TOWN OF CARMEL
PLANNING BOARD

60 McAlpin Avenue
Mahopac, New York 10541
Tel. (845) 628-1500 – Ext.190
www.ci.carmel.ny.us

PLANNING BOARD AGENDA
NOVEMBER 9, 2023– 7:00 P.M.

		TAX MAP #	PUB. HEARING	MAP DATE	COMMENTS
OTHER BUSINESS					
1.	SMSA Limited Partnership d/b/a Verizon Wireless and Homeland Towers, LLC – Walton Drive	87.5-1-90			SEQR Negative Declaration
PUBLIC HEARING					
2.	Chang, John – 716 Route 6	76.30-1-26	11/9/23	9/1/23	Public Hearing & Resolution
3.	Lake Plaza Shopping Center, LLC 983-1005 Route 6	65.10-1-45&46	11/9/23		Bond Return
RESOLUTION					
4.	Diamond Point Development – 4 Baldwin Place Rd	86.10-1-2 & 3		8/30/23	SEQR Negative Declaration
SITE PLAN					
5.	Union Energy Center, LLC – 24 Miller Rd	86.11-1-14		8/30/23	Site Plan/Subdivision
MISCELLANEOUS					
6.	Carmel Fire Department – 94 Gleneida Ave	44.14-1-24		10/31/23	Waiver of Site Plan Application
7.	Minutes – 09/14/23				

Short Environmental Assessment Form
Part 1 - Project Information

Instructions for Completing

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

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

Part 1 – Project and Sponsor Information

Name of Action or Project:

Glenacom Wireless Facility - Stipulation of Settlement and Consent Order

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

End of Walton Drive, Mahopac, NY 10541 (87.5-1-90) [See Project Location on attached Lease Exhibit]

Brief Description of Proposed Action:

Approval of a Stipulation of Settlement and Consent Order regarding litigation captioned as New York SMSA Limited Partnership, et al v. The Town of Carmel, et al. 19-cv-10793 SDNY, (copy attached) regarding a wireless telecommunications facility, including a 120-foot monopole tower and a 2,800 +/- foot multicarrier fenced equipment compound at the base thereof, at the Project Location (a/k/a Alternate Glenacom Facility), subject to the review and approval of (a) a site plan and a special permit from the Planning Board; (b) a height variance from the Zoning Board of Appeals; (c) a "Letter of Permission" or wetlands permit from the Conservation Board, as defined in Chapter 89 of the Town Code; and (d) a building permit from the Building Inspector. No other Town approvals are required.

Name of Applicant or Sponsor:	Telephone: (845) 628-1500
Town of Carmel	E-Mail:

Address:

60 McAlpin Avenue

City/PO:	State:	Zip Code:
Mahopac	NY	10541

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

3. a. Total acreage of the site of the proposed action? <1 acres
   b. Total acreage to be physically disturbed? <1 acres
   c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 0 acres

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

5. ☐ Urban ☐ Rural (non-agriculture) ☐ Industrial ☐ Commercial ☑ Residential (suburban)
   ☑ Forest ☐ Agriculture ☐ Aquatic ☑ Other(Specify): Public Utility Overhead Power Lines to south
   ☐ Parkland

*(a) a site plan and a special permit from the Planning Board; (b) a height variance from the Zoning Board of Appeals; (c) a "Letter of Permission" or wetlands permit from the Conservation Board, as defined in Chapter 89 of the Town Code; and (d) a building permit from the Building Inspector

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

	NO	YES
6. Is the proposed action consistent with the predominant character of the existing built or natural landscape? As noted above to the south is existing similar public utility infrastructure, overhead power lines	☐	☑
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area? If Yes, identify: _____	☑	☐
8. a. Will the proposed action result in a substantial increase in traffic above present levels? Unmanned Facillity	☑	☐
b. Are public transportation services available at or near the site of the proposed action?	☑	☐
c. Are any pedestrian accommodations or bicycle routes available on or near the site of the proposed action? N/A	☑	☐
9. Does the proposed action meet or exceed the state energy code requirements? If the proposed action will exceed requirements, describe design features and technologies: _____ _____	☑	☐
10. Will the proposed action connect to an existing public/private water supply? N/A Unmanned Facility If No, describe method for providing potable water: _____ _____	☑	☐
11. Will the proposed action connect to existing wastewater utilities? N/A Unmanned Facility If No, describe method for providing wastewater treatment: _____ _____	☑	☐
12. a. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places?	☑	☐
b. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory? **	☐	☑
13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency?	☑	☐
b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody?	☑	☐
If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres: _____ _____ _____		

** This factor is not applicable to the current action for approval of the Stipulation of Settlement and Consent Order, and the presence of or potential impact to archaeological sites will be fully evaluated as part of the zoning process for the approval of the construction of the Facility.

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

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

☐ Wetland ☐ Urban ☑ Suburban

	NO	YES
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered? Northern Long-eared Bat — No trees will be removed between the dates of April 1st and November 1st in keeping with the tree clearing restrictions for Northern Long-eared Bats	☐	☑
16. Is the project site located in the 100-year flood plan?	☑	☐
17. Will the proposed action create storm water discharge, either from point or non-point sources?	☑	☐
If Yes, a. Will storm water discharges flow to adjacent properties?	☑	☐
b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)?	☑	☐
If Yes, briefly describe: _____ _____		
18. Does the proposed action include construction or other activities that would result in the impoundment of water or other liquids (e.g., retention pond, waste lagoon, dam)? If Yes, explain the purpose and size of the impoundment: _____ _____	☑	☐
19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility? If Yes, describe: _____ _____	☑	☐
20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste? If Yes, describe: _____ _____	☑	☐

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

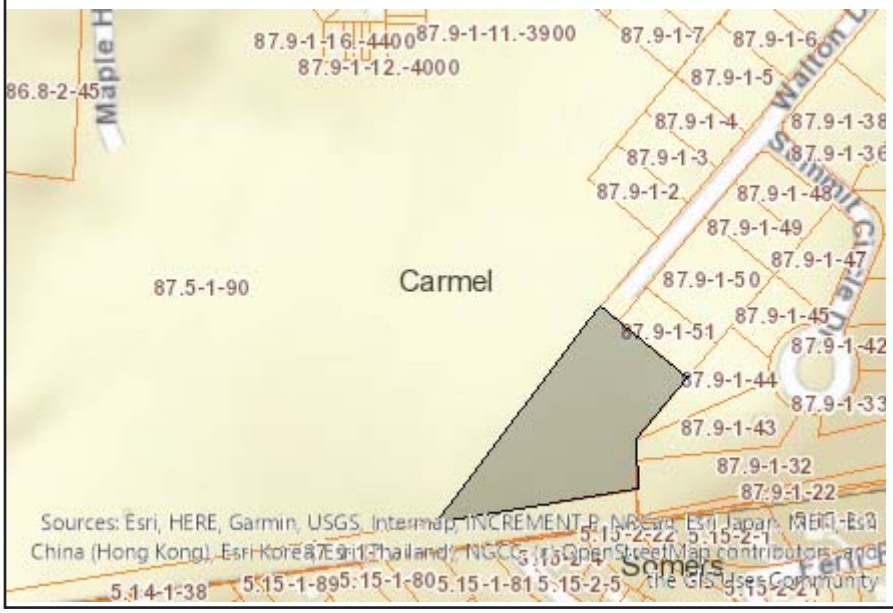
Applicant/sponsor/name: Town of Carmel Date: _____

Signature: _____ Title: _____

PRINT FORM

EAF Mapper Summary Report

Thursday, October 26, 2023 9:51 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.

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

INSITE
ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.

October 30, 2023

Town of Carmel Planning Board
60 McAlpin Avenue
Mahopac, New York 10541

RE: Diamond Point Development
4 Baldwin Place Road
Town of Carmel
TM#'s: 86.10-1-2&3

Dear Chairman Paeprer and Members of the Board:

Please find enclosed the document in support of an application for site plan approval for the above referenced project:

- Traffic Impact Report, by Colliers Engineering, dated September 6, 2023. (2 copies)

It is understood that Creighton Manning is reviewing the enclosed Traffic Impact Report. As discussed with Planning Board staff, we would respectfully request to be placed on the November 9 Planning Board agenda for the Board's consideration of adopting a Negative Declaration under SEQRA, and Conditional Site Plan Approval Resolution.

Should you have any questions or comments regarding this information, please feel free to contact our office.

Very truly yours,

INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.

By: _____
Richard D. Williams, PE
Senior Principal Engineer

RDW/adt

Enclosures
cc: (All via email only)
Aaron Sommer
Jason Sommer
Jennifer Grey, Esq
Scott Stinard
John Anastasiou, AIA

400 Columbus Avenue, Suite 180E
Valhalla, New York 10595
Main: 877 627 3772
colliersengineering.com

Colliers Engineering & Design

September 6, 2023

Mr. Jason Sommer
Diamond Point Development
880 Marietta Highway, Suite 630-243
Roswell, GA 30075

DPD Self Storage
U.S. Route 6/Baldwin Place Road
Colliers Engineering & Design Project No. 23003348A

Dear Mr. Sommer,

This report has been prepared to evaluate the potential traffic impacts associated with the proposed DPD Self Storage development, which is proposed to be developed on the property located on the north of US Route 6 and east of Baldwin Place Road in the Town of Carmel, Putnam County, New York. The site is proposed to consist of several self-storage buildings totaling approximately 360,000 sq. ft. and an approximately 1,110 sq. ft. office/retail building to support the self-storage. As shown on Figure No. 1, access to the development is proposed via driveway connection to US Route 6 approximately 225 ft. north of Baldwin Pace Road at approximately the same location of the existing driveway to the Barney Zipkin Tree Company property and a driveway connection to Baldwin Place Road approximately 600 ft. west of US Route 6. Note that the existing driveway to the property immediately west of the Mobil gas station is proposed to be eliminated as part of the Project.

A Design Year of 2026 has been utilized in completing the traffic analysis in order to evaluate future traffic conditions associated with this proposed development.

Description of Existing Roadways

The following is a brief description of the roadways located within the study area. In addition, Section III-F provides a further description of the existing geometrics, traffic control and a summary of the existing and future Levels of Service and any recommended improvements for each of the study area intersections. Appendix D contains copies of the capacity analyses which indicate the existing geometrics (including lane widths) and other characteristics for each of the individual intersections studied.

U.S. Route 6

U.S. Route 6 is classified as a Principal Arterial under the jurisdiction of the New York State Department of Transportation (NYSDOT). The roadway traverses in a generally east/west direction through northern Westchester and Putnam County. U.S. Route 6, in the immediate vicinity of the site, generally provides one lane in each direction with paved shoulders and turning lanes at several signalized intersections including the intersection with NYS Route 118 and Baldwin Place Road within the study area. Through this intersection an additional eastbound through lane is also provided on US Route 6. The posted speed limit in this area is 40 MPH. North of the Baldwin Place Road/NYS Route 118 intersection U.S. Route 6 reduces to two lanes, one through lane in each direction.

Baldwin Place Road

Baldwin Place Road is a two-lane roadway classified as a Major Collector under the jurisdiction of Putnam County. The roadway traverses in a generally north/south direction between a signalized intersection with U.S. Route 6 and NYS Route 118 and NYS Route 6N. The DPD Self Storage Development is proposed to be accessed via a new roadway connection to Baldwin Place Road. The roadway has a posted speed limit of 40 MPH.

NYS Route 118

NYS Route 118 is classified as a Minor Arterial roadway under the jurisdiction of the NYSDOT. The roadway traverses in an easterly direction from its intersection with Route 6 to its intersection with Miller Road where it turns south. The roadway serves mainly commercial land uses in the vicinity of the site and has a posted speed limit of 30 MPH.

2023 Existing Traffic Volumes

(Figures No. 2. through 4, Appendix A & E)

Manual traffic counts were collected by representatives of Colliers Engineering & Design (CED) on Saturday October 29, 2022, Monday November 1, 2023, Thursday March 2, 2023 and Saturday March 4, 2023 for the AM and PM Peak Hours to determine the existing traffic volume conditions at the study area intersections. These traffic counts were then compared to traffic volume data from previous traffic studies conducted by our office and to traffic volume data available from the New York State Department of Transportation (NYSDOT) for the US Route 6 Corridor. Based on this information, the 2023 Existing Traffic Volumes were established for the Weekday Peak AM and PM Hours and Weekend Saturday Hour at the following study area intersections.

- Balwin Place Road and Kennard Road and Mahopac Farm Access
- US Route 6 and Baldwin Place Road/NYS Route 118
- US Route 6 and Proposed DPD Self-Storage Driveway
- Baldwin Place Road and Proposed DPD Self-Storage Driveway

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 4:00 PM – 5:00 PM
- Weekend SAT Peak Hour 12:00 PM – 1:00 PM

The resulting 2023 Existing Traffic Volumes are shown on Figures No. 2, 3 and 4, contained in Appendix A, for the Weekday Peak AM Hour, Weekday Peak PM Hour and Saturday Peak Hour, respectively. The relevant traffic volume data is provided in Appendix E for reference.

2026 No-Build Traffic Volumes

(Figure No. 5 through 7, Appendix A)

The 2023 Existing Traffic Volumes were increased by a growth factor of 2.0% per year to account for general background growth resulting in the 2026 No-Build Traffic Volumes which are shown on Figures No. 5 through 7, contained in Appendix A, for each of the Peak Hours. Note that there are no known significant other developments that would be expected to contribute significant additional traffic to the study area intersections within the study period.

Site Generated Traffic Volumes

(Table No. 1, Appendix B)

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 – Industrial Mini-Warehouse. Table No. 1, contained in Appendix B, summarizes the trip generation rates and corresponding site generated traffic volumes for the Weekday Peak AM and PM Hours, and Weekend Saturday Peak Hours.

Arrival/Departure Distribution

(Figures No. 8 and 9, Appendix A)

It was necessary to establish arrival and departure distributions to assign the site generated traffic volumes to the surrounding roadway network. Based on a review of the Existing Traffic Volumes and the expected travel patterns on the surrounding roadway network, the distributions were identified. The anticipated arrival and departure distributions are shown on Figures No. 8 and 9 (contained in Appendix A), respectively.

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2026 Build Conditions Traffic Volumes

(Figures No. 10 through 15, Appendix A)

The site generated traffic volumes were assigned to the roadway network based on the arrival and departure distributions referenced above. The resulting site generated traffic volumes for each of the study area intersections are shown on Figures No. 10 through 12 (contained in Appendix A) for each of the peak hours, respectively. The site generated traffic volumes were then added to the 2026 No-Build Traffic Volumes to obtain the 2026 Build Traffic Volumes. The resulting 2026 Build Traffic Volumes are shown on Figures No. 13 through 15 (contained in Appendix A) for the Weekday Peak AM Hour, Weekday Peak PM Hour and Saturday Peak Hour, respectively.

Description of Analysis Procedures

(Appendix C)

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

Signalized Intersection Capacity Analysis

The capacity analysis for a signalized intersection was performed in accordance with the procedures described in the Highway Capacity Manual, 6th Edition, 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. 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 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.

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Results of Analysis

(Table No. 2, Appendix D)

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

Table No. 2 summarizes the results of the capacity analysis for the 2023 Existing, 2026 No-Build and 2026 Build Conditions. Appendix D contains copies of the capacity analysis which also indicate the existing geometrics (including lane widths) and other characteristics for each of the individual intersections studied.

Baldwin Place Road and Kennard Road and Mahopac Farm Access

Baldwin Place Road intersects with the existing Mahopac Farm Access and Kennard Road at a full movement unsignalized intersection. The westerly access to the existing Mobil station also intersects Baldwin Place Road in this vicinity. The Kennard Road northeast bound approach is controlled by a "Stop" sign. Capacity analysis was conducted for this intersection utilizing the 2023 Existing Traffic Volumes. The analysis results indicate that the intersection is currently operating at a Level of Service "C" or better during each of the peak hours. Similar levels of service are anticipated to remain under future 2026 No-Build conditions.

As part of the Project, the existing Mahopac Farm Access driveway is proposed to be eliminated, but existing Mobil station driveway will remain. The capacity analysis was recomputed using the 2026 Build Traffic volumes. These results indicate that the intersection is expected to experience Levels of Service "C" or better during each of the Peak Hours under future conditions.

Baldwin Place Road/NYS Route 118 and US Route 6

US Route 6 intersects with Baldwin Place Road and NYS Route 118 at a full movement signalized intersection. The northbound Route 6 approach consists of an approximately 230 ft. long left turn lane and two through lanes with a shared right turn. The southbound Route 6 approach consists of an approximately 150 ft. left turn lane and one through lane with a shared right turn movement. The eastbound Baldwin Place Road approach consists of an approximately 100 ft. left turn lane a shared through-right turn lane with a channelized right turn movement. The westbound NYS Route 118 approach consists of an approximately 150 ft. left turn lane, a through lane, and a channelized right turn lane of approximately 210 ft in length. The channelized right turn movements on the eastbound and westbound approaches are controlled by "Stop" signs.

Capacity analysis was conducted for this intersection utilizing the 2023 Existing Traffic Volumes. The analysis results indicate that the intersection is currently operating at an overall Level of Service "D" during the AM, PM and Saturday Peak Hours. It should be noted that the eastbound and westbound approaches experience longer delays during peak periods. Similar levels of service are anticipated to be maintained under future No-Build and Build conditions.

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US Route 6 and DPD Proposed Driveway

The DPD Self-Storage Warehouse Development is proposed to be accessed via a reconstruction of the existing Barney Zipkin Tree Company property access driveway connection to US Route 6. This driveway is proposed to be restricted to right turn entering and right turn exiting movements only and will be constructed with a raised mountable channelization median and appropriate "No Left Turn" signage. A NYSDOT Highway Work Permit will be required for the driveway construction. The intersection was analyzed with the 2026 Build Traffic Volumes which indicates that the intersection will experience at Level of Service "B" during each of the peak hours.

Sight distance was reviewed for the proposed driveway based on the AASHTO criteria. The sight distance analysis is summarized in the table below. As indicated in the table, some clearing of vegetation along the west side of Route 6 north of the driveway location will be required to achieve the proposed sight distances noted. The clearing of vegetation will on property controlled by the Applicant or within the NYSDOT Right-of-Way.

Exhibit No. 1 – Proposed DPD Self-Storage Driveway at U.S. Route 6

Sight Line		Available Sight Distance (ft.)		AASHTO Sight Distances (ft.)	
		Existing	Proposed	Stopping Sight Distance	Intersection Sight Distance
Right Turn from Minor Road (Driveway)	Looking Left	320	400	305	385
Right Turn from Major Road (Route 6)	Rear End	415	530	305	---

Notes:

1. AASHTO Sight Distance based on 40 MPH posted speed limit along U.S. Route 6.
2. Proposed sight distances assume clearing of vegetation along the west side of Route 6 north of the driveway location.

Baldwin Place Road and DPD Proposed Driveway

A second full movement driveway is proposed to be provided to the Project connecting to Baldwin Place Road approximately 600 ft. west of US Route 6. The proposed driveway will form a "T" shaped, unsignalized intersection with a single lane on each approach and the driveway approach controlled by a "Stop" sign. The intersection was analyzed with the 2026 Build Traffic Volumes which indicates that the intersection will experience at Level of Service "C" or better during each of the peak hours under future conditions.

Sight distance was also reviewed for the proposed driveway based on the AASHTO criteria. The sight distance analysis is summarized in the table below. As indicated in the table, some clearing of vegetation along the north side of Baldwin Place Road west of the driveway location will be required to achieve the proposed sight distance noted for the sight line looking right from the proposed driveway. The clearing of vegetation will on property controlled by the Applicant or within the County Right-of-Way.

Exhibit No. 2 – Proposed DPD Self-Storage Driveway at Baldwin Place Road

Sight Line		Available Sight Distance (ft.)		AASHTO Sight Distances (ft.)	
		Existing	Proposed	Stopping Sight Distance	Intersection Sight Distance
Left Turn from Minor Road (Driveway)	Looking Left	445[2]	445[2]	305	445
	Looking Right	375	445[3]	305	445
Left Turn from Major Road (Baldwin Place Road	Left Turn Entry	435[1]	435[2]	305	325
	Rear End	445	445	305	---

Notes:

1. AASHTO Sight Distance based on 40 MPH posted speed limit along Baldwin Place Road.
2. Sight distances measured to intersection of U.S. Route 6 at Baldwin Place Road
3. Proposed sight distance assumes clearing of vegetation along the north side of Baldwin Place Road west of the driveway location

Results of Analysis with Bypass

CED is also aware that Putnam County is currently in the initial planning stages for a potential bypass roadway connection between Baldwin Place Road at Grand Meadows Drive and US Route 6 at the PCSB Bank signalized intersection. It is anticipated that this bypass roadway will redistribute traffic that currently travels through the Baldwin Place Road/US Route 6 intersection to the Bypass Roadway.

Capacity analysis was performed taking into account this proposed bypass north of the proposed DPD Self-Storage development. The traffic volumes associated with this scenario under future 2026 No-Build and Build conditions can be found on Figures No. 5R through 7R and 13R through 15R contained in Appendix B. The level of service capacity analysis results are summarized on Table No. 2R and indicate that similar levels of service to those discussed previously are generally anticipated to be experienced with this potential bypass roadway in place. The US Route 6/Baldwin Place Road/ NYS Route 118 intersection would experience some improvements in traffic operations as a result of the Bypass Roadway, especially on the eastbound Baldwin Place Road approach.

Summary and Conclusion

The above summarized analyses indicate that the proposed self-storage development will not have a significant impact on overall traffic operating conditions in the vicinity of the Project site. The proposed driveway modifications associated with the US Route 6 and Baldwin Place Road driveway connections will require review and approval of the NYSDOT and Putnam County Department of Public Works. Highway Work Permits will be required for the construction of both driveways.

Sincerely,

Colliers Engineering & Design CT, P.C.
(DBA Maser Consulting)

Richard D'Andrea, P.E., PTOE
Assistant Department Manager

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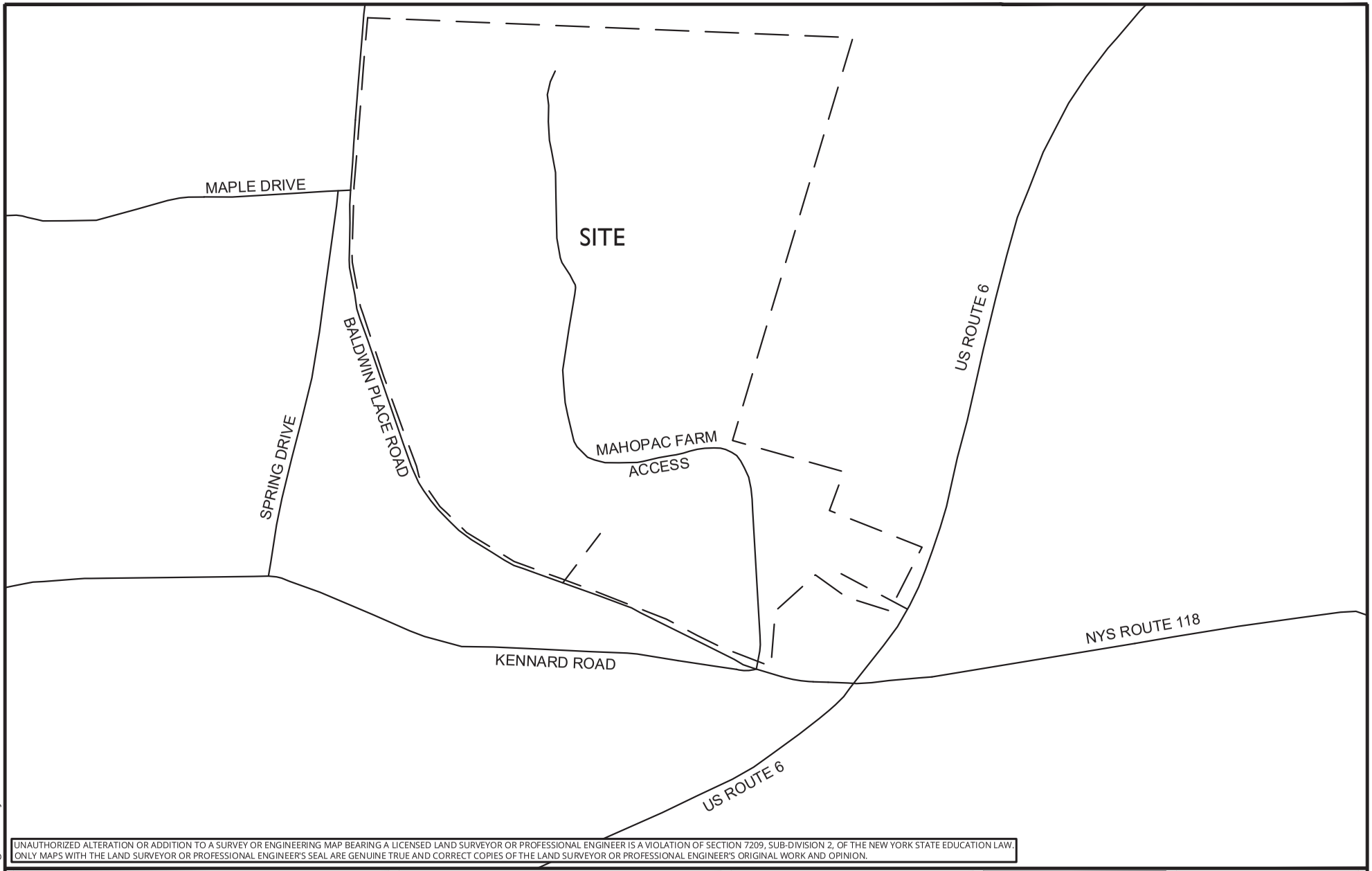
Colliers
Engineering
& Design

Appendix

Appendix A | Figures



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.

Colliers Engineering & Design

www.colliersengineering.com

Doing Business as MASER CONSULTING

REV	DATE	DRAWN BY	DESCRIPTION
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DPD WAREHOUSE
SELF-STORAGE

TOWN OF CARMEL
PUTNAM COUNTY
NEW YORK STATE

811 PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

STATE REQUIRED FILE NUMBER

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

Colliers Engineering & Design
WESTCHESTER
400 Columbus Avenue,
Suite 180E
Valhalla, NY 10595
Phone: 914.347.7500
COLLIERS ENGINEERING & DESIGN CT, P.C. DOING BUSINESS AS MASER CONSULTING ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	6/13/23	PTV	RGD

PROJECT NUMBER:	DRAWING NAME:
23003348A	230906RGD_FIGURES

SHEET TITLE:
SITE MODEL

SHEET NUMBER:
1

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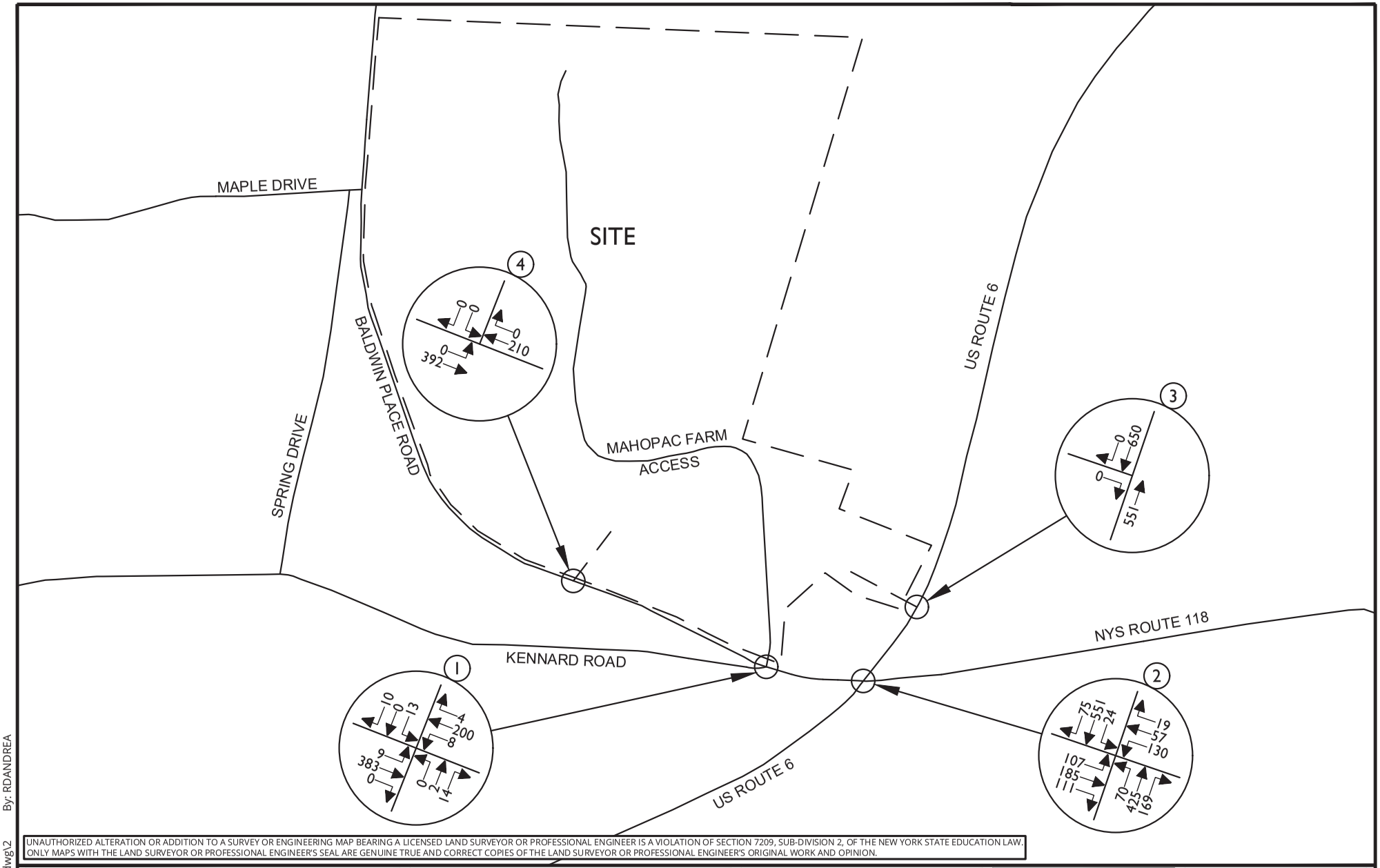

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Colliers Engineering & Design

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Doing Business as MASER CONSULTING

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DPD WAREHOUSE
SELF-STORAGE

TOWN OF CARMEL
PUTNAM COUNTY
NEW YORK STATE

811 PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

STATE REQUIRED FILE NUMBER

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

Colliers Engineering & Design
WESTCHESTER
400 Columbus Avenue,
Suite 180E
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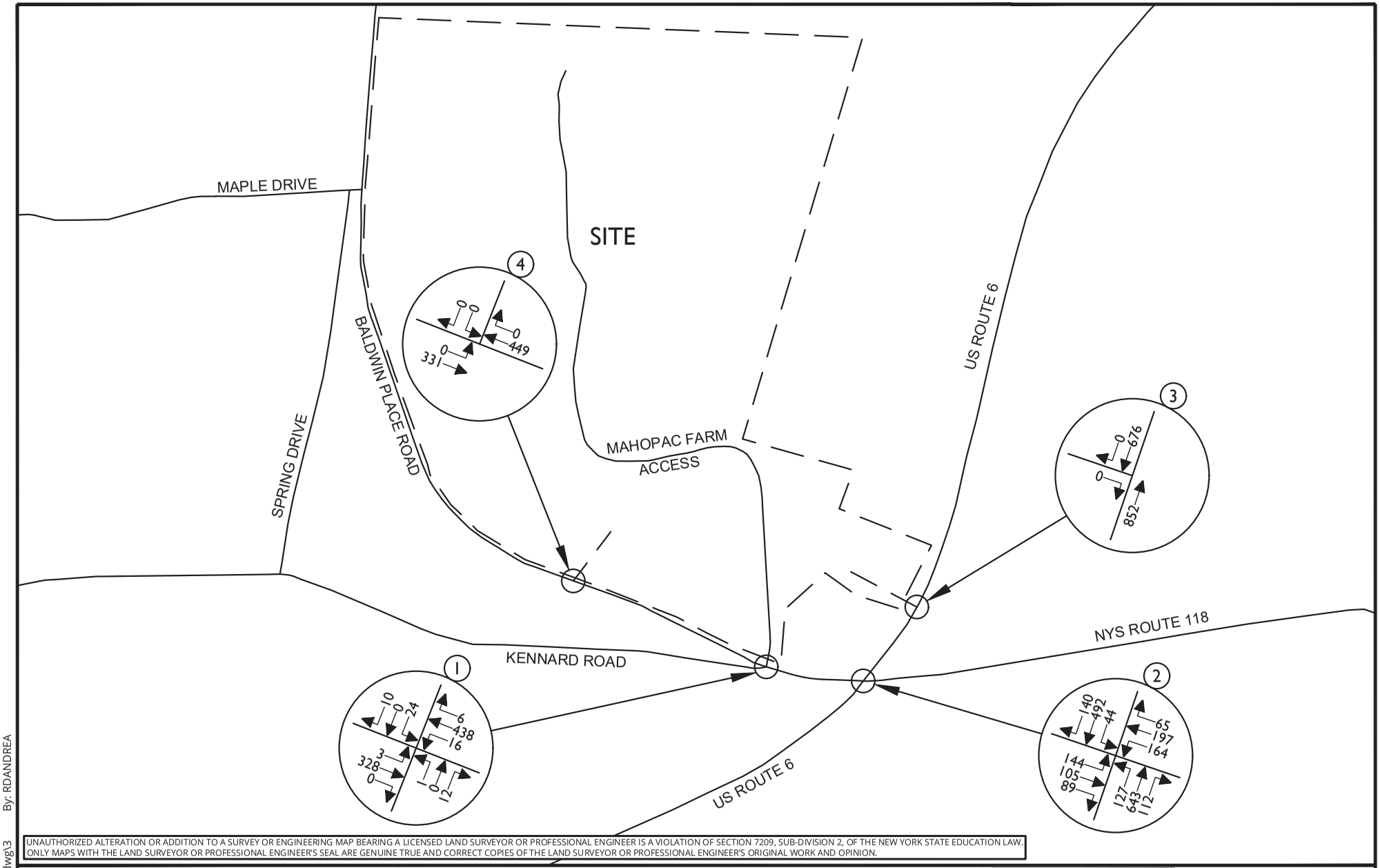
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	6/13/23	PTV	RGD

PROJECT NUMBER:	DRAWING NAME:
23003348A	230906RGD_FIGURES

SHEET TITLE:
2023 EXISTING TRAFFIC VOLUMES
WEEKDAY PEAK AM HOUR

SHEET NUMBER:
2



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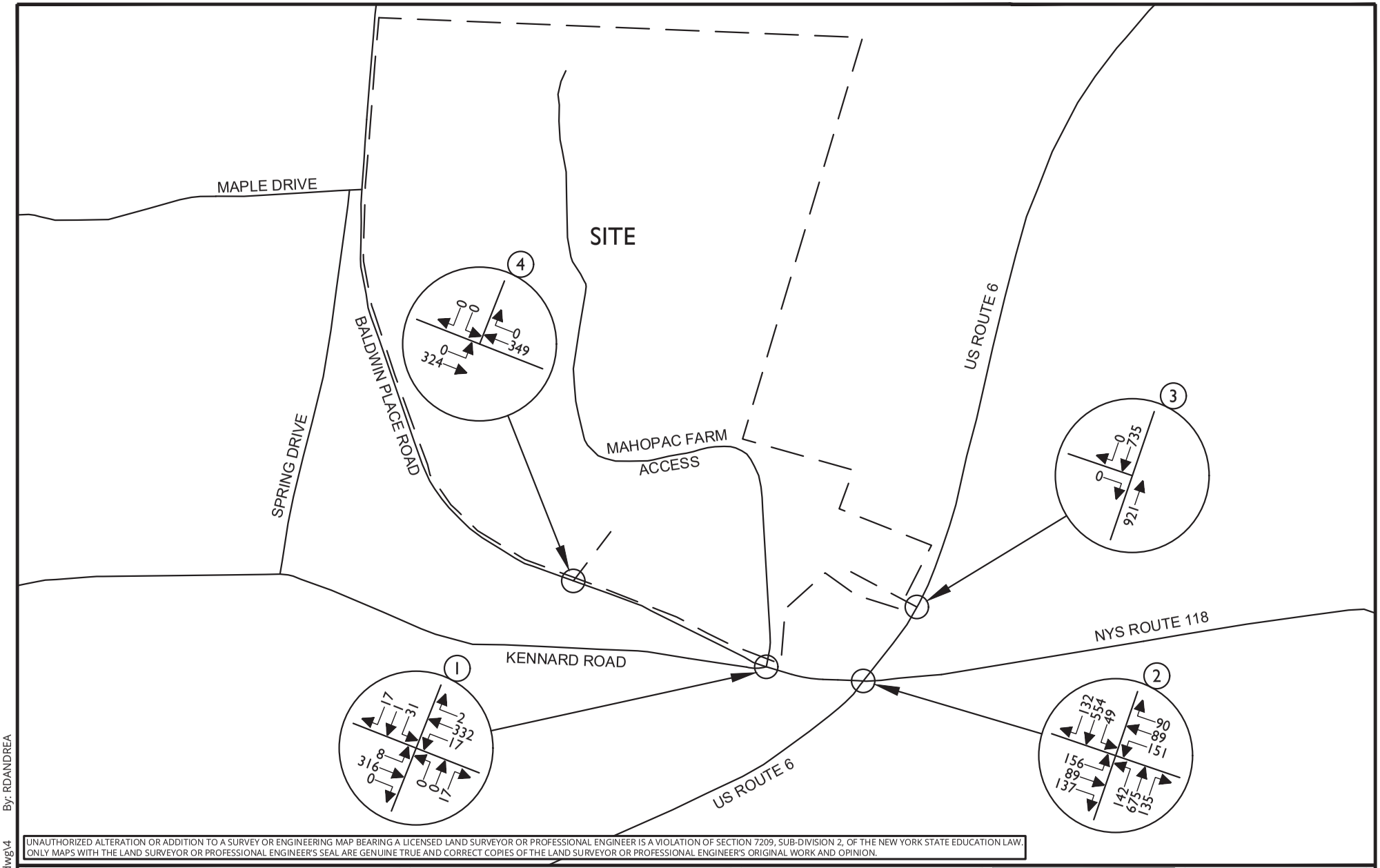
AS SHOWN	6/13/23	PTV	RGD

PROJECT NUMBER:	DRAWING NAME:
23003348A	230906RGD_FIGURES

SHEET TITLE:
2023 EXISTING TRAFFIC VOLUMES
WEEKDAY PEAK PM HOUR

SHEET NUMBER:
3

\AcPublish_9648\230906RGD_Figures.dwg\3 By: RDANDREA



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SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	6/13/23	PTV	RGD

PROJECT NUMBER:	DRAWING NAME:
23003348A	230906RGD_FIGURES

SHEET TITLE:
2023 EXISTING TRAFFIC VOLUMES
SATURDAY PEAK HOUR

SHEET NUMBER:
4

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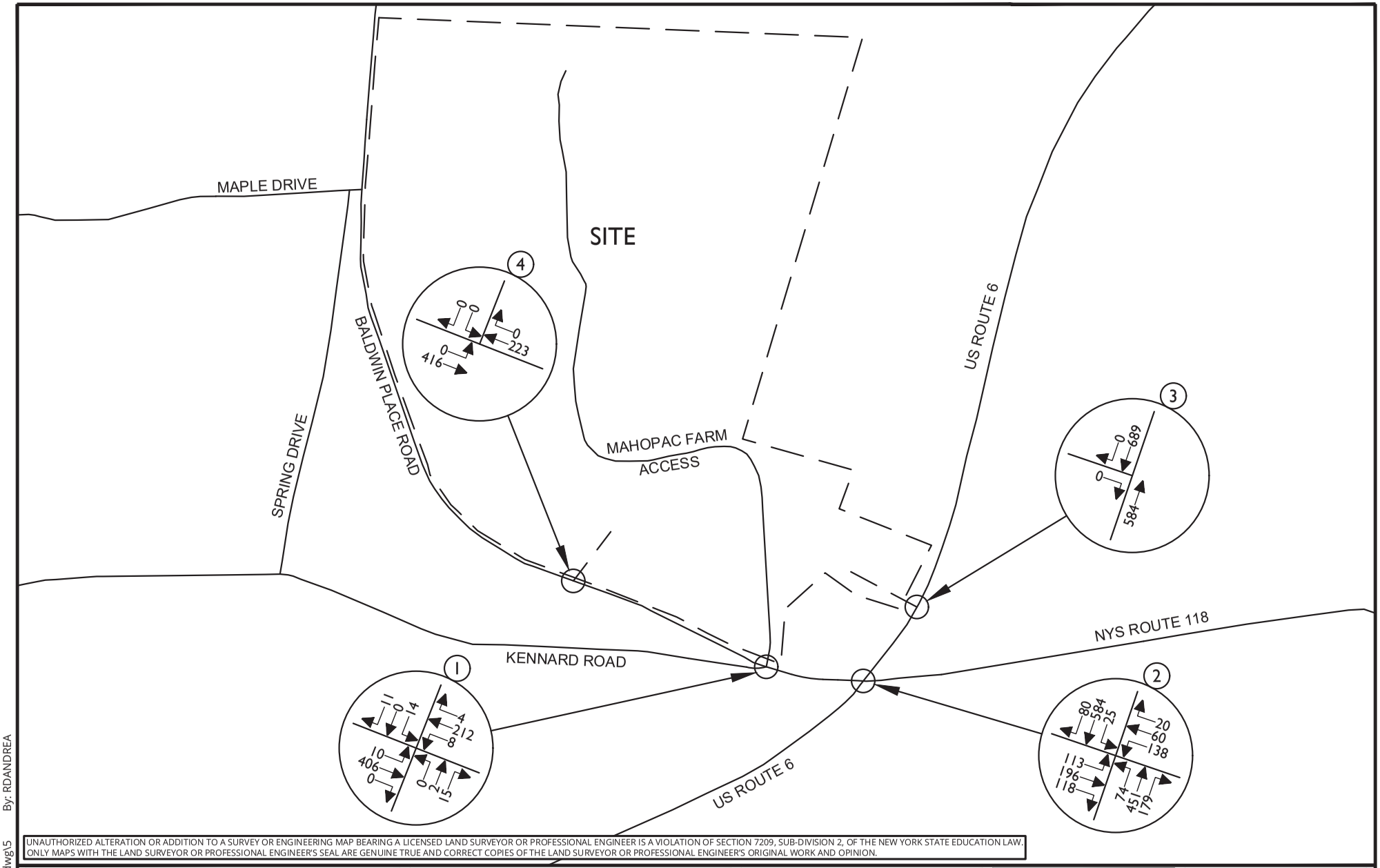

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AS SHOWN	6/13/23	PTV	RGD

PROJECT NUMBER:	DRAWING NAME:
23003348A	230906RGD_FIGURES

SHEET TITLE:
2026 NO-BUILD TRAFFIC VOLUMES
WEEKDAY PEAK AM HOUR

SHEET NUMBER:
5

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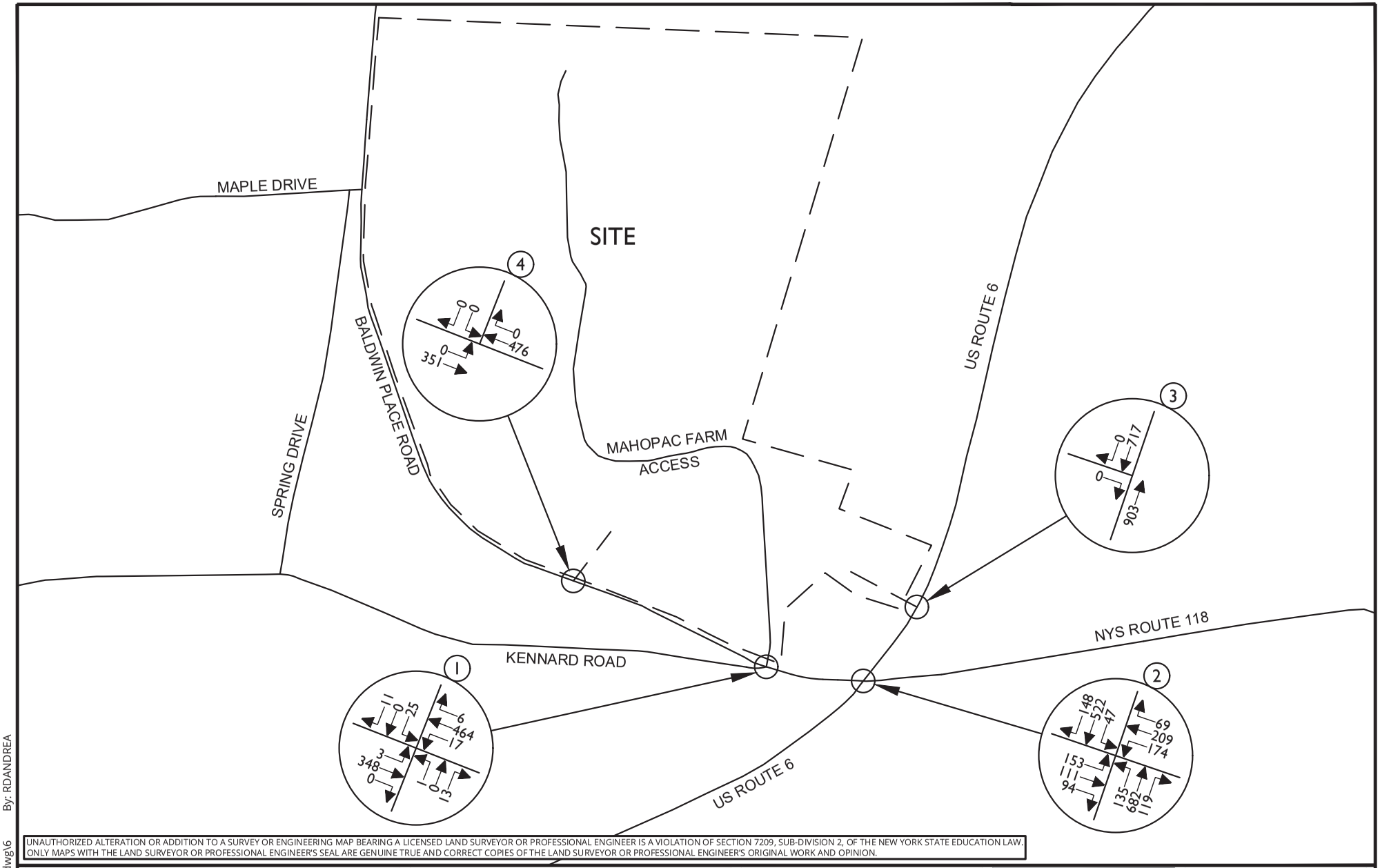

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AS SHOWN	6/13/23	PTV	RGD

PROJECT NUMBER:	DRAWING NAME:
23003348A	230906RGD_FIGURES

SHEET TITLE:
2026 NO-BUILD TRAFFIC VOLUMES
WEEKDAY PEAK PM HOUR

SHEET NUMBER:
6

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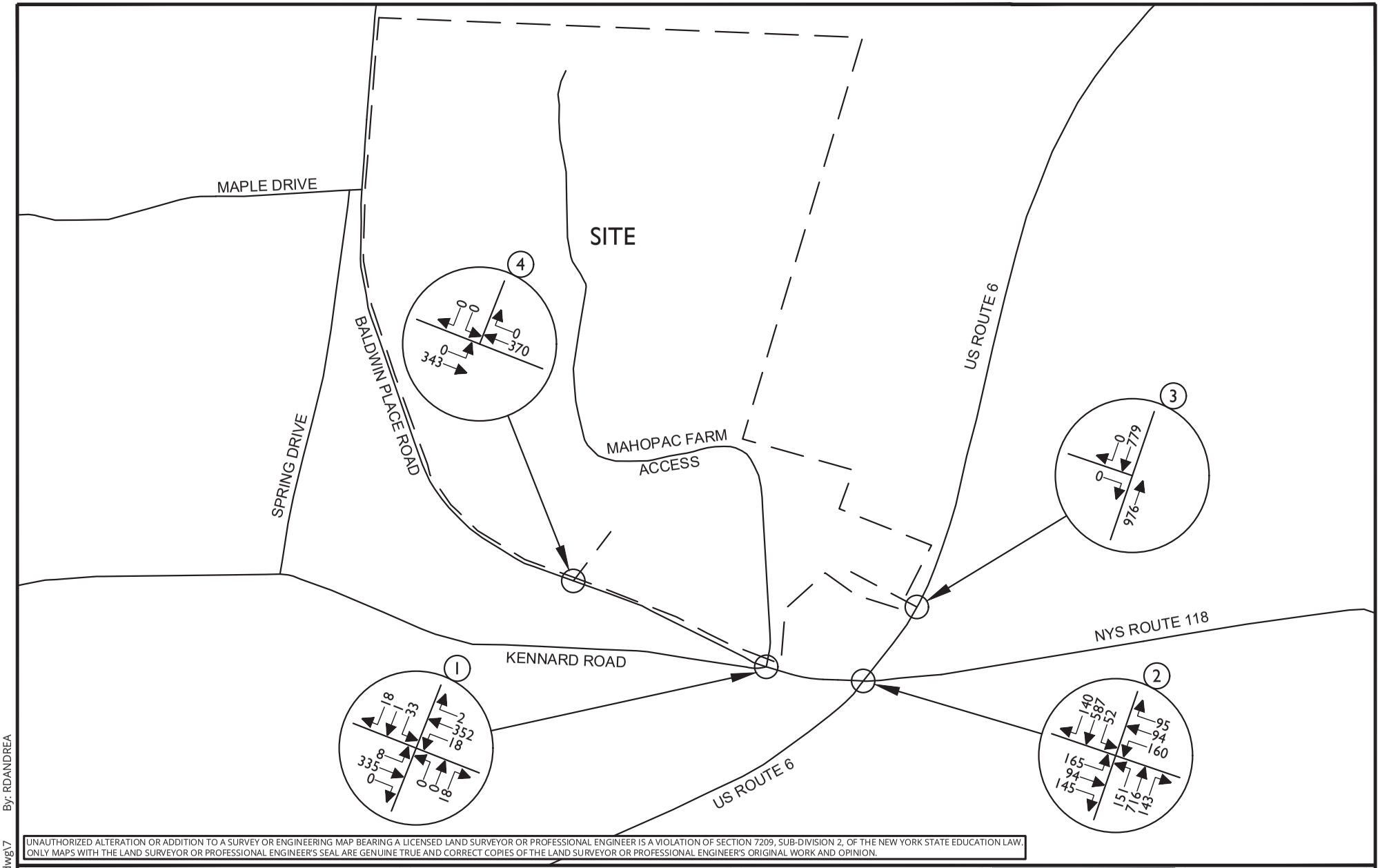

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SCALE:	DATE:	DRAWN BY:	CHECKED BY:
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PROJECT NUMBER: 23003348A
DRAWING NAME: 230906RGD_FIGURES

SHEET TITLE:
2026 NO-BUILD TRAFFIC VOLUMES
SATURDAY PEAK HOUR

SHEET NUMBER:
7

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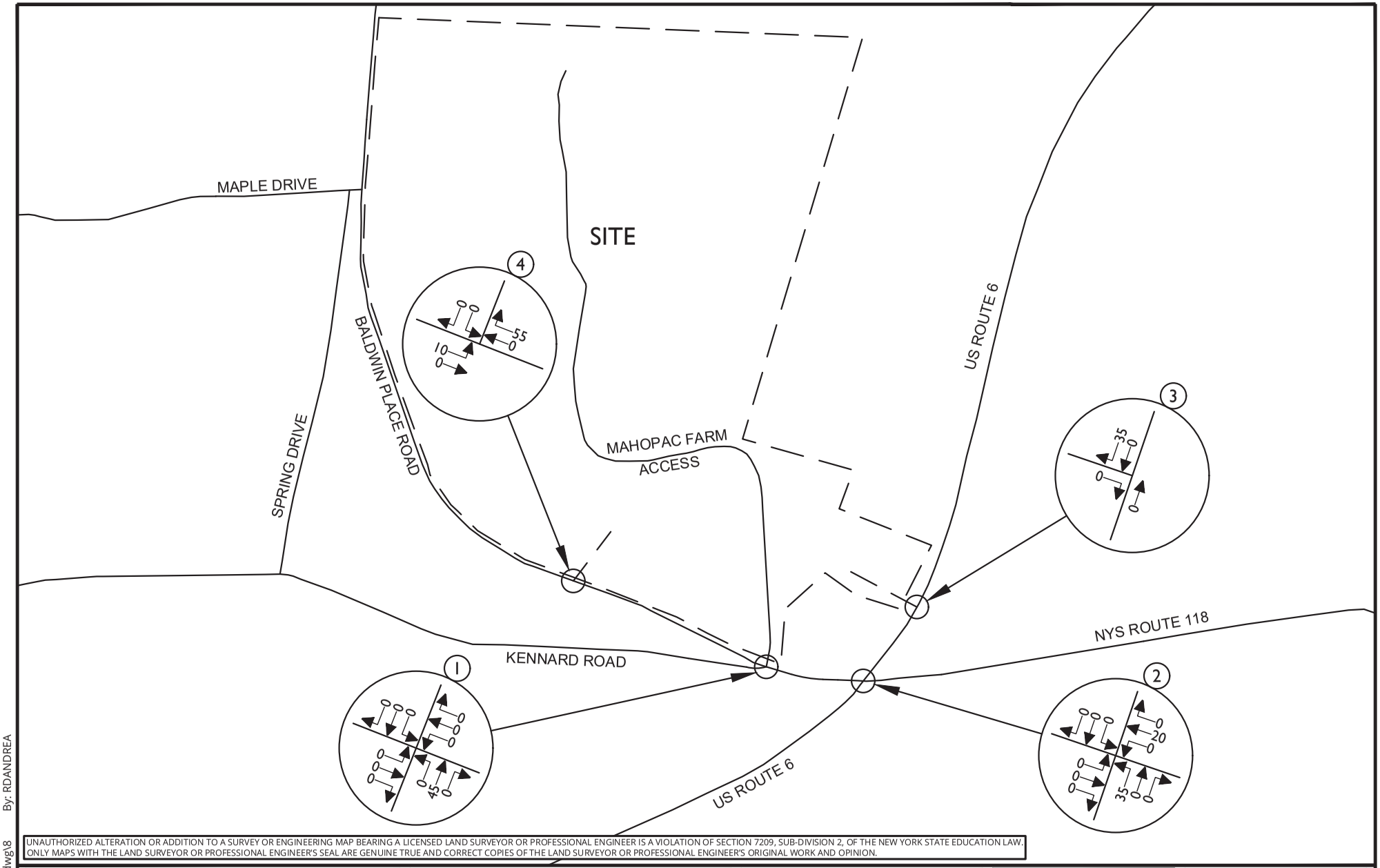

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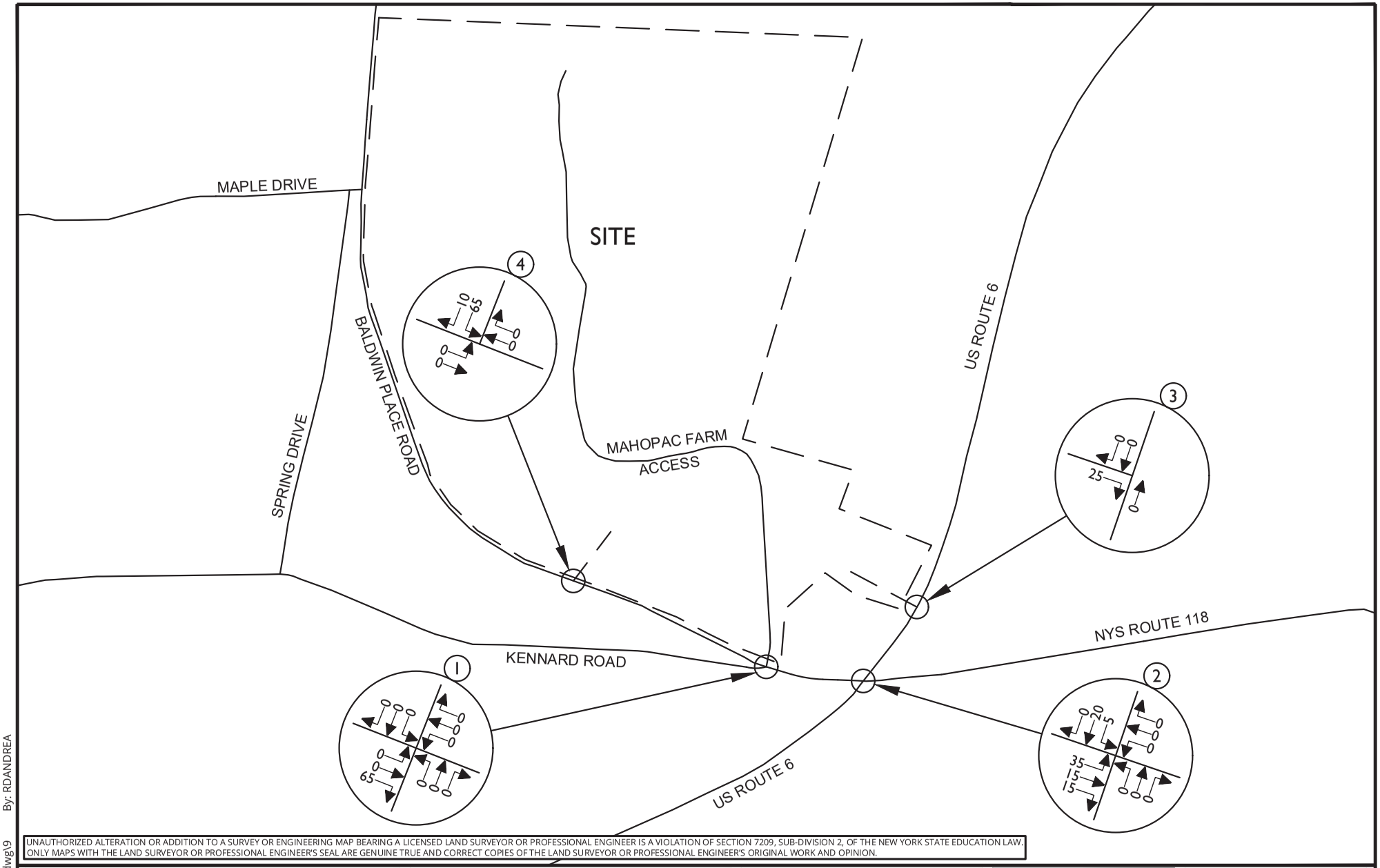
PROJECT NUMBER:	DRAWING NAME:
23003348A	230906RGD_FIGURES

SHEET TITLE:
ARRIVAL DISTRIBUTION
(EXPRESSED AS %)

SHEET NUMBER:
8



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SCALE:	DATE:	DRAWN BY:	CHECKED BY:
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PROJECT NUMBER:	DRAWING NAME:
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SHEET TITLE:
DEPARTURE DISTRIBUTION
(EXPRESSED AS %)

SHEET NUMBER:
9

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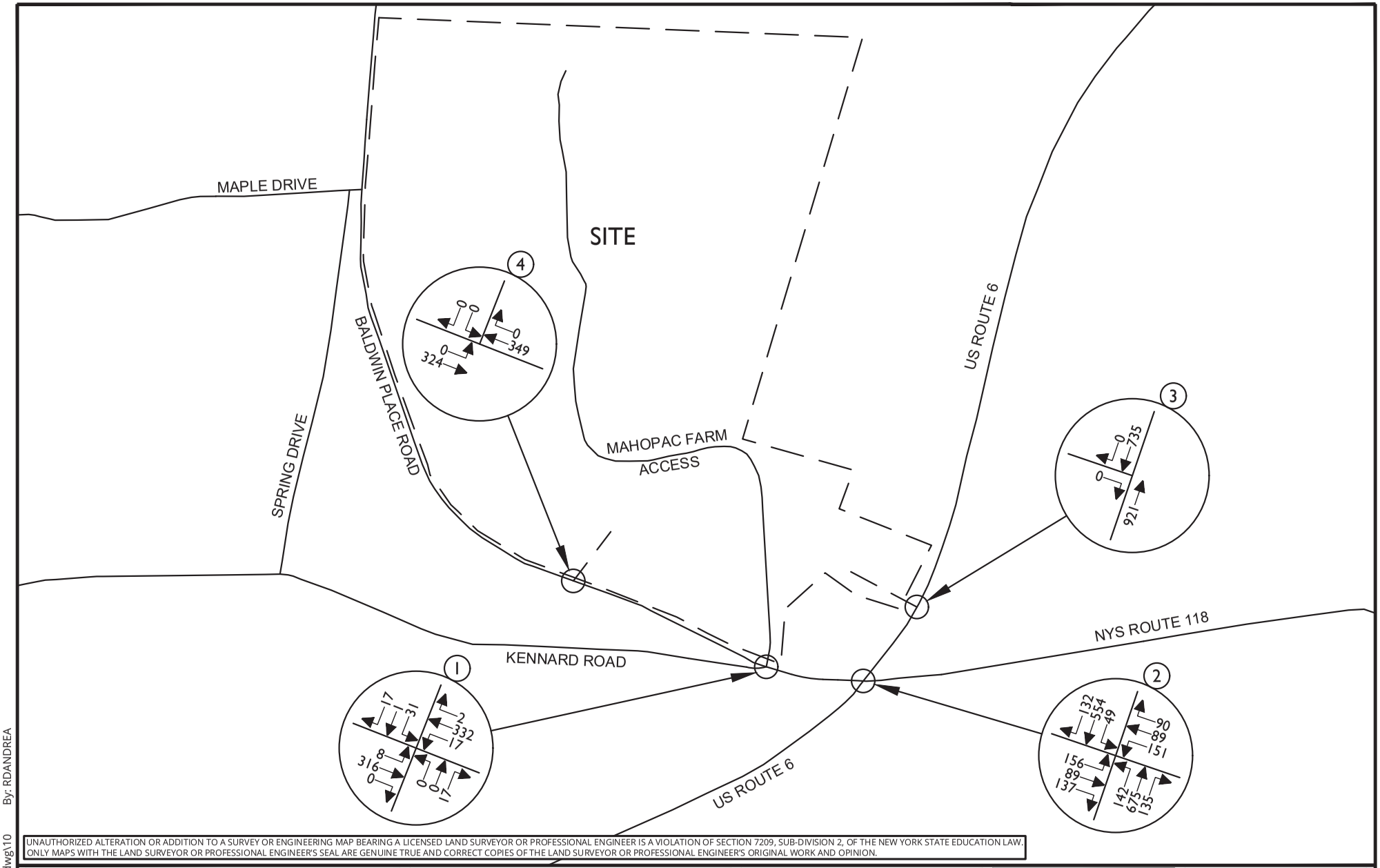

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PROJECT NUMBER:	DRAWING NAME:
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SHEET TITLE:
SITE GENERATED TRAFFIC VOLUMES
WEEKDAY PEAK AM HOUR

SHEET NUMBER:
10

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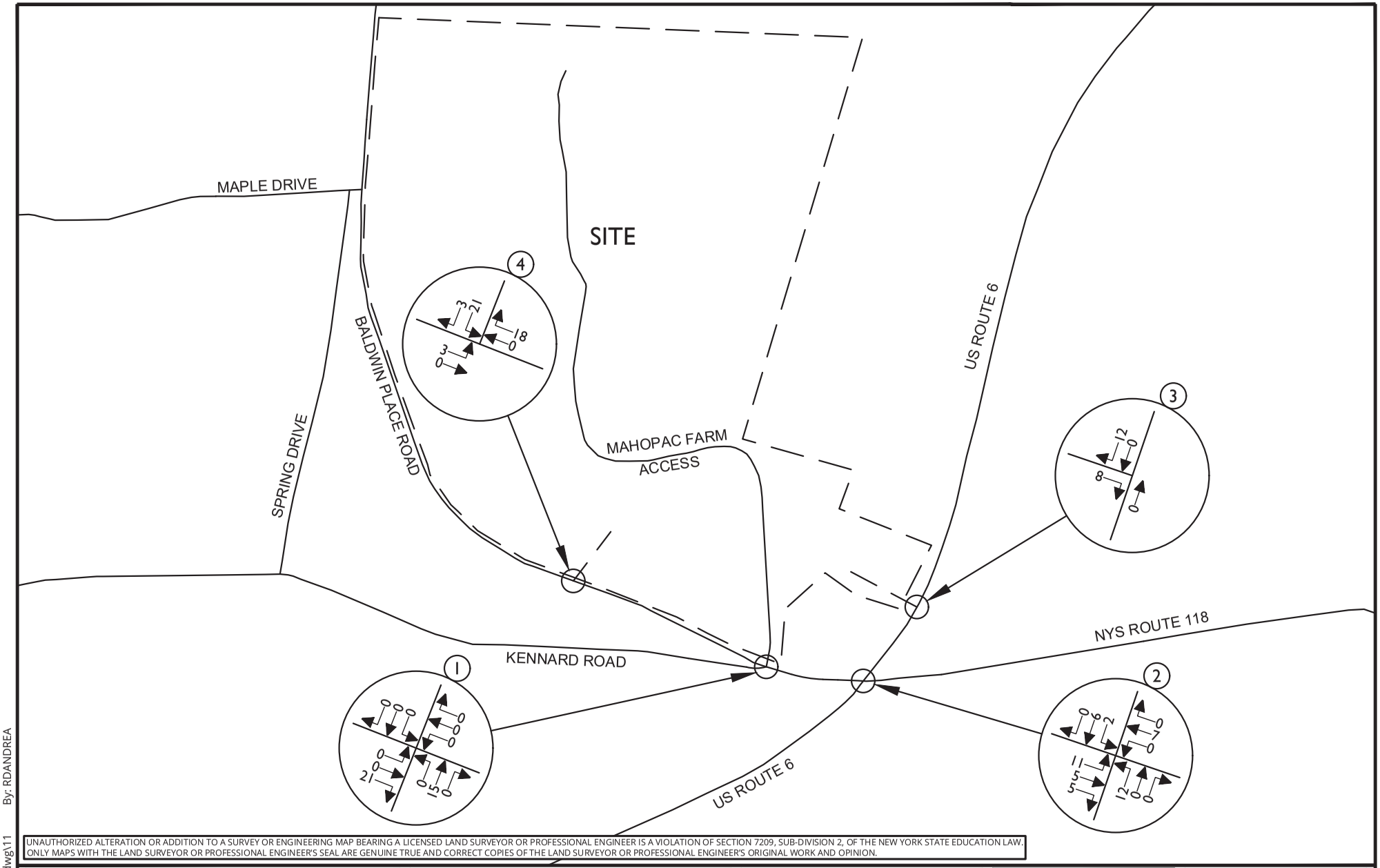

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PROJECT NUMBER:	DRAWING NAME:
23003348A	230906RGD_FIGURES

SHEET TITLE:
SITE GENERATED TRAFFIC VOLUMES
WEEKDAY PEAK PM HOUR

SHEET NUMBER:
11

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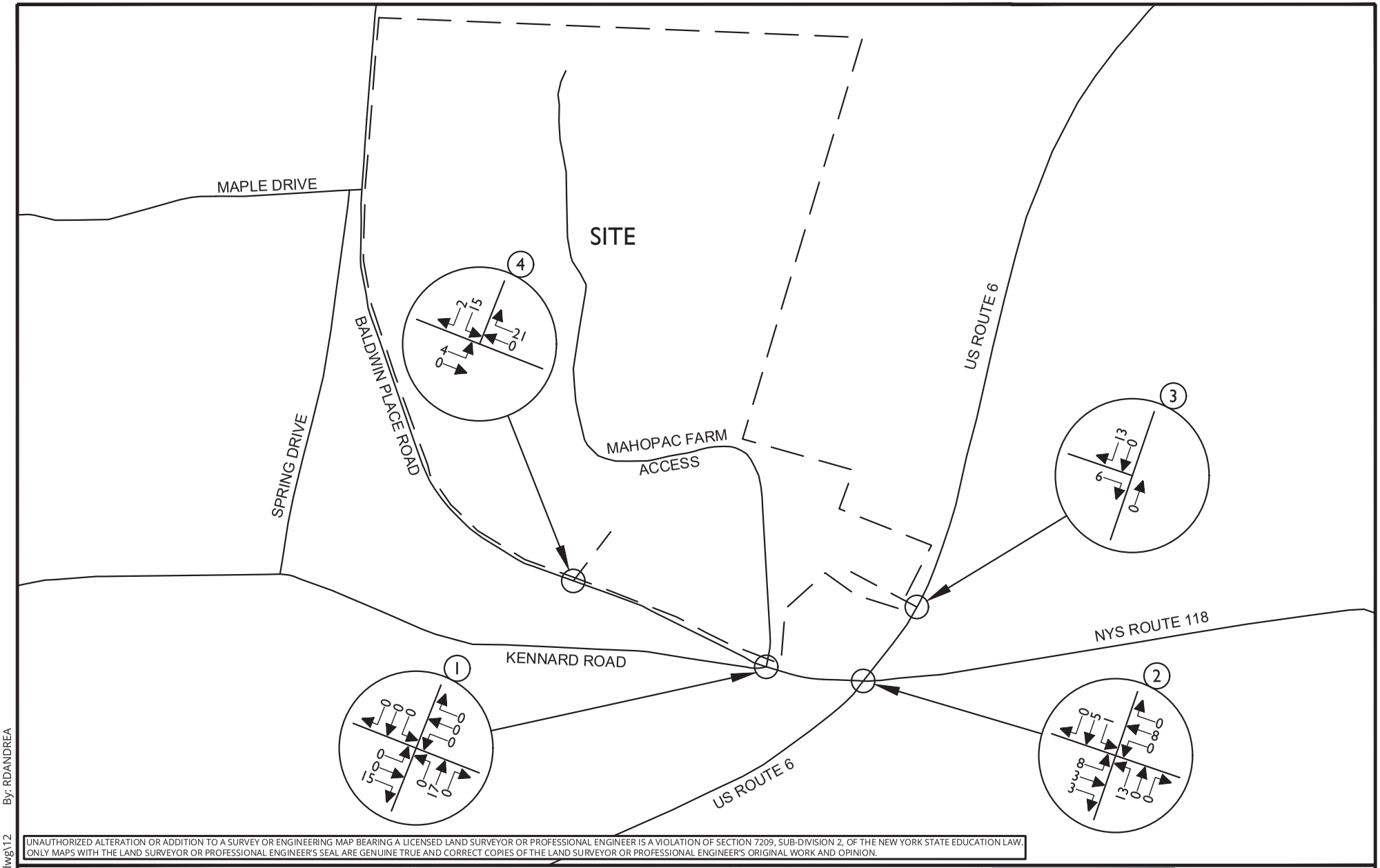

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PROJECT NUMBER:	DRAWING NAME:
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SHEET TITLE:
SITE GENERATED TRAFFIC VOLUMES
SATURDAY PEAK HOUR

SHEET NUMBER:
12

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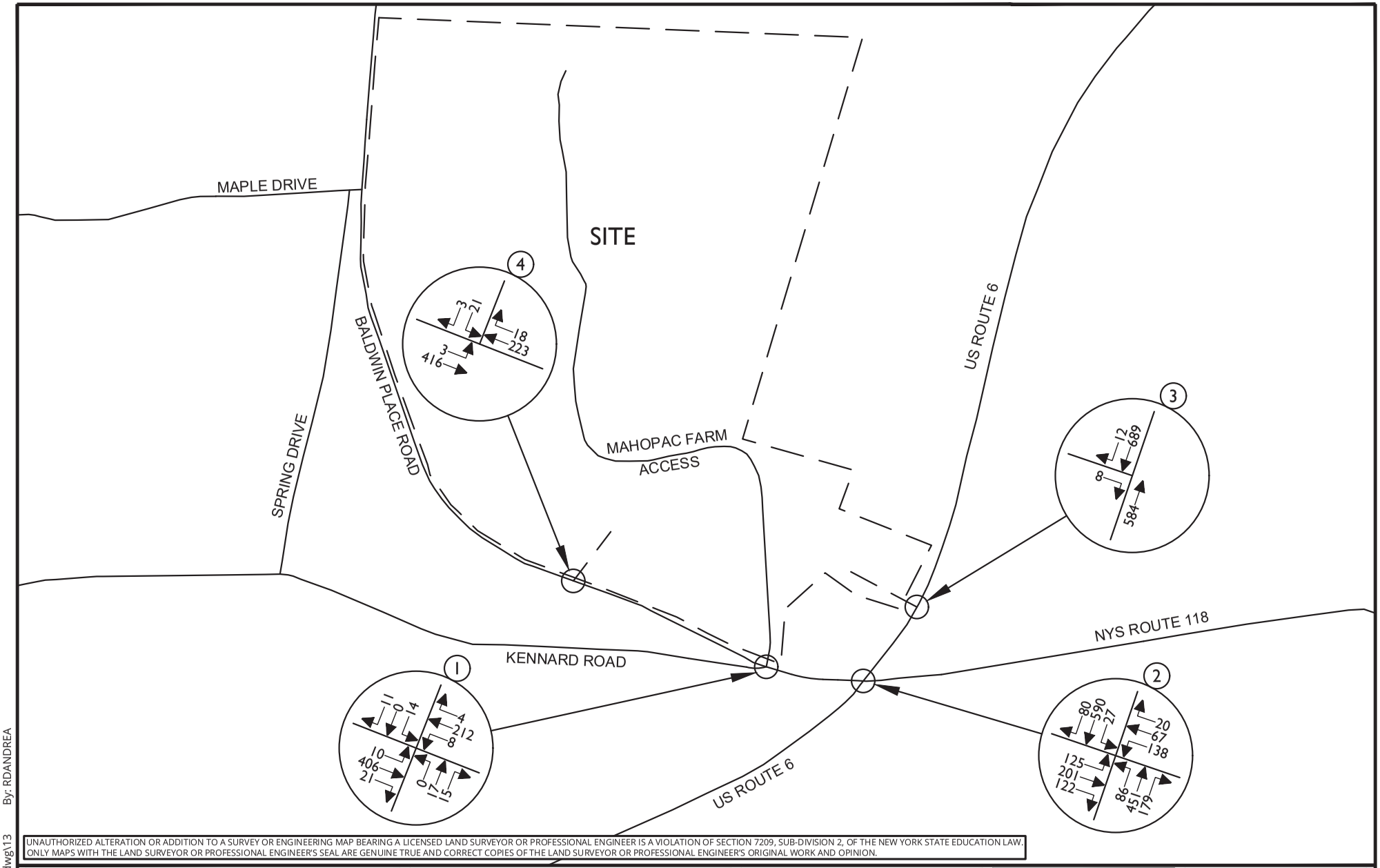

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PROJECT NUMBER:	DRAWING NAME:
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SHEET TITLE:
2026 BUILD TRAFFIC VOLUMES
WEEKDAY PEAK AM HOUR

SHEET NUMBER:
13

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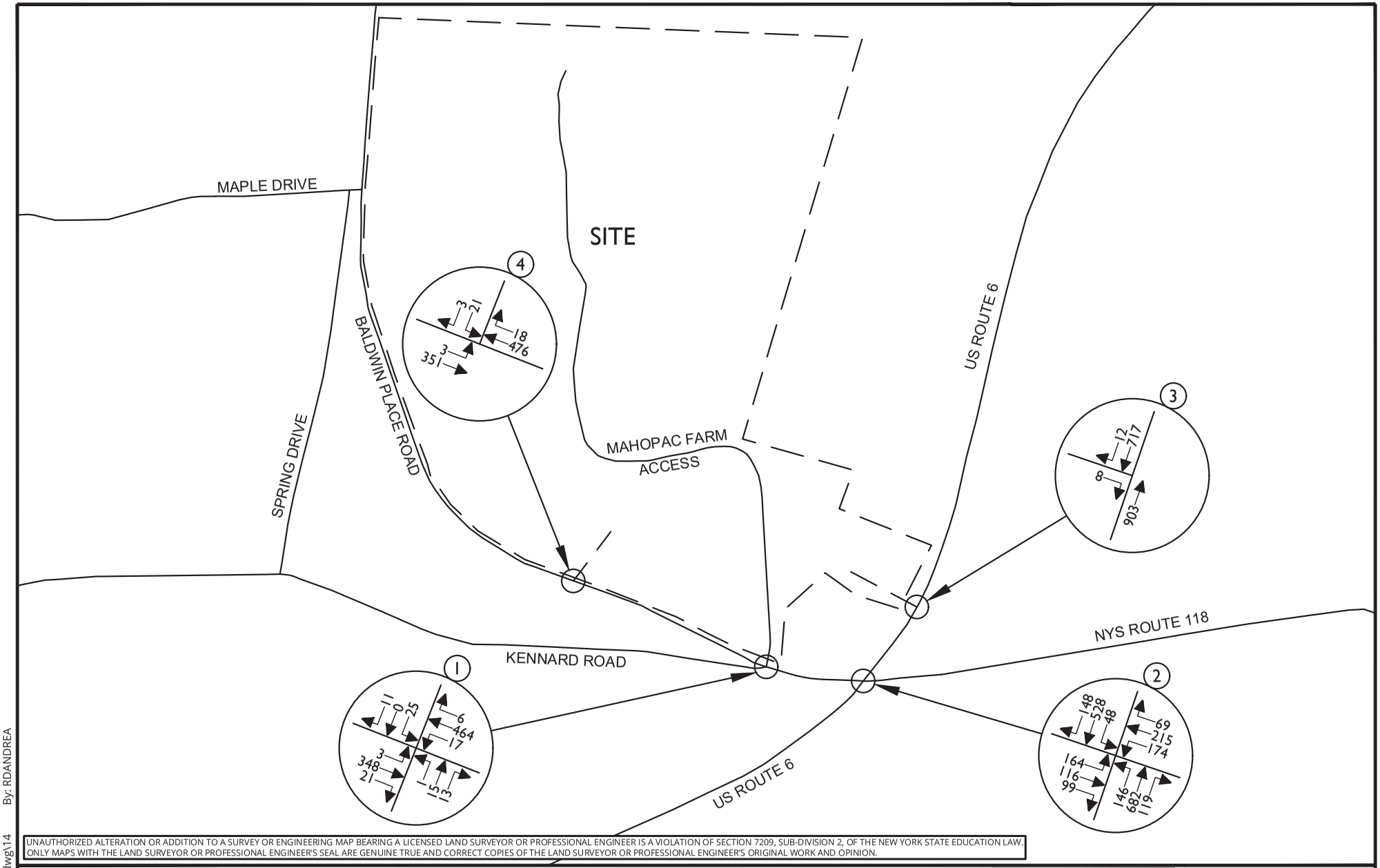

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PROJECT NUMBER:	DRAWING NAME:
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SHEET TITLE:
2026 BUILD TRAFFIC VOLUMES
WEEKDAY PEAK PM HOUR

SHEET NUMBER:
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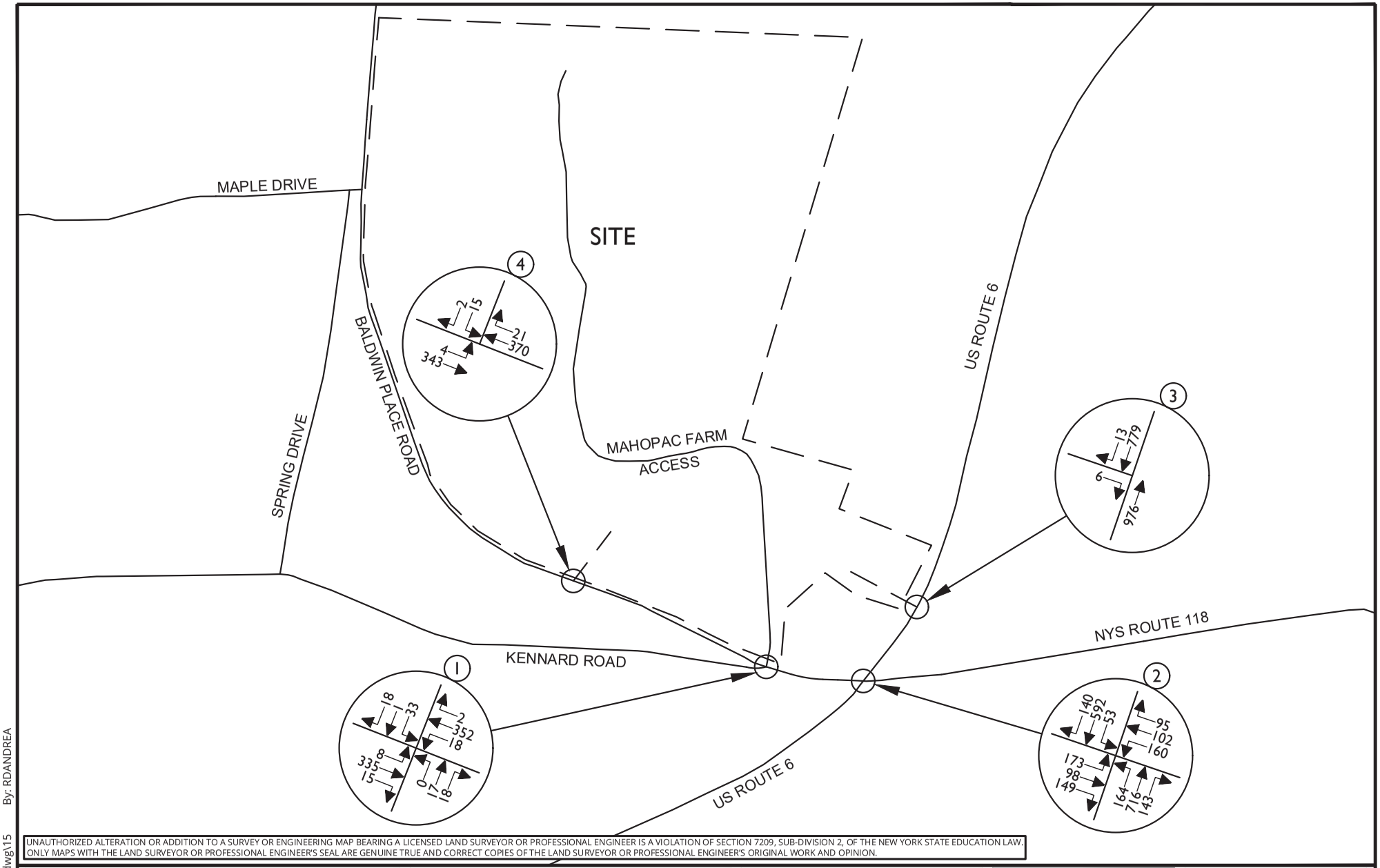

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PROJECT NUMBER:	DRAWING NAME:
23003348A	230906RGD_FIGURES

SHEET TITLE:
2026 BUILD TRAFFIC VOLUMES
SATURDAY PEAK HOUR

SHEET NUMBER:
15

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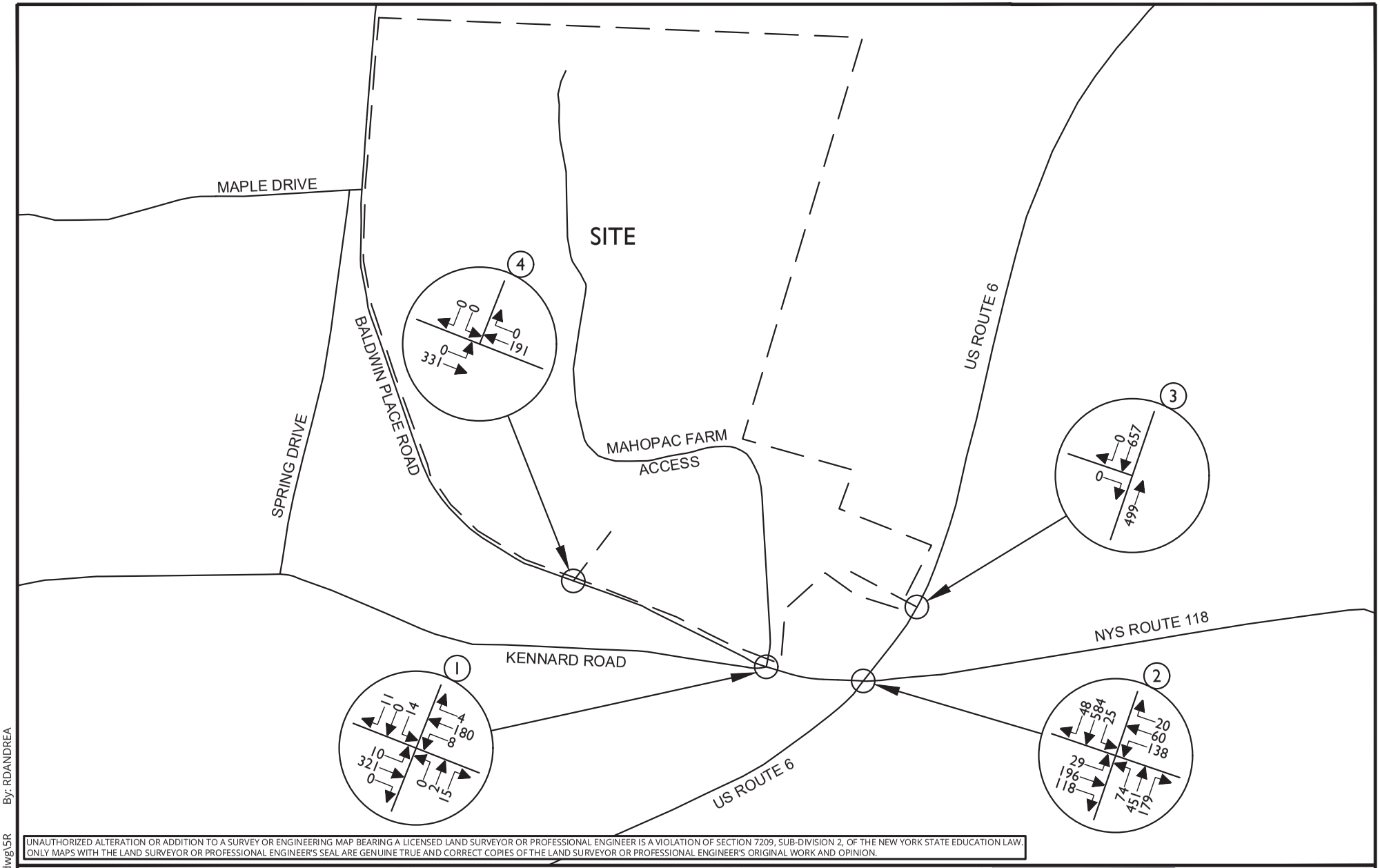

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PROJECT NUMBER:	DRAWING NAME:
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SHEET TITLE:
2026 NO-BUILD TRAFFIC VOLUMES
WITH COUNTY BYPASS ROADWAY
WEEKDAY PEAK AM HOUR

SHEET NUMBER:
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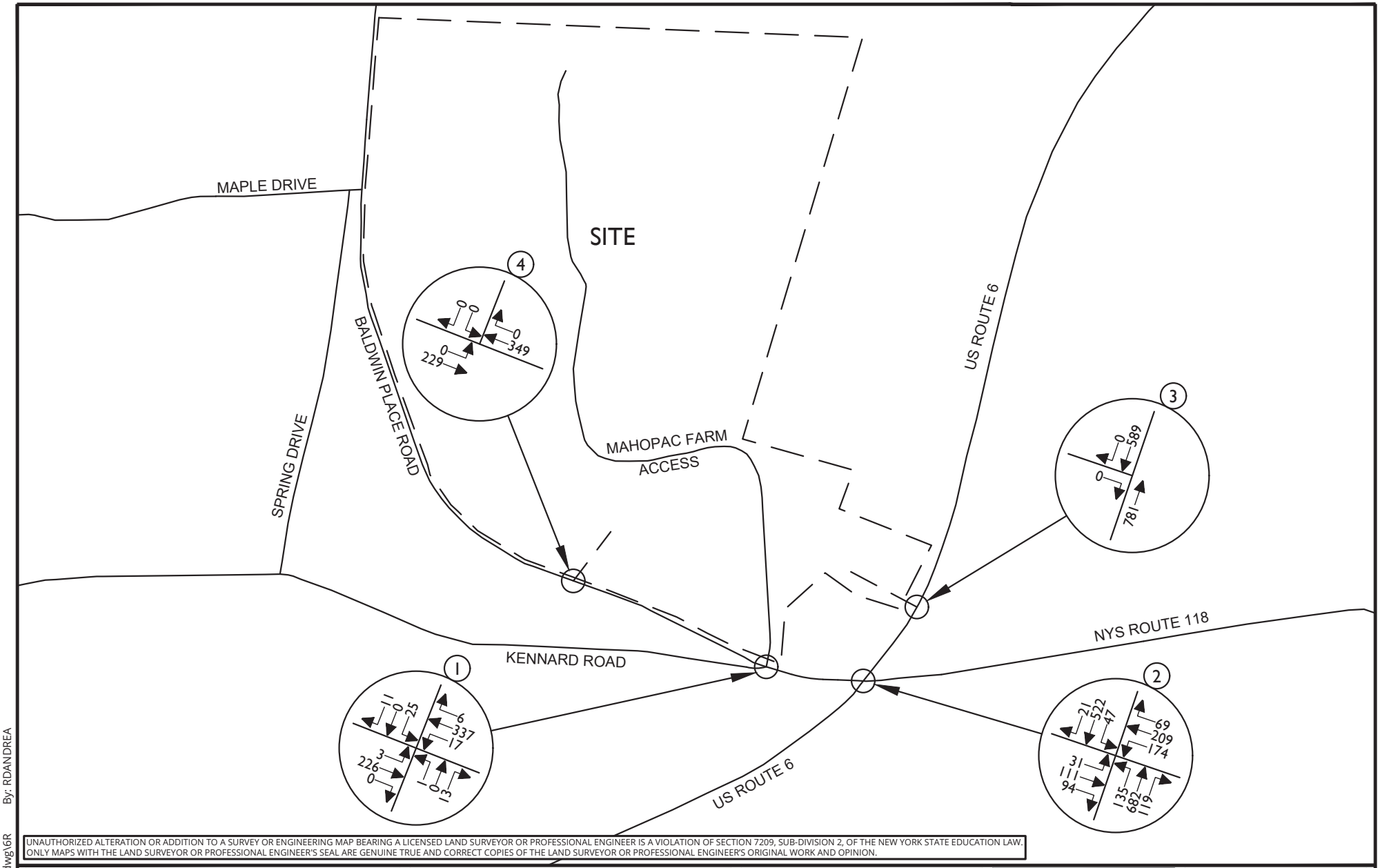

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TOWN OF CARMEL
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PROJECT NUMBER:	DRAWING NAME:
23003348A	230906RGD_FIGURES

SHEET TITLE:
2026 NO-BUILD TRAFFIC VOLUMES WITH COUNTY BYPASS ROADWAY WEEKDAY PEAK PM HOUR

SHEET NUMBER:
6R

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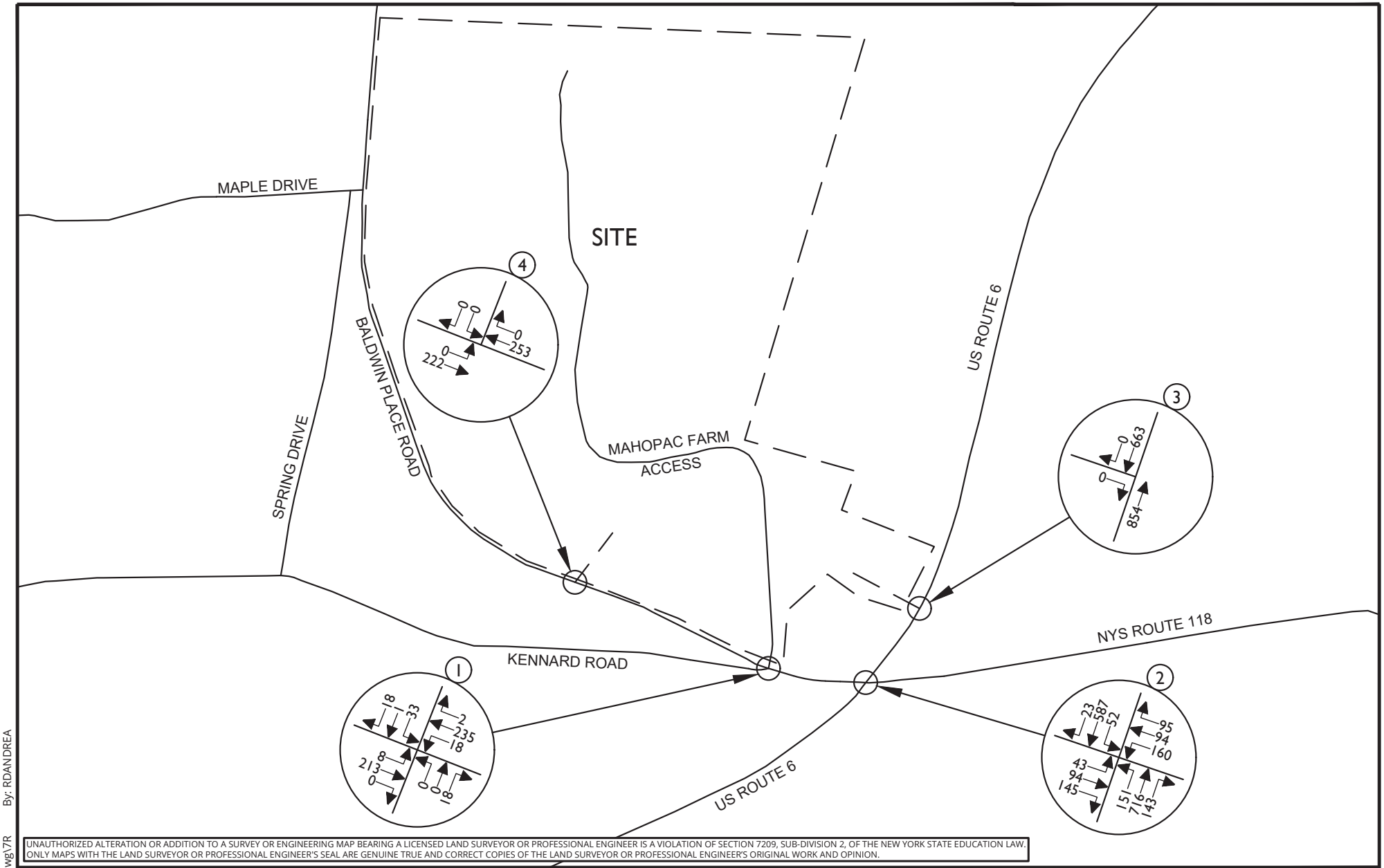

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AS SHOWN	6/13/23	PTV	RGD

PROJECT NUMBER:	DRAWING NAME:
23003348A	230906RGD_FIGURES

SHEET TITLE:
2026 NO-BUILD TRAFFIC VOLUMES WITH COUNTY BYPASS ROADWAY SATURDAY PEAK HOUR

SHEET NUMBER:
10R

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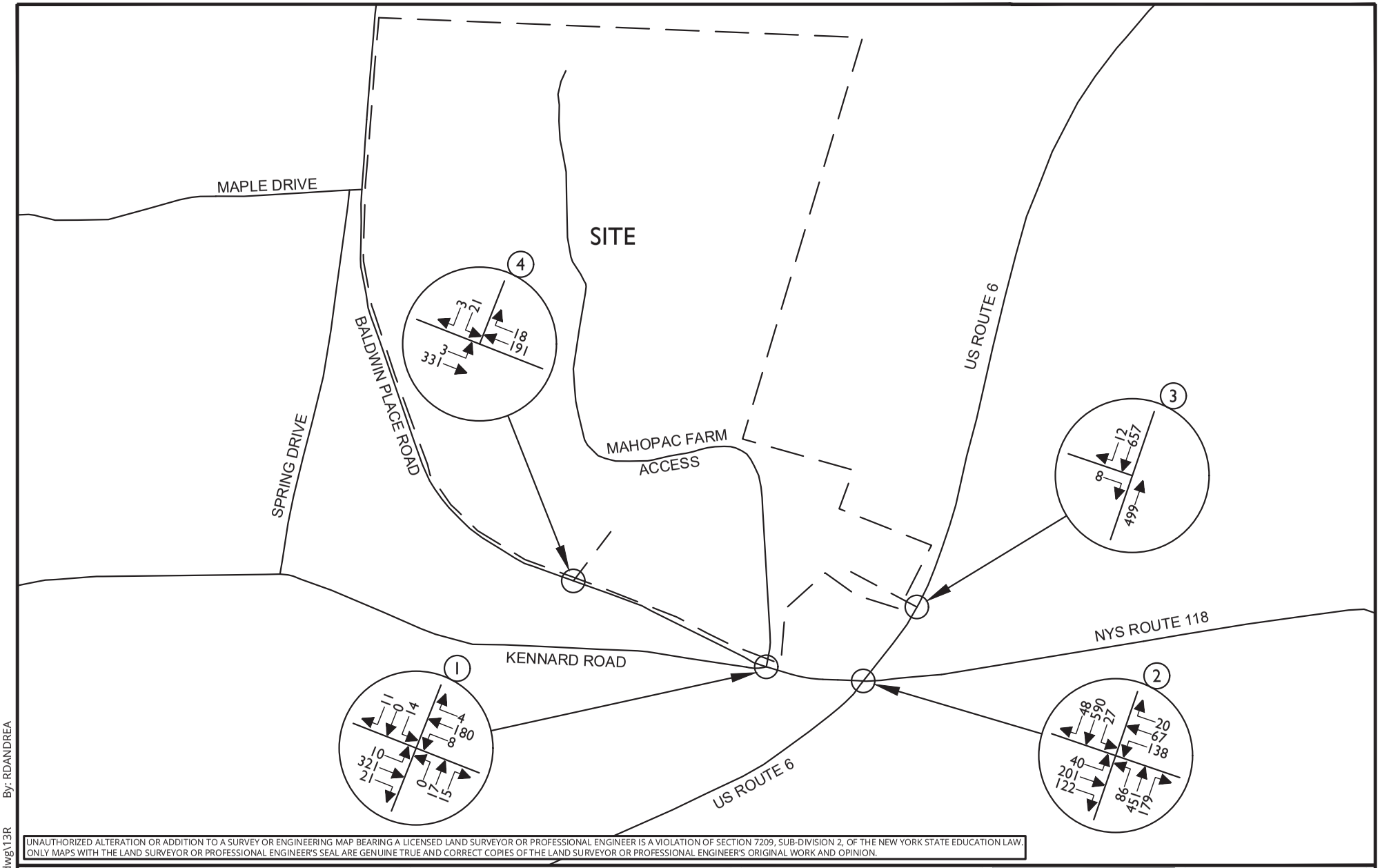

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AS SHOWN	6/13/23	PTV	RGD

PROJECT NUMBER:	DRAWING NAME:
23003348A	230906RGD_FIGURES

SHEET TITLE:
2026 BUILD TRAFFIC VOLUMES WITH COUNTY BYPASS ROADWAY WEEKDAY PEAK AM HOUR

SHEET NUMBER:
16R

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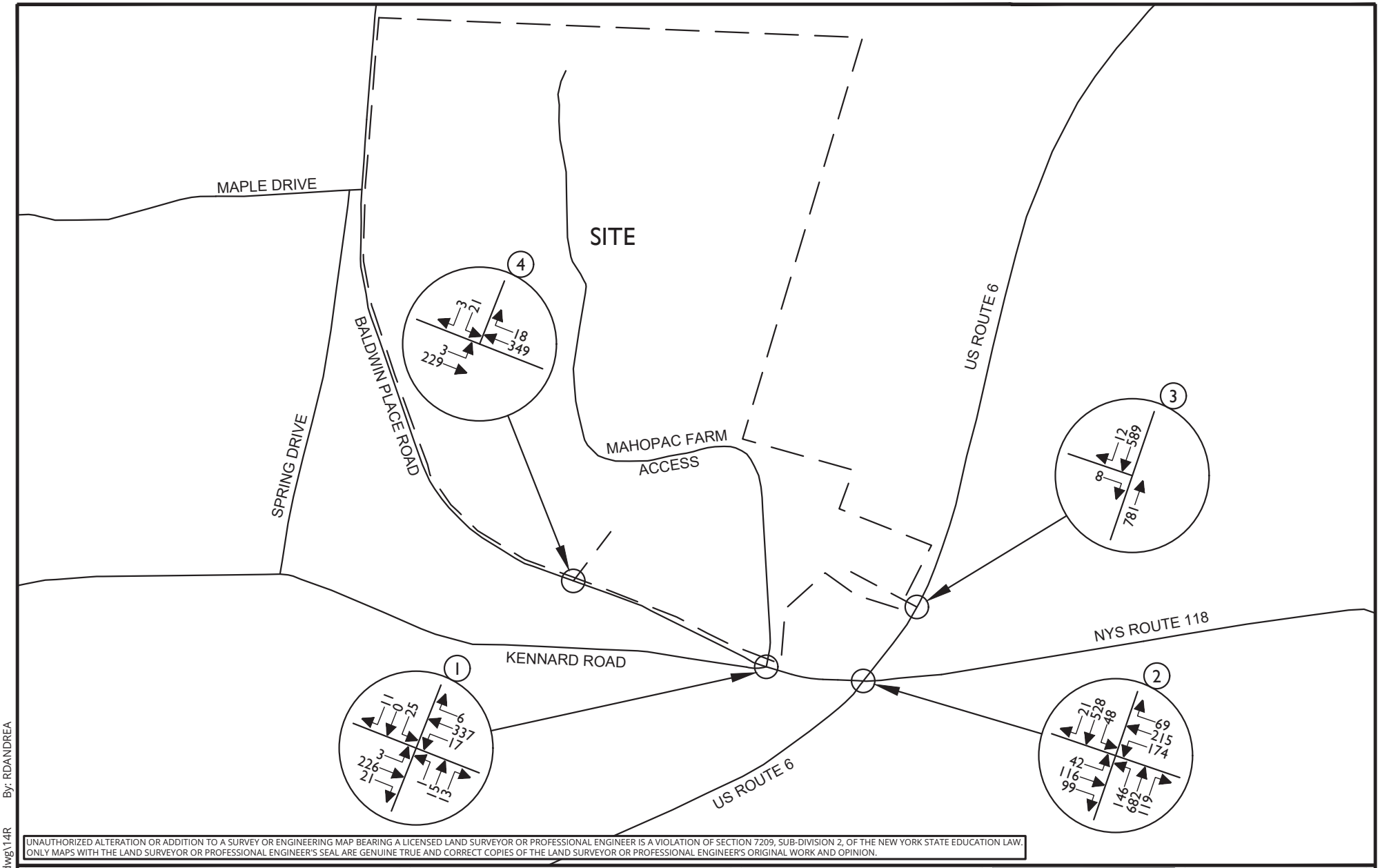

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PROJECT NUMBER:	DRAWING NAME:
23003348A	230906RGD_FIGURES

SHEET TITLE:
2026 BUILD TRAFFIC VOLUMES
WITH COUNTY BYPASS ROADWAY
WEEKDAY PEAK PM HOUR

SHEET NUMBER:
17R

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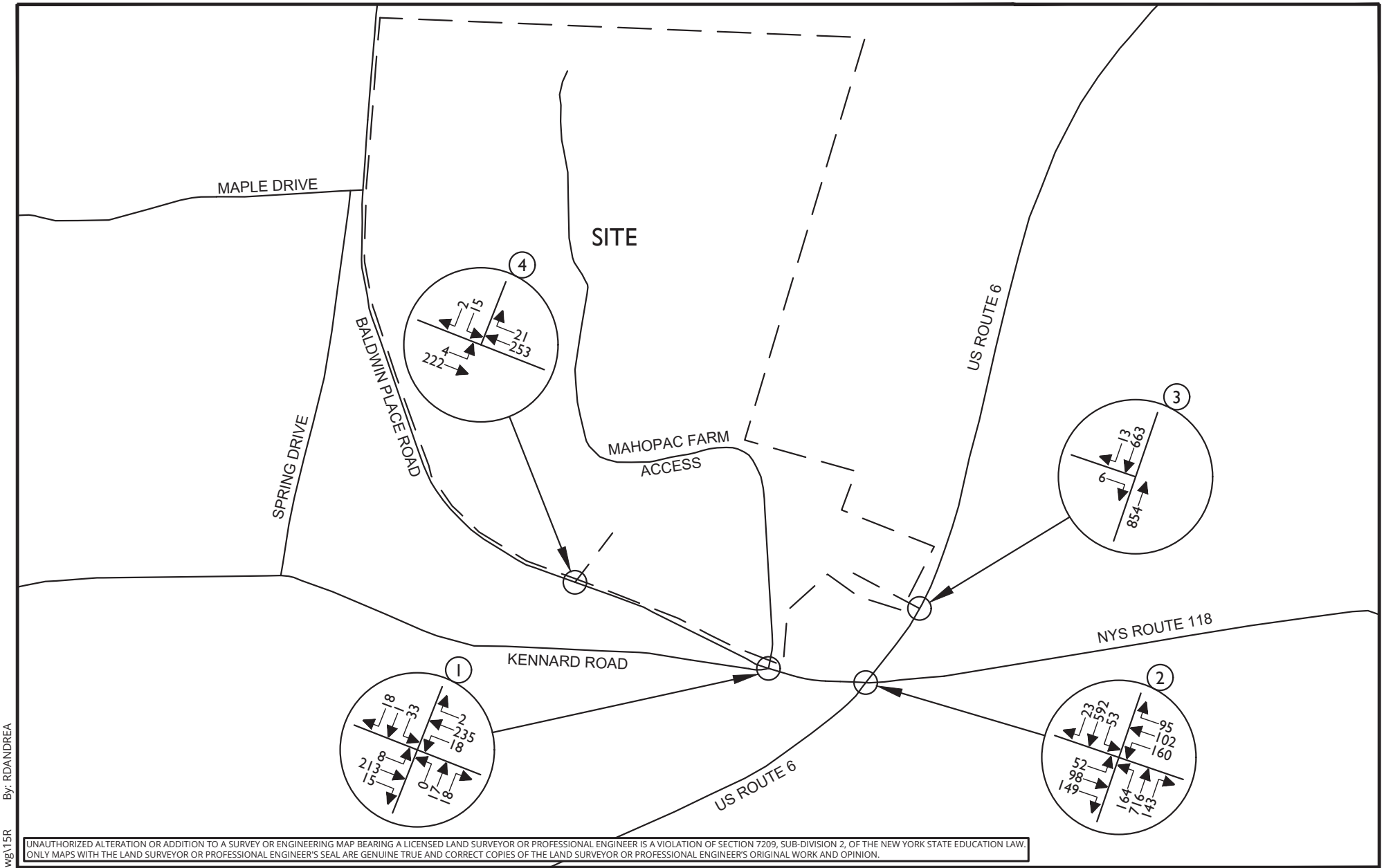

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TRAFFIC IMPACT STUDY

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AS SHOWN	6/13/23	PTV	RGD

PROJECT NUMBER:	DRAWING NAME:
23003348A	230906RGD_FIGURES

SHEET TITLE:
2026 BUILD TRAFFIC VOLUMES
WITH COUNTY BYPASS ROADWAY
SATURDAY PEAK HOUR

SHEET NUMBER:
18R

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Appendix

Appendix B | Tables

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

DPD Warehouse Self-Storage Carmel, Putnam County, NY	Entry		Exit		Total Trips
	HTGR[1]	Volume	HTGR[1]	Volume	
Mini-Warehouse (Self-Storage) (361,110 Sq. Ft.)					
Weekday AM Peak Hour of Generator	0.09	33	0.09	32	65
Weekday PM Peak Hour of Generator	0.09	33	0.09	32	65
Saturday Peak Hour of Generator	0.11	38	0.06	23	61

NOTES:

1) THE HOURLY TRIP GENERATION RATES (HTGR) ARE BASED ON DATA PUBLISHED BY THE INSTITUTE OF TRANSPORTATION ENGINEERS (ITE) AS CONTAINED IN THE TRIP GENERATION HANDBOOK, 11TH EDITION, 2021. ITE LAND USE CODE - 151 - MINI-WAREHOUSE.

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

				2023 Existing			2026 No-Build			2026 Build			Change in Delay
				v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	No-Build to Build
1	**Baldwin Place Road & Kennard Road & Mahopac Farm Access**	**Unsignalized**											
	Baldwin Place Road	EB	LTR	0.01	A	7.7	0.01	A	7.7	0.01	A	7.7	0.0
	Baldwin Place Road	WB	LTR	0.01	A	8.2	0.01	A	8.2	0.01	A	8.3	0.1
	Kennard Road	NB	LTR	0.04	B	12.6	0.04	B	13.0	0.11	C	17.9	4.9
	Mahopac Farm Access	SB	LTR	0.05	B	12.0	0.05	B	12.4	0.07	B	14.4	2.0
2	**US Route 6 & Baldwin Place Road/ NYS Route 118**	**Signalized**											
	Baldwin Place Road	EB	L	0.53	E	62.5	0.53	E	61.8	0.58	E	62.0	0.2
			TR	0.87	E	79.6	0.88	F	81.6	0.88	F	82.4	0.8
		EB Approach		-	E	73.3	-	E	74.4	-	E	74.5	0.1
	NYS Route 118	WB	L	0.83	E	71.1	0.84	E	70.8	0.84	E	70.7	-0.1
			T	0.35	E	64.4	0.35	E	63.8	0.39	E	64.2	0.4
		WB Approach		-	E	69.1	-	E	68.7	-	E	68.6	-0.1
	US Route 6	NB	L	0.36	C	29.7	0.42	C	31.4	0.48	C	31.7	0.3
			T	0.43	C	30.1	0.46	C	30.7	0.46	C	30.2	-0.5
			TR	0.44	C	30.3	0.46	C	30.8	0.46	C	30.4	-0.4
		NB Approach		-	C	30.2	-	C	30.8	-	C	30.5	-0.3
		SB	L	0.07	C	23.7	0.08	C	23.8	0.08	C	23.7	-0.1
			TR	0.79	D	44.1	0.84	D	47.5	0.85	D	48.1	0.6
		SB Approach		-	D	43.3	-	D	46.7	-	D	47.2	0.5
		Overall		-	D	46.0	-	D	47.6	-	D	47.9	0.3
3	**US Route 6 & DPD Warehouse Driveway**	**Unsignalized**											
	DPD Warehouse Driveway	EB	R	-	-	-	-	-	-	0.02	B	13.5	-
4	**Baldwin Place Road & DPD Warehouse Driveway**	**Unsignalized**											
	Baldwin Place Road	EB	LT	-	-	-	-	-	-	0.0	A	7.8	-
	DPD Warehouse Driveway	SB	LR	-	-	-	-	-	-	0.06	B	13.0	-

NOTES:

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

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

				2023 Existing			2026 No-Build			2026 Build			Change in Delay
				v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	No-Build to Build
1	**Baldwin Place Road & Kennard Road & Mahopac Farm Access**	**Unsignalized**											
	Baldwin Place Road	EB	LTR	0.00	A	8.3	0.00	A	8.4	0.00	A	8.4	0.0
	Baldwin Place Road	WB	LTR	0.01	A	8.0	0.02	A	8.1	0.02	A	8.2	0.1
	Kennard Road	NB	LTR	0.03	B	12.3	0.03	B	12.6	0.14	C	23.4	10.8
	Mahopac Farm Access	SB	LTR	0.10	C	15.5	0.11	C	16.2	0.15	C	21.4	5.2
2	**US Route 6 & Baldwin Place Road/ NYS Route 118**	**Signalized**											
	Baldwin Place Road	EB	L	0.85	E	72.6	0.85	E	74.7	0.86	E	77.4	2.7
			TR	0.59	E	65.2	0.59	E	64.7	0.58	E	63.8	-0.9
		EB Approach		-	E	69.5	-	E	70.5	-	E	71.7	1.2
	NYS Route 118	WB	L	0.76	E	68.4	0.77	E	69.3	0.75	E	68.1	-1.2
			T	0.87	E	79.0	0.88	F	81.0	0.88	F	82.1	1.1
		WB Approach		-	E	74.2	-	E	75.7	-	E	75.9	0.2
	US Route 6	NB	L	0.58	C	30.5	0.64	C	32.1	0.68	C	34.5	2.4
			T	0.53	C	31.1	0.54	C	30.2	0.54	C	29.8	-0.4
			TR	0.53	C	31.1	0.54	C	30.2	0.54	C	29.8	-0.4
		NB Approach		-	C	31.0	-	C	30.5	-	C	30.5	0.0
		SB	L	0.15	C	24.0	0.17	C	23.1	0.17	C	23.0	-0.1
			TR	0.81	D	45.6	0.84	D	46.0	0.84	D	46.6	0.6
		SB Approach		-	D	44.2	-	D	44.5	-	D	45.1	0.6
		Overall		-	D	46.7	-	D	47.0	-	D	47.5	0.5
3	**US Route 6 & DPD Warehouse Driveway**	**Unsignalized**											
	DPD Warehouse Driveway	EB	R	-	-	-	-	-	-	0.02	B	13.8	-
4	**Baldwin Place Road & DPD Warehouse Driveway**	**Unsignalized**											
	Baldwin Place Road	EB	LT	-	-	-	-	-	-	0.00	A	8.5	-
	DPD Warehouse Driveway	SB	LR	-	-	-	-	-	-	0.07	C	15.5	-

NOTES:

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

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

				2023 Existing			2026 No-Build			2026 Build			Change in Delay
				v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	No-Build to Build
1	**Baldwin Place Road & Kennard Road & Mahopac Farm Access**	**Unsignalized**											
	Baldwin Place Road	EB	LTR	0.01	A	8.0	0.01	A	8.1	0.01	A	8.1	0.0
	Baldwin Place Road	WB	LTR	0.02	A	8.0	0.02	A	8.1	0.02	A	8.1	0.0
	Kennard Road	NB	LTR	0.03	B	10.8	0.03	B	11.0	0.13	C	18.9	7.9
	Mahopac Farm Access	SB	LTR	0.12	B	14.1	0.13	B	14.8	0.18	C	18.5	3.7
2	**US Route 6 & Baldwin Place Road/ NYS Route 118**	**Signalized**											
	Baldwin Place Road	EB	L	0.86	E	75.9	0.87	E	77.9	0.87	E	79.7	1.8
			TR	0.47	E	63.2	0.47	E	62.6	0.47	E	62.1	-0.5
		EB Approach		-	E	71.3	-	E	72.3	-	E	73.3	1.0
	NYS Route 118	WB	L	0.85	E	72.6	0.86	E	74.7	0.86	E	74.6	-0.1
			T	0.48	E	64.0	0.48	E	63.4	0.52	E	63.8	0.4
		WB Approach		-	E	69.4	-	E	70.5	-	E	70.4	-0.1
	US Route 6	NB	L	0.72	D	36.3	0.80	D	45.3	0.85	D	52.6	7.3
			T	0.56	C	31.7	0.58	C	30.9	0.57	C	30.3	-0.6
			TR	0.56	C	31.7	0.58	C	30.9	0.57	C	30.3	-0.6
		NB Approach		-	C	32.4	-	C	33.0	-	C	33.9	0.9
		SB	L	0.18	C	24.3	0.20	C	23.5	0.20	C	23.3	-0.2
			TR	0.88	D	51.2	0.90	D	52.8	0.91	D	53.6	0.8
		SB Approach		-	D	49.5	-	D	50.9	-	D	51.5	0.6
		Overall		-	D	46.7	-	D	47.6	-	D	48.5	0.9
3	**US Route 6 & DPD Warehouse Driveway**	**Unsignalized**											
	DPD Warehouse Driveway	EB	R	-	-	-	-	-	-	0.02	B	14.5	-
4	**Baldwin Place Road & DPD Warehouse Driveway**	**Unsignalized**											
	Baldwin Place Road	EB	LT	-	-	-	-	-	-	0.00	A	8.2	-
	DPD Warehouse Driveway	SB	LR	-	-	-	-	-	-	0.04	B	13.9	-

NOTES:

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

Table No. 2R
Level of Service Summary Table
Weekday Peak AM Hour With County Bypass Roadway

				2023 Existing			2026 No-Build			2026 Build			Change in Delay
				v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	No-Build to Build
1	**Baldwin Place Road & Kennard Road & Mahopac Farm Access**	**Unsignalized**											
	Baldwin Place Road	EB	LT	0.01	A	7.7	0.01	A	7.6	0.01	A	7.6	0.0
	Baldwin Place Road	WB	LTR	0.01	A	8.2	0.01	A	8.0	0.01	A	8.1	0.1
	Kennard Road	NEB	LTR	0.04	B	12.6	0.03	B	11.7	0.09	C	15.2	3.5
	Mahopac Farm Access	SB	LR	0.05	B	12.0	0.05	B	11.4	0.06	B	12.8	1.4
2	**US Route 6 & Baldwin Place Road/ NYS Route 118**	**Signalized**											
	Baldwin Place Road	EB	L	0.53	E	62.5	0.14	E	58.2	0.18	E	58.2	0.0
			TR	0.87	E	79.6	0.89	F	82.8	0.89	F	83.6	0.8
		EB Approach		-	E	73.3	-	E	79.6	-	E	79.4	-0.2
	NYS Route 118	WB	L	0.83	E	71.1	0.84	E	70.8	0.84	E	70.7	-0.1
			T	0.35	E	64.4	0.35	E	63.8	0.39	E	64.2	0.4
		WB Approach		-	E	69.1	-	E	68.7	-	E	68.6	-0.1
	US Route 6	NB	L	0.36	C	29.7	0.38	C	29.8	0.43	C	30.0	0.2
			T	0.43	C	30.1	0.46	C	30.7	0.46	C	30.2	-0.5
			TR	0.44	C	30.3	0.46	C	30.8	0.46	C	30.4	-0.4
		NB Approach		-	C	30.2	-	C	30.6	-	C	30.2	-0.4
		SB	L	0.07	C	23.7	0.08	C	23.8	0.08	C	23.7	-0.1
			TR	0.79	D	44.1	0.79	D	44.0	0.80	D	44.5	0.5
		SB Approach		-	D	43.3	-	D	43.3	-	D	43.7	0.4
		Overall		-	D	46.0	-	D	45.7	-	D	45.9	0.2
3	**US Route 6 & DPD Warehouse Driveway**	**Unsignalized**											
	DPD Warehouse Driveway	EB	R	-	-	-	-	-	-	0.02	B	13.1	-
4	**Baldwin Place Road & DPD Warehouse Driveway**	**Unsignalized**											
	Baldwin Place Road	EB	LT	-	-	-	-	-	-	0.00	A	7.7	-
	DPD Warehouse Driveway	SB	LR	-	-	-	-	-	-	0.05	B	11.9	-

NOTES:

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Table No. 2R
Level of Service Summary Table
Weekday Peak PM Hour With County Bypass Roadway

				2023 Existing			2026 No-Build			2026 Build			Change in Delay
				v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	No-Build to Build
1	**Baldwin Place Road & Kennard Road & Mahopac Farm Access**	**Unsignalized**											
	Baldwin Place Road	EB	LT	0.00	A	8.3	0.00	A	8.0	0.00	A	8.0	0.0
	Baldwin Place Road	WB	LTR	0.01	A	8.0	0.01	A	7.8	0.01	A	7.8	0.0
	Kennard Road	NEB	LTR	0.03	B	12.3	0.02	B	10.7	0.09	C	16.0	5.3
	Mahopac Farm Access	SB	LR	0.10	C	15.5	0.08	B	12.9	0.10	C	15.2	2.3
2	**US Route 6 & Baldwin Place Road/ NYS Route 118**	**Signalized**											
	Baldwin Place Road	EB	L	0.85	E	72.6	0.24	E	65.2	0.31	E	65.3	0.1
			TR	0.59	E	65.2	0.82	E	72.1	0.82	E	71.8	-0.3
		EB Approach		-	E	69.5	-	E	70.6	-	E	70.1	-0.5
	NYS Route 118	WB	L	0.76	E	68.4	0.77	E	69.3	0.75	E	68.1	-1.2
			T	0.87	E	79.0	0.88	F	81.0	0.88	F	82.1	1.1
		WB Approach		-	E	74.2	-	E	75.7	-	E	75.9	0.2
	US Route 6	NB	L	0.58	C	30.5	0.48	C	26.0	0.51	C	26.2	0.2
			T	0.53	C	31.1	0.55	C	31.7	0.55	C	31.2	-0.5
			TR	0.53	C	31.1	0.55	C	31.7	0.55	C	31.2	-0.5
		NB Approach		-	C	31.0	-	C	30.9	-	C	30.5	-0.4
		SB	L	0.15	C	24.0	0.17	C	24.3	0.17	C	24.1	-0.2
			TR	0.81	D	45.6	0.68	D	38.3	0.68	D	38.6	0.3
		SB Approach		-	D	44.2	-	D	37.1	-	D	37.4	0.3
		Overall		-	D	46.7	-	D	43.8	-	D	43.9	0.1
3	**US Route 6 & DPD Warehouse Driveway**	**Unsignalized**											
	DPD Warehouse Driveway	EB	R	-	-	-	-	-	-	0.02	B	12.4	-
4	**Baldwin Place Road & DPD Warehouse Driveway**	**Unsignalized**											
	Baldwin Place Road	EB	LT	-	-	-	-	-	-	0.00	A	8.1	-
	DPD Warehouse Driveway	SB	LR	-	-	-	-	-	-	0.05	B	12.5	-

NOTES:

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

Table No. 2R
Level of Service Summary Table
Saturday Peak Hour With County Bypass Roadway

				2023 Existing			2026 No-Build			2026 Build			Change in Delay
				v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	No-Build to Build
1	**Baldwin Place Road & Kennard Road & Mahopac Farm Access**	**Unsignalized**											
	Baldwin Place Road	EB	LT	0.01	A	8.0	0.01	A	7.8	0.01	A	7.8	0.0
	Baldwin Place Road	WB	LTR	0.02	A	8.0	0.02	A	7.7	0.02	A	7.8	0.1
	Kennard Road	NEB	LTR	0.03	B	10.8	0.03	A	9.9	0.09	B	13.8	3.9
	Mahopac Farm Access	SB	LR	0.12	B	14.1	0.10	B	12.0	0.12	B	13.6	1.6
2	**US Route 6 & Baldwin Place Road/ NYS Route 118**	**Signalized**											
	Baldwin Place Road	EB	L	0.86	E	75.9	0.38	E	67.5	0.44	E	67.6	0.1
			TR	0.47	E	63.2	0.79	E	72.7	0.79	E	72.4	-0.3
		EB Approach		-	E	71.3	-	E	71.1	-	E	70.8	-0.3
	NYS Route 118	WB	L	0.85	E	72.6	0.86	E	74.7	0.86	E	74.6	-0.1
			T	0.48	E	64.0	0.48	E	63.4	0.52	E	63.8	0.4
		WB Approach		-	E	69.4	-	E	70.5	-	E	70.4	-0.1
	US Route 6	NB	L	0.72	D	36.3	0.60	C	28.6	0.62	C	29.0	0.4
			T	0.56	C	31.7	0.59	C	32.4	0.58	C	31.8	-0.6
			TR	0.56	C	31.7	0.59	C	32.4	0.58	C	31.8	-0.6
		NB Approach		-	C	32.4	-	C	31.8	-	C	31.4	-0.4
		SB	L	0.18	C	24.3	0.20	C	24.7	0.20	C	24.5	-0.2
			TR	0.88	D	51.2	0.76	D	42.1	0.75	D	41.6	-0.5
		SB Approach		-	D	49.5	-	D	40.7	-	D	40.2	-0.5
		Overall		-	D	46.7	-	D	42.1	-	D	41.9	-0.2
3	**US Route 6 & DPD Warehouse Driveway**	**Unsignalized**											
	DPD Warehouse Driveway	EB	R	-	-	-	-	-	-	0.02	B	13.1	-
4	**Baldwin Place Road & DPD Warehouse Driveway**	**Unsignalized**											
	Baldwin Place Road	EB	LT	-	-	-	-	-	-	0.00	A	7.9	-
	DPD Warehouse Driveway	SB	LR	-	-	-	-	-	-	0.03	B	11.6	-

NOTES:

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

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Appendix

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.

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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.

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Appendix

Appendix D | Capacity Analysis

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	383	0	8	200	4	0	2	14	13	0	10
Future Volume (vph)	9	383	0	8	200	4	0	2	14	13	0	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	10	10	12	12	12	12	12	12	12
Grade (%)		2%			2%			10%			-5%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.998			0.881			0.941	
Flt Protected		0.999			0.998						0.973	
Satd. Flow (prot)	0	1842	0	0	1714	0	0	1559	0	0	1748	0
Flt Permitted		0.999			0.998						0.973	
Satd. Flow (perm)	0	1842	0	0	1714	0	0	1559	0	0	1748	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		502			226			603			438	
Travel Time (s)		11.4			5.1			13.7			10.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	416	0	9	217	4	0	2	15	14	0	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	426	0	0	230	0	0	17	0	0	25	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)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	1.11	1.11	1.01	1.07	1.07	1.07	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	9	383	0	8	200	4	0	2	14	13	0	10
Future Vol, veh/h	9	383	0	8	200	4	0	2	14	13	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	2	-	-	10	-	-	-5	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	10	416	0	9	217	4	0	2	15	14	0	11

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	221	0	0	416	0	0	679	675	416	682	673	219
Stage 1	-	-	-	-	-	-	436	436	-	237	237	-
Stage 2	-	-	-	-	-	-	243	239	-	445	436	-
Critical Hdwy	4.12	-	-	4.12	-	-	9.12	8.52	7.22	6.12	5.52	5.72
Critical Hdwy Stg 1	-	-	-	-	-	-	8.12	7.52	-	5.12	4.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	8.12	7.52	-	5.12	4.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1348	-	-	1143	-	-	251	258	567	440	454	846
Stage 1	-	-	-	-	-	-	470	455	-	818	757	-
Stage 2	-	-	-	-	-	-	665	620	-	670	655	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1348	-	-	1143	-	-	244	253	567	419	445	846
Mov Cap-2 Maneuver	-	-	-	-	-	-	244	253	-	419	445	-
Stage 1	-	-	-	-	-	-	465	450	-	810	750	-
Stage 2	-	-	-	-	-	-	651	614	-	642	648	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.3	12.6	12
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	491	1348	-	-	1143	-	-	537
HCM Lane V/C Ratio	0.035	0.007	-	-	0.008	-	-	0.047
HCM Control Delay (s)	12.6	7.7	0	-	8.2	0	-	12
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	107	185	111	130	57	19	70	425	169	24	551	75
Future Volume (vph)	107	185	111	130	57	19	70	425	169	24	551	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	10	10	12	10	10	10	10	10	10
Grade (%)		0%			-2%			4%			-4%	
Storage Length (ft)	100		0	150		210	230		0	150		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt		0.944				0.850		0.957			0.982	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1758	0	1668	1756	1599	1619	3098	0	1685	1741	0
Flt Permitted	0.950			0.950			0.207			0.374		
Satd. Flow (perm)	1770	1758	0	1668	1756	1599	353	3098	0	663	1741	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		17				124		50			6	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		226			924			770			236	
Travel Time (s)		5.1			21.0			17.5			5.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	116	201	121	141	62	21	76	462	184	26	599	82
Shared Lane Traffic (%)												
Lane Group Flow (vph)	116	322	0	141	62	21	76	646	0	26	681	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)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.08	1.08	0.99	1.12	1.12	1.12	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2		2	2	0	2	2		2	2	
Detector Template												
Leading Detector (ft)	83	83		83	83	0	83	83		83	83	
Trailing Detector (ft)	-5	-5		-5	-5	0	-5	-5		-5	-5	
Detector 1 Position(ft)	-5	-5		-5	-5	0	-5	-5		-5	-5	
Detector 1 Size(ft)	40	40		40	40	20	40	40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)	43	43		43	43		43	43		43	43	
Detector 2 Size(ft)	40	40		40	40		40	40		40	40	
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	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	0.0		0.0	0.0	
Turn Type	Split	NA		Split	NA	Free	pm+pt	NA		pm+pt	NA	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases	4	4		8	8		1	6		5	2	
Permitted Phases						Free	6			2		
Detector Phase	4	4		8	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		10.0	15.0		10.0	15.0	
Total Split (s)	30.0	30.0		30.0	30.0		20.0	70.0		20.0	70.0	
Total Split (%)	20.0%	20.0%		20.0%	20.0%		13.3%	46.7%		13.3%	46.7%	
Maximum Green (s)	25.0	25.0		25.0	25.0		15.0	65.0		15.0	65.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		None	C-Max		None	Max	
Walk Time (s)	8.0	8.0		8.0	8.0			8.0			8.0	
Flash Dont Walk (s)	12.0	12.0		12.0	12.0			12.0			12.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
v/c Ratio	0.39	1.05		0.74	0.31	0.01	0.27	0.36		0.06	0.73	
Control Delay	60.3	120.2		86.3	63.4	0.0	15.0	17.6		13.0	33.4	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	60.3	120.2		86.3	63.4	0.0	15.0	17.6		13.0	33.4	
Queue Length 50th (ft)	103	~327		136	57	0	28	167		9	489	
Queue Length 95th (ft)	169	#529		204	101	0	57	240		25	747	
Internal Link Dist (ft)		146			844			690			156	
Turn Bay Length (ft)	100			150		210	230			150		
Base Capacity (vph)	295	307		278	292	1599	345	1802		512	935	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.39	1.05		0.51	0.21	0.01	0.22	0.36		0.05	0.73	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 70 (47%), Referenced to phase 6:NETL, Start of Red
Natural Cycle: 90
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: US Route 6 & Baldwin Place Road/NYS Route 118

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	107	185	111	130	57	19	70	425	169	24	551	75
Future Volume (veh/h)	107	185	111	130	57	19	70	425	169	24	551	75
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1949	1949	1949	1776	1776	1776	2027	2027	2027
Adj Flow Rate, veh/h	116	201	0	141	62	0	76	462	184	26	599	82
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	219	230		169	178		210	1059	419	357	756	104
Arrive On Green	0.12	0.12	0.00	0.09	0.09	0.00	0.04	0.45	0.45	0.02	0.43	0.43
Sat Flow, veh/h	1781	1870	0	1856	1949	1651	1692	2362	933	1931	1745	239
Grp Volume(v), veh/h	116	201	0	141	62	0	76	329	317	26	0	681
Grp Sat Flow(s),veh/h/ln	1781	1870	0	1856	1949	1651	1692	1687	1608	1931	0	1984
Q Serve(g_s), s	9.2	15.8	0.0	11.2	4.5	0.0	3.7	20.0	20.3	1.1	0.0	44.4
Cycle Q Clear(g_c), s	9.2	15.8	0.0	11.2	4.5	0.0	3.7	20.0	20.3	1.1	0.0	44.4
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.58	1.00		0.12
Lane Grp Cap(c), veh/h	219	230		169	178		210	757	721	357	0	860
V/C Ratio(X)	0.53	0.87		0.83	0.35		0.36	0.43	0.44	0.07	0.00	0.79
Avail Cap(c_a), veh/h	297	312		309	325		316	757	721	507	0	860
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	61.7	64.6	0.0	67.1	64.0	0.0	29.4	28.3	28.4	23.7	0.0	36.7
Incr Delay (d2), s/veh	0.7	14.9	0.0	4.1	0.4	0.0	0.4	1.8	1.9	0.0	0.0	7.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	8.5	0.0	5.5	2.3	0.0	1.5	8.6	8.3	0.5	0.0	23.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.5	79.6	0.0	71.1	64.4	0.0	29.7	30.1	30.3	23.7	0.0	44.1
LnGrp LOS	E	E		E	E		C	C	C	C	A	D
Approach Vol, veh/h		317	A		203	A		722			707	
Approach Delay, s/veh		73.3			69.1			30.2			43.3	
Approach LOS		E			E			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.6	70.0		23.4	8.3	72.3		18.7				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	15.0	65.0		25.0	15.0	65.0		25.0				
Max Q Clear Time (g_c+I1), s	5.7	46.4		17.8	3.1	22.3		13.2				
Green Ext Time (p_c), s	0.1	2.6		0.6	0.0	2.4		0.5				

Intersection Summary			
HCM 6th Ctrl Delay		46.0	
HCM 6th LOS		D	

Notes

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

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	406	0	8	212	4	0	2	15	14	0	11
Future Volume (vph)	10	406	0	8	212	4	0	2	15	14	0	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	10	10	12	12	12	12	12	12	12
Grade (%)		2%			2%			10%			-5%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.998			0.880			0.940	
Flt Protected		0.999			0.998						0.973	
Satd. Flow (prot)	0	1842	0	0	1714	0	0	1557	0	0	1746	0
Flt Permitted		0.999			0.998						0.973	
Satd. Flow (perm)	0	1842	0	0	1714	0	0	1557	0	0	1746	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		502			226			607			438	
Travel Time (s)		11.4			5.1			13.8			10.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	441	0	9	230	4	0	2	16	15	0	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	452	0	0	243	0	0	18	0	0	27	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)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	1.11	1.11	1.01	1.07	1.07	1.07	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	10	406	0	8	212	4	0	2	15	14	0	11
Future Vol, veh/h	10	406	0	8	212	4	0	2	15	14	0	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	2	-	-	10	-	-	-5	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	441	0	9	230	4	0	2	16	15	0	12

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	234	0	0	441	0	0	719	715	441	722	713	232
Stage 1	-	-	-	-	-	-	463	463	-	250	250	-
Stage 2	-	-	-	-	-	-	256	252	-	472	463	-
Critical Hdwy	4.12	-	-	4.12	-	-	9.12	8.52	7.22	6.12	5.52	5.72
Critical Hdwy Stg 1	-	-	-	-	-	-	8.12	7.52	-	5.12	4.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	8.12	7.52	-	5.12	4.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1333	-	-	1119	-	-	230	239	545	418	435	834
Stage 1	-	-	-	-	-	-	448	436	-	808	750	-
Stage 2	-	-	-	-	-	-	649	607	-	653	642	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1333	-	-	1119	-	-	223	234	545	397	426	834
Mov Cap-2 Maneuver	-	-	-	-	-	-	223	234	-	397	426	-
Stage 1	-	-	-	-	-	-	443	431	-	799	743	-
Stage 2	-	-	-	-	-	-	634	602	-	623	635	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.3	13	12.4
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	471	1333	-	-	1119	-	-	516
HCM Lane V/C Ratio	0.039	0.008	-	-	0.008	-	-	0.053
HCM Control Delay (s)	13	7.7	0	-	8.2	0	-	12.4
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	113	196	118	138	60	20	74	451	179	25	584	80
Future Volume (vph)	113	196	118	138	60	20	74	451	179	25	584	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	10	10	12	10	10	10	10	10	10
Grade (%)		0%			-2%			4%			-4%	
Storage Length (ft)	100		0	150		210	230		0	150		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt		0.944				0.850		0.957			0.982	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1758	0	1668	1756	1599	1619	3098	0	1685	1741	0
Flt Permitted	0.950			0.950			0.172			0.355		
Satd. Flow (perm)	1770	1758	0	1668	1756	1599	293	3098	0	630	1741	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		17				124		50			6	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		226			924			770			236	
Travel Time (s)		5.1			21.0			17.5			5.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	123	213	128	150	65	22	80	490	195	27	635	87
Shared Lane Traffic (%)												
Lane Group Flow (vph)	123	341	0	150	65	22	80	685	0	27	722	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)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.08	1.08	0.99	1.12	1.12	1.12	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2		2	2	0	2	2		2	2	
Detector Template												
Leading Detector (ft)	83	83		83	83	0	83	83		83	83	
Trailing Detector (ft)	-5	-5		-5	-5	0	-5	-5		-5	-5	
Detector 1 Position(ft)	-5	-5		-5	-5	0	-5	-5		-5	-5	
Detector 1 Size(ft)	40	40		40	40	20	40	40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)	43	43		43	43		43	43		43	43	
Detector 2 Size(ft)	40	40		40	40		40	40		40	40	
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	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	0.0		0.0	0.0	
Turn Type	Split	NA		Split	NA	Free	pm+pt	NA		pm+pt	NA	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases	4	4		8	8		1	6		5	2	
Permitted Phases						Free	6			2		
Detector Phase	4	4		8	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		10.0	15.0		10.0	15.0	
Total Split (s)	30.0	30.0		30.0	30.0		20.0	70.0		20.0	70.0	
Total Split (%)	20.0%	20.0%		20.0%	20.0%		13.3%	46.7%		13.3%	46.7%	
Maximum Green (s)	25.0	25.0		25.0	25.0		15.0	65.0		15.0	65.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		None	C-Max		None	Max	
Walk Time (s)	8.0	8.0		8.0	8.0			8.0			8.0	
Flash Dont Walk (s)	12.0	12.0		12.0	12.0			12.0			12.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
v/c Ratio	0.42	1.11		0.75	0.31	0.01	0.32	0.38		0.07	0.78	
Control Delay	60.9	137.2		86.0	62.6	0.0	16.4	18.5		13.5	37.0	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	60.9	137.2		86.0	62.6	0.0	16.4	18.5		13.5	37.0	
Queue Length 50th (ft)	109	~366		144	59	0	30	184		10	548	
Queue Length 95th (ft)	177	#572		214	104	0	61	262		26	#900	
Internal Link Dist (ft)		146			844			690			156	
Turn Bay Length (ft)	100			150		210	230			150		
Base Capacity (vph)	295	307		278	292	1599	312	1785		490	921	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.42	1.11		0.54	0.22	0.01	0.26	0.38		0.06	0.78	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 70 (47%), Referenced to phase 6:NETL, Start of Red
Natural Cycle: 90
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: US Route 6 & Baldwin Place Road/NYS Route 118

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	113	196	118	138	60	20	74	451	179	25	584	80
Future Volume (veh/h)	113	196	118	138	60	20	74	451	179	25	584	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1949	1949	1949	1776	1776	1776	2027	2027	2027
Adj Flow Rate, veh/h	123	213	0	150	65	0	80	490	195	27	635	87
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	230	242		178	187		189	1062	420	341	756	104
Arrive On Green	0.13	0.13	0.00	0.10	0.10	0.00	0.04	0.45	0.45	0.02	0.43	0.43
Sat Flow, veh/h	1781	1870	0	1856	1949	1651	1692	2361	934	1931	1745	239
Grp Volume(v), veh/h	123	213	0	150	65	0	80	349	336	27	0	722
Grp Sat Flow(s),veh/h/ln	1781	1870	0	1856	1949	1651	1692	1687	1608	1931	0	1984
Q Serve(g_s), s	9.7	16.8	0.0	11.9	4.7	0.0	3.9	21.6	21.8	1.2	0.0	48.6
Cycle Q Clear(g_c), s	9.7	16.8	0.0	11.9	4.7	0.0	3.9	21.6	21.8	1.2	0.0	48.6
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.58	1.00		0.12
Lane Grp Cap(c), veh/h	230	242		178	187		189	759	723	341	0	860
V/C Ratio(X)	0.53	0.88		0.84	0.35		0.42	0.46	0.46	0.08	0.00	0.84
Avail Cap(c_a), veh/h	297	312		309	325		293	759	723	491	0	860
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	61.1	64.2	0.0	66.7	63.4	0.0	30.8	28.6	28.7	23.8	0.0	37.9
Incr Delay (d2), s/veh	0.7	17.5	0.0	4.1	0.4	0.0	0.6	2.0	2.1	0.0	0.0	9.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	9.2	0.0	5.9	2.4	0.0	1.6	9.3	8.9	0.5	0.0	25.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.8	81.6	0.0	70.8	63.8	0.0	31.4	30.7	30.8	23.8	0.0	47.5
LnGrp LOS	E	F		E	E		C	C	C	C	A	D
Approach Vol, veh/h		336	A		215	A		765			749	
Approach Delay, s/veh		74.4			68.7			30.8			46.7	
Approach LOS		E			E			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.8	70.0		24.4	8.4	72.4		19.4				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	15.0	65.0		25.0	15.0	65.0		25.0				
Max Q Clear Time (g_c+I1), s	5.9	50.6		18.8	3.2	23.8		13.9				
Green Ext Time (p_c), s	0.1	2.6		0.6	0.0	2.5		0.5				

Intersection Summary		
HCM 6th Ctrl Delay		47.6
HCM 6th LOS		D

Notes

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

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	406	21	8	212	4	0	17	15	14	0	11
Future Volume (vph)	10	406	21	8	212	4	0	17	15	14	0	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	10	10	12	12	12	12	12	12	12
Grade (%)		2%			2%			10%			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
Frt		0.993			0.998			0.936			0.940	
Flt Protected		0.999			0.998						0.973	
Satd. Flow (prot)	0	1829	0	0	1714	0	0	1656	0	0	1704	0
Flt Permitted		0.999			0.998						0.973	
Satd. Flow (perm)	0	1829	0	0	1714	0	0	1656	0	0	1704	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		502			226			603			191	
Travel Time (s)		11.4			5.1			13.7			4.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	441	23	9	230	4	0	18	16	15	0	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	475	0	0	243	0	0	34	0	0	27	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)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	1.11	1.11	1.01	1.07	1.07	1.07	1.00	1.00	1.00
Turning Speed (mph)	60		9	15		60	15		9	60		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	10	406	21	8	212	4	0	17	15	14	0	11
Future Vol, veh/h	10	406	21	8	212	4	0	17	15	14	0	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	2	-	-	10	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	441	23	9	230	4	0	18	16	15	0	12

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	234	0	0	464	0	0	731	727	453	742	736	232
Stage 1	-	-	-	-	-	-	475	475	-	250	250	-
Stage 2	-	-	-	-	-	-	256	252	-	492	486	-
Critical Hdwy	4.12	-	-	4.12	-	-	9.12	8.52	7.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	8.12	7.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	8.12	7.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1333	-	-	1097	-	-	225	234	535	332	346	807
Stage 1	-	-	-	-	-	-	438	428	-	754	700	-
Stage 2	-	-	-	-	-	-	649	607	-	558	551	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1333	-	-	1097	-	-	218	229	535	297	339	807
Mov Cap-2 Maneuver	-	-	-	-	-	-	218	229	-	297	339	-
Stage 1	-	-	-	-	-	-	433	423	-	746	694	-
Stage 2	-	-	-	-	-	-	634	602	-	512	545	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.3	17.9	14.4
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	313	1333	-	-	1097	-	-	411
HCM Lane V/C Ratio	0.111	0.008	-	-	0.008	-	-	0.066
HCM Control Delay (s)	17.9	7.7	0	-	8.3	0	-	14.4
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.4	0	-	-	0	-	-	0.2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	125	201	122	138	67	20	86	451	179	27	590	80
Future Volume (vph)	125	201	122	138	67	20	86	451	179	27	590	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	10	10	12	10	10	10	10	10	10
Grade (%)		0%			-2%			4%			-4%	
Storage Length (ft)	100		0	150		210	230		0	150		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt		0.943				0.850		0.957			0.982	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1757	0	1668	1756	1599	1619	3098	0	1685	1741	0
Flt Permitted	0.950			0.950			0.163			0.357		
Satd. Flow (perm)	1770	1757	0	1668	1756	1599	278	3098	0	633	1741	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		18				124		50			6	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		226			924			770			236	
Travel Time (s)		5.1			21.0			17.5			5.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	136	218	133	150	73	22	93	490	195	29	641	87
Shared Lane Traffic (%)												
Lane Group Flow (vph)	136	351	0	150	73	22	93	685	0	29	728	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)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.08	1.08	0.99	1.12	1.12	1.12	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2		2	2	0	2	2		2	2	
Detector Template												
Leading Detector (ft)	83	83		83	83	0	83	83		83	83	
Trailing Detector (ft)	-5	-5		-5	-5	0	-5	-5		-5	-5	
Detector 1 Position(ft)	-5	-5		-5	-5	0	-5	-5		-5	-5	
Detector 1 Size(ft)	40	40		40	40	20	40	40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)	43	43		43	43		43	43		43	43	
Detector 2 Size(ft)	40	40		40	40		40	40		40	40	
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	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	0.0		0.0	0.0	
Turn Type	Split	NA		Split	NA	Free	pm+pt	NA		pm+pt	NA	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases	4	4		8	8		1	6		5	2	
Permitted Phases						Free	6			2		
Detector Phase	4	4		8	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		10.0	15.0		10.0	15.0	
Total Split (s)	30.0	30.0		30.0	30.0		20.0	70.0		20.0	70.0	
Total Split (%)	20.0%	20.0%		20.0%	20.0%		13.3%	46.7%		13.3%	46.7%	
Maximum Green (s)	25.0	25.0		25.0	25.0		15.0	65.0		15.0	65.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		None	C-Max		None	Max	
Walk Time (s)	8.0	8.0		8.0	8.0			8.0			8.0	
Flash Dont Walk (s)	12.0	12.0		12.0	12.0			12.0			12.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
v/c Ratio	0.46	1.14		0.75	0.35	0.01	0.38	0.38		0.07	0.80	
Control Delay	62.2	147.0		86.0	63.7	0.0	17.4	18.6		13.6	38.2	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	62.2	147.0		86.0	63.7	0.0	17.4	18.6		13.6	38.2	
Queue Length 50th (ft)	122	~385		144	67	0	36	184		11	560	
Queue Length 95th (ft)	194	#593		214	114	0	70	263		28	#927	
Internal Link Dist (ft)		146			844			690			156	
Turn Bay Length (ft)	100			150		210	230			150		
Base Capacity (vph)	295	307		278	292	1599	304	1783		491	913	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.46	1.14		0.54	0.25	0.01	0.31	0.38		0.06	0.80	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 70 (47%), Referenced to phase 6:NETL, Start of Red
Natural Cycle: 90
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: US Route 6 & Baldwin Place Road/NYS Route 118

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	125	201	122	138	67	20	86	451	179	27	590	80
Future Volume (veh/h)	125	201	122	138	67	20	86	451	179	27	590	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1949	1949	1949	1776	1776	1776	2027	2027	2027
Adj Flow Rate, veh/h	136	218	0	150	73	0	93	490	195	29	641	87
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	235	247		178	187		194	1071	424	347	757	103
Arrive On Green	0.13	0.13	0.00	0.10	0.10	0.00	0.04	0.45	0.45	0.02	0.43	0.43
Sat Flow, veh/h	1781	1870	0	1856	1949	1651	1692	2361	934	1931	1747	237
Grp Volume(v), veh/h	136	218	0	150	73	0	93	349	336	29	0	728
Grp Sat Flow(s),veh/h/ln	1781	1870	0	1856	1949	1651	1692	1687	1608	1931	0	1985
Q Serve(g_s), s	10.8	17.2	0.0	11.9	5.3	0.0	4.6	21.4	21.6	1.2	0.0	49.2
Cycle Q Clear(g_c), s	10.8	17.2	0.0	11.9	5.3	0.0	4.6	21.4	21.6	1.2	0.0	49.2
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.58	1.00		0.12
Lane Grp Cap(c), veh/h	235	247		178	187		194	765	729	347	0	860
V/C Ratio(X)	0.58	0.88		0.84	0.39		0.48	0.46	0.46	0.08	0.00	0.85
Avail Cap(c_a), veh/h	297	312		309	325		290	765	729	495	0	860
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	61.2	64.0	0.0	66.7	63.7	0.0	31.0	28.2	28.3	23.7	0.0	38.0
Incr Delay (d2), s/veh	0.8	18.4	0.0	4.0	0.5	0.0	0.7	2.0	2.1	0.0	0.0	10.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	9.5	0.0	5.9	2.7	0.0	1.9	9.2	8.9	0.6	0.0	26.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.0	82.4	0.0	70.7	64.2	0.0	31.7	30.2	30.4	23.7	0.0	48.1
LnGrp LOS	E	F		E	E		C	C	C	C	A	D
Approach Vol, veh/h		354	A		223	A		778			757	
Approach Delay, s/veh		74.5			68.6			30.5			47.2	
Approach LOS		E			E			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.6	70.0		24.8	8.5	73.0		19.4				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	15.0	65.0		25.0	15.0	65.0		25.0				
Max Q Clear Time (g_c+I1), s	6.6	51.2		19.2	3.2	23.6		13.9				
Green Ext Time (p_c), s	0.1	2.6		0.6	0.0	2.5		0.5				

Intersection Summary			
HCM 6th Ctrl Delay		47.9	
HCM 6th LOS		D	

Notes

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

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	0	8	0	584	689	12
Future Volume (vph)	0	8	0	584	689	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	-3%			0%	0%	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt		0.865			0.998	
Flt Protected						
Satd. Flow (prot)	0	1635	0	3539	1859	0
Flt Permitted						
Satd. Flow (perm)	0	1635	0	3539	1859	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	262			236	844	
Travel Time (s)	6.0			5.4	19.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	9	0	635	749	13
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	9	0	635	762	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			10	10	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.98	0.98	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.1

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	0	8	0	584	689	12
Future Vol, veh/h	0	8	0	584	689	12
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, %	-3	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	9	0	635	749	13

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	756	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	5.93	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.319	-	-	-	-
Pot Cap-1 Maneuver	0	434	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	434	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	13.5	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NET	SELn1	SWT	SWR
Capacity (veh/h)	-	434	-	-
HCM Lane V/C Ratio	-	0.02	-	-
HCM Control Delay (s)	-	13.5	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0.1	-	-

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	3	416	223	18	21	3
Future Volume (vph)	3	416	223	18	21	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		0%	0%		-3%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.990		0.984	
Flt Protected					0.958	
Satd. Flow (prot)	0	1863	1844	0	1782	0
Flt Permitted					0.958	
Satd. Flow (perm)	0	1863	1844	0	1782	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		704	502		255	
Travel Time (s)		16.0	11.4		5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	3	452	242	20	23	3
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	455	262	0	26	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	0.98	0.98
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	416	223	18	21	3
Future Vol, veh/h	3	416	223	18	21	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	-3	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	452	242	20	23	3

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	262	0	-	0	710	252
Stage 1	-	-	-	-	252	-
Stage 2	-	-	-	-	458	-
Critical Hdwy	4.12	-	-	-	5.82	5.92
Critical Hdwy Stg 1	-	-	-	-	4.82	-
Critical Hdwy Stg 2	-	-	-	-	4.82	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1302	-	-	-	450	803
Stage 1	-	-	-	-	824	-
Stage 2	-	-	-	-	687	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1302	-	-	-	449	803
Mov Cap-2 Maneuver	-	-	-	-	449	-
Stage 1	-	-	-	-	822	-
Stage 2	-	-	-	-	687	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	13
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1302	-	-	-	475
HCM Lane V/C Ratio	0.003	-	-	-	0.055
HCM Control Delay (s)	7.8	0	-	-	13
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	328	0	16	438	6	1	0	12	24	0	10
Future Volume (vph)	3	328	0	16	438	6	1	0	12	24	0	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	10	10	12	12	12	12	12	12	12
Grade (%)		2%			2%			10%			-5%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.998			0.875			0.960	
Flt Protected					0.998			0.996			0.966	
Satd. Flow (prot)	0	1844	0	0	1714	0	0	1542	0	0	1771	0
Flt Permitted					0.998			0.996			0.966	
Satd. Flow (perm)	0	1844	0	0	1714	0	0	1542	0	0	1771	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		502			226			603			438	
Travel Time (s)		11.4			5.1			13.7			10.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	3	357	0	17	476	7	1	0	13	26	0	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	360	0	0	500	0	0	14	0	0	37	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)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	1.11	1.11	1.01	1.07	1.07	1.07	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	3	328	0	16	438	6	1	0	12	24	0	10
Future Vol, veh/h	3	328	0	16	438	6	1	0	12	24	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	2	-	-	10	-	-	-5	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	357	0	17	476	7	1	0	13	26	0	11

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	483	0	0	357	0	0	882	880	357	884	877	480
Stage 1	-	-	-	-	-	-	363	363	-	514	514	-
Stage 2	-	-	-	-	-	-	519	517	-	370	363	-
Critical Hdwy	4.12	-	-	4.12	-	-	9.12	8.52	7.22	6.12	5.52	5.72
Critical Hdwy Stg 1	-	-	-	-	-	-	8.12	7.52	-	5.12	4.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	8.12	7.52	-	5.12	4.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1080	-	-	1202	-	-	163	175	622	340	366	626
Stage 1	-	-	-	-	-	-	536	510	-	627	618	-
Stage 2	-	-	-	-	-	-	405	400	-	720	691	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1080	-	-	1202	-	-	157	171	622	327	358	626
Mov Cap-2 Maneuver	-	-	-	-	-	-	157	171	-	327	358	-
Stage 1	-	-	-	-	-	-	534	508	-	625	606	-
Stage 2	-	-	-	-	-	-	390	392	-	703	689	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.3	12.3	15.5
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	507	1080	-	-	1202	-	-	380
HCM Lane V/C Ratio	0.028	0.003	-	-	0.014	-	-	0.097
HCM Control Delay (s)	12.3	8.3	0	-	8	0	-	15.5
HCM Lane LOS	B	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.3

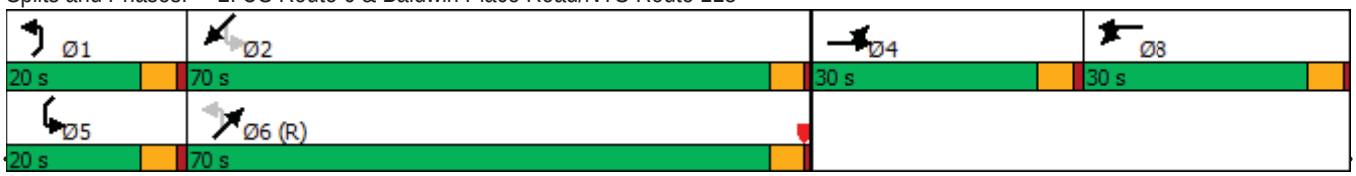
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	144	105	89	164	197	65	127	643	112	44	492	140
Future Volume (vph)	144	105	89	164	197	65	127	643	112	44	492	140
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	10	10	12	10	10	10	10	10	10
Grade (%)		0%			-2%			4%			-4%	
Storage Length (ft)	100		0	150		210	230		0	150		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt		0.931				0.850		0.978			0.967	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1734	0	1668	1756	1599	1619	3166	0	1685	1715	0
Flt Permitted	0.950			0.950			0.187			0.292		
Satd. Flow (perm)	1770	1734	0	1668	1756	1599	319	3166	0	518	1715	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		25				124		17			12	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		226			924			770			236	
Travel Time (s)		5.1			21.0			17.5			5.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	157	114	97	178	214	71	138	699	122	48	535	152
Shared Lane Traffic (%)												
Lane Group Flow (vph)	157	211	0	178	214	71	138	821	0	48	687	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)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.08	1.08	0.99	1.12	1.12	1.12	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2		2	2	0	2	2		2	2	
Detector Template												
Leading Detector (ft)	83	83		83	83	0	83	83		83	83	
Trailing Detector (ft)	-5	-5		-5	-5	0	-5	-5		-5	-5	
Detector 1 Position(ft)	-5	-5		-5	-5	0	-5	-5		-5	-5	
Detector 1 Size(ft)	40	40		40	40	20	40	40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)	43	43		43	43		43	43		43	43	
Detector 2 Size(ft)	40	40		40	40		40	40		40	40	
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	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	0.0		0.0	0.0	
Turn Type	Split	NA		Split	NA	Free	pm+pt	NA		pm+pt	NA	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases	4	4		8	8		1	6		5	2	
Permitted Phases						Free	6			2		
Detector Phase	4	4		8	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		10.0	15.0		10.0	15.0	
Total Split (s)	30.0	30.0		30.0	30.0		20.0	70.0		20.0	70.0	
Total Split (%)	20.0%	20.0%		20.0%	20.0%		13.3%	46.7%		13.3%	46.7%	
Maximum Green (s)	25.0	25.0		25.0	25.0		15.0	65.0		15.0	65.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		None	C-Max		None	Max	
Walk Time (s)	8.0	8.0		8.0	8.0			8.0			8.0	
Flash Dont Walk (s)	12.0	12.0		12.0	12.0			12.0			12.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
v/c Ratio	0.67	0.84		0.74	0.84	0.04	0.48	0.46		0.14	0.77	
Control Delay	75.1	82.1		79.0	89.2	0.0	19.1	22.3		14.6	37.7	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	75.1	82.1		79.0	89.2	0.0	19.1	22.3		14.6	37.7	
Queue Length 50th (ft)	148	180		168	205	0	55	253		18	528	
Queue Length 95th (ft)	221	268		251	#310	0	99	350		41	#873	
Internal Link Dist (ft)		146			844			690			156	
Turn Bay Length (ft)	100			150		210	230			150		
Base Capacity (vph)	295	309		280	294	1599	328	1776		433	895	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.53	0.68		0.64	0.73	0.04	0.42	0.46		0.11	0.77	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 70 (47%), Referenced to phase 6:NETL, Start of Red
Natural Cycle: 90
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: US Route 6 & Baldwin Place Road/NYS Route 118



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	144	105	89	164	197	65	127	643	112	44	492	140
Future Volume (veh/h)	144	105	89	164	197	65	127	643	112	44	492	140
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1949	1949	1949	1776	1776	1776	2027	2027	2027
Adj Flow Rate, veh/h	157	114	0	178	214	0	138	699	122	48	535	152
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	185	194		234	246		237	1330	232	313	658	187
Arrive On Green	0.10	0.10	0.00	0.13	0.13	0.00	0.06	0.46	0.46	0.03	0.43	0.43
Sat Flow, veh/h	1781	1870	0	1856	1949	1651	1692	2872	501	1931	1518	431
Grp Volume(v), veh/h	157	114	0	178	214	0	138	410	411	48	0	687
Grp Sat Flow(s),veh/h/ln	1781	1870	0	1856	1949	1651	1692	1687	1686	1931	0	1950
Q Serve(g_s), s	13.0	8.7	0.0	13.9	16.2	0.0	6.6	25.9	25.9	2.1	0.0	46.2
Cycle Q Clear(g_c), s	13.0	8.7	0.0	13.9	16.2	0.0	6.6	25.9	25.9	2.1	0.0	46.2
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.30	1.00		0.22
Lane Grp Cap(c), veh/h	185	194		234	246		237	781	781	313	0	845
V/C Ratio(X)	0.85	0.59		0.76	0.87		0.58	0.53	0.53	0.15	0.00	0.81
Avail Cap(c_a), veh/h	297	312		309	325		307	781	781	451	0	845
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	66.0	64.1	0.0	63.3	64.3	0.0	29.7	28.6	28.6	23.9	0.0	37.2
Incr Delay (d2), s/veh	6.6	1.0	0.0	5.1	14.6	0.0	0.8	2.5	2.5	0.1	0.0	8.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	4.2	0.0	6.9	9.1	0.0	2.7	11.1	11.1	1.0	0.0	23.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.6	65.2	0.0	68.4	79.0	0.0	30.5	31.1	31.1	24.0	0.0	45.6
LnGrp LOS	E	E		E	E		C	C	C	C	A	D
Approach Vol, veh/h		271	A		392	A		959			735	
Approach Delay, s/veh		69.5			74.2			31.0			44.2	
Approach LOS		E			E			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.8	70.0		20.6	9.3	74.5		23.9				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	15.0	65.0		25.0	15.0	65.0		25.0				
Max Q Clear Time (g_c+I1), s	8.6	48.2		15.0	4.1	27.9		18.2				
Green Ext Time (p_c), s	0.2	2.6		0.6	0.1	3.1		0.8				

Intersection Summary			
HCM 6th Ctrl Delay		46.7	
HCM 6th LOS		D	

Notes

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

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	348	0	17	464	6	1	0	13	25	0	11
Future Volume (vph)	3	348	0	17	464	6	1	0	13	25	0	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	10	10	12	12	12	12	12	12	12
Grade (%)		2%			2%			10%			-5%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.998			0.874			0.958	
Flt Protected					0.998			0.997			0.967	
Satd. Flow (prot)	0	1844	0	0	1714	0	0	1542	0	0	1769	0
Flt Permitted					0.998			0.997			0.967	
Satd. Flow (perm)	0	1844	0	0	1714	0	0	1542	0	0	1769	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		502			226			607			438	
Travel Time (s)		11.4			5.1			13.8			10.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	3	378	0	18	504	7	1	0	14	27	0	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	381	0	0	529	0	0	15	0	0	39	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)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	1.11	1.11	1.01	1.07	1.07	1.07	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

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	3	348	0	17	464	6	1	0	13	25	0	11
Future Vol, veh/h	3	348	0	17	464	6	1	0	13	25	0	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	2	-	-	10	-	-	-5	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	378	0	18	504	7	1	0	14	27	0	12

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	511	0	0	378	0	0	934	931	378	935	928	508
Stage 1	-	-	-	-	-	-	384	384	-	544	544	-
Stage 2	-	-	-	-	-	-	550	547	-	391	384	-
Critical Hdwy	4.12	-	-	4.12	-	-	9.12	8.52	7.22	6.12	5.52	5.72
Critical Hdwy Stg 1	-	-	-	-	-	-	8.12	7.52	-	5.12	4.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	8.12	7.52	-	5.12	4.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1054	-	-	1180	-	-	146	159	602	318	347	606
Stage 1	-	-	-	-	-	-	516	494	-	609	604	-
Stage 2	-	-	-	-	-	-	383	382	-	706	680	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1054	-	-	1180	-	-	140	155	602	305	338	606
Mov Cap-2 Maneuver	-	-	-	-	-	-	140	155	-	305	338	-
Stage 1	-	-	-	-	-	-	514	492	-	607	591	-
Stage 2	-	-	-	-	-	-	368	374	-	687	677	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.3	12.6	16.2
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	487	1054	-	-	1180	-	-	360
HCM Lane V/C Ratio	0.031	0.003	-	-	0.016	-	-	0.109
HCM Control Delay (s)	12.6	8.4	0	-	8.1	0	-	16.2
HCM Lane LOS	B	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.4

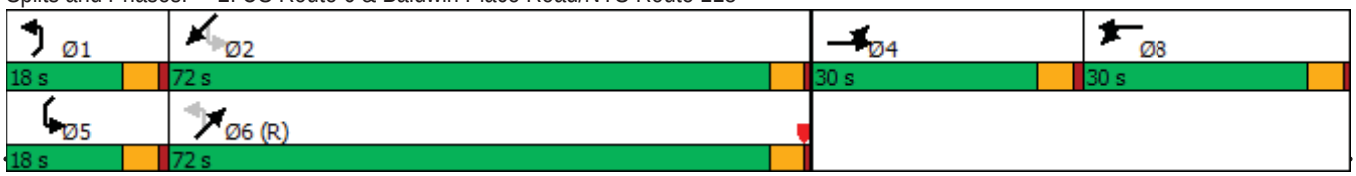
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	153	111	94	174	209	69	135	682	119	47	522	148
Future Volume (vph)	153	111	94	174	209	69	135	682	119	47	522	148
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	10	10	12	10	10	10	10	10	10
Grade (%)		0%			-2%			4%			-4%	
Storage Length (ft)	100		0	150		210	230		0	150		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt		0.931				0.850		0.978			0.967	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1734	0	1668	1756	1599	1619	3166	0	1685	1715	0
Flt Permitted	0.950			0.950			0.147			0.269		
Satd. Flow (perm)	1770	1734	0	1668	1756	1599	250	3166	0	477	1715	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		24				124		17			12	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		226			924			770			236	
Travel Time (s)		5.1			21.0			17.5			5.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	166	121	102	189	227	75	147	741	129	51	567	161
Shared Lane Traffic (%)												
Lane Group Flow (vph)	166	223	0	189	227	75	147	870	0	51	728	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)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.08	1.08	0.99	1.12	1.12	1.12	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2		2	2	0	2	2		2	2	
Detector Template												
Leading Detector (ft)	83	83		83	83	0	83	83		83	83	
Trailing Detector (ft)	-5	-5		-5	-5	0	-5	-5		-5	-5	
Detector 1 Position(ft)	-5	-5		-5	-5	0	-5	-5		-5	-5	
Detector 1 Size(ft)	40	40		40	40	20	40	40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)	43	43		43	43		43	43		43	43	
Detector 2 Size(ft)	40	40		40	40		40	40		40	40	
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	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	0.0		0.0	0.0	
Turn Type	Split	NA		Split	NA	Free	pm+pt	NA		pm+pt	NA	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases	4	4		8	8		1	6		5	2	
Permitted Phases						Free	6			2		
Detector Phase	4	4		8	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		10.0	15.0		10.0	15.0	
Total Split (s)	30.0	30.0		30.0	30.0		18.0	72.0		18.0	72.0	
Total Split (%)	20.0%	20.0%		20.0%	20.0%		12.0%	48.0%		12.0%	48.0%	
Maximum Green (s)	25.0	25.0		25.0	25.0		13.0	67.0		13.0	67.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		None	C-Max		None	Max	
Walk Time (s)	8.0	8.0		8.0	8.0			8.0			8.0	
Flash Dont Walk (s)	12.0	12.0		12.0	12.0			12.0			12.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
v/c Ratio	0.67	0.85		0.76	0.87	0.05	0.59	0.50		0.16	0.83	
Control Delay	74.5	83.3		80.6	92.1	0.1	23.6	23.8		15.1	42.8	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	74.5	83.3		80.6	92.1	0.1	23.6	23.8		15.1	42.8	
Queue Length 50th (ft)	155	192		177	217	0	62	286		20	623	
Queue Length 95th (ft)	233	285		266	#338	0	105	378		43	#938	
Internal Link Dist (ft)		146			844			690			156	
Turn Bay Length (ft)	100			150		210	230			150		
Base Capacity (vph)	295	309		278	292	1599	271	1741		386	873	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.56	0.72		0.68	0.78	0.05	0.54	0.50		0.13	0.83	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 70 (47%), Referenced to phase 6:NETL, Start of Red
Natural Cycle: 90
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: US Route 6 & Baldwin Place Road/NYS Route 118



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	153	111	94	174	209	69	135	682	119	47	522	148
Future Volume (veh/h)	153	111	94	174	209	69	135	682	119	47	522	148
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1949	1949	1949	1776	1776	1776	2027	2027	2027
Adj Flow Rate, veh/h	166	121	0	189	227	0	147	741	129	51	567	161
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	194	204		246	258		230	1372	239	309	678	193
Arrive On Green	0.11	0.11	0.00	0.13	0.13	0.00	0.06	0.48	0.48	0.03	0.45	0.45
Sat Flow, veh/h	1781	1870	0	1856	1949	1651	1692	2873	500	1931	1519	431
Grp Volume(v), veh/h	166	121	0	189	227	0	147	435	435	51	0	728
Grp Sat Flow(s),veh/h/ln	1781	1870	0	1856	1949	1651	1692	1687	1686	1931	0	1950
Q Serve(g_s), s	13.7	9.2	0.0	14.8	17.2	0.0	6.9	27.2	27.3	2.1	0.0	49.5
Cycle Q Clear(g_c), s	13.7	9.2	0.0	14.8	17.2	0.0	6.9	27.2	27.3	2.1	0.0	49.5
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.30	1.00		0.22
Lane Grp Cap(c), veh/h	194	204		246	258		230	806	805	309	0	871
V/C Ratio(X)	0.85	0.59		0.77	0.88		0.64	0.54	0.54	0.17	0.00	0.84
Avail Cap(c_a), veh/h	297	312		309	325		275	806	805	419	0	871
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	65.7	63.7	0.0	62.8	63.9	0.0	30.2	27.6	27.6	23.0	0.0	36.6
Incr Delay (d2), s/veh	9.1	1.0	0.0	6.5	17.1	0.0	1.9	2.6	2.6	0.1	0.0	9.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	4.5	0.0	7.4	9.8	0.0	2.9	11.6	11.6	1.0	0.0	25.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.7	64.7	0.0	69.3	81.0	0.0	32.1	30.2	30.2	23.1	0.0	46.0
LnGrp LOS	E	E		E	F		C	C	C	C	A	D
Approach Vol, veh/h		287	A		416	A		1017			779	
Approach Delay, s/veh		70.5			75.7			30.5			44.5	
Approach LOS		E			E			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.0	72.0		21.4	9.4	76.6		24.9				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	13.0	67.0		25.0	13.0	67.0		25.0				
Max Q Clear Time (g_c+I1), s	8.9	51.5		15.7	4.1	29.3		19.2				
Green Ext Time (p_c), s	0.1	2.7		0.6	0.1	3.3		0.7				

Intersection Summary			
HCM 6th Ctrl Delay		47.0	
HCM 6th LOS		D	

Notes

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

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	348	21	17	464	6	1	15	13	25	0	11
Future Volume (vph)	3	348	21	17	464	6	1	15	13	25	0	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	10	10	12	12	12	12	12	12	12
Grade (%)		2%			2%			10%			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
Frt		0.992			0.998			0.939			0.958	
Flt Protected					0.998			0.998			0.967	
Satd. Flow (prot)	0	1829	0	0	1714	0	0	1658	0	0	1726	0
Flt Permitted					0.998			0.998			0.967	
Satd. Flow (perm)	0	1829	0	0	1714	0	0	1658	0	0	1726	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		502			226			603			191	
Travel Time (s)		11.4			5.1			13.7			4.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	3	378	23	18	504	7	1	16	14	27	0	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	404	0	0	529	0	0	31	0	0	39	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)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	1.11	1.11	1.01	1.07	1.07	1.07	1.00	1.00	1.00
Turning Speed (mph)	60		9	15		60	15		9	60		60
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	3	348	21	17	464	6	1	15	13	25	0	11
Future Vol, veh/h	3	348	21	17	464	6	1	15	13	25	0	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	2	-	-	10	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	378	23	18	504	7	1	16	14	27	0	12

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	511	0	0	401	0	0	946	943	390	955	951	508
Stage 1	-	-	-	-	-	-	396	396	-	544	544	-
Stage 2	-	-	-	-	-	-	550	547	-	411	407	-
Critical Hdwy	4.12	-	-	4.12	-	-	9.12	8.52	7.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	8.12	7.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	8.12	7.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1054	-	-	1158	-	-	143	156	591	238	260	565
Stage 1	-	-	-	-	-	-	505	485	-	523	519	-
Stage 2	-	-	-	-	-	-	383	382	-	618	597	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1054	-	-	1158	-	-	137	152	591	209	253	565
Mov Cap-2 Maneuver	-	-	-	-	-	-	137	152	-	209	253	-
Stage 1	-	-	-	-	-	-	503	483	-	521	508	-
Stage 2	-	-	-	-	-	-	367	374	-	581	595	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.3	23.4	21.4
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	227	1054	-	-	1158	-	-	259
HCM Lane V/C Ratio	0.139	0.003	-	-	0.016	-	-	0.151
HCM Control Delay (s)	23.4	8.4	0	-	8.2	0	-	21.4
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.5	0	-	-	0	-	-	0.5

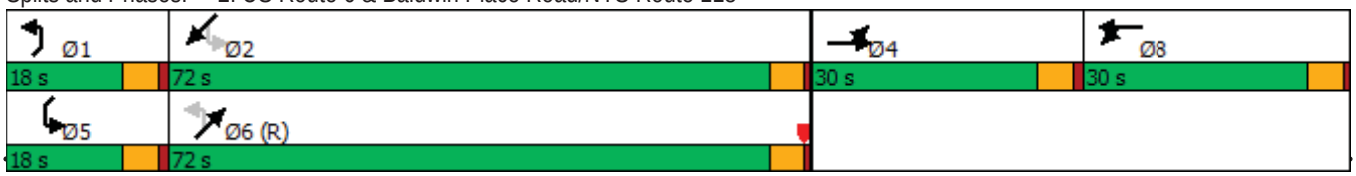
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	164	116	99	174	215	69	146	682	119	48	528	148
Future Volume (vph)	164	116	99	174	215	69	146	682	119	48	528	148
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	10	10	12	10	10	10	10	10	10
Grade (%)		0%			-2%			4%			-4%	
Storage Length (ft)	100		0	150		210	230		0	150		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt		0.931				0.850		0.978			0.967	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1734	0	1668	1756	1599	1619	3166	0	1685	1715	0
Flt Permitted	0.950			0.950			0.130			0.270		
Satd. Flow (perm)	1770	1734	0	1668	1756	1599	221	3166	0	479	1715	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		25				124		17			12	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		226			924			770			236	
Travel Time (s)		5.1			21.0			17.5			5.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	178	126	108	189	234	75	159	741	129	52	574	161
Shared Lane Traffic (%)												
Lane Group Flow (vph)	178	234	0	189	234	75	159	870	0	52	735	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)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.08	1.08	0.99	1.12	1.12	1.12	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2		2	2	0	2	2		2	2	
Detector Template												
Leading Detector (ft)	83	83		83	83	0	83	83		83	83	
Trailing Detector (ft)	-5	-5		-5	-5	0	-5	-5		-5	-5	
Detector 1 Position(ft)	-5	-5		-5	-5	0	-5	-5		-5	-5	
Detector 1 Size(ft)	40	40		40	40	20	40	40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)	43	43		43	43		43	43		43	43	
Detector 2 Size(ft)	40	40		40	40		40	40		40	40	
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	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	0.0		0.0	0.0	
Turn Type	Split	NA		Split	NA	Free	pm+pt	NA		pm+pt	NA	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases	4	4		8	8		1	6		5	2	
Permitted Phases						Free	6			2		
Detector Phase	4	4		8	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		10.0	15.0		10.0	15.0	
Total Split (s)	30.0	30.0		30.0	30.0		18.0	72.0		18.0	72.0	
Total Split (%)	20.0%	20.0%		20.0%	20.0%		12.0%	48.0%		12.0%	48.0%	
Maximum Green (s)	25.0	25.0		25.0	25.0		13.0	67.0		13.0	67.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		None	C-Max		None	Max	
Walk Time (s)	8.0	8.0		8.0	8.0			8.0			8.0	
Flash Dont Walk (s)	12.0	12.0		12.0	12.0			12.0			12.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
v/c Ratio	0.70	0.87		0.75	0.88	0.05	0.66	0.51		0.17	0.86	
Control Delay	75.7	84.7		78.9	93.0	0.1	28.8	24.4		15.5	46.5	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	75.7	84.7		78.9	93.0	0.1	28.8	24.4		15.5	46.5	
Queue Length 50th (ft)	166	202		176	223	0	70	295		21	667	
Queue Length 95th (ft)	249	#316		266	#354	0	122	378		43	#952	
Internal Link Dist (ft)		146			844			690			156	
Turn Bay Length (ft)	100			150		210	230			150		
Base Capacity (vph)	295	309		278	292	1599	256	1718		382	851	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.60	0.76		0.68	0.80	0.05	0.62	0.51		0.14	0.86	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 70 (47%), Referenced to phase 6:NETL, Start of Red
Natural Cycle: 90
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: US Route 6 & Baldwin Place Road/NYS Route 118



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	164	116	99	174	215	69	146	682	119	48	528	148
Future Volume (veh/h)	164	116	99	174	215	69	146	682	119	48	528	148
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1949	1949	1949	1776	1776	1776	2027	2027	2027
Adj Flow Rate, veh/h	178	126	0	189	234	0	159	741	129	52	574	161
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	206	216		252	265		232	1381	240	312	680	191
Arrive On Green	0.12	0.12	0.00	0.14	0.14	0.00	0.06	0.48	0.48	0.03	0.45	0.45
Sat Flow, veh/h	1781	1870	0	1856	1949	1651	1692	2873	500	1931	1523	427
Grp Volume(v), veh/h	178	126	0	189	234	0	159	435	435	52	0	735
Grp Sat Flow(s),veh/h/ln	1781	1870	0	1856	1949	1651	1692	1687	1686	1931	0	1950
Q Serve(g_s), s	14.7	9.6	0.0	14.7	17.7	0.0	7.4	27.1	27.1	2.2	0.0	50.2
Cycle Q Clear(g_c), s	14.7	9.6	0.0	14.7	17.7	0.0	7.4	27.1	27.1	2.2	0.0	50.2
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.30	1.00		0.22
Lane Grp Cap(c), veh/h	206	216		252	265		232	811	811	312	0	871
V/C Ratio(X)	0.86	0.58		0.75	0.88		0.68	0.54	0.54	0.17	0.00	0.84
Avail Cap(c_a), veh/h	297	312		309	325		271	811	811	423	0	871
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	65.2	62.9	0.0	62.3	63.6	0.0	30.6	27.2	27.2	22.9	0.0	36.9
Incr Delay (d2), s/veh	12.2	0.9	0.0	5.8	18.5	0.0	3.9	2.5	2.5	0.1	0.0	9.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	4.6	0.0	7.4	10.2	0.0	3.2	11.6	11.6	1.0	0.0	26.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	77.4	63.8	0.0	68.1	82.1	0.0	34.5	29.8	29.8	23.0	0.0	46.6
LnGrp LOS	E	E		E	F		C	C	C	C	A	D
Approach Vol, veh/h		304	A		423	A		1029			787	
Approach Delay, s/veh		71.7			75.9			30.5			45.1	
Approach LOS		E			E			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.5	72.0		22.3	9.4	77.1		25.4				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	13.0	67.0		25.0	13.0	67.0		25.0				
Max Q Clear Time (g_c+I1), s	9.4	52.2		16.7	4.2	29.1		19.7				
Green Ext Time (p_c), s	0.1	2.7		0.6	0.1	3.3		0.7				

Intersection Summary			
HCM 6th Ctrl Delay		47.5	
HCM 6th LOS		D	

Notes

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

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	0	8	0	903	717	12
Future Volume (vph)	0	8	0	903	717	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	-3%			0%	0%	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt		0.865			0.998	
Flt Protected						
Satd. Flow (prot)	0	1635	0	3539	1859	0
Flt Permitted						
Satd. Flow (perm)	0	1635	0	3539	1859	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	262			236	844	
Travel Time (s)	6.0			5.4	19.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	9	0	982	779	13
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	9	0	982	792	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			10	10	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.98	0.98	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.1

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	0	8	0	903	717	12
Future Vol, veh/h	0	8	0	903	717	12
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, %	-3	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	9	0	982	779	13

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	786	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	5.93	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.319	-	-	-	-
Pot Cap-1 Maneuver	0	418	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	418	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	NET	SELn1	SWT	SWR
Capacity (veh/h)	-	418	-	-
HCM Lane V/C Ratio	-	0.021	-	-
HCM Control Delay (s)	-	13.8	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0.1	-	-

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	3	351	476	18	21	3
Future Volume (vph)	3	351	476	18	21	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		0%	0%		-3%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.995		0.984	
Flt Protected					0.958	
Satd. Flow (prot)	0	1863	1853	0	1782	0
Flt Permitted					0.958	
Satd. Flow (perm)	0	1863	1853	0	1782	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		704	502		255	
Travel Time (s)		16.0	11.4		5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	3	382	517	20	23	3
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	385	537	0	26	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	0.98	0.98
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	351	476	18	21	3
Future Vol, veh/h	3	351	476	18	21	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	-3	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	382	517	20	23	3

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	537	0	-	0	915	527
Stage 1	-	-	-	-	527	-
Stage 2	-	-	-	-	388	-
Critical Hdwy	4.12	-	-	-	5.82	5.92
Critical Hdwy Stg 1	-	-	-	-	4.82	-
Critical Hdwy Stg 2	-	-	-	-	4.82	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1031	-	-	-	353	576
Stage 1	-	-	-	-	647	-
Stage 2	-	-	-	-	731	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1031	-	-	-	352	576
Mov Cap-2 Maneuver	-	-	-	-	352	-
Stage 1	-	-	-	-	644	-
Stage 2	-	-	-	-	731	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	15.5
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1031	-	-	-	370
HCM Lane V/C Ratio	0.003	-	-	-	0.071
HCM Control Delay (s)	8.5	0	-	-	15.5
HCM Lane LOS	A	A	-	-	C
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)	8	316	0	17	332	2	0	0	17	31	1	17
Future Volume (vph)	8	316	0	17	332	2	0	0	17	31	1	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	10	10	12	12	12	12	12	12	12
Grade (%)		2%			2%			10%			-5%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.999			0.865			0.954	
Flt Protected		0.999			0.998						0.969	
Satd. Flow (prot)	0	1842	0	0	1716	0	0	1531	0	0	1765	0
Flt Permitted		0.999			0.998						0.969	
Satd. Flow (perm)	0	1842	0	0	1716	0	0	1531	0	0	1765	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		502			226			603			438	
Travel Time (s)		11.4			5.1			13.7			10.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	9	343	0	18	361	2	0	0	18	34	1	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	352	0	0	381	0	0	18	0	0	53	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)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	1.11	1.11	1.01	1.07	1.07	1.07	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	8	316	0	17	332	2	0	0	17	31	1	17
Future Vol, veh/h	8	316	0	17	332	2	0	0	17	31	1	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	2	-	-	10	-	-	-5	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	343	0	18	361	2	0	0	18	34	1	18

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	363	0	0	343	0	0	769	760	343	768	759	362
Stage 1	-	-	-	-	-	-	361	361	-	398	398	-
Stage 2	-	-	-	-	-	-	408	399	-	370	361	-
Critical Hdwy	4.12	-	-	4.12	-	-	9.12	8.52	7.22	6.12	5.52	5.72
Critical Hdwy Stg 1	-	-	-	-	-	-	8.12	7.52	-	5.12	4.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	8.12	7.52	-	5.12	4.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1196	-	-	1216	-	-	207	220	636	394	415	718
Stage 1	-	-	-	-	-	-	538	512	-	701	673	-
Stage 2	-	-	-	-	-	-	494	482	-	720	692	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1196	-	-	1216	-	-	197	214	636	374	403	718
Mov Cap-2 Maneuver	-	-	-	-	-	-	197	214	-	374	403	-
Stage 1	-	-	-	-	-	-	533	507	-	695	660	-
Stage 2	-	-	-	-	-	-	471	473	-	693	686	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.4	10.8	14.1
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	636	1196	-	-	1216	-	-	449
HCM Lane V/C Ratio	0.029	0.007	-	-	0.015	-	-	0.119
HCM Control Delay (s)	10.8	8	0	-	8	0	-	14.1
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.4

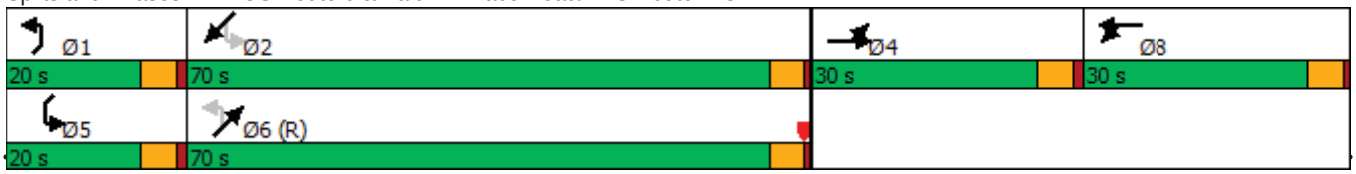
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	156	89	137	151	89	90	142	675	135	49	554	132
Future Volume (vph)	156	89	137	151	89	90	142	675	135	49	554	132
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	10	10	12	10	10	10	10	10	10
Grade (%)		0%			-2%			4%			-4%	
Storage Length (ft)	100		0	150		210	230		0	150		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt		0.909				0.850		0.975			0.971	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1693	0	1668	1756	1599	1619	3156	0	1685	1722	0
Flt Permitted	0.950			0.950			0.136			0.280		
Satd. Flow (perm)	1770	1693	0	1668	1756	1599	232	3156	0	497	1722	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		44				124		20			10	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		226			924			770			236	
Travel Time (s)		5.1			21.0			17.5			5.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	170	97	149	164	97	98	154	734	147	53	602	143
Shared Lane Traffic (%)												
Lane Group Flow (vph)	170	246	0	164	97	98	154	881	0	53	745	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)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.08	1.08	0.99	1.12	1.12	1.12	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2		2	2	0	2	2		2	2	
Detector Template												
Leading Detector (ft)	83	83		83	83	0	83	83		83	83	
Trailing Detector (ft)	-5	-5		-5	-5	0	-5	-5		-5	-5	
Detector 1 Position(ft)	-5	-5		-5	-5	0	-5	-5		-5	-5	
Detector 1 Size(ft)	40	40		40	40	20	40	40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)	43	43		43	43		43	43		43	43	
Detector 2 Size(ft)	40	40		40	40		40	40		40	40	
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	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	0.0		0.0	0.0	
Turn Type	Split	NA		Split	NA	Free	pm+pt	NA		pm+pt	NA	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases	4	4		8	8		1	6		5	2	
Permitted Phases						Free	6			2		
Detector Phase	4	4		8	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		10.0	15.0		10.0	15.0	
Total Split (s)	30.0	30.0		30.0	30.0		20.0	70.0		20.0	70.0	
Total Split (%)	20.0%	20.0%		20.0%	20.0%		13.3%	46.7%		13.3%	46.7%	
Maximum Green (s)	25.0	25.0		25.0	25.0		15.0	65.0		15.0	65.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		None	C-Max		None	Max	
Walk Time (s)	8.0	8.0		8.0	8.0			8.0			8.0	
Flash Dont Walk (s)	12.0	12.0		12.0	12.0			12.0			12.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
v/c Ratio	0.67	0.88		0.78	0.44	0.06	0.57	0.49		0.16	0.85	
Control Delay	73.7	81.0		87.4	65.7	0.1	21.4	22.3		14.5	44.2	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	73.7	81.0		87.4	65.7	0.1	21.4	22.3		14.5	44.2	
Queue Length 50th (ft)	158	196		158	89	0	61	274		20	643	
Queue Length 95th (ft)	238	#318		232	143	0	109	384		44	#998	
Internal Link Dist (ft)		146			844			690			156	
Turn Bay Length (ft)	100			150		210	230			150		
Base Capacity (vph)	295	318		278	292	1599	290	1797		419	878	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.58	0.77		0.59	0.33	0.06	0.53	0.49		0.13	0.85	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 70 (47%), Referenced to phase 6:NETL, Start of Red
Natural Cycle: 90
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: US Route 6 & Baldwin Place Road/NYS Route 118



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	156	89	137	151	89	90	142	675	135	49	554	132
Future Volume (veh/h)	156	89	137	151	89	90	142	675	135	49	554	132
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1949	1949	1949	1776	1776	1776	2027	2027	2027
Adj Flow Rate, veh/h	170	97	0	164	97	0	154	734	147	53	602	143
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	197	207		193	203		214	1309	262	295	686	163
Arrive On Green	0.11	0.11	0.00	0.10	0.10	0.00	0.06	0.47	0.47	0.03	0.43	0.43
Sat Flow, veh/h	1781	1870	0	1856	1949	1651	1692	2802	561	1931	1583	376
Grp Volume(v), veh/h	170	97	0	164	97	0	154	442	439	53	0	745
Grp Sat Flow(s),veh/h/ln	1781	1870	0	1856	1949	1651	1692	1687	1675	1931	0	1960
Q Serve(g_s), s	14.1	7.3	0.0	13.0	7.0	0.0	7.4	28.4	28.4	2.3	0.0	52.1
Cycle Q Clear(g_c), s	14.1	7.3	0.0	13.0	7.0	0.0	7.4	28.4	28.4	2.3	0.0	52.1
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.33	1.00		0.19
Lane Grp Cap(c), veh/h	197	207		193	203		214	788	783	295	0	849
V/C Ratio(X)	0.86	0.47		0.85	0.48		0.72	0.56	0.56	0.18	0.00	0.88
Avail Cap(c_a), veh/h	297	312		309	325		275	788	783	431	0	849
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	65.6	62.5	0.0	66.0	63.4	0.0	32.3	28.8	28.8	24.2	0.0	38.9
Incr Delay (d2), s/veh	10.4	0.6	0.0	6.5	0.7	0.0	4.0	2.9	2.9	0.1	0.0	12.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.0	3.5	0.0	6.5	3.6	0.0	3.2	12.2	12.1	1.1	0.0	27.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.9	63.2	0.0	72.6	64.0	0.0	36.3	31.7	31.7	24.3	0.0	51.2
LnGrp LOS	E	E		E	E		D	C	C	C	A	D
Approach Vol, veh/h		267	A		261	A		1035			798	
Approach Delay, s/veh		71.3			69.4			32.4			49.5	
Approach LOS		E			E			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.5	70.0		21.6	9.5	75.1		20.6				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	15.0	65.0		25.0	15.0	65.0		25.0				
Max Q Clear Time (g_c+I1), s	9.4	54.1		16.1	4.3	30.4		15.0				
Green Ext Time (p_c), s	0.2	2.4		0.6	0.1	3.4		0.6				

Intersection Summary			
HCM 6th Ctrl Delay		46.7	
HCM 6th LOS		D	

Notes

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

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	335	0	18	352	2	0	0	18	33	1	18
Future Volume (vph)	8	335	0	18	352	2	0	0	18	33	1	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	10	10	12	12	12	12	12	12	12
Grade (%)		2%			2%			10%			-5%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.999			0.865			0.953	
Flt Protected		0.999			0.998						0.969	
Satd. Flow (prot)	0	1842	0	0	1716	0	0	1531	0	0	1763	0
Flt Permitted		0.999			0.998						0.969	
Satd. Flow (perm)	0	1842	0	0	1716	0	0	1531	0	0	1763	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		502			226			607			438	
Travel Time (s)		11.4			5.1			13.8			10.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	9	364	0	20	383	2	0	0	20	36	1	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	373	0	0	405	0	0	20	0	0	57	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)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	1.11	1.11	1.01	1.07	1.07	1.07	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	8	335	0	18	352	2	0	0	18	33	1	18
Future Vol, veh/h	8	335	0	18	352	2	0	0	18	33	1	18
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	2	-	-	10	-	-	-5	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	364	0	20	383	2	0	0	20	36	1	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	385	0	0	364	0	0	817	807	364	816	806	384
Stage 1	-	-	-	-	-	-	382	382	-	424	424	-
Stage 2	-	-	-	-	-	-	435	425	-	392	382	-
Critical Hdwy	4.12	-	-	4.12	-	-	9.12	8.52	7.22	6.12	5.52	5.72
Critical Hdwy Stg 1	-	-	-	-	-	-	8.12	7.52	-	5.12	4.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	8.12	7.52	-	5.12	4.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1173	-	-	1195	-	-	188	201	615	371	395	700
Stage 1	-	-	-	-	-	-	518	495	-	684	660	-
Stage 2	-	-	-	-	-	-	471	463	-	705	681	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1173	-	-	1195	-	-	178	195	615	351	383	700
Mov Cap-2 Maneuver	-	-	-	-	-	-	178	195	-	351	383	-
Stage 1	-	-	-	-	-	-	513	490	-	677	646	-
Stage 2	-	-	-	-	-	-	447	453	-	676	674	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.4	11	14.8
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	615	1173	-	-	1195	-	-	425
HCM Lane V/C Ratio	0.032	0.007	-	-	0.016	-	-	0.133
HCM Control Delay (s)	11	8.1	0	-	8.1	0	-	14.8
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	0.5

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	165	94	145	160	94	95	151	716	143	52	587	140
Future Volume (vph)	165	94	145	160	94	95	151	716	143	52	587	140
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	10	10	12	10	10	10	10	10	10
Grade (%)		0%			-2%			4%			-4%	
Storage Length (ft)	100		0	150		210	230		0	150		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt		0.909				0.850		0.975			0.971	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1693	0	1668	1756	1599	1619	3156	0	1685	1722	0
Flt Permitted	0.950			0.950			0.090			0.257		
Satd. Flow (perm)	1770	1693	0	1668	1756	1599	153	3156	0	456	1722	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		45				124		20			10	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		226			924			770			236	
Travel Time (s)		5.1			21.0			17.5			5.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	179	102	158	174	102	103	164	778	155	57	638	152
Shared Lane Traffic (%)												
Lane Group Flow (vph)	179	260	0	174	102	103	164	933	0	57	790	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)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.08	1.08	0.99	1.12	1.12	1.12	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2		2	2	0	2	2		2	2	
Detector Template												
Leading Detector (ft)	83	83		83	83	0	83	83		83	83	
Trailing Detector (ft)	-5	-5		-5	-5	0	-5	-5		-5	-5	
Detector 1 Position(ft)	-5	-5		-5	-5	0	-5	-5		-5	-5	
Detector 1 Size(ft)	40	40		40	40	20	40	40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)	43	43		43	43		43	43		43	43	
Detector 2 Size(ft)	40	40		40	40		40	40		40	40	
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	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	0.0		0.0	0.0	
Turn Type	Split	NA		Split	NA	Free	pm+pt	NA		pm+pt	NA	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases	4	4		8	8		1	6		5	2	
Permitted Phases						Free	6			2		
Detector Phase	4	4		8	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		10.0	15.0		10.0	15.0	
Total Split (s)	30.0	30.0		30.0	30.0		18.0	72.0		18.0	72.0	
Total Split (%)	20.0%	20.0%		20.0%	20.0%		12.0%	48.0%		12.0%	48.0%	
Maximum Green (s)	25.0	25.0		25.0	25.0		13.0	67.0		13.0	67.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		None	C-Max		None	Max	
Walk Time (s)	8.0	8.0		8.0	8.0			8.0			8.0	
Flash Dont Walk (s)	12.0	12.0		12.0	12.0			12.0			12.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
v/c Ratio	0.68	0.90		0.80	0.45	0.06	0.71	0.53		0.19	0.93	
Control Delay	73.4	83.0		88.6	65.4	0.1	39.3	23.9		15.1	53.8	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	73.4	83.0		88.6	65.4	0.1	39.3	23.9		15.1	53.8	
Queue Length 50th (ft)	165	208		167	93	0	74	309		22	~781	
Queue Length 95th (ft)	250	#350		245	151	0	#196	416		46	#1068	
Internal Link Dist (ft)		146			844			690			156	
Turn Bay Length (ft)	100			150		210	230			150		
Base Capacity (vph)	295	319		278	292	1599	237	1762		370	854	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.61	0.82		0.63	0.35	0.06	0.69	0.53		0.15	0.93	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 70 (47%), Referenced to phase 6:NETL, Start of Red
Natural Cycle: 90
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: US Route 6 & Baldwin Place Road/NYS Route 118

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	165	94	145	160	94	95	151	716	143	52	587	140
Future Volume (veh/h)	165	94	145	160	94	95	151	716	143	52	587	140
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1949	1949	1949	1776	1776	1776	2027	2027	2027
Adj Flow Rate, veh/h	179	102	0	174	102	0	164	778	155	57	638	152
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	206	217		203	213		206	1351	269	290	707	168
Arrive On Green	0.12	0.12	0.00	0.11	0.11	0.00	0.07	0.48	0.48	0.03	0.45	0.45
Sat Flow, veh/h	1781	1870	0	1856	1949	1651	1692	2804	559	1931	1582	377
Grp Volume(v), veh/h	179	102	0	174	102	0	164	468	465	57	0	790
Grp Sat Flow(s),veh/h/ln	1781	1870	0	1856	1949	1651	1692	1687	1676	1931	0	1959
Q Serve(g_s), s	14.8	7.6	0.0	13.8	7.4	0.0	7.6	29.9	29.9	2.4	0.0	56.1
Cycle Q Clear(g_c), s	14.8	7.6	0.0	13.8	7.4	0.0	7.6	29.9	29.9	2.4	0.0	56.1
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.33	1.00		0.19
Lane Grp Cap(c), veh/h	206	217		203	213		206	813	807	290	0	875
V/C Ratio(X)	0.87	0.47		0.86	0.48		0.80	0.58	0.58	0.20	0.00	0.90
Avail Cap(c_a), veh/h	297	312		309	325		242	813	807	399	0	875
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	65.2	62.0	0.0	65.6	62.8	0.0	33.0	27.9	27.9	23.4	0.0	38.5
Incr Delay (d2), s/veh	12.7	0.6	0.0	9.1	0.6	0.0	12.3	3.0	3.0	0.1	0.0	14.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.5	3.7	0.0	7.1	3.7	0.0	3.8	12.8	12.7	1.1	0.0	30.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	77.9	62.6	0.0	74.7	63.4	0.0	45.3	30.9	30.9	23.5	0.0	52.8
LnGrp LOS	E	E		E	E		D	C	C	C	A	D
Approach Vol, veh/h		281	A		276	A		1097			847	
Approach Delay, s/veh		72.3			70.5			33.0			50.9	
Approach LOS		E			E			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.8	72.0		22.4	9.5	77.2		21.4				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	13.0	67.0		25.0	13.0	67.0		25.0				
Max Q Clear Time (g_c+I1), s	9.6	58.1		16.8	4.4	31.9		15.8				
Green Ext Time (p_c), s	0.1	2.4		0.6	0.1	3.6		0.6				

Intersection Summary			
HCM 6th Ctrl Delay		47.6	
HCM 6th LOS		D	

Notes

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

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	335	15	18	352	2	0	17	18	33	1	18
Future Volume (vph)	8	335	15	18	352	2	0	17	18	33	1	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	10	10	12	12	12	12	12	12	12
Grade (%)		2%			2%			10%			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
Frt		0.994			0.999			0.929			0.953	
Flt Protected		0.999			0.998						0.969	
Satd. Flow (prot)	0	1831	0	0	1716	0	0	1644	0	0	1720	0
Flt Permitted		0.999			0.998						0.969	
Satd. Flow (perm)	0	1831	0	0	1716	0	0	1644	0	0	1720	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		502			226			603			191	
Travel Time (s)		11.4			5.1			13.7			4.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	9	364	16	20	383	2	0	18	20	36	1	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	389	0	0	405	0	0	38	0	0	57	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)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	1.11	1.11	1.01	1.07	1.07	1.07	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	8	335	15	18	352	2	0	17	18	33	1	18
Future Vol, veh/h	8	335	15	18	352	2	0	17	18	33	1	18
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	2	-	-	10	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	364	16	20	383	2	0	18	20	36	1	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	385	0	0	380	0	0	825	815	372	833	822	384
Stage 1	-	-	-	-	-	-	390	390	-	424	424	-
Stage 2	-	-	-	-	-	-	435	425	-	409	398	-
Critical Hdwy	4.12	-	-	4.12	-	-	9.12	8.52	7.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	8.12	7.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	8.12	7.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1173	-	-	1178	-	-	184	198	608	288	309	664
Stage 1	-	-	-	-	-	-	511	489	-	608	587	-
Stage 2	-	-	-	-	-	-	471	463	-	619	603	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1173	-	-	1178	-	-	174	192	608	252	299	664
Mov Cap-2 Maneuver	-	-	-	-	-	-	174	192	-	252	299	-
Stage 1	-	-	-	-	-	-	506	484	-	602	574	-
Stage 2	-	-	-	-	-	-	446	453	-	570	597	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.4	18.9	18.5
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	296	1173	-	-	1178	-	-	322
HCM Lane V/C Ratio	0.129	0.007	-	-	0.017	-	-	0.176
HCM Control Delay (s)	18.9	8.1	0	-	8.1	0	-	18.5
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.4	0	-	-	0.1	-	-	0.6

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	173	98	149	160	102	95	164	716	143	53	592	140
Future Volume (vph)	173	98	149	160	102	95	164	716	143	53	592	140
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	10	10	12	10	10	10	10	10	10
Grade (%)		0%			-2%			4%			-4%	
Storage Length (ft)	100		0	150		210	230		0	150		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt		0.910				0.850		0.975			0.971	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1695	0	1668	1756	1599	1619	3156	0	1685	1722	0
Flt Permitted	0.950			0.950			0.072			0.260		
Satd. Flow (perm)	1770	1695	0	1668	1756	1599	123	3156	0	461	1722	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		44				124		20			10	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		226			924			770			236	
Travel Time (s)		5.1			21.0			17.5			5.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	188	107	162	174	111	103	178	778	155	58	643	152
Shared Lane Traffic (%)												
Lane Group Flow (vph)	188	269	0	174	111	103	178	933	0	58	795	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)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.08	1.08	0.99	1.12	1.12	1.12	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2		2	2	0	2	2		2	2	
Detector Template												
Leading Detector (ft)	83	83		83	83	0	83	83		83	83	
Trailing Detector (ft)	-5	-5		-5	-5	0	-5	-5		-5	-5	
Detector 1 Position(ft)	-5	-5		-5	-5	0	-5	-5		-5	-5	
Detector 1 Size(ft)	40	40		40	40	20	40	40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)	43	43		43	43		43	43		43	43	
Detector 2 Size(ft)	40	40		40	40		40	40		40	40	
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	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	0.0		0.0	0.0	
Turn Type	Split	NA		Split	NA	Free	pm+pt	NA		pm+pt	NA	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases	4	4		8	8		1	6		5	2	
Permitted Phases						Free	6			2		
Detector Phase	4	4		8	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		10.0	15.0		10.0	15.0	
Total Split (s)	30.0	30.0		30.0	30.0		18.0	72.0		18.0	72.0	
Total Split (%)	20.0%	20.0%		20.0%	20.0%		12.0%	48.0%		12.0%	48.0%	
Maximum Green (s)	25.0	25.0		25.0	25.0		13.0	67.0		13.0	67.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		None	C-Max		None	Max	
Walk Time (s)	8.0	8.0		8.0	8.0			8.0			8.0	
Flash Dont Walk (s)	12.0	12.0		12.0	12.0			12.0			12.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
v/c Ratio	0.70	0.91		0.80	0.48	0.06	0.77	0.53		0.20	0.96	
Control Delay	74.2	85.4		88.6	66.8	0.1	52.8	24.2		15.4	60.2	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	74.2	85.4		88.6	66.8	0.1	52.8	24.2		15.4	60.2	
Queue Length 50th (ft)	174	219		167	102	0	106	311		23	~822	
Queue Length 95th (ft)	261	#372		245	162	0	#261	417		47	#1079	
Internal Link Dist (ft)		146			844			690			156	
Turn Bay Length (ft)	100			150		210	230			150		
Base Capacity (vph)	295	319		278	292	1599	231	1750		367	831	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.64	0.84		0.63	0.38	0.06	0.77	0.53		0.16	0.96	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 70 (47%), Referenced to phase 6:NETL, Start of Red
Natural Cycle: 90
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: US Route 6 & Baldwin Place Road/NYS Route 118

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	173	98	149	160	102	95	164	716	143	53	592	140
Future Volume (veh/h)	173	98	149	160	102	95	164	716	143	53	592	140
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1949	1949	1949	1776	1776	1776	2027	2027	2027
Adj Flow Rate, veh/h	188	107	0	174	111	0	178	778	155	58	643	152
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	215	226		203	213		210	1362	271	294	708	167
Arrive On Green	0.12	0.12	0.00	0.11	0.11	0.00	0.07	0.49	0.49	0.03	0.45	0.45
Sat Flow, veh/h	1781	1870	0	1856	1949	1651	1692	2804	559	1931	1585	375
Grp Volume(v), veh/h	188	107	0	174	111	0	178	468	465	58	0	795
Grp Sat Flow(s),veh/h/ln	1781	1870	0	1856	1949	1651	1692	1687	1676	1931	0	1960
Q Serve(g_s), s	15.6	8.0	0.0	13.8	8.1	0.0	8.3	29.6	29.6	2.4	0.0	56.6
Cycle Q Clear(g_c), s	15.6	8.0	0.0	13.8	8.1	0.0	8.3	29.6	29.6	2.4	0.0	56.6
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.33	1.00		0.19
Lane Grp Cap(c), veh/h	215	226		203	213		210	820	814	294	0	875
V/C Ratio(X)	0.87	0.47		0.86	0.52		0.85	0.57	0.57	0.20	0.00	0.91
Avail Cap(c_a), veh/h	297	312		309	325		239	820	814	403	0	875
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	64.8	61.5	0.0	65.6	63.1	0.0	33.1	27.4	27.4	23.2	0.0	38.6
Incr Delay (d2), s/veh	14.9	0.6	0.0	9.0	0.7	0.0	19.4	2.9	2.9	0.1	0.0	14.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	3.9	0.0	7.1	4.1	0.0	4.4	12.7	12.6	1.1	0.0	30.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	79.7	62.1	0.0	74.6	63.8	0.0	52.6	30.3	30.3	23.3	0.0	53.6
LnGrp LOS	E	E		E	E		D	C	C	C	A	D
Approach Vol, veh/h		295	A		285	A		1111			853	
Approach Delay, s/veh		73.3			70.4			33.9			51.5	
Approach LOS		E			E			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.4	72.0		23.1	9.6	77.9		21.4				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	13.0	67.0		25.0	13.0	67.0		25.0				
Max Q Clear Time (g_c+I1), s	10.3	58.6		17.6	4.4	31.6		15.8				
Green Ext Time (p_c), s	0.1	2.3		0.6	0.1	3.6		0.6				

Intersection Summary		
HCM 6th Ctrl Delay	48.5	
HCM 6th LOS	D	

Notes

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

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	0	6	0	976	779	13
Future Volume (vph)	0	6	0	976	779	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	-3%			0%	0%	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt		0.865			0.998	
Flt Protected						
Satd. Flow (prot)	0	1635	0	3539	1859	0
Flt Permitted						
Satd. Flow (perm)	0	1635	0	3539	1859	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	262			236	844	
Travel Time (s)	6.0			5.4	19.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	7	0	1061	847	14
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	7	0	1061	861	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			10	10	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.98	0.98	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	0	6	0	976	779	13
Future Vol, veh/h	0	6	0	976	779	13
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, %	-3	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	7	0	1061	847	14

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	854	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	5.93	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.319	-	-	-	-
Pot Cap-1 Maneuver	0	384	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	384	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	14.5	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NET	SELn1	SWT	SWR
Capacity (veh/h)	-	384	-	-
HCM Lane V/C Ratio	-	0.017	-	-
HCM Control Delay (s)	-	14.5	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0.1	-	-

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	4	343	370	21	15	2
Future Volume (vph)	4	343	370	21	15	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		0%	0%		-3%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.993		0.985	
Flt Protected		0.999			0.957	
Satd. Flow (prot)	0	1861	1850	0	1782	0
Flt Permitted		0.999			0.957	
Satd. Flow (perm)	0	1861	1850	0	1782	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		704	502		255	
Travel Time (s)		16.0	11.4		5.8	
Confl. Peds. (#/hr)					2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	4	373	402	23	16	2
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	377	425	0	18	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	0.98	0.98
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	4	343	370	21	15	2
Future Vol, veh/h	4	343	370	21	15	2
Conflicting Peds, #/hr	0	0	0	0	2	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	-3	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	373	402	23	16	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	425	0	-	0	797	414
Stage 1	-	-	-	-	414	-
Stage 2	-	-	-	-	383	-
Critical Hdwy	4.12	-	-	-	5.82	5.92
Critical Hdwy Stg 1	-	-	-	-	4.82	-
Critical Hdwy Stg 2	-	-	-	-	4.82	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1134	-	-	-	406	661
Stage 1	-	-	-	-	715	-
Stage 2	-	-	-	-	735	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1134	-	-	-	404	661
Mov Cap-2 Maneuver	-	-	-	-	404	-
Stage 1	-	-	-	-	712	-
Stage 2	-	-	-	-	735	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	13.9
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1134	-	-	-	423
HCM Lane V/C Ratio	0.004	-	-	-	0.044
HCM Control Delay (s)	8.2	0	-	-	13.9
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	321	0	8	180	4	0	2	15	14	0	11
Future Volume (vph)	10	321	0	8	180	4	0	2	15	14	0	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	10	10	12	12	12	12	12	12	12
Grade (%)		2%			2%			10%			-5%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.997			0.880			0.940	
Flt Protected		0.998			0.998						0.973	
Satd. Flow (prot)	0	1840	0	0	1713	0	0	1557	0	0	1746	0
Flt Permitted		0.998			0.998						0.973	
Satd. Flow (perm)	0	1840	0	0	1713	0	0	1557	0	0	1746	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		502			226			600			438	
Travel Time (s)		11.4			5.1			13.6			10.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	349	0	9	196	4	0	2	16	15	0	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	360	0	0	209	0	0	18	0	0	27	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)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	1.11	1.11	1.01	1.07	1.07	1.07	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

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	10	321	0	8	180	4	0	2	15	14	0	11
Future Vol, veh/h	10	321	0	8	180	4	0	2	15	14	0	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	2	-	-	10	-	-	-5	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	349	0	9	196	4	0	2	16	15	0	12

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	200	0	0	349	0	0	593	589	349	596	587	198
Stage 1	-	-	-	-	-	-	371	371	-	216	216	-
Stage 2	-	-	-	-	-	-	222	218	-	380	371	-
Critical Hdwy	4.12	-	-	4.12	-	-	9.12	8.52	7.22	6.12	5.52	5.72
Critical Hdwy Stg 1	-	-	-	-	-	-	8.12	7.52	-	5.12	4.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	8.12	7.52	-	5.12	4.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1372	-	-	1210	-	-	300	303	630	490	497	867
Stage 1	-	-	-	-	-	-	528	504	-	835	769	-
Stage 2	-	-	-	-	-	-	690	640	-	714	687	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1372	-	-	1210	-	-	292	298	630	468	488	867
Mov Cap-2 Maneuver	-	-	-	-	-	-	292	298	-	468	488	-
Stage 1	-	-	-	-	-	-	523	499	-	827	763	-
Stage 2	-	-	-	-	-	-	675	635	-	686	680	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.3	11.7	11.4
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	557	1372	-	-	1210	-	-	587
HCM Lane V/C Ratio	0.033	0.008	-	-	0.007	-	-	0.046
HCM Control Delay (s)	11.7	7.6	0	-	8	0	-	11.4
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	29	196	118	138	60	20	74	451	179	25	584	48
Future Volume (vph)	29	196	118	138	60	20	74	451	179	25	584	48
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	10	10	12	10	10	10	10	10	10
Grade (%)		0%			-2%			4%			-4%	
Storage Length (ft)	100		0	150		210	230		0	150		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt		0.944				0.850		0.957			0.989	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1758	0	1668	1756	1599	1619	3098	0	1685	1754	0
Flt Permitted	0.950			0.950			0.198			0.353		
Satd. Flow (perm)	1770	1758	0	1668	1756	1599	337	3098	0	626	1754	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		17				124		50			3	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		226			924			770			236	
Travel Time (s)		5.1			21.0			17.5			5.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	32	213	128	150	65	22	80	490	195	27	635	52
Shared Lane Traffic (%)												
Lane Group Flow (vph)	32	341	0	150	65	22	80	685	0	27	687	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)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.08	1.08	0.99	1.12	1.12	1.12	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2		2	2	0	2	2		2	2	
Detector Template												
Leading Detector (ft)	83	83		83	83	0	83	83		83	83	
Trailing Detector (ft)	-5	-5		-5	-5	0	-5	-5		-5	-5	
Detector 1 Position(ft)	-5	-5		-5	-5	0	-5	-5		-5	-5	
Detector 1 Size(ft)	40	40		40	40	20	40	40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)	43	43		43	43		43	43		43	43	
Detector 2 Size(ft)	40	40		40	40		40	40		40	40	
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	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	0.0		0.0	0.0	
Turn Type	Split	NA		Split	NA	Free	pm+pt	NA		pm+pt	NA	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases	4	4		8	8		1	6		5	2	
Permitted Phases						Free	6			2		
Detector Phase	4	4		8	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		10.0	15.0		10.0	15.0	
Total Split (s)	30.0	30.0		30.0	30.0		20.0	70.0		20.0	70.0	
Total Split (%)	20.0%	20.0%		20.0%	20.0%		13.3%	46.7%		13.3%	46.7%	
Maximum Green (s)	25.0	25.0		25.0	25.0		15.0	65.0		15.0	65.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		None	C-Max		None	Max	
Walk Time (s)	8.0	8.0		8.0	8.0			8.0			8.0	
Flash Dont Walk (s)	12.0	12.0		12.0	12.0			12.0			12.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
v/c Ratio	0.11	1.11		0.75	0.31	0.01	0.30	0.38		0.07	0.74	
Control Delay	54.3	137.2		86.0	62.6	0.0	15.7	18.5		13.4	34.7	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	54.3	137.2		86.0	62.6	0.0	15.7	18.5		13.4	34.7	
Queue Length 50th (ft)	27	~366		144	59	0	30	184		10	504	
Queue Length 95th (ft)	60	#572		214	104	0	61	262		26	770	
Internal Link Dist (ft)		146			844			690			156	
Turn Bay Length (ft)	100			150		210	230			150		
Base Capacity (vph)	295	307		278	292	1599	335	1785		489	929	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.11	1.11		0.54	0.22	0.01	0.24	0.38		0.06	0.74	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 70 (47%), Referenced to phase 6:NETL, Start of Red
Natural Cycle: 90
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: US Route 6 & Baldwin Place Road/NYS Route 118

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	29	196	118	138	60	20	74	451	179	25	584	48
Future Volume (veh/h)	29	196	118	138	60	20	74	451	179	25	584	48
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1949	1949	1949	1776	1776	1776	2027	2027	2027
Adj Flow Rate, veh/h	32	213	0	150	65	0	80	490	195	27	635	52
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	228	239		178	187		212	1062	420	341	801	66
Arrive On Green	0.13	0.13	0.00	0.10	0.10	0.00	0.04	0.45	0.45	0.02	0.43	0.43
Sat Flow, veh/h	1781	1870	0	1856	1949	1651	1692	2361	934	1931	1849	151
Grp Volume(v), veh/h	32	213	0	150	65	0	80	349	336	27	0	687
Grp Sat Flow(s),veh/h/ln	1781	1870	0	1856	1949	1651	1692	1687	1608	1931	0	2000
Q Serve(g_s), s	2.4	16.8	0.0	11.9	4.7	0.0	3.9	21.6	21.8	1.2	0.0	44.5
Cycle Q Clear(g_c), s	2.4	16.8	0.0	11.9	4.7	0.0	3.9	21.6	21.8	1.2	0.0	44.5
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.58	1.00		0.08
Lane Grp Cap(c), veh/h	228	239		178	187		212	759	723	341	0	867
V/C Ratio(X)	0.14	0.89		0.84	0.35		0.38	0.46	0.46	0.08	0.00	0.79
Avail Cap(c_a), veh/h	297	312		309	325		315	759	723	491	0	867
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	58.1	64.4	0.0	66.7	63.4	0.0	29.4	28.6	28.7	23.8	0.0	36.7
Incr Delay (d2), s/veh	0.1	18.5	0.0	4.1	0.4	0.0	0.4	2.0	2.1	0.0	0.0	7.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	9.3	0.0	5.9	2.4	0.0	1.6	9.3	8.9	0.5	0.0	23.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.2	82.8	0.0	70.8	63.8	0.0	29.8	30.7	30.8	23.8	0.0	44.0
LnGrp LOS	E	F		E	E		C	C	C	C	A	D
Approach Vol, veh/h		245	A		215	A		765			714	
Approach Delay, s/veh		79.6			68.7			30.6			43.3	
Approach LOS		E			E			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.8	70.0		24.2	8.4	72.4		19.4				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	15.0	65.0		25.0	15.0	65.0		25.0				
Max Q Clear Time (g_c+I1), s	5.9	46.5		18.8	3.2	23.8		13.9				
Green Ext Time (p_c), s	0.1	2.6		0.4	0.0	2.5		0.5				

Intersection Summary			
HCM 6th Ctrl Delay		45.7	
HCM 6th LOS		D	

Notes

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

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	321	21	8	180	4	0	17	15	14	0	11
Future Volume (vph)	10	321	21	8	180	4	0	17	15	14	0	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	10	10	12	12	12	12	12	12	12
Grade (%)		2%			2%			10%			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
Frt		0.992			0.997			0.936			0.940	
Flt Protected		0.999			0.998						0.973	
Satd. Flow (prot)	0	1828	0	0	1713	0	0	1656	0	0	1704	0
Flt Permitted		0.999			0.998						0.973	
Satd. Flow (perm)	0	1828	0	0	1713	0	0	1656	0	0	1704	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		502			226			600			191	
Travel Time (s)		11.4			5.1			13.6			4.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	349	23	9	196	4	0	18	16	15	0	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	383	0	0	209	0	0	34	0	0	27	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)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	1.11	1.11	1.01	1.07	1.07	1.07	1.00	1.00	1.00
Turning Speed (mph)	60		9	15		60	15		9	60		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	10	321	21	8	180	4	0	17	15	14	0	11
Future Vol, veh/h	10	321	21	8	180	4	0	17	15	14	0	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	2	-	-	10	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	349	23	9	196	4	0	18	16	15	0	12

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	200	0	0	372	0	0	605	601	361	616	610	198
Stage 1	-	-	-	-	-	-	383	383	-	216	216	-
Stage 2	-	-	-	-	-	-	222	218	-	400	394	-
Critical Hdwy	4.12	-	-	4.12	-	-	9.12	8.52	7.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	8.12	7.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	8.12	7.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1372	-	-	1186	-	-	293	297	618	403	409	843
Stage 1	-	-	-	-	-	-	517	495	-	786	724	-
Stage 2	-	-	-	-	-	-	690	640	-	626	605	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1372	-	-	1186	-	-	285	291	618	368	401	843
Mov Cap-2 Maneuver	-	-	-	-	-	-	285	291	-	368	401	-
Stage 1	-	-	-	-	-	-	512	490	-	778	717	-
Stage 2	-	-	-	-	-	-	674	634	-	581	599	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.3	15.2	12.8
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	387	1372	-	-	1186	-	-	489
HCM Lane V/C Ratio	0.09	0.008	-	-	0.007	-	-	0.056
HCM Control Delay (s)	15.2	7.6	0	-	8.1	0	-	12.8
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	0.2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	40	201	122	138	67	20	86	451	179	27	590	48
Future Volume (vph)	40	201	122	138	67	20	86	451	179	27	590	48
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	10	10	12	10	10	10	10	10	10
Grade (%)		0%			-2%			4%			-4%	
Storage Length (ft)	100		0	150		210	230		0	150		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt		0.943				0.850		0.957			0.989	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1757	0	1668	1756	1599	1619	3098	0	1685	1754	0
Flt Permitted	0.950			0.950			0.189			0.355		
Satd. Flow (perm)	1770	1757	0	1668	1756	1599	322	3098	0	630	1754	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		18				124		50			3	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		226			924			770			236	
Travel Time (s)		5.1			21.0			17.5			5.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	43	218	133	150	73	22	93	490	195	29	641	52
Shared Lane Traffic (%)												
Lane Group Flow (vph)	43	351	0	150	73	22	93	685	0	29	693	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)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.08	1.08	0.99	1.12	1.12	1.12	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2		2	2	0	2	2		2	2	
Detector Template												
Leading Detector (ft)	83	83		83	83	0	83	83		83	83	
Trailing Detector (ft)	-5	-5		-5	-5	0	-5	-5		-5	-5	
Detector 1 Position(ft)	-5	-5		-5	-5	0	-5	-5		-5	-5	
Detector 1 Size(ft)	40	40		40	40	20	40	40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)	43	43		43	43		43	43		43	43	
Detector 2 Size(ft)	40	40		40	40		40	40		40	40	
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	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	0.0		0.0	0.0	
Turn Type	Split	NA		Split	NA	Free	pm+pt	NA		pm+pt	NA	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases	4	4		8	8		1	6		5	2	
Permitted Phases						Free	6			2		
Detector Phase	4	4		8	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		10.0	15.0		10.0	15.0	
Total Split (s)	30.0	30.0		30.0	30.0		20.0	70.0		20.0	70.0	
Total Split (%)	20.0%	20.0%		20.0%	20.0%		13.3%	46.7%		13.3%	46.7%	
Maximum Green (s)	25.0	25.0		25.0	25.0		15.0	65.0		15.0	65.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		None	C-Max		None	Max	
Walk Time (s)	8.0	8.0		8.0	8.0			8.0			8.0	
Flash Dont Walk (s)	12.0	12.0		12.0	12.0			12.0			12.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
v/c Ratio	0.15	1.14		0.75	0.35	0.01	0.35	0.38		0.07	0.75	
Control Delay	55.0	147.0		86.0	63.7	0.0	16.6	18.6		13.5	35.6	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	55.0	147.0		86.0	63.7	0.0	16.6	18.6		13.5	35.6	
Queue Length 50th (ft)	36	~385		144	67	0	36	184		11	515	
Queue Length 95th (ft)	75	#593		214	114	0	70	263		28	#806	
Internal Link Dist (ft)		146			844			690			156	
Turn Bay Length (ft)	100			150		210	230			150		
Base Capacity (vph)	295	307		278	292	1599	327	1783		490	922	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.15	1.14		0.54	0.25	0.01	0.28	0.38		0.06	0.75	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 70 (47%), Referenced to phase 6:NETL, Start of Red
Natural Cycle: 90
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: US Route 6 & Baldwin Place Road/NYS Route 118

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	40	201	122	138	67	20	86	451	179	27	590	48
Future Volume (veh/h)	40	201	122	138	67	20	86	451	179	27	590	48
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1949	1949	1949	1776	1776	1776	2027	2027	2027
Adj Flow Rate, veh/h	43	218	0	150	73	0	93	490	195	29	641	52
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	233	244		178	187		217	1071	424	347	802	65
Arrive On Green	0.13	0.13	0.00	0.10	0.10	0.00	0.04	0.45	0.45	0.02	0.43	0.43
Sat Flow, veh/h	1781	1870	0	1856	1949	1651	1692	2361	934	1931	1850	150
Grp Volume(v), veh/h	43	218	0	150	73	0	93	349	336	29	0	693
Grp Sat Flow(s),veh/h/ln	1781	1870	0	1856	1949	1651	1692	1687	1608	1931	0	2000
Q Serve(g_s), s	3.2	17.2	0.0	11.9	5.3	0.0	4.6	21.4	21.6	1.2	0.0	45.1
Cycle Q Clear(g_c), s	3.2	17.2	0.0	11.9	5.3	0.0	4.6	21.4	21.6	1.2	0.0	45.1
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.58	1.00		0.08
Lane Grp Cap(c), veh/h	233	244		178	187		217	765	729	347	0	867
V/C Ratio(X)	0.18	0.89		0.84	0.39		0.43	0.46	0.46	0.08	0.00	0.80
Avail Cap(c_a), veh/h	297	312		309	325		312	765	729	495	0	867
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	58.1	64.2	0.0	66.7	63.7	0.0	29.5	28.2	28.3	23.7	0.0	36.9
Incr Delay (d2), s/veh	0.1	19.4	0.0	4.0	0.5	0.0	0.5	2.0	2.1	0.0	0.0	7.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	9.5	0.0	5.9	2.7	0.0	1.9	9.2	8.9	0.6	0.0	23.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.2	83.6	0.0	70.7	64.2	0.0	30.0	30.2	30.4	23.7	0.0	44.5
LnGrp LOS	E	F		E	E		C	C	C	C	A	D
Approach Vol, veh/h		261	A		223	A		778			722	
Approach Delay, s/veh		79.4			68.6			30.2			43.7	
Approach LOS		E			E			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.6	70.0		24.6	8.5	73.0		19.4				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	15.0	65.0		25.0	15.0	65.0		25.0				
Max Q Clear Time (g_c+I1), s	6.6	47.1		19.2	3.2	23.6		13.9				
Green Ext Time (p_c), s	0.1	2.6		0.4	0.0	2.5		0.5				

Intersection Summary			
HCM 6th Ctrl Delay		45.9	
HCM 6th LOS		D	

Notes

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

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	0	8	0	499	657	12
Future Volume (vph)	0	8	0	499	657	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	-3%			0%	0%	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt		0.865			0.998	
Flt Protected						
Satd. Flow (prot)	0	1635	0	3539	1859	0
Flt Permitted						
Satd. Flow (perm)	0	1635	0	3539	1859	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	262			236	844	
Travel Time (s)	6.0			5.4	19.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	9	0	542	714	13
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	9	0	542	727	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			10	10	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.98	0.98	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.1

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	0	8	0	499	657	12
Future Vol, veh/h	0	8	0	499	657	12
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, %	-3	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	9	0	542	714	13

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	721	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	5.93	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.319	-	-	-	-
Pot Cap-1 Maneuver	0	453	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	453	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	13.1	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NET	SELn1	SWT	SWR
Capacity (veh/h)	-	453	-	-
HCM Lane V/C Ratio	-	0.019	-	-
HCM Control Delay (s)	-	13.1	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0.1	-	-

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	3	331	191	18	21	3
Future Volume (vph)	3	331	191	18	21	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		0%	0%		-3%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.988		0.984	
Flt Protected					0.958	
Satd. Flow (prot)	0	1863	1840	0	1782	0
Flt Permitted					0.958	
Satd. Flow (perm)	0	1863	1840	0	1782	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		704	502		255	
Travel Time (s)		16.0	11.4		5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	3	360	208	20	23	3
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	363	228	0	26	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	0.98	0.98
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	331	191	18	21	3
Future Vol, veh/h	3	331	191	18	21	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	-3	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	360	208	20	23	3

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	228	0	-	0	584	218
Stage 1	-	-	-	-	218	-
Stage 2	-	-	-	-	366	-
Critical Hdwy	4.12	-	-	-	5.82	5.92
Critical Hdwy Stg 1	-	-	-	-	4.82	-
Critical Hdwy Stg 2	-	-	-	-	4.82	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1340	-	-	-	522	837
Stage 1	-	-	-	-	849	-
Stage 2	-	-	-	-	746	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1340	-	-	-	520	837
Mov Cap-2 Maneuver	-	-	-	-	520	-
Stage 1	-	-	-	-	846	-
Stage 2	-	-	-	-	746	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	11.9
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1340	-	-	-	546
HCM Lane V/C Ratio	0.002	-	-	-	0.048
HCM Control Delay (s)	7.7	0	-	-	11.9
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	226	0	17	337	6	1	0	13	25	0	11
Future Volume (vph)	3	226	0	17	337	6	1	0	13	25	0	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	10	10	12	12	12	12	12	12	12
Grade (%)		2%			2%			10%			-5%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.998			0.874			0.958	
Flt Protected		0.999			0.998			0.997			0.967	
Satd. Flow (prot)	0	1842	0	0	1714	0	0	1542	0	0	1769	0
Flt Permitted		0.999			0.998			0.997			0.967	
Satd. Flow (perm)	0	1842	0	0	1714	0	0	1542	0	0	1769	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		502			226			600			438	
Travel Time (s)		11.4			5.1			13.6			10.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	3	246	0	18	366	7	1	0	14	27	0	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	249	0	0	391	0	0	15	0	0	39	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)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	1.11	1.11	1.01	1.07	1.07	1.07	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

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	3	226	0	17	337	6	1	0	13	25	0	11
Future Vol, veh/h	3	226	0	17	337	6	1	0	13	25	0	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	2	-	-	10	-	-	-5	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	246	0	18	366	7	1	0	14	27	0	12

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	373	0	0	246	0	0	664	661	246	665	658	370
Stage 1	-	-	-	-	-	-	252	252	-	406	406	-
Stage 2	-	-	-	-	-	-	412	409	-	259	252	-
Critical Hdwy	4.12	-	-	4.12	-	-	9.12	8.52	7.22	6.12	5.52	5.72
Critical Hdwy Stg 1	-	-	-	-	-	-	8.12	7.52	-	5.12	4.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	8.12	7.52	-	5.12	4.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1185	-	-	1320	-	-	259	265	740	449	461	711
Stage 1	-	-	-	-	-	-	654	607	-	696	669	-
Stage 2	-	-	-	-	-	-	491	475	-	801	749	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1185	-	-	1320	-	-	251	260	740	434	452	711
Mov Cap-2 Maneuver	-	-	-	-	-	-	251	260	-	434	452	-
Stage 1	-	-	-	-	-	-	652	605	-	694	658	-
Stage 2	-	-	-	-	-	-	475	467	-	783	747	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.4	10.7	12.9
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	650	1185	-	-	1320	-	-	493
HCM Lane V/C Ratio	0.023	0.003	-	-	0.014	-	-	0.079
HCM Control Delay (s)	10.7	8	0	-	7.8	0	-	12.9
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.3

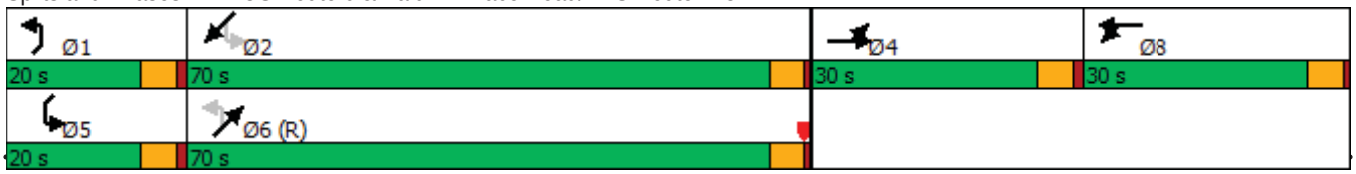
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	31	111	94	174	209	69	135	682	119	47	522	21
Future Volume (vph)	31	111	94	174	209	69	135	682	119	47	522	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	10	10	12	10	10	10	10	10	10
Grade (%)		0%			-2%			4%			-4%	
Storage Length (ft)	100		0	150		210	230		0	150		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt		0.931				0.850		0.978			0.994	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1734	0	1668	1756	1599	1619	3166	0	1685	1763	0
Flt Permitted	0.950			0.950			0.245			0.269		
Satd. Flow (perm)	1770	1734	0	1668	1756	1599	417	3166	0	477	1763	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		24				124		17			2	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		226			924			770			236	
Travel Time (s)		5.1			21.0			17.5			5.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	34	121	102	189	227	75	147	741	129	51	567	23
Shared Lane Traffic (%)												
Lane Group Flow (vph)	34	223	0	189	227	75	147	870	0	51	590	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)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.08	1.08	0.99	1.12	1.12	1.12	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2		2	2	0	2	2		2	2	
Detector Template												
Leading Detector (ft)	83	83		83	83	0	83	83		83	83	
Trailing Detector (ft)	-5	-5		-5	-5	0	-5	-5		-5	-5	
Detector 1 Position(ft)	-5	-5		-5	-5	0	-5	-5		-5	-5	
Detector 1 Size(ft)	40	40		40	40	20	40	40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)	43	43		43	43		43	43		43	43	
Detector 2 Size(ft)	40	40		40	40		40	40		40	40	
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	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	0.0		0.0	0.0	
Turn Type	Split	NA		Split	NA	Free	pm+pt	NA		pm+pt	NA	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases	4	4		8	8		1	6		5	2	
Permitted Phases						Free	6			2		
Detector Phase	4	4		8	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		10.0	15.0		10.0	15.0	
Total Split (s)	30.0	30.0		30.0	30.0		20.0	70.0		20.0	70.0	
Total Split (%)	20.0%	20.0%		20.0%	20.0%		13.3%	46.7%		13.3%	46.7%	
Maximum Green (s)	25.0	25.0		25.0	25.0		15.0	65.0		15.0	65.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		None	C-Max		None	Max	
Walk Time (s)	8.0	8.0		8.0	8.0			8.0			8.0	
Flash Dont Walk (s)	12.0	12.0		12.0	12.0			12.0			12.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
v/c Ratio	0.14	0.85		0.76	0.87	0.05	0.43	0.50		0.16	0.66	
Control Delay	55.9	83.3		80.6	92.1	0.1	17.9	23.8		15.2	34.2	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	55.9	83.3		80.6	92.1	0.1	17.9	23.8		15.2	34.2	
Queue Length 50th (ft)	29	192		177	217	0	62	286		20	435	
Queue Length 95th (ft)	63	285		266	#338	0	105	378		43	645	
Internal Link Dist (ft)		146			844			690			156	
Turn Bay Length (ft)	100			150		210	230			150		
Base Capacity (vph)	295	309		278	292	1599	375	1741		407	894	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.12	0.72		0.68	0.78	0.05	0.39	0.50		0.13	0.66	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 70 (47%), Referenced to phase 6:NETL, Start of Red
Natural Cycle: 80
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: US Route 6 & Baldwin Place Road/NYS Route 118



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	31	111	94	174	209	69	135	682	119	47	522	21
Future Volume (veh/h)	31	111	94	174	209	69	135	682	119	47	522	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1949	1949	1949	1776	1776	1776	2027	2027	2027
Adj Flow Rate, veh/h	34	121	0	189	227	0	147	741	129	51	567	23
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	141	148		246	258		308	1337	233	298	838	34
Arrive On Green	0.08	0.08	0.00	0.13	0.13	0.00	0.06	0.47	0.47	0.03	0.43	0.43
Sat Flow, veh/h	1781	1870	0	1856	1949	1651	1692	2873	500	1931	1935	78
Grp Volume(v), veh/h	34	121	0	189	227	0	147	435	435	51	0	590
Grp Sat Flow(s),veh/h/ln	1781	1870	0	1856	1949	1651	1692	1687	1686	1931	0	2013
Q Serve(g_s), s	2.7	9.6	0.0	14.8	17.2	0.0	7.0	27.9	27.9	2.2	0.0	35.2
Cycle Q Clear(g_c), s	2.7	9.6	0.0	14.8	17.2	0.0	7.0	27.9	27.9	2.2	0.0	35.2
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.30	1.00		0.04
Lane Grp Cap(c), veh/h	141	148		246	258		308	785	785	298	0	872
V/C Ratio(X)	0.24	0.82		0.77	0.88		0.48	0.55	0.55	0.17	0.00	0.68
Avail Cap(c_a), veh/h	297	312		309	325		373	785	785	434	0	872
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	64.8	68.0	0.0	62.8	63.9	0.0	25.6	28.9	28.9	24.2	0.0	34.1
Incr Delay (d2), s/veh	0.3	4.2	0.0	6.5	17.1	0.0	0.4	2.8	2.8	0.1	0.0	4.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	4.8	0.0	7.4	9.8	0.0	2.9	12.0	12.0	1.0	0.0	18.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	65.2	72.1	0.0	69.3	81.0	0.0	26.0	31.7	31.7	24.3	0.0	38.3
LnGrp LOS	E	E		E	F		C	C	C	C	A	D
Approach Vol, veh/h		155	A		416	A		1017			641	
Approach Delay, s/veh		70.6			75.7			30.9			37.1	
Approach LOS		E			E			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.2	70.0		16.9	9.4	74.8		24.9				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	15.0	65.0		25.0	15.0	65.0		25.0				
Max Q Clear Time (g_c+I1), s	9.0	37.2		11.6	4.2	29.9		19.2				
Green Ext Time (p_c), s	0.2	2.2		0.3	0.1	3.3		0.7				

Intersection Summary	
HCM 6th Ctrl Delay	43.8
HCM 6th LOS	D

Notes

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

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	226	21	17	337	6	1	15	13	25	0	11
Future Volume (vph)	3	226	21	17	337	6	1	15	13	25	0	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	10	10	12	12	12	12	12	12	12
Grade (%)		2%			2%			10%			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
Frt		0.989			0.998			0.939			0.958	
Flt Protected		0.999			0.998			0.998			0.967	
Satd. Flow (prot)	0	1822	0	0	1714	0	0	1658	0	0	1726	0
Flt Permitted		0.999			0.998			0.998			0.967	
Satd. Flow (perm)	0	1822	0	0	1714	0	0	1658	0	0	1726	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		502			226			600			191	
Travel Time (s)		11.4			5.1			13.6			4.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	3	246	23	18	366	7	1	16	14	27	0	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	272	0	0	391	0	0	31	0	0	39	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)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	1.11	1.11	1.01	1.07	1.07	1.07	1.00	1.00	1.00
Turning Speed (mph)	60		9	15		60	15		9	60		60
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	3	226	21	17	337	6	1	15	13	25	0	11
Future Vol, veh/h	3	226	21	17	337	6	1	15	13	25	0	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	2	-	-	10	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	246	23	18	366	7	1	16	14	27	0	12

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	373	0	0	269	0	0	676	673	258	685	681	370
Stage 1	-	-	-	-	-	-	264	264	-	406	406	-
Stage 2	-	-	-	-	-	-	412	409	-	279	275	-
Critical Hdwy	4.12	-	-	4.12	-	-	9.12	8.52	7.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	8.12	7.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	8.12	7.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1185	-	-	1295	-	-	252	259	727	362	373	676
Stage 1	-	-	-	-	-	-	640	596	-	622	598	-
Stage 2	-	-	-	-	-	-	491	475	-	728	683	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1185	-	-	1295	-	-	244	254	727	332	365	676
Mov Cap-2 Maneuver	-	-	-	-	-	-	244	254	-	332	365	-
Stage 1	-	-	-	-	-	-	638	594	-	620	587	-
Stage 2	-	-	-	-	-	-	474	466	-	692	681	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.4	16	15.2
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	358	1185	-	-	1295	-	-	393
HCM Lane V/C Ratio	0.088	0.003	-	-	0.014	-	-	0.1
HCM Control Delay (s)	16	8	0	-	7.8	0	-	15.2
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	0.3

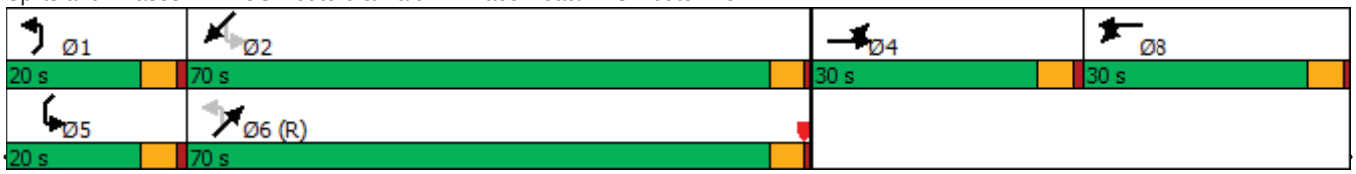
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	42	116	99	174	215	69	146	682	119	48	528	21
Future Volume (vph)	42	116	99	174	215	69	146	682	119	48	528	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	10	10	12	10	10	10	10	10	10
Grade (%)		0%			-2%			4%			-4%	
Storage Length (ft)	100		0	150		210	230		0	150		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt		0.931				0.850		0.978			0.994	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1734	0	1668	1756	1599	1619	3166	0	1685	1763	0
Flt Permitted	0.950			0.950			0.232			0.268		
Satd. Flow (perm)	1770	1734	0	1668	1756	1599	395	3166	0	475	1763	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		25				124		17			2	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		226			924			770			236	
Travel Time (s)		5.1			21.0			17.5			5.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	46	126	108	189	234	75	159	741	129	52	574	23
Shared Lane Traffic (%)												
Lane Group Flow (vph)	46	234	0	189	234	75	159	870	0	52	597	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)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.08	1.08	0.99	1.12	1.12	1.12	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2		2	2	0	2	2		2	2	
Detector Template												
Leading Detector (ft)	83	83		83	83	0	83	83		83	83	
Trailing Detector (ft)	-5	-5		-5	-5	0	-5	-5		-5	-5	
Detector 1 Position(ft)	-5	-5		-5	-5	0	-5	-5		-5	-5	
Detector 1 Size(ft)	40	40		40	40	20	40	40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)	43	43		43	43		43	43		43	43	
Detector 2 Size(ft)	40	40		40	40		40	40		40	40	
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	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	0.0		0.0	0.0	
Turn Type	Split	NA		Split	NA	Free	pm+pt	NA		pm+pt	NA	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases	4	4		8	8		1	6		5	2	
Permitted Phases						Free	6			2		
Detector Phase	4	4		8	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		10.0	15.0		10.0	15.0	
Total Split (s)	30.0	30.0		30.0	30.0		20.0	70.0		20.0	70.0	
Total Split (%)	20.0%	20.0%		20.0%	20.0%		13.3%	46.7%		13.3%	46.7%	
Maximum Green (s)	25.0	25.0		25.0	25.0		15.0	65.0		15.0	65.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		None	C-Max		None	Max	
Walk Time (s)	8.0	8.0		8.0	8.0			8.0			8.0	
Flash Dont Walk (s)	12.0	12.0		12.0	12.0			12.0			12.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
v/c Ratio	0.18	0.87		0.75	0.88	0.05	0.48	0.51		0.17	0.68	
Control Delay	56.6	84.7		78.9	93.0	0.1	19.4	24.4		15.5	35.8	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	56.6	84.7		78.9	93.0	0.1	19.4	24.4		15.5	35.8	
Queue Length 50th (ft)	40	202		176	223	0	70	295		21	460	
Queue Length 95th (ft)	79	#316		266	#354	0	113	378		43	658	
Internal Link Dist (ft)		146			844			690			156	
Turn Bay Length (ft)	100			150		210	230			150		
Base Capacity (vph)	295	309		278	292	1599	361	1718		402	876	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.16	0.76		0.68	0.80	0.05	0.44	0.51		0.13	0.68	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 70 (47%), Referenced to phase 6:NETL, Start of Red
Natural Cycle: 90
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: US Route 6 & Baldwin Place Road/NYS Route 118



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	42	116	99	174	215	69	146	682	119	48	528	21
Future Volume (veh/h)	42	116	99	174	215	69	146	682	119	48	528	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1949	1949	1949	1776	1776	1776	2027	2027	2027
Adj Flow Rate, veh/h	46	126	0	189	234	0	159	741	129	52	574	23
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	146	154		252	265		310	1348	235	301	839	34
Arrive On Green	0.08	0.08	0.00	0.14	0.14	0.00	0.07	0.47	0.47	0.03	0.43	0.43
Sat Flow, veh/h	1781	1870	0	1856	1949	1651	1692	2873	500	1931	1936	78
Grp Volume(v), veh/h	46	126	0	189	234	0	159	435	435	52	0	597
Grp Sat Flow(s),veh/h/ln	1781	1870	0	1856	1949	1651	1692	1687	1686	1931	0	2013
Q Serve(g_s), s	3.6	9.9	0.0	14.7	17.7	0.0	7.6	27.7	27.7	2.2	0.0	35.8
Cycle Q Clear(g_c), s	3.6	9.9	0.0	14.7	17.7	0.0	7.6	27.7	27.7	2.2	0.0	35.8
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.30	1.00		0.04
Lane Grp Cap(c), veh/h	146	154		252	265		310	791	791	301	0	872
V/C Ratio(X)	0.31	0.82		0.75	0.88		0.51	0.55	0.55	0.17	0.00	0.68
Avail Cap(c_a), veh/h	297	312		309	325		369	791	791	437	0	872
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	64.9	67.8	0.0	62.3	63.6	0.0	25.7	28.5	28.5	24.0	0.0	34.2
Incr Delay (d2), s/veh	0.5	4.1	0.0	5.8	18.5	0.0	0.5	2.7	2.7	0.1	0.0	4.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	4.9	0.0	7.4	10.2	0.0	3.1	11.9	11.9	1.0	0.0	18.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	65.3	71.8	0.0	68.1	82.1	0.0	26.2	31.2	31.2	24.1	0.0	38.6
LnGrp LOS	E	E		E	F		C	C	C	C	A	D
Approach Vol, veh/h		172	A		423	A		1029			649	
Approach Delay, s/veh		70.1			75.9			30.5			37.4	
Approach LOS		E			E			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.8	70.0		17.3	9.4	75.4		25.4				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	15.0	65.0		25.0	15.0	65.0		25.0				
Max Q Clear Time (g_c+I1), s	9.6	37.8		11.9	4.2	29.7		19.7				
Green Ext Time (p_c), s	0.2	2.3		0.4	0.1	3.3		0.7				

Intersection Summary			
HCM 6th Ctrl Delay		43.9	
HCM 6th LOS		D	

Notes

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

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	0	8	0	781	589	12
Future Volume (vph)	0	8	0	781	589	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	-3%			0%	0%	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt		0.865			0.997	
Flt Protected						
Satd. Flow (prot)	0	1635	0	3539	1857	0
Flt Permitted						
Satd. Flow (perm)	0	1635	0	3539	1857	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	262			236	844	
Travel Time (s)	6.0			5.4	19.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	9	0	849	640	13
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	9	0	849	653	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			10	10	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.98	0.98	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.1

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	0	8	0	781	589	12
Future Vol, veh/h	0	8	0	781	589	12
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, %	-3	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	9	0	849	640	13

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	647	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	5.93	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.319	-	-	-	-
Pot Cap-1 Maneuver	0	496	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	496	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	12.4	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NET	SELn1	SWT	SWR
Capacity (veh/h)	-	496	-	-
HCM Lane V/C Ratio	-	0.018	-	-
HCM Control Delay (s)	-	12.4	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0.1	-	-

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	3	229	349	18	21	3
Future Volume (vph)	3	229	349	18	21	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		0%	0%		-3%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.993		0.984	
Flt Protected		0.999			0.958	
Satd. Flow (prot)	0	1861	1850	0	1782	0
Flt Permitted		0.999			0.958	
Satd. Flow (perm)	0	1861	1850	0	1782	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		704	502		255	
Travel Time (s)		16.0	11.4		5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	3	249	379	20	23	3
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	252	399	0	26	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	0.98	0.98
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	229	349	18	21	3
Future Vol, veh/h	3	229	349	18	21	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	-3	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	249	379	20	23	3

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	399	0	-	0	644	389
Stage 1	-	-	-	-	389	-
Stage 2	-	-	-	-	255	-
Critical Hdwy	4.12	-	-	-	5.82	5.92
Critical Hdwy Stg 1	-	-	-	-	4.82	-
Critical Hdwy Stg 2	-	-	-	-	4.82	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1160	-	-	-	487	681
Stage 1	-	-	-	-	731	-
Stage 2	-	-	-	-	822	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1160	-	-	-	486	681
Mov Cap-2 Maneuver	-	-	-	-	486	-
Stage 1	-	-	-	-	729	-
Stage 2	-	-	-	-	822	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	12.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1160	-	-	-	504
HCM Lane V/C Ratio	0.003	-	-	-	0.052
HCM Control Delay (s)	8.1	0	-	-	12.5
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	213	0	18	235	2	0	0	18	33	1	18
Future Volume (vph)	8	213	0	18	235	2	0	0	18	33	1	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	10	10	12	12	12	12	12	12	12
Grade (%)		2%			2%			10%			-5%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.999			0.865			0.953	
Flt Protected		0.998			0.996						0.969	
Satd. Flow (prot)	0	1840	0	0	1713	0	0	1531	0	0	1763	0
Flt Permitted		0.998			0.996						0.969	
Satd. Flow (perm)	0	1840	0	0	1713	0	0	1531	0	0	1763	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		502			226			600			438	
Travel Time (s)		11.4			5.1			13.6			10.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	9	232	0	20	255	2	0	0	20	36	1	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	241	0	0	277	0	0	20	0	0	57	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)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	1.11	1.11	1.01	1.07	1.07	1.07	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	8	213	0	18	235	2	0	0	18	33	1	18
Future Vol, veh/h	8	213	0	18	235	2	0	0	18	33	1	18
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	2	-	-	10	-	-	-5	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	232	0	20	255	2	0	0	20	36	1	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	257	0	0	232	0	0	557	547	232	556	546	256
Stage 1	-	-	-	-	-	-	250	250	-	296	296	-
Stage 2	-	-	-	-	-	-	307	297	-	260	250	-
Critical Hdwy	4.12	-	-	4.12	-	-	9.12	8.52	7.22	6.12	5.52	5.72
Critical Hdwy Stg 1	-	-	-	-	-	-	8.12	7.52	-	5.12	4.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	8.12	7.52	-	5.12	4.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1308	-	-	1336	-	-	324	328	757	515	518	811
Stage 1	-	-	-	-	-	-	656	609	-	774	726	-
Stage 2	-	-	-	-	-	-	593	566	-	801	750	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1308	-	-	1336	-	-	310	320	757	492	505	811
Mov Cap-2 Maneuver	-	-	-	-	-	-	310	320	-	492	505	-
Stage 1	-	-	-	-	-	-	651	604	-	768	714	-
Stage 2	-	-	-	-	-	-	568	556	-	774	744	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.5	9.9	12
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	757	1308	-	-	1336	-	-	570
HCM Lane V/C Ratio	0.026	0.007	-	-	0.015	-	-	0.099
HCM Control Delay (s)	9.9	7.8	0	-	7.7	0	-	12
HCM Lane LOS	A	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.3

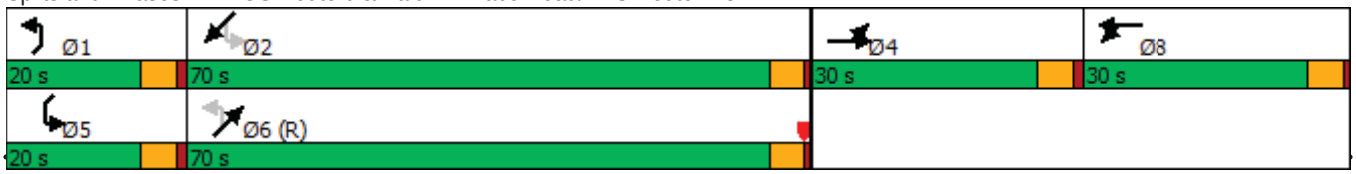
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	43	94	145	160	94	95	151	716	143	52	587	23
Future Volume (vph)	43	94	145	160	94	95	151	716	143	52	587	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	10	10	12	10	10	10	10	10	10
Grade (%)		0%			-2%			4%			-4%	
Storage Length (ft)	100		0	150		210	230		0	150		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt		0.909				0.850		0.975			0.994	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1693	0	1668	1756	1599	1619	3156	0	1685	1763	0
Flt Permitted	0.950			0.950			0.198			0.247		
Satd. Flow (perm)	1770	1693	0	1668	1756	1599	337	3156	0	438	1763	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		45				124		20			2	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		226			924			770			236	
Travel Time (s)		5.1			21.0			17.5			5.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	47	102	158	174	102	103	164	778	155	57	638	25
Shared Lane Traffic (%)												
Lane Group Flow (vph)	47	260	0	174	102	103	164	933	0	57	663	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)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.08	1.08	0.99	1.12	1.12	1.12	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2		2	2	0	2	2		2	2	
Detector Template												
Leading Detector (ft)	83	83		83	83	0	83	83		83	83	
Trailing Detector (ft)	-5	-5		-5	-5	0	-5	-5		-5	-5	
Detector 1 Position(ft)	-5	-5		-5	-5	0	-5	-5		-5	-5	
Detector 1 Size(ft)	40	40		40	40	20	40	40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)	43	43		43	43		43	43		43	43	
Detector 2 Size(ft)	40	40		40	40		40	40		40	40	
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	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	0.0		0.0	0.0	
Turn Type	Split	NA		Split	NA	Free	pm+pt	NA		pm+pt	NA	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases	4	4		8	8		1	6		5	2	
Permitted Phases						Free	6			2		
Detector Phase	4	4		8	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		10.0	15.0		10.0	15.0	
Total Split (s)	30.0	30.0		30.0	30.0		20.0	70.0		20.0	70.0	
Total Split (%)	20.0%	20.0%		20.0%	20.0%		13.3%	46.7%		13.3%	46.7%	
Maximum Green (s)	25.0	25.0		25.0	25.0		15.0	65.0		15.0	65.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		None	C-Max		None	Max	
Walk Time (s)	8.0	8.0		8.0	8.0			8.0			8.0	
Flash Dont Walk (s)	12.0	12.0		12.0	12.0			12.0			12.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
v/c Ratio	0.18	0.90		0.80	0.45	0.06	0.54	0.53		0.19	0.73	
Control Delay	56.1	83.0		88.6	65.4	0.1	20.3	23.9		15.0	36.7	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	56.1	83.0		88.6	65.4	0.1	20.3	23.9		15.0	36.7	
Queue Length 50th (ft)	40	208		167	93	0	68	309		22	516	
Queue Length 95th (ft)	80	#350		245	151	0	116	416		46	#814	
Internal Link Dist (ft)		146			844			690			156	
Turn Bay Length (ft)	100			150		210	230			150		
Base Capacity (vph)	295	319		278	292	1599	337	1762		390	905	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.16	0.82		0.63	0.35	0.06	0.49	0.53		0.15	0.73	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 70 (47%), Referenced to phase 6:NETL, Start of Red
Natural Cycle: 90
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: US Route 6 & Baldwin Place Road/NYS Route 118



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	43	94	145	160	94	95	151	716	143	52	587	23
Future Volume (veh/h)	43	94	145	160	94	95	151	716	143	52	587	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1949	1949	1949	1776	1776	1776	2027	2027	2027
Adj Flow Rate, veh/h	47	102	0	174	102	0	164	778	155	57	638	25
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	123	129		203	213		275	1318	263	280	840	33
Arrive On Green	0.07	0.07	0.00	0.11	0.11	0.00	0.07	0.47	0.47	0.03	0.43	0.43
Sat Flow, veh/h	1781	1870	0	1856	1949	1651	1692	2804	559	1931	1938	76
Grp Volume(v), veh/h	47	102	0	174	102	0	164	468	465	57	0	663
Grp Sat Flow(s),veh/h/ln	1781	1870	0	1856	1949	1651	1692	1687	1676	1931	0	2014
Q Serve(g_s), s	3.8	8.1	0.0	13.8	7.4	0.0	7.8	30.5	30.5	2.4	0.0	41.7
Cycle Q Clear(g_c), s	3.8	8.1	0.0	13.8	7.4	0.0	7.8	30.5	30.5	2.4	0.0	41.7
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.33	1.00		0.04
Lane Grp Cap(c), veh/h	123	129		203	213		275	793	787	280	0	873
V/C Ratio(X)	0.38	0.79		0.86	0.48		0.60	0.59	0.59	0.20	0.00	0.76
Avail Cap(c_a), veh/h	297	312		309	325		331	793	787	414	0	873
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	66.7	68.7	0.0	65.6	62.8	0.0	27.9	29.2	29.2	24.5	0.0	35.9
Incr Delay (d2), s/veh	0.7	4.0	0.0	9.1	0.6	0.0	0.8	3.2	3.2	0.1	0.0	6.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	4.0	0.0	7.1	3.7	0.0	3.2	13.2	13.1	1.2	0.0	22.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.5	72.7	0.0	74.7	63.4	0.0	28.6	32.4	32.4	24.7	0.0	42.1
LnGrp LOS	E	E		E	E		C	C	C	C	A	D
Approach Vol, veh/h		149	A		276	A		1097			720	
Approach Delay, s/veh		71.1			70.5			31.8			40.7	
Approach LOS		E			E			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.0	70.0		15.4	9.5	75.5		21.4				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	15.0	65.0		25.0	15.0	65.0		25.0				
Max Q Clear Time (g_c+I1), s	9.8	43.7		10.1	4.4	32.5		15.8				
Green Ext Time (p_c), s	0.2	2.5		0.3	0.1	3.6		0.6				

Intersection Summary		
HCM 6th Ctrl Delay	42.1	
HCM 6th LOS	D	

Notes

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

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	213	15	18	235	2	0	17	18	33	1	18
Future Volume (vph)	8	213	15	18	235	2	0	17	18	33	1	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	10	10	12	12	12	12	12	12	12
Grade (%)		2%			2%			10%			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
Frt		0.992			0.999			0.929			0.953	
Flt Protected		0.998			0.996						0.969	
Satd. Flow (prot)	0	1826	0	0	1713	0	0	1644	0	0	1720	0
Flt Permitted		0.998			0.996						0.969	
Satd. Flow (perm)	0	1826	0	0	1713	0	0	1644	0	0	1720	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		502			226			600			191	
Travel Time (s)		11.4			5.1			13.6			4.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	9	232	16	20	255	2	0	18	20	36	1	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	257	0	0	277	0	0	38	0	0	57	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)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	1.11	1.11	1.01	1.07	1.07	1.07	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	8	213	15	18	235	2	0	17	18	33	1	18
Future Vol, veh/h	8	213	15	18	235	2	0	17	18	33	1	18
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	2	-	-	10	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	232	16	20	255	2	0	18	20	36	1	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	257	0	0	248	0	0	565	555	240	573	562	256
Stage 1	-	-	-	-	-	-	258	258	-	296	296	-
Stage 2	-	-	-	-	-	-	307	297	-	277	266	-
Critical Hdwy	4.12	-	-	4.12	-	-	9.12	8.52	7.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	8.12	7.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	8.12	7.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1308	-	-	1318	-	-	318	323	747	430	436	783
Stage 1	-	-	-	-	-	-	647	602	-	712	668	-
Stage 2	-	-	-	-	-	-	593	566	-	729	689	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1308	-	-	1318	-	-	303	315	747	392	425	783
Mov Cap-2 Maneuver	-	-	-	-	-	-	303	315	-	392	425	-
Stage 1	-	-	-	-	-	-	642	597	-	706	656	-
Stage 2	-	-	-	-	-	-	567	556	-	682	683	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.5	13.8	13.6
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	448	1308	-	-	1318	-	-	475
HCM Lane V/C Ratio	0.085	0.007	-	-	0.015	-	-	0.119
HCM Control Delay (s)	13.8	7.8	0	-	7.8	0	-	13.6
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	0.4

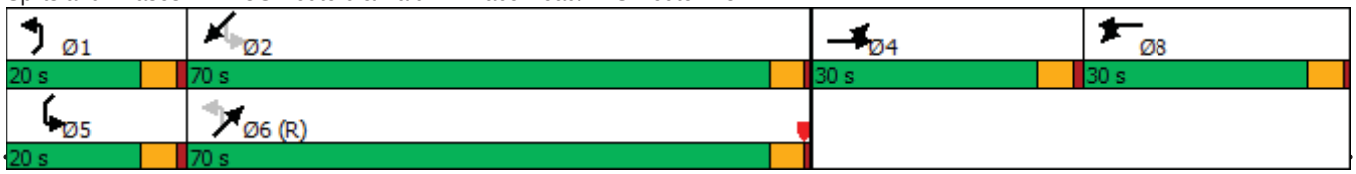
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	52	98	149	160	102	95	164	716	143	53	592	13
Future Volume (vph)	52	98	149	160	102	95	164	716	143	53	592	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	10	10	12	10	10	10	10	10	10
Grade (%)		0%			-2%			4%			-4%	
Storage Length (ft)	100		0	150		210	230		0	150		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt		0.910				0.850		0.975			0.997	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1695	0	1668	1756	1599	1619	3156	0	1685	1768	0
Flt Permitted	0.950			0.950			0.197			0.246		
Satd. Flow (perm)	1770	1695	0	1668	1756	1599	336	3156	0	436	1768	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		44				124		20			1	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		226			924			770			236	
Travel Time (s)		5.1			21.0			17.5			5.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	57	107	162	174	111	103	178	778	155	58	643	14
Shared Lane Traffic (%)												
Lane Group Flow (vph)	57	269	0	174	111	103	178	933	0	58	657	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)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.08	1.08	0.99	1.12	1.12	1.12	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2		2	2	0	2	2		2	2	
Detector Template												
Leading Detector (ft)	83	83		83	83	0	83	83		83	83	
Trailing Detector (ft)	-5	-5		-5	-5	0	-5	-5		-5	-5	
Detector 1 Position(ft)	-5	-5		-5	-5	0	-5	-5		-5	-5	
Detector 1 Size(ft)	40	40		40	40	20	40	40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)	43	43		43	43		43	43		43	43	
Detector 2 Size(ft)	40	40		40	40		40	40		40	40	
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	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	0.0		0.0	0.0	
Turn Type	Split	NA		Split	NA	Free	pm+pt	NA		pm+pt	NA	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases	4	4		8	8		1	6		5	2	
Permitted Phases						Free	6			2		
Detector Phase	4	4		8	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		10.0	15.0		10.0	15.0	
Total Split (s)	30.0	30.0		30.0	30.0		20.0	70.0		20.0	70.0	
Total Split (%)	20.0%	20.0%		20.0%	20.0%		13.3%	46.7%		13.3%	46.7%	
Maximum Green (s)	25.0	25.0		25.0	25.0		15.0	65.0		15.0	65.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		None	C-Max		None	Max	
Walk Time (s)	8.0	8.0		8.0	8.0			8.0			8.0	
Flash Dont Walk (s)	12.0	12.0		12.0	12.0			12.0			12.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
v/c Ratio	0.21	0.91		0.80	0.48	0.06	0.58	0.53		0.20	0.73	
Control Delay	56.7	85.4		88.6	66.8	0.1	21.6	24.2		15.2	37.3	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	56.7	85.4		88.6	66.8	0.1	21.6	24.2		15.2	37.3	
Queue Length 50th (ft)	49	219		167	102	0	75	311		23	516	
Queue Length 95th (ft)	93	#372		245	162	0	125	417		47	#800	
Internal Link Dist (ft)		146			844			690			156	
Turn Bay Length (ft)	100			150		210	230			150		
Base Capacity (vph)	295	319		278	292	1599	335	1750		387	895	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.19	0.84		0.63	0.38	0.06	0.53	0.53		0.15	0.73	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 70 (47%), Referenced to phase 6:NETL, Start of Red
Natural Cycle: 90
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: US Route 6 & Baldwin Place Road/NYS Route 118



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	52	98	149	160	102	95	164	716	143	53	592	13
Future Volume (veh/h)	52	98	149	160	102	95	164	716	143	53	592	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1949	1949	1949	1776	1776	1776	2027	2027	2027
Adj Flow Rate, veh/h	57	107	0	174	111	0	178	778	155	58	643	14
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	128	135		203	213		287	1330	265	284	856	19
Arrive On Green	0.07	0.07	0.00	0.11	0.11	0.00	0.07	0.47	0.47	0.03	0.43	0.43
Sat Flow, veh/h	1781	1870	0	1856	1949	1651	1692	2804	559	1931	1977	43
Grp Volume(v), veh/h	57	107	0	174	111	0	178	468	465	58	0	657
Grp Sat Flow(s),veh/h/ln	1781	1870	0	1856	1949	1651	1692	1687	1676	1931	0	2020
Q Serve(g_s), s	4.6	8.4	0.0	13.8	8.1	0.0	8.5	30.3	30.3	2.5	0.0	41.0
Cycle Q Clear(g_c), s	4.6	8.4	0.0	13.8	8.1	0.0	8.5	30.3	30.3	2.5	0.0	41.0
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.33	1.00		0.02
Lane Grp Cap(c), veh/h	128	135		203	213		287	800	795	284	0	875
V/C Ratio(X)	0.44	0.79		0.86	0.52		0.62	0.58	0.58	0.20	0.00	0.75
Avail Cap(c_a), veh/h	297	312		309	325		335	800	795	418	0	875
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	66.7	68.5	0.0	65.6	63.1	0.0	27.6	28.7	28.7	24.4	0.0	35.7
Incr Delay (d2), s/veh	0.9	3.9	0.0	9.0	0.7	0.0	1.4	3.1	3.1	0.1	0.0	5.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	4.2	0.0	7.1	4.1	0.0	3.5	13.0	12.9	1.2	0.0	21.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.6	72.4	0.0	74.6	63.8	0.0	29.0	31.8	31.8	24.5	0.0	41.6
LnGrp LOS	E	E		E	E		C	C	C	C	A	D
Approach Vol, veh/h		164	A		285	A		1111			715	
Approach Delay, s/veh		70.8			70.4			31.4			40.2	
Approach LOS		E			E			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.7	70.0		15.8	9.6	76.1		21.4				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	15.0	65.0		25.0	15.0	65.0		25.0				
Max Q Clear Time (g_c+I1), s	10.5	43.0		10.4	4.5	32.3		15.8				
Green Ext Time (p_c), s	0.2	2.5		0.4	0.1	3.6		0.6				

Intersection Summary			
HCM 6th Ctrl Delay		41.9	
HCM 6th LOS		D	

Notes

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

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	0	6	0	854	663	13
Future Volume (vph)	0	6	0	854	663	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	-3%			0%	0%	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt		0.865			0.997	
Flt Protected						
Satd. Flow (prot)	0	1635	0	3539	1857	0
Flt Permitted						
Satd. Flow (perm)	0	1635	0	3539	1857	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	262			236	844	
Travel Time (s)	6.0			5.4	19.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	7	0	928	721	14
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	7	0	928	735	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			10	10	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.98	0.98	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.1

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	0	6	0	854	663	13
Future Vol, veh/h	0	6	0	854	663	13
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, %	-3	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	7	0	928	721	14

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	728	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	5.93	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.319	-	-	-	-
Pot Cap-1 Maneuver	0	449	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	449	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	13.1	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NET	SELn1	SWT	SWR
Capacity (veh/h)	-	449	-	-
HCM Lane V/C Ratio	-	0.015	-	-
HCM Control Delay (s)	-	13.1	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0	-	-

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	4	222	253	21	15	2
Future Volume (vph)	4	222	253	21	15	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		0%	0%		-3%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.990		0.985	
Flt Protected		0.999			0.957	
Satd. Flow (prot)	0	1861	1844	0	1782	0
Flt Permitted		0.999			0.957	
Satd. Flow (perm)	0	1861	1844	0	1782	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		704	502		255	
Travel Time (s)		16.0	11.4		5.8	
Confl. Peds. (#/hr)					2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	4	241	275	23	16	2
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	245	298	0	18	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	0.98	0.98
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	4	222	253	21	15	2
Future Vol, veh/h	4	222	253	21	15	2
Conflicting Peds, #/hr	0	0	0	0	2	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	-3	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	241	275	23	16	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	298	0	-	0	538	287
Stage 1	-	-	-	-	287	-
Stage 2	-	-	-	-	251	-
Critical Hdwy	4.12	-	-	-	5.82	5.92
Critical Hdwy Stg 1	-	-	-	-	4.82	-
Critical Hdwy Stg 2	-	-	-	-	4.82	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1263	-	-	-	551	770
Stage 1	-	-	-	-	799	-
Stage 2	-	-	-	-	825	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1263	-	-	-	549	770
Mov Cap-2 Maneuver	-	-	-	-	549	-
Stage 1	-	-	-	-	796	-
Stage 2	-	-	-	-	825	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	11.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1263	-	-	-	568
HCM Lane V/C Ratio	0.003	-	-	-	0.033
HCM Control Delay (s)	7.9	0	-	-	11.6
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Colliers
Engineering
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Appendix

Appendix E | Traffic Volume Data

Colliers Engineering & Design
400 Columbus Avenue Suite 180 E
Valhalla, NY, 10595
Accelerating Success

File Name : 1-ROUTE_6_AT_ROUTE_118_BALDWIN_PL_RD-WKDY_1010289_11-01-2022
Site Code :
Start Date : 11/1/2022
Page No : 1

Groups Printed- Lights - Buses - Trucks - Pedestrians

	ROUTE 6 From North					ROUTE 118 From East					ROUTE 6 From South					BALDWIN PL RD 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	6	107	4	1	118	0	7	15	0	22	24	54	5	0	83	22	23	18	0	63	286
06:45 AM	8	137	5	1	151	2	6	17	0	25	21	66	9	0	96	15	32	22	0	69	341
Total	14	244	9	2	269	2	13	32	0	47	45	120	14	0	179	37	55	40	0	132	627
07:00 AM	22	127	8	0	157	4	11	14	0	29	27	63	15	0	105	25	52	24	0	101	392
07:15 AM	13	141	1	0	155	4	6	27	0	37	33	96	13	0	142	36	36	28	0	100	434
07:30 AM	20	129	4	0	153	1	6	30	0	37	53	118	16	0	187	24	37	23	0	84	461
07:45 AM	18	146	4	0	168	5	14	35	0	54	52	128	15	0	195	28	47	40	0	115	532
Total	73	543	17	0	633	14	37	106	0	157	165	405	59	0	629	113	172	115	0	400	1819
08:00 AM	14	139	2	1	156	6	13	34	0	53	30	79	17	0	126	33	57	30	0	120	455
08:15 AM	12	137	14	0	163	7	14	31	0	52	34	100	12	0	146	26	44	14	0	84	445
08:30 AM	12	122	6	0	140	3	18	36	0	57	33	105	19	0	157	24	34	29	0	87	441
08:45 AM	13	128	7	0	148	6	17	22	0	45	22	110	15	0	147	34	35	31	0	100	440
Total	51	526	29	1	607	22	62	123	0	207	119	394	63	0	576	117	170	104	0	391	1781
09:00 AM	26	124	3	1	154	11	21	26	0	58	29	89	13	0	131	28	30	37	0	95	438
09:15 AM	23	120	5	0	148	5	21	24	0	50	25	82	15	0	122	31	27	31	0	89	409
Grand Total	187	1557	63	4	1811	54	154	311	0	519	383	1090	164	0	1637	326	454	327	0	1107	5074
Apprch %	10.3	86	3.5	0.2		10.4	29.7	59.9	0		23.4	66.6	10	0		29.4	41	29.5	0		
Total %	3.7	30.7	1.2	0.1	35.7	1.1	3	6.1	0	10.2	7.5	21.5	3.2	0	32.3	6.4	8.9	6.4	0	21.8	
Lights	168	1490	52	0	1710	48	137	288	0	473	352	1036	153	0	1541	309	435	299	0	1043	4767
% Lights	89.8	95.7	82.5	0	94.4	88.9	89	92.6	0	91.1	91.9	95	93.3	0	94.1	94.8	95.8	91.4	0	94.2	93.9
Buses	13	9	2	0	24	0	13	11	0	24	9	18	7	0	34	5	11	21	0	37	119
% Buses	7	0.6	3.2	0	1.3	0	8.4	3.5	0	4.6	2.3	1.7	4.3	0	2.1	1.5	2.4	6.4	0	3.3	2.3
Trucks	6	58	9	0	73	6	4	12	0	22	22	36	4	0	62	12	8	7	0	27	184
% Trucks	3.2	3.7	14.3	0	4	11.1	2.6	3.9	0	4.2	5.7	3.3	2.4	0	3.8	3.7	1.8	2.1	0	2.4	3.6
Pedestrians	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
% Pedestrians	0	0	0	100	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1

Colliers Engineering & Design
400 Columbus Avenue Suite 180 E
Valhalla, NY, 10595
Accelerating Success

File Name : 1-ROUTE_6_AT_ROUTE_118_BALDWIN_PL_RD-WKDY_1010289_11-01-2022
Site Code :
Start Date : 11/1/2022

	ROUTE 6 From North					ROUTE 118 From East					ROUTE 6 From South					BALDWIN PL RD 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	**20**	129	4	0	153	1	6	30	0	37	**53**	118	16	0	187	24	37	23	0	84	461
07:45 AM	18	**146**	4	0	**168**	5	**14**	**35**	0	**54**	52	**128**	15	0	**195**	28	47	**40**	0	115	**532**
08:00 AM	14	139	2	**1**	156	6	13	34	0	53	30	79	**17**	0	126	**33**	**57**	30	0	**120**	455
08:15 AM	12	137	**14**	0	163	**7**	14	31	0	52	34	100	12	0	146	26	44	14	0	84	445
Total Volume	64	551	24	1	640	19	47	130	0	196	169	425	60	0	654	111	185	107	0	403	1893
% App. Total	10	86.1	3.8	0.2		9.7	24	66.3	0		25.8	65	9.2	0		27.5	45.9	26.6	0		
PHF	.800	.943	.429	.250	.952	.679	.839	.929	.000	.907	.797	.830	.882	.000	.838	.841	.811	.669	.000	.840	.890
Lights	54	531	19	0	604	14	41	119	0	174	153	398	59	0	610	102	179	96	0	377	1765
% Lights	84.4	96.4	79.2	0	94.4	73.7	87.2	91.5	0	88.8	90.5	93.6	98.3	0	93.3	91.9	96.8	89.7	0	93.5	93.2
Buses	5	2	1	0	8	0	5	6	0	11	5	9	0	0	14	1	2	8	0	11	44
% Buses	7.8	0.4	4.2	0	1.3	0	10.6	4.6	0	5.6	3.0	2.1	0	0	2.1	0.9	1.1	7.5	0	2.7	2.3
Trucks	5	18	4	0	27	5	1	5	0	11	11	18	1	0	30	8	4	3	0	15	83
% Trucks	7.8	3.3	16.7	0	4.2	26.3	2.1	3.8	0	5.6	6.5	4.2	1.7	0	4.6	7.2	2.2	2.8	0	3.7	4.4
Pedestrians	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Pedestrians	0	0	0	100	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1

Colliers Engineering & Design
400 Columbus Avenue Suite 180 E
Valhalla, NY, 10595
Accelerating Success

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Site Code :
Start Date : 11/1/2022
Page No : 1

Groups Printed- Lights - Buses - Trucks - Pedestrians

	ROUTE 6 From North					ROUTE 118 From East					ROUTE 6 From South					BALDWIN PL RD 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
02:00 PM	29	89	9	0	127	15	28	19	0	62	22	119	21	0	162	29	21	33	0	83	434
02:15 PM	23	94	5	0	122	19	24	38	0	81	36	151	21	0	208	19	19	32	0	70	481
02:30 PM	42	126	2	1	171	11	31	26	0	68	23	141	23	0	187	17	11	30	0	58	484
02:45 PM	25	110	11	0	146	9	26	39	0	74	30	166	25	0	221	28	25	54	0	107	548
Total	119	419	27	1	566	54	109	122	0	285	111	577	90	0	778	93	76	149	0	318	1947
03:00 PM	36	114	6	0	156	14	27	36	0	77	35	160	30	0	225	27	29	56	0	112	570
03:15 PM	33	117	5	0	155	20	32	35	0	87	34	152	30	0	216	21	31	18	0	70	528
03:30 PM	30	123	9	1	163	22	28	41	0	91	35	142	33	0	210	27	26	30	0	83	547
03:45 PM	33	126	7	1	167	13	39	25	0	77	41	172	28	0	241	21	24	44	0	89	574
Total	132	480	27	2	641	69	126	137	0	332	145	626	121	0	892	96	110	148	0	354	2219
04:00 PM	19	112	12	1	144	17	34	44	0	95	31	173	48	0	252	15	19	24	0	58	549
04:15 PM	38	129	19	0	186	17	54	51	0	122	21	144	24	0	189	24	35	40	0	99	596
04:30 PM	41	97	8	0	146	10	47	42	0	99	31	174	32	0	237	22	27	33	0	82	564
04:45 PM	22	146	9	0	177	18	52	34	0	104	32	161	33	0	226	24	17	39	0	80	587
Total	120	484	48	1	653	62	187	171	0	420	115	652	137	0	904	85	98	136	0	319	2296
05:00 PM	39	120	8	0	167	20	44	37	0	101	28	164	38	0	230	19	26	32	0	77	575
05:15 PM	29	116	12	0	157	17	36	55	0	108	36	186	33	0	255	21	24	25	0	70	590
05:30 PM	40	130	9	0	179	21	48	46	0	115	25	141	36	0	202	24	16	24	0	64	560
05:45 PM	37	120	6	0	163	13	35	37	0	85	24	166	32	0	222	24	21	35	0	80	550
Total	145	486	35	0	666	71	163	175	0	409	113	657	139	0	909	88	87	116	0	291	2275
06:00 PM	43	123	5	0	171	12	50	29	0	91	31	131	34	0	196	20	13	33	0	66	524
06:15 PM	24	101	13	0	138	20	31	30	0	81	31	160	19	0	210	20	19	22	0	61	490
06:30 PM	21	88	5	0	114	15	19	34	0	68	31	124	25	0	180	17	18	20	0	55	417
06:45 PM	27	92	9	0	128	9	27	28	0	64	24	138	14	0	176	15	28	23	1	67	435
Total	115	404	32	0	551	56	127	121	0	304	117	553	92	0	762	72	78	98	1	249	1866
Grand Total	631	2273	169	4	3077	312	712	726	0	1750	601	3065	579	0	4245	434	449	647	1	1531	10603
Apprch %	20.5	73.9	5.5	0.1		17.8	40.7	41.5	0		14.2	72.2	13.6	0		28.3	29.3	42.3	0.1		
Total %	6	21.4	1.6	0	29	2.9	6.7	6.8	0	16.5	5.7	28.9	5.5	0	40	4.1	4.2	6.1	0	14.4	
Lights	612	2222	167	0	3001	302	692	705	0	1699	579	3007	566	0	4152	424	435	618	0	1477	10329
% Lights	97	97.8	98.8	0	97.5	96.8	97.2	97.1	0	97.1	96.3	98.1	97.8	0	97.8	97.7	96.9	95.5	0	96.5	97.4
Buses	14	8	0	0	22	3	10	9	0	22	9	11	4	0	24	6	6	15	0	27	95
% Buses	2.2	0.4	0	0	0.7	1	1.4	1.2	0	1.3	1.5	0.4	0.7	0	0.6	1.4	1.3	2.3	0	1.8	0.9
Trucks	5	43	2	0	50	7	10	12	0	29	13	47	9	0	69	4	8	14	0	26	174
% Trucks	0.8	1.9	1.2	0	1.6	2.2	1.4	1.7	0	1.7	2.2	1.5	1.6	0	1.6	0.9	1.8	2.2	0	1.7	1.6
Pedestrians	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	5
% Pedestrians	0	0	0	100	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0.1	0

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File Name : 1-ROUTE_6_AT_ROUTE_118_BALDWIN_PL_RD-WKDY_1010289_11-01-2022
Site Code :
Start Date : 11/1/2022

	ROUTE 6 From North					ROUTE 118 From East					ROUTE 6 From South					BALDWIN PL RD 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 02:00 PM to 06:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	38	129	**19**	0	**186**	17	**54**	**51**	0	**122**	21	144	24	0	189	**24**	**35**	**40**	0	**99**	**596**
04:30 PM	**41**	97	8	0	146	10	47	42	0	99	31	**174**	32	0	**237**	22	27	33	0	82	564
04:45 PM	22	**146**	9	0	177	18	52	34	0	104	**32**	161	33	0	226	24	17	39	0	80	587
05:00 PM	39	120	8	0	167	**20**	44	37	0	101	28	164	**38**	0	230	19	26	32	0	77	575
Total Volume	140	492	44	0	676	65	197	164	0	426	112	643	127	0	882	89	105	144	0	338	2322
% App. Total	20.7	72.8	6.5	0		15.3	46.2	38.5	0		12.7	72.9	14.4	0		26.3	31.1	42.6	0		
PHF	.854	.842	.579	.000	.909	.813	.912	.804	.000	.873	.875	.924	.836	.000	.930	.927	.750	.900	.000	.854	.974
Lights	137	485	43	0	665	64	195	159	0	418	111	634	122	0	867	89	103	139	0	331	2281
% Lights	97.9	98.6	97.7	0	98.4	98.5	99.0	97.0	0	98.1	99.1	98.6	96.1	0	98.3	100	98.1	96.5	0	97.9	98.2
Buses	2	2	0	0	4	0	0	1	0	1	0	1	1	0	2	0	0	0	0	0	7
% Buses	1.4	0.4	0	0	0.6	0	0	0.6	0	0.2	0	0.2	0.8	0	0.2	0	0	0	0	0	0.3
Trucks	1	5	1	0	7	1	2	4	0	7	1	8	4	0	13	0	2	5	0	7	34
% Trucks	0.7	1.0	2.3	0	1.0	1.5	1.0	2.4	0	1.6	0.9	1.2	3.1	0	1.5	0	1.9	3.5	0	2.1	1.5
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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File Name : 1-ROUTE_6_AT_ROUTE_118_BALDWIN_PL_RD-SAT_1010290_10-29-2022
Site Code :
Start Date : 10/29/2022
Page No : 1

Groups Printed- Lights - Buses - Trucks - Pedestrians

	ROUTE 6 From North					ROUTE 118 From East					ROUTE 6 From South					BALDWIN PL RD 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
11:00 AM	20	117	12	0	149	25	24	37	0	86	36	125	30	0	191	26	24	40	0	90	516
11:15 AM	31	152	12	0	195	22	19	42	0	83	39	138	19	0	196	42	18	43	0	103	577
11:30 AM	37	134	9	0	180	11	26	36	0	73	27	142	43	0	212	49	16	52	0	117	582
11:45 AM	28	126	10	0	164	20	27	41	2	90	31	160	44	0	235	44	25	52	0	121	610
Total	116	529	43	0	688	78	96	156	2	332	133	565	136	0	834	161	83	187	0	431	2285
12:00 PM	27	147	15	0	189	26	26	29	0	81	34	161	28	0	223	39	20	47	0	106	599
12:15 PM	34	141	10	0	185	17	16	47	0	80	34	166	29	0	229	35	26	34	0	95	589
12:30 PM	33	138	14	0	185	21	23	33	0	77	30	168	46	0	244	24	23	35	0	82	588
12:45 PM	38	128	10	0	176	26	24	42	0	92	37	180	39	0	256	39	20	40	0	99	623
Total	132	554	49	0	735	90	89	151	0	330	135	675	142	0	952	137	89	156	0	382	2399
01:00 PM	25	136	5	0	166	25	13	49	0	87	41	148	35	0	224	27	32	42	0	101	578
01:15 PM	24	152	15	0	191	14	25	46	2	87	39	148	32	0	219	37	18	28	0	83	580
01:30 PM	37	133	10	0	180	14	20	49	0	83	32	145	36	0	213	30	15	33	0	78	554
01:45 PM	34	138	9	0	181	19	22	29	0	70	34	171	27	0	232	25	22	26	0	73	556
Total	120	559	39	0	718	72	80	173	2	327	146	612	130	0	888	119	87	129	0	335	2268
Grand Total	368	1642	131	0	2141	240	265	480	4	989	414	1852	408	0	2674	417	259	472	0	1148	6952
Apprch %	17.2	76.7	6.1	0		24.3	26.8	48.5	0.4		15.5	69.3	15.3	0		36.3	22.6	41.1	0		
Total %	5.3	23.6	1.9	0	30.8	3.5	3.8	6.9	0.1	14.2	6	26.6	5.9	0	38.5	6	3.7	6.8	0	16.5	
Lights	366	1626	130	0	2122	240	257	476	0	973	410	1822	400	0	2632	406	256	467	0	1129	6856
% Lights	99.5	99	99.2	0	99.1	100	97	99.2	0	98.4	99	98.4	98	0	98.4	97.4	98.8	98.9	0	98.3	98.6
Buses	0	0	0	0	0	0	1	1	0	2	1	3	1	0	5	2	1	0	0	3	10
% Buses	0	0	0	0	0	0	0.4	0.2	0	0.2	0.2	0.2	0.2	0	0.2	0.5	0.4	0	0	0.3	0.1
Trucks	2	16	1	0	19	0	7	3	0	10	3	27	7	0	37	9	2	5	0	16	82
% Trucks	0.5	1	0.8	0	0.9	0	2.6	0.6	0	1	0.7	1.5	1.7	0	1.4	2.2	0.8	1.1	0	1.4	1.2
Pedestrians	0	0	0	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	4
% Pedestrians	0	0	0	0	0	0	0	0	100	0.4	0	0	0	0	0	0	0	0	0	0	0.1

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File Name : 1-ROUTE_6_AT_ROUTE_118_BALDWIN_PL_RD-SAT_1010290_10-29-2022
Site Code :
Start Date : 10/29/2022
Page No : 2

	ROUTE 6 From North					ROUTE 118 From East					ROUTE 6 From South					BALDWIN PL RD 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 11:00 AM to 01:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:00 PM																					
12:00 PM	27	**147**	**15**	0	**189**	**26**	**26**	29	0	81	34	161	28	0	223	**39**	20	**47**	0	**106**	599
12:15 PM	34	141	10	0	185	17	16	**47**	0	80	34	166	29	0	229	35	**26**	34	0	95	589
12:30 PM	33	138	14	0	185	21	23	33	0	77	30	168	**46**	0	244	24	23	35	0	82	588
12:45 PM	**38**	128	10	0	176	26	24	42	0	**92**	**37**	**180**	39	0	**256**	39	20	40	0	99	**623**
Total Volume	132	554	49	0	735	90	89	151	0	330	135	675	142	0	952	137	89	156	0	382	2399
% App. Total	18	75.4	6.7	0		27.3	27	45.8	0		14.2	70.9	14.9	0		35.9	23.3	40.8	0		
PHF	.868	.942	.817	.000	.972	.865	.856	.803	.000	.897	.912	.938	.772	.000	.930	.878	.856	.830	.000	.901	.963
Lights	132	550	48	0	730	90	89	150	0	329	134	665	139	0	938	134	89	155	0	378	2375
% Lights	100	99.3	98.0	0	99.3	100	100	99.3	0	99.7	99.3	98.5	97.9	0	98.5	97.8	100	99.4	0	99.0	99.0
Buses	0	0	0	0	0	0	0	1	0	1	1	0	1	0	2	0	0	0	0	0	3
% Buses	0	0	0	0	0	0	0	0.7	0	0.3	0.7	0	0.7	0	0.2	0	0	0	0	0	0.1
Trucks	0	4	1	0	5	0	0	0	0	0	0	10	2	0	12	3	0	1	0	4	21
% Trucks	0	0.7	2.0	0	0.7	0	0	0	0	0	0	1.5	1.4	0	1.3	2.2	0	0.6	0	1.0	0.9
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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File Name : 1-BALDWIN_PL_&_KENNARD_RD-SAT_1045058_03-04-2023
Site Code :
Start Date : 3/4/2023
Page No : 1

Groups Printed- Lights - Buses - Trucks - Pedestrians

	MAHOPAC FARM ACCESS From North							GARAGE ACCESS From Northeast							BALDWIN PL RD From East							BP DRIVEWAY From South							KENNARD RD From Southwest							BALDWIN PL RD From West							
Start Time	Right	Bear Right	Thru	Left	Hard Left	Peds	App. Total	Hard Right	Bear Right	Thru	Bear Left	Hard Left	Peds	App. Total	Hard Right	Right	Thru	Bear Left	Left	Peds	App. Total	Right	Bear Right	Thru	Left	Hard Left	Peds	App. Total	Hard Right	Bear Right	Thru	Bear Left	Hard Left	Peds	App. Total	Hard Right	Right	Thru	Bear Left	Left	Peds	App. Total	Int. Total
11:00 AM	1	0	0	1	0	0	2	0	3	0	0	9	0	12	0	0	74	0	0	0	74	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	83	2	0	0	85	175
11:15 AM	0	0	0	0	0	0	0	0	4	0	0	6	0	10	0	0	65	7	0	0	72	0	0	0	0	0	0	0	0	5	0	0	0	0	5	0	0	67	1	0	0	68	155
11:30 AM	0	0	0	1	0	0	1	0	3	0	0	4	0	7	0	1	60	2	0	0	63	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	78	1	0	0	79	152
11:45 AM	0	0	0	0	1	0	1	0	3	1	0	3	0	7	3	0	55	1	0	1	60	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	75	1	0	0	76	146
Total	1	0	0	2	1	0	4	0	13	1	0	22	0	36	3	1	254	10	0	1	269	0	0	0	0	0	0	0	0	11	0	0	0	0	11	0	0	303	5	0	0	308	628
12:00 PM	0	0	0	5	0	0	5	0	8	1	0	10	0	19	0	2	74	5	0	0	81	0	0	0	0	0	0	0	0	5	0	0	0	0	5	0	0	63	2	0	0	65	175
12:15 PM	1	0	0	1	0	0	2	0	4	0	0	3	0	7	0	0	85	7	0	0	92	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	78	2	1	0	81	184
12:30 PM	0	0	0	1	0	0	1	0	2	0	0	6	0	8	0	0	82	1	0	0	83	0	0	0	0	0	0	0	0	6	0	0	0	0	6	0	0	86	2	0	0	88	186
12:45 PM	0	0	0	0	0	0	0	0	2	0	0	5	0	7	0	0	81	4	0	0	85	0	0	0	0	0	0	0	0	4	0	0	0	0	4	0	0	79	1	0	0	80	176
Total	1	0	0	7	0	0	8	0	16	1	0	24	0	41	0	2	322	17	0	0	341	0	0	0	0	0	0	0	0	17	0	0	0	0	17	0	0	306	7	1	0	314	721
01:00 PM	0	0	0	0	0	0	0	0	6	0	0	3	0	9	0	2	63	0	0	0	65	0	0	0	0	0	0	0	0	1	2	0	0	0	3	0	0	52	5	0	0	57	134
01:15 PM	0	0	0	3	0	0	3	0	2	0	0	3	0	5	0	1	76	6	0	0	83	0	0	0	0	0	0	0	0	4	1	0	0	0	5	0	0	85	0	0	0	85	181
01:30 PM	0	0	0	0	0	0	0	0	2	0	0	5	0	7	0	0	78	3	0	0	81	0	0	0	0	0	0	0	0	3	0	0	0	0	3	0	0	72	1	0	0	73	164
01:45 PM	0	0	0	0	0	0	0	0	2	0	0	3	0	5	0	0	77	2	0	0	79	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	54	0	0	0	54	140
Total	0	0	0	3	0	0	3	0	12	0	0	14	0	26	0	3	294	11	0	0	308	0	0	0	0	0	0	0	0	10	3	0	0	0	13	0	0	263	6	0	0	269	619
Grand Total	2	0	0	12	1	0	15	0	41	2	0	60	0	103	3	6	870	38	0	1	918	0	0	0	0	0	0	0	0	38	3	0	0	0	41	0	0	872	18	1	0	891	1968
Apprch %	13.3	0	0	80	6.7	0		0	39.8	1.9	0	58.3	0		0.3	0.7	94.8	4.1	0	0.1		0	0	0	0	0	0		0	92.7	7.3	0	0	0		0	0	97.9	2	0.1	0		
Total %	0.1	0	0	0.6	0.1	0	0.8	0	2.1	0.1	0	3	0	5.2	0.2	0.3	44.2	1.9	0	0.1	46.6	0	0	0	0	0	0	0	0	1.9	0.2	0	0	0	2.1	0	0	44.3	0.9	0.1	0	45.3	
Lights	2	0	0	11	1	0	14	0	41	2	0	57	0	100	3	3	861	38	0	0	905	0	0	0	0	0	0	0	0	38	3	0	0	0	41	0	0	856	18	1	0	875	1935
% Lights	100	0	0	91.7	100	0	93.3	0	100	100	0	95	0	97.1	100	50	99	100	0	0	98.6	0	0	0	0	0	0	0	0	100	100	0	0	0	100	0	0	98.2	100	100	0	98.2	98.3
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	3
% Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0	0	0	0.2	0.2
Trucks	0	0	0	1	0	0	1	0	0	0	0	3	0	3	0	3	8	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	14	29
% Trucks	0	0	0	8.3	0	0	6.7	0	0	0	0	5	0	2.9	0	50	0.9	0	0	0	1.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.6	0	0	0	1.6	1.5
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1

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File Name : 1-BALDWIN_PL_&_KENNARD_RD-SAT_1045058_03-04-2023
Site Code :
Start Date : 3/4/2023

	MAHOPAC FARM ACCESS From North							GARAGE ACCESS From Northeast							BALDWIN PL RD From East							BP DRIVEWAY From South							KENNARD RD From Southwest							BALDWIN PL RD From West							
Start Time	Right	Bear Right	Thru	Left	Hard Left	Peds	App. Total	Hard Right	Bear Right	Thru	Bear Left	Hard Left	Peds	App. Total	Hard Right	Right	Thru	Bear Left	Left	Peds	App. Total	Right	Bear Right	Thru	Left	Hard Left	Peds	App. Total	Hard Right	Bear Right	Thru	Bear Left	Hard Left	Peds	App. Total	Hard Right	Right	Thru	Bear Left	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1																																									
Peak Hour for Entire Intersection Begins at 12:00 PM																																									
12:00 PM	0	0	0	5	0	0	5	0	8	1	0	10	0	19	0	2	74	5	0	0	81	0	0	0	0	0	0	0	0	5	0	0	0	0	5	0	0	63	2	0	0	65	175
12:15 PM	1	0	0	1	0	0	2	0	4	0	0	3	0	7	0	0	85	7	0	0	92	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	78	2	1	0	81	184
12:30 PM	0	0	0	1	0	0	1	0	2	0	0	6	0	8	0	0	82	1	0	0	83	0	0	0	0	0	0	0	0	6	0	0	0	0	6	0	0	86	2	0	0	88	186
12:45 PM	0	0	0	0	0	0	0	0	2	0	0	5	0	7	0	0	81	4	0	0	85	0	0	0	0	0	0	0	0	4	0	0	0	0	4	0	0	79	1	0	0	80	176
Total Volume	1	0	0	7	0	0	8	0	16	1	0	24	0	41	0	2	322	17	0	0	341	0	0	0	0	0	0	0	0	17	0	0	0	0	17	0	0	306	7	1	0	314	721
% App. Total	12.5	0	0	87.5	0	0		0	39	2.4	0	58.5	0		0	0.6	94.4	5	0	0		0	0	0	0	0	0		0	100	0	0	0	0		0	0	97.5	2.2	0.3	0		
PHF	.250	.000	.000	.350	.000	.000	.400	.000	.500	.250	.000	.600	.000	.539	.000	.250	.947	.607	.000	.000	.927	.000	.000	.000	.000	.000	.000	.000	.000	.708	.000	.000	.000	.000	.708	.000	.000	.890	.875	.250	.000	.892	.969
Lights	1	0	0	6	0	0	7	0	16	1	0	23	0	40	0	0	321	17	0	0	338	0	0	0	0	0	0	0	0	17	0	0	0	0	17	0	0	298	7	1	0	306	708
% Lights	100	0	0	85.7	0	0	87.5	0	100	100	0	95.8	0	97.6	0	0	99.7	100	0	0	99.1	0	0	0	0	0	0	0	0	100	0	0	0	0	100	0	0	97.4	100	100	0	97.5	98.2
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0	0	0	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
Trucks	0	0	0	1	0	0	1	0	0	0	0	1	0	1	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	8	12
% Trucks	0	0	0	14.3	0	0	12.5	0	0	0	0	4.2	0	2.4	0	100	0	0	0	0	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.6	0	0	0	2.5	1.7
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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

File Name : 1-BALDWIN_PL_&_KENNARD_RD-THU_1045057_03-02-2023
Site Code :
Start Date : 3/2/2023
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Groups Printed- Lights - Buses - Trucks - Pedestrians

	MAHOPAC FARM ACCESS From North							GARAGE ACCESS From Northeast							BALDWIN PL RD From East							BP DRIVEWAY From South							KENNARD RD From Southwest							BALDWIN PL RD From West							
Start Time	Right	Bear Right	Thru	Left	Hard Left	Peds	App. Total	Hard Right	Bear Right	Thru	Bear Left	Hard Left	Peds	App. Total	Hard Right	Right	Thru	Bear Left	Left	Peds	App. Total	Right	Bear Right	Thru	Left	Hard Left	Peds	App. Total	Hard Right	Bear Right	Thru	Bear Left	Hard Left	Peds	App. Total	Hard Right	Right	Thru	Bear Left	Left	Peds	App. Total	Int. Total
03:00 PM	0	0	0	3	0	0	3	0	1	0	0	6	0	7	0	3	89	2	0	0	94	0	0	0	0	0	0	0	0	3	0	0	0	0	3	0	0	94	3	0	0	97	204
03:15 PM	0	0	0	3	0	0	3	1	5	1	0	2	0	9	0	2	77	5	0	0	84	0	0	0	0	0	0	0	0	3	0	0	0	0	3	0	0	77	0	1	0	78	177
03:30 PM	0	0	0	1	0	0	1	0	2	0	0	5	0	7	0	1	102	4	0	0	107	0	0	0	0	0	0	0	0	5	0	0	0	0	5	0	0	76	1	0	0	77	197
03:45 PM	0	0	0	4	0	0	4	0	7	0	0	8	0	15	0	1	101	3	0	0	105	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	85	1	1	0	87	212
Total	0	0	0	11	0	0	11	1	15	1	0	21	0	38	0	7	369	14	0	0	390	0	0	0	0	0	0	0	0	12	0	0	0	0	12	0	0	332	5	2	0	339	790
04:00 PM	1	0	0	1	3	0	5	0	3	0	0	5	1	9	1	4	93	1	0	0	99	0	0	0	0	0	1	1	0	7	0	0	0	0	7	0	0	73	0	0	0	73	194
04:15 PM	0	0	0	3	0	0	3	0	7	0	0	10	0	17	0	1	118	5	0	0	124	0	0	0	0	0	0	0	0	5	0	0	0	0	5	0	0	83	0	0	0	83	232
04:30 PM	0	0	0	1	0	0	1	0	1	0	0	1	0	2	0	1	101	3	0	0	105	0	0	0	0	0	0	0	0	3	0	0	0	0	3	0	0	76	1	0	0	77	188
04:45 PM	0	0	0	1	1	0	2	0	6	0	0	2	0	8	1	1	102	2	0	0	106	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	77	1	0	0	78	195
Total	1	0	0	6	4	0	11	0	17	0	0	18	1	36	2	7	414	11	0	0	434	0	0	0	0	0	1	1	0	16	0	0	0	0	16	0	0	309	2	0	0	311	809
05:00 PM	0	0	0	1	1	0	2	0	1	0	0	1	0	2	0	3	112	9	0	0	124	0	0	0	0	0	0	0	0	5	0	0	0	0	5	0	0	76	0	0	0	76	209
05:15 PM	0	0	0	1	0	0	1	0	2	0	0	5	0	7	0	1	125	4	0	0	130	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	68	2	0	0	70	209
05:30 PM	0	0	0	0	0	0	0	0	4	0	0	7	0	11	0	1	100	1	0	0	102	0	0	0	0	0	0	0	0	5	0	0	1	0	6	0	0	100	1	0	0	101	220
05:45 PM	0	0	0	3	0	0	3	0	3	0	0	5	0	8	0	1	101	2	0	0	104	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	84	0	0	0	84	200
Total	0	0	0	5	1	0	6	0	10	0	0	18	0	28	0	6	438	16	0	0	460	0	0	0	0	0	0	0	0	12	0	0	1	0	13	0	0	328	3	0	0	331	838
06:00 PM	0	0	0	0	0	0	0	0	3	0	0	7	0	10	0	1	68	2	0	0	71	0	0	0	0	0	0	0	0	4	0	0	0	0	4	0	0	52	2	0	0	54	139
06:15 PM	0	0	0	1	0	0	1	0	2	0	0	4	0	6	1	1	79	2	0	0	83	0	0	0	0	0	0	0	0	3	0	0	0	0	3	0	0	65	0	0	0	65	158
06:30 PM	1	0	0	1	0	0	2	0	5	0	0	0	0	5	0	1	70	5	0	0	76	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	63	0	0	0	63	147
06:45 PM	0	0	0	1	0	0	1	0	3	1	0	3	0	7	0	1	78	5	0	0	84	0	0	0	0	0	0	0	0	5	0	0	0	0	5	0	0	41	0	0	0	41	138
Total	1	0	0	3	0	0	4	0	13	1	0	14	0	28	1	4	295	14	0	0	314	0	0	0	0	0	0	0	0	13	0	0	0	0	13	0	0	221	2	0	0	223	582
Grand Total	2	0	0	25	5	0	32	1	55	2	0	71	1	130	3	24	1516	55	0	0	1598	0	0	0	0	0	1	1	0	53	0	0	1	0	54	0	0	1190	12	2	0	1204	3019
Apprch %	6.2	0	0	78.1	15.6	0		0.8	42.3	1.5	0	54.6	0.8		0.2	1.5	94.9	3.4	0	0		0	0	0	0	0	100		0	98.1	0	0	1.9	0		0	0	98.8	1	0.2	0		
Total %	0.1	0	0	0.8	0.2	0	1.1	0	1.8	0.1	0	2.4	0	4.3	0.1	0.8	50.2	1.8	0	0	52.9	0	0	0	0	0	0	0	0	1.8	0	0	0	0	1.8	0	0	39.4	0.4	0.1	0	39.9	
Lights	2	0	0	23	5	0	30	1	54	2	0	69	0	126	3	22	1492	53	0	0	1570	0	0	0	0	0	0	0	0	50	0	0	1	0	51	0	0	1176	11	2	0	1189	2966
% Lights	100	0	0	92	100	0	93.8	100	98.2	100	0	97.2	0	96.9	100	91.7	98.4	96.4	0	0	98.2	0	0	0	0	0	0	0	0	94.3	0	0	100	0	94.4	0	0	98.8	91.7	100	0	98.8	98.2
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	13	2	0	0	16	0	0	0	0	0	0	0	0	3	0	0	0	0	3	0	0	7	0	0	0	7	26
% Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.2	0.9	3.6	0	0	1	0	0	0	0	0	0	0	0	5.7	0	0	0	0	5.6	0	0	0.6	0	0	0	0.6	0.9
Trucks	0	0	0	2	0	0	2	0	1	0	0	2	0	3	0	1	11	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	1	0	0	8	25
% Trucks	0	0	0	8	0	0	6.2	0	1.8	0	0	2.8	0	2.3	0	4.2	0.7	0	0	0	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	8.3	0	0	0.7	0.8
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
% Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	100	0.8	0	0	0	0	0	0	0	0	0	0	0	0	100	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1

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

File Name : 1-BALDWIN_PL_&_KENNARD_RD-THU_1045057_03-02-2023
Site Code :
Start Date : 3/2/2023

	MAHOPAC FARM ACCESS From North							GARAGE ACCESS From Northeast							BALDWIN PL RD From East							BP DRIVEWAY From South							KENNARD RD From Southwest							BALDWIN PL RD From West							
Start Time	Right	Bear Right	Thru	Left	Hard Left	Peds	App. Total	Hard Right	Bear Right	Thru	Bear Left	Hard Left	Peds	App. Total	Hard Right	Right	Thru	Bear Left	Left	Peds	App. Total	Right	Bear Right	Thru	Left	Hard Left	Peds	App. Total	Hard Right	Bear Right	Thru	Bear Left	Hard Left	Peds	App. Total	Hard Right	Right	Thru	Bear Left	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 06:45 PM - Peak 1 of 1																																										
Peak Hour for Entire Intersection Begins at 05:00 PM																																										
05:00 PM	0	0	0	1	1	0	2	0	1	0	0	1	0	2	0	3	112	9	0	0	124	0	0	0	0	0	0	0	0	5	0	0	0	0	5	0	0	76	0	0	0	76	209
05:15 PM	0	0	0	1	0	0	1	0	2	0	0	5	0	7	0	1	125	4	0	0	130	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	68	2	0	0	70	209
05:30 PM	0	0	0	0	0	0	0	0	4	0	0	7	0	11	0	1	100	1	0	0	102	0	0	0	0	0	0	0	0	5	0	0	1	0	6	0	0	100	1	0	0	101	220
05:45 PM	0	0	0	3	0	0	3	0	3	0	0	5	0	8	0	1	101	2	0	0	104	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	84	0	0	0	84	200
Total Volume	0	0	0	5	1	0	6	0	10	0	0	18	0	28	0	6	438	16	0	0	460	0	0	0	0	0	0	0	0	12	0	0	1	0	13	0	0	328	3	0	0	331	838
% App. Total	0	0	0	83.3	16.7	0		0	35.7	0	0	64.3	0		0	1.3	95.2	3.5	0	0		0	0	0	0	0	0		0	92.3	0	0	7.7	0		0	0	99.1	0.9	0	0		
PHF	.000	.000	.000	.417	.250	.000	.500	.000	.625	.000	.000	.643	.000	.636	.000	.500	.876	.444	.000	.000	.885	.000	.000	.000	.000	.000	.000	.000	.000	.600	.000	.000	.250	.000	.542	.000	.000	.820	.375	.000	.000	.819	.952
Lights	0	0	0	5	1	0	6	0	9	0	0	18	0	27	0	6	435	16	0	0	457	0	0	0	0	0	0	0	0	12	0	0	1	0	13	0	0	328	3	0	0	331	834
% Lights	0	0	0	100	100	0	100	0	90.0	0	0	100	0	96.4	0	100	99.3	100	0	0	99.3	0	0	0	0	0	0	0	0	100	0	0	100	0	100	0	0	100	100	0	0	100	99.5
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
% Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0	0	0	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2
Trucks	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
% Trucks	0	0	0	0	0	0	0	0	10.0	0	0	0	0	3.6	0	0	0.2	0	0	0	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Groups Printed- Lights - Buses - Trucks - Pedestrians

	MAHOPAC FARM ACCESS From North							GARAGE ACCESS From Northeast							BALDWIN PL RD From East							BP DRIVEWAY From South							KENNARD RD From Southwest							BALDWIN PL RD From West							
Start Time	Right	Bear Right	Thru	Left	Hard Left	Peds	App. Total	Hard Right	Bear Right	Thru	Bear Left	Hard Left	Peds	App. Total	Hard Right	Right	Thru	Bear Left	Left	Peds	App. Total	Right	Bear Right	Thru	Left	Hard Left	Peds	App. Total	Hard Right	Bear Right	Thru	Bear Left	Hard Left	Peds	App. Total	Hard Right	Right	Thru	Bear Left	Left	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	1	0	0	2	0	3	0	1	54	2	0	1	58	0	0	0	0	0	0	0	0	1	2	0	0	0	3	0	0	86	3	0	0	89	153
07:15 AM	1	0	0	0	0	0	1	0	3	0	0	2	0	5	0	1	39	3	0	0	43	0	0	0	0	0	0	0	0	5	0	0	0	0	5	0	0	103	1	0	0	104	158
07:30 AM	0	0	0	0	0	0	0	0	1	0	0	4	0	5	0	2	56	2	0	0	60	0	0	0	0	0	0	0	0	6	0	0	0	0	6	0	0	88	2	0	0	90	161
07:45 AM	0	0	0	0	0	0	0	3	1	0	0	5	0	9	0	0	51	1	0	0	52	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	106	3	0	0	109	172
Total	1	0	0	0	0	0	1	3	6	0	0	13	0	22	0	4	200	8	0	1	213	0	0	0	0	0	0	0	0	14	2	0	0	0	16	0	0	383	9	0	0	392	644
08:00 AM	0	0	0	0	4	0	4	0	0	0	0	5	0	5	0	0	37	1	0	0	38	0	0	0	0	0	0	0	0	4	0	0	0	0	4	0	0	90	0	0	0	90	141
08:15 AM	0	0	0	1	0	0	1	0	2	0	0	10	0	12	0	1	52	0	0	0	53	0	0	0	0	0	0	0	0	3	0	0	0	0	3	0	0	75	1	0	0	76	145
08:30 AM	0	0	0	1	0	0	1	0	2	0	0	4	0	6	0	0	42	1	0	0	43	0	0	0	0	0	0	0	0	4	0	0	0	0	4	0	0	91	0	1	0	92	146
08:45 AM	0	0	0	0	0	0	0	0	1	1	0	1	0	3	0	1	52	2	0	0	55	0	0	0	0	0	0	0	0	4	1	0	0	0	5	1	0	101	2	0	0	104	167
Total	0	0	0	2	4	0	6	0	5	1	0	20	0	26	0	2	183	4	0	0	189	0	0	0	0	0	0	0	0	15	1	0	0	0	16	1	0	357	3	1	0	362	599
Grand Total	1	0	0	2	4	0	7	3	11	1	0	33	0	48	0	6	383	12	0	1	402	0	0	0	0	0	0	0	0	29	3	0	0	0	32	1	0	740	12	1	0	754	1243
Apprch %	14.3	0	0	28.6	57.1	0		6.2	22.9	2.1	0	68.8	0		0	1.5	95.3	3	0	0.2		0	0	0	0	0	0		0	90.6	9.4	0	0	0		0.1	0	98.1	1.6	0.1	0		
Total %	0.1	0	0	0.2	0.3	0	0.6	0.2	0.9	0.1	0	2.7	0	3.9	0	0.5	30.8	1	0	0.1	32.3	0	0	0	0	0	0	0	0	2.3	0.2	0	0	0	2.6	0.1	0	59.5	1	0.1	0	60.7	
Lights	1	0	0	2	3	0	6	3	9	1	0	31	0	44	0	6	356	11	0	0	373	0	0	0	0	0	0	0	0	27	3	0	0	0	30	1	0	707	11	1	0	720	1173
% Lights	100	0	0	100	75	0	85.7	100	81.8	100	0	93.9	0	91.7	0	100	93	91.7	0	0	92.8	0	0	0	0	0	0	0	0	93.1	100	0	0	0	93.8	100	0	95.5	91.7	100	0	95.5	94.4
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	0	0	0	18	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	26	0	0	0	26	45
% Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.7	0	0	0	4.5	0	0	0	0	0	0	0	0	3.4	0	0	0	0	3.1	0	0	3.5	0	0	0	3.4	3.6
Trucks	0	0	0	0	1	0	1	0	2	0	0	2	0	4	0	0	9	1	0	0	10	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	7	1	0	0	8	24
% Trucks	0	0	0	0	25	0	14.3	0	18.2	0	0	6.1	0	8.3	0	0	2.3	8.3	0	0	2.5	0	0	0	0	0	0	0	0	3.4	0	0	0	0	3.1	0	0	0.9	8.3	0	0	1.1	1.9
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1

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

File Name : 1-BALDWIN_PL_&_KENNARD_RD-THU_1045057_03-02-2023
Site Code :
Start Date : 3/2/2023

	MAHOPAC FARM ACCESS From North							GARAGE ACCESS From Northeast							BALDWIN PL RD From East							BP DRIVEWAY From South							KENNARD RD From Southwest							BALDWIN PL RD From West							
Start Time	Right	Bear Right	Thru	Left	Hard Left	Peds	App. Total	Hard Right	Bear Right	Thru	Bear Left	Hard Left	Peds	App. Total	Hard Right	Right	Thru	Bear Left	Left	Peds	App. Total	Right	Bear Right	Thru	Left	Hard Left	Peds	App. Total	Hard Right	Bear Right	Thru	Bear Left	Hard Left	Peds	App. Total	Hard Right	Right	Thru	Bear Left	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																																									
Peak Hour for Entire Intersection Begins at 07:00 AM																																									
07:00 AM	0	0	0	0	0	0	0	0	1	0	0	2	0	3	0	1	54	2	0	1	58	0	0	0	0	0	0	0	0	1	2	0	0	0	3	0	0	86	3	0	0	89	153
07:15 AM	1	0	0	0	0	0	1	0	3	0	0	2	0	5	0	1	39	3	0	0	43	0	0	0	0	0	0	0	0	5	0	0	0	0	5	0	0	103	1	0	0	104	158
07:30 AM	0	0	0	0	0	0	0	0	1	0	0	4	0	5	0	2	56	2	0	0	60	0	0	0	0	0	0	0	0	6	0	0	0	0	6	0	0	88	2	0	0	90	161
07:45 AM	0	0	0	0	0	0	0	3	1	0	0	5	0	9	0	0	51	1	0	0	52	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	106	3	0	0	109	172
Total Volume	1	0	0	0	0	0	1	3	6	0	0	13	0	22	0	4	200	8	0	1	213	0	0	0	0	0	0	0	0	14	2	0	0	0	16	0	0	383	9	0	0	392	644
% App. Total	100	0	0	0	0	0		13.6	27.3	0	0	59.1	0		0	1.9	93.9	3.8	0	0.5		0	0	0	0	0	0		0	87.5	12.5	0	0	0		0	0	97.7	2.3	0	0		
PHF	.250	.000	.000	.000	.000	.000	.250	.250	.500	.000	.000	.650	.000	.611	.000	.500	.893	.667	.000	.250	.888	.000	.000	.000	.000	.000	.000	.000	.000	.583	.250	.000	.000	.000	.667	.000	.000	.903	.750	.000	.000	.899	.936
Lights	1	0	0	0	0	0	1	3	6	0	0	11	0	20	0	4	184	7	0	0	195	0	0	0	0	0	0	0	0	13	2	0	0	0	15	0	0	363	9	0	0	372	603
% Lights	100	0	0	0	0	0	100	100	100	0	0	84.6	0	90.9	0	100	92.0	87.5	0	0	91.5	0	0	0	0	0	0	0	0	92.9	100	0	0	0	93.8	0	0	94.8	100	0	0	94.9	93.6
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	8	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	17	0	0	0	17	26
% Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.0	0	0	0	3.8	0	0	0	0	0	0	0	0	7.1	0	0	0	0	6.3	0	0	4.4	0	0	0	4.3	4.0
Trucks	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	8	1	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	14
% Trucks	0	0	0	0	0	0	0	0	0	0	0	15.4	0	9.1	0	0	4.0	12.5	0	0	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.8	0	0	0	0.8	2.2
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2

Colliers Engineering & Design

NYSDOT VOLUME DATA SUMMARY

ROADWAY: BALDWIN PLACE ROAD (CR 37)
SEGMENT: FROM US ROUTE 6 TO NYS ROUTE 6N
LOCATION: 715' S OF STILLWATER RD
START DATE OF COUNT: Monday, March 18, 2019
NYSDOT COUNT STATION: 842001
FUNCTIONAL CLASS: 17 - URBAN MAJOR COLLECTOR
FACTOR GROUP: 30
SEASONAL FACTOR: 1

TIME PERIOD		DIRECTIONAL VOLUMES		TOTAL VOLUME
START	FINISH	NORTHBOUND	SOUTHBOUND	
12:00 AM	1:00 AM	18	8	26
1:00 AM	2:00 AM	12	7	19
2:00 AM	3:00 AM	5	3	8
3:00 AM	4:00 AM	7	8	15
4:00 AM	5:00 AM	10	26	36
5:00 AM	6:00 AM	18	68	86
6:00 AM	7:00 AM	82	208	290
7:00 AM	8:00 AM	190	454	644
8:00 AM	9:00 AM	180	380	560
9:00 AM	10:00 AM	196	352	548
10:00 AM	11:00 AM	210	248	458
11:00 AM	12:00 PM	252	265	517
12:00 PM	1:00 PM	266	292	558
1:00 PM	2:00 PM	283	249	532
2:00 PM	3:00 PM	346	355	701
3:00 PM	4:00 PM	400	330	730
4:00 PM	5:00 PM	443	318	761
5:00 PM	6:00 PM	472	303	775
6:00 PM	7:00 PM	405	260	665
7:00 PM	8:00 PM	308	204	512
8:00 PM	9:00 PM	219	132	351
9:00 PM	10:00 PM	147	89	236
10:00 PM	11:00 PM	81	33	114
11:00 PM	12:00 AM	41	20	61
AVERAGE WEEKDAY DAILY TRAFFIC		**4591**	**4612**	**9203**
	AADT	**4591**	**4612**	**9203**

NOTES:

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

Colliers Engineering & Design

NYSDOT VOLUME DATA SUMMARY

ROADWAY: US ROUTE 6
SEGMENT: FROM ROUTE 6N TO COUNTY LINE
LOCATION: 400 FT W OF GAY RIDGE RD
START DATE OF COUNT: Monday, December 17, 2018
NYSDOT COUNT STATION: 870102
FUNCTIONAL CLASS: 14 - URBAN PRINCIPAL ARTERIAL - OTHER
FACTOR GROUP: 30
SEASONAL FACTOR: 1.018

TIME PERIOD		DIRECTIONAL VOLUMES		TOTAL VOLUME
START	FINISH	EASTBOUND	WESTBOUND	
12:00 AM	1:00 AM	68	50	118
1:00 AM	2:00 AM	30	23	53
2:00 AM	3:00 AM	18	15	33
3:00 AM	4:00 AM	17	23	40
4:00 AM	5:00 AM	49	90	139
5:00 AM	6:00 AM	109	262	371
6:00 AM	7:00 AM	331	507	838
7:00 AM	8:00 AM	730	664	1394
8:00 AM	9:00 AM	708	714	1422
9:00 AM	10:00 AM	588	654	1242
10:00 AM	11:00 AM	621	729	1350
11:00 AM	12:00 PM	706	705	1411
12:00 PM	1:00 PM	715	756	1471
1:00 PM	2:00 PM	737	706	1443
2:00 PM	3:00 PM	797	757	1554
3:00 PM	4:00 PM	895	791	1686
4:00 PM	5:00 PM	874	856	1730
5:00 PM	6:00 PM	888	814	1702
6:00 PM	7:00 PM	777	688	1465
7:00 PM	8:00 PM	644	513	1157
8:00 PM	9:00 PM	501	424	925
9:00 PM	10:00 PM	354	308	662
10:00 PM	11:00 PM	235	184	419
11:00 PM	12:00 AM	136	88	224
AVERAGE WEEKDAY DAILY TRAFFIC		**11528**	**11321**	**22849**
	AADT	**11324**	**11121**	**22445**

NOTES:

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

Colliers Engineering & Design

NYSDOT VOLUME DATA SUMMARY

ROADWAY: US ROUTE 6
SEGMENT: FROM COUNTY LINE TO MILLER ROAD
LOCATION: 730' N OF TOMAHAWK ST
START DATE OF COUNT: Tuesday, June 27, 2017
NYSDOT COUNT STATION: 840039
FUNCTIONAL CLASS: 14 - URBAN PRINCIPAL ARTERIAL - OTHER
FACTOR GROUP: 30
SEASONAL FACTOR: 1.106

TIME PERIOD		DIRECTIONAL VOLUMES		TOTAL VOLUME
START	FINISH	EASTBOUND	WESTBOUND	
12:00 AM	1:00 AM	75	52	127
1:00 AM	2:00 AM	36	27	63
2:00 AM	3:00 AM	24	22	46
3:00 AM	4:00 AM	20	18	38
4:00 AM	5:00 AM	48	63	111
5:00 AM	6:00 AM	97	190	287
6:00 AM	7:00 AM	253	372	625
7:00 AM	8:00 AM	466	513	979
8:00 AM	9:00 AM	584	624	1208
9:00 AM	10:00 AM	598	572	1170
10:00 AM	11:00 AM	605	537	1142
11:00 AM	12:00 PM	659	540	1199
12:00 PM	1:00 PM	714	584	1298
1:00 PM	2:00 PM	691	568	1259
2:00 PM	3:00 PM	708	578	1286
3:00 PM	4:00 PM	781	592	1373
4:00 PM	5:00 PM	813	677	1490
5:00 PM	6:00 PM	824	668	1492
6:00 PM	7:00 PM	758	551	1309
7:00 PM	8:00 PM	657	470	1127
8:00 PM	9:00 PM	561	383	944
9:00 PM	10:00 PM	392	269	661
10:00 PM	11:00 PM	278	204	482
11:00 PM	12:00 AM	148	106	254
AVERAGE WEEKDAY DAILY TRAFFIC		**10790**	**9180**	**19970**
	AADT	**9756**	**8300**	**18056**

NOTES:

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

Colliers Engineering & Design

NYSDOT VOLUME DATA SUMMARY

ROADWAY: NYS ROUTE 118
SEGMENT: FROM COUNTY LINE TO ROUTE 6 END ROUTE 118
LOCATION: 500' E OF US 6
START DATE OF COUNT: Tuesday, July 10, 2018
NYSDOT COUNT STATION: 840002
FUNCTIONAL CLASS: 16 - URBAN MINOR ARTERIAL
FACTOR GROUP: 30
SEASONAL FACTOR: 1.093

TIME PERIOD		DIRECTIONAL VOLUMES		TOTAL VOLUME
START	FINISH	NORTHBOUND	SOUTHBOUND	
12:00 AM	1:00 AM	15	16	31
1:00 AM	2:00 AM	7	7	14
2:00 AM	3:00 AM	4	6	10
3:00 AM	4:00 AM	4	5	9
4:00 AM	5:00 AM	10	13	23
5:00 AM	6:00 AM	35	43	78
6:00 AM	7:00 AM	78	177	255
7:00 AM	8:00 AM	151	352	503
8:00 AM	9:00 AM	266	323	589
9:00 AM	10:00 AM	254	232	486
10:00 AM	11:00 AM	244	206	450
11:00 AM	12:00 PM	272	238	510
12:00 PM	1:00 PM	277	208	485
1:00 PM	2:00 PM	283	209	492
2:00 PM	3:00 PM	319	230	549
3:00 PM	4:00 PM	363	218	581
4:00 PM	5:00 PM	438	258	696
5:00 PM	6:00 PM	430	256	686
6:00 PM	7:00 PM	350	212	562
7:00 PM	8:00 PM	248	182	430
8:00 PM	9:00 PM	210	156	366
9:00 PM	10:00 PM	135	142	277
10:00 PM	11:00 PM	84	67	151
11:00 PM	12:00 AM	38	30	68
AVERAGE WEEKDAY DAILY TRAFFIC		**4515**	**3786**	**8301**
	AADT	**4131**	**3464**	**7595**

NOTES:

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

INSITE
ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.

October 30, 2023

Town of Carmel Planning Board
60 McAlpin Avenue
Mahopac, New York 10541

RE: Union Energy Center, LLC
24 Miller Road
Mahopac, NY 10541
TM#'s: 86.11-1-14

Dear Chairman Paeprer and Members of the Board:

Please find enclosed the following plans and documents in support of an application for site plan and subdivision approval for the above referenced project:

- Site Plan Set, last revised October 30, 2023.
- Sketch Subdivision Plat, dated October 30, 2023.
- Decommissioning Plan, from East Point Energy.
- PILOT Proposal, from East Point Energy.
- Letter of support for the Mahopac Volunteer Fire Department, dated September 25, 2023.
- Letter in response to the NYCDEP letter dated October 23, 2023.
- Full Environmental Assessment Form (FEAF), last revised October 30, 2023.

In response to comments received from Director of Code Enforcement, Michael Carnazza, dated September 11, 2023, we offer the below responses:

1. This comment is acknowledged.

2. This comment is acknowledged.

3. This comment is acknowledged.

4. The applicant, with their fire safety consultant, Fire Risk Alliance, has been in discussions with the Mahopac Volunteer Fire Department (MVFD), since before our initial submission. See the enclosed letter of support from the Fire Chief Andrew Roberto. The additions and revisions cited in the letter included:

    a. The installation of a Knox Box, which we now show on drawing SP-1.1.

    b. That the driveway meet the requirements for a fire apparatus road. The driveway meets the requirements for width, and offers two turnaround circles that meet fire code specification for dead-end driveways. The only departure from the code is on the maximum slope. The driveway alignment and grading have been revised to reduce the maximum slope from 15% to 12%. To reduce it further to 10% would

increase our total area of disturbance, and our disturbance within the NYSDEC wetland adjacent area. However, the fire code empowers the local fire code official to vary the 10% maximum. The applicant will follow up with MVFD for their approval of a 12% slope on the driveway instead of 10%.

c. Fire Department connections, if any are required, will be located in an area with clear access for hose and apparatus.

d. That the Fire Department be consulted and alerted to any other on site fire safety features.

5. See the attached revised Sketch Subdivision Plat. The owners and applicant are seeking to modify property lines in two locations. Proposed Lot 2 is approximately 12.3 acres, and is an expansion of the existing NYSEG lot and will encompass the substation that will be under NYSEG's control. Proposed Lot 3 will be an expansion of the existing Teal Door lot to the southwest of the property, increasing its size to 4.3 acres. The 78.9 acre remaining parcel makes up lot 1, and will encompass the applicant's proposed operation.

In response to comments received from Town Engineer Richard Franzetti, PE, dated September 12, 2023, we offer the following responses:

General Comments

1. The required referrals are acknowledged.

2. The required permits are acknowledged.

3. A Stormwater Pollution Prevention Plan (SWPPP) will be provided with a future submission.

4. The requirement for a stormwater maintenance agreement is acknowledged and will be provided with a future submission.

5. The requirement for a performance bond is acknowledged and will be provided with a future submission.

Detailed Comments

1. A Vehicle Maneuvering Plan has been added to the plan set on drawing SP-4.

    a. The Vehicle Maneuvering Plan indicates a fire truck being able to move throughout the site.

    b. Pavement radii have been added to the plan and a vehicle turning template has been added to drawing SP-4.

    c. Sight distances are provided on drawing SP-1.1.

    d. Driveway slopes at the entrance are shown on drawing SP-2.1.

2. Layout and Landscape Plans

    a. A note regarding the Wetland Inspector verifying plantings has been added to drawing SP-1.1.

b. A note regarding plantings being installed per the town code has been added to drawing SP-1.1.

c. A light spill plan will be provided with a future submission.

d. All existing easements are shown. No easements are proposed.

3. Grading and Utilities Plans

a. Rims and inverts will be provided with a future submission.

b. Hydraulic calculations and pipe sizes will be provided with a future submission.

c. There is no proposed SSTS for the site.

d. A note has been added to drawing SP-3.1 that all utilities other than transmission lines are to be buried.

e. Tops and bottoms of wall elevations have been added to drawings SP-2.1 & 2.2.

f. This comment is acknowledged.

4. Erosion and Sediment Control Plan

a. Rims and inverts will be provided with a future submission.

b. A construction sequence has been added to drawing D-2.

c. A SWPPP will be provided with a future submission.

5. Site Details

a. End section is labelled as HDPE in the detail on drawing D-2.

b. A note that all driveways must be in accordance with the town code has been added to drawing OP-1.

In response to comments received from Town Planner, Patrick Cleary, AICP, dated September 14, 2023, we offer the following responses:

1. This comment is acknowledged.

2. This comment is acknowledged.

3. Based on discussion with the Director of Code Enforcement, Mike Carnazza, the enclosures that house the batteries would be subject to building height and setback requirements, however, the utility poles and substation equipment would not, as these are not buildings. The plans have been revised.

4. See the Site Plan Narrative provided with our August submission, which addresses the proposed development and operations.

5. As discussed, at the September meeting, the site will be intermittently visited by 1 to 3 maintenance workers, but will not house any full time employees. Vehicle trips will be minimal.

6. Two parking spaces are shown on drawings SP-1.1 & 1.2.

7. Additional detail on the overhead transmission lines has been added to the plans, as well as the underground power service that connects to the proposed emergency generator.

8. As discussed above, the maximum slope of the driveway will be 12%.

9. A schematic site plant list and wetland mitigation plant list are shown on drawing SP-1.1, and quantities will be provided with a future submission.

10. There will be locked gates near the site entry and at each enclosure on site. Motion sensor security lighting is also proposed.

11. The proposed fence will be 6' chainlink.

12. The required wetland permitting is acknowledged. The applicant's environmentsal consultant is currently working on the details of the proposed mitigation, which is now shown schematically on SP-1.1 & 1.2. A Wetland Functional Assessment will be provided with our next submission.

13. As discussed at the September meeting, the site is well suited to the proposed development, for a variety of reasons. The proposed use is only viable adjacent to existing electrical transmission lines, and Putnam County is an area of particular need of backup electrical service. As the Board is aware the grid is vulnerable to a number of risks that can cause outages. The project also has a light impact on the site relative to other potential development types. The development encumbers a relatively small portion of the overall site. Portions of the development that fall within the wetland and adjacent areas will be mitigated, and the remainder of the site will remain wooded and undisturbed.

14. The site will have very little or no visibility from the Putnam County Trailway. Along much of the shared property line a substantial portion of the existing vegetation will remain between the development and the trailway. Additionally, a steep berm exists along its shared property line that is between 6' and 20' above the elevation of the trailway. One location that may have some visibility is the portion of the trailway near Miller Road, looking east toward the northern battery storage enclosure. Additional evergreen planting is shown in this area to mitigate any potential view. The applicant would also like to invite members of the board and its consultants to visit the site to view the development areas.

15. Sight distances are shown on drawing SP-1.1.

16. Security lighting is proposed. A light spill plan will be provided with a future submission.

17. See the enclosed decommissioning plan.

In response to questions raised by the Board at the September 14, 2023 meeting, the applicant offers the following responses:

1. In the event of a transmission grid outage, the system will be designed such that backup generation will support critical functions such as substation controls, energy management systems, communications, and safety & thermal management systems, including HVAC. The

substation controls, energy management system, and external communication network will be backed up by an uninterruptible power supply (UPS) which will enable East Point's team to remotely monitor and control the facility during a local outage for a sufficient amount of time to get personnel on site. Additionally, the internal local communication network and safety & thermal management systems will be on an automatic transfer switch connected to backup generator(s) with sufficient fuel for extended runtime in preparation for an ongoing outage event. The system will be designed such that regardless of whether the external / remote connection is available or not, the safety & thermal management systems will remain active, and if remote connection is unavailable for an extended period of time, the system would default to smoothly shut down to an off/idling mode.

Please place the project on the November 9, 2023 Planning Board agenda for discussion of the project with the Board. Should you have any questions or comments regarding this information, please feel free to contact our office.

Very truly yours,

INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.

By: _____
Jeffrey J. Contelmo, PE
Senior Principal Engineer

JJC/adt

Enclosures
cc: (All via email only)
Scott Connuck
Compton Donohue
Frank Smith, Esq
William Shilling, Esq
Mahopac Volunteer Fire Dept

INSITE
ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.

October 30, 2023

Town of Carmel Planning Board
60 McAlpin Avenue
Mahopac, New York 10541

RE: Union Energy Center, LLC – NYCDEP Letter Response
24 Miller Road
Mahopac, NY 10541
TM#'s: 86.11-1-14

Dear Chairman Paeprer and Members of the Board:

In response to comments received from Cynthia Garcia of the New York City Department of Environmental Protection (NYCDEP), dated October 23, 2023, we offer the below responses:

1. Given the extensive degree of pre-application due diligence, documentation, and studies that have been provided to the Board, as lead agency, and the applicant's continued advancement of wetland analysis, mitigation measures, stormwater management practices, and erosion control, a positive declaration is likely unwarranted.

2. The proposed Battery Energy Storage System (BESS) is not specifically listed by the NYSDEC as a "hot spot". As the project SWPPP is further developed consideration for treatment of hot spot concerns will be addressed.

3. The project will use lithium-ion batteries.

4. It is unclear how DEP defines "community ESS facility." However, according to the Energy Information Administration (EIA), there are about 8,900 MW of battery storage projects in the US as of 2022. This number is rapidly increasing.

5. The battery storage structures will be stored above ground. The FEAF has been revised to note this.

6. The transformers will be the primary source of liquid hazardous materials on site. All transformers will have oil containment, except the transformers not on a skid will have physical containment around them (liner and gravel). All spills will adhere to the plans to be developed with the Energy, Procurement & Construction (EPC), as well as local, state, and federal law.

7. The project will adhere to the latest version of NFPA 855 "Standards for the Installation of Energy Storage Systems" at the time of final engineering and the procurement of equipment. The Project has secured the support of the Mahopac Volunteer Fire Department, subject to compliance with certain standards. Mahopac Volunteer Fire Department (MVFD) has also run the project by the Somers Volunteer Fire Department.

8. Yes, local volunteer fire departments are equipped to manage a fire at this facility. Representatives for the project have met with MVFD three times, including a training session with a battery storage fire safety professional. The Project has secured the support of the MVFD. MVFD has not identified any deficiencies in their equipment to respond to a fire. The recommended fire suppression agent is strictly water, if necessary. It is further recommended that any fire involving the batteries be allowed to burn out and not to use any water or any other extinguishing agent on the container involved in fire; water should only be used to cool exposures near the involved container and only if necessary. The access roads and driveways are designed as per NFPA 855 and allow sufficient access for fire department vehicles.

9. The site will have an Emergency Response Plan for all mentioned conditions which emphasizes not to use excess fire suppressants. As stated in comment 8 it is recommended that fires involving the batteries be allowed to burn themselves out and not to use extinguishing agents on the burning containers. It is further recommended that the only extinguishing agent that should be used is water and only on exposures if necessary. In rare cases where water is used directly on the BESS, water will be captured in stormwater features and can be removed.

10. The project has not selected what type of air conditioning system it will use. If a liquid-cooled system is used, then the Project will determine how to manage spills at that time.

11. This comment is acknowledged and confirmed, relative to operations.

12. This comment is acknowledged, and said permit will be obtained.

13. The project has not selected what type of air conditioning system it will use. If a liquid-cooled system is used, then the Project will determine how to manage spills at that time.

14. The elevation of the proposed enclosures will consider the potential for inundation of the adjacent wetlands, and stormwater management practices are being designed at this time.

15. The requested detailed construction sequence will be provided on the site plans.

16. The project has not selected what type of air conditioning system it will use. If a liquid-cooled system is used, then the Project will determine how to manage spills at that time.

17. A full-size set of plans have been sent to NYCDEP.

18. The wetlands will be validated by the NYSDEC. Permitting with the Army Corps of Engineers, NYSDEC and Town of Carmel Wetland permit are anticipated in addition to the CPDP permitting with NYCDEP.

19. The anticipated disturbance within the wetland is approximately 3,200 sf, and the total disturbance within the adjacent area is approximately 233,000 sf.

20. The location of the proposed driveway crossing is, as indicated in the site plans, at the narrowest practicable section of the wetland/watercourse in the vicinity. As mentioned above, the total wetland disturbance associated with the crossing is approximately 3,200 sf, and the crossing is approximately 36’ wide.

21. The seeding notes on drawing D-1 have been revised to include the recommended seeding.

Should you have any questions or comments regarding this information, please feel free to contact our office.

Very truly yours,

INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.

By: _____
Jeffrey J. Contelmo, PE
Senior Principal Engineer

JJC/adt

Enclosures
cc: (All via email only)
Scott Connuck
Compton Donohue
Frank Smith, Esq
William Shilling, Esq

DECOMMISSIONING PLAN

PROJECT BACKGROUND

The proposed battery energy storage system (BESS) Facility is an open configuration consisting of: an array of multiple individual, fully equipped, containers that contain racks of lithium-ion batteries; thermal management systems; control instrumentation; electric grid interconnection switchgear; and on-board fire protection system; AC/DC inverters; transformers; and an on-site substation that facilitates connection to NYSEG'S electric grid. Separate from the Facility, but necessary for purposes of connecting it to the electric grid, NYSEG will construct, own, and operate a substation adjacent to the Facility.

The proposed BESS facility would be located on a Commercial/Business Park (C/BP) zoned parcel totaling 94.5+/- acres on 24 Miller Road, Mahopac.

INTRODUCTION

This Section provides a general description of the decommissioning activities anticipated in support of restoration of the Project Site when the Facility reaches the end of its useful life. Decommissioning would result in the removal of Facility equipment from the Site, thereby rendering the cleared Site available for redevelopment for another future use.

A determination when decommissioning might occur depends on the BESS Facility's anticipated useful commercial life. With routine maintenance, including periodic battery augmentation, replacements or upgrades, Union Energy Center, LLC anticipates that the proposed BESS Facility's useful life will be a minimum of 20 years.

When the Facility reaches the end of its useful life, an updated Decommissioning Plan based on this document will be implemented to ensure that all above-ground Facility components will be removed such that the Property can be repurposed. Decommissioning will be accomplished with the objective of maximizing the recycling/reuse of the installed BESS Facility's equipment and materials and minimizing the amount of waste to be disposed.

EAST POINT ENERGY

AN EQUINOR COMPANY

PRE-PLANNING

The following protocols/procedures would be implemented with as much advance planning as the still operating system operation allows. This Plan anticipates these actions would be completed at least six (6) months prior to the start of planned equipment deactivation and removal activities.

- ☐ Review and update Decommissioning Plan (review/revise as required).
- ☐ Establish Decommissioning Schedule with key Milestone Dates.
- ☐ Notify all Authority(ies) having Jurisdiction (AHJ).
- ☐ Establish Division of Responsibilities (DOR) Matrix.
- ☐ Gather all of the BESS systems' technical information including, but not limited to:
  - Instruction manuals
  - As-built drawings
  - Equipment weights
  - MSDS sheets
- ☐ Establish Safety Response Plan for decommissioning activities.
- ☐ Review system arc flash report to determine personal protection equipment (PPE) arc flash levels required for decommissioning tasks and obtain required PPE as prescribed in NFPA 70E Standard for Electrical Safety in the Workplace.
- ☐ Review all systems adjacent to and supporting the BESS that may be impacted by decommissioning and determine means of protecting said systems. These systems include but are not limited to: structural elements; building penetrations; means of egress; fire detection and suppression systems and interface points; communication equipment and interface points; and electrical interconnecting equipment including the Facility's on-site substation and NYSEG's substation.
- ☐ Determine salvage value of components and disposal fees. Establish a list of components to be disposed of in one of the following categories:
  - Salvage/recycle
  - Special disposal required
  - General disposal
  - Resell/repurpose
- ☐ Contact receiving entities to establish quantities, schedule, financial, and logistical information.
- ☐ Prepare shipping Chain-of-Custody paperwork and labeling per governing requirements.
- ☐ Obtain any special tools and equipment necessary for disassembly as required.

GENERAL CONSIDERATIONS

The following general considerations should be adhered to prior to and during the decommissioning process.

- An identification of all energy sources (batteries, connected batteries in other enclosures or structures), inverters [also known as power conversion systems (PCS)], DC bus pre-charge power supplies, UPS, support equipment with batteries, and AC or DC auxiliary power equipment and distribution systems.
- Information about PPE and requirements for use as needed (site dependent), noting that each electrical equipment cabinet should already have shock and arc flash warning labels applied as per NFPA 70E.
- A notification that the ESS should be discharged to its safe state of charge for transport.
- Assurance that during the decommissioning process, critical support equipment such as, but not limited to, fire detection and suppression equipment, electrical circuits to facilitate decommissioning, and so forth, remain operational to the extent possible.
- A warning not to disconnect any ESS grounding until all energy sources are isolated and locked out.
- A notification to disconnect and shut down all batteries and support or auxiliary equipment associated with the system or its component parts.
- Isolation of all energy sources, starting with those with highest fault current, by isolating the AC POI, then isolating each inverter/MV transformer, then the battery strings and/or racks, then isolating the individual battery modules in each string/rack/blade.
- The need to mechanically uninstall battery trays and place them into original or equivalent packing materials or protect terminals.
- Information on disposal material associated with the BESS.

Decommissioning procedures vary, and therefore BESS manufacturer's instructions will also be followed.

DISASSEMBLY OF EQUIPMENT AND MATERIALS

The following steps will govern the removal of equipment and materials after the BESS preparation (described above) has been completed.

1. Review DC arc flash reports and labels and utilize PPE appropriate for the designated arc flash hazard level.
2. The Facility will be disconnected from NYSEG's grid at the Facility's POI; inverter/transformers from the AC collection system; containers/enclosures/blocks from the inverter; MV transformer, then individual racks and/or strings from DC bus system.
3. If state of charge has been taken down to 0% as part of system preparation, safety grounds will be applied to the DC bus of each rack. If modules are being removed at a non-zero state of charge, safety grounds won't be applied, and all work will be performed with appropriate shock protection, treating components as potentially energized.

4. Disconnect and/or segment individual groups of modules into segments.
5. Remove battery modules.
6. Remove cooling media (as applicable); store and dispose of per MSDS instructions.
7. Remove any fire suppression media and equipment after all modules have been removed.
8. Remove remaining project-owned fixed equipment and project-owned interconnecting equipment at the original equipment location.
9. Perform final Site waste removal, including removal of rental equipment, tools, and demolition materials at the original equipment location.

The substation owned and operated by NYSEG will remain in place in perpetuity and is not subject to this decommissioning plan.

DECOMMISSIONING PHASES

Actual decommissioning shall proceed in four major phases:

1. Removal of Specialized Equipment: For removal of specialized installations, electrical equipment shall be de-energized, and all hazardous materials associated with or housed in that equipment shall be removed for recycling/disposal, including batteries. Equipment racks can be a source of scrap metal.
2. Removal of Basic Structures: For removal of basic structures, dismantling should first occur. Much of this material would be sold as scrap metal.
3. Removal of Foundations: For removal of foundations, to the extent required, piping, and utilities, excavation would be necessary. The first part of this phase would be removal of aboveground piping, followed by excavation and removal of foundations (with appropriate disposal of the concrete and steel girders), and excavation and piecemeal removal of underground piping.
4. Backfill, reseeding, and general landscaping of excavated areas as required.

SALVAGE VALUE

It is expected that the aboveground portion of the Facility's components would be offered for sale or for salvage or scrap value. For example, there will be a number of high-value, rare metals in the project, such as graphite, copper, and lithium that are expected to retain value. Even if there were no market for the purchasing of the Facility's components for salvage purposes, the aggregate scrap value of the equipment and structures are anticipated to be more than sufficient to offset the costs for complete dismantling, demolition, and removal of the BESS Facility.

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Union Energy Center PILOT Proposal

Union Energy Center, LLC is a proposed 116-megawatt (MW) battery energy storage system located at 24 Miller Road, Mahopac, NY. The Carmel Planning Board requested that East Point Energy, the owner of the project, provide a proposed Payment-in-Lieu-of-Taxes ("PILOT") to the Town, County, and schools.

East Point Energy has had in-depth discussions with multiple stakeholders in Putnam County as it pertains to a PILOT, including the Carmel Assessor, Putnam County Economic Development, and the Putnam County Industrial Development Agency ("IDA"). First, it is worth stating that there is no state guidance on assessing battery energy storage projects. However, many AHJ's in NY recognize that some components of the project are considered "real property" which is taxable—like the containers and affixed structures, while other components like the batteries themselves constitute movable machinery or equipment under Real Property Tax Law Section 102(12)(f) and therefore are not subject to property tax. The batteries represent a significant portion of the capital expenditure of the project.

East Point has proposed to the IDA three different scenarios for real property taxes. The following approach would allow for flexibility if the project electrical capacity were to be modified.

1. 15-year PILOT: $2,000/MW/year ($232K/year)
2. 20-year PILOT: $2,500/MW/year ($290K/year)
3. 25-year PILOT: $2,750/MW/year ($319K/year)

The IDA has also suggested waiving some county and state sales tax payments, such that the project would pay 0.375% for a limited period of time. The Project does not intend to include the mortgage exemption in its PILOT application. The PILOT would provide Union Energy Center a predictable and manageable tax rate that would allow the project to be built. Without a PILOT, the project would be unfeasible. The Town/Schools/County benefit for all the reasons described in the project narrative, including a dramatic increase of the baseline taxes (according to our landowner, the property paid $11,758 in 2022 to Town, County, and Schools), construction jobs, critical electrical infrastructure and reliability, all while having minimal impacts.

East Point's proposal is not without precedent. While every project has unique characteristics and should be treated individually, there are several projects in upstate NY that demonstrate East Point's offer is above and beyond what similar projects have paid:

1. Orange County: A set of three projects agreed to pay ~$1500-$2000/MW/year over 15 years (payment rose gradually over time). Agreed to in 2022.
2. Town of Hamburg: Project agreed to pay ~$1000-$1200/MW/year over 20 years (payment rose gradually over time). Agreed to in 2022.
3. Wyoming County: Project agreed to pay ~$1500-$2400/MW/year over 20 years (payment rose gradually over time). Agreed to in 2022.

4. City of Mechanicsville, Town of Stillwater: Project agreed to pay ~$750-800/MW/year over 15 years (payment rose gradually over time). Agreed to in 2019.

The PILOT negotiation is a work in progress that will not be completed for at least several months. However, we believe that this offer should provide the Planning Board with a meaningful sense of the positive tax impacts as they consider our site plan.

MAHOPAC VOLUNTEER FIRE DEPARTMENT

Office of The Chief

Chief
Andrew Roberto

First Assistant Chief
Gabriel Rivera

Second Assistant Chief
Kyle Trillas

Post Office Box 267
Mahopac, NY 10541

Fire Headquarters
741 Route Six

Emergency Dial 911

Phone: (845) 628-3160
chief@mahopacvfd.com
Fax: (845)628-2174

Monday September 25, 2023

Town of Carmel Planning Board,

Our agency has discussed the plans for the proposed battery storage site located at 24 Miller Road. We have submitted additions and changes for fire protection features, and with those changes we support the new facility to go in. If you have any questions, please do not hesitate to contact us.

Respectfully,

Andrew Roberto
Chief of Department

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: Union Energy Center, LLC		
Project Location (describe, and attach a general location map): Union Valley Road and Miller Road		
Brief Description of Proposed Action (include purpose or need): The applicant is seeking to construct a 116-megawatt battery energy storage system. The project includes the construction of a system of gravel driveways, two pads for battery storage, two substations, and the associated landscaping and stormwater management practices. The batteries would be stored in above ground enclosures similar to shipping containers and the project would connect to NYSEG transmission lines that currently traverse an easement on the site. The 93.5 acre site, where the proposed development would occur is currently undeveloped. The applicant is also seeking to modify existing property lines between the proposed development site, and two neighboring sites. One is to the north which contains a New York State Electric and Gas (NYSEG) substation. Of the two proposed substations, one would be owned and controlled by NYSEG. The proposed lot line adjustment would allow NYSEG ownership of this substation. Additionally, the adjacent lot known as now or formerly The Teal Door, LLC, would be enlarged into the project site. In the proposed configuration, the proposed development lot would contain 78.9 acres, the NYSEG lot would be 12.3 acres, and the Teal Door lot would be 4.3 acres. The proposed subdivision would add 10.7 acres to the NYSEG lot, 3.9 acres to the Teal Door lot, and deduct the sum of the two from the development lot. There are no water or wastewater improvements proposed.		
Name of Applicant/Sponsor: East Point Energy c/o Scott Connuck	Telephone: E-Mail: sconnuck@eastpointenergy.com	
Address: 310 4th Street NE, 3rd Floor		
City/PO: Charlottesville	State: VA	Zip Code: 22902
Project Contact (if not same as sponsor; give name and title/role): Jeffrey J. Contelmo, P.E., Insite Engineering, Surveying & Landscape Architecture, P.C.	Telephone: 845-225-9690 E-Mail: jcontelmo@insite-eng.com	
Address: 3 Garrett Place		
City/PO: Carmel	State: NY	Zip Code: 10512
Property Owner (if not same as sponsor): Miller Road, LLC c/o Nicole Stern	Telephone: E-Mail:	
Address: 888 Route 6		
City/PO: Mahopac	State: NY	Zip Code: 10541

B. Government Approvals

B. Government Approvals, Funding, or Sponsorship. ("Funding" includes grants, loans, tax relief, and any other forms of financial assistance.)

Government Entity	If Yes: Identify Agency and Approval(s) Required	Application Date (Actual or projected)
a. City Counsel, Town Board, or Village Board of Trustees ☐Yes ☑No		
b. City, Town or Village Planning Board or Commission ☑Yes ☐No	Planning Board - Site Plan Approval, Subdivision approval	
c. City, Town or Village Zoning Board of Appeals ☐Yes ☑No		
d. Other local agencies ☑Yes ☐No	Building Permit Town Wetland Permit Permit	
e. County agencies ☐Yes ☑No		
f. Regional agencies ☑Yes ☐No	NYCDEP SWPPP Acceptance	
g. State agencies ☑Yes ☐No	NYSDEC GP-0-20-001 Coverage NYSDEC Freshwater Wetlands Permit	
h. Federal agencies ☑Yes ☐No	ACOE Permitting Wetland Fill Permit	

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):

NYC Watershed Boundary

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?
Commercial / Business Park

b. Is the use permitted or allowed by a special or conditional use permit? ☑ Yes ☐ No

c. Is a zoning change requested as part of the proposed action? ☐ Yes ☑ No
If Yes,
i. What is the proposed new zoning for the site? _____

C.4. Existing community services.

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

b. What police or other public protection forces serve the project site?
Carmel Police Department

c. Which fire protection and emergency medical services serve the project site?
Mahopac Fire District

d. What parks serve the project site?
Empire State Trail, Donald J. Trump State Park, Baldwin Meadows 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)? Industrial / Utility

b. a. Total acreage of the site of the proposed action? 1.6±, 0.4 & 93.5± acres
b. Total acreage to be physically disturbed? 18.0± acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 95.5± 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)
Lot line adjustments for industrial / utility & commercial use.
ii. Is a cluster/conservation layout proposed? ☐ Yes ☑ No
iii. Number of lots proposed? 3
iv. Minimum and maximum proposed lot sizes? Minimum 4.3 Maximum 12.3

e. Will the proposed action be constructed in multiple phases? ☐ Yes ☑ No
i. If No, anticipated period of construction: 12-18 months
ii. If Yes:
- Total number of phases anticipated _____
- Anticipated commencement date of phase 1 (including demolition) _____ month _____ year
- Anticipated completion date of final phase _____ month _____ year
- Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases: _____

f. Does the project include new residential uses? ☐ Yes ☑ No

If Yes, show numbers of units proposed.

	One Family	Two Family	Three Family	Multiple Family (four or more)
Initial Phase				
At completion of all phases				

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

If Yes,

i. Total number of structures 180

ii. Dimensions (in feet) of largest proposed structure: 10.7' height; 10' width; and 60' length

iii. Approximate extent of building space to be heated or cooled: 108,000 square feet

h. Does the proposed action include construction or other activities that will result in the impoundment of any liquids, such as creation of a water supply, reservoir, pond, lake, waste lagoon or other storage? ☐ Yes ☑ No

If Yes,

i. Purpose of the impoundment: _____

ii. If a water impoundment, the principal source of the water: ☐ Ground water ☐ Surface water streams ☐ Other specify:

_____

iii. If other than water, identify the type of impounded/contained liquids and their source.

_____

iv. Approximate size of the proposed impoundment. Volume: _____ million gallons; surface area: _____ acres

v. Dimensions of the proposed dam or impounding structure: _____ height; _____ length

vi. Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock, wood, concrete):

_____

D.2. Project Operations

a. Does the proposed action include any excavation, mining, or dredging, during construction, operations, or both? (Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite) ☐ Yes ☑ No

If Yes:

i .What is the purpose of the excavation or dredging? _____

ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?

- Volume (specify tons or cubic yards): _____
- Over what duration of time? _____

iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them.

_____

_____

iv. Will there be onsite dewatering or processing of excavated materials? ☐ Yes ☐ No

If yes, describe. _____

_____

v. What is the total area to be dredged or excavated? _____ acres

vi. What is the maximum area to be worked at any one time? _____ acres

vii. What would be the maximum depth of excavation or dredging? _____ feet

viii. Will the excavation require blasting? ☐ Yes ☐ No

ix. Summarize site reclamation goals and plan: _____

_____

_____

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area? ☑ Yes ☐ No

If Yes:

i. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): Crossing over NYSDEC Wetland F-26 and associated watercourse for access to the site.

_____

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:
A culvert and headwall would be constructed to allow for access to the site from Miller Road. The action would result in disturbance of about 3,000 sf of the wetland. ACOE permitting will be sought for this part of the project. Other portions of the site would create some disturbance within the 100 adjacent area, but these disturbances would primarily be for the construction of stormwater management practices. A NYSDEC Freshwater Wetlands Permit will be sought for these disturbances.

iii. Will the proposed action cause or result in disturbance to bottom sediments? ☑ Yes ☐ No
If Yes, describe: Culvert and headwalls to be constructed.

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: 3,000 sf±
- expected acreage of aquatic vegetation remaining after project completion: 42.8±ac
- purpose of proposed removal (e.g. beach clearing, invasive species control, boat access): Crossing for access to the site.
- proposed method of plant removal: Mechanical
- if chemical/herbicide treatment will be used, specify product(s): N/A

v. Describe any proposed reclamation/mitigation following disturbance: Wetland Mitigation will be provided per ACOE.

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: _____ 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: _____
- Does the existing public water supply have capacity to serve the proposal? ☐ Yes ☐ No
- Is the project site in the existing district? ☐ Yes ☐ No
- Is expansion of the district needed? ☐ Yes ☐ No
- Do existing lines serve the project site? ☐ Yes ☐ No

iii. Will line extension within an existing district be necessary to supply the project? ☐ Yes ☐ No
If Yes:

- Describe extensions or capacity expansions proposed to serve this project: _____
- Source(s) of supply for the district: _____

iv. Is a new water supply district or service area proposed to be formed to serve the project site? ☐ Yes ☐ No
If, Yes:

- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- Proposed source(s) of supply for new district: _____

v. If a public water supply will not be used, describe plans to provide water supply for the project: _____

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

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

i. Total anticipated liquid waste generation per day: _____ 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): _____

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

- Name of wastewater treatment plant to be used: _____
- Name of district: _____
- Does the existing wastewater treatment plant have capacity to serve the project? ☐ Yes ☐ No
- Is the project site in the existing district? ☐ Yes ☐ No
- Is expansion of the district needed? ☐ Yes ☐ No

- Do existing sewer lines serve the project site? ☐Yes ☐No
- Will a line extension within an existing district be necessary to serve the project? ☐Yes ☐No

If Yes:

- Describe extensions or capacity expansions proposed to serve this project: _____

iv. Will a new wastewater (sewage) treatment district be formed to serve the project site? ☐Yes ☐No

If Yes:

- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- What is the receiving water for the wastewater discharge? _____

v. If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge or describe subsurface disposal plans):

_____

vi. Describe any plans or designs to capture, recycle or reuse liquid waste: _____

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?

56,120 Square feet or 1.3 acres (impervious surface)

4,142,137 Square feet or 95.1 acres (parcel size)

ii. Describe types of new point sources. Battery enclosure structures.

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)?

Proposed stormwater management practices

- If to surface waters, identify receiving water bodies or wetlands: _____
- Will stormwater runoff flow to adjacent properties? ☐Yes ☑No

iv. Does the proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater? ☑Yes ☐No

f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations? ☐Yes ☑No

If Yes, identify:

i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles)

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

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

g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit? ☐Yes ☑No

If Yes:

i. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year) ☐Yes ☐No

ii. In addition to emissions as calculated in the application, the project will generate:

- _____Tons/year (short tons) of Carbon Dioxide (CO_2)
- _____Tons/year (short tons) of Nitrous Oxide (N_2O)
- _____Tons/year (short tons) of Perfluorocarbons (PFCs)
- _____Tons/year (short tons) of Sulfur Hexafluoride (SF_6)
- _____Tons/year (short tons) of Carbon Dioxide equivalent of Hydroflourocarbons (HFCs)
- _____Tons/year (short tons) of Hazardous Air Pollutants (HAPs)

h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)? ☐Yes ☑No

If Yes:

i. Estimate methane generation in tons/year (metric): _____

ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring): _____

_____

i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations? ☐Yes ☑No

If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust):

_____

_____

j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services? ☐Yes ☑No

If Yes:

i. When is the peak traffic expected (Check all that apply): ☐ Morning ☐ Evening ☐Weekend

☐ Randomly between hours of _____ to _____.

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

_____

iii. Parking spaces: Existing _____ Proposed _____ Net increase/decrease _____

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:

_____

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: _____

_____

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

_____

iii. Will the proposed action require a new, or an upgrade, to an existing substation? ☐Yes ☐No

l. Hours of operation. Answer all items which apply.

i. During Construction:

- Monday - Friday: 8:00 am - 6:00 pm
- Saturday: 8:00 am - 5:00 pm
- Sunday: None
- Holidays: None

ii. During Operations:

- Monday - Friday: Occasional
- Saturday: Onsite Employee (1-3) present through the week
- Sunday: _____
- Holidays: _____

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:

During construction: Typical construction and earthwork noise.
During Operation: Sound from HVAC system.

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

Describe: Tree removal as needed. Developed area to receive evergreen plantings to mitigate sound.

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:

Downward facing site lighting, provided for security and safety. Lighting will be limited, motion sensor operated, and dark sky compliant.

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

Describe: Tree removal as needed. Developed area to receive evergreen plantings to mitigate light.

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): Public Trail

ii. If mix of uses, generally describe:

b. Land uses and covertypes on the project site.

Land use or Covertype	Current Acreage	Acreage After Project Completion	Change (Acres +/-)
• Roads, buildings, and other paved or impervious surfaces	0.4 ac	9.2 ac±	+8.8 ac
• Forested	52.8 ac±	34.8 ac±	-18 ac
• Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)	0 ac	0 ac	No Change
• Agricultural (includes active orchards, field, greenhouse etc.)	0 ac	0 ac	No Change
• Surface water features (lakes, ponds, streams, rivers, etc.)	0 ac	0 ac	No Change
• Wetlands (freshwater or tidal)	42.3± ac	42.3± ac	Less than 0.1ac change
• Non-vegetated (bare rock, earth or fill)	0 ac	0 ac	No Change
• Other Describe: Stormwater Management Practices Lawn/meadow/landscape-buffers	0 AC 0 AC	2.2 ± ac 7 ± ac	+2.2 ± ac +7 ± ac

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:

Creative Kids Childcare Center

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): 360023

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

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? 6.5 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:

Paxton Fine Sandy Loam, 3-8% slopes	33 %
Ridgebury Complex, 0-8% slopes	35 %
Woodbridge Loam, 3-8% slopes	11 %

d. What is the average depth to the water table on the project site? Average: 2 feet

e. Drainage status of project site soils:
☑ Well Drained: 35 % of site
☑ Moderately Well Drained: 11 % of site
☑ Poorly Drained 54 % of site

f. Approximate proportion of proposed action site with slopes:
☑ 0-10%: 73 % of site
☑ 10-15%: 15 % of site
☑ 15% or greater: 12 % 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 Federal Waters, NYS Wetland, Federal Waters Approximate Size NYS Wetland (in a...
- Wetland No. (if regulated by DEC) F-26

v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies? ☐ Yes ☑ No

If yes, name of impaired water body/bodies and basis for listing as impaired: _____

i. Is the project site in a designated Floodway? ☐ Yes ☑ No

j. Is the project site in the 100-year Floodplain? ☐ Yes ☑ No

k. Is the project site in the 500-year Floodplain? ☐ Yes ☑ No

l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? ☐ Yes ☑ No
If Yes:

i. Name of aquifer: _____

m. Identify the predominant wildlife species that occupy or use the project site:
Fauna typical to northeast forest and wetlands.

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):

Northern Long-eared Bat

p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern? ☐ Yes ☑ No

If Yes:

i. Species and listing:

q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? ☐ Yes ☑ No

If yes, give a brief description of how the proposed action may affect that use:

E.3. Designated Public Resources On or Near Project Site

a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? ☐ Yes ☑ No

If Yes, provide county plus district name/number:

b. Are agricultural lands consisting of highly productive soils present? ☐ Yes ☑ No

i. If Yes: acreage(s) on project site?

ii. Source(s) of soil rating(s):

c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark? ☐ Yes ☑ No

If Yes:

i. Nature of the natural landmark: ☐ Biological Community ☐ Geological Feature

ii. Provide brief description of landmark, including values behind designation and approximate size/extent:

d. Is the project site located in or does it adjoin a state listed Critical Environmental Area? ☑ Yes ☐ No

If Yes:

i. CEA name: Baldwin Place Area

ii. Basis for designation: Difficulties w/ portable water source

iii. Designating agency and date: Agency:Somers, Town of, Date:9-26-90

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: _____

iii. Brief description of attributes on which listing is based:

_____

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: Empire Trail

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

iii. Distance between project and resource: 0 miles.

i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666? ☐ Yes ☑ No

If Yes:

i. Identify the name of the river and its designation: _____

ii. Is the activity consistent with development restrictions contained in 6NYCRR Part 666? ☐ Yes ☐ No

F. Additional Information

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

If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

G. Verification

I certify that the information provided is true to the best of my knowledge.

Applicant/Sponsor Name Jeffrey J. Contelmo, P.E. Date 8/28/23

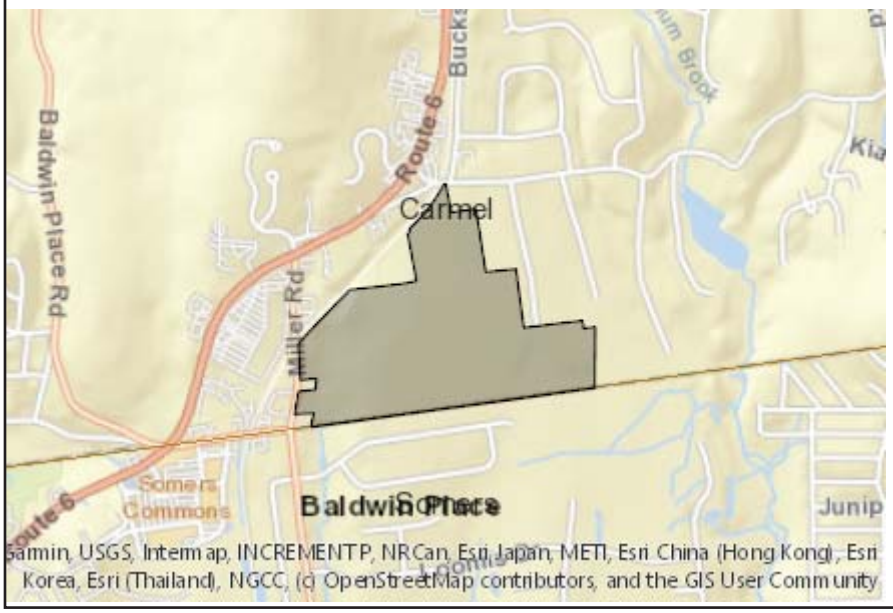
Insite Engineering, Surveying & Landscape Architecture, P.C. Last revised 10/30/23

Signature  Title Senior Principal Engineer

PRINT FORM

EAF Mapper Summary Report

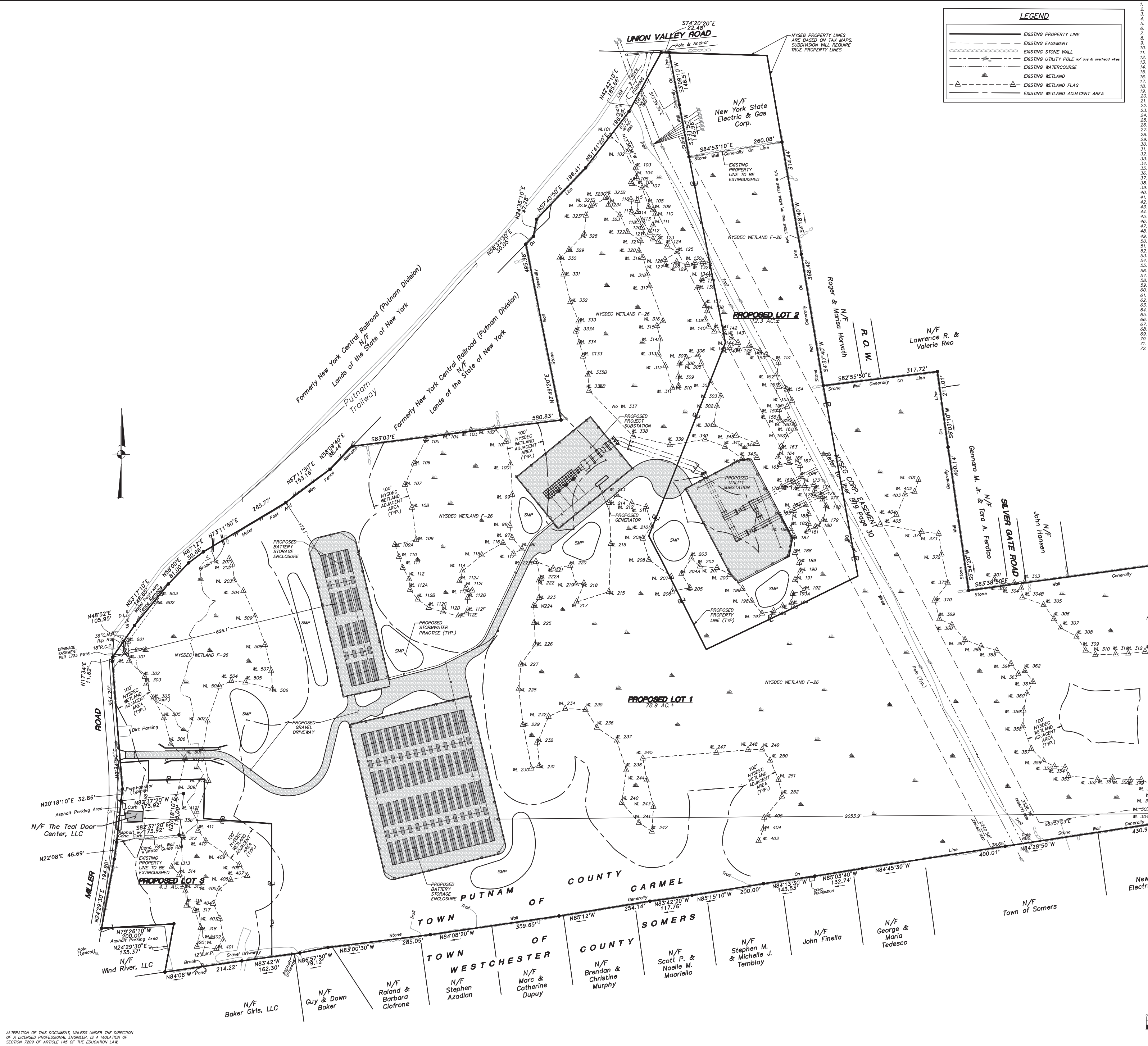
Monday, April 24, 2023 12:48 PM



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

B.i.i [Coastal or Waterfront Area]	No
B.i.ii [Local Waterfront Revitalization Area]	No
C.2.b. [Special Planning District]	Yes - Digital mapping data are not available for all Special Planning Districts. Refer to EAF Workbook.
C.2.b. [Special Planning District - Name]	NYC Watershed Boundary
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]	360023
E.2.g [Unique Geologic Features]	No
E.2.h.i [Surface Water Features]	Yes
E.2.h.ii [Surface Water Features]	Yes
E.2.h.iii [Surface Water Features]	Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook.
E.2.h.iv [Surface Water Features - Wetlands Name]	Federal Waters, NYS Wetland
E.2.h.iv [Surface Water Features - Wetlands Size]	NYS Wetland (in acres):322.1, NYS Wetland (in acres):42.8
E.2.h.iv [Surface Water Features - DEC Wetlands Number]	F-26
E.2.h.v [Impaired Water Bodies]	No

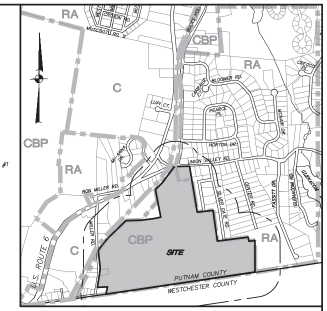
E.2.i. [Floodway]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.2.j. [100 Year Floodplain]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.2.k. [500 Year Floodplain]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.2.l. [Aquifers]	No
E.2.n. [Natural Communities]	No
E.2.o. [Endangered or Threatened Species]	Yes
E.2.o. [Endangered or Threatened Species - Name]	Northern Long-eared Bat
E.2.p. [Rare Plants or Animals]	No
E.3.a. [Agricultural District]	No
E.3.c. [National Natural Landmark]	No
E.3.d [Critical Environmental Area]	Yes
E.3.d [Critical Environmental Area - Name]	Baldwin Place Area
E.3.d.ii [Critical Environmental Area - Reason]	Difficulties w/ portable water source
E.3.d.iii [Critical Environmental Area – Date and Agency]	Agency:Somers, Town of, Date:9-26-90
E.3.e. [National or State Register of Historic Places or State Eligible Sites]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.3.f. [Archeological Sites]	Yes
E.3.i. [Designated River Corridor]	No



LEGEND

▬▬▬	EXISTING PROPERTY LINE
— — —	EXISTING EASEMENT
○○○○	EXISTING STONE WALL
—·—·—	EXISTING UTILITY POLE w/ guy & overhead wires
—···—	EXISTING WATERCOURSE
	EXISTING WETLAND
—△—	EXISTING WETLAND FLAG
—— – ——	EXISTING WETLAND ADJACENT AREA

1. NYS Elec & Gas Corp
2. NYS Elec & Gas Corp
3. Mari Hawkins
4. Rafael Vargas
5. Mahopac Terminals, LLC
6. Gabriel Lamanna
7. Roger Horvath
8. Phyllis Mantovi
9. JAS Palushaj, LLC
10. Iris Gorodess Irrev Trust
11. Rooney Properties LLC
12. The Teal Door Center, LLC
13. Nicole Jimenez
14. John Phillip Gkanios
15. Peter Cirino
16. Christopher Horan
17. Lake Mahopac Motel Inc
18. Anthony Michael Realty, Inc
19. David Nicholas
20. Sigurbjorn Sigurjonsson
21. Sigurbjorn Sigurjonsson
22. Sigurbjorn Sigurjonsson
23. S Sigurjonsson
24. Carbonara Family Irrev Trst #1
25. Videl Realty Corp.
26. Videl Realty Corp.
27. Park Ford Of Mahopac Inc
28. RCTA Realty LLC
29. 287 Route 6, LLC
30. John Henning
31. John Glynn Trust
32. Lawrence Reo
33. George Johnson
34. Lormat Construction Corp
35. Kerril Hynes
36. 12th Street Realty, LLC
37. Marco Chuchuca
38. Francesco Pulice
39. Cherian Family Trust
40. James Brady
41. Gennaro Ferdico
42. Dea Wolfert
43. James Hennessey
44. Ferone Automotive, LLC
45. Irene Cassetta
46. Michael Nicotina
47. Michael Montgomery
48. James Crowley
49. Kathleen D'Ottavio
50. Florence Janet Faulkner
51. Benedetto Salerno
52. Chris Scheedel
53. Thomas Longhitano
54. Mahopac Improvement Owner LLC
55. Mahopac Improvement Owner LLC
56. Amerino D'onofrio
57. Matthew Rosolen
58. Christopher Vennard
59. Samantha Dodge
60. Wind River, LLC
61. Ralph D'alisa
62. Miller Road LLC
63. Michael Barile
64. Nicole Barile Stern
65. Emerson Cargain
66. Union Valley Plaza Inc
67. AAK Realty LLC
68. P P Co Limited Liability
69. Mahopac Volunteer Fire Dept
70. 46 Tomahawk LLC
71. Empire State Assoc Holding Co
72. ALOU Corporation



LOCATION MAP SCALE: 1" = 1000'±

OWNER:

MILLER RD LLC
888 ROUTE 6
MAHOPAC NY 10541

NYS ELEC & GAS CORP.
39 UNION VALLEY ROAD
MAHOPAC NY 10541

THE TEAL DOOR CENTER, LLC
18 MILLER ROAD
MAHOPAC NY 10541

SITE DATA:

Zone: C/BP
Total Acreage 95.5 AC.±
Tax Map Nos.:
1. 86.11-1-14 (93.5 AC.±)
2. 86.8-2-85 (1.6 AC.±)
3. 86.14-1-8 (0.4 AC.±)

APPLICANT:

EAST POINT ENERGY, LLC
310 4th STREET NE, 3rd FLOOR
CHARLOTTESVILLE, VA 22902

GENERAL NOTES:

1. The boundaries, topography, and wetland flags shown hereon are taken from a survey by Insite Engineering, Surveying & Landscape Architecture, P.C., entitled "Survey of Property Prepared for East Point Energy", last revised on March 29, 2023.
2. There will be no full time employees on site. The site will be occasionally visited by 1-2 employees.
3. There are no proposed clubhouses, pools, designated open space, parks or recreation areas.
4. No refuse is to be generated on site. Anything to be removed from the site during operations will be removed by truck. Therefore no refuse enclosure is proposed.
5. Site conditions on Now or Formerly The Teal Door Center, LLC area approximated from aerial orthoimagery.
6. All driveways are to be constructed in accordance with the Town of Carmel Code.

C/BP ZONE REQUIREMENTS:

	Required/Permitted:	Lot 1 Provided:	Lot 2 Provided:	Lot 3 Provided:
Minimum Lot Area:	3 Acres (130,680 SF)	78.9 AC.±	12.3 AC.±	4.3 AC.±
Minimum Lot Width:	200'	888'±	248'±	439'±
Minimum Lot Depth:	200'	3093'±	1557'±	447'±
Minimum Road Frontage:	100'	640.27'	267.14'	462'±
Minimum Yard Setbacks:				
Front:	50'	626.1'	N/A	16'± *
Side:	40'	175.1'	N/A	88'±
Rear:	40'	2,053.9'	N/A	356'±
Maximum Building Height:	40'	N/A	N/A	<40'
Minimum Building Floor Area	5,000 SF	0 SF	N/A	<5,000SF *
Maximum Building Coverage:	40%	1.54%	N/A	0.6%

* Pre-existing non-conforming condition.

GRAPHIC SCALE
0 50 100 200
(IN FEET)
1 inch = 100 ft.

NO.	DATE	REVISION	BY
1	10-30-23	RESUBMISSION TO PLANNING BOARD	MEU

INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.
3 Garrett Place
Carmel, NY 10512
(845) 225-9690
(845) 225-9717 fax
www.insite-eng.com

PROJECT:
UNION ENERGY CENTER
MILLER ROAD, TOWN OF CARMEL, PUTNAM COUNTY NEW YORK

DRAWING:
OVERALL PLAN

PROJECT NUMBER	21120.100	PROJECT MANAGER	J.J.C.
DATE	8-30-23	DRAWN BY	I.B.
SCALE	1"=100'	CHECKED BY	A.D.T.

DRAWING NO. OP-1
SHEET 1 / 11

ALTERATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 7209 OF ARTICLE 145 OF THE EDUCATION LAW.

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1	10-30-23	RESUBMISSION TO PLANNING BOARD	MEU

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PROJECT:

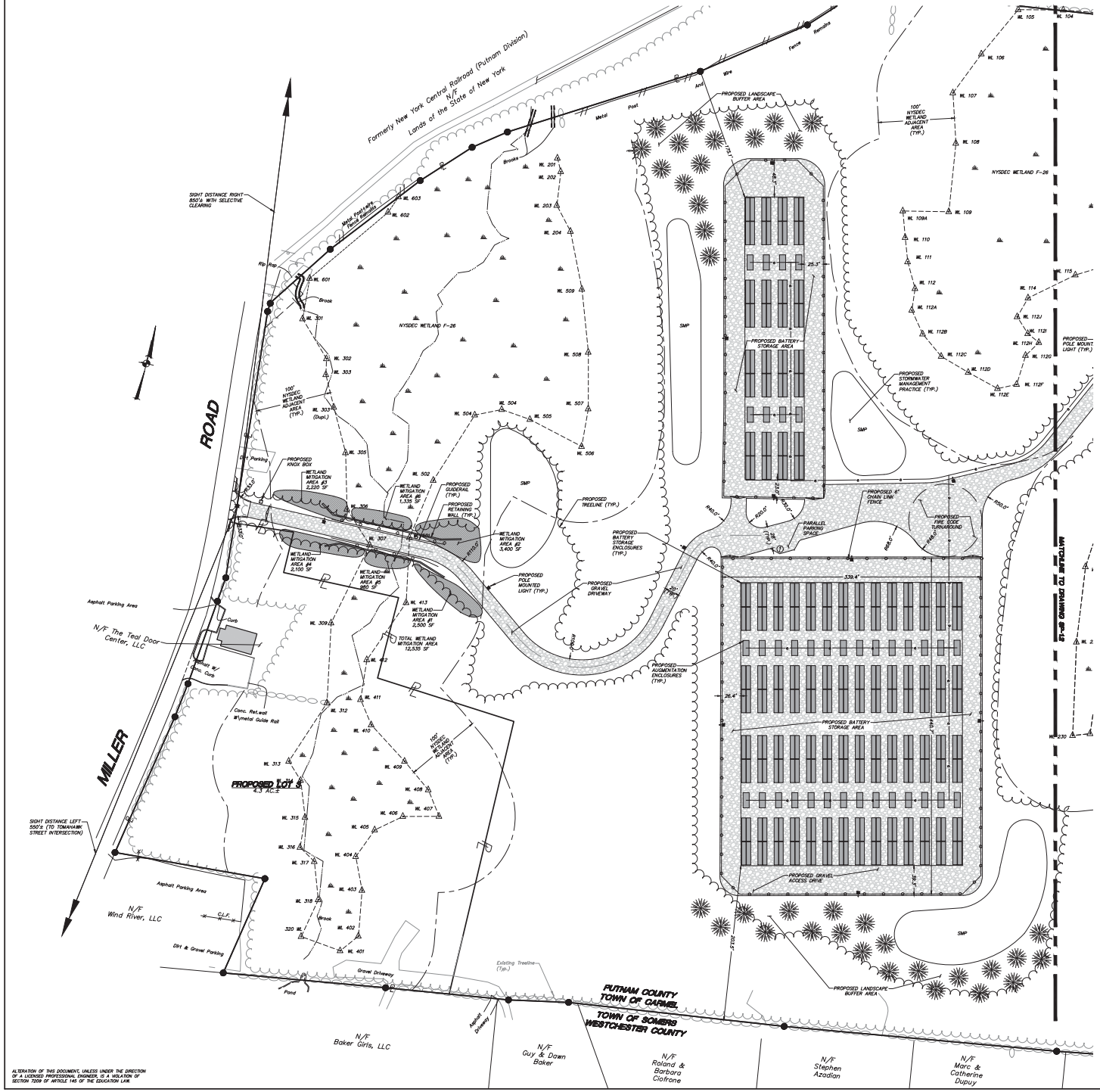
UNION ENERGY CENTER

MILLER ROAD, TOWN OF CARMEL, PUTNAM COUNTY NEW YORK

DRAWING:

EXISTING CONDITIONS PLAN

PROJECT NUMBER	21120.100	PROJECT MANAGER	J.J.C.	DRAWING NO. EX-1
DATE	8-30-23	DRAWN BY	I.B.	SHEET 2 / 11
SCALE	1"=100'	CHECKED BY	A.D.T.	



LEGEND

- EXISTING PROPERTY LINE
- EXISTING EASEMENT
- EXISTING STONE WALL
- EXISTING UTILITY POLE w/ guy & overhead wires
- EXISTING WATERCOURSE
- EXISTING WETLAND
- EXISTING WETLAND FLAG
- EXISTING 100 YR. FLOODPLAIN BOUNDARY
- EXISTING WETLAND BUFFER
- EXISTING TREELINE
- PROPOSED OVERHEAD WIRES
- PROPOSED SINGLE POLE SIGN
- PROPOSED DOUBLE POLE SIGN
- PROPOSED DOUBLE SIDED SIGN
- PROPOSED BOLLARD
- PROPOSED GUIDE RAIL
- PROPOSED POLE MOUNTED LIGHT
- PROPOSED POST MOUNTED LIGHT
- PROPOSED LOADING SPACE
- PROPOSED LANDSCAPING

SCHEMATIC PLANT LIST

KEY	BOTANICAL/COMMON NAME	SIZE	ROOT
	EVERGREEN TREES		
JV	Juniperus virginia / Eastern Redcedar	8'-10' HT.	B&B
PG	Picea glauca / White Spruce	8'-10' HT.	B&B
TO	Relocated Thuja occidentalis / Arborvitae	6'-8' HT.	B&B
	SHRUBS		
JC	Juniperus chinensis "Sea Green" / Sea Green Juniper		#3 CONT./8' O.C.
VD	Viburnum dentatum / Leatherleaf Viburnum		#3 CONT./8' O.C.
	PERENNIALS/GROUND COVERS		
AC	Aquilegia canadensis / Columbine		#1 CONT./18" O.C.
EP	Echinacea purpurea / Purple Coneflower		#1 CONT./18" O.C.
MV	Mertensia virginica / Virginia Bluebells		#1 CONT./18" O.C.

WETLAND MITIGATION PLANT LIST

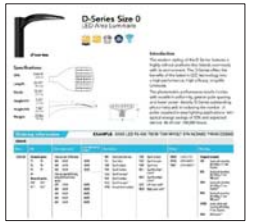
QTY	BOTANICAL/COMMON NAME	SIZE	SPACING
35	Amelanchier canadensis / Shadblow	2"-3'	10' O.C.
36	Cornus foemina / Gray Dogwood	2"-3'	10' O.C.
37	Lindera benzoin / Spicebush	2"-3'	10' O.C.
35	Sambucus canadensis / Elderberry	2"-3'	10' O.C.
36	Viburnum dentatum / Arrowood viburnum	2"-3'	10' O.C.
35	Viburnum lentago / Nannyberry	2"-3'	10' O.C.

NOTES:

1. All plantings to be verified by the Town of Carmel Wetland Inspector.
2. All plantings shall be installed per size of the Town of Carmel Town Code.
3. Wetland mitigation areas and plant lists provided by VHB, Inc.

LUMINAIRE SCHEDULE

Sym	Qty	Catalog Number	Description	Lamp	Mounting Height	Watts
	18	DSXO LED P1 27K BLCN T4M HS	LITHONIA LIGHTING LED POLE MOUNTED LIGHT TYPE 4M DISTRIBUTION	LED	16'-0"	33.2



LIGHTING NOTES:

1. All lighting shall be as noted on the plan or approved equal.
2. Style and finish of all luminaires to be selected by owner.
3. Proposed lights will run on photocells during regular business hours, and will run on motion sensors after hours for security only.
4. Type, location, and shading of all proposed lighting shall prevent the spillover of light onto all adjacent residential properties.
5. All light fixtures to be full cutoff to comply with dark sky guidelines.

GRAPHIC SCALE

0 50 100

(IN FEET)
1 inch = 50 ft.

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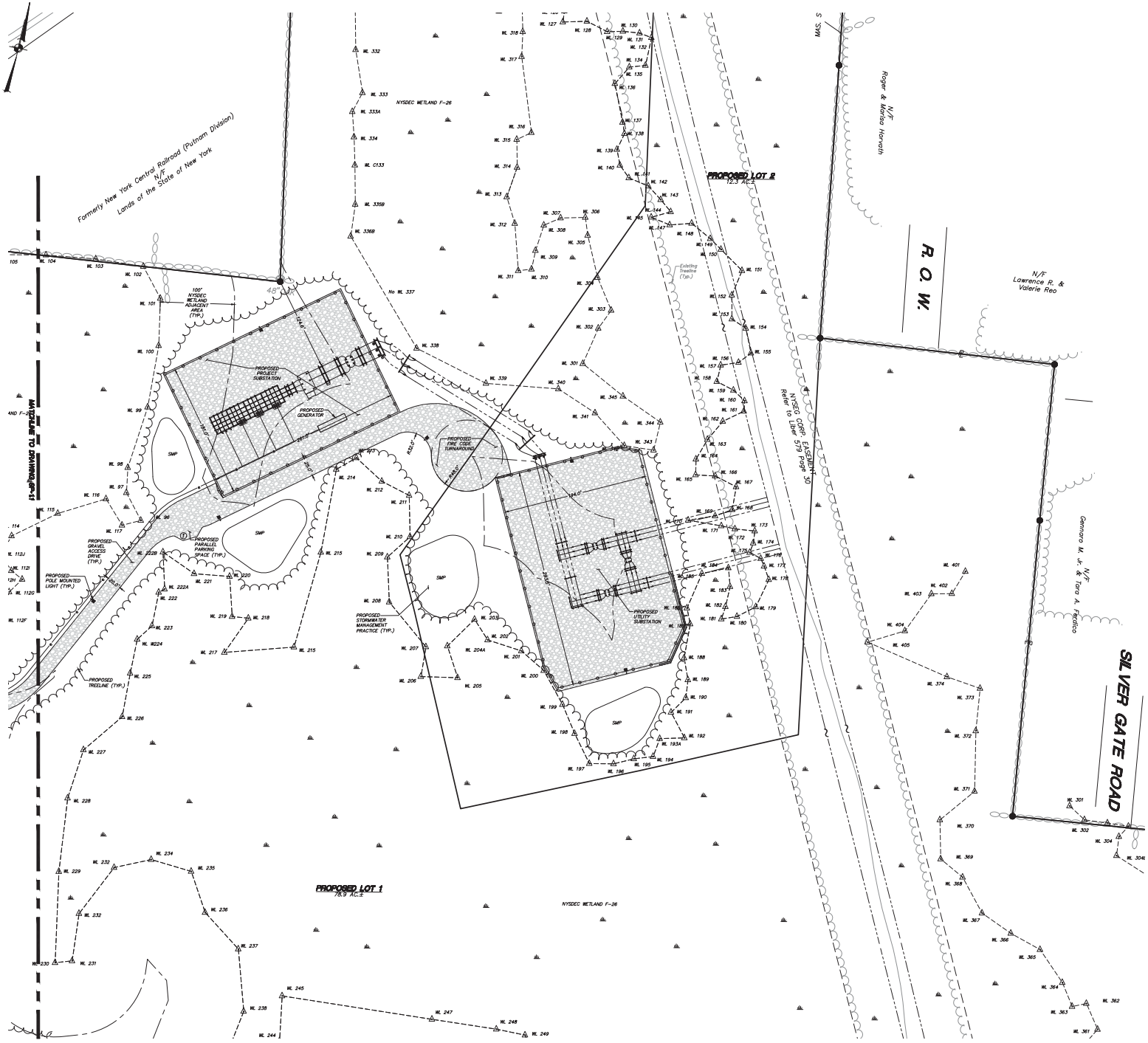
PROJECT:
UNION ENERGY CENTER
MILLER ROAD, TOWN OF CARMEL, PUTNAM COUNTY NEW YORK

DRAWING:
LAYOUT & LANDSCAPE PLAN

PROJECT NUMBER	21120.100	PROJECT MANAGER	J.J.C.
DATE	8-30-23	DRAWN BY	I.B.
SCALE	1"=50'	CHECKED BY	A.D.T.

DRAWING NO. SP-1.1
SHEET 3 / 11



LEGEND

- EXISTING PROPERTY LINE
- EXISTING EASEMENT
- EXISTING STONE WALL
- EXISTING UTILITY POLE w/ guy & overhead wires
- EXISTING WATERCOURSE
- EXISTING WETLAND
- EXISTING WETLAND FLAG
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- EXISTING WETLAND BUFFER
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- PROPOSED LANDSCAPING

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MV	Mertensia virginica / Virginia Bluebells		#1 CONT./18" O.C.

GRAPHIC SCALE
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(IN FEET)
1 inch = 50 ft.

NO.	DATE	REVISION	BY
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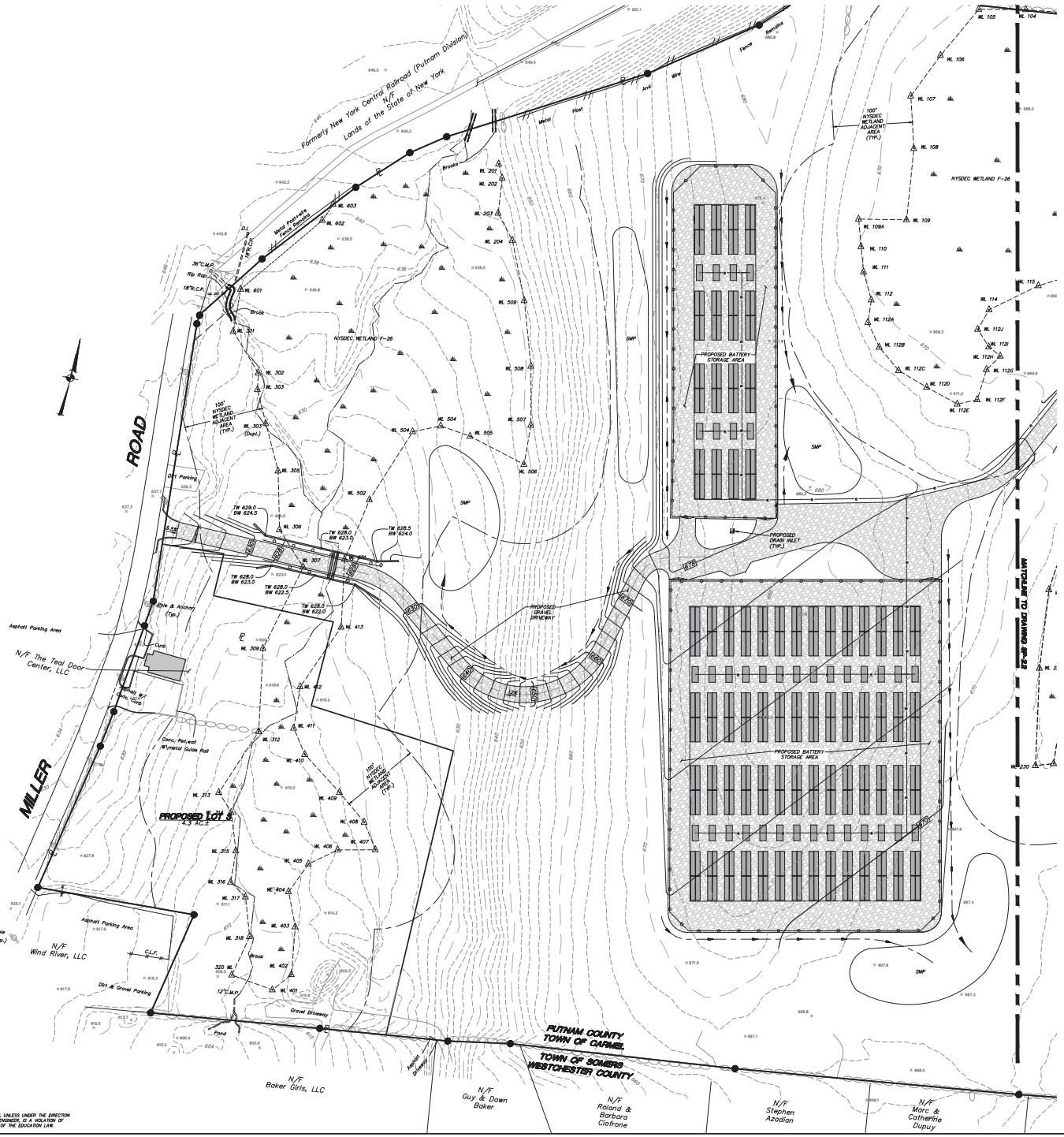
PROJECT:
UNION ENERGY CENTER
MILLER ROAD, TOWN OF CARMEL, PUTNAM COUNTY NEW YORK

DRAWING:
LAYOUT & LANDSCAPE PLAN

PROJECT NUMBER	21120.100	PROJECT MANAGER	J.J.C.
DATE	8-30-23	DRAWN BY	I.B.
SCALE	1"=50'	CHECKED BY	A.D.T.

DRAWING NO. SP-1.2
SHEET 4 / 11



LEGEND

- EXISTING PROPERTY LINE
- EXISTING EASEMENT
- EXISTING STONE WALL
- EXISTING UTILITY POLE(w/ guy & overhead wire)
- EXISTING WATERCOURSE
- EXISTING WETLAND
- EXISTING WETLAND FLAG
- EXISTING WETLAND BUFFER
- EXISTING 10' CONTOUR
- EXISTING 2' CONTOUR
- PROPOSED 10' CONTOUR
- PROPOSED 2' CONTOUR
- PROPOSED SPOT ELEVATION
- PROPOSED OVERHEAD WIRES
- PROPOSED DRAINAGE MANHOLE
- PROPOSED CATCH BASIN
- PROPOSED OUTLET STRUCTURE
- PROPOSED END SECTION
- PROPOSED FIRE HYDRANT
- PROPOSED WELL
- PROPOSED WATER SHUT OFF VALVE
- PROPOSED WATER VALVE
- PROPOSED DRAINAGE PIPE
- PROPOSED FIRE SERVICE LINE
- PROPOSED DOMESTIC WATER SERVICE LINE
- PROPOSED WATER MAIN
- PROPOSED GRASS SWALE
- PTD — PITCH TO DRAIN
- PROPOSED CLEAN OUT

GRAPHIC SCALE
0 25 50 100
(IN FEET)
1 inch = 50 ft.

NO.	DATE	REVISION	BY
1	10-30-23	RESUBMISSION TO PLANNING BOARD	MEU

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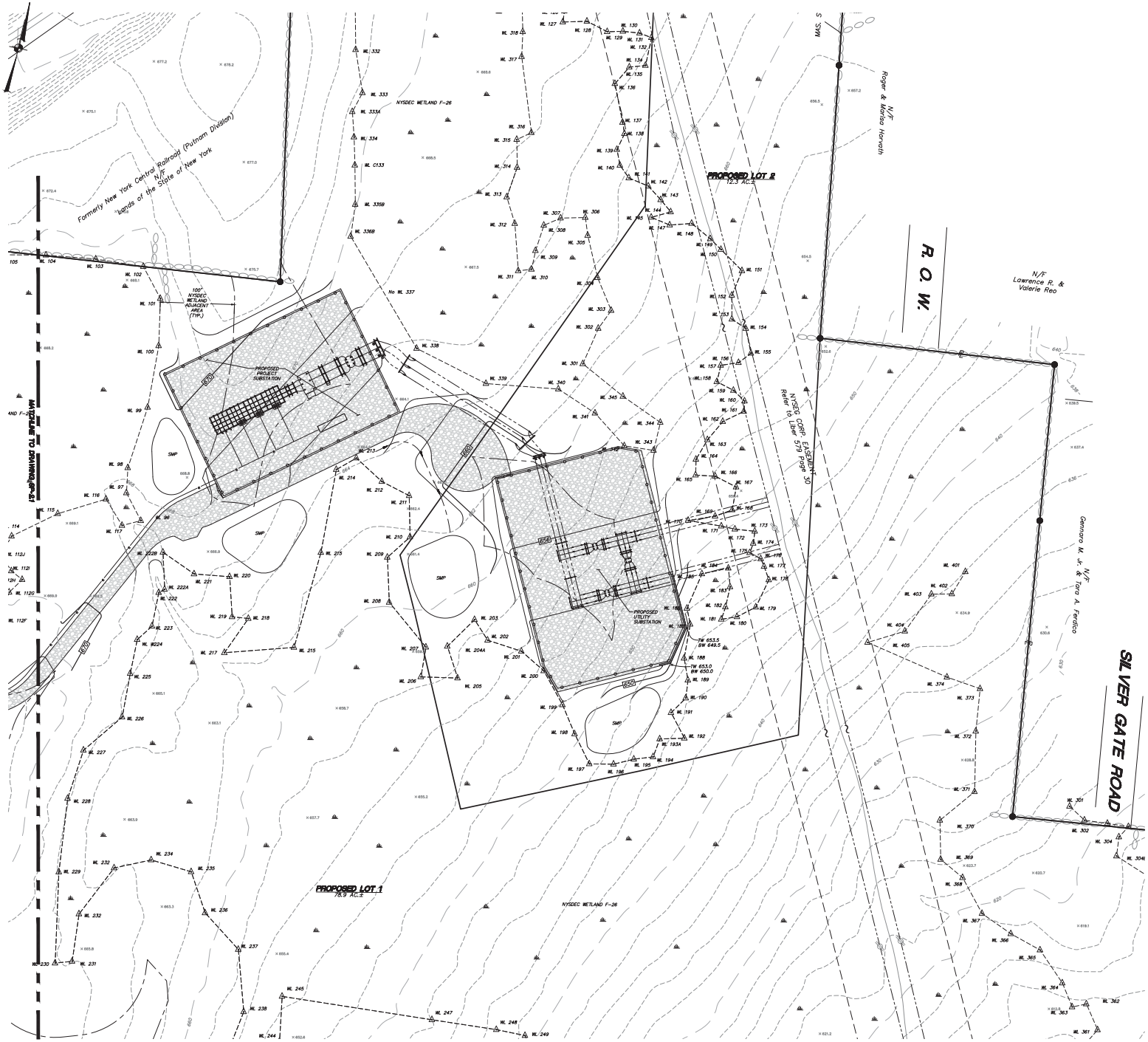
PROJECT:
UNION ENERGY CENTER
MILLER ROAD, TOWN OF CARMEL, PUTNAM COUNTY NEW YORK

DRAWING:
GRADING & UTILITIES PLAN

PROJECT NUMBER	21120.100	PROJECT MANAGER	J.J.C.
DATE	8-30-23	DRAWN BY	I.B.
SCALE	1"=50'	CHECKED BY	A.D.T.

DRAWING NO. SP-2.1
SHEET 5 of 11



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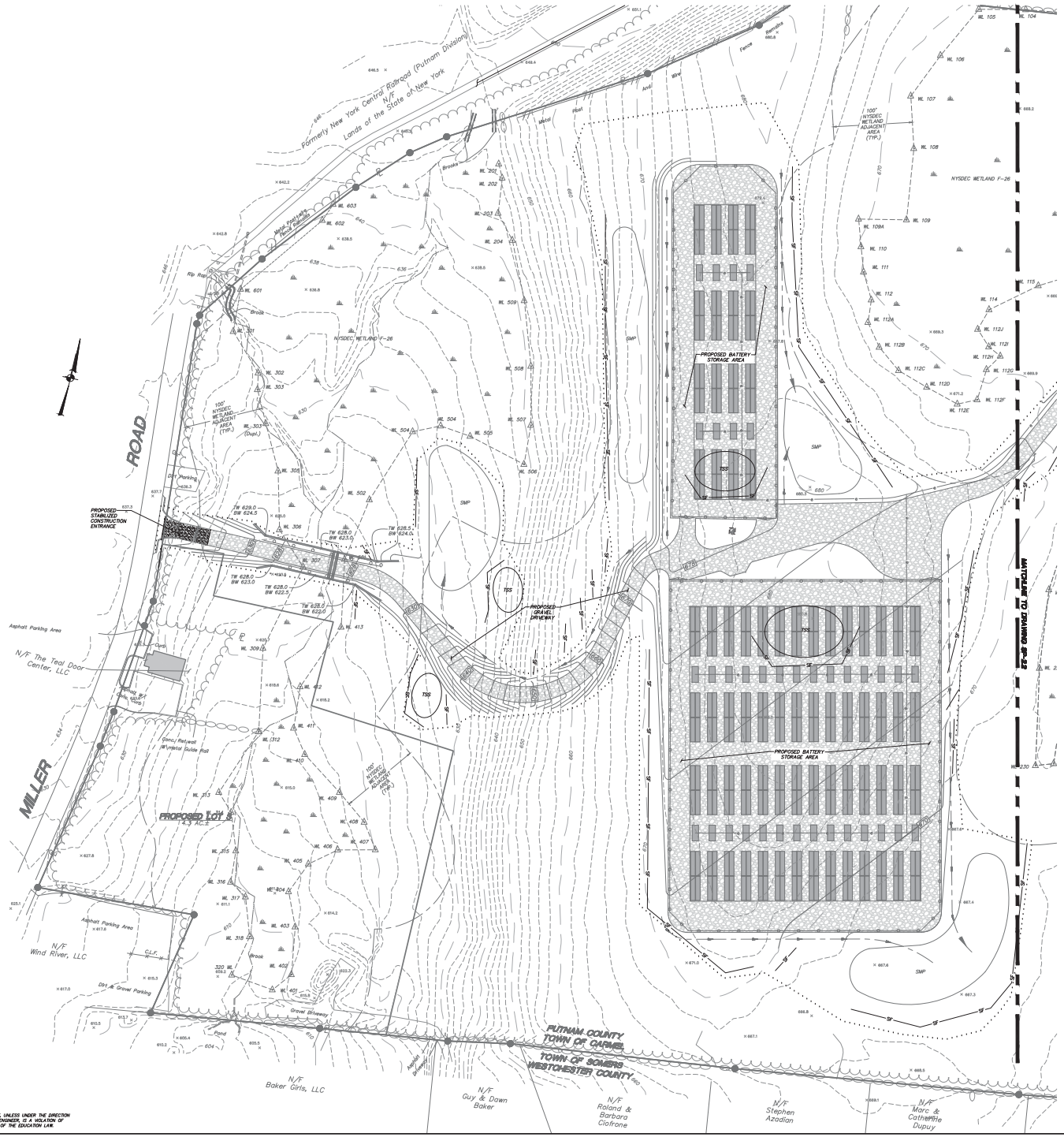
PROJECT:
UNION ENERGY CENTER
MILLER ROAD, TOWN OF CARMEL, PUTNAM COUNTY NEW YORK

DRAWING:
GRADING & UTILITIES PLAN

PROJECT NUMBER	21120.100	PROJECT MANAGER	J.J.C.
DATE	8-30-23	DRAWN BY	I.B.
SCALE	1"=50'	CHECKED BY	A.D.T.

DRAWING NO. SP-2.2
SHEET 6 / 11



LEGEND

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- EXISTING EASEMENT
- EXISTING STONE WALL
- EXISTING UTILITY POLE w/ guy & overhead wires
- EXISTING WATERCOURSE
- EXISTING WETLAND
- EXISTING WETLAND FLAG
- EXISTING WETLAND BUFFER
- 100 EXISTING 10' CONTOUR
- EXISTING 2' CONTOUR
- SF PROPOSED SILT FENCE
- CF PROPOSED CONSTRUCTION FENCE
- TB PROPOSED TURBIDITY CURTAIN
- PROPOSED LIMITS OF DISTURBANCE
- PROPOSED STONE CHECK DAM
- PROPOSED TEMPORARY DIVERSION SWALE
- TSS SF PROPOSED TEMPORARY SOIL STOCKPILE
- PROPOSED STABILIZED CONSTRUCTION ENTRANCE
- PROPOSED EROSION CONTROL BLANKET
- PROPOSED DRAINAGE STRUCTURE W/ INLET PROTECTION
- PROPOSED PHASING LINE

GRAPHIC SCALE

0 25 50 100

(IN FEET)
1 inch = 50 ft.

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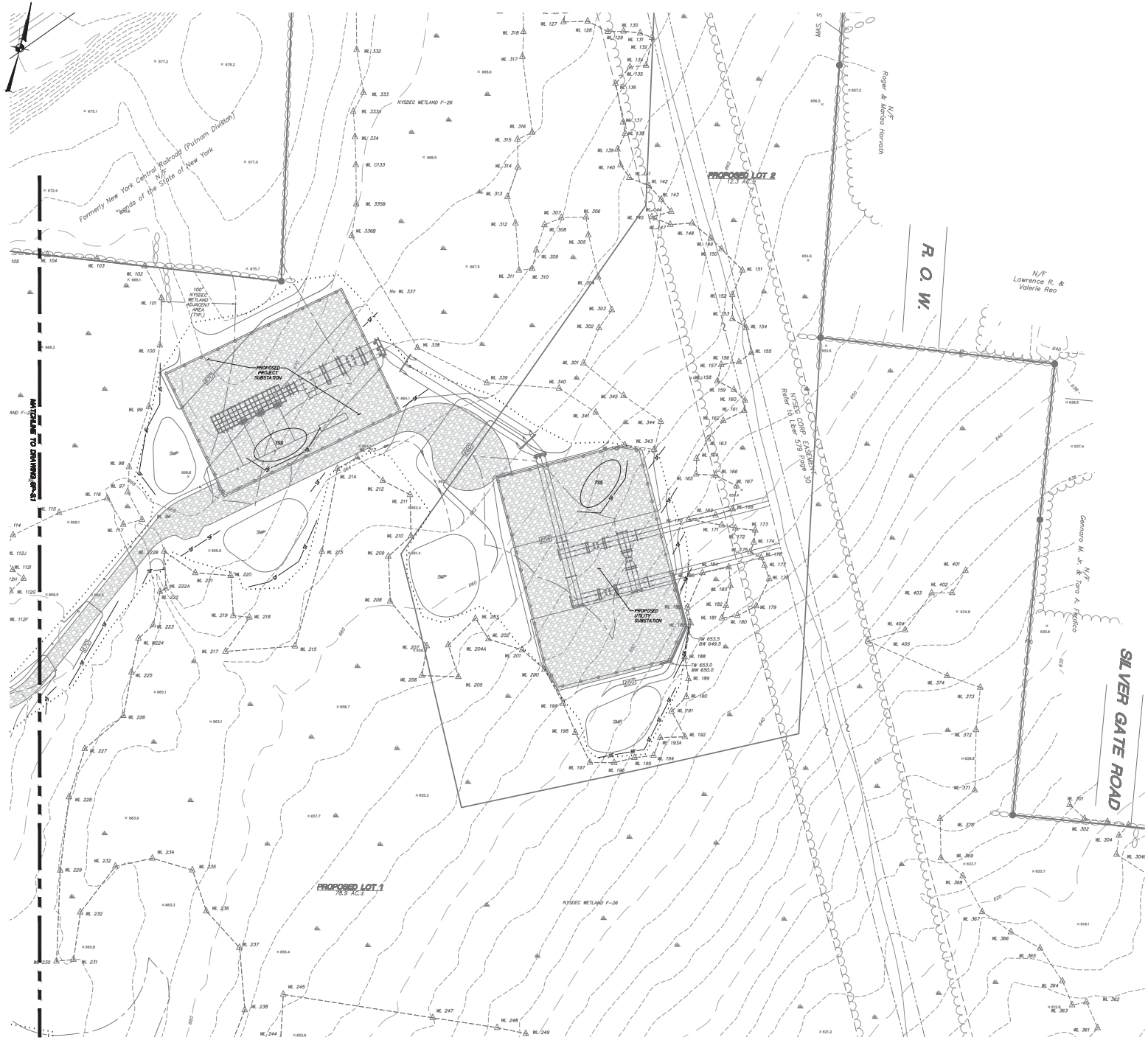
PROJECT:
UNION ENERGY CENTER
MILLER ROAD, TOWN OF CARMEL, PUTNAM COUNTY NEW YORK

DRAWING:
EROSION & SEDIMENT CONTROL PLAN

PROJECT NUMBER	21120.100	PROJECT MANAGER	J.J.C.
DATE	8-30-23	DRAWN BY	I.B.
SCALE	1"=50'	CHECKED BY	A.D.T.

DRAWING NO. SP-3.1
SHEET 7 / 11



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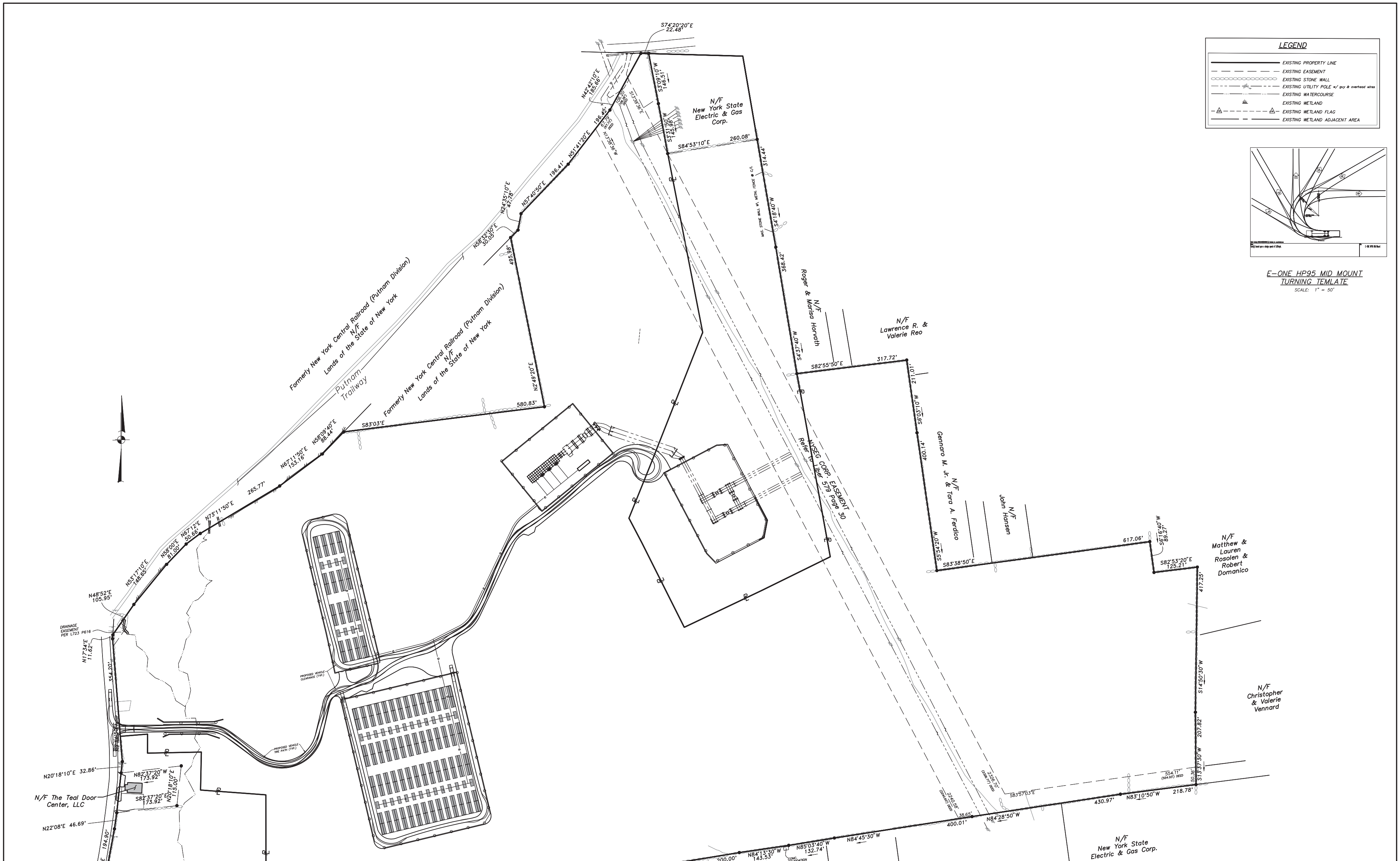
PROJECT:
UNION ENERGY CENTER
MILLER ROAD, TOWN OF CARMEL, PUTNAM COUNTY NEW YORK

DRAWING:
EROSION & SEDIMENT CONTROL PLAN

PROJECT NUMBER	21120.100	PROJECT MANAGER	J.J.C.	DRAWING NO.	SHEET
DATE	8-30-23	DRAWN BY	I.B.	SP-3.2	8 / 11
SCALE	1"=50'	CHECKED BY	A.D.T.		



LEGEND
EXISTING PROPERTY LINE
EXISTING EASEMENT
EXISTING STONE WALL
EXISTING UTILITY POLE w/ guy & overhead wires
EXISTING WATERCOURSE
EXISTING WETLAND
EXISTING WETLAND FLAG
EXISTING WETLAND ADJACENT AREA
E-ONE HP95 MID MOUNT TURNING TEMLATE
SCALE: 1" = 50'
N/F New York State Electric & Gas Corp.
Formerly New York Central Railroad (Putnam Division) N/F Lands of the State of New York
Putnam Trailway
N/F Roger & Marisa Horvath
N/F Lawrence R. & Valerie Reo
N/F Gennaro M. Jr. & Tara A. Ferdico
N/F John Hansen
N/F Matthew & Lauren Rosolen & Robert Domanico
N/F Christopher & Valerie Vennard
NYSEG CORP. EASEMENT Refer to Liber 579 Page 30
N/F The Teal Door Center, LLC
N/F Wind River, LLC
N/F Baker Girls, LLC
N/F Guy & Dawn Baker
N/F Roland & Barbara Ciofrone
N/F Stephen Azadian
N/F Marc & Catherine Dupuy
N/F Brendan & Christine Murphy
N/F Scott P. & Noelle M. Maoriello
N/F Stephen M. & Michelle J. Temblay
N/F John Finella
N/F George & Maria Tedesco
N/F Town of Somers
N/F New York State Electric & Gas Corp.
DRAINAGE EASEMENT PER L723 P616
PROPOSED VEHICLE CLEARANCE (TYP.)
PROPOSED VEHICLE TIRE PATH (TYP.)
GRAPHIC SCALE
(IN FEET)
1 inch = 100 ft.

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NO.	DATE	REVISION	BY

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PROJECT:

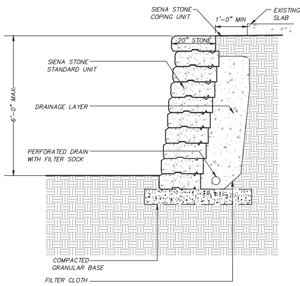
UNION ENERGY CENTER

MILLER ROAD, TOWN OF CARMEL, PUTNAM COUNTY NEW YORK

DRAWING:

MANUEVER PLAN

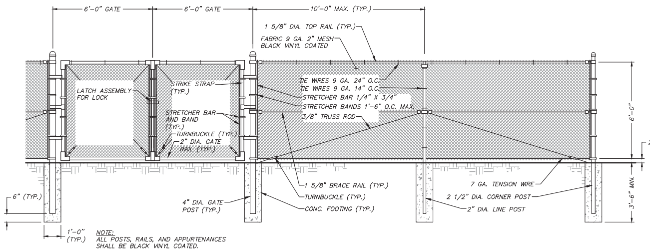
PROJECT NUMBER	21120.100	PROJECT MANAGER	J.J.C.	DRAWING NO.	SHEET
DATE	10-30-23	DRAWN BY	K.J.K.	SP-4	9 / 11
SCALE	1"=100'	CHECKED BY	A.D.T.		



NOTES:

1. STRIP VEGETATION AND ORGANIC SOIL FROM WALL AREA.
2. BENCH CUT ALL EXCAVATED SLOPES.
3. DO NOT OVER EXCAVATE UNLESS DIRECTED BY SITE ENGINEER TO REMOVE UNSUITABLE SOIL.
4. SITE ENGINEER SHALL VERIFY FOUNDATION SOILS AS BEING COMPETENT PER THE DESIGN STANDARDS AND PARAMETERS.
5. LEVELING PAD SHALL CONSIST OF COMPACTED COARSE SAND OR CRUSHED GRAVEL, 6" THICK MIN.
6. CONTRACTOR MAY OPT FOR A LEAN CONCRETE PAD. CONCRETE PAD SHALL BE UNREINFORCED, 3" THICK MAXIMUM.
7. MINIMUM EMBEDMENT OF WALL BELOW FINISH GRADE SHALL BE 6".
8. FOR UNITS TO BE EMBEDDED, COMPACT FILL IN FRONT OF UNITS AT THE SAME TIME FILL BEHIND UNITS IS COMPACTED.
9. DRAINAGE AGGREGATE SHALL BE INSTALLED DIRECTLY BEHIND THE WALL WITHIN 12" OF THE TOP OF THE WALL. DRAINAGE AGGREGATE SHALL NOT EXTEND BELOW FINAL GRADE IN FRONT OF WALL.
10. COMPACTION SHALL BE TO 95% OF MAXIMUM STANDARD PROCTOR DENSITY.(ASTM D-698)
11. COMPACTION TESTS SHALL BE TAKEN AS THE WALL IS INSTALLED. THE MINIMUM NUMBER OF TESTS SHALL BE DETERMINED BY THE SITE SOILS ENGINEER.
12. COMPACTION WITHIN 3 FT. OF WALL SHALL BE LIMITED TO HAND OPERATED EQUIPMENT.
13. CONTRACTOR SHALL DIRECT SURFACE RUNOFF TO AVOID DAMAGING WALL WHILE UNDER CONSTRUCTION.
14. ANY SURFACE DRAINAGE FEATURES, FINISH GRADING, PAVEMENT, OR TURF SHALL BE INSTALLED IMMEDIATELY AFTER WALL IS COMPLETED.
15. FOLLOW APPLICABLE PROVISIONS OF THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND WRITTEN SPECIFICATIONS.

RETAINING WALL DETAIL
(N.T.S.)



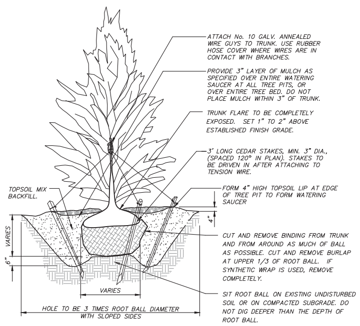
CHAIN LINK FENCE DETAIL
(N.T.S.)

GENERAL PLANTING NOTES:

1. All proposed planting beds to receive a 12" min. depth of topsoil. Soil amendments and fertilizer application rates shall be determined based on specific testing of topsoil material.
2. Any new soils added will be amended as required by results of soil testing and placed using a method that will not cause compaction.
3. No fertilizer shall be added in stormwater basin plantings. Nutrient requirements to be met by incorporation of acceptable organic matter.
4. All plant material to be nursery grown.
5. Plants shall conform with ANSI Z60.1 American Standard for Nursery Stock in all ways including dimensions.
6. Plant material shall be taken from healthy nursery stock.
7. All plants shall be grown under climate conditions similar to those in the locality of the project.
8. Plants shall be planted in all locations designed on the plan or as staked in the field by the Landscape Architect.
9. The location and layout of landscape plants shown on the site plan shall take precedence in any discrepancies between the quantities of plants shown on the plans and the quantity of plants in the Plant List.
10. Provide a 3" layer of shredded pine bark mulch (or as specified) over entire watering saucer at all tree pits or over entire planting bed. Do not place mulch within 3" of tree or shrub trunks.
11. All landscape plantings shall be maintained in a healthy condition at all times. Any dead or diseased plants shall immediately be replaced "in kind" by the contractor (during warranty period) or project owner.

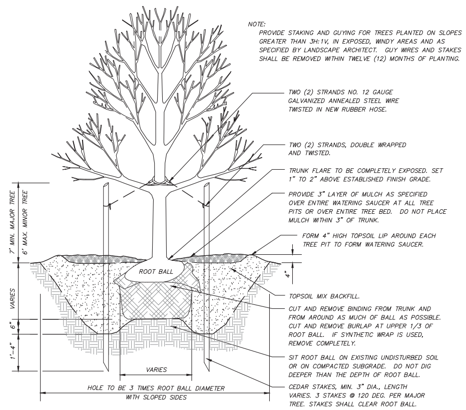
GENERAL SITE SEEDING NOTES:

1. All proposed seeded areas to receive 4" min. depth of topsoil. Soil amendments and fertilizer application rates shall be determined based on specific testing of topsoil material.
2. For temporary stabilization, apply annual ryegrass (Lolium perenne ssp.) at 30 lbs/ acre.
3. Upon final grading and placement of topsoil and any required soil amendments, areas to receive permanent vegetation cover in combination with suitable mulch as follows:
   - select seed mixture per drawings and seeding notes.
   - fertilizer applied at the manufacturer's recommended rate using Lesco 10-0-18 (no phosphorous) fertilizer or equivalent.
   - mulch: salt hay or small grain straw applied at a rate of 90 lbs./1000s.f. or 2 tons/acre, to be applied and anchored according to New York State Standards and Specifications for Erosion and Sediment Control, August 2005.
   - if the season prevents the establishment of a permanent vegetation cover, the disturbed areas will be mulched with straw or equivalent.
4. Seed Mix #1 for areas as shown on the drawings, including tops of berms, backslopes of embankments of stormwater basins, & any area to be seeded within the NYSDEC Wetland Adjacent Area, at a rate of 30 lbs. per acre: 30% annual ryegrass (Lolium perenne ssp.), and 70% New England Conservation/Wildlife Mix from New England Wetland Plants, Inc. of Amherst, MA.
5. Seed Mix #2 for areas as shown on the drawings in stormwater basins with no standing water at a rate of 18 lbs per acre: Erosion Control/ Restoration Mix for Detention Basins and Moist Sites from New England Wetland Plants, Inc. of Amherst MA.
6. Seed Mix #3 for all other disturbed areas not specified as seed mix #1 or #2. Primarily for lawn areas and mow strip along roads at a rate of 100 lbs. per acre:
   Kentucky Bluegrass 20%
   Creeping Red Fescue 40%
   Perennial Ryegrass 20%
   Annual Ryegrass 20%
7. Seed mixes to be planted between March 21 and May 20, or between August 15 and October 15 or as directed by project representative.
8. Mulch: Salt hay or small grain straw applied at a rate of 90 lbs./1000 S.F. or 2 tons/acre, to be applied and anchored according to "New York Standards and Specification For Erosion and Sediment Control," latest edition.
9. Grass seed mix may be applied by either mechanical or hydroseeding methods. Seeding shall be performed in accordance with the current edition of the "NYSDOT Standard Specification, Construction and Materials, Section 610-3.02, Method No. 1". Hydroseeding shall be performed using materials and methods as approved by the site engineer.

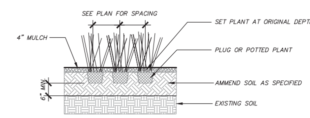


NOTE:
PROVIDE STAKING AND GUYING FOR TREES PLANTED ON SLOPES GREATER THAN 3H:1V, IN EXPOSED, WINDY AREAS AND AS SPECIFIED BY LANDSCAPE ARCHITECT. GUY WIRES AND STAKES SHALL BE REMOVED WITHIN TWELVE MONTHS OF PLANTING.

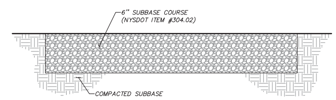
EVERGREEN TREE PLANTING DETAIL
(N.T.S.)



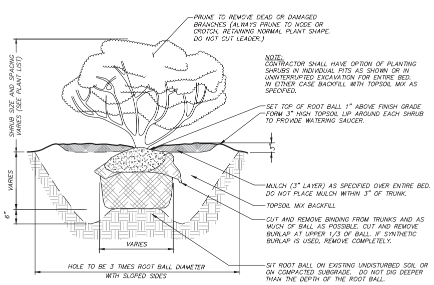
TREE PLANTING DETAIL
(N.T.S.)



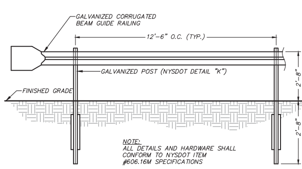
PERENNIAL / ORNAMENTAL GRASS PLANTING DETAIL
(N.T.S.)



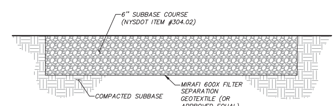
GRAVEL PAVEMENT DETAIL
FOR ENCLOSURES
(N.T.S.)



SHRUB PLANTING DETAIL
(N.T.S.)



GUIDERAIL DETAIL
(N.T.S.)



GRAVEL PAVEMENT DETAIL
FOR DRIVEWAYS
(N.T.S.)

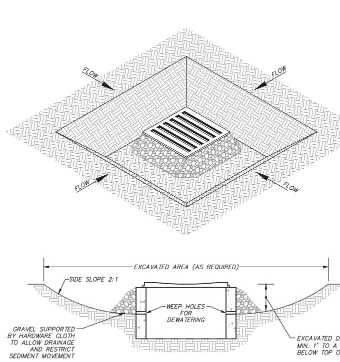
NO.	DATE	REVISION	BY
1	10-30-23	RESUBMISSION TO PLANNING BOARD	MEU

INSITE
ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.
3 Garrett Place
Carmel, NY 10512
(845) 225-9690
(845) 225-9717 fax
www.insite-eng.com

PROJECT:
UNION ENERGY CENTER
MILLER ROAD, TOWN OF CARMEL, PUTNAM COUNTY NEW YORK

DRAWING:
DETAILS & NOTES

PROJECT NUMBER	21120.100	PROJECT MANAGER	J.J.C.	DRAWING NO.	SHEET
DATE	8-30-23	DRAWN BY	I.B.	D-1	10 / 11
SCALE	AS SHOWN	CHECKED BY	A.D.T.		



1. CLEAR THE AREA OF ALL DEBRIS THAT WILL HINDER EXCAVATION
2. GRADE APPROACH TO THE INLET UNIFORMLY AROUND THE BASIN
3. WEEP HOLES SHALL BE PROTECTED BY GRAVEL
4. UPON STABILIZATION OF CONTRIBUTING DRAINAGE AREA, SEAL WEEP HOLES, FILL EXCAVATION WITH STABLE SOIL TO FINAL GRADE, COMPACT IT PROPERLY, AND STABILIZE WITH PERMANENT SEEDING
5. MAXIMUM DRAINAGE AREA = 1 ACRE

EXCAVATED DROP INLET PROTECTION DETAIL
(N.T.S.)

EROSION AND SEDIMENT CONTROL MAINTENANCE SCHEDULE

MONITORING REQUIREMENTS				MAINTENANCE REQUIREMENTS	
PRACTICE	DAILY	WEEKLY	AFTER RAINFALL	DURING CONSTRUCTION	AFTER CONSTRUCTION
SILT FENCE BARRIER	–	Inspect	Inspect	Clean/Replace	Remove
STABILIZED CONSTRUCTION ENTRANCE	Inspect	–	Inspect	Clean/Replace Stone and Fabric	Remove
DUST CONTROL	Inspect	–	Inspect	Mulching/ Spraying Water	N/A
*VEGETATIVE ESTABLISHMENT	–	Inspect	Inspect	Water/Reseed/ Remulch	Reseed to 80% Coverage
INLET PROTECTION	–	Inspect	Inspect	Clean/Repair/ Replace	Remove
SOIL STOCKPILES	–	Inspect	Inspect	Mulching/ Silt Fence Repair	Remove
SWALES	–	Inspect	Inspect	Clean/Mulch/ Repair	Mow Permanent Grass/Replace/ Repair Rip Rap
CHECK DAMS	–	Inspect	Inspect	Clean/Replace Stones/Repair	Clean/Replace Stones/Repair
CONCRETE DRAINAGE STRUCTURES	–	Inspect	Inspect	Clean Sumps/ Remove Debris/ Repair/Replace	Clean Sumps/ Remove Debris/ Repair/Replace
DRAINAGE PIPES	–	Inspect	Inspect	Clean/Repair	Clean/Repair
ROAD & PAVEMENT	–	Inspect	Inspect	Clean	Clean
*STORMWATER TRAP/BASIN	–	Inspect	Inspect	Clean/Mulch/ Repair/Reseed	See Permanent Stormwater Facilities Maintenance Schedule on Drawing SP–3.1

* Permanent vegetation is considered stabilized when 80% of the plant density is established. Erosion control measures shall remain in place until all disturbed areas area permanently stabilized.

Note: The party responsible for implementation of the maintenance schedule during and after construction is:

East Point Energy, LLC
310 4th Street NE 3rd Floor
Charlottesville, VA 22902

and/or the current owner(s) of the subject property.

REQUIRED POST–CONSTRUCTION STORMWATER MANAGEMENT PRACTICE COMPONENTS:

1. Pursuant to the NYSDEC "SPDES General Permit for Stormwater Discharges from Construction Activity" (GP–0–20–001), all construction projects needing post–construction stormwater management practices shall prepare a SWPPP that also includes practices designed in conformance with the most current version of the technical standard, New York State Stormwater Management Design Manual ("Design Manual"). Where post–construction stormwater management practices are not designed in conformance with this technical standard, the owner or operator must demonstrate equivalence to the technical standard. The following list of SWPPP components is provided in accordance with Part III.B.2a–f and III.B.3:

   a. Identification of all post–construction stormwater management practices to be constructed as part of the project; This plan, and details/notes shown hereon serve to satisfy this SWPPP requirement.

   b. A site map/construction drawing(s) showing the specific location and size of each post–construction stormwater management practice; This plan, and details/notes shown hereon serve to satisfy this SWPPP requirement.

   c. A Stormwater Modeling and Analysis Report including pre–development conditions, post–development conditions, the results of the stormwater modeling, a summary table demonstrating that each practice has been designed in conformance with the sizing criteria, identification of and justification for any deviations from the Design Manual, and identification of any design criteria that are not required. The required analysis is provided in the report titled Amended Stormwater Pollution Prevention Plan for Braemar Living at Carmel.

   d. Soil testing results and locations. This SWPPP requirement is provided in the report titled Amended Stormwater Pollution Prevention Plan for Braemar Living at Carmel.

   e. Infiltration testing results. This SWPPP requirement is provided in the report titled Amended Stormwater Pollution Prevention Plan for Braemar Living at Carmel.

   f. An operations and maintenance plan that includes inspection and maintenance schedules and actions to ensure continuous and effective operation of each post–construction stormwater management practice. The plan shall identify the entity that will be responsible for the long term operation and maintenance of each practice. The Permanent Stormwater Facilities Maintenance Schedule provided on these plans serves to satisfy this requirement.

2. Enhanced Phosphorus Removal Standards – Beginning on September 30, 2008, all construction projects identified in Table 2 of Appendix B that are located in the watersheds identified in Appendix C shall prepare a SWPPP that includes post–construction stormwater management practices designed in conformance with the Enhanced Phosphorus Removal Standards included in the most current version of the technical standard, New York Stormwater Management Design Manual. At a minimum, the post–construction stormwater management practice component of the SWPPP shall include items 2.a – 2.f above. The permanent stormwater practices for this project have been sized according to chapter 10 of the Design Manual Enhanced Phosphorus Removal Standards. Please see 2.a – 2.f above.

CONSTRUCTION SEQUENCE:

1. Install stabilized construction entrance/anti–tracking pad at driveway entrance.
2. Install silt fence in general locations indicated on the plan.
3. Begin clearing and grubbing operations associated with the driveway and enclosure area pads..
4. Strip and stockpile topsoil on site for later use in lawn and landscape areas.
5. Begin construction of the driveway and enclosure areas.
6. Begin construction of stormwater management practices and collection system.
7. Begin utility installations.
8. Upon completion of grading operations, install finished driveway surfaces.
9. Topsoil, seed, and mulch all disturbed areas as soon as practical in accordance with the Erosion and Sediment Control Notes contained on this page.

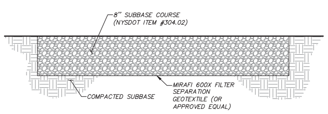
EROSION & SEDIMENT CONTROL NOTES:

1. The owner's field representative (O.F.R.) will be responsible for the implementation and maintenance of erosion and sediment control measures on this site prior to and during construction.
2. All construction activities involving the removal or disposition of soil are to be provided with appropriate protective measures to minimize erosion and contain sediment disposition within. Minimum soil erosion and sediment control measures shall be implemented as shown on the plans and shall be installed in accordance with "New York Standards and Specifications For Erosion and Sediment Control," latest edition.
3. Wherever feasible, natural vegetation should be retained and protected. Disturbance shall be minimized in the areas required to perform construction. No more than 5 acres of unprotected soil shall be exposed at any one time.
4. When land is exposed during development, the exposure shall be kept to the shortest practical period of time. In the areas where soil disturbance activity has temporarily or permanently ceased, the application of soil stabilization measures must be initiated by the end of the next business day and completed within seven (7) days from the date the current soil disturbance activity ceased. Disturbance shall be minimized to the areas required to perform construction.
5. Silt fence shall be installed as shown on the plans prior to beginning any clearing, grubbing or earthwork.
6. All topsoil to be stripped from the area being developed shall be stockpiled and immediately seeded for temporary stabilization. Ryegrass (annual or perennial) at a rate of 30 lbs. per acre shall be used for temporary seeding in spring, summer or early fall. 'Aristook' Winter Rye (cereal rye) shall be used for temporary seeding in late fall and winter.
7. Any disturbed areas not subject to further disturbance or construction traffic, permanent or temporary, shall have soil stabilization measures initiated for permanent vegetation cover in combination with a suitable mulch within 1 business day of final grading. All seeded areas to receive a minimum 4" screened topsoil from stockpile area. Seed mixes as noted in General Site Seeding Notes on drawing SP–1 are to be planted between March 21 and May 20, or between August 15 and October 15 or as directed by project representative.
8. Cut or fill slopes 3:1 and steeper shall be stabilized immediately after grading with Curlex I Single Net Erosion Control Blanket, or approved equal.
9. Paved roadways shall be kept clean at all times.
10. The site shall at all times be graded and maintained such that all stormwater runoff is diverted to soil erosion and sediment control facilities.
11. All storm drainage outlets shall be stabilized, as required, before the discharge points become operational.
12. Stormwater from disturbed areas must be passed through erosion control barriers before discharge beyond disturbed areas or discharged into other drainage systems.
13. Erosion and sediment control measures shall be inspected and maintained on a daily basis by the O.F.R. to insure that channels, temporary and permanent ditches and pipes are clear of debris, that embankments and berms have not been breached and that all straw bales and silt fences are intact. Any failure of erosion and sediment control measures shall be immediately repaired by the contractor and inspected for approval by the O.F.R. and/or site engineer.
14. Dust shall be controlled by sprinkling or other approved methods as necessary, or as directed by the O.F.R.
15. Cut and fills shall not endanger adjoining property, nor divert water onto the property of others.
16. All fills shall be placed and compacted in 6" lifts to provide stability of material and to prevent settlement.
17. The O.F.R. shall inspect downstream conditions for evidence of sedimentation on a weekly basis and after rainstorms.
18. As warranted by field conditions, special additional erosion and sediment control measures, as specified by the site engineer and/or the Town Engineer shall be installed by the contractor.
19. Erosion and sediment control measures shall remain in place until all disturbed areas are suitably stabilized.

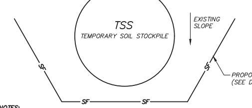
REQUIRED EROSION CONTROL SWPPP CONTENTS:

Pursuant to the NYSDEC "SPDES General Permit for Stormwater Discharges from Construction Activity" (GP–0–20–001), all Stormwater Pollution Prevention Plan's (SWPPP) shall include erosion and sediment control practices designed in conformance with the most current version of the technical standard, "New York Standards and Specifications for Erosion and Sediment Control." Where erosion and sediment control practices are not designed in conformance with this technical standard, the owner or operator must demonstrate equivalence to the technical standard. The following list of required SWPPP components is provided in accordance with Part III.B.1a–l of General Permit GP–0–20–001:

a. Background Information: The subject project consists of the construction of a battery electric storage facility and two electrical substations
b. Site map / construction drawing: These plans serve to satisfy this SWPPP requirement.
c. Description of the soils present at the site: Onsite soils located within the proposed limits of disturbance consist of Ridgebury Complex (RgB), Paxton Fine Sandy Loam (PnD), and Woodbridge Loam (WdB), as identified on the Soil Conservation Service Web Soil Survey. These soil types belong to the Hydrologic Soil Group "B/D" and "C" respectively.
d. Construction phasing plan / sequence of operations: The Construction Sequence and phasing found on these plans provide the required phasing. A Construction Sequence and Erosion and Sediment Control Maintenance Schedule has been provided. The Sedimentation and Erosion Control Notes contained hereon outline a general sequence of operations for the proposed project. In general all erosion and sediment control facilities shall be installed prior to commencement with land disturbing activities, and areas of disturbance shall be limited to the shortest period of time as practicable.
e. Description of erosion and sediment control practices: This plan, and details / notes shown hereon serve to satisfy this SWPPP requirement.
f. Temporary and permanent soil stabilization plan: The Sedimentation and Erosion Control Notes and Details provided heron identify temporary and permanent stabilization measures to be employed with respect to specific elements of the project, and at the various stages of development.
g. Site map / construction drawing: This plan serves to satisfy this SWPPP requirement.
h. The dimensions, material specifications, installation details, and operation and maintenance requirements for all erosion and sediment control practices: The details, Erosion and Sediment Control Notes, and Erosion and Sediment Control Maintenance Schedule serve to satisfy this SWPPP requirement.
i. An inspection schedule: Inspections are to be performed twice weekly and by a qualified professional as required by the General Permit GP–0–20–001. In addition the NYSDEC Trained Contractor shall perform additional inspections as cited in the Sedimentation and Erosion Control Notes.
j. A description of pollution prevention measures that will be used to control litter, construction chemicals and construction debris: In general, all construction litter / debris shall be collected and removed from the site. The general contractor shall supply either waste barrels or dumpster for proper waste disposal. Any construction chemicals utilized during construction shall either be removed from site daily by the contractor or stored in a structurally sound and weatherproof building. No hazardous waste shall be disposed of onsite, and shall ultimately be disposed of in accordance with all federal, state and local regulations. Material Safety Data Sheets (MSDS), material inventory, and emergency contact numbers shall be maintained by the general contractor for all construction chemicals utilized onsite. Finally, temporary sanitary facilities (portable toilets) shall be provided onsite during the entire length of construction, and inspected weekly for evidence of leaking holding tanks.
k. A description and location of any stormwater discharges associated with industrial activity other than construction at the site: There are no known industrial stormwater discharges present or proposed at the site.
l. Identification of any elements of the design that are not in conformance with the technical standard, "New York Standards and Specifications for Erosion and Sediment Control." All proposed elements of this SWPPP have been designed in accordance with the "New York Standards and Specifications for Erosion and Sediment Control."



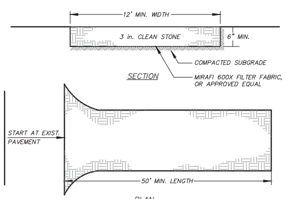
GRAVEL PAVEMENT DETAIL
(N.T.S.)



NOTES:

1. AREA CHOSEN FOR STOCKPILE LOCATION SHALL BE DRY AND STABLE.
2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 2:1.
3. UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE IMMEDIATELY SEEDED WITH K31 PERENNIAL TALL FESCUE.
4. ALL STOCKPILES SHALL BE PROTECTED WITH SILT FENCING INSTALLED ON THE DOWNGRADIENT SIDE.

TEMPORARY SOIL STOCKPILE DETAIL
(N.T.S.)

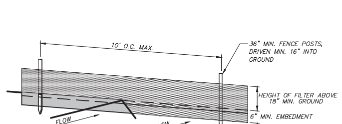


PLAN

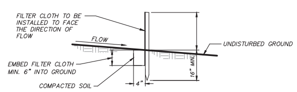
INSTALLATION NOTES

1. STONE SIZE – USE 3" STONE
2. LENGTH – AS REQUIRED, BUT NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLLY
3. THICKNESS – NOT LESS THAN SIX (6) INCHES.
4. WIDTH – 12 FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCUR. TWENTY FOUR (24) FOOT IF SINGLE ACCESS TO SITE.
5. FILTER CLOTH – WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE. FILTER CLOTH WILL NOT BE REQUIRED ON A SINGLE FAMILY RESIDENCE LOT.
6. SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT OF WAY . THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT OF WAY MUST BE REMOVED IMMEDIATELY.
8. WASHING – WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT OF WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

STABILIZED CONSTRUCTION ACCESS DETAIL
(N.T.S.)



PERSPECTIVE VIEW

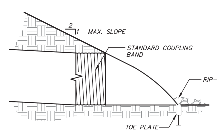


SECTION

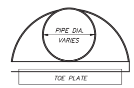
CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL EITHER "T" OR "U" TYPE OR HARDWOOD.
2. FILTER CLOTH TO BE TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 6" MAXIMUM MESH OPENING.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER–LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUIVALENT.
4. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUIVALENT.
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

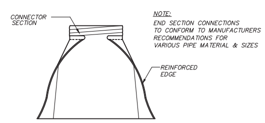
STANDARD SILT FENCE DETAIL
(N.T.S.)



SECTION



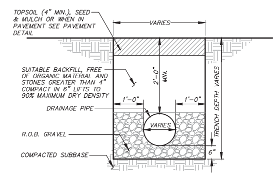
ELEVATION



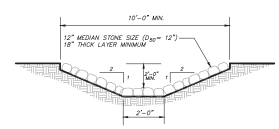
NOTE:
END SECTION CONNECTIONS TO CONFORM TO MANUFACTURERS RECOMMENDATIONS FOR VARIOUS PIPE MATERIAL & SIZES

PLAN

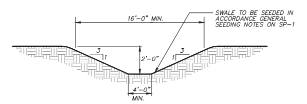
HDPE END SECTION DETAIL
(N.T.S.)



DRAINAGE LINE TRENCH DETAIL
(N.T.S.)

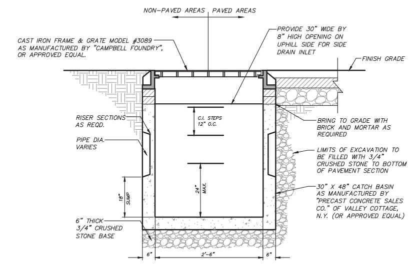


RIP RAP SWALE DETAIL
(N.T.S.)



GRASS SWALE TO BE LINED WITH CHANNEL LINER C–125 AS MANUFACTURED BY "NORTH AMERICAN GREEN" OR APPROVED EQUAL.

GRASS SWALE DETAIL
(N.T.S.)



DRAIN INLET DETAIL
(N.T.S.)
(STRUCTURE AND GRATE TO BE DESIGNED FOR H–20 LOADING)

NO.	DATE	REVISION	BY
1	10–30–23	RESUBMISSION TO PLANNING BOARD	MEU

INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.
3 Garrett Place
Carmel, NY 10512
(845) 225–9690
(845) 225–9717 fax
www.insite–eng.com

PROJECT:
UNION ENERGY CENTER
MILLER ROAD, TOWN OF CARMEL, PUTNAM COUNTY NEW YORK

DRAWING:
DETAILS AND NOTES

PROJECT NUMBER	21120.100	PROJECT MANAGER	J.J.C.
DATE	8–30–23	DRAWN BY	I.B.
SCALE	NTS	CHECKED BY	A.D.T.

DRAWING NO. D–2
SHEET 11 / 11

INSITE
ENGINEERING, SURVEYING &
LANDSCAPE ARCHITECTURE, P.C.

October 31, 2023

Town of Carmel Planning Board
60 McAlpin Avenue
Mahopac, New York 10541

RE: Carmel Fire Department
94 Gleneida Avenue
Town of Carmel
TM# 44.14-1-24

Dear Chairman Paeprer and Members of the Board:

Please find enclosed five (5) copies of the following documents in support of minor proposed improvements for the above referenced project:

- Waiver of Site Plan Application Dated October 31, 2023
- Site Plans prepared by Insite Engineering, Surveying, and Landscape Architecture P.C. dated October 31, 2023

Since the Carmel Fire Department Site Plan Approval on November 12, 2020 and subsequently, May 26, 2021, the applicant has received request from the Carmel Fire Department's members to add a seating area in the rear of the property. The attached plans include the addition of a three walled shade structure for seating, shed, fire pit and seating wall. In addition, a privacy fence is proposed to screen the seating area from the neighboring property.

We respectfully request this project be placed on the November 9, 2023 Planning Board meeting for the discussion of the attached material. Should you have any questions or comments regarding this information, please feel free to contact our office.

Very truly yours,

INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.

By: _____
John M. Watson, PE
Principal Engineer

JMW/kmg
Enclosures
Cc: Michael Hengel / Carmel Fire Department

PLANNING BOARD
Town of Carmel - Town Hall
Mahopac, NY 10541
(845) 628-1500

WAIVER OF SITE PLAN APPLICATION

To: Town of Carmel Planning Board

I would like to request a waiver of the site plan requirements in connection with ~~a change of use~~ minor improvements on the property located at:

94 Gleneida Avenue

Tax Map #44.14-1-24 in the Commercial Zone.

For the following reasons: minor improvements to create a seating area for members.

I do not plan to make any exterior changes to the building.

My proposed use of the site is Carmel Fire Department

The present use of the site is Carmel Fire Department (no change)

I will employ 110±* people (number). *Carmel Fire Department Members are Volunteers not employees

There is (is not) a loading dock to receive my supplies. N/A

Signs will conform to the code. N/A - No signs are proposed

Special Comments

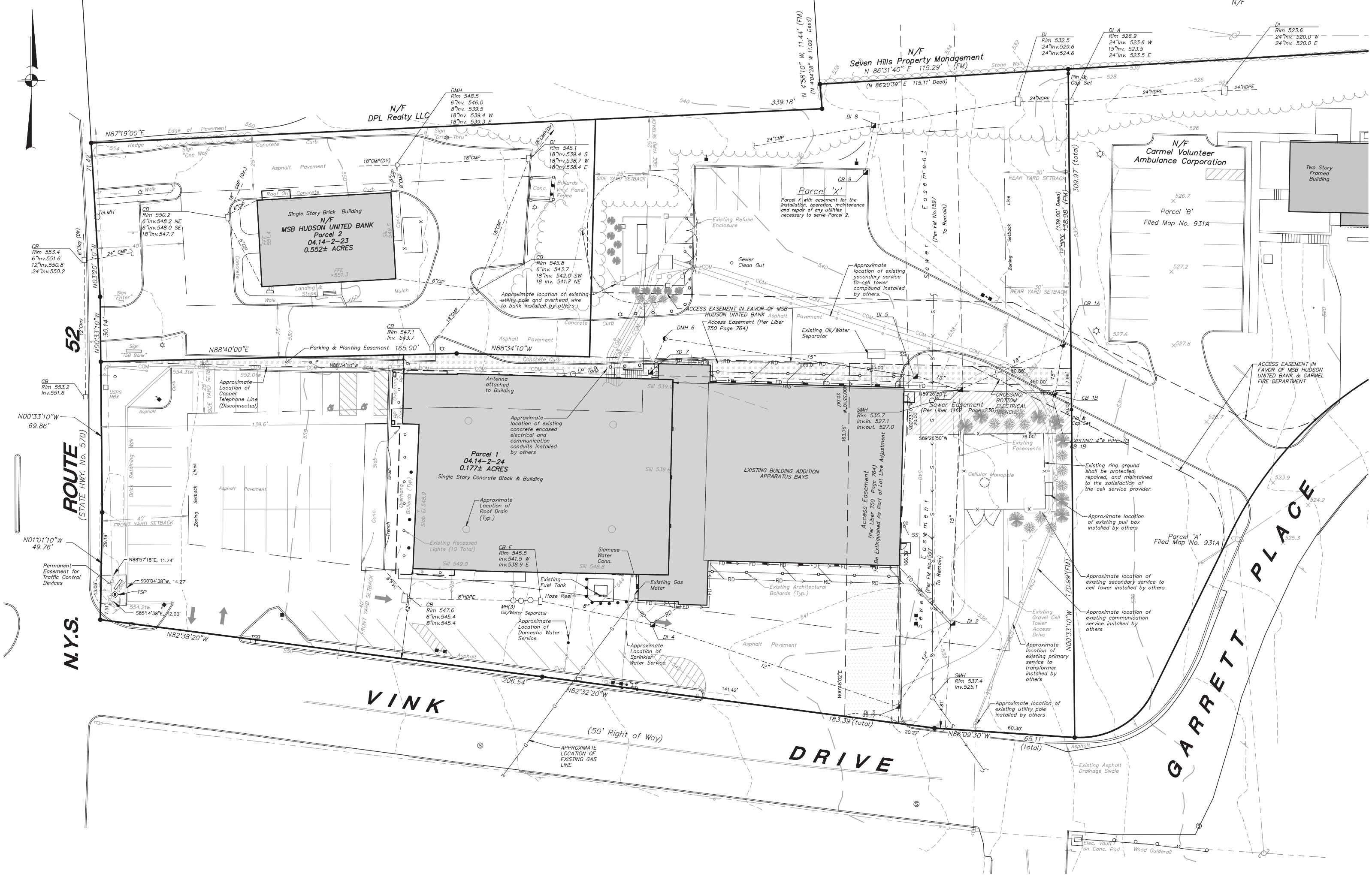
In support of my request, I have attached the following:
Requirements:
5 copies of this waiver request.
5 copies of a floor layout drawn to scale.
5 copies of a parking layout drawn to scale on your survey.
5 copies of a location map.

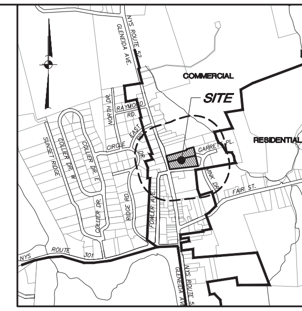
Carmel Fire Department Inc., 94 Gleneida Avenue, 845 225 5100

Print Applicant's Name, Address & Telephone Number

Michael Hengel 10/31/23

Applicant's Signature & Date





LOCATION MAP SCALE: 1" = 800'±

OWNER/APPLICANT:

CARMEL FIRE DEPARTMENT, INC.
94 GLENEIDA AVENUE
CARMEL, NY 10512

SITE DATA:

Zone: Commercial
Total Acreage 2.2 AC
Tax Map No.: 44.14-1-24

GENERAL NOTES:

1. Location map boundary information shown hereon is taken from the Putnam County Tax Map.
2. Property boundary, site features and existing topography shown hereon is based upon fieldwork performed by Insite Engineering, Surveying & Landscape Architecture, P.C. completed December 13, 2019. Elevations shown hereon are in NAVD88. The contour interval is 2'.
3. Recently completed work shown hereon taken from design drawings from Insite Engineering, Surveying, and Landscape Architecture P.C. dated April 29, 2021.

LEGEND

- EXISTING PROPERTY LINE
- EXISTING EASEMENT
- EXISTING STONE WALL
- EXISTING CHAIN LINK FENCE
- EXISTING STOCKADE FENCE
- EXISTING CONCRETE CURB
- EXISTING DROP IN CONCRETE CURB
- TSB EXISTING TRAFFIC SIGNAL BOX
- EXISTING SIGN
- EXISTING UNDERGROUND DRAINAGE PIPE
- RD APPROXIMATE LOCATION OF EXISTING ROOF DRAIN
- COM APPROXIMATE LOCATION OF EXISTING UNDERGROUND COMMUNICATION LINE
- e APPROXIMATE LOCATION OF EXISTING UNDERGROUND ELECTRIC LINE
- WS APPROXIMATE LOCATION OF EXISTING UNDERGROUND WATER SERVICE LINE
- EXISTING CATCH BASIN
- MH EXISTING MANHOLE
- EXISTING POST MOUNTED LIGHT
- EXISTING RECESSED LIGHT
- WV EXISTING WATER VALVE
- CO EXISTING CLEAN OUT
- EXISTING UTILITY POLE
- 100 EXISTING 10' CONTOUR
- EXISTING 2' CONTOUR
- 698.6 × EXISTING SPOT GRADE
- EXISTING HEDGE ROW
- EXISTING TREELINE
- EXISTING LIGHT POLE
- EXISTING LANDSCAPING
- FD EXISTING FOOTING DRAIN
- RD EXISTING ROOF DRAIN
- EXISTING CHAIN LINK FENCE

ADJOINER MAP SCALE: 1" = 400'±

500' ADJOINERS:

TOWN OF CARMEL:

1. Rodolfo A Roque
2. Susan P Alm
3. Marcel Carrillo
4. Louis Sclafani
5. Joyce McGlasson
6. Rick Montes
7. Edward M Schaffer
8. Rt 52 Housing Devel Fund Co
9. DPL Realty, LLC
10. Seven Hills Property Mgmt
11 Michael Yodice
12 Carmel Vol Ambulance Corp
13. John Mitchell
14. Hugo Hayes LLC
15. Harman Holdings Ltd
16. Harman Holdings Ltd
17. Main Woodland Trail
18. United States Postal Service
19. Ranric Enterprises Corp
20. 17 Fair St, LLC
21. Wenco Properties Corp
22. Mt Carmel Baptist Church
23. Kelley Cemetery Inc
24. 90 Gleneida Ave Corp
25. Mt Carmel Baptist Church
26. Wayne Ryder
27. Robert H Hall
28. Peter Fellbusch
29. Robert Hall
30. Carmel Board of Fire Commission
31. Longview Realty Corp
32. Maria J Casti
33. Mary T Kipp
34. Augusto Sacchetti
35. Marlon Ramlogan
36. Kevin D O'Donnell
37. JRP Associates LLC
38. Ermes Fernandez
39. David Chau
40. Yocasta Dass
41. Allan J Eyring
42. Michelle Hicks
43. BND Fowler Property, LLC
44. David Radovich
45. Fowler Ave Corp
46. William Rippey.
47. Richard McGlasson
48. 91 Gleneida LLC
49. 91 Gleneida LLC
50. Josephine Alessi
51. Eleanor Vidalis
52. James P McGuire
53. P & R Estate Corp
54. 99 Gleneida Avenue LLC
55. Carla D Taylor
56. Philip F Ford
57. Wayne Ryder
58. 105 Gleneida Ave Corp.

GRAPHIC SCALE
0 10 20 40
(IN FEET)
1 inch = 20 ft.

NO.	DATE	REVISION	BY

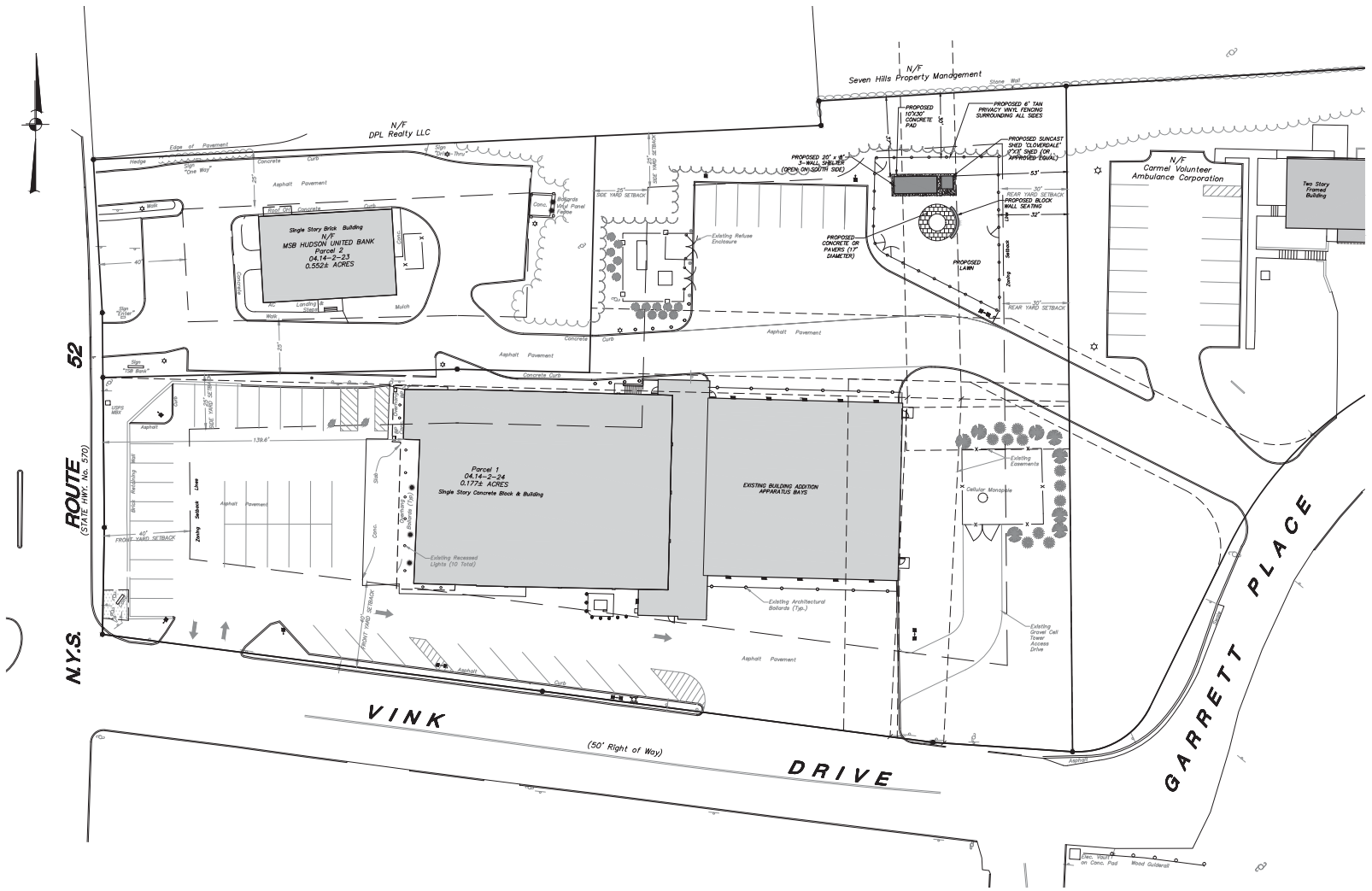
INSITE
ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.
3 Garrett Place
Carmel, NY 10512
(845) 225-9690
(845) 225-9717 fax
www.insite-eng.com

PROJECT:
CARMEL FIRE DEPARTMENT
MEMBERS SEATING AREA
94 GLENEIDA AVENUE, CARMEL, PUTNAM COUNTY, NEW YORK

DRAWING:
EXISTING CONDITIONS
& REMOVALS PLAN

PROJECT NUMBER	19135.100	PROJECT MANAGER	J.M.W.
DATE	10-31-23	DRAWN BY	C.B.Z.
SCALE	1" = 20'	CHECKED BY	K.M.G.

DRAWING NO. EX-1
SHEET 1 / 5



LEGEND

- EXISTING PROPERTY LINE
- EXISTING EASEMENT
- EXISTING STONE WALL
- EXISTING CHAIN LINK FENCE
- EXISTING STOCKADE FENCE
- EXISTING CONCRETE CURB
- EXISTING DROP IN CONCRETE CURB
- EXISTING SIGN
- EXISTING HEDGE ROW
- EXISTING TREELINE
- EXISTING POST MOUNTED LIGHT
- EXISTING RECESSED LIGHT
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- EXISTING LANDSCAPING
- EXISTING CHAIN LINK FENCE
- PROPOSED VINYL FENCE
- PROPOSED STRUCTURE

C ZONE REQUIREMENTS:

	Required/Permitted:	Existing:	Proposed:
Minimum Lot Area:	40,000 SF	94,830 SF	94,830 SF
Minimum Lot Width:	200'	261'±	261'±
Minimum Lot Depth:	200'	450'±	450'±
Minimum Road Frontage:	100'	574.7'±	574.7'±
Minimum Yard Setbacks:			
Front:	40'	42'±	41'±
Side:	25'	8.9'±*	8.9'±*
Rear:	30'	185'±	53'±
Maximum Building Height:	35'	Less Than 35'	Less Than 35'
Minimum Building Floor Area	5,000 SF	>5,000 SF±	26,900 SF±
Maximum Building Coverage:	30%	15%± **	22%± **

* Pre-existing nonconforming condition
** Includes a 775 sf allocation for structures within the cellular tower facility.
*** The applicant was granted a variance for a driveway less than 24' (§ 145-42 D) by the Town of Carmel Zoning Board of Appeals on August 27, 2020. The variance was granted for a 20' driveway.

GRAPHIC SCALE
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3 Garrett Place
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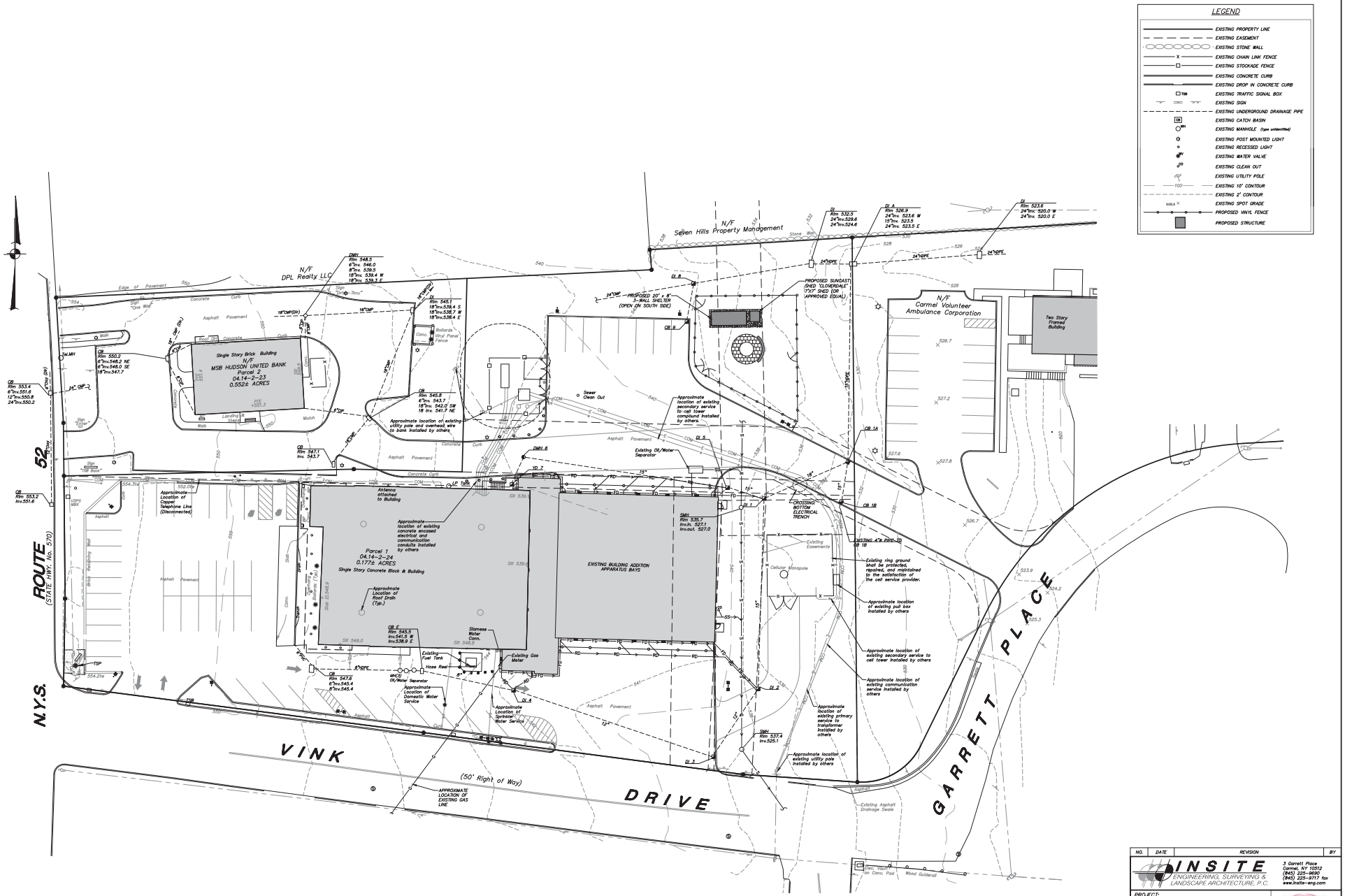
(845) 225-9090
(845) 225-9717 fax
www.insite-eng.com

PROJECT:
CARMEL FIRE DEPARTMENT
MEMBERS SEATING AREA
94 GLENIDA AVENUE, CARMEL, PUTNAM COUNTY, NEW YORK

DRAWING:
LAYOUT AND
LANDSCAPE PLAN

PROJECT NUMBER	191.35.100	PROJECT MANAGER	J.M.W.	DRAWING NO.	SHEET
DATE	10-31-23	DRAWN BY	C.B.Z.	SP-1	2 / 5
SCALE	1" = 20'	CHECKED BY	K.M.G.		



ALTERATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 7209 OF ARTICLE 145 OF THE EDUCATION LAW.

NO.	DATE	REVISION	BY

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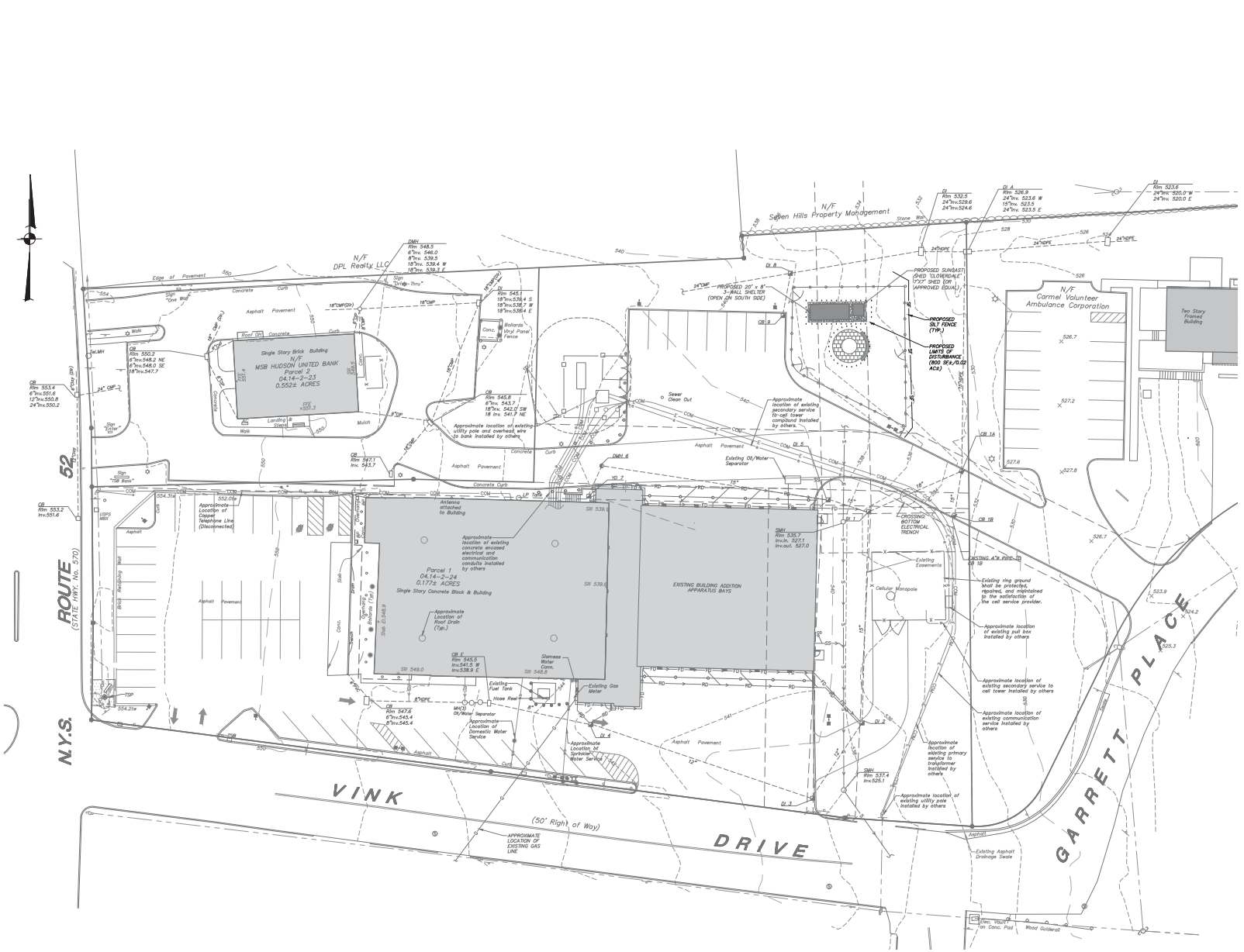
3 Garrett Place
Carmel, NY 10512
(845) 225-9090
(845) 225-9717 fax
www.insite-eng.com

PROJECT:
CARMEL FIRE DEPARTMENT MEMBERS SEATING AREA
94 GLENEIDA AVENUE, CARMEL, PUTNAM COUNTY, NEW YORK

DRAWING:
GRADING AND UTILITIES PLAN

PROJECT NUMBER	191.35.100	PROJECT MANAGER	J.M.W.	DRAWING NO.	SHEET
DATE	10-31-23	DRAWN BY	C.B.Z.	SP-2	3 / 5
SCALE	1" = 20'	CHECKED BY	K.M.G.		



LEGEND

- EXISTING PROPERTY LINE
- EXISTING EASEMENT
- EXISTING STONE WALL
- EXISTING CHAIN LINK FENCE
- EXISTING STOCKADE FENCE
- EXISTING CONCRETE CURB
- EXISTING DROP IN CONCRETE CURB
- EXISTING TRAFFIC SIGNAL BOX
- EXISTING SIGN
- EXISTING UNDERGROUND DRAINAGE PIPE
- EXISTING CATCH BASIN
- EXISTING MANHOLE (type unidentified)
- EXISTING POST MOUNTED LIGHT
- EXISTING RECESSED LIGHT
- EXISTING WATER VALVE
- EXISTING CLEAN OUT
- EXISTING UTILITY POLE
- EXISTING 10' CONTOUR
- EXISTING 2' CONTOUR
- EXISTING SPOT GRADE
- PROPOSED SILT FENCE
- PROPOSED LIMITS OF DISTURBANCE

EROSION & SEDIMENT CONTROL NOTES:

1. The owner's field representative (O.F.R.) will be responsible for the implementation and maintenance of erosion and sediment control measures on this site prior to and during construction.
2. All construction activities involving the removal or disposition of soil are to be provided with appropriate protective measures to minimize erosion and contain sediment disposition within. Minimum soil erosion and sediment control measures shall be implemented as shown on the plans and shall be installed in accordance with "New York Standards and Specifications For Erosion and Sediment Control," latest edition.
3. Wherever feasible, natural vegetation should be retained and protected. Disturbance shall be minimized in the areas required to perform construction. No more than 5 acres of unprotected soil shall be exposed at any one time.
4. When land is exposed during development, the exposure shall be kept to the shortest practical period of time. In the areas where soil disturbance activity has temporarily or permanently ceased, the application of soil stabilization measures must be initiated by the end of the next business day and completed within seven (7) days from the date the current soil disturbance activity ceased. Disturbance shall be minimized to the areas required to perform construction.
5. Silt fence shall be installed as shown on the plans prior to beginning any clearing, grubbing or earthwork.
6. All topsoil to be stripped from the area being developed shall be stockpiled and immediately seeded for temporary stabilization. Ryegrass (annual or perennial) at a rate of 30 lbs. per acre shall be used for temporary seeding in spring, summer or early fall. "Aristaa" Winter Rye (cereal rye) shall be used for temporary seeding in late fall and winter.
7. Any disturbed areas not subject to further disturbance or construction traffic, permanent or temporary, shall have soil stabilization measures initiated for permanent vegetation cover in combination with a suitable mulch within 1 business day of final grading. All seeded areas to receive a minimum 4" topsoil (from stockpile area) and be seeded and mulched as follows:
   - Seed mixture to be planted between March 21 and May 20, or between August 15 and October 15 or as directed by project representative at a rate of 100 pounds per acre in the following proportions:
     - Kentucky Bluegrass 20%
     - Creeping Red Fescue 40%
     - Perennial Ryegrass 20%
     - Annual Ryegrass 20%
   - Mulch: Salt hay or small grain straw applied at a rate of 90 lbs./1000 S.F. or 2 tons/acre, to be applied and anchored according to "New York Standards and Specification For Erosion and Sediment Control," latest edition.
8. Grass seed mix may be applied by either mechanical or hydroseeding methods. Seeding shall be performed in accordance with the current edition of the "NYSDOT Standard Specification, Construction and Materials, Section 610-3.02, Method No. 1". Hydroseeding shall be performed using materials and methods as approved by the site engineer.
9. Cut or fill slopes steeper than 3:1 shall be stabilized immediately after grading with Curlex I Single Net Erosion Control Blanket, or approved equal.
10. Paved roadways shall be kept clean at all times.
11. The site shall at all times be graded and maintained such that all stormwater runoff is diverted to soil erosion and sediment control facilities.
12. All storm drainage outlets shall be stabilized, as required, before the discharge points become operational.
13. Stormwater from disturbed areas must be passed through erosion control barriers before discharge beyond disturbed areas or discharged into other drainage systems.
14. Erosion and sediment control measures shall be inspected and maintained on a daily basis by the O.F.R. to insure that channels, temporary and permanent ditches and pipes are clear of debris, that embankments and berms have not been breached and that all straw bales and silt fences are intact. Any failure of erosion and sediment control measures shall be immediately repaired by the contractor and inspected for approval by the O.F.R. and/or site engineer.
15. Dust shall be controlled by sprinkling or other approved methods as necessary, or as directed by the O.F.R.
16. Cut and fills shall not endanger adjoining property, nor divert water onto the property of others.
17. All fills shall be placed and compacted in 6" lifts to provide stability of material and to prevent settlement.
18. The O.F.R. shall inspect downstream conditions for evidence of sedimentation on a weekly basis and after rainstorms.
19. As warranted by field conditions, special additional erosion and sediment control measures, as specified by the site engineer and/or the Town Engineer shall be installed by the contractor.
20. Erosion and sediment control measures shall remain in place until all disturbed areas are suitably stabilized.

GRAPHIC SCALE
0 10 20 40
(IN FEET)
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3 Garrett Place
Carmel, NY 10512
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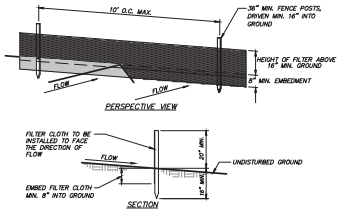
(845) 225-9717 fax
www.insite-eng.com

PROJECT: CARMEL FIRE DEPARTMENT MEMBERS SEATING AREA
94 GLENEIDA AVENUE, CARMEL, PUTNAM COUNTY, NEW YORK

DRAWING: EROSION AND SEDIMENT CONTROL PLAN

PROJECT NUMBER	19135.100	PROJECT MANAGER	J.M.W.	DRAWING NO.	SHEET
DATE	10-31-23	DRAWN BY	C.B.Z.	SP-3	4 / 5
SCALE	1" = 20'	CHECKED BY	K.M.G.		



CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

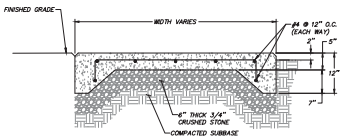
1. FILTER CLOTH TO BE FASTENED SECURELY TO POSTS AT TOP AND MID SECTION.
2. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
3. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

POSTS: STEEL EITHER T OR U TYPE OR 2" HARDWOOD

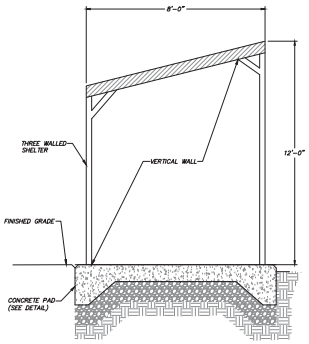
FILTER CLOTH: FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUAL

PREFABRICATED UNIT: GEOFAB, ENVIROFENCE, OR APPROVED EQUAL

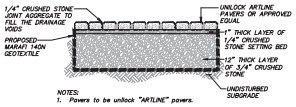
SILT FENCE DETAIL
(N.T.S.)



CONCRETE PAD DETAIL
(N.T.S.)

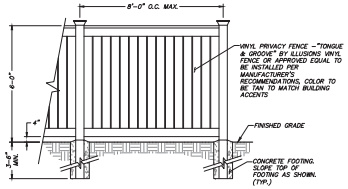


3 WALL SHELTER DETAIL
(N.T.S.)

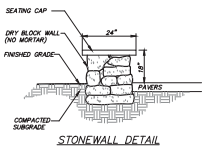


NOTES:
1. Pavers to be unilock "ARTLINE" pavers.
2. Paver finish and color to be as approved by owner.
3. Joint aggregate color to be coordinated with paver color.
4. Utilize pastic, metal or concrete edge restraint at edge of pavers

PAVERS DETAIL
(N.T.S.)



VINYL PRIVACY FENCE DETAIL
(N.T.S.)



STONEWALL DETAIL
(N.T.S.)

NO.	DATE	REVISION	BY

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PROJECT:
CARMEL FIRE DEPARTMENT
MEMBERS SEATING AREA
94 GLENEIDA AVENUE, CARMEL, PUTNAM COUNTY, NEW YORK

DRAWING:
DETAILS

PROJECT NUMBER	191.35.100	PROJECT MANAGER	J.M.W.	DRAWING NO.	SHEET
DATE	10-31-23	DRAWN BY	J.F.R.	D-1	5 of 5
SCALE	AS NOTED	CHECKED BY	K.M.G.		