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Partner
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April 2, 2025

VIA EMAIL AND HAND DELIVERY
Mayor Michael F. Curley and
Village Board of Trustees
Village of Suffern
61 Washington Avenue
Suffern, NY 10901
Attn: Melissa Reimer, Village Clerk

Re: Proposed Rezoning – Transit Development District ("TDD")
Project Site: 37 Washington Avenue, Village of Suffern, New York

Dear Ms. Reimer:

Our office has been retained by Suffern WA, LLC, the petitioner in the above matter. Enclosed please find eight copies of a Fifth Amended Petition related to the above captioned project with the following supporting documents:

1) Fifth Amended Petition to rezone the above captioned Project Site within the TDD zoning district with proposed Village of Suffern local law;
2) Environmental Assessment Form (long), prepared by Colliers Engineering + Design, dated March 24, 2025;
3) Response to comment document, dated March 24, 2025; and
4) Traffic Impact Study, prepared by Colliers Engineering + Design, dated March 4, 2025.

Please note that this Fifth Amended Petition is submitted in response to the Village's desire to provide two parking spaces for each apartment unit and represents a dwelling unit count of 121 dwelling units. This submission is a continuation of the Village Board's review of this development project and requested rezoning, which will continue to be supplemented as the review process continues.

We respectfully requested to be placed on your next available Village Board agenda for review and comment. If you need additional copies or other materials, please let us know.

Thank you for your attention to and consideration of this matter. Please do not hesitate to contact our office with any questions.

Sincerely,

/s/ *Charles J. Gottlieb*

Charles J. Gottlieb

Enclosures

cc: Terry Rice, Esq., Village Attorney (*via email*)
Nathan Swiatycki (*via email*)
Moshe Botnick (*via email*)
Andrew Featherston, P.E. Colliers Engineering & Design (*via email*)
Justin Dates, Colliers Engineering and Design (*via email*)
Jake Raker, AIA, Mino Wasko, Architecture and Planners (*via email*)
Daniel Ruzow, Esq., Whiteman Osterman & Hanna, LLP (*via email*)

1

BOARD OF TRUSTEES: VILLAGE OF SUFFERN

Petition of

SUFFERN WA, LLC

for a change of zoning district to TDD of real property known as 37 Washington Avenue, Suffern, New York, and designated on the tax map of the Town of Ramapo as Section 54.36, Block 1, Lot 6.1

FIFTH AMENDED PETITION

TO THE HONORABLE BOARD OF TRUSTEES OF THE VILLAGE OF SUFFERN:

1. Your petitioner is the owner of premises known as 37 Washington Avenue, Suffern, New York, which premises are also designated on the tax map of the Town of Ramapo as Section 54.36, Block 1, Lot 6.1 (the "Site").
2. Your petitioner seeks to change the zoning district of the Site to the Village's existing Transit Development District (TDD). A prior petition relating to the Site and the proposed zone change was submitted in September 2021. This Fifth Amended Petition supersedes the original petition and the First, Second, Third and Fourth Amended Petitions, while the verifications and the owner affidavits originally submitted remain applicable.
3. The Site is located on the west side of Washington Avenue, approximately 230 feet north of Route 59, and just north of the Village's Community Center. It has frontage on Washington Avenue, Suffern Place, and an unnamed roadway connecting Suffern Place and Washington Avenue that borders the railroad tracks. It has a lot area of approximately 1.86 acres. A location map, which includes zoning designations, is annexed as **Exhibit A**.
4. The parcel is generally known as the Avon Nail Enamel Building. At one time, it was part of a larger tax lot that included the primary Avon research and development facility on the east side of Washington Avenue. The Site was divided from the larger parcel by a subdivision plat filed in 2019.

5. According to Local Law No. 6 of 2015, which enacted the TDD, “the purpose of the Transit Development District is to facilitate redevelopment of properties in proximity to the Village of Suffern train station.” Among the benefits to be accomplished were “to encourage a liveable, walkable community for residents in proximity to mass transit and supportive of existing commercial districts’ and to develop “new multi-family buildings” to be “located within easy walking distance to downtown shops and merchants.”
6. While TDD was initially limited to a single parcel within 500 feet of the train station, the benefits of TDD on the downtown business area have become obvious, as new shops and restaurants have been opened in response to that single TDD project on Orange Avenue, now known as “The Sheldon” apartment building.
7. We have therefore seen how TDD has been a catalyst for downtown growth.
8. According to the Transit Oriented Development Institute, components of a TOD (referred to as a TDD in the Suffern Zoning Code) include walkable design, a train station as a focus, a mix of uses (office, retail, residence) in close proximity to one another, and a "high density, walkable district within a 10-minute walking circle surrounding the train station".[1]
9. The Site is approximately 0.3 miles (walking distance) from the Suffern train station. It is approximately 900 feet (walking distance through municipal parking lot B) from the Hallett Place bus station, which is served by Hudson Link bus service. Direct commuter bus service to New York City is available at the intersection of Orange and Lafayette Avenues, approximately 0.3 miles away (walking distance along Lafayette Avenue).
10. The Site is also served by Transport of Rockland (TOR) local buses. TOR operates on a “flag” system, as opposed to standard stops only. TOR routes 59 and L3 transit along Lafayette Avenue, approximately 230 feet from the Site. TOR route 93 stops at the Hallett Place bus station.
11. The Site is within 500 feet of a State highway (Lafayette Avenue — NY Route 59). Accordingly, this fifth Amended Petition requires referral to the Rockland County

[1] www.tod.org, “Components of Transit Oriented Development”

Planning Department pursuant to sections 239-1 and -m of the N.Y. General Municipal Law.

12. Your petitioner believes that the Site is appropriate for the expansion of TDD. The Site is adjacent to the downtown business district, which boasts a mix of shops, restaurants, entertainment venues, and offices. From its Suffern Place frontage, it is a short walk to the Suffern train station, the Hallett Street bus station, and other public transportation.[2]
13. The Site is served by all municipal utilities including water, sanitary sewer, gas, electricity, and communications. It has frontage on two public streets: Washington Avenue and Suffern Place.
14. The Site benefits from its location just north of Lafayette Avenue, adjacent to the Suffern Community Center and to the eastern edge of the downtown business district.
15. Your petitioner proposes to develop the Site with a five-story multi-family building containing a parking garage and 121 apartments. The apartments will be a mix of one-, two-, and three-bedroom units. Proposed amenities for residents will include outdoor recreation decks, a swimming pool, club room, fitness and yoga centers (although these amenities may change based on site plan requirements and residents' needs and desires). *See* **Exhibit B** [Project Concept Plans].
16. The site has a lot area of 1.865 acres. The TDD district allows up to 65 units per acre. Your Petitioner has proposed 121 dwelling units at 64.7 dwelling units per acre of the Project Site.
17. The TDD district requires 1.5 parking spaces per unit, of which 1.25 spaces per unit must be on-site. The project will exceed the TDD parking requirement and provide two parking spaces per unit totaling 242 parking space, plus an additional 10 on-street parking spaces.
18. Your petitioner proposed to rezone the parcel within the TDD zoning district, which will require the adoption of a local law by the Village of Suffern Village Board, which will be provided for review by your petitioner once this petition is formally accepted as complete.

[2] Various websites indicate that a mile can be walked in 12-15 minutes. Therefore, the site is well within the “10 minute” walk radius of local and commuter public transportation stations.

19. To facilitate to the proposed rezoning of the Site, your Petitioner has annexed hereto as **Exhibit C** a proposed local law for consideration by the Village Board (the "Local Law"). The Local Law sets for the rational for proposing to amend the Village of Suffern Code to allow placement of the TDD zoning district on the Site, which is approximately 1,600 feet from the NJ Transit Suffern Station and closer to other transit options within the Village. The Local Law also provides the Village of Suffern Planning Board with the ability to permit off-street parking for the development on a separate lot within walking distance to the Site.

20. The Local Law and the proposed development on the Site satisfies the intent of the TDD as created by Local Law 6 of 2025 because the proposed development will:

    a. Incorporates transit oriented design principles that encourage a liveable, walkable community for residents in proximity to mass transit and supportive of existing commercial districts;

    b. Create a development of new multi-family buildings which will provide an additional housing resource in the Village. The additional population would be located within easy walking distance to downtown shops and merchants; and

    c. The development would be located within walking distance to a train station providing mass transit to and from connections to the New York City area and points north, along with other transit options;

    d. Revitalize former industrial property within the Village's downtown area to create a downtown core area that provides a livable space with amenities within walking distance.

WHEREFORE, your petitioner respectfully asks that the Site, known as 37 Washington Avenue, Suffern, New York, and designated on the tax map of the Town of Ramapo as Section 54.36, Block 1, Lot 6.1, be redistricted to the TDD district, and, if necessary, that the Comprehensive Plan of the Village be amended to accommodate the proposed redistricting.

[Signature on following page]

Dated: April 2, 2025

AFFIDAVIT OF CONSENT OF OWNER

STATE OF NEW JERSEY)
COUNTY OF OCEAN) ss.:

Moshe Botnick, being duly sworn, hereby deposes and says:

I am the Manager of Suffern WA, LLC, the owner in fee simple of premises located at: 37 Washington Avenue, Suffern, New York, and described in a certain deed of said premises recorded in the Rockland County Clerk's Office in as Instrument No. 2023-00019559.

Said premises have been in its possession since June 2023, and are known and designated on the Town of Ramapo Tax Map as Section: 54.36 Block: 1 Lot 6.1.

I am authorized by the by-laws of Suffern WA, LLC, to give the consent of the Company to the project described in the attached petition. I hereby authorize the within petition on the owner's behalf, and that the statements of fact contained in said application are true, and agree to be bound by the determination of the board.

Owner: Suffern WA, LLC
Mailing Address: 805 Third Avenue, 7th Floor, New York, NY 10022

SWORN to before me this
1 day of April 2025

Notary Public

BENZION WILLNER
Notary Public, State of New Jersey
My Commission Expires 4/16/2028

- If owner is a corporation, fill in the office held by deponent and name of corporation, and provide a list of all directors, officers and stockholders owning more than 5% of any class of stock.

BENZION WEINER
Notary Public, State of New Jersey
My Commission Expires 9/15/2022

SUFFERN WA, LLC

By: _____

Moshe Botnick, Manager

VERIFICATION

STATE OF NEW JERSEY)
) ss.:
COUNTY OF OCEAN)

MOSHE BOTNICK, being duly sworn, deposes and says:

I am the Manager of Suffern WA, LLC, a limited liability company, the petitioner herein. I have read the annexed petition, know the contents thereof, and the same are true to the best of my knowledge, except those matters therein which are stated to be alleged on information and belief, and as to those matters, I believe them to be true.

My belief, as to those matters therein not stated upon knowledge, is based upon information contained in the books and records of the company.

_____

Moshe Botnick

Sworn to before me this
1 day of April, 2025

_____

Notary Public

BENSION WILLNER
Notary Public, State of New Jersey
My Commission Expires 4/16/2028

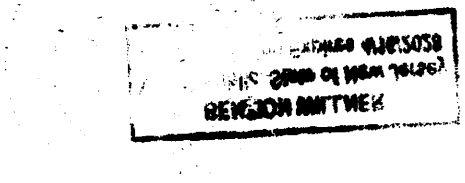
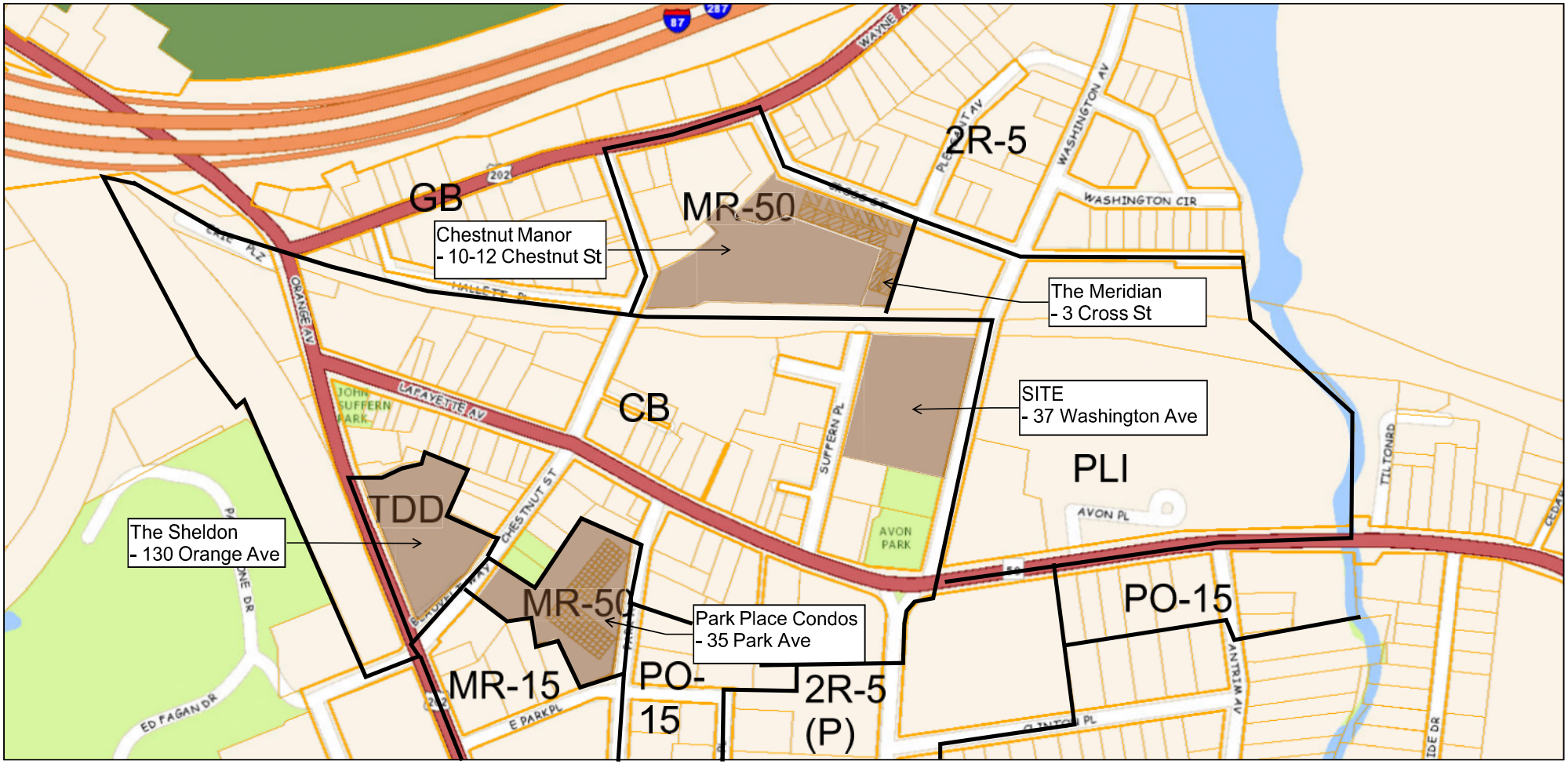


EXHIBIT A

Village of Suffern - Downtown Area



12/29/2022, 11:57:20 AM

Parcel

Parcel ROWs

1:2,800

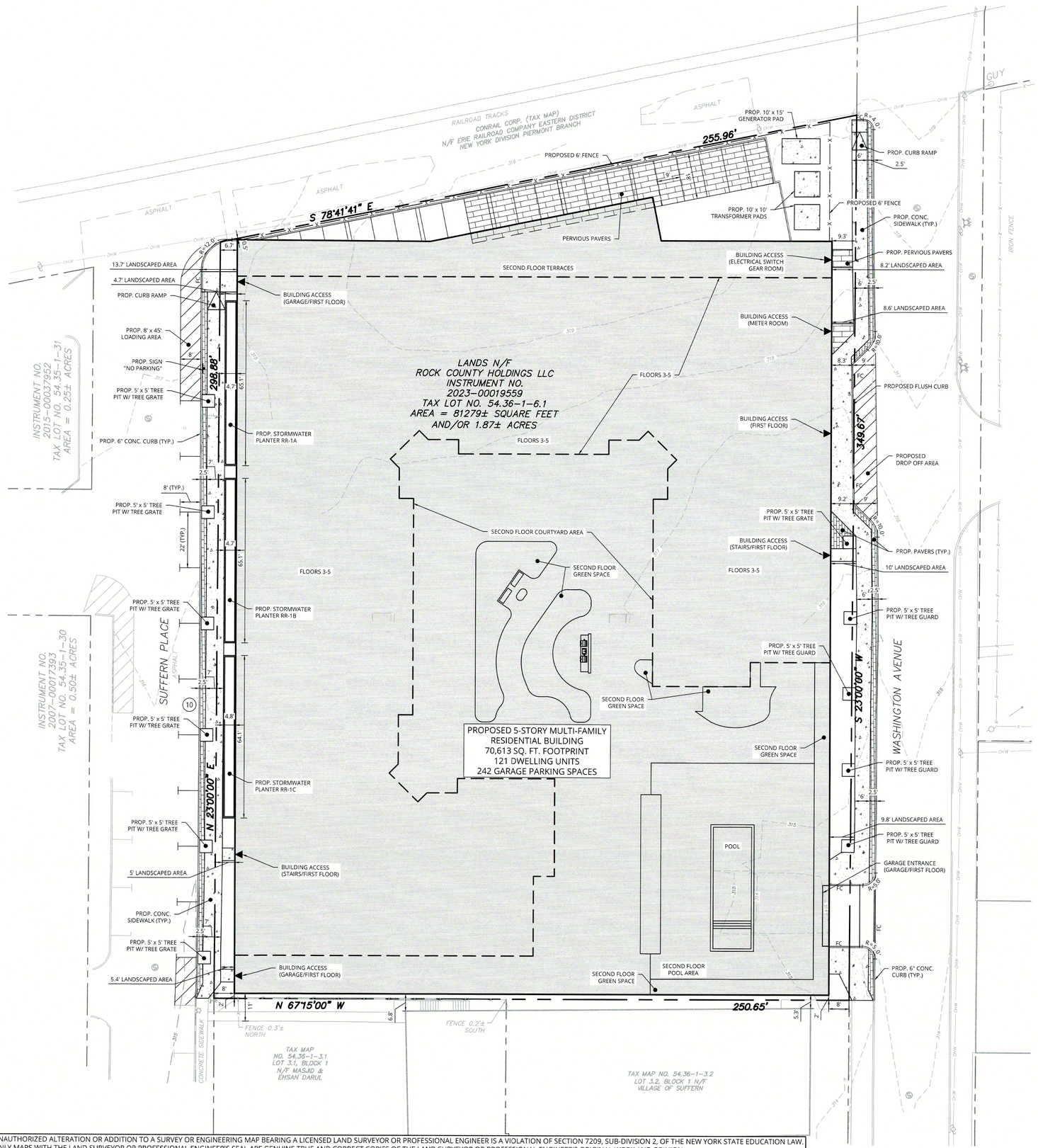
0 0.03 0.07 0.13 mi

0 0.05 0.1 0.2 km

EXHIBIT A

Web AppBuilder for ArcGIS

EXHIBIT B



UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY OR ENGINEERING MAP BEARING A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW. ONLY MAPS WITH THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S ORIGINAL WORK AND OPINION.

ZONING DISTRICT:

EXISTING: CB (CENTRAL BUSINESS)

PROPOSED: TDD (TRANSIT DEVELOPMENT DISTRICT)
USE PERMITTED BY RIGHT: HIGH RISE MULTIPLE DWELLINGS

TABLE OF BULK REQUIREMENTS

PROPOSED: TDD - TRANSIT DEVELOPMENT DISTRICT

MINIMUM	REQUIRED	PROVIDED	REMARKS
LOT AREA	40,000 SQ. FT.	81,279 SQ. FT.	OK
LOT WIDTH	100 FT.	298 FT.	OK
FRONT YARD SETBACK	N/A	6.7 FT.	OK
SIDE YARD SETBACK	N/A	0.5 FT.	OK
TOTAL SIDE YARD SETBACK	N/A	2.5 FT.	OK
REAR YARD SETBACK	N/A	N/A	OK
MAXIMUM			
DEVELOPMENT COVERAGE	90%	88.0%	OK
BUILDING HEIGHT	6 STORIES AND 75 FT.	5 STORIES AND 59.5 FT.	OK
DENSITY	65 DWELLING UNITS PER ACRE	64.7 DWELLING UNITS PER ACRE	OK

PARKING REQUIREMENTS:

MINIMUM REQUIRED:
1.50 SPACES PER DWELLING UNIT WHICH MAY INCLUDE AVAILABLE OFFSITE PARKING ACCEPTABLE TO THE PLANNING BOARD AS PART OF THE SITE PLAN REVIEW, BUT AT LEAST 1.25 SPACES PER DWELLING UNIT MUST BE ON-SITE.

121 DWELLING UNITS = 182 TOTAL SPACES (152 ON-SITE) REQUIRED

PROVIDED

ON-SITE PARKING PROVIDED = 242 SPACES
STREET PARKING PROVIDED = 10 SPACES
TOTAL PARKING PROVIDED = 252 SPACES

OWNER:

COUNTY OF ROCKLAND INDUSTRIAL DEVELOPMENT AGENCY
67 N. MAIN STREET
NEW CITY, NY 10956

APPLICANT:

SUFFERN WA LLC
308 WEST 94TH STREET, SUITE 231
NEW YORK, NY 10025

TAX LOTS:

54.36-1-6.1
AREA = 1.87 ACRES

SURVEY REFERENCE:

1. EXISTING SITE INFORMATION TAKEN FROM MAP ENTITLED "TOPOGRAPHIC SURVEY FOR EXTELL DEVELOPMENT" PREPARED BY COLLIERS ENGINEERING & DESIGN CT P.C., DATED 02/06/2025.
2. EXISTING SITE INFORMATION TAKEN FROM MAP ENTITLED "EXISTING BASE MAP FOR AVON PRODUCTS INC." PREPARED BY MASER CONSULTING, DATED 01/13/2003.

LEGEND

EXISTING		PROPOSED
	RIGHT OF WAY LINE/ PROPERTY LINE	
	EDGE OF PAVEMENT	
FACE / BACK	CURB	FACE / BACK
	FLUSH CURB	FC
	SIDEWALK	
X X	FENCES	X X
	TREELINE	
	ROADWAY SIGNS	
	STALL COUNT	10
	ADA ACCESSIBLE STALL	V

SCALE : 1" = 20'
SELECT LINEAR UNIT OF MEASURE

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

Colliers Engineering & Design
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FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION

Justin Eric Dates
NEW YORK REGISTERED LANDSCAPE ARCHITECT
LICENSE NUMBER: 001964-01
COLLIERS ENGINEERING & DESIGN CT, P.C.

PRELIMINARY SITE PLAN

FOR

SUFFERN WA LLC

SECTION 54.36
BLOCK 1
LOT 6.1

VILLAGE OF SUFFERN
ROCKLAND COUNTY
NEW YORK STATE

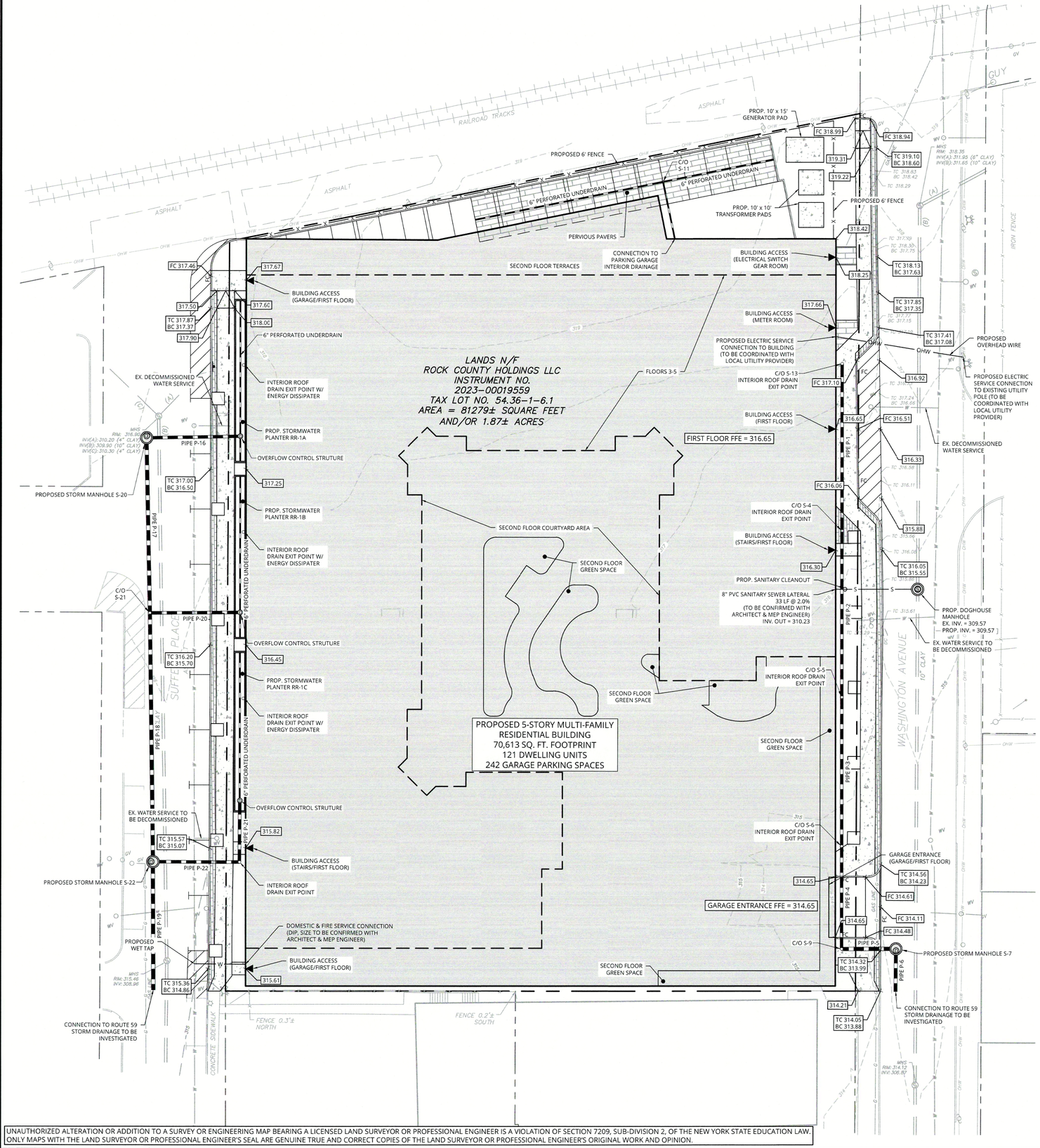
Colliers Engineering & Design
NEWBURGH
555 Hudson Valley Avenue
Suite 101
New Windsor, NY 12553
Phone: 845.564.4495
COLLIERS ENGINEERING & DESIGN, ARCHITECTURE, LANDSCAPE ARCHITECTURE, SURVEYING P.C. DOING BUSINESS AS MASER CONSULTING ENGINEERING & LAND SURVEYING

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	03/07/2025	KAS	JED
PROJECT NUMBER: 20000643D	DRAWING NAME: C-LAYT		

SHEET TITLE: DIMENSION PLAN

SHEET NUMBER: C-201

M:\Active_Projects\20000643D\Engineering\CAD\C-201 LAYOUT By: KYLE SHALLOW



UTILITY NOTES

1. EXISTING UTILITY INFORMATION SHOWN HEREON HAS BEEN COLLECTED FROM VARIOUS SOURCES AND IS NOT GUARANTEED AS TO ACCURACY OR COMPLETENESS. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO EXCAVATION. WHERE EXISTING UTILITIES ARE TO BE CROSSED BY PROPOSED CONSTRUCTIONS, TEST PITS SHALL BE DUG BY THE CONTRACTOR PRIOR TO CONSTRUCTION TO ASCERTAIN EXISTING INVERTS, MATERIALS, AND SIZES. TEST PIT INFORMATION SHALL BE GIVEN TO THE ENGINEER PRIOR TO CONSTRUCTION TO PERMIT ADJUSTMENTS AS REQUIRED TO AVOID CONFLICTS. THE CONTRACTOR SHALL NOTIFY THE UNDER SIGNED PROFESSIONAL IMMEDIATELY IF ANY FIELD CONDITIONS ENCOUNTERED DIFFER MATERIALLY FROM THOSE REPRESENTED HEREON. SUCH CONDITIONS COULD RENDER THE DESIGNS HEREON INAPPROPRIATE OR INEFFECTIVE.

2. UTILITY RELOCATIONS SHOWN HEREON, IF ANY, ARE FOR INFORMATIONAL PURPOSES ONLY AND MAY NOT REPRESENT ALL REQUIRED UTILITY RELOCATIONS. THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING AND/OR COORDINATING ALL REQUIRED UTILITY RELOCATIONS IN COOPERATION WITH THE RESPECTIVE UTILITY COMPANY/AUTHORITIES.

3. STORM SEWERS SHALL BE CLASS III (OR HIGHER IF NOTED) REINFORCED CONCRETE PIPE (RCP) WITH "O" RING GASKETS OR INTERNALLY PRELUBRICATED GASKET (TYLOX SUPERSEAL OR EQUIVALENT, ADS N-12 HIGH DENSITY POLYETHYLENE PIPE (HDPEP), AS NOTED ON THE PLAN, OR APPROVED EQUAL. PROPER PIPE COVERAGE SHALL BE MAINTAINED DURING ALL PHASES OF CONSTRUCTION. PIPE LENGTHS SHOWN HEREON ARE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.

4. WATER SERVICE TO BE PROVIDED FROM THE EXISTING WATER MAIN LINE IN SUFFERN PLACE, OWNED AND OPERATED BY THE VILLAGE OF SUFFERN WATER DEPARTMENT.

5. SANITARY SEWER SERVICE SHALL BE PROVIDED BY GRAVITY CONNECTION TO EXISTING SEWER MAIN IN WASHINGTON AVENUE, OWNED AND OPERATED BY THEVILLAGE OF SUFFERN SEWER DEPARTMENT. PIPE MATERIALS SHALL BE PVC SCH. 40, EXCEPT AS NOTED OTHERWISE ON THE PLANS. EXCEPT WHERE SHALLOWER DEPTHS ARE PERMITTED BY THE MUNICIPALITY OR UTILITY AUTHORITY, SEWER LINES, INCLUDING FORCE MAINS AND LATERALS, SHALL BE INSTALLED TO PROVIDE A MINIMUM 4 FEET OF COVER FROM THE TOP OF PIPE TO PROPOSED GRADE.

6. ALL WATER LINES SHOULD BE SEPARATED FROM SANITARY SEWER BY A MINIMUM HORIZONTAL DISTANCE OF 10 FEET. IF SUCH HORIZONTAL SEPARATION IS NOT POSSIBLE, THE WATER AND SEWER LINES SHALL BE IN SEPARATE TRENCHES WITH THE TOP OF THE SEWER LINE AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN OR WITH SUCH SEPARATION EXPRESSLY APPROVED BY THE DEPARTMENT OF HEALTH.

7. AT THE CROSSINGS OF SEWER LINES AND WATER MAINS, THE TOP OF THE SEWER LINES SHALL BE AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN (SEWER SERVICE LATERALS ARE NOT SUBJECT TO THIS REQUIREMENT). IF SUCH VERTICAL SEPARATION IS NOT POSSIBLE, THE WATER LINE SHALL BE ENCASED IN CONCRETE.

8. GAS, ELECTRIC, LIGHTING, CABLE TELEVISION, AND ELECTRICAL SERVICE PLANS, IF REQUIRED, SHALL BE PREPARED BY THE RESPECTIVE UTILITY COMPANIES THAT SERVICE THE AREA PRIOR TO SITE CONSTRUCTION AND SHALL BE INSTALLED PER ORDINANCE OR LOCAL UTILITY COMPANIES REQUIREMENTS.

9. TELEPHONE, ELECTRIC, AND GAS LINES WILL BE INSTALLED UNDERGROUND. CROSSINGS OF PROPOSED PAVEMENTS WILL BE INSTALLED PRIOR TO THE CONSTRUCTION OF PAVEMENT BASE COURSE.

LEGEND

EXISTING		PROPOSED
	RIGHT OF WAY LINE/ PROPERTY LINE	
	EDGE OF PAVEMENT	
FACE / BACK	CURB	FACE / BACK
	DEPRESSED CURB	
	SIDEWALK	
X X	FENCES	X X
	TREELINE	
	ROADWAY SIGNS	
	WETLAND LINE	
	MUNICIPAL BOUNDARY LINE	
	CATCH BASIN	
	DRAIN INLET	
D	STORM MANHOLE	D
S	SANITARY MANHOLE	S
	FLARED END SECTION	
	HEADWALL	
	HYDRANT	
	POLE MOUNTED LIGHT	
75 / 74	CONTOURS	75 / 74
× G 29.0	SPOT ELEVATION	× G 29.0
	DIRECTION OF OVERLAND FLOW	
× TC 29.0	TOP OF CURB ELEVATION	× TC 29.0
× BC 29.0	BOTTOM OF CURB ELEVATION	× BC 29.0
	TOP OF DEPRESSED CURB ELEVATION	× TDC 29.0
CATV	CABLE TV CONDUIT	CATV
W	WATER MAIN	W
G	GAS MAIN	G
T	TELEPHONE CONDUIT	T
E	ELECTRIC CONDUIT	E
	SANITARY PIPE	
	STORM PIPE	

20 0 20 40

SCALE : 1" = 20'
SELECT LINEAR UNIT OF MEASURE

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FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION

LICENSED LANDSCAPE ARCHITECT
JUSTIN E. DATES
001964
STATE OF NEW YORK
Justin Eric Dates
NEW YORK REGISTERED LANDSCAPE ARCHITECT
LICENSE NUMBER: 001964-01
COLLIERS ENGINEERING & DESIGN CT, P.C.

PRELIMINARY SITE PLAN

FOR

SUFFERN WA LLC

SECTION 54.36
BLOCK 1
LOT 6.1

VILLAGE OF SUFFERN
ROCKLAND COUNTY
NEW YORK STATE

Colliers Engineering & Design
NEWBURGH
555 Hudson Valley Avenue
Suite 101
New Windsor, NY 12553
Phone: 845.564.4495
COLLIERS ENGINEERING & DESIGN; ARCHITECTURE, LANDSCAPE ARCHITECTURE, SURVEYING CT, P.C. DOING BUSINESS AS MASER CONSULTING ENGINEERING & LAND SURVEYING

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	03/07/2025	KAS	JED

PROJECT NUMBER:	DRAWING NAME:
20000643D	C-GRAD

SHEET TITLE:
GRADING, DRAINAGE & UTILITY PLAN

SHEET NUMBER:
C-301

20250206643D\Engineering\Site Plans\C-GRAD.dwg,C-301 GRADING DRAINAGE & UTILITY By: KATE.SHALLOW

EXHIBIT C

Village of Suffern, Rockland County, NY
Local Law No. __ of 2025

A LOCAL LAW AMENDING CHAPTER 266 OF THE VILLAGE OF SUFFERN CODE TO EXPAND THE TRANSIT DEVELOPMENT DISTRICT ("TDD") AND AMEND THE VILLAGE OF SUFFERN ZONING MAP EXPANDING THE TDD

Be it enacted by the Town Board of the Town of Ramapo, Rockland County, New York, as follows:

SECTION 1: TITLE

This LOCAL LAW shall be known and cited as Local Law No. __ of 2025_, and entitled "A Local Law Amending Chapter 266 of the Village of Suffern Code to Expand the Transit Development District ("TDD") and Amend the Village of Suffern Zoning Map Expanding the TDD."

SECTION 2: LEGISLATIVE FINDINGS AND INTENT

A. The Village of Suffern ("Village") has been planning for the redevelopment of selected sections of its downtown that can take advantage of both the proximity to mass transit opportunities and downtown amenities. The Village of Suffern is served by mass transit railroad service which provides service to the New York City market and bus service to various locations within Rockland County.

B. The Village conducted a planning process that evaluated the redevelopment of portions of its downtown that were proximate to its existing train station. By Local Law 6 of 2015, the Village identified an area which is approximately 1.48 acres in size and is generally bounded by lots fronting on Chestnut Street/Blauvelt Place and Orange Avenue and is adjacent to the pedestrian tunnel serving the Suffern Train Station. By Local Law 6 of 2015, the Village Board created the Transit Development District ("TDD"), as described below, and amended the Village of Suffern Zoning Map ("Zoning Map") to place the above identified property within the TDD. To date, the abovementioned property is the only property within the TDD zoning district.

C. The objectives of the planning study included supporting Local Law 6 of 2015 included: to eliminate substandard conditions; to redevelop deteriorating and underutilized properties with residential and limited commercial uses designed to serve local area residents; to create new housing opportunities within the Village; to provide support for downtown retail and service establishments in the adjacent downtown through the development of new housing; to help support the use of and environment surrounding the NJ Transit Suffern Station; to enhance the aesthetics and overall image of the then subject property; to generate a positive trend in neighborhood real estate values; to improve public safety; and to help generate economic activity.

D. Given the success of the TDD zoning district and resulting development, the Village of Suffern has received a Petition to rezone certain lands in the Village of Suffern to the TDD zoning district. SUFFERN WA, LLC (the "Petitioner") has submitted a petition to the Village of Suffern Village Board of Trustees ("Village Board") for a change of zoning district to TDD of real property (the

"Petition") known as 37 Washington Avenue, Suffern, New York, and designated on the tax map of the Town of Ramapo as Section 54.36, Block 1, Lot 6.1 ("Project Site").

E. The Project Site is located on the west side of Washington Avenue, approximately 230 feet north of Route 59, and just north of the Village's Community Center. The Project Site has frontage on Washington Avenue, Suffern Place, and an unnamed roadway connecting Suffern Place and Washington Avenue that borders the railroad tracks. The Project Site has a lot area of approximately 1.86 acres. A survey of the lands to be rezoned TDD along with a metes and bounds description of the Project Site are annexed hereto as Exhibit ___.

F. The Project Site is generally known as the Avon Nail Enamel Building. At one time, it was part of a larger tax lot that included the primary Avon research and development facility on the east side of Washington Avenue. The Project Site was divided from the larger parcel by a subdivision plat filed in 2019.

G. The Project Site is approximately 0.3 miles (walking distance) from the NJ Transit Suffern Station. It is approximately 900 feet (walking distance through municipal parking lot B) from the Hallett Place bus station, which is served by Hudson Link bus service. Direct commuter bus service to New York City is available at the intersection of Orange and Lafayette Avenues, approximately 0.3 miles away (walking distance along Lafayette Avenue).

H. The Project Site is also served by Transport of Rockland ("TOR") local buses. TOR operates on a "flag" system, as opposed to standard stops only. TOR routes 59 and L3 transit along Lafayette Avenue, approximately 230 feet from the Site. TOR route 93 stops at the Hallett Place bus station.

I. The Project Site is located in the Village of Suffern downtown area, and is currently improved with an underutilized industrial space without any beneficial aesthetics to the downtown area.

J. According to the Transit Oriented Development Institute, components of a TOD (referred to as a TDD in the Suffern Zoning Code) include walkable design, a train station as a focus, a mix of uses (office, retail, residence) in close proximity to one another, and a "high density, walkable district within a 10-minute walking circle surrounding the train station".

K. The Project Site is appropriate for the expansion of TDD. The Site is adjacent to the downtown business district, which boasts a mix of shops, restaurants, entertainment venues, and offices. From its Suffern Place frontage, it is a short walk to the Suffern train station, the Hallett Street bus station, and other public transportation.

L. The Project Site is served by all municipal utilities including water, sanitary sewer, gas, electricity, and communications. It has frontage on two public streets: Washington Avenue and Suffern Place.

M. The Project Site benefits from its location just north of Lafayette Avenue, adjacent to the Suffern Community Center and to the eastern edge of the downtown business district.

N. The Petitioner has indicated its intent to develop the Project Site with a five-story multi-family building containing a parking garage and 121 apartments (the "Project"). The apartments will be a mix of one-, two-, and three-bedroom units. Proposed amenities for residents will include outdoor recreation decks, a swimming pool, club room, fitness and yoga centers (although these amenities may change based on site plan requirements and residents' needs and desires).

O. The Project Site has a lot area of 1.865 acres. The TDD district allows up to 65 units per acre. The Petitioner has proposed 121 dwelling units at 64.7 dwelling units per acre of the Project Site.

P. The TDD district requires 1.5 parking spaces per unit, of which 1.25 spaces per unit must be on-site. The project will exceed the TDD parking requirement and provide two parking spaces per unit totaling 242 parking space, plus an additional 10 on-street parking spaces.

Q. The Village is currently in need of transit oriented housing to address the current housing needs within the Village of Suffern and to revitalize the downtown area and facilitate a walkable community.

R. The housing proposed for the Project addresses the need for good rental housing for all citizens in close proximity to the Village's Downtown and mass transit station, promoting smart growth planning concepts. The need for quality rental housing in the Village is particularly acute, as there has been little or no new rental housing built in the Village, in many years.

S. The purpose of the TDD is to facilitate redevelopment of properties in proximity to the Village of Suffern train station. The objectives of the TDD are to provide guidance for redevelopment planning for eligible sites, which will result in or accomplish the following:

    1. The development of a community that incorporates transit oriented design principles that encourage a liveable, walkable community for residents in proximity to mass transit and supportive of existing commercial districts.

    2. The development of new multi-family buildings which will provide an additional housing resource in the Village. The additional population would be located within easy walking distance to downtown shops and merchants.

    3. The new development district would be located within approximately 1,600 feet of a train station providing mass transit to and from connections to the New York City area and points north; and

T. The Village Board recognizes that Local Law 6 of 2015 authorized placement of the TDD on a singular property within 500 feet of a train station providing mass transit to and from connections to the New York City area and points north. However, given the need for additional transit development within the Village of Suffern, this Local Law shall expand that proximity requirement to 1,600 feet and place the TDD district on the Project Site. The Village Board has determined that such placement within 1,600 of transit options will continue to allow residents to still access transit options with ease consistent with the intent of the TDD zoning district.

U. In [INSERT FUTURE DATE], after due consideration, the Village concluded the environmental review related to the adoption of this Local Law, the rezoning of the Project Site to the TDD zoning district, and the Project under the State Environmental Quality Review (SEQRA) laws and regulations of the State of New York, and

V. The Village Board hereby finds that the redevelopment of the Project Site, in the form proposed, will provide numerous benefits to the Village of Suffern, its residents, and its merchants as more fully set forth herein.

W. The Village Board hereby finds that the proposed location of the TDD zoning district is appropriate at the Project Site because it is within 1,600 feet of a train station providing mass transit to and from connections to New York City area and points north.

X. The proposed Project development on the Project Site will be required to comply with all procedural requirements, and area and bulk regulations applicable to the TDD zoning district.

SECTION 3: AMENDING VILLAGE OF SUFFERN CODE SECTION 266-38.1, PARKING REQUIREMENTS IN THE TDD DISTRICT

Village of Suffern Code Section 266-38.1 shall be amended to add the following provision:

C. The Planning Board may allow off-street parking to be located on any lot within walking distance from the lot where the proposed use is the be served. The Planning Board must find that such off site parking shall be within reasonable walking distance from the lot where the proposed use is the be served and adequate pedestrian accommodations are available or proposed.

SECTION 4: AMENDING VILLAGE OF SUFFERN CODE SECTION 266-7 AND THE "ZONING MAP, VILLAGE OF SUFFERN, NEW YORK"

The official "Zoning Map, Village of Suffern, New York" (the "Zoning Map"), duly established by Chapter 266, Article III, Section 7 of the Village of Suffern Town Code, is hereby amended to place the Transit Development District on property known as 37 Washington Avenue, Suffern, New York, and designated on the tax map of the Town of Ramapo as Section 54.36, Block 1, Lot 6.1 and further described by the enclosed survey prepared by [INSERT], dated [INSERT] and the enclosed metes and bounds description attached as Exhibit __hereto.

SECTION 5: SEVERABILITY

If any word, clause, sentence, paragraph, section or part of this local law or the application thereof shall be adjudged by any court of competent jurisdiction to be unconstitutional, illegal or invalid, such judgment shall not affect, impair or invalidate the remainder of this local law or the application thereof and shall be limited to the part directly involved in the controversy and adjudged invalid. The Town Board hereby declares that it would have enacted this local law or the remainder thereof if the invalidity of such provision or application had been apparent.

SECTION 6: EFFECTIVE DATE

This local law shall take effect immediately upon filing in the office of the New York State Secretary of State in accordance with the New York State Municipal Home Rule Law.

DATE: [INSERT]

2

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: 37 Washington Avenue		
Project Location (describe, and attach a general location map): 37 Washington Ave., west side of Washington Ave., south of the railroad, approximately 400' north of Lafayette Ave (Route 59)		
Brief Description of Proposed Action (include purpose or need): Suffern WA LLC. proposes the redevelopment of the former Avon Nail Enamel Building located at 37 Washington Avenue (Tax Lot #54.36-1-6.1) as a multi-family residential building. The development consists of a 5-story residential building comprised of 4 residential stories above a two level parking garage. The building has been designed to house 121 residential units made up of 48 - 1-bedroom, 65 - 2-bedroom and 8 - 3-bedroom units. 242 off street parking spaces (in the garage) are proposed for a ratio of 2.0 parking spaces per unit. 10, on-street parking spaces are also proposed on Suffern Place. The garage is accessed from Washington Avenue. Pedestrian access is provided via the ground floor entrance on Washington Ave. for accessing the lobby, leasing office, elevators and mail room. Sponsor seeks a change of zoning from CB to TDD.		
Name of Applicant/Sponsor: Suffern Wa LLC	Telephone: 646-218-4207 E-Mail: mbotnick@extell.com	
Address: 308 West 94th Street, Suite 231		
City/PO: New York	State: NY	Zip Code: 10025
Project Contact (if not same as sponsor; give name and title/role):	Telephone: E-Mail:	
Address:		
City/PO:	State:	Zip Code:
Property Owner (if not same as sponsor): County of Rockland Industrial Development Agency	Telephone: 845-977-3900 E-Mail:	
Address: 67 N. Main Street		
City/PO: New City	State: NY	Zip Code: 10956

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	Zone Change	Sept. 2022
b. City, Town or Village Planning Board or Commission ☑Yes ☐No	Site Plan	
c. City, Town or Village Zoning Board of Appeals ☐Yes ☑No		
d. Other local agencies ☑Yes ☐No	Suffern Water Dept (water connection); Suffern Dept of Public Works (sewer connection)	
e. County agencies ☑Yes ☐No	RC Health Dept (sewer and water connections), RC Planning Dept, RC Drainage Agency	
f. Regional agencies ☐Yes ☑No		
g. State agencies ☑Yes ☐No	NYSDEC: Stormwater SPDES	
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?
CB Central Business

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? TDD (Transit Development District)

C.4. Existing community services.

a. In what school district is the project site located? Suffern Central School District

b. What police or other public protection forces serve the project site?
Police Department - Village of Suffern, New York

c. Which fire protection and emergency medical services serve the project site?
Suffern Hook & Ladder Co #1, Fire protection. Spring Hill provides ambulance service

d. What parks serve the project site?
Village park at Washington Ave. and Rt 59, Harriman State 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)? Residential

b. a. Total acreage of the site of the proposed action? 1.87 acres
b. Total acreage to be physically disturbed? 2.05 acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 1.87 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: 24 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				121
At completion of all phases				121

g. Does the proposed action include new non-residential construction (including expansions)? ☐ Yes ☑ No

If Yes,

i. Total number of structures _____

ii. Dimensions (in feet) of largest proposed structure: _____ height; _____ width; and _____ length

iii. Approximate extent of building space to be heated or cooled: _____ 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: 22,265 gallons/day

ii. Will the proposed action obtain water from an existing public water supply? ☑ Yes ☐ No
If Yes:

- Name of district or service area: Village of Suffern
- Does the existing public water supply have capacity to serve the proposal? To be confirmed ☑ 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: N/A

vi. If water supply will be from wells (public or private), what is the maximum pumping capacity: N/A gallons/minute.

d. Will the proposed action generate liquid wastes? ☑ Yes ☐ No
If Yes:

i. Total anticipated liquid waste generation per day: 22,265 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

iii. Will the proposed action use any existing public wastewater treatment facilities? ☑ Yes ☐ No
If Yes:

- Name of wastewater treatment plant to be used: Suffern
- Name of district: Village of Suffern
- Does the existing wastewater treatment plant have capacity to serve the project? To be confirmed ☑ 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: _____

N/A

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 1.64 acres (impervious surface)

_____ Square feet or 1.87 acres (parcel size)

ii. Describe types of new point sources. Stormwater runoff from the building deck and roof. Proposed landscaping will reduce impervious surfaces vs. the existing conditions.

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)?

Gutter flow in Suffern Place and Washington Avenue

- If to surface waters, identify receiving water bodies or wetlands: N/A
- 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)

Delivery vehicles

ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers)

Power generation and stationary heating

iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation)

HVAC (heating/cooling)

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 _____ to _____.

ii. For commercial activities only, projected number of truck trips/day and type (e.g., semi trailers and dump trucks): N/A

iii. Parking spaces: Existing 25 Proposed 252 Net increase/decrease +227

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:
The project proposes to remove 4 curb cuts from Washington Ave., remove one curb cut from Suffern Place, & install 2 curb cuts on Washington Ave.

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: To be determined

ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other):
Local utility provider

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: 7 AM - 5 PM
- Saturday: _____
- Sunday: _____
- Holidays: _____

ii. During Operations:
- Monday - Friday: 24/7
- Saturday: 24/7
- Sunday: 24/7
- Holidays: 24/7

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:

Typical demolition and construction of the proposed building, excavation, framing, finishes for 24 months

ii. Will the proposed action remove existing natural barriers that could act as a noise barrier or screen? ☐ Yes ☑ No

Describe:

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:

Energy efficient LED lamps will be used. Exterior site lighting will be the minimum necessary for safety and security. Uplighting will be avoided. Light spill across lot lines will be minimized. Details will be developed during the review process.

ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen? ☐ Yes ☑ No

Describe:

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: _____ tons per _____ (unit of time)
- Operation : _____ tons per _____ (unit of time)

ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:

- Construction:
- Operation:

iii. Proposed disposal methods/facilities for solid waste generated on-site:

- Construction:
- Operation:

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): Village facility

ii. If mix of uses, generally describe:

Place of worship & Village facility to the south, Avon Global Innovation Center to the east, Suffern Fire Dept. to the north, Blue Chip medical products and Crown medical products to the west

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	1.86	1.64	-0.22
• Forested			
• Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)			
• Agricultural (includes active orchards, field, greenhouse etc.)			
• Surface water features (lakes, ponds, streams, rivers, etc.)			
• Wetlands (freshwater or tidal)			
• Non-vegetated (bare rock, earth or fill)			
• Other Describe: landscaped areas	0.01	0.23	+0.22

c. Is the project site presently used by members of the community for public recreation? ☐ Yes ☑ No

i. If Yes: explain: _____

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:

Kollel of Suffern, Rockland Child Development Services, Sacred Heart 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): 344045, C344077, C344085

iv. If yes to (i), (ii) or (iii) above, describe current status of site(s):

All remediation sites are not located on the subject property. 344045 is a State Superfund Program at 3 Pat Malone Drive in Suffern.
C344077 is a Brownfield Cleanup Program at 122 Orange Avenue in Suffern.
C344085 is a Brownfield Cleanup Program at 43-45 Lafayette Avenue in Suffern.

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 feet

b. Are there bedrock outcroppings on the project site? ☐ Yes ☑ No
If Yes, what proportion of the site is comprised of bedrock outcroppings? _____%

c. Predominant soil type(s) present on project site:

Ux - Urban Land	100 %
	%
	%

d. What is the average depth to the water table on the project site? Average: 12 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%:	100 % of site
☐	10-15%:	% of site
☐	15% or greater:	% 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: Principal Aquifer, Primary Aquifer, Sole Source Aquifer Names:Ramapo SSA

m. Identify the predominant wildlife species that occupy or use the project site:
Typical urban species

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):
Timber Rattlesnake

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: Eligible property:Lafayette Theatre, Eligible property:Sacred Heart of Jesus Roman Catholic Church, Eligible property... Savings & Loan

iii. Brief description of attributes on which listing is based: Eligible property:Campbell Building, Eligible property:Bank of New York/ Chase Bank, Washington Avenue Soldier's Monument and Triangle Several eligible as identified above.

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: Harriman State Park (1,800 ft.), Sterling Forest State Park (4.4 miles), Ringwood (NJ) State Park (2.6 miles)

ii. Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): State parks

iii. Distance between project and resource: Noted above 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

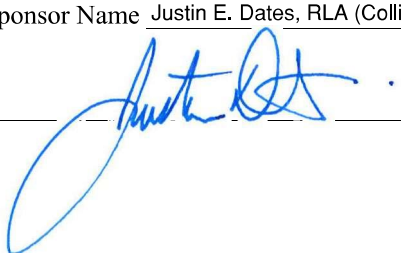
Attach any additional information which may be needed to clarify your project.

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.

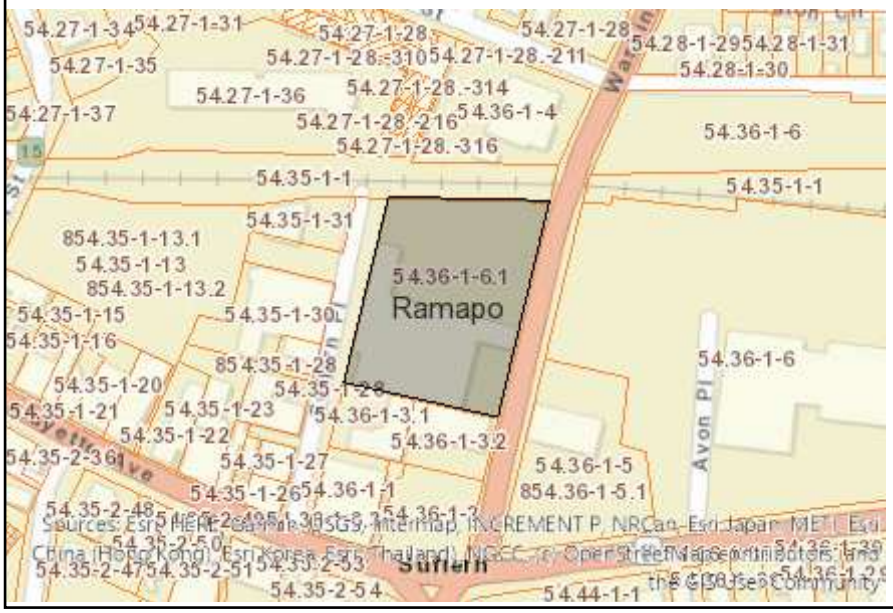
Applicant/Sponsor Name Justin E. Dates, RLA (Colliers Eng. & Design) Date March 24, 2025

Signature  Title Geographic Discipline Leader

PRINT FORM

EAF Mapper Summary Report

Wednesday, March 5, 2025 10:34 AM



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]	No
B.i.ii [Local Waterfront Revitalization Area]	No
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]	344045, C344077, C344085
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]	Yes
E.2.l. [Aquifer Names]	Principal Aquifer, Primary Aquifer, Sole Source Aquifer Names:Ramapo SSA
E.2.n. [Natural Communities]	No

E.2.o. [Endangered or Threatened Species]	Yes
E.2.o. [Endangered or Threatened Species - Name]	Timber Rattlesnake
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]	Eligible property:Lafayette Theatre, Eligible property:Sacred Heart of Jesus Roman Catholic Church, Eligible property:Savings & Loan, Eligible property:Campbell Building, Eligible property:Bank of New York/ Chase Bank, Washington Avenue Soldier's Monument and Triangle
E.3.f. [Archeological Sites]	No
E.3.i. [Designated River Corridor]	No

3

555 Hudson Valley Avenue Suite 101
New Windsor New York 12553
Main: 877 627 3772

Colliers
Engineering & Design

March 24, 2025

Richard Gandon, Chairman
Village of Suffern Planning Board
61 Washington Avenue
Suffern, NY 10901

Mayor Steven Alpert and Members of the Village Board
Village of Suffern Planning Board
61 Washington Avenue
Suffern, NY 10901

Extell Avon - 37 Washington Avenue
Tax Lot: 54.36-1-6
Village of Suffern, Rockland County, New York
CED Project No. 20000643C

Dear Members of the Suffern Planning Board and Village Board,

Below please find our responses to comments received from Nelson Pope Voorhis dated October 9, 2024. The comments have been repeated here for clarity:

<u>General and Procedural Comments:</u>

Comment 1: Petition. Note that Paragraph 11 makes reference to "this Second Amended Petition" – should be updated.

Response 1: **The revised Petition is noted as the 5th petition. The Applicant has provided an amended petition with this submission, which is a continuation of the previous application and therefore all prior owner affidavits and verification pages previously submitted remain effective and have been submitted herein.**

Comment 2: TDD. The creation of the TDD, as per Local Law 5 of 2016, was specific to a 1.48 acre-property and which was identified as per the Downtown Suffern Orange Avenue Designation Study. It seems to be a Petition specific to Orange Avenue Associates LLC. It is unclear whether this proposed rezoning can rely upon that local law as a basis for the rezoning. We raise the question whether another study is needed to justify rezoning the Avon site. Importantly, that local law states: "*Further, the Village Board hereby finds that the proposed location of the Transit Development* ***District is only appropriate at the location proposed*** *as it is within 500 feet of a train station providing mass transit to and from connection to New York City area and point north*" [emphasis added]. We question whether a new local law would be required to broaden the original intent of the TDD. The location of future housing was to be addressed as part of a village-wide planning and zoning effort, but this has not been completed.

Response 2: **Local Law 6 of 2015 (the "TDD Law") created the TDD zoning district to be placed on a singular property that is within 500 feet of the train station. The legislative intent of the TDD Law finds that the goals of the TDD district and related development include:**

1) **To redevelop deteriorating and underutilized properties with residential and limited commercial uses designed to serve local area residents;**
2) **To create new housing opportunities within the Village;**
3) **To provide support for downtown retail and service establishments in the adjacent downtown through the development of new housing;**
4) **To help support the use of and environment surrounding the NJ Transit Suffem Station;**
5) **To enhance the aesthetics and overall image of the Project Area;**
6) **To generate a positive trend in neighborhood real estate values;**
7) **To improve public safety; and to help generate economic activity,**

Further, the TDD Law provides that the purpose of the TDD district is to:

1) **The development of a community that incorporates transit oriented design principles that encourage a liveable, walkable community for residents in proximity to mass transit and supportive of existing commercial districts.**
2) **The development of new multi-family buildings which will provide an additional housing resource in the Village. The additional population would be located within easy walking distance to downtown shops and merchants; and**
3) **The new development district would be located within 500 feet of a train station providing mass transit to and from connections to the New York City area and points north.**

While at the time the TDD Law was enacted the Village Board only considered a singular property to be rezoned within the TDD (500 feet from the Project

Site), the TDD Law references the ability of creating development that is within easy walking distance to merchants, shops and transit options.

Since 2015, and as demonstrated by the 5th Amended Petition, it has become apparent that the legislative intent and purpose of the TDD Law will be accomplished by designating additional properties within the TDD zoning district for residential development that may be more than 500 feet from the train station but still within easy walking distance to downtown amenities, including the train station. The Project Site proposed to be redeveloped herein is approximately 1,500 feet from the train station, which is well under a 10-minute walk to the train station and is only 900 feet from available bus station options.

Accordingly, the Project complies with the legislative intent and purpose of the TDD Law. To effectuate the placement of the TDD over the Project Site, the Village Board will be required to adopt a new local law applicable to only the Project Site, which would allow for placement of the TDD district over the Project Site. The petitioner will supply a proposed local law to rezone the Project Site within the TDD district once the Village Board has recommended that the Project Site is suitable for such rezoning. The proposed local law to rezone the Project Site TDD, will provide the required planning support to ensure that the rezoning is in accordance with the intent and purpose of the TDD district. It is through that review and approval process that the Village Board would set forth its intent to expand the TDD district opportunities further than 500 feet from the train station to the Project Site. The TDD placement process, as evidenced by the TDD Local Law, appears to be done on a case by case basis.

Comment 3: As per Section 266-6 of the zoning chapter, the TDD is a zone which permits "(high-rise multiple family residences at a maximum density of 65 dwelling units per acre which may include commercial component on first floor). The project proposes 106 dwelling units, and the Applicant indicates the size of the lot is 1.86 acres, which would be 56.9 dwelling units. The density appears to comply.

Response 3: Proposed project density of 121 dwelling units complies with the TDD zone.

<u>Submission Comments:</u>

Comment 1: In order to avoid segmentation, the applicant will need to submit a site plan application and full site and SEQR analysis for review. We are in receipt of architectural designs but not a full site plan. This comment not addressed.

Response 1: **In addition to an updated architectural design package, the Applicant has provided a revised Long Form EAF – Part 1 and Preliminary Site Plans for the proposed 121-unit project.**

Comment 2: A bulk table should be included to determine compliance with other aspects of the zoning chapter. Please include.

Response 2: **A bulk zoning table for the TDD zoning requirements has been included on the attached Dimension Plan (C-201).**

Comment 3: Elevations of the 4 sides of the building should be submitted, especially to review what is proposed at the ground level along the street frontages.

Response 3: **Sheets A-07 & A-08 with the architectural design package include rendered building elevations as requested.**

Concept Plan:

Comment 1: Absent a survey and/or site plan, it cannot be determined if the project, especially its parking and building footprint, is accurately shown vis-a-vis the lot lines. The survey metes and bounds from the Alta survey should be evident on the concept plan.

Response 1: **The Preliminary Site Plans provided with this updated submission utilize a boundary & topographic survey prepared by Colliers Engineering & Design as the basemap for the plans.**

Comment 2: Please indicate whether the plan meets the 90 percent development coverage requirement.

Response 2: **A bulk zoning table for the TDD zoning requirements, including project development coverage is provided on the Dimension Plan (C-201). The proposed development coverage is 87.8% and complies with zoning.**

Comment 3: Is the proposed sidewalk along Suffern Place partially on the project site at present? Or is it proposed to be reconstructed partially on the project site? The same question is applicable to Washington Avenue. Will the slips of land be deeded to the Village, or an agreement established?

Response 3: **Based on the project Survey the existing sidewalks are in the Village R.O.W. for Washington Avenue & Suffern Place. The majority of the reconstructed sidewalks on both Streets are also proposed to be within the R.O.W. Some portions do extend into the project site. Dedications and or easements agreements shall be discussed with the Village to accomplish these sidewalks and to facilitate the proposed pedestrian friendly and walkable development in compliance with the TDD zone purpose. Such dedications or easement agreements will be a condition of any approval, as the Village sees fit.**

Comment 4: Please indicate how much space is proposed between the community center building and the southerly wall of the building.

Response 4: Based on the survey, the closest, existing distance between the community center to the existing building on the project site is 4-feet. The closest distance from the proposed building to the community center is 5-feet.

Comment 5: Parking spaces, in places, are slightly short of 18 feet in length. Also, parking standards indicate the minimum dimension in the TDD is 18 feet – the TDD does not appear to permit compact parking. There are 45 parking spaces that may require a variance.

Response 5: All parking spaces in the revised design are now 9'x18'.

Comment 6: Drive aisles are to be a minimum of 24 feet – the drive aisle between the compact spaces is 22 feet. This may necessitate a variance.

Response 6: All drive aisles in the revised design are now 24-feet.

Existing roadway widths for Washington Avenue (±29.5 – 32 feet) and Suffern Place (±18 feet) have been maintained in the proposed condition.

Comment 7: We previously raised the issue of the access point into the garage and its proximity to the Washington Avenue/Lafayette Avenue intersection. This needs to be examined as part of a traffic impact analysis.

Response 7: The Traffic Impact Study for the project & included within this updated submission reviewed the proposed site driveway on Washington Avenue. It concluded that the proposed Site Access will intersect at a "T" type intersection with Washington Ave. and is a stop-sign controlled intersection. This access is also more than 200' of Lafayette Avenue (NYS Route 59). Further, capacity analysis conducted utilizing the Year 2027 Build Traffic Volumes indicates that the proposed site driveway is proposed to operate at a Level of Service "A".

Comment 8: We question the visibility of the space which adjoins the doors to the trash compactor. This should not be used as a parking space due to the need to get access.

Response 8: No parking spaces are proposed in front of the access door to the trash room. This on-street area has been striped & includes 'No Parking' signage. Refer to the attached Dimension Plan (C-201).

Comment 9: For the second floor, we count 22 apartments, not 25 as indicated in the totals row of the table on the same page.

Response 9: **Please refer to Sheet A-03 of the Architectural Plan set, this shows 25 units on the second floor.**

Comment 10: According to the plans, the latest is the same for floors 3 through 5. There are 28 apartments per floor – the table indicates the 3rd and 4th floor have 30 apartments. The total, 106 apartment is accurate, based on the units shown on the plan. The Building Unit Calculations table need to be revised.

Response 10: **Please refer to the Architectural Plan set within this submission for the updated unit counts per floor & unit table.**

Comment 11: At some point, floor plans will need to be submitted to confirm the bedroom counts.

Response 11: **Unit floor plans are provided in the revised Architectural Plan Set.**

Comment 12: A rendering of the building has not been submitted at this time. It is unclear whether it has changed.

Response 12: **Please refer to the Architectural Plan set within this submission for building renderings.**

Comment 13: In future submissions, it would be useful to identify the proposed building's location relative to the adjoining buildings to the south.

Response 13: **Refer to the above Response #4.**

Comment 14: The Board should discuss whether the narrow planting strip along the building is sufficient.

Response 14: **The plans propose planting areas of ±5-feet along the Suffern Place frontage and 9-10 feet along the Washington Avenue frontage. Street tree plantings are also proposed along both frontages.**

<u>SEQR – An updated SEQR EAF was not included as part of this submission.</u>

Comment 1: Classification of action. We believe a Notice of Intent was already circulated on March 6, 2022, to the various involved and interested agencies. There being no objection, the Village Board serves as Lead Agency. The action is an Unlisted Action. We are not in receipt of any agency responses other than the Rockland County Drainage Agency – were any received?

Response 1: **We have no other agency responses other that from the Rockland County Drainage Agency. The prior circulation and designation of the Village Board as the SEQRA lead agency remains effective.**

Comment 2: Applicant should conduct an analysis on the capacity of Suffern to support the water and wastewater capacities. This comment has not been addressed.

Response 2: **The Applicant will request 'will service' letters from the Village of Suffern for the proposed water and sewer flows for the project.**

Comment 3: Traffic analysis should be conducted to predict the increase in traffic due to the project. This comment has not been addressed at this time.

Response 3: **This updated submission includes a Traffic Impact Study for the proposed 121-unit development. Based on the study, similar Levels of Service will be experienced at the Study Area Intersections under future No-Build and future Build Conditions with the proposed development. Thus, the proposed development is not expected to significantly affect the area roadways.**

Comment 4: The FEAF should answer whether there will be an additional demand for energy? To be updated.

Response 4: **This question in the revised EAF has been answered.**

Comment 5: Although there has never been a reported spill on site, the presence of the previous Avon Nail Enamel Building could pose some concern regarding any chemicals on site. A Phase I ESA was submitted, dated August 2021. It appears there are some elements that must still be completed.

Response 5: **Based on the Applicant's review, the existing Phase I ESA does not require further investigation. To the extent any are required by the Village Board in connection with their review, the Applicant will address in the future.**

Comment 6: As per the Applicant, a geotechnical investigation will be submitted.

Response 6: **Geotechnical investigation will be provided to the Board in a future submission.**

If you have any questions regarding the above project responses, please feel free to call me at (845) 875-4948. We look forward to the continued discussions with the Board on this project at the next available meeting.

Sincerely,

Colliers Engineering & Design, Architecture, Landscape Architecture, Surveying, CT P.C.



Andrew Fetherston, P.E., CFM, CPESC, CPSWQ
Regional Discipline Leader

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PRELIMINARY AND FINAL SITE PLAN SUBMISSION

WASHINGTON AVENUE

PROPOSED XXX
BLOCK XXX, LOT X.XX
VILLAGE OF SUFFERN, ROCKLAND COUNTY, NEW YORK



CONCEPT PERSPECTIVE

PROJECT UNIT MIX:

TOTAL PROJECT

1 BEDROOM:	48	40.0%
2 BEDROOM:	65	53.5%
3 BEDROOM:	8	6.5%
TOTAL:	**121**	

PROJECT DATA

LOBBY/LEASING	3,240 s.f.
AMENITY	6,768 s.f.



LOCATION MAP
NTS

PROJECT DATA

BLOCK / LOT:	BLOCK XXX, LOT X.XX
ZONING DISTRICT:	XXX
LOT AREA:	81,280 SF (1.87 ACRES)
BUILDING HEIGHT:	5 STORIES
BUILDING FOOTPRINT:	70,614 SF
RESI FLOOR AREA:	157,204 SF
DWELLING UNITS:	121 DU
GARAGE PARKING:	242 SPACES

SHEET INDEX

C-01 COVER SHEET
A-01 BASEMENT GARAGE PLAN
A-02 GROUND FLOOR PLAN
A-03 SECOND FLOOR PLAN
A-04 THIRD to FIFTH FLOOR PLAN
A-05 TYPICAL UNIT PLANS
A-06 BUILDING SECTIONS
A-07 ELEVATIONS
A-08 ELEVATIONS
A-09 MATERIALS BOARD
A-10 CONCEPT PERSPECTIVE

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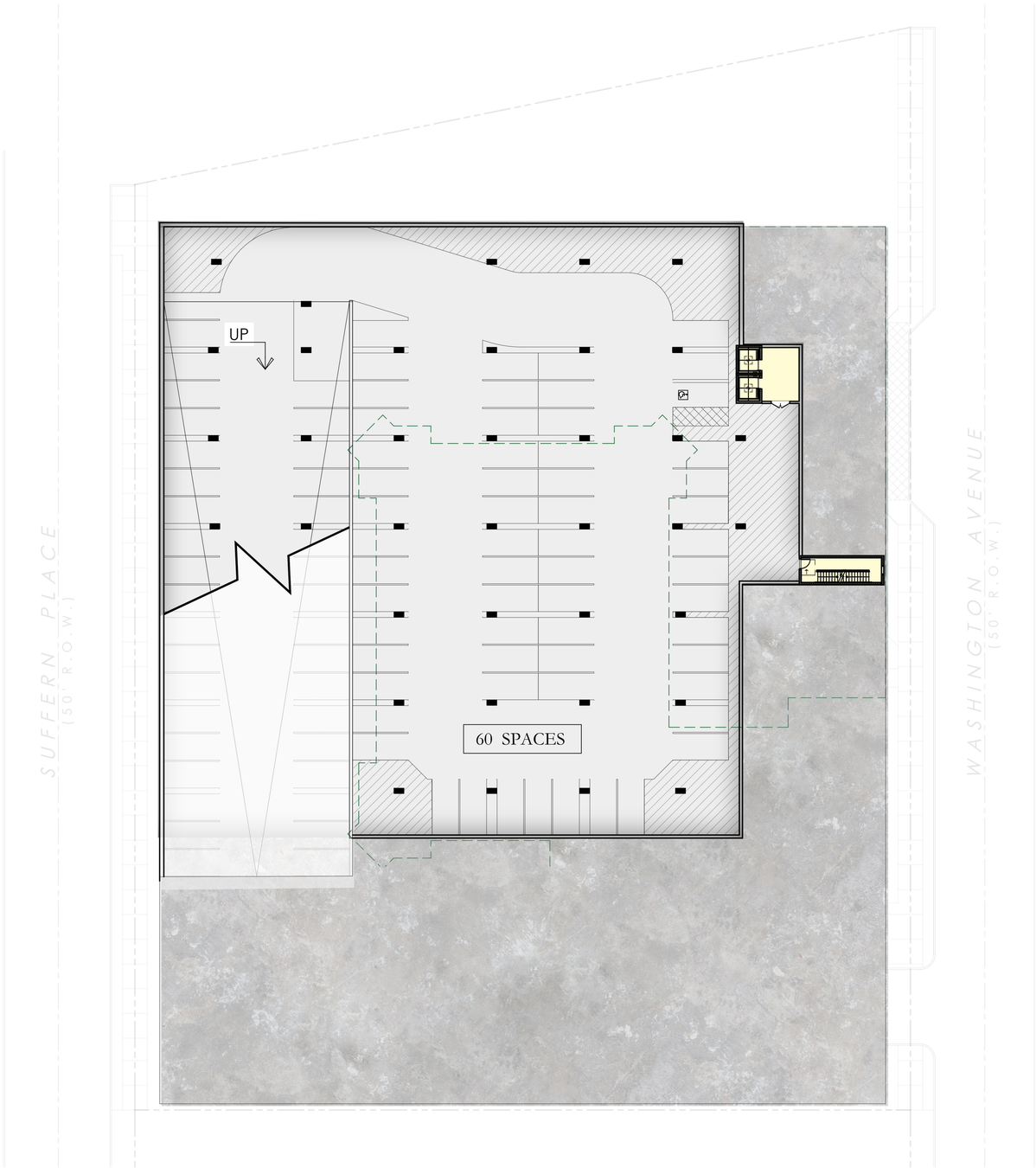
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COVER SHEET

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BASEMENT GARAGE PLAN
SCALE: 1" = 20'

PARKING:

TOTAL PARKING:	242 SP
BASEMENT:	60 SP
GROUND LEVEL:	182 SP

SITE NOTES:

1. REFER TO CIVIL DRAWINGS FOR ALL UNDERGROUND UTILITY LOCATIONS, SIZES AND DETAILING.

2. REFER TO CIVIL DRAWINGS FOR ALL STORM WATER RUNOFF AND RETENTION INFORMATION.

3. REFER TO LANDSCAPE ARCHITECTS DRAWINGS FOR SITE DETAILS, CONDITIONS, AND LANDSCAPING DETAILS.

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BUILDING PLAN

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GROUND FLOOR PLAN
SCALE: 1" = 20'

PARKING:

TOTAL PARKING:	242 SP
BASEMENT:	60 SP
GROUND LEVEL:	182 SP

SITE NOTES:

1. REFER TO CIVIL DRAWINGS FOR ALL UNDERGROUND UTILITY LOCATIONS, SIZES AND DETAILING.

2. REFER TO CIVIL DRAWINGS FOR ALL STORM WATER RUNOFF AND RETENTION INFORMATION.

3. REFER TO LANDSCAPE ARCHITECTS DRAWINGS FOR SITE DETAILS, CONDITIONS, AND LANDSCAPING DETAILS.

REFUSE/RECYCLING:

COMPACTOR IS HYDRAULICALLY OPERATED EXTRUDER-TYPE UNIT. SOLID WASTE WILL BE DELIVERED TO UNIT VIA MULTI-STORY TRASH CHUTE WITH OPENINGS ON EACH RESIDENTIAL FLOOR. COMPACTED REFUSE WILL BE EXTRUDED INTO CONTINUOUS PLASTIC TUBING OR INDIVIDUAL PLASTIC BAGS, WHICH WILL BE STORED IN TRASH COMPACTOR ROOM UNTIL PRIVATE HAULER PICKUP. AT PICKUP TIMES, BUILDING MANAGEMENT WILL WHEEL CONTAINERS TO LOADING AREA FOR PICKUP BY PRIVATE HAULER. YARD STORAGE CONTAINERS WILL BE PROVIDED.

RECYCLING BINS WILL BE LOCATED ON EACH FLOOR AND WILL BE COLLECTED BY BUILDING MANAGEMENT AND STORED IN REFUSE/RECYCLING TERMINATION ROOM UNTIL PRIVATE HAULER PICKUP. AT PICKUP TIMES, BUILDING MANAGEMENT WILL WHEEL CONTAINERS TO LOADING AREA FOR PICKUP BY PRIVATE HAULER. YARD STORAGE CONTAINERS WILL BE PROVIDED.

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A-02

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SECOND FLOOR PLAN

SCALE: 1" = 20'

2nd FLOOR UNIT MIX:

1 BEDROOM:	09
2 BEDROOM:	14
3 BEDROOM:	02
FLOOR TOTAL:	**25 UNITS**

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A-03

BUILDING PLAN

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THIRD TO FIFTH FLOOR PLAN
SCALE: 1" = 20'

UNIT MIX:

1 BEDROOM:	13
2 BEDROOM:	17
3 BEDROOM:	02
FLOOR TOTAL:	**32 UNITS**

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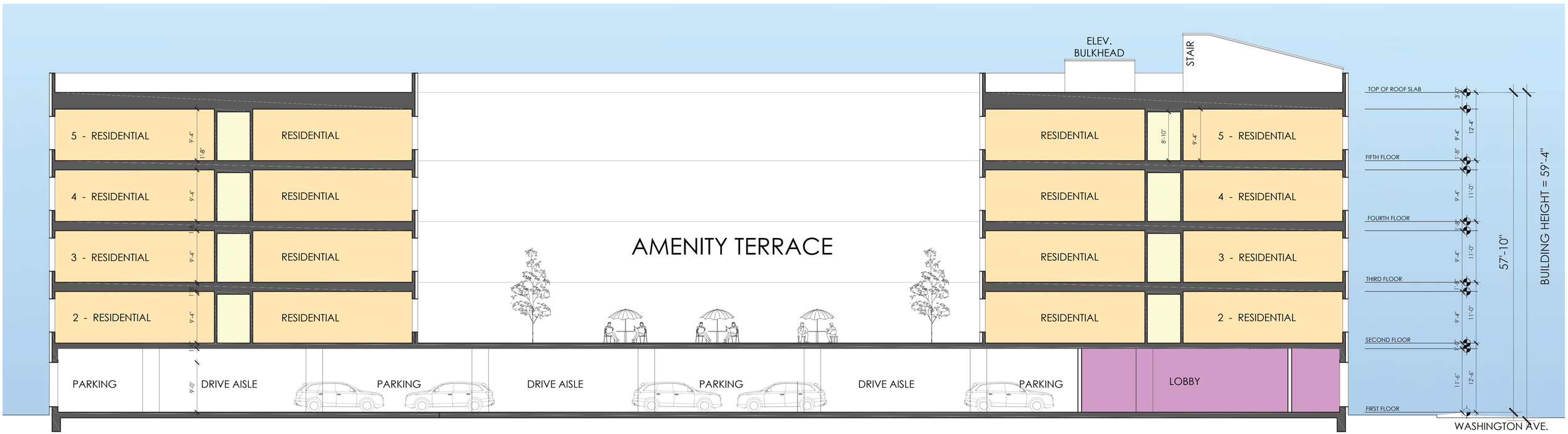
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A-04

BUILDING PLAN

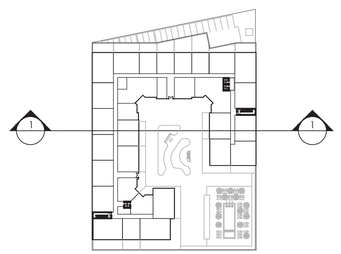
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CONCEPT BUILDING SECTION 1

SCALE: 1/8" = 1'-0"



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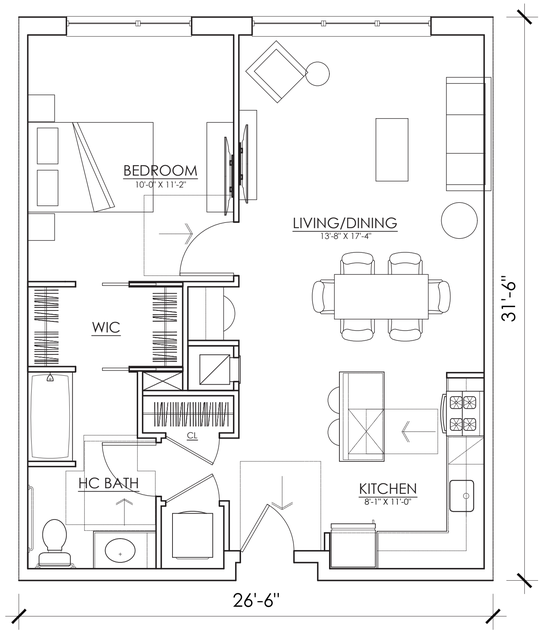
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BUILDING SECTIONS

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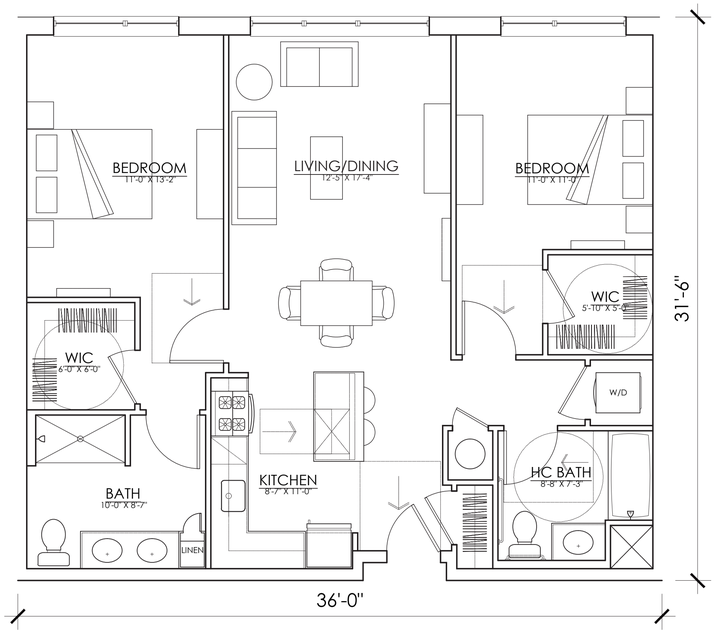
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01 ONE BEDROOM (848 SF)

SCALE: 1/4" = 1'-0"

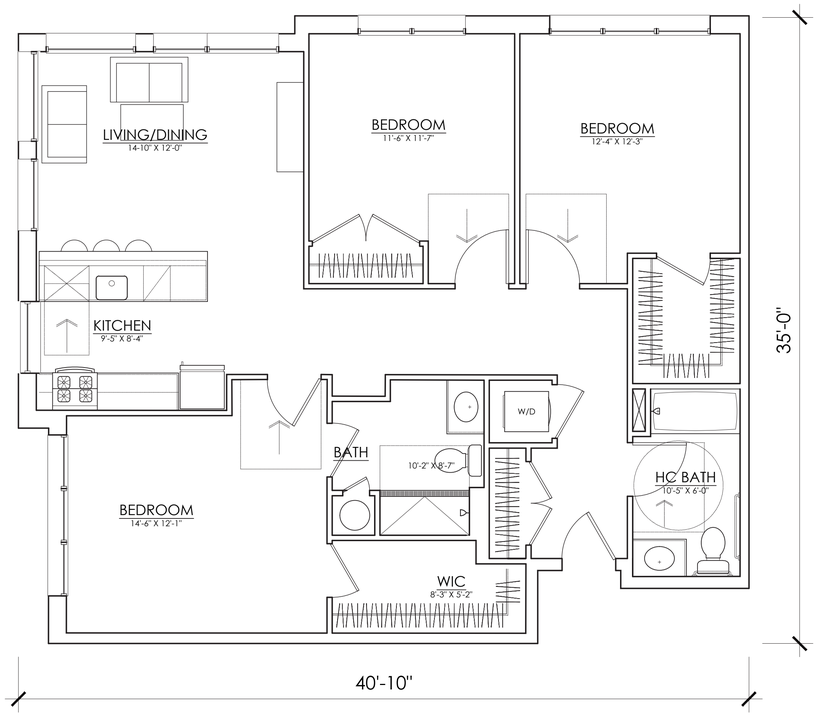
0 2' 4' 8'



02 TWO BEDROOM (1,126 SF)

SCALE: 1/4" = 1'-0"

0 2' 4' 8'



03 THREE BEDROOM (1,384 SF)

SCALE: 1/4" = 1'-0"

0 2' 4' 8'

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TYPICAL UNIT PLANS

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02 - WASHINGTON AVENUE ELEVATION

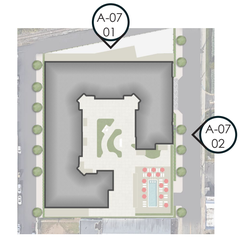
SCALE: 1/16" = 1'-0"



01 - SOUTH ELEVATION

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

KEY PLAN:



MATERIALS KEY:

01 BRICK COLOR 1
02 BRICK COLOR 2
03 HORIZONTAL FIBER CEMENT ARCTIC WHITE
04 HORIZONTAL FIBER CEMENT NIGHT GRAY
05 FIBER CEMENT ARCTIC WHITE
06 FIBER CEMENT PANEL NIGHT GREY
07 WOOD VANEER
08 BLACK METAL COPING
09 METAL PANEL
10 VYNIL WINDOWS
11 ALUMINUM RAILING
12 STOREFRONT WINDOWS
13 ARCHITECTURAL METAL GRILL
14 ARCHITECTURL GLASS RAILING
15 SLUNG METAL CANOPY

NOTES:

PRODUCTS AND MANUFACTURERS LISTED ARE SUBJECT TO CHANGE AND/OR SUBSTITUTED WITH EQUIVALENT AND COMPATIBLE OPTIONS.

LANDSCAPE BY OTHERS AND SHOWN FOR ILLUSTRATIVE PURPOSES ONLY.

SIGNAGE SHOWN FOR ZONING COMPLIANCE AND APPROVAL ONLY. TEXT MAY CHANGE BASED ON FINAL BRANDING OF THE BUILDING.

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BUILDING ELEVATIONS

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02 - SUFFERN PLACE ELEVATION

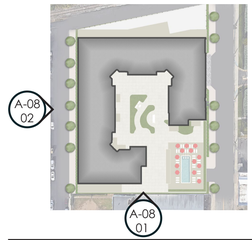
SCALE: 1/16" = 1'-0"



01 - NORTH ELEVATION

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

KEY PLAN:



MATERIALS KEY:

01 BRICK COLOR 1
02 BRICK COLOR 2
03 HORIZONTAL FIBER CEMENT ARCTIC WHITE
04 HORIZONTAL FIBER CEMENT NIGHT GRAY
05 FIBER CEMENT ARCTIC WHITE
06 FIBER CEMENT PANEL NIGHT GREY
07 WOOD VANEER
08 BLACK METAL COPING
09 METAL PANEL
10 VYNIL WINDOWS
11 ALUMINUM RAILING
12 STOREFRONT WINDOWS
13 ARCHITECTURAL METAL GRILL
14 ARCHITECTURL GLASS RAILING
15 SLUNG METAL CANOPY

NOTES:

PRODUCTS AND MANUFACTURERS LISTED ARE SUBJECT TO CHANGE AND/OR SUBSTITUTED WITH EQUIVALENT AND COMPATIBLE OPTIONS.

LANDSCAPE BY OTHERS AND SHOWN FOR ILLUSTRATIVE PURPOSES ONLY.

SIGNAGE SHOWN FOR ZONING COMPLIANCE AND APPROVAL ONLY. TEXT MAY CHANGE BASED ON FINAL BRANDING OF THE BUILDING.

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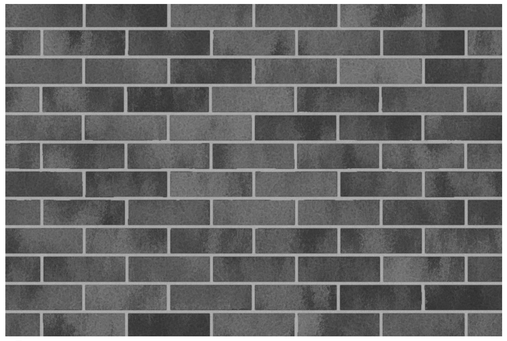
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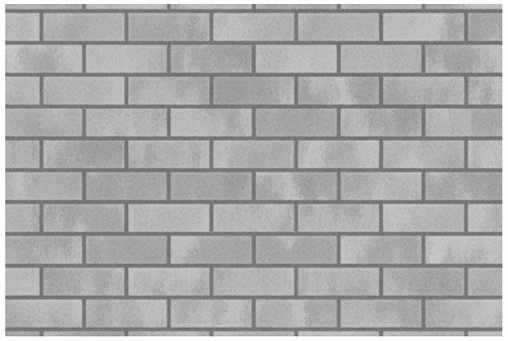
BUILDING ELEVATIONS

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01 MASONRY BRICK VENEER 01

DARK GRAY



02 MASONRY BRICK VENEER 02

LIGHT GRAY



03 FIBER CEMENT LAP SIDING 01

ARCTIC WHITE



04 FIBER CEMENT LAP SIDING 02

NIGHT GRAY

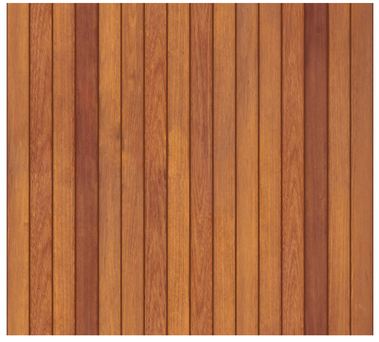
05 FIBER CEMENT PANEL 01

ARCTIC WHITE



06 FIBER CEMENT PANEL 02

NIGHT GRAY



07 ARCHITECTURAL ACCENT PANEL

WARM WOOD TONE



08 METAL COPING

DARK GRAY



09 ARCHITECTURAL METAL PANEL

DARK GRAY



10 ARCHITECTURAL VYNIL WINDOWS

DARK GRAY



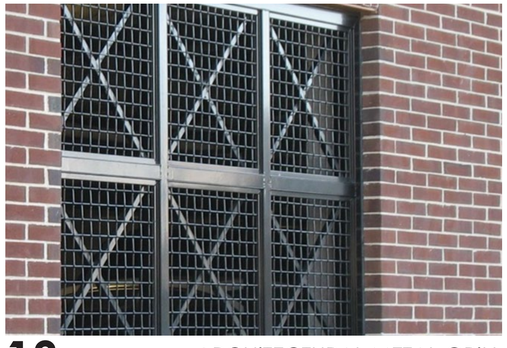
11 ARCHITECTURAL ALUMINUM RAILING

DARK GRAY



12 STOREFRONT WINDOWS

DARK GRAY



13 ARCHITECTURAL METAL GRILL

DARK GRAY



14 ARCHITECTURAL GLASS RAILING

LIGHT GRAY



15 ARCHITECTURAL METAL CANOPY

DARK GRAY

MATERIAL NOTES:

1. ALL MATERIAL ARE SUBJECT TO CHANGE AND/OR SUBSTITUTION WITH EQUIVALENT AND COMPARABLE OPTIONS

PREPARED BY:

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BUILDING MATERIALS

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VIEW FROM WASHINGTON AVENUE

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A-10

CONCEPT PERSPECTIVE

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4

Colliers Engineering & Design

Traffic Impact Study

March 4, 2025

EXTELL Development Company
Village of Suffern, Rockland County, New York

Prepared for:

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Prepared by:

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Project No. 20000643B

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 impacts associated with the proposed residential development ("the Project"), which is planned to be developed on property located on Washington Avenue north of Lafayette Avenue (NYS Route 59) and east of Suffern Place in the Village of Suffern, Rockland County, New York. The site is proposed to consist of 121 dwelling units. As shown on Figure No. 1, access to the development is proposed via an access connection from Washington Avenue.

A Design Year of 2027 has been utilized in completing the traffic analysis in order to evaluate future traffic conditions associated with this proposed development.

B. Scope of Study

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

Traffic counts for the study area intersections were collected by representatives of Colliers Engineering & Design. These traffic counts were compared to historical traffic count for the area including traffic count data from the New York State Department of Transportation (NYSDOT). Together this data was utilized to establish the Year 2023 Existing Traffic Volumes in the vicinity of the site. (See Section II.B).

The Year 2023 Existing Traffic Volumes were then projected to a 2027 Design Year to take into account normal background traffic growth and other potential future development growth in the area, resulting in the Year 2027 No-Build Traffic Volumes. (See Section III.A).

Estimates were then made of the potential traffic that the proposed development would generate during each of the peak hours (see Section III-B. The resulting site generated traffic volumes were then added to the roadway system and combined with the Year 2027 No-Build Traffic Volumes resulting in the Year 2027 Build Traffic Volumes. (See Section III.C).

The Existing, No-Build and Build Traffic Volumes were then compared to roadway capacities based on the procedures from the Highway Capacity Manual, 6th Edition to determine existing and future Levels of Service and operating conditions. Recommendations for improvements were made where necessary to serve existing and future traffic volumes. (See Section III.E).

II. Existing Roadway and Traffic Descriptions

A. Description of Existing Roadways

As shown on Figure No. 1, the proposed residential development will have access from Washington Avenue via a single driveway connection. The following is a brief description of the roadways located within the study area. In addition, Section III-E 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. Washington Avenue

Washington Avenue is a two-lane road which originates at a stop-sign controlled, "T" intersection with Wayne Avenue (US Route 202) north of the site and terminates at Orange Avenue, at the south end of the Village. In the vicinity of the site, Washington Avenue intersects with Cross Street at an unsignalized intersection north of the Site and Lafayette Avenue (NYS Route 59) at a signalized intersection south of the Site. Sidewalks are present on both sides of Washington Avenue in the immediate vicinity of the site. The posted speed limit is 25 mph.

2. Lafayette Avenue (NYS Route 59)

Lafayette Avenue (NYS Route 59) is a major east-west, two-lane State highway which runs throughout Rockland County. Within the study area, Lafayette Avenue is a two-lane road and intersects with Suffern Place at an unsignalized intersection and Washington Avenue at a signalized intersection. There is on-street parking on both sides of Lafayette Avenue west of Washington Avenue and sidewalks present on both sides of the roadway serving primarily commercial land uses. The posted speed limit is 30 mph.

3. Suffern Place

Suffern Place is a two-lane Village roadway beginning at its intersection with Lafayette Avenue (NYS Route 59) and continues north terminating as a dead end. The roadway serves commercial land uses and does not have a posted speed limit. Sidewalks and on-street parking are provided on both sides of Suffern Place.

4. Cross Street

Cross Street is a two-lane Village roadway, which originates at its intersection with Washington Avenue continuing in a westerly direction and terminating at its intersection with US Route 202. Cross Street serves mostly residential land uses with sidewalk along the south side of the roadway and on both sides at its intersection with Washington Avenue. On-street parking is also provided on the north side of the roadway and does not have a posted speed limit.

B. Year 2023 Existing Traffic Volumes

(Figures No. 2 and 3)

In order to establish existing traffic conditions in the vicinity of the site, turning movement traffic counts were collected by representatives of Colliers Engineering & Design on Tuesday, June 20, 2023 between the hours of 6:30 AM and 9:30 AM and 3:30 PM and 6:30 PM to determine the Weekday Peak AM and Weekday Peak PM Hours. These traffic counts were compared to historical traffic count data including traffic count data from the New York State Department of Transportation (NYSDOT).

- Lafayette Avenue (NYS Route 59) and Washington Avenue
- Lafayette Avenue (NYS Route 59) and Suffern Place
- Washington Avenue and Cross Street

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

- Weekday Peak AM Hour 7:30 AM – 8:30 AM
- Weekday Peak PM Hour 5:00 PM – 6:00 PM

The resulting Year 2023 Existing Traffic Volumes are shown on Figures No. 2 and 3 for the Weekday Peak AM Hour and Weekday Peak PM Hour, respectively. A copy of the traffic count data is contained in Appendix E of this study.

III. Evaluation of Future Traffic Conditions

A. Year 2027 No-Build Traffic Volumes

(Figure No. 4 and 5)

A Design Year of 2027 has been utilized in completing the traffic analysis in order to evaluate future traffic conditions associated with the proposed development.

The New York Metropolitan Transportation Council (NYMTC) has established a background growth factor of less than 1% per year for Rockland County. The Year 2023 Existing Traffic Volumes were increased by a conservative growth factor of 2% per year (for a total background growth of 8%) to account for other potential future developments in the area.

The resulting Year 2027 No-Build Traffic Volumes are shown on Figures No. 4 and 5 for the Weekday Peak AM and Weekday Peak PM Hours, respectively.

B. Site Generated Traffic Volumes

(Table No. 1)

Estimates of the amount of traffic to be generated by the proposed residential development during each of the peak hours 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 – 221 Multi-Family Housing (Mid-Rise). The Hourly Trip Generation Rates and anticipated Site Generated Traffic Volumes are summarized below.

Table No. 1

121 Multi-Family Units	ENTRY		EXIT		TOTAL	
	HGTR*	VOLUME	HGTR*	VOLUME	HGTR*	VOLUME
Weekday Peak AM Hour	0.085	10	0.285	35	0.37	45
Weekday Peak PM Hour	0.240	29	0.150	18	0.39	47

HTGR* – Hourly Trip Generation Rates - Based on ITE Land Use Code 221 – Multi-Family Housing (Mid-Rise)

C. Year 2027 Build Conditions Traffic Volumes

(Figures No. 6 through 11)

The site generated traffic volumes shown above (Table No. 1) were assigned to the roadway network based on a review of the existing and anticipated arrival and departure traffic patterns. The resulting Arrival and Departure Distributions are shown on Figures No. 6 and 7. The resulting Site Generated Traffic Volumes and Year 2027 Build Traffic Volumes are shown on Figures No. 8, 9, 10 and 11 for the Weekday Peak AM and Weekday Peak PM Hours, respectively.

D. Description of Analysis Procedures

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.

E. Results of Analysis

(Table No. 2)

In order to evaluate current and future traffic operating conditions, a SYNCHRO analysis which take into consideration appropriate truck percentages, pedestrian activity 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 is 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 (Appendix B) summarizes the resulting Levels of Service, vehicle delay and volume-to-capacity (v/c) ratios for the Year 2023 Existing, Year 2027 No-Build and Year 2027 Build Conditions for each of the Peak Hours. Appendix D contains copies of the capacity analysis which also indicate the existing geometrics (including lane widths), existing signal phasing/timings (where appropriate) and any recommended improvements.

1. **Lafayette Avenue (NYS Route 59) and Washington Avenue**

   Lafayette Avenue (NYS Route 59) and Washington Avenue intersection at a full movement, signalized intersection. All approaches to the intersection consist of one lane except the Lafayette Avenue (NYS Route 59) westbound approach which consists of a shared through/right turn lane and a separate left turn lane. Sidewalks and crosswalks are present at all approaches.

   Capacity analysis conducted utilizing the Year 2023 Existing Traffic Volumes indicates that the intersection is currently operating at an overall Level of Service "D" during both the Weekday AM and Weekday PM Peak Hours.

   Capacity analysis conducted utilizing the Year 2027 No-Build Traffic Volumes indicates that the intersection is projected to operate at an overall Level of Service "D" during the Weekday Peak AM Hour and projected to operate at an overall Level of Service "E" during the Weekday Peak PM Hour.

   Capacity analysis conducted utilizing the Year 2027 Build Traffic Volumes indicates that the intersection is projected to continue to operate at an overall Level of Service "D" during the Weekday Peak AM Hour and projected to continue to operate at an overall Level of Service "E" during the Weekday Peak PM Hour.

   While similar Levels of Service are expected from No-Build to Build Condition, as part of the NYSDOT Highway Work Permit review, a communication modem and possible video detection could be provided at this intersection to improve overall efficiency.

2. **Lafayette Avenue (NYS Route 59) and Suffern Place**

   Lafayette Avenue (NYS Route 59) and Suffern Place intersect at a "T" type, unsignalized intersection. All approaches to the intersection consist of one lane with a stop-sign on the Suffern Road approach. Sidewalks are present at all approaches with a crosswalk on the Suffern Road approach.

   Capacity analysis conducted utilizing the Year 2023 Existing Traffic Volumes indicates that the Suffern Road southbound approach (minor approach) is currently operating at a Level of Service of Service "B" during each of the Peak Hours.

   Capacity analysis conducted utilizing the Year 2027 No-Build Traffic Volumes indicates that the Suffern Road southbound approach (minor approach) is projected to operate at a Level of Service "B" during the Weekday Peak AM Hour and projected to operate at a Level of Service "C" during the Weekday Peak PM Hour.

   Capacity analysis conducted utilizing the Year 2027 Build Traffic Volumes indicates that the Suffern Road southbound approach (minor approach) is projected to continue to operate at a Level of Service "B" during the Weekday Peak AM Hour and continue to operate at a Level of Service "C" during the Weekday Peak PM Hour.

3. **Washington Avenue and Cross Street**

   Washington Avenue and Cross Street intersect at a unsignalized intersection with the Cross Street approaches stop-sign controlled.

   Capacity analysis conducted utilizing the Year 2023 Existing Traffic Volumes indicates that all movements to the intersection are currently operating at a Level of Service of Service "A".

   Capacity analysis conducted utilizing the Year 2027 No-Build and Year 2027 Build Traffic Volumes indicates that all movements to the intersection will continue to operate at a Level of Service "A".

4. **Washington Avenue and Proposed Site Access**

   Washington Avenue and the Proposed Site Access will intersect at a "T" type intersection with the Site Access being stop-sign controlled and is in excess of 200' of Lafayette Avenue (NYS Route 59).

   Capacity analysis conducted utilizing the Year 2027 Build Traffic Volumes indicates that the proposed site driveway is proposed to operate at a Level of Service "A".

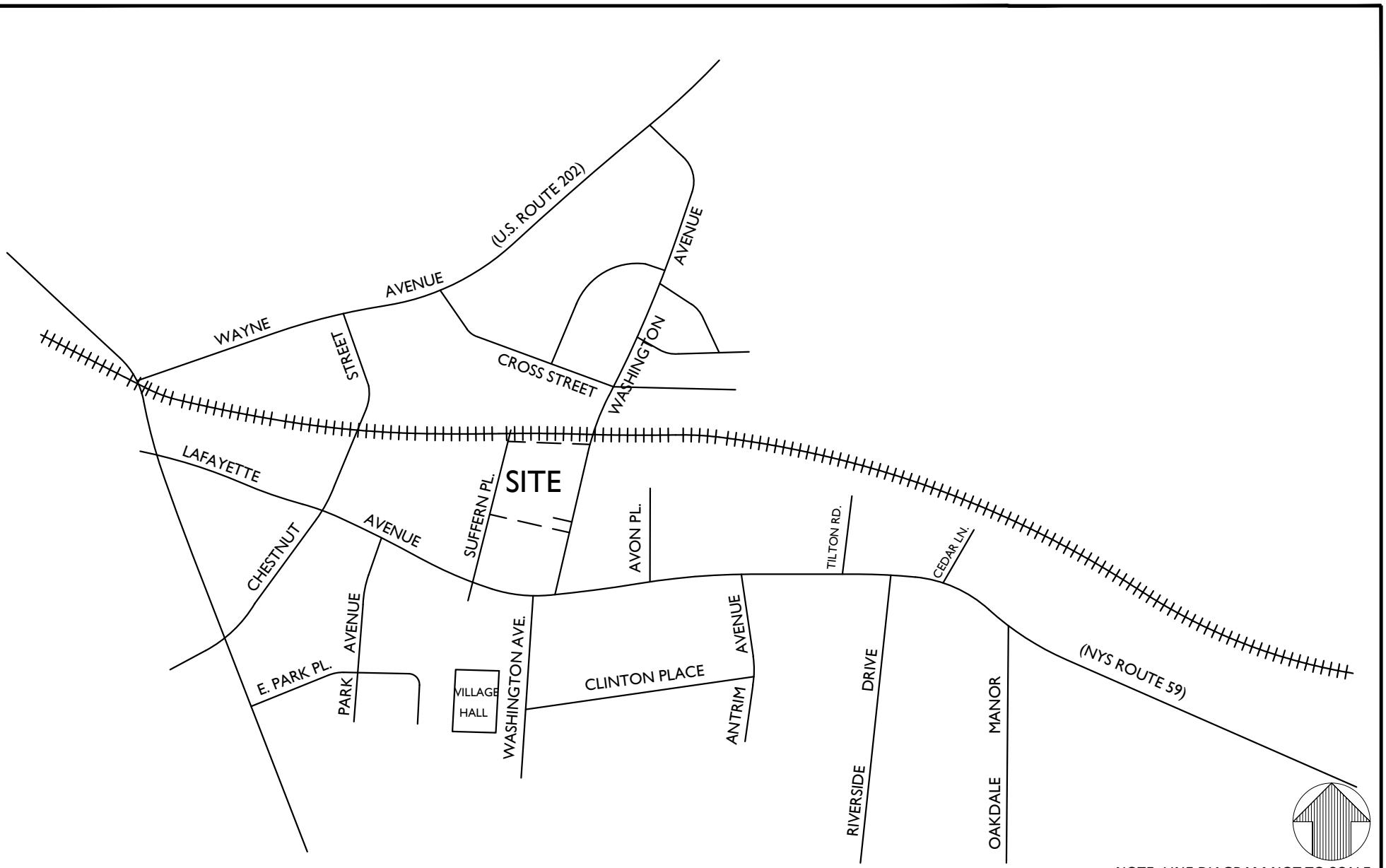
IV. Summary and Conclusion

As summarized in this Study and shown on the Level of Service Summary Table (Table No. 2), similar Levels of Service will be experienced at the Study Area Intersections under future No-Build and future Build Conditions with the proposed development. In addition, the proposed site driveway is projected to operate at a Levels of Service "A" and will provide safe access to the site. Thus the proposed development is not expected to significantly affect the area roadways.

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Traffic Impact Study

Appendix A | Traffic Figures



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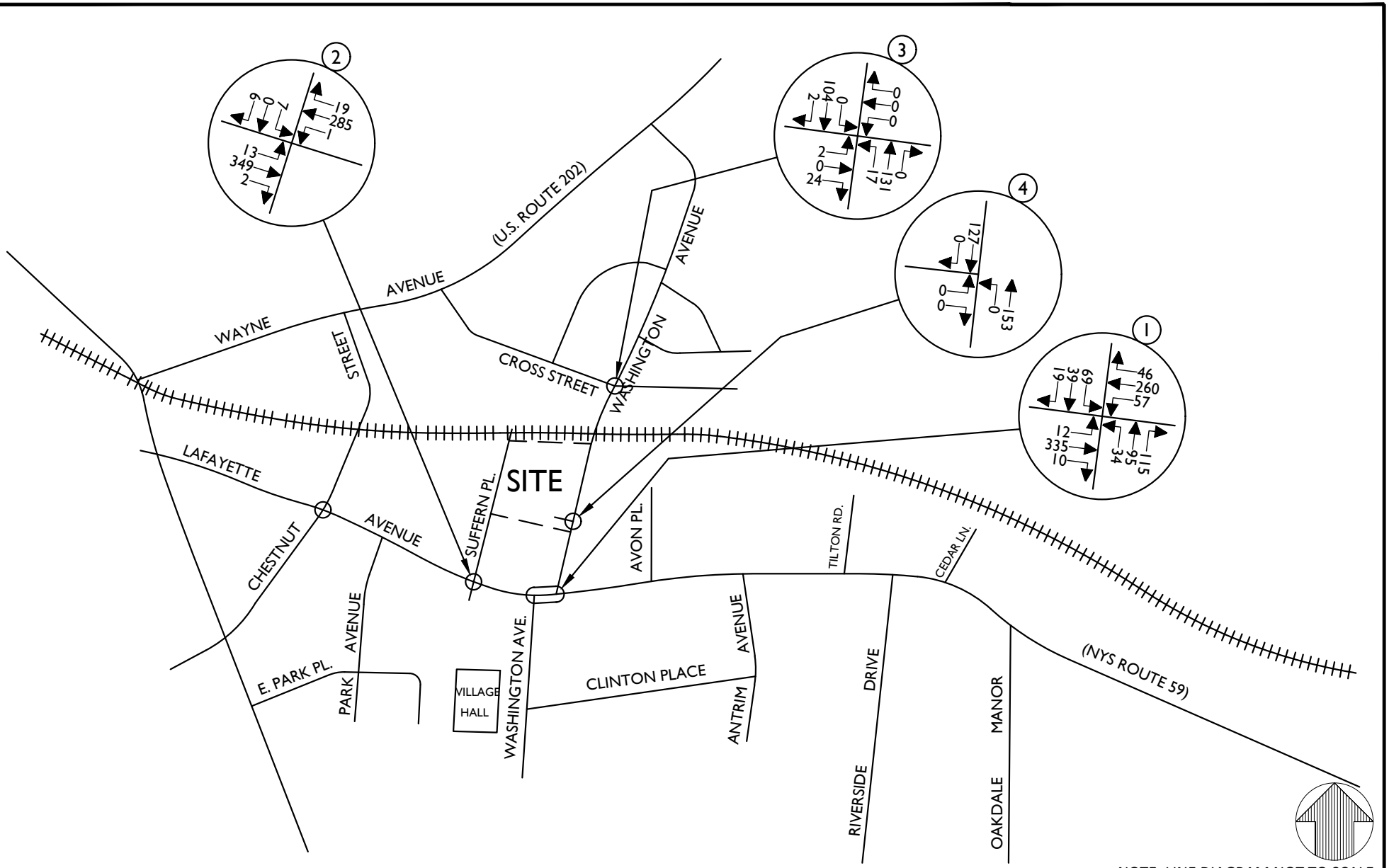
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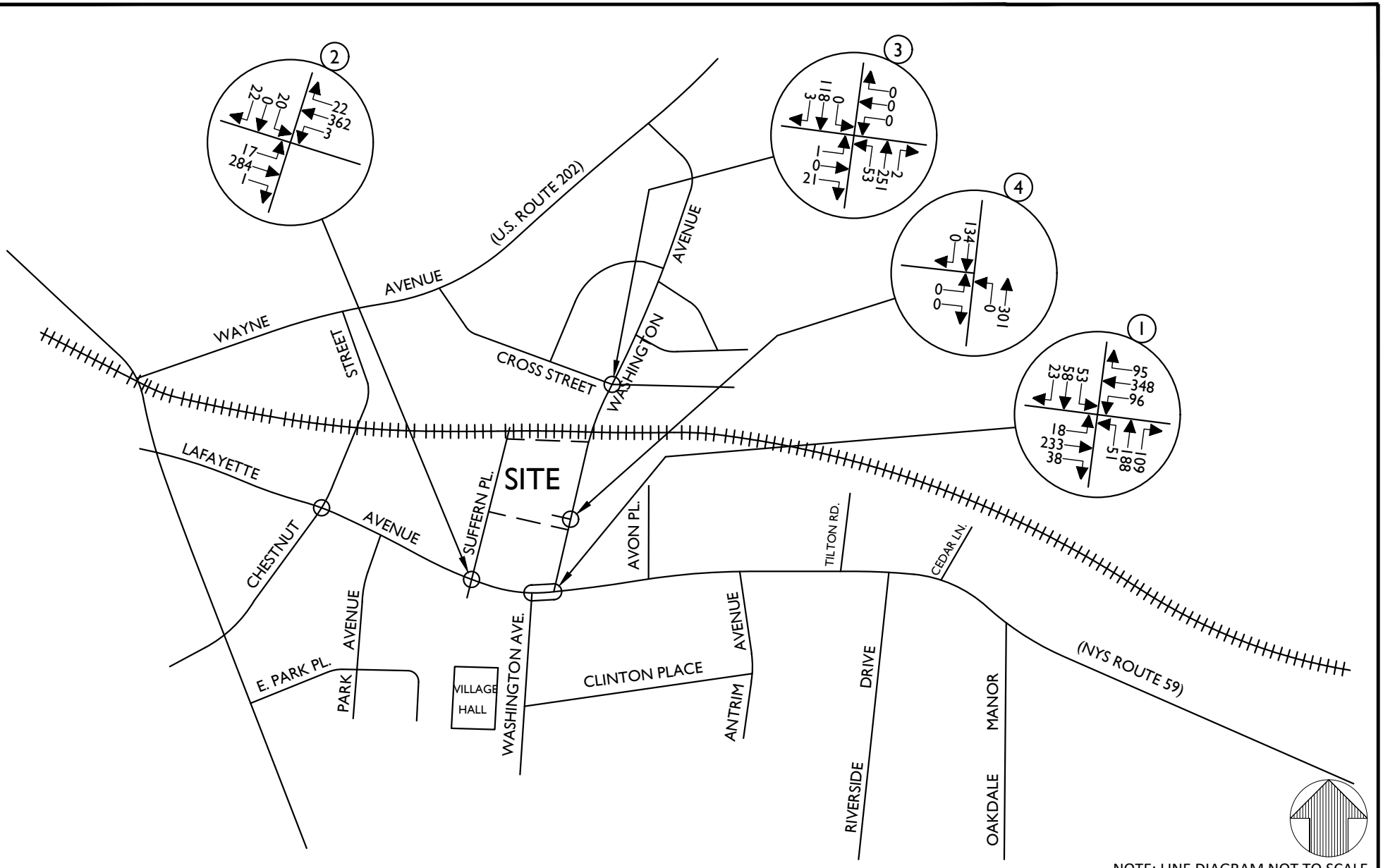
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WEEKDAY PEAK AM HOUR

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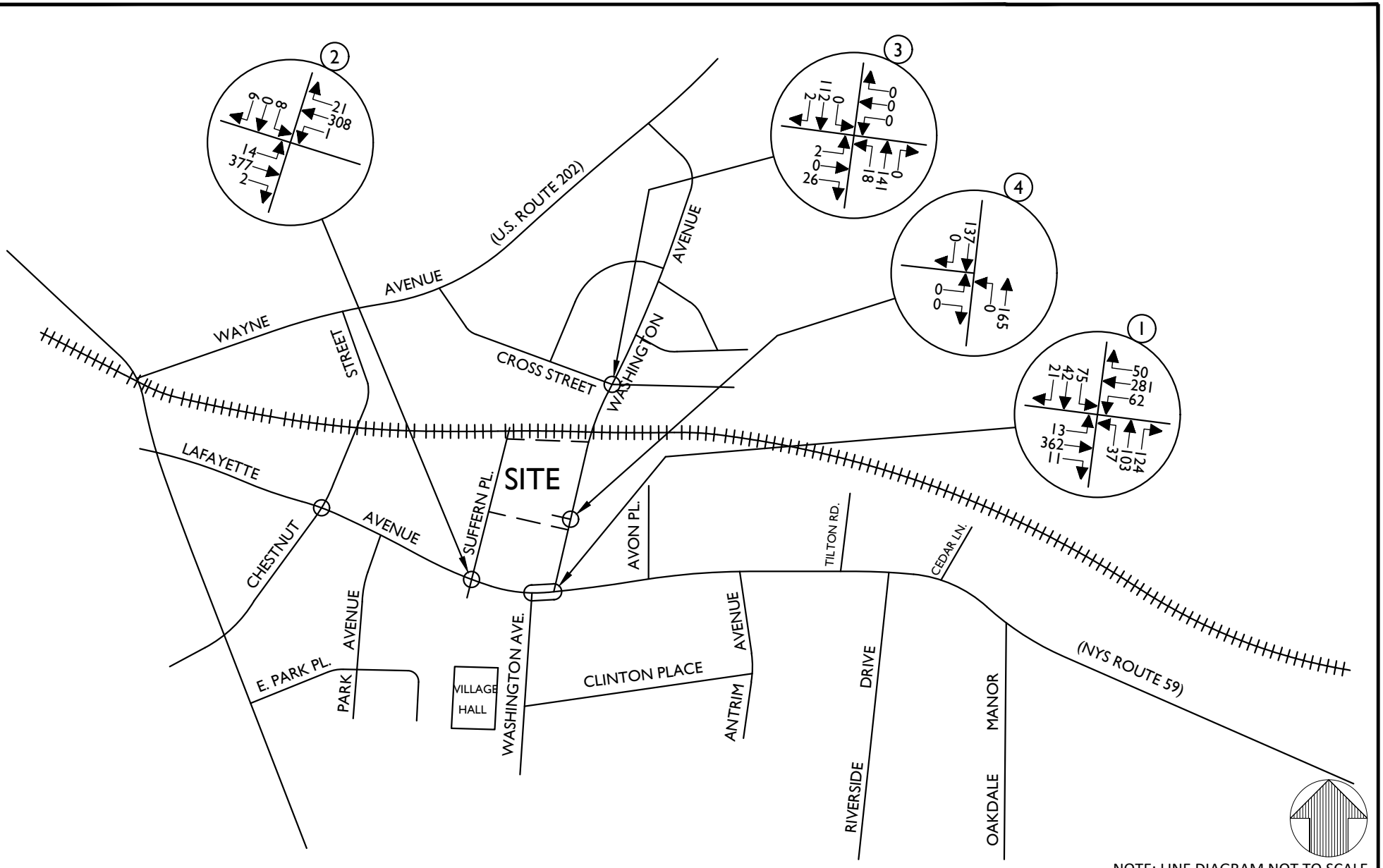
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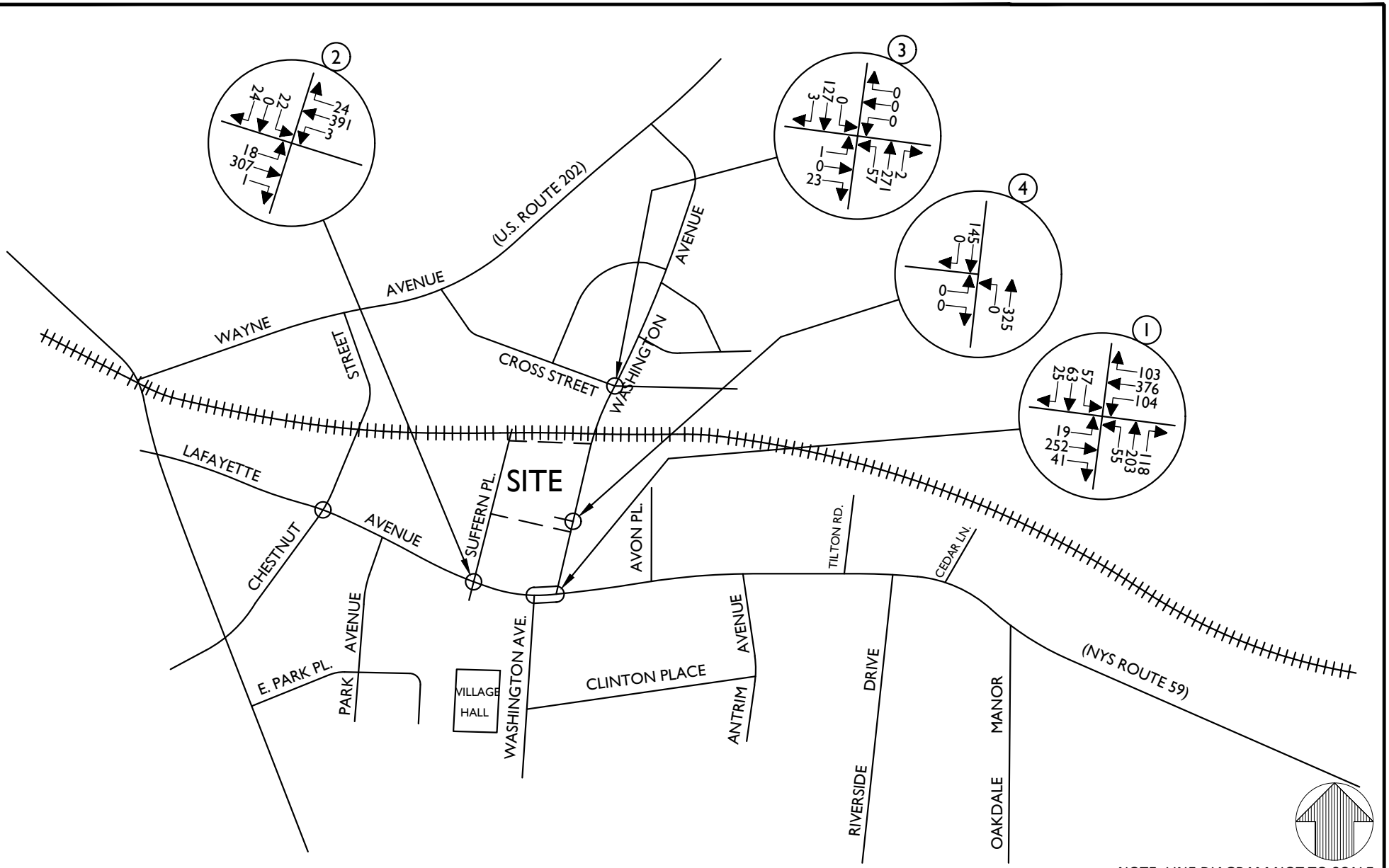
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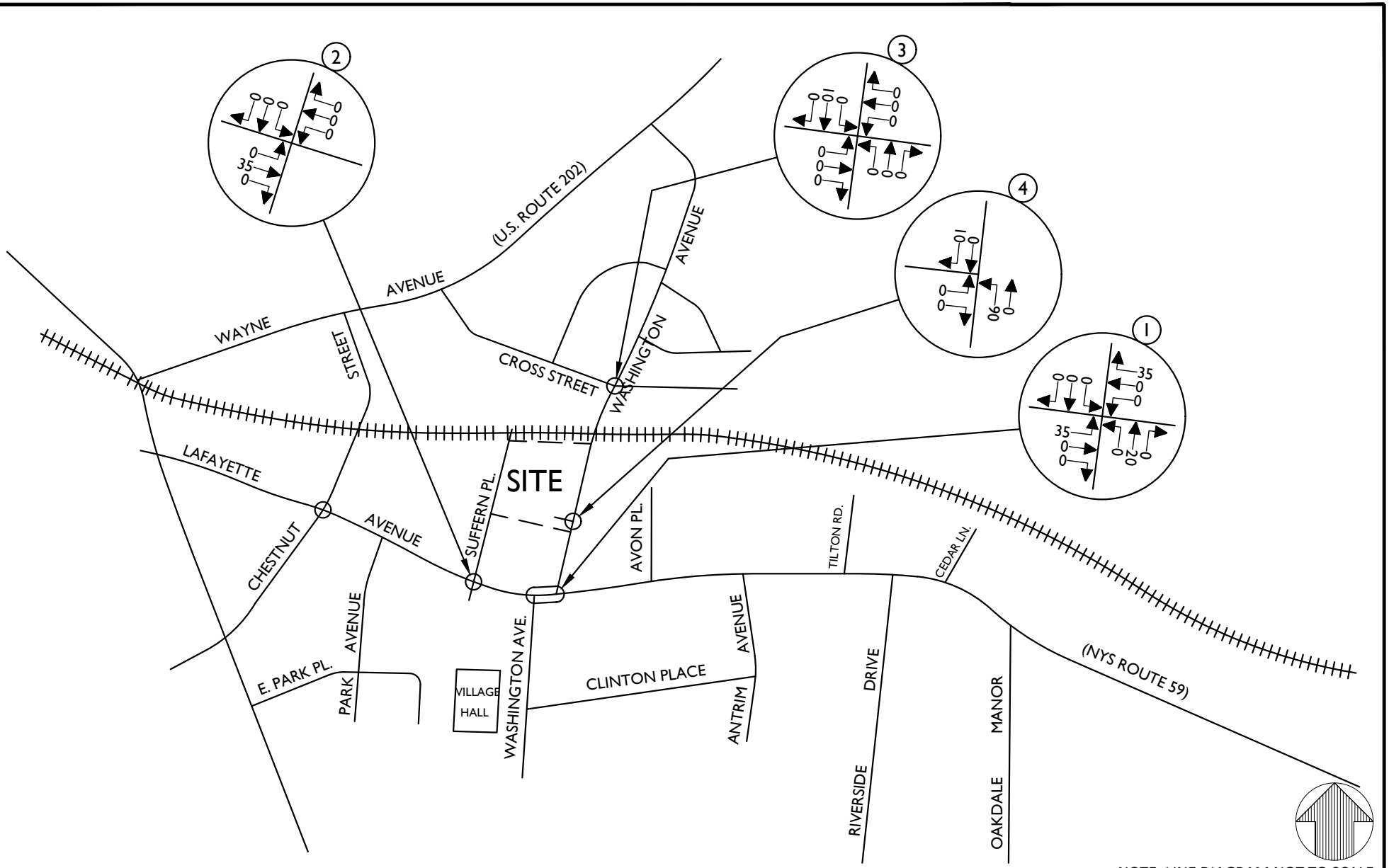
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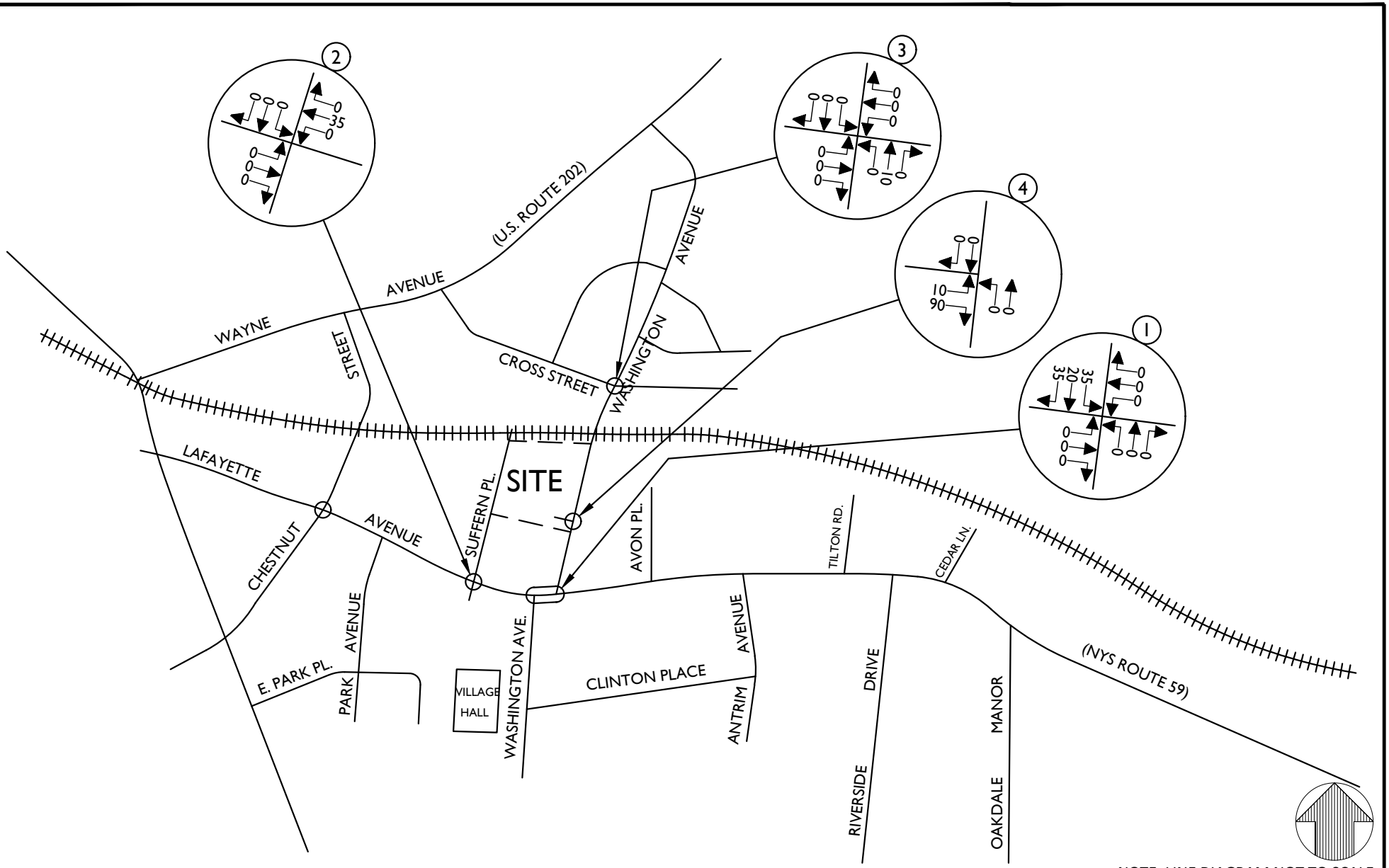
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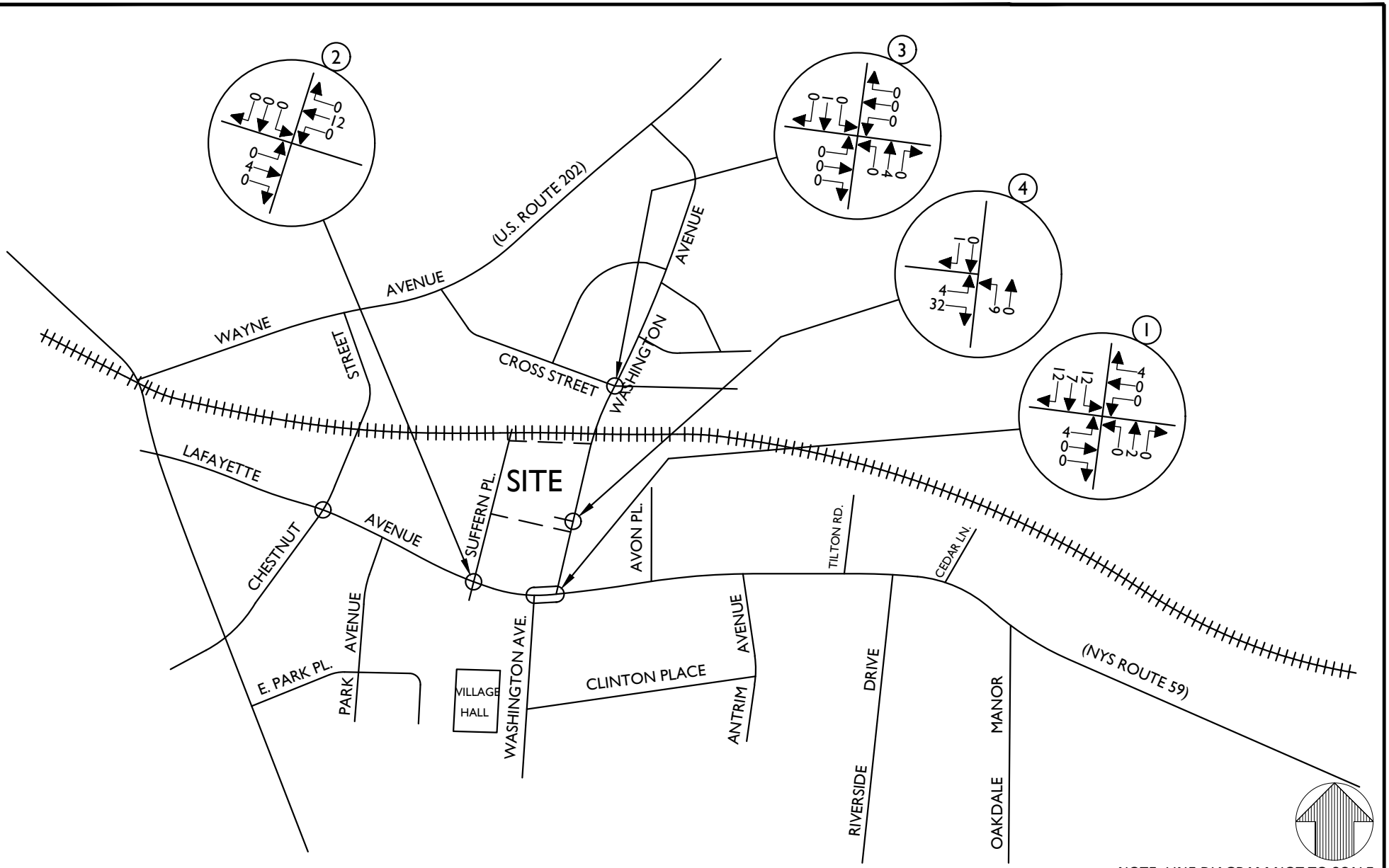
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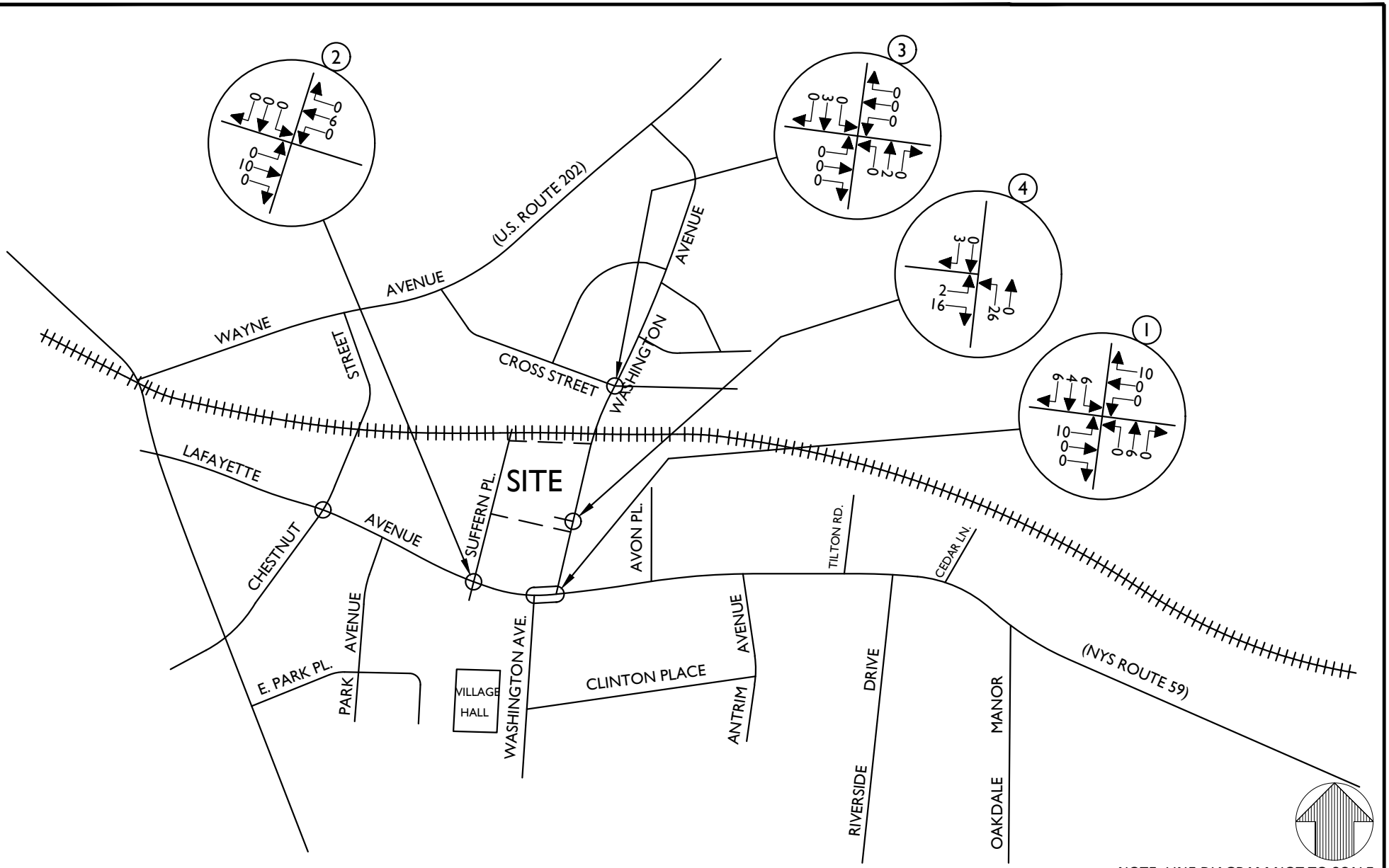
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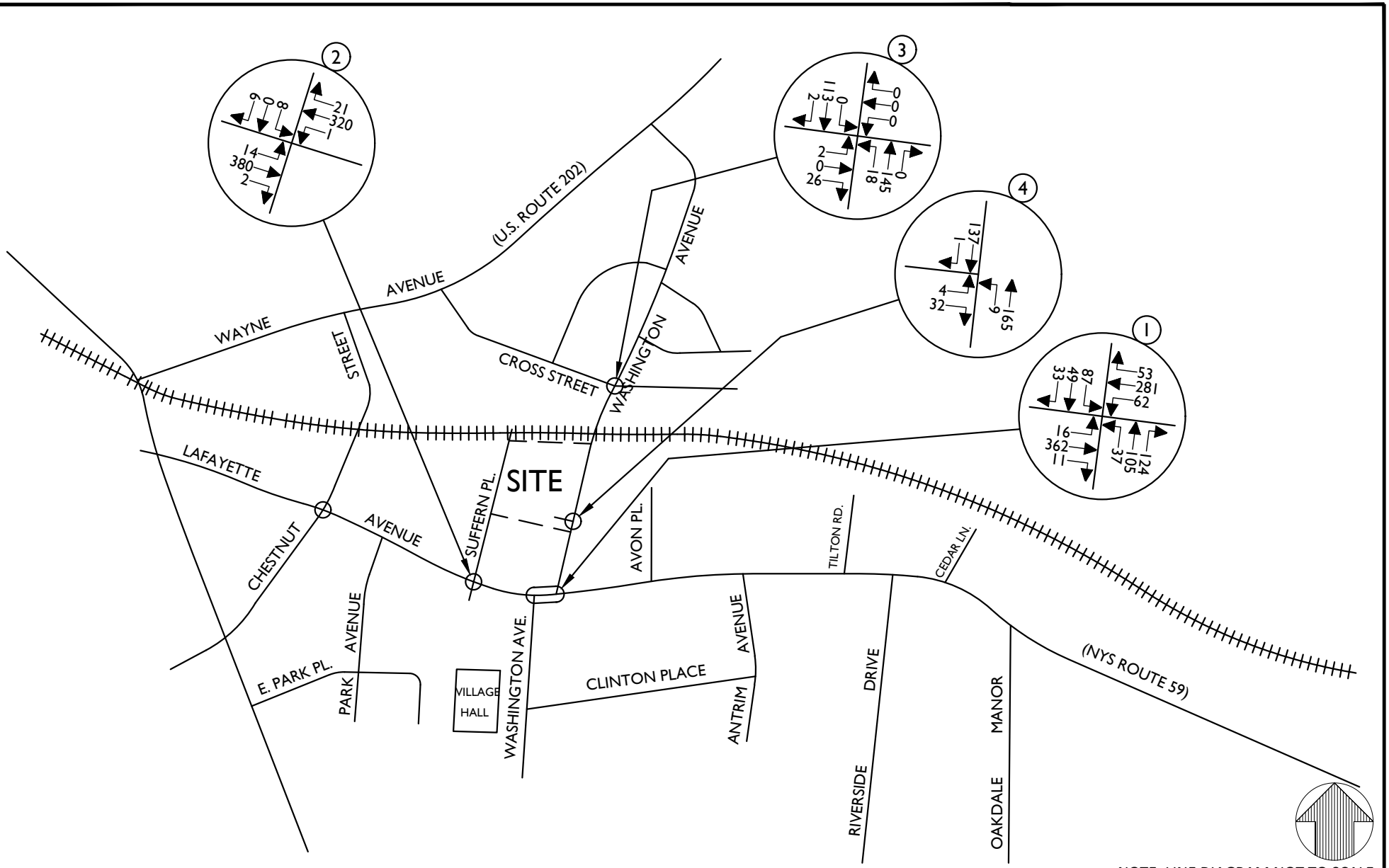
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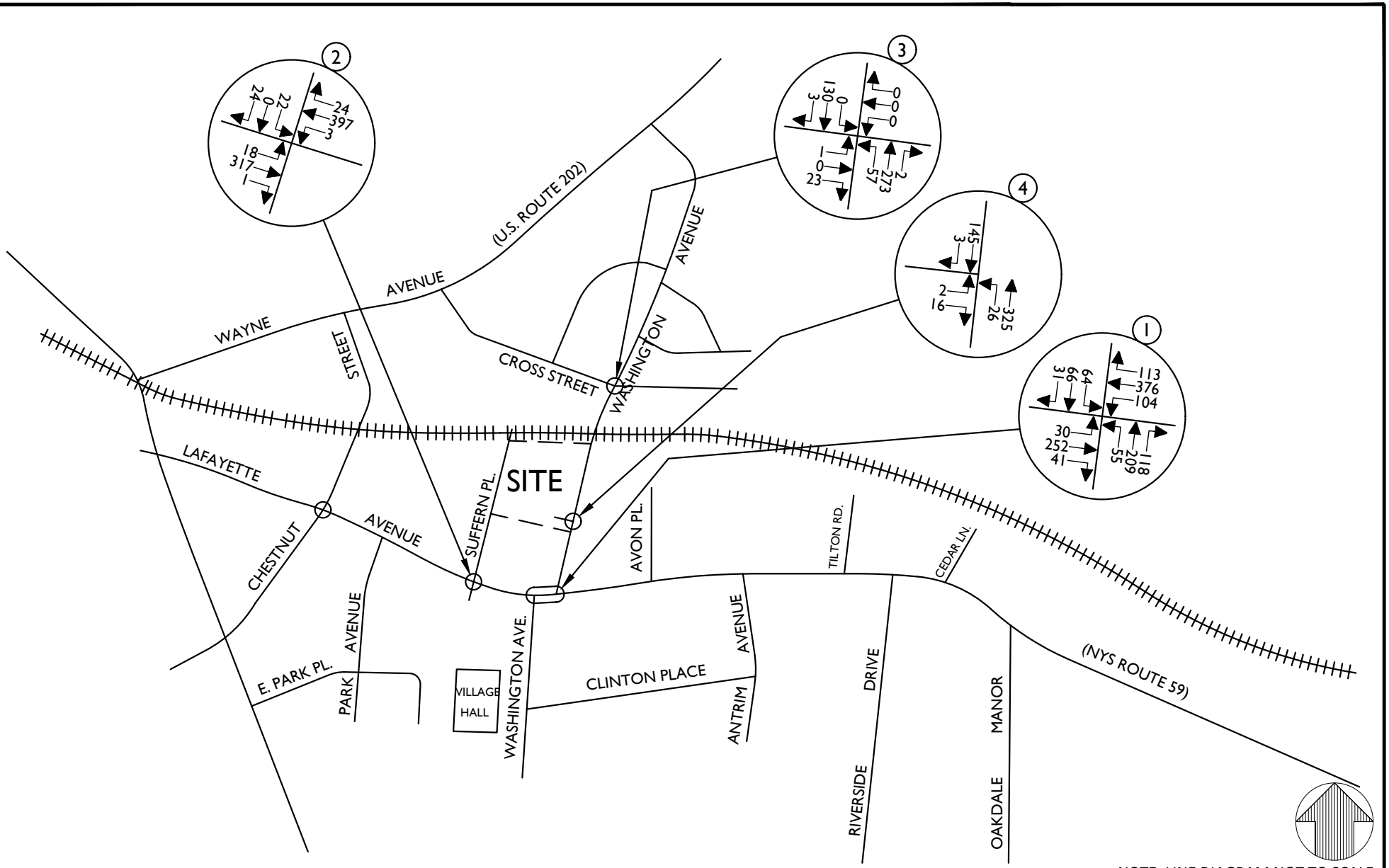
TRAFFIC IMPACT STUDY

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	6/27/23	R.H.	P.J.G.

PROJECT NUMBER: 20000643B
DRAWING NAME: 230627RH_FIGURE

SHEET TITLE:
2027 BUILD TRAFFIC VOLUMES
WEEKDAY PEAK AM HOUR

SHEET NUMBER: 10



NOTE: LINE DIAGRAM NOT TO SCALE

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2027 BUILD TRAFFIC VOLUMES
WEEKDAY PEAK PM HOUR

SHEET NUMBER: 11

0643B\Reports\Traffic\Figures\230627RH_FIGURE.dwg\11 By: PGOTTHELF

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Traffic Impact Study

Appendix B | Tables

Table No. 2
Level of Service Summary Table
Weekday Peak AM Hour

				2023 Existing			2027 No-Build			2027 Build		
				v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay
1	**NYS Route 59 & Washington Avenue**	**Signalized**										
	NYS Route 59	EB	LTR	0.73	D	42.6	0.69	D	41.3	0.64	D	40.8
	NYS Route 59	WB	L	0.37	D	40.6	0.35	D	39.6	0.30	D	38.8
			TR	0.64	D	39.2	0.60	D	38.5	0.56	D	38.5
		WB	APPROACH	-	D	39.4	-	D	38.7	-	D	38.5
	Washington Avenue	NB	LTR	0.71	D	50.7	0.76	E	56.3	0.82	E	65.2
	Washington Avenue	SB	LTR	0.56	E	55.4	0.64	E	62.2	0.73	E	68.1
		Overall		**-**	**D**	**44.8**	**-**	**D**	**46.2**	**-**	**D**	**49.2**
2	**NYS Route 59 & Suffern Place**	**Unsignalized**										
	NYS Route 59	EB	LTR	0.012	A	8.0	0.013	A	8.1	0.013	A	8.1
	NYS Route 59	WB	LTR	0.001	A	8.1	0.001	A	8.2	0.001	A	8.2
	Suffern Place	SB	LTR	0.032	B	13.5	0.038	B	14.3	0.038	B	14.5
3	**Washington Avenue & Cross Street**	**Unsignalized**										
	Washington Avenue	NB	LTR	0.015	A	7.6	0.016	A	7.7	0.016	A	7.7
	Washington Avenue	SB	LTR	0.000	A	0.0	0.000	A	0.0	0.000	A	0.0
	Cross Street	EB	LTR	0.037	A	9.4	0.040	A	9.4	0.040	A	9.4
	Cross Street	WB	LTR	0.000	A	0.0	0.000	A	0.0	0.000	A	0.0
4	**Washington Avenue & Proposed Site Driveway**	**Unsignalized**										
	Washington Avenue	NB	LT	-	-	-	-	-	-	0.008	A	7.5
	Proposed Site Driveway	EB	LR	-	-	-	-	-	-	0.051	A	9.5

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
Weekday Peak PM Hour

				2023 Existing			2027 No-Build			2027 Build		
				v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay
1	**NYS Route 59 & Washington Avenue**	**Signalized**										
	NYS Route 59	EB	LTR	0.72	D	49.2	0.61	D	43.7	0.72	D	49.8
	NYS Route 59	WB	L	0.47	D	45.6	0.36	D	39.2	0.37	D	40.2
			TR	0.83	D	53.3	0.69	D	44.2	0.71	D	45.8
		WB	APPROACH	-	D	51.9	-	D	43.3	-	D	44.8
	Washington Avenue	NB	LTR	0.72	D	51.1	0.93	E	78.9	0.92	E	76.9
	Washington Avenue	SB	LTR	0.58	E	62.1	0.68	E	72.0	0.70	E	72.4
		Overall		**-**	**D**	**52.1**	**-**	**E**	**55.7**	**-**	**E**	**57.4**
2	**NYS Route 59 & Suffern Place**	**Unsignalized**										
	NYS Route 59	EB	LTR	0.016	A	8.3	0.018	A	8.4	0.018	A	8.4
	NYS Route 59	WB	LTR	0.003	A	8.0	0.003	A	8.0	0.003	A	8.1
	Suffern Place	SB	LTR	0.105	B	14.5	0.123	C	15.3	0.125	C	15.5
3	**Washington Avenue & Cross Street**	**Unsignalized**										
	Washington Avenue	NB	LTR	0.029	A	9.5	0.032	A	9.5	0.032	A	9.5
	Washington Avenue	SB	LTR	0.000	A	0.0	0.000	A	0.0	0.000	A	0.0
	Cross Street	EB	LTR	0.041	A	7.7	0.045	A	7.7	0.045	A	7.7
	Cross Street	WB	LTR	0.000	A	0.0	0.000	A	0.0	0.000	A	0.0
4	**Washington Avenue & Proposed Site Driveway**	**Unsignalized**										
	Washington Avenue	NB	LT	-	-	-	-	-	-	0.024	A	9.5
	Proposed Site Driveway	EB	LR	-	-	-	-	-	-	0.020	A	7.6

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.

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Appendix C | Level of Service Standards

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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

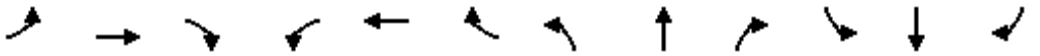
Control Delay (s/veh)	v/c ≤ 1.0	v/c ≥ 1.0
0-10	A	F
>10-15	B	F
>15-25	C	F
>25-35	D	F
>35-50	E	F
>50	F	F

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

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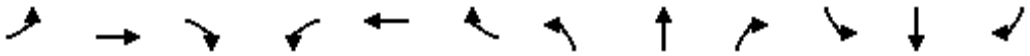
Traffic Impact Study

Appendix D | Capacity Analysis



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	335	10	57	260	46	34	95	115	69	39	19
Future Volume (vph)	12	335	10	57	260	46	34	95	115	69	39	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	12	11	15	12	12	15	12	12	15	12
Grade (%)		-2%			1%			0%			-2%	
Storage Length (ft)	0		0	215		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		1.00	1.00			1.00			1.00	
Frt		0.996			0.977			0.936			0.980	
Flt Protected		0.998		0.950				0.993			0.974	
Satd. Flow (prot)	0	1923	0	1702	1846	0	0	1699	0	0	1944	0
Flt Permitted		0.980		0.329				0.993			0.974	
Satd. Flow (perm)	0	1888	0	588	1846	0	0	1698	0	0	1944	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		247			1043			363			461	
Travel Time (s)		5.6			23.7			9.9			12.6	
Confl. Peds. (#/hr)	7		3	3		7	2					2
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles (%)	17%	9%	0%	2%	10%	7%	9%	3%	1%	6%	0%	0%
Parking (#/hr)								0				
Adj. Flow (vph)	14	394	12	67	306	54	40	112	135	81	46	22
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	420	0	67	360	0	0	287	0	0	149	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)		11			11			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.99	0.87	0.99	1.05	0.89	1.01	1.00	1.01	1.00	0.99	0.87	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		2	2		1	2		1	2	
Detector Template	Left						Left			Left		
Leading Detector (ft)	20	8		8	8		20	8		20	8	
Trailing Detector (ft)	0	-6		-6	-6		0	-6		0	-6	
Detector 1 Position(ft)	0	-6		-6	-6		0	-6		0	-6	
Detector 1 Size(ft)	20	6		6	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		2		2	2			2			2	
Detector 2 Size(ft)		6		6	6			6			6	

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Parking (#/hr)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
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		Split	NA		Split	NA	
Protected Phases		2			6		4	4		8	8	
Permitted Phases	2			6								
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	17.0	17.0		17.0	17.0		12.0	12.0		12.0	12.0	
Total Split (s)	52.0	52.0		52.0	52.0		37.0	37.0		37.0	37.0	
Total Split (%)	33.8%	33.8%		33.8%	33.8%		24.0%	24.0%		24.0%	24.0%	
Maximum Green (s)	45.0	45.0		45.0	45.0		30.0	30.0		30.0	30.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lost Time Adjust (s)		0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)		7.0		7.0	7.0			7.0			7.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	Min	Min		Min	Min		None	None		None	None	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)		30.4		30.4	30.4			23.8			13.8	
Actuated g/C Ratio		0.30		0.30	0.30			0.24			0.14	
v/c Ratio		0.73		0.37	0.64			0.71			0.56	
Control Delay		42.6		40.6	39.2			50.7			55.4	
Queue Delay		0.0		0.0	0.0			0.0			0.0	
Total Delay		42.6		40.6	39.2			50.7			55.4	
LOS		D		D	D			D			E	
Approach Delay		42.6			39.4			50.7			55.4	
Approach LOS		D			D			D			E	
Queue Length 50th (ft)		189		27	157			131			73	
Queue Length 95th (ft)		445		93	376			#366			195	
Internal Link Dist (ft)		167			963			283			381	
Turn Bay Length (ft)				215								
Base Capacity (vph)		965		300	944			579			663	
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		0.44		0.22	0.38			0.50			0.22	

Intersection Summary	
Area Type:	Other
Cycle Length: 154	
Actuated Cycle Length: 99.7	
Natural Cycle: 90	
Control Type: Semi Act-Uncoord	

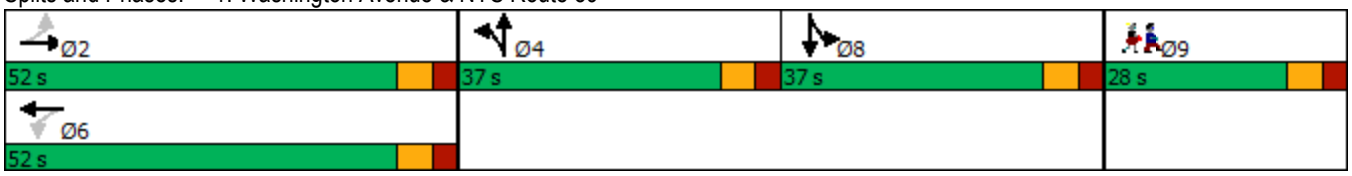
Lane Group	Ø9
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	5.0
Minimum Split (s)	28.0
Total Split (s)	28.0
Total Split (%)	18%
Maximum Green (s)	21.0
Yellow Time (s)	4.0
All-Red Time (s)	3.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	7.0
Flash Dont Walk (s)	14.0
Pedestrian Calls (#/hr)	12
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

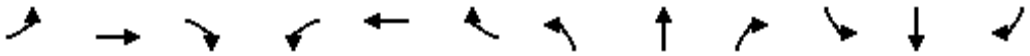
Intersection Summary

Maximum v/c Ratio: 0.73	
Intersection Signal Delay: 44.8	Intersection LOS: D
Intersection Capacity Utilization 63.3%	ICU Level of Service B
Analysis Period (min) 15	

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

Splits and Phases: 1: Washington Avenue & NYS Route 59





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	349	2	1	285	19	0	0	0	7	0	6
Future Volume (vph)	13	349	2	1	285	19	0	0	0	7	0	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	11	12	12	9	12	12	12	12	12	8	12
Grade (%)		0%			-2%			-1%			0%	
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		0.999			0.992						0.942	
Flt Protected		0.998									0.972	
Satd. Flow (prot)	0	1517	0	0	1406	0	0	0	0	0	1256	0
Flt Permitted		0.998									0.972	
Satd. Flow (perm)	0	1517	0	0	1406	0	0	0	0	0	1256	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		639			247			160			241	
Travel Time (s)		14.5			5.6			3.6			5.5	
Confl. Peds. (#/hr)	23		21	15		17	21		15	17		23
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	9%	0%	0%	10%	5%	0%	0%	0%	14%	0%	0%
Parking (#/hr)		0			0						0	
Adj. Flow (vph)	14	375	2	1	306	20	0	0	0	8	0	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	391	0	0	327	0	0	0	0	0	14	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	1.00	1.19	1.00	0.99	1.29	0.99	0.99	0.99	0.99	1.00	1.37	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Free			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 45.7%		ICU Level of Service A	
Analysis Period (min) 15			

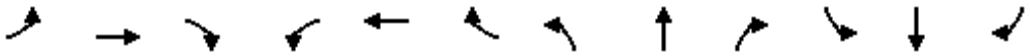
Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕						↕	
Traffic Vol, veh/h	13	349	2	1	285	19	0	0	0	7	0	6
Future Vol, veh/h	13	349	2	1	285	19	0	0	0	7	0	6
Conflicting Peds, #/hr	23	0	21	15	0	17	21	0	15	17	0	23
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	-2	-	-	-1	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	9	0	0	10	5	0	0	0	14	0	0
Mvmt Flow	14	375	2	1	306	20	0	0	0	8	0	6

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	349	0	0	398	0	0	762	767	362
Stage 1	-	-	-	-	-	-	341	341	-
Stage 2	-	-	-	-	-	-	421	426	-
Critical Hdwy	4.1	-	-	4.1	-	-	6.54	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.54	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.54	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.626	4	3.3
Pot Cap-1 Maneuver	1221	-	-	1172	-	-	356	335	687
Stage 1	-	-	-	-	-	-	694	642	-
Stage 2	-	-	-	-	-	-	637	589	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1203	-	-	1172	-	-	340	0	663
Mov Cap-2 Maneuver	-	-	-	-	-	-	340	0	-
Stage 1	-	-	-	-	-	-	673	0	-
Stage 2	-	-	-	-	-	-	627	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	13.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1203	-	-	1172	-	-	439
HCM Lane V/C Ratio	0.012	-	-	0.001	-	-	0.032
HCM Control Delay (s)	8	0	-	8.1	0	-	13.5
HCM Lane LOS	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	-	-	0	-	-	0.1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	0	24	0	0	0	17	131	0	0	104	2
Future Volume (vph)	2	0	24	0	0	0	17	131	0	0	104	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	12	12	9	12	12	15	12	12	15	12
Grade (%)		-2%			-1%			0%			1%	
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		0.874									0.998	
Flt Protected		0.997						0.994				
Satd. Flow (prot)	0	1720	0	0	1719	0	0	1997	0	0	1982	0
Flt Permitted		0.997						0.994				
Satd. Flow (perm)	0	1720	0	0	1719	0	0	1997	0	0	1982	0
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		373			327			409			288	
Travel Time (s)		8.5			7.4			11.2			7.9	
Confl. Peds. (#/hr)	4		4	7		7	4		7	7		4
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles (%)	50%	0%	4%	0%	0%	0%	12%	3%	0%	0%	4%	50%
Adj. Flow (vph)	2	0	29	0	0	0	20	158	0	0	125	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	31	0	0	0	0	0	178	0	0	127	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	0.99	0.87	0.99	0.99	1.14	0.99	1.00	0.88	1.00	1.01	0.89	1.01
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 Capacity Utilization 26.6%		ICU Level of Service A	
Analysis Period (min) 15			

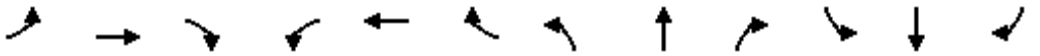
Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	0	24	0	0	0	17	131	0	0	104	2
Future Vol, veh/h	2	0	24	0	0	0	17	131	0	0	104	2
Conflicting Peds, #/hr	4	0	4	7	0	7	4	0	7	7	0	4
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, %	-	-2	-	-	-1	-	-	0	-	-	1	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	50	0	4	0	0	0	12	3	0	0	4	50
Mvmt Flow	2	0	29	0	0	0	20	158	0	0	125	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	335	335	137	353	336	172	131	0	0	165	0	0
Stage 1	130	130	-	205	205	-	-	-	-	-	-	-
Stage 2	205	205	-	148	131	-	-	-	-	-	-	-
Critical Hdwy	7.2	6.1	6.04	6.9	6.3	6.1	4.22	-	-	4.1	-	-
Critical Hdwy Stg 1	6.2	5.1	-	5.9	5.3	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.2	5.1	-	5.9	5.3	-	-	-	-	-	-	-
Follow-up Hdwy	3.95	4	3.336	3.5	4	3.3	2.308	-	-	2.2	-	-
Pot Cap-1 Maneuver	557	611	913	618	599	881	1395	-	-	1426	-	-
Stage 1	782	804	-	811	744	-	-	-	-	-	-	-
Stage 2	715	753	-	866	797	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	543	595	901	583	583	869	1388	-	-	1419	-	-
Mov Cap-2 Maneuver	543	595	-	583	583	-	-	-	-	-	-	-
Stage 1	766	800	-	794	728	-	-	-	-	-	-	-
Stage 2	698	737	-	831	793	-	-	-	-	-	-	-

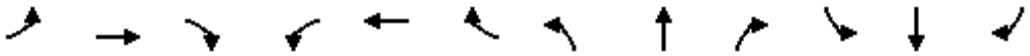
Approach	EB	WB	NB	SB
HCM Control Delay, s	9.4	0	0.9	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1388	-	-	858	-	1419	-	-
HCM Lane V/C Ratio	0.015	-	-	0.037	-	-	-	-
HCM Control Delay (s)	7.6	0	-	9.4	0	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	-	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	233	38	96	348	95	51	188	109	53	58	23
Future Volume (vph)	18	233	38	96	348	95	51	188	109	53	58	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	12	11	15	12	12	15	12	12	15	12
Grade (%)		-2%			1%			0%			-2%	
Storage Length (ft)	0		0	215		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99		0.99	0.99			1.00			0.99	
Frt		0.982			0.968			0.958			0.977	
Flt Protected		0.997		0.950				0.993			0.981	
Satd. Flow (prot)	0	1998	0	1736	1957	0	0	1779	0	0	1996	0
Flt Permitted		0.704		0.417				0.993			0.981	
Satd. Flow (perm)	0	1411	0	752	1957	0	0	1774	0	0	1996	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		247			1043			363			461	
Travel Time (s)		5.6			23.7			9.9			12.6	
Confl. Peds. (#/hr)	5		15	15		5	8					8
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	3%	3%	0%	2%	3%	2%	0%	1%	0%	0%	4%
Parking (#/hr)								0				
Adj. Flow (vph)	18	238	39	98	355	97	52	192	111	54	59	23
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	295	0	98	452	0	0	355	0	0	136	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)		11			11			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.99	0.87	0.99	1.05	0.89	1.01	1.00	1.01	1.00	0.99	0.87	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		2	2		1	2		1	2	
Detector Template	Left						Left			Left		
Leading Detector (ft)	20	8		8	8		20	8		20	8	
Trailing Detector (ft)	0	-6		-6	-6		0	-6		0	-6	
Detector 1 Position(ft)	0	-6		-6	-6		0	-6		0	-6	
Detector 1 Size(ft)	20	6		6	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		2		2	2			2			2	
Detector 2 Size(ft)		6		6	6			6			6	

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Parking (#/hr)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
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		Split	NA		Split	NA	
Protected Phases		2			6		4	4		8	8	
Permitted Phases	2			6								
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	17.0	17.0		17.0	17.0		12.0	12.0		12.0	12.0	
Total Split (s)	52.0	52.0		52.0	52.0		37.0	37.0		37.0	37.0	
Total Split (%)	33.8%	33.8%		33.8%	33.8%		24.0%	24.0%		24.0%	24.0%	
Maximum Green (s)	46.0	46.0		45.0	45.0		31.0	31.0		30.0	30.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		3.0	3.0		2.0	2.0		3.0	3.0	
Lost Time Adjust (s)		0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)		6.0		7.0	7.0			6.0			7.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	Min	Min		Min	Min		None	None		None	None	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)		31.8		30.7	30.7			30.6			13.0	
Actuated g/C Ratio		0.29		0.28	0.28			0.28			0.12	
v/c Ratio		0.72		0.47	0.83			0.72			0.58	
Control Delay		49.2		45.6	53.3			51.1			62.1	
Queue Delay		0.0		0.0	0.0			0.0			0.0	
Total Delay		49.2		45.6	53.3			51.1			62.1	
LOS		D		D	D			D			E	
Approach Delay		49.2			51.9			51.1			62.1	
Approach LOS		D			D			D			E	
Queue Length 50th (ft)		221		68	353			274			108	
Queue Length 95th (ft)		346		133	509			#517			191	
Internal Link Dist (ft)		167			963			283			381	
Turn Bay Length (ft)				215								
Base Capacity (vph)		646		337	877			549			596	
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		0.46		0.29	0.52			0.65			0.23	

Intersection Summary	
Area Type:	Other
Cycle Length: 154	
Actuated Cycle Length: 109.9	
Natural Cycle: 90	
Control Type: Semi Act-Uncoord	

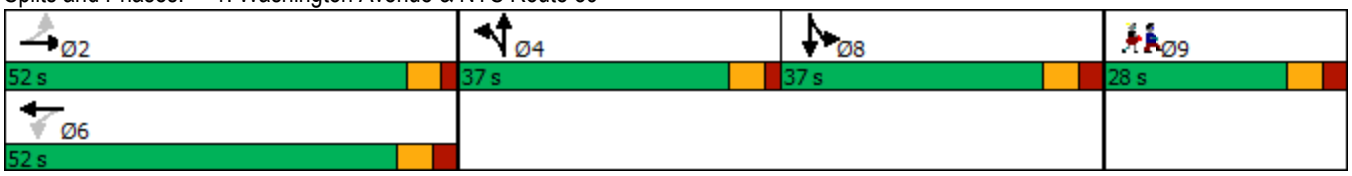
Lane Group	Ø9
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	5.0
Minimum Split (s)	28.0
Total Split (s)	28.0
Total Split (%)	18%
Maximum Green (s)	21.0
Yellow Time (s)	4.0
All-Red Time (s)	3.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	7.0
Flash Dont Walk (s)	14.0
Pedestrian Calls (#/hr)	23
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

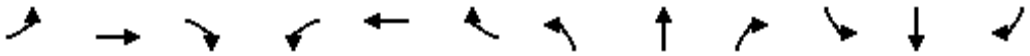
Intersection Summary

Maximum v/c Ratio: 0.83	
Intersection Signal Delay: 52.1	Intersection LOS: D
Intersection Capacity Utilization 72.6%	ICU Level of Service C
Analysis Period (min) 15	

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

Splits and Phases: 1: Washington Avenue & NYS Route 59





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	284	1	3	362	22	0	0	0	20	0	22
Future Volume (vph)	17	284	1	3	362	22	0	0	0	20	0	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	11	12	12	9	12	12	12	12	12	8	12
Grade (%)		0%			-2%			-1%			0%	
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					0.992						0.929	
Flt Protected		0.997									0.977	
Satd. Flow (prot)	0	1603	0	0	1500	0	0	0	0	0	1345	0
Flt Permitted		0.997									0.977	
Satd. Flow (perm)	0	1603	0	0	1500	0	0	0	0	0	1345	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		493			247			160			241	
Travel Time (s)		11.2			5.6			3.6			5.5	
Confl. Peds. (#/hr)	33		53	52		32	53		52	32		33
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	3%	0%	0%	3%	0%	0%	0%	0%	0%	0%	0%
Parking (#/hr)		0			0						0	
Adj. Flow (vph)	18	302	1	3	385	23	0	0	0	21	0	23
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	321	0	0	411	0	0	0	0	0	44	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	1.00	1.19	1.00	0.99	1.29	0.99	0.99	0.99	0.99	1.00	1.37	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Free			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 45.5%		ICU Level of Service A	
Analysis Period (min) 15			

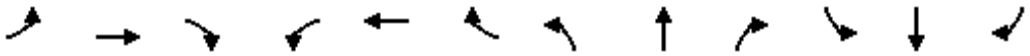
Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕						⇕	
Traffic Vol, veh/h	17	284	1	3	362	22	0	0	0	20	0	22
Future Vol, veh/h	17	284	1	3	362	22	0	0	0	20	0	22
Conflicting Peds, #/hr	33	0	53	52	0	32	53	0	52	32	0	33
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	-2	-	-	-1	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	3	0	0	3	0	0	0	0	0	0	0
Mvmt Flow	18	302	1	3	385	23	0	0	0	21	0	23

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	441	0	0	356	0	0	807	828	463
Stage 1	-	-	-	-	-	-	436	436	-
Stage 2	-	-	-	-	-	-	371	392	-
Critical Hdwy	4.1	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	1130	-	-	1214	-	-	354	309	603
Stage 1	-	-	-	-	-	-	656	583	-
Stage 2	-	-	-	-	-	-	702	610	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1106	-	-	1214	-	-	331	0	573
Mov Cap-2 Maneuver	-	-	-	-	-	-	331	0	-
Stage 1	-	-	-	-	-	-	629	0	-
Stage 2	-	-	-	-	-	-	685	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0.5	0.1	14.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1106	-	-	1214	-	-	425
HCM Lane V/C Ratio	0.016	-	-	0.003	-	-	0.105
HCM Control Delay (s)	8.3	0	-	8	0	-	14.5
HCM Lane LOS	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	-	-	0	-	-	0.3



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	0	21	0	0	0	53	251	2	0	118	3
Future Volume (vph)	1	0	21	0	0	0	53	251	2	0	118	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	12	12	9	12	12	15	12	12	15	12
Grade (%)		-2%			-1%			0%			1%	
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		0.871						0.999			0.997	
Flt Protected		0.998						0.991				
Satd. Flow (prot)	0	1674	0	0	1719	0	0	2048	0	0	2073	0
Flt Permitted		0.998						0.991				
Satd. Flow (perm)	0	1674	0	0	1719	0	0	2048	0	0	2073	0
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		373			327			409			288	
Travel Time (s)		8.5			7.4			11.2			7.9	
Confl. Peds. (#/hr)	8		9	9		8	9		9	8		8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	10%	0%	0%	0%	6%	0%	0%	0%	0%	0%
Adj. Flow (vph)	1	0	23	0	0	0	58	273	2	0	128	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	24	0	0	0	0	0	333	0	0	131	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	0.99	0.87	0.99	0.99	1.14	0.99	1.00	0.88	1.00	1.01	0.89	1.01
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 Capacity Utilization	40.2%	ICU Level of Service	A
Analysis Period (min)	15		

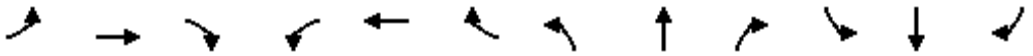
Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	0	21	0	0	0	53	251	2	0	118	3
Future Vol, veh/h	1	0	21	0	0	0	53	251	2	0	118	3
Conflicting Peds, #/hr	8	0	9	9	0	8	9	0	9	8	0	8
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, %	-	-2	-	-	-1	-	-	0	-	-	1	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	10	0	0	0	6	0	0	0	0	0
Mvmt Flow	1	0	23	0	0	0	58	273	2	0	128	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	537	539	148	549	539	291	140	0	0	284	0	0
Stage 1	139	139	-	399	399	-	-	-	-	-	-	-
Stage 2	398	400	-	150	140	-	-	-	-	-	-	-
Critical Hdwy	6.7	6.1	6.1	6.9	6.3	6.1	4.16	-	-	4.1	-	-
Critical Hdwy Stg 1	5.7	5.1	-	5.9	5.3	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.7	5.1	-	5.9	5.3	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.39	3.5	4	3.3	2.254	-	-	2.2	-	-
Pot Cap-1 Maneuver	486	480	885	463	466	759	1419	-	-	1290	-	-
Stage 1	882	798	-	645	619	-	-	-	-	-	-	-
Stage 2	661	633	-	864	791	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	458	449	866	426	436	747	1404	-	-	1282	-	-
Mov Cap-2 Maneuver	458	449	-	426	436	-	-	-	-	-	-	-
Stage 1	830	789	-	610	585	-	-	-	-	-	-	-
Stage 2	623	598	-	832	782	-	-	-	-	-	-	-

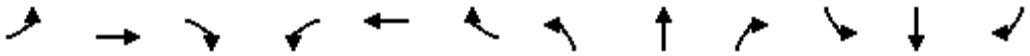
Approach	EB	WB	NB	SB
HCM Control Delay, s	9.5	0	1.3	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1404	-	-	832	-	1282	-	-
HCM Lane V/C Ratio	0.041	-	-	0.029	-	-	-	-
HCM Control Delay (s)	7.7	0	-	9.5	0	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	362	11	62	281	50	37	103	124	75	42	21
Future Volume (vph)	13	362	11	62	281	50	37	103	124	75	42	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	12	11	15	12	12	15	12	12	15	12
Grade (%)		-2%			1%			0%			-2%	
Storage Length (ft)	0		0	215		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		1.00	1.00			1.00			1.00	
Frt		0.996			0.977			0.937			0.979	
Flt Protected		0.998		0.950				0.993			0.974	
Satd. Flow (prot)	0	1924	0	1702	1846	0	0	1701	0	0	1942	0
Flt Permitted		0.980		0.335				0.993			0.974	
Satd. Flow (perm)	0	1888	0	599	1846	0	0	1700	0	0	1942	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		247			1043			363			461	
Travel Time (s)		5.6			23.7			9.9			12.6	
Confl. Peds. (#/hr)	7		3	3		7	2					2
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles (%)	17%	9%	0%	2%	10%	7%	9%	3%	1%	6%	0%	0%
Parking (#/hr)								0				
Adj. Flow (vph)	15	426	13	73	331	59	44	121	146	88	49	25
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	454	0	73	390	0	0	311	0	0	162	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)		11			11			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.99	0.87	0.99	1.05	0.89	1.01	1.00	1.01	1.00	0.99	0.87	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		2	2		1	2		1	2	
Detector Template	Left						Left			Left		
Leading Detector (ft)	20	8		8	8		20	8		20	8	
Trailing Detector (ft)	0	-6		-6	-6		0	-6		0	-6	
Detector 1 Position(ft)	0	-6		-6	-6		0	-6		0	-6	
Detector 1 Size(ft)	20	6		6	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		2		2	2			2			2	
Detector 2 Size(ft)		6		6	6			6			6	

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Parking (#/hr)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
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		Split	NA		Split	NA	
Protected Phases		2			6		4	4		8	8	
Permitted Phases	2			6								
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	17.0	17.0		17.0	17.0		12.0	12.0		12.0	12.0	
Total Split (s)	52.0	52.0		52.0	52.0		37.0	37.0		37.0	37.0	
Total Split (%)	33.8%	33.8%		33.8%	33.8%		24.0%	24.0%		24.0%	24.0%	
Maximum Green (s)	45.0	45.0		45.0	45.0		30.0	30.0		30.0	30.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lost Time Adjust (s)		0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)		7.0		7.0	7.0			7.0			7.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	Min	Min		Min	Min		None	None		None	None	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)		39.3		39.3	39.3			27.1			14.8	
Actuated g/C Ratio		0.35		0.35	0.35			0.24			0.13	
v/c Ratio		0.69		0.35	0.60			0.76			0.64	
Control Delay		41.3		39.6	38.5			56.3			62.2	
Queue Delay		0.0		0.0	0.0			0.0			0.0	
Total Delay		41.3		39.6	38.5			56.3			62.2	
LOS		D		D	D			E			E	
Approach Delay		41.3			38.7			56.3			62.2	
Approach LOS		D			D			E			E	
Queue Length 50th (ft)		234		33	194			178			100	
Queue Length 95th (ft)		494		102	416			#422			210	
Internal Link Dist (ft)		167			963			283			381	
Turn Bay Length (ft)				215								
Base Capacity (vph)		805		255	787			483			552	
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		0.56		0.29	0.50			0.64			0.29	

Intersection Summary	
Area Type:	Other
Cycle Length: 154	
Actuated Cycle Length: 112.2	
Natural Cycle: 100	
Control Type: Semi Act-Uncoord	

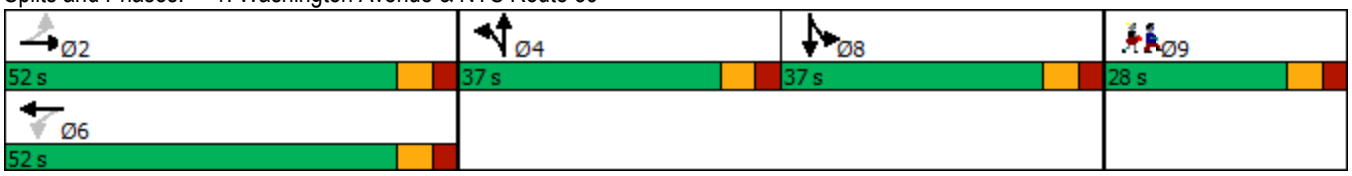
Lane Group	Ø9
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	5.0
Minimum Split (s)	28.0
Total Split (s)	28.0
Total Split (%)	18%
Maximum Green (s)	21.0
Yellow Time (s)	4.0
All-Red Time (s)	3.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	7.0
Flash Dont Walk (s)	14.0
Pedestrian Calls (#/hr)	12
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

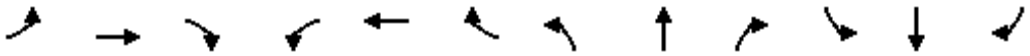
Intersection Summary

Maximum v/c Ratio: 0.76	
Intersection Signal Delay: 46.2	Intersection LOS: D
Intersection Capacity Utilization 67.8%	ICU Level of Service C
Analysis Period (min) 15	

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

Splits and Phases: 1: Washington Avenue & NYS Route 59





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	377	2	1	308	21	0	0	0	8	0	6
Future Volume (vph)	14	377	2	1	308	21	0	0	0	8	0	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	11	12	12	9	12	12	12	12	12	8	12
Grade (%)		0%			-2%			-1%			0%	
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		0.999			0.991						0.946	
Flt Protected		0.998									0.971	
Satd. Flow (prot)	0	1517	0	0	1405	0	0	0	0	0	1256	0
Flt Permitted		0.998									0.971	
Satd. Flow (perm)	0	1517	0	0	1405	0	0	0	0	0	1256	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		639			247			160			241	
Travel Time (s)		14.5			5.6			3.6			5.5	
Confl. Peds. (#/hr)	23		21	15		17	21		15	17		23
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	9%	0%	0%	10%	5%	0%	0%	0%	14%	0%	0%
Parking (#/hr)		0			0						0	
Adj. Flow (vph)	15	405	2	1	331	23	0	0	0	9	0	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	422	0	0	355	0	0	0	0	0	15	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	1.00	1.19	1.00	0.99	1.29	0.99	0.99	0.99	0.99	1.00	1.37	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Free			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 48.1%		ICU Level of Service A	
Analysis Period (min) 15			

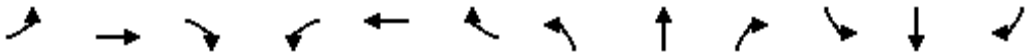
Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕						↕	
Traffic Vol, veh/h	14	377	2	1	308	21	0	0	0	8	0	6
Future Vol, veh/h	14	377	2	1	308	21	0	0	0	8	0	6
Conflicting Peds, #/hr	23	0	21	15	0	17	21	0	15	17	0	23
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	-2	-	-	-1	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	9	0	0	10	5	0	0	0	14	0	0
Mvmt Flow	15	405	2	1	331	23	0	0	0	9	0	6

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	377	0	0	428	0	0	821	826	389
Stage 1	-	-	-	-	-	-	368	368	-
Stage 2	-	-	-	-	-	-	453	458	-
Critical Hdwy	4.1	-	-	4.1	-	-	6.54	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.54	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.54	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.626	4	3.3
Pot Cap-1 Maneuver	1193	-	-	1142	-	-	328	310	664
Stage 1	-	-	-	-	-	-	674	625	-
Stage 2	-	-	-	-	-	-	616	570	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1176	-	-	1142	-	-	313	0	641
Mov Cap-2 Maneuver	-	-	-	-	-	-	313	0	-
Stage 1	-	-	-	-	-	-	653	0	-
Stage 2	-	-	-	-	-	-	606	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	14.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1176	-	-	1142	-	-	401
HCM Lane V/C Ratio	0.013	-	-	0.001	-	-	0.038
HCM Control Delay (s)	8.1	0	-	8.2	0	-	14.3
HCM Lane LOS	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	-	-	0	-	-	0.1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	0	26	0	0	0	18	141	0	0	112	2
Future Volume (vph)	2	0	26	0	0	0	18	141	0	0	112	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	12	12	9	12	12	15	12	12	15	12
Grade (%)		-2%			-1%			0%			1%	
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		0.873									0.998	
Flt Protected		0.997						0.994				
Satd. Flow (prot)	0	1721	0	0	1719	0	0	1997	0	0	1983	0
Flt Permitted		0.997						0.994				
Satd. Flow (perm)	0	1721	0	0	1719	0	0	1997	0	0	1983	0
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		373			327			409			288	
Travel Time (s)		8.5			7.4			11.2			7.9	
Confl. Peds. (#/hr)	4		4	7		7	4		7	7		4
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles (%)	50%	0%	4%	0%	0%	0%	12%	3%	0%	0%	4%	50%
Adj. Flow (vph)	2	0	31	0	0	0	22	170	0	0	135	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	33	0	0	0	0	0	192	0	0	137	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	0.99	0.87	0.99	0.99	1.14	0.99	1.00	0.88	1.00	1.01	0.89	1.01
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 Capacity Utilization 27.2%		ICU Level of Service A	
Analysis Period (min) 15			

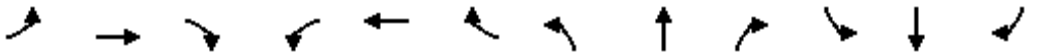
Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	2	0	26	0	0	0	18	141	0	0	112	2
Future Vol, veh/h	2	0	26	0	0	0	18	141	0	0	112	2
Conflicting Peds, #/hr	4	0	4	7	0	7	4	0	7	7	0	4
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, %	-	-2	-	-	-1	-	-	0	-	-	1	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	50	0	4	0	0	0	12	3	0	0	4	50
Mvmt Flow	2	0	31	0	0	0	22	170	0	0	135	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	361	361	147	380	362	184	141	0	0	177	0	0
Stage 1	140	140	-	221	221	-	-	-	-	-	-	-
Stage 2	221	221	-	159	141	-	-	-	-	-	-	-
Critical Hdwy	7.2	6.1	6.04	6.9	6.3	6.1	4.22	-	-	4.1	-	-
Critical Hdwy Stg 1	6.2	5.1	-	5.9	5.3	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.2	5.1	-	5.9	5.3	-	-	-	-	-	-	-
Follow-up Hdwy	3.95	4	3.336	3.5	4	3.3	2.308	-	-	2.2	-	-
Pot Cap-1 Maneuver	536	593	902	594	580	868	1383	-	-	1411	-	-
Stage 1	773	797	-	796	733	-	-	-	-	-	-	-
Stage 2	701	742	-	855	790	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	522	576	890	558	564	856	1376	-	-	1404	-	-
Mov Cap-2 Maneuver	522	576	-	558	564	-	-	-	-	-	-	-
Stage 1	755	793	-	778	716	-	-	-	-	-	-	-
Stage 2	683	725	-	818	786	-	-	-	-	-	-	-

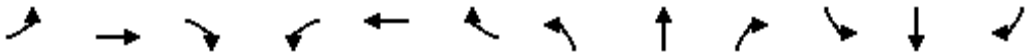
Approach	EB	WB	NB	SB
HCM Control Delay, s	9.4	0	0.9	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1376	-	-	847	-	1404	-	-
HCM Lane V/C Ratio	0.016	-	-	0.04	-	-	-	-
HCM Control Delay (s)	7.7	0	-	9.4	0	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	-	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	262	41	104	376	103	55	203	118	57	63	25
Future Volume (vph)	19	262	41	104	376	103	55	203	118	57	63	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	12	11	15	12	12	15	12	12	15	12
Grade (%)		-2%			1%			0%			-2%	
Storage Length (ft)	0		0	215		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99		0.99	0.99			1.00			0.99	
Frt		0.983			0.968			0.958			0.976	
Flt Protected		0.997		0.950				0.993			0.981	
Satd. Flow (prot)	0	2000	0	1736	1957	0	0	1779	0	0	1993	0
Flt Permitted		0.757		0.458				0.993			0.981	
Satd. Flow (perm)	0	1518	0	826	1957	0	0	1774	0	0	1993	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		247			1043			363			461	
Travel Time (s)		5.6			23.7			9.9			12.6	
Confl. Peds. (#/hr)	5		15	15		5	8					8
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	3%	3%	0%	2%	3%	2%	0%	1%	0%	0%	4%
Parking (#/hr)								0				
Adj. Flow (vph)	19	267	42	106	384	105	56	207	120	58	64	26
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	328	0	106	489	0	0	383	0	0	148	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)		11			11			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.99	0.87	0.99	1.05	0.89	1.01	1.00	1.01	1.00	0.99	0.87	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		2	2		1	2		1	2	
Detector Template	Left						Left			Left		
Leading Detector (ft)	20	8		8	8		20	8		20	8	
Trailing Detector (ft)	0	-6		-6	-6		0	-6		0	-6	
Detector 1 Position(ft)	0	-6		-6	-6		0	-6		0	-6	
Detector 1 Size(ft)	20	6		6	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		2		2	2			2			2	
Detector 2 Size(ft)		6		6	6			6			6	

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Parking (#/hr)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
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		Split	NA		Split	NA	
Protected Phases		2			6		4	4		8	8	
Permitted Phases	2			6								
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	18.0	18.0		17.0	17.0		13.0	13.0		12.0	12.0	
Total Split (s)	52.0	52.0		52.0	52.0		37.0	37.0		37.0	37.0	
Total Split (%)	33.8%	33.8%		33.8%	33.8%		24.0%	24.0%		24.0%	24.0%	
Maximum Green (s)	44.0	44.0		45.0	45.0		29.0	29.0		30.0	30.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	4.0	4.0		3.0	3.0		4.0	4.0		3.0	3.0	
Lost Time Adjust (s)		0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)		8.0		7.0	7.0			8.0			7.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	Min	Min		Min	Min		None	None		None	None	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)		44.9		45.9	45.9			29.6			14.0	
Actuated g/C Ratio		0.35		0.36	0.36			0.23			0.11	
v/c Ratio		0.61		0.36	0.69			0.93			0.68	
Control Delay		43.7		39.2	44.2			78.9			72.0	
Queue Delay		0.0		0.0	0.0			0.0			0.0	
Total Delay		43.7		39.2	44.2			78.9			72.0	
LOS		D		D	D			E			E	
Approach Delay		43.7			43.3			78.9			72.0	
Approach LOS		D			D			E			E	
Queue Length 50th (ft)		258		74	398			~369			131	
Queue Length 95th (ft)		393		141	568			#609			206	
Internal Link Dist (ft)		167			963			283			381	
Turn Bay Length (ft)				215								
Base Capacity (vph)		536		298	707			414			479	
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		0.61		0.36	0.69			0.93			0.31	

Intersection Summary	
Area Type:	Other
Cycle Length: 154	
Actuated Cycle Length: 127.1	
Natural Cycle: 110	
Control Type: Semi Act-Uncoord	

Lane Group	Ø9
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	5.0
Minimum Split (s)	28.0
Total Split (s)	28.0
Total Split (%)	18%
Maximum Green (s)	21.0
Yellow Time (s)	4.0
All-Red Time (s)	3.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	7.0
Flash Dont Walk (s)	14.0
Pedestrian Calls (#/hr)	23
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Maximum v/c Ratio: 0.93	
Intersection Signal Delay: 55.7	Intersection LOS: E
Intersection Capacity Utilization 80.5%	ICU Level of Service D
Analysis Period (min) 15	

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

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

Splits and Phases: 1: Washington Avenue & NYS Route 59



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	307	1	3	391	24	0	0	0	22	0	24
Future Volume (vph)	18	307	1	3	391	24	0	0	0	22	0	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	11	12	12	9	12	12	12	12	12	8	12
Grade (%)		0%			-2%			-1%			0%	
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					0.992						0.928	
Flt Protected		0.997									0.977	
Satd. Flow (prot)	0	1603	0	0	1500	0	0	0	0	0	1344	0
Flt Permitted		0.997									0.977	
Satd. Flow (perm)	0	1603	0	0	1500	0	0	0	0	0	1344	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		639			247			160			241	
Travel Time (s)		14.5			5.6			3.6			5.5	
Confl. Peds. (#/hr)	33		53	52		32	53		52	32		33
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	3%	0%	0%	3%	0%	0%	0%	0%	0%	0%	0%
Parking (#/hr)		0			0						0	
Adj. Flow (vph)	19	327	1	3	416	26	0	0	0	23	0	26
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	347	0	0	445	0	0	0	0	0	49	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	1.00	1.19	1.00	0.99	1.29	0.99	0.99	0.99	0.99	1.00	1.37	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Free			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 47.7%		ICU Level of Service A	
Analysis Period (min) 15			

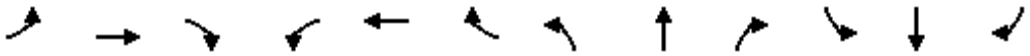
Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕						↕	
Traffic Vol, veh/h	18	307	1	3	391	24	0	0	0	22	0	24
Future Vol, veh/h	18	307	1	3	391	24	0	0	0	22	0	24
Conflicting Peds, #/hr	33	0	53	52	0	32	53	0	52	32	0	33
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	-2	-	-	-1	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	3	0	0	3	0	0	0	0	0	0	0
Mvmt Flow	19	327	1	3	416	26	0	0	0	23	0	26

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	475	0	0	381	0	0	866	887	495
Stage 1	-	-	-	-	-	-	468	468	-
Stage 2	-	-	-	-	-	-	398	419	-
Critical Hdwy	4.1	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	1098	-	-	1189	-	-	326	285	579
Stage 1	-	-	-	-	-	-	634	565	-
Stage 2	-	-	-	-	-	-	683	593	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1075	-	-	1189	-	-	305	0	551
Mov Cap-2 Maneuver	-	-	-	-	-	-	305	0	-
Stage 1	-	-	-	-	-	-	607	0	-
Stage 2	-	-	-	-	-	-	667	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0.5	0.1	15.3
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1075	-	-	1189	-	-	398
HCM Lane V/C Ratio	0.018	-	-	0.003	-	-	0.123
HCM Control Delay (s)	8.4	0	-	8	0	-	15.3
HCM Lane LOS	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.1	-	-	0	-	-	0.4



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	0	23	0	0	0	57	271	2	0	127	3
Future Volume (vph)	1	0	23	0	0	0	57	271	2	0	127	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	12	12	9	12	12	15	12	12	15	12
Grade (%)		-2%			-1%			0%			1%	
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		0.870						0.999			0.997	
Flt Protected		0.998						0.991				
Satd. Flow (prot)	0	1672	0	0	1719	0	0	2048	0	0	2073	0
Flt Permitted		0.998						0.991				
Satd. Flow (perm)	0	1672	0	0	1719	0	0	2048	0	0	2073	0
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		373			327			409			288	
Travel Time (s)		8.5			7.4			11.2			7.9	
Confl. Peds. (#/hr)	8		9	9		8	9		9	8		8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	10%	0%	0%	0%	6%	0%	0%	0%	0%	0%
Adj. Flow (vph)	1	0	25	0	0	0	62	295	2	0	138	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	26	0	0	0	0	0	359	0	0	141	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	0.99	0.87	0.99	0.99	1.14	0.99	1.00	0.88	1.00	1.01	0.89	1.01
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 Capacity Utilization	41.9%	ICU Level of Service	A
Analysis Period (min)	15		

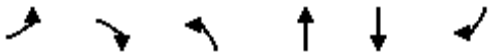
Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	0	23	0	0	0	57	271	2	0	127	3
Future Vol, veh/h	1	0	23	0	0	0	57	271	2	0	127	3
Conflicting Peds, #/hr	8	0	9	9	0	8	9	0	9	8	0	8
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, %	-	-2	-	-	-1	-	-	0	-	-	1	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	10	0	0	0	6	0	0	0	0	0
Mvmt Flow	1	0	25	0	0	0	62	295	2	0	138	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	577	579	158	590	579	313	150	0	0	306	0	0
Stage 1	149	149	-	429	429	-	-	-	-	-	-	-
Stage 2	428	430	-	161	150	-	-	-	-	-	-	-
Critical Hdwy	6.7	6.1	6.1	6.9	6.3	6.1	4.16	-	-	4.1	-	-
Critical Hdwy Stg 1	5.7	5.1	-	5.9	5.3	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.7	5.1	-	5.9	5.3	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.39	3.5	4	3.3	2.254	-	-	2.2	-	-
Pot Cap-1 Maneuver	459	458	874	436	443	738	1407	-	-	1266	-	-
Stage 1	873	791	-	623	602	-	-	-	-	-	-	-
Stage 2	638	616	-	853	783	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	431	426	855	399	412	726	1392	-	-	1258	-	-
Mov Cap-2 Maneuver	431	426	-	399	412	-	-	-	-	-	-	-
Stage 1	818	782	-	586	566	-	-	-	-	-	-	-
Stage 2	598	580	-	819	774	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.5	0	1.3	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1392	-	-	821	-	1258	-	-
HCM Lane V/C Ratio	0.045	-	-	0.032	-	-	-	-
HCM Control Delay (s)	7.7	0	-	9.5	0	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-	0	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	325	145	0
Future Volume (vph)	0	0	0	325	145	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	15	15	12
Grade (%)	0%			-2%	0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1900	0	0	2090	2069	0
Flt Permitted						
Satd. Flow (perm)	1900	0	0	2090	2069	0
Link Speed (mph)	30			25	25	
Link Distance (ft)	203			461	409	
Travel Time (s)	4.6			12.6	11.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	1%	1%	0%
Adj. Flow (vph)	0	0	0	353	158	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	353	158	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	0.99	0.87	0.88	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	20.4%	ICU Level of Service	A
Analysis Period (min)	15		

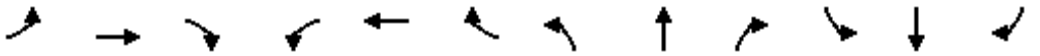
Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	325	145	0
Future Vol, veh/h	0	0	0	325	145	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	-2	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	1	1	0
Mvmt Flow	0	0	0	353	158	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	511	158	158	0	-	0
Stage 1	158	-	-	-	-	-
Stage 2	353	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	526	893	1434	-	-	-
Stage 1	875	-	-	-	-	-
Stage 2	716	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	526	893	1434	-	-	-
Mov Cap-2 Maneuver	526	-	-	-	-	-
Stage 1	875	-	-	-	-	-
Stage 2	716	-	-	-	-	-

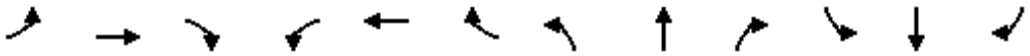
Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1434	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	362	11	62	281	53	37	105	124	87	49	33
Future Volume (vph)	16	362	11	62	281	53	37	105	124	87	49	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	12	11	15	12	12	15	12	12	15	12
Grade (%)		-2%			1%			0%			-2%	
Storage Length (ft)	0		0	215		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		1.00	0.99			1.00			1.00	
Frt		0.996			0.976			0.937			0.974	
Flt Protected		0.998		0.950				0.993			0.975	
Satd. Flow (prot)	0	1922	0	1702	1844	0	0	1701	0	0	1935	0
Flt Permitted		0.973		0.354				0.993			0.975	
Satd. Flow (perm)	0	1874	0	633	1844	0	0	1700	0	0	1935	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		247			1043			363			461	
Travel Time (s)		5.6			23.7			9.9			12.6	
Confl. Peds. (#/hr)	7		3	3		7	2					2
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles (%)	17%	9%	0%	2%	10%	7%	9%	3%	1%	6%	0%	0%
Parking (#/hr)								0				
Adj. Flow (vph)	19	426	13	73	331	62	44	124	146	102	58	39
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	458	0	73	393	0	0	314	0	0	199	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)		11			11			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.99	0.87	0.99	1.05	0.89	1.01	1.00	1.01	1.00	0.99	0.87	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		2	2		1	2		1	2	
Detector Template	Left						Left			Left		
Leading Detector (ft)	20	8		8	8		20	8		20	8	
Trailing Detector (ft)	0	-6		-6	-6		0	-6		0	-6	
Detector 1 Position(ft)	0	-6		-6	-6		0	-6		0	-6	
Detector 1 Size(ft)	20	6		6	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		2		2	2			2			2	
Detector 2 Size(ft)		6		6	6			6			6	

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Parking (#/hr)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
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		Split	NA		Split	NA	
Protected Phases		2			6		4	4		8	8	
Permitted Phases	2			6								
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	17.0	17.0		17.0	17.0		12.0	12.0		12.0	12.0	
Total Split (s)	52.0	52.0		52.0	52.0		37.0	37.0		37.0	37.0	
Total Split (%)	33.8%	33.8%		33.8%	33.8%		24.0%	24.0%		24.0%	24.0%	
Maximum Green (s)	45.0	45.0		45.0	45.0		30.0	30.0		30.0	30.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lost Time Adjust (s)		0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)		7.0		7.0	7.0			7.0			7.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	Min	Min		Min	Min		None	None		None	None	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)		46.4		46.4	46.4			27.6			17.3	
Actuated g/C Ratio		0.38		0.38	0.38			0.23			0.14	
v/c Ratio		0.64		0.30	0.56			0.82			0.73	
Control Delay		40.8		38.8	38.5			65.2			68.1	
Queue Delay		0.0		0.0	0.0			0.0			0.0	
Total Delay		40.8		38.8	38.5			65.2			68.1	
LOS		D		D	D			E			E	
Approach Delay		40.8			38.5			65.2			68.1	
Approach LOS		D			D			E			E	
Queue Length 50th (ft)		252		34	208			203			137	
Queue Length 95th (ft)		519		104	435			#445			252	
Internal Link Dist (ft)		167			963			283			381	
Turn Bay Length (ft)				215								
Base Capacity (vph)		711		240	700			430			490	
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		0.64		0.30	0.56			0.73			0.41	

Intersection Summary	
Area Type:	Other
Cycle Length: 154	
Actuated Cycle Length: 122.2	
Natural Cycle: 110	
Control Type: Semi Act-Uncoord	

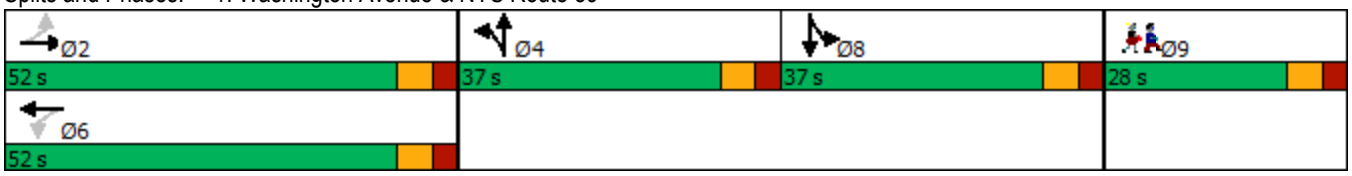
Lane Group	Ø9
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	5.0
Minimum Split (s)	28.0
Total Split (s)	28.0
Total Split (%)	18%
Maximum Green (s)	21.0
Yellow Time (s)	4.0
All-Red Time (s)	3.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	7.0
Flash Dont Walk (s)	14.0
Pedestrian Calls (#/hr)	12
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

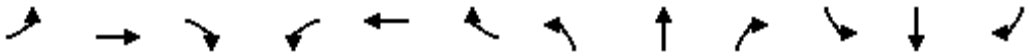
Intersection Summary

Maximum v/c Ratio: 0.82	
Intersection Signal Delay: 49.2	Intersection LOS: D
Intersection Capacity Utilization 70.3%	ICU Level of Service C
Analysis Period (min) 15	

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

Splits and Phases: 1: Washington Avenue & NYS Route 59





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	380	2	1	320	21	0	0	0	8	0	6
Future Volume (vph)	14	380	2	1	320	21	0	0	0	8	0	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	11	12	12	9	12	12	12	12	12	8	12
Grade (%)		0%			-2%			-1%			0%	
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		0.999			0.992						0.946	
Flt Protected		0.998									0.971	
Satd. Flow (prot)	0	1517	0	0	1406	0	0	0	0	0	1256	0
Flt Permitted		0.998									0.971	
Satd. Flow (perm)	0	1517	0	0	1406	0	0	0	0	0	1256	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		639			247			160			241	
Travel Time (s)		14.5			5.6			3.6			5.5	
Confl. Peds. (#/hr)	23		21	15		17	21		15	17		23
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	9%	0%	0%	10%	5%	0%	0%	0%	14%	0%	0%
Parking (#/hr)		0			0						0	
Adj. Flow (vph)	15	409	2	1	344	23	0	0	0	9	0	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	426	0	0	368	0	0	0	0	0	15	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	1.00	1.19	1.00	0.99	1.29	0.99	0.99	0.99	0.99	1.00	1.37	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Free			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 48.3%		ICU Level of Service A	
Analysis Period (min) 15			

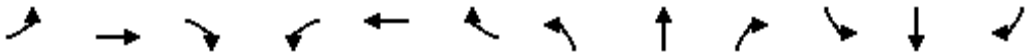
Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕						↕	
Traffic Vol, veh/h	14	380	2	1	320	21	0	0	0	8	0	6
Future Vol, veh/h	14	380	2	1	320	21	0	0	0	8	0	6
Conflicting Peds, #/hr	23	0	21	15	0	17	21	0	15	17	0	23
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	-2	-	-	-1	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	9	0	0	10	5	0	0	0	14	0	0
Mvmt Flow	15	409	2	1	344	23	0	0	0	9	0	6

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	390	0	0	432	0	0	838	843	402
Stage 1	-	-	-	-	-	-	381	381	-
Stage 2	-	-	-	-	-	-	457	462	-
Critical Hdwy	4.1	-	-	4.1	-	-	6.54	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.54	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.54	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.626	4	3.3
Pot Cap-1 Maneuver	1180	-	-	1138	-	-	321	303	653
Stage 1	-	-	-	-	-	-	665	617	-
Stage 2	-	-	-	-	-	-	613	568	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1163	-	-	1138	-	-	306	0	631
Mov Cap-2 Maneuver	-	-	-	-	-	-	306	0	-
Stage 1	-	-	-	-	-	-	644	0	-
Stage 2	-	-	-	-	-	-	603	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	14.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1163	-	-	1138	-	-	393
HCM Lane V/C Ratio	0.013	-	-	0.001	-	-	0.038
HCM Control Delay (s)	8.1	0	-	8.2	0	-	14.5
HCM Lane LOS	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	-	-	0	-	-	0.1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	0	26	0	0	0	18	145	0	0	113	2
Future Volume (vph)	2	0	26	0	0	0	18	145	0	0	113	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	12	12	9	12	12	15	12	12	15	12
Grade (%)		-2%			-1%			0%			1%	
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		0.873									0.998	
Flt Protected		0.997						0.994				
Satd. Flow (prot)	0	1721	0	0	1719	0	0	1997	0	0	1983	0
Flt Permitted		0.997						0.994				
Satd. Flow (perm)	0	1721	0	0	1719	0	0	1997	0	0	1983	0
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		373			327			409			288	
Travel Time (s)		8.5			7.4			11.2			7.9	
Confl. Peds. (#/hr)	4		4	7		7	4		7	7		4
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles (%)	50%	0%	4%	0%	0%	0%	12%	3%	0%	0%	4%	50%
Adj. Flow (vph)	2	0	31	0	0	0	22	175	0	0	136	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	33	0	0	0	0	0	197	0	0	138	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	0.99	0.87	0.99	0.99	1.14	0.99	1.00	0.88	1.00	1.01	0.89	1.01
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 Capacity Utilization 27.4%		ICU Level of Service A	
Analysis Period (min) 15			

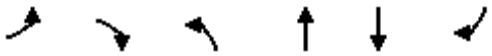
Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	2	0	26	0	0	0	18	145	0	0	113	2
Future Vol, veh/h	2	0	26	0	0	0	18	145	0	0	113	2
Conflicting Peds, #/hr	4	0	4	7	0	7	4	0	7	7	0	4
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, %	-	-2	-	-	-1	-	-	0	-	-	1	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	50	0	4	0	0	0	12	3	0	0	4	50
Mvmt Flow	2	0	31	0	0	0	22	175	0	0	136	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	367	367	148	386	368	189	142	0	0	182	0	0
Stage 1	141	141	-	226	226	-	-	-	-	-	-	-
Stage 2	226	226	-	160	142	-	-	-	-	-	-	-
Critical Hdwy	7.2	6.1	6.04	6.9	6.3	6.1	4.22	-	-	4.1	-	-
Critical Hdwy Stg 1	6.2	5.1	-	5.9	5.3	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.2	5.1	-	5.9	5.3	-	-	-	-	-	-	-
Follow-up Hdwy	3.95	4	3.336	3.5	4	3.3	2.308	-	-	2.2	-	-
Pot Cap-1 Maneuver	531	588	901	589	576	863	1382	-	-	1405	-	-
Stage 1	772	796	-	791	730	-	-	-	-	-	-	-
Stage 2	697	739	-	854	789	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	517	572	889	553	560	852	1375	-	-	1398	-	-
Mov Cap-2 Maneuver	517	572	-	553	560	-	-	-	-	-	-	-
Stage 1	754	792	-	773	713	-	-	-	-	-	-	-
Stage 2	679	722	-	817	785	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.4	0	0.8	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1375	-	-	846	-	1398	-	-
HCM Lane V/C Ratio	0.016	-	-	0.04	-	-	-	-
HCM Control Delay (s)	7.7	0	-	9.4	0	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	-	0	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	4	32	9	165	137	1
Future Volume (vph)	4	32	9	165	137	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	15	15	12
Grade (%)	0%			-2%	0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.880				0.999	
Flt Protected	0.994			0.997		
Satd. Flow (prot)	1662	0	0	2009	2027	0
Flt Permitted	0.994			0.997		
Satd. Flow (perm)	1662	0	0	2009	2027	0
Link Speed (mph)	30			25	25	
Link Distance (ft)	203			461	409	
Travel Time (s)	4.6			12.6	11.2	
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles (%)	0%	0%	0%	5%	3%	0%
Adj. Flow (vph)	5	39	11	199	165	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	44	0	0	210	166	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	0.99	0.87	0.88	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	26.0%	ICU Level of Service	A
Analysis Period (min)	15		

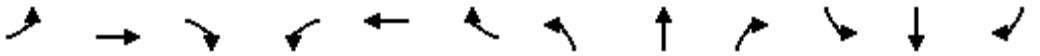
Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	32	9	165	137	1
Future Vol, veh/h	4	32	9	165	137	1
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	-	-	-2	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	0	0	0	5	3	0
Mvmt Flow	5	39	11	199	165	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	387	166	166	0	-	0
Stage 1	166	-	-	-	-	-
Stage 2	221	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	620	884	1424	-	-	-
Stage 1	868	-	-	-	-	-
Stage 2	821	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	614	884	1424	-	-	-
Mov Cap-2 Maneuver	614	-	-	-	-	-
Stage 1	860	-	-	-	-	-
Stage 2	821	-	-	-	-	-

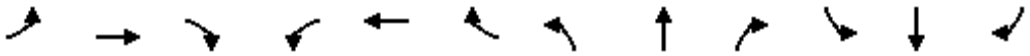
Approach	EB	NB	SB
HCM Control Delay, s	9.5	0.4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1424	-	843	-	-
HCM Lane V/C Ratio	0.008	-	0.051	-	-
HCM Control Delay (s)	7.5	0	9.5	-	-
HCM Lane LOS	A	A	A	-	-
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)	30	252	41	104	376	113	55	209	118	64	66	31
Future Volume (vph)	30	252	41	104	376	113	55	209	118	64	66	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	12	11	15	12	12	15	12	12	15	12
Grade (%)		-2%			1%			0%			-2%	
Storage Length (ft)	0		0	215		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99		0.99	0.99			1.00			0.99	
Frt		0.983			0.965			0.958			0.974	
Flt Protected		0.995		0.950				0.993			0.981	
Satd. Flow (prot)	0	1998	0	1736	1950	0	0	1779	0	0	1986	0
Flt Permitted		0.638		0.450				0.993			0.981	
Satd. Flow (perm)	0	1281	0	812	1950	0	0	1775	0	0	1986	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		247			1043			363			461	
Travel Time (s)		5.6			23.7			9.9			12.6	
Confl. Peds. (#/hr)	5		15	15		5	8					8
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	3%	3%	0%	2%	3%	2%	0%	1%	0%	0%	4%
Parking (#/hr)								0				
Adj. Flow (vph)	31	257	42	106	384	115	56	213	120	65	67	32
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	330	0	106	499	0	0	389	0	0	164	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)		11			11			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.99	0.87	0.99	1.05	0.89	1.01	1.00	1.01	1.00	0.99	0.87	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		2	2		1	2		1	2	
Detector Template	Left						Left			Left		
Leading Detector (ft)	20	8		8	8		20	8		20	8	
Trailing Detector (ft)	0	-6		-6	-6		0	-6		0	-6	
Detector 1 Position(ft)	0	-6		-6	-6		0	-6		0	-6	
Detector 1 Size(ft)	20	6		6	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		2		2	2			2			2	
Detector 2 Size(ft)		6		6	6			6			6	

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Parking (#/hr)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
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		Split	NA		Split	NA	
Protected Phases		2			6		4	4		8	8	
Permitted Phases	2			6								
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	17.0	17.0		17.0	17.0		12.0	12.0		12.0	12.0	
Total Split (s)	52.0	52.0		52.0	52.0		37.0	37.0		37.0	37.0	
Total Split (%)	33.8%	33.8%		33.8%	33.8%		24.0%	24.0%		24.0%	24.0%	
Maximum Green (s)	45.0	45.0		45.0	45.0		30.0	30.0		30.0	30.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lost Time Adjust (s)		0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)		7.0		7.0	7.0			7.0			7.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	Min	Min		Min	Min		None	None		None	None	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)		46.0		46.0	46.0			30.6			15.2	
Actuated g/C Ratio		0.36		0.36	0.36			0.24			0.12	
v/c Ratio		0.72		0.37	0.71			0.92			0.70	
Control Delay		49.8		40.2	45.8			76.9			72.4	
Queue Delay		0.0		0.0	0.0			0.0			0.0	
Total Delay		49.8		40.2	45.8			76.9			72.4	
LOS		D		D	D			E			E	
Approach Delay		49.8			44.8			76.9			72.4	
Approach LOS		D			D			E			E	
Queue Length 50th (ft)		275		75	415			~375			147	
Queue Length 95th (ft)		#461		143	#619			#618			226	
Internal Link Dist (ft)		167			963			283			381	
Turn Bay Length (ft)				215								
Base Capacity (vph)		458		290	698			424			474	
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		0.72		0.37	0.71			0.92			0.35	

Intersection Summary	
Area Type:	Other
Cycle Length: 154	
Actuated Cycle Length: 128.3	
Natural Cycle: 120	
Control Type: Semi Act-Uncoord	

Lane Group	Ø9
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	5.0
Minimum Split (s)	28.0
Total Split (s)	28.0
Total Split (%)	18%
Maximum Green (s)	21.0
Yellow Time (s)	4.0
All-Red Time (s)	3.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	7.0
Flash Dont Walk (s)	14.0
Pedestrian Calls (#/hr)	23
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

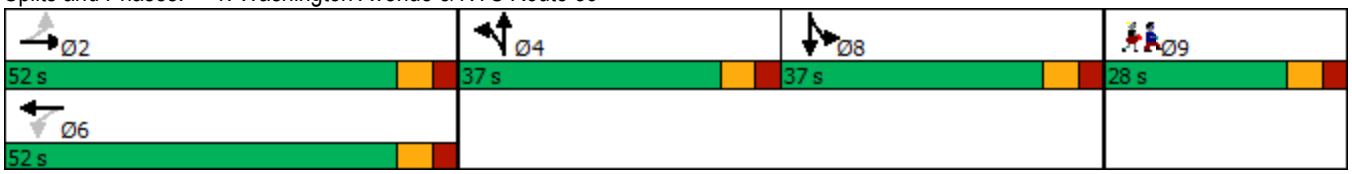
Intersection Summary

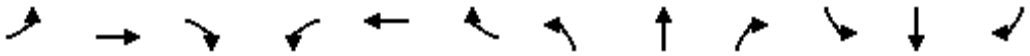
Maximum v/c Ratio: 0.92	
Intersection Signal Delay: 57.4	Intersection LOS: E
Intersection Capacity Utilization 75.5%	ICU Level of Service D
Analysis Period (min) 15	

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

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

Splits and Phases: 1: Washington Avenue & NYS Route 59





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	317	1	3	397	24	0	0	0	22	0	24
Future Volume (vph)	18	317	1	3	397	24	0	0	0	22	0	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	11	12	12	9	12	12	12	12	12	8	12
Grade (%)		0%			-2%			-1%			0%	
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					0.992						0.928	
Flt Protected		0.997									0.977	
Satd. Flow (prot)	0	1603	0	0	1500	0	0	0	0	0	1344	0
Flt Permitted		0.997									0.977	
Satd. Flow (perm)	0	1603	0	0	1500	0	0	0	0	0	1344	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		639			247			160			241	
Travel Time (s)		14.5			5.6			3.6			5.5	
Confl. Peds. (#/hr)	33		53	52		32	53		52	32		33
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	3%	0%	0%	3%	0%	0%	0%	0%	0%	0%	0%
Parking (#/hr)		0			0						0	
Adj. Flow (vph)	19	337	1	3	422	26	0	0	0	23	0	26
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	357	0	0	451	0	0	0	0	0	49	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	1.00	1.19	1.00	0.99	1.29	0.99	0.99	0.99	0.99	1.00	1.37	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Free			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 48.2%		ICU Level of Service A	
Analysis Period (min) 15			

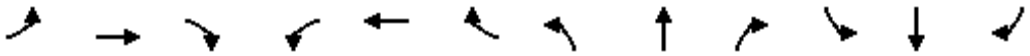
Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕						↕	
Traffic Vol, veh/h	18	317	1	3	397	24	0	0	0	22	0	24
Future Vol, veh/h	18	317	1	3	397	24	0	0	0	22	0	24
Conflicting Peds, #/hr	33	0	53	52	0	32	53	0	52	32	0	33
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	-2	-	-	-1	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	3	0	0	3	0	0	0	0	0	0	0
Mvmt Flow	19	337	1	3	422	26	0	0	0	23	0	26

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	481	0	0	391	0	0	882	903	501
Stage 1	-	-	-	-	-	-	474	474	-
Stage 2	-	-	-	-	-	-	408	429	-
Critical Hdwy	4.1	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	1092	-	-	1179	-	-	319	279	574
Stage 1	-	-	-	-	-	-	630	561	-
Stage 2	-	-	-	-	-	-	676	587	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1069	-	-	1179	-	-	298	0	546
Mov Cap-2 Maneuver	-	-	-	-	-	-	298	0	-
Stage 1	-	-	-	-	-	-	603	0	-
Stage 2	-	-	-	-	-	-	660	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0.5	0.1	15.5
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1069	-	-	1179	-	-	391
HCM Lane V/C Ratio	0.018	-	-	0.003	-	-	0.125
HCM Control Delay (s)	8.4	0	-	8.1	0	-	15.5
HCM Lane LOS	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.1	-	-	0	-	-	0.4



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	0	23	0	0	0	57	273	2	0	130	3
Future Volume (vph)	1	0	23	0	0	0	57	273	2	0	130	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	12	12	9	12	12	15	12	12	15	12
Grade (%)		-2%			-1%			0%			1%	
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		0.870						0.999			0.997	
Flt Protected		0.998						0.991				
Satd. Flow (prot)	0	1672	0	0	1719	0	0	2048	0	0	2073	0
Flt Permitted		0.998						0.991				
Satd. Flow (perm)	0	1672	0	0	1719	0	0	2048	0	0	2073	0
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		373			327			409			288	
Travel Time (s)		8.5			7.4			11.2			7.9	
Confl. Peds. (#/hr)	8		9	9		8	9		9	8		8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	10%	0%	0%	0%	6%	0%	0%	0%	0%	0%
Adj. Flow (vph)	1	0	25	0	0	0	62	297	2	0	141	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	26	0	0	0	0	0	361	0	0	144	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	0.99	0.87	0.99	0.99	1.14	0.99	1.00	0.88	1.00	1.01	0.89	1.01
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 Capacity Utilization	42.1%	ICU Level of Service	A
Analysis Period (min)	15		

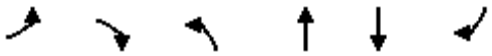
Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	0	23	0	0	0	57	273	2	0	130	3
Future Vol, veh/h	1	0	23	0	0	0	57	273	2	0	130	3
Conflicting Peds, #/hr	8	0	9	9	0	8	9	0	9	8	0	8
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, %	-	-2	-	-	-1	-	-	0	-	-	1	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	10	0	0	0	6	0	0	0	0	0
Mvmt Flow	1	0	25	0	0	0	62	297	2	0	141	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	582	584	161	595	584	315	153	0	0	308	0	0
Stage 1	152	152	-	431	431	-	-	-	-	-	-	-
Stage 2	430	432	-	164	153	-	-	-	-	-	-	-
Critical Hdwy	6.7	6.1	6.1	6.9	6.3	6.1	4.16	-	-	4.1	-	-
Critical Hdwy Stg 1	5.7	5.1	-	5.9	5.3	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.7	5.1	-	5.9	5.3	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.39	3.5	4	3.3	2.254	-	-	2.2	-	-
Pot Cap-1 Maneuver	456	455	871	433	440	737	1403	-	-	1264	-	-
Stage 1	870	789	-	621	601	-	-	-	-	-	-	-
Stage 2	637	615	-	850	781	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	428	423	852	396	409	725	1388	-	-	1256	-	-
Mov Cap-2 Maneuver	428	423	-	396	409	-	-	-	-	-	-	-
Stage 1	814	780	-	584	565	-	-	-	-	-	-	-
Stage 2	597	578	-	816	772	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.5	0	1.3	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1388	-	-	818	-	1256	-	-
HCM Lane V/C Ratio	0.045	-	-	0.032	-	-	-	-
HCM Control Delay (s)	7.7	0	-	9.5	0	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-	0	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	2	16	26	325	145	3
Future Volume (vph)	2	16	26	325	145	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	15	15	12
Grade (%)	0%			-2%	0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.879				0.997	
Flt Protected	0.995			0.996		
Satd. Flow (prot)	1662	0	0	2083	2063	0
Flt Permitted	0.995			0.996		
Satd. Flow (perm)	1662	0	0	2083	2063	0
Link Speed (mph)	30			25	25	
Link Distance (ft)	203			461	409	
Travel Time (s)	4.6			12.6	11.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	1%	1%	0%
Adj. Flow (vph)	2	17	28	353	158	3
Shared Lane Traffic (%)						
Lane Group Flow (vph)	19	0	0	381	161	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	0.99	0.87	0.88	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 39.7%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	16	26	325	145	3
Future Vol, veh/h	2	16	26	325	145	3
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	-	-	-2	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	1	1	0
Mvmt Flow	2	17	28	353	158	3

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	569	160	161	0	-	0
Stage 1	160	-	-	-	-	-
Stage 2	409	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	487	890	1430	-	-	-
Stage 1	874	-	-	-	-	-
Stage 2	675	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	475	890	1430	-	-	-
Mov Cap-2 Maneuver	475	-	-	-	-	-
Stage 1	853	-	-	-	-	-
Stage 2	675	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.5	0.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1430	-	811	-	-
HCM Lane V/C Ratio	0.02	-	0.024	-	-
HCM Control Delay (s)	7.6	0	9.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Colliers Engineering & Design

Traffic Impact Study

Appendix E | Traffic Count Data

Colliers Engineering & Design

400 Columbus Avenue - Suite 180E
Valhalla, New York 10595
Accelerating Success

File Name : 1-Lafayette_Avenue_(NYS_Route_59)_and_Washington_Avenue_1087088_06-20-2023
Site Code :
Start Date : 6/20/2023
Page No : 1

Groups Printed- Lights - Buses - Trucks - Pedestrians

	WASHINGTON AVE From North					LAFAYETTE AVE From East					WASHINGTON AVE From South					LAFAYETTE AVE 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
06:30 AM	4	3	14	1	22	6	23	5	2	36	35	18	5	3	61	4	55	1	0	60	179
06:45 AM	4	4	15	2	25	7	43	14	0	64	61	22	4	0	87	1	87	1	0	89	265
Total	8	7	29	3	47	13	66	19	2	100	96	40	9	3	148	5	142	2	0	149	444
07:00 AM	7	8	10	0	25	13	35	12	2	62	23	22	9	0	54	5	62	1	1	69	210
07:15 AM	2	12	15	0	29	5	55	5	0	65	19	21	7	3	50	1	58	2	0	61	205
07:30 AM	4	12	14	2	32	11	60	16	0	87	30	29	7	0	66	4	83	4	1	92	277
07:45 AM	8	6	27	2	43	14	70	18	0	102	42	28	7	0	77	2	99	3	0	104	326
Total	21	38	66	4	129	43	220	51	2	316	114	100	30	3	247	12	302	10	2	326	1018
08:00 AM	5	9	9	1	24	8	64	11	0	83	22	18	9	0	49	2	72	3	0	77	233
08:15 AM	2	12	19	2	35	13	66	12	0	91	21	20	11	3	55	2	81	2	1	86	267
08:30 AM	7	7	19	2	35	12	66	14	0	92	27	34	9	0	70	6	54	1	0	61	258
08:45 AM	7	13	12	1	33	11	60	21	0	92	32	19	10	0	61	14	96	3	0	113	299
Total	21	41	59	6	127	44	256	58	0	358	102	91	39	3	235	24	303	9	1	337	1057
09:00 AM	5	8	18	1	32	15	51	18	0	84	26	29	7	0	62	6	62	2	0	70	248
09:15 AM	6	8	13	4	31	11	47	20	1	79	18	21	6	0	45	5	66	4	0	75	230
Grand Total	61	102	185	18	366	126	640	166	5	937	356	281	91	9	737	52	875	27	3	957	2997
Apprch %	16.7	27.9	50.5	4.9		13.4	68.3	17.7	0.5		48.3	38.1	12.3	1.2		5.4	91.4	2.8	0.3		
Total %	2	3.4	6.2	0.6	12.2	4.2	21.4	5.5	0.2	31.3	11.9	9.4	3	0.3	24.6	1.7	29.2	0.9	0.1	31.9	
Lights	57	102	174	0	333	117	574	164	0	855	353	274	87	0	714	49	797	23	0	869	2771
% Lights	93.4	100	94.1	0	91	92.9	89.7	98.8	0	91.2	99.2	97.5	95.6	0	96.9	94.2	91.1	85.2	0	90.8	92.5
Buses	2	0	8	0	10	6	36	2	0	44	2	5	3	0	10	2	44	0	0	46	110
% Buses	3.3	0	4.3	0	2.7	4.8	5.6	1.2	0	4.7	0.6	1.8	3.3	0	1.4	3.8	5	0	0	4.8	3.7
Trucks	2	0	3	0	5	3	30	0	0	33	1	2	1	0	4	1	34	4	0	39	81
% Trucks	3.3	0	1.6	0	1.4	2.4	4.7	0	0	3.5	0.3	0.7	1.1	0	0.5	1.9	3.9	14.8	0	4.1	2.7
Pedestrians	0	0	0	18	18	0	0	0	5	5	0	0	0	9	9	0	0	0	3	3	35
% Pedestrians	0	0	0	100	4.9	0	0	0	100	0.5	0	0	0	100	1.2	0	0	0	100	0.3	1.2

Colliers Engineering & Design
400 Columbus Avenue - Suite 180E
Valhalla, New York 10595
Accelerating Success

File Name : 1-Lafayette_Avenue_(NYS_Route_59)_and_Washington_Avenue_1087088_06-20-2023
Site Code :
Start Date : 6/20/2023

	WASHINGTON AVE From North					LAFAYETTE AVE From East					WASHINGTON AVE From South					LAFAYETTE AVE 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 06:30 AM to 09:15 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	4	12	14	2	32	11	60	16	0	87	30	29	7	0	66	4	83	4	1	92	277
07:45 AM	8	6	27	2	43	14	70	18	0	102	42	28	7	0	77	2	99	3	0	104	326
08:00 AM	5	9	9	1	24	8	64	11	0	83	22	18	9	0	49	2	72	3	0	77	233
08:15 AM	2	12	19	2	35	13	66	12	0	91	21	20	11	3	55	2	81	2	1	86	267
Total Volume	19	39	69	7	134	46	260	57	0	363	115	95	34	3	247	10	335	12	2	359	1103
% App. Total	14.2	29.1	51.5	5.2		12.7	71.6	15.7	0		46.6	38.5	13.8	1.2		2.8	93.3	3.3	0.6		
PHF	.594	.813	.639	.875	.779	.821	.929	.792	.000	.890	.685	.819	.773	.250	.802	.625	.846	.750	.500	.863	.846
Lights	19	39	65	0	123	43	235	56	0	334	114	92	31	0	237	10	306	10	0	326	1020
% Lights	100	100	94.2	0	91.8	93.5	90.4	98.2	0	92.0	99.1	96.8	91.2	0	96.0	100	91.3	83.3	0	90.8	92.5
Buses	0	0	4	0	4	1	11	1	0	13	0	3	2	0	5	0	19	0	0	19	41
% Buses	0	0	5.8	0	3.0	2.2	4.2	1.8	0	3.6	0	3.2	5.9	0	2.0	0	5.7	0	0	5.3	3.7
Trucks	0	0	0	0	0	2	14	0	0	16	1	0	1	0	2	0	10	2	0	12	30
% Trucks	0	0	0	0	0	4.3	5.4	0	0	4.4	0.9	0	2.9	0	0.8	0	3.0	16.7	0	3.3	2.7
Pedestrians	0	0	0	7	7	0	0	0	0	0	0	0	0	3	3	0	0	0	2	2	12
% Pedestrians	0	0	0	100	5.2	0	0	0	0	0	0	0	0	100	1.2	0	0	0	100	0.6	1.1

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400 Columbus Avenue - Suite 180E
Valhalla, New York 10595
Accelerating Success

File Name : 1-Lafayette_Avenue_(NYS_Route_59)_and_Washington_Avenue_1087088_06-20-2023
Site Code :
Start Date : 6/20/2023
Page No : 1

Groups Printed- Lights - Buses - Trucks - Pedestrians

	WASHINGTON AVE From North					LAFAYETTE AVE From East					WASHINGTON AVE From South					LAFAYETTE AVE 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
03:30 PM	7	10	17	1	35	22	78	20	0	120	32	37	7	4	80	4	46	2	1	53	288
03:45 PM	5	13	18	0	36	21	88	20	0	129	26	40	6	6	78	6	59	2	0	67	310
Total	12	23	35	1	71	43	166	40	0	249	58	77	13	10	158	10	105	4	1	120	598
04:00 PM	4	12	13	1	30	29	84	13	0	126	35	29	11	3	78	5	49	0	0	54	288
04:15 PM	5	9	13	0	27	19	78	25	0	122	30	35	4	6	75	6	47	2	0	55	279
04:30 PM	6	24	10	3	43	22	91	11	2	126	25	47	9	8	89	5	54	1	1	61	319
04:45 PM	4	16	20	0	40	24	78	20	0	122	26	51	9	2	88	17	55	5	0	77	327
Total	19	61	56	4	140	94	331	69	2	496	116	162	33	19	330	33	205	8	1	247	1213
05:00 PM	11	19	15	2	47	22	86	23	0	131	25	46	11	3	85	12	58	4	2	76	339
05:15 PM	4	20	10	1	35	22	67	27	0	116	32	54	13	6	105	9	47	4	1	61	317
05:30 PM	4	11	10	0	25	32	96	24	0	152	26	43	8	2	79	10	71	2	3	86	342
05:45 PM	4	8	18	2	32	19	97	22	0	138	26	45	19	4	94	7	57	8	2	74	338
Total	23	58	53	5	139	95	346	96	0	537	109	188	51	15	363	38	233	18	8	297	1336
06:00 PM	9	15	10	3	37	19	83	8	0	110	27	42	11	4	84	12	78	5	4	99	330
06:15 PM	0	9	9	1	19	17	102	13	0	132	21	28	20	1	70	9	52	3	2	66	287
Grand Total	63	166	163	14	406	268	1028	226	2	1524	331	497	128	49	1005	102	673	38	16	829	3764
Apprch %	15.5	40.9	40.1	3.4		17.6	67.5	14.8	0.1		32.9	49.5	12.7	4.9		12.3	81.2	4.6	1.9		
Total %	1.7	4.4	4.3	0.4	10.8	7.1	27.3	6	0.1	40.5	8.8	13.2	3.4	1.3	26.7	2.7	17.9	1	0.4	22	
Lights	61	166	160	0	387	258	997	224	0	1479	328	496	127	0	951	101	634	38	0	773	3590
% Lights	96.8	100	98.2	0	95.3	96.3	97	99.1	0	97	99.1	99.8	99.2	0	94.6	99	94.2	100	0	93.2	95.4
Buses	1	0	2	0	3	10	18	0	0	28	0	1	0	0	1	0	24	0	0	24	56
% Buses	1.6	0	1.2	0	0.7	3.7	1.8	0	0	1.8	0	0.2	0	0	0.1	0	3.6	0	0	2.9	1.5
Trucks	1	0	1	0	2	0	13	2	0	15	3	0	1	0	4	1	15	0	0	16	37
% Trucks	1.6	0	0.6	0	0.5	0	1.3	0.9	0	1	0.9	0	0.8	0	0.4	1	2.2	0	0	1.9	1
Pedestrians	0	0	0	14	14	0	0	0	2	2	0	0	0	49	49	0	0	0	16	16	81
% Pedestrians	0	0	0	100	3.4	0	0	0	100	0.1	0	0	0	100	4.9	0	0	0	100	1.9	2.2

Colliers Engineering & Design
400 Columbus Avenue - Suite 180E
Valhalla, New York 10595
Accelerating Success

File Name : 1-Lafayette_Avenue_(NYS_Route_59)_and_Washington_Avenue_1087088_06-20-2023
Site Code :
Start Date : 6/20/2023

	WASHINGTON AVE From North					LAFAYETTE AVE From East					WASHINGTON AVE From South					LAFAYETTE AVE 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 03:30 PM to 06:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	11	19	15	2	47	22	86	23	0	131	25	46	11	3	85	12	58	4	2	76	339
05:15 PM	4	20	10	1	35	22	67	27	0	116	32	54	13	6	105	9	47	4	1	61	317
05:30 PM	4	11	10	0	25	32	96	24	0	152	26	43	8	2	79	10	71	2	3	86	342
05:45 PM	4	8	18	2	32	19	97	22	0	138	26	45	19	4	94	7	57	8	2	74	338
Total Volume	23	58	53	5	139	95	346	96	0	537	109	188	51	15	363	38	233	18	8	297	1336
% App. Total	16.5	41.7	38.1	3.6		17.7	64.4	17.9	0		30	51.8	14	4.1		12.8	78.5	6.1	2.7		
PHF	.523	.725	.736	.625	.739	.742	.892	.889	.000	.883	.852	.870	.671	.625	.864	.792	.820	.563	.667	.863	.977
Lights	22	58	53	0	133	92	338	96	0	526	108	188	50	0	346	37	225	18	0	280	1285
% Lights	95.7	100	100	0	95.7	96.8	97.7	100	0	98.0	99.1	100	98.0	0	95.3	97.4	96.6	100	0	94.3	96.2
Buses	0	0	0	0	0	3	6	0	0	9	0	0	0	0	0	0	5	0	0	5	14
% Buses	0	0	0	0	0	3.2	1.7	0	0	1.7	0	0	0	0	0	0	2.1	0	0	1.7	1.0
Trucks	1	0	0	0	1	0	2	0	0	2	1	0	1	0	2	1	3	0	0	4	9
% Trucks	4.3	0	0	0	0.7	0	0.6	0	0	0.4	0.9	0	2.0	0	0.6	2.6	1.3	0	0	1.3	0.7
Pedestrians	0	0	0	5	5	0	0	0	0	0	0	0	0	15	15	0	0	0	8	8	28
% Pedestrians	0	0	0	100	3.6	0	0	0	0	0	0	0	0	100	4.1	0	0	0	100	2.7	2.1

Colliers Engineering & Design

400 Columbus Avenue - Suite 180E
Valhalla, New York 10595
Accelerating Success

File Name : 2-Lafayette_Avenue_(NYS_Route_59)_and_Suffern_Place_1087083_06-20-2023
Site Code :
Start Date : 6/20/2023
Page No : 1

Groups Printed- Lights - Buses - Trucks - Pedestrians

	SUFFERN PL From North					LAFAYETTE AVE From East					DRIVEWAY From South					LAFAYETTE AVE 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
06:30 AM	0	0	1	1	2	0	34	0	0	34	0	0	0	4	4	0	61	1	1	63	103
06:45 AM	0	0	0	3	3	0	48	1	0	49	0	0	0	5	5	0	94	0	1	95	152
Total	0	0	1	4	5	0	82	1	0	83	0	0	0	9	9	0	155	1	2	158	255
07:00 AM	1	0	0	4	5	4	43	1	0	48	0	0	0	1	1	0	68	0	2	70	124
07:15 AM	1	0	2	1	4	4	68	0	0	72	0	0	0	3	3	0	62	1	2	65	144
07:30 AM	2	0	1	3	6	2	68	0	1	71	0	0	0	3	3	1	90	5	0	96	176
07:45 AM	0	0	3	3	6	5	73	0	0	78	0	0	0	3	3	0	103	2	2	107	194
Total	4	0	6	11	21	15	252	1	1	269	0	0	0	10	10	1	323	8	6	338	638
08:00 AM	0	0	0	4	4	6	71	0	0	77	0	0	0	4	4	1	77	0	4	82	167
08:15 AM	4	0	3	6	13	6	73	1	0	80	0	0	0	4	4	0	79	6	1	86	183
08:30 AM	1	0	4	3	8	8	68	1	1	78	0	0	0	3	3	0	69	3	2	74	163
08:45 AM	4	0	2	5	11	11	60	0	2	73	0	0	0	3	3	1	104	10	3	118	205
Total	9	0	9	18	36	31	272	2	3	308	0	0	0	14	14	2	329	19	10	360	718
09:00 AM	3	0	1	6	10	10	54	1	6	71	0	0	0	5	5	3	70	4	1	78	164
09:15 AM	0	0	1	8	9	5	48	0	0	53	0	0	0	4	4	1	73	1	0	75	141
Grand Total	16	0	18	47	81	61	708	5	10	784	0	0	0	42	42	7	950	33	19	1009	1916
Apprch %	19.8	0	22.2	58		7.8	90.3	0.6	1.3		0	0	0	100		0.7	94.2	3.3	1.9		
Total %	0.8	0	0.9	2.5	4.2	3.2	37	0.3	0.5	40.9	0	0	0	2.2	2.2	0.4	49.6	1.7	1	52.7	
Lights	16	0	16	0	32	59	637	5	0	701	0	0	0	0	0	7	863	29	0	899	1632
% Lights	100	0	88.9	0	39.5	96.7	90	100	0	89.4	0	0	0	0	0	100	90.8	87.9	0	89.1	85.2
Buses	0	0	1	0	1	1	37	0	0	38	0	0	0	0	0	0	46	0	0	46	85
% Buses	0	0	5.6	0	1.2	1.6	5.2	0	0	4.8	0	0	0	0	0	0	4.8	0	0	4.6	4.4
Trucks	0	0	1	0	1	1	34	0	0	35	0	0	0	0	0	0	41	4	0	45	81
% Trucks	0	0	5.6	0	1.2	1.6	4.8	0	0	4.5	0	0	0	0	0	0	4.3	12.1	0	4.5	4.2
Pedestrians	0	0	0	47	47	0	0	0	10	10	0	0	0	42	42	0	0	0	19	19	118
% Pedestrians	0	0	0	100	58	0	0	0	100	1.3	0	0	0	100	100	0	0	0	100	1.9	6.2

Colliers Engineering & Design

400 Columbus Avenue - Suite 180E
Valhalla, New York 10595
Accelerating Success

File Name : 2-Lafayette_Avenue_(NYS_Route_59)_and_Suffern_Place_1087083_06-20-2023
Site Code :
Start Date : 6/20/2023

	SUFFERN PL From North					LAFAYETTE AVE From East					DRIVEWAY From South					LAFAYETTE AVE 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 06:30 AM to 09:15 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	2	0	1	3	6	2	68	0	1	71	0	0	0	3	3	1	90	5	0	96	176
07:45 AM	0	0	3	3	6	5	73	0	0	78	0	0	0	3	3	0	103	2	2	107	194
08:00 AM	0	0	0	4	4	6	71	0	0	77	0	0	0	4	4	1	77	0	4	82	167
08:15 AM	4	0	3	6	13	6	73	1	0	80	0	0	0	4	4	0	79	6	1	86	183
Total Volume	6	0	7	16	29	19	285	1	1	306	0	0	0	14	14	2	349	13	7	371	720
% App. Total	20.7	0	24.1	55.2		6.2	93.1	0.3	0.3		0	0	0	100		0.5	94.1	3.5	1.9		
PHF	.375	.000	.583	.667	.558	.792	.976	.250	.250	.956	.000	.000	.000	.875	.875	.500	.847	.542	.438	.867	.928
Lights	6	0	6	0	12	18	256	1	0	275	0	0	0	0	0	2	319	13	0	334	621
% Lights	100	0	85.7	0	41.4	94.7	89.8	100	0	89.9	0	0	0	0	0	100	91.4	100	0	90.0	86.3
Buses	0	0	1	0	1	0	13	0	0	13	0	0	0	0	0	0	19	0	0	19	33
% Buses	0	0	14.3	0	3.4	0	4.6	0	0	4.2	0	0	0	0	0	0	5.4	0	0	5.1	4.6
Trucks	0	0	0	0	0	1	16	0	0	17	0	0	0	0	0	0	11	0	0	11	28
% Trucks	0	0	0	0	0	5.3	5.6	0	0	5.6	0	0	0	0	0	0	3.2	0	0	3.0	3.9
Pedestrians	0	0	0	16	16	0	0	0	1	1	0	0	0	14	14	0	0	0	7	7	38
% Pedestrians	0	0	0	100	55.2	0	0	0	100	0.3	0	0	0	100	100	0	0	0	100	1.9	5.3

Colliers Engineering & Design

400 Columbus Avenue - Suite 180E
Valhalla, New York 10595
Accelerating Success

File Name : 2-Lafayette_Avenue_(NYS_Route_59)_and_Suffern_Place_1087083_06-20-2023
Site Code :
Start Date : 6/20/2023
Page No : 1

Groups Printed- Lights - Buses - Trucks - Pedestrians

	SUFFERN PL From North					LAFAYETTE AVE From East					DRIVEWAY From South					LAFAYETTE AVE 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
03:30 PM	5	0	2	3	10	7	83	1	0	91	0	0	0	10	10	0	52	3	1	56	167
03:45 PM	1	0	2	2	5	4	93	1	1	99	0	0	0	9	9	0	60	2	3	65	178
Total	6	0	4	5	15	11	176	2	1	190	0	0	0	19	19	0	112	5	4	121	345
04:00 PM	2	0	1	10	13	5	91	0	0	96	0	0	0	5	5	0	58	3	2	63	177
04:15 PM	1	0	4	0	5	2	81	1	0	84	0	0	0	11	11	1	57	1	4	63	163
04:30 PM	6	0	2	10	18	3	101	0	0	104	0	0	0	9	9	0	55	0	4	59	190
04:45 PM	0	0	3	4	7	7	90	0	1	98	0	0	0	10	10	0	71	2	6	79	194
Total	9	0	10	24	43	17	363	1	1	382	0	0	0	35	35	1	241	6	16	264	724
05:00 PM	10	0	8	5	23	7	95	1	8	111	0	0	0	10	10	0	64	3	4	71	215
05:15 PM	2	0	2	5	9	6	83	0	2	91	0	0	0	12	12	0	63	5	6	74	186
05:30 PM	5	0	6	4	15	6	81	1	5	93	0	0	0	5	5	0	79	3	2	84	197
05:45 PM	5	0	4	2	11	3	103	1	1	108	0	0	0	9	9	1	78	6	5	90	218
Total	22	0	20	16	58	22	362	3	16	403	0	0	0	36	36	1	284	17	17	319	816
06:00 PM	2	0	7	9	18	5	76	1	0	82	0	0	0	4	4	1	82	4	4	91	195
06:15 PM	2	0	4	9	15	6	111	0	0	117	0	0	0	6	6	0	62	7	7	76	214
Grand Total	41	0	45	63	149	61	1088	7	18	1174	0	0	0	100	100	3	781	39	48	871	2294
Apprch %	27.5	0	30.2	42.3		5.2	92.7	0.6	1.5		0	0	0	100		0.3	89.7	4.5	5.5		
Total %	1.8	0	2	2.7	6.5	2.7	47.4	0.3	0.8	51.2	0	0	0	4.4	4.4	0.1	34	1.7	2.1	38	
Lights	38	0	45	0	83	60	1053	7	0	1120	0	0	0	0	0	3	739	39	0	781	1984
% Lights	92.7	0	100	0	55.7	98.4	96.8	100	0	95.4	0	0	0	0	0	100	94.6	100	0	89.7	86.5
Buses	0	0	0	0	0	0	22	0	0	22	0	0	0	0	0	0	23	0	0	23	45
% Buses	0	0	0	0	0	0	2	0	0	1.9	0	0	0	0	0	0	2.9	0	0	2.6	2
Trucks	3	0	0	0	3	1	13	0	0	14	0	0	0	0	0	0	19	0	0	19	36
% Trucks	7.3	0	0	0	2	1.6	1.2	0	0	1.2	0	0	0	0	0	0	2.4	0	0	2.2	1.6
Pedestrians	0	0	0	63	63	0	0	0	18	18	0	0	0	100	100	0	0	0	48	48	229
% Pedestrians	0	0	0	100	42.3	0	0	0	100	1.5	0	0	0	100	100	0	0	0	100	5.5	10

Colliers Engineering & Design

400 Columbus Avenue - Suite 180E
Valhalla, New York 10595
Accelerating Success

File Name : 2-Lafayette_Avenue_(NYS_Route_59)_and_Suffern_Place_1087083_06-20-2023
Site Code :
Start Date : 6/20/2023

	SUFFERN PL From North					LAFAYETTE AVE From East					DRIVEWAY From South					LAFAYETTE AVE 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 05:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	10	0	8	5	23	7	95	1	8	111	0	0	0	10	10	0	64	3	4	71	215
05:15 PM	2	0	2	5	9	6	83	0	2	91	0	0	0	12	12	0	63	5	6	74	186
05:30 PM	5	0	6	4	15	6	81	1	5	93	0	0	0	5	5	0	79	3	2	84	197
05:45 PM	5	0	4	2	11	3	103	1	1	108	0	0	0	9	9	1	78	6	5	90	218
Total Volume	22	0	20	16	58	22	362	3	16	403	0	0	0	36	36	1	284	17	17	319	816
% App. Total	37.9	0	34.5	27.6		5.5	89.8	0.7	4		0	0	0	100		0.3	89	5.3	5.3		
PHF	.550	.000	.625	.800	.630	.786	.879	.750	.500	.908	.000	.000	.000	.750	.750	.250	.899	.708	.708	.886	.936
Lights	22	0	20	0	42	22	352	3	0	377	0	0	0	0	0	1	275	17	0	293	712
% Lights	100	0	100	0	72.4	100	97.2	100	0	93.5	0	0	0	0	0	100	96.8	100	0	91.8	87.3
Buses	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	5	0	0	5	11
% Buses	0	0	0	0	0	0	1.7	0	0	1.5	0	0	0	0	0	0	1.8	0	0	1.6	1.3
Trucks	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	4	0	0	4	8
% Trucks	0	0	0	0	0	0	1.1	0	0	1.0	0	0	0	0	0	0	1.4	0	0	1.3	1.0
Pedestrians	0	0	0	16	16	0	0	0	16	16	0	0	0	36	36	0	0	0	17	17	85
% Pedestrians	0	0	0	100	27.6	0	0	0	100	4.0	0	0	0	100	100	0	0	0	100	5.3	10.4

Colliers Engineering & Design

400 Columbus Avenue - Suite 180E
Valhalla, New York 10595
Accelerating Success

File Name : 3-Washington_Avenue_and_Cross_Street_1087085_06-20-2023
Site Code :
Start Date : 6/20/2023

Groups Printed- Lights - Buses - Trucks - Pedestrians

	WASHINGTON AVE From North					CROSS ST From East					WASHINGTON AVE From South					CROSS 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
06:30 AM	0	17	0	0	17	0	0	0	1	1	0	22	2	0	24	2	0	0	0	2	44
06:45 AM	0	19	0	0	19	1	0	0	0	1	0	26	2	0	28	8	0	2	2	12	60
Total	0	36	0	0	36	1	0	0	1	2	0	48	4	0	52	10	0	2	2	14	104
07:00 AM	0	24	0	0	24	0	0	1	2	3	1	28	5	0	34	3	0	2	1	6	67
07:15 AM	0	25	0	0	25	0	0	1	0	1	0	21	3	0	24	8	0	0	1	9	59
07:30 AM	1	24	0	0	25	0	0	0	2	2	0	40	1	0	41	5	0	0	1	6	74
07:45 AM	0	32	0	0	32	0	0	0	4	4	0	37	5	0	42	8	0	1	1	10	88
Total	1	105	0	0	106	0	0	2	8	10	1	126	14	0	141	24	0	3	4	31	288
08:00 AM	0	22	0	0	22	0	0	0	0	0	0	23	7	0	30	1	0	1	0	2	54
08:15 AM	1	26	0	0	27	0	0	0	1	1	0	31	4	0	35	10	0	0	2	12	75
08:30 AM	0	29	0	0	29	0	0	0	0	0	0	42	6	0	48	7	0	0	3	10	87
08:45 AM	1	27	0	0	28	0	0	0	0	0	0	27	3	0	30	6	0	0	0	6	64
Total	2	104	0	0	106	0	0	0	1	1	0	123	20	0	143	24	0	1	5	30	280
09:00 AM	1	28	0	0	29	0	1	0	1	2	0	37	2	0	39	2	0	1	1	4	74
09:15 AM	0	26	0	0	26	0	0	0	0	0	0	31	4	0	35	8	0	0	0	8	69
Grand Total	4	299	0	0	303	1	1	2	11	15	1	365	44	0	410	68	0	7	12	87	815
Apprch %	1.3	98.7	0	0		6.7	6.7	13.3	73.3		0.2	89	10.7	0		78.2	0	8	13.8		
Total %	0.5	36.7	0	0	37.2	0.1	0.1	0.2	1.3	1.8	0.1	44.8	5.4	0	50.3	8.3	0	0.9	1.5	10.7	
Lights	2	286	0	0	288	1	1	2	0	4	1	353	36	0	390	65	0	4	0	69	751
% Lights	50	95.7	0	0	95	100	100	100	0	26.7	100	96.7	81.8	0	95.1	95.6	0	57.1	0	79.3	92.1
Buses	2	8	0	0	10	0	0	0	0	0	0	7	5	0	12	2	0	2	0	4	26
% Buses	50	2.7	0	0	3.3	0	0	0	0	0	0	1.9	11.4	0	2.9	2.9	0	28.6	0	4.6	3.2
Trucks	0	5	0	0	5	0	0	0	0	0	0	5	3	0	8	1	0	1	0	2	15
% Trucks	0	1.7	0	0	1.7	0	0	0	0	0	0	1.4	6.8	0	2	1.5	0	14.3	0	2.3	1.8
Pedestrians	0	0	0	0	0	0	0	0	11	11	0	0	0	0	0	0	0	0	12	12	23
% Pedestrians	0	0	0	0	0	0	0	0	100	73.3	0	0	0	0	0	0	0	0	100	13.8	2.8

Colliers Engineering & Design
400 Columbus Avenue - Suite 180E
Valhalla, New York 10595
Accelerating Success

File Name : 3-Washington_Avenue_and_Cross_Street_1087085_06-20-2023
Site Code :
Start Date : 6/20/2023

	WASHINGTON AVE From North					CROSS ST From East					WASHINGTON AVE From South					CROSS 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 07:30 AM to 08:15 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	1	24	0	0	25	0	0	0	2	2	0	40	1	0	41	5	0	0	1	6	74
07:45 AM	0	32	0	0	32	0	0	0	4	4	0	37	5	0	42	8	0	1	1	10	88
08:00 AM	0	22	0	0	22	0	0	0	0	0	0	23	7	0	30	1	0	1	0	2	54
08:15 AM	1	26	0	0	27	0	0	0	1	1	0	31	4	0	35	10	0	0	2	12	75
Total Volume	2	104	0	0	106	0	0	0	7	7	0	131	17	0	148	24	0	2	4	30	291
% App. Total	1.9	98.1	0	0		0	0	0	100		0	88.5	11.5	0		80	0	6.7	13.3		
PHF	.500	.813	.000	.000	.828	.000	.000	.000	.438	.438	.000	.819	.607	.000	.881	.600	.000	.500	.500	.625	.827
Lights	1	100	0	0	101	0	0	0	0	0	0	127	15	0	142	23	0	1	0	24	267
% Lights	50.0	96.2	0	0	95.3	0	0	0	0	0	0	96.9	88.2	0	95.9	95.8	0	50.0	0	80.0	91.8
Buses	1	3	0	0	4	0	0	0	0	0	0	2	2	0	4	1	0	1	0	2	10
% Buses	50.0	2.9	0	0	3.8	0	0	0	0	0	0	1.5	11.8	0	2.7	4.2	0	50.0	0	6.7	3.4
Trucks	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3
% Trucks	0	1.0	0	0	0.9	0	0	0	0	0	0	1.5	0	0	1.4	0	0	0	0	0	1.0
Pedestrians	0	0	0	0	0	0	0	0	7	7	0	0	0	0	0	0	0	0	4	4	11
% Pedestrians	0	0	0	0	0	0	0	0	100	100	0	0	0	0	0	0	0	0	100	13.3	3.8

Colliers Engineering & Design

400 Columbus Avenue - Suite 180E
Valhalla, New York 10595
Accelerating Success

File Name : 3-Washington_Avenue_and_Cross_Street_1087085_06-20-2023
Site Code :
Start Date : 6/20/2023

Groups Printed- Lights - Buses - Trucks - Pedestrians

	WASHINGTON AVE From North					CROSS ST From East					WASHINGTON AVE From South					CROSS 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
03:30 PM	1	25	0	0	26	0	0	0	0	0	0	63	8	0	71	9	0	0	2	11	108
03:45 PM	3	31	0	0	34	0	0	1	0	1	0	49	17	0	66	3	0	2	0	5	106
Total	4	56	0	0	60	0	0	1	0	1	0	112	25	0	137	12	0	2	2	16	214
04:00 PM	0	19	0	0	19	0	0	1	0	1	0	47	20	0	67	4	0	1	3	8	95
04:15 PM	1	26	0	0	27	0	0	0	0	0	0	47	13	0	60	2	0	2	3	7	94
04:30 PM	1	40	0	0	41	0	0	0	0	0	0	69	12	0	81	1	0	0	2	3	125
04:45 PM	0	32	0	0	32	0	0	0	1	1	0	61	14	0	75	2	0	1	0	3	111
Total	2	117	0	0	119	0	0	1	1	2	0	224	59	0	283	9	0	4	8	21	425
05:00 PM	1	39	0	0	40	0	0	0	0	0	1	63	13	0	77	5	0	0	5	10	127
05:15 PM	0	32	0	0	32	0	0	0	3	3	1	67	11	0	79	5	0	1	0	6	120
05:30 PM	0	25	0	0	25	0	0	0	3	3	0	63	20	1	84	4	0	0	1	5	117
05:45 PM	2	22	0	0	24	0	0	0	2	2	0	58	9	0	67	7	0	0	2	9	102
Total	3	118	0	0	121	0	0	0	8	8	2	251	53	1	307	21	0	1	8	30	466
06:00 PM	0	26	0	0	26	0	0	0	7	7	0	56	3	0	59	3	1	1	2	7	99
06:15 PM	0	18	0	0	18	1	0	0	3	4	0	45	10	0	55	4	0	0	1	5	82
Grand Total	9	335	0	0	344	1	0	2	19	22	2	688	150	1	841	49	1	8	21	79	1286
Apprch %	2.6	97.4	0	0		4.5	0	9.1	86.4		0.2	81.8	17.8	0.1		62	1.3	10.1	26.6		
Total %	0.7	26	0	0	26.7	0.1	0	0.2	1.5	1.7	0.2	53.5	11.7	0.1	65.4	3.8	0.1	0.6	1.6	6.1	
Lights	9	330	0	0	339	1	0	1	0	2	2	680	141	0	823	45	1	8	0	54	1218
% Lights	100	98.5	0	0	98.5	100	0	50	0	9.1	100	98.8	94	0	97.9	91.8	100	100	0	68.4	94.7
Buses	0	2	0	0	2	0	0	0	0	0	0	2	8	0	10	2	0	0	0	2	14
% Buses	0	0.6	0	0	0.6	0	0	0	0	0	0	0.3	5.3	0	1.2	4.1	0	0	0	2.5	1.1
Trucks	0	3	0	0	3	0	0	1	0	1	0	6	1	0	7	2	0	0	0	2	13
% Trucks	0	0.9	0	0	0.9	0	0	50	0	4.5	0	0.9	0.7	0	0.8	4.1	0	0	0	2.5	1
Pedestrians	0	0	0	0	0	0	0	0	19	19	0	0	0	1	1	0	0	0	21	21	41
% Pedestrians	0	0	0	0	0	0	0	0	100	86.4	0	0	0	100	0.1	0	0	0	100	26.6	3.2

Colliers Engineering & Design
400 Columbus Avenue - Suite 180E
Valhalla, New York 10595
Accelerating Success

File Name : 3-Washington_Avenue_and_Cross_Street_1087085_06-20-2023
Site Code :
Start Date : 6/20/2023

	WASHINGTON AVE From North					CROSS ST From East					WASHINGTON AVE From South					CROSS 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 05:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	1	39	0	0	40	0	0	0	0	0	1	63	13	0	77	5	0	0	5	10	127
05:15 PM	0	32	0	0	32	0	0	0	3	3	1	67	11	0	79	5	0	1	0	6	120
05:30 PM	0	25	0	0	25	0	0	0	3	3	0	63	20	1	84	4	0	0	1	5	117
05:45 PM	2	22	0	0	24	0	0	0	2	2	0	58	9	0	67	7	0	0	2	9	102
Total Volume	3	118	0	0	121	0	0	0	8	8	2	251	53	1	307	21	0	1	8	30	466
% App. Total	2.5	97.5	0	0		0	0	0	100		0.7	81.8	17.3	0.3		70	0	3.3	26.7		
PHF	.375	.756	.000	.000	.756	.000	.000	.000	.667	.667	.500	.937	.663	.250	.914	.750	.000	.250	.400	.750	.917
Lights	3	118	0	0	121	0	0	0	0	0	2	250	50	0	302	19	0	1	0	20	443
% Lights	100	100	0	0	100	0	0	0	0	0	100	99.6	94.3	0	98.4	90.5	0	100	0	66.7	95.1
Buses	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	3
% Buses	0	0	0	0	0	0	0	0	0	0	0	0	5.7	0	1.0	0	0	0	0	0	0.6
Trucks	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2	0	0	0	2	3
% Trucks	0	0	0	0	0	0	0	0	0	0	0	0.4	0	0	0.3	9.5	0	0	0	6.7	0.6
Pedestrians	0	0	0	0	0	0	0	0	8	8	0	0	0	1	1	0	0	0	8	8	17
% Pedestrians	0	0	0	0	0	0	0	0	100	100	0	0	0	100	0.3	0	0	0	100	26.7	3.6

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