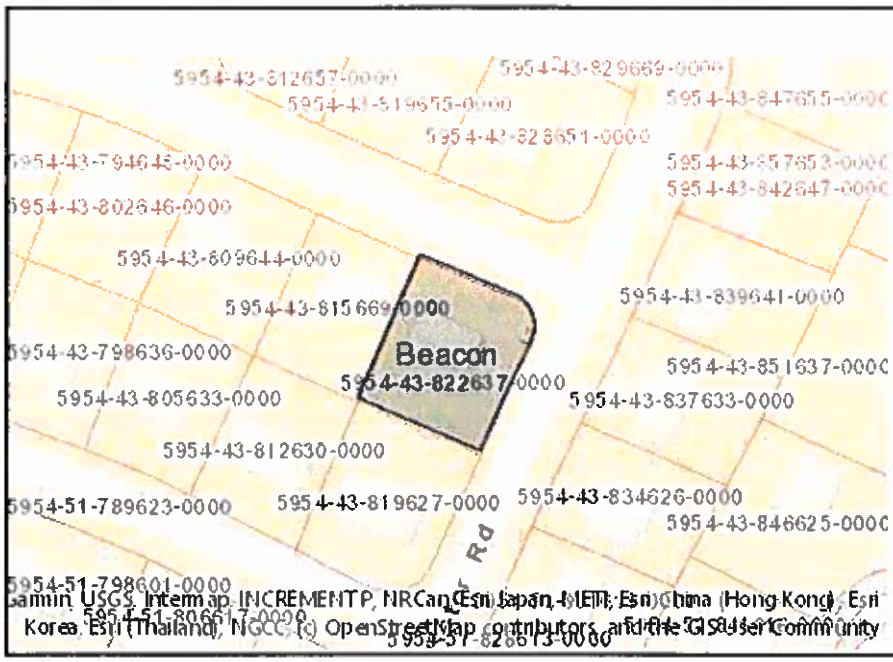
Applicant/sponsor/name: Rajan Kumar Date: January 19, 2022

Signature: Title: Property Owner

PRINT FORM

EAF Mapper Summary Report

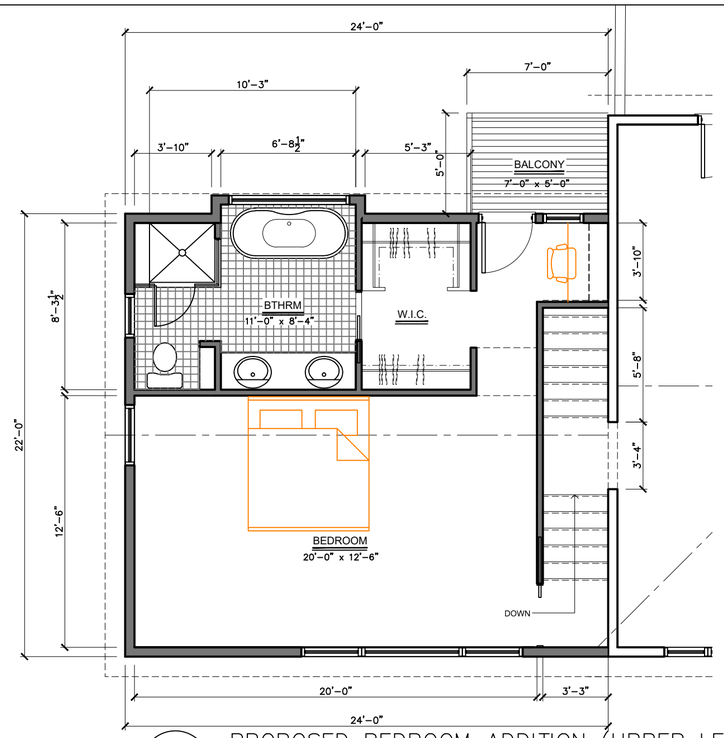
Wednesday, January 19, 2022 4:18 PM



Disclaimer: The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the EAF Workbooks. Although the EAF Mapper provides the most up-to-date digital data available to DEC, you may also need to contact local or other data sources in order to obtain data not provided by the Mapper. Digital data is not a substitute for agency determinations.

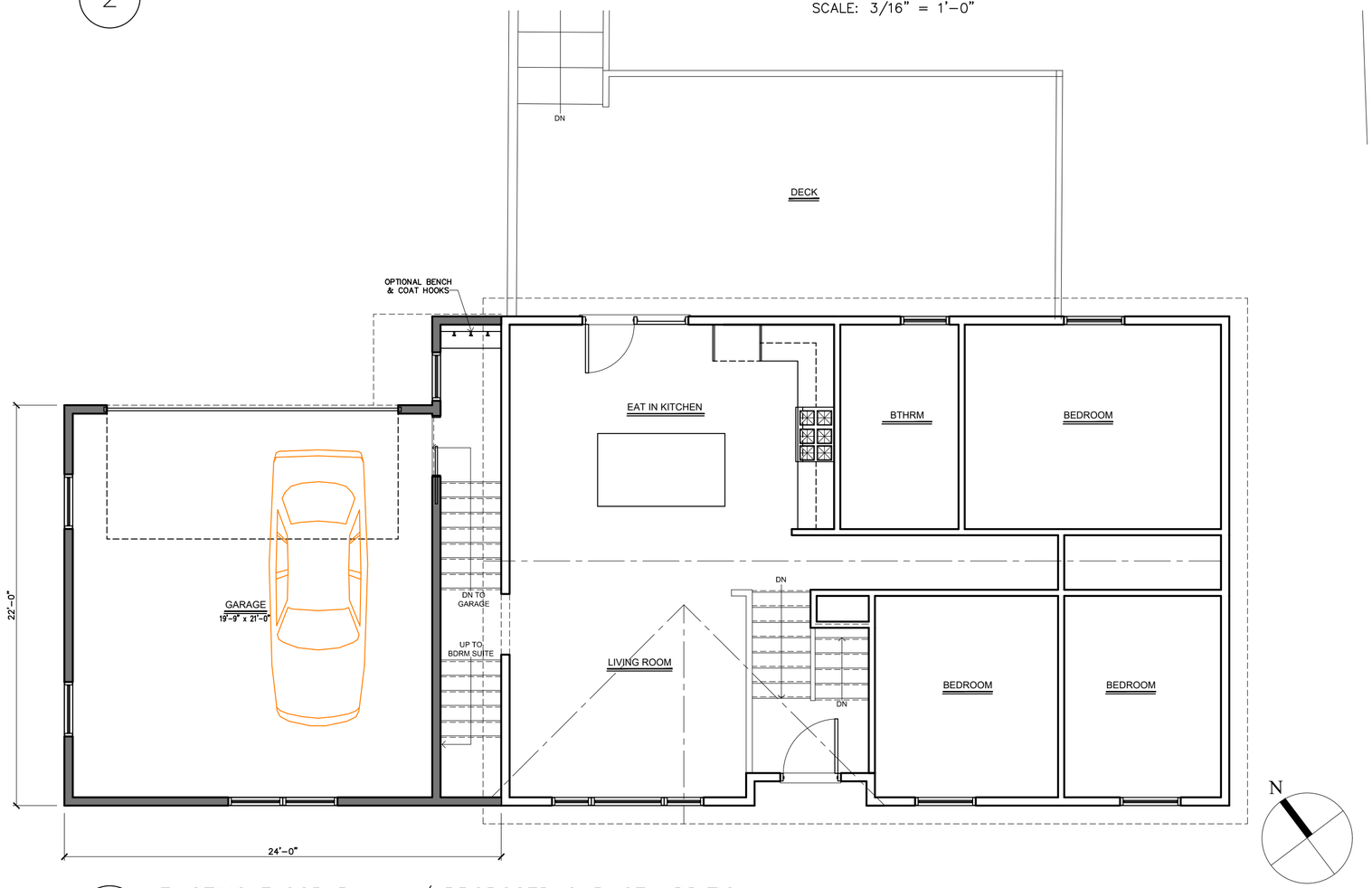


Part 1 / Question 7 [Critical Environmental Area]	No
Part 1 / Question 12a [National or State Register of Historic Places or State Eligible Sites]	No
Part 1 / Question 12b [Archeological Sites]	Yes
Part 1 / Question 13a [Wetlands or Other Regulated Waterbodies]	No
Part 1 / Question 15 [Threatened or Endangered Animal]	Yes
Part 1 / Question 15 [Threatened or Endangered Animal - Name]	Atlantic Sturgeon, Shortnose Sturgeon
Part 1 / Question 16 [100 Year Flood Plain]	No
Part 1 / Question 20 [Remediation Site]	Yes



2 PROPOSED BEDROOM ADDITION (UPPER LEVEL)

SCALE: 3/16" = 1'-0"



1 EXISTING FLOOR PLAN w/ PROPOSED GARAGE ADDITION

SCALE: 3/16" = 1'-0"

DESIGN AND DRAWINGS PREPARED BY:

J. SULLIVAN - associate a.i.a.
16 BARCLAY STREET
POUGHKEEPSIE, NY

PROPERTY OWNER:

RAJAN KUMAR
1 IRIS CIRCLE
CITY OF BEACON, NY

Date	Issue
1.24.2022	ISSUED TO OWNER FOR REVIEW
1.25.2022	ISSUED TO CITY OF BEACON (ZBA APPLICATION)

Project Title

GARAGE
and MASTER SUITE ADDITION
Kumar Residence
1 IRIS CIRCLE
CITY OF BEACON, NY

Drawing Title

Existing & Proposed Floor Plans

Project No.	2201
Date	1.7.2022
Scale	AS NOTED
Drawing by	JVS
Checked by	

Drawing No.

A-1.0

City of Beacon Zoning Board of Appeals Agenda
03/15/2022

Title:

Review and hold public hearing on application submitted by Jonathan Miller, 64 Beacon Street, Tax Grid No.30-5954-35-815855-00, R1-5 Zoning District, for relief from Section 223-10(B)(1) to extend a non-conforming use by creating a 552 sq. ft. home occupation/artist studio in an existing attached garage

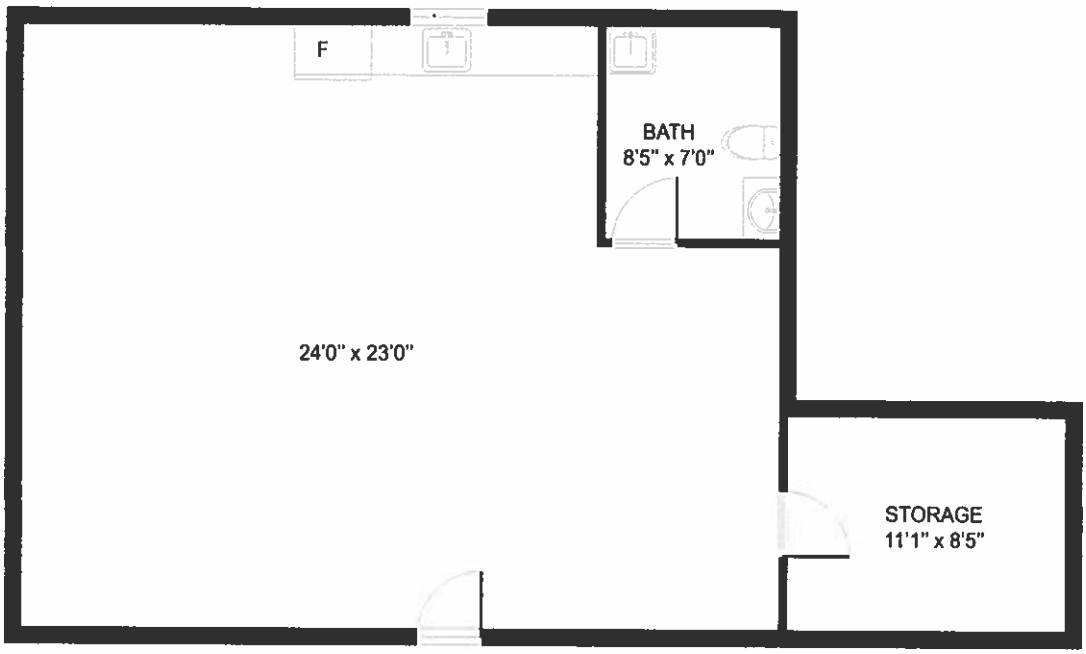
ATTACHMENTS

64 Beacon Street Back Up Document.pdf

64 Beacon Street Back Up Documents.pdf

Back up Information.docx

64 Beacon Street Application.pdf

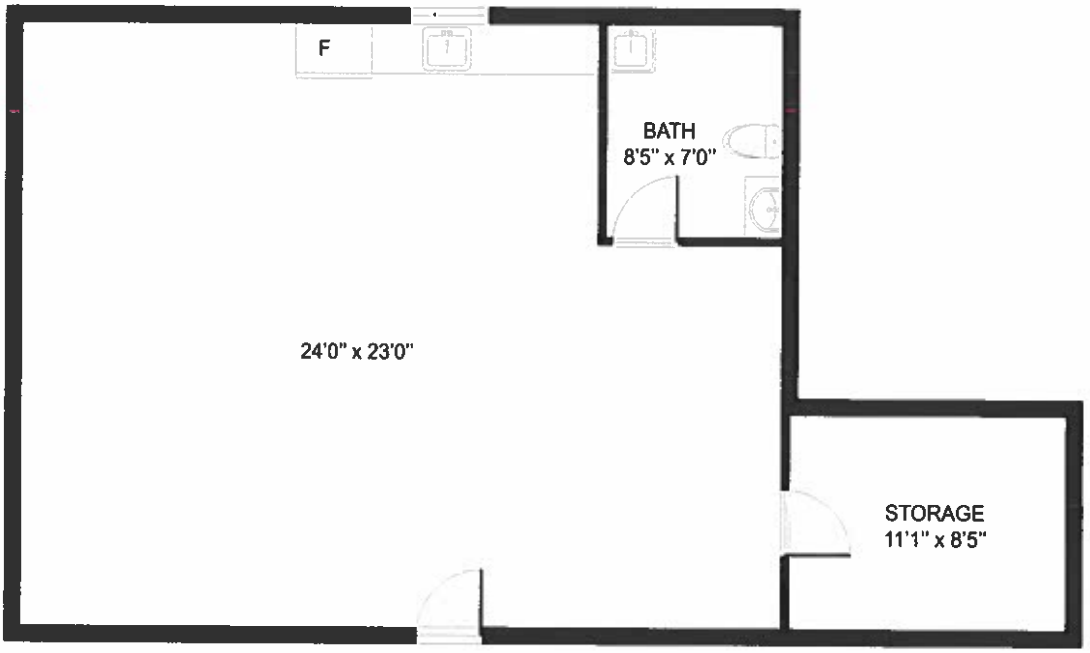

F
BATH
8'5" x 7'0"
24'0" x 23'0"
STORAGE
11'1" x 8'5"



64 Beacon Street Artist Loft


Dutchess County, NY - Tax Map
DEWINDT ST
SELM ST
BEACON ST
BEACON CITY
SWALNUT ST
HUBERT ST
802887
805885
809883
816880
813875
786876
791878
796870
799868
805865
819884
833877
831874
828870
826866
822861
815855
822851
827846
832853
836859
836863
841866
843868
845871
844842
841837
826836
824833
821829
814842
810837
807832
801842
796845
791831
798828
785850
796848




F
BATH
8'5" x 7'0"
24'0" x 23'0"
STORAGE
11'1" x 8'5"










62 Beacon Street
Already permitted artist work space
right across the street.

ZONING BOARD OF APPEALS
City of Beacon, New York

APPLICATION FOR APPEAL

OWNER: Jonathan Miller

ADDRESS: 64 Beacon St Beacon, NY. 12508

TELEPHONE: 845-453-8049

E-MAIL: joncarrealty@yahoo.com

APPLICANT (if not owner): _____

ADDRESS: _____

TELEPHONE: _____

E-MAIL: _____

REPRESENTED BY: _____

ADDRESS: _____

TELEPHONE: _____

E-MAIL: _____

PROPERTY LOCATION: _____

ZONING DISTRICT: R1-5

TAX MAP DESIGNATION: SECTION 5954 BLOCK 35 LOT 815855

Section of Zoning Code appealed from or Interpretation desired:

Section 223-10(B)(1) Extending a non-conforming use by creating a 552 sq. ft. home occupation/artist studio in an existing attached garage

Reason supporting request:

Artist work space

Supporting documents submitted herewith: Site Plan, Survey, etc. as required:

Rendering, Floor Plan,

Date: _____

Jon miller
Owner's Signature

Jon miller
Applicant's Signature

Fee Schedule

AREA VARIANCE	$ 250
USE VARIANCE	$ 500
INTERPRETATION:	$ 250

escrow fees may apply if required by Chairman

City of Beacon
Building Department

APPLICATION PROCESSING RESTRICTION LAW
Affidavit of Property Owner

Property Owner: Jonathan Miller
(Applicant)
If owned by a corporation, partnership or organization please list names of persons holding over 5% interest in business.

List all properties in the City of Beacon that you hold a 5% interest in.
208 E. Main St., 55 Tioronda, 74-76 Howland Ave, 26 High, 29 John St, 64 Beacon St, 100 Hiddenbrook, 12 Alice, 51 Tioronda Ave, 451 Main St, 520 Main St.

Applicant Address:
Project Address: 64 Beacon St.
Project Tax Grid #: 5954-35-815855
Type of Application:

*** Please note that the property owner is the applicant. "Applicant" is defined as any individual who owns at least five percent interest in a corporation or partnership or other business.**

I, _____, the undersigned owner of the above referenced property, hereby affirm that I have reviewed my records and verify that the following information is true.
(Check statements that are **true**)

1. No violations are pending for ANY parcel owned by me situated within the City of Beacon. _____
2. Violations are pending on a parcel or parcels owned by me situated within the City of Beacon. _____
3. ALL tax payments due to the City of Beacon are current. _____
4. Tax delinquencies exist on a parcel or parcels owned by me in the City of Beacon. _____
5. Special Assessments are outstanding on a parcel or parcels owned by me in the City of Beacon _____
6. ALL Special Assessments due to the City of Beacon on any parcel owned by me are current. _____

_____
Signature of Owner

_____
Title if owner is corporation

Office Use Only:	NO	YES	Initial
Applicant has violations pending for ANY parcel owned within the City of Beacon (Building Dept.)	✓		
ALL taxes are current for properties in the City of Beacon are current (Tax Dept.)		✓	
ALL Special Assessments, i.e. water, sewer, fines, etc. are current (Water Billing)		✓	

2/28/22 All city taxes owed (current)

FOR OFFICE USE ONLY
Application #

CITY OF BEACON

1 Municipal Plaza, Beacon, NY

Telephone (845) 838-5000 • http://cityofbeacon.org/

INDIVIDUAL DISCLOSURE FORM

(This form must accompany every land use application and every application for a building permit or certificate of occupancy submitted by any person(s))

Disclosure of the names and addresses of all persons) filing a land-use application with the City is required pursuant to Section 223-62 of the City Code of the City of Beacon. Applicants shall submit supplemental sheets for any additional information that does not fit within the below sections, identifying the Section being supplemented.

SECTION A

Name of Applicant: Jonathan Miller

Address of Applicant: 451 Main St, Beacon, NY. 12508

Telephone Contact Information: 845-453-8049

SECTION B. List all owners of record of the subject property or any part thereof.

Name	Residence or Business Address	Telephone Number	Date and Manner title was acquired	Date and place where the deed or document of conveyance was recorded or filed.
Jonathan Miller	451 Main St. Beacon, NY.	845-453-8049	01/04/2001 Arms length transaction	1/04/2001 DC Clerk

SECTION B. Is any owner of record an officer, elected or appointed, or employee of the City of Beacon or related, by marriage or otherwise, to a City Council member, planning board member, zoning board of appeals member or employee of the City of Beacon ?

☐ YES ☒ NO

If yes, list every Board, Department, Office, agency or other position with the City of Beacon with which a party has a position, unpaid or paid, or relationship and identify the agency, title, and date of hire.

Agency	Title	Date of Hire, Date Elected, or Date Appointed	Position or Nature of Relationship

SECTION C. If the applicant is a contract vendee, a duplicate original or photocopy of the full and complete contract of purchase, including all riders, modification and amendments thereto, shall be submitted with the application.

SECTION D. Have the present owners entered into a contract for the sale of all or any part of the subject property and, if in the affirmative, please provide a duplicate original or photocopy of the fully and complete contract of sale, including all riders, modifications and amendments thereto.

☐ YES ☒ NO

I, JON Miller being first duly sworn, according to law, deposes and says that the statements made herein are true, accurate, and complete.

(Print) Jon Miller

(Signature) Jon Miller

617.20
Appendix B
Short Environmental Assessment Form

Instructions for Completing

Part 1 - Project Information. The applicant or project sponsor is responsible for the completion of Part 1. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

Part 1 - Project and Sponsor Information

Name of Action or Project: Artist Work Space

Project Location (describe, and attach a location map): 64 Beacon St, Beacon, NY. 12508

Brief Description of Proposed Action:

Name of Applicant or Sponsor: Jonathan Miller

Telephone: 845-453-8049

E-Mail: joncarrealty@yahoo.com

Address: 451 Main St

City/PO: Beacon

State: NY.

Zip Code: 12508

	NO	YES
1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation? If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2.	☑	☐
2. Does the proposed action require a permit, approval or funding from any other governmental Agency? If Yes, list agency(s) name and permit or approval:	☑	☐

3.a. Total acreage of the site of the proposed action? _____ acres
b. Total acreage to be physically disturbed? _____ acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? _____ acres

4. Check all land uses that occur on, adjoining and near the proposed action.
☐ Urban ☐ Rural (non-agriculture) ☐ Industrial ☐ Commercial ☑ Residential (suburban)
☐ Forest ☐ Agriculture ☐ Aquatic ☐ Other (specify): _____
☐ Parkland

	NO	YES	N/A
5. Is the proposed action,			
a. A permitted use under the zoning regulations?	☐	☐	☐
b. Consistent with the adopted comprehensive plan?	☐	☐	☐

	NO	YES
6. Is the proposed action consistent with the predominant character of the existing built or natural landscape?	☐	☑
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area?	NO	YES
If Yes, identify: _____	☑	☐
8. a. Will the proposed action result in a substantial increase in traffic above present levels?	☑	☐
b. Are public transportation service(s) available at or near the site of the proposed action?	☐	☑
c. Are any pedestrian accommodations or bicycle routes available on or near site of the proposed action?	☑	☐
9. Does the proposed action meet or exceed the state energy code requirements?	NO	YES
If the proposed action will exceed requirements, describe design features and technologies: _____	☑	☐
10. Will the proposed action connect to an existing public/private water supply?	NO	YES
If No, describe method for providing potable water: _____	☑	☐
11. Will the proposed action connect to existing wastewater utilities?	NO	YES
If No, describe method for providing wastewater treatment: _____	☐	☑
12. a. Does the site contain a structure that is listed on either the State or National Register of Historic Places?	☑	☐
b. Is the proposed action located in an archeological sensitive area?	☑	☐
13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency?	☑	☐
b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody?	☑	☐
If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres: _____		

14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check all that apply:

☐ Shoreline ☐ Forest ☐ Agricultural/grasslands ☐ Early mid-successional
☐ Wetland ☐ Urban ☐ Suburban

	NO	YES
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered?	☑	☐
16. Is the project site located in the 100 year flood plain?	☑	☐
17. Will the proposed action create storm water discharge, either from point or non-point sources?	NO	YES
If Yes,		
a. Will storm water discharges flow to adjacent properties? ☐ NO ☐ YES	☑	☐
b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)?		
If Yes, briefly describe: ☐ NO ☐ YES		
_____		

	NO	YES
18. Does the proposed action include construction or other activities that result in the impoundment of water or other liquids (e.g. retention pond, waste lagoon, dam)? If Yes, explain purpose and size: _____	☑	☐
19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility? If Yes, describe: _____	☑	☐
20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste? If Yes, describe: _____	☑	☐

I AFFIRM THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE

Applicant/sponsor name: Jon Miller Date: _____

Signature: Jon Miller

Part 2 - Impact Assessment. The Lead Agency is responsible for the completion of Part 2. Answer all of the following questions in Part 2 using the information contained in Part 1 and other materials submitted by the project sponsor or otherwise available to the reviewer. When answering the questions the reviewer should be guided by the concept "Have my responses been reasonable considering the scale and context of the proposed action?"

	No, or small impact may occur	Moderate to large impact may occur
1. Will the proposed action create a material conflict with an adopted land use plan or zoning regulations?	☑	☐
2. Will the proposed action result in a change in the use or intensity of use of land?	☑	☐
3. Will the proposed action impair the character or quality of the existing community?	☑	☐
4. Will the proposed action have an impact on the environmental characteristics that caused the establishment of a Critical Environmental Area (CEA)?	☑	☐
5. Will the proposed action result in an adverse change in the existing level of traffic or affect existing infrastructure for mass transit, biking or walkway?	☑	☐
6. Will the proposed action cause an increase in the use of energy and it fails to incorporate reasonably available energy conservation or renewable energy opportunities?	☑	☐
7. Will the proposed action impact existing: a. public / private water supplies?	☑	☐
b. public / private wastewater treatment utilities?	☑	☐
8. Will the proposed action impair the character or quality of important historic, archaeological, architectural or aesthetic resources?	☑	☐
9. Will the proposed action result in an adverse change to natural resources (e.g., wetlands, waterbodies, groundwater, air quality, flora and fauna)?	☑	☐

	No, or small impact may occur	Moderate to large impact may occur
10. Will the proposed action result in an increase in the potential for erosion, flooding or drainage problems?	☑	☐
11. Will the proposed action create a hazard to environmental resources or human health?	☑	☐

Part 3 - Determination of significance. The Lead Agency is responsible for the completion of Part 3. For every question in Part 2 that was answered "moderate to large impact may occur", or if there is a need to explain why a particular element of the proposed action may or will not result in a significant adverse environmental impact, please complete Part 3. Part 3 should, in sufficient detail, identify the impact, including any measures or design elements that have been included by the project sponsor to avoid or reduce impacts. Part 3 should also explain how the lead agency determined that the impact may or will not be significant. Each potential impact should be assessed considering its setting, probability of occurring, duration, irreversibility, geographic scope and magnitude. Also consider the potential for short-term, long-term and cumulative impacts.

☐ Check this box if you have determined, based on the information and analysis above, and any supporting documentation, that the proposed action may result in one or more potentially large or significant adverse impacts and an environmental impact statement is required.

☑ Check this box if you have determined, based on the information and analysis above, and any supporting documentation, that the proposed action will not result in any significant adverse environmental impacts.

Name of Lead Agency	Date
Print or Type Name of Responsible Officer in Lead Agency	Title of Responsible Officer
Signature of Responsible Officer in Lead Agency	Signature of Preparer (if different from Responsible Officer)

PRINT

City of Beacon Zoning Board of Appeals Agenda
03/15/2022

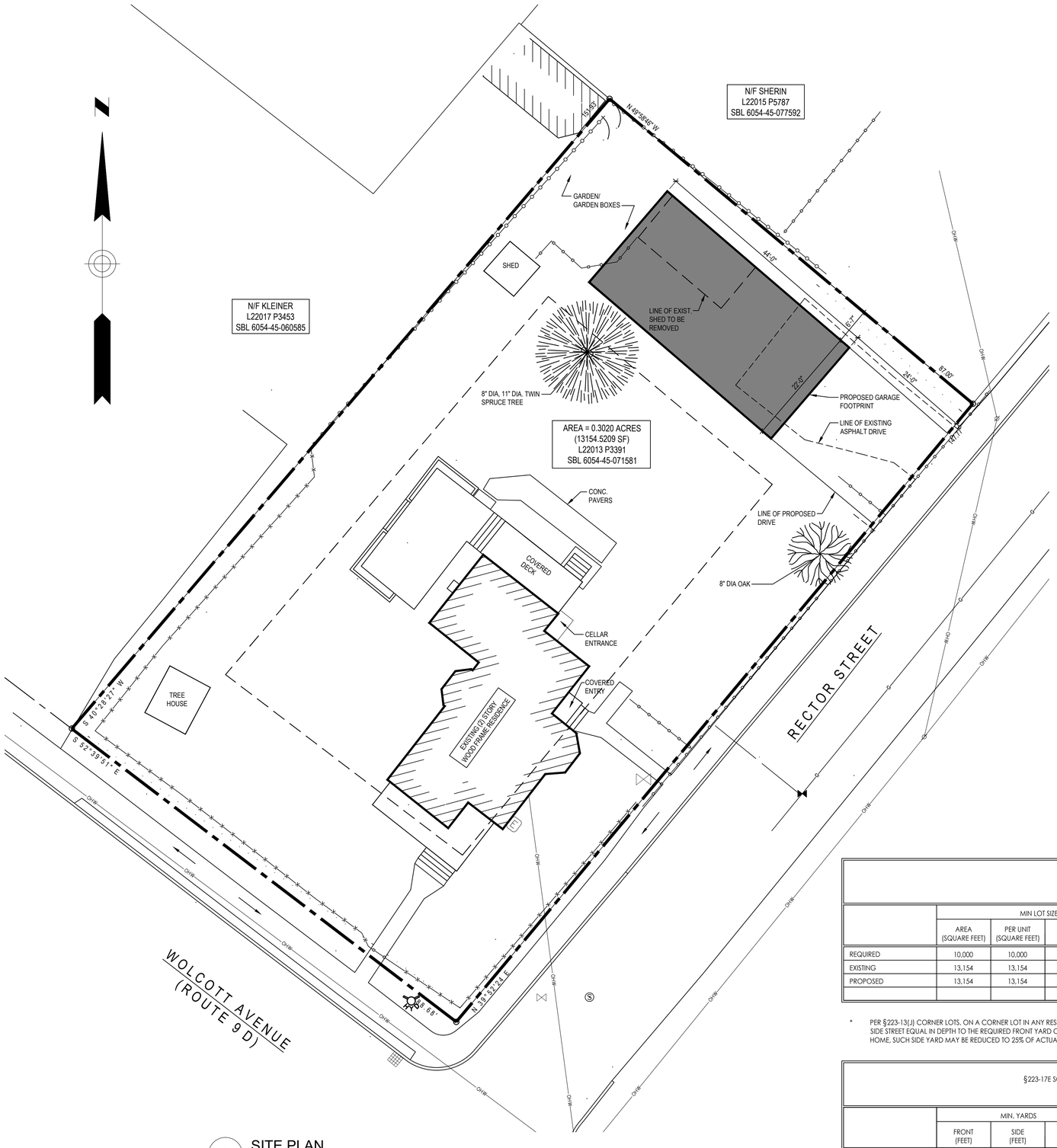
Title:

Review and hold public on application submitted by Michael Isabell, 866 Wolcott Avenue, Tax Grid No. 30-6054-45-071581-00, R1-10 Zoning District, to construct an accessory structure (2 car garage) which requires relief from the following: Section 223-17(E) for a 6.7 ft. rear yard setback *(15 ft. required)*; Section 223-17(E) for a 968 sq. ft. accessory structure *(383 sq. ft. maximum permitted)*; and Section 223-17(E) to allow 1,017 sq. ft. of cumulative lot coverage *(960 sq. ft. maximum lot coverage permitted)*

ATTACHMENTS

866 Wolcott Avenue Site Plan.pdf

866 Wolcott Avenue Application.pdf



1 SITE PLAN
SCALE: 1"=10'-0"

LEGEND

- CATCH BASIN
- SEWER MANHOLE
- ELECTRIC METER
- GAS METER
- GAS VALVE
- WATER VALVE
- UTILITY POLE
- UTILITY POLE WITH LIGHT
- FIRE HYDRANT
- PROPERTY LINE
- PRINCIPLE SETBACK LINES
- CHAIN LINK FENCE
- WIRE FENCE
- WOOD/VINYL FENCE
- GAS LINE
- OVERHEAD WIRES

CITY OF BEACON ZONING CODE
§223-17 SCHEDULE OF DIMENSIONAL REGULATIONS

R1-10 ZONE

	MIN LOT SIZE AREA				MIN. YARDS			MAX. DISTANCE BETWEEN BLDGS SAME LOT	MAX. HEIGHT MAIN BLDG (STORIES/FEET)	MAX. PERCENT BLDG COVERAGE		MAX. NUMBER OF UNITS PER BUILDING	MIN. OPEN SPACE
	AREA (SQUARE FEET)	PER UNIT (SQUARE FEET)	WIDTH (FEET)	DEPTH (FEET)	FRONT (FEET)	SIDE (FEET)	REAR (FEET)			MULTI FAMILY	ALL OTHER		
REQUIRED	10,000	10,000	85	100	25	18.75*/15	35	-	2.5/35	N/A	25%	1	-
EXISTING	13,154	13,154	87	147	22.25	37.25	78.25	-	2/26	N/A	12.4%	1	-
PROPOSED	13,154	13,154	87	147	22.25	37.25	78.25	-	2/26	N/A	12.4%	1	-

* PER §223-13(J) CORNER LOTS. ON A CORNER LOT IN ANY RESIDENCE DISTRICT, THERE SHALL BE PROVIDED A SIDE YARD ON THE SIDE STREET EQUAL IN DEPTH TO THE REQUIRED FRONT YARD ON SAID LOT, OR, IF THE LOT IS TO BE OCCUPIED BY A ONE-FAMILY HOME, SUCH SIDE YARD MAY BE REDUCED TO 25% OF ACTUAL LOT WIDTH. SIDE YARD AT RECTOR STREET ADJUSTED TO 18.25'

CITY OF BEACON ZONING CODE
§223-17E SCHEDULE OF REGULATIONS FOR ACCESSORY BUILDINGS ON RESIDENTIAL LOTS

R1-10 ZONE

	MIN. YARDS			MAX. CUMULATIVE SQUARE FOOTAGE FOR ALL ACCESSORY STRUCTURES	MAX. SQUARE FOOTAGE PERMITTED FOR EACH ACCESSORY BUILDING (BASED ON FOOTPRINT OF PRINCIPAL BUILDING)	MAX. NUMBER OF SHEDS PERMITTED
	FRONT (FEET)	SIDE (FEET)	REAR (FEET)			
REQUIRED	NOT PERMITTED	15	15	960	40%	2
EXISTING	-	20'-4"	6'-7"	332	20%	2
PROPOSED	-	19'-0"	6'-7"	1,102	74%	1

David Burke Architects
46a Verplanck Avenue
Beacon, New York 12508
www.DavidBurkeArchitects.com

Project Name

ISABELL GARAGE

866 WOLCOTT AVENUE
BEACON, NY 12508

No.	Revision/Issue	Date

Drawing Title

SITE PLAN

Scale: AS ANNOTATED

Date: 02.21.2022

Sheet No.: C01

Drawn by: HK

Checked by: DB

ZONING BOARD OF APPEALS

City of Beacon, New York

APPLICATION FOR APPEAL

OWNER: Michael Isabell

ADDRESS: 866 Wolcott Ave
Beacon, NY 12508

TELEPHONE: 917-309-7223

E-MAIL: mdisabell@gmail.com

APPLICANT (if not owner): _____

ADDRESS: _____

TELEPHONE: _____

E-MAIL: _____

REPRESENTED BY: David Burke Architects

ADDRESS: 46 Verplanck Ave
Beacon, NY 12508

TELEPHONE: 914-475-0076

E-MAIL: hkaan@davidburkearchitects.com

PROPERTY LOCATION: 866 Wolcott Ave

ZONING DISTRICT: R1-10

TAX MAP DESIGNATION: SECTION 6054

BLOCK 45 LOT 071581

Section of Zoning Code appealed from or Interpretation desired:

Section 223-17E Schedule of regulations for accessory buildings on residential lots Minimum rear yard, Maximum Cumulative square footage for all accessory buildings, and Maximum square footage permitted for each accessory building.

Reason supporting request:

Applicant would like to build a two car garage at the location of the existing driveway and curb cut. The existing drive and curb cut is located in the rear setback. Also included in the structure is a home office. The area necessary to allow for both exceeds the maximum permitted.

Supporting documents submitted herewith: Site Plan, Survey, etc. as required:

Site plan

Date: 02-22-2022

Owner's Signature

Applicant's Signature

Fee Schedule

AREA VARIANCE	$ 250
USE VARIANCE	$ 500
INTERPRETATION:	$ 250

escrow fees may apply if required by Chairman

APPLICATION PROCESSING RESTRICTION LAW

Affidavit of Property Owner

Property Owner: Michael Isabell

If owned by a corporation, partnership or organization, please list names of persons holding over 5% interest.

N/A

List all properties in the City of Beacon that you hold a 5% interest in:

N/A

Applicant Address: 866 Wolcott Ave. Beacon, NY 12508

Project Address: 866 Wolcott Ave. Beacon, NY 12508

Project Tax Grid # 6054-45-071581

Type of Application Area variance

Please note that the property owner is the applicant. "Applicant" is defined as any individual who owns at least five percent (5%) interest in a corporation or partnership or other business.

I, Michael Isabell, the undersigned owner of the above referenced property, hereby affirm that I have reviewed my records and verify that the following information is true.

1. No violations are pending for ANY parcel owned by me situated within the City of Beacon ✓
2. Violations are pending on a parcel or parcels owned by me situated within the City of Beacon ✓
3. ALL tax payments due to the City of Beacon are current ✓
4. Tax delinquencies exist on a parcel or parcels owned by me within the City of Beacon ✓
5. Special Assessments are outstanding on a parcel or parcels owned by me in the City of Beacon ✓
6. ALL Special Assessments due to the City of Beacon on any parcel owned by me are current ✓

Signature of Owner

Title if owner is corporation

Office Use Only:	NO	YES	Initial
Applicant has violations pending for ANY parcel owned within the City of Beacon (Building Dept.)	✓		EG
ALL taxes are current for properties in the City of Beacon are current (Tax Dept.)		✓	JS
ALL Special Assessments, i.e. water, sewer, fines, etc. are current (Water Billing)		✓	SV

FOR OFFICE USE ONLY
Application #

CITY OF BEACON

1 Municipal Plaza, Beacon, NY

Telephone (845) 838-5000 · http://cityofbeacon.org/

INDIVIDUAL DISCLOSURE FORM

(This form must accompany every land use application and every application for a building permit or certificate of occupancy submitted by any person(s))

Disclosure of the names and addresses of all persons) filing a land-use application with the City is required pursuant to Section 223-62 of the City Code of the City of Beacon. Applicants shall submit supplemental sheets for any additional information that does not fit within the below sections, identifying the Section being supplemented.

SECTION A

Name of Applicant: Michael Isabell

Address of Applicant: 866 Wolcott Ave. Beacon, NY 12508

Telephone Contact Information: 917-309-7223

SECTION B. List all owners of record of the subject property or any part thereof.

Name	Residence or Business Address	Telephone Number	Date and Manner title was acquired	Date and place where the deed or document of conveyance was recorded or filed.
Michael Isabell	866 Wolcott Ave. Beacon, NY 12508	917-309-7223	Purchased	7/8/2013 Dutchess County
Anne Alvergue	866 Wolcott Ave. Beacon, NY 12508	917-541-4150	Purchased	7/8/2013 Dutchess County

SECTION B. Is any owner of record an officer, elected or appointed, or employee of the City of Beacon or related, by marriage or otherwise, to a City Council member, planning board member, zoning board of appeals member or employee of the City of Beacon ?

☐ YES ☒ NO

If yes, list every Board, Department, Office, agency or other position with the City of Beacon with which a party has a position, unpaid or paid, or relationship and identify the agency, title, and date of hire.

Agency	Title	Date of Hire, Date Elected, or Date Appointed	Position or Nature of Relationship

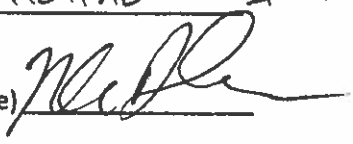
SECTION C. If the applicant is a contract vendee, a duplicate original or photocopy of the full and complete contract of purchase, including all riders, modification and amendments thereto, shall be submitted with the application.

SECTION D. Have the present owners entered into a contract for the sale of all or any part of the subject property and, if in the affirmative, please provide a duplicate original or photocopy of the fully and complete contract of sale, including all riders, modifications and amendments thereto.

☐ YES ☒ NO

I, Michael Isabell being first duly sworn, according to law, deposes and says that the statements made herein are true, accurate, and complete.

(Print) MICHAEL ISABELL

(Signature) 

617.20
Appendix B
Short Environmental Assessment Form

Instructions for Completing

Part 1 - Project Information. The applicant or project sponsor is responsible for the completion of Part 1. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

Part 1 - Project and Sponsor Information

Name of Action or Project:
Garage and Home office for Isabell Residence

Project Location (describe, and attach a location map):
866 Wolcott Ave. Beacon, NY 12508

Brief Description of Proposed Action:
22' x 44' one story wood frame structure that would include a two car garage, a home office, and storage in the attic space.

Name of Applicant or Sponsor:	Telephone: 917-309-7223
Michael Isabell	E-Mail: mdisabell@gmail.com

Address:
866 Wolcott Ave.

City/PO:	State:	Zip Code:
Beacon	NY	12508

	NO	YES
1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation? If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2.	☑	☐
2. Does the proposed action require a permit, approval or funding from any other governmental Agency? If Yes, list agency(s) name and permit or approval: City of Beacon Building Department Building Permit	☐	☑

3.a. Total acreage of the site of the proposed action? .3020 acres
b. Total acreage to be physically disturbed? .04 acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? .3020 acres

4. Check all land uses that occur on, adjoining and near the proposed action.
☐ Urban ☐ Rural (non-agriculture) ☐ Industrial ☐ Commercial ☑ Residential (suburban)
☐ Forest ☐ Agriculture ☐ Aquatic ☐ Other (specify): _____
☐ Parkland

	NO	YES	N/A
5. Is the proposed action, a. A permitted use under the zoning regulations?	☐	☑	☐
b. Consistent with the adopted comprehensive plan?	☐	☑	☐
6. Is the proposed action consistent with the predominant character of the existing built or natural landscape?	NO	YES	
	☐	☑	
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area? If Yes, identify: _____	NO	YES	
	☑	☐	
8. a. Will the proposed action result in a substantial increase in traffic above present levels?	NO	YES	
	☑	☐	
b. Are public transportation service(s) available at or near the site of the proposed action?	☐	☑	
c. Are any pedestrian accommodations or bicycle routes available on or near site of the proposed action?	☐	☑	
9. Does the proposed action meet or exceed the state energy code requirements? If the proposed action will exceed requirements, describe design features and technologies: _____	NO	YES	
	☐	☑	
10. Will the proposed action connect to an existing public/private water supply?	NO	YES	
If No, describe method for providing potable water: _____	☐	☑	
11. Will the proposed action connect to existing wastewater utilities?	NO	YES	
If No, describe method for providing wastewater treatment: _____	☐	☑	
12. a. Does the site contain a structure that is listed on either the State or National Register of Historic Places?	NO	YES	
	☑	☐	
b. Is the proposed action located in an archeological sensitive area?	☑	☐	
13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency?	NO	YES	
	☑	☐	
b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody? If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres: _____	☑	☐	
14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check all that apply: ☐ Shoreline ☐ Forest ☐ Agricultural/grasslands ☐ Early mid-successional ☐ Wetland ☐ Urban ☑ Suburban			
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered?	NO	YES	
	☑	☐	
16. Is the project site located in the 100 year flood plain?	NO	YES	
	☑	☐	
17. Will the proposed action create storm water discharge, either from point or non-point sources? If Yes,	NO	YES	
a. Will storm water discharges flow to adjacent properties? ☑ NO ☐ YES	☐	☑	
b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)? If Yes, briefly describe: ☐ NO ☑ YES Gutters will collect storm-water and redirect it to existing pervious areas on site or towards municipal storm drains			

	NO	YES
18. Does the proposed action include construction or other activities that result in the impoundment of water or other liquids (e.g. retention pond, waste lagoon, dam)? If Yes, explain purpose and size:	☑	☐
19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility? If Yes, describe:	☑	☐
20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste? If Yes, describe:	☑	☐

I AFFIRM THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE

Applicant/sponsor name: Michael Isabell Date: 02-22-2022

Signature:

Part 2 - Impact Assessment. The Lead Agency is responsible for the completion of Part 2. Answer all of the following questions in Part 2 using the information contained in Part 1 and other materials submitted by the project sponsor or otherwise available to the reviewer. When answering the questions the reviewer should be guided by the concept "Have my responses been reasonable considering the scale and context of the proposed action?"

	No, or small impact may occur	Moderate to large impact may occur
1. Will the proposed action create a material conflict with an adopted land use plan or zoning regulations?	☐	☐
2. Will the proposed action result in a change in the use or intensity of use of land?	☐	☐
3. Will the proposed action impair the character or quality of the existing community?	☐	☐
4. Will the proposed action have an impact on the environmental characteristics that caused the establishment of a Critical Environmental Area (CEA)?	☐	☐
5. Will the proposed action result in an adverse change in the existing level of traffic or affect existing infrastructure for mass transit, biking or walkway?	☐	☐
6. Will the proposed action cause an increase in the use of energy and it fails to incorporate reasonably available energy conservation or renewable energy opportunities?	☐	☐
7. Will the proposed action impact existing: a. public / private water supplies?	☐	☐
b. public / private wastewater treatment utilities?	☐	☐
8. Will the proposed action impair the character or quality of important historic, archaeological, architectural or aesthetic resources?	☐	☐
9. Will the proposed action result in an adverse change to natural resources (e.g., wetlands, waterbodies, groundwater, air quality, flora and fauna)?	☐	☐

	No, or small impact may occur	Moderate to large impact may occur
10. Will the proposed action result in an increase in the potential for erosion, flooding or drainage problems?	☐	☐
11. Will the proposed action create a hazard to environmental resources or human health?	☐	☐

Part 3 - Determination of significance. The Lead Agency is responsible for the completion of Part 3. For every question in Part 2 that was answered "moderate to large impact may occur", or if there is a need to explain why a particular element of the proposed action may or will not result in a significant adverse environmental impact, please complete Part 3. Part 3 should, in sufficient detail, identify the impact, including any measures or design elements that have been included by the project sponsor to avoid or reduce impacts. Part 3 should also explain how the lead agency determined that the impact may or will not be significant. Each potential impact should be assessed considering its setting, probability of occurring, duration, irreversibility, geographic scope and magnitude. Also consider the potential for short-term, long-term and cumulative impacts.

☐ Check this box if you have determined, based on the information and analysis above, and any supporting documentation, that the proposed action may result in one or more potentially large or significant adverse impacts and an environmental impact statement is required.

☐ Check this box if you have determined, based on the information and analysis above, and any supporting documentation, that the proposed action will not result in any significant adverse environmental impacts.

Name of Lead Agency	Date
Print or Type Name of Responsible Officer in Lead Agency	Title of Responsible Officer
Signature of Responsible Officer in Lead Agency	Signature of Preparer (if different from Responsible Officer)

PRINT

City of Beacon Zoning Board of Appeals Agenda
03/15/2022

Title:

Miscellaneous Business - 1113 Wolcott Avenue - SEQRA Review

ATTACHMENTS

1113 Wolcott Memo from Building Inspector.pdf

1113 Wolcott Memo from Planning Board.docx

1113 Wolcott Cover Letter.pdf

1113 Wolcott Ex. E - Traffic and Parking Study dated 2-21-22.pdf

1113 Wolcott Ex. A - Images of the Premises - Copy.pdf

1113 Wolcott Ex. B - Full Environmental Assessment Form - Copy.pdf

1113 Wolcott Ex. C - Excerpt of 1964 City of Beacon Parking Regulations - Copy.pdf

1113 Wolcott Ex. D - Traffic & Parking Management Plan dated 2-21-22 - Copy.pdf

1113 Wolcott Sheet 1_Site Plan_Planning Board Submission 7_220222.pdf

1113 Wolcott Sheet 2_Full Site Plan_Planning Board Submission 7_220222.pdf

CITY OF BEACON
New York

David Buckley
Building Inspector

BUILDING DEPARTMENT 845-838-5020

March 1, 2022

Taylor M. Palmer
Cuddy & Feder, LLP
445 Hamilton Avenue
White Plains, New York 10601

Re: 1113 Wolcott Avenue – Off Street Parking Requirements
Beacon, New York 12508
Grid No. 30-5954-36-651901-00

Dear Mr. Palmer:

I have reviewed your submittal for the required number of off-street parking spaces at the referenced address and offer the following comments.

The 1964 parking exception in 223-26(B)(2) of the City Zoning Code cannot be used for this Special Use Permit and Site Plan application. The proposed parking requirement for the conference center and event space is more than twenty-five percent (25%) of the parking requirement for the church in 1964.

Section 223-26(F) requires the following number of off-street parking spaces to be provided based on the particulars of the proposed use which includes 30 hotel rooms with 1 employee, a maximum capacity of 350 persons for the conference/event space and a maximum of 50 seats for the restaurant/cafe:

Hotel	31 off-street parking spaces
Conference Center/Event Space	88 off-street parking spaces
Restaurant/Café	17 off-street parking spaces

In summary, a total of 136 off-street parking spaces are required for the proposed use of the Property. The site plan is proposing to provide a total of 32 off-street parking spaces which will require a zoning variance for 104 parking spaces.

Sincerely,

David Buckley
Building Inspector

cc: Planning Board Chairman John Gunn, City Planner John Clarke, City Engineer John Russo, City Attorney Jennifer Gray, Zoning Board of Appeals

Memorandum

Planning Board

TO: Chairman David Jensen & Zoning Board Members

FROM: Acting Planning Board Chairman Williams and Planning Board Members

RE: 1113 Wolcott Avenue – Prophecy Theater

DATE: February 16, 2022

The referenced property is undergoing review by the Planning Board for a Special Use Permit and Site Plan Approval for conversion of the former Dutch Reformed Church at 1113 Wolcott Avenue. The proposal is to construct a 2½ story, 30 room hotel as an expansion to the existing parsonage and renovate the historic church as a conference center/event space with a maximum occupancy of 350 persons, plus a rear café. The 2.28-acre site is in the R1-40 zoning district, in the Historic District and Landmark Overlay (HDLO) zone. The dining facility and conference center/event space are permitted accessory uses to a hotel in the HDLO district under Section 223-24.7, but the proposed uses require a Special Permit from the Planning Board.

The Planning Board is serving as SEQRA Lead Agency pursuant to previously circulated Notice of Intent to Declare Lead Agency. The Zoning Board of Appeals (ZBA) is an involved agency as one or more variances will be required, including a parking variance. The Planning Board has not completed its SEQRA review, but since parking is a key aspect involved in this application and relevant to SEQRA the Planning Board referred this application to the ZBA for its input and comments relative to parking. No application for a parking variance has been submitted at this time and neither the Applicant nor the Planning Board is seeking a determination from the ZBA on any such application for a parking variance at this time. Rather, for SEQRA purposes, the Planning Board is interested in receiving the ZBA's comments on the areas of the project within its jurisdiction, namely the parking variance.

The Applicant is proposing 31 off-street parking spaces where at least 119 off-street parking spaces are required pursuant to the City of Beacon Zoning Code. Assuming the 30-room hotel will have a maximum of one (1) employee working at the hotel at any given time, the proposed 31 parking spaces will meet the City of Beacon Zoning Code's parking requirement for the principal hotel use, only. It is the Planning Board's understanding that the City Building Inspector has been asked to render a determination as to the total number of off-street parking

spaces required for all proposed uses pursuant to the City of Beacon Zoning Code and this determination is forthcoming.

In addition to securing an off-street parking variance, the Applicant must also satisfy the Planning Board with respect to the Special Permit standards required for the proposed uses which includes the following requirement: "Parking areas will be of adequate size for the particular use and properly located and suitably screened from adjoining residential uses, the entrance and exit drives shall be laid out so as to achieve maximum safety, and uses will not cause unreasonable traffic congestion or create a traffic hazard." (Zoning Code 223-18.B.(d)). The Applicant proposes the use of public parking lots (Tompkins Hose and Municipal Center) and on-street parking on Beekman Street to meet the parking demand associated with the proposed uses.

The Planning Board generally supports an adaptive reuse of the former church building and property and lengthy discussions and review of the proposed project have taken place before the Planning Board. While supportive of an adaptive reuse of the property, the Planning Board has expressed concerns about the scope and intensity of the proposed uses in relation to adequate parking, parking enforcement and use of nearby residential streets for overflow parking, the distance to the closest public lots, and the viability of depending on public lots that are under preliminary discussions for alternative uses.

Attached are Planning Board review letters from the City's professional consultants for your consideration to better inform your discussion. The Planning Board looks forward to receipt of your comments.

CUDDY +FEDER LLP

445 Hamilton Avenue, 14th Floor
White Plains, New York 10601
T 914 761 1300
F 914 761 5372
cuddyfeder.com

Taylor M. Palmer
tpalmer@cuddyfeder.com

February 22, 2022

VIA E-MAIL
AND HAND DELIVERY
Chairperson David Jensen
and Members of Zoning Board of Appeals
City of Beacon
1 Municipal Plaza
Beacon, New York 12508

Re: Planning Board SEQRA Referral – Off-Street Parking Requirements
Application for Site Plan & Special Permit Approval
Premises: 1113 Wolcott Avenue, Beacon, New York 12508

Chairperson Jensen and Members of the Zoning Board of Appeals:

On behalf of Prophecy Theater, LLC (the "Applicant"), the owner of the above-referenced Premises, we respectfully submit this letter and referenced enclosures in connection with the Applicant's pending Application proposing to redevelop the Premises, which includes the preservation of the historic church, for a proposed hotel and customary incidental accessory conference/event center and dining facility uses on the Premises (the "Application" or "Project").

As you are aware, as an involved Agency in the coordinated SEQRA environmental review of the Project, the Application has been referred to your Board by the Planning Board for discussion while the Applicant's request for a determination regarding the total number of off-street parking spaces that are required for the Project is being reviewed by the Building Inspector. In the meantime, the Applicant is pleased to submit the referenced enclosures and looks forward to the opportunity to present the proposed adaptive re-use project to this Board at its March 15, 2022 meeting Agenda.

BACKGROUND – THE PROPERTY & THE PROPOSED ADAPTIVE RE-USE PROJECT:

The Premises consists of a through lot that has frontages along Wolcott Avenue and Beekman Street. The Premises is presently improved with a historic church, rectory, and cemetery, collectively known as the Reformed Church of Beacon. *See* **Exhibit A** – Images of the Premises and Surrounding Area. It is our understanding that the church's capacity in the pews is 336 people. The Premises is classified within the City's the R1-40 One-Family Residence District Zoning District and the Historic District and Landmark Overlay ("HDLO") District, the latter of which permits the hotel and accessory uses pursuant to a special permit issued by the Planning Board.[1]

As you may be aware, on June 29, 2021, the Applicant submitted an Application for Site Plan and Special Permit Approval (the "Application") to the City of Beacon Planning Board ("Planning Board") requesting to construct a hotel, event/conference center space and restaurant/bar on the Premises. Thereafter, the Applicant appeared before the Planning Board and prepared and

[1] ZONING CODE § 223-24.7.B(6).

submitted several supplemental submissions in furtherance of the pending Application.

As detailed within those submissions, the adaptive re-use Application consists of the following:

(1) expanding the rectory into a 2½-story, thirty (30) room hotel with thirty-two (32) off-street parking spaces provided on-site;

(2) renovating the church into an accessory use space that includes a conference/event center and dining facilities (café/restaurant/bar); and

(3) restoring the cemetery to open it as a public park, which will include a walking path from Beekman Street to Wolcott Avenue.

See enclosed Site Plan set.

The hotel lodging is proposed to be available 24/7, 365 days per year, and the dining facilities will be situated in the rear of the existing historic church. The dining facilities will serve as a reception for guests of the hotel and offer breakfast, lunch, and dinner to the hotel guests, as well as members of the public. In addition, it will operate as a bar for hotel guests and for accessory conference/event center programming and events. The dining facilities are expected to operate approximately seven (7) days a week in support of the hotel operations and guests. The conference/event center accessory use will operate less intensely and frequently, utilizing the former church building for various cultural, educational, or professional programs, including weddings, conferences, art exhibitions, performances, lectures, seminars, and workshops.

Since first appearing before the Planning Board, the Applicant has reduced the programmatic scope of the accessory conference/event center from that envisioned in the original Application. While the Applicant previously contemplated a maximum capacity of 420 people for *occasional* larger weekend events, the expected maximum capacity for the occasional weekend programming for the hotel conference center is a *maximum* of 350 people. Notwithstanding the maximum capacity noted here, we understand that these occasional larger weekend programs are typically expected to have fewer people, ranging between 125-200 people. Along the same line, instead of the original Application that included hosting events seven (7) days a week, the refined programing proposes that conference/event center schedule would likely be limited to larger events held only on weekends with smaller functions, such as seminars, workshops or retreats on weekdays with a range between 50 to 200 attendees, but on fewer days of the week (i.e., generally Wednesday-Friday).[2]

In response to the Applicant's request, on November 30, 2021, the Building Inspector issued a Determination that the proposed conference center/event space accessory uses contemplated in

[2] Note: We understand, for example, that there could very well be a retreat or seminar that rents out the entire hotel and occupies the accessory conference center space for the duration of their stay. So, there is the potential that one week the conference center is not used at all; another week it is used Thursday or Friday; and another where it's utilized by the hotel guests for their entire stay (possibly Monday-Sunday).

the Application are permitted uses on the Premises, subject to special permit review by the Planning Board.[3]

Thereafter, the Planning Board classified the Application as an Unlisted Action and declared itself Lead Agency pursuant to the State Environmental Quality Review Act ("SEQRA"). Subject to the Building Inspector's determination that an area variance or waiver from this Board is necessary for the Application's provision of off-street parking spaces, the ZBA will be an Involved Agency. For this Board's reference, the Full Environmental Assessment Form ("Full EAF"), previously submitted to the Planning Board, is annexed hereto as **Exhibit B**.[4]

THE APPLICANT'S PENDING REQUEST FOR A PARKING DETERMINATION:

On February 3, 2022, the Applicant submitted a request for determination to the Building Inspector in connection with the total number of off-street parking spaces that are required for the Project. As is more fully detailed hereinbelow, the Applicant is seeking the following determinations from the Building Inspector:

1) 1964 Parking Exception. Pursuant to the parking exception provided within Zoning Code Section 223-26.B and based on the church and rectory uses and accompanying parking requirements existing on the Premises in 1964, the Applicant qualifies for an exception of 86 off-street parking spaces, which represents less than a twenty-five percent (25%) increase in intensity over the applicable parking requirements in 1964; and

2) Off-Street Parking Requirement for Proposed Project. Based on the proposed Project, which includes a hotel and accessory conference/event space and café, the total off-street parking requirement is 119 off-street parking spaces as a result of the non-simultaneous nature of the conference/event component and the café. Therefore, a waiver or variance of 33 parking spaces is required for the project as presently proposed.[5]

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[3] *See* ZONING CODE § 223-24.7.B(6).

[4] Note: As this Board may be aware, the Premises is located within the City of Beacon's Waterfront Revitalization Management Area, and as such the Application requires the preparation of a Local Waterfront Revitalization Plan ("LWRP") consistency statement. As is more fully detailed in the Coastal Assessment Form & LWRP Consistency Statement previously submitted to the Planning Board, the Project is consistent with LWRP Policies 5, 13, 14, 23, 23A, 25, 33, 37, 38, and 41. The Applicant has accordingly requested that the Planning Board issue a determination that the amended Project is consistent with the policies established in the City's LWRP. Upon this Application's formal referral to the ZBA for a waiver or area variance relief, the Applicant will provide the necessary LWRP documentation for this Board's review.

[5] Note: Since submitting its request to the Building Inspector, the Applicant has refined the Application so that thirty-two (32) off-street parking spaces are provided on the Premises, as opposed to the previously proposed thirty-one (31).

THE 1964 USES OF THE PREMISES:

The Zoning Code establishes an exception to the off-street parking requirements for existing buildings constructed prior to April 20, 1964 (the "1964 Parking Exception"). Zoning Code Section 223-26.B provides in relevant part that:

> (1) Structures and land uses in existence on April 20, 1964, or structures and uses for which building permits had been approved on or before said date, shall not be subject to the requirements set forth in this section, unless there shall occur an increased intensity of use...
>
> . . .
>
> (2) Whenever a building or structure erected prior to or after April 20, 1964 [ ] or any land use shall undergo any increase in intensity of use in the number of dwelling units, floor area, seating capacity, number of employees or other unit of measurement specified hereinafter for required parking facilities, or from other causes, and further when said increase would result in a requirement for additional parking facilities through application of the Schedule of Off-Street Parking Requirements (Subsection F), additional parking facilities shall be provided accordingly, **except that no building or structure erected prior to said date shall be required to provide parking facilities unless the aforesaid additional required facilities amount to a cumulative total increase of at least 25% over the existing use as of said date**, in which case parking spaces shall be provided on the basis of the total units of measurements of the new use or of the alteration or expansion of the existing use (emphasis added).

To assist in the Building Inspector in his review of the 1964 uses of the Premises in relation to the Project, the Applicant obtained documents from the Beacon Historical Society, specifically, the 1963 and 1965 Beacon Directories (the "Beacon Directories").[6] The Beacon Directories confirmed that the Premises in 1964 included a church located at 44 Ferry Street and a rectory located at 50 Ferry Street.

1964 PARKING EXCEPTION CALCULATION:

Pursuant to the 1964 Parking Exception provisions excerpted above, the Applicant also obtained a copy of what we understand to be the relevant portion of the City of Beacon's 1964 Parking Regulations (the "1964 Parking Regulations"), a copy of which is annexed hereto as **Exhibit A**. The 1964 Parking Regulations provide that church use required one (1) parking space per five (5) seats. As noted above, it is our understanding that the church's pew capacity is 336. Therefore, the church use on the Premises required 68 parking spaces in 1964. Moreover, the 1964 Regulations establish that the rectory, which qualifies as a single-family house, required one (1) parking space.

The 1964 Parking Regulations provide that "[w]here two or more different uses occur on a single

[6] Note: As you may be aware, the 1964 Beacon Directory is missing from the Beacon Historical Society, so the Applicant has interpolated from the bracketing years (i.e., 1963 and 1965).

lot, the total amount of parking facilities to be provided shall be the sum of the requirements of each individual use on the lot..." (emphasis added). Accordingly, when you combine the space from the rectory use to the 68 spaces from the church use, the sum of the parking requirements for the 1964 uses on the Property is 69 spaces. Based on the 1964 Parking Exception calculation, 86 parking spaces would constitute just under a twenty-five percent (25%) increase from the 1964 requirement for 69 parking spaces.

As noted, the Application includes a hotel and accessory event space and café. For the hotel use, "[o]ne parking space shall be provided for each hotel guest room" and "[o]ne parking space shall be provided for each employee for the maximum number of employees working at the hotel at any one time."[7] The Applicant's proposal includes 30 hotel rooms with one (1) employee working at a time, thereby requiring 31 total parking spaces. The event space falls within the use category "other place of assembly," which requires "1 space for each 4 seats or pew spaces or, in places or, in places without seats, 1 space for each 100 square feet of floor space used for public assembly."[8] The Applicant is proposing a maximum capacity of 350, thus requiring 88 parking spaces. Similarly, the café qualifies as a "[r]estaurant or coffee house," which use mandates "1 space for each 3 patron seats or 1 space for each 150 square feet of gross floor area, excluding kitchen and storage areas, whichever is greater."[9] Considering that the café is intended to host a maximum of 50 patrons, a total of 16 parking spaces are required for that use.

It is important to note, however, the café and the event space, which are both contained in the church, are non-simultaneous uses, meaning that the café will be fully accessory to the events and not generate any traffic on its own. Indeed, the café is not intended to operate on its own when conferences or events are being hosted, thus the calculation of total required parking spaces for the Project is based on the critical event periods during which times the café will be used as a complimentary space to the event space, but no additional persons outside of those attending the events will be permitted in the café during these times. Accordingly, the Applicant submits that the required parking for the Project is 119 spaces, representing 31 spaces for the hotel and 88 spaces for the event space. This represents the more conservative total of require parking spaces for the church uses. When events are not occurring, the Zoning Code would require 47 total parking spaces for the Project.[10]

Accordingly, pursuant to the 1964 Parking Exception that permits an exception for 86 parking

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[7] ZONING CODE §§ 223-26.F; 223-14.1.C(1), (3).

[8] ZONING CODE § 223-26.F.

[9] ZONING CODE § 223-26.F.

[10] Note: It is also worth mentioning that a combination of public parking lots and other potential mitigation measures, such as valet parking that can be provided for events and dissemination of parking and public transportation information will permit sufficient parking for the Premises. In total, there are approximately 369 total parking spaces within 2,000 ft. walking distance of the Premises that can be utilized to accommodate the parking needs of the Project under the event conditions. *See* Revised Traffic and Parking Study prepared by Colliers Engineering & Design CT P.C., dated November 30, 2021, last revised December 28, 2021, available in City records. The Applicant is happy to provide additional copies to the Building Department, if requested.

spaces and the required 119 off-street parking spaces, the Applicant respectfully submits that, barring any waiver by the Planning Board,[11] either a waiver of[12] or variance for 33 spaces is required from the Zoning Board of Appeals.

TRAFFIC AND PARKING STUDY:

In support of the Project, the Applicant's traffic consultant, Colliers Engineering & Design ("Colliers"), prepared a Traffic and Parking Study dated February 21, 2022 (the "Parking Study"). As is more fully detailed in the Parking Study enclosed as **Exhibit E**, the Project is *not* anticipated to have a significant impact on traffic conditions in the vicinity of the Project, which will be accessed on Wolcott Avenue via the existing main ingress/egress driveway and the reestablished existing northern driveway, which will operate as a one-way egress driveway connecting to the proposed parking area behind the hotel. This driveway is proposed to better address on-site circulation concerns expressed by the Planning Board, especially as it relates to drop-off/pick-up operations associated with the proposed events. Notably, the prior loop driveway that the Applicant proposed in front of the existing church building—which stemmed from an existing driveway south to the south side of the church—has been removed from the site plan in response to comments from the Planning Board and its consultants. We understand that a referral letter from the Planning Board will be directed to your Board including the Planning Board's comments regarding the pending Application. The Planning Board's referral comment letter was not available at the time of this submission to your Board, so it may include certain details that are no longer applicable, as the Applicant has revised the Site Plan, a copy of which is enclosed herein.[13]

The updated Parking Study also found that while the Project proposes thirty-two (32) parking spaces to accommodate the hotel use, there is enough public parking in the vicinity to accommodate

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[11] *See* ZONING CODE § 223-26.C(6):

> Where two or more different uses occur on a single lot, the total amount of parking facilities to be provided shall be the sum of the requirements of each individual use on the lot, except that the Planning Board may approve the joint use of parking space by two or more establishments on the same lot or on contiguous lots, the total capacity of which is less than the sum of the spaces required for each, provided that said Board finds that the capacity to be provided will substantially meet the intent of this article by reason of variation in the probable time of maximum use by patrons or employees at such establishments and provided that such approval of such joint use shall be automatically terminated upon a change of use at any such establishment.

[12] *See* ZONING CODE § 223-26.A(2):

> In case of exceptional difficulty or unusual hardship to such properties arising out of the requirements of this section, the Board of Appeals may reduce the parking requirements but shall require such degree of compliance as it may deem reasonable for that part of the structure or use that is legally nonconforming and shall not waive any part of the requirement for that part of the structure or use that constitutes an enlargement or expansion and shall not permit reduction or elimination of whatever quantity of parking may already exist, unless it is in excess of requirements.

[13] Note: The Applicant may provide additional details to this Board in response to the comments in the Planning Board's referral comment letter once the Applicant receives a copy of same.

the excess parking demand associated with the conference center/event and café dining area spaces. A combination of public parking lots and other potential mitigation measures will permit sufficient parking and traffic circulation for the Project. In order to properly maintain and manage the traffic flows and parking conditions within the site and surrounding area, Colliers has prepared the enclosed draft Traffic and Parking Management Plan (the "Draft Management Plan"). *See* **Exhibit D**. As is detailed more fully in the Draft Management Plan, the traffic and parking conditions on the Premises and in the near vicinity will be managed through a combination of additional staffing and directional signage on the Premises, dissemination of public transportation and shuttle information by the Applicant, and the facilitation of pedestrian and bicycle access to the Premises.[14]

CONCLUSION:

For the reasons set forth above, the Applicant has requested from the Building Inspector a favorable interpretation confirming that, if a waiver is not otherwise provided by the Planning Board, a waiver or variance for 33 off-street parking spaces is required from the Zoning Board of Appeals.

INDEX OF ENCLOSURES:

In support of this submission, please find enclosed seven (7) copies of the following documents:

Exhibit A: Images of the Premises and Surrounding Area;

Exhibit B: Full Environmental Assessment Form;

Exhibit C: Excerpt of 1964 City of Beacon Parking Regulations;

Exhibit D: Draft Traffic and Parking Management Plan prepared by Colliers Engineering & Design CT P.C., dated February 21, 2022; and

Exhibit E: Traffic and Parking Study prepared by Colliers Engineering & Design P.C., dated February 21, 2022.

In further support of this Application, we respectfully submit copies of the following revised site plan sheets from the site plan set entitled "Special Use Permit Application", prepared by Hudson Land Design Professional Engineering, P.C. and Aryeh Siegal, Architect, dated June 29, 2021, last revised February 22, 2022 numbered and titled as follows:

- Sheet 1 of 13 Site Plan; and
- Sheet 2 of 13 Full Site Plan.

[14] Note: This Traffic & Parking Management Plan will continue to be progressed as the plans for the Project continue to develop.

We look forward to appearing at the Zoning Board of Appeal's March 15th regular meeting to introduce this Application and to address any SEQRA questions or comments that the Board may have at this time. In the meantime, should this Board or City Staff have any questions or comments with regard to the foregoing, please do not hesitate to contact me.

Very truly yours,

Taylor M. Palmer

Enclosures

cc: Jennifer L. Gray, Esq.
Aryeh J. Siegel Architect
Richard D'Andrea, P.E. PTOE – Colliers Engineering & Design CT, P.C.
Michael A. Bodendorf, P.E. – Hudson Land Design Professional Engineering, P.C.
Prophecy Theater, LLC
Allison Fausner, Esq.

Colliers
Engineering
& Design

Traffic & Parking Study

February 21, 2022

1113 Wolcott Avenue

City of Beacon
Dutchess County, New York

Prepared for:

Prophecy Theatre LLC
369 Main Street, Unit 493 Beacon,
NY 12508

Prepared by:

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Project No. 21004333A

Maser Consulting is now Colliers Engineering & Design

Colliers Engineering & Design

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I. Introduction

A. Project Description and Location

(Figure No. 1)

This report has been prepared to evaluate the potential traffic and parking related impacts associated with the proposed redevelopment of the property located at 1113 Wolcott Avenue (NYS Route 9D) in the City of Beacon, Dutchess County, New York (the "Project"). The former rectory building and church, which was most recently occupied by the Reformed Church of Beacon, are proposed to be redeveloped as a 30-room hotel contained in an expanded rectory building along with accessory conference center and dining facility (café/restaurant/bar) uses within the church building. In addition, the existing cemetery located behind (west of) the church and rectory building will be restored to be opened as a public park including a walking path from Beekman Street to Wolcott avenue.

The hotel will operate 365 days per year, and the dining facilities will be situated in the rear of the existing church. The dining facilities will serve as a reception for guests of the hotel and offer breakfast, lunch and dinner to the hotel guests, as well as members of the public. In addition, it will operate as a bar for hotel guests and for accessory conference center programming and events. The dining facilities are expected to operate seven (7) days a week in support of the hotel operations and guests with a maximum capacity of 50 seats including deck seating.

The conference center accessory use will operate less frequently, utilizing the former church building for various cultural, educational, or professional programs, including weddings, conferences, art exhibitions, performances, lectures, seminars and workshops. The expected maximum capacity for the occasional weekend programming for the hotel conference center is a maximum of 350 people including required staff to support these events, however these larger programs, which will occur on weekends, will typically have fewer people, ranging between 125-200 people. Furthermore, smaller functions, such as seminars, workshops or retreats with attendance ranging between 50 to 200 people will occur on weekdays generally Wednesday – Friday.

As shown on Figure No. 1, access to the development is proposed via an existing access connection from Wolcott Avenue that will provide access to the main parking area. A secondary, exit only driveway is also proposed at the northern property line of the Site, which will be a reestablishment of the existing driveway in this location. This driveway is proposed to provide for improved on-site circulation for deliveries and emergency vehicles as well as to assist with event drop-off & pick-up operations. A total of 32 off-street parking spaces will be provided primarily for use by hotel guests and employees. The existing Site is also provided a third driveway connection to wall street south of the existing church building. This existing southern driveway is proposed to be eliminated as part of the Project.

B. Scope of Study

This study has been prepared to identify current and future traffic operating and parking conditions on the surrounding roadway network and to assess the potential traffic and parking impacts of the proposed development.

All available traffic count data for the study area intersections were obtained from previous reports prepared by our office. These data were supplemented with new traffic counts collected by representatives of Colliers Engineering & Design CT, P.C. These data were also compared to count data obtained from the New York State Department of Transportation (NYSDOT). Together these data were utilized to establish the Year 2021 Existing Traffic Volumes representing existing traffic conditions in the vicinity of the site. In addition, observations of the existing parking conditions in the vicinity of the Project were also conducted.

The 2021 Existing Traffic Volumes were then projected to a 2024 Design Year to take into account background traffic growth. In addition, traffic for other specific potential or approved developments in the area were estimated and then added to the Projected Traffic Volumes to obtain the 2024 No-Build Traffic Volumes.

Estimates were then made of the potential traffic that the proposed development would generate during each of the peak hours (see Section III-C for further discussion). The resulting site generated traffic volumes were then added to the roadway system and combined with the 2024 No-Build Traffic Volumes resulting in the 2024 Build Traffic Volumes.

The Existing, No-Build and Build Traffic Volumes were then compared to roadway capacities based on the procedures from the Highway Capacity Manual to determine existing and future Levels of Service and operating conditions. Recommendations for improvements were made where necessary to serve the existing and/or future traffic volumes.

In addition to the traffic analysis, the anticipated parking demand of the Project was computed based on the City Code requirements. The anticipated demand was compared to the observed available parking in the vicinity of the Project site. Recommendations to accommodate the anticipated parking demands for the Project were identified.

II. Existing Roadway and Traffic Descriptions

A. Project Description and Location

As shown on Figure No. 1, the proposed residential development will be accessed from Wolcott Avenue via an existing driveway connection. A secondary, exit only driveway is also proposed at the northern property line of the Site, which will be a reestablishment of the existing driveway in this location. The following is a brief description of the roadways located within the study area. In addition, Section III-F provides a further description of the existing geometrics, traffic control and a summary of the existing and future Levels of Service and any recommended improvements for each of the study area intersections. Appendix "D" contains copies of the capacity analyses which indicate the existing geometrics (including lane widths) and other characteristics for each of the individual intersections studied.

1. Wolcott Avenue (NYS Route 9D)

Wolcott Avenue (NYS Route 9D) is a classified as a urban minor arterial roadway, which traverses in a generally north south direction throughout the City of Beacon. In the immediate vicinity of the Project, Wolcott Avenue consists of one lane in each direction with a center turn lane. There is no on-street parking along the roadway, but sidewalks are provided on both sides of the roadway. Within the study area Wolcott Avenue has signalized intersection with Verplanck Avenue, Beekman Street, Main Street and South Avenue. The posted speed limit within the City limits is 30 MPH.

2. Main Street

Main Street is a two-lane City roadway classified as an urban Major Collector roadway that generally traverses in an east/west direction beginning at its signalized intersection with Wolcott Avenue. On-street parking and separate sidewalks are provided along both sides of the roadway.

3. Beekman Street

Beekman Street is a two-lane City roadway classified as an urban Major Collector roadway that originates at a signalized intersection with Wolcott Avenue north of the Project site. The roadway serves as a main access connection between Wolcott Avenue and the Beacon Metro North Train Station. Sidewalks are provided along the roadway on alternating sides of the roadway throughout its entire length. On-street parking is also provided along the east side of the roadway between Wolcott Avenue and River Street and then on the west side of the roadway between River Street and Railroad Avenue.

B. 2021 Existing Traffic Volumes

(Figures No. 2. and 3, Appendix E)

Turning movement traffic counts were collected by representatives of Colliers Engineering & Design CT, P.C. on Friday September 24, 2021 and Saturday September 25, 2021 between the hours of 12:00 PM and 8:00 PM each day to collect data for the Friday PM and Saturday Peak Hours to determine the existing traffic volume conditions at the study area intersections during the anticipated peak operation of the Project. The traffic volume data is provided in Appenidx E of this report for reference. These traffic counts were then compared to traffic volume data from previous traffic studies conducted by our office and to traffic volume data available from the New York State Department of Transportation (NYSDOT) for the Wolcott Avenue corridor. All relevant traffic volume data is provided in Appendix E for referenced. Based on this information, the 2021 Existing Traffic Volumes were established for the Friday PM Peak Hour and Saturday Peak Hour at the following study area intersections.

- Wolcott Avenue and Verplanck Avenue
- Wolcott Avenue and Beekman Street/W. Church Street
- Wolcott Avenue and Main Street/City Hall
- Wolcott Avenue and Beacon Street/West End Lofts
- Wolcott Avenue and South Avenue

Based upon a review of the traffic counts, the peak hours were generally identified as follows:

- Friday PM Peak Hour 4:30 PM – 5:30 PM
- Saturday Peak Hour 1:00 PM – 2:00 PM

The resulting 2021 Existing Traffic Volumes are shown on Figures No. 2 and 3 for the Friday PM Peak Hour and Saturday Peak Hour, respectively.

It should be noted that based on observations of the existing parking conditions in the vicinity of the Site, parking at the Beacon Metro-North Train Station is significantly underutilized when compared with historic levels of parking at the train station. This is discussed further in Section IV of this report. These lower levels of parking utilization at the train station are likely due to the ongoing impacts of the COVID-19 pandemic. As a result of these of these lower parking levels of train station parking and based on a review of the available historical traffic volume data for the study area, it was determined that the traffic volumes from the train station along Beekman Street and along Wolcott Avenue between Beekman Street and the Interstate 84 ramps are lower than historically experienced during the Friday PM Peak Hour. To account for this, these volumes have been adjusted by approximately 60 vehicles exiting Beekman Street and traveling north on Route 9D to ensure the traffic volumes at the intersections of Wolcott Avenue at Beekman Street and Wolcott Avenue at Verplanck Avenue are representative of peak conditions pre-COVID.

III. Evaluation of Future Traffic Conditions

A. 2024 No-Build Traffic Volumes

(Figure No. 4 through 9)

The 2021 Existing Traffic Volumes were increased by a growth factor of 2% per year to account for general background growth resulting in the 2024 Projected Traffic Volumes which are shown on Figures No. 4 and 5 for each of the Peak Hours. In addition, traffic from other specific potential and/or approved developments in the area including the potential 364 Main Street project, the Craig House development and the recently approved 416-420 Main Street project were identified. The resulting traffic volumes associated with these other developments are shown on Figures No. 6 and 7 for each of the peak hours. These volumes were added to the 2024 Projected Traffic Volumes resulting in the Year 2024 No-Build Traffic Volumes which are shown on Figures No. 8 and 9 for the Friday PM Peak Hour and Saturday Peak Hour, respectively.

B. Site Generated Traffic Volumes

(Table No. 1)

Estimates of the amount of traffic to be generated by the Project during each of the peak hours under Typical Conditions (no event) were developed based on information published by the Institute of Transportation Engineers (ITE) as contained in the report entitled ***Trip Generation, 11th Edition, 2021***, based on Land Use Category – 310 – Hotel and Land Use Category – 932 – High-Turnover (Sit Down) Restaurant. Table No. 1 summarizes the trip generation rates and corresponding site generated traffic volumes for the Friday PM Peak Hour and Saturday Peak Hour under these Typical Conditions. As noted previously, the café will be an accessory use to the Hotel and will provide breakfast, lunch and dinner options for hotel guests, therefore it is anticipated that a significant portion of the café generated traffic will actually come from the Hotel, reducing the overall traffic generation for the development. Therefore, an internal trip credit of 25% has been applied to the Café use traffic generation estimates under typical conditions to account for this.

Similarly, traffic generation estimates were developed for the event conditions for each of the peak hours. The event conditions estimates were developed for the Friday PM and Saturday Peak Hour Entry Periods as well as the Friday PM and Saturday Peak Hour Exit Periods. During events it is anticipated that the Café use will be a non-simultaneous use, meaning that the café area will be fully accessory to the events and therefore will not generate any traffic of its own. It is anticipated that the Hotel will be fully occupied during events and as much as 100% of hotel guests will also be attending the events, although for the purposes of providing a somewhat conservative traffic analysis it has been assumed that only 50% of the Hotel traffic generation will be attributable to the events. The same Hotel traffic generated as indicated under the Typical conditions has been assumed for the event conditions periods, although it is unlikely that the peak hour of Hotel generation will actually overlap with the event periods.

ITE does not provide data comparable to the proposed event space that will accommodate various cultural, educational, or professional programs, including weddings, conferences, art exhibitions, performances, lectures, seminars and workshops. Therefore, it was necessary to establish traffic generation estimates for the event space based on the anticipated attendance. As previously indicated, the maximum anticipated attendance for the larger weekend events is 350 people including required staff. Typical vehicle occupancy for the anticipated event types can vary significantly depending on the specific event. However, the for the purposes of the analysis a 2.75 persons per vehicle car occupancy has been utilized, which is at the low end of the anticipated vehicle occupancy for the events. Applying this to the anticipated maximum occupancy of 350 persons, including required staff, for the larger weekend events results in the anticipated peak entering and exiting traffic volumes as summarized in Table No. 1. It has been assumed that all traffic will either enter or exit during a one-hour period.

It is also anticipated that a portion of the event attendees for the larger weekend events will arrive via other modes of transportation. This includes attendees attracted from the local area and therefore would be likely to arrive by non-vehicular transportation. 10% of the event attendees will be attracted from the local area and therefore would be likely to arrive by non-vehicular transportation. The Project also anticipates promoting the use of public transportation including use of Metro-North trains to the Beacon train station, which is within walking distance to the Project site. In addition, the Project will also promote the use of Dutchess County Buses, including the Poughkeepsie Transit Hub to Beacon bus route, the Beacon to Hopewell Junction bus route and the Beacon Free Loop bus, each of which have designated stops along Main Street and pass the Project site on Route 9D. Based on this, the anticipated event traffic generation has been reduced by 10% during each of the peak hours. Finally, in order to account for drop-off/pick-up trips during the entry and exit hours it has been assumed that 20% of the total entering or exiting traffic will be drop-off or pick-up trips and therefore will both enter and exit during the peak entry and peak exit periods. The resulting event conditions “new trips” accounting for these credits are summarized in Table No. 1.

It should be noted that the use of the 10% credit identified above is supported by 2019 American Community Survey Commuting data which indicates a Public Transportation usage of approximately 10% for the City of Beacon, with carpooling usage of approximately 10% and approximately 5% walking or bicycling. As indicated above, the Applicant plans to advertise and promote the use of public transportation and other non-vehicular means of transportation for event attendees and therefore the 10% credit was utilized, which may actually provide a somewhat conservative analysis.

As indicated previously, the 350-person maximum occupancy of the events will include employees and vendors servicing the events. It is anticipated that vendors and employees would arrive before or depart after the events and therefore would not be coincident with peak arrival hour and peak exit hour of attendees. Furthermore, the analysis contained herein, conservatively assumes all attendees will arrive and depart within the one-hour period prior to or following events. Typically, arrivals and departures are spread over a greater time period. The analysis also assumes that all event entering and/or exiting traffic will be coincident with the Friday or Saturday Peak Hours of traffic, which is possible based on event timing, but is not anticipated to be a regular occurrence for the larger events. Therefore, it is our opinion that the analysis contained herein is representative of the future traffic conditions after completion of the Project and is actually somewhat conservative.

C. Arrival/Departure Distribution

(Figures No. 10 through 13)

It was necessary to establish arrival and departure distributions to assign the site generated traffic volumes to the surrounding roadway network. Based on a review of the Existing Traffic Volumes and the expected travel patterns on the surrounding roadway network, the distributions were identified. Separate distributions were developed for the Hotel and the Café/Event space since it is anticipated there will be slight variations on the arrival and departure distributions for each portion of the development including the fact that the onsite parking is anticipated to only accommodate the Hotel use.

The resulting anticipated arrival and departure distributions for the Hotel use are shown on Figures No. 10 and 11, respectively. Similarly Figures No. 12 and 13 provide the arrival and departure distributions for the Café/Event Space.

Note that for the purposes of the analysis, it has been assumed that all traffic will enter and exit the Site access driveway location, however as discussed further in Section IV of this report, only 32 parking spaces will be provided on the Project site for the use of Hotel guests only. Therefore, additional café guests or event attendees will be required to utilize off-site parking and therefore will not actually enter the Site unless dropping off and/or picking up.

D. 2024 Build Conditions Traffic Volumes

(Figures No. 14 through 25)

The site generated traffic volumes were assigned to the roadway network based on the arrival and departure distributions referenced above. The resulting typical conditions site generated traffic volumes for each of the study area intersections are shown on Figures No. 14 and 15 for each of the peak hours, respectively. The site generated traffic volumes for the Friday PM Event Entry Period and Friday PM Event Exit Period are identified on Figures No. 16 and 17 while the site generated traffic volumes for the Saturday Event Entry and Event Exit Period are identified on Figures No. 18 and 19. The site generated traffic volumes were then added to the 2024 No-Build Traffic Volumes to obtain the 2024 Build Traffic Volumes. The resulting Year 2024 Build Traffic Volumes are shown on Figures No. 20 through 25.

E. Description of Analysis Procedures

(Appendix C)

It was necessary to perform capacity analyses in order to determine existing and future traffic operating conditions at the study area intersections. The following is a brief description of the analysis method utilized in this report:

Signalized Intersection Capacity Analysis

The capacity analysis for a signalized intersection was performed in accordance with the procedures described in the Highway Capacity Manual, 6th Edition, dated 2016, published by the Transportation Research Board. The terminology used in identifying traffic flow conditions is Levels of Service. A Level of Service "A" represents the best condition and a Level of Service "F" represents the worst condition. A Level of Service "C" is generally used as a design standard while a Level of Service "D" is acceptable during peak periods. A Level of Service "E" represents an operation near capacity. In order to identify an intersection's Level of Service, the average amount of vehicle delay is computed for each approach to the intersection as well as for the overall intersection.

Unsignalized Intersection Capacity Analysis

The unsignalized intersection capacity analysis method utilized in this report was also performed in accordance with the procedures described in the Highway Capacity Manual, 6th Edition, dated 2016. The procedure is based on total elapsed time from when a vehicle stops at the end of the queue until the vehicle departs from the stop line. The average total delay for any particular critical movement is a function of the service rate or capacity of the approach and the degree of saturation. In order to identify the Level of Service, the average amount of vehicle delay is computed for each critical movement to the intersection.

Additional information concerning signalized and unsignalized Levels of Service can be found in Appendix "C" of this report.

F. Results of Analysis

(Tables No. 2 and 3)

Capacity analyses which take into consideration appropriate truck percentages, pedestrian activity, roadway grades and other factors were performed at the study area intersections utilizing the procedures described above to determine the Levels of Service and average vehicle delays. Summarized below are a description of the existing geometrics, traffic control and a summary of the existing and future Levels of Service as well as any recommended improvements.

Table No. 2 summarizes the results of the capacity analysis for the 2021 Existing, 2024 No-Build and 2024 Build Conditions. Appendix "D" contains copies of the capacity analysis which also indicate the existing geometrics (including lane widths) and other characteristics for each of the individual intersections studied.

1. **Wolcott Avenue and Verplanck Avenue**

   Wolcott Avenue and Verplanck Avenue intersect at a "T"-shaped signalized intersection. The northbound Wolcott Avenue approach consists of a single through lane. The southbound Wolcott Avenue approach consists a through lane and separate left turn lane with approximately 340 ft. of storage distance. The westbound Verplanck Avenue approach consists of an 85 ft. long separate left turn lane and a separate right turn lane. The intersection also has signalized pedestrian actuated crossings of the northbound and westbound approaches.

   Capacity analysis was conducted for this intersection utilizing the 2021 Existing Traffic Volumes. The analysis results indicate that the intersection is currently operating at an overall Level of Service "C" during the Friday PM Peak Hours while an overall Level of Service "B" is experienced during the Saturday Peak Hour.

   The capacity analysis was recomputed using the 2024 No-Build Traffic volumes. These results indicate that the intersection is expected to experience an overall Level of Service "C" during each of the peak hours under future conditions without the project. Under the future build conditions, both Typical and Event conditions, similar overall Levels of Service are anticipated to be experienced during of the time periods with the exception of the event Friday PM Event Exit period during which the intersection will operate at an overall Level of Service "D". Since this will only occur occasionally when full capacity Weekday or Friday evening events are held, this should not be considered a significant impact.

2. **Wolcott Avenue and Beekman Street/W. Church Street**

   Wolcott Avenue intersects with Beekman Street and W. Church Street at a full movement signalized intersection. The northbound and southbound approaches each consist of a separate left turn lane in each direction with a shared through/right turn lane. The Beekman Street eastbound approach consists of a shared left turn/through lane and an approximately 95 ft. long separate right turn lane. The westbound W. Church Street approach consists of a single lane for all movements. The intersection also has signalized pedestrian actuated crossings of the southbound, eastbound and westbound approaches. There is no pedestrian crossing on the northbound Wolcott Avenue approach.

   Capacity analysis was conducted for this intersection utilizing the 2021 Existing Traffic Volumes. The analysis results indicate that the intersection is currently operating at an overall Level of Service "F" during the Friday PM Peak Hour while an overall Level of Service "A" is currently experienced during the Saturday Peak Hour. It should be noted that during the Friday PM Peak hour all intersection movements/lane groups currently operate at a Level of Service "C" or better with the exception of the eastbound left/through lane. This is a result of the traffic exiting the Beacon Metro-North train station during the Friday PM Peak Hour destined to the north on Route 9D towards the Interstate 84 interchange. Similar levels of service are expected to be experienced under future conditions during each of the peak hours both with and without the Project.

While the Project generated traffic is not anticipated to result in significant impacts to the operation of this intersection during either of the peak hours analyzed, potential traffic signal phasing and timing improvements have been identified for the Friday PM Peak Hour to address the significant delays experienced by traffic exiting Beekman Street onto Route 9D northbound. In order to address these delays splitting the phasing for the eastbound and westbound approaches could be considered, which will reduce conflicts between eastbound and westbound traffic. Together with associated traffic signal timing modifications, the eastbound delays would be significantly reduced, and the overall intersection would be expected to experience a Level of Service "E" during the Friday PM Peak hour under both the Project typical and event conditions. This modification to the traffic signal should be considered regardless of the Project.

3. **Wolcott Avenue and Main Street/City Hall Driveway**

   Wolcott Avenue intersects Main Street and the City Hall Driveway at a full movement signalized intersection. The northbound and southbound approaches each consist of a separate left turn lane with a shared through/right turn lane. The Main Street westbound approach consists of a shared left turn/through lane and an approximately 65 ft. long separate right turn lane. The eastbound City Hall driveway approach consists of a single lane for all movements. The intersection also has signalized pedestrian actuated crossings of the northbound, eastbound and westbound approaches. There is no pedestrian crossing on the southbound Wolcott Avenue approach.

   Capacity analysis was conducted for this intersection utilizing the 2021 Existing Traffic Volumes. The analysis results indicate that the intersection is currently operating at an overall Level of Service "B" during the Friday PM Peak Hours and Saturday Peak Hours. The analysis was recomputed using the 2024 No-Build and Build Traffic volumes, which indicates that similar levels of service will be maintained under all conditions both with and without the Project.

4. **Wolcott Avenue and Beacon Street/West End Lofts Driveway**

   Beacon Street intersects Wolcott Avenue at a full movement unsignalized intersection with Beacon Street aligning opposite the driveway to the West End Lofts development. The northbound and southbound Wolcott Avenue approaches each consist of one travel lane in each direction with a center two-way left turn lane provided. Beacon Street and the West End Lofts Driveway each provide a single lane for all movements and there is a pedestrian crossing of each of these approaches. There is no dedicated pedestrian crossing of Wolcott Avenue at this location.

   Capacity analysis was conducted for this intersection utilizing the 2021 Existing Traffic Volumes. The analysis results indicate that the intersection is currently operating at a Level of Service "C" or better on all approaches during the Friday PM and Saturday Peak Horus.

The capacity analysis was recomputed using the 2024 No-Build and Build Traffic volumes. These results indicate that the intersection is expected to experience similar Levels of Service to existing conditions under the future No-Build and future Build Typical conditions. Under event conditions a Level of Service "D" may be experienced with some small increases in delay over No-Build conditions (approximately 4 seconds per vehicle or less) as a result of the event condition Project generated traffic.

5. **Wolcott Avenue and Site Access**

As previously indicated, the Site is proposed to be access via a two-way driveway at the existing center curb cut location to Wolcott Avenue which forms an unsignalized "T"-shaped intersection. The northbound and southbound Wolcott Avenue approaches each consist of one travel lane in each direction with a center two-way left turn lane provided. In addition, a secondary exit only driveway is also proposed at the northern property line of the Site, which will be a reestablishment of the existing driveway in this location. It should be noted that the existing southern driveway and curb cut are now proposed to be eliminated as part of the Project reducing the total curb cuts provided for the Site from three (3) to two (2).

Capacity analysis was conducted for this intersection utilizing the 2024 Build Traffic volumes, conservatively assuming all traffic would exit at one location. These results indicate that the intersection is expected to experience Levels of Service "B" or better during each of the peak hours. It should be noted that some modifications to the driveways and sidewalks within the NYSDOT Right-of-Way are proposed as part of the Project and therefore will require a Highway Work Permit to be obtained from the NYSDOT.

Sight distances for the proposed main driveway location were reviewed based on American Association of State Highway and Transportation Officials (AASHTO) criteria. Field measurements conducted at the driveway location indicate existing sight distances are approximately 435 feet looking left (north) and 545 feet looking right (south) from the proposed access location. These sight distance measurements are summarized in Table No. 3 contained in Appendix B. Available NYSDOT speed data for this section of Wolcott Avenue indicates an 85th Percentile Speed of 38 MPH. Table No. 3 provides the calculated stopping and intersection sight distances based on AASHTO criteria for all relevant sight lines. As shown in the table the required intersection sight distances will be met at the Site Access location for the 38 MPH design speed. It should be noted that some pruning/clearing of the existing vegetation along the Site frontage, if proposed to remain, immediately north of the proposed driveway location on the west side of Route 9D should be completed in order to maximize the sight distance looking to the north from the Site driveway location.

Sight distance was also reviewed for the proposed northern exit only driveway. Field measurements conducted at the driveway location indicate existing sight distances are approximately 500 feet looking left (north) and 575 feet looking right (south) from the proposed access location. As indicated in Table No. 3, these available sight distances exceed the AASHTO required sight distances based on the 38 MPH 85th Percentile Speeds along the roadway. Similar to main driveway, some pruning/clearing of the existing vegetation along the Site frontage, if proposed to remain, immediately south of the proposed driveway location on the west side of Route 9D should be completed in order to maximize the sight distance looking to the south from the Site driveway location.

6. **Wolcott Avenue and South Avenue**

Wolcott Avenue and South Avenue intersect at a full movement signalized intersection. Each of the approaches to the intersection consist of a single lane in each direction. There is a striped pedestrian crosswalk on each of the four intersection approaches but there are no pedestrian actuated signals for these crosswalks.

Capacity analysis was conducted for this intersection utilizing the 2021 Existing Traffic Volumes. The analysis results indicate that the intersection is currently operating at an overall Level of Service "C" during both the Friday PM and Saturday Peak Hours.

The capacity analysis was recomputed using the 2024 No-Build and Build Traffic volumes. These results indicate that the intersection is expected to continue to experience an overall Level of Service "C" during each of the peak hours under all scenarios, with minimal increases in delay (less than 1.0 seconds per vehicle) resulting from the project generated traffic.

G. Pedestrian Access

Access to the Project by pedestrians, including those who may be parking offsite is provided in several manners. There are existing sidewalks along both sides of most roadways within the Study area. There are existing signalized crosswalks of Wolcott Avenue both at its signalized intersections with Beekman Street and Main Street providing signalized pedestrian access from the east side of Wolcott Avenue to the west side where the Project site is located. In addition, there are existing crosswalks crossing Wolcott Avenue which are supplemented with pedestrian activated Rectangular Rapid Flashing Beacon (RRFB) signs located at the northern property line of the Project site as well as at a location approximately 150 ft. south of Rombout Avenue at approximately the southern property line of the River Ridge property. Any patrons utilizing the public parking available at the Tompkins lot on the east side of Wolcott Avenue would be likely to use the RRFB crosswalk at the northern property line of the Project site to cross Wolcott Avenue. Similarly, any pedestrians coming from the Main Street area would be likely to utilize either the signalized pedestrian crossing at the Wolcott Avenue/Main Street intersection or the RRFB crosswalk at the northern property line to cross to the west side of the roadway.

Pedestrians arriving from the Beacon Train Station or utilizing parking along Beekman Street would also be provided several opportunities to access the Project site. There are existing pedestrian pathway connections between Beekman Street and Wolcott Avenue that have been previously constructed as part of the River Ridge and West End Lofts development that could be utilized as these are intended for public use. In addition to these pathways, the Project also proposes to provide a pedestrian pathway between Beekman Street and Wolcott Avenue for direct access to the Project Site. Signage is proposed to be provided at the connection of the on-site path with Beekman Street to direct patrons to the Site.

H. Site Circulation and Operations

As previously discussed, general vehicular access to the Project will be provided via the existing driveway connection to Wolcott Avenue and will accommodate both entering and exiting traffic. A secondary, exit only driveway is also proposed at the northern property line of the Site, which will be a reestablishment of the existing driveway in this location. The existing southern access driveway is proposed to be eliminated as part of the project. The combination of the main access driveway and the northern exit only driveway will provide the ability to vehicles to circulate through the Site without the need to turn around and eliminating a previously proposed dead-end parking situation. Under the anticipated event conditions this provides improved on-site traffic flow for drop-off & pick-up operations.

Vehicle maneuvering analyses of a refuse truck, a shuttle bus and a 30 ft. Single Unit box truck have been included on the Site Plan showing that these vehicles can be accommodated within the proposed entry & exit loop. It is noted that the Applicant anticipates that a 20 ft. single unit box truck will be the largest vehicle utilized for deliveries to the Site. However, the maneuvering analysis was prepared for a 30 ft. box truck, indicating that this size vehicle can be accommodated in the event that a larger delivery vehicle is utilized in the future.

The anticipated drop-off and pick-up operations during event periods will require coordination and management by on-site staff during events. The operation of this is further discussed in the draft Traffic & Parking Management Plan.

In addition to the above, a designated loading zone is shown on the Site Plans at the northwest corner of the church building. This is also the location of the refuse container and where refuse pick-up will occur. Vehicle Maneuvering analyses for both a typical front-loading refuse truck and 30 ft. Single Unit box truck have also been included on this Site Plans for this area. These Vehicle Maneuvering analyses indicate that these vehicles can be adequately accommodated.

IV. Parking Evaluation

A. Project Related Code Parking Requirements

The City of Beacon Zoning Code's (the "Zoning Code") Schedule Off-Street Parking Requirements (§223-26.F) indicates the required number of off-street parking spaces to be provided for the Project. Based the Zoning Code, Table No. 2 below provides a summary of the code parking requirements and minimum number of required parking spaces for the Project.

Table No. 2 – City of Beacon Code Required Parking

Proposed Use	Size	City of Beacon Code Requirement	Required Spaces
Hotel	30 Rooms 1 Employee	1 Space/Room +1 Space/Employee	31 Spaces
Café	50 Patrons	1 Space/3 Patrons	17 Spaces[2]
Event Space	350 Persons (Seats)[1]	1 Space/4 seats	88 Spaces
		Total Required Parking Spaces	**119 Spaces[2]**

Notes:
1. The maximum proposed Event Space attendance of 350 Persons will include required staff for these events.
2. The Café' and the Event Space, which are both contained in the Church building, are non-simultaneous uses, therefore the Total Required Parking Spaces includes those required for the Hotel and the Event Space, since the Event Space represents the more conservative total of require parking spaces for the Church building uses. When events are not occurring the City Code would require 53 parking spaces for the Project.

As indicated in the above table the Project would require a total of 119 parking spaces. As noted above, the Café use is proposed to be a non-simultaneous use with the Event Space. Therefore, the calculation of total required parking spaces for the Project is based on the critical event periods during which times the Café will be used as a complimentary space to the Event space, but no additional persons outside of those attending the events will be permitted in the Café during these times. As previously indicated, the Project proposes to provide 32 off-street parking spaces to accommodate the parking needs for the proposed Hotel use. Therefore, all additional parking for the proposed Café use and event related parking would be required to be accommodated by on-street and off-street public parking in the area.

As previously discussed, it is also anticipated that a portion of the event attendees for the larger weekend events will arrive via other modes of transportation. This includes attendees attracted from the local area and therefore would be likely to arrive by non-vehicular transportation. The Project also anticipates promoting the use of public transportation including use of Metro-North trains to the Beacon train station, which is within walking distance to the Project site. In addition, the Project will also promote the use of Dutchess County Buses, including the Poughkeepsie Transit Hub to Beacon bus route, the Beacon to Hopewell Junction bus route and the Beacon Free Loop bus, each of which have designated stops along Main Street and pass the Project site

on Route 9D. Based on this, it is anticipated that the overall parking demand of the project during these event conditions could be reduced by as much as 10% as discussed in Section III.B above. Applying this 10% reduction, the total number of event occupants arriving by personal vehicle would be 315 occupants *(350 occupants X 10% non-vehicular = 315 Occupants).*

Furthermore, it is also anticipated that the uses within the proposed development would permit for some amount of "Shared Parking" resulting from hotel guests frequenting the Café and also the events held in the Church building. It is anticipated that as many as 100% of the hotel guest could be attending an event. Assuming a room occupancy of two (2) persons per room this would reduce the total occupants arriving at events by personal vehicle to 255 occupants *(30 rooms X 2 persons/room = 60 occupants in Hotel, 315 -60 = 255 occupants by personal vehicle).* Applying the code required 1 space per 4 seats (occupants) results in a total parking demand of 64 parking spaces to be accommodated by offsite parking in the vicinity of the Site.

B. Review of Off-Site Parking Locations

The Project proposes to provide 32 off-street parking spaces on the Site primarily for the use of Hotel guests and employees as required by the City of Beacon code for that use. While as indicated above, there is expected to be some amount of "shared parking" between the Hotel and café/event space under both typical and event conditions, under both scenarios there will be a need for additional parking to be accommodated by off-site public parking in the vicinity of the Project.

The closest public parking in the area include the below listed locations in order of proximity to the Project:

- **Tomkins Firehouse Parking Lot** – 68± Parking Spaces
  This lot is currently unstriped and therefore the number of parking spaces is an estimate. See below for further discussion.
- **City of Beacon Municipal Plaza (City Hall) Parking Lots** – 76 Parking Spaces
- **Beekman Street Metro North on-street parking between Railroad Drive and Wolcott Avenue** - 70± on-street metered parking spaces
  This parking is operated by LAZ parking, parking can be paid electronically via LAZgo Parking App.
- **Cross Lot** – 18 Parking Spaces (24 Hour Free Parking – City Lot)
- **Cliff Lot** – 19 Parking Spaces (24 Hour Free Parking – City Lot)
- **Beacon Center Lot** – 92 Parking Spaces (24 Hour Free Parking – City Lot)
- **Beacon Metro North Train Station Parking lots metered parking spaces**
  This parking is operated by LAZ parking, parking can be paid electronically via LAZgo Parking App.

The Tomkins Firehouse and City of Beacon Municipal Plaza parking lots have each recently been signed as available for public parking and are within 500 and 1,000 ft. respectively of the Project Site making these the most accessible public parking for the project. As previously noted, a walkway connection to Beekman Street is proposed to be provided through the Site as part of the Project with signage at Beekman Street directing patrons to the Site. This will provide more convenient access to the Beekman Street on-street metered parking spaces of which the nearest spaces will be within the 350 ft. of the Hotel and Café/Event spaces with the more remote spaces

approximately 1,200 ft. from these buildings. This will also provide more convenient access to parking available at the Beacon Metro north station, however these metered spaces are more remote, in excess of 2,000 ft. from the Project site, and less likely to be utilized. The Cross Street lot, Cliff Lot and Beacon Center Lot are all located within 1,500 – 1,900 ft. from the Project site. In total there are approximately 343 total parking spaces within 2,000 ft. walking distance of the Project site which can be utilized to accommodate the parking needs of the Project under the event conditions. There is also on-street public parking along Main Street within this distance from the Project, but this parking is known to have limited availability and therefore has been discounted from the parking analysis.

Observations of each of the parking areas noted above were conducted by representatives of Colliers Engineer & Design on Friday September 24, 2021, Saturday September 25, 2021, Friday November 5, 2021 and Saturday November 6, 2021, as well as supplemental observations conducted on Friday January 21, 2022, in order asses the availability of parking in each of these location during the anticipated peak event periods. The hourly parking observations for each parking area are summarized in Table No. 4 contained in Appendix B. The following is a summary of these parking observations for each of the of the parking locations identified above:

- **Tomkins Firehouse Parking Lot**
  - This parking lot was observed to be significantly underutilized during all time periods with 5 vehicles or less parked at any one time. This is likely due to its location further from the Main Street business district and the fact that it was only recently signed for public parking.
  - As requested by the City's Engineer, a conceptual layout of formalized striping parking spaces within this lot has been prepared. Drawing CP-1 contained in Appendix "A" identifies a possible layout of the parking within this lot. Based on this conceptual layout it is estimated that the lot could accommodate 68 parking spaces.
  - It is understood there are plans for expansion of the Tompkins Fire House for which parking for the facility will be accommodated on this property. It has been estimated that this could usurp up to 14 parking spaces of the 68 available spaces, leaving 54 spaces for public use.
- **City of Beacon Municipal Plaza (City Hall) Parking Lots**
  - There is a total of 100 parking spaces in this Municipal Plaza Lot. These include 10 handicap spaces, 10 designated police parking spaces and 4 designated spaces for City Officials. The resulting effective available public parking is 76 parking spaces
  - This parking lot was observed to be significantly underutilized outside of Beacon City Hall business hours with less than 15 vehicles parked at any one time including municipal vehicles.
  - Observations of this lot during Beacon City Hall business hours were conducted on January 21, 2021 to document the parking availability in this lot during hours when it might be utilized by patrons of the café under typical conditions.

- **Beekman Street Metro North on-street parking between Railroad Drive and Wolcott Avenue**
  - This parking was observed to be significantly underutilized during all time periods. It is noted that a review of historical aerial photography indicates a higher utilization of this parking on Weekdays prior to the COVID-19 pandemic, however it is anticipated that this parking would be mostly free on nights and weekends.
- **Cross Lot**
  - This parking was observed to be nearly fully occupied during all time periods. It is unlikely that this parking area could be relied upon for parking for the proposed project.
- **Cliff Lot**
  - This parking was observed to be nearly fully occupied during all time periods. It is unlikely that this parking area could be relied upon for parking for the proposed project.
- **Beacon Center Lot**
  - This parking was observed to be in excess of 75% utilized during most time periods but there is more of a likelihood of parking availability in this lot than the other public parking in this vicinity. While somewhat remote from the Project site in some cases event attendees may utilize this parking to visit locations on Main Street prior to or after the events.
- **Beacon Metro North Train Station Parking lots metered parking spaces**
  - Specific parking counts of train station parking lots were not conducted since these lots were found to be underutilized during all-time periods observed and it is known this is not representative of peak parking utilization prior to the COVID-19 Pandemic. Significant parking availability was observed on weeknights and weekends. It is noted that a review of historical aerial photography indicates a higher utilization of this parking on Weekdays prior to the COVID-19 pandemic, however it is anticipated that this parking would remain mostly free on weeknights and weekends if parking utilization at the train station returns to pre-pandemic levels.

The Tomkins Firehouse Parking Lot, City of Beacon Municipal Plaza parking lot as well as on street parking along Beekman Street, which are all nearest the Project each appear to have sufficient availability to accommodate the excess parking demand of the Project while still leaving additional available parking for other public uses as well. It should be noted that all proposed events are limited timeframe events that will utilize these parking spaces during the events only and these parking spaces would be available during all other times of the day.

C. Parking Recommendations

As noted above, it is the opinion of Colliers Engineering & Design that there is sufficient public parking in the vicinity of the Project to accommodate the excess parking demand associated with the events, there are several parking mitigation measures that could be implemented in order to reduce the parking demands of the Project and/or reduce the parking impacts in the surrounding area, which are identified below.

Dissemination of Parking Information

Prophecy Theater, LLC as owners of the Project should disseminate parking information to event attendees to identify appropriate available parking areas. This can be done via the facility's website, distribution of information upon purchase of event tickets (as applicable), e-mails to event attendees and information disseminated by event organizers. Day-of, on-site signage and/or distribution of flyers identifying parking locations for event attendees to be distributed by attendants at the on-site parking lot could also be utilized. This information should direct event attendees to any of the various parking locations identified above.

In addition, by providing attendees with appropriate parking areas it can help to mitigate the possibility of attendees utilizing other undesirable parking locations including the nearby residential properties directly north and south of the Project as well as those on the east side of Route 9D opposite the Project site.

Dissemination of Public Transportation Information

Similar to the above, the Project owners should also disseminate and encourage the use of public transportation by event attendees in order to reduce the overall parking demand of the Project, as well as the Project traffic generation. This can include information on available metro-north train schedules, Duchess County bus schedules and any other relevant public transportation information.

Provision of Valet Parking

For certain events, such as weddings, it may be possible and desirable to provide valet parking on the Project site utilizing the on-site parking facilities or nearby off-site parking locations. For certain events it may even be possible to accommodate all event and hotel parking on the Project Site with valet parking by using tandem parking and other areas that may not otherwise be available for parking under typical parking conditions. This could be done by utilizing outside valet parking services for those specific events for which valet parking may be possible. This could be a service provided by the Project Owners and offered to event coordinators as appropriate. This should be considered for all reasonably appropriate events in order to further limit the need for the use of off-site public parking for event attendee parking.

The above items, as well as other recommendations for the management of traffic and parking for events will be incorporated into a Traffic & Parking Management Plan to be implemented by the Applicant for management of events at the Site.

V. Summary and Conclusion

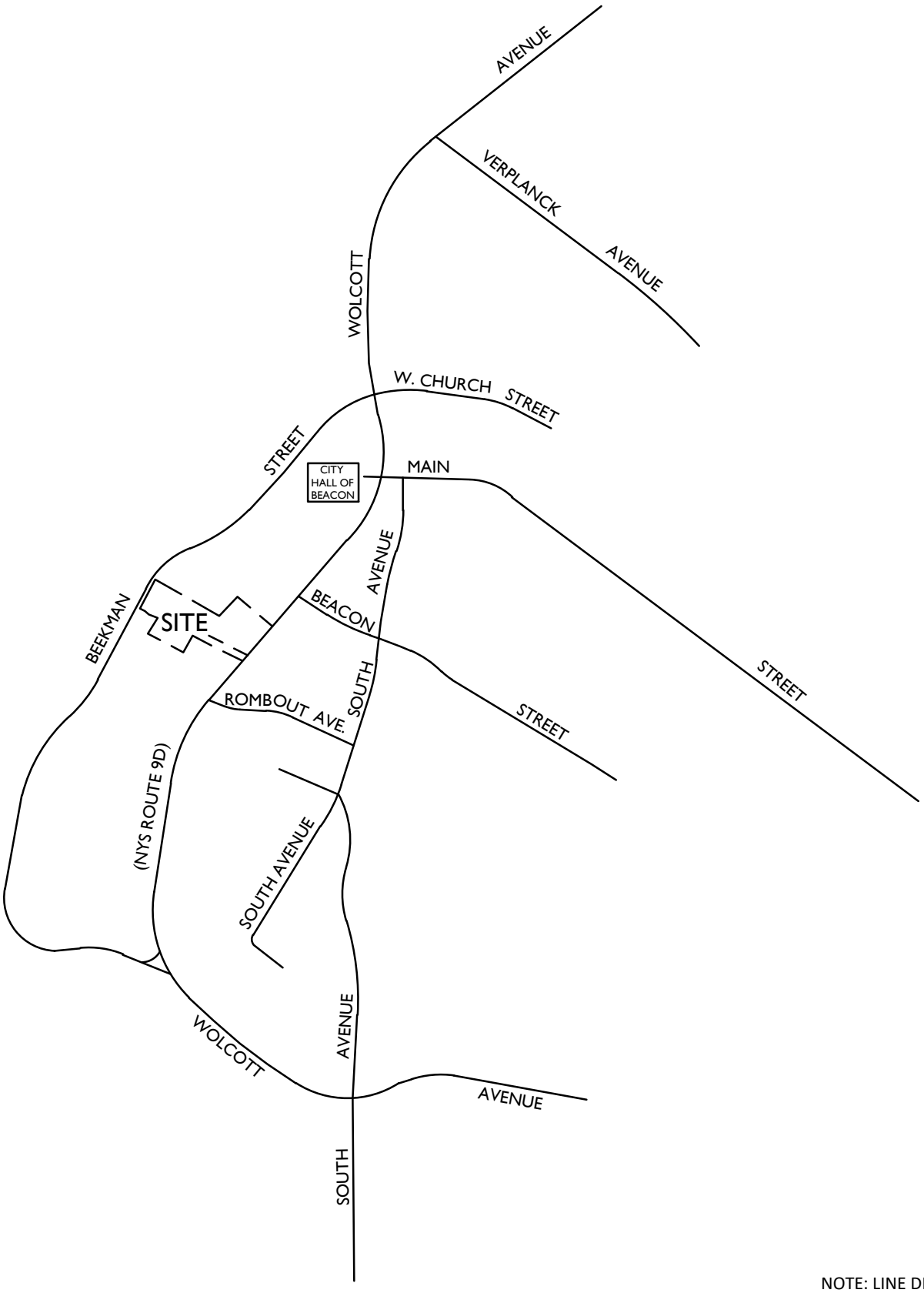
As summarized here-in the Project is not anticipated to have a significant impact on traffic conditions in the vicinity of the Project site. Recommendations for traffic signal phasing and timing modifications at the intersection of Wolcott Avenue (Route 9D) and Beekman Street should be explored regardless of the proposed Project in order to reduce delays on the eastbound Beekman Street approach. These modifications would require the review and approval of the NYSDOT who owns and maintains the traffic signal at that location.

As previously noted, any modifications to the existing Site access driveways will also require review and approval by the NYSDOT and a Highway Work Permit will need to be obtained for those modifications.

The above parking analysis indicates that the Project will provide the required parking for the proposed Hotel use, but all additional parking for the café/event space will need to be accommodated by public parking in the vicinity of the Project. As noted above there is sufficient available parking in the vicinity of the Site to accommodate the Project parking needs, however several recommendations should be implemented to reduce the use of public parking in the area to the greatest extend possible.

Appendix

Appendix A | Traffic Figures



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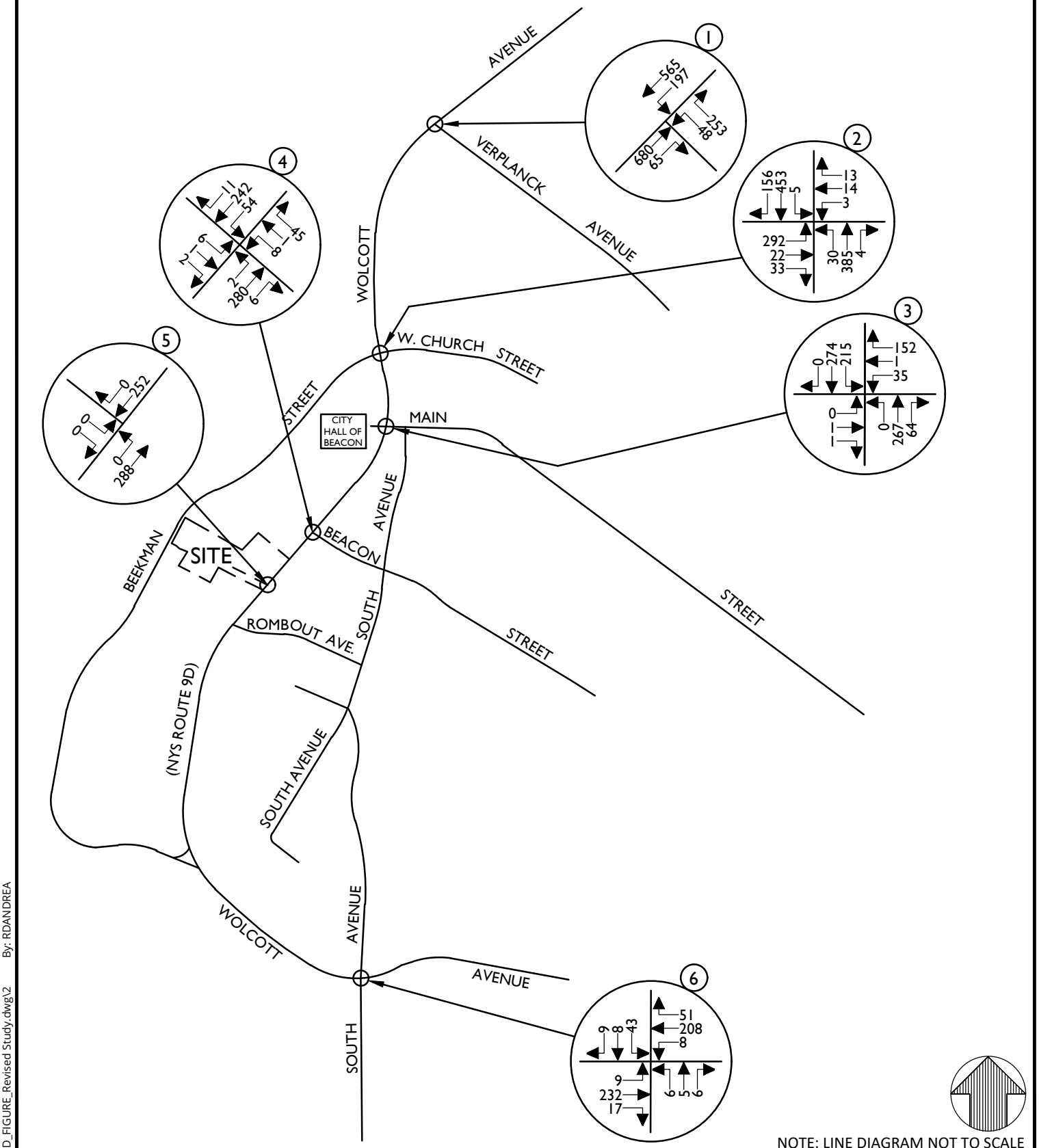
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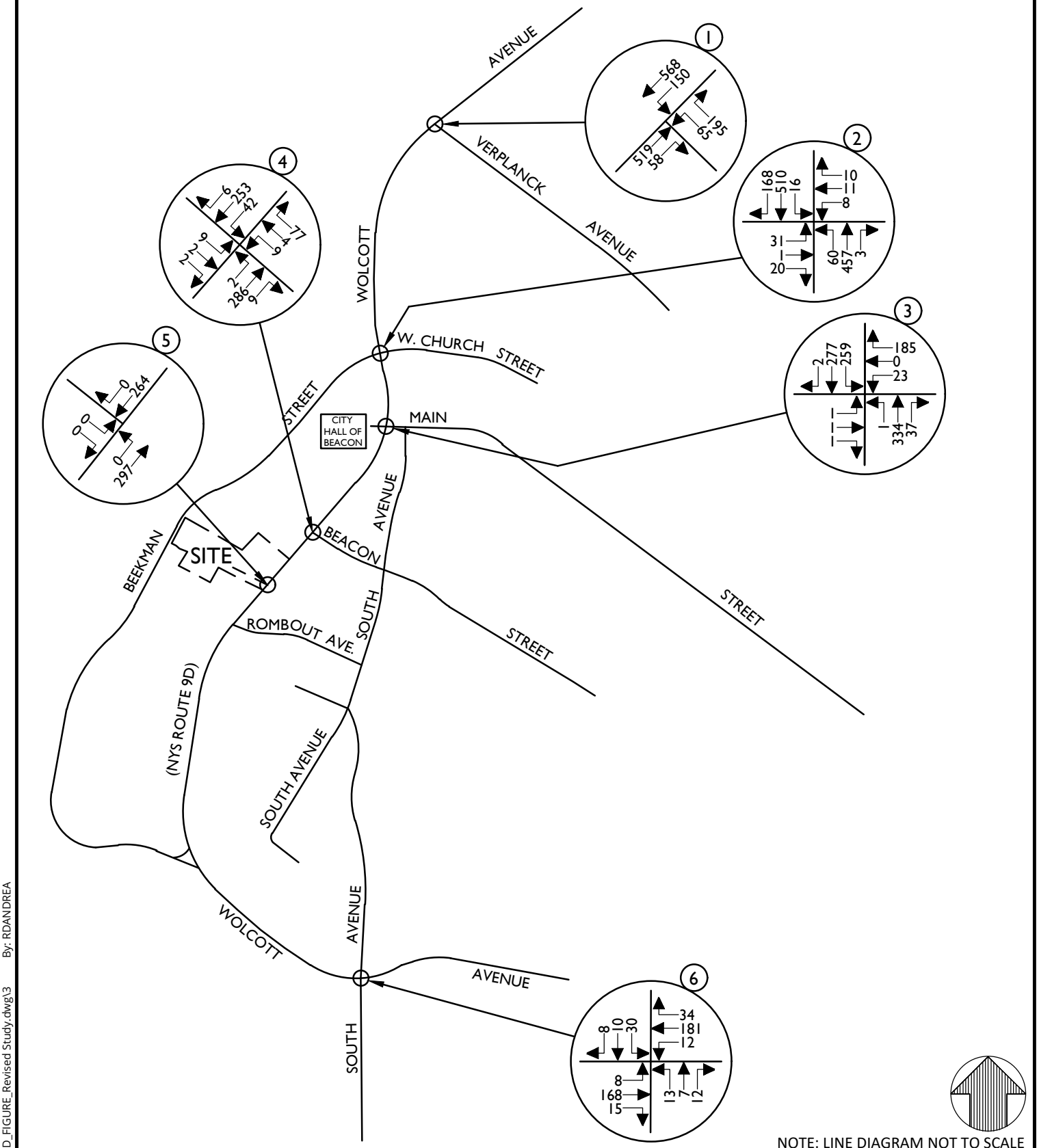
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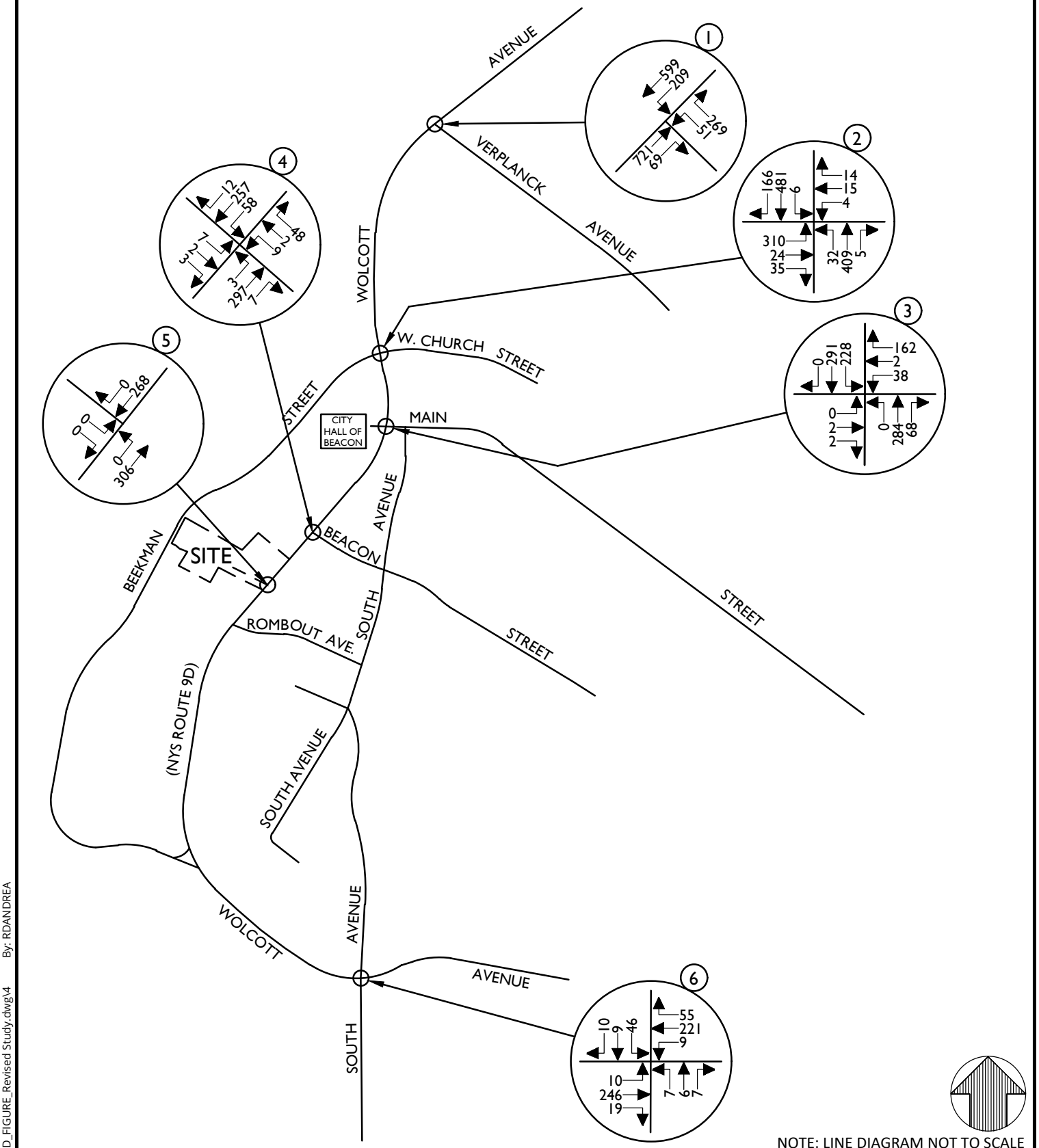
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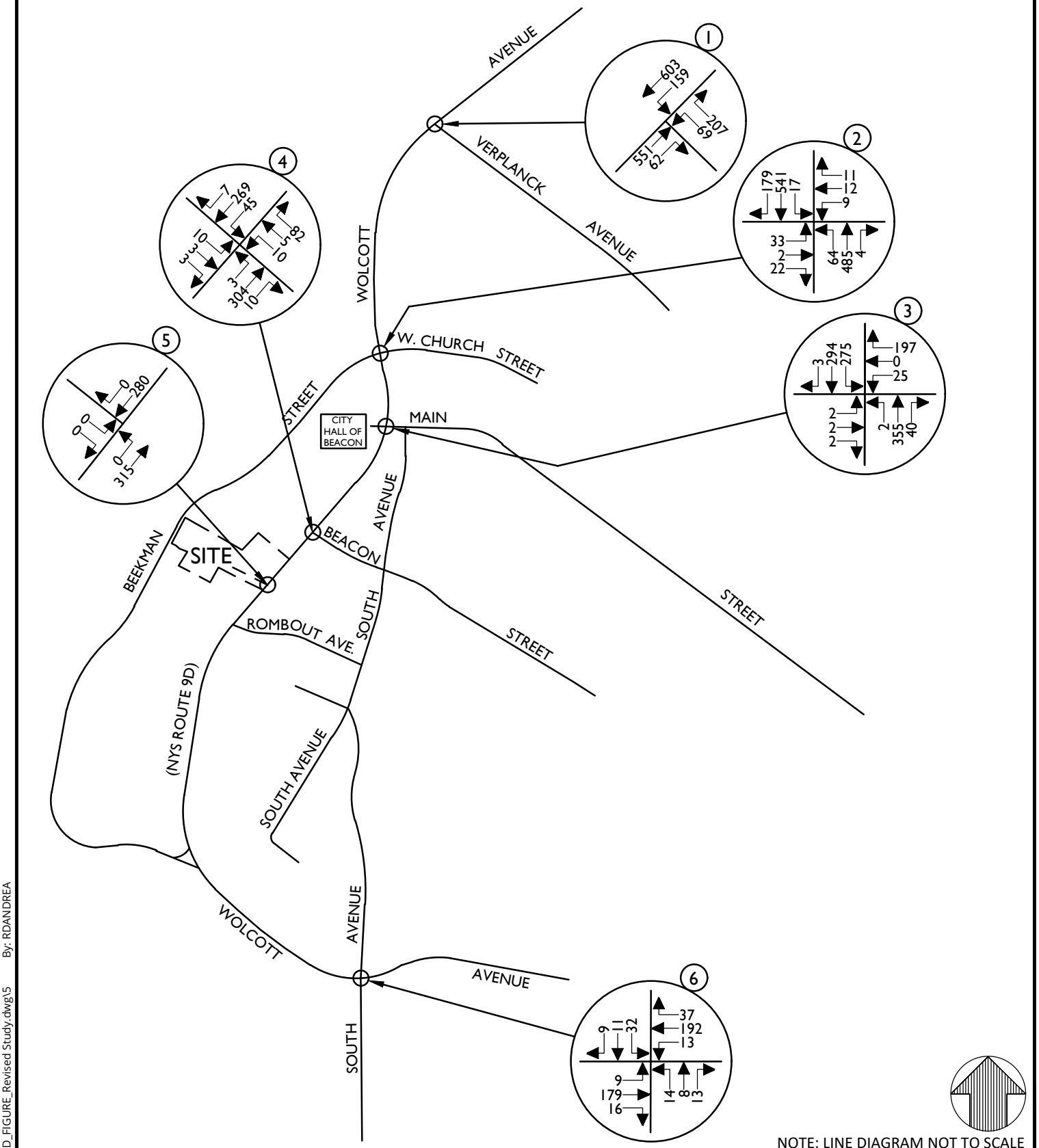
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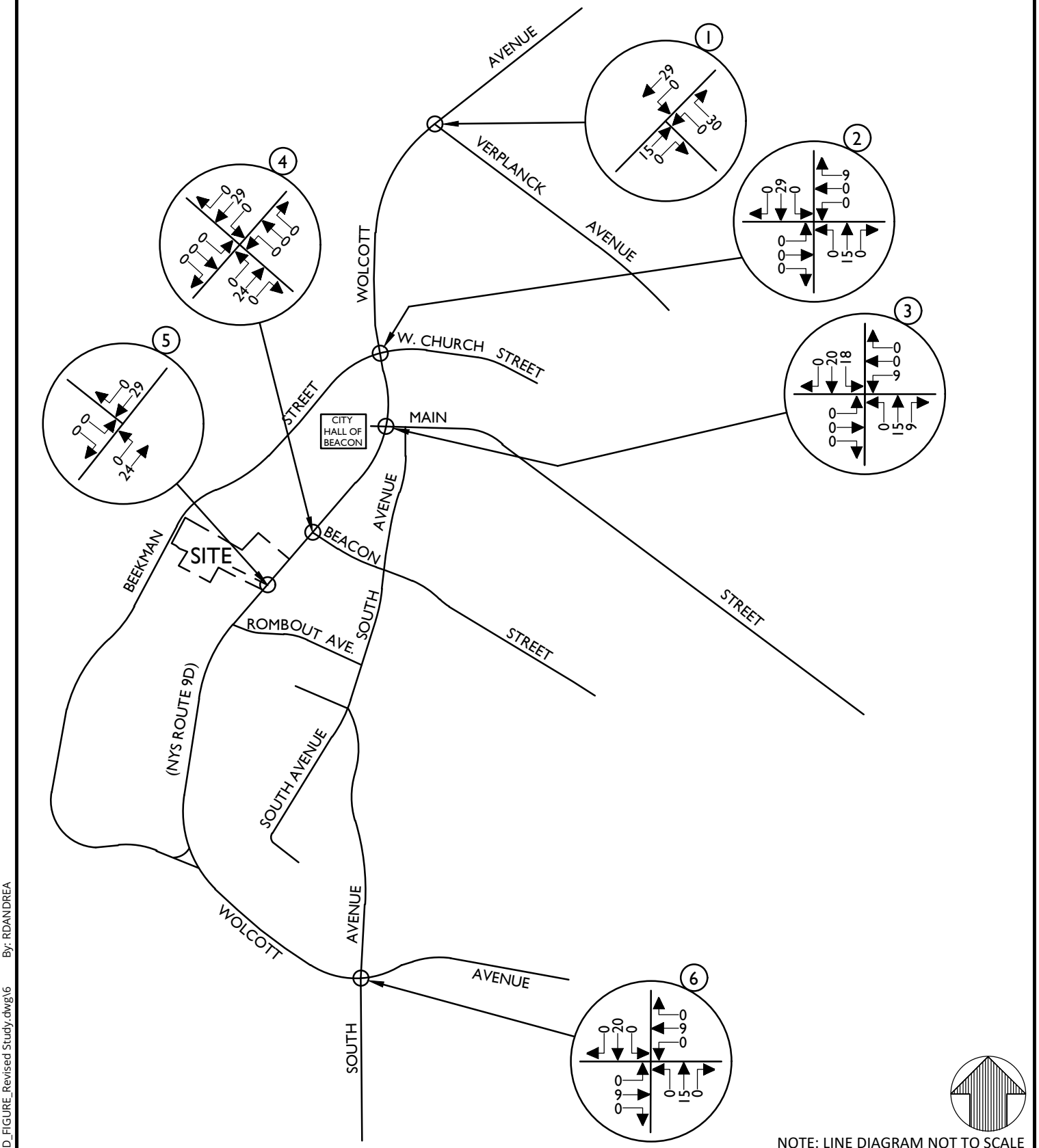
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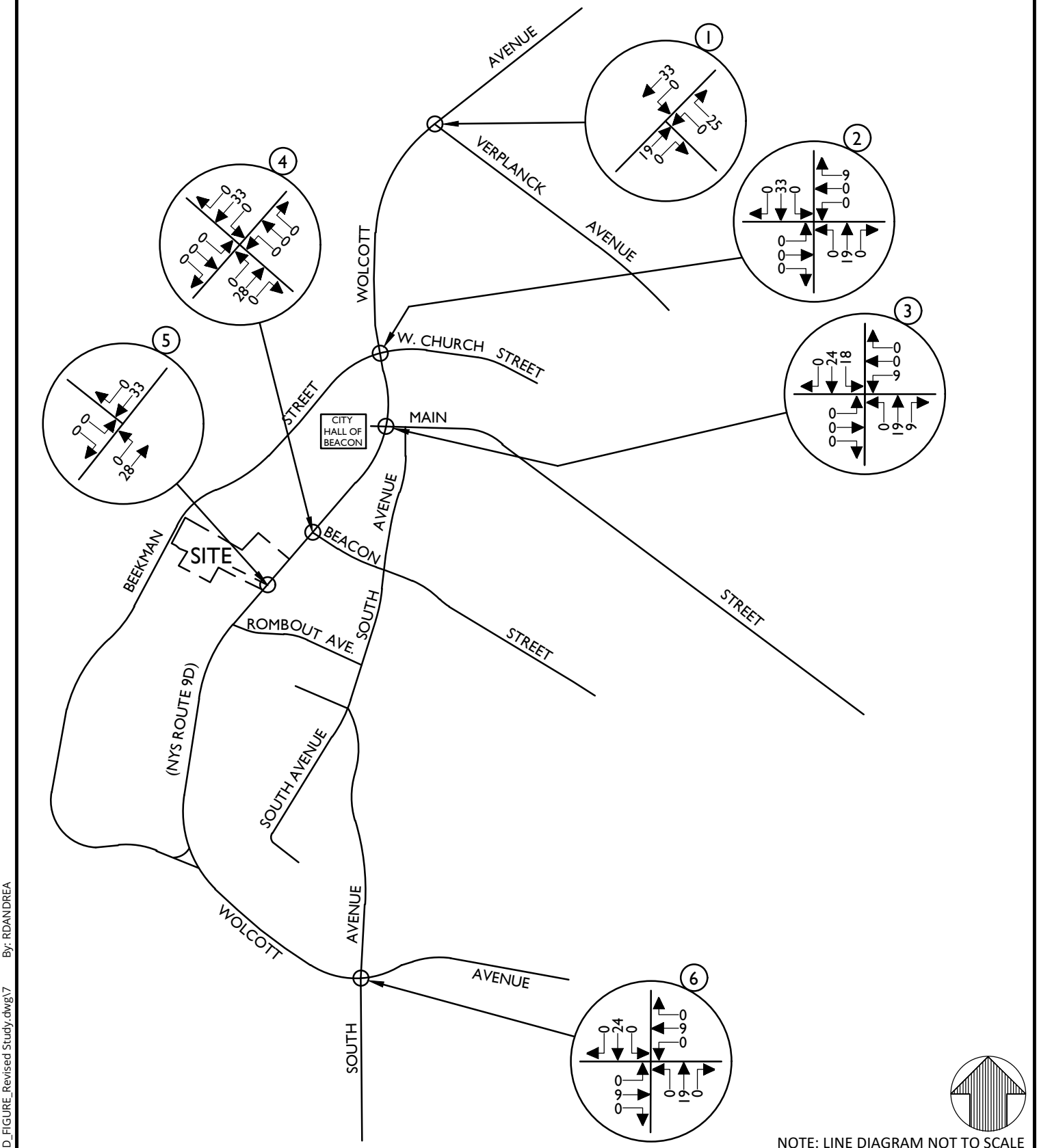
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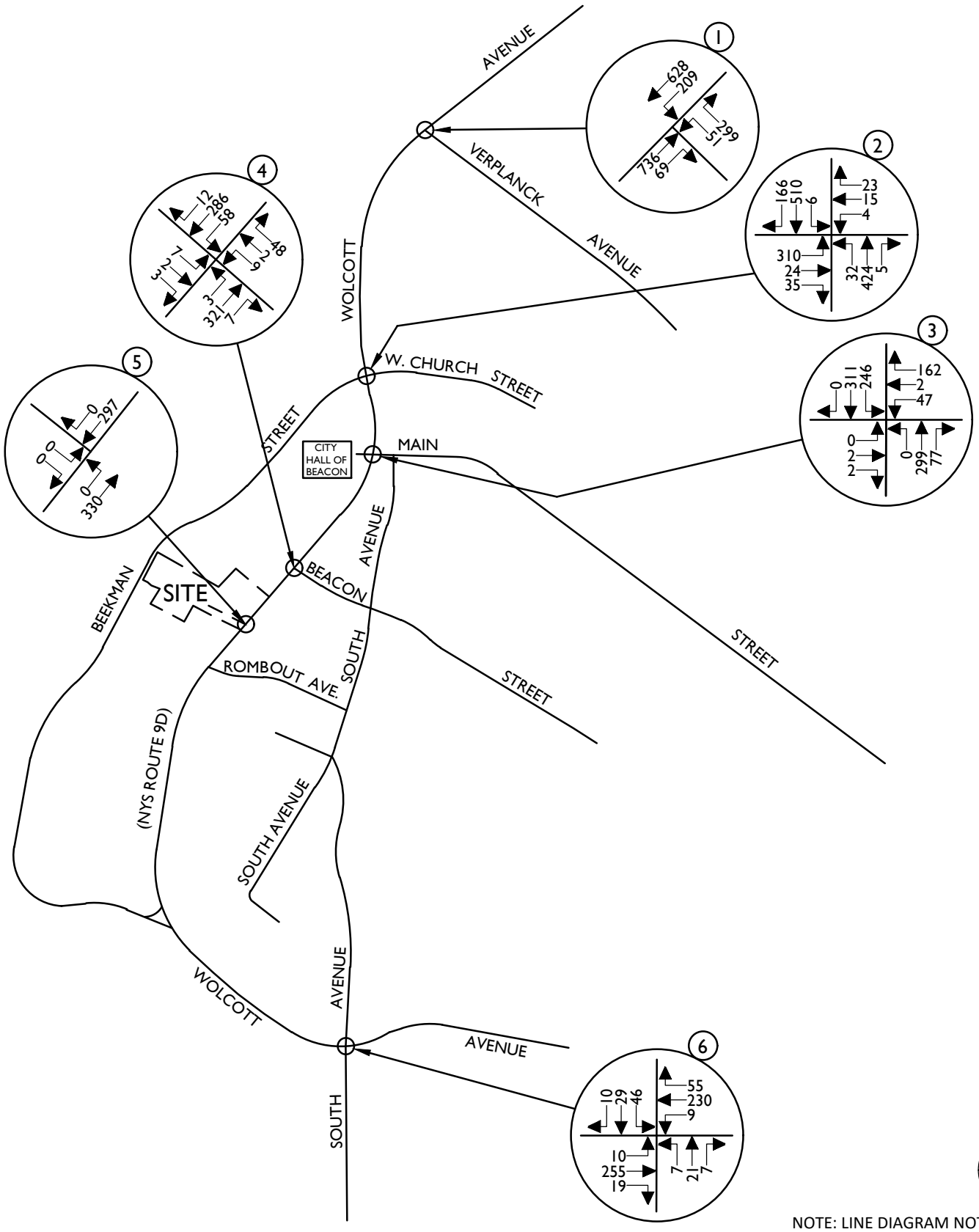
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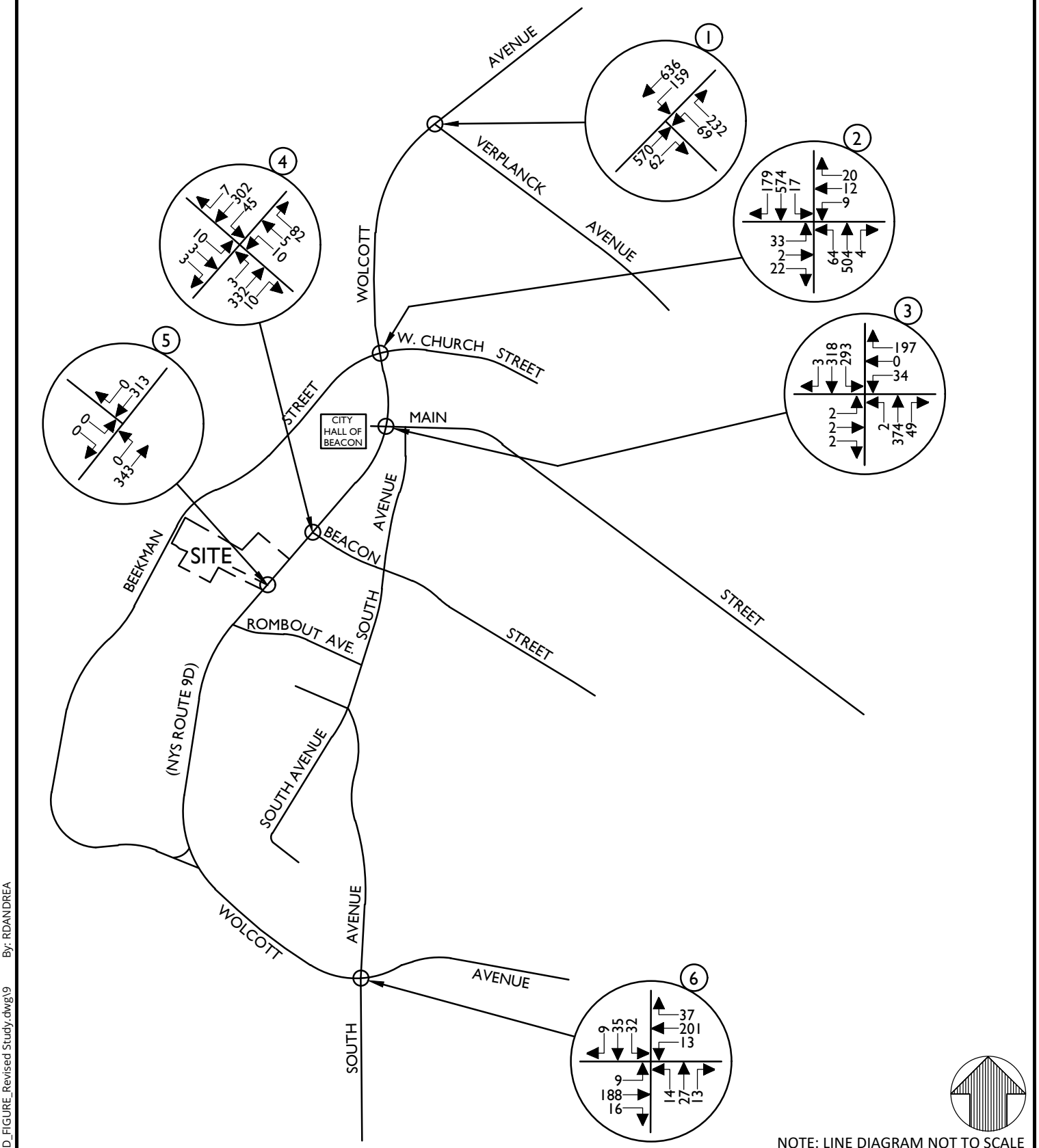
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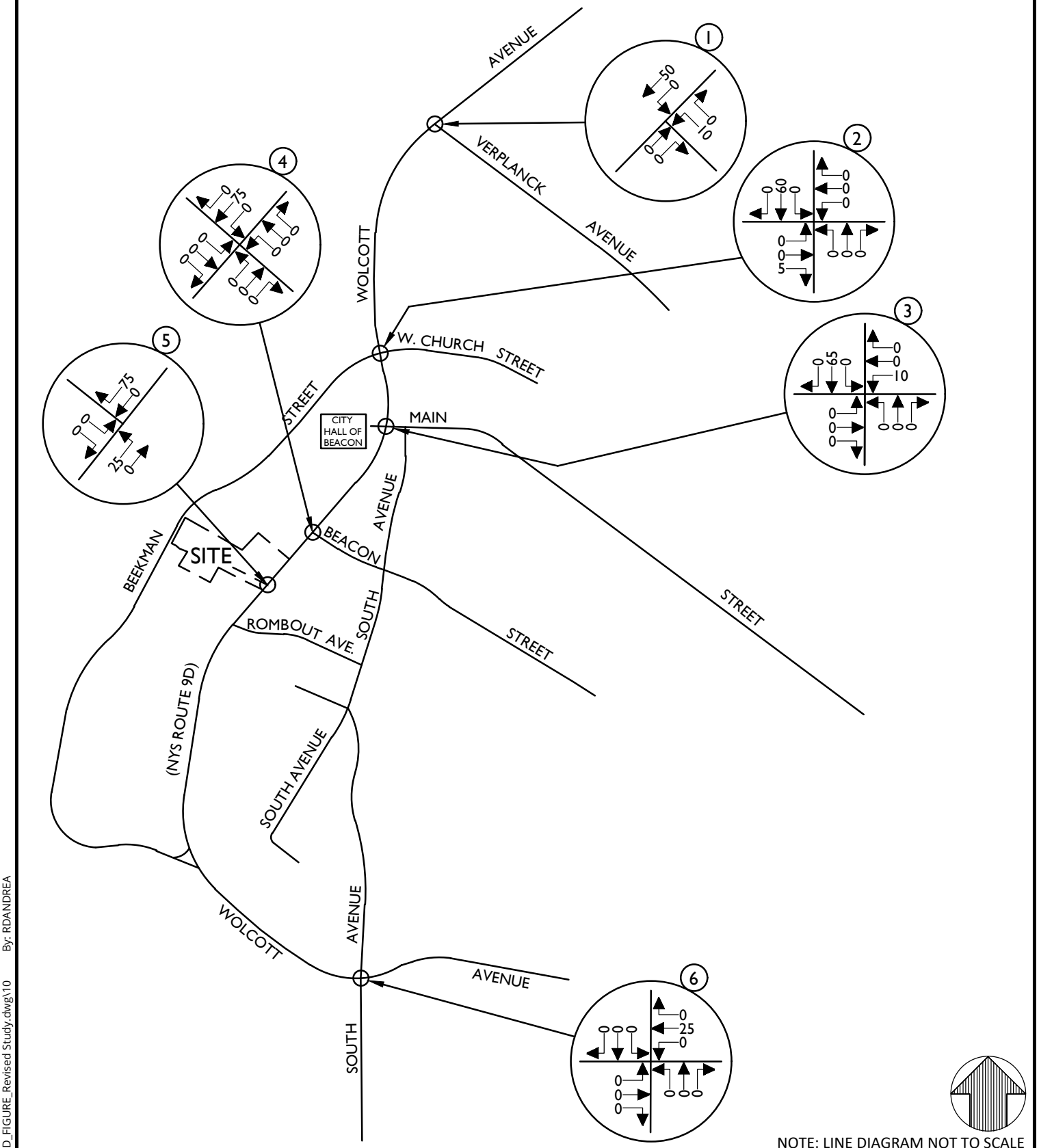
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2024 NO-BUILD TRAFFIC VOLUMES
SATURDAY PEAK HOUR

SHEET NUMBER:
9

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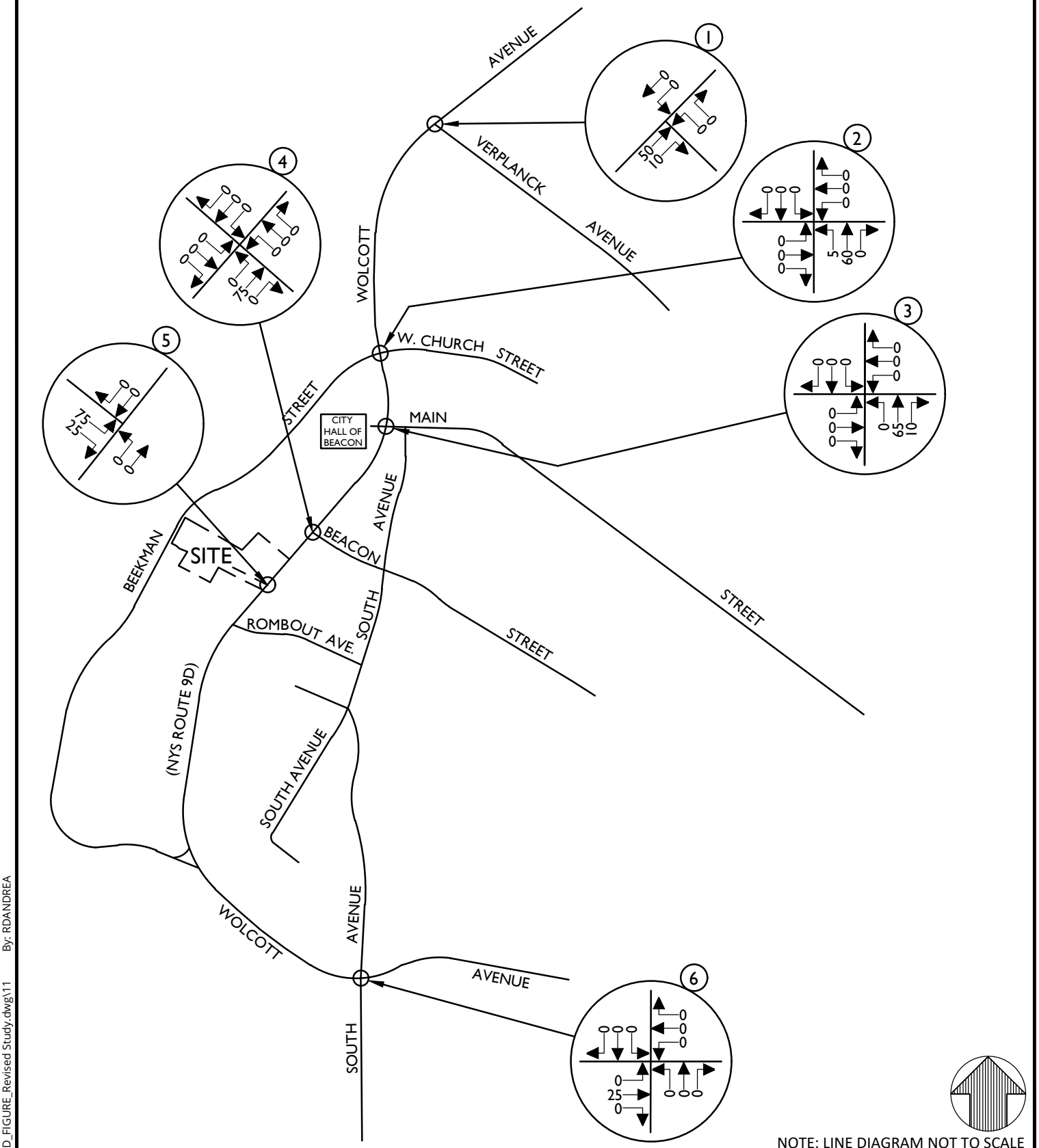
PROJECT NUMBER: 21004333A

DRAWING NAME: 220221RGD_FIGURE_REVISED STUDY

SHEET TITLE: HOTEL ARRIVAL DISTRIBUTION (EXPRESSED AS A %)

SHEET NUMBER: 10

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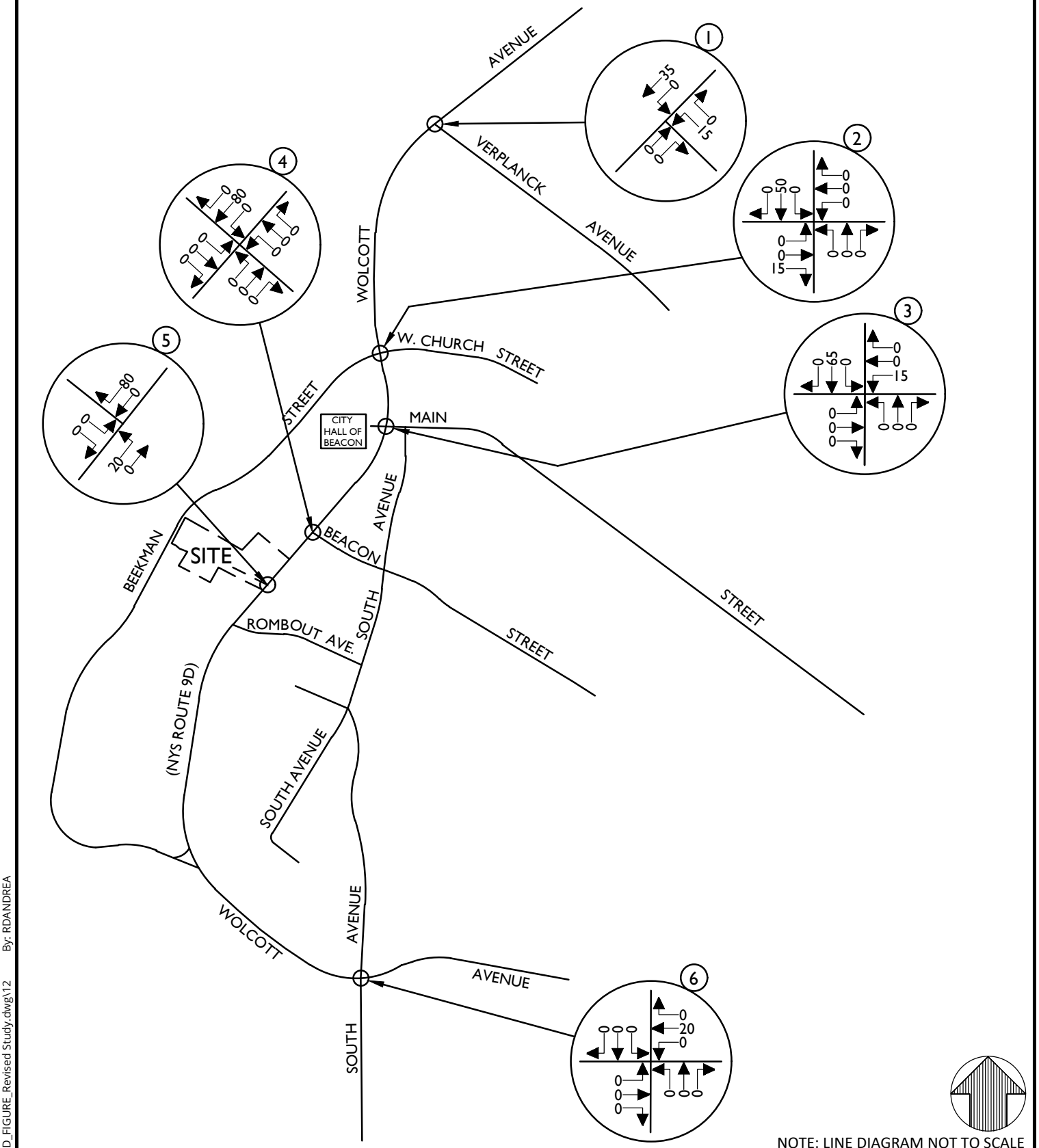
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PROJECT NUMBER: 21004333A
DRAWING NAME: 220221RGD_FIGURE_REVISED STUDY

SHEET TITLE: HOTEL DEPARTURE DISTRIBUTION (EXPRESSED AS A %)

SHEET NUMBER: 11

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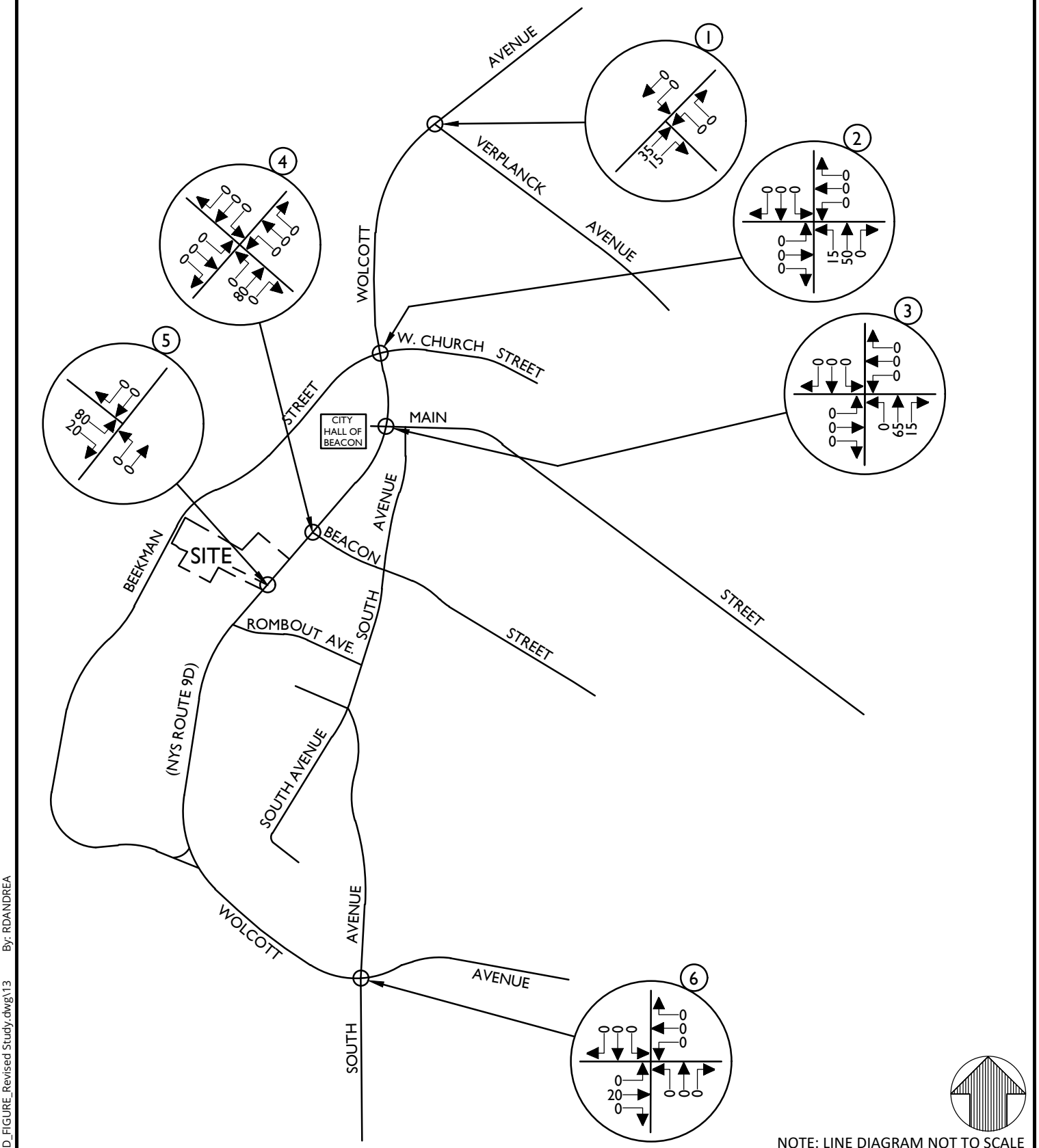
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SHEET TITLE:
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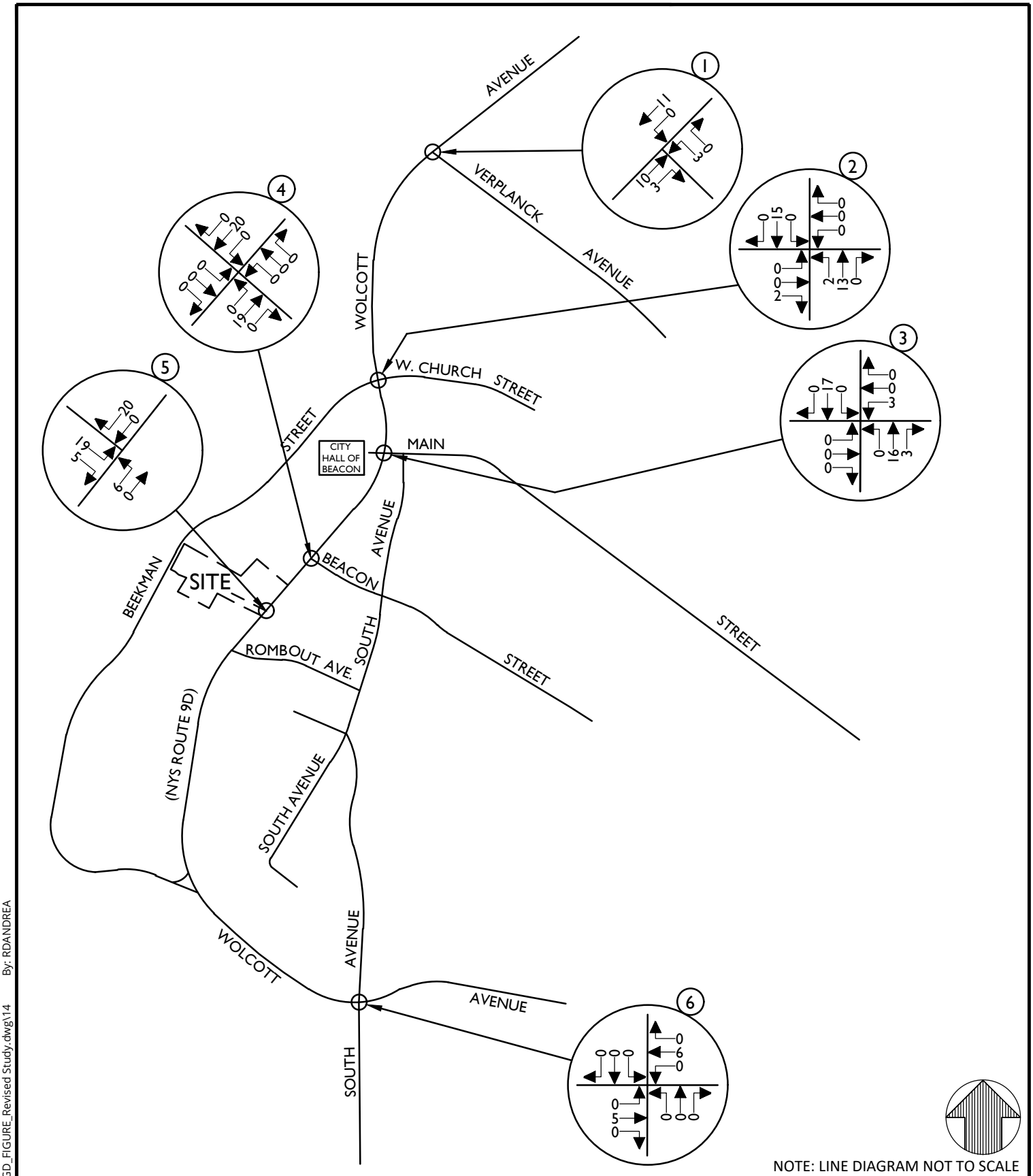
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SHEET TITLE:
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(EXPRESSED AS A %)

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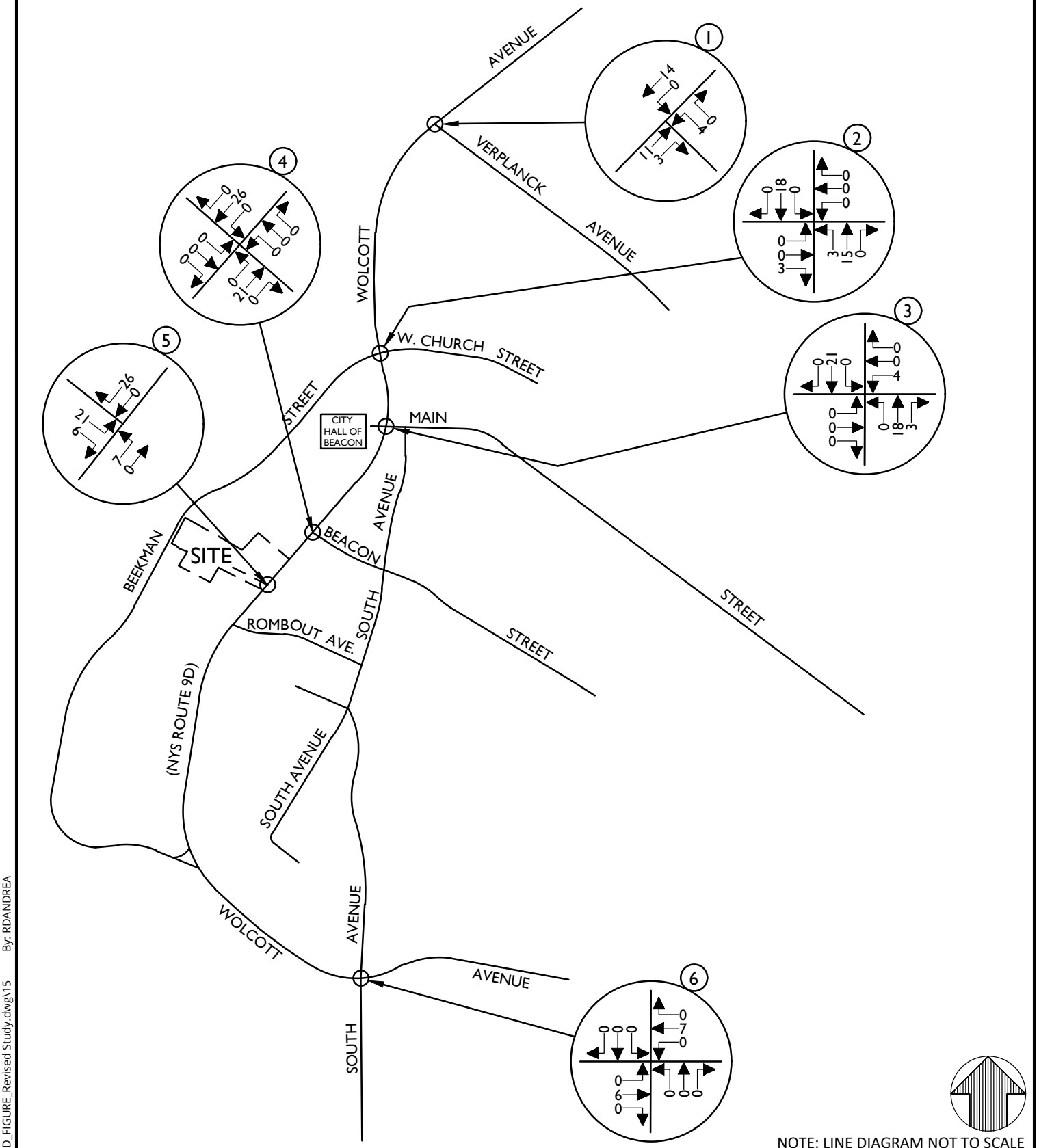
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DRAWING NAME: 220221RGD_FIGURE_REVISED STUDY

SHEET TITLE:
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SITE GENERATED TRAFFIC VOLUMES
FRIDAY PM PEAK HOUR

SHEET NUMBER: 14

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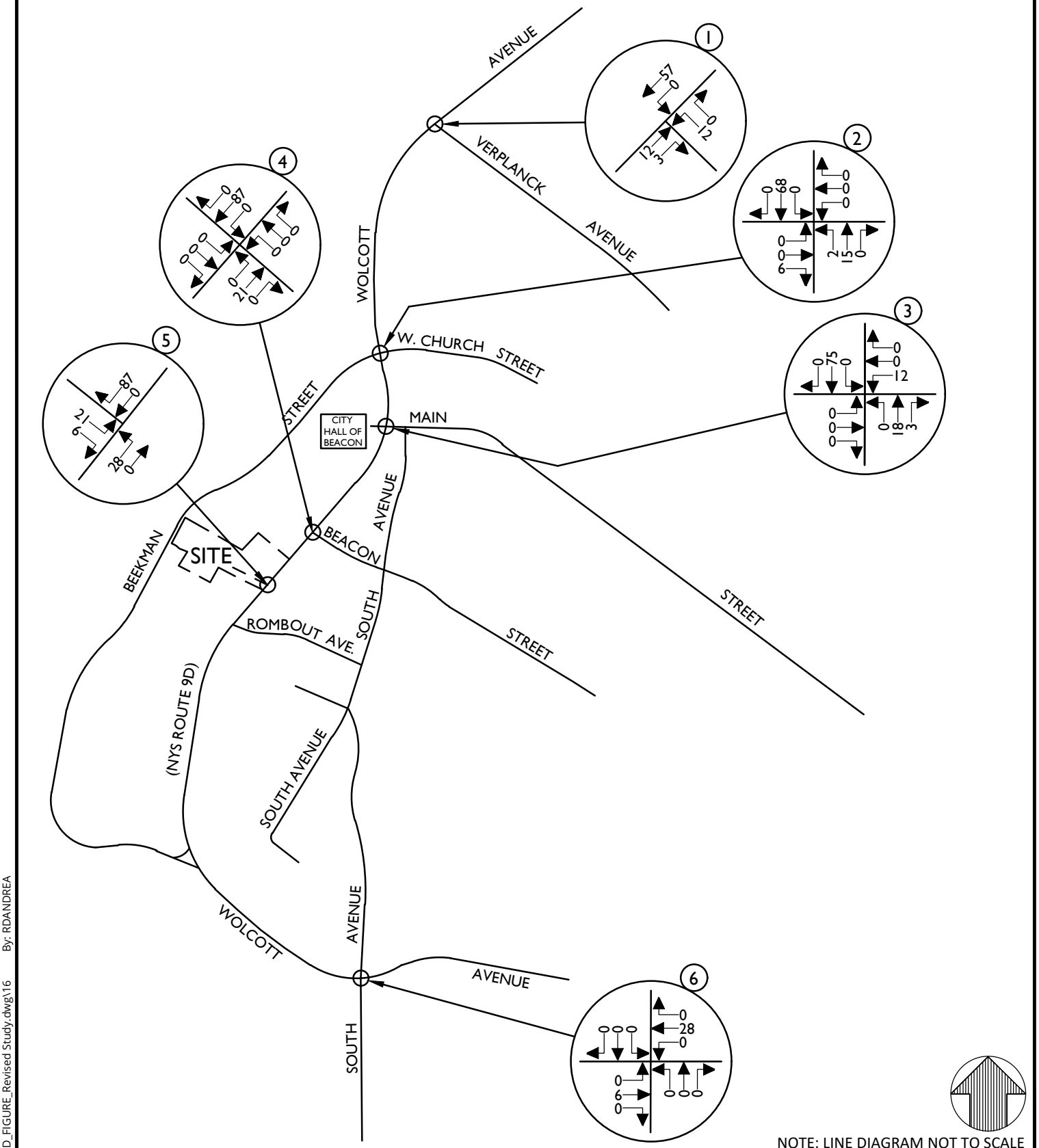
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SHEET TITLE:
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SITE GENERATED TRAFFIC VOLUMES
SATURDAY PEAK HOUR

SHEET NUMBER:
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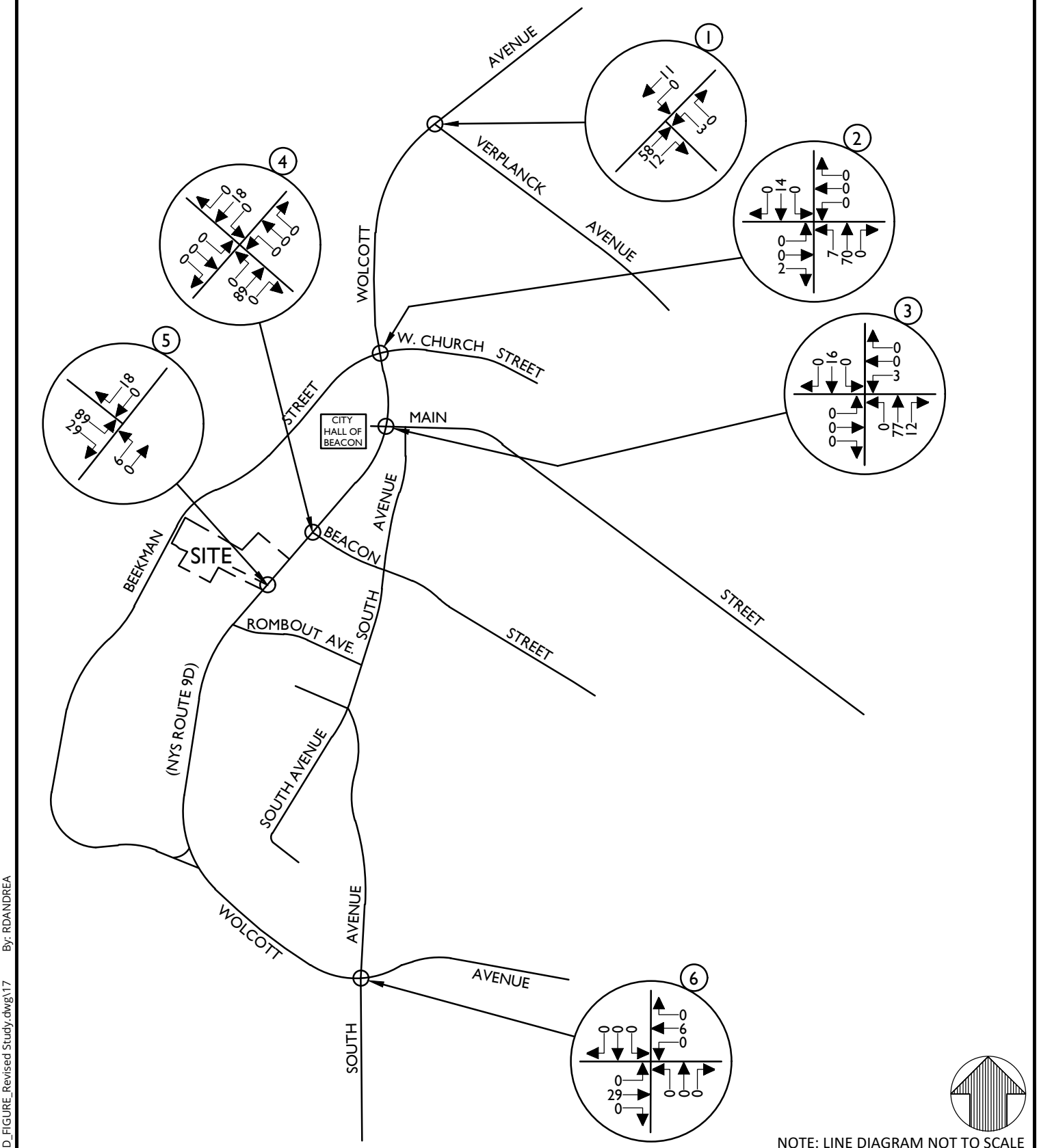
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SHEET TITLE:
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SHEET NUMBER:
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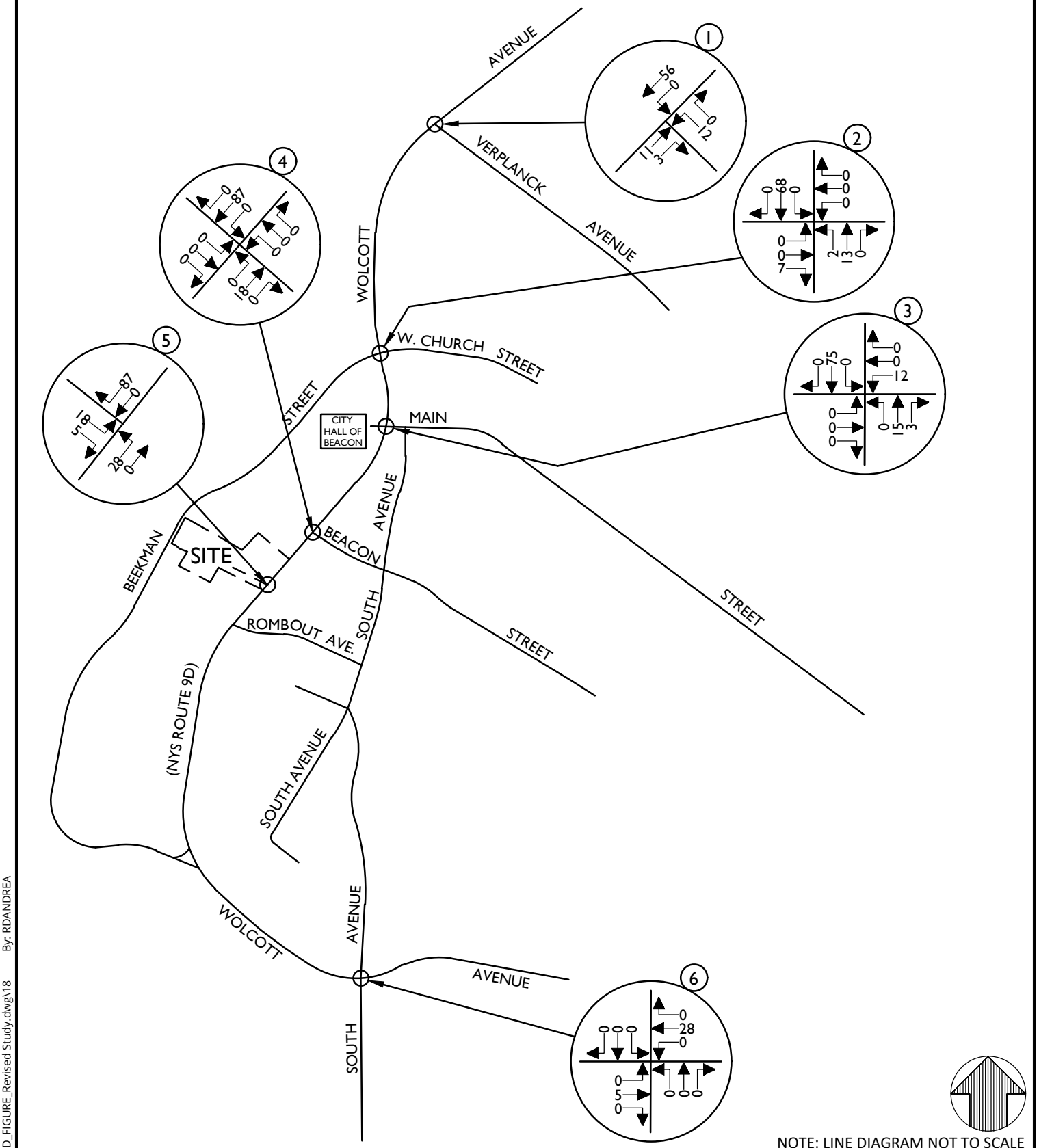
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SHEET TITLE:
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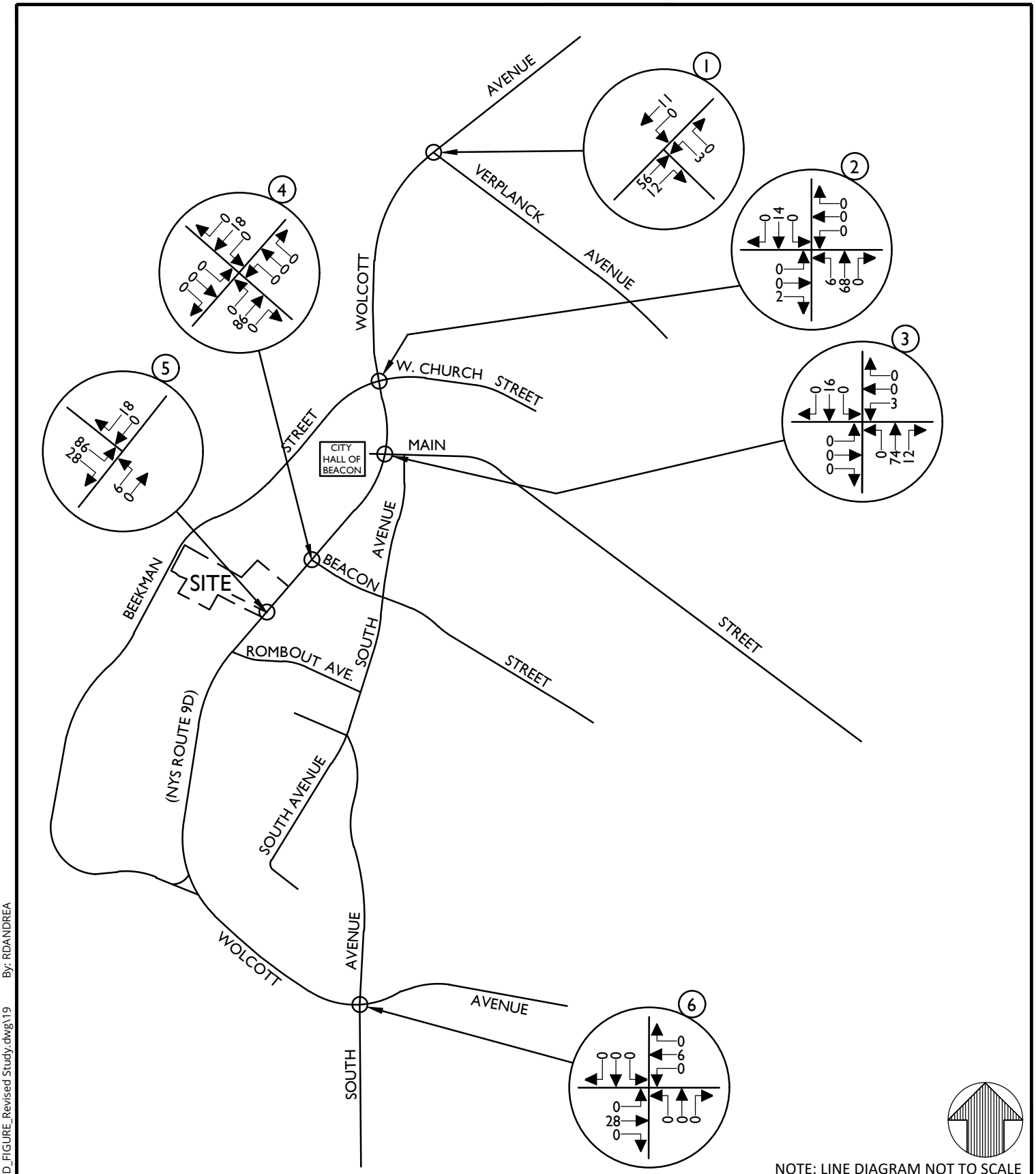
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SATURDAY PEAK HOUR

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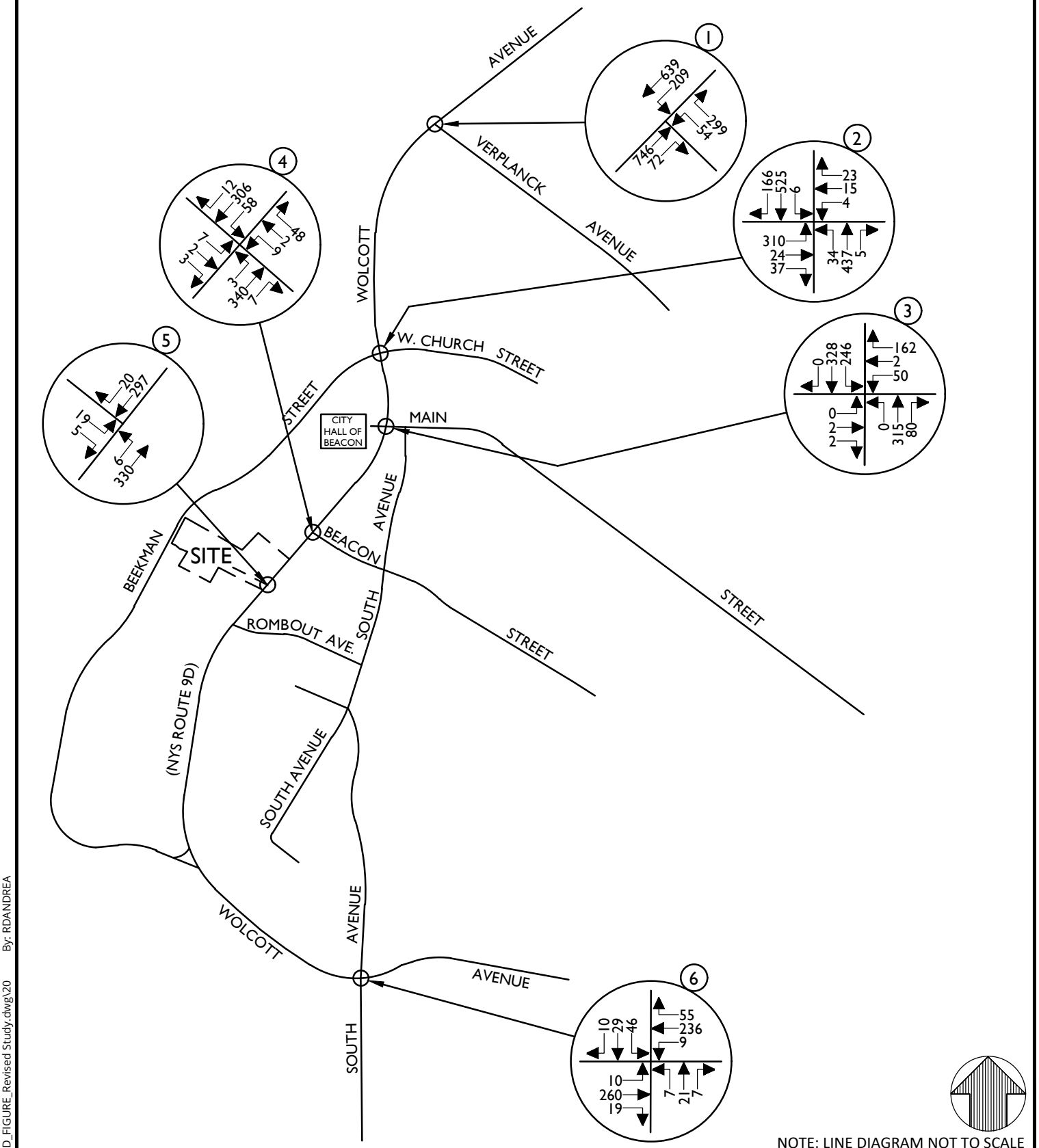
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SATURDAY PEAK HOUR

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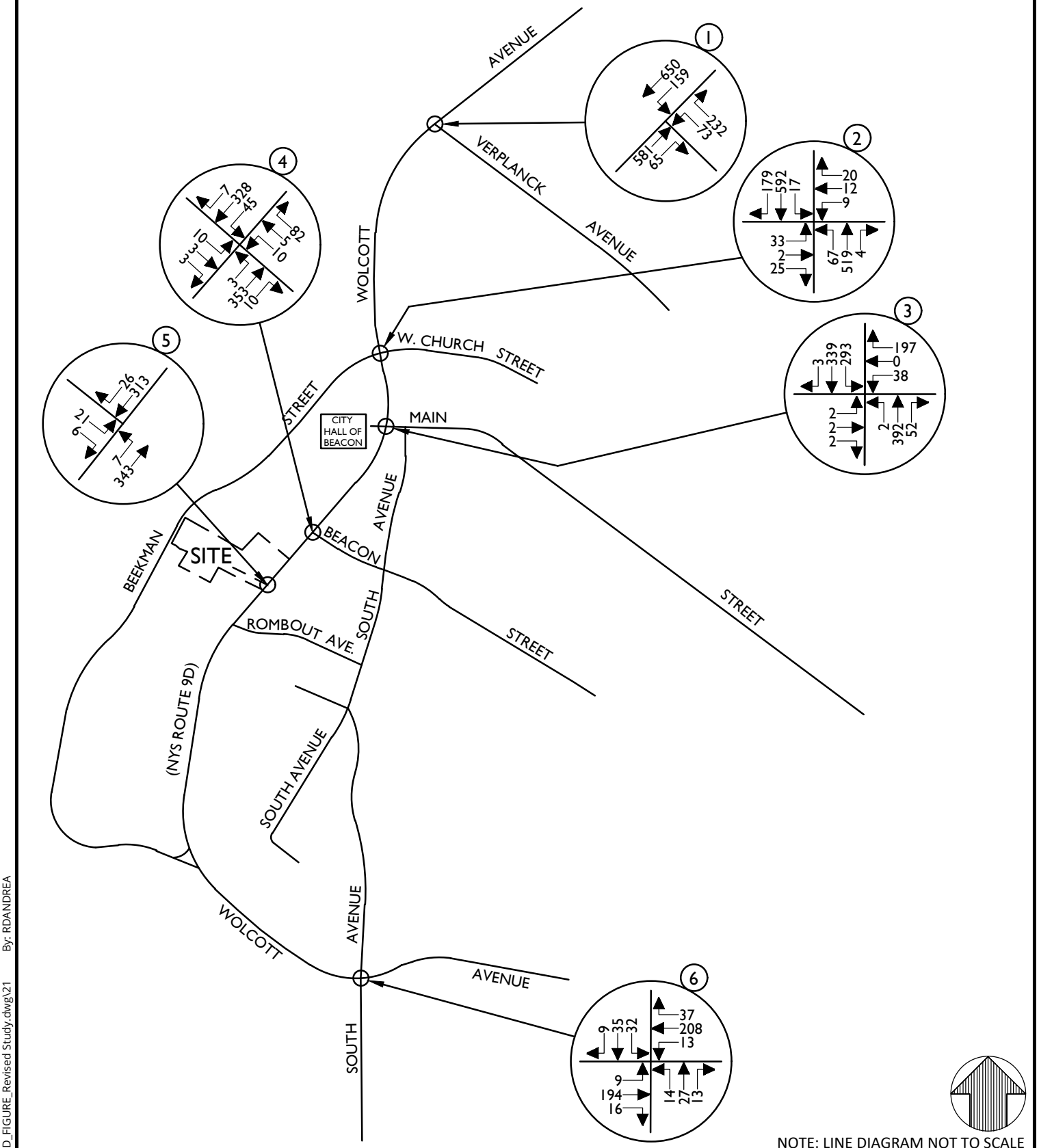
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SHEET TITLE:
TYPICAL CONDITIONS
2024 BUILD TRAFFIC VOLUMES
FRIDAY PM PEAK HOUR

SHEET NUMBER:
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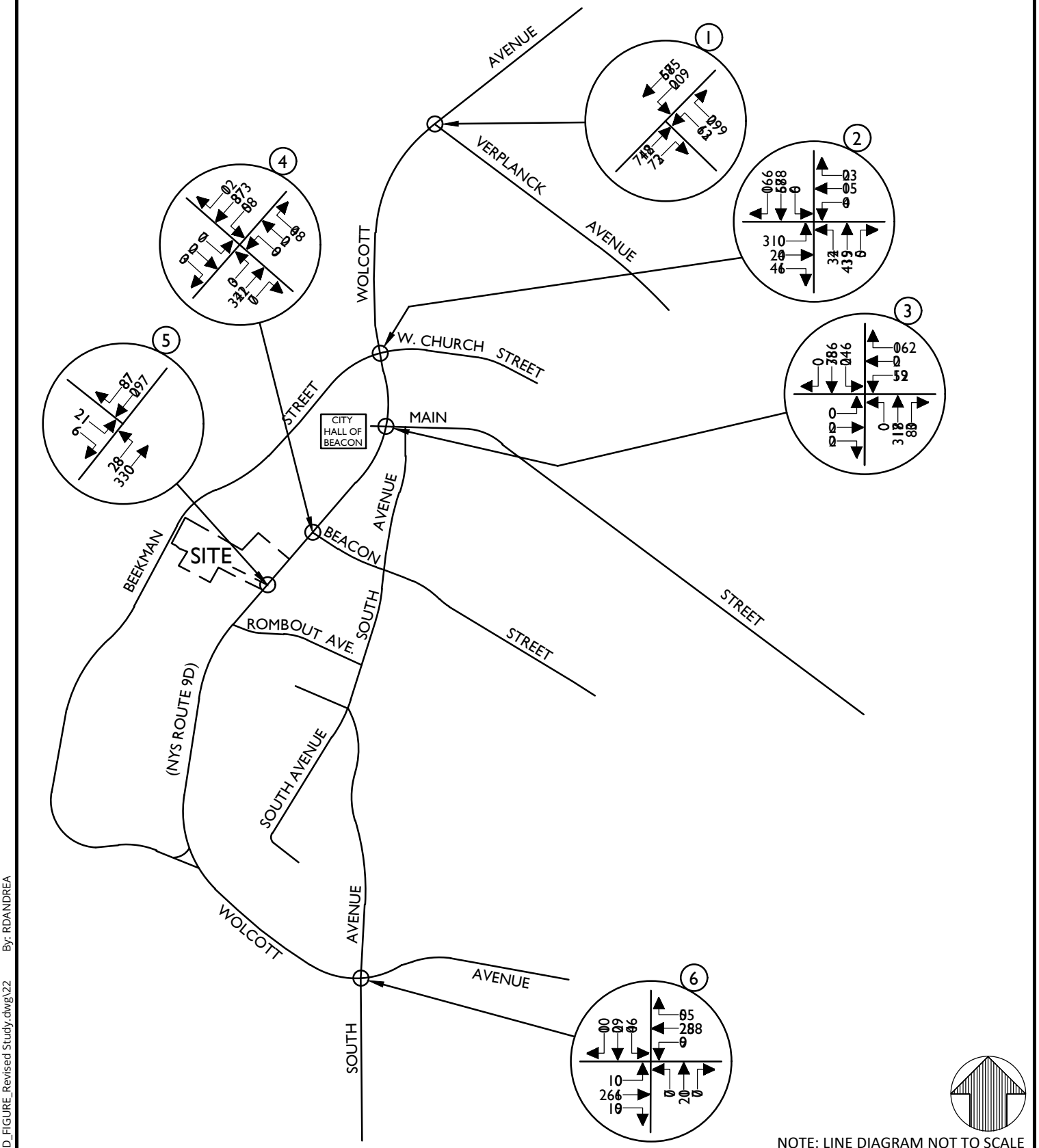
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TYPICAL CONDITIONS
2024 BUILD TRAFFIC VOLUMES
SATURDAY PEAK HOUR

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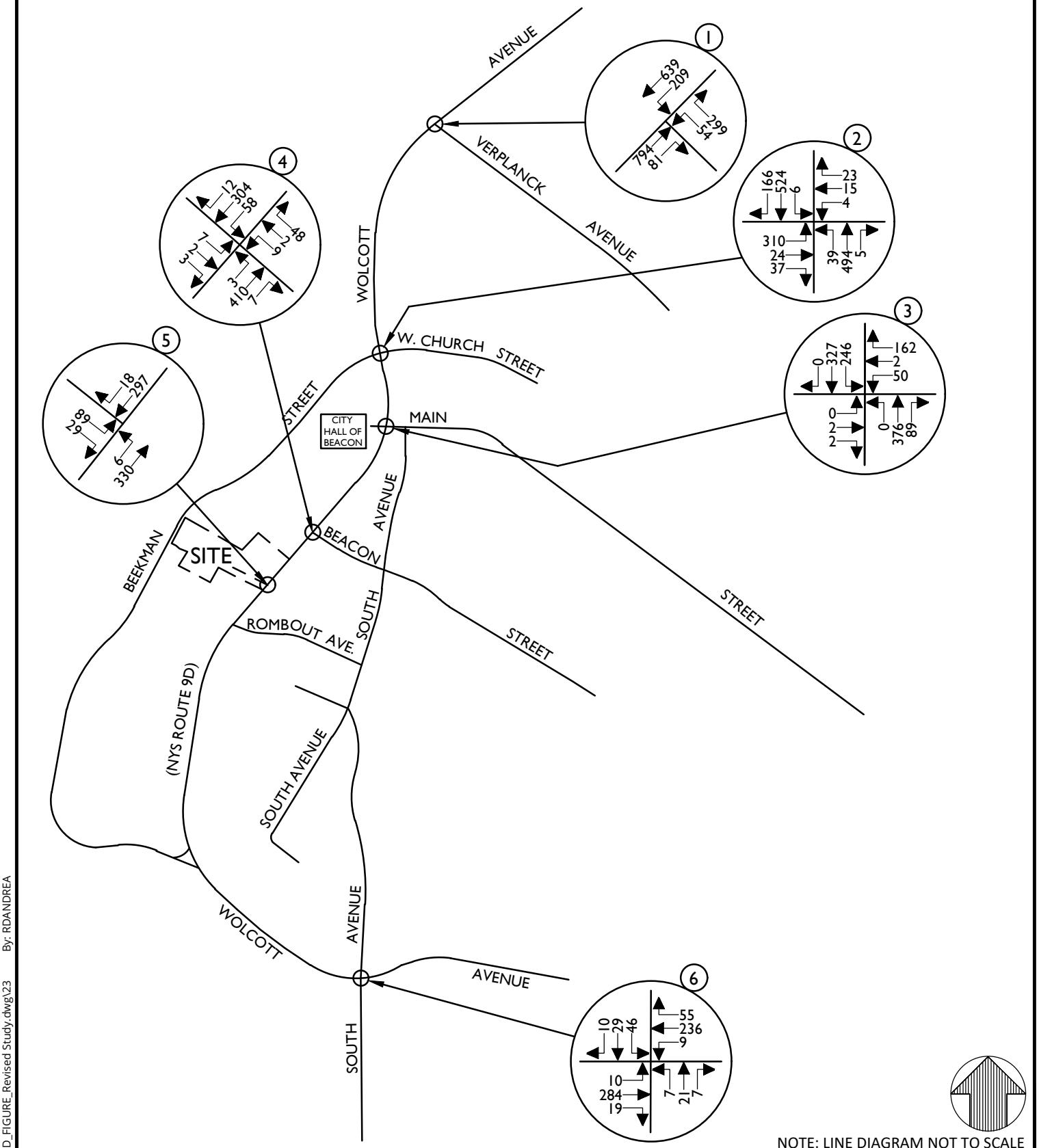
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SHEET TITLE:
EVENT ENTRY
2024 BUILD TRAFFIC VOLUMES
FRIDAY PM PEAK HOUR

SHEET NUMBER: 22

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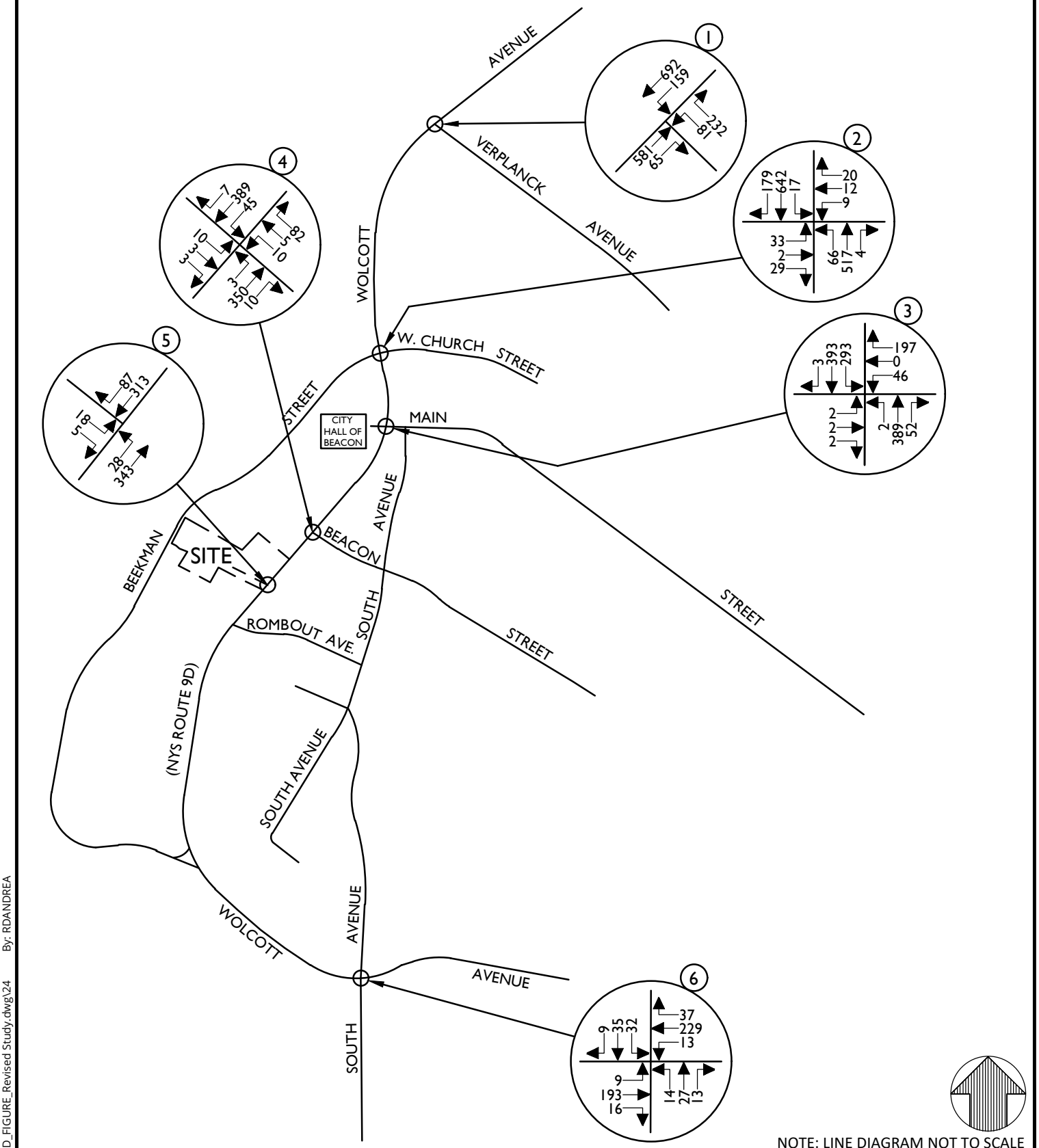
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SHEET TITLE:
EVENT EXIT
2024 BUILD TRAFFIC VOLUMES
FRIDAY PM PEAK HOUR

SHEET NUMBER: 23

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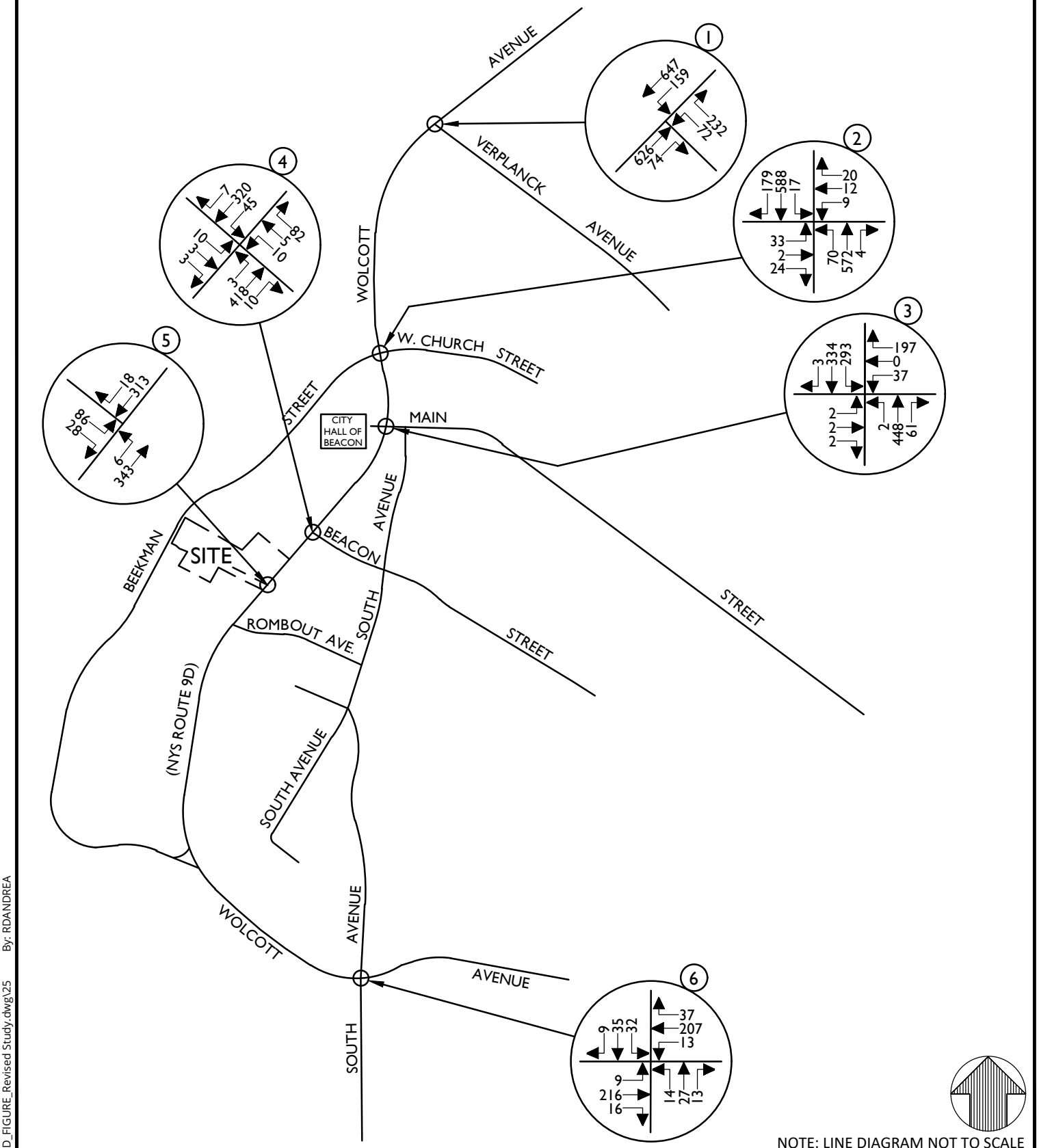
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PROJECT NUMBER:	DRAWING NAME:
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SHEET TITLE:
EVENT ENTRY
2024 BUILD TRAFFIC VOLUMES
SATURDAY PEAK HOUR

SHEET NUMBER: 24

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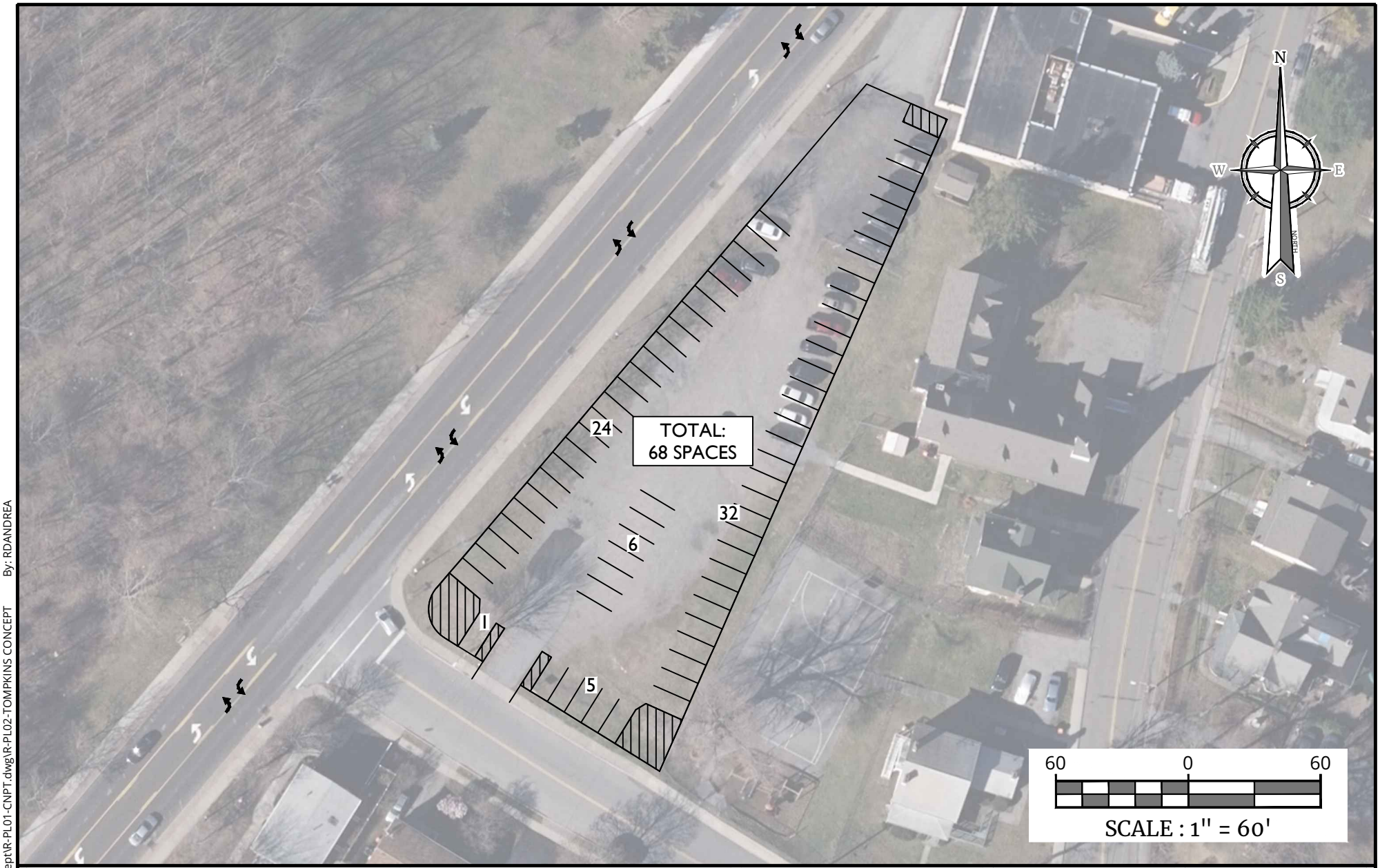
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PROJECT NUMBER:	DRAWING NAME:
21004333A	220221RGD_FIGURE_REVISED STUDY

SHEET TITLE:
EVENT EXIT
2024 BUILD TRAFFIC VOLUMES
SATURDAY PEAK HOUR

SHEET NUMBER: 25

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CONCEPTUAL PARKING LAYOUT
FOR
TOMPKINS FIRE PARKING LOT

NYS ROUTE 9D (WOLCOTT AVENUE)
AT BEACON STREET
CITY OF BEACON
DUTCHESS COUNTY
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PROJECT NUMBER:	DRAWING NAME:
21004333A	R-PL01-CNPT

SHEET TITLE:
CONCEPTUAL PARKING PLAN

SHEET NUMBER:
DRAWING CP-1

2021\21004333A\Transportation\Concept\R-PL01-CNPT.dwg\R-PL02-TOMPKINS CONCEPT By: RDANDREA

Appendix

Appendix B | Tables

Table No. 1
Hourly Trip Generation Rates (HTGR) and
Anticipated Site Generated Traffic Volumes

1113 Wolcott Avenue City of Beacon, New York	Entry			Exit			Total Trips
	HTGR[1]	Volume	New Trips[2]	HTGR1	HTGR[1]	New Trips[2]	
Typical Conditions							
Weekday Peak PM Hour							
Hotel (30 Rooms)	0.37	11	9	0.40	12	8	17
Café (50 Seats)	0.12	15	12	0.10	12	9	21
Total	-	**26**	**21**	-	**24**	**17**	**38**
Saturday Midday Peak Hour							
Hotel (30 Rooms)	0.60	18	14	0.50	15	12	26
Café (50 Seats)	0.12	15	12	0.10	12	9	21
Total	-	**33**	**26**	-	**27**	**21**	**47**
Event Conditions							
Weekday Peak Event Entry Hour							
Hotel (30 Rooms)	0.37	11	6	0.40	12	8	14
Event (350 Persons)	1.02	127	109	0.20	25	19	128
Total	-	**138**	**115**	-	**37**	**27**	**142**
Weekday Peak Event Exit Hour							
Hotel (30 Rooms)	0.37	11	6	0.40	12	8	14
Event (350 Persons)	0.20	25	18	1.02	127	110	128
Total	-	**36**	**24**	-	**139**	**118**	**142**
Saturday Peak Event Entry Hour							
Hotel (30 Rooms)	0.50	15	8	0.40	12	6	14
Event (350 Persons)	1.02	127	107	0.20	25	17	124
Total	-	**142**	**115**	-	**37**	**23**	**138**
Saturday Peak Event Exit Hour							
Hotel (30 Rooms)	0.50	15	8	0.40	12	6	14
Event (350 Persons)	0.20	25	16	1.02	127	108	124
Total	-	**40**	**24**	-	**139**	**114**	**138**

NOTES:

1) The Hotel and Café Hourly Trip Generation Rates (HTGR) are based on data published by the Institute of Transportation Engineers (ITE) as contained in the Trip Generation Handbook, 10TH Edition, 2017. ITE Land Use Code - 310 - Hotel and Land Use - 932 - High-Turnover (Sit-Down) Restaurant. The Event traffic generation is based on a 2.75 Persons per Vehicle car occupancy ratio for the maximum of 350 guests. It is assumed that all guests will enter in a one hour period prior to the event and exit in a one hour period following the event.

Table No. 2
Level of Service Summary Table
Friday PM Peak Hour

				2021 Existing			2024 No-Build			2024 Build Typical Conditions			2024 Build Event Entry Conditions			2024 Build Event Exit Conditions		
				v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay
1	**NYS Route 9D & Verplanck Avenue**	**Signalized**																
	Verplanck Avenue	WB	L	0.14	D	39.6	0.16	D	40.8	0.16	D	39.9	0.19	D	40.3	0.16	D	39.9
			R	0.53	D	36.4	0.64	D	41.1	0.63	D	39.6	0.63	D	39.6	0.63	D	39.6
		WB Approach			*D*	*36.9*		*D*	*41.0*		*D*	*39.6*		*D*	*39.7*		*D*	*39.6*
	NYS Route 9D	NB	TR	0.83	C	30.8	0.88	D	35.2	0.91	D	38.5	0.91	D	38.8	0.97	D	49.5
		NB Approach			*C*	*30.8*		*D*	*35.2*		*D*	*38.5*		*D*	*38.8*		*D*	*49.5*
	NYS Route 9D	SB	L	0.54	C	25.3	0.63	C	31.9	0.66	C	34.6	0.66	D	35.1	0.75	D	51.0
			T	0.46	A	8.8	0.51	A	9.3	0.52	A	9.6	0.56	B	10.2	0.52	A	9.6
		SB Approach			*B*	*13.0*		*B*	*14.9*		*B*	*15.8*		*B*	*16.0*		*B*	*19.8*
		Overall			**C**	**24.4**		**C**	**27.7**		**C**	**29.1**		**C**	**29.1**		**D**	**35.7**
2	**NYS Route 9D & Beekman Street/W. Church Street**	**Unsignalized**																
	Beekman Street	EB	LT	2.17	F	573.4	2.33	F	647.2	2.33	F	648.2	2.33	F	648.2	2.34	F	651.0
			R	0.08	B	17.1	0.08	B	17.2	0.09	B	17.3	0.10	B	17.4	0.09	B	17.4
		EB Approach			*F*	*520.9*		*F*	*587.9*		*F*	*585.5*		*F*	*579.1*		*F*	*588.0*
	W. Church Street	WB	LTR	0.09	B	18.4	0.12	B	18.5	0.12	B	18.5	0.12	B	18.5	0.12	B	18.6
		WB Approach			*B*	*18.4*		*B*	*18.5*		*B*	*18.5*		*B*	*18.5*		*B*	*18.6*
	NYS Route 9D	NB	L	0.16	B	17.1	0.21	B	19.0	0.23	B	19.6	0.29	C	21.1	0.26	B	19.8
			TR	0.54	B	19	0.60	C	20.2	0.61	C	20.6	0.62	C	20.7	0.69	C	22.7
		NB Approach			*B*	*18.9*		*C*	*20.1*		*C*	*20.5*		*C*	*20.7*		*C*	*22.5*
	NYS Route 9D	SB	L	0.01	B	14.4	0.02	B	14.7	0.02	B	14.8	0.02	B	14.9	0.02	B	15.6
			TR	0.83	C	31.3	0.92	D	40.6	0.94	D	44.0	1.01	F	58.9	0.94	D	44.3
		SB Approach			*C*	*31.2*		*D*	*40.4*		*D*	*43.7*		*E*	*58.5*		*D*	*44.0*
		Overall			**F**	**172.5**		**F**	**191.1**		**F**	**189.6**		**F**	**190.6**		**F**	**184.6**
	<u>With Signal Timing & Phasing Modifications</u>																	
	Beekman Street	EB	LT	-	-	-	-	-	-	1.23	F	152.5	1.29	F	178.2	1.24	F	155
			R	-	-	-	-	-	-	0.15	C	22.1	0.18	C	23.8	0.15	C	22.2
		EB Approach		-	-	-	-	-	-		*F*	*139.8*		*F*	*161.3*		*F*	*141.8*
	W. Church Street	WB	LTR	-	-	-	-	-	-	0.83	E	59.6	0.84	E	61.7	0.83	E	60.0
		WB Approach		-	-	-	-	-	-		*E*	*59.6*		*E*	*61.7*		*E*	*60.0*
	NYS Route 9D	NB	L	-	-	-	-	-	-	0.20	B	16.1	0.22	B	17.0	0.23	B	16.2
			TR	-	-	-	-	-	-	0.61	B	15.1	0.58	B	14.6	0.68	B	16.6
		NB Approach		-	-	-	-	-	-		*B*	*15.2*		*B*	*14.8*		*B*	*16.6*
	NYS Route 9D	SB	L	-	-	-	-	-	-	0.02	B	12.2	0.02	B	11.8	0.02	B	12.8
			TR	-	-	-	-	-	-	0.93	C	33.4	0.95	D	37.8	0.93	C	33.6
		SB Approach		-	-	-	-	-	-		*C*	*33.2*		*D*	*37.6*		*C*	*33.5*
		Overall		**-**	**-**	**-**	**-**	**-**	**-**		**E**	**58.5**		**E**	**65.7**		**E**	**58.0**
3	**NYS Route 9D & Main Street/City Hall**	**Signalized**																
	City Hall	EB	LTR	0.02	C	23.7	0.03	C	23.7	0.03	C	23.7	0.03	C	23.7	0.03	C	23.7
		EB Approach			*C*	*23.7*		*C*	*23.7*		*C*	*23.7*		*C*	*23.7*		*C*	*23.7*
	Main Street	WB	LT	0.13	C	24.5	0.18	C	24.8	0.19	C	24.9	0.23	C	25.2	0.19	C	24.9
			R	0.56	C	24.2	0.59	C	24.5	0.59	C	24.5	0.59	C	24.5	0.59	C	24.5
		WB Approach			*C*	*24.2*		*C*	*24.6*		*C*	*24.6*		*C*	*24.7*		*C*	*24.6*
	NYS Route 9D	NB	L	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0
			TR	0.41	A	8.8	0.47	A	9.5	0.49	A	9.8	0.49	A	9.8	0.58	B	11.0
		NB Approach			*A*	*8.8*		*A*	*9.5*		*A*	*9.8*		*A*	*9.8*		*B*	*11.0*
	NYS Route 9D	SB	L	0.38	B	10.8	0.47	B	13.0	0.48	B	13.7	0.49	B	13.8	0.54	B	16.8
			TR	0.30	A	7.7	0.34	A	8.1	0.36	A	8.2	0.42	A	8.9	0.35	A	8.2
		SB Approach			*A*	*9.0*		*B*	*10.2*		*B*	*10.6*		*B*	*10.8*		*B*	*11.9*
		Overall			**B**	**11.6**		**B**	**12.5**		**B**	**12.7**		**B**	**12.8**		**B**	**13.6**

Table No. 2
Level of Service Summary Table
Friday PM Peak Hour

				2021 Existing			2024 No-Build			2024 Build Typical Conditions			2024 Build Event Entry Conditions			2024 Build Event Exit Conditions		
				v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay
4	**NYS Route 9D & Beacon Street/West End Lofts**	**Unsignalized**																
	West End Lofts	EB	LTR	0.04	C	17.9	0.06	C	20.4	0.07	C	21.9	0.07	C	24.0	0.08	D	25.0
	Beacon Street	WB	LTR	0.15	B	12.5	0.18	B	13.8	0.19	B	14.3	0.2	B	14.8	0.21	C	15.9
	NYS Route 9D	NB	LTR	0.00	A	7.8	0.00	A	7.9	0.00	A	8.0	0.00	A	8.1	0.00	A	8.0
	NYS Route 9D	SB	LTR	0.52	A	8.3	0.06	A	8.5	0.06	A	8.6	0.06	A	8.6	0.07	A	9.0
5	**NYS Route 9D & Site Access**	**Unsignalized**																
		EB	LR	-	-	-	-	-	-	0.05	B	12.0	0.06	B	12.5	0.24	B	13.7
		NB	LT	-	-	-	-	-	-	0.01	A	8.0	0.03	A	8.2	0.01	A	8.0
6	**NYS Route 9D & South Avenue**	**Signalized**																
	NYS Route 9D	EB	LTR	0.33	C	23.4	0.37	C	24.0	0.37	C	24.1	0.37	C	24.1	0.4	C	24.7
	NYS Route 9D	WB	LTR	0.37	C	24.1	0.41	C	24.8	0.42	C	24.9	0.45	C	25.6	0.42	C	25.0
	South Avenue	NB	LTR	0.03	B	19.1	0.05	B	19.4	0.05	B	19.4	0.05	B	19.4	0.05	B	19.4
	South Avenue	SB	LTR	0.11	C	20.1	0.15	C	20.6	0.15	C	20.6	0.15	C	20.6	0.15	C	20.6
		Overall			**C**	**23.2**		**C**	**23.7**		**C**	**23.8**		**C**	**24.1**		**C**	**24.0**

NOTES:

1) THE ABOVE REPRESENTS THE LEVEL OF SERVICE AND VEHICLE DELAY IN SECONDS, C [16.2], FOR EACH KEY APPROACH OF THE UNSIGNALIZED INTERSECTIONS AS WELL AS FOR EACH APPROACH AND THE OVERALL INTERSECTION FOR THE SIGNALIZED INTERSECTIONS. SEE APPENDIX "C" FOR A DESCRIPTION OF THE LEVELS OF SERVICE.

Table No. 2
Level of Service Summary Table
Saturday Peak Hour

				2021 Existing			2024 No-Build			2024 Build Typical Conditions			2024 Build Event Entry Conditions			2024 Build Event Exit Conditions		
				v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay
1	**NYS Route 9D & Verplanck Avenue**		**Signalized**															
	Verplanck Avenue	WB	L	0.20	D	40.4	0.21	D	40.6	0.22	D	40.8	0.24	D	41.2	0.22	D	40.8
			R	0.41	C	33.3	0.49	D	35.2	0.49	D	35.2	0.49	D	35.2	0.49	D	35.2
			WB Approach		*D*	*35.1*		*D*	*36.4*		*D*	*36.5*		*D*	*36.7*		*D*	*36.5*
	NYS Route 9D	NB	TR	0.64	C	22.6	0.70	C	24.6	0.72	C	25.2	0.72	C	25.2	0.78	C	27.9
			NB Approach		*C*	*22.6*		*C*	*24.6*		*C*	*25.2*		*C*	*25.2*		*C*	*27.9*
	NYS Route 9D	SB	L	0.31	B	13.3	0.36	B	15.7	0.37	B	16.4	0.37	B	16.4	0.40	B	19.3
			T	0.47	A	8.8	0.52	A	9.6	0.53	A	9.7	0.57	B	10.3	0.53	A	9.7
			SB Approach		*A*	*9.7*		*B*	*10.8*		*B*	*11.0*		*B*	*11.4*		*B*	*11.6*
			Overall		**B**	**18.7**		**C**	**20.3**		**C**	**20.7**		**C**	**20.7**		**C**	**22.1**
2	**NYS Route 9D & Beekman Street/W. Church Street**		**Unsignalized**															
	Beekman Street	EB	LT	0.17	C	25.0	0.19	C	25.1	0.18	C	25.0	0.19	C	25.1	0.19	C	25.1
			R	0.22	C	25.4	0.24	C	25.5	0.27	C	25.8	0.30	C	26.0	0.26	C	25.7
			EB Approach		*C*	*25.2*		*C*	*25.2*		*C*	*25.3*		*C*	*25.5*		*C*	*25.4*
	W. Church Street	WB	LTR	0.17	C	24.9	0.24	C	25.3	0.24	C	25.3	0.24	C	25.3	0.24	C	25.4
			WB Approach		*C*	*24.9*		*C*	*25.3*		*C*	*25.3*		*C*	*25.3*		*C*	*25.4*
	NYS Route 9D	NB	L	0.14	A	5.9	0.17	A	7.1	0.18	A	7.4	0.20	A	8.4	0.19	A	7.4
			TR	0.40	A	6.0	0.44	A	6.5	0.45	A	6.6	0.45	A	6.6	0.50	A	7.1
			NB Approach		*A*	*6.0*		*A*	*6.5*		*A*	*6.7*		*A*	*6.8*		*A*	*7.1*
	NYS Route 9D	SB	L	0.03	A	4.3	0.03	A	4.5	0.03	A	4.6	0.03	A	4.6	0.03	A	4.8
			TR	0.66	B	10.6	0.74	B	12.6	0.76	B	13.2	0.80	B	15.1	0.75	B	13.2
			SB Approach		*B*	*10.4*		*B*	*12.4*		*B*	*13.1*		*B*	*14.9*		*B*	*13.0*
			Overall		**A**	**9.8**		**B**	**11.2**		**B**	**11.6**		**B**	**12.7**		**B**	**11.6**
3	**NYS Route 9D & Main Street/City Hall**		**Signalized**															
	City Hall	EB	LTR	0.01	C	23.6	0.03	C	23.7	0.03	C	23.7	0.03	C	23.7	0.03	C	23.7
			EB Approach		*C*	*23.6*		*C*	*23.7*		*C*	*23.7*		*C*	*23.7*		*C*	*23.7*
	Main Street	WB	LT	0.09	C	24.1	0.13	C	24.3	0.14	C	24.4	0.17	C	24.6	0.14	C	24.4
			R	0.66	C	25.5	0.70	C	26.2	0.70	C	26.1	0.70	C	26.1	0.70	C	26.1
			WB Approach		*C*	*25.4*		*C*	*25.9*		*C*	*25.9*		*C*	*25.9*		*C*	*25.9*
	NYS Route 9D	NB	L	0.00	A	6.4	0.00	A	6.9	0.00	A	7.1	0.00	A	7.8	0.00	A	7.1
			TR	0.40	A	8.7	0.46	A	9.4	0.49	A	9.7	0.48	A	9.7	0.56	B	10.7
			NB Approach		*A*	*8.7*		*A*	*9.4*		*A*	*9.7*		*A*	*9.7*		*B*	*10.7*
	NYS Route 9D	SB	L	0.44	B	11.4	0.53	B	13.9	0.55	B	14.7	0.54	B	14.6	0.60	B	17.5
			TR	0.29	A	7.7	0.33	A	8.1	0.35	A	8.3	0.41	A	8.8	0.35	A	8.2
			SB Approach		*A*	*9.5*		*B*	*10.9*		*B*	*11.2*		*B*	*11.3*		*B*	*12.5*
			Overall		**B**	**12.2**		**B**	**13.2**		**B**	**13.4**		**B**	**13.4**		**B**	**14.2**
4	**NYS Route 9D & Beacon Street/West End Lofts**		**Unsignalized**															
	West End Lofts	EB	LTR	0.07	C	18.4	0.11	C	21.5	0.12	C	23.3	0.13	D	25.5	0.13	D	25.7
	Beacon Street	WB	LTR	0.17	B	12.1	0.21	B	13.3	0.21	B	13.7	0.22	B	14.0	0.23	B	14.8
	NYS Route 9D	NB	LTR	0.00	A	7.8	0.00	A	7.9	0.00	A	8.0	0.00	A	8.2	0.00	A	8.0
	NYS Route 9D	SB	LTR	0.04	A	8.1	0.04	A	8.3	0.04	A	8.3	0.04	A	8.3	0.05	A	8.6

Table No. 2
Level of Service Summary Table
Saturday Peak Hour

				2021 Existing			2024 No-Build			2024 Build Typical Conditions			2024 Build Event Entry Conditions			2024 Build Event Exit Conditions		
				v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay
5	NYS Route 9D &	Unsignalized																
	Site Access	EB	LR	-	-	-	-	-	-	0.06	B	12.3	0.05	B	12.8	0.23	B	13.8
		NB	LT	-	-	-	-	-	-	0.01	A	8.1	0.03	A	8.3	0.01	A	8.0
6	NYS Route 9D &	Signalized																
	South Avenue																	
	NYS Route 9D	EB	LTR	0.27	C	22.4	0.30	C	22.9	0.31	C	23.1	0.31	C	23.0	0.34	C	23.6
	NYS Route 9D	WB	LTR	0.31	C	23.0	0.34	C	23.5	0.35	C	23.7	0.38	C	24.2	0.35	C	23.7
	South Avenue	NB	LTR	0.08	B	19.7	0.12	C	20.2	0.12	C	20.2	0.12	C	20.2	0.12	C	20.2
	South Avenue	SB	LTR	0.08	B	19.7	0.13	C	20.3	0.13	C	20.3	0.13	C	20.3	0.13	C	20.3
		Overall			**C**	**22.1**		**C**	**22.5**		**C**	**22.6**		**C**	**22.8**		**C**	**22.8**

NOTES:

1) THE ABOVE REPRESENTS THE LEVEL OF SERVICE AND VEHICLE DELAY IN SECONDS, C [16.2], FOR EACH KEY APPROACH OF THE UNSIGNALIZED INTERSECTIONS AS WELL AS FOR EACH APPROACH AND THE OVERALL INTERSECTION FOR THE SIGNALIZED INTERSECTIONS. SEE APPENDIX "C" FOR A DESCRIPTION OF THE LEVELS OF SERVICE.

Colliers Engineering & Design

Table No. 3
Sight Distance Summary Table
Wolcott Avenue (NYS Route 9D) at Site Access

Roadway Design Speed 38 MPH		Available Sight Distance (ft.)		AASHTO Sight Distances	
		Existing	Proposed	Stopping Sight Distance (ft.)	Intersection Sight Distance (ft.)
Main Access Driveway					
Left Turn From Minor Road (Site Access)	Looking Left	435	435	278	419
	Looking Right	545	545	278	419
Left Turn From Major Road (Wolcott Avenue)	Left Turn Entry	450	450	278	307
	Rear End	500	500	278	-
North Exit Driveway					
Left Turn From Minor Road (Site Access)	Looking Left	500	500	278	419
	Looking Right	575	575	278	419
Left Turn From Major Road (Wolcott Avenue)	Left Turn Entry	-	-	-	-
	Rear End	-	-	-	-

Notes:

1) AASHTO Sight Distances are based on a 38 MPH operating speed along the roadway in the vicinity of the Site Access location
2) Available Sight Distances shown are for existing conditions and for future conditions after completion any improvements such as Vegetative Pruning/Clearing .

Table No. 4
Area Parking Observations Summary

Time of Day	Observed Available Parking Spaces						
	Tompkins Lot	Municipal Plaza	Beekman St. On-Street	Cross Lot	Cliff Lot	Beacon Center Lot	Beacon Metro North Train Station
Total Spaces	68	76	70±	18	19	92	---
Friday September 24, 2021							
1:00 PM	Not Observed This Day	Not Observed This Day	65	3	1	8	Not Specifically Counted
2:00 PM			65	3	1	7	
3:00 PM			65	3	-	6	
4:00 PM			65	2	2	10	
5:00 PM			66	-	1	12	
6:00 PM			67	1	-	15	
7:00 PM			70	2	-	18	
8:00 PM			70	5	3	22	
Saturday September 25, 2021							
1:00 PM	Not Observed This Day	Not Observed This Day	70	1	3	25	Not Specifically Counted
2:00 PM			70	-	3	20	
3:00 PM			70	1	2	21	
4:00 PM			70	1	1	19	
5:00 PM			70	-	-	16	
6:00 PM			70	-	-	18	
7:00 PM			70	-	-	20	
8:00 PM			70	1	1	19	
Friday November 5, 2021							
1:00 PM	65	Not Specifically Counted	64	2	2	5	Not Specifically Counted
2:00 PM	65		64	2	3	8	
3:00 PM	65		64	1	2	9	
4:00 PM	66		65	-	1	7	
5:00 PM	68	55	65	-	1	10	
6:00 PM	68	73	67	1	1	13	
7:00 PM	66	76	69	-	2	19	
8:00 PM	66	76	70	3	2	21	
Saturday November 6, 2021							
1:00 PM	65	76	70	2	3	22	Not Specifically Counted
2:00 PM	65	76	70	1	1	20	
3:00 PM	65	76	70	1	-	23	
4:00 PM	66	76	70	-	-	25	
5:00 PM	65	76	70	-	-	19	
6:00 PM	66	76	70	-	2	18	
7:00 PM	66	76	70	-	1	17	
8:00 PM	67	76	70	1	1	19	
Friday January 21, 2021							
1:00 PM	-	20	-	-	-	-	Not Specifically Counted
2:00 PM	-	23	-	-	-	-	
3:00 PM	-	21	-	-	-	-	
4:00 PM	-	26	-	-	-	-	
5:00 PM	-	36	-	-	-	-	

Appendix

Appendix C | Level of Service Standards

Level of Service Standards

Level of Service for Signalized Intersections

Level of Service (LOS) can be characterized for the entire intersection, each intersection approach, and each lane group. Control delay alone is used to characterize LOS for the entire intersection or an approach. Control delay and volume-to-capacity (v/c) ratio are used to characterize LOS for a lane group. Delay quantifies the increase in travel time due to traffic signal control. It is also a measure of driver discomfort and fuel consumption. The volume-to-capacity ratio quantifies the degree to which a phase's capacity is utilized by a lane group.

- **LOS A** describes operations with a control delay of 10 s/veh or less 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 it is due to favorable progression, most vehicles arrive during the green indication and travel through the intersection without stopping.
- **LOS 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.
- **LOS 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.
- **LOS 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.
- **LOS 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.
- **LOS 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.

A lane group can incur a delay less than 80 s/veh when the volume-to-capacity ratio exceeds 1.0. This condition typically occurs when the cycle length is short, the signal progression is favorable, or both. As a result, both the delay and volume-to-capacity ratio are considered when lane group LOS is established. A ratio of 1.0 or more indicates that cycle capacity is fully utilized and represents failure from a capacity perspective (just as delay in excess of 80 s/veh represents failure from a delay perspective).

The Level of Service Criteria for signalized intersections are given in Exhibit 19-8 from the *Highway Capacity Manual, 6th Edition* published by the Transportation Research Board.

Exhibit 19-8 LOS by Volume-to-Capacity Ratio

Control Delay (s/veh)	v/c ≤ 1.0	v/c ≥ 1.0
≤10	A	F
>10-20	B	F
>20-35	C	F
>35-55	D	F
>55-80	E	F
>80	F	F

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

Level of Service Criteria
For Two-Way Stop-Controlled (TWSC) Unsignalized Intersections

Level of Service (LOS) for a two-way stop-controlled (TWSC) intersection is determined by the computed or measured control delay. For motor vehicles, LOS is determined for each minor-street movement (or shared movement) as well as major-street left turns. LOS is not defined for the intersection as a whole or for major-street approaches.

The Level of Service Criteria for TWSC unsignalized intersections are given in Exhibit 20-2 from the Highway Capacity Manual, 6th Edition published by the Transportation Research Board.

Exhibit 20-2 LOS by Volume-to-Capacity Ratio

Control Delay (s/veh)	v/c ≤ 1.0	v/c ≥ 1.0
0-10	A	F
>10-15	B	F
>15-25	C	F
>25-35	D	F
>35-50	E	F
>50	F	F

The 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.

As Exhibit 20-2 notes, LOS F is assigned to the movement if the volume-to-capacity ratio for the movement exceeds 1.0, regardless of the control delay.

The Level of Service Criteria for unsignalized intersections are somewhat different from the criteria for signalized intersections.

Level of Service Criteria
For All-Way Stop-Controlled (AWSC) Unsignalized Intersections

The Levels of Service (LOS) for all-way stop-controlled (AWSC) intersections are given in Exhibit 21-8. As the exhibit notes, LOS F is assigned if the volume-to-capacity (v/c) ratio of a lane exceeds 1.0, regardless of the control delay. For assessment of LOS at the approach and intersection levels, LOS is based solely on control delay.

The Level of Service Criteria for AWSC unsignalized intersections are given in Exhibit 21-8 from the *Highway Capacity Manual, 6th Edition* published by the Transportation Research Board.

Exhibit 21-8 LOS by Volume-to-Capacity Ratio

Control Delay (s/veh)	v/c ≤ 1.0	v/c ≥ 1.0
0-10	A	F
>10-15	B	F
>15-25	C	F
>25-35	D	F
>35-50	E	F
>50	F	F

For approaches and intersection wide assessment, LOS is defined solely by control delay.

Appendix

Appendix D | Capacity Analysis



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	48	253	680	65	197	565
Future Volume (vph)	48	253	680	65	197	565
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	5%		3%			-1%
Storage Length (ft)	85	0		0	340	
Storage Lanes	1	1		0	1	
Taper Length (ft)	86				86	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.988			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1725	1544	1813	0	1778	1872
Flt Permitted	0.950				0.129	
Satd. Flow (perm)	1725	1544	1813	0	241	1872
Right Turn on Red		No		No		
Satd. Flow (RTOR)						
Link Speed (mph)	30		30			30
Link Distance (ft)	427		462			529
Travel Time (s)	9.7		10.5			12.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	52	275	739	71	214	614
Shared Lane Traffic (%)						
Lane Group Flow (vph)	52	275	810	0	214	614
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			
Headway Factor	1.03	1.03	1.02	1.02	0.99	0.99
Turning Speed (mph)	15	9		9	15	
Turn Type	Prot	pm+ov	NA		pm+pt	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8			6	
Minimum Split (s)	21.0	9.0	15.0		9.0	15.0
Total Split (s)	30.0	20.0	70.0		20.0	90.0
Total Split (%)	25.0%	16.7%	58.3%		16.7%	75.0%
Maximum Green (s)	25.0	15.0	65.0		15.0	85.0
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0		5.0	5.0
Lead/Lag		Lead	Lag		Lead	
Lead-Lag Optimize?		Yes	Yes		Yes	
Walk Time (s)	5.0		5.0			
Flash Dont Walk (s)	11.0		11.0			
Pedestrian Calls (#/hr)	0		0			
v/c Ratio	0.14	0.47	0.82		0.59	0.46
Control Delay	40.2	31.9	31.6		16.7	9.0

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	40.2	31.9	31.6		16.7	9.0
Queue Length 50th (ft)	33	160	499		49	184
Queue Length 95th (ft)	69	243	694		117	254
Internal Link Dist (ft)	347		382			449
Turn Bay Length (ft)	85				340	
Base Capacity (vph)	359	579	982		362	1326
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.14	0.47	0.82		0.59	0.46

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NET and 6:SWTL, Start of Green	
Natural Cycle: 70	
Control Type: Pretimed	

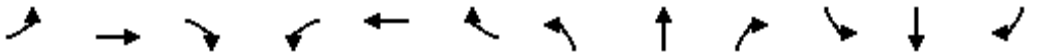
Splits and Phases: 1: NYS Route 9D & Verplanck Avenue



Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (veh/h)	48	253	680	65	197	565
Future Volume (veh/h)	48	253	680	65	197	565
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1816	1816	1835	1872	1872	1872
Adj Flow Rate, veh/h	52	275	739	71	214	614
Adj No. of Lanes	1	1	1	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	360	515	893	86	397	1326
Arrive On Green	0.21	0.21	0.54	0.54	0.13	0.71
Sat Flow, veh/h	1730	1544	1648	158	1783	1872
Grp Volume(v), veh/h	52	275	0	810	214	614
Grp Sat Flow(s),veh/h/ln	1730	1544	0	1807	1783	1872
Q Serve(g_s), s	2.9	17.3	0.0	44.7	5.2	17.1
Cycle Q Clear(g_c), s	2.9	17.3	0.0	44.7	5.2	17.1
Prop In Lane	1.00	1.00		0.09	1.00	
Lane Grp Cap(c), veh/h	360	515	0	979	397	1326
V/C Ratio(X)	0.14	0.53	0.00	0.83	0.54	0.46
Avail Cap(c_a), veh/h	360	515	0	979	397	1326
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.8	32.4	0.0	22.8	20.1	7.6
Incr Delay (d2), s/veh	0.8	3.9	0.0	8.0	5.2	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	8.0	0.0	24.2	4.6	9.1
LnGrp Delay(d),s/veh	39.6	36.4	0.0	30.8	25.3	8.8
LnGrp LOS	D	D		C	C	A
Approach Vol, veh/h	327		810			828
Approach Delay, s/veh	36.9		30.8			13.0
Approach LOS	D		C			B

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	20.0	70.0				90.0		30.0
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	15.0	65.0				85.0		25.0
Max Q Clear Time (g_c+I1), s	0.0	0.0				0.0		0.0
Green Ext Time (p_c), s	0.0	0.0				0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	24.4
HCM 2010 LOS	C



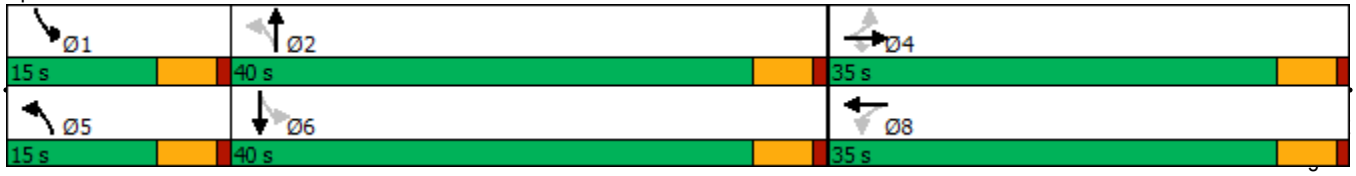
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	292	22	33	3	14	13	30	385	4	5	453	156
Future Volume (vph)	292	22	33	3	14	13	30	385	4	5	453	156
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		2%			-10%			-6%			3%	
Storage Length (ft)	0		95	0		0	75		0	75		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.98		0.98			1.00			0.99	
Frt			0.850		0.941			0.998			0.962	
Flt Protected		0.956			0.995		0.950			0.950		
Satd. Flow (prot)	0	1761	1599	0	1764	0	1805	1915	0	1778	1770	0
Flt Permitted		0.718			0.969		0.174			0.388		
Satd. Flow (perm)	0	1322	1562	0	1717	0	331	1915	0	726	1770	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			85		14			1			23	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		584			328			388			335	
Travel Time (s)		13.3			7.5			8.8			7.6	
Confl. Peds. (#/hr)			2			13			1			6
Confl. Bikes (#/hr)						1			1			1
Peak Hour Factor	0.71	0.71	0.71	0.92	0.92	0.92	0.84	0.84	0.84	0.98	0.98	0.98
Heavy Vehicles (%)	2%	4%	0%	0%	7%	0%	3%	2%	0%	0%	1%	1%
Adj. Flow (vph)	411	31	46	3	15	14	36	458	5	5	462	159
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	442	46	0	32	0	36	463	0	5	621	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.01	1.01	1.01	0.94	0.94	0.94	0.96	0.96	0.96	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2		2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83	83	20	83		83	6		83	6	
Trailing Detector (ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Position(ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Size(ft)	20	43	43	20	43		43	6		43	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)		40	40		40		40			40		
Detector 2 Size(ft)		43	43		43		43			43		
Detector 2 Type		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)		0.0	0.0		0.0		0.0			0.0		
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	16.0		4.0	16.0	
Minimum Split (s)	20.0	20.0	20.0	21.0	21.0		9.0	21.0		9.0	21.0	
Total Split (s)	35.0	35.0	35.0	35.0	35.0		15.0	40.0		15.0	40.0	
Total Split (%)	38.9%	38.9%	38.9%	38.9%	38.9%		16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	30.0	30.0	30.0	30.0	30.0		10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		None	Max		None	Max	
Walk Time (s)				5.0	5.0							
Flash Dont Walk (s)				11.0	11.0							
Pedestrian Calls (#/hr)				0	0							
v/c Ratio		0.91	0.07		0.05		0.13	0.50		0.01	0.81	
Control Delay		52.8	1.6		13.6		10.5	17.2		9.6	31.2	
Queue Delay		0.0	0.0		0.0		0.0	2.5		0.0	0.0	
Total Delay		52.8	1.6		13.6		10.5	19.8		9.6	31.2	
Queue Length 50th (ft)		233	0		6		9	144		1	290	
Queue Length 95th (ft)		#284	0		26		21	260		6	#500	
Internal Link Dist (ft)		504			248			308			255	
Turn Bay Length (ft)			95				75			75		
Base Capacity (vph)		484	626		638		348	931		489	770	
Starvation Cap Reductn		0	0		0		0	336		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		0.91	0.07		0.05		0.10	0.78		0.01	0.81	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 82.3
Natural Cycle: 80
Control Type: Semi Act-Uncoord
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: NYS Route 9D & Beekman Street/W. Church Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	292	22	33	3	14	13	30	385	4	5	453	156
Future Volume (veh/h)	292	22	33	3	14	13	30	385	4	5	453	156
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.96	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1842	1881	1995	1932	1995	1900	1919	1957	1872	1853	1872
Adj Flow Rate, veh/h	411	31	46	3	15	14	36	458	5	5	462	159
Adj No. of Lanes	0	1	1	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.71	0.71	0.71	0.92	0.92	0.92	0.84	0.84	0.84	0.98	0.98	0.98
Percent Heavy Veh, %	2	4	0	0	7	0	3	2	0	0	1	1
Cap, veh/h	196	8	582	48	180	140	228	848	9	349	557	192
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.03	0.45	0.45	0.01	0.43	0.43
Sat Flow, veh/h	305	23	1594	0	492	383	1810	1894	21	1782	1308	450
Grp Volume(v), veh/h	442	0	46	32	0	0	36	0	463	5	0	621
Grp Sat Flow(s),veh/h/ln	328	0	1594	875	0	0	1810	0	1915	1782	0	1758
Q Serve(g_s), s	0.0	0.0	1.6	0.0	0.0	0.0	0.9	0.0	14.5	0.1	0.0	25.8
Cycle Q Clear(g_c), s	30.0	0.0	1.6	30.0	0.0	0.0	0.9	0.0	14.5	0.1	0.0	25.8
Prop In Lane	0.93		1.00	0.09		0.44	1.00		0.01	1.00		0.26
Lane Grp Cap(c), veh/h	204	0	582	367	0	0	228	0	857	349	0	748
V/C Ratio(X)	2.17	0.00	0.08	0.09	0.00	0.00	0.16	0.00	0.54	0.01	0.00	0.83
Avail Cap(c_a), veh/h	204	0	582	367	0	0	399	0	857	557	0	748
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	32.3	0.0	17.1	18.3	0.0	0.0	16.8	0.0	16.6	14.3	0.0	21.0
Incr Delay (d2), s/veh	541.0	0.0	0.1	0.1	0.0	0.0	0.3	0.0	2.4	0.0	0.0	10.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	35.2	0.0	0.7	0.5	0.0	0.0	0.5	0.0	8.2	0.1	0.0	14.6
LnGrp Delay(d),s/veh	573.4	0.0	17.1	18.4	0.0	0.0	17.1	0.0	19.0	14.4	0.0	31.3
LnGrp LOS	F		B	B			B		B	B		C
Approach Vol, veh/h		488			32			499			626	
Approach Delay, s/veh		520.9			18.4			18.9			31.2	
Approach LOS		F			B			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.4	41.8		35.0	7.2	40.0		35.0
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0
Max Q Clear Time (g_c+I1), s	2.1	16.5		32.0	2.9	27.8		32.0
Green Ext Time (p_c), s	0.0	1.1		0.0	0.0	1.2		0.0

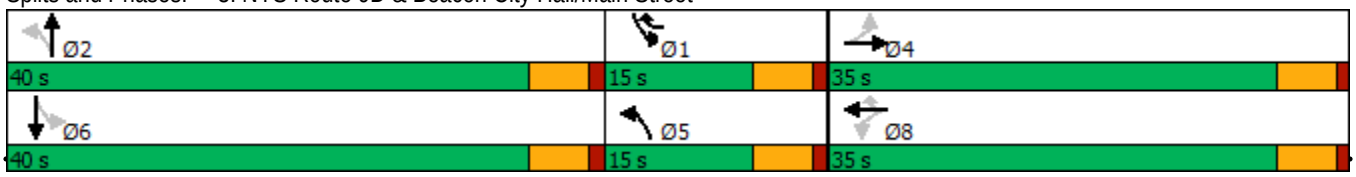
Intersection Summary		
HCM 2010 Ctrl Delay		172.5
HCM 2010 LOS		F

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1	1	35	1	152	0	267	64	215	274	0
Future Volume (vph)	0	1	1	35	1	152	0	267	64	215	274	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		1%			-8%			-3%			3%	
Storage Length (ft)	0		0	0		70	65		0	120		0
Storage Lanes	0		0	0		1	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98				0.96		0.98				
Frt		0.932				0.850		0.971				
Flt Protected					0.954					0.950		
Satd. Flow (prot)	0	1722	0	0	1885	1647	1928	1798	0	1743	1853	0
Flt Permitted										0.475		
Satd. Flow (perm)	0	1722	0	0	1976	1587	1928	1798	0	872	1853	0
Right Turn on Red			Yes			No			No			Yes
Satd. Flow (RTOR)		2										
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		133			350			693			388	
Travel Time (s)		3.0			8.0			15.8			8.8	
Confl. Peds. (#/hr)			9			15			21			12
Confl. Bikes (#/hr)			1						1			
Peak Hour Factor	0.60	0.60	0.60	0.91	0.91	0.91	0.79	0.79	0.79	0.88	0.88	0.88
Heavy Vehicles (%)	0%	0%	0%	0%	0%	2%	0%	2%	5%	2%	1%	0%
Adj. Flow (vph)	0	2	2	38	1	167	0	338	81	244	311	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	4	0	0	39	167	0	419	0	244	311	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.01	1.01	1.01	0.95	0.95	0.95	0.98	0.98	0.98	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	2	2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83		20	83	83	83	6		83	6	
Trailing Detector (ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Position(ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Size(ft)	20	43		20	43	43	43	6		43	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)		40			40	40	40			40		
Detector 2 Size(ft)		43			43	43	43			43		
Detector 2 Type		Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0	0.0	0.0			0.0		
Turn Type		NA		Perm	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8	1	5	2		1	6	
Permitted Phases	4			8		8	2			6		
Detector Phase	4	4		8	8	1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		8.0	8.0	4.0	4.0	31.0		4.0	35.0	
Minimum Split (s)	21.0	21.0		21.0	21.0	9.0	9.0	36.0		9.0	40.0	
Total Split (s)	35.0	35.0		35.0	35.0	15.0	15.0	40.0		15.0	40.0	
Total Split (%)	38.9%	38.9%		38.9%	38.9%	16.7%	16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	30.0	30.0		30.0	30.0	10.0	10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0			5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag						Lag	Lag	Lead		Lag	Lead	
Lead-Lag Optimize?						Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None	None	None	Max		None	Max	
Walk Time (s)	5.0	5.0						5.0				
Flash Dont Walk (s)	11.0	11.0						11.0				
Pedestrian Calls (#/hr)	0	0						0				
v/c Ratio		0.02			0.14	0.49		0.39		0.28	0.19	
Control Delay		22.0			26.7	23.7		9.5		3.4	2.1	
Queue Delay		0.0			0.0	0.0		0.0		0.0	0.0	
Total Delay		22.0			26.7	23.7		9.5		3.4	2.1	
Queue Length 50th (ft)		1			11	50		53		0	0	
Queue Length 95th (ft)		6			40	95		145		45	56	
Internal Link Dist (ft)		53			270			613			308	
Turn Bay Length (ft)						70				120		
Base Capacity (vph)		876			1005	359		1067		887	1651	
Starvation Cap Reductn		0			0	0		0		0	177	
Spillback Cap Reductn		0			0	0		0		0	0	
Storage Cap Reductn		0			0	0		0		0	0	
Reduced v/c Ratio		0.00			0.04	0.47		0.39		0.28	0.21	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 59.8	
Natural Cycle: 70	
Control Type: Semi Act-Uncoord	

Splits and Phases: 3: NYS Route 9D & Beacon City Hall/Main Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1	1	35	1	152	0	267	64	215	274	0
Future Volume (veh/h)	0	1	1	35	1	152	0	267	64	215	274	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	0.96		0.94	1.00		0.96	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1890	1890	1890	1976	1976	1937	1928	1880	1928	1835	1853	1872
Adj Flow Rate, veh/h	0	2	2	38	1	167	0	338	81	244	311	0
Adj No. of Lanes	0	1	0	0	1	1	1	1	0	1	1	0
Peak Hour Factor	0.60	0.60	0.60	0.91	0.91	0.91	0.79	0.79	0.79	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	2	0	2	5	2	1	0
Cap, veh/h	0	106	106	290	6	301	762	824	198	640	1051	0
Arrive On Green	0.00	0.13	0.13	0.13	0.13	0.13	0.00	0.57	0.57	0.06	0.57	0.00
Sat Flow, veh/h	0	841	841	1389	50	1551	1837	1454	348	1747	1853	0
Grp Volume(v), veh/h	0	0	4	39	0	167	0	0	419	244	311	0
Grp Sat Flow(s),veh/h/ln	0	0	1681	1439	0	1551	1837	0	1802	1747	1853	0
Q Serve(g_s), s	0.0	0.0	0.1	1.4	0.0	1.8	0.0	0.0	8.1	0.0	5.4	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.1	1.5	0.0	1.8	0.0	0.0	8.1	0.0	5.4	0.0
Prop In Lane	0.00		0.50	0.97		1.00	1.00		0.19	1.00		0.00
Lane Grp Cap(c), veh/h	0	0	212	297	0	301	762	0	1022	640	1051	0
V/C Ratio(X)	0.00	0.00	0.02	0.13	0.00	0.56	0.00	0.00	0.41	0.38	0.30	0.00
Avail Cap(c_a), veh/h	0	0	817	818	0	859	943	0	1022	812	1051	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	23.6	24.3	0.0	22.6	0.0	0.0	7.5	10.4	7.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	1.6	0.0	0.0	1.2	0.4	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.1	0.6	0.0	2.6	0.0	0.0	4.3	2.8	3.0	0.0
LnGrp Delay(d),s/veh	0.0	0.0	23.7	24.5	0.0	24.2	0.0	0.0	8.8	10.8	7.7	0.0
LnGrp LOS			C	C		C			A	B	A	
Approach Vol, veh/h		4			206			419			555	
Approach Delay, s/veh		23.7			24.2			8.8			9.0	
Approach LOS		C			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.9	40.0		12.8	8.9	40.0		12.8
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0
Max Q Clear Time (g_c+I1), s	2.0	10.1		2.1	0.0	7.4		3.8
Green Ext Time (p_c), s	0.7	1.1		0.0	0.0	0.7		1.2

Intersection Summary	
HCM 2010 Ctrl Delay	11.6
HCM 2010 LOS	B

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	6	1	2	8	1	45	2	280	6	54	242	11
Future Volume (vph)	6	1	2	8	1	45	2	280	6	54	242	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			-3%			-4%			4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.973			0.888			0.997			0.995	
Flt Protected		0.966			0.993						0.991	
Satd. Flow (prot)	0	1786	0	0	1701	0	0	1843	0	0	1801	0
Flt Permitted		0.966			0.993						0.991	
Satd. Flow (perm)	0	1786	0	0	1701	0	0	1843	0	0	1801	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		162			281			312			693	
Travel Time (s)		3.7			6.4			7.1			15.8	
Confl. Peds. (#/hr)			2			4			3			2
Confl. Bikes (#/hr)			2									
Peak Hour Factor	0.81	0.81	0.81	0.66	0.66	0.66	0.69	0.69	0.69	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	5%	0%	2%	2%	0%
Adj. Flow (vph)	7	1	2	12	2	68	3	406	9	59	263	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	10	0	0	82	0	0	418	0	0	334	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	0.98	0.98	0.98	0.97	0.97	0.97	1.03	1.03	1.03
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

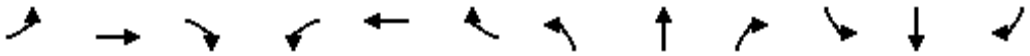
Intersection	
Int Delay, s/veh	2.1

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	6	1	2	8	1	45	2	280	6	54	242	11
Future Vol, veh/h	6	1	2	8	1	45	2	280	6	54	242	11
Conflicting Peds, #/hr	0	0	2	0	0	4	0	0	3	0	0	2
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	-	-	-3	-	-	-4	-	-	4	-
Peak Hour Factor	81	81	81	66	66	66	69	69	69	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	5	0	2	2	0
Mvmt Flow	7	1	2	12	2	68	3	406	9	59	263	12

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	845	813	273	811	815	418	277	0	0	418	0	0
Stage 1	389	389	-	420	420	-	-	-	-	-	-	-
Stage 2	456	424	-	391	395	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	6.5	5.9	5.9	4.1	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	5.5	-	5.5	4.9	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	5.5	4.9	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.218	-	-
Pot Cap-1 Maneuver	285	315	771	344	360	662	1298	-	-	1141	-	-
Stage 1	639	612	-	660	636	-	-	-	-	-	-	-
Stage 2	588	590	-	680	649	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	241	294	768	324	336	658	1296	-	-	1138	-	-
Mov Cap-2 Maneuver	241	294	-	324	336	-	-	-	-	-	-	-
Stage 1	636	573	-	657	633	-	-	-	-	-	-	-
Stage 2	522	587	-	634	608	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	17.9	12.5	0.1	1.5
HCM LOS	C	B		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	1296	-	-	562	291	1138	-	-
HCM Lane V/C Ratio	0.002	-	-	0.146	0.038	0.052	-	-
HCM Control Delay (s)	7.8	0	-	12.5	17.9	8.3	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.5	0.1	0.2	-	-

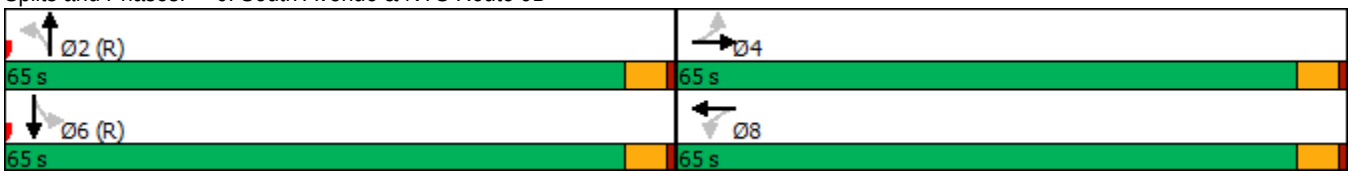


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	232	17	8	208	51	6	5	6	43	8	9
Future Volume (vph)	9	232	17	8	208	51	6	5	6	43	8	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		6%			-6%			-1%			3%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor								0.99			0.99	
Frt		0.991			0.974			0.953			0.980	
Flt Protected		0.998			0.998			0.983			0.965	
Satd. Flow (prot)	0	1823	0	0	1838	0	0	1789	0	0	1707	0
Flt Permitted		0.986			0.988			0.943			0.816	
Satd. Flow (perm)	0	1801	0	0	1820	0	0	1703	0	0	1443	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			12			7			9	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		241			516			194			303	
Travel Time (s)		5.5			11.7			4.4			6.9	
Confl. Peds. (#/hr)							6					6
Peak Hour Factor	0.90	0.90	0.90	0.83	0.83	0.83	0.85	0.85	0.85	0.79	0.79	0.79
Heavy Vehicles (%)	0%	0%	0%	12%	4%	0%	0%	0%	0%	2%	12%	0%
Adj. Flow (vph)	10	258	19	10	251	61	7	6	7	54	10	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	287	0	0	322	0	0	20	0	0	75	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	0.96	0.96	0.96	0.99	0.99	0.99	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	21.0	21.0		21.0	21.0		21.0	21.0		21.0	21.0	
Total Split (s)	65.0	65.0		65.0	65.0		65.0	65.0		65.0	65.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	60.0	60.0		60.0	60.0		60.0	60.0		60.0	60.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
v/c Ratio		0.34			0.38			0.03			0.11	
Control Delay		23.5			23.6			14.4			18.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		23.5			23.6			14.4			18.0	
Queue Length 50th (ft)		149			167			6			31	
Queue Length 95th (ft)		220			218			20			53	
Internal Link Dist (ft)		161			436			114			223	
Turn Bay Length (ft)												
Base Capacity (vph)		833			846			789			670	
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		0.34			0.38			0.03			0.11	

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 45	
Control Type: Pretimed	

Splits and Phases: 6: South Avenue & NYS Route 9D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	232	17	8	208	51	6	5	6	43	8	9
Future Volume (veh/h)	9	232	17	8	208	51	6	5	6	43	8	9
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1843	1843	1843	1957	1891	1957	1910	1910	1910	1872	1816	1872
Adj Flow Rate, veh/h	10	258	19	10	251	61	7	6	7	54	10	11
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.90	0.90	0.90	0.83	0.83	0.83	0.85	0.85	0.85	0.79	0.79	0.79
Percent Heavy Veh, %	0	0	0	12	4	0	0	0	0	2	12	0
Cap, veh/h	40	766	55	39	669	159	281	242	262	515	96	97
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
Sat Flow, veh/h	25	1659	119	22	1449	344	528	525	567	1013	207	210
Grp Volume(v), veh/h	287	0	0	322	0	0	20	0	0	75	0	0
Grp Sat Flow(s),veh/h/ln	1803	0	0	1815	0	0	1620	0	0	1430	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	0.0	0.0
Cycle Q Clear(g_c), s	13.1	0.0	0.0	14.9	0.0	0.0	0.8	0.0	0.0	3.7	0.0	0.0
Prop In Lane	0.03		0.07	0.03		0.19	0.35		0.35	0.72		0.15
Lane Grp Cap(c), veh/h	861	0	0	866	0	0	785	0	0	708	0	0
V/C Ratio(X)	0.33	0.00	0.00	0.37	0.00	0.00	0.03	0.00	0.00	0.11	0.00	0.00
Avail Cap(c_a), veh/h	861	0	0	866	0	0	785	0	0	708	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	22.4	0.0	0.0	22.9	0.0	0.0	19.1	0.0	0.0	19.8	0.0	0.0
Incr Delay (d2), s/veh	1.0	0.0	0.0	1.2	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	0.0	0.0	7.8	0.0	0.0	0.4	0.0	0.0	1.6	0.0	0.0
LnGrp Delay(d),s/veh	23.4	0.0	0.0	24.1	0.0	0.0	19.1	0.0	0.0	20.1	0.0	0.0
LnGrp LOS	C			C			B			C		
Approach Vol, veh/h		287			322			20			75	
Approach Delay, s/veh		23.4			24.1			19.1			20.1	
Approach LOS		C			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		65.0		65.0		65.0		65.0
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		60.0		60.0		60.0		60.0
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		0.0
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	23.2
HCM 2010 LOS	C



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	65	195	519	58	150	568
Future Volume (vph)	65	195	519	58	150	568
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	5%		3%			-1%
Storage Length (ft)	85	0		0	340	
Storage Lanes	1	1		0	1	
Taper Length (ft)	86				86	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.986			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1725	1544	1809	0	1778	1872
Flt Permitted	0.950				0.248	
Satd. Flow (perm)	1725	1544	1809	0	464	1872
Right Turn on Red		No		No		
Satd. Flow (RTOR)						
Link Speed (mph)	30		30			30
Link Distance (ft)	427		462			529
Travel Time (s)	9.7		10.5			12.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	71	212	564	63	163	617
Shared Lane Traffic (%)						
Lane Group Flow (vph)	71	212	627	0	163	617
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			
Headway Factor	1.03	1.03	1.02	1.02	0.99	0.99
Turning Speed (mph)	15	9		9	15	
Turn Type	Prot	pm+ov	NA		pm+pt	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8			6	
Minimum Split (s)	21.0	9.0	15.0		9.0	15.0
Total Split (s)	30.0	20.0	70.0		20.0	90.0
Total Split (%)	25.0%	16.7%	58.3%		16.7%	75.0%
Maximum Green (s)	25.0	15.0	65.0		15.0	85.0
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0		5.0	5.0
Lead/Lag		Lead	Lag		Lead	
Lead-Lag Optimize?		Yes	Yes		Yes	
Walk Time (s)	5.0		5.0			
Flash Dont Walk (s)	11.0		11.0			
Pedestrian Calls (#/hr)	0		0			
v/c Ratio	0.20	0.37	0.64		0.33	0.47
Control Delay	41.0	29.5	23.1		7.5	9.0

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	41.0	29.5	23.1		7.5	9.0
Queue Length 50th (ft)	46	118	327		36	186
Queue Length 95th (ft)	88	185	454		59	256
Internal Link Dist (ft)	347		382			449
Turn Bay Length (ft)	85				340	
Base Capacity (vph)	359	579	979		492	1326
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.20	0.37	0.64		0.33	0.47

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NET and 6:SWTL, Start of Green	
Natural Cycle: 60	
Control Type: Pretimed	

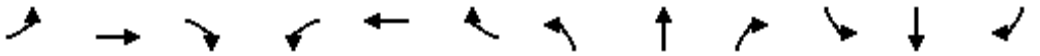
Splits and Phases: 1: NYS Route 9D & Verplanck Avenue



Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (veh/h)	65	195	519	58	150	568
Future Volume (veh/h)	65	195	519	58	150	568
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1816	1816	1835	1872	1872	1872
Adj Flow Rate, veh/h	71	212	564	63	163	617
Adj No. of Lanes	1	1	1	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	360	515	878	98	520	1326
Arrive On Green	0.21	0.21	0.54	0.54	0.13	0.71
Sat Flow, veh/h	1730	1544	1622	181	1783	1872
Grp Volume(v), veh/h	71	212	0	627	163	617
Grp Sat Flow(s),veh/h/ln	1730	1544	0	1803	1783	1872
Q Serve(g_s), s	4.1	12.7	0.0	29.3	3.8	17.2
Cycle Q Clear(g_c), s	4.1	12.7	0.0	29.3	3.8	17.2
Prop In Lane	1.00	1.00		0.10	1.00	
Lane Grp Cap(c), veh/h	360	515	0	977	520	1326
V/C Ratio(X)	0.20	0.41	0.00	0.64	0.31	0.47
Avail Cap(c_a), veh/h	360	515	0	977	520	1326
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.2	30.9	0.0	19.3	11.8	7.6
Incr Delay (d2), s/veh	1.2	2.4	0.0	3.2	1.6	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	5.8	0.0	15.3	2.0	9.2
LnGrp Delay(d),s/veh	40.4	33.3	0.0	22.6	13.3	8.8
LnGrp LOS	D	C		C	B	A
Approach Vol, veh/h	283		627			780
Approach Delay, s/veh	35.1		22.6			9.7
Approach LOS	D		C			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	20.0	70.0				90.0		30.0
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	15.0	65.0				85.0		25.0
Max Q Clear Time (g_c+I1), s	0.0	0.0				0.0		0.0
Green Ext Time (p_c), s	0.0	0.0				0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	18.7
HCM 2010 LOS	B



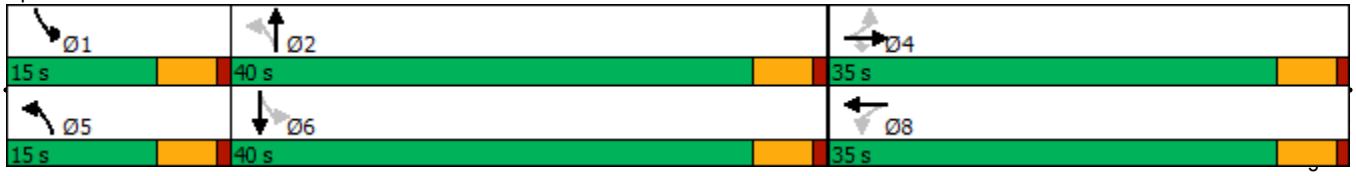
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	1	20	8	11	10	60	457	3	16	510	168
Future Volume (vph)	31	1	20	8	11	10	60	457	3	16	510	168
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		2%			-10%			-6%			3%	
Storage Length (ft)	0		95	0		0	75		0	75		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.96		0.99			1.00			0.99	
Frt			0.850		0.955			0.999			0.963	
Flt Protected		0.953			0.986		0.950			0.950		
Satd. Flow (prot)	0	1775	1599	0	1859	0	1771	1936	0	1778	1766	0
Flt Permitted		0.859			0.890		0.277			0.485		
Satd. Flow (perm)	0	1600	1533	0	1678	0	516	1936	0	908	1766	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			85		13						22	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		584			328			388			335	
Travel Time (s)		13.3			7.5			8.8			7.6	
Confl. Peds. (#/hr)			12			4			1			10
Confl. Bikes (#/hr)			3									
Peak Hour Factor	0.73	0.73	0.73	0.75	0.75	0.75	0.94	0.94	0.94	0.95	0.95	0.95
Heavy Vehicles (%)	1%	0%	0%	0%	0%	0%	5%	1%	0%	0%	1%	2%
Adj. Flow (vph)	42	1	27	11	15	13	64	486	3	17	537	177
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	43	27	0	39	0	64	489	0	17	714	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.01	1.01	1.01	0.94	0.94	0.94	0.96	0.96	0.96	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2		2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83	83	20	83		83	6		83	6	
Trailing Detector (ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Position(ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Size(ft)	20	43	43	20	43		43	6		43	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)		40	40		40		40			40		
Detector 2 Size(ft)		43	43		43		43			43		
Detector 2 Type		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)		0.0	0.0		0.0		0.0			0.0		
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	16.0		4.0	16.0	
Minimum Split (s)	20.0	20.0	20.0	21.0	21.0		9.0	21.0		9.0	21.0	
Total Split (s)	35.0	35.0	35.0	35.0	35.0		15.0	40.0		15.0	40.0	
Total Split (%)	38.9%	38.9%	38.9%	38.9%	38.9%		16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	30.0	30.0	30.0	30.0	30.0		10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		None	Max		None	Max	
Walk Time (s)				5.0	5.0							
Flash Dont Walk (s)				11.0	11.0							
Pedestrian Calls (#/hr)				0	0							
v/c Ratio		0.21	0.10		0.17		0.12	0.32		0.02	0.56	
Control Delay		27.8	0.8		21.6		3.2	5.3		3.2	11.6	
Queue Delay		0.0	0.0		0.0		0.0	0.2		0.0	0.0	
Total Delay		27.8	0.8		21.6		3.2	5.5		3.2	11.6	
Queue Length 50th (ft)		16	0		9		5	52		1	185	
Queue Length 95th (ft)		34	0		27		15	182		6	#351	
Internal Link Dist (ft)		504			248			308			255	
Turn Bay Length (ft)			95				75			75		
Base Capacity (vph)		853	857		901		627	1543		852	1278	
Starvation Cap Reductn		0	0		0		0	452		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		0.05	0.03		0.04		0.10	0.45		0.02	0.56	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 58.4
Natural Cycle: 60
Control Type: Semi Act-Uncoord
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

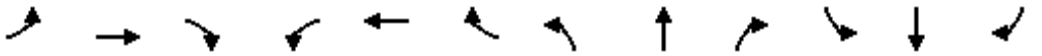
Splits and Phases: 2: NYS Route 9D & Beekman Street/W. Church Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	1	20	8	11	10	60	457	3	16	510	168
Future Volume (veh/h)	31	1	20	8	11	10	60	457	3	16	510	168
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.90	0.94		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1863	1881	1995	1995	1995	1864	1938	1957	1872	1848	1872
Adj Flow Rate, veh/h	42	1	27	11	15	13	64	486	3	17	537	177
Adj No. of Lanes	0	1	1	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.73	0.73	0.73	0.75	0.75	0.75	0.94	0.94	0.94	0.95	0.95	0.95
Percent Heavy Veh, %	1	0	0	0	0	0	5	1	0	0	1	2
Cap, veh/h	242	4	121	107	71	49	457	1227	8	622	810	267
Arrive On Green	0.08	0.08	0.08	0.08	0.08	0.08	0.04	0.64	0.64	0.02	0.61	0.61
Sat Flow, veh/h	1396	52	1436	313	847	580	1775	1924	12	1782	1329	438
Grp Volume(v), veh/h	43	0	27	39	0	0	64	0	489	17	0	714
Grp Sat Flow(s),veh/h/ln	1447	0	1436	1739	0	0	1775	0	1936	1782	0	1767
Q Serve(g_s), s	0.3	0.0	1.0	0.0	0.0	0.0	0.7	0.0	7.0	0.2	0.0	15.2
Cycle Q Clear(g_c), s	1.4	0.0	1.0	1.1	0.0	0.0	0.7	0.0	7.0	0.2	0.0	15.2
Prop In Lane	0.98		1.00	0.28		0.33	1.00		0.01	1.00		0.25
Lane Grp Cap(c), veh/h	246	0	121	227	0	0	457	0	1234	622	0	1077
V/C Ratio(X)	0.17	0.00	0.22	0.17	0.00	0.00	0.14	0.00	0.40	0.03	0.00	0.66
Avail Cap(c_a), veh/h	841	0	750	961	0	0	687	0	1234	903	0	1077
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.7	0.0	24.5	24.6	0.0	0.0	5.8	0.0	5.0	4.3	0.0	7.3
Incr Delay (d2), s/veh	0.3	0.0	0.9	0.4	0.0	0.0	0.1	0.0	1.0	0.0	0.0	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.4	0.6	0.0	0.0	0.4	0.0	4.0	0.1	0.0	8.3
LnGrp Delay(d),s/veh	25.0	0.0	25.4	24.9	0.0	0.0	5.9	0.0	6.0	4.3	0.0	10.6
LnGrp LOS	C		C	C			A		A	A		B
Approach Vol, veh/h		70			39			553			731	
Approach Delay, s/veh		25.2			24.9			6.0			10.4	
Approach LOS		C			C			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.9	41.6		9.8	7.6	40.0		9.8
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0
Max Q Clear Time (g_c+I1), s	2.2	9.0		3.4	2.7	17.2		3.1
Green Ext Time (p_c), s	0.0	1.3		0.3	0.1	2.1		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	9.8
HCM 2010 LOS	A

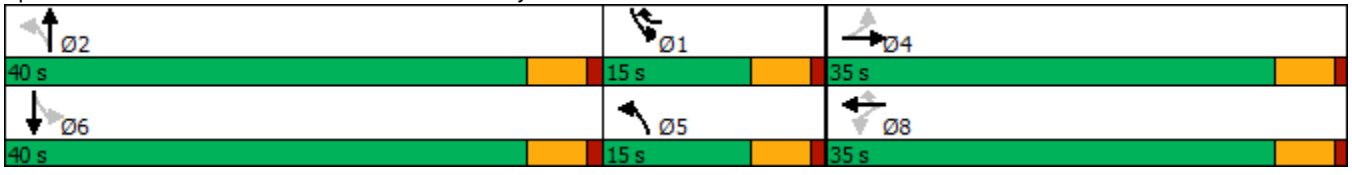


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	1	1	23	0	185	1	334	37	259	277	2
Future Volume (vph)	1	1	1	23	0	185	1	334	37	259	277	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		1%			-8%			-3%			3%	
Storage Length (ft)	0		0	0		70	65		0	120		0
Storage Lanes	0		0	0		1	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98				0.97		0.98			1.00	
Frt		0.955				0.850		0.985			0.999	
Flt Protected		0.984			0.950		0.950			0.950		
Satd. Flow (prot)	0	1742	0	0	1877	1663	1832	1829	0	1760	1851	0
Flt Permitted		0.920					0.575			0.455		
Satd. Flow (perm)	0	1629	0	0	1976	1619	1109	1829	0	843	1851	0
Right Turn on Red			Yes			No			No			Yes
Satd. Flow (RTOR)		1										
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		133			350			693			388	
Travel Time (s)		3.0			8.0			15.8			8.8	
Confl. Peds. (#/hr)			14			6			48			11
Peak Hour Factor	0.71	0.71	0.71	0.89	0.89	0.89	0.88	0.88	0.88	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%	0%	2%	5%	1%	1%	0%
Adj. Flow (vph)	1	1	1	26	0	208	1	380	42	282	301	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	3	0	0	26	208	1	422	0	282	303	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.01	1.01	1.01	0.95	0.95	0.95	0.98	0.98	0.98	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	2	2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83		20	83	83	83	6		83	6	
Trailing Detector (ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Position(ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Size(ft)	20	43		20	43	43	43	6		43	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)		40			40	40	40			40		
Detector 2 Size(ft)		43			43	43	43			43		
Detector 2 Type		Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0	0.0	0.0			0.0		
Turn Type	Perm	NA		Perm	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8	1	5	2		1	6	
Permitted Phases	4			8		8	2			6		
Detector Phase	4	4		8	8	1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		8.0	8.0	4.0	4.0	31.0		4.0	35.0	
Minimum Split (s)	21.0	21.0		21.0	21.0	9.0	9.0	36.0		9.0	40.0	
Total Split (s)	35.0	35.0		35.0	35.0	15.0	15.0	40.0		15.0	40.0	
Total Split (%)	38.9%	38.9%		38.9%	38.9%	16.7%	16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	30.0	30.0		30.0	30.0	10.0	10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0			5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag						Lag	Lag	Lead		Lag	Lead	
Lead-Lag Optimize?						Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None	None	None	Max		None	Max	
Walk Time (s)	5.0	5.0						5.0				
Flash Dont Walk (s)	11.0	11.0						11.0				
Pedestrian Calls (#/hr)	0	0						0				
v/c Ratio		0.02			0.10	0.60	0.00	0.39		0.33	0.19	
Control Delay		24.0			26.5	26.9	3.0	9.4		3.9	4.4	
Queue Delay		0.0			0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay		24.0			26.5	26.9	3.0	9.4		3.9	4.4	
Queue Length 50th (ft)		1			8	65	0	53		0	0	
Queue Length 95th (ft)		6			30	115	1	165		50	117	
Internal Link Dist (ft)		53			270			613			308	
Turn Bay Length (ft)						70	65			120		
Base Capacity (vph)		825			1000	359	964	1080		854	1572	
Starvation Cap Reductn		0			0	0	0	0		0	79	
Spillback Cap Reductn		0			0	0	0	0		0	0	
Storage Cap Reductn		0			0	0	0	0		0	0	
Reduced v/c Ratio		0.00			0.03	0.58	0.00	0.39		0.33	0.20	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 60	
Natural Cycle: 70	
Control Type: Semi Act-Uncoord	

Splits and Phases: 3: NYS Route 9D & Beacon City Hall/Main Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	1	1	23	0	185	1	334	37	259	277	2
Future Volume (veh/h)	1	1	1	23	0	185	1	334	37	259	277	2
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.94	0.95		0.98	0.99		0.96	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1890	1890	1890	1976	1976	1956	1928	1885	1928	1853	1853	1872
Adj Flow Rate, veh/h	1	1	1	26	0	208	1	380	42	282	301	2
Adj No. of Lanes	0	1	0	0	1	1	1	1	0	1	1	0
Peak Hour Factor	0.71	0.71	0.71	0.89	0.89	0.89	0.88	0.88	0.88	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	1	0	2	5	1	1	0
Cap, veh/h	115	97	67	297	0	313	765	940	104	643	1041	7
Arrive On Green	0.13	0.13	0.13	0.13	0.00	0.13	0.06	0.57	0.57	0.06	0.57	0.57
Sat Flow, veh/h	291	763	527	1418	0	1624	1837	1660	183	1765	1839	12
Grp Volume(v), veh/h	3	0	0	26	0	208	1	0	422	282	0	303
Grp Sat Flow(s),veh/h/ln	1581	0	0	1418	0	1624	1837	0	1843	1765	0	1851
Q Serve(g_s), s	0.0	0.0	0.0	0.9	0.0	3.3	0.0	0.0	8.0	0.0	0.0	5.3
Cycle Q Clear(g_c), s	0.1	0.0	0.0	1.0	0.0	3.3	0.0	0.0	8.0	0.0	0.0	5.3
Prop In Lane	0.33		0.33	1.00		1.00	1.00		0.10	1.00		0.01
Lane Grp Cap(c), veh/h	279	0	0	297	0	313	765	0	1043	643	0	1048
V/C Ratio(X)	0.01	0.00	0.00	0.09	0.00	0.66	0.00	0.00	0.40	0.44	0.00	0.29
Avail Cap(c_a), veh/h	804	0	0	803	0	895	944	0	1043	815	0	1048
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.6	0.0	0.0	24.0	0.0	23.1	6.4	0.0	7.6	11.0	0.0	7.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	2.4	0.0	0.0	1.2	0.5	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.4	0.0	3.3	0.0	0.0	4.3	3.5	0.0	2.8
LnGrp Delay(d),s/veh	23.6	0.0	0.0	24.1	0.0	25.5	6.4	0.0	8.7	11.4	0.0	7.7
LnGrp LOS	C			C		C	A		A	B		A
Approach Vol, veh/h		3			234			423			585	
Approach Delay, s/veh		23.6			25.4			8.7			9.5	
Approach LOS		C			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	40.0		12.9	9.0	40.0		12.9
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0
Max Q Clear Time (g_c+I1), s	2.0	10.0		2.1	2.0	7.3		5.3
Green Ext Time (p_c), s	0.9	1.1		0.0	0.0	0.7		1.3

Intersection Summary	
HCM 2010 Ctrl Delay	12.2
HCM 2010 LOS	B

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	9	2	2	9	4	77	2	286	9	42	253	6
Future Volume (vph)	9	2	2	9	4	77	2	286	9	42	253	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			-3%			-4%			4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.981			0.885			0.996			0.997	
Flt Protected		0.966			0.995						0.993	
Satd. Flow (prot)	0	1680	0	0	1647	0	0	1852	0	0	1808	0
Flt Permitted		0.966			0.995						0.993	
Satd. Flow (perm)	0	1680	0	0	1647	0	0	1852	0	0	1808	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		162			281			312			693	
Travel Time (s)		3.7			6.4			7.1			15.8	
Confl. Peds. (#/hr)			4			19			2			3
Confl. Bikes (#/hr)												1
Peak Hour Factor	0.61	0.61	0.61	0.88	0.88	0.88	0.85	0.85	0.85	0.92	0.92	0.92
Heavy Vehicles (%)	0%	50%	0%	11%	25%	1%	0%	4%	11%	2%	2%	0%
Adj. Flow (vph)	15	3	3	10	5	88	2	336	11	46	275	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	21	0	0	103	0	0	349	0	0	328	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	0.98	0.98	0.98	0.97	0.97	0.97	1.03	1.03	1.03
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

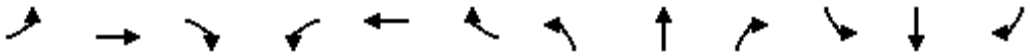
Intersection	
Int Delay, s/veh	2.5

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	9	2	2	9	4	77	2	286	9	42	253	6
Future Vol, veh/h	9	2	2	9	4	77	2	286	9	42	253	6
Conflicting Peds, #/hr	0	0	4	0	0	19	0	0	2	0	0	3
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	-	-	-3	-	-	-4	-	-	4	-
Peak Hour Factor	61	61	61	88	88	88	85	85	85	92	92	92
Heavy Vehicles, %	0	50	0	11	25	1	0	4	11	2	2	0
Mvmt Flow	15	3	3	10	5	88	2	336	11	46	275	7

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	785	727	286	726	725	363	285	0	0	349	0	0
Stage 1	374	374	-	348	348	-	-	-	-	-	-	-
Stage 2	411	353	-	378	377	-	-	-	-	-	-	-
Critical Hdwy	7.1	7	6.2	6.61	6.15	5.91	4.1	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	6	-	5.61	5.15	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	6	-	5.61	5.15	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4.45	3.3	3.599	4.225	3.309	2.2	-	-	2.218	-	-
Pot Cap-1 Maneuver	313	298	758	371	367	705	1289	-	-	1210	-	-
Stage 1	651	542	-	689	631	-	-	-	-	-	-	-
Stage 2	622	554	-	666	615	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	256	283	754	351	348	693	1286	-	-	1208	-	-
Mov Cap-2 Maneuver	256	283	-	351	348	-	-	-	-	-	-	-
Stage 1	648	517	-	686	628	-	-	-	-	-	-	-
Stage 2	530	552	-	627	586	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	18.4	12.1	0.1	1.1
HCM LOS	C	B		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	1286	-	-	607	290	1208	-	-
HCM Lane V/C Ratio	0.002	-	-	0.168	0.073	0.038	-	-
HCM Control Delay (s)	7.8	0	-	12.1	18.4	8.1	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.6	0.2	0.1	-	-

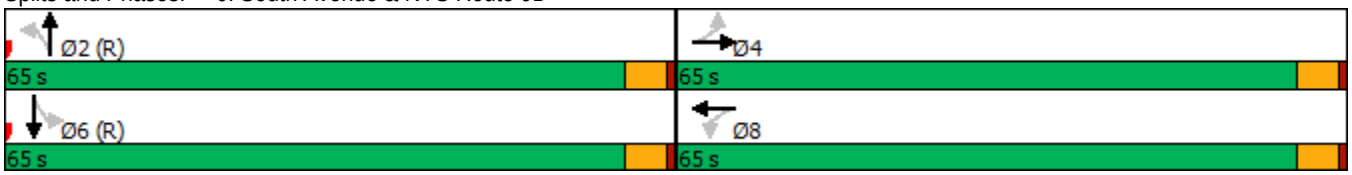


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	168	15	12	181	34	13	7	12	30	10	8
Future Volume (vph)	8	168	15	12	181	34	13	7	12	30	10	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		6%			-6%			-1%			3%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor								0.99			0.99	
Frt		0.990			0.980			0.950			0.977	
Flt Protected		0.998			0.997			0.980			0.970	
Satd. Flow (prot)	0	1821	0	0	1842	0	0	1778	0	0	1698	0
Flt Permitted		0.985			0.980			0.900			0.836	
Satd. Flow (perm)	0	1797	0	0	1810	0	0	1618	0	0	1463	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			9			22			10	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		241			516			194			303	
Travel Time (s)		5.5			11.7			4.4			6.9	
Confl. Peds. (#/hr)							6					6
Peak Hour Factor	0.82	0.82	0.82	0.85	0.85	0.85	0.55	0.55	0.55	0.82	0.82	0.82
Heavy Vehicles (%)	0%	0%	0%	12%	4%	0%	0%	0%	0%	2%	12%	0%
Adj. Flow (vph)	10	205	18	14	213	40	24	13	22	37	12	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	233	0	0	267	0	0	59	0	0	59	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	0.96	0.96	0.96	0.99	0.99	0.99	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	21.0	21.0		21.0	21.0		21.0	21.0		21.0	21.0	
Total Split (s)	65.0	65.0		65.0	65.0		65.0	65.0		65.0	65.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	60.0	60.0		60.0	60.0		60.0	60.0		60.0	60.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
v/c Ratio		0.28			0.32			0.08			0.09	
Control Delay		22.4			22.6			13.5			16.9	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		22.4			22.6			13.5			16.9	
Queue Length 50th (ft)		117			134			17			23	
Queue Length 95th (ft)		157			185			22			44	
Internal Link Dist (ft)		161			436			114			223	
Turn Bay Length (ft)												
Base Capacity (vph)		831			840			758			680	
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		0.28			0.32			0.08			0.09	

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 45	
Control Type: Pretimed	

Splits and Phases: 6: South Avenue & NYS Route 9D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	168	15	12	181	34	13	7	12	30	10	8
Future Volume (veh/h)	8	168	15	12	181	34	13	7	12	30	10	8
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1843	1843	1843	1957	1885	1957	1910	1910	1910	1872	1805	1872
Adj Flow Rate, veh/h	10	205	18	14	213	40	24	13	22	37	12	10
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.82	0.82	0.82	0.85	0.85	0.85	0.55	0.55	0.55	0.82	0.82	0.82
Percent Heavy Veh, %	0	0	0	12	4	0	0	0	0	2	12	0
Cap, veh/h	45	749	64	51	687	125	320	178	273	452	145	113
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
Sat Flow, veh/h	35	1622	139	48	1488	271	610	385	591	883	315	244
Grp Volume(v), veh/h	233	0	0	267	0	0	59	0	0	59	0	0
Grp Sat Flow(s),veh/h/ln	1796	0	0	1807	0	0	1586	0	0	1442	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Cycle Q Clear(g_c), s	10.3	0.0	0.0	11.9	0.0	0.0	2.4	0.0	0.0	2.5	0.0	0.0
Prop In Lane	0.04		0.08	0.05		0.15	0.41		0.37	0.63		0.17
Lane Grp Cap(c), veh/h	858	0	0	863	0	0	771	0	0	711	0	0
V/C Ratio(X)	0.27	0.00	0.00	0.31	0.00	0.00	0.08	0.00	0.00	0.08	0.00	0.00
Avail Cap(c_a), veh/h	858	0	0	863	0	0	771	0	0	711	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	21.6	0.0	0.0	22.1	0.0	0.0	19.5	0.0	0.0	19.5	0.0	0.0
Incr Delay (d2), s/veh	0.8	0.0	0.0	0.9	0.0	0.0	0.2	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	0.0	0.0	6.2	0.0	0.0	1.2	0.0	0.0	1.2	0.0	0.0
LnGrp Delay(d),s/veh	22.4	0.0	0.0	23.0	0.0	0.0	19.7	0.0	0.0	19.7	0.0	0.0
LnGrp LOS	C			C			B			B		
Approach Vol, veh/h		233			267			59			59	
Approach Delay, s/veh		22.4			23.0			19.7			19.7	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		65.0		65.0		65.0		65.0
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		60.0		60.0		60.0		60.0
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		0.0
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	22.1
HCM 2010 LOS	C



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	51	299	736	69	209	628
Future Volume (vph)	51	299	736	69	209	628
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	5%		3%			-1%
Storage Length (ft)	85	0		0	340	
Storage Lanes	1	1		0	1	
Taper Length (ft)	86				86	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.988			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1725	1544	1813	0	1778	1872
Flt Permitted	0.950				0.094	
Satd. Flow (perm)	1725	1544	1813	0	176	1872
Right Turn on Red		No		No		
Satd. Flow (RTOR)						
Link Speed (mph)	30		30			30
Link Distance (ft)	427		462			529
Travel Time (s)	9.7		10.5			12.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	55	325	800	75	227	683
Shared Lane Traffic (%)						
Lane Group Flow (vph)	55	325	875	0	227	683
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			
Headway Factor	1.03	1.03	1.02	1.02	0.99	0.99
Turning Speed (mph)	15	9		9	15	
Turn Type	Prot	pm+ov	NA		pm+pt	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8			6	
Minimum Split (s)	21.0	9.0	15.0		9.0	15.0
Total Split (s)	30.0	20.0	72.0		20.0	92.0
Total Split (%)	24.6%	16.4%	59.0%		16.4%	75.4%
Maximum Green (s)	25.0	15.0	67.0		15.0	87.0
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0		5.0	5.0
Lead/Lag		Lead	Lag		Lead	
Lead-Lag Optimize?		Yes	Yes		Yes	
Walk Time (s)	5.0		5.0			
Flash Dont Walk (s)	11.0		11.0			
Pedestrian Calls (#/hr)	0		0			
v/c Ratio	0.16	0.57	0.88		0.70	0.51
Control Delay	41.3	35.6	35.9		31.0	9.5

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	41.3	35.6	35.9		31.0	9.5
Queue Length 50th (ft)	36	203	576		82	217
Queue Length 95th (ft)	74	301	#864		#176	297
Internal Link Dist (ft)	347		382			449
Turn Bay Length (ft)	85				340	
Base Capacity (vph)	353	569	995		322	1334
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.16	0.57	0.88		0.70	0.51

Intersection Summary	
Area Type:	Other
Cycle Length: 122	
Actuated Cycle Length: 122	
Offset: 0 (0%), Referenced to phase 2:NET and 6:SWTL, Start of Green	
Natural Cycle: 80	
Control Type: Pretimed	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

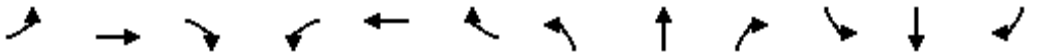
Splits and Phases: 1: NYS Route 9D & Verplanck Avenue



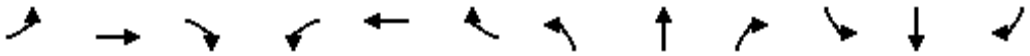
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (veh/h)	51	299	736	69	209	628
Future Volume (veh/h)	51	299	736	69	209	628
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1816	1816	1835	1872	1872	1872
Adj Flow Rate, veh/h	55	325	800	75	227	683
Adj No. of Lanes	1	1	1	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	354	506	908	85	358	1335
Arrive On Green	0.20	0.20	0.55	0.55	0.12	0.71
Sat Flow, veh/h	1730	1544	1653	155	1783	1872
Grp Volume(v), veh/h	55	325	0	875	227	683
Grp Sat Flow(s),veh/h/ln	1730	1544	0	1807	1783	1872
Q Serve(g_s), s	3.2	21.9	0.0	51.6	5.5	20.1
Cycle Q Clear(g_c), s	3.2	21.9	0.0	51.6	5.5	20.1
Prop In Lane	1.00	1.00		0.09	1.00	
Lane Grp Cap(c), veh/h	354	506	0	993	358	1335
V/C Ratio(X)	0.16	0.64	0.00	0.88	0.63	0.51
Avail Cap(c_a), veh/h	354	506	0	993	358	1335
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.8	34.9	0.0	24.0	23.6	7.9
Incr Delay (d2), s/veh	0.9	6.1	0.0	11.2	8.3	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	10.2	0.0	28.6	5.2	10.8
LnGrp Delay(d),s/veh	40.8	41.1	0.0	35.2	31.9	9.3
LnGrp LOS	D	D		D	C	A
Approach Vol, veh/h	380		875			910
Approach Delay, s/veh	41.0		35.2			14.9
Approach LOS	D		D			B

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	20.0	72.0				92.0		30.0
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	15.0	67.0				87.0		25.0
Max Q Clear Time (g_c+I1), s	0.0	0.0				0.0		0.0
Green Ext Time (p_c), s	0.0	0.0				0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	27.7
HCM 2010 LOS	C



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	310	24	35	4	15	23	32	424	5	6	510	166
Future Volume (vph)	310	24	35	4	15	23	32	424	5	6	510	166
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		2%			-10%			-6%			3%	
Storage Length (ft)	0		95	0		0	75		0	75		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.98		0.97			1.00			0.99	
Frt			0.850		0.925			0.998			0.963	
Flt Protected		0.956			0.996		0.950			0.950		
Satd. Flow (prot)	0	1760	1599	0	1737	0	1805	1915	0	1778	1772	0
Flt Permitted		0.709			0.966		0.115			0.342		
Satd. Flow (perm)	0	1306	1562	0	1684	0	219	1915	0	640	1772	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			85		25			1			21	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		584			328			388			335	
Travel Time (s)		13.3			7.5			8.8			7.6	
Confl. Peds. (#/hr)			2			13			1			6
Confl. Bikes (#/hr)						1			1			1
Peak Hour Factor	0.71	0.71	0.71	0.92	0.92	0.92	0.84	0.84	0.84	0.98	0.98	0.98
Heavy Vehicles (%)	2%	4%	0%	0%	7%	0%	3%	2%	0%	0%	1%	1%
Adj. Flow (vph)	437	34	49	4	16	25	38	505	6	6	520	169
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	471	49	0	45	0	38	511	0	6	689	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.01	1.01	1.01	0.94	0.94	0.94	0.96	0.96	0.96	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2		2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83	83	20	83		83	6		83	6	
Trailing Detector (ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Position(ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Size(ft)	20	43	43	20	43		43	6		43	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)		40	40		40		40			40		
Detector 2 Size(ft)		43	43		43		43			43		
Detector 2 Type		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex		



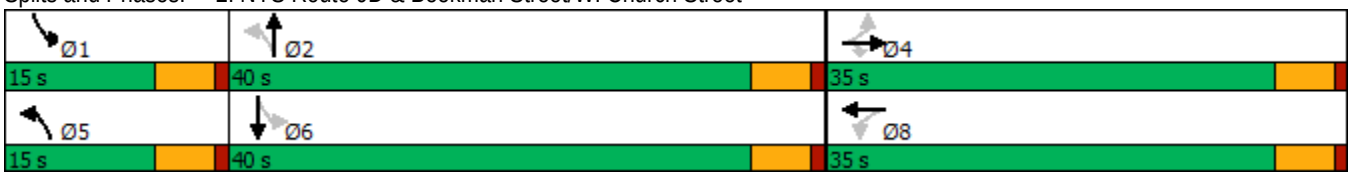
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)		0.0	0.0		0.0		0.0			0.0		
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	16.0		4.0	16.0	
Minimum Split (s)	20.0	20.0	20.0	21.0	21.0		9.0	21.0		9.0	21.0	
Total Split (s)	35.0	35.0	35.0	35.0	35.0		15.0	40.0		15.0	40.0	
Total Split (%)	38.9%	38.9%	38.9%	38.9%	38.9%		16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	30.0	30.0	30.0	30.0	30.0		10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		None	Max		None	Max	
Walk Time (s)				5.0	5.0							
Flash Dont Walk (s)				11.0	11.0							
Pedestrian Calls (#/hr)				0	0							
v/c Ratio		0.99	0.08		0.07		0.16	0.55		0.02	0.90	
Control Delay		67.7	1.9		11.7		11.1	18.2		9.5	39.5	
Queue Delay		0.0	0.0		0.0		0.0	3.8		0.0	0.0	
Total Delay		67.7	1.9		11.7		11.1	22.0		9.5	39.5	
Queue Length 50th (ft)		~282	0		7		9	164		1	346	
Queue Length 95th (ft)		#318	1		30		22	293		7	#589	
Internal Link Dist (ft)		504			248			308			255	
Turn Bay Length (ft)			95				75			75		
Base Capacity (vph)		478	626		632		305	931		456	769	
Starvation Cap Reductn		0	0		0		0	325		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		0.99	0.08		0.07		0.12	0.84		0.01	0.90	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 82.3	
Natural Cycle: 90	
Control Type: Semi Act-Uncoord	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: NYS Route 9D & Beekman Street/W. Church Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	310	24	35	4	15	23	32	424	5	6	510	166
Future Volume (veh/h)	310	24	35	4	15	23	32	424	5	6	510	166
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.96	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1842	1881	1995	1947	1995	1900	1919	1957	1872	1853	1872
Adj Flow Rate, veh/h	437	34	49	4	16	25	38	505	6	6	520	169
Adj No. of Lanes	0	1	1	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.71	0.71	0.71	0.92	0.92	0.92	0.84	0.84	0.84	0.98	0.98	0.98
Percent Heavy Veh, %	2	4	0	0	7	0	3	2	0	0	1	1
Cap, veh/h	193	8	581	48	144	180	181	846	10	317	565	184
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.03	0.45	0.45	0.01	0.43	0.43
Sat Flow, veh/h	299	23	1594	0	396	495	1810	1892	22	1782	1330	432
Grp Volume(v), veh/h	471	0	49	45	0	0	38	0	511	6	0	689
Grp Sat Flow(s),veh/h/ln	323	0	1594	890	0	0	1810	0	1915	1782	0	1762
Q Serve(g_s), s	0.0	0.0	1.7	0.0	0.0	0.0	1.0	0.0	16.6	0.2	0.0	30.4
Cycle Q Clear(g_c), s	30.0	0.0	1.7	30.0	0.0	0.0	1.0	0.0	16.6	0.2	0.0	30.4
Prop In Lane	0.93		1.00	0.09		0.56	1.00		0.01	1.00		0.25
Lane Grp Cap(c), veh/h	202	0	581	372	0	0	181	0	856	317	0	749
V/C Ratio(X)	2.33	0.00	0.08	0.12	0.00	0.00	0.21	0.00	0.60	0.02	0.00	0.92
Avail Cap(c_a), veh/h	202	0	581	372	0	0	350	0	856	523	0	749
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	32.4	0.0	17.2	18.4	0.0	0.0	18.5	0.0	17.2	14.7	0.0	22.3
Incr Delay (d2), s/veh	614.8	0.0	0.1	0.1	0.0	0.0	0.6	0.0	3.1	0.0	0.0	18.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	39.0	0.0	0.7	0.7	0.0	0.0	0.5	0.0	9.4	0.1	0.0	18.5
LnGrp Delay(d),s/veh	647.2	0.0	17.2	18.5	0.0	0.0	19.0	0.0	20.2	14.7	0.0	40.6
LnGrp LOS	F		B	B			B		C	B		D
Approach Vol, veh/h		520			45			549			695	
Approach Delay, s/veh		587.9			18.5			20.1			40.4	
Approach LOS		F			B			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.5	41.8		35.0	7.3	40.0		35.0
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0
Max Q Clear Time (g_c+I1), s	2.2	18.6		32.0	3.0	32.4		32.0
Green Ext Time (p_c), s	0.0	1.2		0.0	0.0	0.7		0.0

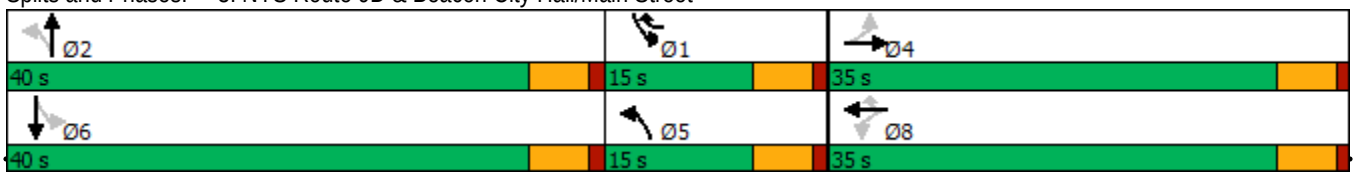
Intersection Summary		
HCM 2010 Ctrl Delay		191.1
HCM 2010 LOS		F

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2	2	47	2	162	0	299	77	246	311	0
Future Volume (vph)	0	2	2	47	2	162	0	299	77	246	311	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		1%			-8%			-3%			3%	
Storage Length (ft)	0		0	0		70	65		0	120		0
Storage Lanes	0		0	0		1	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98				0.96		0.98				
Frt		0.932				0.850		0.969				
Flt Protected					0.954					0.950		
Satd. Flow (prot)	0	1722	0	0	1885	1647	1928	1792	0	1743	1853	0
Flt Permitted					0.785					0.423		
Satd. Flow (perm)	0	1722	0	0	1551	1587	1928	1792	0	776	1853	0
Right Turn on Red			Yes			No			No			Yes
Satd. Flow (RTOR)		3										
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		133			350			693			388	
Travel Time (s)		3.0			8.0			15.8			8.8	
Confl. Peds. (#/hr)			9			15			21			12
Confl. Bikes (#/hr)			1						1			
Peak Hour Factor	0.60	0.60	0.60	0.91	0.91	0.91	0.79	0.79	0.79	0.88	0.88	0.88
Heavy Vehicles (%)	0%	0%	0%	0%	0%	2%	0%	2%	5%	2%	1%	0%
Adj. Flow (vph)	0	3	3	52	2	178	0	378	97	280	353	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	6	0	0	54	178	0	475	0	280	353	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.01	1.01	1.01	0.95	0.95	0.95	0.98	0.98	0.98	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	2	2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83		20	83	83	83	6		83	6	
Trailing Detector (ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Position(ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Size(ft)	20	43		20	43	43	43	6		43	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)		40			40	40	40			40		
Detector 2 Size(ft)		43			43	43	43			43		
Detector 2 Type		Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0	0.0	0.0			0.0		
Turn Type		NA		Perm	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8	1	5	2		1	6	
Permitted Phases	4			8		8	2			6		
Detector Phase	4	4		8	8	1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		8.0	8.0	4.0	4.0	31.0		4.0	35.0	
Minimum Split (s)	21.0	21.0		21.0	21.0	9.0	9.0	36.0		9.0	40.0	
Total Split (s)	35.0	35.0		35.0	35.0	15.0	15.0	40.0		15.0	40.0	
Total Split (%)	38.9%	38.9%		38.9%	38.9%	16.7%	16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	30.0	30.0		30.0	30.0	10.0	10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0			5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag						Lag	Lag	Lead		Lag	Lead	
Lead-Lag Optimize?						Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None	None	None	Max		None	Max	
Walk Time (s)	5.0	5.0						5.0				
Flash Dont Walk (s)	11.0	11.0						11.0				
Pedestrian Calls (#/hr)	0	0						0				
v/c Ratio		0.03			0.25	0.47		0.47		0.37	0.23	
Control Delay		21.5			29.8	22.1		11.9		5.5	3.0	
Queue Delay		0.0			0.0	0.0		0.0		0.0	0.2	
Total Delay		21.5			29.8	22.1		11.9		5.5	3.2	
Queue Length 50th (ft)		1			21	54		122		28	36	
Queue Length 95th (ft)		7			52	100		175		56	70	
Internal Link Dist (ft)		53			270			613			308	
Turn Bay Length (ft)						70				120		
Base Capacity (vph)		834			750	391		1011		781	1545	
Starvation Cap Reductn		0			0	0		0		0	560	
Spillback Cap Reductn		0			0	0		0		0	0	
Storage Cap Reductn		0			0	0		0		0	0	
Reduced v/c Ratio		0.01			0.07	0.46		0.47		0.36	0.36	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 63	
Natural Cycle: 70	
Control Type: Semi Act-Uncoord	

Splits and Phases: 3: NYS Route 9D & Beacon City Hall/Main Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2	2	47	2	162	0	299	77	246	311	0
Future Volume (veh/h)	0	2	2	47	2	162	0	299	77	246	311	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	0.97		0.94	1.00		0.96	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1890	1890	1890	1976	1976	1937	1928	1879	1928	1835	1853	1872
Adj Flow Rate, veh/h	0	3	3	52	2	178	0	378	97	280	353	0
Adj No. of Lanes	0	1	0	0	1	1	1	1	0	1	1	0
Peak Hour Factor	0.60	0.60	0.60	0.91	0.91	0.91	0.79	0.79	0.79	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	2	0	2	5	2	1	0
Cap, veh/h	0	107	107	288	9	303	726	810	208	597	1049	0
Arrive On Green	0.00	0.13	0.13	0.13	0.13	0.13	0.00	0.57	0.57	0.06	0.57	0.00
Sat Flow, veh/h	0	841	841	1364	72	1551	1837	1430	367	1747	1853	0
Grp Volume(v), veh/h	0	0	6	54	0	178	0	0	475	280	353	0
Grp Sat Flow(s),veh/h/ln	0	0	1682	1436	0	1551	1837	0	1797	1747	1853	0
Q Serve(g_s), s	0.0	0.0	0.2	2.0	0.0	2.2	0.0	0.0	9.6	0.0	6.3	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.2	2.2	0.0	2.2	0.0	0.0	9.6	0.0	6.3	0.0
Prop In Lane	0.00		0.50	0.96		1.00	1.00		0.20	1.00		0.00
Lane Grp Cap(c), veh/h	0	0	214	297	0	303	726	0	1017	597	1049	0
V/C Ratio(X)	0.00	0.00	0.03	0.18	0.00	0.59	0.00	0.00	0.47	0.47	0.34	0.00
Avail Cap(c_a), veh/h	0	0	816	817	0	858	905	0	1017	767	1049	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	23.6	24.5	0.0	22.7	0.0	0.0	7.9	12.4	7.2	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.1	0.3	0.0	1.8	0.0	0.0	1.5	0.6	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.1	0.9	0.0	2.8	0.0	0.0	5.2	3.7	3.4	0.0
LnGrp Delay(d),s/veh	0.0	0.0	23.7	24.8	0.0	24.5	0.0	0.0	9.5	13.0	8.1	0.0
LnGrp LOS			C	C		C			A	B	A	
Approach Vol, veh/h		6			232			475			633	
Approach Delay, s/veh		23.7			24.6			9.5			10.2	
Approach LOS		C			C			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	40.0		12.9	9.0	40.0		12.9
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0
Max Q Clear Time (g_c+I1), s	2.0	11.6		2.2	0.0	8.3		4.2
Green Ext Time (p_c), s	0.9	1.3		0.0	0.0	0.9		1.3

Intersection Summary	
HCM 2010 Ctrl Delay	12.5
HCM 2010 LOS	B

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	7	2	3	9	2	48	3	321	7	58	286	12
Future Volume (vph)	7	2	3	9	2	48	3	321	7	58	286	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			-3%			-4%			4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.964			0.890			0.997			0.995	
Flt Protected		0.971			0.992						0.992	
Satd. Flow (prot)	0	1778	0	0	1703	0	0	1843	0	0	1803	0
Flt Permitted		0.971			0.992						0.992	
Satd. Flow (perm)	0	1778	0	0	1703	0	0	1843	0	0	1803	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		162			281			312			693	
Travel Time (s)		3.7			6.4			7.1			15.8	
Confl. Peds. (#/hr)			2			4			3			2
Confl. Bikes (#/hr)			2									
Peak Hour Factor	0.81	0.81	0.81	0.66	0.66	0.66	0.69	0.69	0.69	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	5%	0%	2%	2%	0%
Adj. Flow (vph)	9	2	4	14	3	73	4	465	10	63	311	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	15	0	0	90	0	0	479	0	0	387	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	0.98	0.98	0.98	0.97	0.97	0.97	1.03	1.03	1.03
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

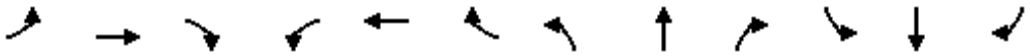
Intersection	
Int Delay, s/veh	2.2

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	7	2	3	9	2	48	3	321	7	58	286	12
Future Vol, veh/h	7	2	3	9	2	48	3	321	7	58	286	12
Conflicting Peds, #/hr	0	0	2	0	0	4	0	0	3	0	0	2
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	-	-	-3	-	-	-4	-	-	4	-
Peak Hour Factor	81	81	81	66	66	66	69	69	69	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	5	0	2	2	0
Mvmt Flow	9	2	4	14	3	73	4	465	10	63	311	13

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	966	932	322	930	933	477	326	0	0	478	0	0
Stage 1	446	446	-	481	481	-	-	-	-	-	-	-
Stage 2	520	486	-	449	452	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	6.5	5.9	5.9	4.1	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	5.5	-	5.5	4.9	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	5.5	4.9	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.218	-	-
Pot Cap-1 Maneuver	236	269	724	291	313	616	1245	-	-	1084	-	-
Stage 1	595	577	-	618	604	-	-	-	-	-	-	-
Stage 2	543	554	-	639	619	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	194	248	722	270	289	612	1243	-	-	1081	-	-
Mov Cap-2 Maneuver	194	248	-	270	289	-	-	-	-	-	-	-
Stage 1	591	535	-	614	600	-	-	-	-	-	-	-
Stage 2	473	551	-	587	574	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	20.4	13.8	0.1	1.4
HCM LOS	C	B		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	1243	-	-	497	248	1081	-	-
HCM Lane V/C Ratio	0.003	-	-	0.18	0.06	0.058	-	-
HCM Control Delay (s)	7.9	0	-	13.8	20.4	8.5	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.7	0.2	0.2	-	-

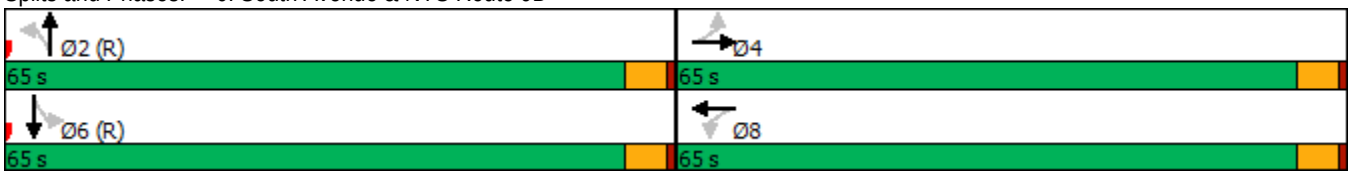


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	255	19	9	230	55	7	21	7	46	29	10
Future Volume (vph)	10	255	19	9	230	55	7	21	7	46	29	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		6%			-6%			-1%			3%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor								1.00			0.99	
Frt		0.991			0.975			0.974			0.984	
Flt Protected		0.998			0.998			0.990			0.974	
Satd. Flow (prot)	0	1823	0	0	1840	0	0	1841	0	0	1696	0
Flt Permitted		0.984			0.987			0.961			0.842	
Satd. Flow (perm)	0	1797	0	0	1820	0	0	1781	0	0	1466	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			12			8			7	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		241			516			194			303	
Travel Time (s)		5.5			11.7			4.4			6.9	
Confl. Peds. (#/hr)							6					6
Peak Hour Factor	0.90	0.90	0.90	0.83	0.83	0.83	0.85	0.85	0.85	0.79	0.79	0.79
Heavy Vehicles (%)	0%	0%	0%	12%	4%	0%	0%	0%	0%	2%	12%	0%
Adj. Flow (vph)	11	283	21	11	277	66	8	25	8	58	37	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	315	0	0	354	0	0	41	0	0	108	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	0.96	0.96	0.96	0.99	0.99	0.99	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	21.0	21.0		21.0	21.0		21.0	21.0		21.0	21.0	
Total Split (s)	65.0	65.0		65.0	65.0		65.0	65.0		65.0	65.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	60.0	60.0		60.0	60.0		60.0	60.0		60.0	60.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
v/c Ratio		0.38			0.42			0.05			0.16	
Control Delay		24.2			24.4			16.5			19.8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		24.2			24.4			16.5			19.8	
Queue Length 50th (ft)		167			188			15			48	
Queue Length 95th (ft)		243			242			34			74	
Internal Link Dist (ft)		161			436			114			223	
Turn Bay Length (ft)												
Base Capacity (vph)		831			846			826			680	
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		0.38			0.42			0.05			0.16	

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 45	
Control Type: Pretimed	

Splits and Phases: 6: South Avenue & NYS Route 9D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	255	19	9	230	55	7	21	7	46	29	10
Future Volume (veh/h)	10	255	19	9	230	55	7	21	7	46	29	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1843	1843	1843	1957	1891	1957	1910	1910	1910	1872	1779	1872
Adj Flow Rate, veh/h	11	283	21	11	277	66	8	25	8	58	37	13
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.90	0.90	0.90	0.83	0.83	0.83	0.85	0.85	0.85	0.79	0.79	0.79
Percent Heavy Veh, %	0	0	0	12	4	0	0	0	0	2	12	0
Cap, veh/h	41	764	55	39	670	156	167	511	156	394	244	82
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
Sat Flow, veh/h	26	1655	120	23	1453	338	289	1108	339	761	530	177
Grp Volume(v), veh/h	315	0	0	354	0	0	41	0	0	108	0	0
Grp Sat Flow(s),veh/h/ln	1801	0	0	1814	0	0	1736	0	0	1467	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	0.0	0.0
Cycle Q Clear(g_c), s	14.6	0.0	0.0	16.8	0.0	0.0	1.6	0.0	0.0	5.2	0.0	0.0
Prop In Lane	0.03		0.07	0.03		0.19	0.20		0.20	0.54		0.12
Lane Grp Cap(c), veh/h	860	0	0	866	0	0	834	0	0	720	0	0
V/C Ratio(X)	0.37	0.00	0.00	0.41	0.00	0.00	0.05	0.00	0.00	0.15	0.00	0.00
Avail Cap(c_a), veh/h	860	0	0	866	0	0	834	0	0	720	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	22.8	0.0	0.0	23.4	0.0	0.0	19.3	0.0	0.0	20.2	0.0	0.0
Incr Delay (d2), s/veh	1.2	0.0	0.0	1.4	0.0	0.0	0.1	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.6	0.0	0.0	8.8	0.0	0.0	0.8	0.0	0.0	2.3	0.0	0.0
LnGrp Delay(d),s/veh	24.0	0.0	0.0	24.8	0.0	0.0	19.4	0.0	0.0	20.6	0.0	0.0
LnGrp LOS	C			C			B			C		
Approach Vol, veh/h		315			354			41			108	
Approach Delay, s/veh		24.0			24.8			19.4			20.6	
Approach LOS		C			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		65.0		65.0		65.0		65.0
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		60.0		60.0		60.0		60.0
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		0.0
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	23.7
HCM 2010 LOS	C



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	69	232	570	62	159	636
Future Volume (vph)	69	232	570	62	159	636
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	5%		3%			-1%
Storage Length (ft)	85	0		0	340	
Storage Lanes	1	1		0	1	
Taper Length (ft)	86				86	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.987			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1725	1544	1811	0	1778	1872
Flt Permitted	0.950				0.208	
Satd. Flow (perm)	1725	1544	1811	0	389	1872
Right Turn on Red		No		No		
Satd. Flow (RTOR)						
Link Speed (mph)	30		30			30
Link Distance (ft)	427		462			529
Travel Time (s)	9.7		10.5			12.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	75	252	620	67	173	691
Shared Lane Traffic (%)						
Lane Group Flow (vph)	75	252	687	0	173	691
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			
Headway Factor	1.03	1.03	1.02	1.02	0.99	0.99
Turning Speed (mph)	15	9		9	15	
Turn Type	Prot	pm+ov	NA		pm+pt	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8			6	
Minimum Split (s)	21.0	9.0	15.0		9.0	15.0
Total Split (s)	30.0	20.0	70.0		20.0	90.0
Total Split (%)	25.0%	16.7%	58.3%		16.7%	75.0%
Maximum Green (s)	25.0	15.0	65.0		15.0	85.0
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0		5.0	5.0
Lead/Lag		Lead	Lag		Lead	
Lead-Lag Optimize?		Yes	Yes		Yes	
Walk Time (s)	5.0		5.0			
Flash Dont Walk (s)	11.0		11.0			
Pedestrian Calls (#/hr)	0		0			
v/c Ratio	0.21	0.44	0.70		0.39	0.52
Control Delay	41.2	31.0	25.2		8.2	9.8

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	41.2	31.0	25.2		8.2	9.8
Queue Length 50th (ft)	49	144	377		39	221
Queue Length 95th (ft)	93	222	523		62	304
Internal Link Dist (ft)	347		382			449
Turn Bay Length (ft)	85				340	
Base Capacity (vph)	359	579	980		449	1326
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.21	0.44	0.70		0.39	0.52

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NET and 6:SWTL, Start of Green	
Natural Cycle: 60	
Control Type: Pretimed	

Splits and Phases: 1: NYS Route 9D & Verplanck Avenue



Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (veh/h)	69	232	570	62	159	636
Future Volume (veh/h)	69	232	570	62	159	636
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1816	1816	1835	1872	1872	1872
Adj Flow Rate, veh/h	75	252	620	67	173	691
Adj No. of Lanes	1	1	1	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	360	515	882	95	479	1326
Arrive On Green	0.21	0.21	0.54	0.54	0.13	0.71
Sat Flow, veh/h	1730	1544	1628	176	1783	1872
Grp Volume(v), veh/h	75	252	0	687	173	691
Grp Sat Flow(s),veh/h/ln	1730	1544	0	1804	1783	1872
Q Serve(g_s), s	4.3	15.6	0.0	33.8	4.1	20.5
Cycle Q Clear(g_c), s	4.3	15.6	0.0	33.8	4.1	20.5
Prop In Lane	1.00	1.00		0.10	1.00	
Lane Grp Cap(c), veh/h	360	515	0	977	479	1326
V/C Ratio(X)	0.21	0.49	0.00	0.70	0.36	0.52
Avail Cap(c_a), veh/h	360	515	0	977	479	1326
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.3	31.9	0.0	20.4	13.6	8.1
Incr Delay (d2), s/veh	1.3	3.3	0.0	4.2	2.1	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	7.1	0.0	17.9	2.5	10.9
LnGrp Delay(d),s/veh	40.6	35.2	0.0	24.6	15.7	9.6
LnGrp LOS	D	D		C	B	A
Approach Vol, veh/h	327		687			864
Approach Delay, s/veh	36.4		24.6			10.8
Approach LOS	D		C			B

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	20.0	70.0				90.0		30.0
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	15.0	65.0				85.0		25.0
Max Q Clear Time (g_c+I1), s	0.0	0.0				0.0		0.0
Green Ext Time (p_c), s	0.0	0.0				0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	20.3
HCM 2010 LOS	C

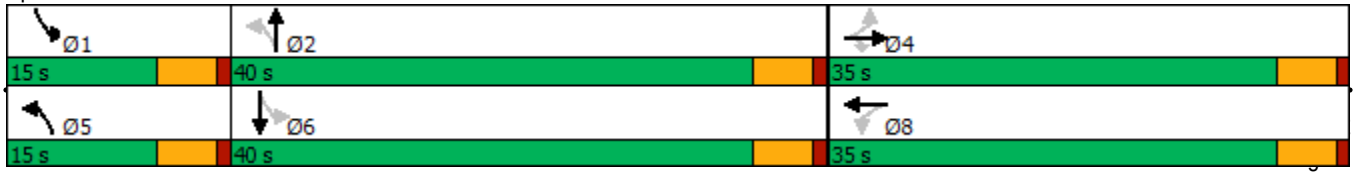
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	2	22	9	12	20	64	504	4	17	574	179
Future Volume (vph)	33	2	22	9	12	20	64	504	4	17	574	179
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		2%			-10%			-6%			3%	
Storage Length (ft)	0		95	0		0	75		0	75		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.96		0.98			1.00			0.99	
Frt			0.850		0.934			0.999			0.964	
Flt Protected		0.955			0.989		0.950			0.950		
Satd. Flow (prot)	0	1780	1599	0	1815	0	1771	1936	0	1778	1768	0
Flt Permitted		0.824			0.911		0.232			0.449		
Satd. Flow (perm)	0	1536	1533	0	1672	0	432	1936	0	840	1768	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			85		27						20	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		584			328			388			335	
Travel Time (s)		13.3			7.5			8.8			7.6	
Confl. Peds. (#/hr)			12			4			1			10
Confl. Bikes (#/hr)			3									
Peak Hour Factor	0.73	0.73	0.73	0.75	0.75	0.75	0.94	0.94	0.94	0.95	0.95	0.95
Heavy Vehicles (%)	1%	0%	0%	0%	0%	0%	5%	1%	0%	0%	1%	2%
Adj. Flow (vph)	45	3	30	12	16	27	68	536	4	18	604	188
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	48	30	0	55	0	68	540	0	18	792	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.01	1.01	1.01	0.94	0.94	0.94	0.96	0.96	0.96	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2		2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83	83	20	83		83	6		83	6	
Trailing Detector (ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Position(ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Size(ft)	20	43	43	20	43		43	6		43	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)		40	40		40		40			40		
Detector 2 Size(ft)		43	43		43		43			43		
Detector 2 Type		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)		0.0	0.0		0.0		0.0			0.0		
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	16.0		4.0	16.0	
Minimum Split (s)	20.0	20.0	20.0	21.0	21.0		9.0	21.0		9.0	21.0	
Total Split (s)	35.0	35.0	35.0	35.0	35.0		15.0	40.0		15.0	40.0	
Total Split (%)	38.9%	38.9%	38.9%	38.9%	38.9%		16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	30.0	30.0	30.0	30.0	30.0		10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		None	Max		None	Max	
Walk Time (s)				5.0	5.0							
Flash Dont Walk (s)				11.0	11.0							
Pedestrian Calls (#/hr)				0	0							
v/c Ratio		0.24	0.11		0.23		0.14	0.35		0.03	0.62	
Control Delay		28.2	0.8		18.9		3.4	5.7		3.3	13.8	
Queue Delay		0.0	0.0		0.0		0.0	0.3		0.0	0.0	
Total Delay		28.2	0.8		18.9		3.4	6.0		3.3	13.8	
Queue Length 50th (ft)		17	0		10		6	61		2	225	
Queue Length 95th (ft)		37	0		30		16	211		6	#491	
Internal Link Dist (ft)		504			248			308			255	
Turn Bay Length (ft)			95				75			75		
Base Capacity (vph)		816	854		901		574	1540		809	1275	
Starvation Cap Reductn		0	0		0		0	434		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		0.06	0.04		0.06		0.12	0.49		0.02	0.62	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 58.6
Natural Cycle: 65
Control Type: Semi Act-Uncoord
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

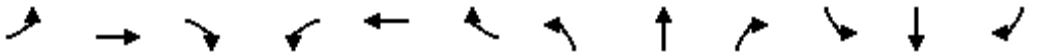
Splits and Phases: 2: NYS Route 9D & Beekman Street/W. Church Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	2	22	9	12	20	64	504	4	17	574	179
Future Volume (veh/h)	33	2	22	9	12	20	64	504	4	17	574	179
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.90	0.94		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1864	1881	1995	1995	1995	1864	1938	1957	1872	1849	1872
Adj Flow Rate, veh/h	45	3	30	12	16	27	68	536	4	18	604	188
Adj No. of Lanes	0	1	1	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.73	0.73	0.73	0.75	0.75	0.75	0.94	0.94	0.94	0.95	0.95	0.95
Percent Heavy Veh, %	1	0	0	0	0	0	5	1	0	0	1	2
Cap, veh/h	239	12	126	97	56	74	402	1220	9	583	819	255
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.05	0.64	0.64	0.02	0.61	0.61
Sat Flow, veh/h	1350	139	1441	240	635	843	1775	1921	14	1782	1350	420
Grp Volume(v), veh/h	48	0	30	55	0	0	68	0	540	18	0	792
Grp Sat Flow(s),veh/h/ln	1489	0	1441	1718	0	0	1775	0	1935	1782	0	1770
Q Serve(g_s), s	0.0	0.0	1.1	0.0	0.0	0.0	0.8	0.0	8.2	0.2	0.0	18.4
Cycle Q Clear(g_c), s	1.5	0.0	1.1	1.6	0.0	0.0	0.8	0.0	8.2	0.2	0.0	18.4
Prop In Lane	0.94		1.00	0.22		0.49	1.00		0.01	1.00		0.24
Lane Grp Cap(c), veh/h	251	0	126	226	0	0	402	0	1229	583	0	1074
V/C Ratio(X)	0.19	0.00	0.24	0.24	0.00	0.00	0.17	0.00	0.44	0.03	0.00	0.74
Avail Cap(c_a), veh/h	838	0	749	947	0	0	628	0	1229	861	0	1074
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.7	0.0	24.5	24.8	0.0	0.0	6.9	0.0	5.3	4.5	0.0	8.1
Incr Delay (d2), s/veh	0.4	0.0	1.0	0.6	0.0	0.0	0.2	0.0	1.1	0.0	0.0	4.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.5	0.9	0.0	0.0	0.4	0.0	4.6	0.1	0.0	10.2
LnGrp Delay(d),s/veh	25.1	0.0	25.5	25.3	0.0	0.0	7.1	0.0	6.5	4.5	0.0	12.6
LnGrp LOS	C		C	C			A		A	A		B
Approach Vol, veh/h		78			55			608			810	
Approach Delay, s/veh		25.2			25.3			6.5			12.4	
Approach LOS		C			C			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.0	41.7		10.1	7.7	40.0		10.1
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0
Max Q Clear Time (g_c+I1), s	2.2	10.2		3.5	2.8	20.4		3.6
Green Ext Time (p_c), s	0.0	1.4		0.3	0.1	2.3		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	11.2
HCM 2010 LOS	B

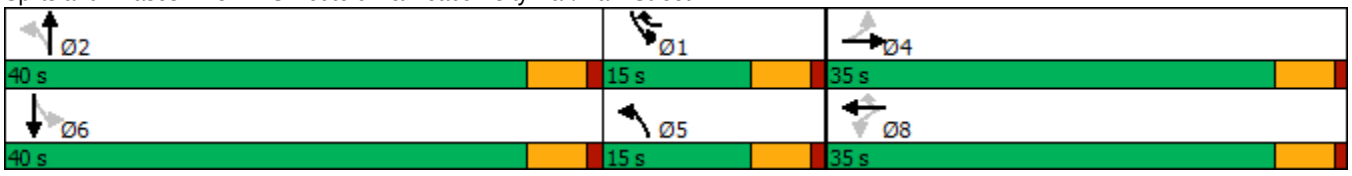


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	2	2	34	0	197	2	374	49	293	318	3
Future Volume (vph)	2	2	2	34	0	197	2	374	49	293	318	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		1%			-8%			-3%			3%	
Storage Length (ft)	0		0	0		70	65		0	120		0
Storage Lanes	0		0	0		1	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98				0.97		0.98			1.00	
Frt		0.955				0.850		0.983			0.999	
Flt Protected		0.984			0.950		0.950			0.950		
Satd. Flow (prot)	0	1742	0	0	1877	1663	1832	1819	0	1760	1851	0
Flt Permitted		0.874					0.552			0.408		
Satd. Flow (perm)	0	1547	0	0	1976	1619	1065	1819	0	756	1851	0
Right Turn on Red			Yes			No			No			Yes
Satd. Flow (RTOR)		3									1	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		133			350			693			388	
Travel Time (s)		3.0			8.0			15.8			8.8	
Confl. Peds. (#/hr)			14			6			48			11
Peak Hour Factor	0.71	0.71	0.71	0.89	0.89	0.89	0.88	0.88	0.88	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%	0%	2%	5%	1%	1%	0%
Adj. Flow (vph)	3	3	3	38	0	221	2	425	56	318	346	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	9	0	0	38	221	2	481	0	318	349	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.01	1.01	1.01	0.95	0.95	0.95	0.98	0.98	0.98	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	2	2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83		20	83	83	83	6		83	6	
Trailing Detector (ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Position(ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Size(ft)	20	43		20	43	43	43	6		43	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)		40			40	40	40			40		
Detector 2 Size(ft)		43			43	43	43			43		
Detector 2 Type		Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0	0.0	0.0			0.0		
Turn Type	Perm	NA		Perm	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8	1	5	2		1	6	
Permitted Phases	4			8		8	2			6		
Detector Phase	4	4		8	8	1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		8.0	8.0	4.0	4.0	31.0		4.0	35.0	
Minimum Split (s)	21.0	21.0		21.0	21.0	9.0	9.0	36.0		9.0	40.0	
Total Split (s)	35.0	35.0		35.0	35.0	15.0	15.0	40.0		15.0	40.0	
Total Split (%)	38.9%	38.9%		38.9%	38.9%	16.7%	16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	30.0	30.0		30.0	30.0	10.0	10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0			5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag						Lag	Lag	Lead		Lag	Lead	
Lead-Lag Optimize?						Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None	None	None	Max		None	Max	
Walk Time (s)	5.0	5.0						5.0				
Flash Dont Walk (s)	11.0	11.0						11.0				
Pedestrian Calls (#/hr)	0	0						0				
v/c Ratio		0.05			0.14	0.63	0.00	0.45		0.41	0.22	
Control Delay		23.0			26.6	27.8	3.0	10.3		5.3	4.7	
Queue Delay		0.0			0.0	0.0	0.0	0.0		3.6	0.0	
Total Delay		23.0			26.6	27.8	3.0	10.3		8.9	4.7	
Queue Length 50th (ft)		2			11	69	0	64		0	0	
Queue Length 95th (ft)		11			39	122	2	201		61	140	
Internal Link Dist (ft)		53			270			613			308	
Turn Bay Length (ft)						70	65			120		
Base Capacity (vph)		782			996	362	934	1070		793	1569	
Starvation Cap Reductn		0			0	0	0	0		376	74	
Spillback Cap Reductn		0			0	0	0	0		0	0	
Storage Cap Reductn		0			0	0	0	0		0	0	
Reduced v/c Ratio		0.01			0.04	0.61	0.00	0.45		0.76	0.23	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 60.2	
Natural Cycle: 70	
Control Type: Semi Act-Uncoord	

Splits and Phases: 3: NYS Route 9D & Beacon City Hall/Main Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	2	2	34	0	197	2	374	49	293	318	3
Future Volume (veh/h)	2	2	2	34	0	197	2	374	49	293	318	3
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.95	0.95		0.98	0.99		0.96	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1890	1890	1890	1976	1976	1956	1928	1884	1928	1853	1853	1872
Adj Flow Rate, veh/h	3	3	3	38	0	221	2	425	56	318	346	3
Adj No. of Lanes	0	1	0	0	1	1	1	1	0	1	1	0
Peak Hour Factor	0.71	0.71	0.71	0.89	0.89	0.89	0.88	0.88	0.88	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	1	0	2	5	1	1	0
Cap, veh/h	115	97	67	298	0	315	726	917	121	599	1037	9
Arrive On Green	0.13	0.13	0.13	0.13	0.00	0.13	0.06	0.57	0.57	0.06	0.57	0.57
Sat Flow, veh/h	290	761	526	1423	0	1624	1837	1622	214	1765	1834	16
Grp Volume(v), veh/h	9	0	0	38	0	221	2	0	481	318	0	349
Grp Sat Flow(s),veh/h/ln	1577	0	0	1423	0	1624	1837	0	1835	1765	0	1850
Q Serve(g_s), s	0.0	0.0	0.0	1.1	0.0	3.8	0.0	0.0	9.6	0.0	0.0	6.3
Cycle Q Clear(g_c), s	0.3	0.0	0.0	1.4	0.0	3.8	0.0	0.0	9.6	0.0	0.0	6.3
Prop In Lane	0.33		0.33	1.00		1.00	1.00		0.12	1.00		0.01
Lane Grp Cap(c), veh/h	279	0	0	298	0	315	726	0	1038	599	0	1046
V/C Ratio(X)	0.03	0.00	0.00	0.13	0.00	0.70	0.00	0.00	0.46	0.53	0.00	0.33
Avail Cap(c_a), veh/h	800	0	0	801	0	894	904	0	1038	770	0	1046
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.7	0.0	0.0	24.1	0.0	23.3	6.9	0.0	7.9	13.2	0.0	7.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	2.8	0.0	0.0	1.5	0.7	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	0.6	0.0	3.5	0.0	0.0	5.2	4.5	0.0	3.4
LnGrp Delay(d),s/veh	23.7	0.0	0.0	24.3	0.0	26.2	6.9	0.0	9.4	13.9	0.0	8.1
LnGrp LOS	C			C		C	A		A	B		A
Approach Vol, veh/h		9			259			483			667	
Approach Delay, s/veh		23.7			25.9			9.4			10.9	
Approach LOS		C			C			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	40.0		12.9	9.0	40.0		12.9
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0
Max Q Clear Time (g_c+I1), s	2.0	11.6		2.3	2.0	8.3		5.8
Green Ext Time (p_c), s	1.0	1.3		0.0	0.0	0.8		1.5

Intersection Summary	
HCM 2010 Ctrl Delay	13.2
HCM 2010 LOS	B

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	10	3	3	10	5	82	3	332	10	45	302	7
Future Volume (vph)	10	3	3	10	5	82	3	332	10	45	302	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			-3%			-4%			4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.974			0.886			0.996			0.997	
Flt Protected		0.970			0.995						0.994	
Satd. Flow (prot)	0	1638	0	0	1646	0	0	1853	0	0	1810	0
Flt Permitted		0.970			0.995						0.994	
Satd. Flow (perm)	0	1638	0	0	1646	0	0	1853	0	0	1810	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		162			281			312			693	
Travel Time (s)		3.7			6.4			7.1			15.8	
Confl. Peds. (#/hr)			4			19			2			3
Confl. Bikes (#/hr)												1
Peak Hour Factor	0.61	0.61	0.61	0.88	0.88	0.88	0.85	0.85	0.85	0.92	0.92	0.92
Heavy Vehicles (%)	0%	50%	0%	11%	25%	1%	0%	4%	11%	2%	2%	0%
Adj. Flow (vph)	16	5	5	11	6	93	4	391	12	49	328	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	26	0	0	110	0	0	407	0	0	385	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	0.98	0.98	0.98	0.97	0.97	0.97	1.03	1.03	1.03
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

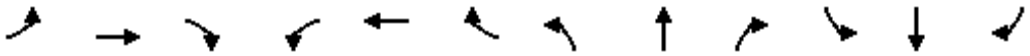
Intersection	
Int Delay, s/veh	2.7

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	3	3	10	5	82	3	332	10	45	302	7
Future Vol, veh/h	10	3	3	10	5	82	3	332	10	45	302	7
Conflicting Peds, #/hr	0	0	4	0	0	19	0	0	2	0	0	3
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	-	-	-3	-	-	-4	-	-	4	-
Peak Hour Factor	61	61	61	88	88	88	85	85	85	92	92	92
Heavy Vehicles, %	0	50	0	11	25	1	0	4	11	2	2	0
Mvmt Flow	16	5	5	11	6	93	4	391	12	49	328	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	907	846	339	846	844	418	339	0	0	405	0	0
Stage 1	433	433	-	407	407	-	-	-	-	-	-	-
Stage 2	474	413	-	439	437	-	-	-	-	-	-	-
Critical Hdwy	7.1	7	6.2	6.61	6.15	5.91	4.1	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	6	-	5.61	5.15	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	6	-	5.61	5.15	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4.45	3.3	3.599	4.225	3.309	2.2	-	-	2.218	-	-
Pot Cap-1 Maneuver	259	252	708	314	318	660	1231	-	-	1154	-	-
Stage 1	605	508	-	646	599	-	-	-	-	-	-	-
Stage 2	575	519	-	624	583	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	205	237	704	292	299	648	1228	-	-	1152	-	-
Mov Cap-2 Maneuver	205	237	-	292	299	-	-	-	-	-	-	-
Stage 1	601	481	-	642	595	-	-	-	-	-	-	-
Stage 2	478	516	-	579	552	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	21.5	13.3	0.1	1.1
HCM LOS	C	B		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	1228	-	-	546	244	1152	-	-
HCM Lane V/C Ratio	0.003	-	-	0.202	0.107	0.042	-	-
HCM Control Delay (s)	7.9	0	-	13.3	21.5	8.3	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.7	0.4	0.1	-	-

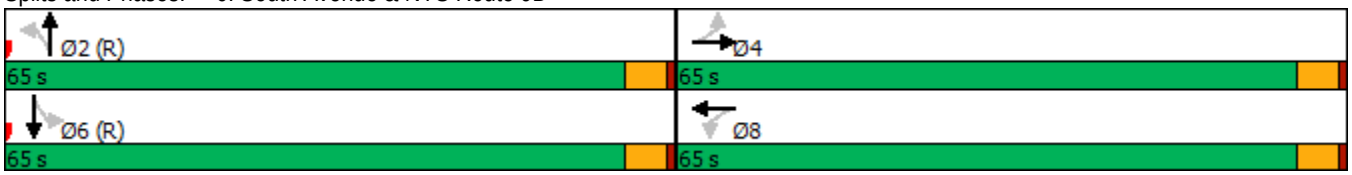


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	188	16	13	201	37	14	27	13	32	35	9
Future Volume (vph)	9	188	16	13	201	37	14	27	13	32	35	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		6%			-6%			-1%			3%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor								0.99			0.99	
Frt		0.990			0.980			0.967			0.984	
Flt Protected		0.998			0.997			0.987			0.979	
Satd. Flow (prot)	0	1821	0	0	1842	0	0	1822	0	0	1686	0
Flt Permitted		0.983			0.979			0.926			0.866	
Satd. Flow (perm)	0	1794	0	0	1809	0	0	1701	0	0	1491	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			9			17			7	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		241			516			194			303	
Travel Time (s)		5.5			11.7			4.4			6.9	
Confl. Peds. (#/hr)							6					6
Peak Hour Factor	0.82	0.82	0.82	0.85	0.85	0.85	0.55	0.55	0.55	0.82	0.82	0.82
Heavy Vehicles (%)	0%	0%	0%	12%	4%	0%	0%	0%	0%	2%	12%	0%
Adj. Flow (vph)	11	229	20	15	236	44	25	49	24	39	43	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	260	0	0	295	0	0	98	0	0	93	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	0.96	0.96	0.96	0.99	0.99	0.99	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	21.0	21.0		21.0	21.0		21.0	21.0		21.0	21.0	
Total Split (s)	65.0	65.0		65.0	65.0		65.0	65.0		65.0	65.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	60.0	60.0		60.0	60.0		60.0	60.0		60.0	60.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
v/c Ratio		0.31			0.35			0.12			0.13	
Control Delay		23.0			23.2			16.9			19.2	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		23.0			23.2			16.9			19.2	
Queue Length 50th (ft)		133			151			38			41	
Queue Length 95th (ft)		176			206			39			67	
Internal Link Dist (ft)		161			436			114			223	
Turn Bay Length (ft)												
Base Capacity (vph)		830			839			794			691	
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		0.31			0.35			0.12			0.13	

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 45	
Control Type: Pretimed	

Splits and Phases: 6: South Avenue & NYS Route 9D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	188	16	13	201	37	14	27	13	32	35	9
Future Volume (veh/h)	9	188	16	13	201	37	14	27	13	32	35	9
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1843	1843	1843	1957	1885	1957	1910	1910	1910	1872	1759	1872
Adj Flow Rate, veh/h	11	229	20	15	236	44	25	49	24	39	43	11
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.82	0.82	0.82	0.85	0.85	0.85	0.55	0.55	0.55	0.82	0.82	0.82
Percent Heavy Veh, %	0	0	0	12	4	0	0	0	0	2	12	0
Cap, veh/h	44	749	64	50	689	124	212	409	190	312	333	81
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
Sat Flow, veh/h	34	1623	138	46	1492	270	384	887	412	590	721	176
Grp Volume(v), veh/h	260	0	0	295	0	0	98	0	0	93	0	0
Grp Sat Flow(s),veh/h/ln	1795	0	0	1808	0	0	1683	0	0	1487	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	11.7	0.0	0.0	13.4	0.0	0.0	4.0	0.0	0.0	4.0	0.0	0.0
Prop In Lane	0.04		0.08	0.05		0.15	0.26		0.24	0.42		0.12
Lane Grp Cap(c), veh/h	857	0	0	863	0	0	812	0	0	726	0	0
V/C Ratio(X)	0.30	0.00	0.00	0.34	0.00	0.00	0.12	0.00	0.00	0.13	0.00	0.00
Avail Cap(c_a), veh/h	857	0	0	863	0	0	812	0	0	726	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	22.0	0.0	0.0	22.5	0.0	0.0	19.9	0.0	0.0	19.9	0.0	0.0
Incr Delay (d2), s/veh	0.9	0.0	0.0	1.1	0.0	0.0	0.3	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	0.0	0.0	7.1	0.0	0.0	2.1	0.0	0.0	2.0	0.0	0.0
LnGrp Delay(d),s/veh	22.9	0.0	0.0	23.5	0.0	0.0	20.2	0.0	0.0	20.3	0.0	0.0
LnGrp LOS	C			C			C			C		
Approach Vol, veh/h		260			295			98			93	
Approach Delay, s/veh		22.9			23.5			20.2			20.3	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		65.0		65.0		65.0		65.0
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		60.0		60.0		60.0		60.0
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		0.0
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	22.5
HCM 2010 LOS	C



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	54	299	746	72	209	639
Future Volume (vph)	54	299	746	72	209	639
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	5%		3%			-1%
Storage Length (ft)	85	0		0	340	
Storage Lanes	1	1		0	1	
Taper Length (ft)	86				86	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.988			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1725	1544	1813	0	1778	1872
Flt Permitted	0.950				0.078	
Satd. Flow (perm)	1725	1544	1813	0	146	1872
Right Turn on Red		No		No		
Satd. Flow (RTOR)						
Link Speed (mph)	30		30			30
Link Distance (ft)	427		462			529
Travel Time (s)	9.7		10.5			12.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	59	325	811	78	227	695
Shared Lane Traffic (%)						
Lane Group Flow (vph)	59	325	889	0	227	695
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			
Headway Factor	1.03	1.03	1.02	1.02	0.99	0.99
Turning Speed (mph)	15	9		9	15	
Turn Type	Prot	pm+ov	NA		pm+pt	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8			6	
Minimum Split (s)	21.0	9.0	15.0		9.0	15.0
Total Split (s)	30.0	20.0	70.0		20.0	90.0
Total Split (%)	25.0%	16.7%	58.3%		16.7%	75.0%
Maximum Green (s)	25.0	15.0	65.0		15.0	85.0
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0		5.0	5.0
Lead/Lag		Lead	Lag		Lead	
Lead-Lag Optimize?		Yes	Yes		Yes	
Walk Time (s)	5.0		5.0			
Flash Dont Walk (s)	11.0		11.0			
Pedestrian Calls (#/hr)	0		0			
v/c Ratio	0.16	0.56	0.91		0.74	0.52
Control Delay	40.4	34.3	39.1		38.3	9.9

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	40.4	34.3	39.1		38.3	9.9
Queue Length 50th (ft)	38	197	594		97	223
Queue Length 95th (ft)	76	293	#888		#209	307
Internal Link Dist (ft)	347		382			449
Turn Bay Length (ft)	85				340	
Base Capacity (vph)	359	579	982		307	1326
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.16	0.56	0.91		0.74	0.52

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NET and 6:SWTL, Start of Green	
Natural Cycle: 80	
Control Type: Pretimed	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

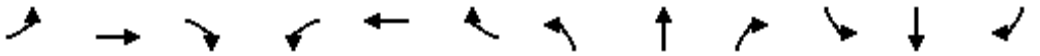
Splits and Phases: 1: NYS Route 9D & Verplanck Avenue



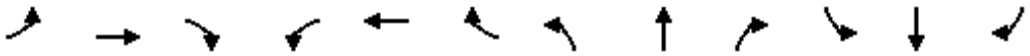
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (veh/h)	54	299	746	72	209	639
Future Volume (veh/h)	54	299	746	72	209	639
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1816	1816	1835	1872	1872	1872
Adj Flow Rate, veh/h	59	325	811	78	227	695
Adj No. of Lanes	1	1	1	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	360	515	893	86	344	1326
Arrive On Green	0.21	0.21	0.54	0.54	0.13	0.71
Sat Flow, veh/h	1730	1544	1648	159	1783	1872
Grp Volume(v), veh/h	59	325	0	889	227	695
Grp Sat Flow(s),veh/h/ln	1730	1544	0	1807	1783	1872
Q Serve(g_s), s	3.4	21.3	0.0	53.3	6.0	20.7
Cycle Q Clear(g_c), s	3.4	21.3	0.0	53.3	6.0	20.7
Prop In Lane	1.00	1.00		0.09	1.00	
Lane Grp Cap(c), veh/h	360	515	0	979	344	1326
V/C Ratio(X)	0.16	0.63	0.00	0.91	0.66	0.52
Avail Cap(c_a), veh/h	360	515	0	979	344	1326
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.9	33.8	0.0	24.8	25.1	8.1
Incr Delay (d2), s/veh	1.0	5.8	0.0	13.7	9.6	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	9.9	0.0	30.1	7.8	11.2
LnGrp Delay(d),s/veh	39.9	39.6	0.0	38.5	34.6	9.6
LnGrp LOS	D	D		D	C	A
Approach Vol, veh/h	384		889			922
Approach Delay, s/veh	39.6		38.5			15.8
Approach LOS	D		D			B

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	20.0	70.0				90.0		30.0
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	15.0	65.0				85.0		25.0
Max Q Clear Time (g_c+I1), s	0.0	0.0				0.0		0.0
Green Ext Time (p_c), s	0.0	0.0				0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	29.1
HCM 2010 LOS	C



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	310	24	37	4	15	23	34	437	5	6	525	166
Future Volume (vph)	310	24	37	4	15	23	34	437	5	6	525	166
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		2%			-10%			-6%			3%	
Storage Length (ft)	0		95	0		0	75		0	75		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.98		0.97			1.00			0.99	
Frt			0.850		0.925			0.998			0.964	
Flt Protected		0.956			0.996		0.950			0.950		
Satd. Flow (prot)	0	1760	1599	0	1737	0	1805	1915	0	1778	1774	0
Flt Permitted		0.709			0.966		0.103			0.328		
Satd. Flow (perm)	0	1306	1562	0	1684	0	196	1915	0	614	1774	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			85		25			1			21	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		584			328			388			335	
Travel Time (s)		13.3			7.5			8.8			7.6	
Confl. Peds. (#/hr)			2			13			1			6
Confl. Bikes (#/hr)						1			1			1
Peak Hour Factor	0.71	0.71	0.71	0.92	0.92	0.92	0.84	0.84	0.84	0.98	0.98	0.98
Heavy Vehicles (%)	2%	4%	0%	0%	7%	0%	3%	2%	0%	0%	1%	1%
Adj. Flow (vph)	437	34	52	4	16	25	40	520	6	6	536	169
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	471	52	0	45	0	40	526	0	6	705	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.01	1.01	1.01	0.94	0.94	0.94	0.96	0.96	0.96	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2		2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83	83	20	83		83	6		83	6	
Trailing Detector (ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Position(ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Size(ft)	20	43	43	20	43		43	6		43	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)		40	40		40		40			40		
Detector 2 Size(ft)		43	43		43		43			43		
Detector 2 Type		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex		

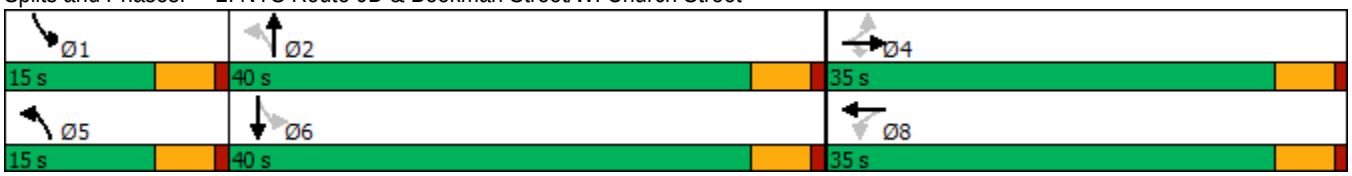


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)		0.0	0.0		0.0		0.0			0.0		
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	16.0		4.0	16.0	
Minimum Split (s)	20.0	20.0	20.0	21.0	21.0		9.0	21.0		9.0	21.0	
Total Split (s)	35.0	35.0	35.0	35.0	35.0		15.0	40.0		15.0	40.0	
Total Split (%)	38.9%	38.9%	38.9%	38.9%	38.9%		16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	30.0	30.0	30.0	30.0	30.0		10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		None	Max		None	Max	
Walk Time (s)				5.0	5.0							
Flash Dont Walk (s)				11.0	11.0							
Pedestrian Calls (#/hr)				0	0							
v/c Ratio		0.99	0.08		0.07		0.17	0.56		0.02	0.92	
Control Delay		67.8	2.2		11.8		11.3	18.5		9.5	42.1	
Queue Delay		0.0	0.0		0.0		0.0	4.3		0.0	0.0	
Total Delay		67.8	2.2		11.8		11.3	22.8		9.5	42.1	
Queue Length 50th (ft)		~282	0		7		10	171		1	359	
Queue Length 95th (ft)		#319	2		30		22	304		7	#611	
Internal Link Dist (ft)		504			248			308			255	
Turn Bay Length (ft)			95				75			75		
Base Capacity (vph)		478	625		632		296	932		446	770	
Starvation Cap Reductn		0	0		0		0	321		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		0.99	0.08		0.07		0.14	0.86		0.01	0.92	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 82.4
Natural Cycle: 90
Control Type: Semi Act-Uncoord
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: NYS Route 9D & Beekman Street/W. Church Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	310	24	37	4	15	23	34	437	5	6	525	166
Future Volume (veh/h)	310	24	37	4	15	23	34	437	5	6	525	166
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.96	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1842	1881	1995	1947	1995	1900	1919	1957	1872	1853	1872
Adj Flow Rate, veh/h	437	34	52	4	16	25	40	520	6	6	536	169
Adj No. of Lanes	0	1	1	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.71	0.71	0.71	0.92	0.92	0.92	0.84	0.84	0.84	0.98	0.98	0.98
Percent Heavy Veh, %	2	4	0	0	7	0	3	2	0	0	1	1
Cap, veh/h	193	8	581	48	144	180	172	847	10	308	570	180
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.03	0.45	0.45	0.01	0.42	0.42
Sat Flow, veh/h	299	23	1594	0	396	495	1810	1893	22	1782	1341	423
Grp Volume(v), veh/h	471	0	52	45	0	0	40	0	526	6	0	705
Grp Sat Flow(s),veh/h/ln	323	0	1594	890	0	0	1810	0	1915	1782	0	1764
Q Serve(g_s), s	0.0	0.0	1.8	0.0	0.0	0.0	1.0	0.0	17.2	0.2	0.0	31.6
Cycle Q Clear(g_c), s	30.0	0.0	1.8	30.0	0.0	0.0	1.0	0.0	17.2	0.2	0.0	31.6
Prop In Lane	0.93		1.00	0.09		0.56	1.00		0.01	1.00		0.24
Lane Grp Cap(c), veh/h	202	0	581	372	0	0	172	0	857	308	0	749
V/C Ratio(X)	2.33	0.00	0.09	0.12	0.00	0.00	0.23	0.00	0.61	0.02	0.00	0.94
Avail Cap(c_a), veh/h	202	0	581	372	0	0	339	0	857	513	0	749
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	32.5	0.0	17.2	18.4	0.0	0.0	18.9	0.0	17.3	14.8	0.0	22.7
Incr Delay (d2), s/veh	615.8	0.0	0.1	0.1	0.0	0.0	0.7	0.0	3.3	0.0	0.0	21.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	39.0	0.0	0.8	0.7	0.0	0.0	0.5	0.0	9.8	0.1	0.0	19.7
LnGrp Delay(d),s/veh	648.2	0.0	17.3	18.5	0.0	0.0	19.6	0.0	20.6	14.8	0.0	44.0
LnGrp LOS	F		B	B			B		C	B		D
Approach Vol, veh/h		523			45			566			711	
Approach Delay, s/veh		585.5			18.5			20.5			43.7	
Approach LOS		F			B			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.5	41.9		35.0	7.4	40.0		35.0
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0
Max Q Clear Time (g_c+I1), s	2.2	19.2		32.0	3.0	33.6		32.0
Green Ext Time (p_c), s	0.0	1.3		0.0	0.0	0.4		0.0

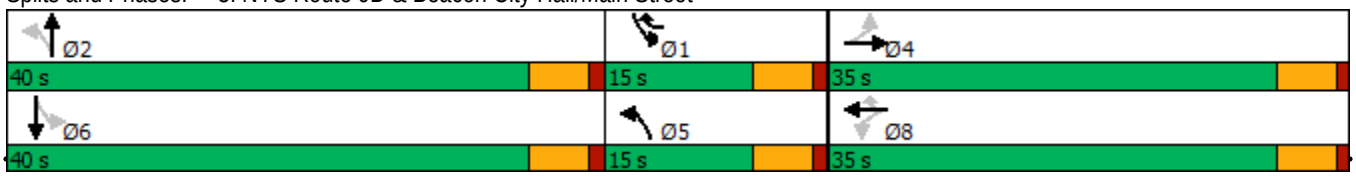
Intersection Summary		
HCM 2010 Ctrl Delay		189.6
HCM 2010 LOS		F

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2	2	50	2	162	0	315	80	246	328	0
Future Volume (vph)	0	2	2	50	2	162	0	315	80	246	328	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		1%			-8%			-3%			3%	
Storage Length (ft)	0		0	0		70	65		0	120		0
Storage Lanes	0		0	0		1	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98				0.96		0.98				
Frt		0.932				0.850		0.970				
Flt Protected					0.954					0.950		
Satd. Flow (prot)	0	1722	0	0	1885	1647	1928	1794	0	1743	1853	0
Flt Permitted					0.771					0.404		
Satd. Flow (perm)	0	1722	0	0	1523	1587	1928	1794	0	741	1853	0
Right Turn on Red			Yes			No			No			Yes
Satd. Flow (RTOR)		3										
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		133			350			693			388	
Travel Time (s)		3.0			8.0			15.8			8.8	
Confl. Peds. (#/hr)			9			15			21			12
Confl. Bikes (#/hr)			1						1			
Peak Hour Factor	0.60	0.60	0.60	0.91	0.91	0.91	0.79	0.79	0.79	0.88	0.88	0.88
Heavy Vehicles (%)	0%	0%	0%	0%	0%	2%	0%	2%	5%	2%	1%	0%
Adj. Flow (vph)	0	3	3	55	2	178	0	399	101	280	373	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	6	0	0	57	178	0	500	0	280	373	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.01	1.01	1.01	0.95	0.95	0.95	0.98	0.98	0.98	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	2	2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83		20	83	83	83	6		83	6	
Trailing Detector (ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Position(ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Size(ft)	20	43		20	43	43	43	6		43	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)		40			40	40	40			40		
Detector 2 Size(ft)		43			43	43	43			43		
Detector 2 Type		Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0	0.0	0.0			0.0		
Turn Type		NA		Perm	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8	1	5	2		1	6	
Permitted Phases	4			8		8	2			6		
Detector Phase	4	4		8	8	1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		8.0	8.0	4.0	4.0	31.0		4.0	35.0	
Minimum Split (s)	21.0	21.0		21.0	21.0	9.0	9.0	36.0		9.0	40.0	
Total Split (s)	35.0	35.0		35.0	35.0	15.0	15.0	40.0		15.0	40.0	
Total Split (%)	38.9%	38.9%		38.9%	38.9%	16.7%	16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	30.0	30.0		30.0	30.0	10.0	10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0			5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag						Lag	Lag	Lead		Lag	Lead	
Lead-Lag Optimize?						Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None	None	None	Max		None	Max	
Walk Time (s)	5.0	5.0						5.0				
Flash Dont Walk (s)	11.0	11.0						11.0				
Pedestrian Calls (#/hr)	0	0						0				
v/c Ratio		0.03			0.27	0.47		0.49		0.38	0.24	
Control Delay		21.5			30.1	22.0		12.3		5.9	3.1	
Queue Delay		0.0			0.0	0.0		0.0		0.0	0.2	
Total Delay		21.5			30.1	22.0		12.3		5.9	3.3	
Queue Length 50th (ft)		1			22	54		130		28	39	
Queue Length 95th (ft)		7			54	100		187		56	75	
Internal Link Dist (ft)		53			270			613			308	
Turn Bay Length (ft)						70				120		
Base Capacity (vph)		833			735	392		1011		758	1544	
Starvation Cap Reductn		0			0	0		0		0	551	
Spillback Cap Reductn		0			0	0		0		0	0	
Storage Cap Reductn		0			0	0		0		0	0	
Reduced v/c Ratio		0.01			0.08	0.45		0.49		0.37	0.38	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 63.1	
Natural Cycle: 70	
Control Type: Semi Act-Uncoord	

Splits and Phases: 3: NYS Route 9D & Beacon City Hall/Main Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2	2	50	2	162	0	315	80	246	328	0
Future Volume (veh/h)	0	2	2	50	2	162	0	315	80	246	328	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	0.97		0.94	1.00		0.96	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1890	1890	1890	1976	1976	1937	1928	1880	1928	1835	1853	1872
Adj Flow Rate, veh/h	0	3	3	55	2	178	0	399	101	280	373	0
Adj No. of Lanes	0	1	0	0	1	1	1	1	0	1	1	0
Peak Hour Factor	0.60	0.60	0.60	0.91	0.91	0.91	0.79	0.79	0.79	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	2	0	2	5	2	1	0
Cap, veh/h	0	107	107	288	9	303	709	812	206	579	1049	0
Arrive On Green	0.00	0.13	0.13	0.13	0.13	0.13	0.00	0.57	0.57	0.06	0.57	0.00
Sat Flow, veh/h	0	841	841	1366	68	1551	1837	1435	363	1747	1853	0
Grp Volume(v), veh/h	0	0	6	57	0	178	0	0	500	280	373	0
Grp Sat Flow(s),veh/h/ln	0	0	1682	1434	0	1551	1837	0	1798	1747	1853	0
Q Serve(g_s), s	0.0	0.0	0.2	2.1	0.0	2.2	0.0	0.0	10.3	0.0	6.8	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.2	2.3	0.0	2.2	0.0	0.0	10.3	0.0	6.8	0.0
Prop In Lane	0.00		0.50	0.96		1.00	1.00		0.20	1.00		0.00
Lane Grp Cap(c), veh/h	0	0	214	297	0	303	709	0	1018	579	1049	0
V/C Ratio(X)	0.00	0.00	0.03	0.19	0.00	0.59	0.00	0.00	0.49	0.48	0.36	0.00
Avail Cap(c_a), veh/h	0	0	816	816	0	858	889	0	1018	749	1049	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	23.6	24.6	0.0	22.7	0.0	0.0	8.1	13.1	7.3	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.1	0.3	0.0	1.8	0.0	0.0	1.7	0.6	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.1	0.9	0.0	2.8	0.0	0.0	5.5	3.8	3.7	0.0
LnGrp Delay(d),s/veh	0.0	0.0	23.7	24.9	0.0	24.5	0.0	0.0	9.8	13.7	8.2	0.0
LnGrp LOS			C	C		C			A	B	A	
Approach Vol, veh/h		6			235			500			653	
Approach Delay, s/veh		23.7			24.6			9.8			10.6	
Approach LOS		C			C			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	40.0		12.9	9.0	40.0		12.9
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0
Max Q Clear Time (g_c+I1), s	2.0	12.3		2.2	0.0	8.8		4.3
Green Ext Time (p_c), s	0.9	1.4		0.0	0.0	0.9		1.3

Intersection Summary	
HCM 2010 Ctrl Delay	12.7
HCM 2010 LOS	B

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	7	2	3	9	2	48	3	340	7	58	306	12
Future Volume (vph)	7	2	3	9	2	48	3	340	7	58	306	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			-3%			-4%			4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.964			0.890			0.997			0.996	
Flt Protected		0.971			0.992						0.992	
Satd. Flow (prot)	0	1778	0	0	1703	0	0	1843	0	0	1805	0
Flt Permitted		0.971			0.992						0.992	
Satd. Flow (perm)	0	1778	0	0	1703	0	0	1843	0	0	1805	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		162			281			312			693	
Travel Time (s)		3.7			6.4			7.1			15.8	
Confl. Peds. (#/hr)			2			4			3			2
Confl. Bikes (#/hr)			2									
Peak Hour Factor	0.81	0.81	0.81	0.66	0.66	0.66	0.69	0.69	0.69	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	5%	0%	2%	2%	0%
Adj. Flow (vph)	9	2	4	14	3	73	4	493	10	63	333	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	15	0	0	90	0	0	507	0	0	409	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	0.98	0.98	0.98	0.97	0.97	0.97	1.03	1.03	1.03
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2.1

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	7	2	3	9	2	48	3	340	7	58	306	12
Future Vol, veh/h	7	2	3	9	2	48	3	340	7	58	306	12
Conflicting Peds, #/hr	0	0	2	0	0	4	0	0	3	0	0	2
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	-	-	-3	-	-	-4	-	-	4	-
Peak Hour Factor	81	81	81	66	66	66	69	69	69	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	5	0	2	2	0
Mvmt Flow	9	2	4	14	3	73	4	493	10	63	333	13

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1016	982	344	980	983	505	348	0	0	506	0	0
Stage 1	468	468	-	509	509	-	-	-	-	-	-	-
Stage 2	548	514	-	471	474	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	6.5	5.9	5.9	4.1	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	5.5	-	5.5	4.9	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	5.5	4.9	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.218	-	-
Pot Cap-1 Maneuver	218	251	703	272	295	596	1222	-	-	1059	-	-
Stage 1	579	565	-	599	589	-	-	-	-	-	-	-
Stage 2	524	539	-	624	607	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	177	230	701	251	271	593	1220	-	-	1056	-	-
Mov Cap-2 Maneuver	177	230	-	251	271	-	-	-	-	-	-	-
Stage 1	575	522	-	595	585	-	-	-	-	-	-	-
Stage 2	454	535	-	571	561	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	21.9	14.3	0.1	1.3
HCM LOS	C	B		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	1220	-	-	475	228	1056	-	-
HCM Lane V/C Ratio	0.004	-	-	0.188	0.065	0.06	-	-
HCM Control Delay (s)	8	0	-	14.3	21.9	8.6	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.7	0.2	0.2	-	-



Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	19	5	6	330	297	20
Future Volume (vph)	19	5	6	330	297	20
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	0.974				0.991	
Flt Protected	0.961			0.999		
Satd. Flow (prot)	1744	0	0	1861	1846	0
Flt Permitted	0.961			0.999		
Satd. Flow (perm)	1744	0	0	1861	1846	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	176			499	312	
Travel Time (s)	4.0			11.3	7.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	21	5	7	359	323	22
Shared Lane Traffic (%)						
Lane Group Flow (vph)	26	0	0	366	345	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane				Yes	Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

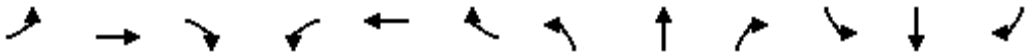
Intersection	
Int Delay, s/veh	0.5

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	19	5	6	330	297	20
Future Vol, veh/h	19	5	6	330	297	20
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	21	5	7	359	323	22

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	707	334	345	0	-	0
Stage 1	334	-	-	-	-	-
Stage 2	373	-	-	-	-	-
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	402	708	1214	-	-	-
Stage 1	725	-	-	-	-	-
Stage 2	696	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	399	708	1214	-	-	-
Mov Cap-2 Maneuver	505	-	-	-	-	-
Stage 1	720	-	-	-	-	-
Stage 2	696	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	12	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SWT	SWR
Capacity (veh/h)	1214	-	537	-	-
HCM Lane V/C Ratio	0.005	-	0.049	-	-
HCM Control Delay (s)	8	0	12	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

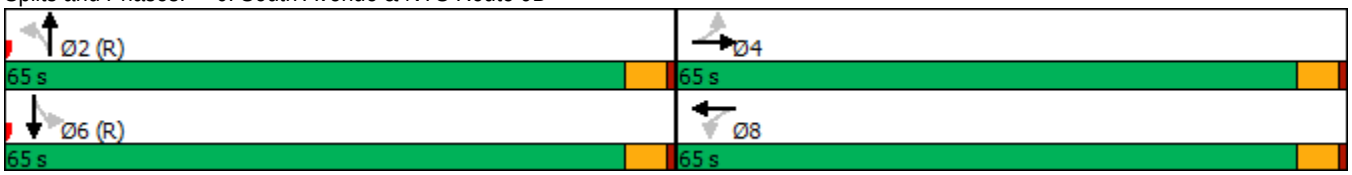


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	260	19	9	236	55	7	21	7	46	29	10
Future Volume (vph)	10	260	19	9	236	55	7	21	7	46	29	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		6%			-6%			-1%			3%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor								1.00			0.99	
Frt		0.991			0.975			0.974			0.984	
Flt Protected		0.998			0.998			0.990			0.974	
Satd. Flow (prot)	0	1823	0	0	1840	0	0	1841	0	0	1696	0
Flt Permitted		0.985			0.987			0.961			0.842	
Satd. Flow (perm)	0	1799	0	0	1819	0	0	1781	0	0	1466	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			12			8			7	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		241			516			194			303	
Travel Time (s)		5.5			11.7			4.4			6.9	
Confl. Peds. (#/hr)							6					6
Peak Hour Factor	0.90	0.90	0.90	0.83	0.83	0.83	0.85	0.85	0.85	0.79	0.79	0.79
Heavy Vehicles (%)	0%	0%	0%	12%	4%	0%	0%	0%	0%	2%	12%	0%
Adj. Flow (vph)	11	289	21	11	284	66	8	25	8	58	37	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	321	0	0	361	0	0	41	0	0	108	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	0.96	0.96	0.96	0.99	0.99	0.99	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	21.0	21.0		21.0	21.0		21.0	21.0		21.0	21.0	
Total Split (s)	65.0	65.0		65.0	65.0		65.0	65.0		65.0	65.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	60.0	60.0		60.0	60.0		60.0	60.0		60.0	60.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
v/c Ratio		0.39			0.43			0.05			0.16	
Control Delay		24.3			24.6			16.5			19.8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		24.3			24.6			16.5			19.8	
Queue Length 50th (ft)		171			193			15			48	
Queue Length 95th (ft)		247			247			34			74	
Internal Link Dist (ft)		161			436			114			223	
Turn Bay Length (ft)												
Base Capacity (vph)		832			846			826			680	
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		0.39			0.43			0.05			0.16	

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 45	
Control Type: Pretimed	

Splits and Phases: 6: South Avenue & NYS Route 9D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	260	19	9	236	55	7	21	7	46	29	10
Future Volume (veh/h)	10	260	19	9	236	55	7	21	7	46	29	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1843	1843	1843	1957	1891	1957	1910	1910	1910	1872	1779	1872
Adj Flow Rate, veh/h	11	289	21	11	284	66	8	25	8	58	37	13
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.90	0.90	0.90	0.83	0.83	0.83	0.85	0.85	0.85	0.79	0.79	0.79
Percent Heavy Veh, %	0	0	0	12	4	0	0	0	0	2	12	0
Cap, veh/h	40	765	54	39	674	153	167	511	156	394	244	82
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
Sat Flow, veh/h	25	1659	118	23	1461	332	289	1108	339	761	530	177
Grp Volume(v), veh/h	321	0	0	361	0	0	41	0	0	108	0	0
Grp Sat Flow(s),veh/h/ln	1802	0	0	1815	0	0	1736	0	0	1467	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	0.0	0.0
Cycle Q Clear(g_c), s	15.0	0.0	0.0	17.2	0.0	0.0	1.6	0.0	0.0	5.2	0.0	0.0
Prop In Lane	0.03		0.07	0.03		0.18	0.20		0.20	0.54		0.12
Lane Grp Cap(c), veh/h	860	0	0	866	0	0	834	0	0	720	0	0
V/C Ratio(X)	0.37	0.00	0.00	0.42	0.00	0.00	0.05	0.00	0.00	0.15	0.00	0.00
Avail Cap(c_a), veh/h	860	0	0	866	0	0	834	0	0	720	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	22.9	0.0	0.0	23.5	0.0	0.0	19.3	0.0	0.0	20.2	0.0	0.0
Incr Delay (d2), s/veh	1.2	0.0	0.0	1.5	0.0	0.0	0.1	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.8	0.0	0.0	9.0	0.0	0.0	0.8	0.0	0.0	2.3	0.0	0.0
LnGrp Delay(d),s/veh	24.1	0.0	0.0	24.9	0.0	0.0	19.4	0.0	0.0	20.6	0.0	0.0
LnGrp LOS	C			C			B			C		
Approach Vol, veh/h		321			361			41			108	
Approach Delay, s/veh		24.1			24.9			19.4			20.6	
Approach LOS		C			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		65.0		65.0		65.0		65.0
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		60.0		60.0		60.0		60.0
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		0.0
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0

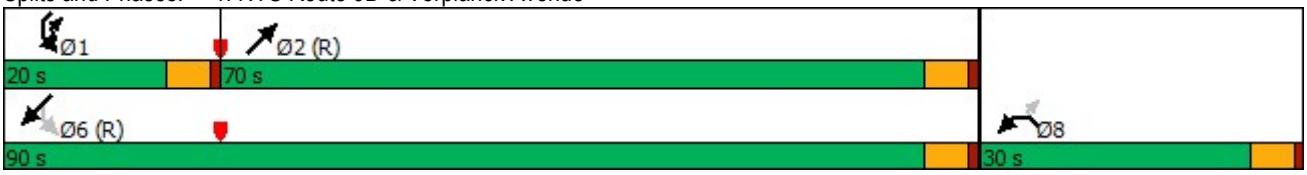
Intersection Summary	
HCM 2010 Ctrl Delay	23.8
HCM 2010 LOS	C

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	63	299	748	72	209	685
Future Volume (vph)	63	299	748	72	209	685
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	5%		3%			-1%
Storage Length (ft)	85	0		0	340	
Storage Lanes	1	1		0	1	
Taper Length (ft)	86				86	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.988			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1725	1544	1813	0	1778	1872
Flt Permitted	0.950				0.077	
Satd. Flow (perm)	1725	1544	1813	0	144	1872
Right Turn on Red		No		No		
Satd. Flow (RTOR)						
Link Speed (mph)	30		30			30
Link Distance (ft)	427		462			529
Travel Time (s)	9.7		10.5			12.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	68	325	813	78	227	745
Shared Lane Traffic (%)						
Lane Group Flow (vph)	68	325	891	0	227	745
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			
Headway Factor	1.03	1.03	1.02	1.02	0.99	0.99
Turning Speed (mph)	15	9		9	15	
Turn Type	Prot	pm+ov	NA		pm+pt	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8			6	
Minimum Split (s)	21.0	9.0	15.0		9.0	15.0
Total Split (s)	30.0	20.0	70.0		20.0	90.0
Total Split (%)	25.0%	16.7%	58.3%		16.7%	75.0%
Maximum Green (s)	25.0	15.0	65.0		15.0	85.0
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0		5.0	5.0
Lead/Lag		Lead	Lag		Lead	
Lead-Lag Optimize?		Yes	Yes		Yes	
Walk Time (s)	5.0		5.0			
Flash Dont Walk (s)	11.0		11.0			
Pedestrian Calls (#/hr)	0		0			
v/c Ratio	0.19	0.56	0.91		0.74	0.56
Control Delay	40.9	34.3	39.3		38.9	10.5
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	40.9	34.3	39.3		38.9	10.5
Queue Length 50th (ft)	44	197	597		99	250
Queue Length 95th (ft)	86	293	#891		#211	344

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Internal Link Dist (ft)	347		382			449
Turn Bay Length (ft)	85				340	
Base Capacity (vph)	359	579	982		306	1326
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.19	0.56	0.91		0.74	0.56

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NET and 6:SWTL, Start of Green	
Natural Cycle: 80	
Control Type: Pretimed	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 1: NYS Route 9D & Verplanck Avenue



Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (veh/h)	63	299	748	72	209	685
Future Volume (veh/h)	63	299	748	72	209	685
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1816	1816	1835	1872	1872	1872
Adj Flow Rate, veh/h	68	325	813	78	227	745
Adj No. of Lanes	1	1	1	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	360	515	893	86	343	1326
Arrive On Green	0.21	0.21	0.54	0.54	0.13	0.71
Sat Flow, veh/h	1730	1544	1649	158	1783	1872
Grp Volume(v), veh/h	68	325	0	891	227	745
Grp Sat Flow(s),veh/h/ln	1730	1544	0	1807	1783	1872
Q Serve(g_s), s	3.9	21.3	0.0	53.5	6.1	23.1
Cycle Q Clear(g_c), s	3.9	21.3	0.0	53.5	6.1	23.1
Prop In Lane	1.00	1.00		0.09	1.00	
Lane Grp Cap(c), veh/h	360	515	0	979	343	1326
V/C Ratio(X)	0.19	0.63	0.00	0.91	0.66	0.56
Avail Cap(c_a), veh/h	360	515	0	979	343	1326
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.1	33.8	0.0	24.9	25.4	8.5
Incr Delay (d2), s/veh	1.2	5.8	0.0	13.9	9.7	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	9.9	0.0	30.3	7.9	12.4
LnGrp Delay(d),s/veh	40.3	39.6	0.0	38.8	35.1	10.2
LnGrp LOS	D	D		D	D	B
Approach Vol, veh/h	393		891			972
Approach Delay, s/veh	39.7		38.8			16.0
Approach LOS	D		D			B

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	20.0	70.0				90.0		30.0
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	15.0	65.0				85.0		25.0
Max Q Clear Time (g_c+I1), s	0.0	0.0				0.0		0.0
Green Ext Time (p_c), s	0.0	0.0				0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	29.1
HCM 2010 LOS	C

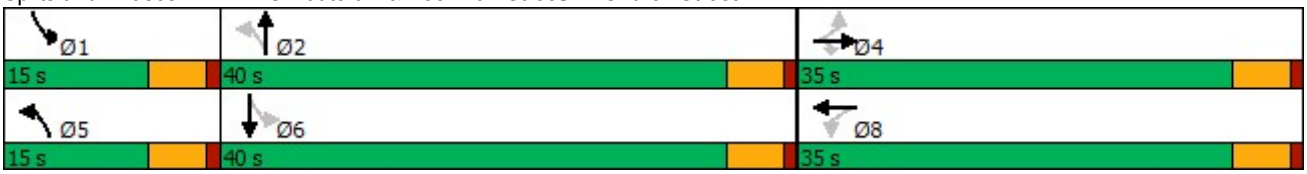
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	310	24	41	4	15	23	34	439	5	6	578	166
Future Volume (vph)	310	24	41	4	15	23	34	439	5	6	578	166
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		2%			-10%			-6%			3%	
Storage Length (ft)	0		95	0		0	75		0	75		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.98		0.97			1.00			0.99	
Frt			0.850		0.925			0.998			0.967	
Flt Protected		0.956			0.996		0.950			0.950		
Satd. Flow (prot)	0	1760	1599	0	1737	0	1805	1915	0	1778	1780	0
Flt Permitted		0.709			0.966		0.100			0.325		
Satd. Flow (perm)	0	1306	1562	0	1684	0	190	1915	0	608	1780	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			85		25			1			19	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		584			328			388			335	
Travel Time (s)		13.3			7.5			8.8			7.6	
Confl. Peds. (#/hr)			2			13			1			6
Confl. Bikes (#/hr)						1			1			1
Peak Hour Factor	0.71	0.71	0.71	0.92	0.92	0.92	0.84	0.84	0.84	0.98	0.98	0.98
Heavy Vehicles (%)	2%	4%	0%	0%	7%	0%	3%	2%	0%	0%	1%	1%
Adj. Flow (vph)	437	34	58	4	16	25	40	523	6	6	590	169
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	471	58	0	45	0	40	529	0	6	759	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.01	1.01	1.01	0.94	0.94	0.94	0.96	0.96	0.96	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2		2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83	83	20	83		83	6		83	6	
Trailing Detector (ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Position(ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Size(ft)	20	43	43	20	43		43	6		43	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)		40	40		40		40			40		
Detector 2 Size(ft)		43	43		43		43			43		
Detector 2 Type		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)		0.0	0.0		0.0		0.0			0.0		
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	16.0		4.0	16.0	
Minimum Split (s)	20.0	20.0	20.0	21.0	21.0		9.0	21.0		9.0	21.0	
Total Split (s)	35.0	35.0	35.0	35.0	35.0		15.0	40.0		15.0	40.0	
Total Split (%)	38.9%	38.9%	38.9%	38.9%	38.9%		16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	30.0	30.0	30.0	30.0	30.0		10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		None	Max		None	Max	
Walk Time (s)				5.0	5.0							
Flash Dont Walk (s)				11.0	11.0							
Pedestrian Calls (#/hr)				0	0							
v/c Ratio		0.99	0.09		0.07		0.18	0.57		0.02	0.98	
Control Delay		67.8	2.7		11.8		11.4	18.6		9.5	55.2	
Queue Delay		0.0	0.0		0.0		0.0	4.5		0.0	0.0	
Total Delay		67.8	2.7		11.8		11.4	23.1		9.5	55.2	
Queue Length 50th (ft)		~282	0		7		10	172		1	~447	
Queue Length 95th (ft)		#319	5		30		22	306		7	#679	
Internal Link Dist (ft)		504			248			308			255	
Turn Bay Length (ft)			95				75			75		
Base Capacity (vph)		478	625		632		294	932		444	771	
Starvation Cap Reductn		0	0		0		0	321		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		0.99	0.09		0.07		0.14	0.87		0.01	0.98	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 82.4
Natural Cycle: 90
Control Type: Semi Act-Uncoord
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: NYS Route 9D & Beekman Street/W. Church Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	310	24	41	4	15	23	34	439	5	6	578	166
Future Volume (veh/h)	310	24	41	4	15	23	34	439	5	6	578	166
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.96	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1842	1881	1995	1947	1995	1900	1919	1957	1872	1853	1872
Adj Flow Rate, veh/h	437	34	58	4	16	25	40	523	6	6	590	169
Adj No. of Lanes	0	1	1	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.71	0.71	0.71	0.92	0.92	0.92	0.84	0.84	0.84	0.98	0.98	0.98
Percent Heavy Veh, %	2	4	0	0	7	0	3	2	0	0	1	1
Cap, veh/h	193	8	581	48	144	180	140	847	10	306	584	167
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.03	0.45	0.45	0.01	0.42	0.42
Sat Flow, veh/h	299	23	1594	0	396	495	1810	1893	22	1782	1376	394
Grp Volume(v), veh/h	471	0	58	45	0	0	40	0	529	6	0	759
Grp Sat Flow(s),veh/h/ln	323	0	1594	890	0	0	1810	0	1915	1782	0	1770
Q Serve(g_s), s	0.0	0.0	2.0	0.0	0.0	0.0	1.0	0.0	17.4	0.2	0.0	35.0
Cycle Q Clear(g_c), s	30.0	0.0	2.0	30.0	0.0	0.0	1.0	0.0	17.4	0.2	0.0	35.0
Prop In Lane	0.93		1.00	0.09		0.56	1.00		0.01	1.00		0.22
Lane Grp Cap(c), veh/h	202	0	581	372	0	0	140	0	857	306	0	752
V/C Ratio(X)	2.33	0.00	0.10	0.12	0.00	0.00	0.29	0.00	0.62	0.02	0.00	1.01
Avail Cap(c_a), veh/h	202	0	581	372	0	0	307	0	857	511	0	752
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	32.5	0.0	17.3	18.4	0.0	0.0	20.0	0.0	17.4	14.9	0.0	23.7
Incr Delay (d2), s/veh	615.8	0.0	0.1	0.1	0.0	0.0	1.1	0.0	3.3	0.0	0.0	35.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	39.0	0.0	0.9	0.7	0.0	0.0	0.5	0.0	9.9	0.1	0.0	24.3
LnGrp Delay(d),s/veh	648.2	0.0	17.4	18.5	0.0	0.0	21.1	0.0	20.7	14.9	0.0	58.9
LnGrp LOS	F		B	B			C		C	B		F
Approach Vol, veh/h		529			45			569			765	
Approach Delay, s/veh		579.1			18.5			20.7			58.5	
Approach LOS		F			B			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.5	41.9		35.0	7.4	40.0		35.0
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0
Max Q Clear Time (g_c+I1), s	2.2	19.4		32.0	3.0	37.0		32.0
Green Ext Time (p_c), s	0.0	1.3		0.0	0.0	0.0		0.0

Intersection Summary		
HCM 2010 Ctrl Delay		190.6
HCM 2010 LOS		F

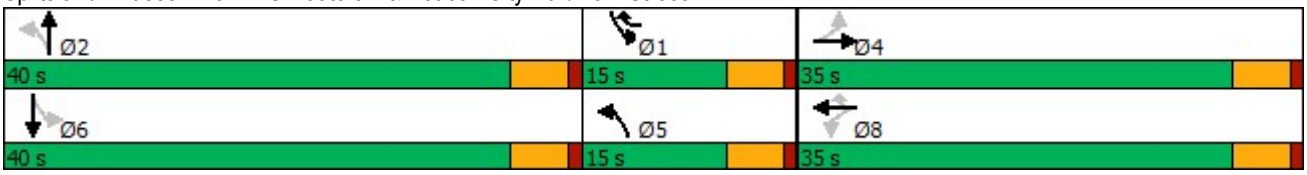
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2	2	59	2	162	0	317	80	246	386	0
Future Volume (vph)	0	2	2	59	2	162	0	317	80	246	386	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		1%			-8%			-3%			3%	
Storage Length (ft)	0		0	0		70	65		0	120		0
Storage Lanes	0		0	0		1	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98				0.96		0.98				
Frt		0.932				0.850		0.970				
Flt Protected					0.954					0.950		
Satd. Flow (prot)	0	1722	0	0	1885	1647	1928	1794	0	1743	1853	0
Flt Permitted					0.730					0.401		
Satd. Flow (perm)	0	1722	0	0	1442	1587	1928	1794	0	736	1853	0
Right Turn on Red			Yes			No			No			Yes
Satd. Flow (RTOR)		3										
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		133			350			693			388	
Travel Time (s)		3.0			8.0			15.8			8.8	
Confl. Peds. (#/hr)			9			15			21			12
Confl. Bikes (#/hr)			1						1			
Peak Hour Factor	0.60	0.60	0.60	0.91	0.91	0.91	0.79	0.79	0.79	0.88	0.88	0.88
Heavy Vehicles (%)	0%	0%	0%	0%	0%	2%	0%	2%	5%	2%	1%	0%
Adj. Flow (vph)	0	3	3	65	2	178	0	401	101	280	439	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	6	0	0	67	178	0	502	0	280	439	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.01	1.01	1.01	0.95	0.95	0.95	0.98	0.98	0.98	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	2	2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83		20	83	83	83	6		83	6	
Trailing Detector (ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Position(ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Size(ft)	20	43		20	43	43	43	6		43	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)		40			40	40	40			40		
Detector 2 Size(ft)		43			43	43	43			43		
Detector 2 Type		Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0	0.0	0.0			0.0		
Turn Type		NA		Perm	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8	1	5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8		8	2			6		
Detector Phase	4	4		8	8	1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		8.0	8.0	4.0	4.0	31.0		4.0	35.0	
Minimum Split (s)	21.0	21.0		21.0	21.0	9.0	9.0	36.0		9.0	40.0	
Total Split (s)	35.0	35.0		35.0	35.0	15.0	15.0	40.0		15.0	40.0	
Total Split (%)	38.9%	38.9%		38.9%	38.9%	16.7%	16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	30.0	30.0		30.0	30.0	10.0	10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0			5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag						Lag	Lag	Lead		Lag	Lead	
Lead-Lag Optimize?						Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None	None	None	Max		None	Max	
Walk Time (s)	5.0	5.0						5.0				
Flash Dont Walk (s)	11.0	11.0						11.0				
Pedestrian Calls (#/hr)	0	0						0				
v/c Ratio		0.03			0.32	0.46		0.50		0.38	0.29	
Control Delay		21.2			31.1	21.7		12.7		6.2	3.5	
Queue Delay		0.0			0.0	0.0		0.0		0.0	0.3	
Total Delay		21.2			31.1	21.7		12.7		6.2	3.8	
Queue Length 50th (ft)		1			26	54		133		29	50	
Queue Length 95th (ft)		7			61	100		193		60	97	
Internal Link Dist (ft)		53			270			613			308	
Turn Bay Length (ft)						70				120		
Base Capacity (vph)		829			693	398		1006		751	1536	
Starvation Cap Reductn		0			0	0		0		0	520	
Spillback Cap Reductn		0			0	0		0		0	0	
Storage Cap Reductn		0			0	0		0		0	0	
Reduced v/c Ratio		0.01			0.10	0.45		0.50		0.37	0.43	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 63.4
Natural Cycle: 70
Control Type: Semi Act-Uncoord

Splits and Phases: 3: NYS Route 9D & Beacon City Hall/Main Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2	2	59	2	162	0	317	80	246	386	0
Future Volume (veh/h)	0	2	2	59	2	162	0	317	80	246	386	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	0.97		0.94	1.00		0.96	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1890	1890	1890	1976	1976	1937	1928	1880	1928	1835	1853	1872
Adj Flow Rate, veh/h	0	3	3	65	2	178	0	401	101	280	439	0
Adj No. of Lanes	0	1	0	0	1	1	1	1	0	1	1	0
Peak Hour Factor	0.60	0.60	0.60	0.91	0.91	0.91	0.79	0.79	0.79	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	2	0	2	5	2	1	0
Cap, veh/h	0	107	107	290	7	304	656	813	205	577	1048	0
Arrive On Green	0.00	0.13	0.13	0.13	0.13	0.13	0.00	0.57	0.57	0.06	0.57	0.00
Sat Flow, veh/h	0	841	841	1372	58	1551	1837	1437	362	1747	1853	0
Grp Volume(v), veh/h	0	0	6	67	0	178	0	0	502	280	439	0
Grp Sat Flow(s),veh/h/ln	0	0	1682	1430	0	1551	1837	0	1799	1747	1853	0
Q Serve(g_s), s	0.0	0.0	0.2	2.5	0.0	2.2	0.0	0.0	10.4	0.0	8.3	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.2	2.7	0.0	2.2	0.0	0.0	10.4	0.0	8.3	0.0
Prop In Lane	0.00		0.50	0.97		1.00	1.00		0.20	1.00		0.00
Lane Grp Cap(c), veh/h	0	0	215	297	0	304	656	0	1018	577	1048	0
V/C Ratio(X)	0.00	0.00	0.03	0.23	0.00	0.59	0.00	0.00	0.49	0.49	0.42	0.00
Avail Cap(c_a), veh/h	0	0	816	815	0	858	835	0	1018	747	1048	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	23.6	24.8	0.0	22.7	0.0	0.0	8.1	13.2	7.6	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.1	0.4	0.0	1.8	0.0	0.0	1.7	0.6	1.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.1	1.1	0.0	2.8	0.0	0.0	5.5	3.8	4.5	0.0
LnGrp Delay(d),s/veh	0.0	0.0	23.7	25.2	0.0	24.5	0.0	0.0	9.8	13.8	8.9	0.0
LnGrp LOS			C	C		C			A	B	A	
Approach Vol, veh/h		6			245			502			719	
Approach Delay, s/veh		23.7			24.7			9.8			10.8	
Approach LOS		C			C			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	40.0		12.9	9.0	40.0		12.9
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0
Max Q Clear Time (g_c+I1), s	2.0	12.4		2.2	0.0	10.3		4.7
Green Ext Time (p_c), s	0.9	1.4		0.0	0.0	1.1		1.4

Intersection Summary	
HCM 2010 Ctrl Delay	12.8
HCM 2010 LOS	B

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	7	2	3	9	2	48	3	342	7	58	373	12
Future Volume (vph)	7	2	3	9	2	48	3	342	7	58	373	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			-3%			-4%			4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.964			0.890			0.997			0.996	
Flt Protected		0.971			0.992						0.993	
Satd. Flow (prot)	0	1778	0	0	1703	0	0	1843	0	0	1806	0
Flt Permitted		0.971			0.992						0.993	
Satd. Flow (perm)	0	1778	0	0	1703	0	0	1843	0	0	1806	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		162			281			312			693	
Travel Time (s)		3.7			6.4			7.1			15.8	
Confl. Peds. (#/hr)			2			4			3			2
Confl. Bikes (#/hr)			2									
Peak Hour Factor	0.81	0.81	0.81	0.66	0.66	0.66	0.69	0.69	0.69	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	5%	0%	2%	2%	0%
Adj. Flow (vph)	9	2	4	14	3	73	4	496	10	63	405	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	15	0	0	90	0	0	510	0	0	481	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	0.98	0.98	0.98	0.97	0.97	0.97	1.03	1.03	1.03
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2.1

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	7	2	3	9	2	48	3	342	7	58	373	12
Future Vol, veh/h	7	2	3	9	2	48	3	342	7	58	373	12
Conflicting Peds, #/hr	0	0	2	0	0	4	0	0	3	0	0	2
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	-	-	-3	-	-	-4	-	-	4	-
Peak Hour Factor	81	81	81	66	66	66	69	69	69	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	5	0	2	2	0
Mvmt Flow	9	2	4	14	3	73	4	496	10	63	405	13

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1091	1057	416	1055	1058	508	420	0	0	509	0	0
Stage 1	540	540	-	512	512	-	-	-	-	-	-	-
Stage 2	551	517	-	543	546	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	6.5	5.9	5.9	4.1	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	5.5	-	5.5	4.9	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	5.5	4.9	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.218	-	-
Pot Cap-1 Maneuver	194	227	641	245	270	593	1150	-	-	1056	-	-
Stage 1	530	524	-	597	588	-	-	-	-	-	-	-
Stage 2	522	537	-	578	571	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	157	207	639	225	247	590	1148	-	-	1053	-	-
Mov Cap-2 Maneuver	157	207	-	225	247	-	-	-	-	-	-	-
Stage 1	526	482	-	593	584	-	-	-	-	-	-	-
Stage 2	451	533	-	526	525	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	24	14.8	0.1	1.1
HCM LOS	C	B		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	1148	-	-	456	204	1053	-	-
HCM Lane V/C Ratio	0.004	-	-	0.196	0.073	0.06	-	-
HCM Control Delay (s)	8.1	0	-	14.8	24	8.6	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.7	0.2	0.2	-	-

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	21	6	28	330	297	87
Future Volume (vph)	21	6	28	330	297	87
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	0.968				0.969	
Flt Protected	0.963			0.996		
Satd. Flow (prot)	1736	0	0	1855	1805	0
Flt Permitted	0.963			0.996		
Satd. Flow (perm)	1736	0	0	1855	1805	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	176			499	312	
Travel Time (s)	4.0			11.3	7.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	23	7	30	359	323	95
Shared Lane Traffic (%)						
Lane Group Flow (vph)	30	0	0	389	418	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane				Yes	Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	60	60	60			60
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	0.7

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	21	6	28	330	297	87
Future Vol, veh/h	21	6	28	330	297	87
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	23	7	30	359	323	95

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	790	371	418	0	-	0
Stage 1	371	-	-	-	-	-
Stage 2	419	-	-	-	-	-
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	359	675	1141	-	-	-
Stage 1	698	-	-	-	-	-
Stage 2	664	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	347	675	1141	-	-	-
Mov Cap-2 Maneuver	464	-	-	-	-	-
Stage 1	675	-	-	-	-	-
Stage 2	664	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	12.7	0.6	0
HCM LOS	B		

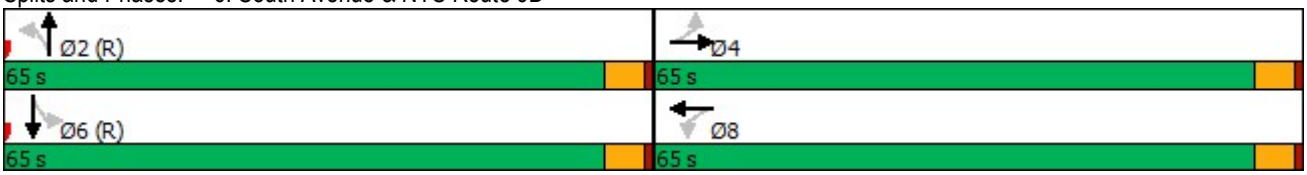
Minor Lane/Major Mvmt	NEL	NET	SELn1	SWT	SWR
Capacity (veh/h)	1141	-	499	-	-
HCM Lane V/C Ratio	0.027	-	0.059	-	-
HCM Control Delay (s)	8.2	0	12.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	261	19	9	258	55	7	21	7	46	29	10
Future Volume (vph)	10	261	19	9	258	55	7	21	7	46	29	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		6%			-6%			-1%			3%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor								1.00			0.99	
Frt		0.991			0.977			0.974			0.984	
Flt Protected		0.998			0.999			0.990			0.974	
Satd. Flow (prot)	0	1823	0	0	1845	0	0	1841	0	0	1696	0
Flt Permitted		0.984			0.988			0.961			0.842	
Satd. Flow (perm)	0	1797	0	0	1824	0	0	1781	0	0	1466	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			11			8			7	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		241			516			194			303	
Travel Time (s)		5.5			11.7			4.4			6.9	
Confl. Peds. (#/hr)							6					6
Peak Hour Factor	0.90	0.90	0.90	0.83	0.83	0.83	0.85	0.85	0.85	0.79	0.79	0.79
Heavy Vehicles (%)	0%	0%	0%	12%	4%	0%	0%	0%	0%	2%	12%	0%
Adj. Flow (vph)	11	290	21	11	311	66	8	25	8	58	37	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	322	0	0	388	0	0	41	0	0	108	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	0.96	0.96	0.96	0.99	0.99	0.99	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	21.0	21.0		21.0	21.0		21.0	21.0		21.0	21.0	
Total Split (s)	65.0	65.0		65.0	65.0		65.0	65.0		65.0	65.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	60.0	60.0		60.0	60.0		60.0	60.0		60.0	60.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
v/c Ratio		0.39			0.46			0.05			0.16	
Control Delay		24.4			25.3			16.5			19.8	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		24.4			25.3			16.5			19.8	
Queue Length 50th (ft)		172			212			15			48	
Queue Length 95th (ft)		248			270			34			74	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		161			436			114			223	
Turn Bay Length (ft)												
Base Capacity (vph)		831			847			826			680	
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		0.39			0.46			0.05			0.16	

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 45	
Control Type: Pretimed	

Splits and Phases: 6: South Avenue & NYS Route 9D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	261	19	9	258	55	7	21	7	46	29	10
Future Volume (veh/h)	10	261	19	9	258	55	7	21	7	46	29	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1843	1843	1843	1957	1890	1957	1910	1910	1910	1872	1779	1872
Adj Flow Rate, veh/h	11	290	21	11	311	66	8	25	8	58	37	13
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.90	0.90	0.90	0.83	0.83	0.83	0.85	0.85	0.85	0.79	0.79	0.79
Percent Heavy Veh, %	0	0	0	12	4	0	0	0	0	2	12	0
Cap, veh/h	40	765	54	38	687	143	167	511	156	394	244	82
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
Sat Flow, veh/h	25	1658	117	21	1489	309	289	1108	339	761	530	177
Grp Volume(v), veh/h	322	0	0	388	0	0	41	0	0	108	0	0
Grp Sat Flow(s),veh/h/ln	1801	0	0	1819	0	0	1736	0	0	1467	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	0.0	0.0
Cycle Q Clear(g_c), s	15.0	0.0	0.0	18.8	0.0	0.0	1.6	0.0	0.0	5.2	0.0	0.0
Prop In Lane	0.03		0.07	0.03		0.17	0.20		0.20	0.54		0.12
Lane Grp Cap(c), veh/h	860	0	0	868	0	0	834	0	0	720	0	0
V/C Ratio(X)	0.37	0.00	0.00	0.45	0.00	0.00	0.05	0.00	0.00	0.15	0.00	0.00
Avail Cap(c_a), veh/h	860	0	0	868	0	0	834	0	0	720	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	22.9	0.0	0.0	23.9	0.0	0.0	19.3	0.0	0.0	20.2	0.0	0.0
Incr Delay (d2), s/veh	1.2	0.0	0.0	1.7	0.0	0.0	0.1	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.8	0.0	0.0	9.9	0.0	0.0	0.8	0.0	0.0	2.3	0.0	0.0
LnGrp Delay(d),s/veh	24.1	0.0	0.0	25.6	0.0	0.0	19.4	0.0	0.0	20.6	0.0	0.0
LnGrp LOS	C			C			B			C		
Approach Vol, veh/h		322			388			41			108	
Approach Delay, s/veh		24.1			25.6			19.4			20.6	
Approach LOS		C			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		65.0		65.0		65.0		65.0
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		60.0		60.0		60.0		60.0
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		0.0
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0

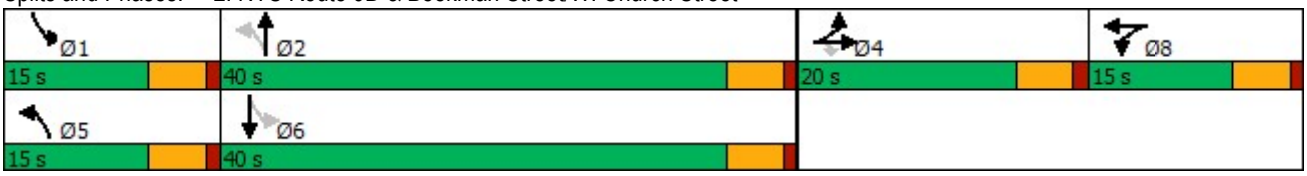
Intersection Summary	
HCM 2010 Ctrl Delay	24.1
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	310	24	41	4	15	23	34	439	5	6	578	166
Future Volume (vph)	310	24	41	4	15	23	34	439	5	6	578	166
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		2%			-10%			-6%			3%	
Storage Length (ft)	0		95	0		0	75		0	75		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.97		0.96			1.00			0.99	
Frt			0.850		0.925			0.998			0.967	
Flt Protected		0.956			0.996		0.950			0.950		
Satd. Flow (prot)	0	1760	1599	0	1713	0	1805	1915	0	1778	1780	0
Flt Permitted		0.956			0.996		0.104			0.355		
Satd. Flow (perm)	0	1760	1557	0	1713	0	198	1915	0	664	1780	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			145		25			1			19	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		584			328			388			335	
Travel Time (s)		13.3			7.5			8.8			7.6	
Confl. Peds. (#/hr)			2			13			1			6
Confl. Bikes (#/hr)						1			1			1
Peak Hour Factor	0.71	0.71	0.71	0.92	0.92	0.92	0.84	0.84	0.84	0.98	0.98	0.98
Heavy Vehicles (%)	2%	4%	0%	0%	7%	0%	3%	2%	0%	0%	1%	1%
Adj. Flow (vph)	437	34	58	4	16	25	40	523	6	6	590	169
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	471	58	0	45	0	40	529	0	6	759	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.01	1.01	1.01	0.94	0.94	0.94	0.96	0.96	0.96	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2		2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83	83	20	83		83	6		83	6	
Trailing Detector (ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Position(ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Size(ft)	20	43	43	20	43		43	6		43	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)		40	40		40		40			40		
Detector 2 Size(ft)		43	43		43		43			43		
Detector 2 Type		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)		0.0	0.0		0.0		0.0			0.0		
Turn Type	Split	NA	Perm	Split	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	4	4		8	8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			4				2			6		
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	16.0		4.0	16.0	
Minimum Split (s)	20.0	20.0	20.0	9.0	9.0		9.0	21.0		9.0	21.0	
Total Split (s)	20.0	20.0	20.0	15.0	15.0		15.0	40.0		15.0	40.0	
Total Split (%)	22.2%	22.2%	22.2%	16.7%	16.7%		16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	15.0	15.0	15.0	10.0	10.0		10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		None	Min		None	Min	
v/c Ratio		1.30	0.13		0.25		0.16	0.51		0.01	0.88	
Control Delay		185.0	0.6		25.0		9.9	15.2		9.0	35.1	
Queue Delay		0.0	0.0		0.0		0.0	1.7		0.0	0.0	
Total Delay		185.0	0.6		25.0		9.9	16.9		9.0	35.1	
Queue Length 50th (ft)		~346	0		10		9	155		1	~382	
Queue Length 95th (ft)		#399	0		41		22	301		7	#670	
Internal Link Dist (ft)		504			248			308			255	
Turn Bay Length (ft)			95				75			75		
Base Capacity (vph)		362	435		256		332	1038		518	864	
Starvation Cap Reductn		0	0		0		0	334		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		1.30	0.13		0.18		0.12	0.75		0.01	0.88	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 75.1	
Natural Cycle: 90	
Control Type: Semi Act-Uncoord	
~ Volume exceeds capacity, queue is theoretically infinite.	
Queue shown is maximum after two cycles.	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 2: NYS Route 9D & Beekman Street/W. Church Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	310	24	41	4	15	23	34	439	5	6	578	166
Future Volume (veh/h)	310	24	41	4	15	23	34	439	5	6	578	166
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.86	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1842	1881	1995	1947	1995	1900	1919	1957	1872	1853	1872
Adj Flow Rate, veh/h	437	34	58	4	16	25	40	523	6	6	590	169
Adj No. of Lanes	0	1	1	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.71	0.71	0.71	0.92	0.92	0.92	0.84	0.84	0.84	0.98	0.98	0.98
Percent Heavy Veh, %	2	4	0	0	7	0	3	2	0	0	1	1
Cap, veh/h	339	26	330	5	19	30	184	901	10	352	622	178
Arrive On Green	0.21	0.21	0.21	0.03	0.03	0.03	0.03	0.48	0.48	0.01	0.45	0.45
Sat Flow, veh/h	1633	127	1591	143	572	894	1810	1893	22	1782	1376	394
Grp Volume(v), veh/h	471	0	58	45	0	0	40	0	529	6	0	759
Grp Sat Flow(s),veh/h/ln	1760	0	1591	1609	0	0	1810	0	1915	1782	0	1770
Q Serve(g_s), s	15.0	0.0	2.2	2.0	0.0	0.0	0.8	0.0	14.5	0.1	0.0	29.7
Cycle Q Clear(g_c), s	15.0	0.0	2.2	2.0	0.0	0.0	0.8	0.0	14.5	0.1	0.0	29.7
Prop In Lane	0.93		1.00	0.09		0.56	1.00		0.01	1.00		0.22
Lane Grp Cap(c), veh/h	365	0	330	54	0	0	184	0	912	352	0	800
V/C Ratio(X)	1.29	0.00	0.18	0.84	0.00	0.00	0.22	0.00	0.58	0.02	0.00	0.95
Avail Cap(c_a), veh/h	365	0	330	223	0	0	379	0	927	588	0	857
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	28.6	0.0	23.6	34.7	0.0	0.0	16.4	0.0	13.7	11.8	0.0	19.0
Incr Delay (d2), s/veh	149.5	0.0	0.3	27.0	0.0	0.0	0.6	0.0	0.9	0.0	0.0	18.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	22.4	0.0	1.0	1.3	0.0	0.0	0.4	0.0	7.7	0.1	0.0	18.5
LnGrp Delay(d),s/veh	178.2	0.0	23.8	61.7	0.0	0.0	17.0	0.0	14.6	11.8	0.0	37.8
LnGrp LOS	F		C	E			B		B	B		D
Approach Vol, veh/h		529			45			569			765	
Approach Delay, s/veh		161.3			61.7			14.8			37.6	
Approach LOS		F			E			B			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.5	39.4		20.0	7.2	37.7		7.4
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	10.0	35.0		15.0	10.0	35.0		10.0
Max Q Clear Time (g_c+I1), s	2.1	16.5		17.0	2.8	31.7		4.0
Green Ext Time (p_c), s	0.0	1.3		0.0	0.0	0.9		0.1

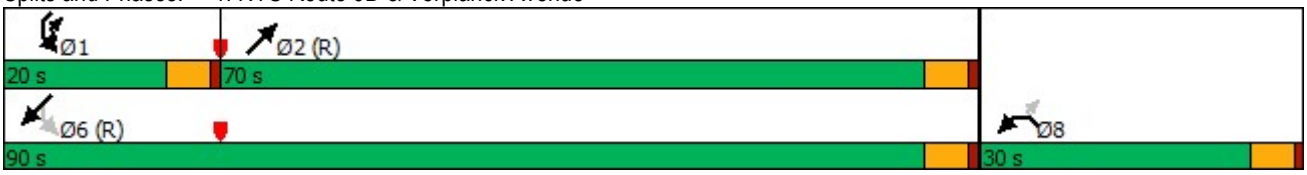
Intersection Summary		
HCM 2010 Ctrl Delay		65.7
HCM 2010 LOS		E

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	54	299	794	81	209	639
Future Volume (vph)	54	299	794	81	209	639
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	5%		3%			-1%
Storage Length (ft)	85	0		0	340	
Storage Lanes	1	1		0	1	
Taper Length (ft)	86				86	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.988			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1725	1544	1813	0	1778	1872
Flt Permitted	0.950				0.057	
Satd. Flow (perm)	1725	1544	1813	0	107	1872
Right Turn on Red		No		No		
Satd. Flow (RTOR)						
Link Speed (mph)	30		30			30
Link Distance (ft)	427		462			529
Travel Time (s)	9.7		10.5			12.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	59	325	863	88	227	695
Shared Lane Traffic (%)						
Lane Group Flow (vph)	59	325	951	0	227	695
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			
Headway Factor	1.03	1.03	1.02	1.02	0.99	0.99
Turning Speed (mph)	15	9		9	15	
Turn Type	Prot	pm+ov	NA		pm+pt	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8			6	
Minimum Split (s)	21.0	9.0	15.0		9.0	15.0
Total Split (s)	30.0	20.0	70.0		20.0	90.0
Total Split (%)	25.0%	16.7%	58.3%		16.7%	75.0%
Maximum Green (s)	25.0	15.0	65.0		15.0	85.0
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0		5.0	5.0
Lead/Lag		Lead	Lag		Lead	
Lead-Lag Optimize?		Yes	Yes		Yes	
Walk Time (s)	5.0		5.0			
Flash Dont Walk (s)	11.0		11.0			
Pedestrian Calls (#/hr)	0		0			
v/c Ratio	0.16	0.56	0.97		0.80	0.52
Control Delay	40.4	34.3	49.4		51.1	9.9
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	40.4	34.3	49.4		51.1	9.9
Queue Length 50th (ft)	38	197	681		119	223
Queue Length 95th (ft)	76	293	#991		#247	307

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Internal Link Dist (ft)	347		382			449
Turn Bay Length (ft)	85				340	
Base Capacity (vph)	359	579	982		284	1326
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.16	0.56	0.97		0.80	0.52

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NET and 6:SWTL, Start of Green	
Natural Cycle: 90	
Control Type: Pretimed	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 1: NYS Route 9D & Verplanck Avenue



Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (veh/h)	54	299	794	81	209	639
Future Volume (veh/h)	54	299	794	81	209	639
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1816	1816	1835	1872	1872	1872
Adj Flow Rate, veh/h	59	325	863	88	227	695
Adj No. of Lanes	1	1	1	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	360	515	887	90	301	1326
Arrive On Green	0.21	0.21	0.54	0.54	0.13	0.71
Sat Flow, veh/h	1730	1544	1638	167	1783	1872
Grp Volume(v), veh/h	59	325	0	951	227	695
Grp Sat Flow(s),veh/h/ln	1730	1544	0	1805	1783	1872
Q Serve(g_s), s	3.4	21.3	0.0	61.2	9.3	20.7
Cycle Q Clear(g_c), s	3.4	21.3	0.0	61.2	9.3	20.7
Prop In Lane	1.00	1.00		0.09	1.00	
Lane Grp Cap(c), veh/h	360	515	0	978	301	1326
V/C Ratio(X)	0.16	0.63	0.00	0.97	0.75	0.52
Avail Cap(c_a), veh/h	360	515	0	978	301	1326
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.9	33.8	0.0	26.6	35.1	8.1
Incr Delay (d2), s/veh	1.0	5.8	0.0	22.9	15.9	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	9.9	0.0	36.6	8.5	11.2
LnGrp Delay(d),s/veh	39.9	39.6	0.0	49.5	51.0	9.6
LnGrp LOS	D	D		D	D	A
Approach Vol, veh/h	384		951			922
Approach Delay, s/veh	39.6		49.5			19.8
Approach LOS	D		D			B

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	20.0	70.0				90.0		30.0
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	15.0	65.0				85.0		25.0
Max Q Clear Time (g_c+I1), s	0.0	0.0				0.0		0.0
Green Ext Time (p_c), s	0.0	0.0				0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	35.7
HCM 2010 LOS	D

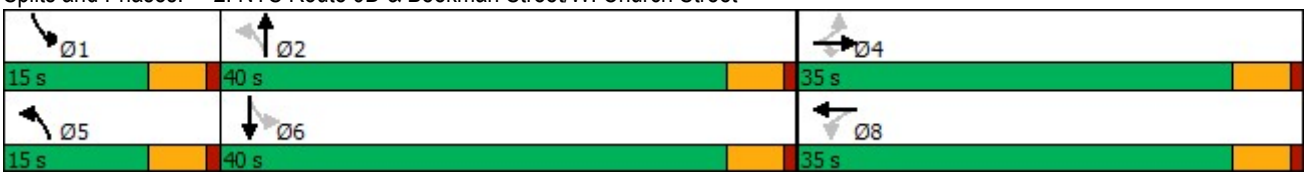
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	310	24	37	4	15	23	39	494	5	6	524	166
Future Volume (vph)	310	24	37	4	15	23	39	494	5	6	524	166
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		2%			-10%			-6%			3%	
Storage Length (ft)	0		95	0		0	75		0	75		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.98		0.97			1.00			0.99	
Frt			0.850		0.925			0.998			0.964	
Flt Protected		0.956			0.996		0.950			0.950		
Satd. Flow (prot)	0	1760	1599	0	1737	0	1805	1915	0	1778	1774	0
Flt Permitted		0.709			0.966		0.103			0.266		
Satd. Flow (perm)	0	1306	1562	0	1684	0	196	1915	0	498	1774	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			85		25			1			21	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		584			328			388			335	
Travel Time (s)		13.3			7.5			8.8			7.6	
Confl. Peds. (#/hr)			2			13			1			6
Confl. Bikes (#/hr)						1			1			1
Peak Hour Factor	0.71	0.71	0.71	0.92	0.92	0.92	0.84	0.84	0.84	0.98	0.98	0.98
Heavy Vehicles (%)	2%	4%	0%	0%	7%	0%	3%	2%	0%	0%	1%	1%
Adj. Flow (vph)	437	34	52	4	16	25	46	588	6	6	535	169
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	471	52	0	45	0	46	594	0	6	704	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.01	1.01	1.01	0.94	0.94	0.94	0.96	0.96	0.96	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2		2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83	83	20	83		83	6		83	6	
Trailing Detector (ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Position(ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Size(ft)	20	43	43	20	43		43	6		43	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)		40	40		40		40			40		
Detector 2 Size(ft)		43	43		43		43			43		
Detector 2 Type		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)		0.0	0.0		0.0		0.0			0.0		
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	16.0		4.0	16.0	
Minimum Split (s)	20.0	20.0	20.0	21.0	21.0		9.0	21.0		9.0	21.0	
Total Split (s)	35.0	35.0	35.0	35.0	35.0		15.0	40.0		15.0	40.0	
Total Split (%)	38.9%	38.9%	38.9%	38.9%	38.9%		16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	30.0	30.0	30.0	30.0	30.0		10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		None	Max		None	Max	
Walk Time (s)				5.0	5.0							
Flash Dont Walk (s)				11.0	11.0							
Pedestrian Calls (#/hr)				0	0							
v/c Ratio		0.99	0.08		0.07		0.20	0.64		0.02	0.92	
Control Delay		68.2	2.2		11.8		11.6	20.2		9.7	42.2	
Queue Delay		0.0	0.0		0.0		0.0	9.7		0.0	0.0	
Total Delay		68.2	2.2		11.8		11.6	29.9		9.7	42.2	
Queue Length 50th (ft)		~283	0		7		11	203		1	360	
Queue Length 95th (ft)		#319	2		30		24	356		7	#611	
Internal Link Dist (ft)		504			248			308			255	
Turn Bay Length (ft)			95				75			75		
Base Capacity (vph)		477	624		631		296	933		402	769	
Starvation Cap Reductn		0	0		0		0	306		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		0.99	0.08		0.07		0.16	0.95		0.01	0.92	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 82.5
Natural Cycle: 90
Control Type: Semi Act-Uncoord
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: NYS Route 9D & Beekman Street/W. Church Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	310	24	37	4	15	23	39	494	5	6	524	166
Future Volume (veh/h)	310	24	37	4	15	23	39	494	5	6	524	166
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.96	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1842	1881	1995	1947	1995	1900	1919	1957	1872	1853	1872
Adj Flow Rate, veh/h	437	34	52	4	16	25	46	588	6	6	535	169
Adj No. of Lanes	0	1	1	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.71	0.71	0.71	0.92	0.92	0.92	0.84	0.84	0.84	0.98	0.98	0.98
Percent Heavy Veh, %	2	4	0	0	7	0	3	2	0	0	1	1
Cap, veh/h	193	8	579	47	144	180	175	851	9	264	568	179
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.03	0.45	0.45	0.01	0.42	0.42
Sat Flow, veh/h	299	23	1594	0	396	495	1810	1896	19	1782	1341	423
Grp Volume(v), veh/h	471	0	52	45	0	0	46	0	594	6	0	704
Grp Sat Flow(s),veh/h/ln	323	0	1594	890	0	0	1810	0	1915	1782	0	1764
Q Serve(g_s), s	0.0	0.0	1.8	0.0	0.0	0.0	1.2	0.0	20.5	0.2	0.0	31.6
Cycle Q Clear(g_c), s	30.0	0.0	1.8	30.0	0.0	0.0	1.2	0.0	20.5	0.2	0.0	31.6
Prop In Lane	0.93		1.00	0.09		0.56	1.00		0.01	1.00		0.24
Lane Grp Cap(c), veh/h	201	0	579	371	0	0	175	0	860	264	0	747
V/C Ratio(X)	2.34	0.00	0.09	0.12	0.00	0.00	0.26	0.00	0.69	0.02	0.00	0.94
Avail Cap(c_a), veh/h	201	0	579	371	0	0	337	0	860	469	0	747
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	32.6	0.0	17.3	18.5	0.0	0.0	19.0	0.0	18.2	15.5	0.0	22.8
Incr Delay (d2), s/veh	618.5	0.0	0.1	0.1	0.0	0.0	0.8	0.0	4.5	0.0	0.0	21.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	39.1	0.0	0.8	0.7	0.0	0.0	0.6	0.0	11.8	0.1	0.0	19.7
LnGrp Delay(d),s/veh	651.0	0.0	17.4	18.6	0.0	0.0	19.8	0.0	22.7	15.6	0.0	44.3
LnGrp LOS	F		B	B			B		C	B		D
Approach Vol, veh/h		523			45			640			710	
Approach Delay, s/veh		588.0			18.6			22.5			44.0	
Approach LOS		F			B			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.5	42.1		35.0	7.6	40.0		35.0
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0
Max Q Clear Time (g_c+I1), s	2.2	22.5		32.0	3.2	33.6		32.0
Green Ext Time (p_c), s	0.0	1.4		0.0	0.1	0.4		0.0

Intersection Summary		
HCM 2010 Ctrl Delay		184.6
HCM 2010 LOS		F

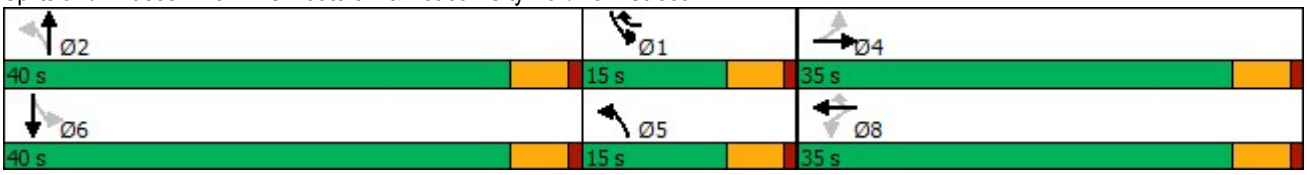
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2	2	50	2	162	0	376	89	246	327	0
Future Volume (vph)	0	2	2	50	2	162	0	376	89	246	327	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		1%			-8%			-3%			3%	
Storage Length (ft)	0		0	0		70	65		0	120		0
Storage Lanes	0		0	0		1	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98				0.96		0.98				
Frt		0.932				0.850		0.971				
Flt Protected					0.954					0.950		
Satd. Flow (prot)	0	1722	0	0	1885	1647	1928	1798	0	1743	1853	0
Flt Permitted					0.771					0.338		
Satd. Flow (perm)	0	1722	0	0	1523	1587	1928	1798	0	620	1853	0
Right Turn on Red			Yes			No			No			Yes
Satd. Flow (RTOR)		3										
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		133			350			693			388	
Travel Time (s)		3.0			8.0			15.8			8.8	
Confl. Peds. (#/hr)			9			15			21			12
Confl. Bikes (#/hr)			1						1			
Peak Hour Factor	0.60	0.60	0.60	0.91	0.91	0.91	0.79	0.79	0.79	0.88	0.88	0.88
Heavy Vehicles (%)	0%	0%	0%	0%	0%	2%	0%	2%	5%	2%	1%	0%
Adj. Flow (vph)	0	3	3	55	2	178	0	476	113	280	372	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	6	0	0	57	178	0	589	0	280	372	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.01	1.01	1.01	0.95	0.95	0.95	0.98	0.98	0.98	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	2	2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83		20	83	83	83	6		83	6	
Trailing Detector (ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Position(ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Size(ft)	20	43		20	43	43	43	6		43	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)		40			40	40	40			40		
Detector 2 Size(ft)		43			43	43	43			43		
Detector 2 Type		Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0	0.0	0.0			0.0		
Turn Type		NA		Perm	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8	1	5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8		8	2			6		
Detector Phase	4	4		8	8	1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		8.0	8.0	4.0	4.0	31.0		4.0	35.0	
Minimum Split (s)	21.0	21.0		21.0	21.0	9.0	9.0	36.0		9.0	40.0	
Total Split (s)	35.0	35.0		35.0	35.0	15.0	15.0	40.0		15.0	40.0	
Total Split (%)	38.9%	38.9%		38.9%	38.9%	16.7%	16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	30.0	30.0		30.0	30.0	10.0	10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0			5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag						Lag	Lag	Lead		Lag	Lead	
Lead-Lag Optimize?						Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None	None	None	Max		None	Max	
Walk Time (s)	5.0	5.0						5.0				
Flash Dont Walk (s)	11.0	11.0						11.0				
Pedestrian Calls (#/hr)	0	0						0				
v/c Ratio		0.03			0.27	0.47		0.58		0.42	0.24	
Control Delay		21.5			30.1	21.9		13.9		7.5	3.1	
Queue Delay		0.0			0.0	0.0		0.0		0.0	0.2	
Total Delay		21.5			30.1	21.9		13.9		7.5	3.3	
Queue Length 50th (ft)		1			22	54		164		28	39	
Queue Length 95th (ft)		7			54	100		231		56	75	
Internal Link Dist (ft)		53			270			613			308	
Turn Bay Length (ft)						70				120		
Base Capacity (vph)		831			734	391		1011		678	1544	
Starvation Cap Reductn		0			0	0		0		0	551	
Spillback Cap Reductn		0			0	0		0		0	0	
Storage Cap Reductn		0			0	0		0		0	0	
Reduced v/c Ratio		0.01			0.08	0.46		0.58		0.41	0.37	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 63.2
Natural Cycle: 70
Control Type: Semi Act-Uncoord

Splits and Phases: 3: NYS Route 9D & Beacon City Hall/Main Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2	2	50	2	162	0	376	89	246	327	0
Future Volume (veh/h)	0	2	2	50	2	162	0	376	89	246	327	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	0.97		0.94	1.00		0.96	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1890	1890	1890	1976	1976	1937	1928	1880	1928	1835	1853	1872
Adj Flow Rate, veh/h	0	3	3	55	2	178	0	476	113	280	372	0
Adj No. of Lanes	0	1	0	0	1	1	1	1	0	1	1	0
Peak Hour Factor	0.60	0.60	0.60	0.91	0.91	0.91	0.79	0.79	0.79	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	2	0	2	5	2	1	0
Cap, veh/h	0	107	107	288	9	303	710	825	196	516	1049	0
Arrive On Green	0.00	0.13	0.13	0.13	0.13	0.13	0.00	0.57	0.57	0.06	0.57	0.00
Sat Flow, veh/h	0	841	841	1366	68	1551	1837	1457	346	1747	1853	0
Grp Volume(v), veh/h	0	0	6	57	0	178	0	0	589	280	372	0
Grp Sat Flow(s),veh/h/ln	0	0	1682	1434	0	1551	1837	0	1803	1747	1853	0
Q Serve(g_s), s	0.0	0.0	0.2	2.1	0.0	2.2	0.0	0.0	13.0	0.0	6.7	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.2	2.3	0.0	2.2	0.0	0.0	13.0	0.0	6.7	0.0
Prop In Lane	0.00		0.50	0.96		1.00	1.00		0.19	1.00		0.00
Lane Grp Cap(c), veh/h	0	0	214	297	0	303	710	0	1020	516	1049	0
V/C Ratio(X)	0.00	0.00	0.03	0.19	0.00	0.59	0.00	0.00	0.58	0.54	0.35	0.00
Avail Cap(c_a), veh/h	0	0	816	816	0	858	889	0	1020	687	1049	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	23.6	24.6	0.0	22.7	0.0	0.0	8.7	15.9	7.3	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.1	0.3	0.0	1.8	0.0	0.0	2.4	0.9	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.1	0.9	0.0	2.8	0.0	0.0	7.1	4.3	3.7	0.0
LnGrp Delay(d),s/veh	0.0	0.0	23.7	24.9	0.0	24.5	0.0	0.0	11.0	16.8	8.2	0.0
LnGrp LOS			C	C		C			B	B	A	
Approach Vol, veh/h		6			235			589			652	
Approach Delay, s/veh		23.7			24.6			11.0			11.9	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	40.0		12.9	9.0	40.0		12.9
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0
Max Q Clear Time (g_c+I1), s	2.0	15.0		2.2	0.0	8.7		4.3
Green Ext Time (p_c), s	0.9	1.6		0.0	0.0	0.9		1.3

Intersection Summary	
HCM 2010 Ctrl Delay	13.6
HCM 2010 LOS	B

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	7	2	3	9	2	48	3	410	7	58	304	12
Future Volume (vph)	7	2	3	9	2	48	3	410	7	58	304	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			-3%			-4%			4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.964			0.890			0.998			0.996	
Flt Protected		0.971			0.992						0.992	
Satd. Flow (prot)	0	1778	0	0	1703	0	0	1844	0	0	1805	0
Flt Permitted		0.971			0.992						0.992	
Satd. Flow (perm)	0	1778	0	0	1703	0	0	1844	0	0	1805	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		162			281			312			693	
Travel Time (s)		3.7			6.4			7.1			15.8	
Confl. Peds. (#/hr)			2			4			3			2
Confl. Bikes (#/hr)			2									
Peak Hour Factor	0.81	0.81	0.81	0.66	0.66	0.66	0.69	0.69	0.69	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	5%	0%	2%	2%	0%
Adj. Flow (vph)	9	2	4	14	3	73	4	594	10	63	330	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	15	0	0	90	0	0	608	0	0	406	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	0.98	0.98	0.98	0.97	0.97	0.97	1.03	1.03	1.03
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2.2

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	7	2	3	9	2	48	3	410	7	58	304	12
Future Vol, veh/h	7	2	3	9	2	48	3	410	7	58	304	12
Conflicting Peds, #/hr	0	0	2	0	0	4	0	0	3	0	0	2
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	-	-	-3	-	-	-4	-	-	4	-
Peak Hour Factor	81	81	81	66	66	66	69	69	69	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	5	0	2	2	0
Mvmt Flow	9	2	4	14	3	73	4	594	10	63	330	13

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1114	1080	341	1078	1081	606	345	0	0	607	0	0
Stage 1	465	465	-	610	610	-	-	-	-	-	-	-
Stage 2	649	615	-	468	471	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	6.5	5.9	5.9	4.1	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	5.5	-	5.5	4.9	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	5.5	4.9	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.218	-	-
Pot Cap-1 Maneuver	187	220	706	237	263	527	1225	-	-	971	-	-
Stage 1	581	566	-	537	540	-	-	-	-	-	-	-
Stage 2	462	485	-	626	609	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	148	201	704	218	240	524	1223	-	-	969	-	-
Mov Cap-2 Maneuver	148	201	-	218	240	-	-	-	-	-	-	-
Stage 1	577	520	-	533	536	-	-	-	-	-	-	-
Stage 2	392	482	-	569	559	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	25	15.9	0.1	1.4
HCM LOS	D	C		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	1223	-	-	418	195	969	-	-
HCM Lane V/C Ratio	0.004	-	-	0.214	0.076	0.065	-	-
HCM Control Delay (s)	8	0	-	15.9	25	9	0	-
HCM Lane LOS	A	A	-	C	D	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.8	0.2	0.2	-	-

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	89	29	6	330	297	18
Future Volume (vph)	89	29	6	330	297	18
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	0.967				0.992	
Flt Protected	0.964			0.999		
Satd. Flow (prot)	1736	0	0	1861	1848	0
Flt Permitted	0.964			0.999		
Satd. Flow (perm)	1736	0	0	1861	1848	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	176			499	312	
Travel Time (s)	4.0			11.3	7.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	97	32	7	359	323	20
Shared Lane Traffic (%)						
Lane Group Flow (vph)	129	0	0	366	343	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane				Yes	Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	60	60	60			60
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	2.1

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	89	29	6	330	297	18
Future Vol, veh/h	89	29	6	330	297	18
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	97	32	7	359	323	20

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	706	333	343	0	-	0
Stage 1	333	-	-	-	-	-
Stage 2	373	-	-	-	-	-
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	402	709	1216	-	-	-
Stage 1	726	-	-	-	-	-
Stage 2	696	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	399	709	1216	-	-	-
Mov Cap-2 Maneuver	505	-	-	-	-	-
Stage 1	721	-	-	-	-	-
Stage 2	696	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	13.7	0.1	0
HCM LOS	B		

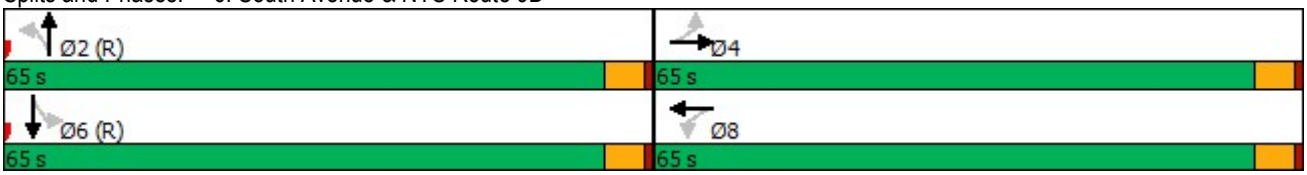
Minor Lane/Major Mvmt	NEL	NET	SELn1	SWT	SWR
Capacity (veh/h)	1216	-	543	-	-
HCM Lane V/C Ratio	0.005	-	0.236	-	-
HCM Control Delay (s)	8	0	13.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.9	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	284	19	9	236	55	7	21	7	46	29	10
Future Volume (vph)	10	284	19	9	236	55	7	21	7	46	29	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		6%			-6%			-1%			3%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor								1.00			0.99	
Frt		0.992			0.975			0.974			0.984	
Flt Protected		0.998			0.998			0.990			0.974	
Satd. Flow (prot)	0	1825	0	0	1840	0	0	1841	0	0	1696	0
Flt Permitted		0.986			0.987			0.961			0.842	
Satd. Flow (perm)	0	1803	0	0	1819	0	0	1781	0	0	1466	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			12			8			7	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		241			516			194			303	
Travel Time (s)		5.5			11.7			4.4			6.9	
Confl. Peds. (#/hr)							6					6
Peak Hour Factor	0.90	0.90	0.90	0.83	0.83	0.83	0.85	0.85	0.85	0.79	0.79	0.79
Heavy Vehicles (%)	0%	0%	0%	12%	4%	0%	0%	0%	0%	2%	12%	0%
Adj. Flow (vph)	11	316	21	11	284	66	8	25	8	58	37	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	348	0	0	361	0	0	41	0	0	108	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	0.96	0.96	0.96	0.99	0.99	0.99	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	21.0	21.0		21.0	21.0		21.0	21.0		21.0	21.0	
Total Split (s)	65.0	65.0		65.0	65.0		65.0	65.0		65.0	65.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	60.0	60.0		60.0	60.0		60.0	60.0		60.0	60.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
v/c Ratio		0.42			0.43			0.05			0.16	
Control Delay		25.1			24.6			16.5			19.8	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		25.1			24.6			16.5			19.8	
Queue Length 50th (ft)		190			193			15			48	
Queue Length 95th (ft)		271			247			34			74	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		161			436			114			223	
Turn Bay Length (ft)												
Base Capacity (vph)		833			846			826			680	
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		0.42			0.43			0.05			0.16	

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 45	
Control Type: Pretimed	

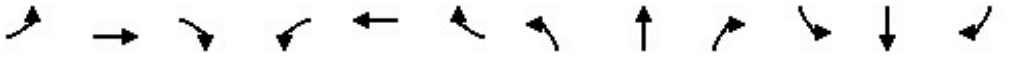
Splits and Phases: 6: South Avenue & NYS Route 9D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	284	19	9	236	55	7	21	7	46	29	10
Future Volume (veh/h)	10	284	19	9	236	55	7	21	7	46	29	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1843	1843	1843	1957	1891	1957	1910	1910	1910	1872	1779	1872
Adj Flow Rate, veh/h	11	316	21	11	284	66	8	25	8	58	37	13
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.90	0.90	0.90	0.83	0.83	0.83	0.85	0.85	0.85	0.79	0.79	0.79
Percent Heavy Veh, %	0	0	0	12	4	0	0	0	0	2	12	0
Cap, veh/h	39	772	50	39	674	153	167	511	156	394	244	82
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
Sat Flow, veh/h	23	1673	109	23	1460	332	289	1108	339	761	530	177
Grp Volume(v), veh/h	348	0	0	361	0	0	41	0	0	108	0	0
Grp Sat Flow(s),veh/h/ln	1805	0	0	1814	0	0	1736	0	0	1467	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	0.0	0.0
Cycle Q Clear(g_c), s	16.5	0.0	0.0	17.2	0.0	0.0	1.6	0.0	0.0	5.2	0.0	0.0
Prop In Lane	0.03		0.06	0.03		0.18	0.20		0.20	0.54		0.12
Lane Grp Cap(c), veh/h	862	0	0	866	0	0	834	0	0	720	0	0
V/C Ratio(X)	0.40	0.00	0.00	0.42	0.00	0.00	0.05	0.00	0.00	0.15	0.00	0.00
Avail Cap(c_a), veh/h	862	0	0	866	0	0	834	0	0	720	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	23.3	0.0	0.0	23.5	0.0	0.0	19.3	0.0	0.0	20.2	0.0	0.0
Incr Delay (d2), s/veh	1.4	0.0	0.0	1.5	0.0	0.0	0.1	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.7	0.0	0.0	9.0	0.0	0.0	0.8	0.0	0.0	2.3	0.0	0.0
LnGrp Delay(d),s/veh	24.7	0.0	0.0	25.0	0.0	0.0	19.4	0.0	0.0	20.6	0.0	0.0
LnGrp LOS	C			C			B			C		
Approach Vol, veh/h		348			361			41			108	
Approach Delay, s/veh		24.7			25.0			19.4			20.6	
Approach LOS		C			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		65.0		65.0		65.0		65.0
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		60.0		60.0		60.0		60.0
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		0.0
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	24.0
HCM 2010 LOS	C

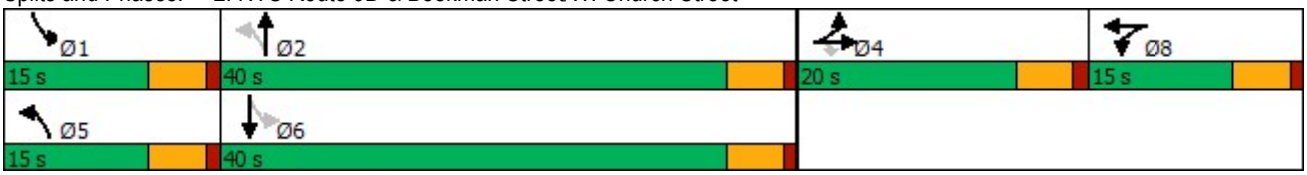


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	310	24	37	4	15	23	39	494	5	6	524	166
Future Volume (vph)	310	24	37	4	15	23	39	494	5	6	524	166
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		2%			-10%			-6%			3%	
Storage Length (ft)	0		95	0		0	75		0	75		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.97		0.96			1.00			0.99	
Frt			0.850		0.925			0.998			0.964	
Flt Protected		0.956			0.996		0.950			0.950		
Satd. Flow (prot)	0	1760	1599	0	1713	0	1805	1915	0	1778	1774	0
Flt Permitted		0.956			0.996		0.134			0.294		
Satd. Flow (perm)	0	1760	1557	0	1713	0	255	1915	0	550	1774	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			145		25			1			21	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		584			328			388			335	
Travel Time (s)		13.3			7.5			8.8			7.6	
Confl. Peds. (#/hr)			2			13			1			6
Confl. Bikes (#/hr)						1			1			1
Peak Hour Factor	0.71	0.71	0.71	0.92	0.92	0.92	0.84	0.84	0.84	0.98	0.98	0.98
Heavy Vehicles (%)	2%	4%	0%	0%	7%	0%	3%	2%	0%	0%	1%	1%
Adj. Flow (vph)	437	34	52	4	16	25	46	588	6	6	535	169
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	471	52	0	45	0	46	594	0	6	704	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.01	1.01	1.01	0.94	0.94	0.94	0.96	0.96	0.96	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2		2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83	83	20	83		83	6		83	6	
Trailing Detector (ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Position(ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Size(ft)	20	43	43	20	43		43	6		43	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)		40	40		40		40			40		
Detector 2 Size(ft)		43	43		43		43			43		
Detector 2 Type		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)		0.0	0.0		0.0		0.0			0.0		
Turn Type	Split	NA	Perm	Split	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	4	4		8	8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			4				2			6		
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	16.0		4.0	16.0	
Minimum Split (s)	20.0	20.0	20.0	9.0	9.0		9.0	21.0		9.0	21.0	
Total Split (s)	20.0	20.0	20.0	15.0	15.0		15.0	40.0		15.0	40.0	
Total Split (%)	22.2%	22.2%	22.2%	16.7%	16.7%		16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	15.0	15.0	15.0	10.0	10.0		10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		None	Min		None	Min	
v/c Ratio		1.27	0.12		0.24		0.16	0.58		0.02	0.84	
Control Delay		169.5	0.5		25.0		9.8	16.6		9.0	31.5	
Queue Delay		0.0	0.0		0.0		0.0	2.1		0.0	0.0	
Total Delay		169.5	0.5		25.0		9.8	18.7		9.0	31.5	
Queue Length 50th (ft)		~346	0		10		10	182		1	334	
Queue Length 95th (ft)		#400	0		42		24	351		7	#602	
Internal Link Dist (ft)		504			248			308			255	
Turn Bay Length (ft)			95				75			75		
Base Capacity (vph)		372	444		263		360	1068		469	887	
Starvation Cap Reductn		0	0		0		0	319		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		1.27	0.12		0.17		0.13	0.79		0.01	0.79	

Intersection Summary
Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 73.8
Natural Cycle: 90
Control Type: Semi Act-Uncoord
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: NYS Route 9D & Beekman Street/W. Church Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	310	24	37	4	15	23	39	494	5	6	524	166
Future Volume (veh/h)	310	24	37	4	15	23	39	494	5	6	524	166
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.86	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1842	1881	1995	1947	1995	1900	1919	1957	1872	1853	1872
Adj Flow Rate, veh/h	437	34	52	4	16	25	46	588	6	6	535	169
Adj No. of Lanes	0	1	1	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.71	0.71	0.71	0.92	0.92	0.92	0.84	0.84	0.84	0.98	0.98	0.98
Percent Heavy Veh, %	2	4	0	0	7	0	3	2	0	0	1	1
Cap, veh/h	353	27	344	5	19	30	202	864	9	289	574	181
Arrive On Green	0.22	0.22	0.22	0.03	0.03	0.03	0.03	0.46	0.46	0.01	0.43	0.43
Sat Flow, veh/h	1633	127	1591	144	574	897	1810	1896	19	1782	1341	423
Grp Volume(v), veh/h	471	0	52	45	0	0	46	0	594	6	0	704
Grp Sat Flow(s),veh/h/ln	1760	0	1591	1615	0	0	1810	0	1915	1782	0	1764
Q Serve(g_s), s	15.0	0.0	1.8	1.9	0.0	0.0	1.0	0.0	17.0	0.1	0.0	26.3
Cycle Q Clear(g_c), s	15.0	0.0	1.8	1.9	0.0	0.0	1.0	0.0	17.0	0.1	0.0	26.3
Prop In Lane	0.93		1.00	0.09		0.56	1.00		0.01	1.00		0.24
Lane Grp Cap(c), veh/h	380	0	344	54	0	0	202	0	873	289	0	756
V/C Ratio(X)	1.24	0.00	0.15	0.83	0.00	0.00	0.23	0.00	0.68	0.02	0.00	0.93
Avail Cap(c_a), veh/h	380	0	344	233	0	0	401	0	966	535	0	890
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	27.2	0.0	22.0	33.3	0.0	0.0	15.6	0.0	14.9	12.8	0.0	18.9
Incr Delay (d2), s/veh	127.8	0.0	0.2	26.6	0.0	0.0	0.6	0.0	1.7	0.0	0.0	14.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	20.7	0.0	0.8	1.2	0.0	0.0	0.5	0.0	9.3	0.1	0.0	15.8
LnGrp Delay(d),s/veh	155.0	0.0	22.2	60.0	0.0	0.0	16.2	0.0	16.6	12.8	0.0	33.6
LnGrp LOS	F		C	E			B		B	B		C
Approach Vol, veh/h		523			45			640			710	
Approach Delay, s/veh		141.8			60.0			16.6			33.5	
Approach LOS		F			E			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.4	36.6		20.0	7.4	34.7		7.3
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	10.0	35.0		15.0	10.0	35.0		10.0
Max Q Clear Time (g_c+I1), s	2.1	19.0		17.0	3.0	28.3		3.9
Green Ext Time (p_c), s	0.0	1.5		0.0	0.1	1.4		0.1

Intersection Summary		
HCM 2010 Ctrl Delay	58.0	
HCM 2010 LOS	E	

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	73	232	581	65	159	650
Future Volume (vph)	73	232	581	65	159	650
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	5%		3%			-1%
Storage Length (ft)	85	0		0	340	
Storage Lanes	1	1		0	1	
Taper Length (ft)	86				86	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.986			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1725	1544	1809	0	1778	1872
Flt Permitted	0.950				0.198	
Satd. Flow (perm)	1725	1544	1809	0	371	1872
Right Turn on Red		No		No		
Satd. Flow (RTOR)						
Link Speed (mph)	30		30			30
Link Distance (ft)	427		462			529
Travel Time (s)	9.7		10.5			12.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	79	252	632	71	173	707
Shared Lane Traffic (%)						
Lane Group Flow (vph)	79	252	703	0	173	707
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			
Headway Factor	1.03	1.03	1.02	1.02	0.99	0.99
Turning Speed (mph)	15	9		9	15	
Turn Type	Prot	pm+ov	NA		pm+pt	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8			6	
Minimum Split (s)	21.0	9.0	15.0		9.0	15.0
Total Split (s)	30.0	20.0	70.0		20.0	90.0
Total Split (%)	25.0%	16.7%	58.3%		16.7%	75.0%
Maximum Green (s)	25.0	15.0	65.0		15.0	85.0
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0		5.0	5.0
Lead/Lag		Lead	Lag		Lead	
Lead-Lag Optimize?		Yes	Yes		Yes	
Walk Time (s)	5.0		5.0			
Flash Dont Walk (s)	11.0		11.0			
Pedestrian Calls (#/hr)	0		0			
v/c Ratio	0.22	0.44	0.72		0.39	0.53
Control Delay	41.4	31.0	25.8		8.4	10.0

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	41.4	31.0	25.8		8.4	10.0
Queue Length 50th (ft)	51	144	391		39	229
Queue Length 95th (ft)	96	222	544		62	316
Internal Link Dist (ft)	347		382			449
Turn Bay Length (ft)	85				340	
Base Capacity (vph)	359	579	979		438	1326
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.22	0.44	0.72		0.39	0.53

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NET and 6:SWTL, Start of Green	
Natural Cycle: 60	
Control Type: Pretimed	

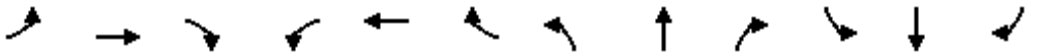
Splits and Phases: 1: NYS Route 9D & Verplanck Avenue



Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (veh/h)	73	232	581	65	159	650
Future Volume (veh/h)	73	232	581	65	159	650
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1816	1816	1835	1872	1872	1872
Adj Flow Rate, veh/h	79	252	632	71	173	707
Adj No. of Lanes	1	1	1	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	360	515	878	99	468	1326
Arrive On Green	0.21	0.21	0.54	0.54	0.13	0.71
Sat Flow, veh/h	1730	1544	1621	182	1783	1872
Grp Volume(v), veh/h	79	252	0	703	173	707
Grp Sat Flow(s),veh/h/ln	1730	1544	0	1803	1783	1872
Q Serve(g_s), s	4.5	15.6	0.0	35.2	4.1	21.2
Cycle Q Clear(g_c), s	4.5	15.6	0.0	35.2	4.1	21.2
Prop In Lane	1.00	1.00		0.10	1.00	
Lane Grp Cap(c), veh/h	360	515	0	976	468	1326
V/C Ratio(X)	0.22	0.49	0.00	0.72	0.37	0.53
Avail Cap(c_a), veh/h	360	515	0	976	468	1326
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.4	31.9	0.0	20.7	14.2	8.2
Incr Delay (d2), s/veh	1.4	3.3	0.0	4.6	2.2	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	7.1	0.0	18.6	2.6	11.4
LnGrp Delay(d),s/veh	40.8	35.2	0.0	25.2	16.4	9.7
LnGrp LOS	D	D		C	B	A
Approach Vol, veh/h	331		703			880
Approach Delay, s/veh	36.5		25.2			11.0
Approach LOS	D		C			B

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	20.0	70.0				90.0		30.0
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	15.0	65.0				85.0		25.0
Max Q Clear Time (g_c+I1), s	0.0	0.0				0.0		0.0
Green Ext Time (p_c), s	0.0	0.0				0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	20.7
HCM 2010 LOS	C



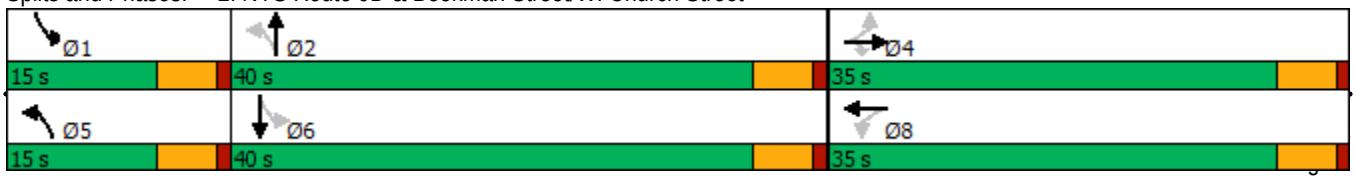
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	1	25	9	12	20	67	519	4	17	592	179
Future Volume (vph)	33	1	25	9	12	20	67	519	4	17	592	179
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		2%			-10%			-6%			3%	
Storage Length (ft)	0		95	0		0	75		0	75		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.96		0.98			1.00			0.99	
Frt			0.850		0.934			0.999			0.965	
Flt Protected		0.953			0.989		0.950			0.950		
Satd. Flow (prot)	0	1775	1599	0	1815	0	1771	1936	0	1778	1771	0
Flt Permitted		0.842			0.912		0.220			0.439		
Satd. Flow (perm)	0	1568	1533	0	1673	0	410	1936	0	822	1771	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			85		27						20	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		584			328			388			335	
Travel Time (s)		13.3			7.5			8.8			7.6	
Confl. Peds. (#/hr)			12			4			1			10
Confl. Bikes (#/hr)			3									
Peak Hour Factor	0.73	0.73	0.73	0.75	0.75	0.75	0.94	0.94	0.94	0.95	0.95	0.95
Heavy Vehicles (%)	1%	0%	0%	0%	0%	0%	5%	1%	0%	0%	1%	2%
Adj. Flow (vph)	45	1	34	12	16	27	71	552	4	18	623	188
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	46	34	0	55	0	71	556	0	18	811	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.01	1.01	1.01	0.94	0.94	0.94	0.96	0.96	0.96	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2		2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83	83	20	83		83	6		83	6	
Trailing Detector (ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Position(ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Size(ft)	20	43	43	20	43		43	6		43	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)		40	40		40		40			40		
Detector 2 Size(ft)		43	43		43		43			43		
Detector 2 Type		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)		0.0	0.0		0.0		0.0			0.0		
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	16.0		4.0	16.0	
Minimum Split (s)	20.0	20.0	20.0	21.0	21.0		9.0	21.0		9.0	21.0	
Total Split (s)	35.0	35.0	35.0	35.0	35.0		15.0	40.0		15.0	40.0	
Total Split (%)	38.9%	38.9%	38.9%	38.9%	38.9%		16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	30.0	30.0	30.0	30.0	30.0		10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		None	Max		None	Max	
Walk Time (s)				5.0	5.0							
Flash Dont Walk (s)				11.0	11.0							
Pedestrian Calls (#/hr)				0	0							
v/c Ratio		0.22	0.12		0.23		0.15	0.36		0.03	0.64	
Control Delay		28.0	1.3		19.0		3.5	5.7		3.2	14.2	
Queue Delay		0.0	0.0		0.0		0.0	0.3		0.0	0.0	
Total Delay		28.0	1.3		19.0		3.5	6.0		3.2	14.2	
Queue Length 50th (ft)		17	0		10		6	63		2	236	
Queue Length 95th (ft)		35	0		30		17	219		6	#509	
Internal Link Dist (ft)		504			248			308			255	
Turn Bay Length (ft)			95				75			75		
Base Capacity (vph)		833	854		902		562	1541		798	1277	
Starvation Cap Reductn		0	0		0		0	429		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		0.06	0.04		0.06		0.13	0.50		0.02	0.64	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 58.6
Natural Cycle: 70
Control Type: Semi Act-Uncoord
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

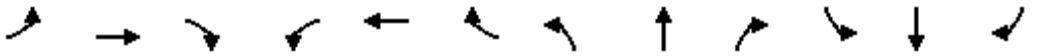
Splits and Phases: 2: NYS Route 9D & Beekman Street/W. Church Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	1	25	9	12	20	67	519	4	17	592	179
Future Volume (veh/h)	33	1	25	9	12	20	67	519	4	17	592	179
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.90	0.94		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1863	1881	1995	1995	1995	1864	1938	1957	1872	1849	1872
Adj Flow Rate, veh/h	45	1	34	12	16	27	71	552	4	18	623	188
Adj No. of Lanes	0	1	1	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.73	0.73	0.73	0.75	0.75	0.75	0.94	0.94	0.94	0.95	0.95	0.95
Percent Heavy Veh, %	1	0	0	0	0	0	5	1	0	0	1	2
Cap, veh/h	248	4	126	97	56	74	391	1221	9	572	824	249
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.05	0.64	0.64	0.02	0.61	0.61
Sat Flow, veh/h	1426	48	1441	239	635	843	1775	1921	14	1782	1361	411
Grp Volume(v), veh/h	46	0	34	55	0	0	71	0	556	18	0	811
Grp Sat Flow(s),veh/h/ln	1474	0	1441	1717	0	0	1775	0	1935	1782	0	1772
Q Serve(g_s), s	0.0	0.0	1.3	0.0	0.0	0.0	0.8	0.0	8.5	0.2	0.0	19.2
Cycle Q Clear(g_c), s	1.4	0.0	1.3	1.6	0.0	0.0	0.8	0.0	8.5	0.2	0.0	19.2
Prop In Lane	0.98		1.00	0.22		0.49	1.00		0.01	1.00		0.23
Lane Grp Cap(c), veh/h	253	0	126	227	0	0	391	0	1230	572	0	1073
V/C Ratio(X)	0.18	0.00	0.27	0.24	0.00	0.00	0.18	0.00	0.45	0.03	0.00	0.76
Avail Cap(c_a), veh/h	831	0	748	946	0	0	614	0	1230	850	0	1073
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.7	0.0	24.6	24.8	0.0	0.0	7.2	0.0	5.4	4.6	0.0	8.3
Incr Delay (d2), s/veh	0.3	0.0	1.1	0.5	0.0	0.0	0.2	0.0	1.2	0.0	0.0	5.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.5	0.9	0.0	0.0	0.4	0.0	4.9	0.1	0.0	10.7
LnGrp Delay(d),s/veh	25.0	0.0	25.8	25.3	0.0	0.0	7.4	0.0	6.6	4.6	0.0	13.2
LnGrp LOS	C		C	C			A		A	A		B
Approach Vol, veh/h		80			55			627			829	
Approach Delay, s/veh		25.3			25.3			6.7			13.1	
Approach LOS		C			C			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.0	41.7		10.1	7.7	40.0		10.1
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0
Max Q Clear Time (g_c+I1), s	2.2	10.5		3.4	2.8	21.2		3.6
Green Ext Time (p_c), s	0.0	1.5		0.4	0.1	2.3		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	11.6
HCM 2010 LOS	B

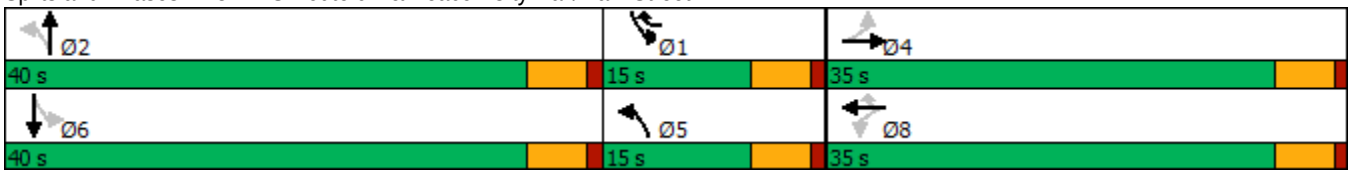


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	2	2	38	0	197	2	392	52	293	339	3
Future Volume (vph)	2	2	2	38	0	197	2	392	52	293	339	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		1%			-8%			-3%			3%	
Storage Length (ft)	0		0	0		70	65		0	120		0
Storage Lanes	0		0	0		1	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98				0.97		0.98			1.00	
Frt		0.955				0.850		0.982			0.999	
Flt Protected		0.984			0.950		0.950			0.950		
Satd. Flow (prot)	0	1742	0	0	1877	1663	1832	1817	0	1760	1851	0
Flt Permitted		0.872			0.833		0.531			0.383		
Satd. Flow (perm)	0	1544	0	0	1646	1619	1024	1817	0	710	1851	0
Right Turn on Red			Yes			No			No			Yes
Satd. Flow (RTOR)		3									1	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		133			350			693			388	
Travel Time (s)		3.0			8.0			15.8			8.8	
Confl. Peds. (#/hr)			14			6			48			11
Peak Hour Factor	0.71	0.71	0.71	0.89	0.89	0.89	0.88	0.88	0.88	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%	0%	2%	5%	1%	1%	0%
Adj. Flow (vph)	3	3	3	43	0	221	2	445	59	318	368	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	9	0	0	43	221	2	504	0	318	371	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.01	1.01	1.01	0.95	0.95	0.95	0.98	0.98	0.98	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	2	2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83		20	83	83	83	6		83	6	
Trailing Detector (ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Position(ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Size(ft)	20	43		20	43	43	43	6		43	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)		40			40	40	40			40		
Detector 2 Size(ft)		43			43	43	43			43		
Detector 2 Type		Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0	0.0	0.0			0.0		
Turn Type	Perm	NA		Perm	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8	1	5	2		1	6	
Permitted Phases	4			8		8	2			6		
Detector Phase	4	4		8	8	1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		8.0	8.0	4.0	4.0	31.0		4.0	35.0	
Minimum Split (s)	21.0	21.0		21.0	21.0	9.0	9.0	36.0		9.0	40.0	
Total Split (s)	35.0	35.0		35.0	35.0	15.0	15.0	40.0		15.0	40.0	
Total Split (%)	38.9%	38.9%		38.9%	38.9%	16.7%	16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	30.0	30.0		30.0	30.0	10.0	10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0			5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag						Lag	Lag	Lead		Lag	Lead	
Lead-Lag Optimize?						Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None	None	None	Max		None	Max	
Walk Time (s)	5.0	5.0						5.0				
Flash Dont Walk (s)	11.0	11.0						11.0				
Pedestrian Calls (#/hr)	0	0						0				
v/c Ratio		0.05			0.19	0.58	0.00	0.49		0.44	0.25	
Control Delay		23.3			28.9	25.0	3.5	12.1		7.1	5.5	
Queue Delay		0.0			0.0	0.0	0.0	0.0		0.0	0.2	
Total Delay		23.3			28.9	25.0	3.5	12.1		7.1	5.7	
Queue Length 50th (ft)		2			17	69	0	131		32	39	
Queue Length 95th (ft)		11			43	121	2	217		63	152	
Internal Link Dist (ft)		53			270			613			308	
Turn Bay Length (ft)						70	65			120		
Base Capacity (vph)		746			794	391	871	1023		730	1469	
Starvation Cap Reductn		0			0	0	0	0		0	460	
Spillback Cap Reductn		0			0	0	0	0		0	0	
Storage Cap Reductn		0			0	0	0	0		0	0	
Reduced v/c Ratio		0.01			0.05	0.57	0.00	0.49		0.44	0.37	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 63	
Natural Cycle: 70	
Control Type: Semi Act-Uncoord	

Splits and Phases: 3: NYS Route 9D & Beacon City Hall/Main Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	2	2	38	0	197	2	392	52	293	339	3
Future Volume (veh/h)	2	2	2	38	0	197	2	392	52	293	339	3
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.95	0.95		0.98	0.99		0.96	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1890	1890	1890	1976	1976	1956	1928	1884	1928	1853	1853	1872
Adj Flow Rate, veh/h	3	3	3	43	0	221	2	445	59	318	368	3
Adj No. of Lanes	0	1	0	0	1	1	1	1	0	1	1	0
Peak Hour Factor	0.71	0.71	0.71	0.89	0.89	0.89	0.88	0.88	0.88	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	1	0	2	5	1	1	0
Cap, veh/h	115	97	67	299	0	315	708	916	121	582	1038	8
Arrive On Green	0.13	0.13	0.13	0.13	0.00	0.13	0.06	0.57	0.57	0.06	0.57	0.57
Sat Flow, veh/h	290	761	526	1423	0	1624	1837	1620	215	1765	1835	15
Grp Volume(v), veh/h	9	0	0	43	0	221	2	0	504	318	0	371
Grp Sat Flow(s),veh/h/ln	1577	0	0	1423	0	1624	1837	0	1835	1765	0	1850
Q Serve(g_s), s	0.0	0.0	0.0	1.3	0.0	3.8	0.0	0.0	10.2	0.0	0.0	6.7
Cycle Q Clear(g_c), s	0.3	0.0	0.0	1.6	0.0	3.8	0.0	0.0	10.2	0.0	0.0	6.7
Prop In Lane	0.33		0.33	1.00		1.00	1.00		0.12	1.00		0.01
Lane Grp Cap(c), veh/h	279	0	0	299	0	315	708	0	1037	582	0	1046
V/C Ratio(X)	0.03	0.00	0.00	0.14	0.00	0.70	0.00	0.00	0.49	0.55	0.00	0.35
Avail Cap(c_a), veh/h	800	0	0	801	0	894	886	0	1037	754	0	1046
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.7	0.0	0.0	24.2	0.0	23.3	7.1	0.0	8.1	13.9	0.0	7.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	2.8	0.0	0.0	1.6	0.8	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	0.7	0.0	3.5	0.0	0.0	5.5	4.6	0.0	3.7
LnGrp Delay(d),s/veh	23.7	0.0	0.0	24.4	0.0	26.1	7.1	0.0	9.7	14.7	0.0	8.3
LnGrp LOS	C			C		C	A		A	B		A
Approach Vol, veh/h		9			264			506			689	
Approach Delay, s/veh		23.7			25.9			9.7			11.2	
Approach LOS		C			C			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	40.0		12.9	9.0	40.0		12.9
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0
Max Q Clear Time (g_c+I1), s	2.0	12.2		2.3	2.0	8.7		5.8
Green Ext Time (p_c), s	1.0	1.3		0.0	0.0	0.9		1.5

Intersection Summary	
HCM 2010 Ctrl Delay	13.4
HCM 2010 LOS	B

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	10	3	3	10	5	82	3	353	10	45	328	7
Future Volume (vph)	10	3	3	10	5	82	3	353	10	45	328	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			-3%			-4%			4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.974			0.886			0.996			0.997	
Flt Protected		0.970			0.995						0.994	
Satd. Flow (prot)	0	1638	0	0	1646	0	0	1853	0	0	1810	0
Flt Permitted		0.970			0.995						0.994	
Satd. Flow (perm)	0	1638	0	0	1646	0	0	1853	0	0	1810	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		162			281			312			693	
Travel Time (s)		3.7			6.4			7.1			15.8	
Confl. Peds. (#/hr)			4			19			2			3
Confl. Bikes (#/hr)												1
Peak Hour Factor	0.61	0.61	0.61	0.88	0.88	0.88	0.85	0.85	0.85	0.92	0.92	0.92
Heavy Vehicles (%)	0%	50%	0%	11%	25%	1%	0%	4%	11%	2%	2%	0%
Adj. Flow (vph)	16	5	5	11	6	93	4	415	12	49	357	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	26	0	0	110	0	0	431	0	0	414	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	0.98	0.98	0.98	0.97	0.97	0.97	1.03	1.03	1.03
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2.6

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	10	3	3	10	5	82	3	353	10	45	328	7
Future Vol, veh/h	10	3	3	10	5	82	3	353	10	45	328	7
Conflicting Peds, #/hr	0	0	4	0	0	19	0	0	2	0	0	3
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	-	-	-3	-	-	-4	-	-	4	-
Peak Hour Factor	61	61	61	88	88	88	85	85	85	92	92	92
Heavy Vehicles, %	0	50	0	11	25	1	0	4	11	2	2	0
Mvmt Flow	16	5	5	11	6	93	4	415	12	49	357	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	960	899	368	899	897	442	368	0	0	429	0	0
Stage 1	462	462	-	431	431	-	-	-	-	-	-	-
Stage 2	498	437	-	468	466	-	-	-	-	-	-	-
Critical Hdwy	7.1	7	6.2	6.61	6.15	5.91	4.1	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	6	-	5.61	5.15	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	6	-	5.61	5.15	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4.45	3.3	3.599	4.225	3.309	2.2	-	-	2.218	-	-
Pot Cap-1 Maneuver	238	233	682	291	298	641	1202	-	-	1130	-	-
Stage 1	584	492	-	629	586	-	-	-	-	-	-	-
Stage 2	558	505	-	604	568	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	187	218	678	270	279	630	1199	-	-	1128	-	-
Mov Cap-2 Maneuver	187	218	-	270	279	-	-	-	-	-	-	-
Stage 1	580	464	-	625	582	-	-	-	-	-	-	-
Stage 2	462	502	-	559	536	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	23.3	13.7	0.1	1
HCM LOS	C	B		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	1199	-	-	524	223	1128	-	-
HCM Lane V/C Ratio	0.003	-	-	0.21	0.118	0.043	-	-
HCM Control Delay (s)	8	0	-	13.7	23.3	8.3	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.8	0.4	0.1	-	-



Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	21	6	7	343	313	26
Future Volume (vph)	21	6	7	343	313	26
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	0.968				0.990	
Flt Protected	0.963			0.999		
Satd. Flow (prot)	1736	0	0	1861	1844	0
Flt Permitted	0.963			0.999		
Satd. Flow (perm)	1736	0	0	1861	1844	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	176			499	312	
Travel Time (s)	4.0			11.3	7.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	23	7	8	373	340	28
Shared Lane Traffic (%)						
Lane Group Flow (vph)	30	0	0	381	368	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane				Yes	Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	60	60	60			60
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	0.6

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	21	6	7	343	313	26
Future Vol, veh/h	21	6	7	343	313	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
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	23	7	8	373	340	28

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	743	354	368	0	-	0
Stage 1	354	-	-	-	-	-
Stage 2	389	-	-	-	-	-
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	383	690	1191	-	-	-
Stage 1	710	-	-	-	-	-
Stage 2	685	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	380	690	1191	-	-	-
Mov Cap-2 Maneuver	490	-	-	-	-	-
Stage 1	704	-	-	-	-	-
Stage 2	685	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	12.3	0.2	0
HCM LOS	B		

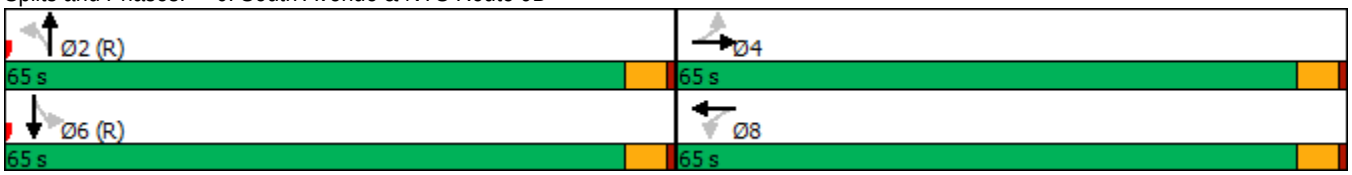
Minor Lane/Major Mvmt	NEL	NET	SELn1	SWT	SWR
Capacity (veh/h)	1191	-	524	-	-
HCM Lane V/C Ratio	0.006	-	0.056	-	-
HCM Control Delay (s)	8	0	12.3	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	194	16	13	208	37	14	27	13	32	35	9
Future Volume (vph)	9	194	16	13	208	37	14	27	13	32	35	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		6%			-6%			-1%			3%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor								0.99			0.99	
Frt		0.990			0.980			0.967			0.984	
Flt Protected		0.998			0.998			0.987			0.979	
Satd. Flow (prot)	0	1821	0	0	1844	0	0	1822	0	0	1686	0
Flt Permitted		0.984			0.980			0.926			0.866	
Satd. Flow (perm)	0	1795	0	0	1810	0	0	1701	0	0	1491	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			9			17			7	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		241			516			194			303	
Travel Time (s)		5.5			11.7			4.4			6.9	
Confl. Peds. (#/hr)							6					6
Peak Hour Factor	0.82	0.82	0.82	0.85	0.85	0.85	0.55	0.55	0.55	0.82	0.82	0.82
Heavy Vehicles (%)	0%	0%	0%	12%	4%	0%	0%	0%	0%	2%	12%	0%
Adj. Flow (vph)	11	237	20	15	245	44	25	49	24	39	43	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	268	0	0	304	0	0	98	0	0	93	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	0.96	0.96	0.96	0.99	0.99	0.99	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	21.0	21.0		21.0	21.0		21.0	21.0		21.0	21.0	
Total Split (s)	65.0	65.0		65.0	65.0		65.0	65.0		65.0	65.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	60.0	60.0		60.0	60.0		60.0	60.0		60.0	60.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
v/c Ratio		0.32			0.36			0.12			0.13	
Control Delay		23.1			23.5			16.9			19.2	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		23.1			23.5			16.9			19.2	
Queue Length 50th (ft)		138			157			38			41	
Queue Length 95th (ft)		181			213			39			67	
Internal Link Dist (ft)		161			436			114			223	
Turn Bay Length (ft)												
Base Capacity (vph)		830			840			794			691	
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		0.32			0.36			0.12			0.13	

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 45	
Control Type: Pretimed	

Splits and Phases: 6: South Avenue & NYS Route 9D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	194	16	13	208	37	14	27	13	32	35	9
Future Volume (veh/h)	9	194	16	13	208	37	14	27	13	32	35	9
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1843	1843	1843	1957	1885	1957	1910	1910	1910	1872	1759	1872
Adj Flow Rate, veh/h	11	237	20	15	245	44	25	49	24	39	43	11
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.82	0.82	0.82	0.85	0.85	0.85	0.55	0.55	0.55	0.82	0.82	0.82
Percent Heavy Veh, %	0	0	0	12	4	0	0	0	0	2	12	0
Cap, veh/h	44	752	62	49	694	121	212	409	190	312	333	81
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
Sat Flow, veh/h	32	1630	134	44	1504	262	384	887	412	590	721	176
Grp Volume(v), veh/h	268	0	0	304	0	0	98	0	0	93	0	0
Grp Sat Flow(s),veh/h/ln	1796	0	0	1810	0	0	1683	0	0	1487	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	12.1	0.0	0.0	13.9	0.0	0.0	4.0	0.0	0.0	4.0	0.0	0.0
Prop In Lane	0.04		0.07	0.05		0.14	0.26		0.24	0.42		0.12
Lane Grp Cap(c), veh/h	858	0	0	864	0	0	812	0	0	726	0	0
V/C Ratio(X)	0.31	0.00	0.00	0.35	0.00	0.00	0.12	0.00	0.00	0.13	0.00	0.00
Avail Cap(c_a), veh/h	858	0	0	864	0	0	812	0	0	726	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	22.1	0.0	0.0	22.6	0.0	0.0	19.9	0.0	0.0	19.9	0.0	0.0
Incr Delay (d2), s/veh	1.0	0.0	0.0	1.1	0.0	0.0	0.3	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	0.0	0.0	7.3	0.0	0.0	2.1	0.0	0.0	2.0	0.0	0.0
LnGrp Delay(d),s/veh	23.1	0.0	0.0	23.7	0.0	0.0	20.2	0.0	0.0	20.3	0.0	0.0
LnGrp LOS	C			C			C			C		
Approach Vol, veh/h		268			304			98			93	
Approach Delay, s/veh		23.1			23.7			20.2			20.3	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		65.0		65.0		65.0		65.0
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		60.0		60.0		60.0		60.0
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		0.0
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0

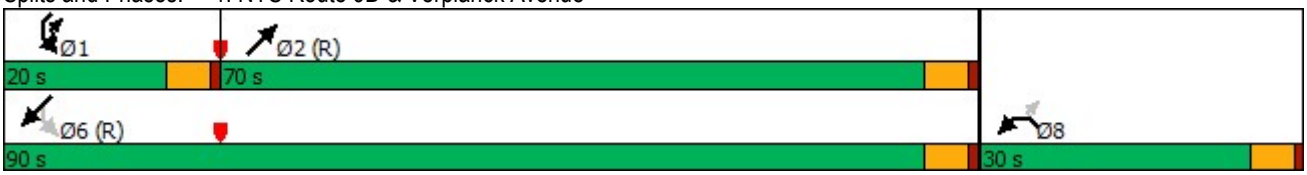
Intersection Summary		
HCM 2010 Ctrl Delay		22.6
HCM 2010 LOS		C

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	81	232	581	65	159	692
Future Volume (vph)	81	232	581	65	159	692
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	5%		3%			-1%
Storage Length (ft)	85	0		0	340	
Storage Lanes	1	1		0	1	
Taper Length (ft)	86				86	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.986			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1725	1544	1809	0	1778	1872
Flt Permitted	0.950				0.198	
Satd. Flow (perm)	1725	1544	1809	0	371	1872
Right Turn on Red		No		No		
Satd. Flow (RTOR)						
Link Speed (mph)	30		30			30
Link Distance (ft)	427		462			529
Travel Time (s)	9.7		10.5			12.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	88	252	632	71	173	752
Shared Lane Traffic (%)						
Lane Group Flow (vph)	88	252	703	0	173	752
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			
Headway Factor	1.03	1.03	1.02	1.02	0.99	0.99
Turning Speed (mph)	15	9		9	15	
Turn Type	Prot	pm+ov	NA		pm+pt	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8			6	
Minimum Split (s)	21.0	9.0	15.0		9.0	15.0
Total Split (s)	30.0	20.0	70.0		20.0	90.0
Total Split (%)	25.0%	16.7%	58.3%		16.7%	75.0%
Maximum Green (s)	25.0	15.0	65.0		15.0	85.0
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0		5.0	5.0
Lead/Lag		Lead	Lag		Lead	
Lead-Lag Optimize?		Yes	Yes		Yes	
Walk Time (s)	5.0		5.0			
Flash Dont Walk (s)	11.0		11.0			
Pedestrian Calls (#/hr)	0		0			
v/c Ratio	0.25	0.44	0.72		0.39	0.57
Control Delay	41.8	31.0	25.8		8.4	10.6
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	41.8	31.0	25.8		8.4	10.6
Queue Length 50th (ft)	57	144	391		39	254
Queue Length 95th (ft)	106	222	544		62	349

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Internal Link Dist (ft)	347		382			449
Turn Bay Length (ft)	85				340	
Base Capacity (vph)	359	579	979		438	1326
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.25	0.44	0.72		0.39	0.57

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NET and 6:SWTL, Start of Green	
Natural Cycle: 60	
Control Type: Pretimed	

Splits and Phases: 1: NYS Route 9D & Verplanck Avenue



Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (veh/h)	81	232	581	65	159	692
Future Volume (veh/h)	81	232	581	65	159	692
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1816	1816	1835	1872	1872	1872
Adj Flow Rate, veh/h	88	252	632	71	173	752
Adj No. of Lanes	1	1	1	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	360	515	878	99	468	1326
Arrive On Green	0.21	0.21	0.54	0.54	0.13	0.71
Sat Flow, veh/h	1730	1544	1621	182	1783	1872
Grp Volume(v), veh/h	88	252	0	703	173	752
Grp Sat Flow(s),veh/h/ln	1730	1544	0	1803	1783	1872
Q Serve(g_s), s	5.1	15.6	0.0	35.2	4.1	23.5
Cycle Q Clear(g_c), s	5.1	15.6	0.0	35.2	4.1	23.5
Prop In Lane	1.00	1.00		0.10	1.00	
Lane Grp Cap(c), veh/h	360	515	0	976	468	1326
V/C Ratio(X)	0.24	0.49	0.00	0.72	0.37	0.57
Avail Cap(c_a), veh/h	360	515	0	976	468	1326
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.6	31.9	0.0	20.7	14.2	8.5
Incr Delay (d2), s/veh	1.6	3.3	0.0	4.6	2.2	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	7.1	0.0	18.6	2.6	12.6
LnGrp Delay(d),s/veh	41.2	35.2	0.0	25.2	16.4	10.3
LnGrp LOS	D	D		C	B	B
Approach Vol, veh/h	340		703			925
Approach Delay, s/veh	36.7		25.2			11.4
Approach LOS	D		C			B

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	20.0	70.0				90.0		30.0
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	15.0	65.0				85.0		25.0
Max Q Clear Time (g_c+I1), s	0.0	0.0				0.0		0.0
Green Ext Time (p_c), s	0.0	0.0				0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	20.7
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	2	28	9	12	20	66	517	4	17	642	179
Future Volume (vph)	33	2	28	9	12	20	66	517	4	17	642	179
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		2%			-10%			-6%			3%	
Storage Length (ft)	0		95	0		0	75		0	75		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.96		0.98			1.00			0.99	
Frt			0.850		0.934			0.999			0.967	
Flt Protected		0.955			0.989		0.950			0.950		
Satd. Flow (prot)	0	1780	1599	0	1815	0	1771	1936	0	1778	1775	0
Flt Permitted		0.699			0.911		0.174			0.433		
Satd. Flow (perm)	0	1303	1533	0	1672	0	324	1936	0	810	1775	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			85		27						18	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		584			328			388			335	
Travel Time (s)		13.3			7.5			8.8			7.6	
Confl. Peds. (#/hr)			12			4			1			10
Confl. Bikes (#/hr)			3									
Peak Hour Factor	0.73	0.73	0.73	0.75	0.75	0.75	0.94	0.94	0.94	0.95	0.95	0.95
Heavy Vehicles (%)	1%	0%	0%	0%	0%	0%	5%	1%	0%	0%	1%	2%
Adj. Flow (vph)	45	3	38	12	16	27	70	550	4	18	676	188
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	48	38	0	55	0	70	554	0	18	864	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.01	1.01	1.01	0.94	0.94	0.94	0.96	0.96	0.96	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2		2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83	83	20	83		83	6		83	6	
Trailing Detector (ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Position(ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Size(ft)	20	43	43	20	43		43	6		43	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)		40	40		40		40			40		
Detector 2 Size(ft)		43	43		43		43			43		
Detector 2 Type		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)		0.0	0.0		0.0		0.0			0.0		
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	16.0		4.0	16.0	
Minimum Split (s)	20.0	20.0	20.0	21.0	21.0		9.0	21.0		9.0	21.0	
Total Split (s)	35.0	35.0	35.0	35.0	35.0		15.0	40.0		15.0	40.0	
Total Split (%)	38.9%	38.9%	38.9%	38.9%	38.9%		16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	30.0	30.0	30.0	30.0	30.0		10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		None	Max		None	Max	
Walk Time (s)				5.0	5.0							
Flash Dont Walk (s)				11.0	11.0							
Pedestrian Calls (#/hr)				0	0							
v/c Ratio		0.29	0.14		0.23		0.18	0.39		0.03	0.74	
Control Delay		30.4	2.4		18.8		4.0	6.5		3.3	17.9	
Queue Delay		0.0	0.0		0.0		0.0	0.5		0.0	0.0	
Total Delay		30.4	2.4		18.8		4.0	6.9		3.3	17.9	
Queue Length 50th (ft)		18	0		10		6	63		2	267	
Queue Length 95th (ft)		37	0		30		17	219		6	#562	
Internal Link Dist (ft)		504			248			308			255	
Turn Bay Length (ft)			95				75			75		
Base Capacity (vph)		648	805		845		480	1416		748	1165	
Starvation Cap Reductn		0	0		0		0	430		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		0.07	0.05		0.07		0.15	0.56		0.02	0.74	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 61
Natural Cycle: 75
Control Type: Semi Act-Uncoord
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: NYS Route 9D & Beekman Street/W. Church Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	2	28	9	12	20	66	517	4	17	642	179
Future Volume (veh/h)	33	2	28	9	12	20	66	517	4	17	642	179
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.90	0.95		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1864	1881	1995	1995	1995	1864	1938	1957	1872	1849	1872
Adj Flow Rate, veh/h	45	3	38	12	16	27	70	550	4	18	676	188
Adj No. of Lanes	0	1	1	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.73	0.73	0.73	0.75	0.75	0.75	0.94	0.94	0.94	0.95	0.95	0.95
Percent Heavy Veh, %	1	0	0	0	0	0	5	1	0	0	1	2
Cap, veh/h	240	12	127	97	56	74	355	1220	9	573	842	234
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.05	0.63	0.63	0.02	0.61	0.61
Sat Flow, veh/h	1349	139	1442	238	636	843	1775	1921	14	1782	1390	387
Grp Volume(v), veh/h	48	0	38	55	0	0	70	0	554	18	0	864
Grp Sat Flow(s),veh/h/ln	1488	0	1442	1717	0	0	1775	0	1935	1782	0	1777
Q Serve(g_s), s	0.0	0.0	1.4	0.0	0.0	0.0	0.8	0.0	8.5	0.2	0.0	21.6
Cycle Q Clear(g_c), s	1.5	0.0	1.4	1.6	0.0	0.0	0.8	0.0	8.5	0.2	0.0	21.6
Prop In Lane	0.94		1.00	0.22		0.49	1.00		0.01	1.00		0.22
Lane Grp Cap(c), veh/h	252	0	127	228	0	0	355	0	1228	573	0	1076
V/C Ratio(X)	0.19	0.00	0.30	0.24	0.00	0.00	0.20	0.00	0.45	0.03	0.00	0.80
Avail Cap(c_a), veh/h	837	0	748	945	0	0	579	0	1228	850	0	1076
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.7	0.0	24.7	24.8	0.0	0.0	8.2	0.0	5.4	4.6	0.0	8.8
Incr Delay (d2), s/veh	0.4	0.0	1.3	0.5	0.0	0.0	0.3	0.0	1.2	0.0	0.0	6.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.6	0.9	0.0	0.0	0.5	0.0	4.9	0.1	0.0	12.2
LnGrp Delay(d),s/veh	25.1	0.0	26.0	25.3	0.0	0.0	8.4	0.0	6.6	4.6	0.0	15.1
LnGrp LOS	C		C	C			A		A	A		B
Approach Vol, veh/h		86			55			624			882	
Approach Delay, s/veh		25.5			25.3			6.8			14.9	
Approach LOS		C			C			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.0	41.7		10.1	7.7	40.0		10.1
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0
Max Q Clear Time (g_c+I1), s	2.2	10.5		3.5	2.8	23.6		3.6
Green Ext Time (p_c), s	0.0	1.5		0.4	0.1	2.4		0.2

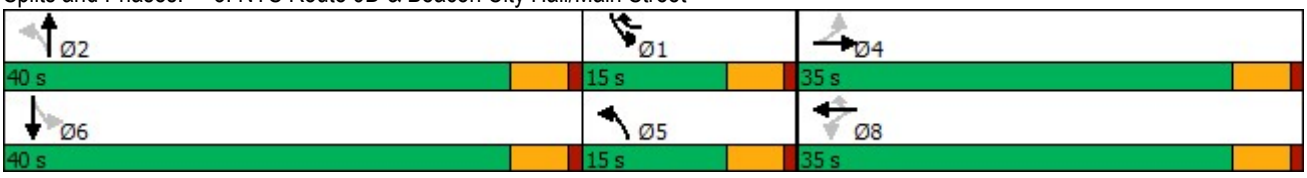
Intersection Summary	
HCM 2010 Ctrl Delay	12.7
HCM 2010 LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	2	2	46	0	197	2	389	52	293	393	3
Future Volume (vph)	2	2	2	46	0	197	2	389	52	293	393	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		1%			-8%			-3%			3%	
Storage Length (ft)	0		0	0		70	65		0	120		0
Storage Lanes	0		0	0		1	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98				0.97		0.98			1.00	
Frt		0.955				0.850		0.982			0.999	
Flt Protected		0.984			0.950		0.950			0.950		
Satd. Flow (prot)	0	1742	0	0	1877	1663	1832	1817	0	1760	1851	0
Flt Permitted		0.869			0.800		0.486			0.384		
Satd. Flow (perm)	0	1538	0	0	1581	1619	937	1817	0	712	1851	0
Right Turn on Red			Yes			No			No			Yes
Satd. Flow (RTOR)		3										
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		133			350			693			388	
Travel Time (s)		3.0			8.0			15.8			8.8	
Confl. Peds. (#/hr)			14			6			48			11
Peak Hour Factor	0.71	0.71	0.71	0.89	0.89	0.89	0.88	0.88	0.88	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%	0%	2%	5%	1%	1%	0%
Adj. Flow (vph)	3	3	3	52	0	221	2	442	59	318	427	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	9	0	0	52	221	2	501	0	318	430	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.01	1.01	1.01	0.95	0.95	0.95	0.98	0.98	0.98	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	2	2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83		20	83	83	83	6		83	6	
Trailing Detector (ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Position(ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Size(ft)	20	43		20	43	43	43	6		43	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)		40			40	40	40			40		
Detector 2 Size(ft)		43			43	43	43			43		
Detector 2 Type		Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0	0.0	0.0			0.0		
Turn Type	Perm	NA		Perm	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8	1	5	2		1	6	
Permitted Phases	4			8		8	2			6		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4		8	8	1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		8.0	8.0	4.0	4.0	31.0		4.0	35.0	
Minimum Split (s)	21.0	21.0		21.0	21.0	9.0	9.0	36.0		9.0	40.0	
Total Split (s)	35.0	35.0		35.0	35.0	15.0	15.0	40.0		15.0	40.0	
Total Split (%)	38.9%	38.9%		38.9%	38.9%	16.7%	16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	30.0	30.0		30.0	30.0	10.0	10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0			5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag						Lag	Lag	Lead		Lag	Lead	
Lead-Lag Optimize?						Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None	None	None	Max		None	Max	
Walk Time (s)	5.0	5.0						5.0				
Flash Dont Walk (s)	11.0	11.0						11.0				
Pedestrian Calls (#/hr)	0	0						0				
v/c Ratio		0.05			0.24	0.57	0.00	0.49		0.44	0.29	
Control Delay		23.2			29.5	24.7	3.5	12.2		7.3	5.9	
Queue Delay		0.0			0.0	0.0	0.0	0.0		0.0	0.2	
Total Delay		23.2			29.5	24.7	3.5	12.2		7.3	6.2	
Queue Length 50th (ft)		2			20	69	0	130		32	47	
Queue Length 95th (ft)		11			50	121	2	219		65	185	
Internal Link Dist (ft)		53			270			613			308	
Turn Bay Length (ft)						70	65			120		
Base Capacity (vph)		742			761	395	820	1020		729	1465	
Starvation Cap Reductn		0			0	0	0	0		0	440	
Spillback Cap Reductn		0			0	0	0	0		0	0	
Storage Cap Reductn		0			0	0	0	0		0	0	
Reduced v/c Ratio		0.01			0.07	0.56	0.00	0.49		0.44	0.42	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 63.2	
Natural Cycle: 70	
Control Type: Semi Act-Uncoord	

Splits and Phases: 3: NYS Route 9D & Beacon City Hall/Main Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	2	2	46	0	197	2	389	52	293	393	3
Future Volume (veh/h)	2	2	2	46	0	197	2	389	52	293	393	3
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.95	0.95		0.98	1.00		0.96	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1890	1890	1890	1976	1976	1956	1928	1884	1928	1853	1853	1872
Adj Flow Rate, veh/h	3	3	3	52	0	221	2	442	59	318	427	3
Adj No. of Lanes	0	1	0	0	1	1	1	1	0	1	1	0
Peak Hour Factor	0.71	0.71	0.71	0.89	0.89	0.89	0.88	0.88	0.88	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	1	0	2	5	1	1	0
Cap, veh/h	115	97	67	299	0	315	661	915	122	584	1039	7
Arrive On Green	0.13	0.13	0.13	0.13	0.00	0.13	0.06	0.57	0.57	0.06	0.57	0.57
Sat Flow, veh/h	291	761	526	1423	0	1624	1837	1619	216	1765	1838	13
Grp Volume(v), veh/h	9	0	0	52	0	221	2	0	501	318	0	430
Grp Sat Flow(s),veh/h/ln	1577	0	0	1423	0	1624	1837	0	1835	1765	0	1851
Q Serve(g_s), s	0.0	0.0	0.0	1.7	0.0	3.8	0.0	0.0	10.1	0.0	0.0	8.1
Cycle Q Clear(g_c), s	0.3	0.0	0.0	2.0	0.0	3.8	0.0	0.0	10.1	0.0	0.0	8.1
Prop In Lane	0.33		0.33	1.00		1.00	1.00		0.12	1.00		0.01
Lane Grp Cap(c), veh/h	280	0	0	299	0	315	661	0	1037	584	0	1046
V/C Ratio(X)	0.03	0.00	0.00	0.17	0.00	0.70	0.00	0.00	0.48	0.54	0.00	0.41
Avail Cap(c_a), veh/h	800	0	0	801	0	894	839	0	1037	756	0	1046
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.7	0.0	0.0	24.4	0.0	23.3	7.8	0.0	8.1	13.8	0.0	7.6
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.3	0.0	2.8	0.0	0.0	1.6	0.8	0.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	0.8	0.0	3.5	0.0	0.0	5.5	4.6	0.0	4.4
LnGrp Delay(d),s/veh	23.7	0.0	0.0	24.6	0.0	26.1	7.8	0.0	9.7	14.6	0.0	8.8
LnGrp LOS	C			C		C	A		A	B		A
Approach Vol, veh/h		9			273			503			748	
Approach Delay, s/veh		23.7			25.9			9.7			11.3	
Approach LOS		C			C			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	40.0		12.9	9.0	40.0		12.9
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0
Max Q Clear Time (g_c+I1), s	2.0	12.1		2.3	2.0	10.1		5.8
Green Ext Time (p_c), s	1.0	1.3		0.0	0.0	1.1		1.6

Intersection Summary	
HCM 2010 Ctrl Delay	13.4
HCM 2010 LOS	B

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	10	3	3	10	5	82	3	350	10	45	389	7
Future Volume (vph)	10	3	3	10	5	82	3	350	10	45	389	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			-3%			-4%			4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.974			0.886			0.996			0.998	
Flt Protected		0.970			0.995						0.995	
Satd. Flow (prot)	0	1638	0	0	1646	0	0	1853	0	0	1813	0
Flt Permitted		0.970			0.995						0.995	
Satd. Flow (perm)	0	1638	0	0	1646	0	0	1853	0	0	1813	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		162			281			312			693	
Travel Time (s)		3.7			6.4			7.1			15.8	
Confl. Peds. (#/hr)			4			19			2			3
Confl. Bikes (#/hr)												1
Peak Hour Factor	0.61	0.61	0.61	0.88	0.88	0.88	0.85	0.85	0.85	0.92	0.92	0.92
Heavy Vehicles (%)	0%	50%	0%	11%	25%	1%	0%	4%	11%	2%	2%	0%
Adj. Flow (vph)	16	5	5	11	6	93	4	412	12	49	423	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	26	0	0	110	0	0	428	0	0	480	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	0.98	0.98	0.98	0.97	0.97	0.97	1.03	1.03	1.03
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2.5

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	3	3	10	5	82	3	350	10	45	389	7
Future Vol, veh/h	10	3	3	10	5	82	3	350	10	45	389	7
Conflicting Peds, #/hr	0	0	4	0	0	19	0	0	2	0	0	3
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	-	-	-3	-	-	-4	-	-	4	-
Peak Hour Factor	61	61	61	88	88	88	85	85	85	92	92	92
Heavy Vehicles, %	0	50	0	11	25	1	0	4	11	2	2	0
Mvmt Flow	16	5	5	11	6	93	4	412	12	49	423	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1023	962	434	962	960	439	434	0	0	426	0	0
Stage 1	528	528	-	428	428	-	-	-	-	-	-	-
Stage 2	495	434	-	534	532	-	-	-	-	-	-	-
Critical Hdwy	7.1	7	6.2	6.61	6.15	5.91	4.1	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	6	-	5.61	5.15	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	6	-	5.61	5.15	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4.45	3.3	3.599	4.225	3.309	2.2	-	-	2.218	-	-
Pot Cap-1 Maneuver	216	213	626	266	276	643	1136	-	-	1133	-	-
Stage 1	538	457	-	631	588	-	-	-	-	-	-	-
Stage 2	560	507	-	562	535	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	169	199	622	246	258	632	1133	-	-	1131	-	-
Mov Cap-2 Maneuver	169	199	-	246	258	-	-	-	-	-	-	-
Stage 1	534	430	-	627	584	-	-	-	-	-	-	-
Stage 2	463	503	-	518	503	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	25.5	14	0.1	0.8
HCM LOS	D	B		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	1133	-	-	511	202	1131	-	-
HCM Lane V/C Ratio	0.003	-	-	0.216	0.13	0.043	-	-
HCM Control Delay (s)	8.2	0	-	14	25.5	8.3	0	-
HCM Lane LOS	A	A	-	B	D	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.8	0.4	0.1	-	-

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	18	5	28	343	313	87
Future Volume (vph)	18	5	28	343	313	87
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	0.973				0.971	
Flt Protected	0.962			0.996		
Satd. Flow (prot)	1744	0	0	1855	1809	0
Flt Permitted	0.962			0.996		
Satd. Flow (perm)	1744	0	0	1855	1809	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	176			499	312	
Travel Time (s)	4.0			11.3	7.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	20	5	30	373	340	95
Shared Lane Traffic (%)						
Lane Group Flow (vph)	25	0	0	403	435	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane				Yes	Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	60	60	60			60
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	0.7

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	18	5	28	343	313	87
Future Vol, veh/h	18	5	28	343	313	87
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	20	5	30	373	340	95

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	821	388	435	0	-	0
Stage 1	388	-	-	-	-	-
Stage 2	433	-	-	-	-	-
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	344	660	1125	-	-	-
Stage 1	686	-	-	-	-	-
Stage 2	654	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	332	660	1125	-	-	-
Mov Cap-2 Maneuver	452	-	-	-	-	-
Stage 1	663	-	-	-	-	-
Stage 2	654	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	12.8	0.6	0
HCM LOS	B		

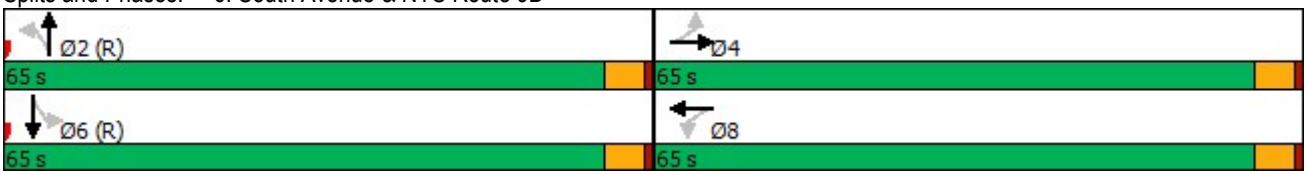
Minor Lane/Major Mvmt	NEL	NET	SELn1	SWT	SWR
Capacity (veh/h)	1125	-	485	-	-
HCM Lane V/C Ratio	0.027	-	0.052	-	-
HCM Control Delay (s)	8.3	0	12.8	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	193	16	13	229	37	14	27	13	32	35	9
Future Volume (vph)	9	193	16	13	229	37	14	27	13	32	35	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		6%			-6%			-1%			3%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor								0.99			0.99	
Frt		0.990			0.982			0.967			0.984	
Flt Protected		0.998			0.998			0.987			0.979	
Satd. Flow (prot)	0	1821	0	0	1847	0	0	1822	0	0	1686	0
Flt Permitted		0.983			0.981			0.926			0.866	
Satd. Flow (perm)	0	1794	0	0	1816	0	0	1701	0	0	1491	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			8			17			7	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		241			516			194			303	
Travel Time (s)		5.5			11.7			4.4			6.9	
Confl. Peds. (#/hr)							6					6
Peak Hour Factor	0.82	0.82	0.82	0.85	0.85	0.85	0.55	0.55	0.55	0.82	0.82	0.82
Heavy Vehicles (%)	0%	0%	0%	12%	4%	0%	0%	0%	0%	2%	12%	0%
Adj. Flow (vph)	11	235	20	15	269	44	25	49	24	39	43	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	266	0	0	328	0	0	98	0	0	93	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	0.96	0.96	0.96	0.99	0.99	0.99	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	21.0	21.0		21.0	21.0		21.0	21.0		21.0	21.0	
Total Split (s)	65.0	65.0		65.0	65.0		65.0	65.0		65.0	65.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	60.0	60.0		60.0	60.0		60.0	60.0		60.0	60.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
v/c Ratio		0.32			0.39			0.12			0.13	
Control Delay		23.1			24.1			16.9			19.2	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		23.1			24.1			16.9			19.2	
Queue Length 50th (ft)		137			173			38			41	
Queue Length 95th (ft)		180			232			39			67	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		161			436			114			223	
Turn Bay Length (ft)												
Base Capacity (vph)		830			842			794			691	
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		0.32			0.39			0.12			0.13	

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 45	
Control Type: Pretimed	

Splits and Phases: 6: South Avenue & NYS Route 9D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	193	16	13	229	37	14	27	13	32	35	9
Future Volume (veh/h)	9	193	16	13	229	37	14	27	13	32	35	9
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1843	1843	1843	1957	1885	1957	1910	1910	1910	1872	1759	1872
Adj Flow Rate, veh/h	11	235	20	15	269	44	25	49	24	39	43	11
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.82	0.82	0.82	0.85	0.85	0.85	0.55	0.55	0.55	0.82	0.82	0.82
Percent Heavy Veh, %	0	0	0	12	4	0	0	0	0	2	12	0
Cap, veh/h	44	751	62	47	708	112	212	409	190	312	333	81
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
Sat Flow, veh/h	32	1627	135	39	1533	244	384	887	412	590	721	176
Grp Volume(v), veh/h	266	0	0	328	0	0	98	0	0	93	0	0
Grp Sat Flow(s),veh/h/ln	1795	0	0	1816	0	0	1683	0	0	1487	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	12.0	0.0	0.0	15.2	0.0	0.0	4.0	0.0	0.0	4.0	0.0	0.0
Prop In Lane	0.04		0.08	0.05		0.13	0.26		0.24	0.42		0.12
Lane Grp Cap(c), veh/h	857	0	0	867	0	0	812	0	0	726	0	0
V/C Ratio(X)	0.31	0.00	0.00	0.38	0.00	0.00	0.12	0.00	0.00	0.13	0.00	0.00
Avail Cap(c_a), veh/h	857	0	0	867	0	0	812	0	0	726	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	22.1	0.0	0.0	22.9	0.0	0.0	19.9	0.0	0.0	19.9	0.0	0.0
Incr Delay (d2), s/veh	0.9	0.0	0.0	1.3	0.0	0.0	0.3	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	0.0	0.0	8.0	0.0	0.0	2.1	0.0	0.0	2.0	0.0	0.0
LnGrp Delay(d),s/veh	23.0	0.0	0.0	24.2	0.0	0.0	20.2	0.0	0.0	20.3	0.0	0.0
LnGrp LOS	C			C			C			C		
Approach Vol, veh/h		266			328			98			93	
Approach Delay, s/veh		23.0			24.2			20.2			20.3	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		65.0		65.0		65.0		65.0
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		60.0		60.0		60.0		60.0
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		0.0
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0

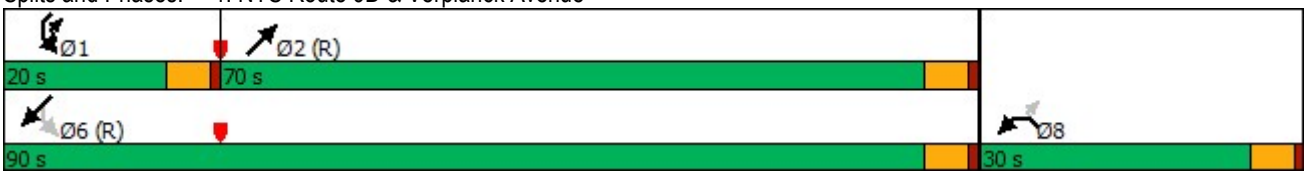
Intersection Summary	
HCM 2010 Ctrl Delay	22.8
HCM 2010 LOS	C

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	72	232	626	74	159	647
Future Volume (vph)	72	232	626	74	159	647
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	5%		3%			-1%
Storage Length (ft)	85	0		0	340	
Storage Lanes	1	1		0	1	
Taper Length (ft)	86				86	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.986			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1725	1544	1809	0	1778	1872
Flt Permitted	0.950				0.161	
Satd. Flow (perm)	1725	1544	1809	0	301	1872
Right Turn on Red		No		No		
Satd. Flow (RTOR)						
Link Speed (mph)	30		30			30
Link Distance (ft)	427		462			529
Travel Time (s)	9.7		10.5			12.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	78	252	680	80	173	703
Shared Lane Traffic (%)						
Lane Group Flow (vph)	78	252	760	0	173	703
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			
Headway Factor	1.03	1.03	1.02	1.02	0.99	0.99
Turning Speed (mph)	15	9		9	15	
Turn Type	Prot	pm+ov	NA		pm+pt	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8			6	
Minimum Split (s)	21.0	9.0	15.0		9.0	15.0
Total Split (s)	30.0	20.0	70.0		20.0	90.0
Total Split (%)	25.0%	16.7%	58.3%		16.7%	75.0%
Maximum Green (s)	25.0	15.0	65.0		15.0	85.0
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0		5.0	5.0
Lead/Lag		Lead	Lag		Lead	
Lead-Lag Optimize?		Yes	Yes		Yes	
Walk Time (s)	5.0		5.0			
Flash Dont Walk (s)	11.0		11.0			
Pedestrian Calls (#/hr)	0		0			
v/c Ratio	0.22	0.44	0.78		0.44	0.53
Control Delay	41.3	31.0	28.6		9.2	10.0
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	41.3	31.0	28.6		9.2	10.0
Queue Length 50th (ft)	51	144	446		39	227
Queue Length 95th (ft)	96	222	620		62	312

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Internal Link Dist (ft)	347		382			449
Turn Bay Length (ft)	85				340	
Base Capacity (vph)	359	579	979		397	1326
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.22	0.44	0.78		0.44	0.53

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NET and 6:SWTL, Start of Green	
Natural Cycle: 65	
Control Type: Pretimed	

Splits and Phases: 1: NYS Route 9D & Verplanck Avenue





Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (veh/h)	72	232	626	74	159	647
Future Volume (veh/h)	72	232	626	74	159	647
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1816	1816	1835	1872	1872	1872
Adj Flow Rate, veh/h	78	252	680	80	173	703
Adj No. of Lanes	1	1	1	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	360	515	873	103	429	1326
Arrive On Green	0.21	0.21	0.54	0.54	0.13	0.71
Sat Flow, veh/h	1730	1544	1612	190	1783	1872
Grp Volume(v), veh/h	78	252	0	760	173	703
Grp Sat Flow(s),veh/h/ln	1730	1544	0	1801	1783	1872
Q Serve(g_s), s	4.5	15.6	0.0	40.1	4.1	21.0
Cycle Q Clear(g_c), s	4.5	15.6	0.0	40.1	4.1	21.0
Prop In Lane	1.00	1.00		0.11	1.00	
Lane Grp Cap(c), veh/h	360	515	0	976	429	1326
V/C Ratio(X)	0.22	0.49	0.00	0.78	0.40	0.53
Avail Cap(c_a), veh/h	360	515	0	976	429	1326
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.4	31.9	0.0	21.8	16.5	8.2
Incr Delay (d2), s/veh	1.4	3.3	0.0	6.1	2.8	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	7.1	0.0	21.5	3.0	11.3
LnGrp Delay(d),s/veh	40.8	35.2	0.0	27.9	19.3	9.7
LnGrp LOS	D	D		C	B	A
Approach Vol, veh/h	330		760			876
Approach Delay, s/veh	36.5		27.9			11.6
Approach LOS	D		C			B

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	20.0	70.0				90.0		30.0
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	15.0	65.0				85.0		25.0
Max Q Clear Time (g_c+I1), s	0.0	0.0				0.0		0.0
Green Ext Time (p_c), s	0.0	0.0				0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	22.1
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	2	24	9	12	20	70	572	4	17	588	179
Future Volume (vph)	33	2	24	9	12	20	70	572	4	17	588	179
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		2%			-10%			-6%			3%	
Storage Length (ft)	0		95	0		0	75		0	75		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.96		0.98			1.00			0.99	
Frt			0.850		0.934			0.999			0.965	
Flt Protected		0.955			0.989		0.950			0.950		
Satd. Flow (prot)	0	1780	1599	0	1815	0	1771	1936	0	1778	1770	0
Flt Permitted		0.824			0.911		0.222			0.402		
Satd. Flow (perm)	0	1536	1533	0	1672	0	414	1936	0	752	1770	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			85		27						20	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		584			328			388			335	
Travel Time (s)		13.3			7.5			8.8			7.6	
Confl. Peds. (#/hr)			12			4			1			10
Confl. Bikes (#/hr)			3									
Peak Hour Factor	0.73	0.73	0.73	0.75	0.75	0.75	0.94	0.94	0.94	0.95	0.95	0.95
Heavy Vehicles (%)	1%	0%	0%	0%	0%	0%	5%	1%	0%	0%	1%	2%
Adj. Flow (vph)	45	3	33	12	16	27	74	609	4	18	619	188
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	48	33	0	55	0	74	613	0	18	807	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.01	1.01	1.01	0.94	0.94	0.94	0.96	0.96	0.96	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2		2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83	83	20	83		83	6		83	6	
Trailing Detector (ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Position(ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Size(ft)	20	43	43	20	43		43	6		43	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)		40	40		40		40			40		
Detector 2 Size(ft)		43	43		43		43			43		
Detector 2 Type		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)		0.0	0.0		0.0		0.0			0.0		
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	16.0		4.0	16.0	
Minimum Split (s)	20.0	20.0	20.0	21.0	21.0		9.0	21.0		9.0	21.0	
Total Split (s)	35.0	35.0	35.0	35.0	35.0		15.0	40.0		15.0	40.0	
Total Split (%)	38.9%	38.9%	38.9%	38.9%	38.9%		16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	30.0	30.0	30.0	30.0	30.0		10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		None	Max		None	Max	
Walk Time (s)				5.0	5.0							
Flash Dont Walk (s)				11.0	11.0							
Pedestrian Calls (#/hr)				0	0							
v/c Ratio		0.24	0.12		0.23		0.15	0.40		0.03	0.63	
Control Delay		28.3	1.2		19.0		3.5	6.1		3.3	14.3	
Queue Delay		0.0	0.0		0.0		0.0	0.3		0.0	0.0	
Total Delay		28.3	1.2		19.0		3.5	6.4		3.3	14.3	
Queue Length 50th (ft)		18	0		10		6	72		2	235	
Queue Length 95th (ft)		37	0		31		18	253		6	#507	
Internal Link Dist (ft)		504			248			308			255	
Turn Bay Length (ft)			95				75			75		
Base Capacity (vph)		815	853		900		564	1541		756	1275	
Starvation Cap Reductn		0	0		0		0	412		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		0.06	0.04		0.06		0.13	0.54		0.02	0.63	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 58.7
Natural Cycle: 70
Control Type: Semi Act-Uncoord
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: NYS Route 9D & Beekman Street/W. Church Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	2	24	9	12	20	70	572	4	17	588	179
Future Volume (veh/h)	33	2	24	9	12	20	70	572	4	17	588	179
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.90	0.94		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1864	1881	1995	1995	1995	1864	1938	1957	1872	1849	1872
Adj Flow Rate, veh/h	45	3	33	12	16	27	74	609	4	18	619	188
Adj No. of Lanes	0	1	1	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.73	0.73	0.73	0.75	0.75	0.75	0.94	0.94	0.94	0.95	0.95	0.95
Percent Heavy Veh, %	1	0	0	0	0	0	5	1	0	0	1	2
Cap, veh/h	239	12	127	97	56	74	394	1222	8	533	822	250
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.05	0.64	0.64	0.02	0.60	0.60
Sat Flow, veh/h	1350	139	1441	239	635	843	1775	1923	13	1782	1359	413
Grp Volume(v), veh/h	48	0	33	55	0	0	74	0	613	18	0	807
Grp Sat Flow(s),veh/h/ln	1488	0	1441	1717	0	0	1775	0	1936	1782	0	1772
Q Serve(g_s), s	0.0	0.0	1.2	0.0	0.0	0.0	0.9	0.0	9.8	0.2	0.0	19.1
Cycle Q Clear(g_c), s	1.5	0.0	1.2	1.7	0.0	0.0	0.9	0.0	9.8	0.2	0.0	19.1
Prop In Lane	0.94		1.00	0.22		0.49	1.00		0.01	1.00		0.23
Lane Grp Cap(c), veh/h	251	0	127	227	0	0	394	0	1230	533	0	1072
V/C Ratio(X)	0.19	0.00	0.26	0.24	0.00	0.00	0.19	0.00	0.50	0.03	0.00	0.75
Avail Cap(c_a), veh/h	836	0	747	944	0	0	615	0	1230	810	0	1072
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.7	0.0	24.6	24.8	0.0	0.0	7.2	0.0	5.6	4.7	0.0	8.3
Incr Delay (d2), s/veh	0.4	0.0	1.1	0.5	0.0	0.0	0.2	0.0	1.4	0.0	0.0	4.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.5	0.9	0.0	0.0	0.5	0.0	5.6	0.1	0.0	10.7
LnGrp Delay(d),s/veh	25.1	0.0	25.7	25.4	0.0	0.0	7.4	0.0	7.1	4.8	0.0	13.2
LnGrp LOS	C		C	C			A		A	A		B
Approach Vol, veh/h		81			55			687			825	
Approach Delay, s/veh		25.4			25.4			7.1			13.0	
Approach LOS		C			C			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.0	41.8		10.1	7.8	40.0		10.1
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0
Max Q Clear Time (g_c+I1), s	2.2	11.8		3.5	2.9	21.1		3.7
Green Ext Time (p_c), s	0.0	1.7		0.4	0.1	2.3		0.2

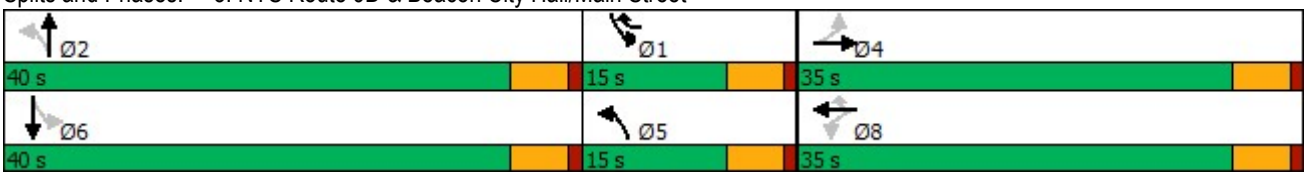
Intersection Summary	
HCM 2010 Ctrl Delay	11.6
HCM 2010 LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	2	2	37	0	197	2	448	61	293	334	3
Future Volume (vph)	2	2	2	37	0	197	2	448	61	293	334	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		1%			-8%			-3%			3%	
Storage Length (ft)	0		0	0		70	65		0	120		0
Storage Lanes	0		0	0		1	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98				0.97		0.98			1.00	
Frt		0.955				0.850		0.982			0.999	
Flt Protected		0.984			0.950		0.950			0.950		
Satd. Flow (prot)	0	1742	0	0	1877	1663	1832	1817	0	1760	1851	0
Flt Permitted		0.872			0.833		0.535			0.324		
Satd. Flow (perm)	0	1544	0	0	1646	1619	1032	1817	0	600	1851	0
Right Turn on Red			Yes			No			No			Yes
Satd. Flow (RTOR)		3									1	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		133			350			693			388	
Travel Time (s)		3.0			8.0			15.8			8.8	
Confl. Peds. (#/hr)			14			6			48			11
Peak Hour Factor	0.71	0.71	0.71	0.89	0.89	0.89	0.88	0.88	0.88	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%	0%	2%	5%	1%	1%	0%
Adj. Flow (vph)	3	3	3	42	0	221	2	509	69	318	363	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	9	0	0	42	221	2	578	0	318	366	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.01	1.01	1.01	0.95	0.95	0.95	0.98	0.98	0.98	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	2	2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83		20	83	83	83	6		83	6	
Trailing Detector (ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Position(ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Size(ft)	20	43		20	43	43	43	6		43	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)		40			40	40	40			40		
Detector 2 Size(ft)		43			43	43	43			43		
Detector 2 Type		Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0	0.0	0.0			0.0		
Turn Type	Perm	NA		Perm	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8	1	5	2		1	6	
Permitted Phases	4			8		8	2			6		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4		8	8	1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		8.0	8.0	4.0	4.0	31.0		4.0	35.0	
Minimum Split (s)	21.0	21.0		21.0	21.0	9.0	9.0	36.0		9.0	40.0	
Total Split (s)	35.0	35.0		35.0	35.0	15.0	15.0	40.0		15.0	40.0	
Total Split (%)	38.9%	38.9%		38.9%	38.9%	16.7%	16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	30.0	30.0		30.0	30.0	10.0	10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0			5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag						Lag	Lag	Lead		Lag	Lead	
Lead-Lag Optimize?						Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None	None	None	Max		None	Max	
Walk Time (s)	5.0	5.0						5.0				
Flash Dont Walk (s)	11.0	11.0						11.0				
Pedestrian Calls (#/hr)	0	0						0				
v/c Ratio		0.05			0.19	0.57	0.00	0.57		0.48	0.25	
Control Delay		23.3			28.8	24.7	3.5	13.4		9.2	5.5	
Queue Delay		0.0			0.0	0.0	0.0	0.0		0.0	0.2	
Total Delay		23.3			28.8	24.7	3.5	13.4		9.2	5.7	
Queue Length 50th (ft)		2			16	69	0	159		32	38	
Queue Length 95th (ft)		11			43	122	2	261		63	149	
Internal Link Dist (ft)		53			270			613			308	
Turn Bay Length (ft)						70	65			120		
Base Capacity (vph)		742			790	389	870	1017		657	1469	
Starvation Cap Reductn		0			0	0	0	0		0	462	
Spillback Cap Reductn		0			0	0	0	0		0	0	
Storage Cap Reductn		0			0	0	0	0		0	0	
Reduced v/c Ratio		0.01			0.05	0.57	0.00	0.57		0.48	0.36	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 63.2	
Natural Cycle: 70	
Control Type: Semi Act-Uncoord	

Splits and Phases: 3: NYS Route 9D & Beacon City Hall/Main Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	2	2	37	0	197	2	448	61	293	334	3
Future Volume (veh/h)	2	2	2	37	0	197	2	448	61	293	334	3
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.95	0.95		0.98	0.99		0.96	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1890	1890	1890	1976	1976	1956	1928	1884	1928	1853	1853	1872
Adj Flow Rate, veh/h	3	3	3	42	0	221	2	509	69	318	363	3
Adj No. of Lanes	0	1	0	0	1	1	1	1	0	1	1	0
Peak Hour Factor	0.71	0.71	0.71	0.89	0.89	0.89	0.88	0.88	0.88	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	1	0	2	5	1	1	0
Cap, veh/h	115	97	67	299	0	315	712	913	124	531	1037	9
Arrive On Green	0.13	0.13	0.13	0.13	0.00	0.13	0.06	0.57	0.57	0.06	0.57	0.57
Sat Flow, veh/h	290	761	526	1423	0	1624	1837	1615	219	1765	1835	15
Grp Volume(v), veh/h	9	0	0	42	0	221	2	0	578	318	0	366
Grp Sat Flow(s),veh/h/ln	1577	0	0	1423	0	1624	1837	0	1834	1765	0	1850
Q Serve(g_s), s	0.0	0.0	0.0	1.3	0.0	3.8	0.0	0.0	12.4	0.0	0.0	6.6
Cycle Q Clear(g_c), s	0.3	0.0	0.0	1.6	0.0	3.8	0.0	0.0	12.4	0.0	0.0	6.6
Prop In Lane	0.33		0.33	1.00		1.00	1.00		0.12	1.00		0.01
Lane Grp Cap(c), veh/h	279	0	0	299	0	315	712	0	1037	531	0	1046
V/C Ratio(X)	0.03	0.00	0.00	0.14	0.00	0.70	0.00	0.00	0.56	0.60	0.00	0.35
Avail Cap(c_a), veh/h	800	0	0	801	0	894	890	0	1037	703	0	1046
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.7	0.0	0.0	24.2	0.0	23.3	7.1	0.0	8.5	16.4	0.0	7.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	2.8	0.0	0.0	2.2	1.1	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	0.7	0.0	3.5	0.0	0.0	6.7	5.1	0.0	3.6
LnGrp Delay(d),s/veh	23.7	0.0	0.0	24.4	0.0	26.1	7.1	0.0	10.7	17.5	0.0	8.2
LnGrp LOS	C			C		C	A		B	B		A
Approach Vol, veh/h		9			263			580			684	
Approach Delay, s/veh		23.7			25.9			10.7			12.5	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	40.0		12.9	9.0	40.0		12.9
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0
Max Q Clear Time (g_c+I1), s	2.0	14.4		2.3	2.0	8.6		5.8
Green Ext Time (p_c), s	1.0	1.6		0.0	0.0	0.9		1.5

Intersection Summary	
HCM 2010 Ctrl Delay	14.2
HCM 2010 LOS	B

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	10	3	3	10	5	82	3	418	10	45	320	7
Future Volume (vph)	10	3	3	10	5	82	3	418	10	45	320	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			-3%			-4%			4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.974			0.886			0.997			0.997	
Flt Protected		0.970			0.995						0.994	
Satd. Flow (prot)	0	1638	0	0	1646	0	0	1855	0	0	1810	0
Flt Permitted		0.970			0.995						0.994	
Satd. Flow (perm)	0	1638	0	0	1646	0	0	1855	0	0	1810	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		162			281			312			693	
Travel Time (s)		3.7			6.4			7.1			15.8	
Confl. Peds. (#/hr)			4			19			2			3
Confl. Bikes (#/hr)												1
Peak Hour Factor	0.61	0.61	0.61	0.88	0.88	0.88	0.85	0.85	0.85	0.92	0.92	0.92
Heavy Vehicles (%)	0%	50%	0%	11%	25%	1%	0%	4%	11%	2%	2%	0%
Adj. Flow (vph)	16	5	5	11	6	93	4	492	12	49	348	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	26	0	0	110	0	0	508	0	0	405	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	0.98	0.98	0.98	0.97	0.97	0.97	1.03	1.03	1.03
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

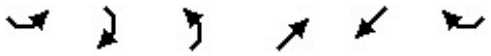
Intersection	
Int Delay, s/veh	2.6

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	3	3	10	5	82	3	418	10	45	320	7
Future Vol, veh/h	10	3	3	10	5	82	3	418	10	45	320	7
Conflicting Peds, #/hr	0	0	4	0	0	19	0	0	2	0	0	3
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	-	-	-3	-	-	-4	-	-	4	-
Peak Hour Factor	61	61	61	88	88	88	85	85	85	92	92	92
Heavy Vehicles, %	0	50	0	11	25	1	0	4	11	2	2	0
Mvmt Flow	16	5	5	11	6	93	4	492	12	49	348	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1028	967	359	967	965	519	359	0	0	506	0	0
Stage 1	453	453	-	508	508	-	-	-	-	-	-	-
Stage 2	575	514	-	459	457	-	-	-	-	-	-	-
Critical Hdwy	7.1	7	6.2	6.61	6.15	5.91	4.1	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	6	-	5.61	5.15	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	6	-	5.61	5.15	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4.45	3.3	3.599	4.225	3.309	2.2	-	-	2.218	-	-
Pot Cap-1 Maneuver	214	212	690	264	274	584	1211	-	-	1059	-	-
Stage 1	590	497	-	578	547	-	-	-	-	-	-	-
Stage 2	507	464	-	610	573	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	165	198	686	244	256	574	1208	-	-	1057	-	-
Mov Cap-2 Maneuver	165	198	-	244	256	-	-	-	-	-	-	-
Stage 1	586	467	-	574	543	-	-	-	-	-	-	-
Stage 2	412	461	-	563	539	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	25.7	14.8	0.1	1
HCM LOS	D	B		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	1208	-	-	477	200	1057	-	-
HCM Lane V/C Ratio	0.003	-	-	0.231	0.131	0.046	-	-
HCM Control Delay (s)	8	0	-	14.8	25.7	8.6	0	-
HCM Lane LOS	A	A	-	B	D	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.9	0.4	0.1	-	-



Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	86	28	6	343	313	18
Future Volume (vph)	86	28	6	343	313	18
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	0.967				0.992	
Flt Protected	0.964			0.999		
Satd. Flow (prot)	1736	0	0	1861	1848	0
Flt Permitted	0.964			0.999		
Satd. Flow (perm)	1736	0	0	1861	1848	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	176			499	312	
Travel Time (s)	4.0			11.3	7.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	93	30	7	373	340	20
Shared Lane Traffic (%)						
Lane Group Flow (vph)	123	0	0	380	360	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane				Yes	Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	60	60	60			60
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	2

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	86	28	6	343	313	18
Future Vol, veh/h	86	28	6	343	313	18
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	93	30	7	373	340	20

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	737	350	360	0	-	0
Stage 1	350	-	-	-	-	-
Stage 2	387	-	-	-	-	-
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	386	693	1199	-	-	-
Stage 1	713	-	-	-	-	-
Stage 2	686	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	383	693	1199	-	-	-
Mov Cap-2 Maneuver	493	-	-	-	-	-
Stage 1	708	-	-	-	-	-
Stage 2	686	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	13.8	0.1	0
HCM LOS	B		

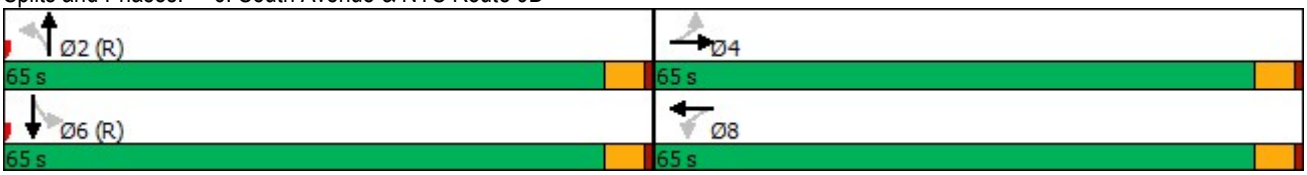
Minor Lane/Major Mvmt	NEL	NET	SELn1	SWT	SWR
Capacity (veh/h)	1199	-	531	-	-
HCM Lane V/C Ratio	0.005	-	0.233	-	-
HCM Control Delay (s)	8	0	13.8	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.9	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	216	16	13	207	37	14	27	13	32	35	9
Future Volume (vph)	9	216	16	13	207	37	14	27	13	32	35	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		6%			-6%			-1%			3%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor								0.99			0.99	
Frt		0.991			0.980			0.967			0.984	
Flt Protected		0.998			0.998			0.987			0.979	
Satd. Flow (prot)	0	1823	0	0	1844	0	0	1822	0	0	1686	0
Flt Permitted		0.985			0.978			0.926			0.866	
Satd. Flow (perm)	0	1799	0	0	1807	0	0	1701	0	0	1491	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			9			17			7	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		241			516			194			303	
Travel Time (s)		5.5			11.7			4.4			6.9	
Confl. Peds. (#/hr)							6					6
Peak Hour Factor	0.82	0.82	0.82	0.85	0.85	0.85	0.55	0.55	0.55	0.82	0.82	0.82
Heavy Vehicles (%)	0%	0%	0%	12%	4%	0%	0%	0%	0%	2%	12%	0%
Adj. Flow (vph)	11	263	20	15	244	44	25	49	24	39	43	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	294	0	0	303	0	0	98	0	0	93	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	0.96	0.96	0.96	0.99	0.99	0.99	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	21.0	21.0		21.0	21.0		21.0	21.0		21.0	21.0	
Total Split (s)	65.0	65.0		65.0	65.0		65.0	65.0		65.0	65.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	60.0	60.0		60.0	60.0		60.0	60.0		60.0	60.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
v/c Ratio		0.35			0.36			0.12			0.13	
Control Delay		23.7			23.4			16.9			19.2	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		23.7			23.4			16.9			19.2	
Queue Length 50th (ft)		154			157			38			41	
Queue Length 95th (ft)		199			213			39			67	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		161			436			114			223	
Turn Bay Length (ft)												
Base Capacity (vph)		832			838			794			691	
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		0.35			0.36			0.12			0.13	

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 45	
Control Type: Pretimed	

Splits and Phases: 6: South Avenue & NYS Route 9D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	216	16	13	207	37	14	27	13	32	35	9
Future Volume (veh/h)	9	216	16	13	207	37	14	27	13	32	35	9
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1843	1843	1843	1957	1885	1957	1910	1910	1910	1872	1759	1872
Adj Flow Rate, veh/h	11	263	20	15	244	44	25	49	24	39	43	11
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.82	0.82	0.82	0.85	0.85	0.85	0.55	0.55	0.55	0.82	0.82	0.82
Percent Heavy Veh, %	0	0	0	12	4	0	0	0	0	2	12	0
Cap, veh/h	41	762	57	49	693	121	212	409	190	312	333	81
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
Sat Flow, veh/h	28	1652	123	44	1501	263	384	887	412	590	721	176
Grp Volume(v), veh/h	294	0	0	303	0	0	98	0	0	93	0	0
Grp Sat Flow(s),veh/h/ln	1802	0	0	1808	0	0	1683	0	0	1487	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	13.5	0.0	0.0	13.8	0.0	0.0	4.0	0.0	0.0	4.0	0.0	0.0
Prop In Lane	0.04		0.07	0.05		0.15	0.26		0.24	0.42		0.12
Lane Grp Cap(c), veh/h	860	0	0	863	0	0	812	0	0	726	0	0
V/C Ratio(X)	0.34	0.00	0.00	0.35	0.00	0.00	0.12	0.00	0.00	0.13	0.00	0.00
Avail Cap(c_a), veh/h	860	0	0	863	0	0	812	0	0	726	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	22.5	0.0	0.0	22.6	0.0	0.0	19.9	0.0	0.0	19.9	0.0	0.0
Incr Delay (d2), s/veh	1.1	0.0	0.0	1.1	0.0	0.0	0.3	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.0	0.0	0.0	7.3	0.0	0.0	2.1	0.0	0.0	2.0	0.0	0.0
LnGrp Delay(d),s/veh	23.6	0.0	0.0	23.7	0.0	0.0	20.2	0.0	0.0	20.3	0.0	0.0
LnGrp LOS	C			C			C			C		
Approach Vol, veh/h		294			303			98			93	
Approach Delay, s/veh		23.6			23.7			20.2			20.3	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		65.0		65.0		65.0		65.0
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		60.0		60.0		60.0		60.0
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		0.0
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	22.8
HCM 2010 LOS	C

Appendix

Appendix E | Traffic Volume Data

Colliers Engineering & Design

Appendix

Appendix E | Traffic Volume Data

Maser Consulting

400 Columbus Avenue, Stuite 180 E
Valhalla, NY 10595

Customer Loyalty through Client Satisfaction

File Name : 1-North_Ave_and_W_Church_St-Bekkman_St_-_Friday_880295_09-24-2021
Site Code :
Start Date : 9/24/2021
Page No : 1

Groups Printed- Lights - Buses - Trucks - Bicycles on Crosswalk - Pedestrians

	North Ave From North					W Church St From East					North Ave From South					Beekman St From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
12:00 PM	28	105	4	1	138	7	2	3	1	13	2	96	12	0	110	13	2	16	1	32	293
12:15 PM	24	107	1	3	135	3	2	3	2	10	4	85	8	0	97	22	1	35	2	60	302
12:30 PM	30	105	3	2	140	2	2	3	2	9	2	68	13	0	83	9	1	8	2	20	252
12:45 PM	36	101	1	1	139	3	3	2	3	11	0	93	8	0	101	7	1	22	1	31	282
Total	118	418	9	7	552	15	9	11	8	43	8	342	41	0	391	51	5	81	6	143	1129
01:00 PM	28	100	3	0	131	3	5	2	1	11	1	92	9	0	102	8	3	23	2	36	280
01:15 PM	22	101	3	0	126	5	2	3	0	10	5	67	11	0	83	16	0	27	2	45	264
01:30 PM	29	112	2	0	143	0	4	0	0	4	1	84	17	0	102	10	3	23	4	40	289
01:45 PM	36	116	2	1	155	2	6	0	1	9	1	66	9	0	76	8	0	22	1	31	271
Total	115	429	10	1	555	10	17	5	2	34	8	309	46	0	363	42	6	95	9	152	1104
02:00 PM	22	106	0	1	129	3	3	2	3	11	0	79	7	0	86	6	2	15	1	24	250
02:15 PM	17	99	0	0	116	0	1	0	2	3	2	71	9	0	82	8	1	51	0	60	261
02:30 PM	24	89	1	1	115	2	3	2	3	10	4	86	11	0	101	7	2	16	0	25	251
02:45 PM	34	101	4	1	140	9	9	0	3	21	5	65	10	0	80	5	8	14	4	31	272
Total	97	395	5	3	500	14	16	4	11	45	11	301	37	0	349	26	13	96	5	140	1034
03:00 PM	26	103	0	1	130	4	2	4	1	11	7	64	9	0	80	14	1	13	6	34	255
03:15 PM	23	66	2	2	93	2	7	1	1	11	6	49	6	0	61	21	10	38	3	72	237
03:30 PM	15	74	2	2	93	2	5	2	1	10	2	38	6	0	46	13	11	24	4	52	201
03:45 PM	28	68	3	1	100	0	7	1	2	10	3	63	9	0	75	11	4	9	1	25	210
Total	92	311	7	6	416	8	21	8	5	42	18	214	30	0	262	59	26	84	14	183	903
04:00 PM	24	73	2	2	101	5	5	2	3	15	5	112	13	0	130	7	4	12	1	24	270
04:15 PM	35	88	4	2	129	12	6	2	5	25	7	74	6	0	87	16	9	69	0	94	335
04:30 PM	39	124	1	0	164	0	3	2	2	7	4	80	4	0	88	3	2	28	0	33	292
04:45 PM	39	117	3	0	159	3	4	0	1	8	2	85	9	2	98	5	5	92	0	102	367
Total	137	402	10	4	553	20	18	6	11	55	18	351	32	2	403	31	20	201	1	253	1264
05:00 PM	32	123	1	2	158	2	3	2	5	12	0	94	8	0	102	11	4	38	2	55	327
05:15 PM	36	114	1	0	151	5	4	0	3	12	1	112	8	0	121	10	7	70	0	87	371
05:30 PM	49	99	0	5	153	3	3	1	5	12	1	81	5	0	87	7	6	32	0	45	297
05:45 PM	27	99	0	1	127	2	2	1	2	7	5	96	12	0	113	7	4	80	2	93	340
Total	144	435	2	8	589	12	12	4	15	43	7	383	33	0	423	35	21	220	4	280	1335
06:00 PM	44	99	0	0	143	4	1	0	3	8	1	83	12	0	96	2	2	18	5	27	274

Maser Consulting

400 Columbus Avenue, Stuite 180 E
Valhalla, NY 10595

Customer Loyalty through Client Satisfaction

File Name : 1-North_Ave_and_W_Church_St-Bekkman_St_-_Friday_880295_09-24-2021
Site Code :
Start Date : 9/24/2021

Groups Printed- Lights - Buses - Trucks - Bicycles on Crosswalk - Pedestrians

	North Ave From North					W Church St From East					North Ave From South					Beekman St From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
06:15 PM	30	86	2	1	119	1	3	0	1	5	3	82	4	0	89	15	3	74	1	93	306
06:30 PM	33	102	1	0	136	3	2	2	1	8	7	76	2	0	85	10	4	61	0	75	304
06:45 PM	32	76	1	3	112	1	2	0	1	4	0	111	7	0	118	8	0	33	0	41	275
Total	139	363	4	4	510	9	8	2	6	25	11	352	25	0	388	35	9	186	6	236	1159
07:00 PM	24	92	1	0	117	3	2	0	0	5	1	88	7	0	96	14	3	55	1	73	291
07:15 PM	20	86	1	0	107	2	2	2	0	6	0	93	5	0	98	13	3	53	0	69	280
07:30 PM	20	77	1	1	99	1	0	2	0	3	1	84	5	0	90	9	1	23	1	34	226
07:45 PM	22	61	3	0	86	3	3	1	2	9	1	79	5	0	85	13	1	54	3	71	251
Total	86	316	6	1	409	9	7	5	2	23	3	344	22	0	369	49	8	185	5	247	1048
Grand Total	928	3069	53	34	4084	97	108	45	60	310	84	2596	266	2	2948	328	108	1148	50	1634	8976
Apprch %	22.7	75.1	1.3	0.8		31.3	34.8	14.5	19.4		2.8	88.1	9	0.1		20.1	6.6	70.3	3.1		
Total %	10.3	34.2	0.6	0.4	45.5	1.1	1.2	0.5	0.7	3.5	0.9	28.9	3	0	32.8	3.7	1.2	12.8	0.6	18.2	
Lights	905	2989	48	0	3942	95	101	42	0	238	82	2508	251	0	2841	326	107	1124	0	1557	8578
% Lights	97.5	97.4	90.6	0	96.5	97.9	93.5	93.3	0	76.8	97.6	96.6	94.4	0	96.4	99.4	99.1	97.9	0	95.3	95.6
Buses	9	32	1	0	42	0	1	1	0	2	1	24	12	0	37	0	0	10	0	10	91
% Buses	1	1	1.9	0	1	0	0.9	2.2	0	0.6	1.2	0.9	4.5	0	1.3	0	0	0.9	0	0.6	1
Trucks	14	48	4	0	66	2	6	2	0	10	1	64	3	0	68	2	1	14	0	17	161
% Trucks	1.5	1.6	7.5	0	1.6	2.1	5.6	4.4	0	3.2	1.2	2.5	1.1	0	2.3	0.6	0.9	1.2	0	1	1.8
Bicycles on Crosswalk	0	0	0	1	1	0	0	0	1	1	0	0	0	1	1	0	0	0	5	5	8
% Bicycles on Crosswalk	0	0	0	2.9	0	0	0	0	1.7	0.3	0	0	0	50	0	0	0	0	10	0.3	0.1
Pedestrians	0	0	0	33	33	0	0	0	59	59	0	0	0	1	1	0	0	0	45	45	138
% Pedestrians	0	0	0	97.1	0.8	0	0	0	98.3	19	0	0	0	50	0	0	0	0	90	2.8	1.5

Maser Consulting

400 Columbus Avenue, Stuite 180 E
Valhalla, NY 10595

Customer Loyalty through Client Satisfaction

File Name : 1-North_Ave_and_W_Church_St-Bekkman_St_-_Friday_880295_09-24-2021
Site Code :
Start Date : 9/24/2021
Page No : 3

	North Ave From North					W Church St From East					North Ave From South					Beekman St From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 07:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	39	117	3	0	159	3	4	0	1	8	2	85	9	2	98	5	5	92	0	102	367
05:00 PM	32	123	1	2	158	2	3	2	5	12	0	94	8	0	102	11	4	38	2	55	327
05:15 PM	36	114	1	0	151	5	4	0	3	12	1	112	8	0	121	10	7	70	0	87	371
05:30 PM	49	99	0	5	153	3	3	1	5	12	1	81	5	0	87	7	6	32	0	45	297
Total Volume	156	453	5	7	621	13	14	3	14	44	4	372	30	2	408	33	22	232	2	289	1362
% App. Total	25.1	72.9	0.8	1.1		29.5	31.8	6.8	31.8		1	91.2	7.4	0.5		11.4	7.6	80.3	0.7		
PHF	.796	.921	.417	.350	.976	.650	.875	.375	.700	.917	.500	.830	.833	.250	.843	.750	.786	.630	.250	.708	.918
Lights	154	447	5	0	606	13	13	3	0	29	4	364	29	0	397	33	21	226	0	280	1312
% Lights	98.7	98.7	100	0	97.6	100	92.9	100	0	65.9	100	97.8	96.7	0	97.3	100	95.5	97.4	0	96.9	96.3
Buses	1	4	0	0	5	0	0	0	0	0	0	2	1	0	3	0	0	3	0	3	11
% Buses	0.6	0.9	0	0	0.8	0	0	0	0	0	0	0.5	3.3	0	0.7	0	0	1.3	0	1.0	0.8
Trucks	1	2	0	0	3	0	1	0	0	1	0	6	0	0	6	0	1	3	0	4	14
% Trucks	0.6	0.4	0	0	0.5	0	7.1	0	0	2.3	0	1.6	0	0	1.5	0	4.5	1.3	0	1.4	1.0
Bicycles on Crosswalk	0	0	0	1	1	0	0	0	1	1	0	0	0	1	1	0	0	0	0	0	3
% Bicycles on Crosswalk	0	0	0	14.3	0.2	0	0	0	7.1	2.3	0	0	0	50.0	0.2	0	0	0	0	0	0.2
Pedestrians	0	0	0	6	6	0	0	0	13	13	0	0	0	1	1	0	0	0	2	2	22
% Pedestrians	0	0	0	85.7	1.0	0	0	0	92.9	29.5	0	0	0	50.0	0.2	0	0	0	100	0.7	1.6

Maser Consulting

400 Columbus Avenue, Stuite 180 E
Valhalla, NY 10595

Customer Loyalty through Client Satisfaction

File Name : 1-North_Ave_and_W_Church_St-Beekman_St_-_Saturday_880298_09-25-2021
Site Code :
Start Date : 9/25/2021
Page No : 1

Groups Printed- Lights - Buses - Trucks - Bicycles on Crosswalk - Pedestrians

	North Ave From North					W Church St From East					North Ave From South					Beekman St From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
12:00 PM	48	125	5	6	184	3	1	0	6	10	1	95	10	0	106	8	0	27	3	38	338
12:15 PM	55	104	1	1	161	2	1	2	0	5	0	88	9	1	98	14	2	36	3	55	319
12:30 PM	45	98	2	8	153	1	3	1	0	5	1	117	18	0	136	15	2	37	12	66	360
12:45 PM	46	125	6	2	179	4	1	3	2	10	0	112	11	1	124	7	1	24	0	32	345
Total	194	452	14	17	677	10	6	6	8	30	2	412	48	2	464	44	5	124	18	191	1362
01:00 PM	35	137	5	0	177	5	6	0	0	11	2	120	16	0	138	6	2	36	0	44	370
01:15 PM	42	129	3	0	174	0	1	4	2	7	0	108	15	0	123	15	1	31	3	50	354
01:30 PM	42	115	1	0	158	4	3	2	1	10	1	84	12	2	99	20	2	43	3	68	335
01:45 PM	44	111	2	1	158	2	2	1	4	9	0	109	16	2	127	12	0	30	0	42	336
Total	163	492	11	1	667	11	12	7	7	37	3	421	59	4	487	53	5	140	6	204	1395
02:00 PM	36	106	1	1	144	0	3	3	3	9	0	99	7	0	106	15	0	18	4	37	296
02:15 PM	48	94	0	3	145	3	1	4	0	8	3	107	13	0	123	6	2	48	3	59	335
02:30 PM	33	112	3	0	148	2	1	3	1	7	0	97	15	0	112	12	3	37	3	55	322
02:45 PM	45	104	3	1	153	2	5	1	2	10	3	102	17	0	122	9	2	34	3	48	333
Total	162	416	7	5	590	7	10	11	6	34	6	405	52	0	463	42	7	137	13	199	1286
03:00 PM	42	102	1	0	145	0	2	3	1	6	3	101	10	0	114	16	0	39	1	56	321
03:15 PM	42	132	1	2	177	1	6	1	6	14	1	112	9	1	123	9	1	44	2	56	370
03:30 PM	49	112	0	4	165	2	0	2	6	10	0	90	12	0	102	10	0	24	3	37	314
03:45 PM	34	112	0	3	149	2	0	0	4	6	0	88	13	0	101	6	3	26	2	37	293
Total	167	458	2	9	636	5	8	6	17	36	4	391	44	1	440	41	4	133	8	186	1298
04:00 PM	32	128	4	0	164	2	2	3	1	8	0	99	22	0	121	7	2	34	0	43	336
04:15 PM	28	115	1	3	147	3	1	3	1	8	4	98	10	1	113	11	3	60	2	76	344
04:30 PM	25	103	3	2	133	3	1	1	2	7	1	97	10	0	108	14	1	32	3	50	298
04:45 PM	33	125	1	6	165	3	0	0	7	10	2	111	9	0	122	5	0	37	2	44	341
Total	118	471	9	11	609	11	4	7	11	33	7	405	51	1	464	37	6	163	7	213	1319
05:00 PM	29	125	3	0	157	3	0	0	1	4	1	80	10	0	91	11	2	22	5	40	292
05:15 PM	31	99	1	3	134	2	1	3	5	11	1	93	6	0	100	15	2	52	3	72	317
05:30 PM	41	99	1	0	141	3	2	4	6	15	3	82	11	0	96	6	1	26	3	36	288
05:45 PM	45	116	2	3	166	1	1	2	1	5	1	84	9	0	94	9	1	25	0	35	300
Total	146	439	7	6	598	9	4	9	13	35	6	339	36	0	381	41	6	125	11	183	1197
06:00 PM	35	92	2	5	134	6	2	1	9	18	0	114	9	1	124	12	2	70	0	84	360

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400 Columbus Avenue, Stuite 180 E
Valhalla, NY 10595

Customer Loyalty through Client Satisfaction

File Name : 1-North_Ave_and_W_Church_St-Beekman_St_-_Saturday_880298_09-25-2021
Site Code :
Start Date : 9/25/2021

Groups Printed- Lights - Buses - Trucks - Bicycles on Crosswalk - Pedestrians

	North Ave From North					W Church St From East					North Ave From South					Beekman St From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
06:15 PM	28	94	3	2	127	2	3	4	1	10	2	81	7	1	91	8	1	44	0	53	281
06:30 PM	33	89	3	0	125	1	0	2	1	4	0	96	3	1	100	15	1	17	4	37	266
06:45 PM	36	70	1	3	110	2	3	0	1	6	2	95	11	0	108	9	1	26	0	36	260
Total	132	345	9	10	496	11	8	7	12	38	4	386	30	3	423	44	5	157	4	210	1167
07:00 PM	21	84	2	0	107	4	2	2	0	8	2	73	5	2	82	13	1	60	0	74	271
07:15 PM	9	90	5	0	104	2	2	0	0	4	1	69	4	1	75	16	1	35	1	53	236
07:30 PM	10	72	3	0	85	2	0	1	8	11	0	84	5	2	91	7	1	11	4	23	210
07:45 PM	27	57	3	0	87	3	1	2	0	6	2	68	8	1	79	10	1	34	2	47	219
Total	67	303	13	0	383	11	5	5	8	29	5	294	22	6	327	46	4	140	7	197	936
Grand Total	1149	3376	72	59	4656	75	57	58	82	272	37	3053	342	17	3449	348	42	1119	74	1583	9960
Apprch %	24.7	72.5	1.5	1.3		27.6	21	21.3	30.1		1.1	88.5	9.9	0.5		22	2.7	70.7	4.7		
Total %	11.5	33.9	0.7	0.6	46.7	0.8	0.6	0.6	0.8	2.7	0.4	30.7	3.4	0.2	34.6	3.5	0.4	11.2	0.7	15.9	
Lights	1144	3357	72	0	4573	75	55	57	0	187	35	3021	322	0	3378	348	42	1113	0	1503	9641
% Lights	99.6	99.4	100	0	98.2	100	96.5	98.3	0	68.8	94.6	99	94.2	0	97.9	100	100	99.5	0	94.9	96.8
Buses	3	9	0	0	12	0	1	0	0	1	0	11	17	0	28	0	0	4	0	4	45
% Buses	0.3	0.3	0	0	0.3	0	1.8	0	0	0.4	0	0.4	5	0	0.8	0	0	0.4	0	0.3	0.5
Trucks	2	10	0	0	12	0	1	1	0	2	2	21	3	0	26	0	0	2	0	2	42
% Trucks	0.2	0.3	0	0	0.3	0	1.8	1.7	0	0.7	5.4	0.7	0.9	0	0.8	0	0	0.2	0	0.1	0.4
Bicycles on Crosswalk	0	0	0	1	1	0	0	0	4	4	0	0	0	1	1	0	0	0	16	16	22
% Bicycles on Crosswalk	0	0	0	1.7	0	0	0	0	4.9	1.5	0	0	0	5.9	0	0	0	0	21.6	1	0.2
Pedestrians	0	0	0	58	58	0	0	0	78	78	0	0	0	16	16	0	0	0	58	58	210
% Pedestrians	0	0	0	98.3	1.2	0	0	0	95.1	28.7	0	0	0	94.1	0.5	0	0	0	78.4	3.7	2.1

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400 Columbus Avenue, Stuite 180 E
Valhalla, NY 10595

Customer Loyalty through Client Satisfaction

File Name : 1-North_Ave_and_W_Church_St-Beekman_St_-_Saturday_880298_09-25-2021
Site Code :
Start Date : 9/25/2021
Page No : 3

	North Ave From North					W Church St From East					North Ave From South					Beekman St From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 07:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:30 PM																					
12:30 PM	45	98	2	8	153	1	3	1	0	5	1	117	18	0	136	15	2	37	12	66	360
12:45 PM	46	125	6	2	179	4	1	3	2	10	0	112	11	1	124	7	1	24	0	32	345
01:00 PM	35	137	5	0	177	5	6	0	0	11	2	120	16	0	138	6	2	36	0	44	370
01:15 PM	42	129	3	0	174	0	1	4	2	7	0	108	15	0	123	15	1	31	3	50	354
Total Volume	168	489	16	10	683	10	11	8	4	33	3	457	60	1	521	43	6	128	15	192	1429
% App. Total	24.6	71.6	2.3	1.5		30.3	33.3	24.2	12.1		0.6	87.7	11.5	0.2		22.4	3.1	66.7	7.8		
PHF	.913	.892	.667	.313	.954	.500	.458	.500	.500	.750	.375	.952	.833	.250	.944	.717	.750	.865	.313	.727	.966
Lights	165	485	16	0	666	10	11	8	0	29	3	451	57	0	511	43	6	127	0	176	1382
% Lights	98.2	99.2	100	0	97.5	100	100	100	0	87.9	100	98.7	95.0	0	98.1	100	100	99.2	0	91.7	96.7
Buses	1	1	0	0	2	0	0	0	0	0	0	1	3	0	4	0	0	1	0	1	7
% Buses	0.6	0.2	0	0	0.3	0	0	0	0	0	0	0.2	5.0	0	0.8	0	0	0.8	0	0.5	0.5
Trucks	2	3	0	0	5	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	10
% Trucks	1.2	0.6	0	0	0.7	0	0	0	0	0	0	1.1	0	0	1.0	0	0	0	0	0	0.7
Bicycles on Crosswalk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	3
% Bicycles on Crosswalk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20.0	1.6	0.2
Pedestrians	0	0	0	10	10	0	0	0	4	4	0	0	0	1	1	0	0	0	12	12	27
% Pedestrians	0	0	0	100	1.5	0	0	0	100	12.1	0	0	0	100	0.2	0	0	0	80.0	6.3	1.9

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400 Columbus Avenue, Stuite 180 E
Valhalla, NY 10595

Customer Loyalty through Client Satisfaction

File Name : 2-Main_St_and_North_Ave-Walcott_Ave_-_Friday_880304_09-24-2021
Site Code :
Start Date : 9/24/2021
Page No : 1

Groups Printed- Lights - Buses - Trucks - Bicycles on Crosswalk - Pedestrians

	North Ave From North					Municipal Plaza From East					Wolcott Ave From South					Main St From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
12:00 PM	4	56	58	0	118	38	1	9	0	48	15	66	1	2	84	1	0	3	1	5	255
12:15 PM	2	58	73	1	134	39	3	4	0	46	16	62	0	1	79	1	0	0	0	1	260
12:30 PM	2	51	62	0	115	27	2	6	0	35	10	50	1	2	63	0	2	5	0	7	220
12:45 PM	0	51	53	6	110	30	2	3	0	35	20	71	0	5	96	1	0	2	2	5	246
Total	8	216	246	7	477	134	8	22	0	164	61	249	2	10	322	3	2	10	3	18	981
01:00 PM	0	51	57	3	111	42	1	9	0	52	9	62	0	1	72	0	2	0	0	2	237
01:15 PM	0	63	55	3	121	27	1	4	0	32	15	52	2	4	73	1	1	1	3	6	232
01:30 PM	3	66	48	4	121	47	2	9	0	58	15	63	1	5	84	4	1	2	1	8	271
01:45 PM	0	65	56	2	123	32	0	8	1	41	11	40	0	8	59	2	1	0	2	5	228
Total	3	245	216	12	476	148	4	30	1	183	50	217	3	18	288	7	5	3	6	21	968
02:00 PM	0	62	51	0	113	26	1	4	1	32	10	58	1	10	79	0	2	0	2	4	228
02:15 PM	0	48	57	0	105	34	1	2	1	38	11	49	1	2	63	0	1	0	0	1	207
02:30 PM	0	45	49	5	99	43	1	7	1	52	12	62	4	3	81	0	1	1	0	2	234
02:45 PM	0	61	41	7	109	36	3	6	1	46	10	43	0	6	59	0	2	1	1	4	218
Total	0	216	198	12	426	139	6	19	4	168	43	212	6	21	282	0	6	2	3	11	887
03:00 PM	0	56	58	5	119	34	0	10	4	48	13	57	1	8	79	1	2	0	0	3	249
03:15 PM	0	36	54	4	94	33	2	15	0	50	16	30	3	9	58	0	0	0	2	2	204
03:30 PM	2	32	53	6	93	19	3	9	0	31	6	20	0	7	33	0	3	0	1	4	161
03:45 PM	2	43	39	2	86	28	3	10	0	41	8	47	0	4	59	4	1	0	2	7	193
Total	4	167	204	17	392	114	8	44	4	170	43	154	4	28	229	5	6	0	5	16	807
04:00 PM	1	45	36	3	85	39	0	6	0	45	16	82	0	5	103	2	3	2	1	8	241
04:15 PM	0	55	50	1	106	36	1	5	0	42	17	47	2	15	81	2	1	4	2	9	238
04:30 PM	0	65	64	0	129	31	1	3	0	35	7	56	0	4	67	1	0	0	0	1	232
04:45 PM	0	76	49	0	125	32	0	10	0	42	10	58	0	3	71	0	0	0	1	1	239
Total	1	241	199	4	445	138	2	24	0	164	50	243	2	27	322	5	4	6	4	19	950
05:00 PM	0	73	61	2	136	35	1	4	2	42	17	66	0	3	86	1	0	0	1	2	266
05:15 PM	0	69	51	2	122	37	0	10	6	53	25	81	0	6	112	0	1	0	1	2	289
05:30 PM	0	64	41	4	109	41	0	4	3	48	10	56	0	7	73	0	0	0	3	3	233
05:45 PM	0	54	56	4	114	39	0	6	4	49	12	64	0	6	82	0	0	0	5	5	250
Total	0	260	209	12	481	152	1	24	15	192	64	267	0	22	353	1	1	0	10	12	1038
06:00 PM	0	52	48	4	104	33	0	8	0	41	8	57	0	3	68	0	0	0	1	1	214

Maser Consulting

400 Columbus Avenue, Stuite 180 E
Valhalla, NY 10595

Customer Loyalty through Client Satisfaction

File Name : 2-Main_St_and_North_Ave-Walcott_Ave_-_Friday_880304_09-24-2021
Site Code :
Start Date : 9/24/2021
Page No : 2

Groups Printed- Lights - Buses - Trucks - Bicycles on Crosswalk - Pedestrians

	North Ave From North					Municipal Plaza From East					Wolcott Ave From South					Main St From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
06:15 PM	0	42	51	4	97	38	0	3	1	42	14	55	0	5	74	0	1	0	0	1	214
06:30 PM	0	51	68	1	120	20	0	3	0	23	17	61	0	4	82	0	0	0	0	0	225
06:45 PM	0	35	44	5	84	41	0	4	0	45	8	66	1	2	77	0	1	0	2	3	209
Total	0	180	211	14	405	132	0	18	1	151	47	239	1	14	301	0	2	0	3	5	862
07:00 PM	0	43	59	1	103	29	1	5	0	35	8	70	0	10	88	1	1	0	1	3	229
07:15 PM	0	47	50	6	103	25	0	7	0	32	6	67	0	2	75	0	0	0	1	1	211
07:30 PM	1	33	54	0	88	35	1	6	0	42	6	57	0	3	66	1	0	1	1	3	199
07:45 PM	0	34	39	2	75	28	0	2	1	31	7	51	1	0	59	0	0	0	1	1	166
Total	1	157	202	9	369	117	2	20	1	140	27	245	1	15	288	2	1	1	4	8	805
Grand Total	17	1682	1685	87	3471	1074	31	201	26	1332	385	1826	19	155	2385	23	27	22	38	110	7298
Apprch %	0.5	48.5	48.5	2.5		80.6	2.3	15.1	2		16.1	76.6	0.8	6.5		20.9	24.5	20	34.5		
Total %	0.2	23	23.1	1.2	47.6	14.7	0.4	2.8	0.4	18.3	5.3	25	0.3	2.1	32.7	0.3	0.4	0.3	0.5	1.5	
Lights	16	1615	1662	0	3293	1056	30	200	0	1286	361	1744	19	0	2124	22	24	22	0	68	6771
% Lights	94.1	96	98.6	0	94.9	98.3	96.8	99.5	0	96.5	93.8	95.5	100	0	89.1	95.7	88.9	100	0	61.8	92.8
Buses	0	25	9	0	34	1	0	1	0	2	17	42	0	0	59	1	0	0	0	1	96
% Buses	0	1.5	0.5	0	1	0.1	0	0.5	0	0.2	4.4	2.3	0	0	2.5	4.3	0	0	0	0.9	1.3
Trucks	1	42	14	0	57	17	1	0	0	18	7	40	0	0	47	0	3	0	0	3	125
% Trucks	5.9	2.5	0.8	0	1.6	1.6	3.2	0	0	1.4	1.8	2.2	0	0	2	0	11.1	0	0	2.7	1.7
Bicycles on Crosswalk	0	0	0	1	1	0	0	0	0	0	0	0	0	3	3	0	0	0	4	4	8
% Bicycles on Crosswalk	0	0	0	1.1	0	0	0	0	0	0	0	0	0	1.9	0.1	0	0	0	10.5	3.6	0.1
Pedestrians	0	0	0	86	86	0	0	0	26	26	0	0	0	152	152	0	0	0	34	34	298
% Pedestrians	0	0	0	98.9	2.5	0	0	0	100	2	0	0	0	98.1	6.4	0	0	0	89.5	30.9	4.1

Maser Consulting

400 Columbus Avenue, Stuite 180 E
Valhalla, NY 10595

Customer Loyalty through Client Satisfaction

File Name : 2-Main_St_and_North_Ave-Walcott_Ave_-_Friday_880304_09-24-2021
Site Code :
Start Date : 9/24/2021
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	North Ave From North					Municipal Plaza From East					Wolcott Ave From South					Main St From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 07:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	0	73	61	2	136	35	1	4	2	42	17	66	0	3	86	1	0	0	1	2	266
05:15 PM	0	69	51	2	122	37	0	10	6	53	25	81	0	6	112	0	1	0	1	2	289
05:30 PM	0	64	41	4	109	41	0	4	3	48	10	56	0	7	73	0	0	0	3	3	233
05:45 PM	0	54	56	4	114	39	0	6	4	49	12	64	0	6	82	0	0	0	5	5	250
Total Volume	0	260	209	12	481	152	1	24	15	192	64	267	0	22	353	1	1	0	10	12	1038
% App. Total	0	54.1	43.5	2.5		79.2	0.5	12.5	7.8		18.1	75.6	0	6.2		8.3	8.3	0	83.3		
PHF	.000	.890	.857	.750	.884	.927	.250	.600	.625	.906	.640	.824	.000	.786	.788	.250	.250	.000	.500	.600	.898
Lights	0	257	206	0	463	149	1	24	0	174	61	258	0	0	319	1	1	0	0	2	958
% Lights	0	98.8	98.6	0	96.3	98.0	100	100	0	90.6	95.3	96.6	0	0	90.4	100	100	0	0	16.7	92.3
Buses	0	2	1	0	3	0	0	0	0	0	3	4	0	0	7	0	0	0	0	0	10
% Buses	0	0.8	0.5	0	0.6	0	0	0	0	0	4.7	1.5	0	0	2.0	0	0	0	0	0	1.0
Trucks	0	1	2	0	3	3	0	0	0	3	0	5	0	0	5	0	0	0	0	0	11
% Trucks	0	0.4	1.0	0	0.6	2.0	0	0	0	1.6	0	1.9	0	0	1.4	0	0	0	0	0	1.1
Bicycles on Crosswalk	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	1	2
% Bicycles on Crosswalk	0	0	0	0	0	0	0	0	0	0	0	0	0	4.5	0.3	0	0	0	10.0	8.3	0.2
Pedestrians	0	0	0	12	12	0	0	0	15	15	0	0	0	21	21	0	0	0	9	9	57
% Pedestrians	0	0	0	100	2.5	0	0	0	100	7.8	0	0	0	95.5	5.9	0	0	0	90.0	75.0	5.5

Maser Consulting

400 Columbus Avenue, Stuite 180 E
Valhalla, NY 10595

Customer Loyalty through Client Satisfaction

File Name : 2-_Main_St_and_North_Ave-Wolcott_Ave_-_Saturday_880306_09-25-2021
Site Code :
Start Date : 9/25/2021

Groups Printed- Lights - Buses - Trucks - Bicycles on Crosswalk - Pedestrians

	North Ave From North					Main St From East					Wolcott Ave From South					Municipal Plaza From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
12:00 PM	0	77	59	5	141	40	0	7	0	47	11	68	0	4	83	0	0	0	1	1	272
12:15 PM	0	52	64	2	118	35	0	8	6	49	21	63	2	3	89	1	1	1	3	6	262
12:30 PM	0	55	57	5	117	54	0	3	3	60	7	85	0	27	119	1	0	0	3	4	300
12:45 PM	1	72	61	1	135	45	0	7	2	54	13	77	0	6	96	0	1	0	2	3	288
Total	1	256	241	13	511	174	0	25	11	210	52	293	2	40	387	2	2	1	9	14	1122
01:00 PM	1	78	67	2	148	46	0	6	0	52	7	90	0	4	101	0	0	1	5	6	307
01:15 PM	0	72	74	3	149	40	0	6	1	47	10	82	1	11	104	0	0	0	4	4	304
01:30 PM	0	57	73	10	140	31	1	3	1	36	15	73	0	20	108	0	0	0	3	3	287
01:45 PM	0	58	68	0	126	41	2	1	1	45	10	79	0	3	92	0	2	1	2	5	268
Total	1	265	282	15	563	158	3	16	3	180	42	324	1	38	405	0	2	2	14	18	1166
02:00 PM	1	50	73	3	127	49	0	2	2	53	17	63	0	6	86	0	0	0	1	1	267
02:15 PM	0	51	49	2	102	38	0	8	0	46	22	82	0	8	112	0	3	0	4	7	267
02:30 PM	0	69	54	1	124	51	3	3	0	57	20	71	0	6	97	0	0	0	4	4	282
02:45 PM	1	52	58	4	115	43	1	3	1	48	17	78	1	6	102	1	0	0	7	8	273
Total	2	222	234	10	468	181	4	16	3	204	76	294	1	26	397	1	3	0	16	20	1089
03:00 PM	0	48	71	3	122	35	0	6	0	41	16	77	0	9	102	0	0	0	2	2	267
03:15 PM	0	58	78	5	141	48	2	5	0	55	14	78	1	7	100	1	0	1	2	4	300
03:30 PM	0	67	55	11	133	39	1	3	3	46	16	64	1	12	93	0	2	1	7	10	282
03:45 PM	0	54	58	3	115	41	2	9	2	54	13	62	2	12	89	0	0	0	1	1	259
Total	0	227	262	22	511	163	5	23	5	196	59	281	4	40	384	1	2	2	12	17	1108
04:00 PM	0	70	64	5	139	53	1	6	2	62	10	69	1	4	84	0	0	1	2	3	288
04:15 PM	0	64	62	12	138	42	0	5	0	47	10	72	0	6	88	0	0	0	2	2	275
04:30 PM	0	58	60	10	128	43	0	6	0	49	15	67	0	13	95	0	0	0	11	11	283
04:45 PM	0	65	64	12	141	50	0	12	2	64	16	74	0	15	105	0	0	0	2	2	312
Total	0	257	250	39	546	188	1	29	4	222	51	282	1	38	372	0	0	1	17	18	1158
05:00 PM	0	67	68	8	143	41	0	7	0	48	13	44	0	10	67	0	2	0	9	11	269
05:15 PM	0	48	65	3	116	39	0	9	8	56	15	70	0	14	99	0	0	0	1	1	272
05:30 PM	0	65	38	18	121	38	0	7	0	45	18	61	0	17	96	0	0	0	1	1	263
05:45 PM	1	61	68	21	151	30	1	6	5	42	12	63	2	16	93	0	0	0	5	5	291
Total	1	241	239	50	531	148	1	29	13	191	58	238	2	57	355	0	2	0	16	18	1095
06:00 PM	0	45	58	2	105	42	0	10	2	54	5	74	0	6	85	0	0	0	1	1	245

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400 Columbus Avenue, Stuite 180 E
Valhalla, NY 10595

Customer Loyalty through Client Satisfaction

File Name : 2-_Main_St_and_North_Ave-Wolcott_Ave_-_Saturday_880306_09-25-2021
Site Code :
Start Date : 9/25/2021
Page No : 2

Groups Printed- Lights - Buses - Trucks - Bicycles on Crosswalk - Pedestrians

	North Ave From North					Main St From East					Wolcott Ave From South					Municipal Plaza From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
06:15 PM	2	50	53	9	114	37	2	6	0	45	9	53	0	13	75	0	1	1	4	6	240
06:30 PM	0	50	55	5	110	37	0	10	1	48	8	66	0	16	90	0	1	0	1	2	250
06:45 PM	0	32	48	16	96	43	2	6	0	51	8	65	0	9	82	1	1	0	2	4	233
Total	2	177	214	32	425	159	4	32	3	198	30	258	0	44	332	1	3	1	8	13	968
07:00 PM	0	44	53	1	98	35	3	6	0	44	11	45	0	9	65	0	1	1	2	4	211
07:15 PM	0	42	64	3	109	37	0	4	1	42	8	34	0	5	47	1	0	0	1	2	200
07:30 PM	0	34	46	3	83	41	0	2	0	43	6	48	0	3	57	0	0	0	1	1	184
07:45 PM	0	28	38	4	70	47	0	5	5	57	3	31	0	13	47	0	0	0	1	1	175
Total	0	148	201	11	360	160	3	17	6	186	28	158	0	30	216	1	1	1	5	8	770
Grand Total	7	1793	1923	192	3915	1331	21	187	48	1587	396	2128	11	313	2848	6	15	8	97	126	8476
Apprch %	0.2	45.8	49.1	4.9		83.9	1.3	11.8	3		13.9	74.7	0.4	11		4.8	11.9	6.3	77		
Total %	0.1	21.2	22.7	2.3	46.2	15.7	0.2	2.2	0.6	18.7	4.7	25.1	0.1	3.7	33.6	0.1	0.2	0.1	1.1	1.5	
Lights	7	1780	1912	0	3699	1321	21	186	0	1528	381	2087	11	0	2479	5	15	8	0	28	7734
% Lights	100	99.3	99.4	0	94.5	99.2	100	99.5	0	96.3	96.2	98.1	100	0	87	83.3	100	100	0	22.2	91.2
Buses	0	3	8	0	11	4	0	0	0	4	15	24	0	0	39	0	0	0	0	0	54
% Buses	0	0.2	0.4	0	0.3	0.3	0	0	0	0.3	3.8	1.1	0	0	1.4	0	0	0	0	0	0.6
Trucks	0	10	3	0	13	6	0	1	0	7	0	17	0	0	17	1	0	0	0	1	38
% Trucks	0	0.6	0.2	0	0.3	0.5	0	0.5	0	0.4	0	0.8	0	0	0.6	16.7	0	0	0	0.8	0.4
Bicycles on Crosswalk	0	0	0	8	8	0	0	0	3	3	0	0	0	8	8	0	0	0	14	14	33
% Bicycles on Crosswalk	0	0	0	4.2	0.2	0	0	0	6.2	0.2	0	0	0	2.6	0.3	0	0	0	14.4	11.1	0.4
Pedestrians	0	0	0	184	184	0	0	0	45	45	0	0	0	305	305	0	0	0	83	83	617
% Pedestrians	0	0	0	95.8	4.7	0	0	0	93.8	2.8	0	0	0	97.4	10.7	0	0	0	85.6	65.9	7.3

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400 Columbus Avenue, Stuite 180 E
Valhalla, NY 10595

Customer Loyalty through Client Satisfaction

File Name : 2-_Main_St_and_North_Ave-Wolcott_Ave_-_Saturday_880306_09-25-2021
Site Code :
Start Date : 9/25/2021
Page No : 3

	North Ave From North					Main St From East					Wolcott Ave From South					Municipal Plaza From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 07:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:30 PM																					
12:30 PM	0	55	57	5	117	54	0	3	3	60	7	85	0	27	119	1	0	0	3	4	300
12:45 PM	1	72	61	1	135	45	0	7	2	54	13	77	0	6	96	0	1	0	2	3	288
01:00 PM	1	78	67	2	148	46	0	6	0	52	7	90	0	4	101	0	0	1	5	6	307
01:15 PM	0	72	74	3	149	40	0	6	1	47	10	82	1	11	104	0	0	0	4	4	304
Total Volume	2	277	259	11	549	185	0	22	6	213	37	334	1	48	420	1	1	1	14	17	1199
% App. Total	0.4	50.5	47.2	2		86.9	0	10.3	2.8		8.8	79.5	0.2	11.4		5.9	5.9	5.9	82.4		
PHF	.500	.888	.875	.550	.921	.856	.000	.786	.500	.888	.712	.928	.250	.444	.882	.250	.250	.250	.700	.708	.976
Lights	2	275	257	0	534	183	0	22	0	205	35	326	1	0	362	1	1	1	0	3	1104
% Lights	100	99.3	99.2	0	97.3	98.9	0	100	0	96.2	94.6	97.6	100	0	86.2	100	100	100	0	17.6	92.1
Buses	0	0	2	0	2	1	0	0	0	1	2	4	0	0	6	0	0	0	0	0	9
% Buses	0	0	0.8	0	0.4	0.5	0	0	0	0.5	5.4	1.2	0	0	1.4	0	0	0	0	0	0.8
Trucks	0	2	0	0	2	1	0	0	0	1	0	4	0	0	4	0	0	0	0	0	7
% Trucks	0	0.7	0	0	0.4	0.5	0	0	0	0.5	0	1.2	0	0	1.0	0	0	0	0	0	0.6
Bicycles on Crosswalk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Crosswalk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrians	0	0	0	11	11	0	0	0	6	6	0	0	0	48	48	0	0	0	14	14	79
% Pedestrians	0	0	0	100	2.0	0	0	0	100	2.8	0	0	0	100	11.4	0	0	0	100	82.4	6.6

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400 Columbus Avenue, Stuite 180 E
Valhalla, NY 10595

Customer Loyalty through Client Satisfaction

File Name : 3-Wolcott__Ave_and_Beacon_St-Liam_Dr_-_Friday_880310_09-24-2021
Site Code :
Start Date : 9/24/2021

Groups Printed- Lights - Buses - Trucks - Bicycles on Crosswalk - Pedestrians

	Wolcott Ave From North					Beacon St From East					Wolcott Ave From South					Liam Dr From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
12:00 PM	4	54	7	0	65	11	0	1	0	12	3	53	3	0	59	2	3	4	1	10	146
12:15 PM	2	62	3	0	67	11	2	2	0	15	2	60	1	1	64	2	1	2	1	6	152
12:30 PM	2	50	6	1	59	10	1	2	3	16	1	47	1	0	49	1	2	0	1	4	128
12:45 PM	0	52	5	2	59	16	0	1	1	18	1	60	0	0	61	0	0	4	0	4	142
Total	8	218	21	3	250	48	3	6	4	61	7	220	5	1	233	5	6	10	3	24	568
01:00 PM	1	55	6	0	62	18	1	2	0	21	0	50	0	0	50	1	1	1	0	3	136
01:15 PM	1	51	7	0	59	10	1	0	1	12	0	53	1	1	55	1	0	0	1	2	128
01:30 PM	2	72	10	1	85	11	1	1	0	13	2	56	0	1	59	1	0	1	1	3	160
01:45 PM	2	64	13	2	81	9	1	1	3	14	0	39	0	0	39	0	1	2	4	7	141
Total	6	242	36	3	287	48	4	4	4	60	2	198	1	2	203	3	2	4	6	15	565
02:00 PM	3	62	5	0	70	12	1	3	0	16	2	53	1	0	56	0	0	0	0	0	142
02:15 PM	1	49	5	0	55	10	1	2	1	14	1	47	2	0	50	0	1	1	1	3	122
02:30 PM	1	43	6	0	50	18	0	0	0	18	0	51	1	0	52	1	0	2	0	3	123
02:45 PM	0	55	14	1	70	12	0	2	1	15	2	37	0	0	39	0	1	0	0	1	125
Total	5	209	30	1	245	52	2	7	2	63	5	188	4	0	197	1	2	3	1	7	512
03:00 PM	1	54	17	0	72	19	0	2	1	22	1	61	2	0	64	0	0	4	5	9	167
03:15 PM	2	44	5	0	51	21	0	3	1	25	18	42	1	1	62	0	3	0	2	5	143
03:30 PM	2	44	5	0	51	10	0	4	1	15	17	17	1	0	35	1	1	1	1	4	105
03:45 PM	5	45	7	0	57	10	0	7	4	21	9	54	0	1	64	1	2	1	0	4	146
Total	10	187	34	0	231	60	0	16	7	83	45	174	4	2	225	2	6	6	8	22	561
04:00 PM	3	40	9	1	53	6	1	3	0	10	12	64	3	1	80	0	5	3	2	10	153
04:15 PM	2	44	12	0	58	10	0	1	1	12	1	57	2	0	60	2	1	3	0	6	136
04:30 PM	4	61	8	1	74	4	1	3	0	8	0	56	0	1	57	0	1	1	2	4	143
04:45 PM	3	66	14	1	84	11	0	1	1	13	0	56	1	2	59	1	0	2	0	3	159
Total	12	211	43	3	269	31	2	8	2	43	13	233	6	4	256	3	7	9	4	23	591
05:00 PM	1	60	16	0	77	14	0	4	2	20	0	59	0	0	59	1	0	2	0	3	159
05:15 PM	3	55	16	0	74	11	0	0	1	12	6	93	1	0	100	0	0	1	2	3	189
05:30 PM	1	60	15	0	76	8	0	0	2	10	0	45	1	0	46	0	0	5	1	6	138
05:45 PM	0	51	10	0	61	10	1	4	0	15	4	61	2	0	67	0	1	4	3	8	151
Total	5	226	57	0	288	43	1	8	5	57	10	258	4	0	272	1	1	12	6	20	637
06:00 PM	2	44	8	0	54	17	0	2	0	19	2	41	1	0	44	0	0	4	3	7	124

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400 Columbus Avenue, Stuite 180 E
Valhalla, NY 10595

Customer Loyalty through Client Satisfaction

File Name : 3-Wolcott__Ave_and_Beacon_St-Liam_Dr_-_Friday_880310_09-24-2021
Site Code :
Start Date : 9/24/2021

Groups Printed- Lights - Buses - Trucks - Bicycles on Crosswalk - Pedestrians

	Wolcott Ave From North					Beacon St From East					Wolcott Ave From South					Liam Dr From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
06:15 PM	2	41	10	0	53	11	1	1	0	13	1	55	2	0	58	1	2	0	0	3	127
06:30 PM	1	40	17	0	58	16	0	3	0	19	0	54	1	1	56	1	0	2	0	3	136
06:45 PM	1	33	5	1	40	14	1	3	2	20	0	58	2	1	61	2	0	2	2	6	127
Total	6	158	40	1	205	58	2	9	2	71	3	208	6	2	219	4	2	8	5	19	514
07:00 PM	4	37	12	2	55	22	1	0	1	24	1	48	2	0	51	0	0	1	1	2	132
07:15 PM	5	36	10	1	52	13	0	0	0	13	0	63	0	0	63	1	0	3	1	5	133
07:30 PM	4	30	7	0	41	9	1	1	2	13	0	50	2	1	53	1	0	2	2	5	112
07:45 PM	5	31	5	0	41	10	1	0	1	12	2	48	1	0	51	0	0	4	3	7	111
Total	18	134	34	3	189	54	3	1	4	62	3	209	5	1	218	2	0	10	7	19	488
Grand Total	70	1585	295	14	1964	394	17	59	30	500	88	1688	35	12	1823	21	26	62	40	149	4436
Apprch %	3.6	80.7	15	0.7		78.8	3.4	11.8	6		4.8	92.6	1.9	0.7		14.1	17.4	41.6	26.8		
Total %	1.6	35.7	6.7	0.3	44.3	8.9	0.4	1.3	0.7	11.3	2	38.1	0.8	0.3	41.1	0.5	0.6	1.4	0.9	3.4	
Lights	69	1520	284	0	1873	387	16	58	0	461	83	1593	33	0	1709	20	24	62	0	106	4149
% Lights	98.6	95.9	96.3	0	95.4	98.2	94.1	98.3	0	92.2	94.3	94.4	94.3	0	93.7	95.2	92.3	100	0	71.1	93.5
Buses	0	20	5	0	25	3	0	0	0	3	4	49	0	0	53	0	0	0	0	0	81
% Buses	0	1.3	1.7	0	1.3	0.8	0	0	0	0.6	4.5	2.9	0	0	2.9	0	0	0	0	0	1.8
Trucks	1	45	6	0	52	4	1	1	0	6	1	46	2	0	49	1	2	0	0	3	110
% Trucks	1.4	2.8	2	0	2.6	1	5.9	1.7	0	1.2	1.1	2.7	5.7	0	2.7	4.8	7.7	0	0	2	2.5
Bicycles on Crosswalk	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	6	6	7
% Bicycles on Crosswalk	0	0	0	0	0	0	0	0	0	0	0	0	0	8.3	0.1	0	0	0	15	4	0.2
Pedestrians	0	0	0	14	14	0	0	0	30	30	0	0	0	11	11	0	0	0	34	34	89
% Pedestrians	0	0	0	100	0.7	0	0	0	100	6	0	0	0	91.7	0.6	0	0	0	85	22.8	2

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Customer Loyalty through Client Satisfaction

File Name : 3-Wolcott__Ave_and_Beacon_St-Liam_Dr_-_Friday_880310_09-24-2021
Site Code :
Start Date : 9/24/2021
Page No : 3

	Wolcott Ave From North					Beacon St From East					Wolcott Ave From South					Liam Dr From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 07:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	4	61	8	1	74	4	1	3	0	8	0	56	0	1	57	0	1	1	2	4	143
04:45 PM	3	66	14	1	84	11	0	1	1	13	0	56	1	2	59	1	0	2	0	3	159
05:00 PM	1	60	16	0	77	14	0	4	2	20	0	59	0	0	59	1	0	2	0	3	159
05:15 PM	3	55	16	0	74	11	0	0	1	12	6	93	1	0	100	0	0	1	2	3	189
Total Volume	11	242	54	2	309	40	1	8	4	53	6	264	2	3	275	2	1	6	4	13	650
% App. Total	3.6	78.3	17.5	0.6		75.5	1.9	15.1	7.5		2.2	96	0.7	1.1		15.4	7.7	46.2	30.8		
PHF	.688	.917	.844	.500	.920	.714	.250	.500	.500	.663	.250	.710	.500	.375	.688	.500	.250	.750	.500	.813	.860
Lights	11	238	53	0	302	40	1	8	0	49	6	252	2	0	260	2	1	6	0	9	620
% Lights	100	98.3	98.1	0	97.7	100	100	100	0	92.5	100	95.5	100	0	94.5	100	100	100	0	69.2	95.4
Buses	0	1	1	0	2	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	9
% Buses	0	0.4	1.9	0	0.6	0	0	0	0	0	0	2.7	0	0	2.5	0	0	0	0	0	1.4
Trucks	0	3	0	0	3	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	8
% Trucks	0	1.2	0	0	1.0	0	0	0	0	0	0	1.9	0	0	1.8	0	0	0	0	0	1.2
Bicycles on Crosswalk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2
% Bicycles on Crosswalk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50.0	15.4	0.3
Pedestrians	0	0	0	2	2	0	0	0	4	4	0	0	0	3	3	0	0	0	2	2	11
% Pedestrians	0	0	0	100	0.6	0	0	0	100	7.5	0	0	0	100	1.1	0	0	0	50.0	15.4	1.7

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Customer Loyalty through Client Satisfaction

File Name : 3-Wolcott_Ave_and_Beacon_St-Liam_Dr_-_Saturday_880316_09-25-2021
Site Code :
Start Date : 9/25/2021
Page No : 1

Groups Printed- Lights - Buses - Trucks - Bicycles on Crosswalk - Pedestrians

	Wolcott Ave From North					Beacon St From East					Walcott Ave From South					Liam Dr From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
12:00 PM	1	65	10	1	77	21	1	2	3	27	3	53	0	0	56	1	0	4	0	5	165
12:15 PM	2	60	4	0	66	11	1	1	6	19	2	67	0	0	69	1	0	3	1	5	159
12:30 PM	2	45	6	0	53	13	0	0	0	13	0	71	3	0	74	0	1	3	0	4	144
12:45 PM	0	65	12	1	78	19	1	3	4	27	0	73	0	2	75	0	0	2	0	2	182
Total	5	235	32	2	274	64	3	6	13	86	5	264	3	2	274	2	1	12	1	16	650
01:00 PM	4	67	11	1	83	20	1	1	6	28	7	76	1	0	84	0	2	2	0	4	199
01:15 PM	2	66	11	0	79	15	0	2	6	23	0	63	1	0	64	1	0	4	2	7	173
01:30 PM	0	55	8	2	65	23	2	3	3	31	2	61	0	0	63	1	0	1	2	4	163
01:45 PM	1	54	5	0	60	11	0	0	3	14	1	73	0	1	75	0	0	1	0	1	150
Total	7	242	35	3	287	69	3	6	18	96	10	273	2	1	286	2	2	8	4	16	685
02:00 PM	0	42	9	0	51	17	2	0	2	21	1	48	1	0	50	0	2	3	2	7	129
02:15 PM	2	54	6	0	62	18	0	0	4	22	1	77	0	1	79	1	0	1	0	2	165
02:30 PM	0	57	13	0	70	19	2	1	0	22	1	54	1	0	56	1	0	1	3	5	153
02:45 PM	1	59	7	0	67	14	0	2	6	22	1	75	1	0	77	0	1	0	9	10	176
Total	3	212	35	0	250	68	4	3	12	87	4	254	3	1	262	2	3	5	14	24	623
03:00 PM	1	42	9	0	52	18	0	3	2	23	0	68	0	0	68	2	0	5	2	9	152
03:15 PM	4	48	12	1	65	20	0	1	0	21	0	64	0	0	64	1	0	4	3	8	158
03:30 PM	4	64	5	0	73	12	2	2	6	22	0	56	2	2	60	0	1	2	4	7	162
03:45 PM	2	55	9	0	66	7	1	2	4	14	2	57	0	0	59	1	1	3	3	8	147
Total	11	209	35	1	256	57	3	8	12	80	2	245	2	2	251	4	2	14	12	32	619
04:00 PM	3	66	10	0	79	17	1	2	2	22	0	54	0	0	54	0	0	5	4	9	164
04:15 PM	1	59	10	1	71	15	0	0	3	18	1	59	0	2	62	0	0	2	1	3	154
04:30 PM	3	44	13	0	60	23	0	1	1	25	1	56	2	2	61	1	0	4	3	8	154
04:45 PM	4	59	15	0	78	14	0	3	6	23	1	68	0	0	69	0	0	1	3	4	174
Total	11	228	48	1	288	69	1	6	12	88	3	237	2	4	246	1	0	12	11	24	646
05:00 PM	6	52	7	0	65	13	1	0	2	16	1	43	0	1	45	0	0	1	3	4	130
05:15 PM	2	53	10	0	65	18	0	0	1	19	1	53	0	0	54	1	0	6	2	9	147
05:30 PM	2	57	15	1	75	13	0	1	0	14	2	63	1	0	66	1	1	0	2	4	159
05:45 PM	1	50	12	0	63	15	0	0	1	16	2	59	2	1	64	0	2	2	1	5	148
Total	11	212	44	1	268	59	1	1	4	65	6	218	3	2	229	2	3	9	8	22	584
06:00 PM	1	50	11	0	62	17	1	1	0	19	1	53	1	0	55	0	0	3	3	6	142

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Customer Loyalty through Client Satisfaction

File Name : 3-Wolcott_Ave_and_Beacon_St-Liam_Dr_-_Saturday_880316_09-25-2021
Site Code :
Start Date : 9/25/2021

Groups Printed- Lights - Buses - Trucks - Bicycles on Crosswalk - Pedestrians

	Wolcott Ave From North					Beacon St From East					Walcott Ave From South					Liam Dr From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
06:15 PM	3	45	6	2	56	16	0	0	0	16	0	44	1	0	45	1	0	1	3	5	122
06:30 PM	4	47	7	0	58	11	0	2	2	15	0	57	1	0	58	0	0	0	2	2	133
06:45 PM	4	32	8	2	46	17	0	1	0	18	0	51	1	0	52	2	0	5	0	7	123
Total	12	174	32	4	222	61	1	4	2	68	1	205	4	0	210	3	0	9	8	20	520
07:00 PM	1	38	8	0	47	10	0	2	0	12	1	43	0	0	44	1	0	1	6	8	111
07:15 PM	2	34	9	0	45	7	0	0	0	7	1	32	0	0	33	0	1	1	0	2	87
07:30 PM	1	23	11	0	35	10	0	0	0	10	0	43	0	0	43	0	0	1	0	1	89
07:45 PM	2	27	8	0	37	7	2	1	0	10	0	24	1	0	25	0	0	5	3	8	80
Total	6	122	36	0	164	34	2	3	0	39	2	142	1	0	145	1	1	8	9	19	367
Grand Total	66	1634	297	12	2009	481	18	37	73	609	33	1838	20	12	1903	17	12	77	67	173	4694
Apprch %	3.3	81.3	14.8	0.6		79	3	6.1	12		1.7	96.6	1.1	0.6		9.8	6.9	44.5	38.7		
Total %	1.4	34.8	6.3	0.3	42.8	10.2	0.4	0.8	1.6	13	0.7	39.2	0.4	0.3	40.5	0.4	0.3	1.6	1.4	3.7	
Lights	65	1623	293	0	1981	476	16	35	0	527	31	1784	20	0	1835	16	10	77	0	103	4446
% Lights	98.5	99.3	98.7	0	98.6	99	88.9	94.6	0	86.5	93.9	97.1	100	0	96.4	94.1	83.3	100	0	59.5	94.7
Buses	0	1	3	0	4	4	0	0	0	4	1	37	0	0	38	0	0	0	0	0	46
% Buses	0	0.1	1	0	0.2	0.8	0	0	0	0.7	3	2	0	0	2	0	0	0	0	0	1
Trucks	1	10	1	0	12	1	2	2	0	5	1	17	0	0	18	1	2	0	0	3	38
% Trucks	1.5	0.6	0.3	0	0.6	0.2	11.1	5.4	0	0.8	3	0.9	0	0	0.9	5.9	16.7	0	0	1.7	0.8
Bicycles on Crosswalk	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	8	8	9
% Bicycles on Crosswalk	0	0	0	8.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11.9	4.6	0.2
Pedestrians	0	0	0	11	11	0	0	0	73	73	0	0	0	12	12	0	0	0	59	59	155
% Pedestrians	0	0	0	91.7	0.5	0	0	0	100	12	0	0	0	100	0.6	0	0	0	88.1	34.1	3.3

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Valhalla, NY 10595

Customer Loyalty through Client Satisfaction

File Name : 3-Wolcott_Ave_and_Beacon_St-Liam_Dr_-_Saturday_880316_09-25-2021
Site Code :
Start Date : 9/25/2021
Page No : 3

	Wolcott Ave From North					Beacon St From East					Walcott Ave From South					Liam Dr From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 07:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:45 PM																					
12:45 PM	0	65	12	1	78	19	1	3	4	27	0	73	0	2	75	0	0	2	0	2	182
01:00 PM	4	67	11	1	83	20	1	1	6	28	7	76	1	0	84	0	2	2	0	4	199
01:15 PM	2	66	11	0	79	15	0	2	6	23	0	63	1	0	64	1	0	4	2	7	173
01:30 PM	0	55	8	2	65	23	2	3	3	31	2	61	0	0	63	1	0	1	2	4	163
Total Volume	6	253	42	4	305	77	4	9	19	109	9	273	2	2	286	2	2	9	4	17	717
% App. Total	2	83	13.8	1.3		70.6	3.7	8.3	17.4		3.1	95.5	0.7	0.7		11.8	11.8	52.9	23.5		
PHF	.375	.944	.875	.500	.919	.837	.500	.750	.792	.879	.321	.898	.500	.250	.851	.500	.250	.563	.500	.607	.901
Lights	6	249	41	0	296	76	3	8	0	87	8	261	2	0	271	2	1	9	0	12	666
% Lights	100	98.4	97.6	0	97.0	98.7	75.0	88.9	0	79.8	88.9	95.6	100	0	94.8	100	50.0	100	0	70.6	92.9
Buses	0	0	1	0	1	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	6
% Buses	0	0	2.4	0	0.3	0	0	0	0	0	0	1.8	0	0	1.7	0	0	0	0	0	0.8
Trucks	0	4	0	0	4	1	1	1	0	3	1	7	0	0	8	0	1	0	0	1	16
% Trucks	0	1.6	0	0	1.3	1.3	25.0	11.1	0	2.8	11.1	2.6	0	0	2.8	0	50.0	0	0	5.9	2.2
Bicycles on Crosswalk	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Bicycles on Crosswalk	0	0	0	25.0	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
Pedestrians	0	0	0	3	3	0	0	0	19	19	0	0	0	2	2	0	0	0	4	4	28
% Pedestrians	0	0	0	75.0	1.0	0	0	0	100	17.4	0	0	0	100	0.7	0	0	0	100	23.5	3.9

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NYSDOT VOLUME DATA SUMMARY

ROADWAY: NYS ROUTE 9D (WOLCOTT AVENUE)
SEGMENT: FROM TELLER AVE TO MAIN ST
LOCATION: 85' E OF HARBOR VIEW CT
START DATE OF COUNT: Monday, May 06, 2019
NYSDOT COUNT STATION: 820633
FUNCTIONAL CLASS: 16 - URBAN MINOR ARTERIAL
FACTOR GROUP: 30
SEASONAL FACTOR: 1.089

TIME PERIOD		DIRECTIONAL VOLUMES		TOTAL VOLUME
START	FINISH	EASTBOUND	WESTBOUND	
12:00 AM	1:00 AM	28	23	51
1:00 AM	2:00 AM	11	7	18
2:00 AM	3:00 AM	8	5	13
3:00 AM	4:00 AM	7	12	19
4:00 AM	5:00 AM	20	27	47
5:00 AM	6:00 AM	79	59	138
6:00 AM	7:00 AM	166	176	342
7:00 AM	8:00 AM	223	259	482
8:00 AM	9:00 AM	284	268	552
9:00 AM	10:00 AM	189	176	365
10:00 AM	11:00 AM	160	164	324
11:00 AM	12:00 PM	166	164	330
12:00 PM	1:00 PM	196	200	396
1:00 PM	2:00 PM	192	189	381
2:00 PM	3:00 PM	206	211	417
3:00 PM	4:00 PM	250	288	538
4:00 PM	5:00 PM	286	306	592
5:00 PM	6:00 PM	326	288	614
6:00 PM	7:00 PM	337	233	570
7:00 PM	8:00 PM	214	178	392
8:00 PM	9:00 PM	158	121	279
9:00 PM	10:00 PM	112	115	227
10:00 PM	11:00 PM	66	48	114
11:00 PM	12:00 AM	40	33	73
AVERAGE WEEKDAY DAILY TRAFFIC		**3724**	**3550**	**7274**
	AADT	**3420**	**3260**	**6680**

NOTES:

1) DATA SOURCE: NEW YORK STATE DEPARTMENT OF TRANSPORTATION (NYSDOT) TRAFFIC DATA VIEWER AVERAGE WEEKDAY VOLUMES

NYSDOT CLASSIFICATION DATA SUMMARY

ROADWAY: NYS ROUTE 9D (WOLCOTT AVENUE)
SEGMENT: FROM TELLER AVE TO MAIN ST
LOCATION: 85' E OF HARBOR VIEW CT
START DATE OF COUNT: Monday, May 06, 2019
NYSDOT COUNT STATION: 820633
FUNCTIONAL CLASS: 16 - URBAN MINOR ARTERIAL
FACTOR GROUP: 30

VEHICLE CLASS	DIRECTIONAL VOLUMES		TOTAL VEHICLES	TOTAL AXLES
	EASTBOUND	WESTBOUND		
F1	26	28	54	108
F2	2785	2856	5641	11282
F3	353	383	736	1472
F4	29	24	53	133
F5	99	67	166	332
F6	14	15	29	87
F7	0	4	4	16
F8	2	3	5	18
F9	21	16	37	185
F10	4	6	10	60
F11	0	0	0	0
F12	0	0	0	0
F13	0	0	0	0
AVERAGE WEEKDAY TOTAL	**3333**	**3402**	**6735**	**13692**

	EASTBOUND	WESTBOUND	TOTAL
% TRUCKS & BUSES (F3 - F13)	16%	15%	15%
% HEAVY VEHICLES (F4 - F13)	5%	4%	5%
% F3 - F7	4%	3%	4%
% F8 - F13	1%	1%	1%
% F1	1%	1%	1%
% F2	84%	84%	84%
% F3	11%	11%	11%
% F4	1%	1%	1%
% F5 - F7	3%	3%	3%

VEHICLE CLASSIFICATION CODES:

- **F1** MOTORCYCLES
- **F2** AUTOS (INCLUDING THOSE HAULING TRAILERS)
- **F3** 2 AXLE, 4-TIRE PICKUPS, VANS, MOTORHOMES (INCLUDING THOSE HAULING TRAILERS)
- **F4** BUSES
- **F5** 2 AXLE, 6-TIRE SINGLE UNIT TRUCKS
- **F6** 3 AXLE SINGLE UNIT TRUCKS
- **F7** 4 OR MORE AXLE SINGLE UNIT TRUCKS
- **F8** 4 OR LESS AXLE VEHICLES, ONE UNIT IS A TRUCK
- **F9** 5 AXLE DOUBLE UNIT VEHICLES, ONE UNIT IS A TRUCK
- **F10** 6 OR MORE AXLE DOUBLE UNIT VEHICLES, ONE UNIT IS A TRUCK
- **F11** 5 OR LESS AXLE MULTI-UNIT TRUCKS
- **F12** 6 AXLE MULTI UNIT TRUCKS
- **F13** 7 OR MORE AXLE MULTI-UNIT TRUCKS

NOTES:

1) DATA SOURCE: NEW YORK STATE DEPARTMENT OF TRANSPORTATION (NYSDOT) TRAFFIC DATA VIEWER AVERAGE WEEKDAY VOLUMES

NYSDOT SPEED DATA SUMMARY

ROADWAY: NYS ROUTE 9D (WOLCOTT AVENUE)
SEGMENT: FROM TELLER AVE TO MAIN ST
LOCATION: 85' E OF HARBOR VIEW CT
START DATE OF COUNT: Monday, May 06, 2019
NYSDOT COUNT STATION: 820633
FUNCTIONAL CLASS: 16 - URBAN MINOR ARTERIAL
POSTED SPEED LIMIT: 30
FACTOR GROUP: 30

SPEEDS (MPH)	DIRECTIONAL VOLUMES		TOTAL VOLUME
	EASTBOUND	WESTBOUND	
0 - 20.0	177	104	281
20.1 - 25.0	390	271	661
25.1 - 30.0	1120	839	1959
30.1 - 35.0	1366	1607	2973
35.1 - 40.0	563	642	1205
40.1 - 45.0	89	80	169
45.1 - 50.0	5	4	9
50.1 - 55.0	0	0	0
55.1 - 60.0	0	0	0
60.1 - 65.0	0	0	0
65.1 - 70.0	0	0	0
70.1 - 75.0	0	0	0
75.1 - 80.0	0	0	0
80.1+	0	0	0
UNCLASSIFIED	0	0	0
AVERAGE SPEED (MPH)	**28**	**30**	**29**
50TH PERCENTILE SPEED (MPH)	**31**	**32**	**31**
85TH PERCENTILE SPEED (MPH)	**36**	**37**	**36**

NOTES:

1) DATA SOURCE: NEW YORK STATE DEPARTMENT OF TRANSPORTATION (NYSDOT) TRAFFIC DATA VIEWER AVERAGE WEEKDAY VOLUMES

Colliers Engineering & Design

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Infrastructure • Geotechnical/Environmental • Telecommunications • Utilities/Energy

Exhibit A: Images of the Premises and Surrounding Area

Dutchess County Parcel Access Viewer: 1113 Wolcott Avenue

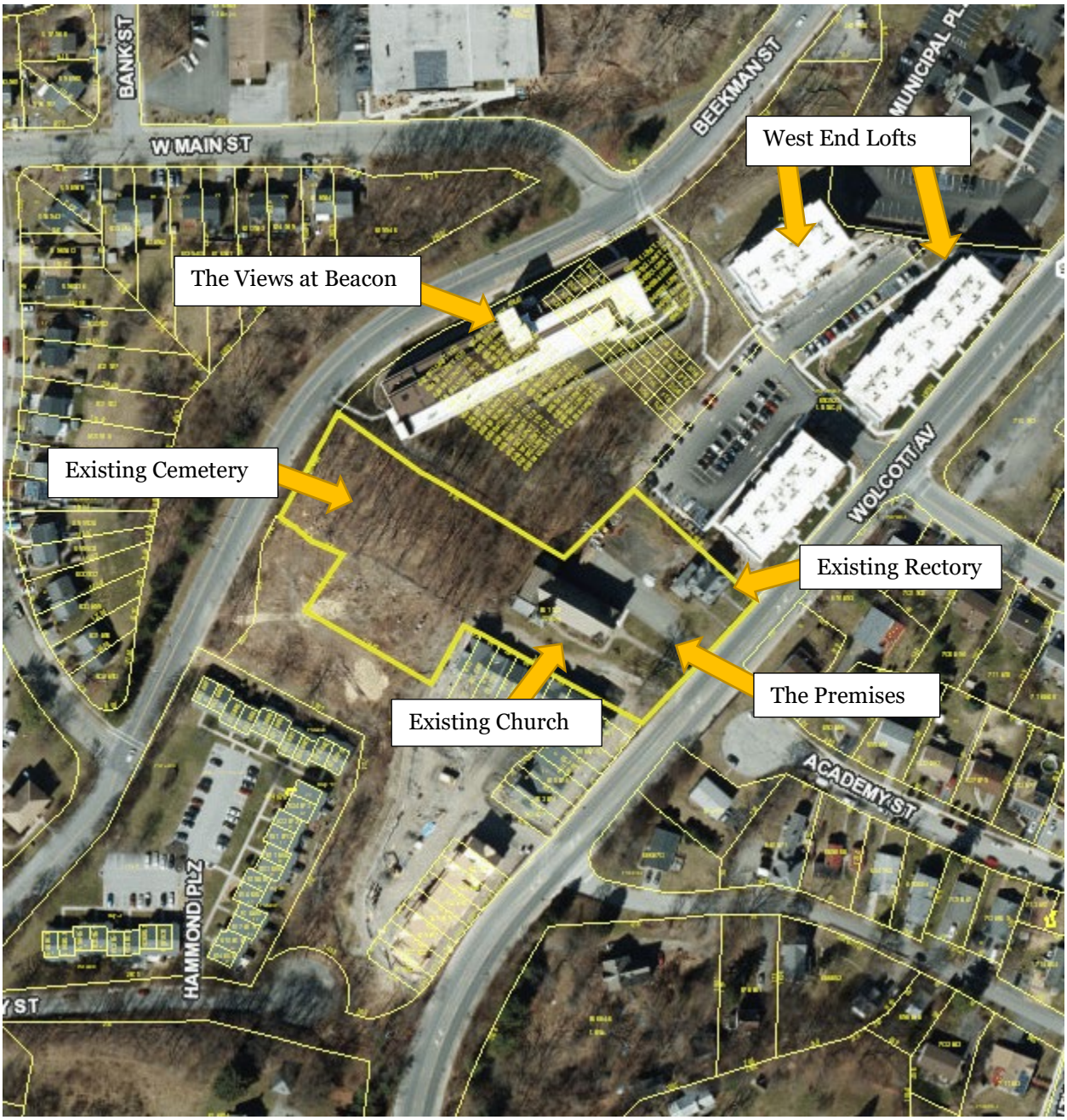
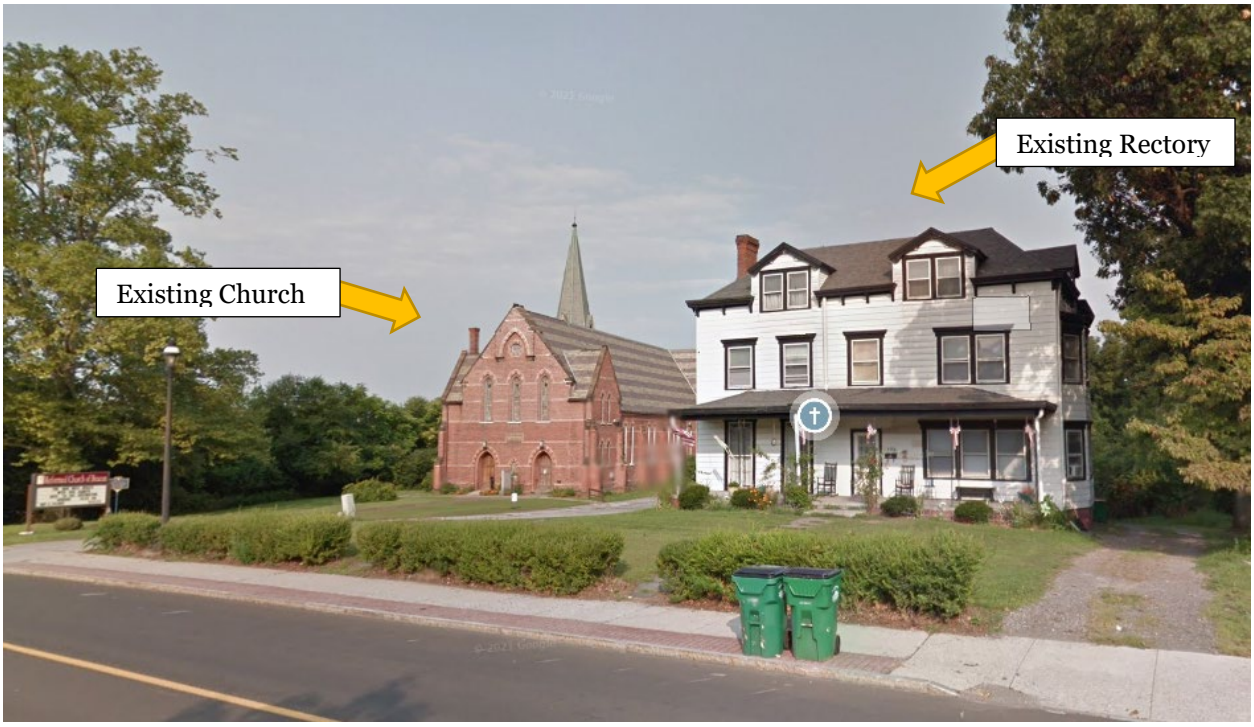


Exhibit A: Images of the Premises and Surrounding Area (cont.)

Google Map Street View: Wolcott Avenue Toward the Premises



Google Map Street View: Wolcott Avenue Toward the Premises

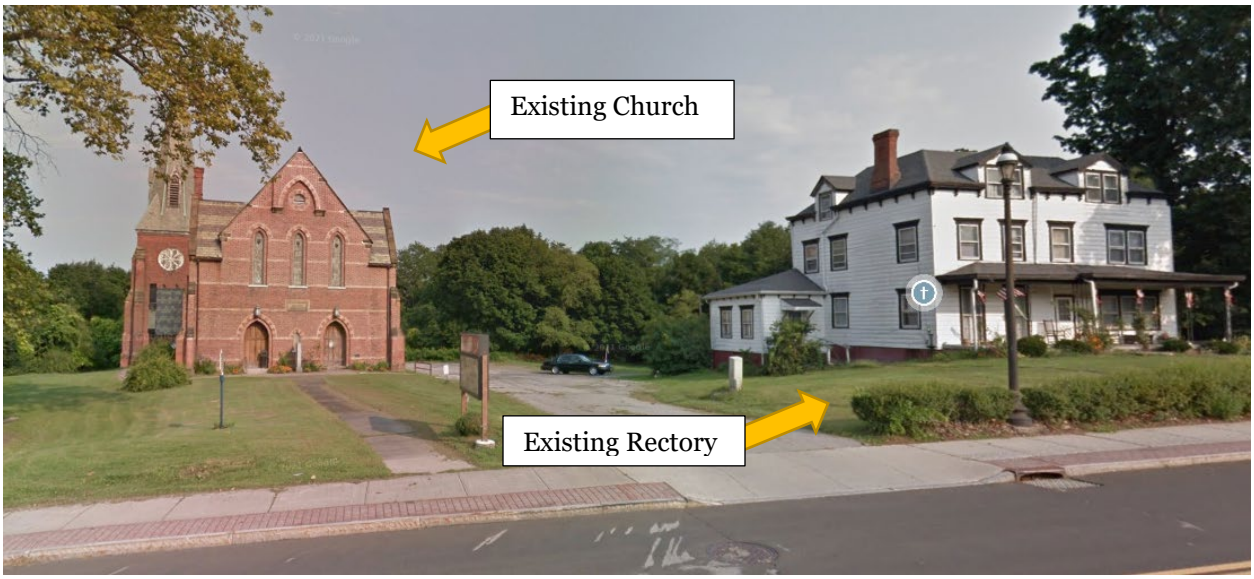


Exhibit A: Images of the Premises and Surrounding Area (cont.)

Google Map Street View: Beekman Street Toward the Premises



Instructions for Completing Part 1

Part 1 is to be completed by the applicant or project sponsor. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification.

Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information; indicate whether missing information does not exist, or is not reasonably available to the sponsor; and, when possible, generally describe work or studies which would be necessary to update or fully develop that information.

Applicants/sponsors must complete all items in Sections A & B. In Sections C, D & E, most items contain an initial question that must be answered either "Yes" or "No". If the answer to the initial question is "Yes", complete the sub-questions that follow. If the answer to the initial question is "No", proceed to the next question. Section F allows the project sponsor to identify and attach any additional information. Section G requires the name and signature of the applicant or project sponsor to verify that the information contained in Part 1is accurate and complete.

A. Project and Applicant/Sponsor Information.

Name of Action or Project: 1113 Wolcott Avenue - Application for Site Plan and Special Permit Approval		
Project Location (describe, and attach a general location map): 1113 Wolcott Avenue, Beacon NY 12508		
Brief Description of Proposed Action (include purpose or need): Application for Site Plan and Special Permit Approval proposing to redevelop the Premises, which includes an existing church, rectory and cemetery. The proposal calls for the rectory to be renovated with a proposed addition to allow for the construction of a 30 room, 2-1/2 story hotel building with an adjacent parking lot for 30 vehicles. The existing church building will be preserved with minimal changes to the exterior, and internally modified to serve as an accessory venue consisting of a conference center and cafe equipped to serve a maximum occupancy of 350. The existing cemetery will be preserved and restored as a public park, which will include a walking path from Beekman Street to Wolcott Avenue.		
Name of Applicant/Sponsor: Prophecy Theater, LLC - Gavin Hecker, President	Telephone: 215-913-3199 E-Mail: gavinhecker@gmail.com	
Address: 36 South Brett Street		
City/PO: Beacon	State: New York	Zip Code: 12508
Project Contact (if not same as sponsor; give name and title/role):	Telephone: E-Mail:	
Address:		
City/PO: Beacon	State:	Zip Code:
Property Owner (if not same as sponsor):	Telephone: E-Mail:	
Address:		
City/PO:	State:	Zip Code:

B. Government Approvals

B. Government Approvals, Funding, or Sponsorship. ("Funding" includes grants, loans, tax relief, and any other forms of financial assistance.)

Government Entity	If Yes: Identify Agency and Approval(s) Required	Application Date (Actual or projected)
a. City Counsel, Town Board, or Village Board of Trustees ☐Yes ☑No		
b. City, Town or Village Planning Board or Commission ☑Yes ☐No	Site Plan & Special Use Approval LWRP Consistency & Certificate of App. - Planning Board	June 2021, Amended November 2021
c. City, Town or Village Zoning Board of Appeals ☐Yes ☑No		
d. Other local agencies ☐Yes ☑No	Interpretation & Building Permit - Building Department	November 2021
e. County agencies ☐Yes ☑No		
f. Regional agencies ☐Yes ☑No		
g. State agencies ☑Yes ☐No	SHPO	June 2021
h. Federal agencies ☐Yes ☑No		

i. Coastal Resources.

i. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway? ☑Yes ☐No

ii. Is the project site located in a community with an approved Local Waterfront Revitalization Program? ☑Yes ☐No

iii. Is the project site within a Coastal Erosion Hazard Area? ☐Yes ☑No

C. Planning and Zoning

C.1. Planning and zoning actions.

Will administrative or legislative adoption, or amendment of a plan, local law, ordinance, rule or regulation be the only approval(s) which must be granted to enable the proposed action to proceed? ☐Yes ☑No

- **If Yes,** complete sections C, F and G.
- **If No,** proceed to question C.2 and complete all remaining sections and questions in Part 1

C.2. Adopted land use plans.

a. Do any municipally- adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located? ☑Yes ☐No

If Yes, does the comprehensive plan include specific recommendations for the site where the proposed action would be located? ☑Yes ☐No

b. Is the site of the proposed action within any local or regional special planning district (for example: Greenway; Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; or other?) ☐Yes ☑No

If Yes, identify the plan(s):

_____

_____

_____

c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan? ☐Yes ☑No

If Yes, identify the plan(s):

_____

_____

_____

C.3. Zoning

a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. ☑ Yes ☐ No
If Yes, what is the zoning classification(s) including any applicable overlay district?
R1-40-One Family, Historic District and Landmark Overlay Zone

b. Is the use permitted or allowed by a special or conditional use permit? ☑ Yes ☐ No

c. Is a zoning change requested as part of the proposed action? ☐ Yes ☑ No
If Yes,
i. What is the proposed new zoning for the site? _____

C.4. Existing community services.

a. In what school district is the project site located? Beacon City School District

b. What police or other public protection forces serve the project site?
City of Beacon Police Department

c. Which fire protection and emergency medical services serve the project site?
City of Beacon Fire Department

d. What parks serve the project site?
Scenic Hudson Long Dock Park, Pete and Toshi Seeger Riverfront Park, Polhill Park

D. Project Details

D.1. Proposed and Potential Development

a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if mixed, include all components)? Commercial and recreational

b. a. Total acreage of the site of the proposed action? 2.28 acres
b. Total acreage to be physically disturbed? 0.96 acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 2.28 acres

c. Is the proposed action an expansion of an existing project or use? ☐ Yes ☑ No
i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, miles, housing units, square feet)? % _____ Units: _____

d. Is the proposed action a subdivision, or does it include a subdivision? ☐ Yes ☑ No
If Yes,
i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types)
_____
ii. Is a cluster/conservation layout proposed? ☐ Yes ☐ No
iii. Number of lots proposed? _____
iv. Minimum and maximum proposed lot sizes? Minimum _____ Maximum _____

e. Will the proposed action be constructed in multiple phases? ☐ Yes ☑ No
i. If No, anticipated period of construction: 18 months
ii. If Yes:
- Total number of phases anticipated _____
- Anticipated commencement date of phase 1 (including demolition) _____ month _____ year
- Anticipated completion date of final phase _____ month _____year
- Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases: _____

f. Does the project include new residential uses? ☐ Yes ☑ No

If Yes, show numbers of units proposed.

	One Family	Two Family	Three Family	Multiple Family (four or more)
Initial Phase				
At completion of all phases				

g. Does the proposed action include new non-residential construction (including expansions)? ☑ Yes ☐ No

If Yes,

i. Total number of structures 1

ii. Dimensions (in feet) of largest proposed structure: 35 height; 48 width; and 84 length

iii. Approximate extent of building space to be heated or cooled: 12,000 square feet

h. Does the proposed action include construction or other activities that will result in the impoundment of any liquids, such as creation of a water supply, reservoir, pond, lake, waste lagoon or other storage? ☐ Yes ☑ No

If Yes,

i. Purpose of the impoundment: _____

ii. If a water impoundment, the principal source of the water: ☐ Ground water ☐ Surface water streams ☐ Other specify:

_____

iii. If other than water, identify the type of impounded/contained liquids and their source.

_____

iv. Approximate size of the proposed impoundment. Volume: _____ million gallons; surface area: _____ acres

v. Dimensions of the proposed dam or impounding structure: _____ height; _____ length

vi. Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock, wood, concrete):

_____

D.2. Project Operations

a. Does the proposed action include any excavation, mining, or dredging, during construction, operations, or both? (Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite) ☐ Yes ☑ No

If Yes:

i .What is the purpose of the excavation or dredging? _____

ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?

- Volume (specify tons or cubic yards): _____
- Over what duration of time? _____

iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them.

_____

_____

iv. Will there be onsite dewatering or processing of excavated materials? ☐ Yes ☐ No

If yes, describe. _____

_____

v. What is the total area to be dredged or excavated? _____ acres

vi. What is the maximum area to be worked at any one time? _____ acres

vii. What would be the maximum depth of excavation or dredging? _____ feet

viii. Will the excavation require blasting? ☐ Yes ☐ No

ix. Summarize site reclamation goals and plan: _____

_____

_____

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area? ☐ Yes ☑ No

If Yes:

i. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): _____

_____

ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placement of structures, or alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres:

_____

_____

_____

_____

iii. Will the proposed action cause or result in disturbance to bottom sediments? ☐Yes ☐No

If Yes, describe: _____

iv. Will the proposed action cause or result in the destruction or removal of aquatic vegetation? ☐Yes ☐No

If Yes:

- acres of aquatic vegetation proposed to be removed: _____
- expected acreage of aquatic vegetation remaining after project completion: _____
- purpose of proposed removal (e.g. beach clearing, invasive species control, boat access): _____

_____

- proposed method of plant removal: _____
- if chemical/herbicide treatment will be used, specify product(s): _____

v. Describe any proposed reclamation/mitigation following disturbance: _____

_____

c. Will the proposed action use, or create a new demand for water? ☑Yes ☐No

If Yes:

i. Total anticipated water usage/demand per day: 8,200 gallons/day

ii. Will the proposed action obtain water from an existing public water supply? ☑Yes ☐No

If Yes: Proposed water usage is based upon (30 hotel rooms X 110 gpd per room) + (350 venue seats X 5 gpd X 0.8) + (125 cafe seats X 35 gpd X 0.8) = 8,200 gpd [*Per DCDBCH loading rates*]

- Name of district or service area: City of Beacon Water District
- Does the existing public water supply have capacity to serve the proposal? ☑Yes ☐No
- Is the project site in the existing district? ☑Yes ☐No
- Is expansion of the district needed? ☐Yes ☑No
- Do existing lines serve the project site? ☑Yes ☐No

iii. Will line extension within an existing district be necessary to supply the project? ☐Yes ☑No

If Yes:

- Describe extensions or capacity expansions proposed to serve this project: _____

_____

- Source(s) of supply for the district: _____

iv. Is a new water supply district or service area proposed to be formed to serve the project site? ☐ Yes ☑No

If, Yes:

- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- Proposed source(s) of supply for new district: _____

v. If a public water supply will not be used, describe plans to provide water supply for the project: _____

_____

vi. If water supply will be from wells (public or private), what is the maximum pumping capacity: _____ gallons/minute.

d. Will the proposed action generate liquid wastes? ☑Yes ☐No

If Yes:

i. Total anticipated liquid waste generation per day: 8,200 gallons/day

ii. Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe all components and approximate volumes or proportions of each): _____

Sanitary wastewater, laundry, food preparation/cleaning wastewater

_____

iii. Will the proposed action use any existing public wastewater treatment facilities? ☑Yes ☐No

If Yes:

- Name of wastewater treatment plant to be used: City of Beacon Wastewater Treatment Facility
- Name of district: City of Beacon Sewer
- Does the existing wastewater treatment plant have capacity to serve the project? ☑Yes ☐No
- Is the project site in the existing district? ☑Yes ☐No
- Is expansion of the district needed? ☐Yes ☑No

- Do existing sewer lines serve the project site? ☑ Yes ☐ No
- Will a line extension within an existing district be necessary to serve the project? ☐ Yes ☑ No

  If Yes:
  - Describe extensions or capacity expansions proposed to serve this project: _____

iv. Will a new wastewater (sewage) treatment district be formed to serve the project site? ☐ Yes ☑ No

If Yes:
- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- What is the receiving water for the wastewater discharge? _____

v. If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge or describe subsurface disposal plans):

N/A

vi. Describe any plans or designs to capture, recycle or reuse liquid waste: _____

None

e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction? ☐ Yes ☑ No

If Yes:

i. How much impervious surface will the project create in relation to total size of project parcel?

_____ Square feet or _____ acres (impervious surface)

_____ Square feet or _____ acres (parcel size)

ii. Describe types of new point sources. _____

iii. Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)?

Stormwater currently flows toward adjacent properties to the west, and will continue to flow toward the west. An on site underground detention/infiltration system is proposed to mitigate runoff from additional impervious surfaces where currently there is no stormwater control.

- If to surface waters, identify receiving water bodies or wetlands: _____
- Will stormwater runoff flow to adjacent properties? ☑ Yes ☐ No

iv. Does the proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater? ☑ Yes ☐ No

f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations? ☐ Yes ☑ No

If Yes, identify:

i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles)

ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers)

iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation)

g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit? ☐ Yes ☑ No

If Yes:

i. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year) ☐ Yes ☐ No

ii. In addition to emissions as calculated in the application, the project will generate:
- _____Tons/year (short tons) of Carbon Dioxide (CO_2)
- _____Tons/year (short tons) of Nitrous Oxide (N_2O)
- _____Tons/year (short tons) of Perfluorocarbons (PFCs)
- _____Tons/year (short tons) of Sulfur Hexafluoride (SF_6)
- _____Tons/year (short tons) of Carbon Dioxide equivalent of Hydroflourocarbons (HFCs)
- _____Tons/year (short tons) of Hazardous Air Pollutants (HAPs)

h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)? ☐Yes ☑No

If Yes:

i. Estimate methane generation in tons/year (metric): _____

ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring): _____

i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations? ☐Yes ☑No

If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust):

j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services? ☑Yes ☐No

If Yes:

i. When is the peak traffic expected (Check all that apply): ☑ Morning ☑ Evening ☑Weekend ☑ Randomly between hours of 7 am to 11 pm.

ii. For commercial activities only, projected number of truck trips/day and type (e.g., semi trailers and dump trucks): 2 truck trips per day using box delivery trucks

iii. Parking spaces: Existing 18-20 Proposed 31 Net increase/decrease +11

iv. Does the proposed action include any shared use parking? ☐Yes ☑No

v. If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe: None

vi. Are public/private transportation service(s) or facilities available within ½ mile of the proposed site? ☑Yes ☐No

vii Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? ☑Yes ☐No

viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? ☑Yes ☐No

k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy? ☑Yes ☐No

If Yes:

i. Estimate annual electricity demand during operation of the proposed action: 450 kWh for the hotel and 400 kWh for the venue

ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other): Central Hudson Gas and Electric

iii. Will the proposed action require a new, or an upgrade, to an existing substation? ☐Yes ☑No

l. Hours of operation. Answer all items which apply.

i. During Construction:

- Monday - Friday: 8 am to 7 pm
- Saturday: 8 am to 6 pm
- Sunday: 9 am to 5 pm
- Holidays: Emergency only

ii. During Operations:

- Monday - Friday: 8 am to 11 pm
- Saturday: 8 am to 11 pm
- Sunday: 8 am to 11 pm
- Holidays: 8 am to 11 pm

m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both? ☑ Yes ☐ No

If yes:

i. Provide details including sources, time of day and duration:

Construction equipment on site during demolition and construction operations (8 am to 7 pm). During operation, the church building will continue to be used as it has in the past as a place of public assembly for music, school, food and other community events. Noise ordinances will be followed.

ii. Will the proposed action remove existing natural barriers that could act as a noise barrier or screen? ☑ Yes ☐ No

Describe: If the City permits, the existing cemetery will be cleaned up by removal of vegetation and some trees.

n. Will the proposed action have outdoor lighting? ☑ Yes ☐ No

If yes:

i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:

Most site lighting will be building mounted; however, parking lighting will be LED dark sky compliant on 18' high poles.

ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen? ☑ Yes ☐ No

Describe: See D2.m.ii.

o. Does the proposed action have the potential to produce odors for more than one hour per day? ☐ Yes ☑ No

If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures:

p. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) or chemical products 185 gallons in above ground storage or any amount in underground storage? ☐ Yes ☑ No

If Yes:

i. Product(s) to be stored _____

ii. Volume(s) _____ per unit time _____ (e.g., month, year)

iii. Generally, describe the proposed storage facilities:_____

q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation? ☐ Yes ☑ No

If Yes:

i. Describe proposed treatment(s):

ii. Will the proposed action use Integrated Pest Management Practices? ☐ Yes ☐ No

r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)? ☑ Yes ☐ No

If Yes:

i. Describe any solid waste(s) to be generated during construction or operation of the facility:

- Construction: 50 tons per year (unit of time)
- Operation : 400 tons per year (unit of time)

ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:

- Construction: Demolition and construction waste will be recycled as applicable.
- Operation: Solid waste will be separated from recycled materials

iii. Proposed disposal methods/facilities for solid waste generated on-site:

- Construction: Local sanitation company
- Operation: Local sanitation company

s. Does the proposed action include construction or modification of a solid waste management facility? ☐ Yes ☑ No

If Yes:

i. Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill, or other disposal activities): _____

ii. Anticipated rate of disposal/processing:

- _____ Tons/month, if transfer or other non-combustion/thermal treatment, or
- _____ Tons/hour, if combustion or thermal treatment

iii. If landfill, anticipated site life: _____ years

t. Will the proposed action at the site involve the commercial generation, treatment, storage, or disposal of hazardous waste? ☐ Yes ☑ No

If Yes:

i. Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility: _____

ii. Generally describe processes or activities involving hazardous wastes or constituents: _____

iii. Specify amount to be handled or generated _____ tons/month

iv. Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents: _____

v. Will any hazardous wastes be disposed at an existing offsite hazardous waste facility? ☐ Yes ☐ No

If Yes: provide name and location of facility: _____

If No: describe proposed management of any hazardous wastes which will not be sent to a hazardous waste facility:

E. Site and Setting of Proposed Action

E.1. Land uses on and surrounding the project site

a. Existing land uses.

i. Check all uses that occur on, adjoining and near the project site.

☑ Urban ☐ Industrial ☐ Commercial ☑ Residential (suburban) ☐ Rural (non-farm)
☐ Forest ☐ Agriculture ☐ Aquatic ☐ Other (specify): _____

ii. If mix of uses, generally describe:

b. Land uses and covertypes on the project site.

Land use or Covertype	Current Acreage	Acreage After Project Completion	Change (Acres +/-)
• Roads, buildings, and other paved or impervious surfaces	0.53 ac.	0.59 ac.	+0.06 ac.
• Forested	0.89 ac.	0.89 ac.	0
• Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)	0.32 ac	0.32 ac.	0
• Agricultural (includes active orchards, field, greenhouse etc.)	0	0	0
• Surface water features (lakes, ponds, streams, rivers, etc.)	0	0	0
• Wetlands (freshwater or tidal)	0	0	0
• Non-vegetated (bare rock, earth or fill)	0	0	0
• Other Describe: Lawn/Landscaped areas	0.54 ac.	0.48 ac.	-0.06 ac.

c. Is the project site presently used by members of the community for public recreation? ☑ Yes ☐ No

i. If Yes: explain: The existing church is rented out to the public for events. This will continue after the project is completed.

d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers, or group homes) within 1500 feet of the project site? ☑ Yes ☐ No

If Yes,

i. Identify Facilities:

South Avenue Elementary School, Rose Hill Manor Day School

e. Does the project site contain an existing dam? ☐ Yes ☑ No

If Yes:

i. Dimensions of the dam and impoundment:

- Dam height: _____ feet
- Dam length: _____ feet
- Surface area: _____ acres
- Volume impounded: _____ gallons OR acre-feet

ii. Dam's existing hazard classification: _____

iii. Provide date and summarize results of last inspection:

f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility? ☐ Yes ☑ No

If Yes:

i. Has the facility been formally closed? ☐ Yes ☐ No

- If yes, cite sources/documentation: _____

ii. Describe the location of the project site relative to the boundaries of the solid waste management facility:

iii. Describe any development constraints due to the prior solid waste activities: _____

g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste? ☐ Yes ☑ No

If Yes:

i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred:

h. Potential contamination history. Has there been a reported spill at the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site? ☐ Yes ☑ No

If Yes:

i. Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply: ☐ Yes ☐ No

☐ Yes – Spills Incidents database — Provide DEC ID number(s): _____

☐ Yes – Environmental Site Remediation database — Provide DEC ID number(s): _____

☐ Neither database

ii. If site has been subject of RCRA corrective activities, describe control measures: _____

iii. Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database? ☑ Yes ☐ No

If yes, provide DEC ID number(s): V00299, V00096, C314112, V00293, 314069, 546031

iv. If yes to (i), (ii) or (iii) above, describe current status of site(s):

V00299 - remediation complete % Site Management Plan in place; V00096 & C314112 remediation complete & Site Management Plan in place; V00293 remediation complete; 314069 has been redeveloped; 546031 ongoing

v. Is the project site subject to an institutional control limiting property uses? ☐ Yes ☑ No

- If yes, DEC site ID number: _____
- Describe the type of institutional control (e.g., deed restriction or easement): _____
- Describe any use limitations: _____
- Describe any engineering controls: _____
- Will the project affect the institutional or engineering controls in place? ☐ Yes ☐ No
- Explain: _____

E.2. Natural Resources On or Near Project Site

a. What is the average depth to bedrock on the project site? 5.0 (average) feet

b. Are there bedrock outcroppings on the project site? ☑ Yes ☐ No
If Yes, what proportion of the site is comprised of bedrock outcroppings? <5 %

c. Predominant soil type(s) present on project site:

Nassau-Cardigan complex, rolling	60.6 %
Udorthents, smoothed	39.4 %
	%

d. What is the average depth to the water table on the project site? Average: 7 (average) feet

e. Drainage status of project site soils:
☑ Well Drained: 100 % of site
☐ Moderately Well Drained: _____% of site
☐ Poorly Drained _____% of site

f. Approximate proportion of proposed action site with slopes:
☑ 0-10%: 48.2 % of site
☑ 10-15%: 29.5 % of site
☑ 15% or greater: 22.3 % of site

g. Are there any unique geologic features on the project site? ☐ Yes ☑ No
If Yes, describe: _____

h. Surface water features.

i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)? ☐ Yes ☑ No

ii. Do any wetlands or other waterbodies adjoin the project site? ☐ Yes ☑ No

If Yes to either *i* or *ii*, continue. If No, skip to E.2.i.

iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency? ☐ Yes ☑ No

iv. For each identified regulated wetland and waterbody on the project site, provide the following information:

- Streams: Name _____ Classification _____
- Lakes or Ponds: Name _____ Classification _____
- Wetlands: Name _____ Approximate Size _____
- Wetland No. (if regulated by DEC) _____

v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies? ☐ Yes ☑ No

If yes, name of impaired water body/bodies and basis for listing as impaired: _____

i. Is the project site in a designated Floodway? ☐ Yes ☑ No

j. Is the project site in the 100-year Floodplain? ☐ Yes ☑ No

k. Is the project site in the 500-year Floodplain? ☐ Yes ☑ No

l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? ☐ Yes ☑ No
If Yes:

i. Name of aquifer: _____

m. Identify the predominant wildlife species that occupy or use the project site:

White Tail Deer	Native Birds	
Gray Squirrel	Chipmunk	
Racoon	Skunk	

n. Does the project site contain a designated significant natural community? ☐ Yes ☑ No

If Yes:

i. Describe the habitat/community (composition, function, and basis for designation): _____

ii. Source(s) of description or evaluation: _____

iii. Extent of community/habitat:

- Currently: _____ acres
- Following completion of project as proposed: _____ acres
- Gain or loss (indicate + or -): _____ acres

o. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species? ☑ Yes ☐ No

If Yes:

i. Species and listing (endangered or threatened): Atlantic Sturgeon, Shortnose Sturgeon, Indiana Bat

p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern? ☐ Yes ☑ No

If Yes:

i. Species and listing: _____

q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? ☐ Yes ☑ No

If yes, give a brief description of how the proposed action may affect that use: _____

E.3. Designated Public Resources On or Near Project Site

a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? ☐ Yes ☑ No

If Yes, provide county plus district name/number: _____

b. Are agricultural lands consisting of highly productive soils present? ☐ Yes ☑ No

i. If Yes: acreage(s) on project site? _____

ii. Source(s) of soil rating(s): _____

c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark? ☐ Yes ☑ No

If Yes:

i. Nature of the natural landmark: ☐ Biological Community ☐ Geological Feature

ii. Provide brief description of landmark, including values behind designation and approximate size/extent: _____

d. Is the project site located in or does it adjoin a state listed Critical Environmental Area? ☐ Yes ☑ No

If Yes:

i. CEA name: _____

ii. Basis for designation: _____

iii. Designating agency and date: _____

e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places? ☑ Yes ☐ No

If Yes:

i. Nature of historic/archaeological resource: ☑ Archaeological Site ☑ Historic Building or District

ii. Name: Reformed Dutch Church of Fishkill Landing

iii. Brief description of attributes on which listing is based:

Reformed Dutch Church is on the National Register of Historic Places. There is a cemetery located behind the church that dates back to the early 1800's.

f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory? ☑ Yes ☐ No

g. Have additional archaeological or historic site(s) or resources been identified on the project site? ☐ Yes ☑ No

If Yes:

i. Describe possible resource(s): _____

ii. Basis for identification: _____

h. Is the project site within fives miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource? ☑ Yes ☐ No

If Yes:

i. Identify resource: Hudson Highlands State Park (+/- 6.5 miles)

ii. Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): Long Dock Park;Madame Brett Park; Fishkill Ridge; Mount Beacon; Beacon Point Park

iii. Distance between project and resource: 0.2 - 1.0 miles.

i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666? ☐ Yes ☑ No

If Yes:

i. Identify the name of the river and its designation: _____

ii. Is the activity consistent with development restrictions contained in 6NYCRR Part 666? ☐ Yes ☐ No

F. Additional Information

Attach any additional information which may be needed to clarify your project.

If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

G. Verification

I certify that the information provided is true to the best of my knowledge.

Applicant/Sponsor Name Prophecy Theater, LLC (Gavin Hecker) Date 11/30/2021

Signature Gavin Hecker Title Member/Owner/Manager

PRINT FORM



Disclaimer: The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the EAF Workbooks. Although the EAF Mapper provides the most up-to-date digital data available to DEC, you may also need to contact local or other data sources in order to obtain data not provided by the Mapper. Digital data is not a substitute for agency determinations.



B.i.i [Coastal or Waterfront Area]	Yes
B.i.ii [Local Waterfront Revitalization Area]	Yes
C.2.b. [Special Planning District]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h [DEC Spills or Remediation Site - Potential Contamination History]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Listed]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Environmental Site Remediation Database]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.iii [Within 2,000' of DEC Remediation Site]	Yes
E.1.h.iii [Within 2,000' of DEC Remediation Site - DEC ID]	V00299, V00096, C314112, V00293, 314069, 546031
E.2.g [Unique Geologic Features]	No
E.2.h.i [Surface Water Features]	No
E.2.h.ii [Surface Water Features]	No
E.2.h.iii [Surface Water Features]	No
E.2.h.v [Impaired Water Bodies]	No
E.2.i. [Floodway]	No
E.2.j. [100 Year Floodplain]	No
E.2.k. [500 Year Floodplain]	No
E.2.l. [Aquifers]	No
E.2.n. [Natural Communities]	No
E.2.o. [Endangered or Threatened Species]	Yes

E.2.o. [Endangered or Threatened Species - Name]	Atlantic Sturgeon, Shortnose Sturgeon, Indiana Bat
E.2.p. [Rare Plants or Animals]	No
E.3.a. [Agricultural District]	No
E.3.c. [National Natural Landmark]	No
E.3.d [Critical Environmental Area]	No
E.3.e. [National or State Register of Historic Places or State Eligible Sites]	Yes - Digital mapping data for archaeological site boundaries are not available. Refer to EAF Workbook.
E.3.e.ii [National or State Register of Historic Places or State Eligible Sites - Name]	Reformed Dutch Church of Fishkill Landing
E.3.f. [Archeological Sites]	Yes
E.3.i. [Designated River Corridor]	No

A-2 Assembly uses intended for food and/or drink consumption including, but not limited to:

Banquet halls
Night clubs
Restaurants
Taverns and bars

A-3 Assembly uses intended for worship, recreation or amusement and other assembly uses not classified elsewhere in Group A, including, but not limited to:

Amusement arcades
Art galleries
Bowling alleys
Churches
Community halls
Courtrooms
Dance halls (not including food or drink consumption)
Exhibition halls
Funeral parlors
Gymnasiums (without spectator seating)
Indoor swimming pools (without spectator seating)
Indoor tennis courts (without spectator seating)
Lecture halls
Libraries
Museums
Passenger stations (waiting area)
Pool and billiard parlors

A-4 Assembly uses intended for viewing of indoor sporting events and activities with spectator seating, including, but not limited to:

Arenas
Skating rinks
Swimming pools
Tennis courts

A-5 Assembly uses intended for participation in or viewing outdoor activities including, but not limited to:

Amusement park structures
Bleachers
Grandstands
Stadiums

SECTION 304
BUSINESS GROUP B

304.1 Business Group B. Business Group B occupancy includes, among others, the use of a building or structure, or a portion thereof, for office, professional or service-type transactions, including storage of records and accounts. Business occupancies shall include, but not be limited to, the following:

Airport traffic control towers
Animal hospitals, kennels and pounds
Banks
Barber and beauty shops
Car wash
Civic administration
Clinic—outpatient
Dry cleaning and laundries; pick-up and delivery stations and self-service
Educational occupancies above the 12th grade
Electronic data processing
Fire and police stations
Laboratories; testing and research
Motor vehicle showrooms
Post offices
Print shops
Professional services (architects, attorneys, dentists, physicians, engineers, etc.)
Radio and television stations
Telephone exchanges

SECTION 305
EDUCATIONAL GROUP E

305.1 Educational Group E. Educational Group E occupancy includes, among others, the use of a building or structure, or a portion thereof, by six or more persons at any one time for educational purposes through the 12th grade.

305.2 Day care. The use of a building or structure, or portion thereof, for educational, supervision or personal care services for more than five children older than $2^1/_2$ years of age, shall be classified as a Group E occupancy.

SECTION 306
FACTORY INDUSTRIAL GROUP F

306.1 Factory Industrial Group F. Factory Industrial Group F occupancy includes, among others, the use of a building or structure, or a portion thereof, for assembling, disassembling, fabricating, finishing, manufacturing, packaging, repair or processing operations that are not classified as a Group H hazardous occupancy.

306.2 Factory Industrial F-1 Moderate-Hazard occupancy. Factory Industrial uses that are not classified as Factory Industrial F-2 Low Hazard shall be classified as F-1 Moderate Hazard and shall include, but not be limited to, the following:

Aircraft
Appliances
Athletic equipment
Automobiles and other motor vehicles
Bakeries
Beverages; over 12 percent in alcoholic content

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of access for cars and pedestrians using the parking facility, before a permit and/or certificate of occupancy shall be issued. Plans relating to parking, loading and access under Section 330 shall be approved as provided in that Section.

355. *Parking Specifications*

Each parking space provided in an unenclosed area shall be at least nine (9) feet wide and at least twenty (20) feet long, except that the Planning Board, in approving a plan under Section 354, may permit that portion of the total required parking which is specifically set aside for and limited to employee parking to have a width of at least 8½ feet and a depth of at least 20 feet. This possible exception shall not be permitted in the CB District.

Each parking space which is bordered by walls or columns on two or more sides shall be not less than 10 feet wide nor less than 20 feet long. Enclosed or garaged parking areas shall not contain any columns, walls, or other obstacles which would prevent or obstruct the use of any parking space.

The maneuvering area needed to permit parked vehicles to enter and exit off-street parking spaces shall have a width of at least 25 feet, except where the Planning Board approves a lesser distance as adequate for areas with parallel or angled parking spaces, and except where such area is also utilized for the through circulation of vehicles, in which case a minimum width of at least 30 feet shall be provided.

All required parking facilities shall be graded, paved, drained and suitably maintained to the satisfaction of the Commissioner of Public Works to the extent necessary to avoid nuisances of dust, erosion or excessive water flow across public ways or abutting property. Where the Commissioner of Public Works deems necessary, he may require suitable markings to indicate individual parking spaces, maneuvering area, entrances and exits.

356. *Certificate of Occupancy*

Required off-street parking facilities shall be completed before a certificate of occupancy shall be issued, and said parking facilities shall be maintained as long as the structure or use exists which the facilities are designed to serve.

357. *Alternate Method of Providing Parking Spaces*

Where, because of limitations of size, dimensions or topography of a lot, an applicant for the building permit in a business district finds it impracticable to provide all or a portion of the off-street parking spaces required by Section 358 herein, in connection with a proposed building or addition, he may grant and convey to the City of Beacon, and the City Council, at its discretion, may accept, appropriately located and developed land for commercial parking as a permitted use equivalent, providing said land is permanently dedicated to the City.

358. SCHEDULE OF OFF-STREET PARKING REQUIREMENTS

USE	MINIMUM NUMBER OF SPACES PER UNIT
One and two family residence	One per dwelling unit.
Multiple family residences and/or apartments	1½ spaces per dwelling unit.
Rooming, boarding or lodging houses	One per guest sleeping room, plus residence requirement.
Hotels	One per guest sleeping room, plus one per employee, plus one per 100 sq. ft. of public rooms.
Retail or Service Business	One per 200 sq. ft. of gross floor area, excluding basement storage and utility areas.
Office for business or professional	One per 300 sq. ft. of gross floor area, excluding basement storage and utility areas, plus 2 spaces for each separate office or suite of offices of a given tenancy.
Restaurant	One space for each two patron seats in the restaurant, plus one space per 100 square feet of floor area, exclusive of kitchen and storage areas.

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Hospital, clinic, sanitarium, or convalescent home	One per 3 patient beds, plus one per 100 square feet of office use.
Theater, auditorium, stadium, or other place of public assembly, including churches	One per five seats.
Amusement center, the capacity of which cannot be measured in seats	One per 200 sq. ft. of floor area devoted to patron use, except bowling alleys which shall have six spaces per alley.
Industrial uses, including wholesale, storage, and manufacturing	One space per two employees, employed or intended to be employed at the same time when the capacity of the building is in full use, or one space for each 400 sq. ft. of gross floor area, whichever is greater.
Funeral parlor or undertaking establishment	10 per establishment, plus one per two employees.
Other uses not listed	Off-street parking requirements for types of uses which do not fall within the categories listed above shall be determined by the City Council and adopted as an amendment to this Ordinance.

358.1 *Two or More Uses on Same Lot*
Where two or more different uses occur on a single lot, the total amount of parking facilities to be provided shall be the sum of the requirements of each individual use on the lot, except that the Board of Appeals may approve the joint use of parking space by two or more establishments on the same lot or on contiguous lots, the total capacity of which is less than the sum of the spaces required for each, provided said Board finds that the capacity to be provided will substantially meet the intent of the article by reason of variation in the probable time of maximum use by patrons or employees at such establishments, and provided such approval of such joint use shall be automatically terminated upon a change of use at any such establishment.

358.2 In RD or RMF Districts, not more than 50% of the required parking shall be provided in enclosed or garaged areas. Roofed areas, open on at least two sides, shall be considered open or unenclosed spaces.

359. SCHEDULE OF OFF-STREET LOADING SPACE REQUIREMENTS

Note: All building areas used in this Schedule are gross floor areas.

USE CLASSIFICATION AND BUILDING SIZE	NUMBER OF SPACES	
Retail Store Buildings		
2,000 - 5,000 sq. ft.	½	(12'x 22½')*
5,000 - 25,000 sq. ft.	1	"
25,000 - 50,000 sq. ft.	2	"
Each additional 50,000 sq. ft. or part thereof	1	"
Office, Apartment, Institutional, Hotel, Theater, Public Assembly Buildings		
5,000 - 50,000 sq. ft.	1	"
Each additional 100,000 sq. ft. or part thereof	1	"
Industrial and Warehousing Buildings		
2,000 - 50,000 sq. ft.	1	"
50,000 - 100,000 sq. ft.	2	"
Each additional 100,000 sq. ft. or part thereof	1	"

*The size of one off-street loading space.

Colliers
Engineering
& Design

Traffic & Parking Management Plan

DRAFT

February 21, 2022

1113 Wolcott Avenue

City of Beacon
Dutchess County, New York

Prepared for:

Prophecy Theatre LLC
369 Main Street, Unit 493 Beacon,
NY 12508

Prepared by:

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New York Professional Engineer
License No. 090241

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Colliers Engineering & Design

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Colliers Engineering & Design

Introduction and Background

The 1113 Wolcott Avenue Project ("the Project") is a proposed redevelopment of the property located at 1113 Wolcott Avenue (NYS Route 9D) in the City of Beacon, Dutchess County, New York. The former rectory building and church, which was most recently occupied by the Reformed Church of Beacon, are proposed to be redeveloped as a 30-room hotel contained in an expanded rectory building along with accessory conference center and dining facility (café/restaurant/bar) uses within the church building. In addition, the existing cemetery located behind (west of) the church and rectory building will be restored to be opened as a public park including a walking path from Beekman Street to Wolcott avenue.

The hotel will operate 365 days per year, and the dining facilities will be situated in the rear of the existing church. The dining facilities will serve as a reception for guests of the hotel and offer breakfast, lunch and dinner to the hotel guests, as well as members of the public. In addition, it will operate as a bar for hotel guests and for accessory conference center programming and events. The dining facilities are expected to operate seven (7) days a week in support of the hotel operations and guests with a maximum capacity of 50 seats including deck seating.

The conference center accessory use will operate less frequently, utilizing the former church building for various cultural, educational, or professional programs, including weddings, conferences, art exhibitions, performances, lectures, seminars and workshops. The expected maximum capacity for the occasional weekend programming for the hotel conference center is a maximum of 350 people including required staff to support these events, however these larger programs, which will occur on weekends, will typically have fewer people, ranging between 125-200 people. Furthermore, smaller functions, such as seminars, workshops or retreats with attendance ranging between 50 to 200 people will occur on weekdays generally Wednesday – Friday.

Access to the Project is proposed via an existing access connection from Wolcott Avenue that will provide access to the main parking area. A secondary, exit only driveway is also proposed at the northern property line of the Site, which will be a reestablishment of the existing driveway in this location. A total of 32 off-street parking spaces will be provided primarily for use by hotel guests and employees. The existing Site is also provided a third driveway connection to Wolcott Avenue south of the existing church building. This existing southern driveway is proposed to be eliminated as part of the Project.

During events, all event related parking will be required to be accommodated by off-site public parking in the vicinity of the Project. This is anticipated to create a need for the management of on-site drop-off and pick-up operations. In addition, it was determined that specific parking strategies were needed to ensure event parking occurs in desired locations, to reduce parking as practicable and manage on-site parking.

Based on the above, and associated with the review of the Project by the City of Beacon Planning Board and its consultants, this Traffic & Parking Management plan has been prepared in order to provide an efficient and ongoing method of managing traffic flows, on-site and off-site parking, and other transportation related aspects of the Project.

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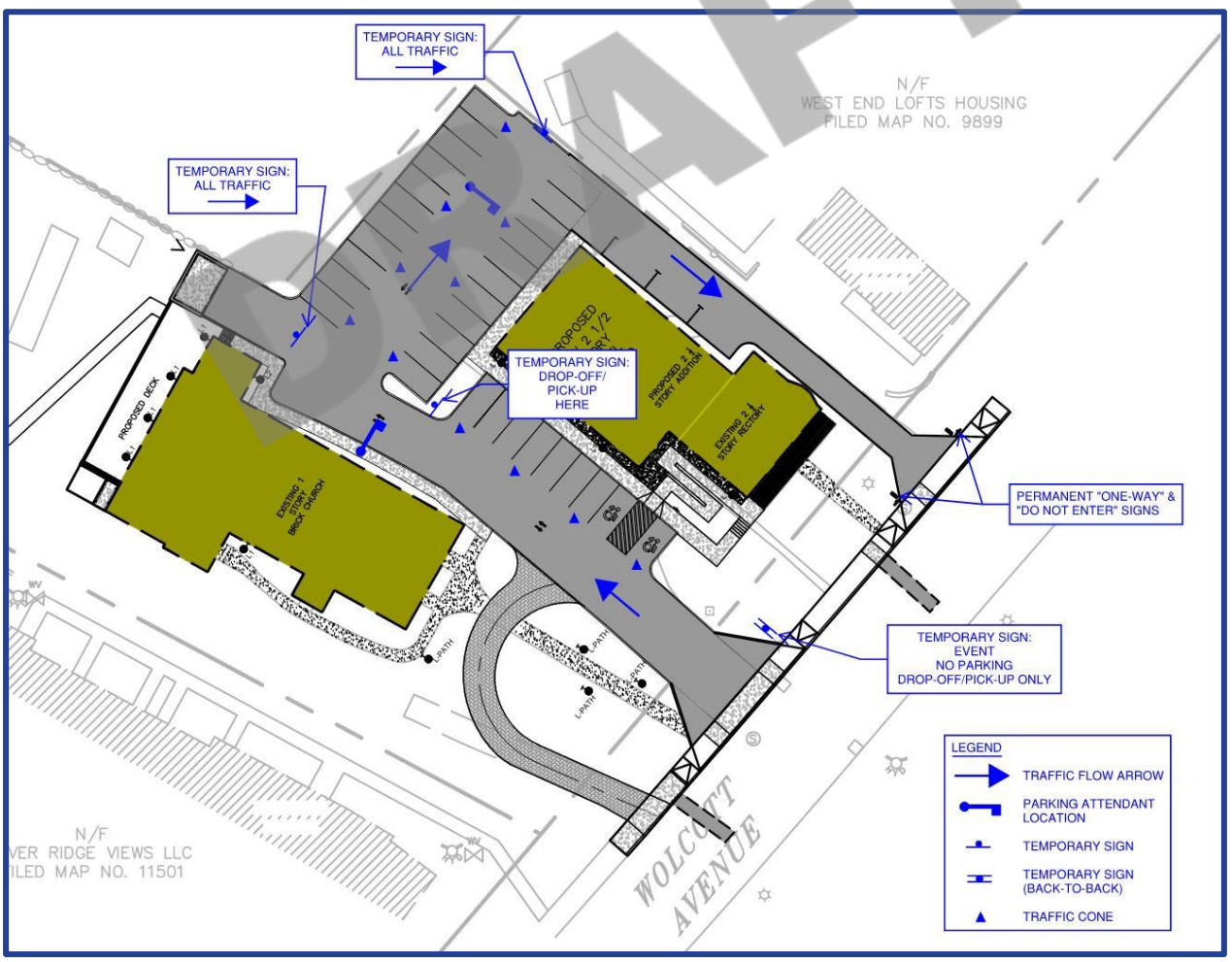
The purpose of this program is to allow input and coordination with other agencies, including the New York State Department of Transportation (NYSDOT) and the City of Beacon and allow for ongoing revisions to this plan upon implementation of the Project.

On-Site Parking and Circulation

The Project site will provide a total of 32 parking spaces. These spaces will primarily be designated for the use of the Hotel guests. Therefore, during Event Conditions all additional parking needs will need to be accommodated by off-site public parking in the area. It is anticipated that this will result in a need for drop-off/pick-up operations within the Site.

In order to manage these drop-off/pick-up operations the Applicant will provide staff within the on-site driveways and parking area to ensure efficient flow of traffic within the Site. Exhibit No. 1 below indicates the drop-off/pick-up location as well as locations of staff for traffic direction and anticipated directional signage.

Exhibit No. 1 - Event Site Circulation Plan



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As indicated previously, the Main (southerly) access driveway will be a two-way driveway. However, during events it is proposed that Site will function as under a one-way clockwise circulation pattern with all vehicles entering at the Main access driveway and exiting at the northerly exit only driveway. This is also indicated on the diagram below. Temporary signage is also proposed to indicate this flow pattern within the Site as indicated on Exhibit No. 1 above.

The on-site parking during events will be reserved for the exclusive use of hotel guests and employees of the Project only. These parking spaces will be coned off during events. In the event that hotel guests desire to enter or exit during the event times, they will be assisted by on-site staff with entering and exiting the parking spaces. Hotel guests will also be provided with printed parking passes or tags to signify their ability to park in these spaces. It is anticipated that majority, if not all, of the hotel guests will also be attendees of the events limiting amount of hotel related entries and exits during the event periods.

As discussed further below, event parking attendants will also be provided with information regarding parking areas to be utilized by event attendees.

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Off-Site Parking

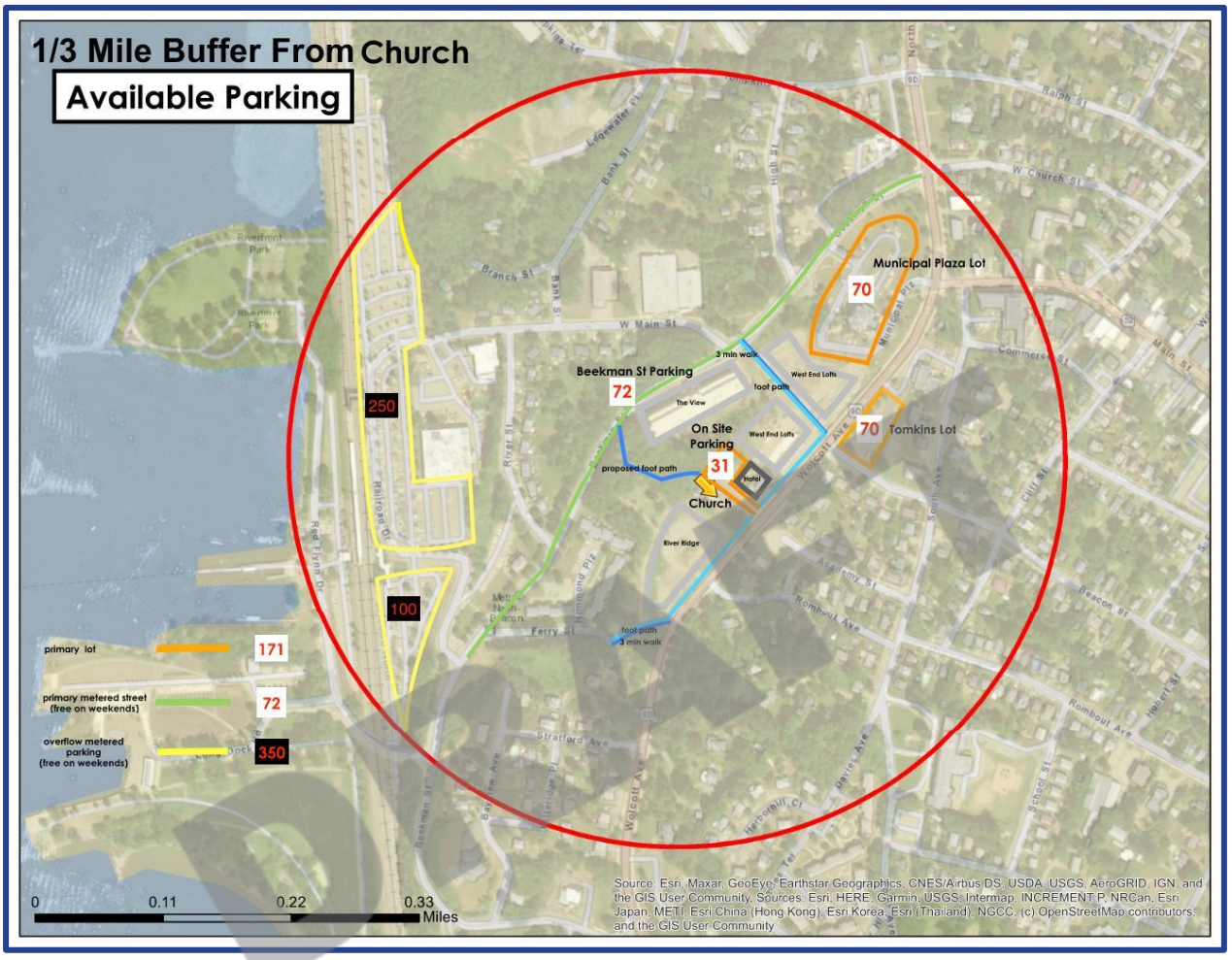
Off-Site Parking Locations

The Project proposes to provide 32 off-street parking spaces on the Site primarily for the use of Hotel guests and employees as required by the City of Beacon code for that use. All additional parking required for event attendees will be accommodated by off-site public parking in the vicinity of the Site. The closest public parking in the area include the below listed locations in order of proximity to the Project:

- **Tomkins Firehouse Parking Lot** – 68± Parking Spaces
- **City of Beacon Municipal Plaza (City Hall) Parking Lots** – 76 Parking Spaces
- **Beekman Street Metro North on-street parking between Railroad Drive and Wolcott Avenue** - 70± on-street metered parking spaces
  This parking is operated by LAZ parking, parking can be paid electronically via LAZgo Parking App.
- **Cross Lot** – 18 Parking Spaces (24 Hour Free Parking – City Lot)
- **Cliff Lot** – 19 Parking Spaces (24 Hour Free Parking – City Lot)
- **Beacon Center Lot** – 92 Parking Spaces (24 Hour Free Parking – City Lot)
- **Beacon Metro North Train Station Parking lots metered parking spaces**
  This parking is operated by LAZ parking, parking can be paid electronically via LAZgo Parking App.

Exhibit No. 2 below identifies the locations of parking within 1/3 of mile of the Project location.

Exhibit No. 2 – Off-Site Parking Locations



The Tomkins Firehouse and City of Beacon Municipal Plaza parking lots are within 500 and 1,000 ft. respectively of the Project Site making these the most accessible public parking for the Project. As previously noted, a walkway connection to Beekman Street is proposed to be provided through the Site as part of the Project with signage at Beekman Street directing patrons to the Site. This will provide more convenient access to the Beekman Street on-street metered parking spaces of which the nearest spaces will be within the 350 ft. of the Hotel and Café/Event spaces with the more remote spaces approximately 1,200 ft. from these buildings. This pathway will also provide more convenient access to parking available at the Beacon Metro north station, however these metered spaces are more remote, in excess of 2,000 ft. from the Project site, and less likely to be utilized. The Cross Street lot, Cliff Lot and Beacon Center Lot are more remove parking locations located within 1,500 – 1,900 ft. from the Project site.

In total there are approximately 343 total parking spaces within 2,000 ft. walking distance of the Project site which can be utilized to accommodate the parking needs of the Project under the event conditions. Each of the identified areas of public parking were observed during the anticipated peak

event periods to determine the parking availability in the area. These observations indicated that there is sufficient public parking within the Tomkins Lot, the Municipal Plaza Lot and along Beekman Street to accommodate the parking needs of the Project Event conditions.

Dissemination of Parking Information

Prophecy Theater, LLC as owners of the Project will be responsible to disseminate parking information to Event attendees to identify appropriate available parking areas. This will be accomplished in several ways.

The Project's website will provide parking information including a map indicating the preferred areas of public parking. These will include the Tompkins Lot, the Municipal Plaza Lot and the on-street metered parking along Beekman Street. This map will be similar to that provided in Exhibit 3 below. In addition, the map will indicate other more remote parking locations as identified above.

This map will also be distributed electronically to all event attendees for ticketed events. Distribution of this map for other non-ticketed events will be can be done via the Event representative or coordinator for those specific events.

On the day of the event the on-site parking attendants will be provided with copies of this map which can be provided to any attendees that may enter the Site for drop-off and/or looking for parking.

It should be noted that this map will provide no reference to other areas of on-street parking specifically those that may be located within residential neighborhoods near the Project.

Exhibit No. 3 - Preferred Parking Area Map

TO BE PROVIDED

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Dissemination of Public Transportation Information

Similar to the above, the Project owners will also disseminate and encourage the use of public transportation by event attendees in order to reduce the overall parking demand of the Project, as well as the Project traffic generation. This will include links to information on available metro-north train schedules, Duchess County bus schedules and any other relevant public transportation information to be provided through the Project's website. This information map will also be distributed electronically to all event attendees for ticketed events as well as for other non-ticketed events by the Event representative or coordinator for those events.

Shuttles

Events such as conferences or weddings may allow for the use of shuttle buses for attendees arriving from other area hotels. The use of shuttles will be strongly encouraged by the Project owners. Information on available area shuttle bus companies will be provided to event coordinators at the start of the planning process to assist in this effort. The use of shuttles for attendees arriving from other consolidated locations will reduce the overall parking needs for certain types of events.

Pedestrian and Bicycle Access

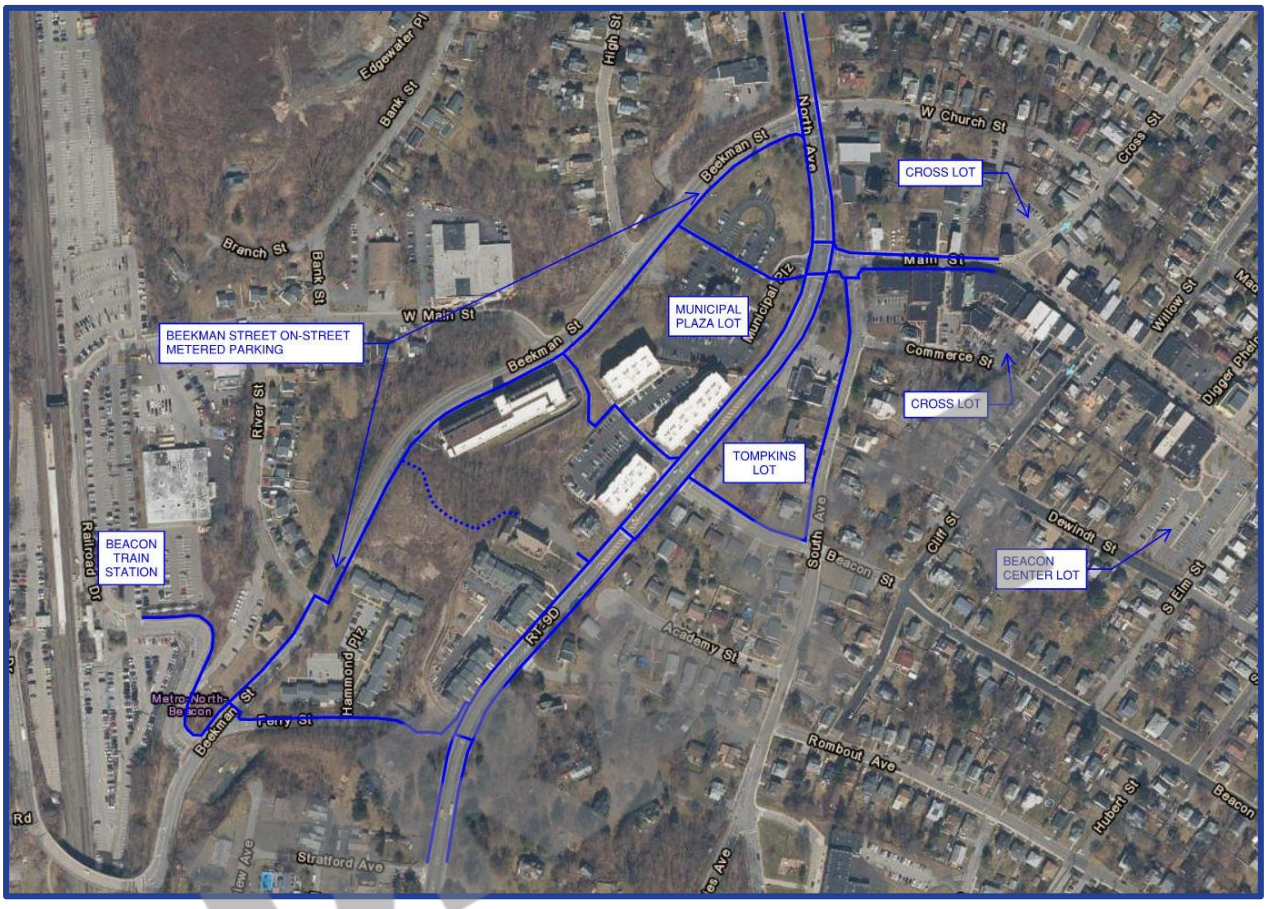
Access to the Project by pedestrians, including event attendees parking off-site, is provided in several manners. There are existing sidewalks along all area roadways surrounding the Project that can be utilized to access various parking areas or pedestrians arriving from other destinations. There are existing signalized crosswalks of Wolcott Avenue both at its signalized intersections with Beekman Street and Main Street providing signalized pedestrian access from the east side of Wolcott Avenue to the west side where the Project site is located. In addition, there are existing crosswalks crossing Wolcott Avenue that are supplemented with pedestrian activated Rectangular Rapid Flashing Beacon (RRFB) signs located at the northern property line of the Project site as well as at a location approximately 150 ft. south of Rombout Avenue at approximately the southern property line of the River Ridge property. Any patrons utilizing the public parking available at the Tompkins lot on the east side of Wolcott Avenue would be likely to use the RRFB crosswalk at the northern property line of the Project site to cross Wolcott Avenue. Similarly, any pedestrians coming from the Main Street area would be likely to utilize either the signalized pedestrian crossing at the Wolcott Avenue/Main Street intersection or the RRFB crosswalk at the northern property line to cross to the west side of the roadway.

Pedestrians arriving from the Beacon Train Station or utilizing parking along Beekman Street would also be provided several opportunities to access the Project site. There are existing public pedestrian pathway connections between Beekman Street and Wolcott Avenue through the River Ridge and West End Lofts developments that could be utilized. In addition to these pathways, the Project also proposes to provide a pedestrian pathway between Beekman Street and Wolcott Avenue for direct access to the Project Site. Signage is proposed to be provided at the connection of the on-site path with Beekman Street to direct patrons to the Site. Exhibit No. 4 below provides a map of the existing and future pedestrian accommodations in the vicinity of the Project that would be anticipated to be utilized by Event attendees.

Bicycle racks are also proposed to be provided on the Site for any event attendees that may arrive via bicycle.

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Exhibit No. 4 – Existing & Proposed Pedestrian Pathways



Ongoing Monitoring and Coordination

This Traffic & Parking Management Plan is meant to be a living document that can regularly be referred and updated by the operators of the Project. This document provides the basis for managing and directing traffic and parking for the anticipated Events to be held at the facility. This document may be updated and modified based on the future needs of the Project and in coordination with the City of Beacon to best serve the Project and the City as traffic and parking conditions in the vicinity of the Project may change over time.

Colliers Engineering & Design

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DRAFT

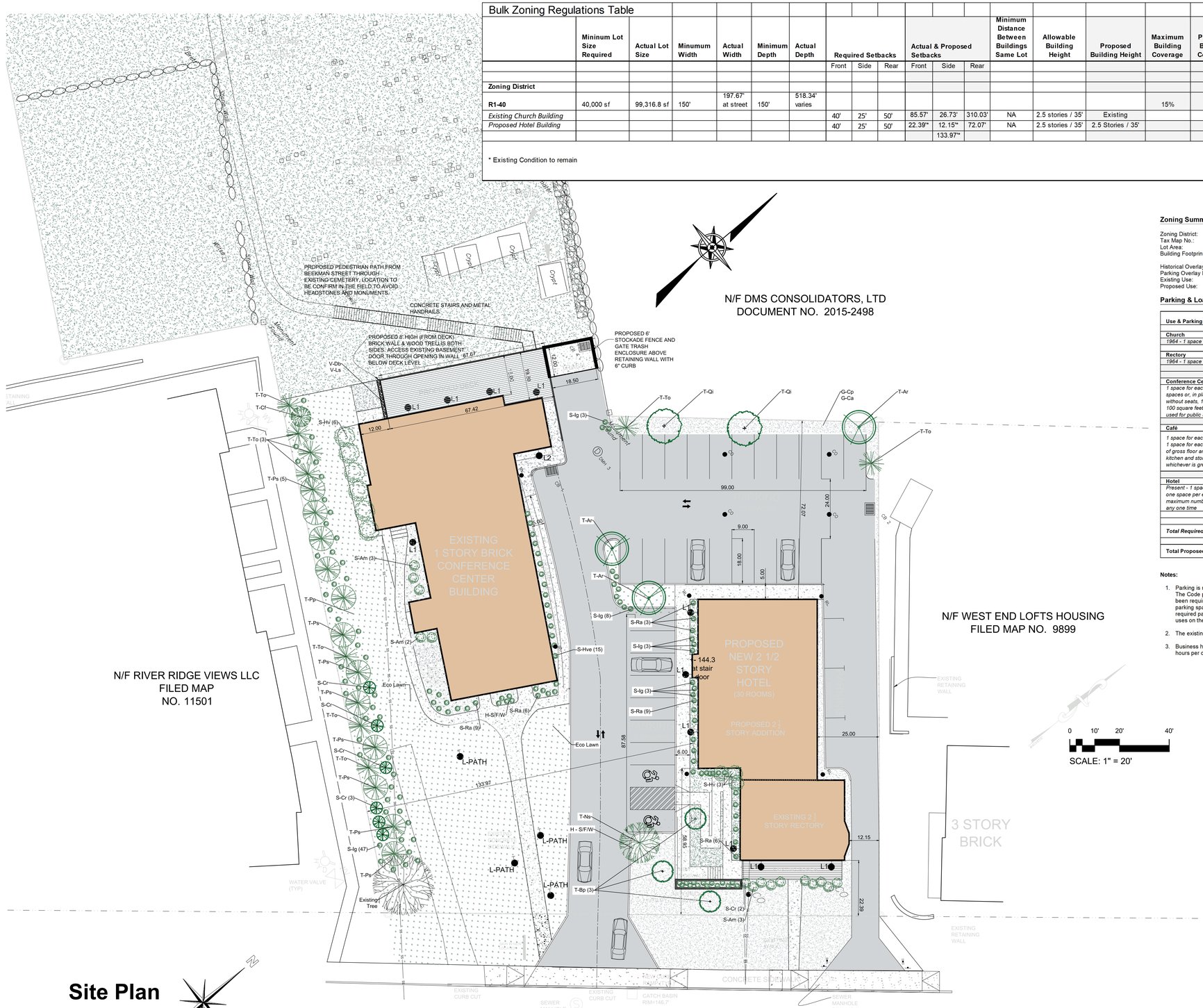
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Civil/Site • Traffic/Transportation • Governmental • Survey/Geospatial
Infrastructure • Geotechnical/Environmental • Telecommunications • Utilities/Energy

Bulk Zoning Regulations Table

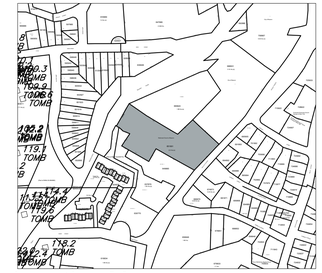
	Mininum Lot Size Required	Actual Lot Size	Minumum Width	Actual Width	Minimum Depth	Actual Depth	Required Setbacks			Actual & Proposed Setbacks			Minimum Distance Between Buildings Same Lot	Allowable Building Height	Proposed Building Height	Maximum Building Coverage	Proposed Building Coverage
							Front	Side	Rear	Front	Side	Rear					
Zoning District																	
R1-40	40,000 sf	99,316.8 sf	150'	197.67' at street	150'	518.34' varies										15%	1%
Existing Church Building							40'	25'	50'	85.57'	26.73'	310.03'	NA	2.5 stories / 35'	Existing		
Proposed Hotel Building							40'	25'	50'	22.39'*	12.15'*	72.07'	NA	2.5 stories / 35'	2.5 Stories / 35'		
											133.97'*						

* Existing Condition to remain



Site Plan

Scale: 1" = 20'



Location Map

Scale: 1" = 400'

Zoning Summary

Zoning District:	R1-40
Tax Map No.:	5954-26-651901
Lot Area:	2.28 Acres
Building Footprint:	10,279 square feet (existing church building + proposed hotel building)
Historical Overlay District:	Yes
Parking Overlay District:	Yes
Existing Use:	Church / Rectory
Proposed Use:	Hotel, Event Space accessory to the Hotel Use

Parking & Loading

Use & Parking Requirements	1964 Units	1964 Parking Requirement	Proposed Units	Current Parking Requirement
Church				
1964 - 1 space per 5 seats	336 occupants	68 parking spaces		
Rectory				
1964 - 1 space per dwelling unit	1 dwelling unit	1 parking space		
Conference Center				
1 space for each 4 seats or pew spaces or, in places or, in places without seats, 1 space for each 100 square feet of floor space used for public assembly			350 occupants	88 parking spaces
Café				
1 space for each 3 patron seats or 1 space for each 150 square feet of gross floor area, excluding kitchen and storage areas, whichever is greater			Non-simultaneous use with confernce center	0 parking spaces
Hotel				
Present - 1 space per room plus one space per employee for the maximum number of employees at any one time			30 rooms plus 1 employee	31 parking spaces
Total Required Parking Spaces		***69 Parking Spaces***		***119 Parking Spac***
Total Proposed Parking Spaces				**32 Parking Space (Note 1)**

Notes:

1. Parking is required per Beacon Zoning Code Section 223-26 (B.2): The building was in existence on April 20, 1964. The Code permits no more than 25% greater intensity than the use existing in 1964. 69 parking spaces would have been required in 1964 for the uses in existence at that time. The 1964 exception would allow for a total of 86 parking spaces. 119 parking spaces are required for the current proposed hotel and event space uses. The total required parking is subject to a determination from the Building Inspector regarding shared parking for 2 or multiple uses on the same lot.
2. The existing use in 1964 was a Church with 336 seats, plus the Rectory.
3. Business hours: 8am – 11pm Monday through Sunday inclusive for the Conference Center. The Hotel is open 24 hours per day.

REVISIONS:			
NO.	DATE	DESCRIPTION	BY
1	08/31/21	REVISED PER PLANNING BOARD COMMENTS	AJS
2	09/28/21	REVISED PER PLANNING BOARD COMMENTS	AJS
3	11/30/21	REVISED PER PLANNING BOARD COMMENTS	AJS
4	12/28/21	REVISED PER PLANNING BOARD COMMENTS	AJS
5	01/25/22	REVISED PER PLANNING BOARD COMMENTS	AJS
6	02/22/22	REVISED PER PLANNING BOARD COMMENTS	AJS

Index of Drawings

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Sheet 6 of 13	Conference Center Plans
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Sheet 8 of 13	Grading & Utility Plans
Sheet 9 of 13	Erosion and Sediment Control Plan
Sheet 10 of 13	Vehicle Tracking Plan
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Sheet 12 of 13	Stormwater Details
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Special Use Permit Application

Sheet 1 of 13 - Site Plan

Owner:
Prophecy Theater, LLC
36 South Brett Street
Beacon, NY 12508

Architect:
Aryeh Siegel, Architect
84 Mason Circle
Beacon, New York 12508

Site / Civil Engineer:
Hudson Land Design
174 Main Street
Beacon, New York 12508

Surveyor:
Robert Oswald
175 WALSH ROAD PO BOX 1
LAGRANGEVILLE, NEW YORK 12540

Landscape Designer:
Landscape Restorations
7 Creek Drive
Beacon, New York 12508

1113 Wolcott Avenue
Beacon, New York
Scale: 1" = 20'
June 29, 2021

REVISIONS:			
NO.	DATE	DESCRIPTION	BY
1	08/31/21	ADDED PER PLANNING BOARD COMMENTS	AJS
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Site Plan

Scale: 1" = 30'

Special Use Permit Application

Sheet 2 of 13 - Full Site Plan

Owner:
Prophecy Theater, LLC
36 South Brett Street
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Aryeh Siegel, Architect
84 Mason Circle
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