



COURTROOM, CITY HALL
1 MUNICIPAL PLAZA
BEACON, NY 12508
THE PLANNING BOARD WILL
MEET ON TUESDAY,
DECEMBER 8, 2020 AT 7:00
PM. A WORK SESSION WILL
TAKE PLACE AT 7:00 PM FOR
A TRAINING WORKSHOP,
DISCUSSION OF AGENDA,
ITEMS AND/OR TOPICS OF
INTEREST TO THE PLANNING
BOARD. THE REGULAR
MEETING WILL BEGIN
IMMEDIATELY THEREAFTER,
BUT NOT LATER THAN 7:30
PM.

Len Warner
Karen Quiana
Kevin Byrne
Jill Reynolds
J. Randall Williams
J.C. Calderon
Chair John Gunn

January 11, 2022
7:00 PM
Planning Board Agenda

Regular Meeting

1. Continue public hearing for SEQRA environmental review on applications for Subdivision and Site Plan Approval, "Beacon Views Townhouses" 40 units, Conklin Street, submitted by Beacon Views, LLC (postponed at the request of the applicant)
2. Public hearing on applications for Subdivision Approval (lot merger) and Site Plan Approval, three-story mixed-use residential and commercial development, 364 Main Street, submitted by O'Donnell Construction Corp.
3. Continue review of application for Special Use Permit and Site Plan Approval, accessory apartment, 1080 Wolcott Avenue, submitted by Catrinel Bartolomeu & Bruno Maddox
4. Continue review of application for Site Plan Approval, hotel and event space, 1113 Wolcott Avenue, submitted by Prophecy Theater, LLC

Miscellaneous Business

1. Zoning Board of Appeals - No applications submitted for the January meeting

Architectural Review

City of Beacon Planning Board Agenda
01/11/2022

Title:

Continue public hearing for SEQRA environmental review on applications for Subdivision and Site Plan Approval, "Beacon Views Townhouses" 40 units, Conklin Street, submitted by Beacon Views, LLC
(postponed at the request of the applicant)

ATTACHMENTS

City of Beacon Planning Board Agenda
01/11/2022

Title:

Public hearing on applications for Subdivision Approval (lot merger) and Site Plan Approval, three-story mixed-use residential and commercial development, 364 Main Street, submitted by O'Donnell Construction Corp.

ATTACHMENTS

[364 Main Street Cover Letter.pdf](#)

[364 Main Street Exhibit C Architect Response Letter.pdf](#)

[364 Main Street Exhibit D Engineer Response Letter.pdf](#)

[364 Main Street Exhibit E Traffic Engineer Response Letter.pdf](#)

[364 Main Street Exhibit A Subdivision Application.pdf](#)

[364 Main Street - Attachment 1 Final Plans.pdf](#)

[364 Main Street - Attachment 2 Subdivision Plat Lot Line Removal.pdf](#)

[Engineer Review Letter.pdf](#)

[Planner Review Letter Revised.pdf](#)

[Planner Review Letter.pdf](#)

[Traffic Engineer Review Letter.pdf](#)

[364 Main Street SEQRA Negative Declaration Site Plan and Subdivision.docx](#)

[364 Main Street EAF Part 2 Site Plan and Subdivision.pdf](#)

[364 Main Street EAF Part 3 Site Plan and Subdivision.pdf](#)

[364 Main St - Revised FEAF.pdf](#)

[364 Main St - Updated Beacon PB Site Plan Application Form - Signed 1-5-22\(5081292.1\).pdf](#)



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

Taylor M. Palmer, Esq.
tpalmer@cuddyfeder.com

December 28, 2021

VIA E-MAIL
AND HAND DELIVERY

Hon. John Gunn
And Members of the Planning Board
City of Beacon
1 Municipal Plaza
Beacon, New York 12508

Re: Supplemental SEQR Submission – Application for Site Plan and Subdivision Approval
Commercial and Multi-Family Residential Mixed-Use Development
Premises: 364 Main Street & Eliza Street, Beacon, New York
Tax Parcel IDs: (6054-29-006819 & 6054-29-004836)

Dear Chairman Gunn and Members of the Planning Board:

On behalf of O'Donnell Construction Corp. (the "Applicant"), the owner of the above-referenced Premises, we respectfully submit this letter and the referenced enclosures in furtherance of the Applicant's pending Applications for Site Plan and Lot Merger Approval (collectively, the "Applications").

Since last appearing before the Planning Board on December 14, 2021, the Applicant has further refined and improved the building program in response to the comments raised by the Board at that meeting and the comments contained in the memoranda prepared by the City's Engineering Consultant, Lanc & Tully, dated December 8, 2021 (the "Engineering Comments Memorandum"); the City's Planning Consultant, John Clarke Planning and Design, dated December 9, 2021 (the "Planning Comments Memorandum"); and the City's Traffic Consultant, Creighton Manning, dated December 9, 2021 (the "Traffic Comments Memorandum").

UPDATED BUILDING PROGRAM:

Based on this Board's comments at the December 14th meeting, the Applicant updated the site plans to incorporate various features that will further activate the Main Street frontage, which includes new landscape design that reflects a more usable paved area along Main Street. As requested by the Board, this design includes benches and additional green space along the west side of the building. As with the prior plans, this proposal satisfies the landscaping requirement in the CMS Zoning District. The landscape design has strived to balance the functional needs of the site with requirements the City has for ensuring each project meets the ten percent (10%) of green space. By using permeable pavers planted with eco-grass, the Applicant is greening up the hardscaping and using a grass species that does not need constant cutting, which reduces the



December 28, 2021

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resources needed to maintain the landscaping. The Applicant's Landscape Designer also diversified the planting bed that runs along the east side of the property line along the border of the Salvation Army property by adding more species and evergreens with fuller blooms. The plant list currently has 23 trees scheduled for planting, which not only enhances the experience on the property but adds an ecological benefit as well.

We would also note that while developing the refined landscape design elements to further activate the Main Street frontage, the structural engineer identified that it is not feasible to remove the front stone portion of the building due to the existing condition of the foundation and the basement below, which creates structural issues as well as issues with the water table. Instead, to remedy these conditions, as is more fully shown on the enclosed Site Plans, the Applicant proposes to bring the small remaining portion of the building across so that the overall building design does not change, but the plaza area is slightly shallower by approximately 44 inches.¹ However, as noted above, using the landscape design and the proposed bench installation, the Applicant submits that the end result is better activation of the Main Street frontage.

In addition to the adjustments noted above, the refined building program now consists of a 35,000 sq. ft. mixed-use development, which includes the following updates:

- The commercial area on the first floor was increased to 8,819 sq. ft.;
- The residential common area on the first floor was decreased to 1,607 sq. ft.; and
- A 6' high wood stockade privacy fencing has been added to the north, rear side of the Eliza Street parking lot.

Additionally, in further response to stormwater concerns raised at the Public Hearing and in addition to the mitigation measures previously discussed in the prior submission – reduced impervious surface, additional landscaped area, roof drains, and snow storage areas – the Applicant is now proposing a six-inch-high concrete curb on the northern edge of the existing parking lot to prevent runoff from leaving the Premises to the north. Collectively, these measures will reduce the peak rate of runoff from the Premises.

¹ Note: The Applicant will submit the necessary forms and documents (i.e., updated Application Form & EAF) reflecting this change in building depth in advance of the next Planning Board meeting. Copies will be forwarded directly to the Planning Board's Engineering Consultant.



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PROPOSED LOT LINE REMOVAL TO MERGE LOTS & REFERRAL TO ARB SUBCOMMITTEE:

In connection with the lot line removal (subdivision) component of the Application, enclosed please find an updated copy of the Subdivision Plat, which details the proposed lot merger that will remove the existing lot lines between the Eliza Street Lot and Main Street Lot, thereby merging the existing two (2) lots into one (1) resultant lot. *See* enclosed Subdivision Plat.

In addition, as this Board is aware, the Project was referred to the Architectural Review Board Subcommittee at the December 14th meeting.

ADDITIONAL RESPONSE TO COMMENTS MEMORANDA:

To further assist this Board in its continued review of the refined proposal, the Applicant respectfully submits the following memoranda prepared by its Consultants providing annotated responses to the applicable comments noted in the Engineering Comments Memoranda, the Planning Comments Memorandum, and the Traffic Comments Memorandum:

- Response to Comments Memorandum prepared by Aryeh J. Siegel Architect dated December 28, 2021 (the “Architect Response to Comments Memorandum”). *See Exhibit C* – Architect Response to Comments Memorandum;
- Response to Comments Memorandum prepared by Day Stokosa Engineering, P.C. dated December 21, 2021 (the “Day Response to Comments Memorandum”). *See Exhibit D* – Day Response to Comments Memorandum; and
- Response to Comments letter prepared by Colliers Engineering & Design CT, P.C., dated December 20, 2021 (the “Colliers Response to Comments Memorandum”). *See Exhibit E* – Colliers Response to Comments Memorandum.

INDEX OF ENCLOSURES:

In support of this supplemental submission, please find enclosed five (5) sets of the instant letter with the following materials:

Exhibit A: Updated Application for Site Plan Approval Form;²

² Note: As noted above, there are no changes to the subdivision plat that require modification to the Subdivision Application Form that was previously submitted to this Board.



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- Exhibit B:** Updated Full Environmental Assessment Form (“EAF”);³
- Exhibit C:** Response to Comments Memorandum prepared by Aryeh J. Siegel Architect dated December 28, 2021, providing responses to the Planning Comments Memorandum;
- Exhibit D:** Response to Comments Memorandum prepared by Day Stokosa Engineering, P.C. dated December 21, 2021, providing responses to the Engineering Comments Memoranda; and
- Exhibit E:** Response to Comments Memorandum prepared by Colliers Engineering & Design CT, P.C., dated December 20, 2021, providing responses to the Traffic Comments Memorandum.

In further support of this supplemental submission, we respectfully submit the revised site plans and renderings entitled “364 Main Street”, prepared by Day & Stokosa Engineering P.C. and Aryeh Siegel, Architect, dated April 2, 2021, last revised December 28, 2021, unless otherwise noted, numbered and titled as follows:

- Sheet 1 of 12 Site Plan;
- Sheet 2 of 12 Existing Conditions & Demolition Plan;
- Sheet 3 of 12 Landscape Plan & Planting Schedule⁴;
- Sheet 4 of 12 Building Plans;
- Sheet 5 of 12 Building Elevations & Renderings;
- Sheet UP.1 Utility Plan;⁵
- Sheet LP.1 Lighting Plan;⁶
- Sheet VM.1 Refuse Truck Movement Plan;
- Sheet VM.2 30’ Truck Movement Plan;
- Sheet CD.1 Construction Details;
- Sheet CD.2 Construction Details;

³ Note: As noted above, the Applicant will submit an updated EAF in advance of the Planning Board meeting that reflects the update building square footage reflective of the update in building depth in advance of the next Planning Board meeting.

⁴ Note: The Landscape Plan was prepared in collaboration with Debra Adamsons of Landscape Restorations.

⁵ Note: As requested by Mr. Russo, the Site Plan Set will be updated so that sheet numbers are provided in numerical order, which will be provided in the next submission. The Sheet names will be unchanged, but the sheet numbers will be updated.

⁶ Note: In accordance with the Planning Comments Memorandum, a lighting plan has been included with this submission, which demonstrates consistency with Zoning Code Section 223-14B.



December 28, 2021

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- o Sheet CD.3 Construction Details;
- o Sheet ESC.1 Erosion & Sediment Control Plan; and
- o Sheet ESC.2 Erosion & Sediment Control Details.

Also enclosed, please find a copy of the revised Subdivision Plat entitled "Lot Line Change for the Lands of O'Donnell Construction Corp.", prepared by Robert V. Oswald, dated February 20, 2017, last revised December 17, 2021.

We look forward to appearing at the Planning Board's January 11th regular meeting for further review of the Project, at which time the Applicant respectfully requests that the Planning Board close the State Environmental Quality Review Act ("SEQR") Public Hearing and consider adopting a Negative Declaration. It is respectfully submitted that the Project does not present any potentially significant adverse environmental impacts and therefore a Negative Declaration can be adopted by this Board. The Applicant further requests that the Planning Board consider opening the Site Plan and Subdivision Public Hearings for the Project.

In the meantime, should the Planning Board or City Staff have any questions or comments with regard to the foregoing, please do not hesitate to contact me.

Very truly yours,

A handwritten signature in black ink, appearing to read 'TP', with a long, sweeping horizontal line extending to the right.

Taylor M. Palmer

Enclosures

cc: Jennifer L. Gray, Esq.
John Clarke Planning and Design
Lanc & Tully, P.C.
Aryeh J. Siegel Architect
Mark A. Day, P.E. – Day Stokosa Engineering, P.C.
Colliers Engineering & Design CT, P.C.
Allison Fausner, Esq.

ARYEH SIEGEL
ARCHITECT

John Gunn - Planning Board Chairman
City of Beacon
One Municipal Plaza
Beacon, NY 12508

Re: 364 Main Street, Beacon, New York
Site Plan Application – Responses to Comments

December 28, 2021

Dear Chairman Gunn and Members of the Planning Board,

Below please find our responses to the comments included in John Clarke Planning and Design's Memorandum, dated December 9 2021. Please refer to Day & Stokoska's response letter regarding Lanc & Tully's letter dated December 8, 2021.

John Clarke Planning and Design Comment Responses:

1. Comment acknowledged. The Applicant submitted a subdivision plan.
The cover letter and EAF will be revised to remove reference to a Special Permit, which is no longer required.
2. The parking table on Sheet 1 will be coordinated with the EAF, cover letter, and Sheet 4 plans.
3. Comment acknowledged. The landscape and paving in front of the building have been revised to reflect the Planning Board's stated desire to have paved space that can be used by building tenants. Benches have been added to the revised front area.
4. The tree at the Eliza Lot entrance has been correctly labeled.
5. The one way entrance drive from Main Street has been reduced to 10 feet wide along most of the length of the drive. The entrance is somewhat awkward at the 10 foot width, so the first few feet of the driveway is wider to allow for easier vehicle maneuvering. The Board determined at the December Planning Board meeting that the landscape strip should remain at the east side of the entry drive, and that the plantings within the strip be revised to make it more interesting. A pipe railing has been added to the curb along the sidewalk to provide additional protection to pedestrians along the driveway.
6. Wood stockade privacy fencing has been added to the North side of the Eliza Street parking lot.

7. For Sheet 4 & 5 Building Plans
 - a The site plan has been revised to show 5 storefront entrances
 - b A roof plan will be provided in the next submission
 - c Comment acknowledged. The project will be referred to the Architectural Review Committee.
8. A lighting plan is provided in the Day & Stokoska set

Lanc & Tully Comment Response

Site Plan Sheet 1 of 12

1. The parking and loading table shows the actual square footage of the commercial area
2. The Bulk Zoning table shows the actual square footage of proposed floor area
3. The revisions table has been relocated
4. Required signage for accessible parking is shown

Existing Conditions Sheet 2 of 12

1. Topography and spot elevations have been added to this sheet

Building Plans Sheet 4 of 12

1. A table has been added to this sheet that lists the floor areas

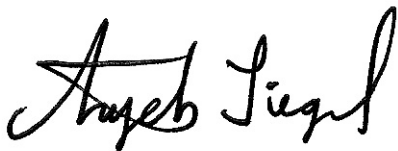
Building Elevations Sheet 5 of 12

1. The main street views reflect the building setback. The views are for building design only and do not reflect the landscape design shown on Sheet 1 Site Plan.

Please refer to Day & Stokoska's letter for responses to additional engineering comments from Lanc & Tully.

Thank you. Please let me know if you have any questions.

Sincerely,



Aryeh Siegel
Aryeh Siegel, Architect

3 Van Wyck Lane
Suite 2
Wappingers Falls, New York 12590
Phone: 845-223-3202

December 21, 2021

Mr. John Gunn, Chair, and the City of Beacon Planning Board
City of Beacon City Hall
1 Municipal Plaza
Beacon, New York 12508

Re: 364 Main Street Site Plan Application
364 Main Street
City of Beacon
Dutchess County, New York

Mr. Chairman and Board members:

This office has received comment letters from both the office of the City Engineering Office and the City Planning Office. This cover letter and the accompanying submission is in response to the comments. I offer the following:

Lanc & Tully – December 8, 2021:

General Comments:

1. Additional spot elevations have been provided by the Surveyor-of-Record. A 6” high concrete curb has been proposed on the northern edge of the existing parking lot to prevent runoff from leaving the site to the north.
2. The sheets prepared by this office have been numbered sequentially from 7 to 15.

Site Plan:

No Comment.

Existing Condition Plan:

No Comment.

Building Elevation Plan:

No Comment.

Utility Plan:

1. The 2” connection to the 4” fire line has been relocated to the interior of the basement.

Construction Details:

1. The Bike Rack Detail has been removed from the Construction Details.

Construction Details:

1. The Utility Trench Detail and Pavement Detail have been revised to show 3” asphalt base course and a note has been added to the details about the concrete conditions on Main Street.

Construction Details:

1. The profiles have been updated to reflect the vertical and horizontal scales. Dimensions have been placed on the profile indicating the separation distances between the existing utilities and the new water service

Erosion and Sediment:

1. The note about the silt fence has been revised.

Erosion and Sediment Control Details:

1. The detail for the protection of the existing catch basin has been revised to include filter fabric under the grate in lieu of a barrier.

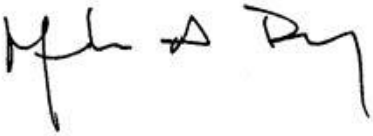
John Clarke – December 9, 2021:

Comments and Recommendations:

1. No Comment.
2. No Comment.
3. No Comment.
4. No Comment.
5. No Comment.
6. A fence on the Northern Border (4' or higher) will help eliminate light spilling on to the properties to the north of the site.
7. No Comment.
8. A Lighting Plan has been prepared in accordance with Section 223-14B.

Please feel free to contact me if you require any further information on this matter.

Very truly yours,

A handwritten signature in black ink, appearing to read "Mark A. Day". The signature is stylized with a large "M", a small "A", and a long, sweeping "D" that ends in a hook.

Mark A. Day, PE

December 20, 2021

Chairman John Gunn
City of Beacon Planning Board
City of Beacon City Hall
1 Municipal Plaza
Beacon, NY 12508

364 Main Street City of Beacon, Dutchess County, New York
Colliers Engineering & Design Project No. 21001718A

Dear Chairman Gunn and Members of the Planning Board,

The following items are in response to the comments contained in the Creighton Manning (CM) letter dated December 9, 2021. The items are numbered according to their review comments. Note, many of the items contained in their letter were noted to be addressed by our previous submission dated November 29, 2021. Therefore, only items requiring further response have identified below.

Site Plan

1. CM Review #3 Follow-Up Comment: The Submittal Package includes a Truck Movement Plan, prepared by Day Stokosa Engineering PC, depicting a refuse vehicle accessing the garbage enclosure by fronting into the site and backing out. Because the refuse truck will be conducting a reversing maneuver onto Eliza Street, CM recommends that the refuse pickup be restricted to off-peak hours to avoid conflicts with drivers and pedestrians. Attached is a site plan submitted separately from the Submittal Package depicting a 30 ft. single unit box truck maneuvering in and out of the site. Can the Applicant confirm that a 30 ft. single unit box truck is the largest non-emergency vehicle anticipated to enter the site? Additionally, based on the turning maneuvers indicating that parking spaces adjacent to the building will be blocked, will there be a designated loading/unloading area for the commercial tenant to receive goods?

Response: The Applicant agrees to restrict refuse pickup operations to off-peak hours as suggested by CM.

The referenced plan depicting a Single Unit 30 ft. box truck was omitted from the previous submission but was provided to Creighton Manning directly for their review. This plan is attached to this letter for the Boards review. Based on the size of the proposed apartments as well as the size and anticipated uses of the commercial space, the Applicant does not anticipate a need for vehicles larger than a 30 ft. single unit box truck for moving or delivery purposes. There is no designated loading area proposed within the Site parking lots. Deliveries and moving are short duration operations that are not anticipated to have a significant impact on the on-site parking. If necessary, the Applicant could, in the

future, restrict deliveries and moving activities to certain hours of the day to ensure minimal impacts to parking.

3. CM Review #3 Follow-Up Comment: The Submittal Package includes a Site Plan depicting the requested “No Left Turn” sign. Attached is a site plan submitted separately from the Submittal Package depicting the requested “One-Way” sign on Eliza Street. Upon review, CM has no further comment regarding the requested signs.

Response: The “One-Way” sign on Eliza Street was previously overwritten on the Site Plan by the Revision Block. This has been corrected on the Site plan included in this submission.

6. CM Review #3 Follow-Up Comment: CM understands there is no requirement that the off-street parking spaces be assigned and therefore defers to the Board as to its preference on this matter. There are benefits and drawbacks to assigning spaces versus leaving them unassigned—CM understands the value and flexibility of shared parking and also the desire of future residents to have a predictable parking experience. If not now as part of the site plan, the applicant could decide to assign parking spaces in the future, once the building is occupied, to address the issue then.

Response: It is the Applicant’s preference to have all parking be unassigned at this time. Understanding the possible desire for tenant’s to have predictability in available parking the Applicant acknowledges that assigned parking may be beneficial in the future, but would prefers the flexibility to determine the need for this as part of the overall operation of the facility after occupancy.

4. CM Review #3 Follow-Up Comment: The Submittal Package includes a site plan depicting a passenger vehicle conducting a turnaround maneuver. Attached is a site plan submitted separately from the Submittal Package depicting a 30 ft. single unit box truck maneuvering in and out of the site. Can the Applicant confirm that a 30 ft. single unit box truck is the largest non-emergency vehicle anticipated to enter the site? Additionally, based on the turning maneuvers indicating that parking spaces adjacent to the building will be blocked, will there be a designated loading/unloading area for the commercial tenant to receive goods?

Response: See response to Item 1 above.

Traffic Impact Study

A revised traffic impact study was not included in the Submittal Package. As noted, the proposed project has been further refined such that the proposed commercial space is 657 square feet smaller while the number of residential units – 20 – remain the same. Because this reduction would not result in an increase in site trip generation, CM does not require a revised Traffic Impact Study to be prepared and submitted by the applicant.

Response: Comment noted. The reduction in the proposed size of the commercial space is a result of the provision of sufficient space for vehicles to back and turn around in the parking area behind the building. The 657 sq. ft. reduction in the size of the commercial space would result in a minimal reduction in the traffic generation for the project from what was analyzed in our prior traffic analysis. Therefore, the previous traffic analysis conducted by our office can be considered representative of the currently proposed project.

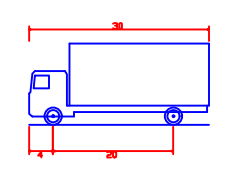
Sincerely,

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



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

R:\Projects\2021\21001718A\Correspondence\OUT\211220RGD_CM 12.9.21 Response.docx



SU-30 - Single Unit Truck	
Overall Length	30.000ft
Overall Width	8.000ft
Overall Body Height	13.500ft
Min Body Ground Clearance	1.367ft
Track Width	8.000ft
Lock-to-lock time	5.00s
Max Steering Angle (Virtual)	31.80°

APPLICATION FOR SPECIAL USE PERMIT & SITE PLAN APPROVAL

Submit to Planning Board Secretary, One Municipal Plaza, Suite One, Beacon, New York 12508

IDENTIFICATION OF APPLICANTName: O'Donnell Construction Corp.Address: P.O. Box 526
Fishkill, NY 12524Signature: Date: 12/28/2021Phone: 845-590-0622(For Official Use Only)
Application & Fee Rec'd
Initial Review Public Hearing

Date Initials

Conditional Approval

Final Approval

IDENTIFICATION OF REPRESENTATIVE / DESIGN PROFESSIONALName: Cuddy & Feder, LLPAddress: 300 Westage Business

Center Dr., Suite 380, Fishkill, NY

Phone: 914-761-1300Fax: 914-761-5378Email address: tpalmer@cuddyfeder.com**IDENTIFICATION OF SUBJECT PROPERTY:**Property Address: 346 Main Street & Eliza Street, Beacon, NY 12508Tax Map Designation: Section 6054 Block 29 Lot(s) 006819 & 004836Land Area: .54 acres 364 Main St. & .31 acres Eliza St. Zoning District(s) CMS, T**DESCRIPTION OF PROPOSED DEVELOPMENT:**Proposed Use: Mixed-Use Multi-Family Residential and CommercialGross Non-Residential Floor Space: Existing 7,031 +/- sq. ft. Proposed 1,788 +/- sq. ft.TOTAL: 8,819 +/- sq. ft.Dwelling Units (by type): Existing 0TOTAL: 20Proposed 20 multi-family units**ITEMS TO ACCOMPANY THIS APPLICATION**

- One electronic and five (5) **folded** paper copies of a site location sketch showing the location of the subject property and the proposed development with respect to neighboring properties and developments.
- One electronic and five (5) **folded** paper copies of the proposed site development plan, consisting of sheets, showing the required information as set forth on the back of this form and other such information as deemed necessary by the City Council or the Planning Board to determine and provide for the property enforcement of the Zoning Ordinance.
- One electronic and five (5) **folded** paper copies of additional sketches, renderings or other information.
- An application fee, payable to the City of Beacon, computed per the attached fee schedule.
- An initial escrow amount, payable to the City of Beacon, as set forth in the attached fee schedule.

INFORMATION TO BE SHOWN ON SITE LOCATION SKETCH

- a. Property lines, zoning district boundaries and special district boundaries affecting all adjoining streets and properties, including properties located on the opposite sides of adjoining streets.
- b. Any reservations, easements or other areas of public or special use which affect the subject property.
- c. Section, block and lot numbers written on the subject property and all adjoining properties, including the names of the record owners of such adjoining properties.

INFORMATION TO BE SHOWN ON THE SITE DEVELOPMENT PLAN

- a. Title of development, date and revision dates if any, north point, scale, name and address of record owner of property, and of the licensed engineer, architect, landscape architect, or surveyor preparing the site plan.
- b. Existing and proposed contours at a maximum vertical interval of two (2) feet.
- c. Location and identification of natural features including rock outcrops, wooded areas, single trees with a caliper of six (6) or more inches measured four (4) feet above existing grade, water bodies, water courses, wetlands, soil types, etc.
- d. Location and dimensions of all existing and proposed buildings, retaining walls, fences, septic fields, etc.
- e. Finished floor level elevations and heights of all existing and proposed buildings.
- f. Location, design, elevations, and pavement and curbing specifications, including pavement markings, of all existing and proposed sidewalks, and parking and truck loading areas, including access and egress drives thereto.
- g. Existing pavement and elevations of abutting streets, and proposed modifications.
- h. Location, type and design of all existing and proposed storm drainage facilities, including computation of present and estimated future runoff of the entire tributary watershed, at a maximum density permitted under existing zoning, based on a 100 year storm.
- i. Location and design of all existing and proposed water supply and sewage disposal facilities.
- j. Location of all existing and proposed power and telephone lines and equipment, including that located within the adjoining street right-of-way. All such lines and equipment must be installed underground.
- k. Estimate of earth work, including type and quantities of material to be imported to or removed from the site.
- l. Detailed landscape plan, including the type, size, and location of materials to be used.
- m. Location, size, type, power, direction, shielding, and hours of operation of all existing and proposed lighting facilities.
- n. Location, size, type, and design of all existing and proposed business and directional signs.
- o. Written dimensions shall be used wherever possible.
- p. Signature and seal of licensed professional preparing the plan shall appear on each sheet.
- q. Statement of approval, in blank, as follows:

**Approved by Resolution of the Beacon Planning Board
on the _____ day of _____, 20_____
subject to all conditions as stated therein**

Chairman, City Planning Board

Date

APPLICATION FEES

Site Plan	<u>Residential</u> \$500 + \$250 per dwelling unit <u>Commercial</u> \$500 + \$250 per 1,000 s.f.
Special Use Permit	<u>Residential</u> \$500 + \$250 per dwelling unit <u>Commercial</u> \$500 + \$250 per 1,000 s.f.
Subdivision	\$ 750 for 2-4 lots + \$100 per lot \$1,000 for 5 or more lots + \$300 per lot
Zoning Board of Appeals	Use Variance \$500 Area Variance \$250 Interpretation \$250

ESCROW FEES

ALL SUBDIVISIONS, AND RESIDENTIAL SITE PLAN AND SUP APPLICATIONS

No. of Lots or Dwelling Units	Initial Deposit	Depleted to	Replenishment
1-5 (including lot-line realignment)	\$ 2,500	\$ 1,000	Current bills + \$1,000
6-15	\$ 7,500	\$ 2,500	Current bills + \$1,000
Over 15	\$ 15,000	\$ 5,000	Current bills + \$5,000

NON-RESIDENTIAL SITE PLAN AND SUP APPLICATIONS

	Initial Deposit	Depleted to	Replenishment
Existing Buildings/Change of Use with no site development	\$ 1,500	\$ 1,000	Current bills + \$500
Up to 3,000 s.f. gross floor area	\$ 2,500	\$ 1,000	Current bills + \$1,000
3,000 to 10,000 s.f. gross floor area	\$ 2,500 + \$0.50 per sq.ft. over 3,000	\$ 2,500	Current bills + \$2,500
Over 10,000 s.f. gross floor area	\$ 7,500 + \$0.50 per sq.ft. over 10,000	\$ 2,500	Current bills + \$2,500

ZONING

<i>* if required by Chairman</i>	Initial Deposit	Depleted to	Replenishment
Use Variance*	\$ 1,000	\$500	Current bills + \$500
Area Variance*	\$ 1,000	\$500	Current bills + \$500
Interpretation*	\$ 1,000	\$500	Current bills + \$500

ARCHITECTURAL REVIEW OR CERTIFICATE OF APPROPRIATENESS *(if not currently before PB)*

<i>* if required by Chairman</i>	Initial Deposit	Depleted to	Replenishment
Single Family House*	\$500	\$250	Current bills + \$250
All others*	\$500	\$250	Current bills + \$250

APPLICATION PROCESSING RESTRICTION LAW

Affidavit of Property Owner

Property Owner: O'Donnell Construction Corp.

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

Sean O'Donnell.

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

Eliza Street – (Parcel ID: 5954-36-994862)

Applicant Address: P.O. Box 526, Fishkill, New York 12525

Project Address: 364 Main Street & Eliza Street

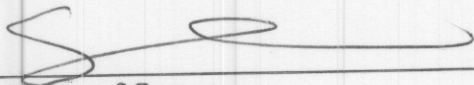
Project Tax Grid # 6054-29-006819 & 6054-29-004836

Type of Application: Site Plan Approval for Proposed Mixed-Used Development

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

I, Sean O'Donnell, the undersigned owner of the above referenced property, hereby affirm that I have reviewed my records and verify that the following information is true.

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


Signature of Owner

By: Sean O'Donnell

President, O'Donnell Construction Corp.

Title if owner is corporation

Office Use Only:

Applicant has violations pending for ANY parcel owned within the City of Beacon (Building Dept.)

ALL taxes are current for properties in the City of Beacon are current (Tax Dept.)

ALL Special Assessments, i.e. water, sewer, fines, etc. are current (Water Billing)

NO	YES	Initial
—	—	—
—	—	—
—	—	—

**CITY OF BEACON
SITE PLAN SPECIFICATION FORM**

Name of Application: 364 Main Street – Application for Site Plan Approval

PLEASE INDICATE WHETHER THE SITE PLAN DRAWINGS SHOW THE SUBJECT INFORMATION BY PLACING A CHECK MARK IN THE APPROPRIATE BOXES BELOW.		
	YES	NO
The site plan shall be clearly marked “Site Plan”, it shall be prepared by a legally certified individual of firm, such as a Registered Architect or Professional Engineer, and it shall contain the following information:	✓	
LEGAL DATA		
Name and address of the owner of record.	✓	
Name and address of the applicant (if other than the owner).	✓	
Name and address of person, firm or organization preparing the plan.	✓	
Date, north arrow, and written and graphic scale.		
NATURAL FEATURES		
Existing contours with intervals of two (2) feet, referred to a datum satisfactory to the Planning Board.	✓	
Approximate boundaries of any areas subject to flooding or stormwater overflows.	✓	
Location of existing watercourses, wetlands, wooded areas, rock outcrops, isolated trees with a diameter of eight (8) inches or more measured three (3) feet above the base of the trunk, and any other significant existing natural features.	✓	
EXISTING STRUCTURES, UTILITIES, ETC.		
Outlines of all structures and the location of all uses not requiring structures.	✓	
Paved areas, sidewalks, and vehicular access between the site and public streets.		
Locations, dimensions, grades, and flow direction of any existing sewers, culverts, water lines, as well as other underground and above ground utilities within and adjacent to the property.	✓	
Other existing development, including fences, retaining walls, landscaping, and screening.	✓	
Sufficient description or information to define precisely the boundaries of the property.	✓	
The owners of all adjoining lands as shown on the latest tax records.	✓	
The locations, names, and existing widths of adjacent streets and curb lines.	✓	
Location, width, and purpose of all existing and proposed easements, setbacks, reservations, and areas dedicated to private or public use within or adjacent to the properties.	✓	

PROPOSED DEVELOPMENT	YES	NO
The location, use and design of proposed buildings or structural improvements.	✓	
The location and design of all uses not requiring structures, such as outdoor storage (if permitted), and off-street parking and unloading areas.	✓	
Any proposed division of buildings into units of separate occupancy.	✓	
The location, direction, power, and time of use for any proposed outdoor lighting.	✓	
The location and plans for any outdoor signs.	✓	
The location, arrangement, size(s) and materials of proposed means of ingress and egress, including sidewalks, driveways, or other paved areas.	✓	
Proposed screening and other landscaping including a planting plan and schedule prepared by a qualified individual or firm.	✓	
The location, sizes and connection of all proposed water lines, valves, and hydrants and all storm drainage and sewer lines, culverts, drains, etc.	✓	
Proposed easements, deed restrictions, or covenants and a notation of any areas to be dedicated to the City.	✓	
Any contemplated public improvements on or adjoining the property.		✓
Any proposed new grades, indicating clearly how such grades will meet existing grades of adjacent properties or the street.	✓	
Elevations of all proposed principal or accessory structures.	✓	
Any proposed fences or retaining walls.	✓	
MISCELLANEOUS		
A location map showing the applicant's entire property and adjacent properties and streets, at a convenient scale.	✓	
Erosion and sedimentation control measures.	✓	
A schedule indicating how the proposal complies with all pertinent zoning standards, including parking and loading requirements.	✓	
An indication of proposed hours of operation.		✓
If the site plan only indicates a first stage, a supplementary plan shall indicate ultimate development.		✓

For all items marked "NO" above, please explain below why the required information has not been provided:

Please See Attached Project Application Narrative

Applicant/Sponsor Name: O'Donnell Construction Corp.

Signature: _____

By: Sean O'Donnell, President

Date: _____

12/28/2021

FOR OFFICE USE ONLY
Application #

CITY OF BEACON
1 Municipal Plaza, Beacon, NY
Telephone (845) 838-5000 • <http://cityofbeacon.org/>

INDIVIDUAL DISCLOSURE FORM

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

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

SECTION A

Name of Applicant: O'Donnell Construction Corp.

Address of Applicant: P.O. Box 526, Fishkill, NY 12524

Telephone Contact Information: 845-590-0622

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

Name	Residence or Business Address	Telephone Number	Date and Manner title was acquired	Date and place where the deed or document of conveyance was recorded or filed.
O'Donnell Construction Corp.	P.O. Box 526, Fishkill, NY 12524	845-590-0622	3/6/2017 Deed	3/16/2017 Dutchess County Clerk's Office

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

☐ YES ☒ NO

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

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

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

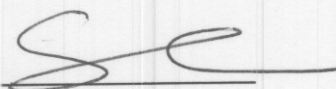
SECTION D. Have the present owners entered into a contract for the sale of all or any part of the subject property and, if in the affirmative, please provide a duplicate original or photocopy of the fully and complete contract of sale, including all riders, modifications and amendments thereto.

☒ YES

☐ NO

I, Sean O'Donnell being first duly sworn, according to law, deposes and says that the statements made herein are true, accurate, and complete.

O'Donnell Construction Corp.
(Print) By: Sean O'Donnell, President

(Signature) 

FOR OFFICE USE ONLY
Application #

CITY OF BEACON
1 Municipal Plaza, Beacon, NY
Telephone (845) 838-5000 • <http://cityofbeacon.org/>

ENTITY DISCLOSURE FORM

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

Disclosure of the names and addresses of all persons or entities owning any interest or controlling position of any Limited Liability Company, Partnership, Limited Partnership, Joint Venture, Corporation or other business entity (hereinafter referred to as the "Entity") filing a land-use application with the City is required pursuant to Section 223-61.4 of the City Code of the City of Beacon. If any Member of the Entity is not a natural person, then the names and addresses as well as all other information sought herein must be supplied about the non-natural person member of that Entity, including names, addresses and Formation filing documents. Applicants shall submit supplemental sheets for any additional information that does not fit within the below sections, identifying the Section being supplemented.

SECTION A.

IF AFFIANT IS A PARTNERSHIP, JOINT VENTURE OR OTHER BUSINESS ENTITY, EXCEPT A CORPORATION:

Name of Entity	Address of Entity
Place where such business entity was created	Official Registrar's or Clerk's office where the documents and papers creating entity were filed
Date such business entity or partnership was created	Telephone Contact Information

IF AFFIANT IS A CORPORATION:

Name of Entity O'Donnell Construction Corp.	Telephone Contact Information 845-590-0622
Principal Place of Business of Entity P.O. Box 526, Fishkill, NY 12524	Place and Date of incorporation New York New York State Dept. of State (7/20/1995)
Method of Incorporation Domestic Business Corporation	Official place where the documents and papers of incorporation were filed New York State Dept. of State

SECTION B. List all persons, officers, limited or general partners, directors, members, shareholders, managers, and any others with any interest, mortgage, encumbrance or other interest (recorded or unrecorded) in or with the above referenced

Entity. List all persons to whom corporate stock has been pledged, mortgaged or encumbered and with whom any agreement has been made to pledge, mortgage or encumber said stock. Use a supplemental sheet to list additional persons.

Name	Resident Address	Resident Telephone Number	Nature and Extent of Interest
Sean O'Donnell	P.O. Box 526, Fishkill, New York 12524	845-590-0622	100%

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

Name	Residence or Business Address	Telephone Number	Date and Manner title was acquired	Date and place where the deed or document of conveyance was recorded or filed.
O'Donnell Construction Corp.	P.O. Box 526, Fishkill, NY 12524		3/6/2017 Deed	3/16/2017 Dutchess County Clerk's Office

SECTION D. Is any owner, of record or otherwise, an officer, director, stockholder, agent or employee of any person listed in Section B-C?

☐ YES

☒ NO

Name	Employer	Position

SECTION E. Is any party identified in Sections A- C an officer, elected or appointed, or employee of the City of Beacon or related, by marriage or otherwise, to a City Council member, planning board member, zoning board of appeals member or employee of the City of Beacon ?

☐ YES

☒ NO

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

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

SECTION F. Was any person referred to in Sections A-D known by any other name within five (5) years preceding the date of the application?

☐ YES

☒ NO

Current Name	Other Names

SECTION G. List the names and addresses of each person, business entity, partnership and corporation in the chain of title of the subject premises for the five (5) years next preceding the date of the application.

Name	Address
O'Donnell Construction Corp.	P.O. Box 526, Fishkill, New York 12524
CRE JV Five Branch Holdings LLC	C/o Grammercy Property Trust, 90 Park Avenue, 32 nd Floor, New York, NY 10016

SECTION H. If the applicant is not a record owner of the subject property, describe the applicant's interest in the subject property and the relationship the applicant has to the record owner(s) of the subject property.

N/A

SECTION I. If the applicant is a contract vendee, a duplicate original or photocopy of the full and complete contract of purchase, including all riders, modification and amendments thereto, shall be submitted with the application. Any sensitive or confidential information may be redacted from the contract prior to production.

SECTION J.

1. Where the record owner or contract vendee is a corporation, the following additional information shall be submitted:

Name of the Corporation O'Donnell Construction Corp.	Telephone Contact Information 845-590-0622
Principal Business Address P.O. Box 526, Fishkill, New York 12524	Place and Date of Incorporation New York State Dept. of State (7/20/1995)
Method of Incorporation Domestic Business Corporation	Official place where the documents and papers of incorporation were filed New York Dept. of State

2. Please provide the following information for every incorporator, officer, director and shareholder of the corporation.

Name	Residence or business address	Telephone number
Sean O'Donnell	P.O. Box 526, Fishkill, New York 12524	845-590-0622

3. Have any shares of the stock of the corporation or of any stockholder been pledged, mortgaged or encumbered?

☐

YES

☒

NO

If so, please list the name and address of each person having, holding, owning or claiming any such interest.

Name	Address

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

☐

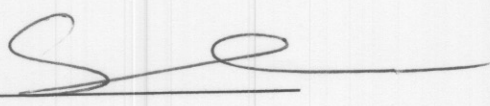
YES

☒

NO

I, Sean O'Donnell being first duly sworn, according to law, deposes and says that I am (Title) President, an active and qualified member of O'Donnell Construction Corp., a business duly authorized by law to do business in the State of New York, and that the statements made herein are true, accurate, and complete.

O'Donnell Construction Corp.
(Print) By: Sean O'Donnell, President

(Signature) 

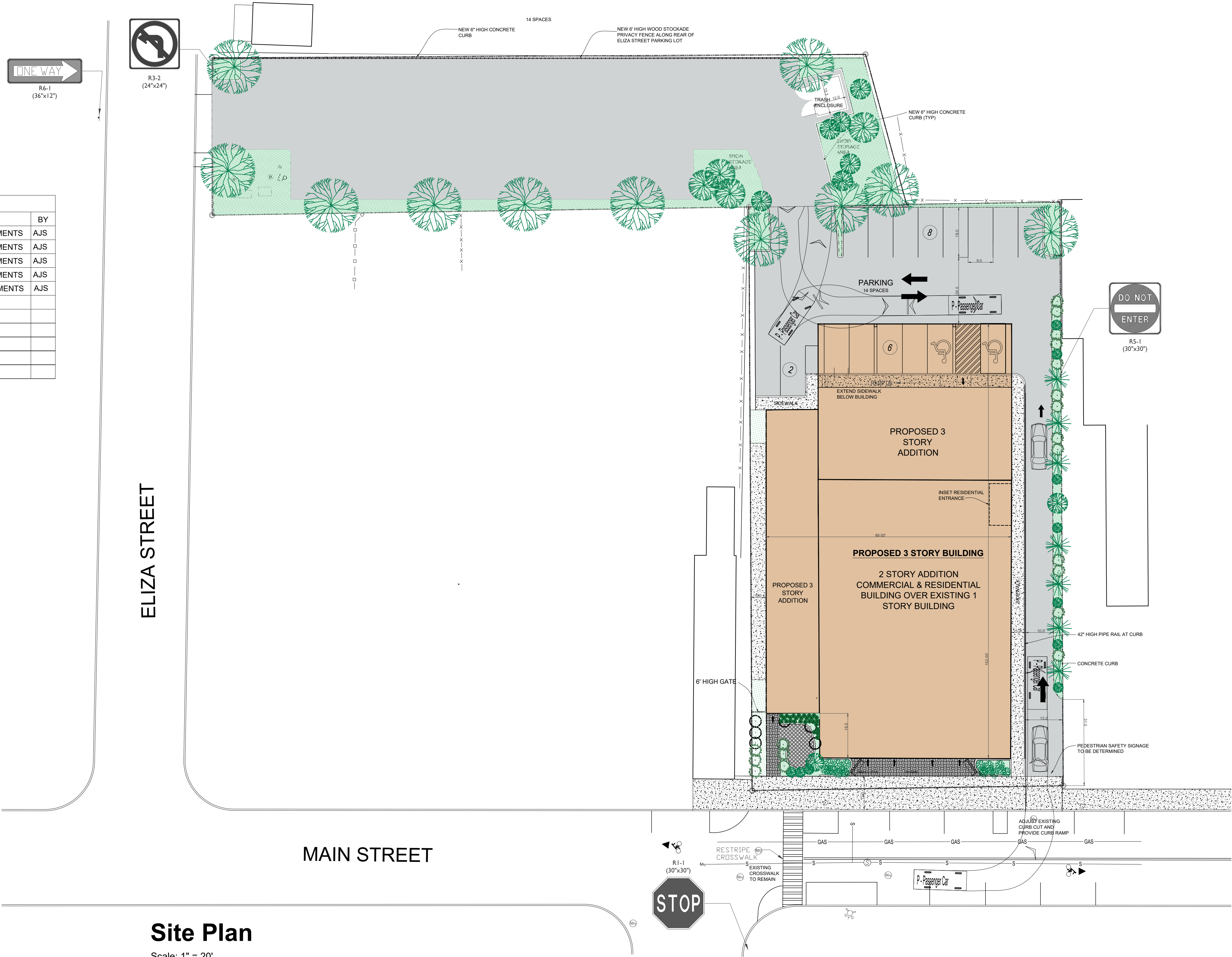
Bulk Zoning Regulations Table - Parking Lot

	Required Setbacks			Proposed Setbacks			Lot Depth Required	Lot Depth Existing	Allowable Building Height	Proposed Building Height	Lot Area	Proposed Floor Area
	Front	Side	Rear	Front	Side	Rear						
Zoning District												
T*	10'	10'	20'	NA	NA	NA	100'	242.6'	2.5 35'	NA	0.85	NA

Bulk Zoning Regulations Table

	Required Setbacks			Proposed Setbacks			Main Street Frontage Required	Main Street Frontage Required	Minimum Lot Depth	Proposed Lot Depth	Allowable Building Height	Proposed Building Height	Minimum Landscaped Area	Proposed Landscaped Area	Lot Area	Proposed Floor Area
	Front	Side	Rear	Front	Side	Rear										
Zoning District																
CMS*	0'-10'	0'	20'	14.78'	18' exist 5'	44'	80%	89%	75'	264.37'	3 38' & 4th Story w/ Special Permit	3 Stories 38'	10% 5% if open to public	11%	0.85 acres	35,000 SF

REVISIONS:			
NO.	DATE	DESCRIPTION	BY
1	07/27/21	REVISED PER PLANNING BOARD COMMENTS	AJS
2	08/27/21	REVISED PER PLANNING BOARD COMMENTS	AJS
3	10/26/21	REVISED PER PLANNING BOARD COMMENTS	AJS
4	11/30/21	REVISED PER PLANNING BOARD COMMENTS	AJS
5	12/28/21	REVISED PER PLANNING BOARD COMMENTS	AJS



Zoning Summary	
Zoning District:	CMS (Central Main Street) & T (Transition Zone)
Tax Map No.:	6054-29-006819 (364 Main Street) & 6054-29-0004836 (Eliza Street)
Lot Area:	0.54 Acres & 0.31 Acres
Building Footprint:	12,632 SF
Historical Overlay District:	No
Parking Overlay District:	Partial, not the portion of the lot in the T District.
Existing Use:	Vacant (364 Main Street) & Parking Lot
Proposed Use:	Mixed-Use: Retail / Residential

Use & Parking Requirements	Proposed Area	Current Parking Requirement
Residential		
(1) space per unit (CMS)	(20) Apartments	20 parking spaces
Commercial		
(2) spaces per 1,000 SF for Retail	8,819 sf	18 parking spaces
Total Required		38 parking spaces
Total Provided		42 parking spaces

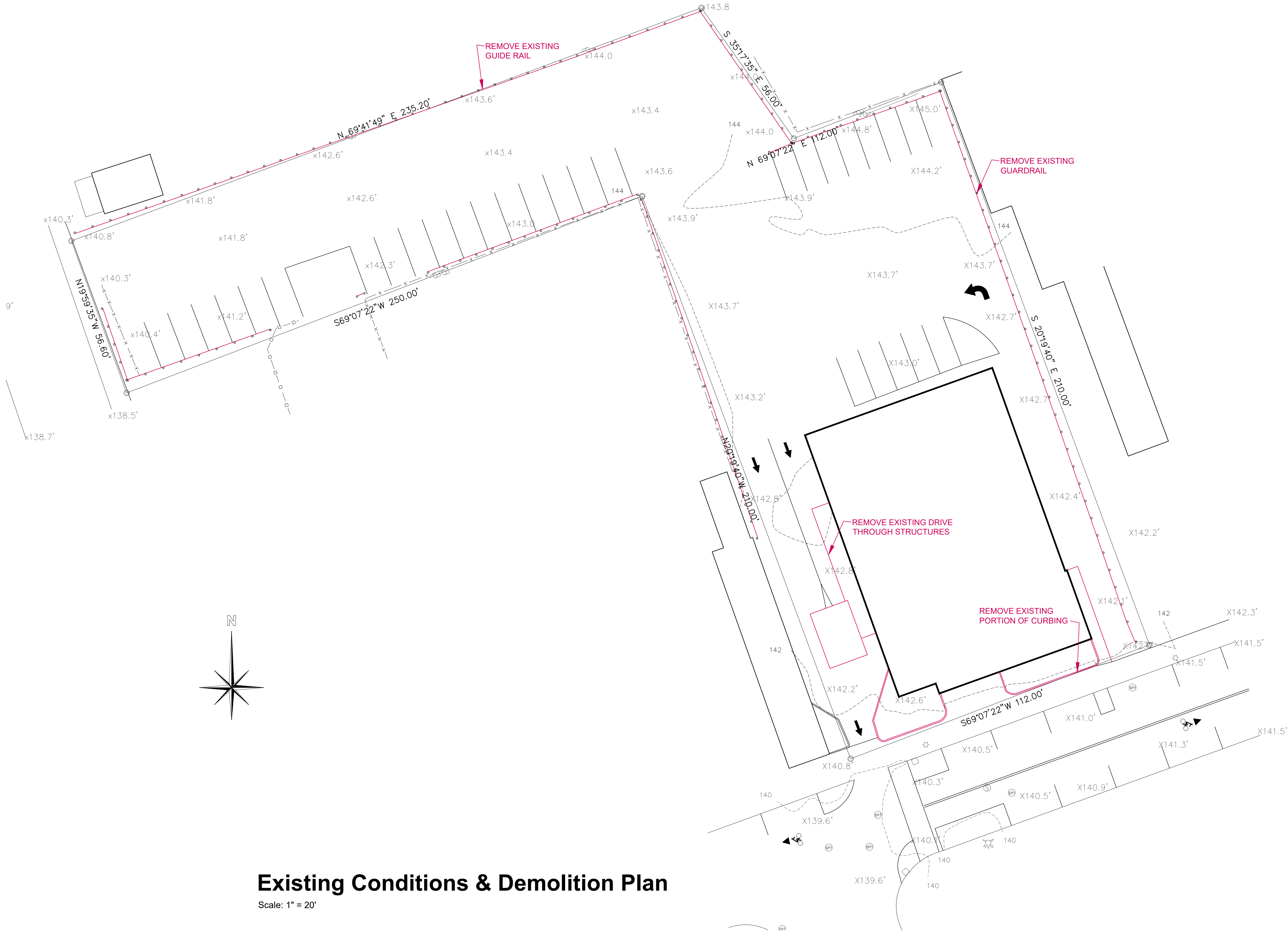
- Notes:
- Commercial hours are 7am – 12am, Monday through Sunday, inclusive.
 - No signage is proposed as part of this application. Retail tenants will apply separately to the Planning Board for their own signage

Index of Drawings	
Subdivision Plat	
Sheet 1 of 12	Site Plan
Sheet 2 of 12	Existing Conditions & Demolition Plan
Sheet 3 of 12	Landscape Plan
Sheet 4 of 12	Building Plans
Sheet 5 of 12	Building Elevations & Renderings
Sheet 6 of 12 - UP.1	Utility Plan
Sheet 7 of 12 - VM.1	Truck Movement Plan
Sheet 8 of 12 - CD.1	Construction Details
Sheet 9 of 12 - CD.2	Construction Details
Sheet 10 of 12 - CD.3	Construction Details
Sheet 11 of 12 - ESC.1	Erosion & Sediment Control Plan
Sheet 12 of 12 - ESC.2	Erosion & Sediment Control Details

Site Plan Application

Sheet 1 of 12 - Site Plan

REVISIONS:			
NO.	DATE	DESCRIPTION	BY
1	07/27/21	REVISED PER PLANNING BOARD COMMENTS	AJS
2	08/27/21	REVISED PER PLANNING BOARD COMMENTS	AJS
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4	11/30/21	REVISED PER PLANNING BOARD COMMENTS	AJS
5	12/28/21	REVISED PER PLANNING BOARD COMMENTS	AJS



Existing Conditions & Demolition Plan
Scale: 1" = 20'

Site Plan Application

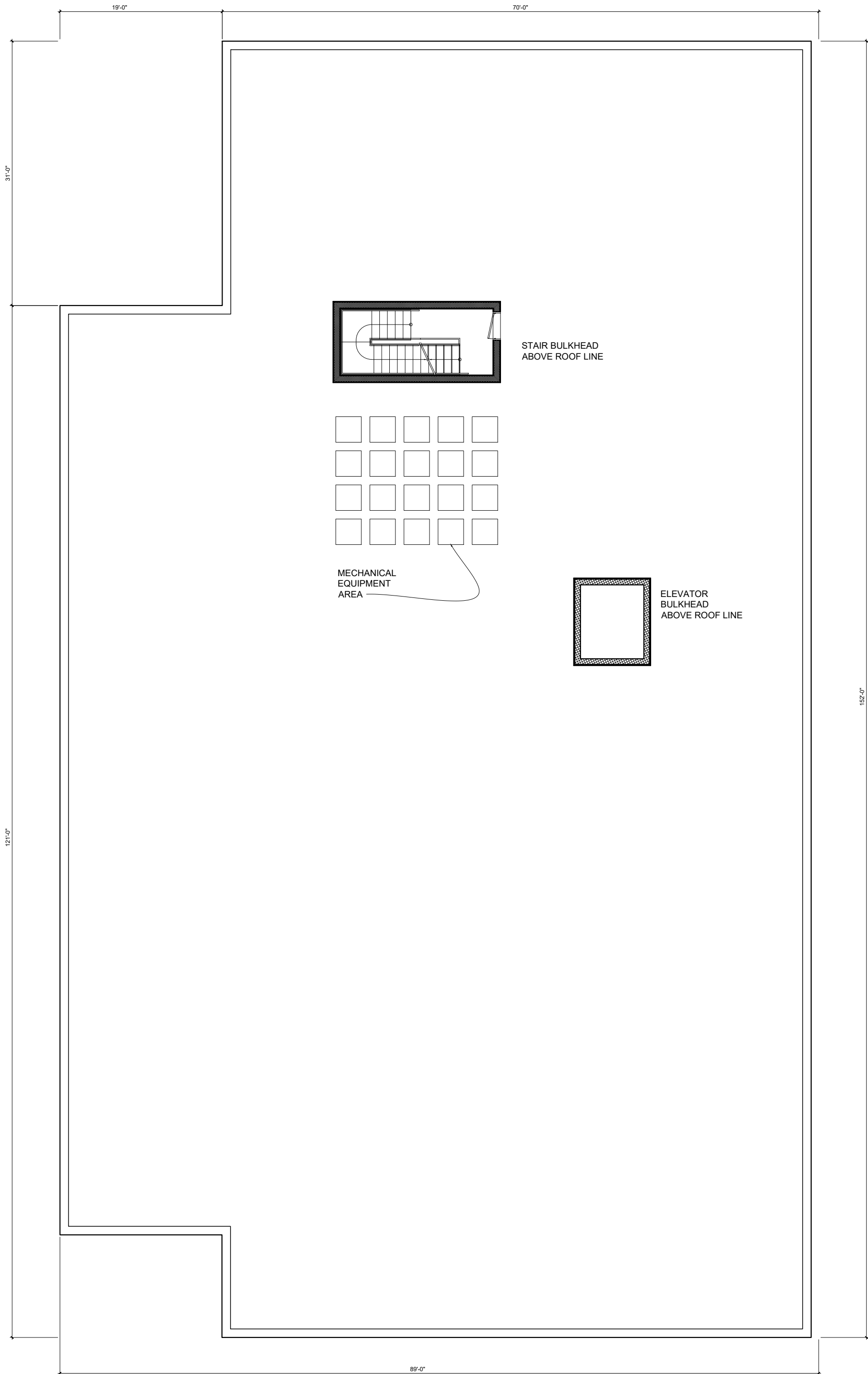
Sheet 2 of 12 - Existing Conditions & Demolition Plan

1. CONTRACTORS SHALL ENTER AND EXIT SITE THROUGH PRE-APPROVED ROUTES. ALL
2. NO NON-NATIVE PLANT SPECIES SHALL BE INTRODUCED UNTO THE SITE. ALL SPECIES
3. SHALL BE INDIGENOUS TO THE NORTH-EAST REGION OF NORTH AMERICA.
4. IF A DRAINAGE SPECIES IS SPECIFIED, NO CULTIVARS WILL BE ACCEPTED WITHOUT PRIOR
5. APPROVAL OF DESIGNER.
6. NO PLANTS WILL BE ACCEPTED THAT DISPLAY MECHANICAL INJURY, DISEASE OR SPECIE
7. SUSCEPTIBILITIES.
8. SOIL SHALL BE PREPARED BY REMOVING ALL CONSTRUCTION DEBRIS, LOOSE ROOTS AND
9. STONES LARGER THAN 3".
10. ALL PLANTS MUST BE LABELED WHEN DELIVERED TO SITE.
11. TREES TO BE PLANTED SHALL BE LABELED BY DESIGNER.
12. ALL PLANT LOCATIONS AND ORIENTATIONS IN THE FIELD REQUIRE APPROVAL FROM
13. DESIGNER AND OWNER PRIOR TO INSTALLATION.
14. TEST TREE-PIT FOR DRAINAGE BEFORE PLANTING. DO NOT PLANT TREE IN PIT IF WATER
15. IS NOT EVIDENT AFTER ONE HOUR. CONTACT SITE ENGINEER OR LANDSCAPE DESIGNER
16. IF THIS CONDITION IS ENCOUNTERED.
17. ALL TREE-PLANTING TO BE COORDINATED WITH AS-BUILT UTILITIES. TREES TO BE
18. LOCATED MINIMUM OF 5' FROM CONTACT. CONTACT SITE ENGINEER OR LANDSCAPE DESIGNER
19. IF ALL TREES SHALL BE BAIL AND BURLAP UNLESS OTHERWISE SPECIFIED ON PLANT
20. LIST.
21. EACH NEW TREE HOLE TREE SHALL BE TWICE THE WIDTH OF THE ROOTBALL.
22. BURLAP, WIRE, CORDS, TIES AND ANY WRAPPING MATERIALS MUST BE REMOVED
23. FROM ALL ROOTBALLS BEFORE BACKFILLING.
24. PLANT ALL PLANTS SO TOP OF ROOTBALL IS SLIGHTLY ABOVE SURROUNDING
25. SOIL (SMALL AND LARGE PLANTS)
26. NO PLANTING SHALL BE DONE IN MUDDY, RAINY OR FROZEN CONDITIONS.
27. ALL PLANTS CALLING FOR "OVERFLOWING" IN THE NOTES SHALL NOT BE ACCEPTED
28. BY DESIGNER IF PLANTS ARE THIN.
29. IF PLANTING IS DELAYED FOR MORE THAN 3 HOURS AFTER DELIVERY, SET PLANTS IN
30. SHADY, PROTECT FROM WEATHER AND MECHANICAL DAMAGE. KEEP ROOTS MOIST AND
31. COVER WITH MULCH.
32. CONTRACTORS SHALL LEAVE SITE NEAT AND ORDERLY DURING APPROVED LOCATIONS
33. PROJECT AND STORED MATERIALS AND EQUIPMENT IN OWNER-APPROVED LOCATIONS
34. AWAY FROM ALL TREES AND PLANTS. STORE ALL UNPLANTED PLANT MATERIAL AWAY
35. FROM DAMAGING SUN.
36. IF SITE CONDITIONS CONFLICT WITH INTENDED DESIGN, CONTRACTOR SHALL ALERT
37. OWNER AND DESIGNER IMMEDIATELY.
38. NO SUBSTITUTIONS ARE TO BE MADE WITHOUT THE WRITTEN OR VERBAL CONSENT
39. OF LANDSCAPE DESIGNER AND OWNER
40. CREATE A SIZE-SPECIFIC WATER-WELL AROUND EACH PLANT, 3' FROM CENTER OF
41. TREE, AND MULCH FROM THE OUTRICHES. DO NOT MULCH CROWN.
42. WATER THOROUGHLY AFTER PLANTING EACH PLANT. WATER SCHEDULE TO BE
43. DETERMINED.
44. SPRAY FOR DEER IF PLANTED IN FALL. SOMETIMES BUCKS MARK THEIR TERRITORY
45. WITH THEIR ANTLERS.
46. KEEP PLANTING AREAS WEED-FREE UNTIL PLANT IS ESTABLISHED.
47. ECO-LAWN SEEDING SHALL BE IMPLEMENTED BY CONTRACTOR FAMILIAR WITH THIS
48. SPECIES MIX AND WITH THE PLANTS SPECIFIED AND APPROVED BY DESIGNER. THIS IS NOT THE
49. SAME AS CASTING CONTRACTOR GRASS SEED.
50. PERVIOUS/PERMEABLE PAVERS AND ASSOCIATED GRASS SEEDING SHALL BE
51. INSTALLED BY CONTRACTOR WITH EXPERIENCE IN THIS PROCESS. THIS PROCESS
52. REQUIRES ESTABLISHMENT MAINTENANCE, IN ORDER TO SUCCEED.
53. BERMED AREAS SHALL BE BUILT WITH DESIGNER DIRECTING CONSTRUCTION
54. STREET TREE AND SURROUNDING TREE-PIT SHALL BE INSTALLED BY CONTRACTOR
55. EXPERIENCED WITH PLANTING AND MAINTENANCE OF APPROVED SPECIES.
56. ALL PLANTS REQUIRE REGULAR WATERING FOR THE FIRST TWO SEASONS IN ORDER
57. TO SUCCEED

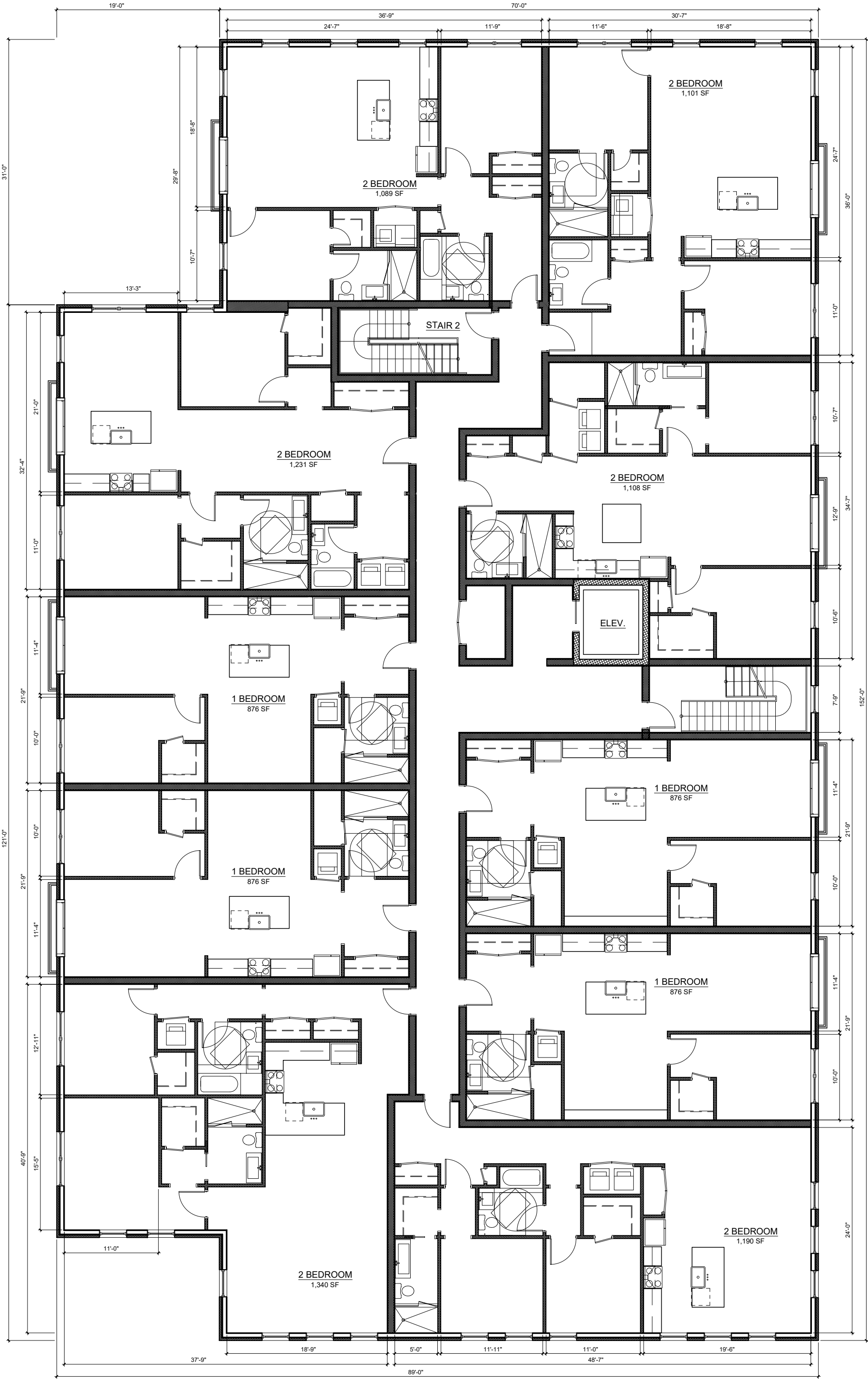
11/20/21, 9:25 AM	Dennstaedtia punctilobula COMMON NAME Hayscented Fern TYPE Fern IMAGES	Carex pennsylvanica COMMON NAME Pennsylvania Sedge TYPE Grass IMAGES	Schizachyrium scoparium COMMON NAME Little Blue Stem TYPE Grass IMAGES	Aquilegia canadensis COMMON NAME Columbine TYPE Herbaceous IMAGES
11/20/21, 9:25 AM	Aster divaricatus COMMON NAME White Wood Aster TYPE Herbaceous IMAGES	Corynephorus virginicus COMMON NAME Green and Gold TYPE Herbaceous IMAGES	Phlox stolonifera COMMON NAME Creeping Phlox TYPE Herbaceous IMAGES	Tiarella cordifolia COMMON NAME Foam Flower TYPE Herbaceous IMAGES
11/20/21, 9:25 AM	Viola pedata COMMON NAME TYPE Herbaceous IMAGES	Aronia melanocarpa COMMON NAME Black Chokeberry TYPE Shrub IMAGES	Comptonia peregrina COMMON NAME Sweet Fern TYPE Shrub IMAGES	Diervilla lonicera COMMON NAME Bush Honeyuckle TYPE Shrub IMAGES
11/20/21, 9:25 AM	Ilex Glabra COMMON NAME TYPE Shrub IMAGES	Myrica pennsylvanica COMMON NAME TYPE Shrub IMAGES	Rhus aromatica Lo Gro COMMON NAME Fragrant Sumac TYPE Shrub IMAGES	Viburnum dentatum COMMON NAME Arrowwood Viburnum TYPE Shrub IMAGES
11/20/21, 9:25 AM	Xanthorhiza simplicissima COMMON NAME TYPE Shrub IMAGES	Amelanchier canadensis COMMON NAME TYPE Tree IMAGES	Betula populifolia COMMON NAME Grey Birch TYPE Tree IMAGES	Cercis canadensis COMMON NAME Eastern Redbud TYPE Tree IMAGES
11/20/21, 9:25 AM	Cornus florida COMMON NAME Flowering Dogwood TYPE Tree IMAGES	Magnolia virginiana COMMON NAME Sweetbay Magnolia TYPE Tree IMAGES	Nysa sylvatica COMMON NAME Blackgum TYPE Tree IMAGES	Quercus ilicifolia COMMON NAME Bear Oak TYPE Tree IMAGES

[illegible]

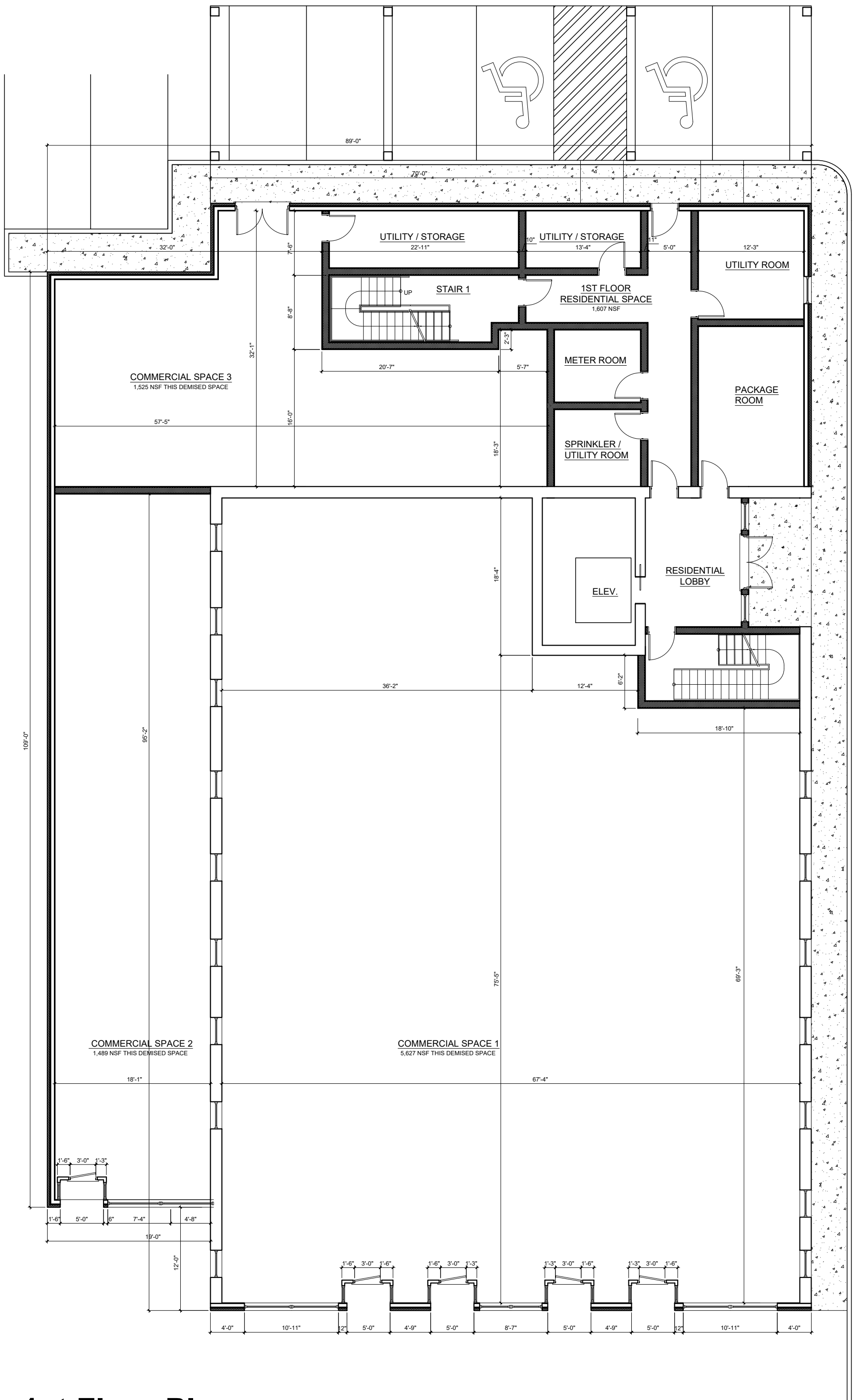
364 Main Street
Beacon, New York
Scale: $\frac{1}{8}" = 1'-0"$
May 25, 2021



Roof Plan
Scale: 3/32" = 1'-0"



2nd & 3rd Floor Plans
Scale: 3/32" = 1'-0"



1st Floor Plan
Scale: 3/32" = 1'-0"

Area Summary Table

Floor	Space	Area (Net Square Feet)
1	Commercial 1	6,637
	Commercial 2	1,489
	Commercial 3	1,525
	All Commercial	9,651
	Notes: Total of commercial space is 9,651 sq. ft. This includes the area of the building which is not the total of the individual commercial spaces.	
	1st Floor Residential	1,597
2	Residential	12,287
3	Residential	12,287
		24,574

REVISIONS:			
NO.	DATE	DESCRIPTION	BY
1	07/27/21	REVISED PER PLANNING BOARD COMMENTS	AJS
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4	11/30/21	REVISED PER PLANNING BOARD COMMENTS	AJS
5	12/28/21	REVISED PER PLANNING BOARD COMMENTS	AJS



View: From Main Street
Not to Scale



View: From Main Street
Not to Scale



View: From Main Street
Not to Scale

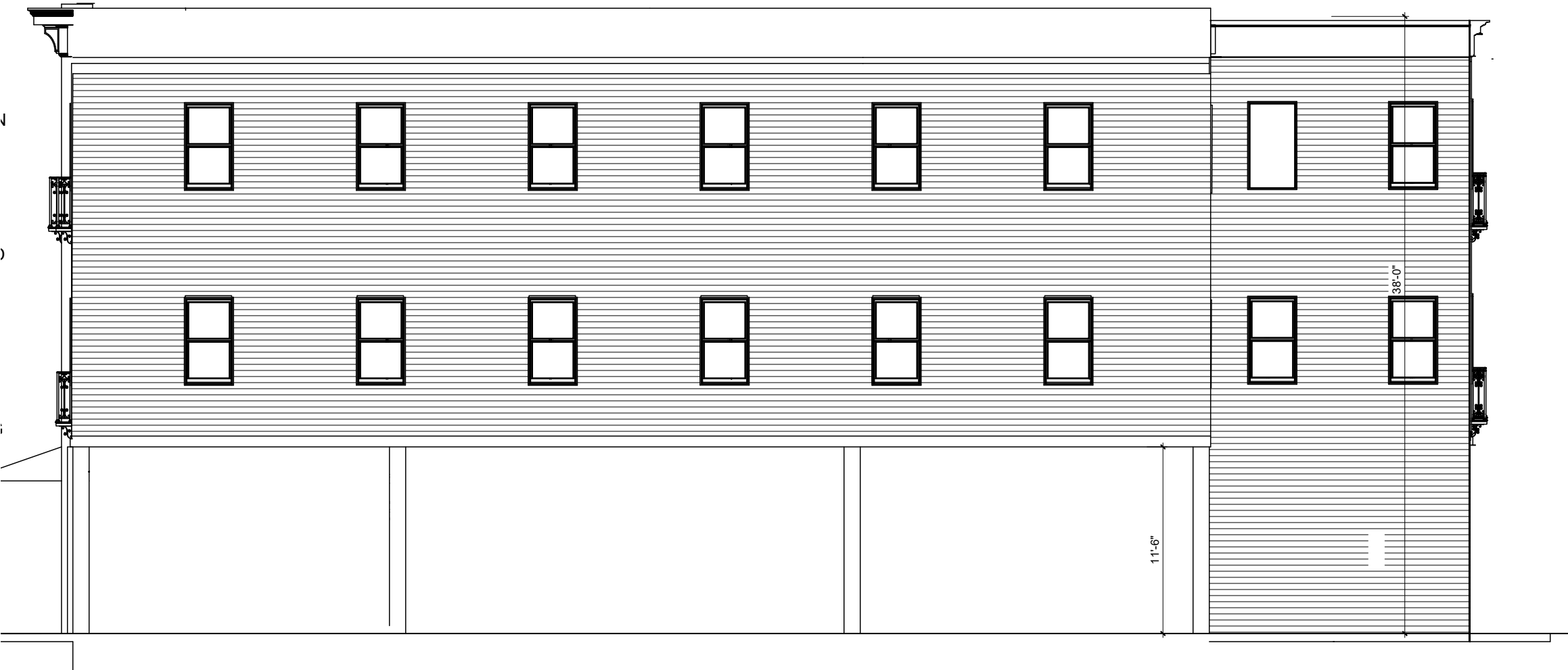
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5	12/28/21	REVISED PER PLANNING BOARD COMMENTS	AJS



View: From Driveway
Not to Scale



View: Main Street
Not to Scale



Site Plan Application

Sheet 5 of 12 - Building Elevations

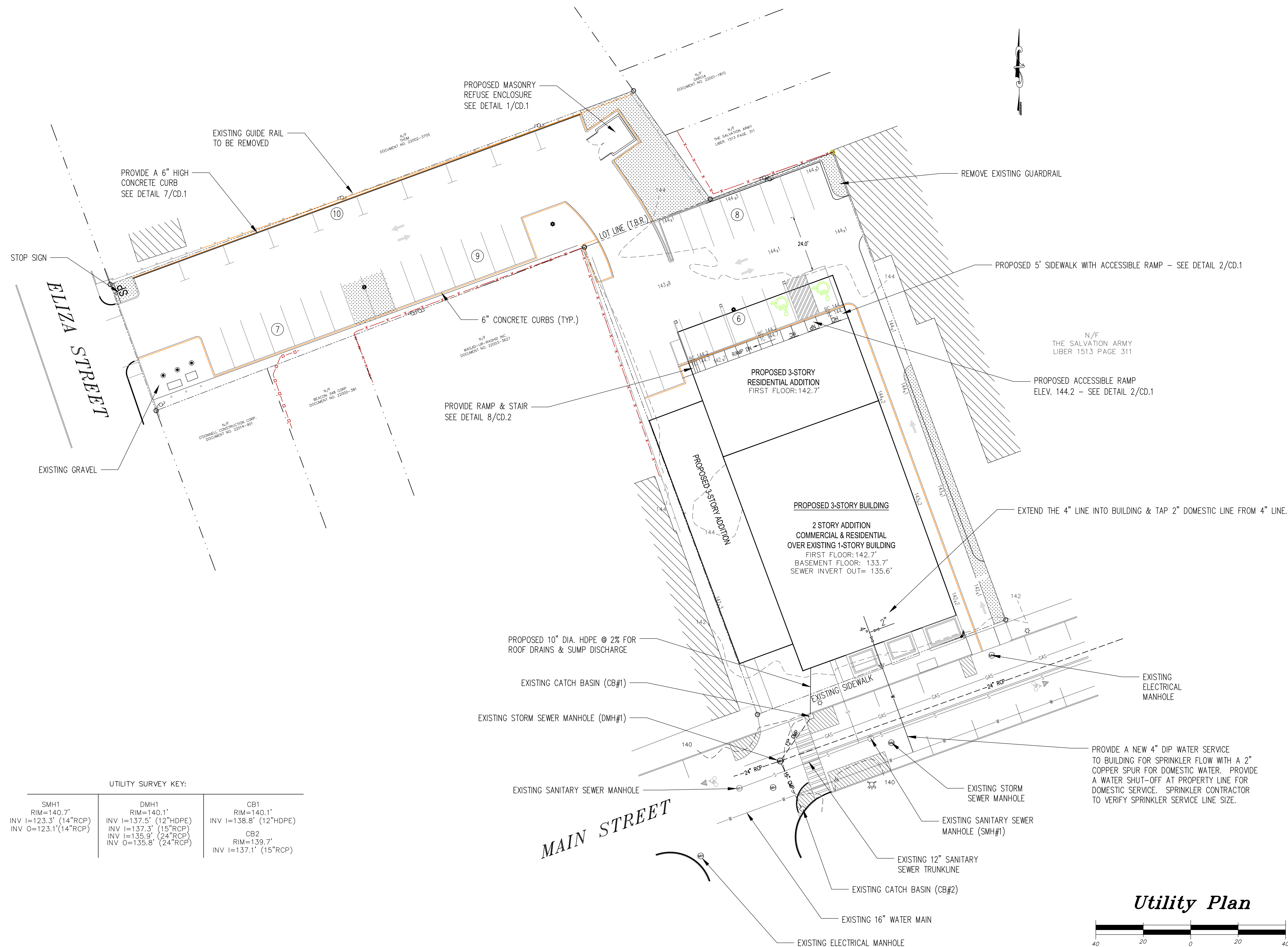
Owner:
O'Donnell Construction Corp.
P.O. Box 526
Fishkill, NY 12524

Architect:
Aryeh Siegel, Architect
84 Mason Circle
Beacon, New York 12508

Site / Civil Engineer:
Day & Stokosa Engineering P.C
3 Van Wyck Lane
Wappingers Falls, New York 12590

Landscape Designer:
Landscape Restorations
7 Creek Drive
Beacon, New York 12508

364 Main Street
Beacon, New York
Scale: $\frac{1}{8}" = 1'-0"$
May 25, 2021



PARKING AND ACCESS EASEMENTS:

THERE SHALL BE A BLANKET ACCESS AND PARKING EASEMENT OVER BOTH LOTS ALLOWING BOTH ACCESS AND PARKING FOR EACH LOT OVER THE OTHER LOT.

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12-21-21	11-27-21
08-27-21	07-20-21
2020.475	License No. 069646

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ENGINEERING P.C.

3 Van Wyck
Lane Suite 2
Wappingers Falls, New York
(845)-223-3202

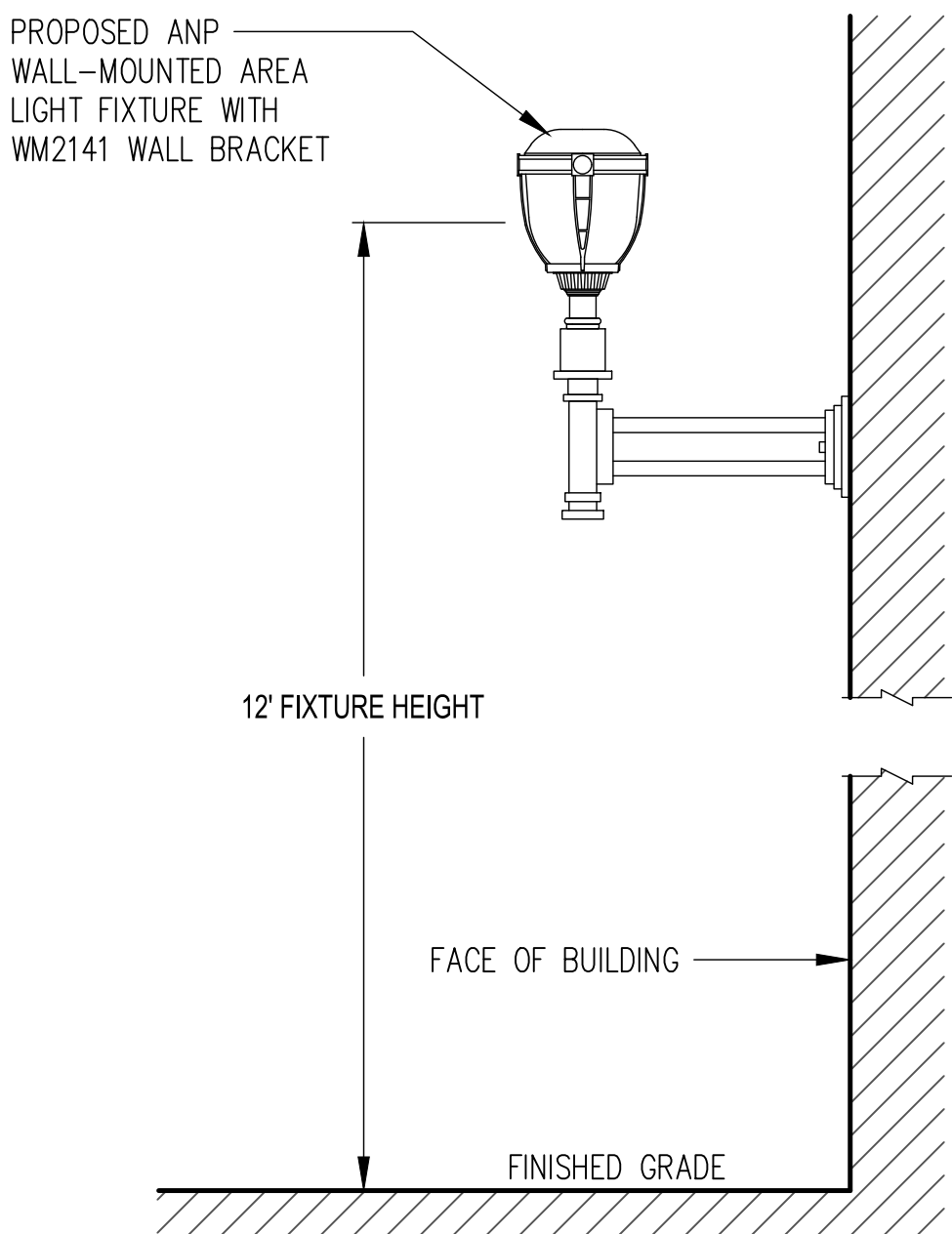
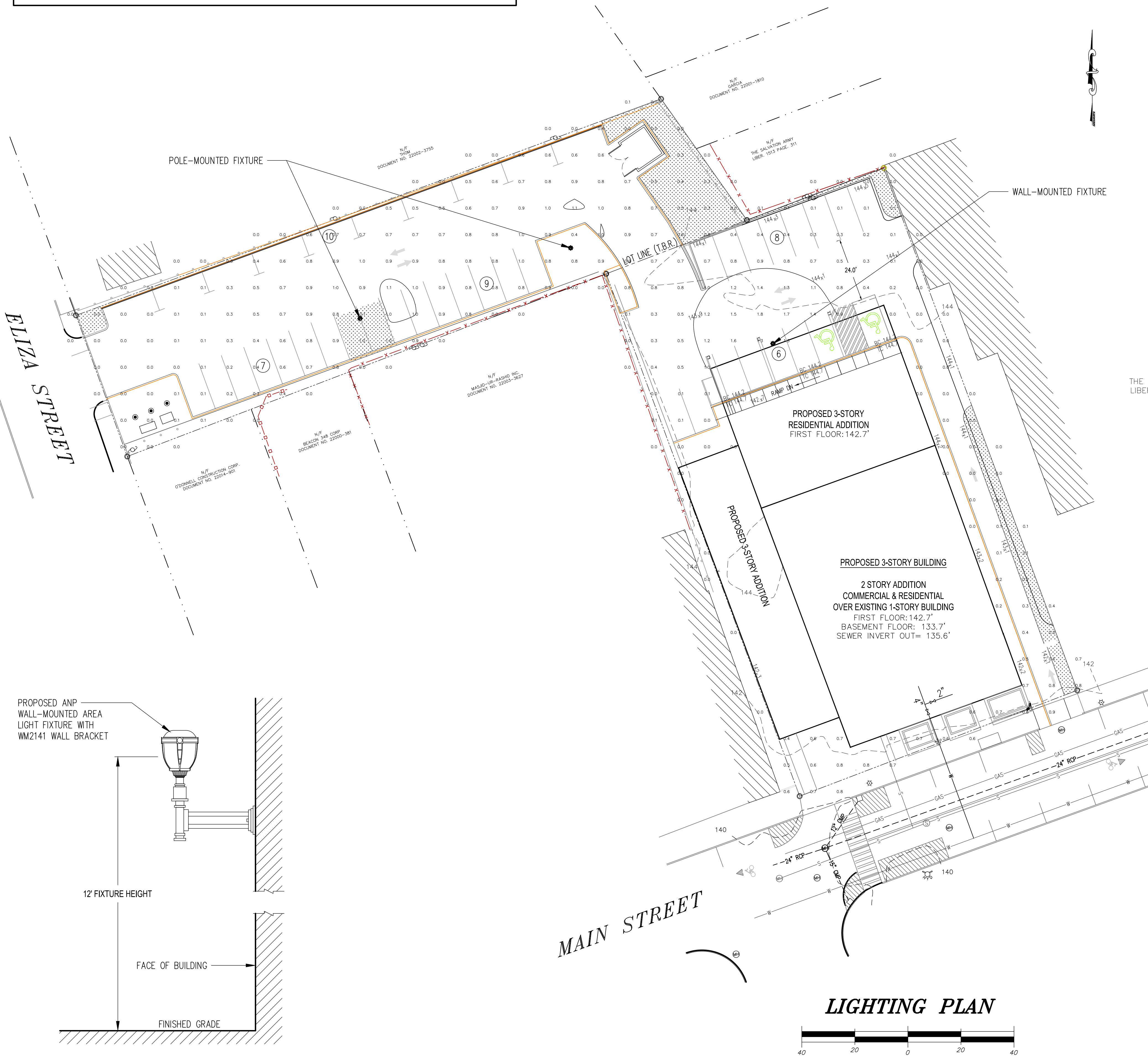
PROJECT
364 Main Street
City of Beacon
Dutchess County, New York

DRAWING
Utility Plan

SCALE 1" = 20'	DRAWN BY MAD	DRAWING NO. UP.1
DATE 04-02-21	CHECKED BY MAD	7 of 15

LIGHTING FIXTURE SCHEDULE

LP	ANP LED POLE-MOUNTED FIXTURE	20' POLE	CRI > 90	2 FIXTURES
WM	ANP LED WALL-MOUNTED LIGHT FIXTURE	15' MOUNTING HEIGHT	CRI > 98	1 FIXTURES



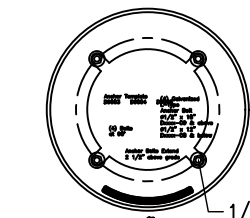
4 WALL-MOUNTED LIGHT FIXTURE DETAIL
NOT TO SCALE



ANP POLE MOUNTED LED FIXTURE
LA792-1-PO46LD4-D-T3-35K-PC-PA5151-41
WM5161 WALL MOUNT BRACKET
COLOR TEMPERATURE - 3500K
FULL CUTOFF/DOWNLIGHT
POLE COLOR - BLACK

1 ANP POLE & WALL MOUNTED FIXTURES
NOT TO SCALE

Orientation/Anchor Guide



1/2" x 18" L-type galvanized
anchor bolts at 90° on a 12
3/4" bolt circle

FIXTURE DETAILS

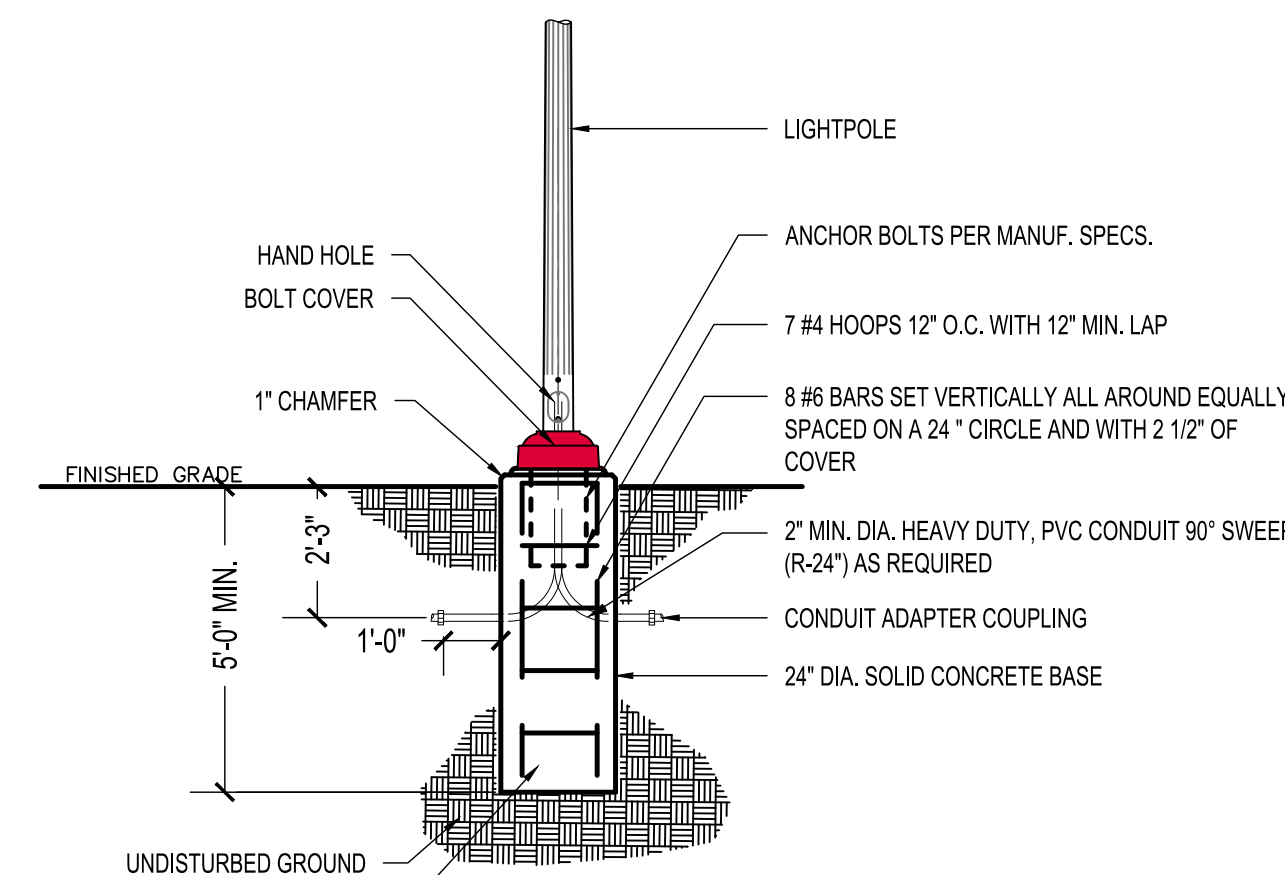
Materials
Cast Aluminum Fitter
Electrical
4kv Pulse Rated Socket
The Ballast used shall be of the
High Power Factor design

POLE DETAILS

Shaft
Ø4" Extruded Fluted Aluminum 125 Wall
#6005-T5 Aluminum
Base
Cast Aluminum (a319 Alloy)
Finish
Black Powder Coat

IT SHALL BE THE RESPONSIBILITY OF THE LIGHTING
CONTRACTOR TO VERIFY ALL CONDITIONS IN THE FIELD

2 LIGHT POLE DETAIL
NOT TO SCALE



- UNDISTURBED GROUND
CLASS A CONCRETE (3,500 PSI)
- NOTE:
- CONCRETE SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF 3,500 PSI, WITH AIR-ENTRAINMENT OF 5-7%
 - CHAMFER EXPOSED EDGES OF ALL FOUNDATIONS.
 - COLOR OF FIXTURE SHALL MATCH COLOR OF POLE

IT SHALL BE THE RESPONSIBILITY OF THE LIGHTING
CONTRACTOR TO VERIFY ALL CONDITIONS IN THE FIELD

3 LIGHTPOLE DETAIL
NOT TO SCALE

PARKING AND ACCESS EASEMENTS:

THERE SHALL BE A BLANKET ACCESS AND
PARKING EASEMENT OVER BOTH LOTS ALLOWING
BOTH ACCESS AND PARKING FOR EACH LOT
OVER THE OTHER LOT.

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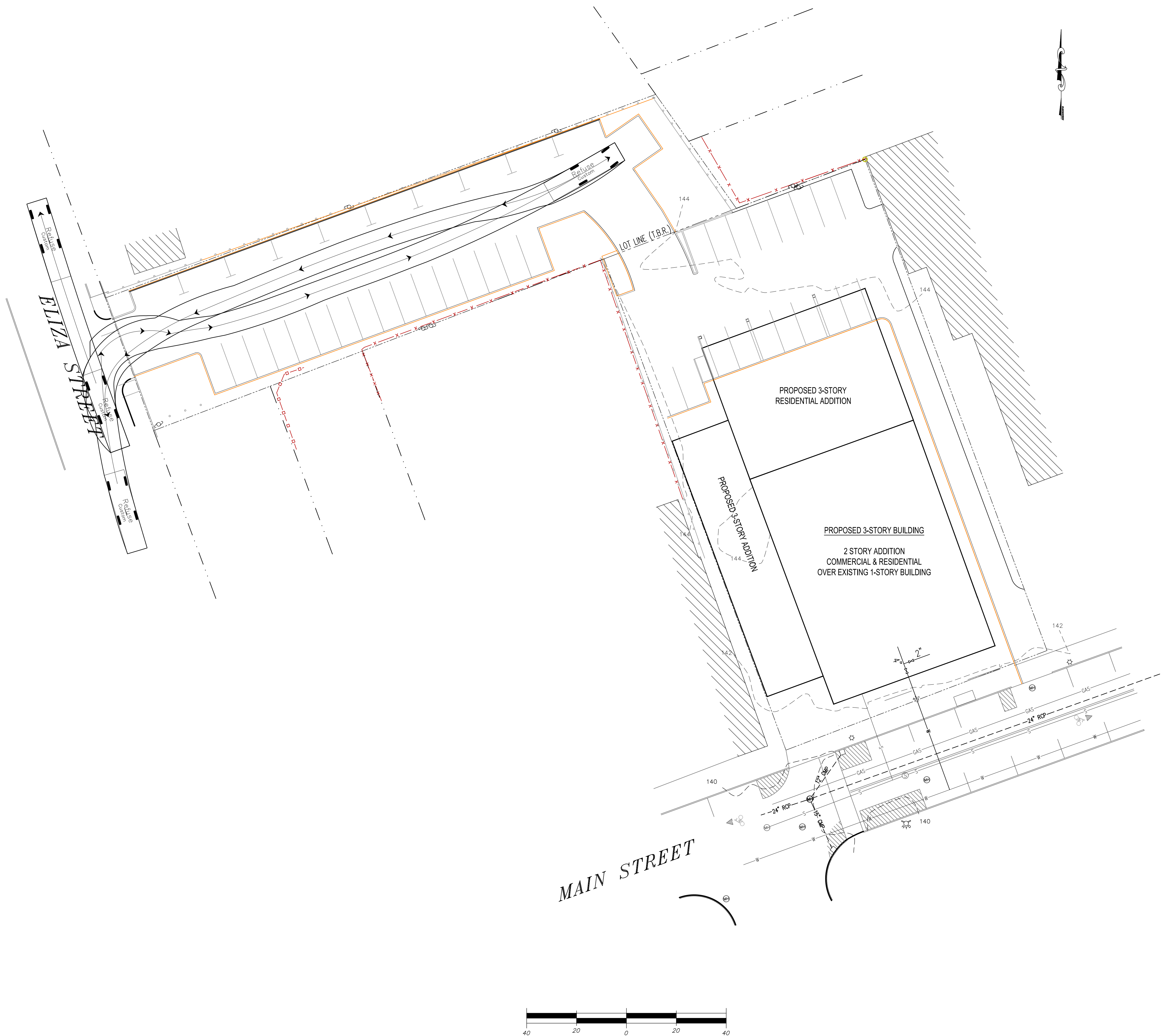
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ENGINEERING P.C.

3 Van Wyck
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Wappingers Falls, New York
(845)-223-3202

PROJECT
364 Main Street
City of Beacon Dutchess County, New York

DRAWING
Lighting Plan

SCALE 1" = 20'	DRAWN BY MAD	DRAWING NO. LP.1
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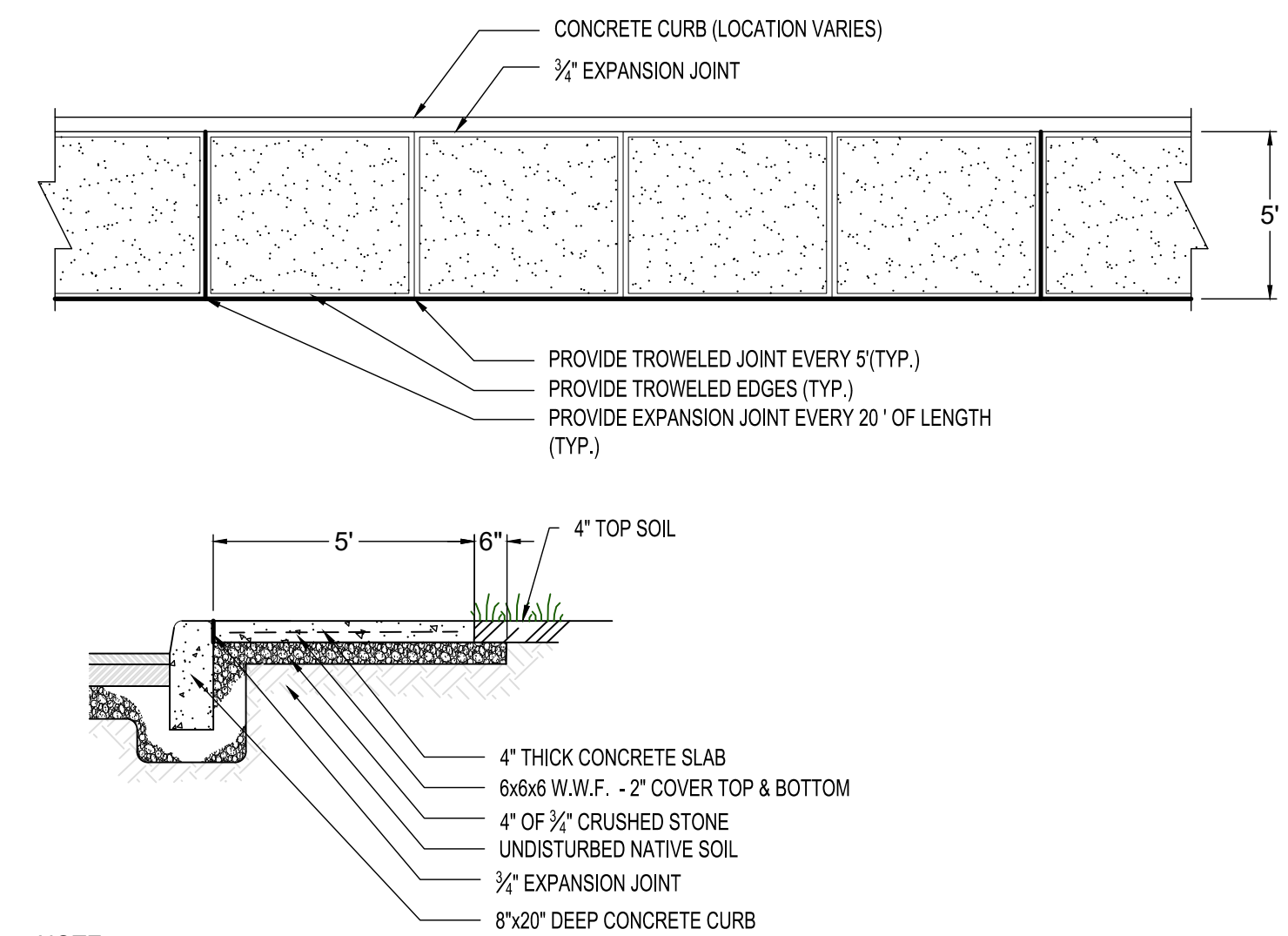
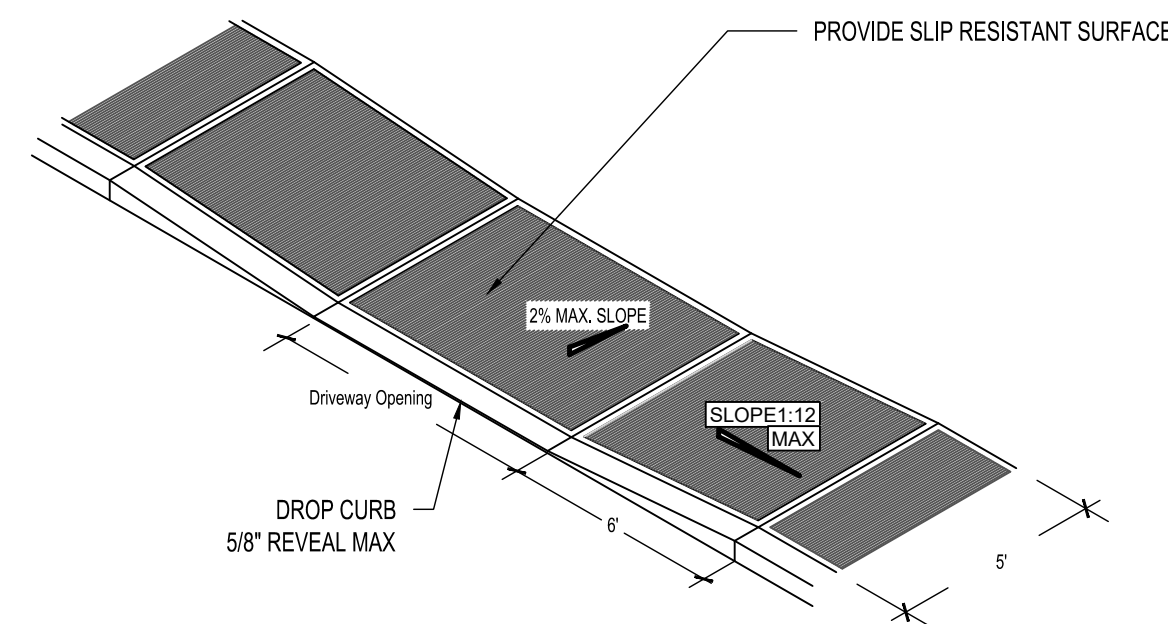
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PROJECT
364 Main Street
City of Beacon Dutchess County, New York

DRAWING
Refuse Truck Movement Plan

SCALE 1" = 20'	DRAWN BY MAD	DRAWING NO. VM.1
DATE 04-02-21	CHECKED BY MAD	9 of 15



- NOTE:
1. ALL CONCRETE SHALL HAVE A 28 COMPRESSIVE STRENGTH OF 4,000 PSI
 2. ALL EXPOSED SURFACES SHALL HAVE A BROOM TEXTURED FINISH
 3. ALL SIDEWALK SHALL BE 6" THICK AT DRIVEWAY CROSSINGS
 4. EXPANSION JOINTS SHALL BE LOCATED AS MAXIMUM OF 20'-0" ON CENTER, OR AS INDICATED ON PLANS.

1 REFUSE ENCLOSURE DETAIL
NOT TO SCALE

NOT TO SCALE

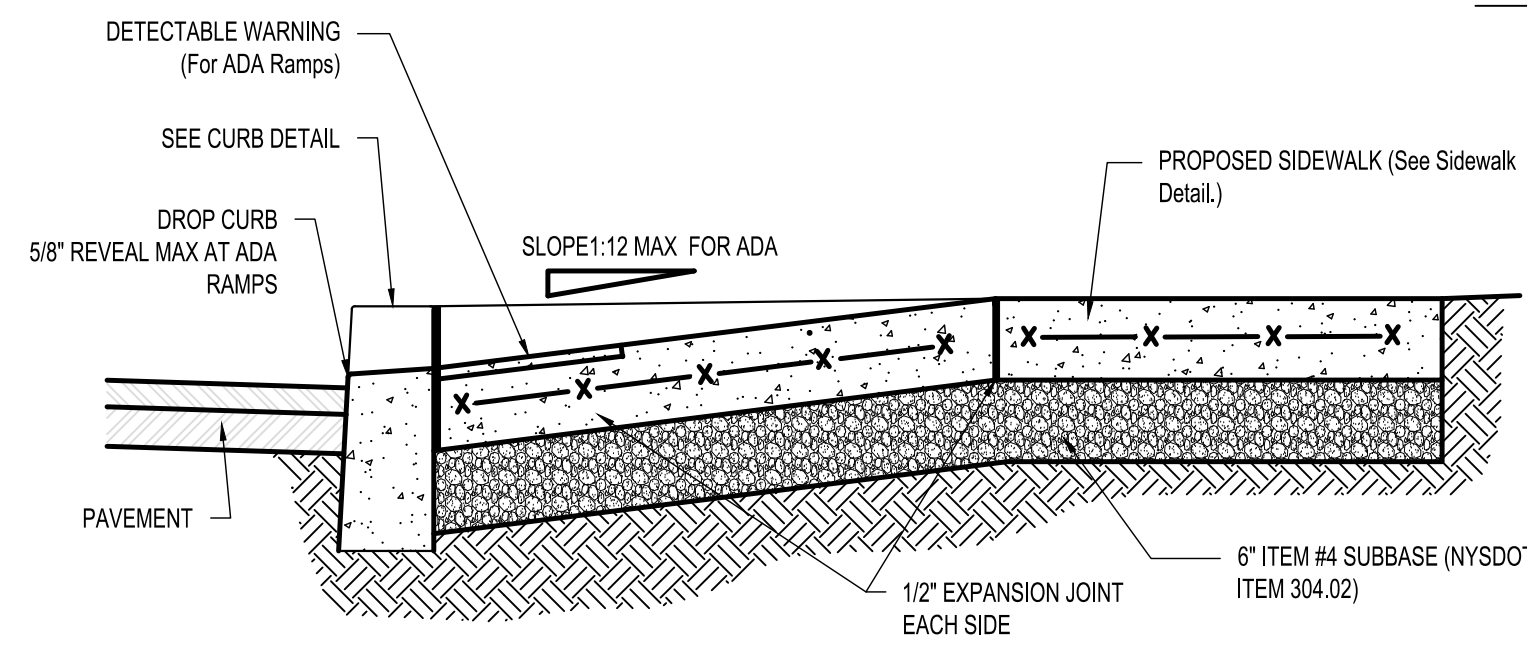
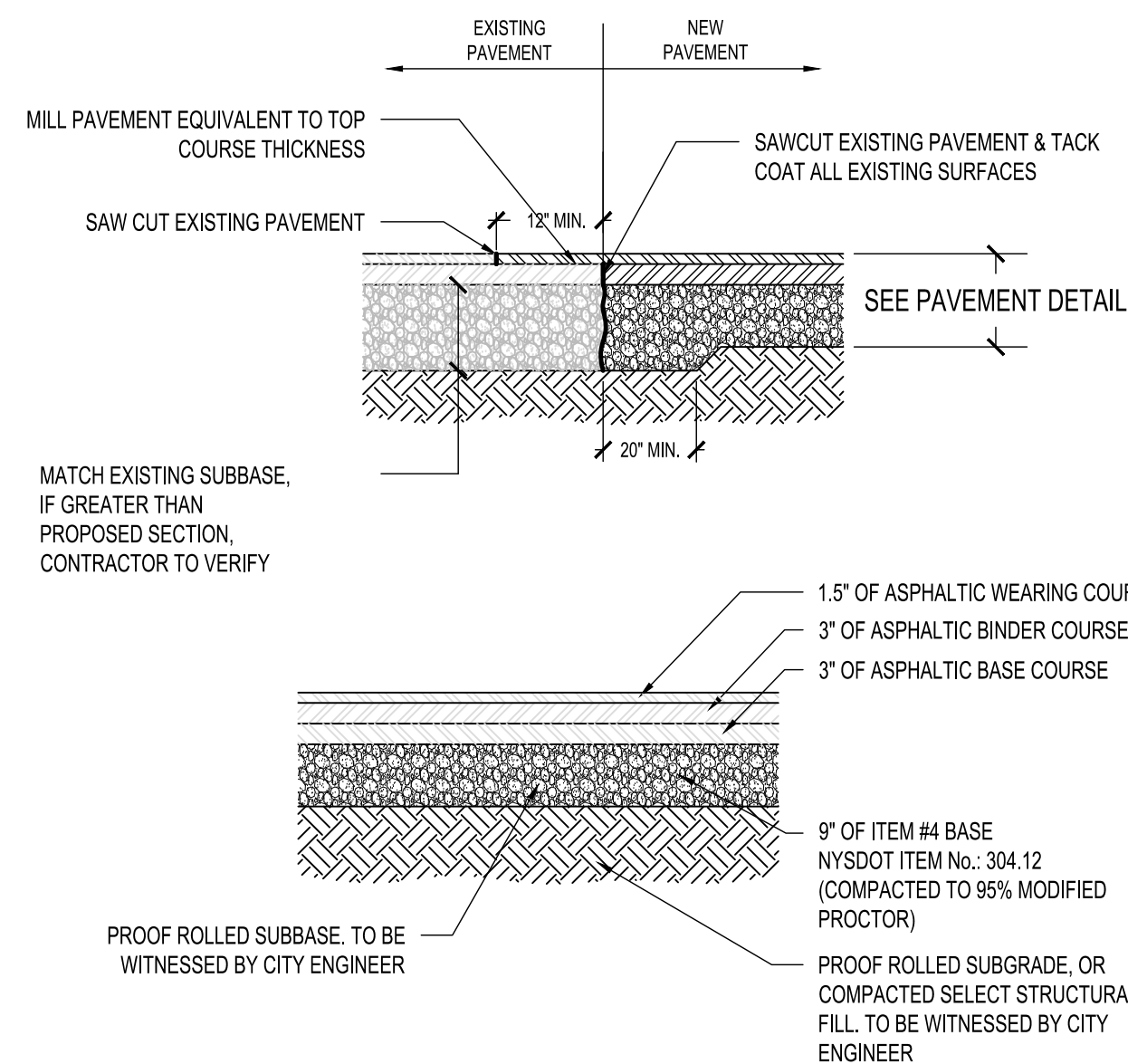
2 ADA RAMP & SIDEWALK DETAIL
NOT TO SCALE

NOT TO SCALE

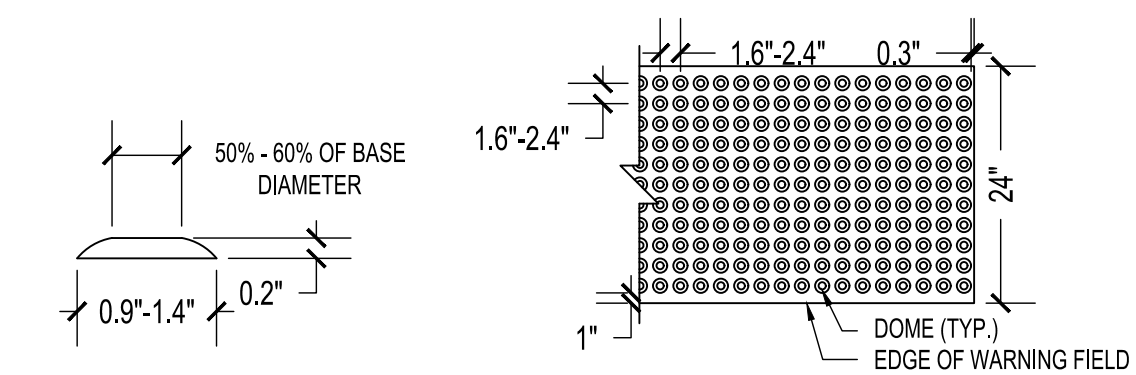
3 SIDEWALK & CURB DETAILS

NOT TO SCALE

NOT TO SCALE



- NOTES:**
1. THE SIZE OF THE DETECTABLE WARNING FIELD SHALL BE 24" IN THE DIRECTION OF TRAVEL AND SHALL EXTEND THE FULL WIDTH OF THE CURB RAMP OR FLUSH SURFACE, EXCLUSIVE OF SIDE FLARES.
 2. THE ROWS OF DOMES SHALL BE ALIGNED TO BE PERPENDICULAR OR RADIAL TO THE GRADE BREAK BETWEEN THE RAMP LANDING OR CURB RAMP AND THE STREET.
 3. WHERE DOMES ARE ARRAYED RADIALLY THEY MAY DIFFER IN DOME DIAMETER AND CENTER-TO-CENTER SPACING WITHIN THE RANGES SPECIFIED ON THIS SHEET.
 4. DETECTABLE WARNING SHALL BE LOCATED SO THAT THE EDGE OR CORNER OF THE WARNING FIELD NEAREST TO THE ROADWAY IS 5" TO 9" FROM THE CURB TO THE ROADWAY EDGE.



4 PARKING STALL DETAIL

NOT TO SCALE

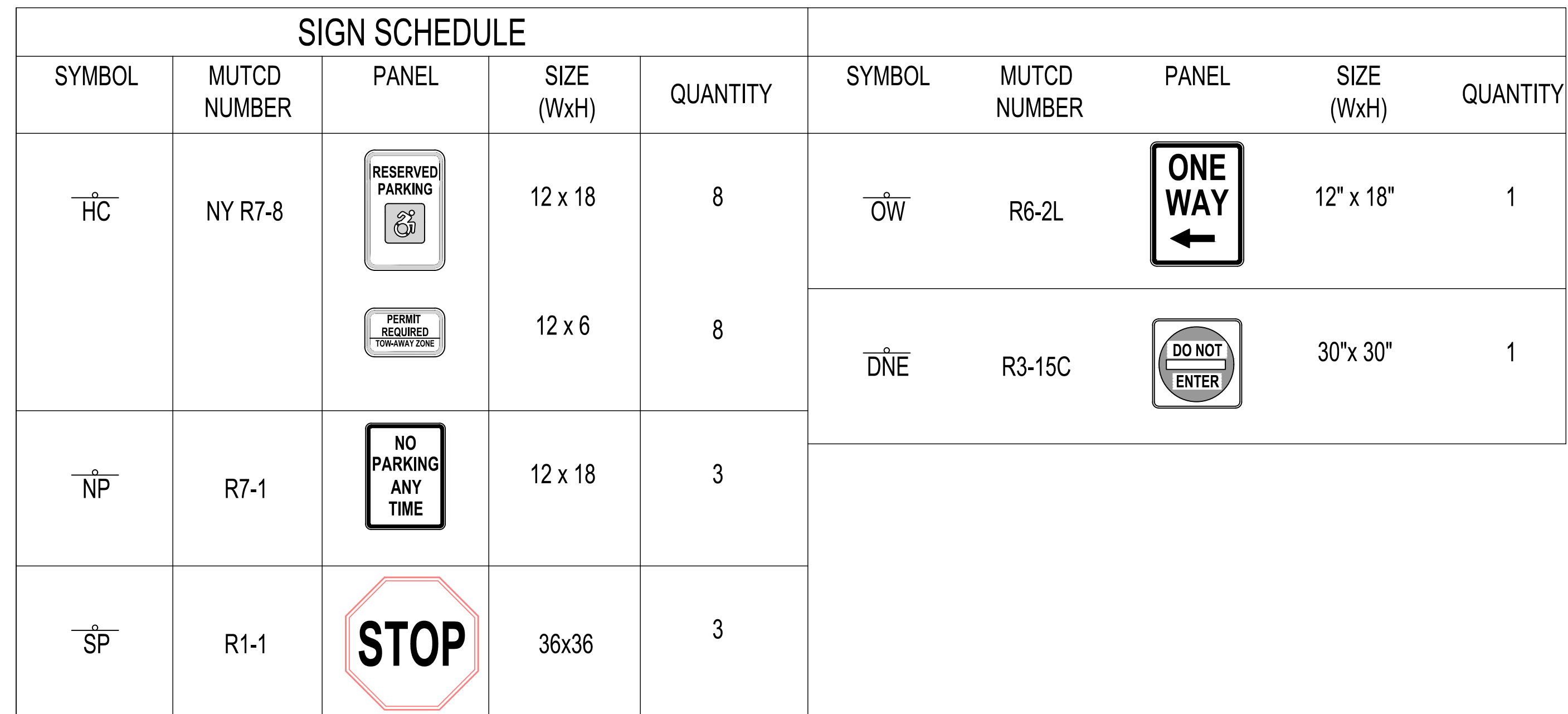
NOT TO SCALE

5 PARKING LOT PAVEMENT SECTION
NOT TO SCALE

NOT TO SCALE

6 ADA RAMP DETAIL
NOT TO SCALE

NOT TO SCALE



- NOTE:
1. CONCRETE SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF 4,000 PSI
 2. EXPANSION JOINTS OF 1/2" CELLULOSE OR SIMILAR MATERIAL SHALL NE INSTALLED WHERE REQUIRED (AT CURB BOXES, CATCH BASINS, BRIDGES, ETC.). CONSTRUCTION (CONTROL) JOINTS SHALL BE INSTALLED AT 20' INTERVALS

7 CAST-IN-PLACE CONCRETE CURB DETAIL
NOT TO SCALE

NOT TO SCALE

8 PROPOSED SIGNAGE

PROPOS

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Expirations		
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3 Van Wyck
Lane Suite 2
Wappingers Falls, New York
(845)-223-3202

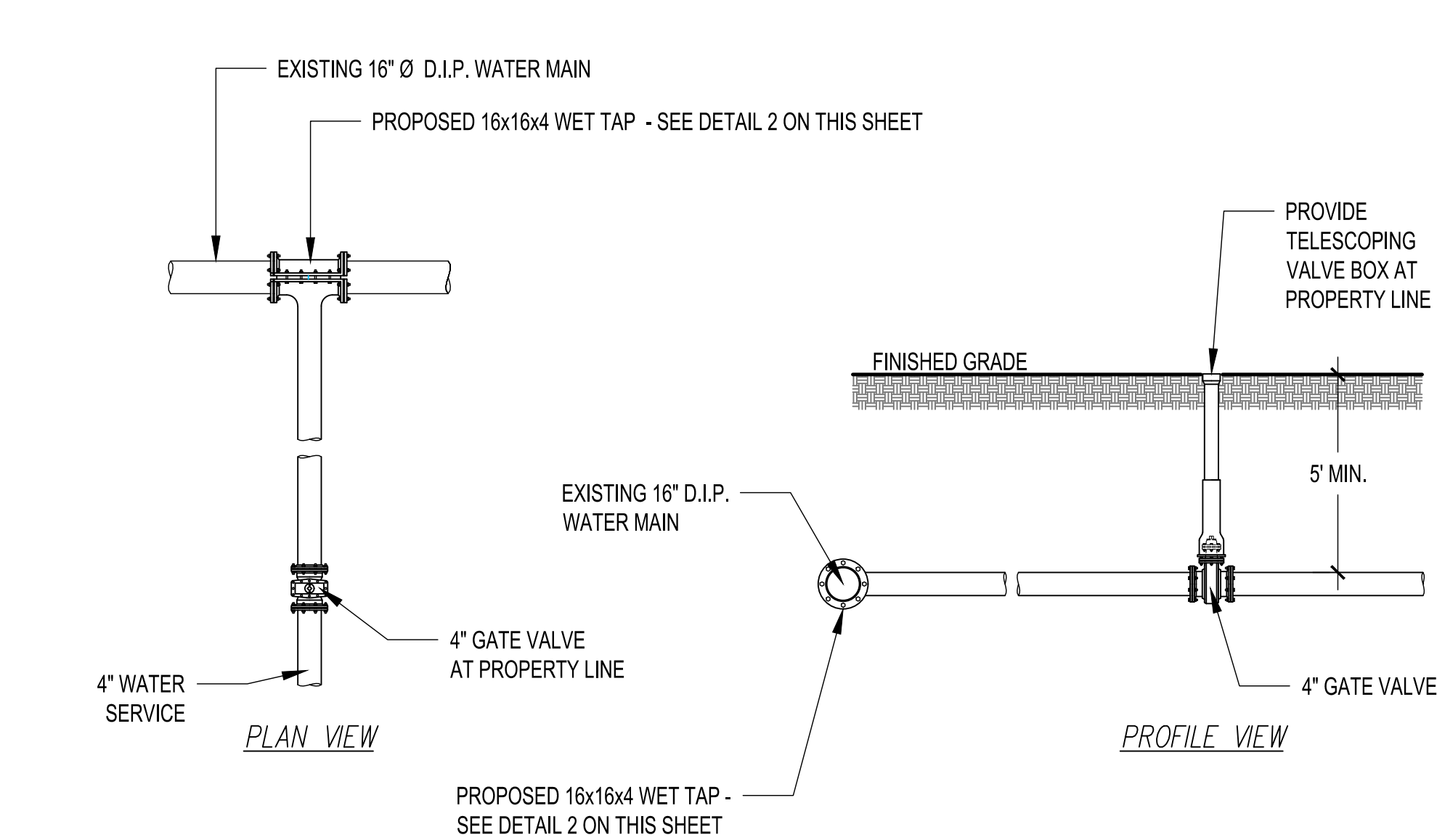
PROJECT

364 Main Street

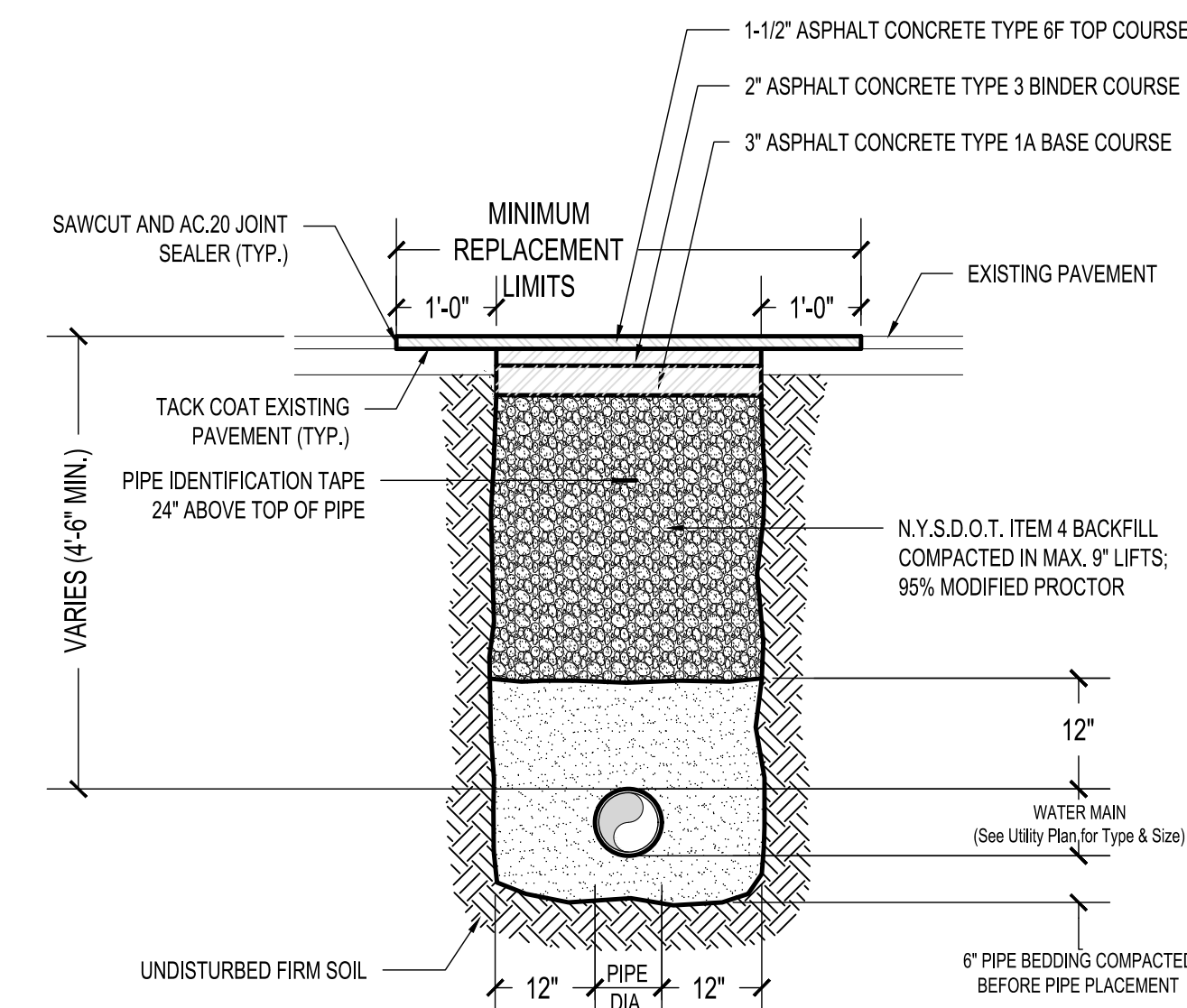
City of Beacon Dutchess County, New York

Construction Details

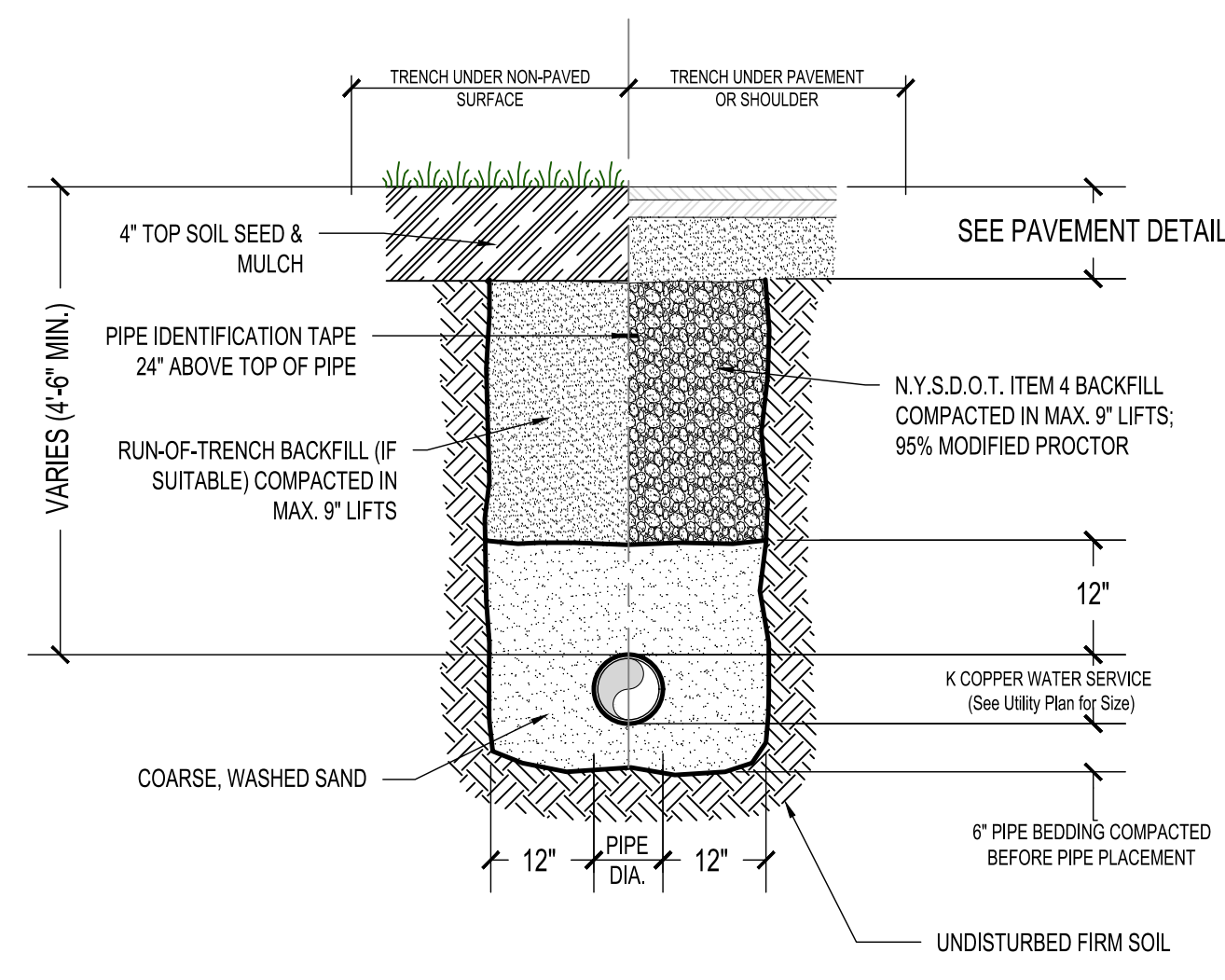
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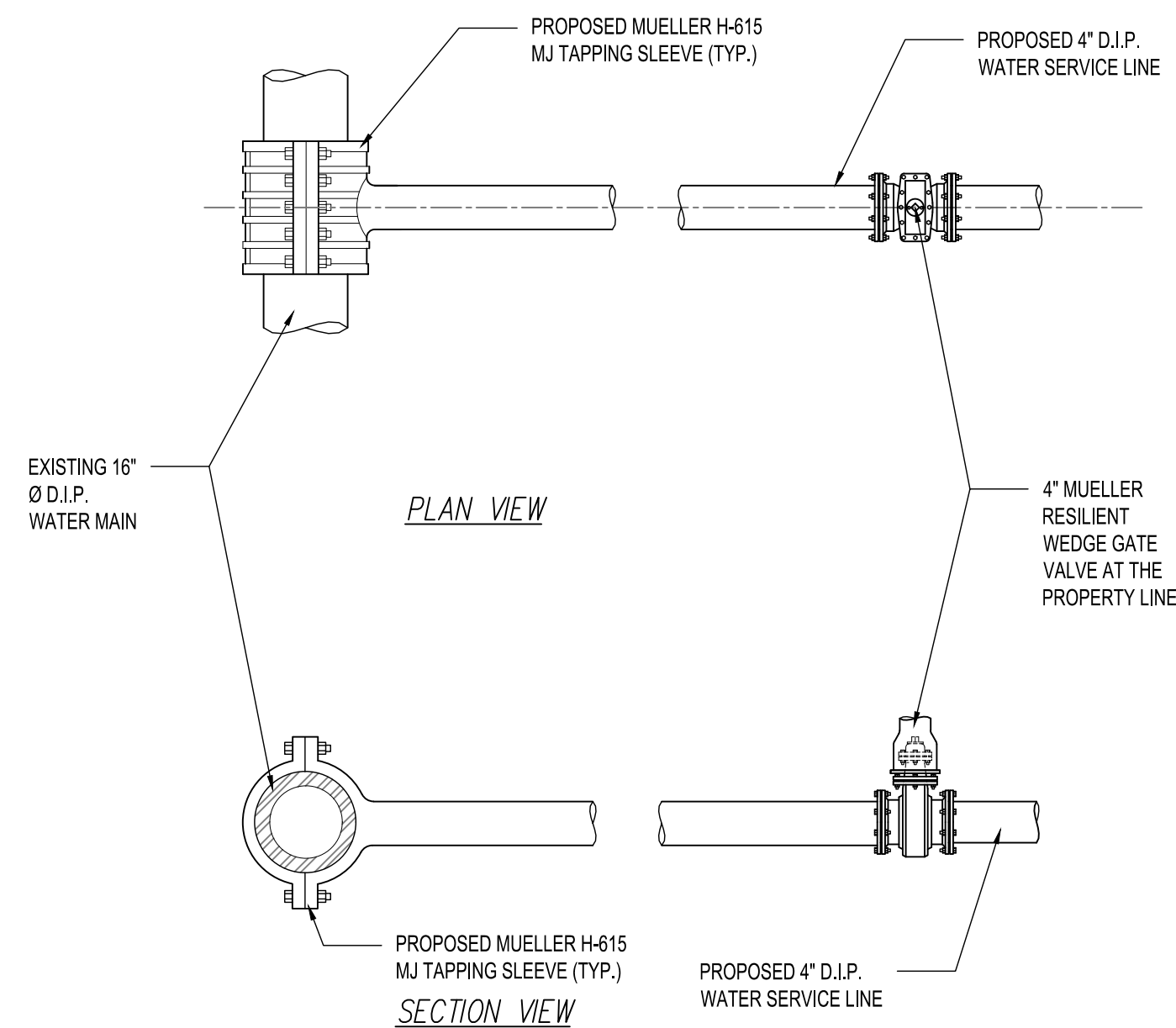
1 WET TAP AND VALVE INSTALLATION DETAIL
NOT TO SCALE



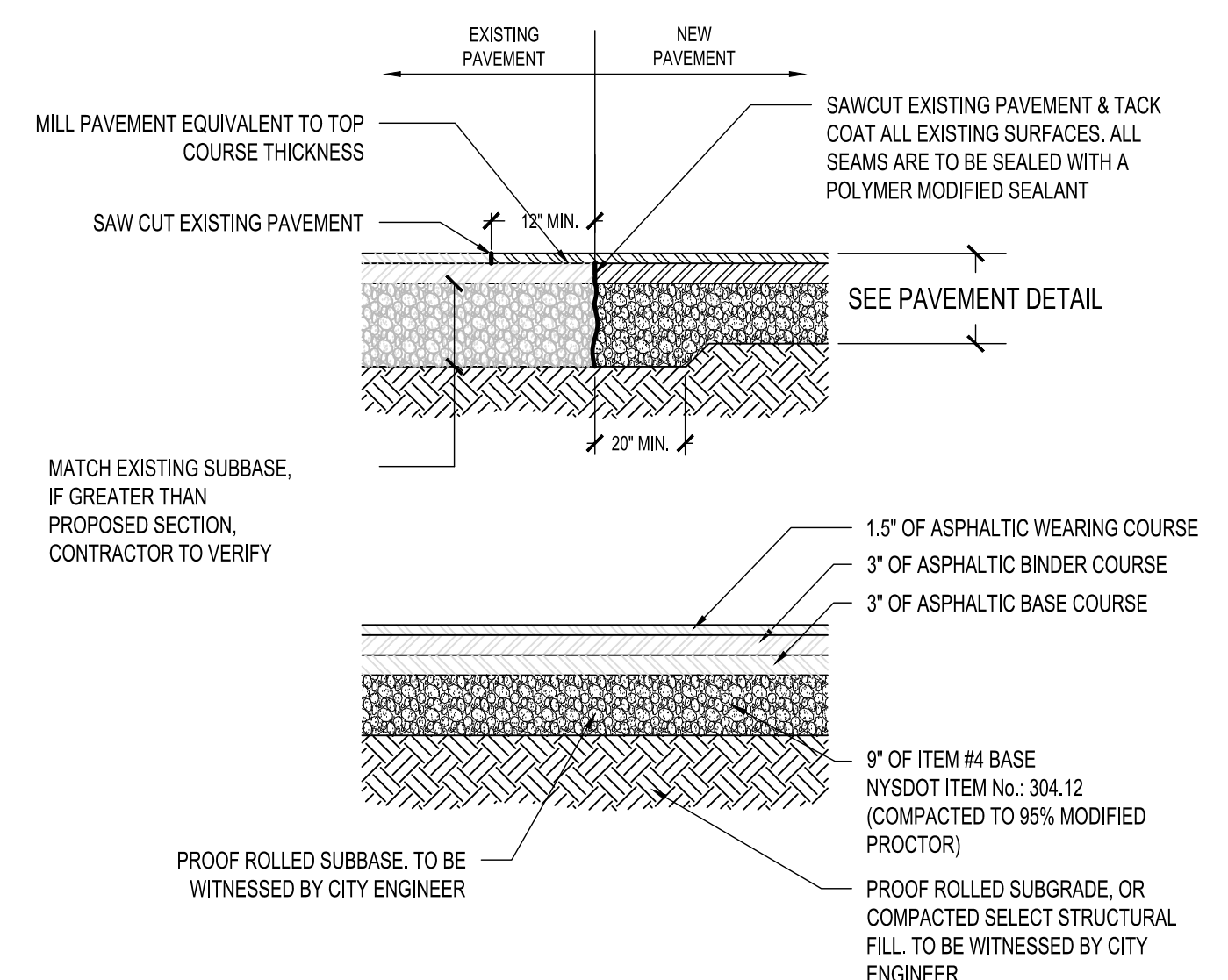
4 UTILITY TRENCH DETAIL (Below Existing Pavement)
NOT TO SCALE



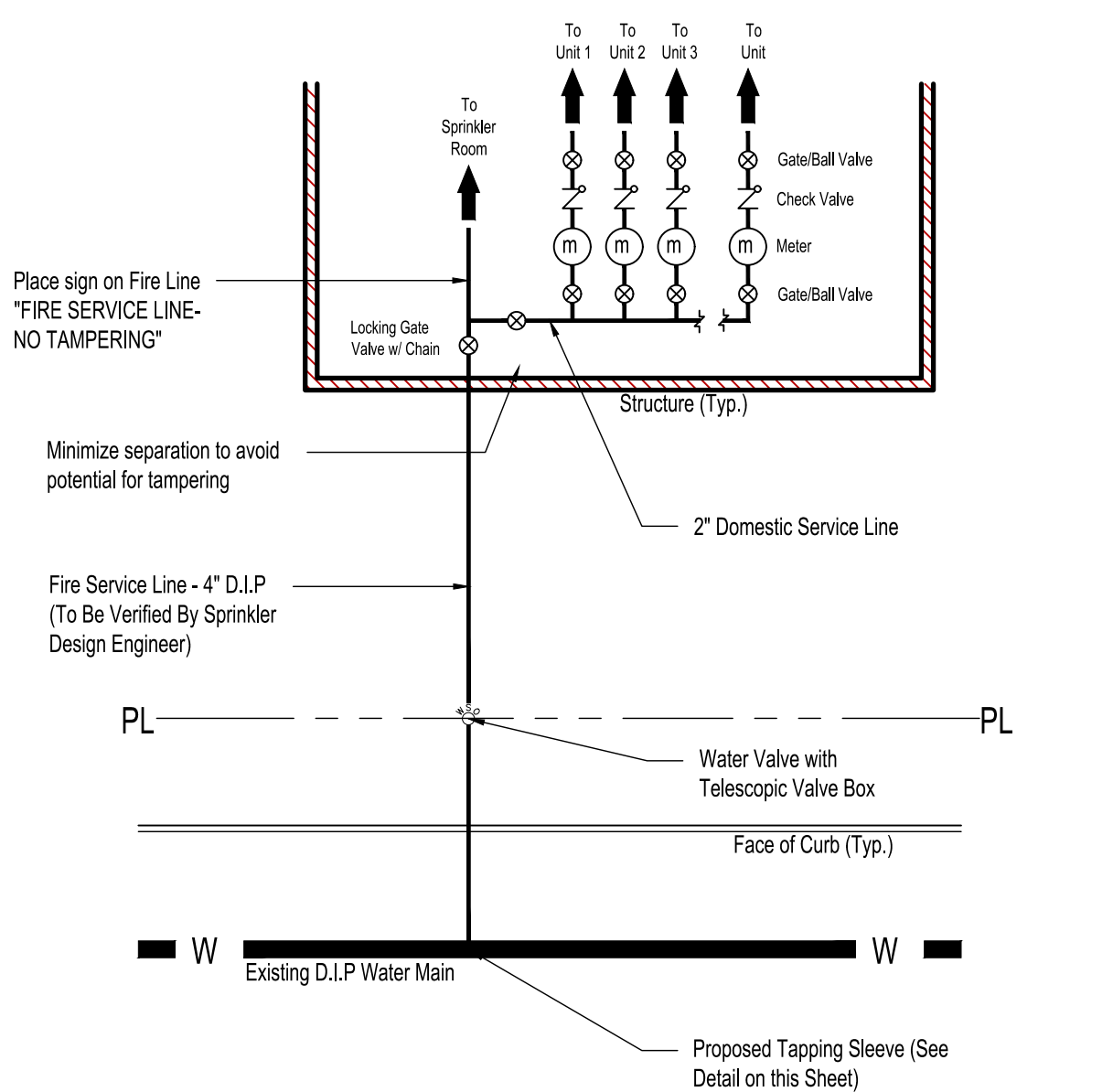
5 TYPICAL WATER SERVICE (BELOW 2" DIA.) DETAIL
NOT TO SCALE



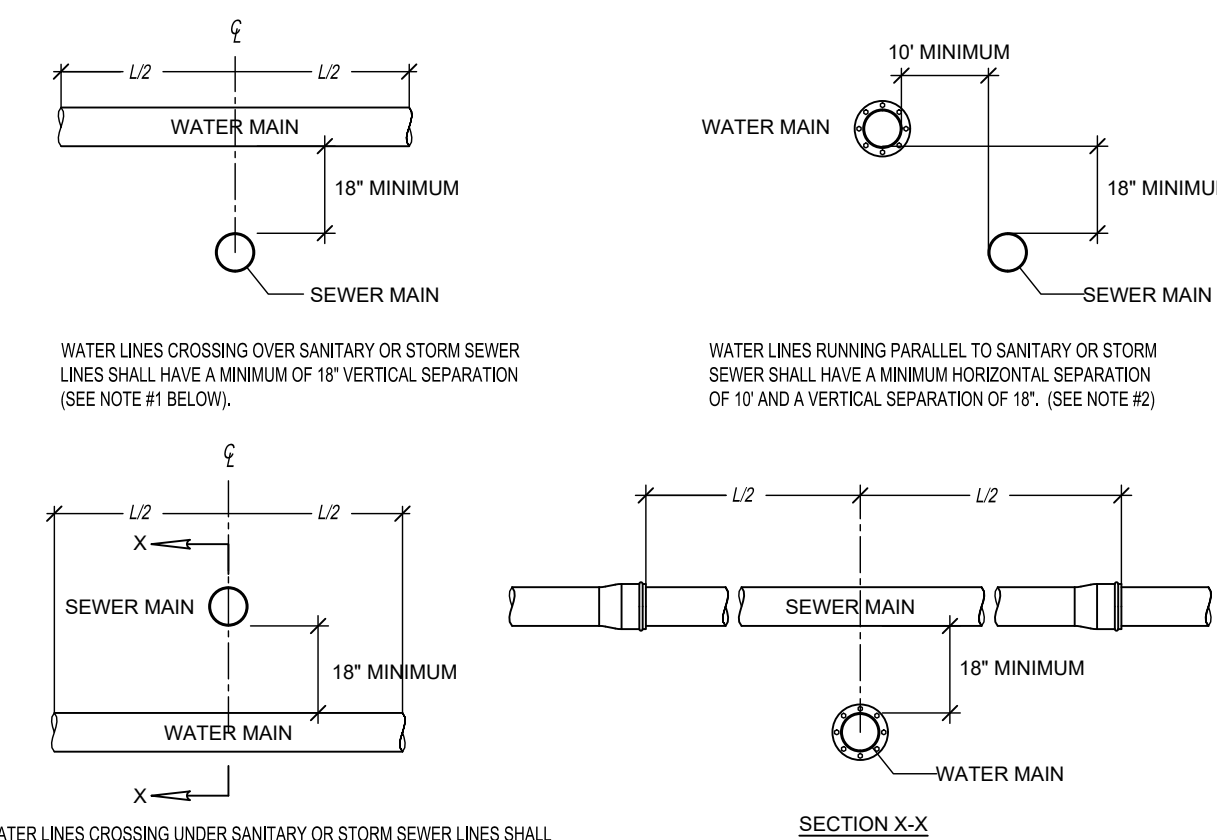
2 TAPPING SLEEVE AND VALVE INSTALLATION DETAIL
NOT TO SCALE



6 PAVEMENT SECTION
NOT TO SCALE

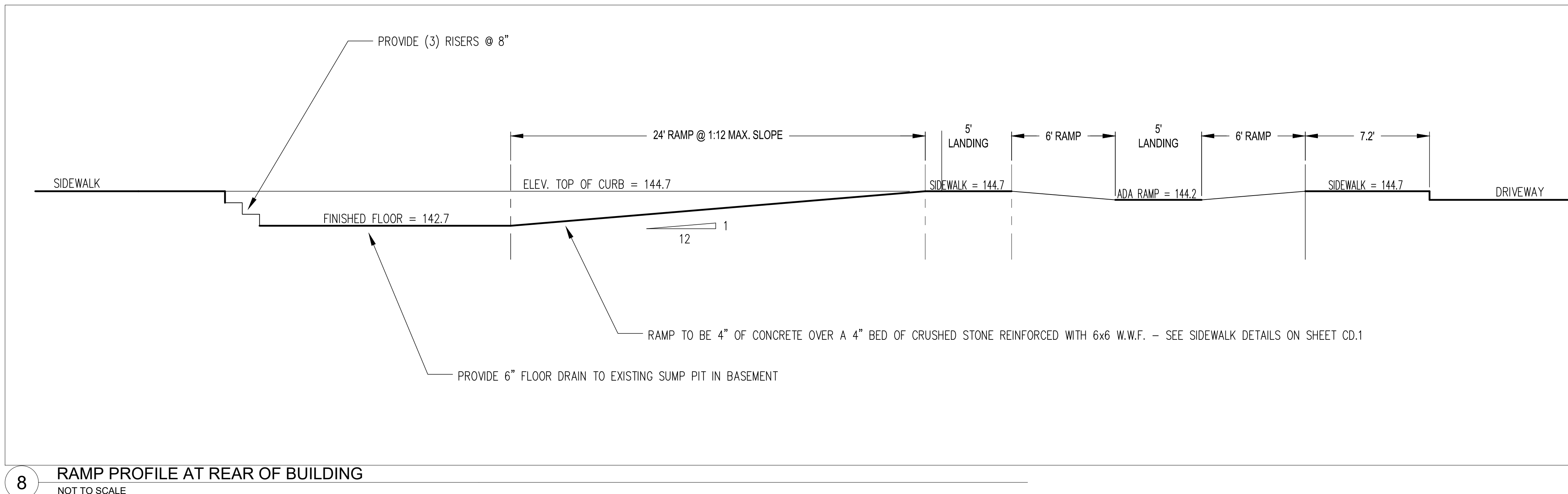


3 WATER SERVICE DETAIL
NOT TO SCALE



- NOTES:
1. WATER LINES CROSSING OVER SANITARY OR STORM SEWERS IN A COMMON TRENCH SHALL HAVE A MINIMUM VERTICAL SEPARATION OF 18" FROM TOP OF SEWER TO BOTTOM OF WATER LINE.
 2. WATER LINES RUNNING PARALLEL TO SANITARY OR STORM SEWERS SHALL HAVE A MINIMUM VERTICAL SEPARATION OF 18" ABOVE THE SEWER AND A MINIMUM HORIZONTAL SEPARATION OF 10" FROM THE SEWER. SANITARY SEWERS LOCATED NEARER THAN THIS MINIMUM SEPARATION REQUIREMENT SHALL BE CLASS 52 CEMENT LINER MECHANICAL JOINT DUCTILE IRON PRESSURE PIPE.
 3. WATER LINES CROSSING UNDER SANITARY OR STORM SEWERS SHALL HAVE THE FOLLOWING:
 - A. A MINIMUM VERTICAL SEPARATION OF 18" FROM THE TOP OF THE WATER MAIN TO THE BOTTOM OF THE SEWER LINE (UNLESS OTHERWISE SHOWN).
 - B. ADDITIONAL STRUCTURAL SUPPORT FOR THE SEWER TO PREVENT DEFLECTION OF THE SEWER LINE.
 - C. AN 18 FOOT MINIMUM LENGTH OF SEWER PIPE CENTERED OVER THE POINT WHERE THE SEWER LINE CROSSES OVER THE WATER MAIN SO THAT THE JOINTS OF THE SEWER MAIN ARE EQUIDISTANT FROM THE CENTERLINE OF THE WATER MAIN.

7 WATER & SEWER SEPARATION
NOT TO SCALE



8 RAMP PROFILE AT REAR OF BUILDING
NOT TO SCALE

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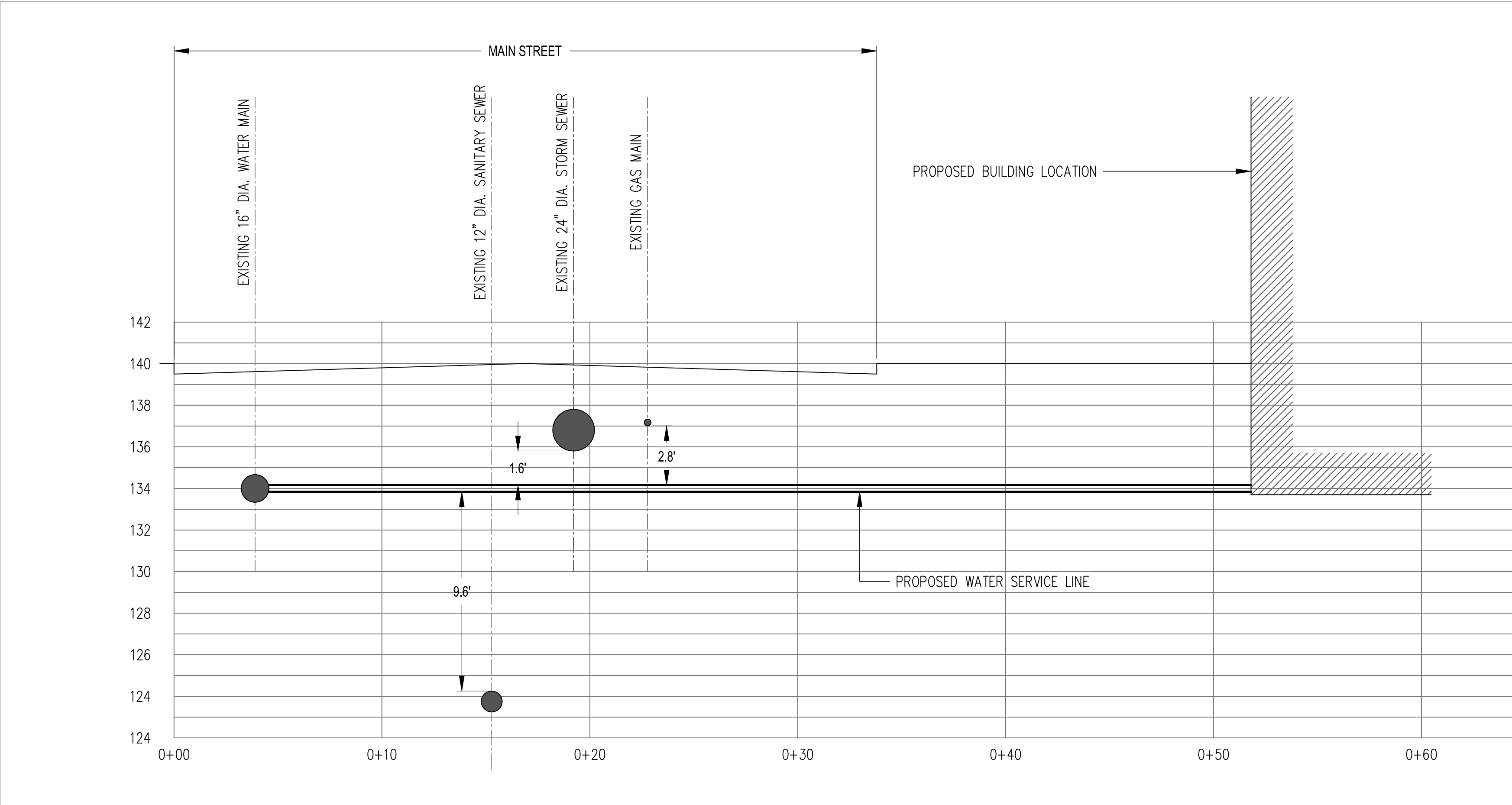
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Revisions	
Project No.	2020.475
License No. 069646	

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ENGINEERING P.C.

3 Van Wyck
Lane Suite 2
Wappingers Falls, New York
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PROJECT
364 Main Street
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8 WATER LINE PROFILE
1" = 4" (HORIZONTAL & VERTICAL)

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ENGINEERING P.C.

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(845)-223-3202

PROJECT
364 Main Street
City of Beacon Dutchess County, New York

DRAWING
Construction Details

SCALE	DRAWN BY	DRAWING NO.
As Noted	MAD	CD.3 13 of 15
DATE	CHECKED BY	
04-02-21	MAD	

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PROJECT

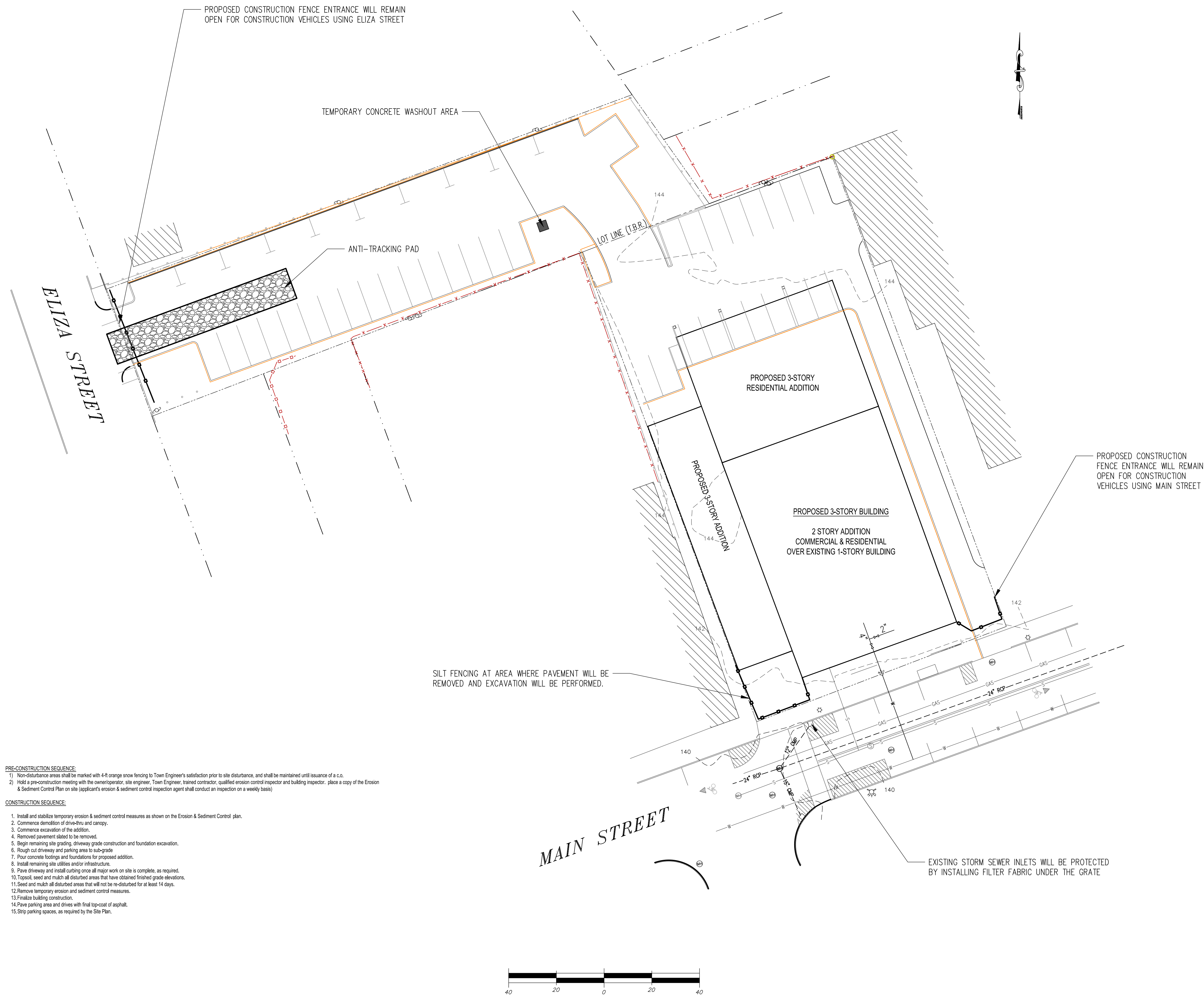
364 Main Street

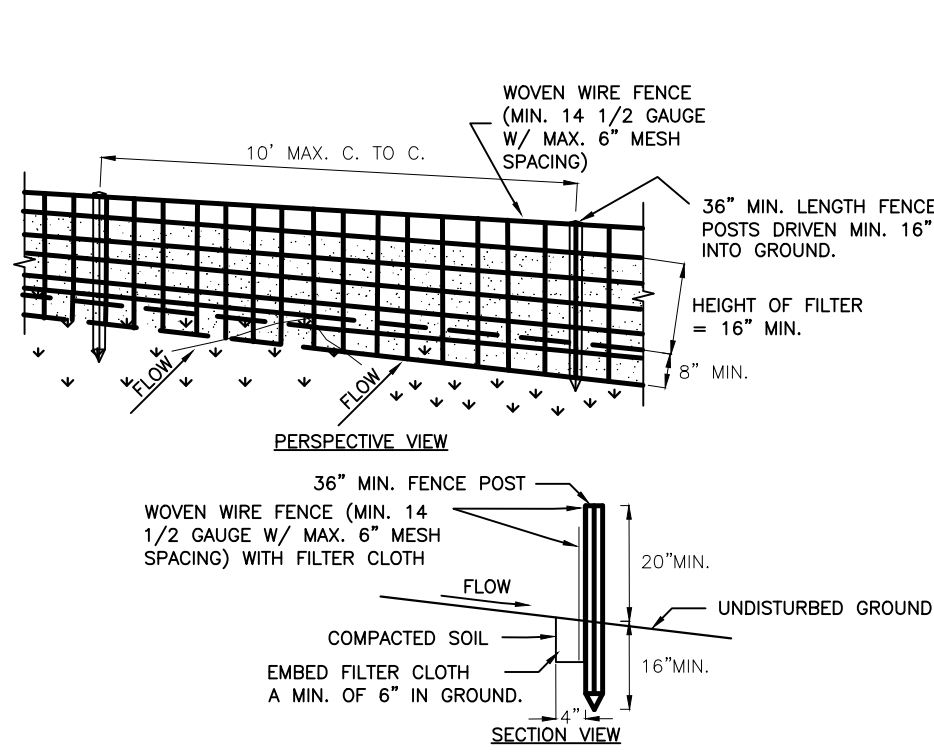
City of Beacon Dutchess County, New York

DRAWING

Erosion & Sediment Control Plan

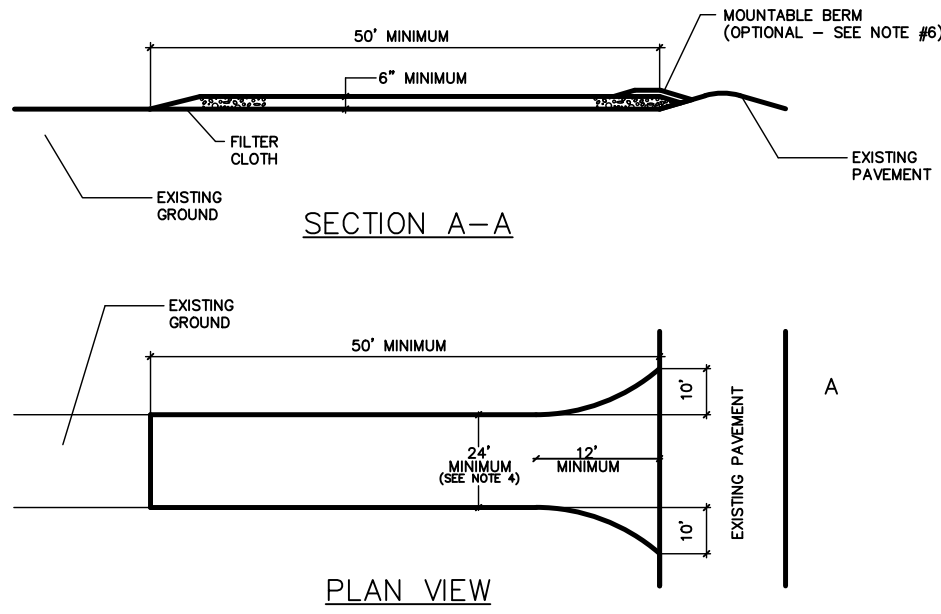
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CONSTRUCTION SPECIFICATIONS

- 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.
- 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, 12 1/2 GAUGE, 6" MAXIMUM MESH OPENING.
- WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUIVALENT.
- PREFABRICATED UNITS SHALL BE GEOFAB, ENVROFENCE, OR APPROVED EQUIVALENT.
- MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.



NOTES:

- STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
 - LENGTH - AS REQUIRED, BUT NOT LESS THAN 50 FEET.
 - THICKNESS - NOT LESS THAN 3/4 (6) INCHES.
 - WIDTH - 12 FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INDESS OR EDRESS OCCURS. 24 FOOT MINIMUM IF SINGLE ENTRANCE TO SITE.
 - FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
 - SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPIED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
 - MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OF FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURE USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
 - WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-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.
 - PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.
1. ALL SEDIMENT & EROSION CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH THESE PLANS & DETAILS. CHANGES, OMISSIONS AND/OR OTHER ALTERATIONS CAN NOT BE MADE TO THESE PLANS WITHOUT THE CONSENT OF THE DESIGN ENGINEER.
2. SILT FENCE SHALL BE INSTALLED AS SHOWN ON THIS DRAWING PRIOR TO BEGINNING ANY CLEARING, GRUBBING AND EARTHWORK.
3. EXPOSED SLOPES AND ALL GRADED AREAS SHALL BE SEEDED WITH THE FOLLOWING GRASS SEED MIX IMMEDIATELY UPON COMPLETION OF ITS CONSTRUCTION, OR IF PLANNED TO BE LEFT UNDISTURBED FOR MORE THAN 21 DAYS, GRASS SEED MIX TO BE APPLIED AT A RATE OF 50 POUNDS PER ACRE IN THE FOLLOWING PROPORTIONS:

KENTUCKY BLUEGRASS 40% CREEPING
RED FESCUE 40% RYE GRASS
20%

- GRASS SEED MIX MAY BE APPLIED BY EITHER MECHANICAL OR HYDROSEEDING METHODS. HYDROSEEDING SHALL BE PERFORMED IN ACCORDANCE WITH THE CURRENT EDITION OF THE NYSDOT STANDARD SPECIFICATIONS, CONSTRUCTION AND MATERIALS, SECTION 810-1.02, METHOD NO. 1.
- SEEDED AREAS SHALL BE MULCHED WITH STRAW AT A RATE OF 2 TONS PER ACRE, OR 30 LBS. PER 1,000 SQUARE FEET, SUCH THAT IT FORMS A CONTINUOUS BLANKET.
- SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE INSPECTED AND MAINTAINED ON A DAILY BASIS BY THE OWNER'S FIELD REPRESENTATIVE.
- DUST SHALL BE CONTROLLED BY SPRINKLING OF WATER OR OTHER APPROVED METHODS AS NECESSARY AS DIRECTED BY THE OWNER'S FIELD REPRESENTATIVE.
- CUTS AND FILLS SHALL NOT ENDANGER ADJOINING PROPERTY, NOR DIVERT SURFACE WATER ONTO ADJOINING PROPERTIES.
- ALL FILLS SHALL BE COMPACTED TO PROVIDE STABILITY OF MATERIALS AND TO PREVENT SETTLEMENT.
- EXCAVATIONS AND FILLS TO BE ROLLED, SEALED AND STABILIZED AT COMPLETION OF EACH DAY'S WORK.
- THE OWNER'S FIELD REPRESENTATIVE SHALL INSPECT THE DOWNSTREAM CONDITIONS FOR EVIDENCE OF SEDIMENTATION ON A WEEKLY BASIS AND AFTER RAINSTORMS.
- AS WARRANTED BY FIELD CONDITIONS, SPECIAL ADDITIONAL SEDIMENTATION AND EROSION CONTROL MEASURES MAY BE ADDED TO THIS PLAN BY THE SITE ENGINEER, TOWN ENGINEER AND HIGHWAY SUPERINTENDENT. ANY REVISIONS TO THIS PLAN MUST BE SUBMITTED TO THE SITE ENGINEER. ANY CHANGES DEEMED NECESSARY TO THIS PLAN SHALL BE DICTATED BY THE SITE ENGINEER AS NECESSARY TO CARRY-OUT THE INTENT OF THIS PLAN.

Construction Waste Management Plan

Construction waste management practices are designed to maintain a clean and orderly work environment. This will reduce the potential for significant materials to come into contact with stormwater. A maintenance schedule shall be developed for these areas. The general contractor shall implement the following practices:

- Material resulting from the clearing and grubbing operation will be stockpiled up slope from adequate sedimentation controls.
- Equipment cleaning, maintenance, and repair areas shall be designated and protected by a temporary perimeter berm.
- The use of detergents for large scale washing is prohibited (i.e., vehicles, buildings, pavement surfaces, etc.).

Spill Prevention and Response

A Spill Prevention and Response Plan shall be developed for the site by the general contractor. The plan shall detail the steps needed to be followed in the event of an accidental spill and shall identify contact names and phone numbers of people and agencies that must be notified.

The plan shall include Material Safety Data Sheets (MSDS) for all materials to be stored on-site. All workers on-site will be required to be trained on safe handling and spill prevention procedures for all materials used during construction. Regular tailgate safety meetings shall be held and all workers that are expected on the site during the week shall be required to attend.

Material Storage

Construction materials shall be stored in a dedicated staging area. The staging area shall be located in an area that minimizes the impacts of the construction materials effecting stormwater quality.

Chemicals, paints, solvents, fertilizers, and other toxic material must be stored in waterproof containers. Except during application, the contents must be kept in trucks or within storage facilities. Runoff containing such material must be collected, removed from the site, treated and disposed at an approved solid waste or chemical disposal facility.

Temporary Concrete Washout Facility

Temporary concrete washout facilities should be located a minimum of 50 ft from storm drain inlets, open drainage facilities, and watercourses. Each facility should be located away from construction traffic or access areas to prevent disturbance or tracking. A sign should be installed adjacent to each washout facility to inform concrete equipment operators to utilize the proper facilities.

When temporary concrete washout facilities are no longer required for the work, the hardened concrete shall be removed and disposed of. Materials used to construct the temporary concrete washout facilities shall be removed from the site and disposed of. Holes, depressions or other ground disturbance caused by the removal of the temporary concrete washout facilities shall be backfilled and/or repaired and seeded and mulched for final stabilization.

Solid Waste Disposal

No solid materials, including building materials, are allowed to be discharged from the site with stormwater. All solid waste, including disposable materials incidental to the major construction activities, must be collected and placed in containers. The containers will be emptied periodically by a contract trash disposal service and hauled away from the site.

Substances that have the potential for polluting surface and/or groundwater must be controlled by whatever means necessary in order to ensure that they do not discharge from the site. As an example, special care must be exercised during equipment fueling and servicing operations. If a spill occurs, it must be contained and disposed so that it will not flow from the site or enter groundwater, even if this requires removal, treatment, and disposal of soil. In this regard, potentially polluting substances should be handled in a manner consistent with the impact they represent.

Water Source

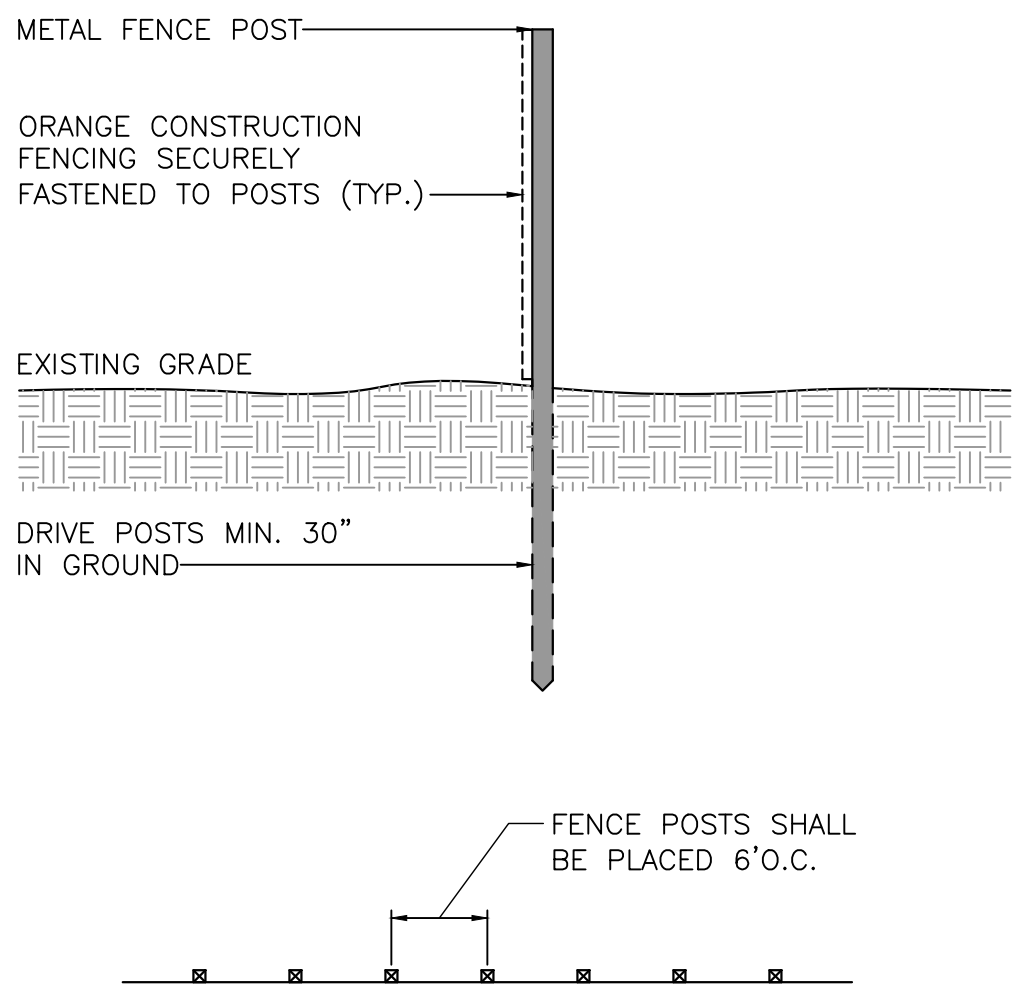
Non-stormwater components of site discharge must be clean water. Water used for construction, which discharges from the site, must originate from a public water supply or private well approved by the Health Department. Water used for construction that does not originate from an approved public supply must not discharge from the site. It can be retained in the ponds until it infiltrates and evaporates.

CONSTRUCTION WASTE MANAGEMENT PLAN

NOT TO SCALE

1 SILT FENCE DETAIL

NOT TO SCALE



3 TYPICAL ORANGE CONSTRUCTION FENCE DETAIL

NOT TO SCALE

EROSION AND SEDIMENT CONTROL MEASURES:

- ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE IN STRICT COMPLIANCE WITH "NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL", AUGUST 2005.
- DAMAGE TO SURFACE WATERS RESULTING FROM EROSION AND SEDIMENTATION SHALL BE MINIMIZED BY STABILIZING DISTURBED AREAS AND BY REMOVING SEDIMENT FROM CONSTRUCTION SITE DISCHARGES.
- SITE PREPARATION ACTIVITIES SHALL BE PLANNED TO MINIMIZE THE SCOPE AND DURATION OF SOIL DISRUPTION.
- PERMANENT TRAFFIC CORRIDORS SHALL BE ESTABLISHED AND "ROUTES OF CONVENIENCE" SHALL BE AVOIDED. STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT ALL POINTS OF ENTRY ONTO THE PROJECT SITE.
- SEEDED AREAS TO BE MULCHED WITH STRAW OR HAY MULCH IN ACCORDANCE WITH VEGETATIVE COVER SPECIFICATIONS.
- THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL MEASURES THROUGHOUT THE COURSE OF CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR CONTROLLING DUST BY SPRINKLING EXPOSED SOIL AREAS PERIODICALLY WITH WATER AS REQUIRED. THE CONTRACTOR IS TO SUPPLY ALL EQUIPMENT AND WATER.
- WHEN ALL DISTURBED AREAS ARE STABLE, ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED.

MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES:

- PERMANENT AND TEMPORARY VEGETATION:
INSPECT ALL AREAS THAT HAVE RECEIVED VEGETATION EVERY SEVEN DAYS. ALL AREAS DAMAGED BY EROSION OR WHERE SEED HAS NOT ESTABLISHED SHALL BE REPAIRED AND RESTABILIZED IMMEDIATELY.
- STABILIZED CONSTRUCTION ENTRANCE:
INSPECT THE ENTRANCE PAD EVERY SEVEN DAYS. CHECK FOR MUD, SEDIMENT BUILD-UP AND PAD INTEGRITY. MAKE DAILY INSPECTIONS DURING WET WEATHER. RESHAPE PAD AS NEEDED FOR DRAINAGE AND RUNOFF CONTROL. WASH AND REPLACE STONE AS NEEDED. THE STONE IN THE ENTRANCE SHOULD BE WASHED OR REPLACED WHENEVER THE ENTRANCE FAILS TO REDUCE MUD BEING CARRIED OFF-SITE BY VEHICLES. IMMEDIATELY REMOVE MUD AND SEDIMENT TRACKED OR WASHED ONTO PUBLIC ROADS BY BRUSHING OR SWEEPING. REMOVE TEMPORARY CONSTRUCTION ENTRANCE AS SOON AS THEY ARE NO LONGER NEEDED TO PROVIDE ACCESS TO THE SITE.
- SILT FENCE:
INSPECT FOR DAMAGE EVERY SEVEN DAYS. MAKE ALL REPAIRS IMMEDIATELY. REMOVE SEDIMENT FROM THE UP-SLOPE FACE OF THE FENCE BEFORE IT ACCUMULATES TO A HEIGHT EQUAL TO 1/3 THE HEIGHT OF THE FENCE. IF FENCE FABRIC TEARS, BEGINS TO DECOMPOSE, OR IN ANY WAY BECOMES INEFFECTIVE, REPLACE THE AFFECTED SECTION OF FENCE IMMEDIATELY.
- INLET PROTECTION:
INSPECT INLET PROTECTION FOR DAMAGE EVERY SEVEN DAYS. MAKE ALL REPAIRS IMMEDIATELY. REMOVE SEDIMENT AS NECESSARY TO PROVIDE FOR ADEQUATE STORAGE VOLUME FOR SUBSEQUENT RAINS.
- DUST CONTROL:
SCHEDULE CONSTRUCTION OPERATIONS TO MINIMIZE THE AMOUNT OF DISTURBED AREAS AT ANY ONE TIME DURING THE COURSE OF WORK. APPLY TEMPORARY SOIL STABILIZATION

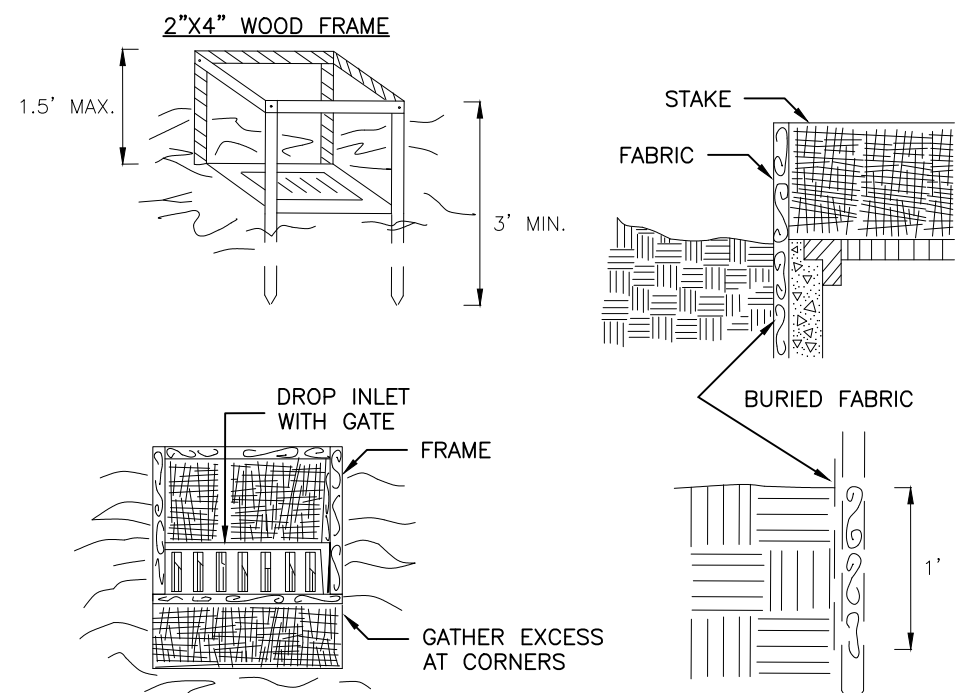
PRACTICES SUCH AS MULCHING, SEEDING, AND SPRAYING (WATER), STRUCTURAL MEASURES (MULCH, SEEDING) SHALL BE INSTALLED IN DISTURBED AREAS BEFORE SIGNIFICANT BLOWING PROBLEMS DEVELOP. WATER SHALL BE SPRAYED AS NEEDED, REPEAT AS NEEDED, BUT AVOID EXCESSIVE SPRAYING, WHICH COULD CREATE RUNOFF AND EROSION PROBLEMS.

5 EROSION & SEDIMENT CONTROL NOTES

NOT TO SCALE

4 SEEDING & MULCHING NOTES

NOT TO SCALE



CONSTRUCTION SPECIFICATIONS

- FILTER FABRIC SHALL HAVE AN EOS OF 40-85. BURLAP MAY BE USED FOR SHORT TERM APPLICATIONS.
- CUT FABRIC FROM A CONTINUOUS ROLL TO ELIMINATE JOINTS, IF JOINTS ARE NEEDED THEY WILL BE OVERLAPPED TO THE NEXT STAKE.
- STAKE MATERIALS WILL BE STANDARD 2" x 4" WOOD OR EQUIVALENT. METAL WITH A MINIMUM LENGTH OF 3 FEET.
- SPACE STAKES EVENLY AROUND INLET 3 FEET APART AND DRIVE A MINIMUM 18 INCHES DEEP. SPANS GREATER THAN 3 FEET MAY BE BRIDGED WITH THE USE OF WIRE MESH BEHIND THE FILTER FABRIC FOR SUPPORT.
- FABRIC SHALL BE EMBEDDED 1 FOOT MINIMUM BELOW GROUND AND BACKFILLED. IT SHALL BE SECURELY FASTENED TO THE STAKES AND FRAME.
- A 2" x 4" WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVER FLOW STABILITY.
MAXIMUM DRAINAGE AREA 1 ACRE

6 FILTER FABRIC DROP INLET PROTECTION DETAIL

NOT TO SCALE

IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW FOR ANY PERSONS TO ALTER THESE PLANS, SPECIFICATIONS, OR REPORTS IN ANY WAY, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR.

	Mark A. Day, PE
	12-21-21
	11-27-21
	08-27-21
Revisions	07-20-21
Project No.	2020.475
	License No. 069646

DAY | STOKOSA
ENGINEERING P.C.

3 Van Wyck
Lane Suite 2
Wappingers Falls, New York
(845)-223-3202

PROJECT
364 Main Street
City of Beacon Dutchess County, New York

DRAWING Erosion & Sediment Control Details		
SCALE As Noted	DRAWN BY MAD	ESC.2 15 of 15
DATE 04-02-21	CHECKED BY MAD	

LANC & TULLY

ENGINEERING AND SURVEYING, P.C.

John J. O'Rourke, P.E., Principal
David E. Higgins, P.E., Principal
John Queenan, P.E., Principal

Rodney C. Knowlton, L.S., Principal
Jerry A. Woods, L.S., Principal

John D. Russo, P.E., Principal
John Lenc, P.E., L.S.
Arthur R. Tully, P.E.

January 6, 2022

Mr. John Gunn
Beacon Planning Board Chair
City of Beacon
1 Municipal Plaza
Beacon, NY 12508

RE: 364 Main Street
Tax No. 6054-29-006819
Subdivision & Site Plan
City of Beacon

Dear Mr. Gunn:

My office has received the following in regard to the above application:

- Correspondence dated December 28, 2021, from Taylor Palmer, Esq. of Cuddy & Feder, LLP.
- Response correspondence dated December 28, 2021, from Aryeh Siegel, Architect.
- Response correspondence dated December 21, 2021, from Day/Stokosa Engineering.
- Response correspondence dated December 20, 2021, from Colliers Engineering.
- Updated Application for Site Plan Approval form.
- A Full Environmental Assessment Form (EAF) dated December 2021.
- Plan titled "Lot Line Change for The Lands of O'Donnell Construction Corp.", with the latest revision date of December 13, 2021, as prepared by Robert Oswald Land Surveying.
- Plans titled "364 Main Street", consisting of Sheets 1 through 5 of 14 with the latest revision date of December 28, 2021, as prepared by Aryeh Siegel, Architect and Landscape Restorations; Sheets 6 through 14 of 14 with the latest revision date of December 21, 2021, as prepared by Day & Stokosa Engineering.

The proposed project is comprised of two parcels, totaling 0.85± acres, with the main parcel being located on Main Street and the 2nd parcel be located on Eliza Street. The parcel on Main Street is located in the "CMS" (Central Main Street) zoning district, whereas the parcel on Eliza Street is located within the "T" (Transitional) zoning district. The applicant is seeking to merge the 2 parcels into a single parcel at this time, and to develop a mixed-use commercial and multi-family residential development, with commercial space

(8,819 sf) and a residential common area (1,607 sf) on the 1st floor, and 20 residential apartments to be located on the 2nd and 3rd floors totaling 24,574 square feet.

Based on our review of the above documents and plans, we would like to offer the following comments:

General Comments:

1. To minimize and alleviate the drainage concerns that were raised by the neighboring parcels, the applicant is now proposing to install a 6" high concrete curb along the northern edge of the existing parking lot so as to re-direct runoff from the project parcel towards Eliza Street.
2. The "Drawing Index" on the first sheet shall be updated to reflect all sheets within the plan set. It should be further noted that there are 14 sheets in the plan set and the sheet numbering should be corrected on all sheets.
3. A construction detail shall be added to the plan for the proposed brick pavers located along the front of the site.

Full EAF:

1. Section D.2., question c.i., should be revised to accurately reflect the anticipated water usage as 4,4019 gallons per day based upon 110 gal/day per bedroom (32 x 110 gpd) and 0.1 gal/day for the commercial area (8,819 x 0.1 gpd).
2. Section D.2., question d.i., shall be updated to reflect the proper flow as noted in the comment above.

Lot Line Change Plan:

1. The plan shall be signed and sealed by the land surveyor.
2. The submitted plan is not to scale. The plan should be resubmitted at proper scale.
3. The plan is illegible due to printing at wrong scale. Prior to plan being resubmitted at proper scale, plan should be checked to ensure that all information is legible on the plan.
4. As this is a "Lot Line Change" plan, the plan shall show the existing property line that is to be changed and/or eliminated.

Site Plan – Sheet 1 of 14:

1. As previously noted, as signage is represented on this sheet, the required signage for the accessible parking shall also be provided on this sheet.
2. The parking stall layout for the for the parking area off of Eliza Street shall be shown on the plan to demonstrate that a total of 42 parking spaces are being provided as noted in the "Parking & Loading" table on this sheet.

Landscape Plan – Sheet 3 of 14:

1. The "Planting Schedule" table on the sheet is partially cutoff and should be rotated 90 degrees so that it is properly oriented on the sheet.
2. The plan shall include construction details for the planting of trees and shrubs.

Building Plans – Sheet 4 of 14:

1. The "Area Summary" table at the top of the sheet shall be rotated 90 degrees so that it properly oriented on the sheet.

Utility Plan – Sheet 6 of 14 (UP.1):

1. A wet tap and valve shall be called out on the plan at the point of connection of the 4" water service line to the existing 16" water main on Main Street.

Lighting Plan – Sheet 7 of 14 (LP.1):

1. A pole mounted fixture is located between two parking stalls, near the entrances to the stalls, in the rear parking lot. It appears that this will be a conflict/hazard for cars maneuvering in and out of these two stalls. We would recommend that the light pole be relocated so as not to impede movement of vehicles, or that these two parking stalls be eliminated and provided as a landscaped island within the parking lot.

Construction Details – Sheet 11 of 14 (CD.2):

1. The "Utility Trench Detail" on the left side of the sheet shall be revised to reflect the proper pavement thickness as noted in the "Pavement Section" detail, or the pavement thicknesses removed and a noted added referencing the "Pavement Section".

2. The "Wet Tap and Valve Installation Detail" and "Taping Sleeve and Valve Installation Detail" shall be revised to show the wet tap valve directly at the wet tap tee. To install the line as indicated on the plan and in the detail would require the shutting down of the 16" water main on Main Street which shall not occur except for emergency situations.

Erosion & Sediment – Sheet 13 of 14 (ESC.1):

1. The plan shows sit fencing running across the entrances from Eliza Street and Main Street. It is unclear as to how silt fence will be installed across an entrance used by vehicles.
2. A note shall be added to the plans that the roads shall be swept daily during construction to ensure that dirt and mud that might tracked out onto the road are not washed down into the City's stormwater collection system.

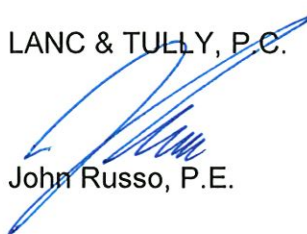
Erosions & Control Details – Sheet 14 of 14 (ESC.2):

1. The "Filter Fabric Drop Inlet Protection" detail shall be revised to reflect the note provided on Sheet 13 of 14 (ESC.1), as the protection cannot be provided as currently shown in the detail.
2. A detail shall be provided for the "Temporary Concrete Washout" called out on Sheet 13 of 14 (ESC.1).

This completes our review at this time. Further comments may be provided based on future submissions. **A written response letter addressing each of the above comments should be provided with the next submission.** If you have any questions, or require any additional information, please do not hesitate to contact our office.

Very truly,

LANC & TULLY, P.C.


John Russo, P.E.

cc: John Clarke, Planner
Jennifer Gray, Esq.
David Buckley, Building Inspector

To: John Gunn, Chair, and the City of Beacon Planning Board

Date: January 6, 2022

Re: **364 Main Street Site Plan and Lot Merger Subdivision**

I have reviewed the December 28, 2021 cover letter from Cuddy+Feder, December 28, 2021 revised Site Plan Application, December 21, 2021 response letter from Day Stokosa Engineering, December 28, 2021 response letter from Aryeh Siegel, Revised December 2021 Long EAF Part 1, December 20, 2021 traffic/parking response letter by Colliers Engineering and Design, December 13, 2021 Lot Line Change sheet, and a 14-sheet Site Plan set, with sheets 1-5 dated December 28, 2021 and the remaining sheets dated December 21, 2021.

Proposal

The applicant is proposing to construct a 3-story, mixed-use building on a 0.54-acre parcel in the Central Main Street (CMS) district, including 8,819 square feet of first floor commercial space and 20 apartments. An adjoining 0.31-acre parcel in the Transitional (T) district will be used for parking and merged into one combined lot by subdivision approval.

Comments and Recommendations

1. On the Sheet 1 Site Plan:

- a. The proposed landscaped area in front the building has been reduced by 4 feet in depth and appears less usable as a space that will enhance street life along the Main Street frontage. The entirely paved storefront entrance area has also been increased, but the proposal's listed landscaped area has remained at 11 percent. The applicant should provide details for how the proposed measurements meet the 10 percent minimum requirement.
- b. The landscaping strip on the eastern side should be extended up to the front building plane, so drivers do not attempt to temporarily park in the wider paved space.
- c. The existing tree well and large street tree in the front sidewalk should be shown on the plans.
- d. The Eliza Street parking area was missing on the plans.
- e. The plan should include at least one bike rack near the front and perhaps another in the rear.
- f. Details should be provided for the rear fence, front gate, benches, and east side railing.

2. On the Sheet 3 Landscape Plan:

- a. The landscaped area in front of the western section should be shown in detail and include some seating.
- b. The Planting Schedule was not printed properly

3. For the Sheet 4 and 5 Building Plans,
 - a. For the Roof Plan, the applicant and Board should consider green roof plantings, solar panels, and a tenant access area.
 - b. The mechanical equipment, stairs, and elevator bulkhead should be shown on the elevations.
4. On the Lighting Plan, the light pole on the line between two parking spaces should be relocated.
5. The printed version of the Lot Line Change sheet has an incorrect scale.

If you have any questions or need additional information, please feel free to contact me.

John Clarke, Beacon Planning Consultant

- c: Dave Buckley, Building Inspector
 Jennifer L. Gray, Esq., City Attorney
 Arthur R. Tully, P.E., City Engineer
 John Russo, P.E., City Engineer
 Taylor Palmer, Esq., Project Attorney
 Aryeh Siegel, Project Architect

To: John Gunn, Chair, and the City of Beacon Planning Board

Date: January 6, 2022

Re: **364 Main Street Site Plan and Lot Merger Subdivision**

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Proposal

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If you have any questions or need additional information, please feel free to contact me.

John Clarke, Beacon Planning Consultant

- c: Dave Buckley, Building Inspector
 Jennifer L. Gray, Esq., City Attorney
 Arthur R. Tully, P.E., City Engineer
 John Russo, P.E., City Engineer
 Taylor Palmer, Esq., Project Attorney
 Aryeh Siegel, Project Architect

January 7, 2022

Mr. John Gunn, Chairman
Beacon Planning Board
City of Beacon City Hall
1 Municipal Plaza
Beacon, NY 12508

RE: Site Plan, Traffic and Parking Study Review #4 for Proposed Commercial and Multi-family Mixed-use Redevelopment, 364 Main Street, City of Beacon, Dutchess County, New York; CM Project No. 121-295

Dear Mr. Gunn:

Creighton Manning Engineering, LLP (CM) has performed a review of the documents enclosed in the “364 Main Street 12.28.21 PB Submission with Exhibits and Attachments (FULL)” (Submittal Package). Since CM’s third review letter, dated December 9, 2021, the project has been modified such that the commercial space on the first floor is 25 square feet larger and the residential common area on the first floor is 122 square feet smaller. Therefore, the proposed project now consists of an 8,819-square-foot commercial space and a 1,607-square-foot residential common space on the first floor, 20 residential units on the two new upper floors, and 42 parking spaces. Site access will be provided via the existing ingress-only driveway on Main Street and one right-in/right-out driveway on Eliza Street.

Below, please find our follow-up comments and any additional comments regarding the submitted materials (the newest comments are bolded):

Site Plan

Review #1 Comments

1. CM notes that there is trash enclosure proposed in the parking lot. CM recommends that a truck circulation exhibit be provided so the route can be reviewed. The truck circulation exhibit should also include the path of a typical vehicle used for residential “move-in” and “move-out” activities.
 - *Colliers’ Response: The requested truck circulation exhibit will be included in the Site Plans.*
 - **CM Review #2 Follow-Up Comment:** A Site Plan was not included in the aforementioned submittal package considered for review. Please submit Site Plan to confirm your response.
 - *Colliers’ Response: The request truck circulation paths for a garbage truck for trash collection and a 30 ft. single unit truck for move-in/move-out activities have been included on the Site Plans.*
 - **CM Review #3 Follow-Up Comment:** The Submittal Package includes a Truck Movement Plan, prepared by Day Stokosa Engineering PC, depicting a refuse vehicle accessing the garbage enclosure by fronting into the site and backing out. Because the refuse truck will be conducting a reversing maneuver onto Eliza Street, CM recommends that the refuse pickup be restricted to off-peak hours to avoid conflicts with drivers and pedestrians. Attached is a site plan submitted separately from the Submittal Package depicting a 30 ft. single unit box truck maneuvering in and out of the site. Can the Applicant confirm that a 30 ft. single unit box truck is the largest non-emergency vehicle anticipated to enter the site? Additionally, based on the turning maneuvers indicating that parking spaces adjacent to the building will be blocked, will there be a designated loading/unloading area for the commercial tenant to receive goods?
 - *Colliers’ Response: The Applicant agrees to restrict refuse pickup operations to off-peak hours as suggest by CM. The referenced plan depicting a Single Unit 30 ft. box truck was omitted from the previous submission but was provided to Creighton Manning directly for their review. This plan is attached to this letter for the Boards review. Based on the size of the proposed apartments as well as the size and anticipated uses of the commercial spaces, the Applicant does not anticipate a need for vehicles larger than a 30 ft. box truck for moving or delivery purposes. There is no designated loading area proposed within the Site parking lots. Deliveries and moving are short duration operations that are not anticipated to have a significant impact on*

the on-site parking. If necessary, the Applicant could, in the future, restrict deliveries and moving activities to certain hours of the day to ensure minimal impacts to parking.

- **CM Review #4 Follow-Up Comment:** CM recommends a loading area to reduce conflicts between moving/delivery vehicles and access to parking spaces. CM defers to the City of Beacon Building Inspector to opine on whether a loading zone is required based on the differences in City of Beacon Zoning Code Sections 223-41.18 and Section 223-26.H.2.a.
2. CM recommends that (a) a No Left Turn sign be installed at the driveway exit approach to Eliza Street and (b) a One Way sign be installed across from the Eliza Street driveway exit.
- *Colliers' Response: A "No Left Turn" sign (MUTCD Sign No. R3-2) and a "One-Way" (MUTCD Sign No. R6-1) sign will be installed at the Project driveway location with Eliza Street. These signs are been reflected in the Site Plans.*
 - **CM Review #2 Follow-Up Comment:** A Site Plan was not included in the aforementioned submittal package considered for review. Please submit Site Plan to confirm your response.
 - *Colliers' Response: The proposed "No Left Turn" and "One-Way" signs to be installed at the Eliza Street driveway are now reflected on the Site Plans.*
 - **CM Review #3 Follow-Up Comment:** The Submittal Package includes a Site Plan depicting the requested "No Left Turn" sign. Attached is a site plan submitted separately from the Submittal Package depicting the requested "One-Way" sign on Eliza Street. Upon review, CM has no further comment regarding the requested signs.
 - *Colliers' Response: The "One-Way" sign on Eliza Street was previously overwritten on the Site Plan by the Revision Block. This has been corrected on the Site plan included in this submission.*
 - **CM Review #4 Follow-Up Comment:** Comment addressed.
3. CM recommends that the applicant investigate the need for a Stop sign on the Veterans Place approach to Main Street, across from the subject property.
- *Colliers' Response: A new "Stop" sign (MUTCD Sign No. R1-1) will be installed on the Veteran Place approach by the Applicant as part of the Project. This is reflected in Exhibit 1R below.*
 - **CM Review #2 Follow-Up Comment:** Comment addressed.
 - *Colliers' Response: The proposed "Stop" sign to be installed on the Veterans Road approach is now reflected on the Site Plans.*
 - **CM Review #3 Follow-Up Comment:** Comment addressed.
4. CM acknowledges the applicant's concern over limited sight distance for left turns onto Main Street due to the existing building immediately to the west (see photo at right). CM recommends that a crash history analysis be conducted at and immediately adjacent to the intersection of Main Street and Veterans Place, inclusive of the site driveway, to identify safety concerns, especially those involving pedestrians and bicyclists, to further inform this matter. It is important that the crash data include a three-year period while the bank was in normal operation. Regardless of the crash history analysis, the applicant should propose treatments at both Main Street driveways to enhance pedestrian safety since the expansion of the site will increase vehicle-pedestrian interaction at these locations.
- *Colliers' Response: The crash history data has been requested by from the City of Beacon and NYSDOT but has not yet been received. However, since the existing exit driveway, which was previously proposed to remains as part of the Project, is now proposed to be eliminated, it is the opinion of Colliers Engineer & Design that this crash analysis is no longer necessary.*
 - **CM Review #2 Follow-Up Comment:** CM agrees that a crash analysis is no longer necessary given that the egress driveway on Main Street is being eliminated. Furthermore, Colliers is proposing pedestrian safety

countermeasures in conjunction with recently completed pedestrian safety countermeasures constructed separate of the subject project under review.

- *Colliers' Response: No further response required. See further discussion regarding pedestrian safety countermeasures in response to Traffic Impact Study Comment #6 below.*
- **CM Review #3 Follow-Up Comment:** No further comment.

5. CM recommends that a Do Not Enter sign be installed at the Main Street egress-only driveway facing Veterans Place.

- *Colliers' Response: The existing egress only driveway is now proposed to be eliminated and therefore additional signage at this driveway location is no longer required.*
- **CM Review #2 Follow-Up Comment:** Comment addressed.

6. Given the mixed-use nature of the project, how will the off-street parking operate? Will parking spaces be assigned to residents and patrons/employees of the retail space? If so, please delineate this on the plan and detail any applicable signs.

- *Colliers' Response: The parking spaces are not proposed to be specifically assigned to residents and/or patrons/employees of the commercial space.*
- **CM Review #2 Follow-Up Comment:** CM recommends that the spaces for the residential use be designated for residents-only. This would help eliminate the event of a resident needing to turn around inside the parking lot and exit via the egress-only driveway due to a spot not being available.
- *Colliers' Response: It is the Applicant's preference to not assign parking spaces to the residents of the Project. Assigning of parking spaces to the residential units will eliminate the ability for shared parking between the residential and commercial uses of the project. The provision of a turnaround area, which is discussed further in Response to Item 8 below, will accommodate vehicles needing to turn around inside the parking lot and exit via the egress-only driveway due to a spot not being available.*

It is also anticipated that residents of the Project will learn to utilize the Main Street access to access the parking behind the building first to avoid the need for this turn-around maneuver.

- **CM Review #3 Follow-Up Comment:** CM understands there is no requirement that the off-street parking spaces be assigned and therefore defers to the Board as to its preference on this matter. There are benefits and drawbacks to assigning spaces versus leaving them unassigned—CM understands the value and flexibility of shared parking and also the desire of future residents to have a predictable parking experience. If not now as part of the site plan, the applicant could decide to assign parking spaces in the future, once the building is occupied, to address the issue then.
- *Colliers' Response: It is the Applicant's preference to have all parking be unassigned at this time. Understanding the possible desire for tenants to have predictability in available parking the Applicant acknowledges that assigned parking may be beneficial in the future, but would prefer the flexibility to determine the need for this as part of the overall operation of the facility after occupancy.*
- **CM Review #4 Follow-Up Comment:** No further comment.

7. The applicant should consider including at least one electric vehicle (EV) charging station on the site.

- *Colliers' Response: The installation of an electric vehicle charging station is not proposed as part of the Project.*
- **CM Review #2 Follow-Up Comment:** Comment addressed.

8. The one-way inbound driveway creates a dead-end parking condition near the northeast corner of the site. The applicant should consider improving this condition to avoid inefficient site circulation.

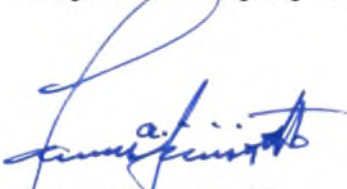
- *Colliers' Response: This item is being reviewed as part of the Site Plans. A sufficient area for vehicles to turn around in the event that parking on the Main Street parcel is full will be provided and diagrammed as part of the a future Site Plan submission.*
- **CM Review #2 Follow-Up Comment:** A Site Plan was not included in the aforementioned submittal package considered for review. Please submit Site Plan to confirm your response.
- *Colliers' Response: As shown on the Site Plan the west side building extension has been stepped to the south allowing the two western most parking spaces directly behind the building to also be stepped to the south by approximately 8 ft. this provides additional area for both a passenger vehicle or a moving vehicle that may need to turn around behind the building to do so. The vehicle turning paths for both a passenger car and a 30 ft. single unit truck show that this area will sufficiently accommodate the required vehicle maneuvers to turn around in this parking area and return to the Eliza Street parcel parking area.*
- **CM Review #3 Follow-Up Comment:** The Submittal Package includes a site plan depicting a passenger vehicle conducting a turnaround maneuver. Attached is a site plan submitted separately from the Submittal Package depicting a 30 ft. single unit box truck maneuvering in and out of the site. Can the Applicant confirm that a 30 ft. single unit box truck is the largest non-emergency vehicle anticipated to enter the site? Additionally, based on the turning maneuvers indicating that parking spaces adjacent to the building will be blocked, will there be a designated loading/unloading area for the commercial tenant to receive goods?
- *Colliers' Response: See response to Item 1 Above.*
- **CM Review #4 Follow-Up Comment:** **CM recommends a loading area to reduce conflicts between moving/delivery vehicles and access to parking spaces. CM defers to the City of Beacon Building Inspector to opine on whether a loading zone is required based on the differences in City of Beacon Zoning Code Sections 223-41.18 and Section 223-26.H.2.a.**

Traffic Impact Study

A revised traffic impact study was not included in the Submittal Package. As noted, the proposed project has been further refined such that the proposed commercial space is 25 square feet larger and the residential common area on the first floor is 122 square feet smaller while the number of residential units – 20 – remain the same. Because this reduction would not result in an increase in site trip generation based on the most recent Traffic Impact Study, which evaluated a 9,451-square-foot commercial space and 20 residential units, CM does not require a revised Traffic Impact Study to be prepared and submitted by the applicant.

If you have any questions about the above comments, please do not hesitate to contact our office at (914) 800-9201. Respectfully,

Creighton Manning Engineering, LLP



Frank A. Filiciotto, PE
Associate



Starke W. Hipp, PE
Project Engineer

**ATTACHMENT TO
NEGATIVE DECLARATION
REASONS SUPPORTING DETERMINATION**

**APPLICATION FOR SITE PLAN AND SUBDIVISION (LOT MERGER)
FOR 364 MAIN STREET**

Parcel Nos. 6054-29-006819 and 6054-29-004836

CONCLUSIONS

This Part 3 analysis has been prepared to address all relevant areas of environmental concern as identified in the review by the Planning Board. This Part 3 analysis will discuss and explain the analysis of the potential impacts, and why a particular element of the proposed action will not result in a significant adverse environmental impact. Such analysis is appropriately set forth in Part 3, even if the potential impact was identified as “none” or “small.” Based upon a review of Parts 1 and 2 of the Short Environmental Assessment Form (EAF) and all other application materials that were submitted in support of the Proposed Action, along with reports from City staff and consultants, information from involved and interested agencies, and information from the public, the Planning Board, acting as Lead Agency, provides the following rationale for its SEQRA Determination.

Project Description:

The Proposed Action is the construction of two (2) stories on an existing one (1) story commercial building and the construction of a three (3) story addition to the rear and a three (3) story addition to the west of the existing building for a commercial and multi-family mixed-use building fronting on Main Street. The first story is proposed to consist of 8,819 s.f. of commercial space and 1,607 s.f. of residential common area space. The second and third floors are proposed to include a total of 25,120 s.f. of multi-family residential space, consisting of twenty (20) apartments with thirty-two (32) total bedrooms. The Proposed Action includes the merger of two (2) parcels, one lot having 0.54 acres and the other having 0.31 acres totaling 0.85-acres. A total of forty-two (42) off-street parking spaces are proposed and the site will maintain two existing driveway connections to Main Street and Eliza Street while eliminating a third driveway connection on Main Street at the west side of the Site. The 0.54 acre parcel on Main Street is located in the Central Main Street “CMS” Zoning District and designated on the Tax Map as Parcel No. **6054-29-006189**. The 0.31 acre parcel on Eliza Street is located in the Transitional “T” Zoning District and designated on the Tax Map as Parcel No. **6054-29-004836** (collectively, the “Property”).

The Proposed Action is an Unlisted action. On August 10, 2021, the Planning Board declared itself Lead Agency circulated its Notice of Intent to act as Lead Agency, received no objections and proceeded to review the application pursuant to SEQRA.

Summary of Rationale for Negative Declaration

The Proposed Action will not result in any significant adverse impacts on the environment. In summary:

- **Impact on Land: The Proposed Action will not have a significant adverse environmental impact as a result of any physical change to the project site.**

The Property is in the CMS and T Zoning Districts and currently improved with a single-story commercial building, parking and driveways associated with two curb cuts on Main Street and one curb cut on Eliza Street. The Proposed Action would involve the construction of a three-story mixed-use building and associated parking. The proposed mixed-use building will utilize the existing 1-story building and will involve typical grading and site work associated with such construction. There are no wetlands, water bodies, very steep slopes or other environmentally sensitive areas on the Property. The Proposed Action will not have a significant adverse environmental impact as a result of physical changes to the Property.

- **Impact on Geological Features: The Proposed Action will not have a significant adverse environmental impact on any unique or unusual land forms on the site.**

There are no unique geological features on the Property.

- **Impacts on Surface Water and Groundwater: The Proposed Action will not have a significant adverse environmental impact on surface or groundwater quality or quantity.**

The proposed commercial and residential land uses are generally not associated with the discharge of contaminants into aquifers or other groundwater sources. There will be no bulk storage of petroleum or chemicals on-site. The Project does not include or require wastewater discharged to groundwater. The Project will be connected to the existing public water distribution and sanitary sewer systems. The total anticipated water and sewer demand for the Proposed Action is 4,401.9 gallons per day (gpd) based upon 110 gal/day per bedroom (32 x 110) and 0.1 gal/day for the commercial area (8,819 x 0.1). Adequate water supply and sewer capacity exist for these additional flows.

For these reasons, the Proposed Action will not result in any significant adverse impact to surface or groundwater quality or quantity.

- **Impact on Flooding: The Proposed Action will not have a significant adverse environmental impact on or alter drainage flows or patterns, or surface water runoff.**

According to the EAF the Property is not located within a regulated flood plain and there are no wetlands. The Applicant has reduced the amount of impervious land coverage by adding landscaping to promote ground percolation in lieu of sheet flow off of the site during rain events or snowmelt. The Project also includes roof drains to direct stormwater runoff to the municipal stormwater sewer system, along with a 6" concrete curb along the northern edge of the existing parking lot to redirect runoff from the project parcel towards Eliza Street.

The Planning Board received comments from the public that one or more properties to the north of the subject Property receives stormwater runoff during storm events. To the extent the subject Property is contributing to the existing condition the proposed stormwater controls are designed to direct stormwater runoff from the site to the municipal stormwater sewer system and alleviate flows to nearby properties. However, based on a review by the Project

Engineer and the City Engineer it was determined that it is unlikely that the Property is contributing to the existing water conditions described to occur north of the Property.

For these reasons and those stated above, the Proposed Action will not have a significant adverse impact on drainage flows or patterns, or surface water runoff.

Impact on Air: The Proposed Action will not have a significant adverse environmental impact on air quality.

Construction activities associated with grading and excavation could result in temporary air quality impacts. Air quality in the area, however, is not expected to be significantly impacted by project construction because the construction activities will be temporary and confined to the Property. Construction vehicles will emit certain air pollutants through engine exhaust. There is also the potential for fugitive dust to be created during the construction period from site preparation activities, including removal of existing impervious surfaces and vegetation, and site grading. Fugitive dust emissions will be mitigated by wetting and stabilizing soils to suppress dust generation. Other dust suppression methods will include the spraying of soil stockpiles during dry periods and covering trucks carrying solid and other dry materials. These unavoidable short-term impacts to air quality will cease upon project completion. Construction will be conducted in accordance with all applicable federal, state and local codes. It is anticipated that nearby properties will experience temporary fugitive dust and an elevation in vehicle emissions from construction vehicles throughout occasional periods during construction of the proposed project. This is a temporary, construction-related, unavoidable impact that is not significant.

For these reasons, the Proposed Action will not have a significant adverse environmental impact on air quality.

- **Impact on Plants and Animals: The Proposed Action will not have a significant adverse environmental impact on flora or fauna.**

The EAF indicates that the Property may contain or serve as habitat for the Indiana Bat. However, no trees are proposed to be removed. The Proposed Action will increase the amount of landscaped area on the site as compared to the existing condition.

For these reasons, the Proposed Action will not have a significant adverse environmental impact on flora or fauna.

- **Impact on Agricultural Resources: The Proposed Action will not have a significant adverse environmental impact on agricultural resources.**

There are no agricultural resources in the vicinity of the Property.

- **Impact on Aesthetic Resources: The Proposed Action will not have a significant adverse environmental impact on aesthetic resources.**

The Proposed Action will not result in the obstruction, elimination or significant screening of one or more officially designated scenic views, or visible from any publicly accessible vantage points either seasonally nor year around.

For these reasons, the Proposed Action will not have a significant adverse environmental impact on aesthetic resources.

- **Impact on Historic and Archeological Resources: The Proposed Action will not have a significant adverse environmental impact on historic or archeological resources.**

The Proposed Action will not have a significant adverse impact on historic or archeological resources. The EAF mapper identified several eligible national or state historic sites including the Empire National Bank, Roosa Commercial, Stavros Commercial, Angelo Commercial, Dumke Commercial, Memorial Building, the Madam Brett Homestead and the US Post Office but the nature of the area as a developed commercial and mixed-use neighborhood makes impacts to archeological resources unlikely and not significant. No archaeological or historic resources have been identified on the Property and the Property is not located within the City's Historic District and Landmark Overlay Zone, and therefore a Certificate of Appropriateness is not required. The Proposed Action is in character with the neighboring structures and will not have any significant impact on the historic character of nearby eligible historic sites.

For these reasons, the Proposed Action will not have a significant adverse impact on historic or agricultural resources.

- **Impact on Open Space and Recreation: The Proposed Action will not have a significant adverse environmental impact on open space and recreation.**

The area of the Proposed Action is not designated as open space by the City of Beacon. The Proposed Action will not result in the loss of a current or future recreational resource, eliminate significant open space, or result in loss of an area now used informally by the community as an open space resource. A recreation set aside or fee may be required which will be used for the future need for park and recreational opportunities in the City of Beacon.

For these reasons, the Proposed Action will not have a significant adverse impact on open space and recreation.

- **Impact on Critical Environmental Areas: The Proposed Action will not have a significant adverse environmental impact on Critical Environmental Areas.**

The Proposed Action is not located in a Critical Environmental Area.

- **Impact on Transportation: The Proposed Action will not have a significant adverse environmental impact on transportation.**

The construction of twenty (20) residential apartments with a total of thirty-two (32) bedrooms above 8,819 s.f commercial space will not result in a significant adverse traffic impact. The

Proposed Action includes a parking lot with forty-two (42) off-street parking spaces and site access will be provided via the existing ingress-only driveway on Main Street and one right-in/right-out driveway on Eliza Street. The Applicant conducted an extensive review of traffic and parking impacts associated with the Proposed Action and submitted a Traffic and Parking Study, prepared by Colliers Engineer and Design, dated July 26, 2021 and updated August 30, 2021 and October 25, 2021. The Traffic and Parking Study was reviewed by the City's Traffic Consultant Creighton Manning and addressed traffic generation, capacity analysis, traffic and pedestrian safety, truck movement and site circulation.

Manual traffic counts were collected by Colliers on Thursday, June 3, 2021 and Saturday, June 5, 2021 for the Weekday AM (8:30-9:30 AM) and PM (3:45-4:45 PM) Peak periods and the Saturday Midday Peak (2:00-3:00 PM) period to determine existing traffic volume conditions at the study area intersections. The intersections studied are: (1) Fishkill Avenue/Teller Avenue (NYS Route 52) and Main Street, and (2) Main Street and Veterans Place. In the October 25, 2021 update to the Traffic and Parking Study, Colliers estimated the traffic to be generated by the Project using standard industry information published by the Institute of Transportation Engineers (ITE) as contained in the most recent edition of the report entitled "Trip Generation," 11th Edition, 2021, based on Land Use Category 220 (Multifamily Housing – Low-Rise) and Land Use Category 820 (Retail). When the projected traffic volume was applied to the 2026 Build condition it was determined that the Project would generate a total of 37 trips in the Weekday AM Peak period, 84 trips in the Weekday PM Peak period, and 80 trips in the Saturday Midday Peak period. These totals are below NYSDOT and ITE standard threshold of 100 vehicle trips which suggests the Project is not anticipated to result in a significant impact on traffic operating conditions near the Site.

Colliers then applied the trip generation data and the existing traffic volume counts to conduct a capacity analysis to assess whether the local roadways can accommodate the increase in vehicle trips. This analysis took into account the removal of the existing egress-only curb cut on Main Street and is shown on Table No. 2R in the October 25, 2021 update to the Traffic and Parking Study prepared by Colliers. The capacity analysis demonstrates there will be no significant adverse impacts to Levels of Service in the study area as a result of the Proposed Action.

Based on the Traffic and Parking Study and the City Traffic Consultant's review of same, the project plans were revised to include specific features such as: (1) a "No Left Turn" sign for the driveway exit onto Eliza Street; (2) a "One-Way" sign across from the driveway on Eliza Street; (3) a "Stop Sign" on the Veteran's Place approach to Main Street; (4) removal of the existing egress only curb cut onto Main Street; (5) pedestrian safety countermeasures; and (6) a turnaround on-site to avoid inefficient site circulation. In addition, to avoid conflicts with drivers and pedestrians, refuse pick up operations will be limited to off-peak hours due to the necessity for the refuse truck to back-out onto Eliza Street from the site.

Regarding parking, the City of Beacon Zoning Code requires 39 off-street parking spaces for the Proposed Action and the Applicant is proposing 42 off-street parking spaces. Thus, the Site Plan is compliant with the requirements of the Zoning Code.

The City Traffic Consultant reviewed the submissions of the Applicant, concurred with the approach and methodology utilized by Colliers and made certain recommendations concerning signage and operations.

The Planning Board has reviewed all relevant documents including the Traffic and Parking Study, as updated, further submissions by Colliers, and the City Traffic Consultant's reviews of same.

Based on this review, the Planning Board finds that the Proposed Action will not have a significant adverse impact on traffic, parking or transportation.

- **Impact on Energy: The Proposed Action will not have a significant adverse environmental impact on energy.**

The existing energy infrastructure will adequately serve the additional demand associated with the Proposed Action. The Proposed Action does not require a new, or an upgrade to any existing substation. For these reasons, the Proposed Action will not have a significant adverse impact on energy.

- **Impact on Noise, Odor and Light: The Proposed Action will not have a significant adverse environmental impact as a result of objectionable odors, noise or light.**

The Proposed Action is not anticipated to generate any noxious odors. Outdoor lighting will be consistent with the neighborhood and typical mixed-use lighting. Noise impacts associated with the proposed Project will be limited to temporary impacts generated during construction. Temporary noise impacts associated with construction will be mitigated by limiting construction activities to the hours between 7:00 a.m. and 7:00 p.m. It is not anticipated that blasting will be necessary during the proposed construction. If blasting does become necessary, it will be performed in accordance with all applicable state and local requirements. In addition, there will be no significant noise impacts post-construction.

For these reasons, the Proposed Action will not have a significant adverse environmental impact as a result of objectionable odors, noise or light.

- **Impact on Human Health: The Proposed Action will not have a significant adverse environmental impact on human health from exposure to new or existing sources of contaminants.**

The proposed commercial and residential land uses are generally not associated with significant adverse impacts on human health from exposure to new or existing sources of contaminants. The EAF Mapper Summary Report identified two DEC Remediation Sites as being located within 2,000 feet of the Property: (1) C314118, a Class N site, at 1 East Main Street, and (2) B00130, a Class C site, at 33 North Cedar Street. A review of reports from DEC's Environmental Site Remediation Database reveal that the B00130 site has been closed out. A remediation plan was generated and approved in 2007 for C314118, however, the volunteer terminated the Brownfield Cleanup Agreement (BCA) without implementing the investigation work plan. C314118 is located approximately 1,375 feet from the Property and is unlikely to impact the Proposed Action.

Any contamination discovered during construction which requires remediation shall be remediated in accordance with all State and local laws, rules and regulations.

For these reasons, the Proposed Action will not have a significant adverse environmental impact on human health from exposure to new or existing sources of contaminants.

- **Consistency with Community Plans and Community Character: The Proposed Action is not inconsistent with adopted community plans and community character.**

The Proposed Action is generally consistent with the Comprehensive Plan and City Zoning Code and consistent with the character of the existing neighborhood.

Based upon this information and the information in the Environmental Assessment Form and all other documents and information in the record, the Planning Board finds that the Proposed Action will not have any significant adverse impacts upon the environment. This Negative Declaration indicates that no environmental impact statement need be prepared and that the SEQRA process is complete.

Adopted: January 11, 2022
Beacon, New York

Motion by _____, seconded by _____:

Kevin Byrne
J.C. Calderon
Karen Quiana
Jill Reynolds

Voting:
Voting:
Voting:
Voting:

Len Warner
Randall Williams
John Gunn, Chairman Voting:

Voting:
Voting:

Full Environmental Assessment Form
Part 2 - Identification of Potential Project Impacts

Agency Use Only [If applicable]
Project : 364 Main St. Site Plan & Lot Merger
Date : January 11, 2022

Part 2 is to be completed by the lead agency. Part 2 is designed to help the lead agency inventory all potential resources that could be affected by a proposed project or action. We recognize that the lead agency's reviewer(s) will not necessarily be environmental professionals. So, the questions are designed to walk a reviewer through the assessment process by providing a series of questions that can be answered using the information found in Part 1. To further assist the lead agency in completing Part 2, the form identifies the most relevant questions in Part 1 that will provide the information needed to answer the Part 2 question. When Part 2 is completed, the lead agency will have identified the relevant environmental areas that may be impacted by the proposed activity.

If the lead agency is a state agency **and** the action is in any Coastal Area, complete the Coastal Assessment Form before proceeding with this assessment.

Tips for completing Part 2:

- Review all of the information provided in Part 1.
- Review any application, maps, supporting materials and the Full EAF Workbook.
- Answer each of the 18 questions in Part 2.
- If you answer “**Yes**” to a numbered question, please complete all the questions that follow in that section.
- If you answer “**No**” to a numbered question, move on to the next numbered question.
- Check appropriate column to indicate the anticipated size of the impact.
- Proposed projects that would exceed a numeric threshold contained in a question should result in the reviewing agency checking the box “Moderate to large impact may occur.”
- The reviewer is not expected to be an expert in environmental analysis.
- If you are not sure or undecided about the size of an impact, it may help to review the sub-questions for the general question and consult the workbook.
- When answering a question consider all components of the proposed activity, that is, the “whole action”.
- Consider the possibility for long-term and cumulative impacts as well as direct impacts.
- Answer the question in a reasonable manner considering the scale and context of the project.

1. Impact on Land Proposed action may involve construction on, or physical alteration of, the land surface of the proposed site. (See Part 1. D.1) <i>If “Yes”, answer questions a - j. If “No”, move on to Section 2.</i> ☐ NO ☒ YES			
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may involve construction on land where depth to water table is less than 3 feet.	E2d	☒	☐
b. The proposed action may involve construction on slopes of 15% or greater.	E2f	☒	☐
c. The proposed action may involve construction on land where bedrock is exposed, or generally within 5 feet of existing ground surface.	E2a	☒	☐
d. The proposed action may involve the excavation and removal of more than 1,000 tons of natural material.	D2a	☒	☐
e. The proposed action may involve construction that continues for more than one year or in multiple phases.	D1e	☒	☐
f. The proposed action may result in increased erosion, whether from physical disturbance or vegetation removal (including from treatment by herbicides).	D2e, D2q	☒	☐
g. The proposed action is, or may be, located within a Coastal Erosion hazard area.	B1i	☒	☐
h. Other impacts: _____ _____		☒	☐

2. Impact on Geological Features The proposed action may result in the modification or destruction of, or inhibit access to, any unique or unusual land forms on the site (e.g., cliffs, dunes, minerals, fossils, caves). (See Part 1. E.2.g) ☒ NO ☐ YES <i>If "Yes", answer questions a - c. If "No", move on to Section 3.</i>			
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. Identify the specific land form(s) attached: _____	E2g	☐	☐
b. The proposed action may affect or is adjacent to a geological feature listed as a registered National Natural Landmark. Specific feature: _____	E3c	☐	☐
c. Other impacts: _____		☐	☐

3. Impacts on Surface Water The proposed action may affect one or more wetlands or other surface water bodies (e.g., streams, rivers, ponds or lakes). (See Part 1. D.2, E.2.h) ☐ NO ☒ YES <i>If "Yes", answer questions a - l. If "No", move on to Section 4.</i>			
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may create a new water body.	D2b, D1h	☒	☐
b. The proposed action may result in an increase or decrease of over 10% or more than a 10 acre increase or decrease in the surface area of any body of water.	D2b	☒	☐
c. The proposed action may involve dredging more than 100 cubic yards of material from a wetland or water body.	D2a	☒	☐
d. The proposed action may involve construction within or adjoining a freshwater or tidal wetland, or in the bed or banks of any other water body.	E2h	☒	☐
e. The proposed action may create turbidity in a waterbody, either from upland erosion, runoff or by disturbing bottom sediments.	D2a, D2h	☒	☐
f. The proposed action may include construction of one or more intake(s) for withdrawal of water from surface water.	D2c	☒	☐
g. The proposed action may include construction of one or more outfall(s) for discharge of wastewater to surface water(s).	D2d	☒	☐
h. The proposed action may cause soil erosion, or otherwise create a source of stormwater discharge that may lead to siltation or other degradation of receiving water bodies.	D2e	☒	☐
i. The proposed action may affect the water quality of any water bodies within or downstream of the site of the proposed action.	E2h	☒	☐
j. The proposed action may involve the application of pesticides or herbicides in or around any water body.	D2q, E2h	☒	☐
k. The proposed action may require the construction of new, or expansion of existing, wastewater treatment facilities.	D1a, D2d	☒	☐

l. Other impacts: _____ _____		☒	☐
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4. Impact on groundwater The proposed action may result in new or additional use of ground water, or may have the potential to introduce contaminants to ground water or an aquifer. (See Part 1. D.2.a, D.2.c, D.2.d, D.2.p, D.2.q, D.2.t) <i>If “Yes”, answer questions a - h. If “No”, move on to Section 5.</i>			
		☐ NO	☒ YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may require new water supply wells, or create additional demand on supplies from existing water supply wells.	D2c	☒	☐
b. Water supply demand from the proposed action may exceed safe and sustainable withdrawal capacity rate of the local supply or aquifer. Cite Source: _____	D2c	☒	☐
c. The proposed action may allow or result in residential uses in areas without water and sewer services.	D1a, D2c	☒	☐
d. The proposed action may include or require wastewater discharged to groundwater.	D2d, E2l	☒	☐
e. The proposed action may result in the construction of water supply wells in locations where groundwater is, or is suspected to be, contaminated.	D2c, E1f, E1g, E1h	☒	☐
f. The proposed action may require the bulk storage of petroleum or chemical products over ground water or an aquifer.	D2p, E2l	☒	☐
g. The proposed action may involve the commercial application of pesticides within 100 feet of potable drinking water or irrigation sources.	E2h, D2q, E2l, D2c	☒	☐
h. Other impacts: _____ _____		☒	☐

5. Impact on Flooding The proposed action may result in development on lands subject to flooding. (See Part 1. E.2) <i>If “Yes”, answer questions a - g. If “No”, move on to Section 6.</i>			
		☐ NO	☒ YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may result in development in a designated floodway.	E2i	☒	☐
b. The proposed action may result in development within a 100 year floodplain.	E2j	☒	☐
c. The proposed action may result in development within a 500 year floodplain.	E2k	☒	☐
d. The proposed action may result in, or require, modification of existing drainage patterns.	D2b, D2e	☒	☐
e. The proposed action may change flood water flows that contribute to flooding.	D2b, E2i, E2j, E2k	☒	☐
f. If there is a dam located on the site of the proposed action, is the dam in need of repair, or upgrade?	E1e	☒	☐

g. Other impacts: _____ _____		☒	☐
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6. Impacts on Air The proposed action may include a state regulated air emission source. (See Part 1. D.2.f., D.2.h, D.2.g) <i>If "Yes", answer questions a - f. If "No", move on to Section 7.</i>				☒ NO	☐ YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur		
a. If the proposed action requires federal or state air emission permits, the action may also emit one or more greenhouse gases at or above the following levels:					
i. More than 1000 tons/year of carbon dioxide (CO ₂)	D2g	☐	☐		
ii. More than 3.5 tons/year of nitrous oxide (N ₂ O)	D2g	☐	☐		
iii. More than 1000 tons/year of carbon equivalent of perfluorocarbons (PFCs)	D2g	☐	☐		
iv. More than .045 tons/year of sulfur hexafluoride (SF ₆)	D2g	☐	☐		
v. More than 1000 tons/year of carbon dioxide equivalent of hydrochloroflourocarbons (HFCs) emissions	D2g	☐	☐		
vi. 43 tons/year or more of methane	D2h	☐	☐		
b. The proposed action may generate 10 tons/year or more of any one designated hazardous air pollutant, or 25 tons/year or more of any combination of such hazardous air pollutants.	D2g	☐	☐		
c. The proposed action may require a state air registration, or may produce an emissions rate of total contaminants that may exceed 5 lbs. per hour, or may include a heat source capable of producing more than 10 million BTU's per hour.	D2f, D2g	☐	☐		
d. The proposed action may reach 50% of any of the thresholds in "a" through "c", above.	D2g	☐	☐		
e. The proposed action may result in the combustion or thermal treatment of more than 1 ton of refuse per hour.	D2s	☐	☐		
f. Other impacts: _____ _____		☐	☐		

7. Impact on Plants and Animals The proposed action may result in a loss of flora or fauna. (See Part 1. E.2. m.-q.) <i>If "Yes", answer questions a - j. If "No", move on to Section 8.</i>				☐ NO	☒ YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur		
a. The proposed action may cause reduction in population or loss of individuals of any threatened or endangered species, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site.	E2o	☒	☐		
b. The proposed action may result in a reduction or degradation of any habitat used by any rare, threatened or endangered species, as listed by New York State or the federal government.	E2o	☒	☐		
c. The proposed action may cause reduction in population, or loss of individuals, of any species of special concern or conservation need, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site.	E2p	☒	☐		
d. The proposed action may result in a reduction or degradation of any habitat used by any species of special concern and conservation need, as listed by New York State or the Federal government.	E2p	☒	☐		

e. The proposed action may diminish the capacity of a registered National Natural Landmark to support the biological community it was established to protect.	E3c	☒	☐
f. The proposed action may result in the removal of, or ground disturbance in, any portion of a designated significant natural community. Source: _____	E2n	☒	☐
g. The proposed action may substantially interfere with nesting/breeding, foraging, or over-wintering habitat for the predominant species that occupy or use the project site.	E2m	☒	☐
h. The proposed action requires the conversion of more than 10 acres of forest, grassland or any other regionally or locally important habitat. Habitat type & information source: _____	E1b	☒	☐
i. Proposed action (commercial, industrial or recreational projects, only) involves use of herbicides or pesticides.	D2q	☒	☐
j. Other impacts: _____		☒	☐

8. Impact on Agricultural Resources The proposed action may impact agricultural resources. (See Part 1. E.3.a. and b.) ☒ NO ☐ YES <i>If "Yes", answer questions a - h. If "No", move on to Section 9.</i>			
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may impact soil classified within soil group 1 through 4 of the NYS Land Classification System.	E2c, E3b	☐	☐
b. The proposed action may sever, cross or otherwise limit access to agricultural land (includes cropland, hayfields, pasture, vineyard, orchard, etc).	E1a, E1b	☐	☐
c. The proposed action may result in the excavation or compaction of the soil profile of active agricultural land.	E3b	☐	☐
d. The proposed action may irreversibly convert agricultural land to non-agricultural uses, either more than 2.5 acres if located in an Agricultural District, or more than 10 acres if not within an Agricultural District.	E1b, E3a	☐	☐
e. The proposed action may disrupt or prevent installation of an agricultural land management system.	E1 a, E1b	☐	☐
f. The proposed action may result, directly or indirectly, in increased development potential or pressure on farmland.	C2c, C3, D2c, D2d	☐	☐
g. The proposed project is not consistent with the adopted municipal Farmland Protection Plan.	C2c	☐	☐
h. Other impacts: _____		☐	☐

9. Impact on Aesthetic Resources The land use of the proposed action are obviously different from, or are in sharp contrast to, current land use patterns between the proposed project and a scenic or aesthetic resource. (Part 1. E.1.a, E.1.b, E.3.h.) <i>If "Yes", answer questions a - g. If "No", go to Section 10.</i>			
		☐ NO	☒ YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. Proposed action may be visible from any officially designated federal, state, or local scenic or aesthetic resource.	E3h	☒	☐
b. The proposed action may result in the obstruction, elimination or significant screening of one or more officially designated scenic views.	E3h, C2b	☒	☐
c. The proposed action may be visible from publicly accessible vantage points: i. Seasonally (e.g., screened by summer foliage, but visible during other seasons) ii. Year round	E3h	☒ ☒	☐ ☐
d. The situation or activity in which viewers are engaged while viewing the proposed action is: i. Routine travel by residents, including travel to and from work ii. Recreational or tourism based activities	E3h E2q, E1c	☒ ☒	☐ ☐
e. The proposed action may cause a diminishment of the public enjoyment and appreciation of the designated aesthetic resource.	E3h	☒	☐
f. There are similar projects visible within the following distance of the proposed project: 0-1/2 mile 1/2 -3 mile 3-5 mile 5+ mile	D1a, E1a, D1f, D1g	☒	☐
g. Other impacts: _____ _____		☒	☐

10. Impact on Historic and Archeological Resources The proposed action may occur in or adjacent to a historic or archaeological resource. (Part 1. E.3.e, f. and g.) <i>If "Yes", answer questions a - e. If "No", go to Section 11.</i>			
		☐ NO	☒ YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may occur wholly or partially within, or substantially contiguous to, any buildings, archaeological site or district which is listed on the National or State Register of Historical 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.	E3e	☒	☐
b. The proposed action may occur wholly or partially within, or substantially contiguous to, an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory.	E3f	☒	☐
c. The proposed action may occur wholly or partially within, or substantially contiguous to, an archaeological site not included on the NY SHPO inventory. Source: _____	E3g	☒	☐

d. Other impacts: _____ _____		☒	☐
If any of the above (a-d) are answered “Moderate to large impact may occur”, continue with the following questions to help support conclusions in Part 3: e. i. The proposed action may result in the destruction or alteration of all or part of the site or property. ii. The proposed action may result in the alteration of the property’s setting or integrity. iii. The proposed action may result in the introduction of visual elements which are out of character with the site or property, or may alter its setting.	E3e, E3g, E3f E3e, E3f, E3g, E1a, E1b E3e, E3f, E3g, E3h, C2, C3	☒ ☒ ☒	☐ ☐ ☐

11. Impact on Open Space and Recreation The proposed action may result in a loss of recreational opportunities or a reduction of an open space resource as designated in any adopted municipal open space plan. (See Part 1. C.2.c, E.1.c., E.2.q.) <i>If “Yes”, answer questions a - e. If “No”, go to Section 12.</i>				☒ NO	☐ YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur		
a. The proposed action may result in an impairment of natural functions, or “ecosystem services”, provided by an undeveloped area, including but not limited to stormwater storage, nutrient cycling, wildlife habitat.	D2e, E1b E2h, E2m, E2o, E2n, E2p	☐	☐		
b. The proposed action may result in the loss of a current or future recreational resource.	C2a, E1c, C2c, E2q	☐	☐		
c. The proposed action may eliminate open space or recreational resource in an area with few such resources.	C2a, C2c E1c, E2q	☐	☐		
d. The proposed action may result in loss of an area now used informally by the community as an open space resource.	C2c, E1c	☐	☐		
e. Other impacts: _____ _____		☐	☐		

12. Impact on Critical Environmental Areas The proposed action may be located within or adjacent to a critical environmental area (CEA). (See Part 1. E.3.d) <i>If “Yes”, answer questions a - c. If “No”, go to Section 13.</i>				☒ NO	☐ YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur		
a. The proposed action may result in a reduction in the quantity of the resource or characteristic which was the basis for designation of the CEA.	E3d	☐	☐		
b. The proposed action may result in a reduction in the quality of the resource or characteristic which was the basis for designation of the CEA.	E3d	☐	☐		
c. Other impacts: _____ _____		☐	☐		

13. Impact on Transportation The proposed action may result in a change to existing transportation systems. ☐ NO ☒ YES (See Part 1. D.2.j) <i>If "Yes", answer questions a - f. If "No", go to Section 14.</i>			
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. Projected traffic increase may exceed capacity of existing road network.	D2j	☒	☐
b. The proposed action may result in the construction of paved parking area for 500 or more vehicles.	D2j	☒	☐
c. The proposed action will degrade existing transit access.	D2j	☒	☐
d. The proposed action will degrade existing pedestrian or bicycle accommodations.	D2j	☒	☐
e. The proposed action may alter the present pattern of movement of people or goods.	D2j	☒	☐
f. Other impacts: _____ _____		☐	☐

14. Impact on Energy The proposed action may cause an increase in the use of any form of energy. ☐ NO ☒ YES (See Part 1. D.2.k) <i>If "Yes", answer questions a - e. If "No", go to Section 15.</i>			
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action will require a new, or an upgrade to an existing, substation.	D2k	☒	☐
b. The proposed action will require the creation or extension of an energy transmission or supply system to serve more than 50 single or two-family residences or to serve a commercial or industrial use.	D1f, D1q, D2k	☒	☐
c. The proposed action may utilize more than 2,500 MWhrs per year of electricity.	D2k	☒	☐
d. The proposed action may involve heating and/or cooling of more than 100,000 square feet of building area when completed.	D1g	☒	☐
e. Other Impacts: _____ _____		☒	☐

15. Impact on Noise, Odor, and Light The proposed action may result in an increase in noise, odors, or outdoor lighting. ☐ NO ☒ YES (See Part 1. D.2.m., n., and o.) <i>If "Yes", answer questions a - f. If "No", go to Section 16.</i>			
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may produce sound above noise levels established by local regulation.	D2m	☒	☐
b. The proposed action may result in blasting within 1,500 feet of any residence, hospital, school, licensed day care center, or nursing home.	D2m, E1d	☒	☐
c. The proposed action may result in routine odors for more than one hour per day.	D2o	☒	☐

d. The proposed action may result in light shining onto adjoining properties.	D2n	☒	☐
e. The proposed action may result in lighting creating sky-glow brighter than existing area conditions.	D2n, E1a	☒	☐
f. Other impacts: _____ _____		☒	☐

16. Impact on Human Health

The proposed action may have an impact on human health from exposure to new or existing sources of contaminants. (See Part 1.D.2.q., E.1. d. f. g. and h.)

☒ NO

☐ YES

If "Yes", answer questions a - m. If "No", go to Section 17.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action is located within 1500 feet of a school, hospital, licensed day care center, group home, nursing home or retirement community.	E1d	☐	☐
b. The site of the proposed action is currently undergoing remediation.	E1g, E1h	☐	☐
c. There is a completed emergency spill remediation, or a completed environmental site remediation on, or adjacent to, the site of the proposed action.	E1g, E1h	☐	☐
d. The site of the action is subject to an institutional control limiting the use of the property (e.g., easement or deed restriction).	E1g, E1h	☐	☐
e. The proposed action may affect institutional control measures that were put in place to ensure that the site remains protective of the environment and human health.	E1g, E1h	☐	☐
f. The proposed action has adequate control measures in place to ensure that future generation, treatment and/or disposal of hazardous wastes will be protective of the environment and human health.	D2t	☐	☐
g. The proposed action involves construction or modification of a solid waste management facility.	D2q, E1f	☐	☐
h. The proposed action may result in the unearthing of solid or hazardous waste.	D2q, E1f	☐	☐
i. The proposed action may result in an increase in the rate of disposal, or processing, of solid waste.	D2r, D2s	☐	☐
j. The proposed action may result in excavation or other disturbance within 2000 feet of a site used for the disposal of solid or hazardous waste.	E1f, E1g E1h	☐	☐
k. The proposed action may result in the migration of explosive gases from a landfill site to adjacent off site structures.	E1f, E1g	☐	☐
l. The proposed action may result in the release of contaminated leachate from the project site.	D2s, E1f, D2r	☐	☐
m. Other impacts: _____ _____			

17. Consistency with Community Plans The proposed action is not consistent with adopted land use plans. (See Part 1. C.1, C.2. and C.3.) <i>If “Yes”, answer questions a - h. If “No”, go to Section 18.</i>			
		☒ NO	☐ YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action’s land use components may be different from, or in sharp contrast to, current surrounding land use pattern(s).	C2, C3, D1a E1a, E1b	☐	☐
b. The proposed action will cause the permanent population of the city, town or village in which the project is located to grow by more than 5%.	C2	☐	☐
c. The proposed action is inconsistent with local land use plans or zoning regulations.	C2, C2, C3	☐	☐
d. The proposed action is inconsistent with any County plans, or other regional land use plans.	C2, C2	☐	☐
e. The proposed action may cause a change in the density of development that is not supported by existing infrastructure or is distant from existing infrastructure.	C3, D1c, D1d, D1f, D1d, E1b	☐	☐
f. The proposed action is located in an area characterized by low density development that will require new or expanded public infrastructure.	C4, D2c, D2d D2j	☐	☐
g. The proposed action may induce secondary development impacts (e.g., residential or commercial development not included in the proposed action)	C2a	☐	☐
h. Other: _____ _____		☐	☐

18. Consistency with Community Character The proposed project is inconsistent with the existing community character. (See Part 1. C.2, C.3, D.2, E.3) <i>If “Yes”, answer questions a - g. If “No”, proceed to Part 3.</i>			
		☒ NO	☐ YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may replace or eliminate existing facilities, structures, or areas of historic importance to the community.	E3e, E3f, E3g	☐	☐
b. The proposed action may create a demand for additional community services (e.g. schools, police and fire)	C4	☐	☐
c. The proposed action may displace affordable or low-income housing in an area where there is a shortage of such housing.	C2, C3, D1f D1g, E1a	☐	☐
d. The proposed action may interfere with the use or enjoyment of officially recognized or designated public resources.	C2, E3	☐	☐
e. The proposed action is inconsistent with the predominant architectural scale and character.	C2, C3	☐	☐
f. Proposed action is inconsistent with the character of the existing natural landscape.	C2, C3 E1a, E1b E2g, E2h	☐	☐
g. Other impacts: _____ _____		☐	☐

Full Environmental Assessment Form
Part 3 - Evaluation of the Magnitude and Importance of Project Impacts
and
Determination of Significance

Part 3 provides the reasons in support of the determination of significance. The lead agency must complete Part 3 for every question in Part 2 where the impact has been identified as potentially moderate to large or where there is a need to explain why a particular element of the proposed action will not, or may, result in a significant adverse environmental impact.

Based on the analysis in Part 3, the lead agency must decide whether to require an environmental impact statement to further assess the proposed action or whether available information is sufficient for the lead agency to conclude that the proposed action will not have a significant adverse environmental impact. By completing the certification on the next page, the lead agency can complete its determination of significance.

Reasons Supporting This Determination:

To complete this section:

- Identify the impact based on the Part 2 responses and describe its magnitude. Magnitude considers factors such as severity, size or extent of an impact.
- Assess the importance of the impact. Importance relates to the geographic scope, duration, probability of the impact occurring, number of people affected by the impact and any additional environmental consequences if the impact were to occur.
- The assessment should take into consideration any design element or project changes.
- Repeat this process for each Part 2 question where the impact has been identified as potentially moderate to large or where there is a need to explain why a particular element of the proposed action will not, or may, result in a significant adverse environmental impact.
- Provide the reason(s) why the impact may, or will not, result in a significant adverse environmental impact
- For Conditional Negative Declarations identify the specific condition(s) imposed that will modify the proposed action so that no significant adverse environmental impacts will result.
- Attach additional sheets, as needed.

See attached addendum.

Determination of Significance - Type 1 and Unlisted Actions

SEQR Status: ☐ Type 1 ☒ Unlisted

Identify portions of EAF completed for this Project: ☒ Part 1 ☒ Part 2 ☒ Part 3

Upon review of the information recorded on this EAF, as noted, plus this additional support information
All application materials submitted by the Applicant, memoranda from City staff and consultants, agency and public comment, and testimony from
meetings held on the application.

and considering both the magnitude and importance of each identified potential impact, it is the conclusion of the
Planning Board _____ as lead agency that:

☒ A. This project will result in no significant adverse impacts on the environment, and, therefore, an environmental impact statement need not be prepared. Accordingly, this negative declaration is issued.

☐ B. Although this project could have a significant adverse impact on the environment, that impact will be avoided or substantially mitigated because of the following conditions which will be required by the lead agency:

There will, therefore, be no significant adverse impacts from the project as conditioned, and, therefore, this conditioned negative declaration is issued. A conditioned negative declaration may be used only for UNLISTED actions (see 6 NYCRR 617.7(d)).

☐ C. This Project may result in one or more significant adverse impacts on the environment, and an environmental impact statement must be prepared to further assess the impact(s) and possible mitigation and to explore alternatives to avoid or reduce those impacts. Accordingly, this positive declaration is issued.

Name of Action: 364 Main Street Site Plan and Lot Merger

Name of Lead Agency: City of Beacon Planning Board

Name of Responsible Officer in Lead Agency: John Gunn

Title of Responsible Officer: Chairman of the Planning Board

Signature of Responsible Officer in Lead Agency: _____ Date: January 11, 2022

Signature of Preparer (if different from Responsible Officer) Jennifer L. Gray, Esq. Keane & Beane, P.C. _____ Date: January 11, 2022

For Further Information:

Contact Person: Etha Grogan, Planning Board Secretary

Address: 1 Municipal Plaza, Beacon, NY 12508

Telephone Number: (845) 838-5002

E-mail: egrogan@cityofbeacon.org

For Type 1 Actions and Conditioned Negative Declarations, a copy of this Notice is sent to:

Chief Executive Officer of the political subdivision in which the action will be principally located (e.g., Town / City / Village of)

Other involved agencies (if any)

Applicant (if any)

Environmental Notice Bulletin: <http://www.dec.ny.gov/enb/enb.html>

Full Environmental Assessment Form
Part 1 - Project and Setting

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 1 is accurate and complete.

A. Project and Applicant/Sponsor Information.

Name of Action or Project: 364 MAIN STREET - APPLICATION FOR SITE PLAN AND SUBDIVISION APPROVAL		
Project Location (describe, and attach a general location map): 364 MAIN STREET, BEACON, NEW YORK 12508		
Brief Description of Proposed Action (include purpose or need): Application for Site Plan and Subdivision Approval proposing to add two (2) stories to an existing one (1)-story commercial building and to construct a three (3)-story addition to the rear and a three (3)-story addition to the west of the same building for a commercial and multi-family residential mixed-use building fronting on Main Street. The first story will consist of 9,086 s.f. of commercial space and 1,607 s.f. of residential common area space. The second and third floors will include a total of 25,120 s.f. of multi-family residential space, consisting of twenty (20) apartments with thirty-two (32) total bedrooms. The property is presently comprised of two (2) lots, and the site will provide off-street parking facilities with driveway connections to Main Street and Eliza Street.		
Name of Applicant/Sponsor: O'DONNELL CONSTRUCTION CORP.		Telephone: 845-590-0622
		E-Mail: SEANEO64@GMAIL.COM
Address: P.O. BOX 526		
City/PO: FISHKILL	State: NEW YORK	Zip Code: 12524
Project Contact (if not same as sponsor; give name and title/role): TAYLOR M. PALMER, ESQ., - CUDDY & FEDER LLP - ATTORNEY FOR APPLICANT		Telephone: 914-761-1300
		E-Mail: TPALMER@CUDDYFEDER.COM
Address: 300 WESTAGE BUSINESS CENTER, SUITE 300		
City/PO: FISHKILL	State: NEW YORK	Zip Code: 12524
Property Owner (if not same as sponsor): SAME		Telephone:
		E-Mail:
Address:		
City/PO:	State:	Zip Code:

B. Government Approvals

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

Government Entity	If Yes: Identify Agency and Approval(s) Required	Application Date (Actual or projected)
a. City Counsel, Town Board, ☐ Yes ☒ No or Village Board of Trustees		
b. City, Town or Village Planning Board or Commission ☒ Yes ☐ No	PB- SITE PLAN PB - SUBDIVISION	05/25/2021 AMENDED 1/5/2022 8/31/2021
c. City, Town or Village Zoning Board of Appeals ☐ Yes ☒ No		
d. Other local agencies ☒ Yes ☐ No	BUILDING DEPARTMENT- BUILDING PERMIT	03/1/2022
e. County agencies ☐ Yes ☒ No		
f. Regional agencies ☐ Yes ☒ No		
g. State agencies ☐ Yes ☒ No		
h. Federal agencies ☐ Yes ☒ No		
i. Coastal Resources. i. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway? ☐ Yes ☒ No ii. Is the project site located in a community with an approved Local Waterfront Revitalization Program? ☒ Yes ☐ No iii. Is the project site within a Coastal Erosion Hazard Area? ☐ Yes ☒ No		

C. Planning and Zoning

C.1. Planning and zoning actions.

Will administrative or legislative adoption, or amendment of a plan, local law, ordinance, rule or regulation be the only approval(s) which must be granted to enable the proposed action to proceed? ☐ Yes ☒ No

- If Yes, complete sections C, F and G.
- If No, proceed to question C.2 and complete all remaining sections and questions in Part 1

C.2. Adopted land use plans.

a. Do any municipally- adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located? ☒ Yes ☐ No

If Yes, does the comprehensive plan include specific recommendations for the site where the proposed action would be located? ☒ Yes ☐ No

b. Is the site of the proposed action within any local or regional special planning district (for example: Greenway; Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; or other?) ☐ Yes ☒ No

If Yes, identify the plan(s):

c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan? ☐ Yes ☒ No

If Yes, identify the plan(s):

C.3. Zoning

a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. ☒ Yes ☐ No
If Yes, what is the zoning classification(s) including any applicable overlay district?

CMS - CENTRAL MAIN STREET DISTRICT & T - TRANSITIONAL DISTRICT.

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

c. Is a zoning change requested as part of the proposed action? ☐ Yes ☒ No

If Yes,

i. What is the proposed new zoning for the site? _____

C.4. Existing community services.

a. In what school district is the project site located? BEACON CITY SCHOOL DISTRICT

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

CITY OF BEACON POLICE

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

CITY OF BEACON FIRE DEPARTMENT

d. What parks serve the project site?

MOUNT BEACON, GREEN STREET PARK, MEMORIAL PARK.

D. Project Details

D.1. Proposed and Potential Development

a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if mixed, include all components)? COMMERCIAL, RESIDENTIAL MIXED USES.

b. a. Total acreage of the site of the proposed action? 0.85 acres

b. Total acreage to be physically disturbed? 0.54 acres

c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 0.85 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)? % 29-increased 2,055 sq.ft. Units: non-residential sq. ft.

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)

COMMERCIAL, RESIDENTIAL

ii. Is a cluster/conservation layout proposed? ☐ Yes ☒ No

iii. Number of lots proposed? 1

iv. Minimum and maximum proposed lot sizes? Minimum 0.85 AC Maximum 0.85 AC

e. Will the proposed action be constructed in multiple phases? ☐ Yes ☒ No

i. If No, anticipated period of construction: 12 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.				
	<u>One Family</u>	<u>Two Family</u>	<u>Three Family</u>	<u>Multiple Family (four or more)</u>
Initial Phase	_____	_____	_____	20
At completion of all phases	_____	_____	_____	20

g. Does the proposed action include new non-residential construction (including expansions)? ☒ Yes ☐ No	
If Yes,	
i. Total number of structures _____ 1	
ii. Dimensions (in feet) of largest proposed structure: _____ 38' height; _____ 89.0' width; and _____ 156' length	
iii. Approximate extent of building space to be heated or cooled: _____ 35,813 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? ☐ Yes ☒ No	
(Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite)	
If Yes:	
i. What is the purpose of the excavation or dredging? _____	
ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?	
• Volume (specify tons or cubic yards): _____ • Over what duration of time? _____	
iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them. _____	
iv. Will there be onsite dewatering or processing of excavated materials? ☐ Yes ☐ No	
If yes, describe. _____	
v. What is the total area to be dredged or excavated? _____ acres	
vi. What is the maximum area to be worked at any one time? _____ acres	
vii. What would be the maximum depth of excavation or dredging? _____ feet	
viii. Will the excavation require blasting? ☐ Yes ☐ No	
ix. Summarize site reclamation goals and plan: _____	

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area? ☐ Yes ☒ No	
If Yes:	
i. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): _____	

ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placement of structures, or alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres:

iii. Will the proposed action cause or result in disturbance to bottom sediments? ☐ Yes ☐ No
If Yes, describe: _____

iv. Will the proposed action cause or result in the destruction or removal of aquatic vegetation? ☐ Yes ☐ No
If Yes:

- acres of aquatic vegetation proposed to be removed: _____
- expected acreage of aquatic vegetation remaining after project completion: _____
- purpose of proposed removal (e.g. beach clearing, invasive species control, boat access): _____
- proposed method of plant removal: _____
- if chemical/herbicide treatment will be used, specify product(s): _____

v. Describe any proposed reclamation/mitigation following disturbance: _____

c. Will the proposed action use, or create a new demand for water? ☒ Yes ☐ No
If Yes:

i. Total anticipated water usage/demand per day: _____ 4,355.1 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: CITY OF BEACON
- 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: _____ 4,355.1 gallons/day

ii. Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe all components and approximate volumes or proportions of each): _____
SANITARY WASTEWATER

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

- Name of wastewater treatment plant to be used: CITY OF BEACON WASTEWATER TREATMENT PLANT
- Name of district: CITY OF BEACON
- 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? _____ • Will a line extension within an existing district be necessary to serve the project? If Yes: • Describe extensions or capacity expansions proposed to serve this project: _____	☒ Yes ☐ No ☐ Yes ☒ No	
iv. Will a new wastewater (sewage) treatment district be formed to serve the project site? If Yes: • Applicant/sponsor for new district: _____ • Date application submitted or anticipated: _____ • What is the receiving water for the wastewater discharge? _____	☐ Yes ☒ No	
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? If Yes: i. How much impervious surface will the project create in relation to total size of project parcel? _____ Square feet or _____ acres (impervious surface) _____ Square feet or _____ acres (parcel size) ii. Describe types of new point sources. _____ iii. Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)? _____ _____ • If to surface waters, identify receiving water bodies or wetlands: _____ • Will stormwater runoff flow to adjacent properties? _____	☐ Yes ☒ No ☐ Yes ☐ No ☐ Yes ☐ No	
iv. Does the proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater? 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? 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) _____	☐ Yes ☐ No ☐ Yes ☒ No	
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? 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) _____ ii. In addition to emissions as calculated in the application, the project will generate: • _____ Tons/year (short tons) of Carbon Dioxide (CO₂) • _____ Tons/year (short tons) of Nitrous Oxide (N₂O) • _____ Tons/year (short tons) of Perfluorocarbons (PFCs) • _____ Tons/year (short tons) of Sulfur Hexafluoride (SF₆) • _____ Tons/year (short tons) of Carbon Dioxide equivalent of Hydrofluorocarbons (HFCs) • _____ Tons/year (short tons) of Hazardous Air Pollutants (HAPs)		☐ Yes ☒ No ☐ Yes ☐ No

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: _____ TBD ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other): CENTRAL HUDSON GAS AND ELECTRIC CO. 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. <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> i. During Construction: • Monday - Friday: _____ 7 AM - 5 PM • Saturday: _____ 9 AM - 5 PM • Sunday: _____ 9 AM - 5 PM • Holidays: _____ N/A </td> <td style="width: 50%; vertical-align: top;"> ii. During Operations: • Monday - Friday: _____ TBD • Saturday: _____ TBD • Sunday: _____ TBD • Holidays: _____ TBD </td> </tr> </table>		i. During Construction: • Monday - Friday: _____ 7 AM - 5 PM • Saturday: _____ 9 AM - 5 PM • Sunday: _____ 9 AM - 5 PM • Holidays: _____ N/A	ii. During Operations: • Monday - Friday: _____ TBD • Saturday: _____ TBD • Sunday: _____ TBD • Holidays: _____ TBD
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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: Ambient noise levels will increase slightly during construction only.	
ii. Will the proposed action remove existing natural barriers that could act as a noise barrier or screen? ☐ Yes ☒ No Describe: _____	
n. Will the proposed action have outdoor lighting? ☒ Yes ☐ No If yes: i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures: See Lighting Plan There will be building mounted lighting over entry/exit doors on the building, as well as light poles in the parking area. The closest light pole to the nearest occupied structure is approximately 50'. The light fixtures will be shielded LED, which will comply with the City's requirements for light spill.	
ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen? ☐ Yes ☒ No Describe: _____	
o. Does the proposed action have the potential to produce odors for more than one hour per day? ☐ Yes ☒ No If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures: _____	
p. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) or chemical products 185 gallons in above ground storage or any amount in underground storage? ☐ Yes ☒ No If Yes: i. Product(s) to be stored _____ ii. Volume(s) _____ per unit time _____ (e.g., month, year) iii. Generally, describe the proposed storage facilities: _____	
q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation? ☐ Yes ☒ No If Yes: i. Describe proposed treatment(s): _____	
ii. Will the proposed action use Integrated Pest Management Practices? ☐ Yes ☐ No	
r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)? ☒ Yes ☐ No If Yes: i. Describe any solid waste(s) to be generated during construction or operation of the facility: • Construction: _____ 1.0 tons per _____ MONTH (unit of time) • Operation : _____ 0.3 tons per _____ MONTH (unit of time) ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste: • Construction: RECYCLING _____ • Operation: RECYCLING _____ iii. Proposed disposal methods/facilities for solid waste generated on-site: • Construction: APPROVED CONTRACTOR TO AN APPROVED SITE _____ • Operation: APPROVED CONTRACTOR TO AN APPROVED SITE _____	

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): RESIDENTIAL - MULTIFAMILY

ii. If mix of uses, generally describe:

MIXED USES CONSISTENT WITH MAIN STREET AND THE SURROUNDING CMS AND TRANSITIONAL DISTRICTS.

b. Land uses and covertypes on the project site.

Land use or Covertypes	Current Acreage	Acreage After Project Completion	Change (Acres +/-)
• Roads, buildings, and other paved or impervious surfaces	0.85	0.82	-0.03
• Forested	0	0	0
• Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)	0	0	0
• Agricultural (includes active orchards, field, greenhouse etc.)	0	0	0
• Surface water features (lakes, ponds, streams, rivers, etc.)	0	0	0
• Wetlands (freshwater or tidal)	0	0	0
• Non-vegetated (bare rock, earth or fill)	0	0	0
• Other Describe: <u>LANDSCAPING</u>	0	0.03	+0.03

c. Is the project site presently used by members of the community for public recreation? i. If Yes: explain: _____	☐ Yes ☒ No
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? If Yes, i. Identify Facilities: CITY OF BEACON HIGH SCHOOL ATHLETIC FIELDS. _____ _____	☐ Yes ☒ No
e. Does the project site contain an existing dam? 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: _____ _____ _____	☐ Yes ☒ No
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? If Yes: i. Has the facility been formally closed? • If yes, cite sources/documentation: _____ ii. Describe the location of the project site relative to the boundaries of the solid waste management facility: _____ _____ _____	☐ Yes ☒ No ☐ Yes ☐ No
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? If Yes: i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred: _____ _____ _____	☐ Yes ☒ No
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? 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 – 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: _____ _____ _____	☐ Yes ☒ No ☐ Yes ☒ No
iii. Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database? If yes, provide DEC ID number(s): B00130, C314118 iv. If yes to (i), (ii) or (iii) above, describe current status of site(s): C314118 IS LOCATED AT 1 EAST MAIN STREET ACCORDING TO THE DATABASE, AND IS A CLASS N SITE. B00130 IS LOCATED AT 33 NORTH CEDAR STREET, AND IS A CLASS C SITE. THIS SITE HAS BEEN REMEDIATED. _____ _____	☒ Yes ☐ No

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? <u>GREATER THAN 7.0</u> 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: <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;"><u>KuB-KNICKERBOCKER-URBAN</u></td> <td style="width: 40%; text-align: right;"><u>12.6</u> %</td> </tr> <tr> <td><u>Ur-URBAN LAND</u></td> <td style="text-align: right;"><u>87.4</u> %</td> </tr> <tr> <td>_____</td> <td style="text-align: right;">_____ %</td> </tr> </table>		<u>KuB-KNICKERBOCKER-URBAN</u>	<u>12.6</u> %	<u>Ur-URBAN LAND</u>	<u>87.4</u> %	_____	_____ %						
<u>KuB-KNICKERBOCKER-URBAN</u>	<u>12.6</u> %												
<u>Ur-URBAN LAND</u>	<u>87.4</u> %												
_____	_____ %												
d. What is the average depth to the water table on the project site? Average: <u>>5'</u> feet													
e. Drainage status of project site soils: <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">☐ Well Drained:</td> <td style="width: 70%; text-align: right;">_____ % of site</td> </tr> <tr> <td>☐ Moderately Well Drained:</td> <td style="text-align: right;">_____ % of site</td> </tr> <tr> <td>☒ Poorly Drained</td> <td style="text-align: right;"><u>100</u> % of site</td> </tr> </table>		☐ Well Drained:	_____ % of site	☐ Moderately Well Drained:	_____ % of site	☒ Poorly Drained	<u>100</u> % of site						
☐ Well Drained:	_____ % of site												
☐ Moderately Well Drained:	_____ % of site												
☒ Poorly Drained	<u>100</u> % of site												
f. Approximate proportion of proposed action site with slopes: <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 40%;">☒ 0-10%:</td> <td style="width: 60%; text-align: right;"><u>100</u> % of site</td> </tr> <tr> <td>☐ 10-15%:</td> <td style="text-align: right;">_____ % of site</td> </tr> <tr> <td>☐ 15% or greater:</td> <td style="text-align: right;">_____ % of site</td> </tr> </table>		☒ 0-10%:	<u>100</u> % of site	☐ 10-15%:	_____ % of site	☐ 15% or greater:	_____ % of site						
☒ 0-10%:	<u>100</u> % of site												
☐ 10-15%:	_____ % of site												
☐ 15% or greater:	_____ % of site												
g. Are there any unique geologic features on the project site? ☐ Yes ☒ No If Yes, describe: _____ _____													
h. Surface water features.													
i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)? ☐ Yes ☒ No													
ii. Do any wetlands or other waterbodies adjoin the project site? ☐ Yes ☒ No													
If Yes to either <i>i</i> or <i>ii</i> , 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: <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;">• Streams:</td> <td style="width: 40%;">Name _____</td> <td style="width: 50%;">Classification _____</td> </tr> <tr> <td>• Lakes or Ponds:</td> <td>Name _____</td> <td>Classification _____</td> </tr> <tr> <td>• Wetlands:</td> <td>Name _____</td> <td>Approximate Size _____</td> </tr> <tr> <td>• Wetland No. (if regulated by DEC)</td> <td colspan="2">_____</td> </tr> </table>		• Streams:	Name _____	Classification _____	• Lakes or Ponds:	Name _____	Classification _____	• Wetlands:	Name _____	Approximate Size _____	• Wetland No. (if regulated by DEC)	_____	
• Streams:	Name _____	Classification _____											
• Lakes or Ponds:	Name _____	Classification _____											
• Wetlands:	Name _____	Approximate Size _____											
• Wetland No. (if regulated by DEC)	_____												
v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies? ☐ Yes ☒ No If yes, name of impaired water body/bodies and basis for listing as impaired: _____ _____													
i. Is the project site in a designated Floodway? ☐ Yes ☒ No													
j. Is the project site in the 100-year Floodplain? ☐ Yes ☒ No													
k. Is the project site in the 500-year Floodplain? ☐ Yes ☒ No													
l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? ☐ Yes ☒ No If Yes:													
i. Name of aquifer: _____													

m. Identify the predominant wildlife species that occupy or use the project site: _____ BIRDS _____ SQUIRRELS _____ SMALL MAMMALS _____ RACCOON _____	
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): _____ Indiana Bat _____ _____	
p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern? ☐ Yes ☒ No If Yes: i. Species and listing: _____ _____	
q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? ☐ Yes ☒ No If yes, give a brief description of how the proposed action may affect that use: _____ _____	
E.3. Designated Public Resources On or Near Project Site	
a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? ☐ Yes ☒ No If Yes, provide county plus district name/number: _____	
b. Are agricultural lands consisting of highly productive soils present? ☐ Yes ☒ No i. If Yes: acreage(s) on project site? _____ ii. Source(s) of soil rating(s): _____	
c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark? ☐ Yes ☒ No If Yes: i. Nature of the natural landmark: ☐ Biological Community ☐ Geological Feature ii. Provide brief description of landmark, including values behind designation and approximate size/extent: _____ _____ _____	
d. Is the project site located in or does it adjoin a state listed Critical Environmental Area? ☐ Yes ☒ No If Yes: i. CEA name: _____ ii. Basis for designation: _____ iii. Designating agency and date: _____	

e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places? ☒ Yes ☐ No

If Yes:

i. Nature of historic/archaeological resource: ☐ Archaeological Site ☒ Historic Building or District

ii. Name: Eligible property: EMPIRE NAT. BANK, Eligible property: ROOSA COMMERCIAL, Eligible property: STAVROS COMMERCIAL, Eligible...

iii. Brief description of attributes on which listing is based:
 AUTO-FILLED BY THE EAF MAPPER. PROPERTY IS NOT LOCATED IN THE CITY'S HISTORIC DISTRICT AND LANDMARK OVERLAY DISTRICT.

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 five miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource? ☒ Yes ☐ No

If Yes:

i. Identify resource: MOUNT BEACON, HUDSON RIVER, LONG DOCK PARK.

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

iii. Distance between project and resource: _____ 1.5 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.

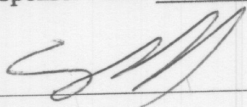
If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

G. Verification

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

Applicant/Sponsor Name O'DONNELL CONSTRUCTION CORP. Date 1/5/2022

Signature



BY: SEAN O'DONNELL

Title MANAGING MEMBER

PRINT FORM



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

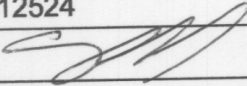


B.i.i [Coastal or Waterfront Area]	No
B.i.ii [Local Waterfront Revitalization Area]	Yes
C.2.b. [Special Planning District]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h [DEC Spills or Remediation Site - Potential Contamination History]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Listed]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Environmental Site Remediation Database]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.iii [Within 2,000' of DEC Remediation Site]	Yes
E.1.h.iii [Within 2,000' of DEC Remediation Site - DEC ID]	B00130, C314118
E.2.g [Unique Geologic Features]	No
E.2.h.i [Surface Water Features]	No
E.2.h.ii [Surface Water Features]	No
E.2.h.iii [Surface Water Features]	No
E.2.h.v [Impaired Water Bodies]	No
E.2.i. [Floodway]	No
E.2.j. [100 Year Floodplain]	No
E.2.k. [500 Year Floodplain]	No
E.2.l. [Aquifers]	No
E.2.n. [Natural Communities]	No
E.2.o. [Endangered or Threatened Species]	Yes

E.2.o. [Endangered or Threatened Species - Name]	Indiana Bat
E.2.p. [Rare Plants or Animals]	No
E.3.a. [Agricultural District]	No
E.3.c. [National Natural Landmark]	No
E.3.d [Critical Environmental Area]	No
E.3.e. [National or State Register of Historic Places or State Eligible Sites]	Yes - Digital mapping data for archaeological site boundaries are not available. Refer to EAF Workbook.
E.3.e.ii [National or State Register of Historic Places or State Eligible Sites - Name]	Eligible property:EMPIRE NAT. BANK, Eligible property:ROOSA COMMERCIAL, Eligible property:STAVROS COMMERCIAL, Eligible property:ANGELO COMMERCIAL, Eligible property:DUMKE COMMERCIAL, Eligible property:Memorial Building, Brett, Madam Catharyna, Homestead, US Post Office--Beacon
E.3.f. [Archeological Sites]	Yes
E.3.i. [Designated River Corridor]	No

APPLICATION FOR SPECIAL USE PERMIT & SITE PLAN APPROVAL
Submit to Planning Board Secretary, One Municipal Plaza, Suite One, Beacon, New York 12508

IDENTIFICATION OF APPLICANT

Name: O'Donnell Construction Corp.
Address: P.O. Box 526
Fishkill, NY 12524
Signature: 
Date: 1/5/2022
Phone: 845-590-0622

(For Official Use Only)
Application & Fee Rec'd
Initial Review Public Hearing

Date Initials

Conditional Approval
Final Approval

IDENTIFICATION OF REPRESENTATIVE / DESIGN PROFESSIONAL

Name: Cuddy & Feder, LLP
Address: 300 Westage Business
Center Dr., Suite 380, Fishkill, NY

Phone: 914-761-1300
Fax: 914-761-5378
Email address: tpalmer@cuddyfeder.com

IDENTIFICATION OF SUBJECT PROPERTY:

Property Address: 346 Main Street & Eliza Street, Beacon, NY 12508

Tax Map Designation: Section 6054 Block 29

Lot(s) 006819 & 004836

Land Area: .54 acres 364 Main St. & .31 acres Eliza St.

Zoning District(s) CMS, T

DESCRIPTION OF PROPOSED DEVELOPMENT:

Proposed Use: Mixed-Use Multi-Family Residential and Commercial

Gross Non-Residential Floor Space: Existing 7,031 +/- sq. ft.

Proposed 9,086 +/- sq. ft.

TOTAL: 2,055 +/- sq. ft.

Dwelling Units (by type): Existing 0

Proposed 20 multi-family units

TOTAL: 20

ITEMS TO ACCOMPANY THIS APPLICATION

- One electronic and five (5) **folded** paper copies of a site location sketch showing the location of the subject property and the proposed development with respect to neighboring properties and developments.
- One electronic and five (5) **folded** paper copies of the proposed site development plan, consisting of sheets, showing the required information as set forth on the back of this form and other such information as deemed necessary by the City Council or the Planning Board to determine and provide for the property enforcement of the Zoning Ordinance.
- One electronic and five (5) **folded** paper copies of additional sketches, renderings or other information.
- An application fee, payable to the City of Beacon, computed per the attached fee schedule.
- An initial escrow amount, payable to the City of Beacon, as set forth in the attached fee schedule.

INFORMATION TO BE SHOWN ON SITE LOCATION SKETCH

- a. Property lines, zoning district boundaries and special district boundaries affecting all adjoining streets and properties, including properties located on the opposite sides of adjoining streets.
- b. Any reservations, easements or other areas of public or special use which affect the subject property.
- c. Section, block and lot numbers written on the subject property and all adjoining properties, including the names of the record owners of such adjoining properties.

INFORMATION TO BE SHOWN ON THE SITE DEVELOPMENT PLAN

- a. Title of development, date and revision dates if any, north point, scale, name and address of record owner of property, and of the licensed engineer, architect, landscape architect, or surveyor preparing the site plan.
- b. Existing and proposed contours at a maximum vertical interval of two (2) feet.
- c. Location and identification of natural features including rock outcrops, wooded areas, single trees with a caliper of six (6) or more inches measured four (4) feet above existing grade, water bodies, water courses, wetlands, soil types, etc.
- d. Location and dimensions of all existing and proposed buildings, retaining walls, fences, septic fields, etc.
- e. Finished floor level elevations and heights of all existing and proposed buildings.
- f. Location, design, elevations, and pavement and curbing specifications, including pavement markings, of all existing and proposed sidewalks, and parking and truck loading areas, including access and egress drives thereto.
- g. Existing pavement and elevations of abutting streets, and proposed modifications.
- h. Location, type and design of all existing and proposed storm drainage facilities, including computation of present and estimated future runoff of the entire tributary watershed, at a maximum density permitted under existing zoning, based on a 100 year storm.
- i. Location and design of all existing and proposed water supply and sewage disposal facilities.
- j. Location of all existing and proposed power and telephone lines and equipment, including that located within the adjoining street right-of-way. All such lines and equipment must be installed underground.
- k. Estimate of earth work, including type and quantities of material to be imported to or removed from the site.
- l. Detailed landscape plan, including the type, size, and location of materials to be used.
- m. Location, size, type, power, direction, shielding, and hours of operation of all existing and proposed lighting facilities.
- n. Location, size, type, and design of all existing and proposed business and directional signs.
- o. Written dimensions shall be used wherever possible.
- p. Signature and seal of licensed professional preparing the plan shall appear on each sheet.
- q. Statement of approval, in blank, as follows:

**Approved by Resolution of the Beacon Planning Board
on the _____ day of _____, 20_____
subject to all conditions as stated therein**

Chairman, City Planning Board

Date

APPLICATION FEES

Site Plan	<u>Residential</u> \$500 + \$250 per dwelling unit <u>Commercial</u> \$500 + \$250 per 1,000 s.f.
Special Use Permit	<u>Residential</u> \$500 + \$250 per dwelling unit <u>Commercial</u> \$500 + \$250 per 1,000 s.f.
Subdivision	\$ 750 for 2-4 lots + \$100 per lot \$1,000 for 5 or more lots + \$300 per lot
Zoning Board of Appeals	Use Variance \$500 Area Variance \$250 Interpretation \$250

ESCROW FEES

ALL SUBDIVISIONS, AND RESIDENTIAL SITE PLAN AND SUP APPLICATIONS

No. of Lots or Dwelling Units	Initial Deposit	Depleted to	Replenishment
1-5 (including lot-line realignment)	\$ 2,500	\$ 1,000	Current bills + \$1,000
6-15	\$ 7,500	\$ 2,500	Current bills + \$1,000
Over 15	\$ 15,000	\$ 5,000	Current bills + \$5,000

NON-RESIDENTIAL SITE PLAN AND SUP APPLICATIONS

	Initial Deposit	Depleted to	Replenishment
Existing Buildings/Change of Use with no site development	\$ 1,500	\$ 1,000	Current bills + \$500
Up to 3,000 s.f. gross floor area	\$ 2,500	\$ 1,000	Current bills + \$1,000
3,000 to 10,000 s.f. gross floor area	\$ 2,500 + \$0.50 per sq.ft. over 3,000	\$ 2,500	Current bills + \$2,500
Over 10,000 s.f. gross floor area	\$ 7,500 + \$0.50 per sq.ft. over 10,000	\$ 2,500	Current bills + \$2,500

ZONING

<i>* if required by Chairman</i>	Initial Deposit	Depleted to	Replenishment
Use Variance*	\$ 1,000	\$500	Current bills + \$500
Area Variance*	\$ 1,000	\$500	Current bills + \$500
Interpretation*	\$ 1,000	\$500	Current bills + \$500

ARCHITECTURAL REVIEW OR CERTIFICATE OF APPROPRIATENESS *(if not currently before PB)*

<i>* if required by Chairman</i>	Initial Deposit	Depleted to	Replenishment
Single Family House*	\$500	\$250	Current bills + \$250
All others*	\$500	\$250	Current bills + \$250

APPLICATION PROCESSING RESTRICTION LAW

Affidavit of Property Owner

Property Owner: O'Donnell Construction Corp.

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

Sean O'Donnell.

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

Eliza Street - (Parcel ID: 5954-36-994862)

Applicant Address: P.O. Box 526, Fishkill, New York 12525

Project Address: 364 Main Street & Eliza Street

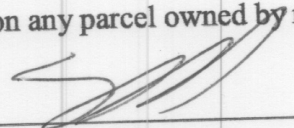
Project Tax Grid # 6054-29-006819 & 6054-29-004836

Type of Application: Site Plan Approval for Proposed Mixed-Used Development

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

I, Sean O'Donnell, the undersigned owner of the above referenced property, hereby affirm that I have reviewed my records and verify that the following information is true.

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


Signature of Owner
By: Sean O'Donnell

President, O'Donnell Construction Corp.

Title if owner is corporation

Office Use Only:

Applicant has violations pending for ANY parcel owned within the City of Beacon (Building Dept.)
ALL taxes are current for properties in the City of Beacon are current (Tax Dept.)
ALL Special Assessments, i.e. water, sewer, fines, etc. are current (Water Billing)

NO	YES	Initial
—	—	—
—	—	—
—	—	—

**CITY OF BEACON
SITE PLAN SPECIFICATION FORM**

Name of Application: 364 Main Street – Application for Site Plan Approval

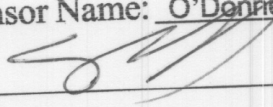
PLEASE INDICATE WHETHER THE SITE PLAN DRAWINGS SHOW THE SUBJECT INFORMATION BY PLACING A CHECK MARK IN THE APPROPRIATE BOXES BELOW.		
	YES	NO
The site plan shall be clearly marked “Site Plan”, it shall be prepared by a legally certified individual of firm, such as a Registered Architect or Professional Engineer, and it shall contain the following information:	✓	
LEGAL DATA		
Name and address of the owner of record.	✓	
Name and address of the applicant (if other than the owner).	✓	
Name and address of person, firm or organization preparing the plan.	✓	
Date, north arrow, and written and graphic scale.		
NATURAL FEATURES		
Existing contours with intervals of two (2) feet, referred to a datum satisfactory to the Planning Board.	✓	
Approximate boundaries of any areas subject to flooding or stormwater overflows.	✓	
Location of existing watercourses, wetlands, wooded areas, rock outcrops, isolated trees with a diameter of eight (8) inches or more measured three (3) feet above the base of the trunk, and any other significant existing natural features.	✓	
EXISTING STRUCTURES, UTILITIES, ETC.		
Outlines of all structures and the location of all uses not requiring structures.	✓	
Paved areas, sidewalks, and vehicular access between the site and public streets.		
Locations, dimensions, grades, and flow direction of any existing sewers, culverts, water lines, as well as other underground and above ground utilities within and adjacent to the property.	✓	
Other existing development, including fences, retaining walls, landscaping, and screening.	✓	
Sufficient description or information to define precisely the boundaries of the property.	✓	
The owners of all adjoining lands as shown on the latest tax records.	✓	
The locations, names, and existing widths of adjacent streets and curb lines.	✓	
Location, width, and purpose of all existing and proposed easements, setbacks, reservations, and areas dedicated to private or public use within or adjacent to the properties.	✓	

PROPOSED DEVELOPMENT	YES	NO
The location, use and design of proposed buildings or structural improvements.	✓	
The location and design of all uses not requiring structures, such as outdoor storage (if permitted), and off-street parking and unloading areas.	✓	
Any proposed division of buildings into units of separate occupancy.	✓	
The location, direction, power, and time of use for any proposed outdoor lighting.	✓	
The location and plans for any outdoor signs.	✓	
The location, arrangement, size(s) and materials of proposed means of ingress and egress, including sidewalks, driveways, or other paved areas.	✓	
Proposed screening and other landscaping including a planting plan and schedule prepared by a qualified individual or firm.	✓	
The location, sizes and connection of all proposed water lines, valves, and hydrants and all storm drainage and sewer lines, culverts, drains, etc.	✓	
Proposed easements, deed restrictions, or covenants and a notation of any areas to be dedicated to the City.	✓	
Any contemplated public improvements on or adjoining the property.		✓
Any proposed new grades, indicating clearly how such grades will meet existing grades of adjacent properties or the street.	✓	
Elevations of all proposed principal or accessory structures.	✓	
Any proposed fences or retaining walls.	✓	
MISCELLANEOUS		
A location map showing the applicant's entire property and adjacent properties and streets, at a convenient scale.	✓	
Erosion and sedimentation control measures.	✓	
A schedule indicating how the proposal complies with all pertinent zoning standards, including parking and loading requirements.	✓	
An indication of proposed hours of operation.		✓
If the site plan only indicates a first stage, a supplementary plan shall indicate ultimate development.		✓

For all items marked "NO" above, please explain below why the required information has not been provided:

Please See Attached Project Application Narrative

Applicant/Sponsor Name: O'Donnell Construction Corp.

Signature: 

By: Sean O'Donnell, President

Date: 1/5/2022

FOR OFFICE USE ONLY

Application #

CITY OF BEACON
1 Municipal Plaza, Beacon, NY
Telephone (845) 838-5000 • <http://cityofbeacon.org/>

INDIVIDUAL DISCLOSURE FORM

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

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

SECTION AName of Applicant: O'Donnell Construction Corp.Address of Applicant: P.O. Box 526, Fishkill, NY 12524Telephone Contact Information: 845-590-0622**SECTION B.** List all owners of record of the subject property or any part thereof.

Name	Residence or Business Address	Telephone Number	Date and Manner title was acquired	Date and place where the deed or document of conveyance was recorded or filed.
O'Donnell Construction Corp.	P.O. Box 526, Fishkill, NY 12524	845-590-0622	3/6/2017 Deed	3/16/2017 Dutchess County Clerk's Office

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

☐

YES

☒

NO

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

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

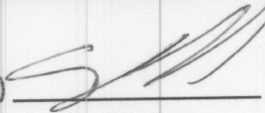
SECTION C. If the applicant is a contract vendee, a duplicate original or photocopy of the full and complete contract of purchase, including all riders, modification and amendments thereto, shall be submitted with the application.

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

☒ YES ☐ NO

I, Sean O'Donnell being first duly sworn, according to law, deposes and says that the statements made herein are true, accurate, and complete.

O'Donnell Construction Corp.
(Print) By: Sean O'Donnell, President

(Signature) 

FOR OFFICE USE ONLY
Application #

CITY OF BEACON
1 Municipal Plaza, Beacon, NY
Telephone (845) 838-5000 • <http://cityofbeacon.org/>

ENTITY DISCLOSURE FORM

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

Disclosure of the names and addresses of all persons or entities owning any interest or controlling position of any Limited Liability Company, Partnership, Limited Partnership, Joint Venture, Corporation or other business entity (hereinafter referred to as the "Entity") filing a land-use application with the City is required pursuant to Section 223-61.4 of the City Code of the City of Beacon. If any Member of the Entity is not a natural person, then the names and addresses as well as all other information sought herein must be supplied about the non-natural person member of that Entity, including names, addresses and Formation filing documents. Applicants shall submit supplemental sheets for any additional information that does not fit within the below sections, identifying the Section being supplemented.

SECTION A.

IF AFFIANT IS A PARTNERSHIP, JOINT VENTURE OR OTHER BUSINESS ENTITY, EXCEPT A CORPORATION:

Name of Entity	Address of Entity
Place where such business entity was created	Official Registrar's or Clerk's office where the documents and papers creating entity were filed
Date such business entity or partnership was created	Telephone Contact Information

IF AFFIANT IS A CORPORATION:

Name of Entity O'Donnell Construction Corp.	Telephone Contact Information 845-590-0622
Principal Place of Business of Entity P.O. Box 526, Fishkill, NY 12524	Place and Date of incorporation New York New York State Dept. of State (7/20/1995)
Method of Incorporation Domestic Business Corporation	Official place where the documents and papers of incorporation were filed New York State Dept. of State

SECTION B. List all persons, officers, limited or general partners, directors, members, shareholders, managers, and any others with any interest, mortgage, encumbrance or other interest (recorded or unrecorded) in or with the above referenced

Entity. List all persons to whom corporate stock has been pledged, mortgaged or encumbered and with whom any agreement has been made to pledge, mortgage or encumber said stock. Use a supplemental sheet to list additional persons.

Name	Resident Address	Resident Telephone Number	Nature and Extent of Interest
Sean O'Donnell	P.O. Box 526, Fishkill, New York 12524	845-590-0622	100%

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

Name	Residence or Business Address	Telephone Number	Date and Manner title was acquired	Date and place where the deed or document of conveyance was recorded or filed.
O'Donnell Construction Corp.	P.O. Box 526, Fishkill, NY 12524		3/6/2017 Deed	3/16/2017 Dutchess County Clerk's Office

SECTION D. Is any owner, of record or otherwise, an officer, director, stockholder, agent or employee of any person listed in Section B-C?

☐ YES

☒ NO

Name	Employer	Position

SECTION E. Is any party identified in Sections A- C an officer, elected or appointed, or employee of the City of Beacon or related, by marriage or otherwise, to a City Council member, planning board member, zoning board of appeals member or employee of the City of Beacon ?

☐ YES

☒ NO

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

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

SECTION F. Was any person referred to in Sections A-D known by any other name within five (5) years preceding the date of the application?

☐ YES ☒ NO

Current Name	Other Names

SECTION G. List the names and addresses of each person, business entity, partnership and corporation in the chain of title of the subject premises for the five (5) years next preceding the date of the application.

Name	Address
O'Donnell Construction Corp.	P.O. Box 526, Fishkill, New York 12524
CRE JV Five Branch Holdings LLC	C/o Grammercy Property Trust, 90 Park Avenue, 32 nd Floor, New York, NY 10016

SECTION H. If the applicant is not a record owner of the subject property, describe the applicant's interest in the subject property and the relationship the applicant has to the record owner(s) of the subject property.

N/A

SECTION I. If the applicant is a contract vendee, a duplicate original or photocopy of the full and complete contract of purchase, including all riders, modification and amendments thereto, shall be submitted with the application. Any sensitive or confidential information may be redacted from the contract prior to production.

SECTION J.

1. Where the record owner or contract vendee is a corporation, the following additional information shall be submitted:

Name of the Corporation O'Donnell Construction Corp.	Telephone Contact Information 845-590-0622
Principal Business Address P.O. Box 526, Fishkill, New York 12524	Place and Date of Incorporation New York State Dept. of State (7/20/1995)
Method of Incorporation Domestic Business Corporation	Official place where the documents and papers of incorporation were filed New York Dept. of State

2. Please provide the following information for every incorporator, officer, director and shareholder of the corporation.

Name	Residence or business address	Telephone number
Sean O'Donnell	P.O. Box 526, Fishkill, New York 12524	845-590-0622

3. Have any shares of the stock of the corporation or of any stockholder been pledged, mortgaged or encumbered?

☐

YES

☒

NO

If so, please list the name and address of each person having, holding, owning or claiming any such interest.

Name	Address

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

☐

YES

☒

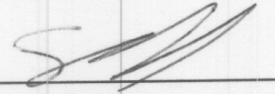
NO

I, Sean O'Donnell being first duly sworn, according to law, deposes and says that I am (Title) President, an active and qualified member of O'Donnell Construction Corp., a business duly authorized by law to do business in the State of New York, and that the statements made herein are true, accurate, and complete.

O'Donnell Construction Corp.

(Print) By: Sean O'Donnell, President

(Signature)



January 7, 2022

Mr. John Gunn, Chairman
Beacon Planning Board
City of Beacon City Hall
1 Municipal Plaza
Beacon, NY 12508

RE: Site Plan, Traffic and Parking Study Review #4 for Proposed Commercial and Multi-family Mixed-use Redevelopment, 364 Main Street, City of Beacon, Dutchess County, New York; CM Project No. 121-295

Dear Mr. Gunn:

Creighton Manning Engineering, LLP (CM) has performed a review of the documents enclosed in the “364 Main Street 12.28.21 PB Submission with Exhibits and Attachments (FULL)” (Submittal Package). Since CM’s third review letter, dated December 9, 2021, the project has been modified such that the commercial space on the first floor is 25 square feet larger and the residential common area on the first floor is 122 square feet smaller. Therefore, the proposed project now consists of an 8,819-square-foot commercial space and a 1,607-square-foot residential common space on the first floor, 20 residential units on the two new upper floors, and 42 parking spaces. Site access will be provided via the existing ingress-only driveway on Main Street and one right-in/right-out driveway on Eliza Street.

Below, please find our follow-up comments and any additional comments regarding the submitted materials (the newest comments are bolded):

Site Plan

Review #1 Comments

1. CM notes that there is trash enclosure proposed in the parking lot. CM recommends that a truck circulation exhibit be provided so the route can be reviewed. The truck circulation exhibit should also include the path of a typical vehicle used for residential “move-in” and “move-out” activities.
 - *Colliers’ Response: The requested truck circulation exhibit will be included in the Site Plans.*
 - **CM Review #2 Follow-Up Comment:** A Site Plan was not included in the aforementioned submittal package considered for review. Please submit Site Plan to confirm your response.
 - *Colliers’ Response: The request truck circulation paths for a garbage truck for trash collection and a 30 ft. single unit truck for move-in/move-out activities have been included on the Site Plans.*
 - **CM Review #3 Follow-Up Comment:** The Submittal Package includes a Truck Movement Plan, prepared by Day Stokosa Engineering PC, depicting a refuse vehicle accessing the garbage enclosure by fronting into the site and backing out. Because the refuse truck will be conducting a reversing maneuver onto Eliza Street, CM recommends that the refuse pickup be restricted to off-peak hours to avoid conflicts with drivers and pedestrians. Attached is a site plan submitted separately from the Submittal Package depicting a 30 ft. single unit box truck maneuvering in and out of the site. Can the Applicant confirm that a 30 ft. single unit box truck is the largest non-emergency vehicle anticipated to enter the site? Additionally, based on the turning maneuvers indicating that parking spaces adjacent to the building will be blocked, will there be a designated loading/unloading area for the commercial tenant to receive goods?
 - *Colliers’ Response: The Applicant agrees to restrict refuse pickup operations to off-peak hours as suggest by CM. The referenced plan depicting a Single Unit 30 ft. box truck was omitted from the previous submission but was provided to Creighton Manning directly for their review. This plan is attached to this letter for the Boards review. Based on the size of the proposed apartments as well as the size and anticipated uses of the commercial spaces, the Applicant does not anticipate a need for vehicles larger than a 30 ft. box truck for moving or delivery purposes. There is no designated loading area proposed within the Site parking lots. Deliveries and moving are short duration operations that are not anticipated to have a significant impact on*

the on-site parking. If necessary, the Applicant could, in the future, restrict deliveries and moving activities to certain hours of the day to ensure minimal impacts to parking.

- **CM Review #4 Follow-Up Comment:** CM recommends a loading area to reduce conflicts between moving/delivery vehicles and access to parking spaces. CM defers to the City of Beacon Building Inspector to opine on whether a loading zone is required based on the differences in City of Beacon Zoning Code Sections 223-41.18 and Section 223-26.H.2.a.
2. CM recommends that (a) a No Left Turn sign be installed at the driveway exit approach to Eliza Street and (b) a One Way sign be installed across from the Eliza Street driveway exit.
- *Colliers' Response: A "No Left Turn" sign (MUTCD Sign No. R3-2) and a "One-Way" (MUTCD Sign No. R6-1) sign will be installed at the Project driveway location with Eliza Street. These signs are been reflected in the Site Plans.*
 - **CM Review #2 Follow-Up Comment:** A Site Plan was not included in the aforementioned submittal package considered for review. Please submit Site Plan to confirm your response.
 - *Colliers' Response: The proposed "No Left Turn" and "One-Way" signs to be installed at the Eliza Street driveway are now reflected on the Site Plans.*
 - **CM Review #3 Follow-Up Comment:** The Submittal Package includes a Site Plan depicting the requested "No Left Turn" sign. Attached is a site plan submitted separately from the Submittal Package depicting the requested "One-Way" sign on Eliza Street. Upon review, CM has no further comment regarding the requested signs.
 - *Colliers' Response: The "One-Way" sign on Eliza Street was previously overwritten on the Site Plan by the Revision Block. This has been corrected on the Site plan included in this submission.*
 - **CM Review #4 Follow-Up Comment:** Comment addressed.
3. CM recommends that the applicant investigate the need for a Stop sign on the Veterans Place approach to Main Street, across from the subject property.
- *Colliers' Response: A new "Stop" sign (MUTCD Sign No. R1-1) will be installed on the Veteran Place approach by the Applicant as part of the Project. This is reflected in Exhibit 1R below.*
 - **CM Review #2 Follow-Up Comment:** Comment addressed.
 - *Colliers' Response: The proposed "Stop" sign to be installed on the Veterans Road approach is now reflected on the Site Plans.*
 - **CM Review #3 Follow-Up Comment:** Comment addressed.
4. CM acknowledges the applicant's concern over limited sight distance for left turns onto Main Street due to the existing building immediately to the west (see photo at right). CM recommends that a crash history analysis be conducted at and immediately adjacent to the intersection of Main Street and Veterans Place, inclusive of the site driveway, to identify safety concerns, especially those involving pedestrians and bicyclists, to further inform this matter. It is important that the crash data include a three-year period while the bank was in normal operation. Regardless of the crash history analysis, the applicant should propose treatments at both Main Street driveways to enhance pedestrian safety since the expansion of the site will increase vehicle-pedestrian interaction at these locations.
- *Colliers' Response: The crash history data has been requested by from the City of Beacon and NYSDOT but has not yet been received. However, since the existing exit driveway, which was previously proposed to remains as part of the Project, is now proposed to be eliminated, it is the opinion of Colliers Engineer & Design that this crash analysis is no longer necessary.*
 - **CM Review #2 Follow-Up Comment:** CM agrees that a crash analysis is no longer necessary given that the egress driveway on Main Street is being eliminated. Furthermore, Colliers is proposing pedestrian safety

countermeasures in conjunction with recently completed pedestrian safety countermeasures constructed separate of the subject project under review.

- *Colliers' Response: No further response required. See further discussion regarding pedestrian safety countermeasures in response to Traffic Impact Study Comment #6 below.*
- **CM Review #3 Follow-Up Comment:** No further comment.

5. CM recommends that a Do Not Enter sign be installed at the Main Street egress-only driveway facing Veterans Place.

- *Colliers' Response: The existing egress only driveway is now proposed to be eliminated and therefore additional signage at this driveway location is no longer required.*
- **CM Review #2 Follow-Up Comment:** Comment addressed.

6. Given the mixed-use nature of the project, how will the off-street parking operate? Will parking spaces be assigned to residents and patrons/employees of the retail space? If so, please delineate this on the plan and detail any applicable signs.

- *Colliers' Response: The parking spaces are not proposed to be specifically assigned to residents and/or patrons/employees of the commercial space.*
- **CM Review #2 Follow-Up Comment:** CM recommends that the spaces for the residential use be designated for residents-only. This would help eliminate the event of a resident needing to turn around inside the parking lot and exit via the egress-only driveway due to a spot not being available.
- *Colliers' Response: It is the Applicant's preference to not assign parking spaces to the residents of the Project. Assigning of parking spaces to the residential units will eliminate the ability for shared parking between the residential and commercial uses of the project. The provision of a turnaround area, which is discussed further in Response to Item 8 below, will accommodate vehicles needing to turn around inside the parking lot and exit via the egress-only driveway due to a spot not being available.*

It is also anticipated that residents of the Project will learn to utilize the Main Street access to access the parking behind the building first to avoid the need for this turn-around maneuver.

- **CM Review #3 Follow-Up Comment:** CM understands there is no requirement that the off-street parking spaces be assigned and therefore defers to the Board as to its preference on this matter. There are benefits and drawbacks to assigning spaces versus leaving them unassigned—CM understands the value and flexibility of shared parking and also the desire of future residents to have a predictable parking experience. If not now as part of the site plan, the applicant could decide to assign parking spaces in the future, once the building is occupied, to address the issue then.
- *Colliers' Response: It is the Applicant's preference to have all parking be unassigned at this time. Understanding the possible desire for tenants to have predictability in available parking the Applicant acknowledges that assigned parking may be beneficial in the future, but would prefer the flexibility to determine the need for this as part of the overall operation of the facility after occupancy.*
- **CM Review #4 Follow-Up Comment:** No further comment.

7. The applicant should consider including at least one electric vehicle (EV) charging station on the site.

- *Colliers' Response: The installation of an electric vehicle charging station is not proposed as part of the Project.*
- **CM Review #2 Follow-Up Comment:** Comment addressed.

8. The one-way inbound driveway creates a dead-end parking condition near the northeast corner of the site. The applicant should consider improving this condition to avoid inefficient site circulation.

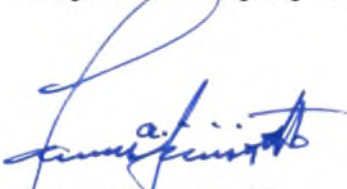
- *Colliers' Response: This item is being reviewed as part of the Site Plans. A sufficient area for vehicles to turn around in the event that parking on the Main Street parcel is full will be provided and diagrammed as part of the a future Site Plan submission.*
- **CM Review #2 Follow-Up Comment:** A Site Plan was not included in the aforementioned submittal package considered for review. Please submit Site Plan to confirm your response.
- *Colliers' Response: As shown on the Site Plan the west side building extension has been stepped to the south allowing the two western most parking spaces directly behind the building to also be stepped to the south by approximately 8 ft. this provides additional area for both a passenger vehicle or a moving vehicle that may need to turn around behind the building to do so. The vehicle turning paths for both a passenger car and a 30 ft. single unit truck show that this area will sufficiently accommodate the required vehicle maneuvers to turn around in this parking area and return to the Eliza Street parcel parking area.*
- **CM Review #3 Follow-Up Comment:** The Submittal Package includes a site plan depicting a passenger vehicle conducting a turnaround maneuver. Attached is a site plan submitted separately from the Submittal Package depicting a 30 ft. single unit box truck maneuvering in and out of the site. Can the Applicant confirm that a 30 ft. single unit box truck is the largest non-emergency vehicle anticipated to enter the site? Additionally, based on the turning maneuvers indicating that parking spaces adjacent to the building will be blocked, will there be a designated loading/unloading area for the commercial tenant to receive goods?
- *Colliers' Response: See response to Item 1 Above.*
- **CM Review #4 Follow-Up Comment:** **CM recommends a loading area to reduce conflicts between moving/delivery vehicles and access to parking spaces. CM defers to the City of Beacon Building Inspector to opine on whether a loading zone is required based on the differences in City of Beacon Zoning Code Sections 223-41.18 and Section 223-26.H.2.a.**

Traffic Impact Study

A revised traffic impact study was not included in the Submittal Package. As noted, the proposed project has been further refined such that the proposed commercial space is 25 square feet larger and the residential common area on the first floor is 122 square feet smaller while the number of residential units – 20 – remain the same. Because this reduction would not result in an increase in site trip generation based on the most recent Traffic Impact Study, which evaluated a 9,451-square-foot commercial space and 20 residential units, CM does not require a revised Traffic Impact Study to be prepared and submitted by the applicant.

If you have any questions about the above comments, please do not hesitate to contact our office at (914) 800-9201. Respectfully,

Creighton Manning Engineering, LLP



Frank A. Filiciotto, PE
Associate



Starke W. Hipp, PE
Project Engineer

City of Beacon Planning Board Agenda
01/11/2022

Title:

Continue review of application for Special Use Permit and Site Plan Approval, accessory apartment, 1080 Wolcott Avenue, submitted by Catrinel Bartolomeu & Bruno Maddox

ATTACHMENTS

[1080 Wolcott Site Plan.pdf](#)

[Planner Review Letter.pdf](#)

[1080 Wolcott Avenue Resolution Accessory Apartment Special Permit and Site Plan Approval.docx](#)

BARN CONVERSION

1080 WOLCOTT AVENUE
BEACON, NEW YORK 12508

ACCESSORY BUILDING - VARIANCE
APPLICATION
06.22.2021

GENERAL NOTES

LOCATION:	1080 WOLCOTT AVENUE, BEACON, NY 12508
TAX MAP:	130200-5954-34-659817-0000
DEED REFERENCE:	BOOK: 22020, PAGE: 30
OWNER OF RECORD:	CATRINEL AND BRUNO BARTOLOMEU 1080 WOLCOTT AVE BEACON NY 12508
APPLICANT:	CATRINEL AND BRUNO BARTOLOMEU 1080 WOLCOTT AVE BEACON NY 12508
ZONING DISTRICT:	R1-40: RESIDENTIAL; HISTORIC DISTRICT AND LANDMARK ZONING OVERLAY
PROPOSED USE:	BARN CONVERSION
NARRATIVE:	CONVERSION OF AN EXISTING BARN NON-SPRINKLERED. CURRENTLY ZONED AS RESIDENTIAL. NO CHANGE TO ZONING. PROPOSED USE OF BARN TO BE APARTMENT SPACE FOR OWNER'S FAMILY.
HOURS OF OPERATION:	N/A - RESIDENTIAL USE

ZONING ANALYSIS - ACCESSORY BUILDING

	REQUIRED BY ORDINANCE	PROPOSED
ZONING DISTRICT	R1-40: RESIDENTIAL; HISTORIC DISTRICT AND LANDMARK ZONING OVERLAY	
USE GROUPS EXISTING ON SITE	RESIDENTIAL	
USE GROUPS PROPOSED ON SITE	RESIDENTIAL - ACCESSORY BUILDING CONVERSION	
BUILDING FOOTPRINT	N/A	955 SF - NO CHANGE
MAX LOT COVERAGE	N/A	NO CHANGE
SETBACK REGULATIONS (SEC. 223-17E)		
FRONT YARD SETBACK: SIDE YARD SETBACK: REAR YARD SETBACK:	NOT PERMITTED IN FRONT YARD 25 FT MIN 25 FT MIN	N/A EXISTING - 76'-3", 52'-5" EXISTING, NON-COMPLIANT - 2'-2 1/2"
MAX CUMULATIVE SQUARE FOOTAGE FOR ALL ACCESSORY BUILDINGS:	1,625 SF	EXISTING, NON-COMPLIANT - 371 SF (GARAGE) + 1,720 SF (BARN) = 2,091 SF > 1,625 SF
MAX SQUARE FOOTAGE PERMITTED FOR EACH ACCESSORY BUILDING:	40% OF PRINCIPAL BUILDING	3,709.2 SF (PRINCIPAL BUILDING) X 40% = 1,484 SF ALLOWABLE
MAX NUMBER OF SHEDS PERMITTED:	2	NO CHANGE - 2 EXISTING ACCESSORY BUILDINGS
SETBACK REGULATIONS (SEC. 223-24.1)		
FLOOR AREA REQUIREMENTS FOR AN ACCESSORY APARTMENT IN AN ACCESSORY BUILDING:	300 SF MIN 600 SF MAX	1,320 SF FOR PROPOSED APARTMENT
VARIANCE SUMMARY:	1. REAR YARD SETBACK ACCESSORY BUILDING (SEC. 223-17E): 2. PERMITTED ACCESSORY BLDG SF (SEC. 223-17): 3. CUMULATIVE ACCESSORY BLDGS AREA (SEC. 223-17): 4. FLOOR AREA REQS FOR ACCESSORY APT/ (SEC. 223-24.1): 5. 2ND FL. OF ACCESSORY B'D'G SHALL BE STORAGE (SEC. 223-14E(3)(e)):	
	REAR YARD SETBACK (24.4' VARIANCE REQ'D) TOTAL SF OF BARN = 1,720 SF TOTAL SF OF CUMULATIVE BLDGS = 2,091 SF TOTAL SF OF PROPOSED APT. = 1,320 SF PROPOSED RESIDENTIAL USE	

ZONING ANALYSIS

	REQUIRED BY ORDINANCE	PROPOSED
ZONING DISTRICT	R1-40: RESIDENTIAL; HISTORIC DISTRICT AND LANDMARK ZONING OVERLAY	
LOT AREA	1.599 ACRES (69,654.9 SF)	
STREET FRONTAGE	203 FT ALONG WOLCOTT AVENUE	
USE GROUPS EXISTING ON SITE	RESIDENTIAL	
USE GROUPS PROPOSED ON SITE	RESIDENTIAL ACCESSORY BUILDING	
BUILDING FOOTPRINT	N/A	3,709.2 SF - NO CHANGE
MAX LOT COVERAGE	15%	NO CHANGE
YARD REGULATIONS (SEC. 223-17C)		
MINIMUM LOT AREA: MINIMUM LOT WIDTH: MINIMUM LOT DEPTH:	40,000 SF 150 FT 150 FT	NO CHANGE +/- 419' - COMPLIES +/- 203' - COMPLIES
SETBACK REGULATIONS (SEC. 223-17C)		
FRONT YARD SETBACK: SIDE YARD SETBACK: REAR YARD SETBACK:	40 FT MIN 25 FT MIN 50 FT MIN	NO CHANGE - COMPLIES NO CHANGE - COMPLIES NO CHANGE - 49.4' VARIANCE REQ'D
HEIGHT REGULATIONS (SEC. 223-17C)		
MAX HEIGHT (STORIES):	2.5 STORIES / MAX 35 FT	NO CHANGE
LANDSCAPE REGULATIONS	N/A	-
PARKING REGULATIONS (SEC. 223-26)		
SPACES REQUIRED: ACCESSIBLE SPACES:	2 SPACES FOR EACH DWELLING -	NO CHANGE

OWNER'S CERTIFICATION

THE UNDERSIGNED, OWNER OF THE PROPERTY SHOWN HEREON, STATES THAT HE IS FAMILIAR WITH THIS MAP, ITS CONTENTS, LEGENDS AND DATA AND HEREBY CONSENTS TO ALL SAID TERMS AND CONDITIONS AS STATED HEREON.

OWNER DATE

PLANNING BOARD APPROVAL

RECOMMENDED FOR APPROVAL BY THE CITY OF BEACON PLANNING BOARD ON THE 22nd DAY OF December, 2020. SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGES, ERASURES, MODIFICATIONS OF REVISIONS TO THE PLAT AS APPROVED SHALL VOID THIS APPROVAL.

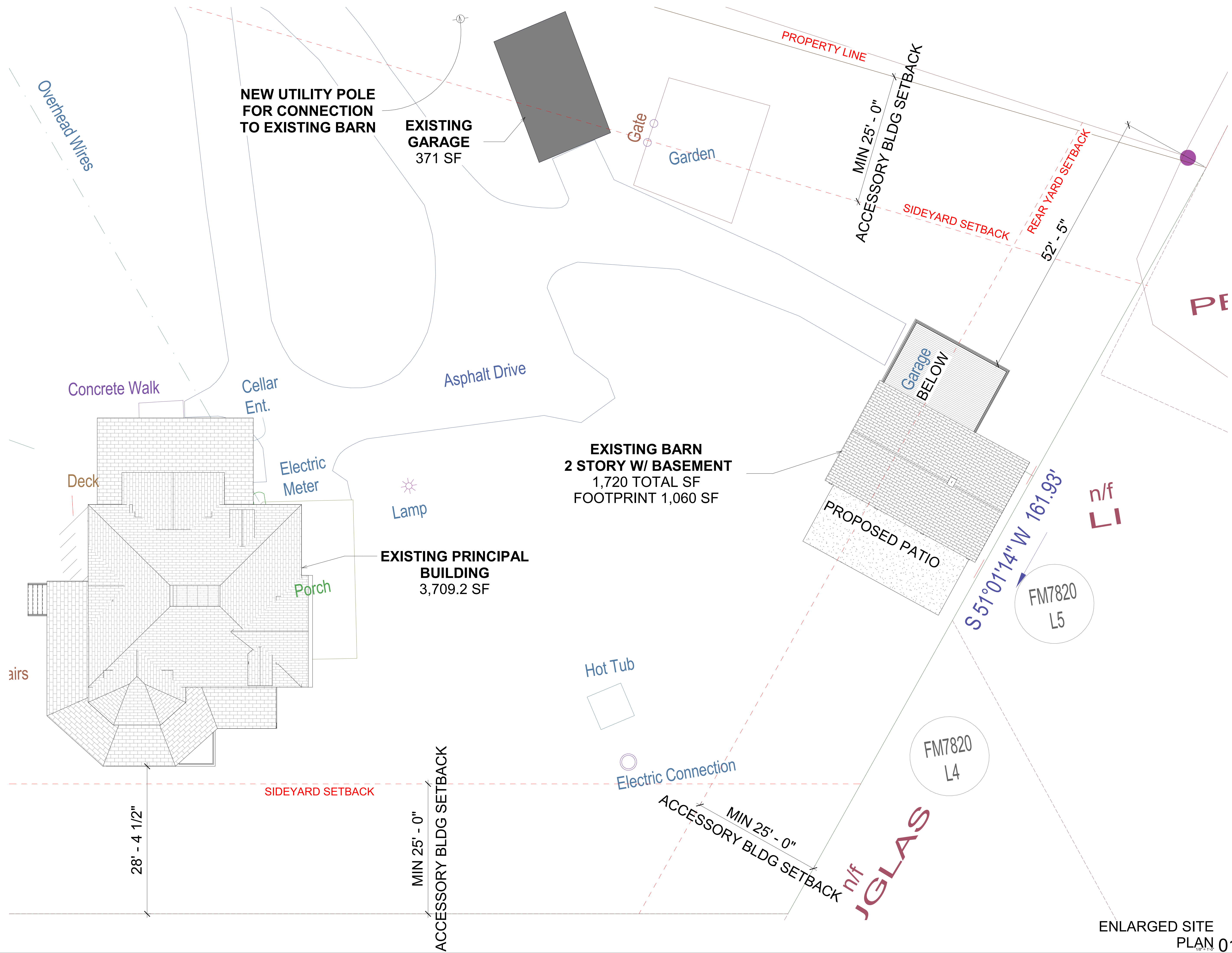
CHAIRMAN DATE

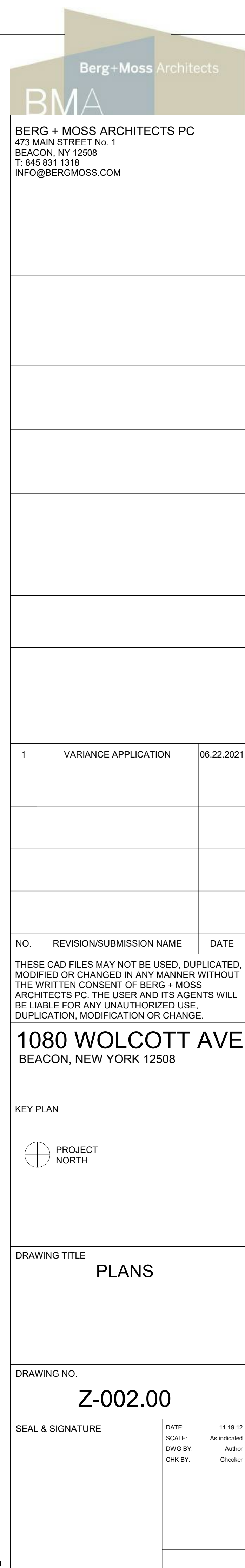
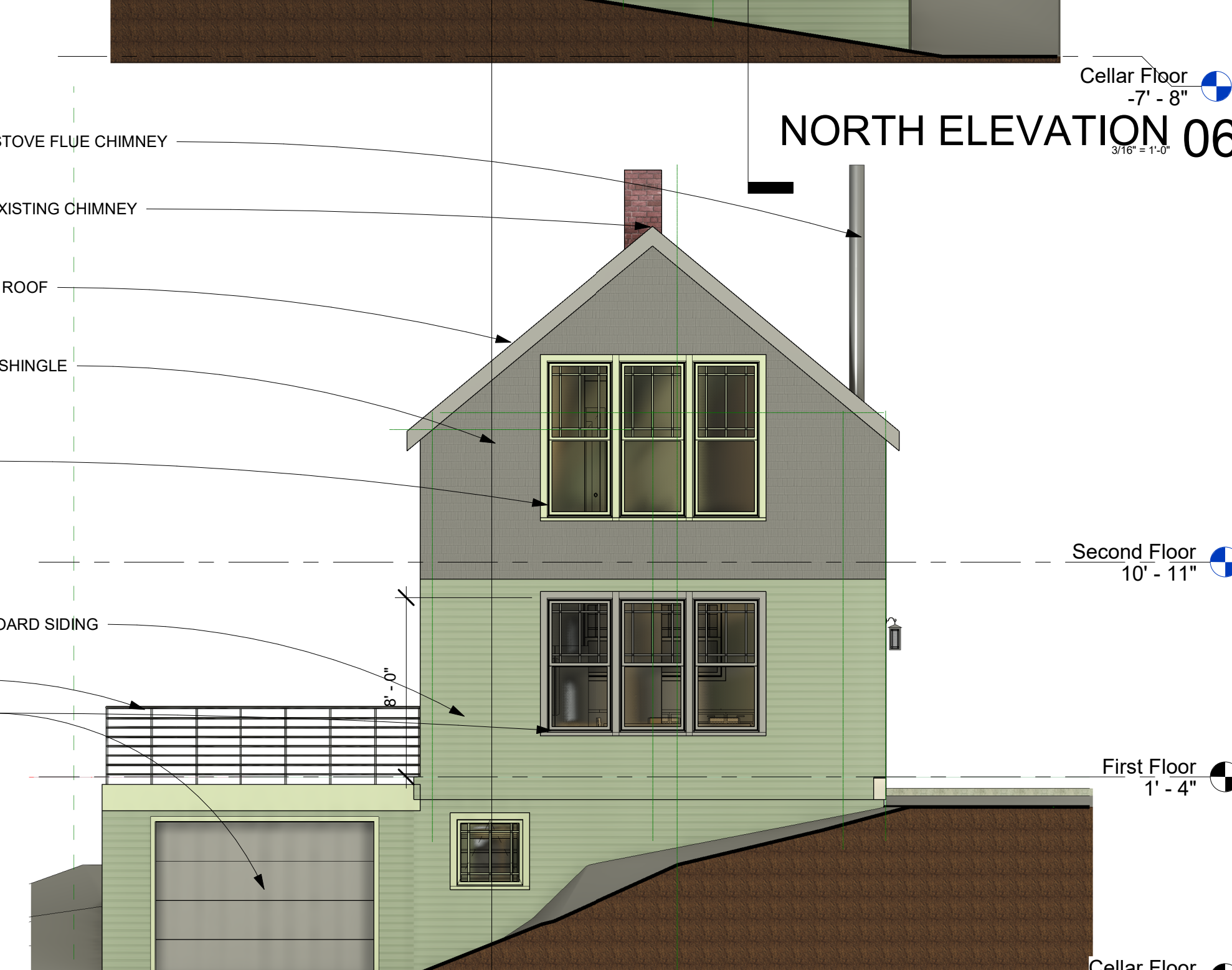
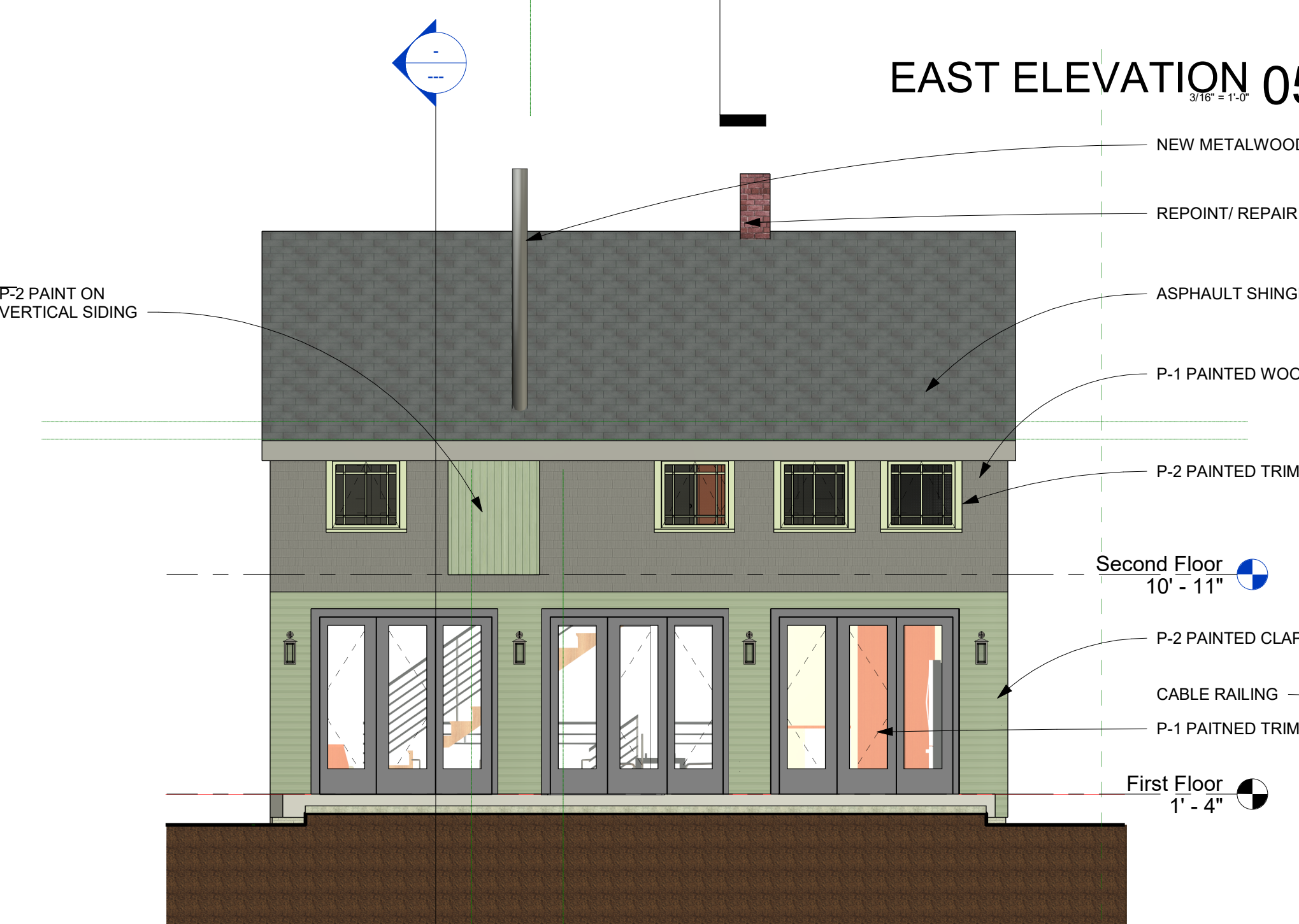
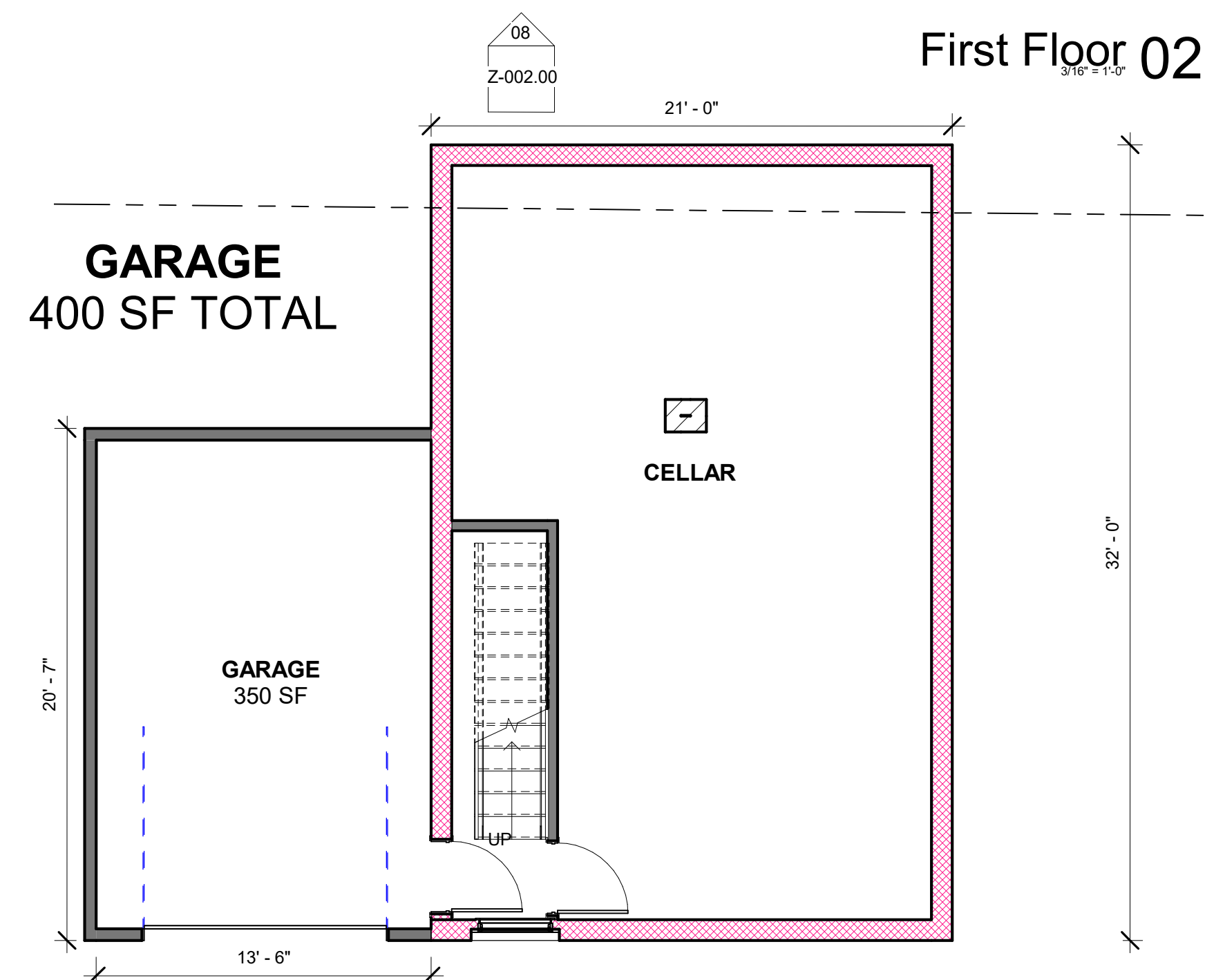
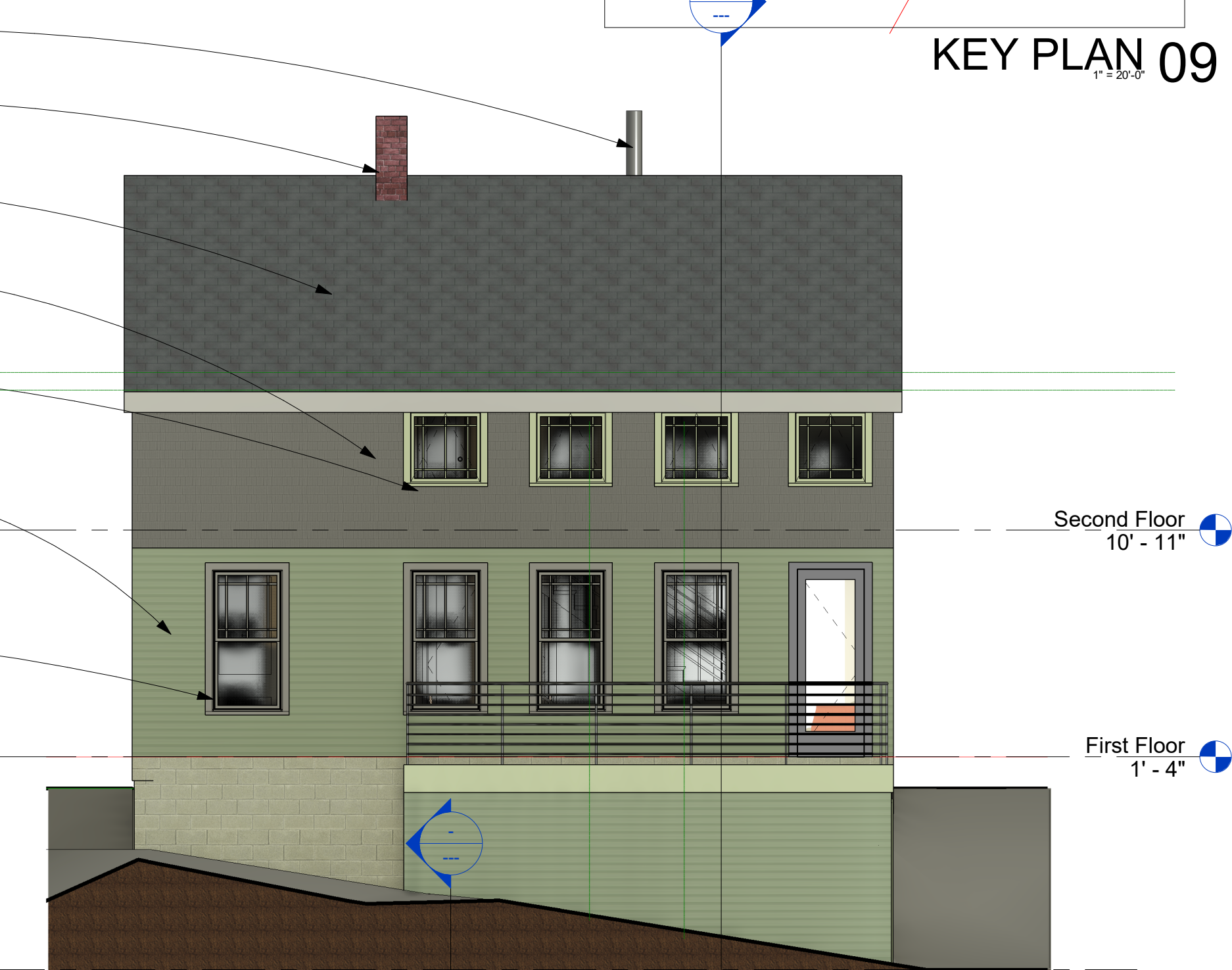
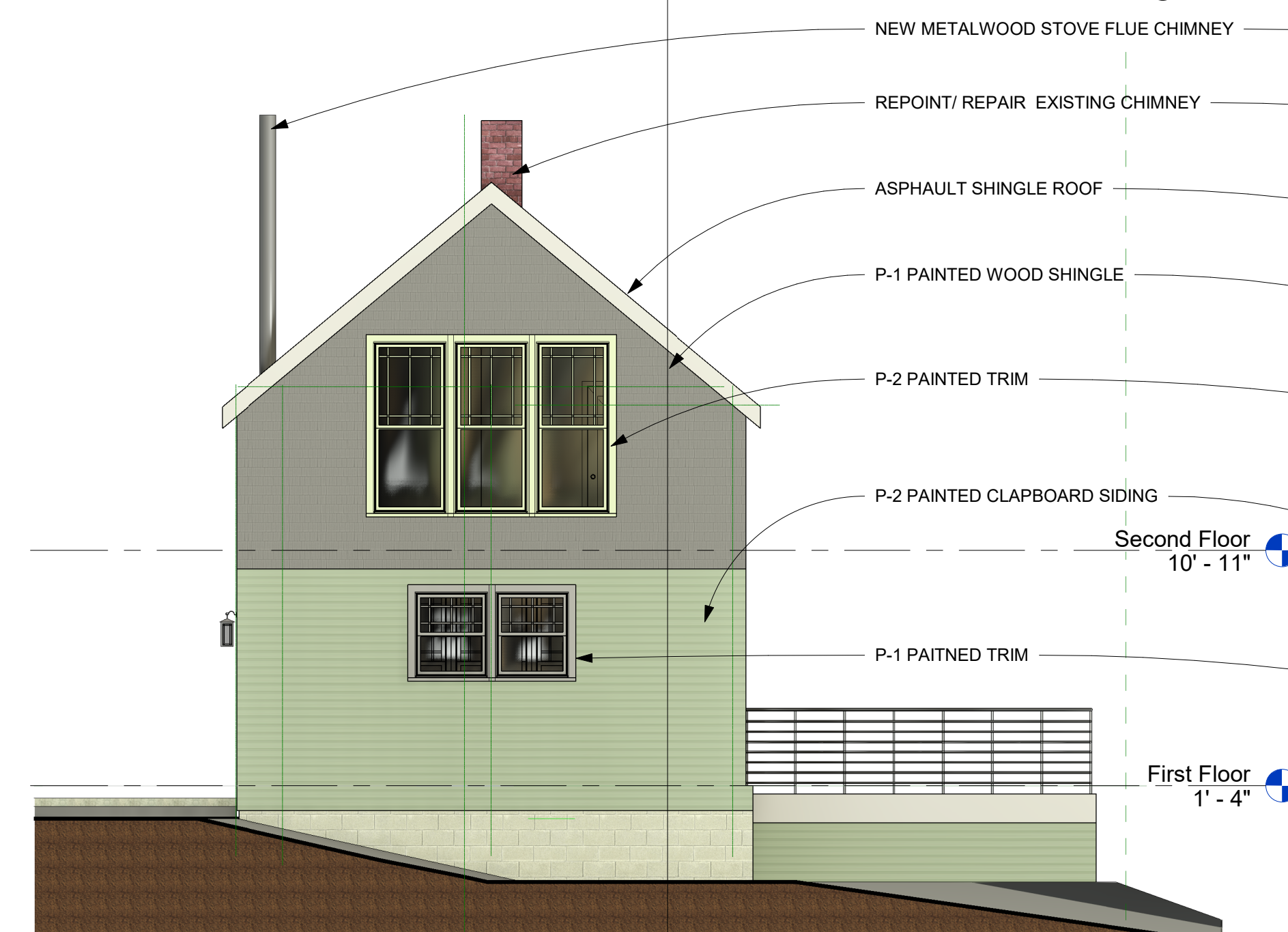
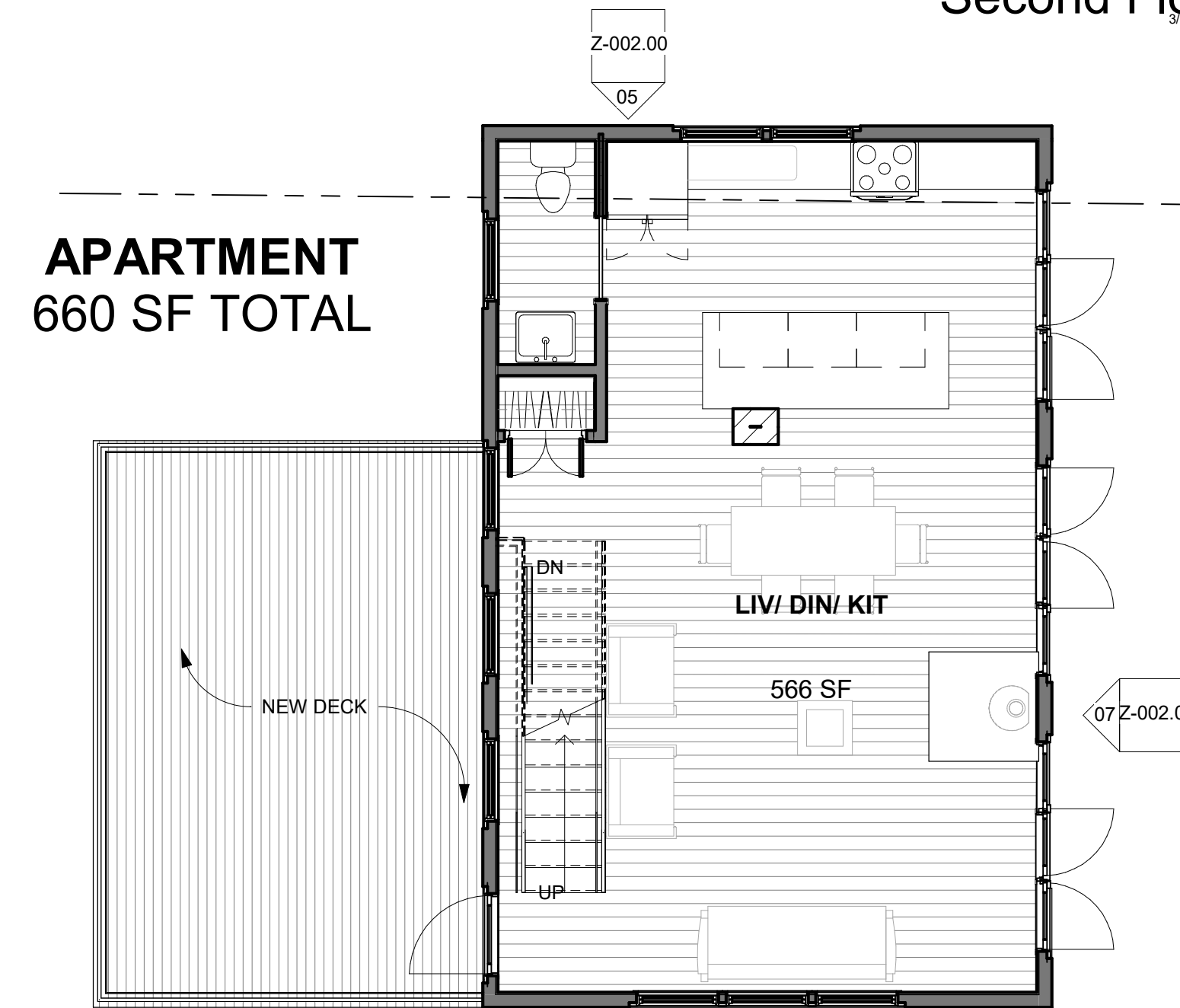
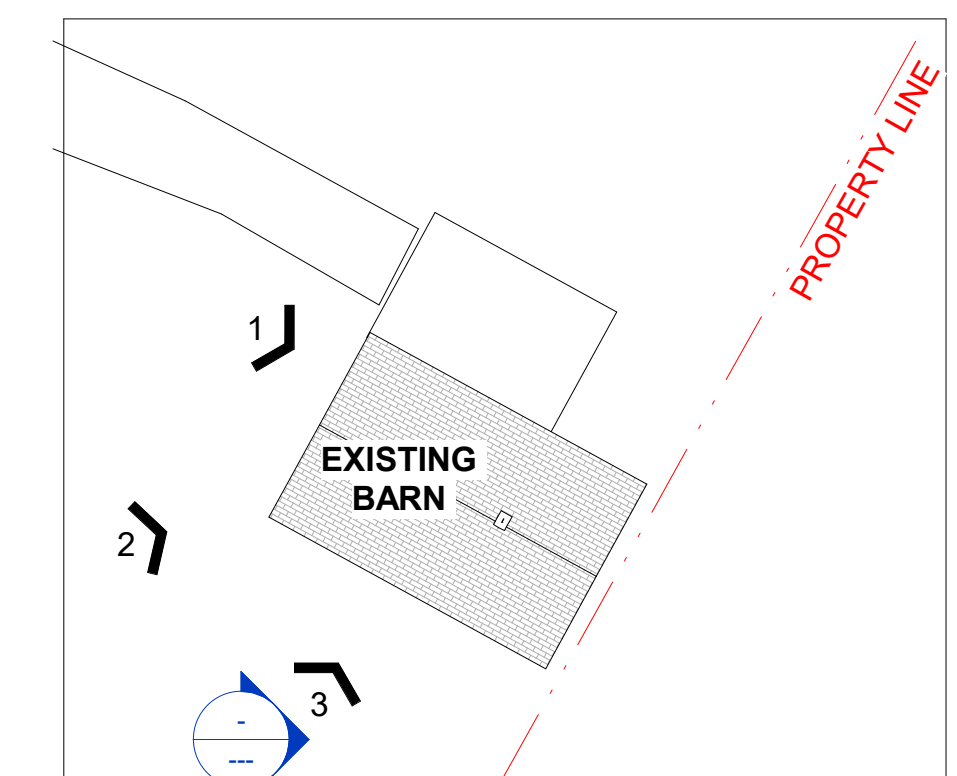
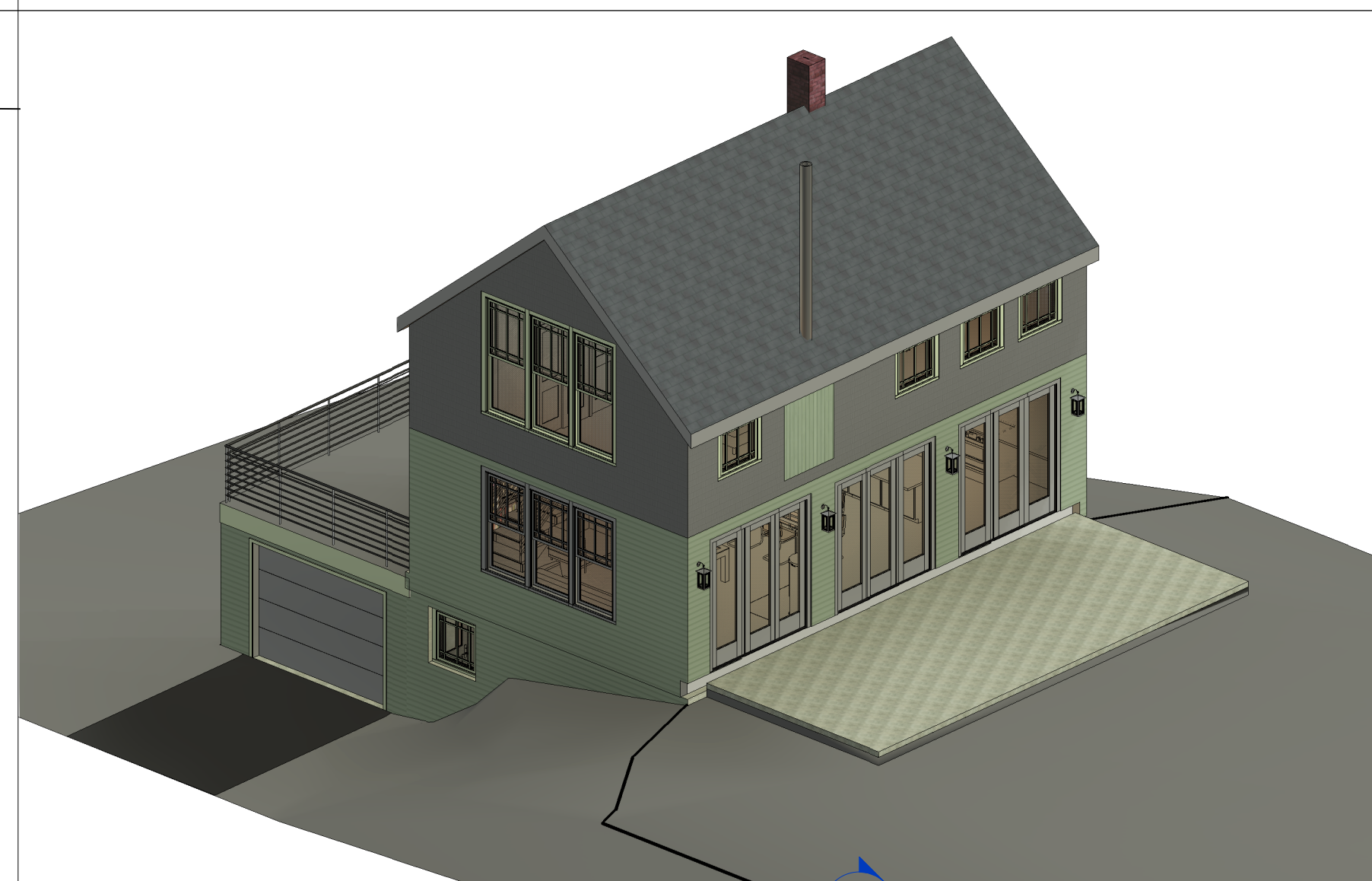
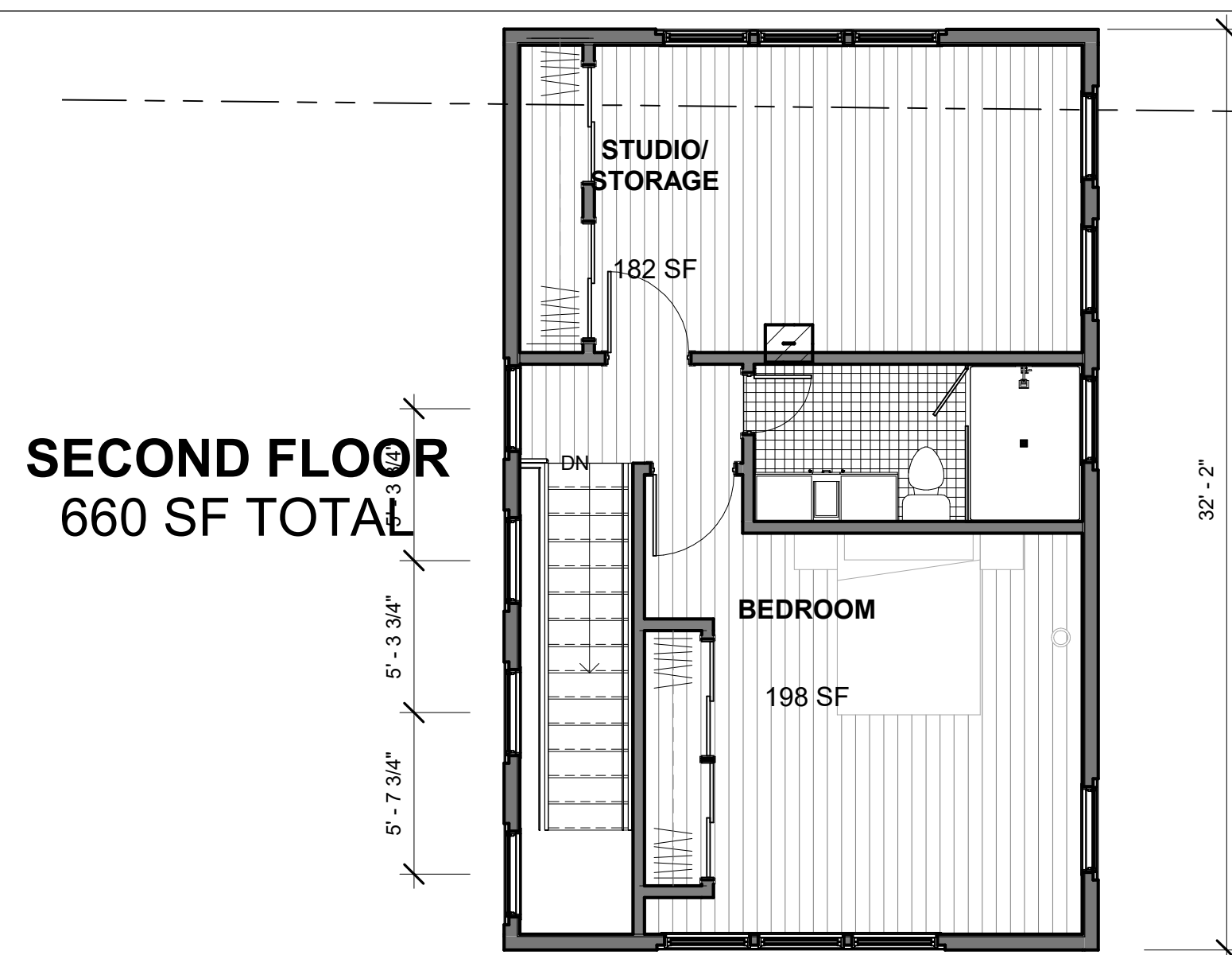
DRAWING LIST

Sheet No.	Rev.	Drawing Title	Issue 1 - 06.22.2021 Issue Date 2 Issue Date 3
Z-000.00	1	COVER SHEET	
Z-001.00	1	SITE PLAN	
Z-002.00	1	PLANS	

TAX MAP



16



BMA

BERG + MOSS ARCHITECTS PC
473 MAIN STREET No. 1
BEACON, NY 12508
T: 845 831 1318
INFO@BERGMOSS.COM

1	VARIANCE APPLICATION	06.22.2021
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NO.	REVISION/SUBMISSION NAME	DATE
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1080 WOLCOTT AVE
BEACON, NEW YORK 12508

KEY PLAN



DRAWING TITLE	PLANS
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DRAWING NO.

Z-002.00

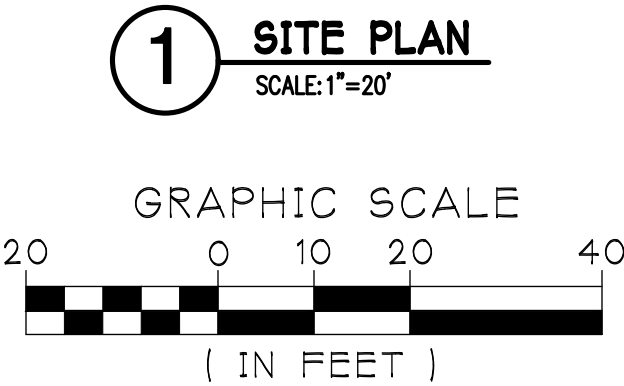
SEAL & SIGNATURE

DATE:	11.19.12
SCALE:	As indicated
DWG BY:	Author
CHK BY:	Checker



LEGEND	
EXISTING	PROPOSED
PROPERTY LINE	---
UNDERGROUND ELECTRIC /COMMUNICATION	---UE/C---
GAS	---G---
CLEAN OUT	○
POWER POLE	⊗
STREET LIGHT	⊗
HYDRANT	⊗HYD
WATER LINE	---W---
SANITARY LINE	---S---
STORM LINE	---D---
CATCH BASIN	■CB
SANITARY MANHOLE	⊗SMH
SIDEWALK	▬
TRANSFORMER	▬

- GENERAL NOTES:
1. BASED ON SURVEY PREFORMED BY OICLE LAND SURVEYING, PC 2020
 2. TOPOGRAPHY CREATED BY LIDAR TAKEN FROM GIS CLEARINGHOUSE
 3. SIZE AND MATERIAL OF EXISTING WATER AND SEWER MAINS LOCATED ON WOLCOTT AVE. TO BE VERIFIED PRIOR TO ANY WORK BEING PERFORMED



NOT FOR CONSTRUCTION

THIS PLAN HAS NOT RECEIVED FINAL APPROVAL OF ALL REVIEWING AGENCIES. THIS PLAN IS SUBJECT TO REVISION UNTIL ALL APPROVALS ARE OBTAINED AND SHOULD NOT BE USED FOR CONSTRUCTION PURPOSES.

 DUNN & SGROMO ENGINEERS 5800 HERITAGE LANDING DRIVE EAST SYRACUSE, NEW YORK 13057 T: (315)449-4940 F: (315)449-4941		 IT IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER A LICENSED, REGISTERED ENGINEER, TO ALTER AN ITEM ON THIS DOCUMENT IN ANY WAY. ©DUNN & SGROMO ENGINEERS - 2021 ALL RIGHTS RESERVED		
CITY OF BEACON DUTCHESS COUNTY, NEW YORK 1080 WOLCOTT AVENUE	NO.	DATE	REVISION	BY
	1	10.26.2021	LANC & TRACY COMMENTS	MGS
UTILITY PLAN	SCALE: AS NOTED		FILE NO.: 1298.001	
	DESIGNED BY: MGS		DATE: 08.05.2021	
	DRAWN BY: MGS		DWG. NO:	
	CHECKED BY: GS		C-1	

To: John Gunn, Chair, and the City of Beacon Planning Board

Date: January 6, 2022

Re: **1080 Wolcott Avenue, Site Plan and Special Permit for Accessory Apartment**

I have reviewed the 3-sheet Site Plan set with Sheet 01 dated June 22, 2021 and the next two sheets dated November 19, 2012(?) and 2 Utility Plan sheets from Dunn & Sgromo dated October 26, 2021. Since no new plans were submitted and the applicant did not respond to the points in my previous memo, some of the comments have been repeated.

Proposal

The applicant is proposing the renovation of an existing barn to create an accessory apartment. The 1.599-acre parcel is in the R1-40 zoning district, in the Historic District and Landmark Overlay (HDLO) zone, and within the City's Local Waterfront Revitalization Program (LWRP) boundary.

Comments and Recommendations

1. The parcel is in the HDLO, so approval will require a Certificate of Appropriateness.
2. The Zoning Analysis tables should be updated:
 - a. The parking requirement is two spaces for the main house and one space for the accessory apartment, or three total spaces.
 - b. The Variance Summary should list the ZBA approval and date for the rear yard variance and that the Planning Board has agreed to permit a larger than allowed maximum accessory apartment size under the provisions in Section 223-24.1D.
3. The plans should include a note confirming that the proposal will comply with the specific accessory apartment provision in Section 223-24.1 that the property owner will occupy one of the dwelling units on the lot.
4. Since the barn is directly on the property line, windows on that side of the building should be limited in size to only what is necessary.
5. The plans should include specifications for the exterior lighting fixtures that demonstrate consistency with the requirements in Section 223-14B.

If you have any questions or need additional information, please feel free to contact me.

John Clarke, Beacon Planning Consultant

c: Dave Buckley, Building Inspector
Jennifer L. Gray, Esq., City Attorney
Arthur R. Tully, P.E., City Engineer
John Russo, P.E., City Engineer
Chris Berg, Berg + Moss Architects

RESOLUTION

PLANNING BOARD
BEACON, NEW YORK

GRANTING SPECIAL PERMIT, SITE PLAN
AND CERTIFICATE OF APPROPRIATENESS APPROVALS FOR
1080 WOLCOTT AVENUE

Parcel ID# 5954-34-659817

WHEREAS, the Beacon Planning Board received an application for a Special Permit, Site Plan and Certificate of Appropriateness Approval from Catrinel Bartholomeu & Bruno Maddox (the “Applicant”), to convert the existing 2-story barn to allow for construction of a 1,320 square foot accessory apartment (the “Proposed Action” or “Project”) on a 1.599-acre parcel of property located at 1080 Wolcott Avenue in the R1-40 Zoning District and the Historic District and Landmark Overlay (HDLO) Zone and within the Local Waterfront Revitalization Program (“LWRP”) boundary and designated on the City tax map as Parcel ID# 5954-34-659817 (the “Property”); and

WHEREAS, the Planning Board is the approval authority for a Special Permit for the accessory apartment pursuant to City of Beacon Zoning Code § 223-17.C; and

WHEREAS, the Planning Board is the approval authority for the Site Plan pursuant to City of Beacon Zoning Code § 223-25; and

WHEREAS, the Proposed Action includes a request for a certificate of appropriateness pursuant to the criteria in City of Beacon Code § 134-7; and

WHEREAS, the application consists of application materials, correspondence, and professional studies and reports submitted to the Planning Board; and

WHEREAS, the Site Plan is shown on the drawings, entitled “Barn Conversion – 1080 Wolcott Avenue,” Sheets 1-3, prepared by Berg & Moss Architects P.C.:

Sheet	Title	Dated
Z-000.00	<i>Cover Sheet</i>	6/22/21, rev 11/19/21
Z-001.00	<i>Site Plan</i>	6/22/21, rev 11/19/21
Z-002.00	<i>Landscaped Plan</i>	6/22/21, rev 11/19/21

and Utility and Utility Detail Plans, entitled “1080 Wolcott Avenue”, Sheets 1-2, prepared by Dunn & Sgromo Engineers, PLLC:

Sheet	Title	Dated
C-1	<i>General Notes</i>	08/05/21, rev. 10/26/21

**Special Permit, Site Plan
& Certificate of Appropriateness Approvals
1080 Wolcott Avenue**

C-2

Site Plan

08/05/21, rev. 10/26/21; and

WHEREAS, the Proposed Action is a Type II Action, pursuant to 6 NYCRR 617.5(c)(12) of the New York State Environmental Quality Review Act ("SEQRA") requiring no further environmental review; and

WHEREAS, pursuant to City of Beacon Code Chapter 220 a LWRP Consistency Determination is not required for Type II Actions; and

WHEREAS, on September 21, 2021 the City of Beacon Zoning Board of Appeals granted a rear yard setback variance to allow a setback of less than one foot where 50 feet is required pursuant to City Code §§ 223-17D and 223 Attachment 1; and

WHEREAS, on December 14, 2021, the Planning Board opened a duly noticed public hearing on the Special Permit and Site Plan applications, at which time all interested parties were given the opportunity to be heard and the public hearing was closed on December 14, 2021; and

WHEREAS, the Planning Board has reviewed the application for a Special Permit to convert the existing 2-story barn to allow for construction of a 1,320 square foot accessory apartment and compared the application against the standards set forth in the City of Beacon Zoning Code §§ 223-18.B and 223-24.1; and

WHEREAS, the Planning Board has reviewed the application for Site Plan Approval and considered the standards as set forth in the City of Beacon Zoning Code § 223-25.E; and

WHEREAS, the Planning Board has reviewed the application for a certificate of appropriateness against the standards set forth in the City of Beacon Zoning Code §134-6 and applied the design standards in City of Beacon Zoning Code §134-7; and

WHEREAS, the Planning Board is fully familiar with the Project and has reviewed the Project relative to all applicable provisions of the City Code.

NOW, THEREFORE, BE IT RESOLVED, that the Planning Board hereby finds pursuant to the City of Beacon Zoning Code §§ 134-6 and 134-7 that the proposed renovations to construct an accessory apartment are consistent with the historic character of the surrounding area and compatible with the design standards for the Historic District Landmark Overlay Zone and accordingly, the Planning Board hereby grants a Certificate of Appropriateness for the Project, as shown on the application materials referenced above.

BE IT FURTHER RESOLVED, that upon review of the Special Permit application to allow the existing 2-story barn to be renovated on property located at 1080 Wolcott Avenue, to construct a 1,320 square foot accessory apartment, the Planning Board

**Special Permit, Site Plan
& Certificate of Appropriateness Approvals
1080 Wolcott Avenue**

hereby finds pursuant to Sections 223-18.B and 223-24.1 of the City of Beacon Zoning Code:

1. The location and size of the use, the nature, hours and intensity of the operations involved in or conducted in connection with it, the size of the site in relation to it and the location of the site with respect to streets giving access to it are such that it will be in harmony with the appropriate and orderly development of the site and the existing permitted uses on adjacent blocks.
2. The location, nature and height of the buildings, walls and fences and the nature and extent of the landscaping on the site are such that the use will not conflict with the existing permitted uses on adjacent blocks and will not hinder or discourage the appropriate development use of adjacent land and buildings. The proposed accessory apartment is compatible with the surrounding residential uses in the neighborhood.
3. Operations in connection with the use as an accessory apartment will not be more objectionable to nearby properties by reason of noise, fumes, vibration or other characteristic than would be the operations of any permitted use, not requiring a special permit. Windows on the east elevation have been minimized to the extent practicable to reduce impacts along the property boundary to the east.
4. Parking areas will be of adequate size for the particular use and properly located and suitably screened from the adjoining residential uses, the entrance and exit drives are laid out in a manner that achieves maximum safety, and uses will not cause unreasonable traffic congestion or create a traffic hazard.
5. The building is accessible for emergency services and appropriately located for water, sewer and other infrastructure requirements.
6. The accessory apartment will comply with other regulations in the Code and will be compatible with the recommendations of the City's Comprehensive Plan and the Local Waterfront Revitalization Program.
7. The accessory apartment is located in an accessory building on a single-family lot where the owner shall occupy at least one of the dwelling units on the lot.
8. The accessory apartment at 1,320 square feet is larger than generally permitted for an apartment in an accessory building, however, the existing barn was constructed prior to 1989 and pursuant to City Zoning Code § 223-24.1.D the Planning Board has discretion to approve a larger accessory apartment where the existing accessory building was constructed prior to August 1, 1989.

**Special Permit, Site Plan
& Certificate of Appropriateness Approvals
1080 Wolcott Avenue**

9. An additional off-street parking space is available for the accessory apartment.

BE IT FURTHER RESOLVED, that the Planning Board hereby grants Special Permit and Site Plan Approvals to convert the existing 2-story barn and construct a 1,320 square foot accessory apartment at property located at 1080 Wolcott Avenue as shown on the application materials enumerated above, subject to compliance with the following conditions and any other requirements which must be met by law:

- A. Prior to signing of the Site Plan Drawings by the Planning Board Chairman, the following conditions shall be fulfilled:

1. All application review fees shall be paid in full.
2. The Applicant shall seek and obtain all required permits and/or approvals from the appropriate agencies for the Project shall meet all conditions contained in such approvals, as required therein.
3. The comments contained in the City Planner's letter to the Planning Board dated January 6, 2022, and all comments in any subsequent letter(s) issued, shall be fulfilled to the satisfaction of the City Planner.
4. The comments contained in the City Engineer's letter to the Planning Board dated December 3, 2021, and all comments in any subsequent letter(s) issued, shall be fulfilled to the satisfaction of the City Engineer.
5. The plans shall be updated to indicate the Resolution date of the City of Beacon Zoning Board of Appeals granting the referenced variances.

When the conditions above have been satisfied, six (6) sets of the above referenced plans revised as per the conditions above shall be submitted for endorsement by the Planning Board Chairman. One set of the endorsed plans will be returned to the Applicant, one set will be retained by the City Clerk, one set will be provided to the Planning Board, and one set each will be forwarded to the Building Inspector, City Engineer and City Planner.

- B. Prior to the issuance of the Certificate of Occupancy, the following conditions shall be fulfilled to the satisfaction of the Building Inspector:

1. Based on the current and anticipated future need for park and recreational opportunities in the City of Beacon, as set forth in the analysis provided by BFJ Planning, and the demands of the future population of the Project, the Planning Board hereby finds that additional recreation/parkland should be created as a condition of approval. However, the Planning Board hereby determines that recreation/parkland of adequate size and location cannot be provided on the

**Special Permit, Site Plan
& Certificate of Appropriateness Approvals
1080 Wolcott Avenue**

Project Site. Therefore, that Applicant shall pay a Recreation Fee as prescribed under Sections 223-25.H(4) and 223-61.A(7) of the Zoning Law.

The Planning Board hereby requires that, prior to the issuance of the Certificate of Occupancy, the Applicant shall pay a Recreation Fee for the new accessory apartment in accordance with Sections 223-25.H(4) and 223-61.A(7) of the Zoning Law, as per the City's Fee Schedule in effect at the time of payment.

2. All application review fees shall be paid in full.

C. The following are general conditions which shall be fulfilled:

1. The Building Inspector and the City Engineer shall have the right to direct the Applicant to cause the placement, cleaning and/or repair of sedimentation and erosion control devices wherever and whenever deemed necessary during construction.
2. A copy of this Resolution shall be attached to the Certificate of Occupancy.
3. The accessory apartment shall be inspected by the Building Department every two years in order to determine whether the apartment remains in compliance with § 223-24.1 of the City of Beacon Zoning Code. Upon a satisfactory inspection report, the accessory apartment owner shall be reissued a certificate of occupancy. In the event that the inspection indicates that the apartment is no longer in compliance, the certificate of occupancy shall be revoked until the violations are cured.
4. The Building Inspector may revoke this Special Permit Approval where it is found that the use of the premises does not conform to the limitations and conditions contained in the Special Permit Approval.
5. The accessory apartment shall not be used for short term rentals unless a short-term rental permit is obtained pursuant to Section 223-26.5 of the City Code.
6. In accordance with Section 223-18.F(1) of the Zoning Law, this Special Permit Approval authorizes only the particular use specified in the permit and shall expire if:
 - a. A bona fide application for a Building Permit is not filed within one (1) year of the issuances of this Special Permit Approval; or

**Special Permit, Site Plan
& Certificate of Appropriateness Approvals
1080 Wolcott Avenue**

- b. If all required improvements are not made within two (2) years from the date of issuance of the Building Permit; or
 - c. If said use ceases for more than six (6) months for any reason.
- 7. In accordance with Section 223-18.F(2) of the Zoning Law, the Planning Board may grant one (1) or more extensions of up to six (6) months each, to (a) complete the conditions of approval for the special permit use, upon a finding that the applicant is working toward completion of such conditions with due diligence and has offered a reasonable explanation of its inability to complete such improvements and file a bona fide application for a building permit, and (b) to complete construction of the improvements, upon a finding that the Applicant is prosecuting construction with due diligence and has offered a reasonable explanation of its inability to complete the Project. The Planning Board may impose such conditions as it deems appropriate upon the grant of any extension. The granting of an extension of time shall not require a public hearing.
- 8. The Applicant shall be responsible for the payment of all application review costs incurred by the City in its review and approval of this project. Such fees shall be paid by the Applicant within thirty (30) days of each notification by the City that such fees are due. If such fees are not paid within the thirty (30) day period, and an extension therefor has not been granted by the City, this resolution shall be rendered null and void.
- 9. As used herein, the term “Applicant” shall include the Applicant and the Applicant’s heirs, successors and assigns, and where applicable its contractors and employees.
- 10. If any of the conditions enumerated in this resolution upon which this approval is granted are found to be invalid or unenforceable, then the integrity of this resolution and the remaining conditions shall remain valid and intact.
- 11. The approval granted by this resolution does not supersede the authority of any other entity.
- 12. The Applicant must return for approval from the Planning Board if any changes to the endorsed plans and/or this resolution of approval are subsequently desired other than changes determined to be field changes by the Building Inspector or City Engineer. The Planning Board, in its discretion, shall determine the appropriate procedures for consideration of the proposed revision, and whether such revision is material enough to require further

**Special Permit, Site Plan
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environmental analysis, further project review and/or a public hearing, as it may deem appropriate.

Resolution Adopted: January 11, 2022
Beacon, New York

_____, 2022
John Gunn, Chairman Dated
City of Beacon Planning Board

Motion by _____, seconded by _____:

Kevin Byrne	Voting:	Len Warner	Voting:
J.C. Calderon	Voting:	Randall Williams	Voting:
Karen Quiana	Voting:	John Gunn, Chairman	Voting:
Jill Reynolds	Voting:		

Resolution: Approved ____

Denied ____

City of Beacon Planning Board Agenda
01/11/2022

Title:

Continue review of application for Site Plan Approval, hotel and event space, 1113 Wolcott Avenue, submitted by Prophecy Theater, LLC

ATTACHMENTS

[1113 Wolcott Avenue Cover Letter.pdf](#)

[1113 Wolcott Avenue Exhibit A - Architect Response Letter.pdf](#)

[1113 Wolcott Avenue Exhibit B - Engineer Response Letter.pdf](#)

[1113 Wolcott Avenue Exhibit C - Traffic Engineer Response Letter.pdf](#)

[1113 Wolcott Avenue Exhibit D - Revised Traffic and Parking Study.pdf](#)

[1113 Wolcott Avenue Sheet 1 Site Plan.pdf](#)

[1113 Wolcott Avenue Sheet 2 Full Site Plan.pdf](#)

[1113 Wolcott Avenue Sheet 3 Existing Conditions and Demolition Plan.pdf](#)

[1113 Wolcott Avenue Sheet 4 Landscape and Lighting Plan.pdf](#)

[1113 Wolcott Avenue Sheet 5 Floor Plans Hotel.pdf](#)

[1113 Wolcott Avenue Sheet 6 Floor Plans Conference Center.pdf](#)

[1113 Wolcott Avenue Sheet 7 Elevations Conference Center.pdf](#)

[1113 Wolcott Avenue Sheet 8 Grading & Utility.pdf](#)

[1113 Wolcott Avenue Sheet 9 Erosion & Sediment.pdf](#)

[1113 Wolcott Avenue Sheet 10 Vehicle Tracking Plan.pdf](#)

[1113 Wolcott Avenue Sheet 11 Site and E&SC Details.pdf](#)

[1113 Wolcott Avenue Sheet 12 Stormwater Details.pdf](#)

1113 Wolcott Avenue Sheet 13 Water & Sewer Details.pdf

Engineer Review Letter.pdf

Planner Review Letter.pdf



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

Taylor M. Palmer, Esq.
tpalmer@cuddyfeder.com

December 28, 2021

VIA E-MAIL
AND HAND DELIVERY

Hon. John Gunn
And Members of the Planning Board
City of Beacon
1 Municipal Plaza
Beacon, New York 12508

Re: Supplemental Submission – Application for Site Plan and Special Use Permit Approval
Premises: 1113 Wolcott Avenue, Beacon, New York 12508
Tax Parcel ID: (5054-26-6511901)

Dear Chairman Gunn and Members of the Planning Board:

On behalf of Prophecy Theater, LLC (the “Applicant”), the owner of the above-referenced Premises, we respectfully submit this letter and the referenced enclosures in furtherance of the Applicant’s pending Applications for Site Plan Approval and Special Permit Approval (the “Application”) to adaptively re-use the Premises for a hotel and accessory conference/event space and café.

Since last appearing before the Planning Board on December 14, 2021, the Applicant has further updated the site circulation in response to the comments raised by the Board at that meeting and the comments contained in the memoranda prepared by the City’s Engineering Consultant, Lanc & Tully, dated December 8, 2021 (the “Engineering Comments Memorandum”); the City’s Planning Consultant, John Clarke Planning and Design, dated December 9, 2021 (the “Planning Comments Memorandum”); and the City’s Traffic Consultant, Creighton Manning, dated December 13, 2021 (the “Traffic Comments Memorandum”). This supplemental submission responds to the comments noted therein and describes the Project’s conformance with the City’s special permit criteria.

THE PROPOSED ADAPTIVE RE-USE PROJECT SATISFIES THE SPECIAL USE PERMIT CRITERIA:

As this Board is aware, the Premises are presently improved with a historic church, rectory and cemetery. As is detailed in the Applicant’s prior submissions to the Planning Board, the Applicant’s Application consists of the following:

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



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

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

The Premises is presently classified within the City's the R1-40 One-Family Residence District Zoning District and the Historic District and Landmark Overlay ("HDLO") District, the latter of which permits hotels and hotel-related accessory uses and structures pursuant to a special permit issued by the Planning Board upon its finding that the uses meet the standards set forth in Zoning Code Sections 223-24.7.D(1) and 223-18.B(1) (the "Special Permit Provisions").¹ The Applicant respectfully submits that the proposed Project fully satisfies the criteria for issuance of a special permit as set forth in the Special Permit Provisions.

Pursuant to N.Y. Gen. City Law Section 27-b and City of Beacon Zoning Code Section 223-18, special uses shall be deemed to be permitted uses in their respective districts subject to the satisfaction of the requirements set forth therein. According to the New York Court of Appeals, New York's highest court, generally:

a special exception [permit/use] gives permission to use property in a way that is consistent with the zoning ordinance, although not necessarily allowed as of right. The significance of this distinction is that the 'inclusion of the permitted use in the ordinance is tantamount to a legislative finding that the permitted use is in harmony with the general zoning plan and will not adversely affect the neighborhood' . . .²

In considering this Application, Zoning Code Section 223-18.B(1) directs that the Planning Board

¹ ZONING CODE § 223-24.7.B(6). As was noted in the Applicant's prior supplemental submission to this Board dated November 30, 2021, the Building Inspector issued a Determination dated November 12, 2021 that the proposed conference center/event space accessory uses contemplated in this refined application are permitted uses on the Premises.

² Retail Prop. Trust v. Bd. of Zoning Appeals of Town of Hempstead, 98 N.Y.2d 190, 195, 774 N.E.2d 727 (2002) (citing Matter of North Shore Steak House v. Board of Appeals of Inc. Vil. of Thomaston, 30 N.Y.2d 238, 243 (1972) [citations omitted]); see also Nathan v. Bd. of Appeals of Town of Hempstead, 125 A.D.3d 866, 5 N.Y.S.3d 127 (2d Dep't 2015) (holding that "[a]n applicant for a special exception permit need only show that it has complied with every legislatively imposed condition on the permitted use"); see also Juda Const., Ltd. v. Spencer, 21 A.D.3d 898, 900, 800 N.Y.S.2d 741, 743 (2d Dep't 2005) (holding that "[a] use permitted by special exception use permit is a use that has been found by the local legislative body to be appropriate for the zoning district and 'in harmony with the general zoning plan and will not adversely affect the neighborhood'" and further holding that "[t]he [special] permit must be granted if the application satisfies the criteria set forth in the zoning law" [citations omitted]).



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shall consider the following general standards when reviewing a special use permit request (the “General Special Permit Standards”):

- a) The location and size of the use, the nature, hours and intensity of the operations involved in or conducted in connection with it, the size of the site in relation to it and the location of the site with respect to streets giving access to it are such that it will not conflict with the appropriate and orderly development of the site and the existing permitted uses on adjacent blocks.
- b) The location, nature and height of buildings, walls and fences and the nature and extent of the landscaping on the site are such that the use will not conflict with the existing permitted uses on adjacent blocks and will not hinder or discourage the appropriate development use of adjacent land and buildings.
- c) Operations in connection with any special use will not be more objectionable to nearby properties by reason of noise, fumes, vibration or other characteristic in Article IV than would be the operations of any permitted use, not requiring a special permit.
- d) Parking areas will be of adequate size for the particular use and properly located and suitably screened from adjoining residential uses, the entrance and exit drives shall be laid out so as to achieve maximum safety, and uses will not cause unreasonable traffic congestion or create a traffic hazard.
- e) Uses, buildings, and operations will be accessible for emergency services and appropriately located for water, sewer, and other infrastructure requirements.
- f) The use will comply with other regulations in the Code and will be compatible with the recommendations in the City’s Comprehensive Plan and Local Waterfront Revitalization Program.

Furthermore, in considering this Application, Zoning Code Section 223-24.7.D(1) directs that the Planning Board shall consider the following standards when reviewing a special use permit request in the HDLO District (the “HDLO Special Permit Standards”):

- a) Any exterior restoration shall maintain the architectural and historic integrity of the structure. Any new construction shall be compatible with neighboring structures.
- b) The proposed use is compatible with the neighborhood, and activities permitted within the structure can be adequately buffered from any surrounding residential homes.
- c) The resulting traffic generation will not overburden existing roads, and adequate parking can be provided without unduly destroying the landscape or the setting of the structure.



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- d) The proposed use is appropriate to the structure, will aid in the preservation of the structure and will not result in undue alterations or enlargement of the structure.

A. The Project Satisfies the General Special Permit Standards.

It is respectfully submitted that the proposed Project fully satisfies the criteria for issuance of a special permit as established within the Zoning Code Section 223-18.B(1), and for the following reasons, the special permit should be granted:

- a) *The location and size of the use, the nature, hours and intensity of the operations involved in or conducted in connection with it, the size of the site in relation to it and the location of the site with respect to streets giving access to it are such that it will not conflict with the appropriate and orderly development of the site and the existing permitted uses on adjacent blocks.*

The location, size, nature, and intensity of the re-use Project is in harmony with the appropriate and orderly development of the HDLO District. The HDLO District was specifically designed to facilitate and incentivize the rehabilitation and reuse of historic buildings and structures. In accordance with that mandate, the Applicant proposes to repurpose the rectory into a hotel and the church into an accessory event/conference space and café.

The City's 2017 Comprehensive Plan Update supports the proposed revitalization of the Premises. Indeed, the Comprehensive Plan Update establishes a general historic resource goal of encouraging the preservation of historically and culturally significant buildings, landscapes, and neighborhoods,³ and the Premises are explicitly identified as a historic resource within the Comprehensive Plan.⁴ The 2017 Comprehensive Plan also promotes encouraging local regional residents and tourists to visit the City by highlighting the historic, cultural, and recreational opportunities of the City.⁵

The proposed Project will re-activate a Premises that has been dormant for years and will be in harmony with the existing neighborhood as it includes the re-occupancy of a property that has historically been used for event space purposes (church gathers, weddings, and other accessory uses and occupancy of up to 336 people in the pews of the existing church building). The location and size of the Project and the nature, hours and intensity of the operations involved are in accord with the surrounding area. The hotel lodging is proposed to be available 24/7, 365 days per year. The café will serve as a reception for guests of the hotel and offer breakfast, lunch and dinner to the hotel guests, as well as members of the public. In addition, it will operate as a bar for hotel

³ See CITY OF BEACON 2017 COMPREHENSIVE PLAN, at pg. 119.

⁴ See CITY OF BEACON 2017 COMPREHENSIVE PLAN, at pg. 115.

⁵ See CITY OF BEACON 2017 COMPREHENSIVE PLAN, at pg. 70.



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guests and for accessory conference center programming and events. The dining facilities are expected to operate approximately seven (7) days a week in support of the hotel operations and guests and will be expected to serve approximately forty (40) patrons. The conference/event center accessory use will operate less intensely and frequently, utilizing the former church building for various cultural, educational, or professional programs, including weddings, conferences, art exhibitions, performances, lectures, seminars and workshops. The expected capacity for the occasional weekend programming for the hotel conference center is a *maximum* of 350 people. Notwithstanding the maximum capacity noted here, we understand that these occasional larger weekend programs are typically expected to have fewer people, ranging between 125-200 people. Conference/event center programming would likely be limited to larger events held only on weekends with smaller functions, such as seminars, workshops or retreats held on weekdays with a range between 50 to 200 attendees, but on fewer days of the week (i.e., generally Wednesday-Friday). Importantly, the historic cemetery located at the rear of the Premises will be restored and reopened as a public park and walking trail connecting Beekman Street and Wolcott Avenue.

A seating configuration is contained in the attached plans demonstrates that approximately 310 seats are available within seating areas in the church. Thus, when comparing the propose re-use and the existing church's present seating capacity of 336 in the existing pews, the Applicant's re-use is expected to continue the overall intensity of the operations at the Premises.

Finally, the Project's relation to the streets giving access to it has been thoroughly considered, and the Project includes mitigation measures to ensure that no adverse impacts will occur. The Applicant's traffic consultant, Colliers Engineering & Design, updated and revised the Traffic Impact and Parking Study dated November 30, 2021, last revised December 28, 2021 (the "Revised Parking Study"). See **Exhibit D** – Revised Parking Study. The Revised Parking Study evaluated potential traffic impacts associated with the proposed Project, which would be accessed from an existing driveway connection to Wolcott Avenue (the "Main Driveway") that will connect with an existing southern access driveway, which will provide for exit only traffic. This driveway will connect to the Main Driveway via a newly constructed loop roadway that will provide a drop-off/pick-up area in front of the church equipped to handle smaller deliveries and rideshare vehicles. Ultimately, the Revised Parking Study concludes that the Project is not anticipated to have a significant impact on traffic conditions in the vicinity of the Project. Further discussion of the traffic and parking conditions is found within subsection (d) below of the General Special Permit Standards.

Therefore, the location and size of the use, nature and intensity of the operations involved in or conducted in connection with it, the size of the site in relation to it, and the location of the site with respect to streets giving access to it are such that the proposed Project is in harmony with the appropriate and orderly development of the HDLO District. Furthermore, the re-use is not

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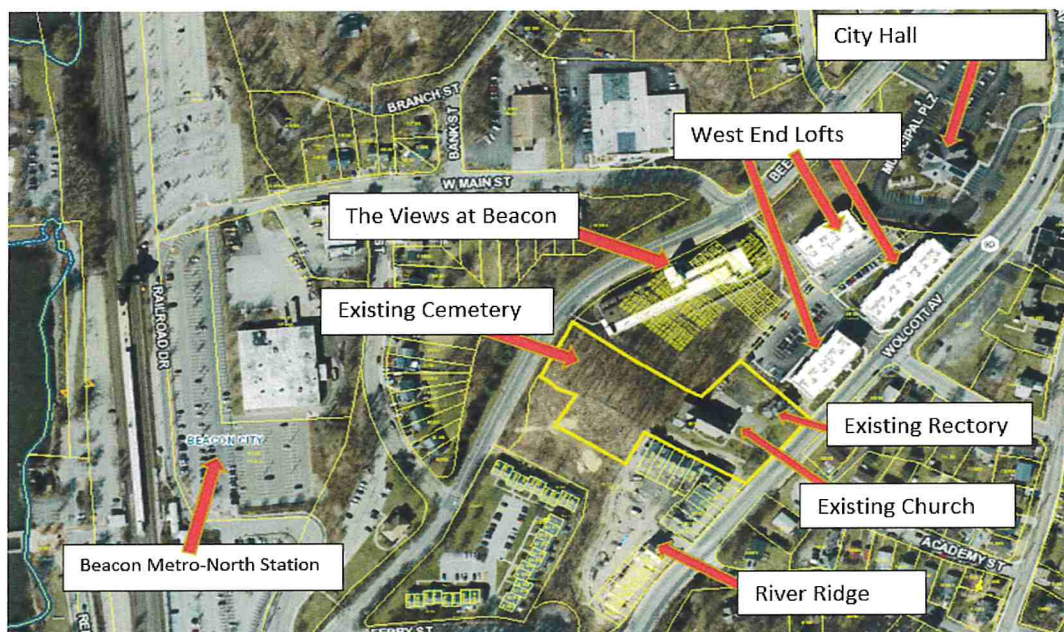
expected to create any detriment to the orderly development of the adjacent areas that have been recently redeveloped, as the Project will be maintaining the event space character of this site and the appropriately scaled re-occupancy will be an improvement to the immediate community compared to the Premises currently unoccupied status.

b) The location, nature and height of buildings, walls and fences and the nature and extent of the landscaping on the site are such that the use will not conflict with the existing permitted uses on adjacent blocks and will not hinder or discourage the appropriate development use of adjacent land and buildings.

As discussed above, the Premises was specifically zoned to encourage the preservation of historic buildings and structures and to permit the establishment of hotels and attendant uses. Therefore, the location and nature of the uses proposed are in conformance with the Zoning Code.

The Premises are proposed to be redeveloped as a 30-room hotel contained in an expanded rectory building with accessory conference/event space and café to be located in the church. Neither building is proposed to increase in height. The Applicant is not proposing any new structures, but rather is preserving the existing church and modifying the existing rectory building to be attractive and harmonious in style and appearance. Further, the properties that surround the Premises have all be recently developed, as can be seeing in *Image 1* below, which includes the recent River Ridge, Beacon Views and West End Lofts projects.

Image 1 – Images of Surrounding Development:





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Additionally, canopy street trees and additional low landscaping are proposed in front of the rectory and ample trees and shrubbery are proposed along the abutting property lines. Additional plantings have been added to the rear parking lot to help screen views from the neighboring multi-family residences. Therefore, the Project's scale and landscaping is appropriate for the site, and it will not hinder appropriate development of adjacent land or buildings.

c) Operations in connection with any special use will not be more objectionable to nearby properties by reason of noise, fumes, vibration or other characteristic in Article IV than would be the operations of any permitted use, not requiring a special permit.

The proposed Project complies with this requirement. The adaptive re-use is not anticipated to generate any offsite noise, fumes, or vibrations during operations or during renovations. Any potential construction-related impacts are temporary and will be limited to hours permitted by City Code.

d) Parking areas will be of adequate size for the particular use and properly located and suitably screened from adjoining residential uses, the entrance and exit drives shall be laid out so as to achieve maximum safety, and uses will not cause unreasonable traffic congestion or create a traffic hazard.

The Project's parking area and access driveways are located in a manner that achieves maximum safety and alleviates traffic congestion. The Applicant has modified the site circulation in response to comments from the Planning Board. As further detailed in the attached Revised Parking Study, the Applicant's proposed operations are not expected to generate any significant traffic impacts. The Premises will be served by the Main Driveway located off Wolcott Avenue, which will create a loop connecting it with a southerly egress only driveway. These connected driveways will be used for drop-off and pick-up of patrons, as well as delivery and refuse truck access. The attached Vehicle Tracking Plan in the site plan set demonstrates the vehicle tracking for a shuttle bus, refuse truck and delivery truck.

The required parking for the Project is 31 spaces for the hotel, 22 for the café, and 88 spaces for the event space. The café is a non-simultaneous use, meaning that it will be fully accessory to the events and not generate any traffic on its own. Accordingly, the total required parking for the Project is 119 spaces, amounting for the hotel and event space. When events are not being held, the required parking spaces would be 53, representing the required spaces for the hotel and café.

Additionally, while the Project proposes 31 parking spaces to accommodate the hotel use, the Applicant respectfully submits that there is sufficient public parking in the vicinity to accommodate the excess parking demand associated with the conference center/event and café dining area spaces. As further detailed in the Revised Traffic Study, a combination of public parking lots and other potential mitigation measures, such as valet parking that can be provided



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for events and dissemination of parking and public transportation information will permit sufficient parking for the Premises. *Image 1* above also shows the proximity of the Premises to the Metro-North Train Station and associated parking lot. Additional walking access is proposed from Beekman Street to the Premises, and the recent River Ridge and West End Lofts projects provide for pedestrian connections to Beekman Street as well.

As is detailed in the Parking Summary on the enclosed site plans and is provided in Zoning Code Section 223-26(B), there is also an exception to the off-street parking requirements for existing buildings constructed prior to April 20, 1964. The existing nonconforming use of the building as a church and a rectory required 69 spaces, and pursuant to the above-referenced Zoning Code section, the 86 parking spaces would constitute just under a twenty-five percent (25%) increase from the 1964 parking requirement. As noted previously, the Applicant looks forward to reviewing the shared parking analysis and associated details with the Planning Board and Building Department pursuant to Zoning Codes Sections 223-26(C)(6), 223-26(A)(2) & 223-26(B).

e) Uses, buildings, and operations will be accessible for emergency services and appropriately located for water, sewer, and other infrastructure requirements.

The proposed Project will be accessible for emergency services. The Project will obtain water from the City of Beacon Water District, which has the capacity to serve the proposal. By virtue of the Premises location within the City's Water District, existing lines already serve the Premises, and an expansion of the district is not needed. Similarly, the Premises are located with the City of Beacon Sewer District, which has capacity to serve the Project without an expansion as existing sewer lines already serve the Premises. Stormwater currently flows toward adjacent properties to the west. An on-site underground detention/infiltration system is proposed to mitigate runoff from additional impervious surfaces where currently there is no stormwater control. As detailed in the previously submitted Engineer Drainage Report dated November 30, 2021 prepared by Hudson Land Design Professional Engineering, P.C., the runoff rates will decrease from pre-development to post-development conditions following the establishment of the underground stormwater management area. Accordingly, the Project will be accessible for emergency services and appropriately located for water, sewer, and other infrastructure requirements.

f) The use will comply with other regulations in the Code and will be compatible with the recommendations in the City's Comprehensive Plan and Local Waterfront Revitalization Program.

As noted above, the City's 2017 Comprehensive Plan Update supports the proposed revitalization of the Premises. Indeed, the Comprehensive Plan Update establishes a general historic resource goal of encouraging the preservation of historically and culturally significant buildings,



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landscapes, and neighborhoods⁶ and the Premises are explicitly identified as a historic resource within the Comprehensive Plan.⁷ In accordance with the foregoing, the Applicant is proposing to maintain and restore the historic church and rectory located on the Premises. The 2017 Comprehensive Plan Update also promotes local regional residents and tourists to visit the City by highlighting the historic, cultural, and recreational opportunities of the City.⁸ The establishment of the hotel and conference/event space will encourage tourists to visit Beacon in order attend a variety of events proposed to be hosted. Local residents will similarly benefit from the provision of cultural events and conferences proposed on the Premises. Thus, the proposed Project is in conformance with the City's Comprehensive Plan.

The Premises is also located within the City of Beacon's Waterfront Revitalization Management Area. As is detailed in our previously submitted Coastal Assessment Form & LWRP Consistency Statement, the Project is consistent with LWRP Policies 5, 13, 14, 23, 23A, 25, 33, 37, 38, and 41. Accordingly, the Applicant respectfully submits that the Project is consistent with the policies established in the City's Comprehensive Plan and LWRP.

B. The Project Satisfies the HDLO Special Permit Standards.

It is respectfully submitted that the proposed Project fully satisfies the criteria for issuance of a special permit as established within the Zoning Code Section 223-24.7.D(1), and for the following reasons, the special permit should be granted:

- a) Any exterior restoration shall maintain the architectural and historic integrity of the structure. Any new construction shall be compatible with neighboring structures.*

The proposed Project protects, maintains, and enhances the architectural and historic integrity of the existing buildings. The Premises are proposed to be redeveloped as a 30-room hotel contained in an expanded rectory building with accessory conference/event space and café located in the church. The Applicant is not proposing any new structures, but rather is preserving the existing church and modifying the existing rectory building to be attractive and harmonious in style and appearance. As demonstrated by the attached elevations contained in the enclosed revised Site Plan Set, the rear addition to the rectory is proposed to match the style and design of the existing structure. Discrete wall-mounted house lights are proposed along the front of the existing rectory and rear addition. No lighting fixtures are proposed for the church. The church's brick exterior will be cleaned and repointed and the existing roof repaired in accordance with the New York State Parks Department's restoration standards. In addition, a new wood door and frame will be installed on the front façade that matches the existing entry doors. Along the rear façade, the

⁶ See CITY OF BEACON 2017 COMPREHENSIVE PLAN, at pg. 119.

⁷ See CITY OF BEACON 2017 COMPREHENSIVE PLAN, at pg. 115.

⁸ See CITY OF BEACON 2017 COMPREHENSIVE PLAN, pg. 70.



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Applicant proposes to replace in kind a stone wall with vines, as well as install new wood and glass French doors and frames in new masonry openings. All of the proposed improvements herein detailed will meet the standards set forth in Chapter 134 of the City's Code and the Applicant will pursue a Certificate of Appropriateness for the same. In addition, as this Board is aware, the Project was referred to the Architectural Review Board Subcommittee at the December 14th meeting for review. Accordingly, the exterior restorations and expansion will maintain the architectural and historic integrity of the church and rectory.

b) The proposed use is compatible with the neighborhood, and activities permitted within the structure can be adequately buffered from any surrounding residential homes.

As noted previously, the Zoning Code establishes that hotel and hotel-related accessory uses and structures are permitted in the HDLO District as an incentive for the preservation of historic structures. This district was specifically designed to encourage the protection, enhancement, perpetuation and use of historic buildings and structures and the Project. In accordance with the foregoing, the Project proposes to maintain and restore the church and rectory while establishing uses permitted under the Zoning Code. Therefore, the nature of the uses proposed are in conformance with the Zoning Code. These uses will be adequately buffered from the surrounding residential area. Canopy street trees and additional low landscaping are proposed in front of the rectory and ample trees and shrubbery are proposed along the abutting property lines. Additional plantings have been added to the rear parking lot to help screen views from the neighboring multi-family residences. Therefore, the Project's scale and landscaping is appropriate for the site, and the adaptive re-use is compatible with the surrounding neighborhood and will not prevent or impair the reasonable or orderly use or development of the other properties in the neighborhood.

c) The resulting traffic generation will not overburden existing roads, and adequate parking can be provided without unduly destroying the landscape or the setting of the structure.

The resulting traffic generation from the proposed Project will not overburden existing roads, and adequate parking can be provided on the Premises and in the surrounding area without unduly destroying the landscape or the setting of the structure. As is more fully detailed in the Revised Traffic Study enclosed as **Exhibit D**, the Project is not anticipated to have a significant impact on traffic conditions in the vicinity of the Project. Additionally, while the Project proposes 31 parking spaces to accommodate the hotel use, there is sufficient public parking in the vicinity to accommodate the excess parking demand associated with the conference center/event and café dining area spaces. As further detailed in the Revised Traffic Study, a combination of public parking lots and other potential mitigation measures, such as valet parking that can be provided for events and dissemination of parking and public transportation information will permit sufficient parking for the Premises. For a more detailed parking and traffic discussion, please refer to subsection (d) hereinabove on pages 7 & 8 in response to the General Special Permit Standards.



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d) The proposed use is appropriate to the structure, will aid in the preservation of the structure and will not result in undue alterations or enlargement of the structure.

The proposed use is appropriate to the structure, will aid in the preservation of the structure and will not result in undue alterations or enlargement of the structure. All alterations proposed to the church and rectory will be in conformance with the existing historic nature of the buildings. The proposed permitted as of right hotel and accessory uses are appropriate to the existing buildings. As noted above, the attached seating configuration contained in the site plan set demonstrates that approximately 310 seats are available within seating areas in the church. Thus, when comparing the proposed re-use and the existing church's present seating capacity of 336 in the existing pews, the Applicant's re-use is expected to continue the overall intensity of the operations at the Premises. It is also worth noting that the proposed expansion to the rectory will be located at the rear of that building and thus any visual impacts are limited. Moreover, to the extent the expansion is visible, it will conform with the existing style and design of the rectory, thereby mitigating any adverse impacts to the historic nature of the site.

It is respectfully submitted that the proposed Project complies with these legislatively imposed criteria and will have no adverse impacts on the neighborhood as demonstrated herein.

THE PROPOSED PROJECT COMPLIES WITH SEQRA:

The Applicant's Special Use Permit Application is considered an Unlisted Action under the State Environmental Quality Review Act ("SEQRA") Regulations, and the Planning Board declared its intent to serve as Lead Agency for the environmental review of the Project.⁹ As is more fully detailed in the Applicant's submissions to this Board, and as noted herein, it is respectfully submitted that the Project does not present any potentially significant adverse environmental impacts.

ADDITIONAL RESPONSES TO COMMENTS MEMORANDA:

To assist this Board in its review, the Applicant respectfully submits the following memoranda prepared by its Consultants providing annotated responses to the applicable comments noted in the Engineering Comments Memoranda and the Planning Comments Memoranda.

- Response to Comments Memorandum prepared by Aryeh J. Siegel Architect dated December 28, 2021, providing responses to the Planning Comments Memoranda (the "Architect Response to Comments Memorandum"). See **Exhibit A** – Architect Response to Comments Memorandum; and
- Response to Comments Memorandum prepared by Hudson Land Design Professional

⁹ Note: As this Board is aware, a SEQR public hearing was not required as the Application does not involve a request for subdivision approval.



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Engineering, P.C. (“HLD”) dated December 28, 2021 (the “HLD Response to Comments Memorandum”). See **Exhibit B** – HLD Response to Comments Memorandum.

- Response to Comments Memorandum prepared by Colliers Engineering & Design dated December 28, 2021 (the “Colliers Response to Comments Memorandum”). See **Exhibit C** – Colliers Response to Comments Memorandum.

UPDATED SITE PLAN SET:

In support of this supplemental submission and in response to the comments contained in the City Planning and Engineering Comments Memoranda, we respectfully submit revised site plans and renderings entitled “Special Use Permit Application”, prepared by Hudson Land Design Professional Engineering, P.C. and Aryeh Siegal, Architect, dated June 29, 2021, last revised December 28, 2021, numbered and titled as follows:

- Sheet 1 of 13 Site Plan;
- Sheet 2 of 13 Full Site Plan;
- Sheet 3 of 13 Existing Conditions & Demolition Plan;
- Sheet 4 of 13 Landscape Plan & Planting Schedule;
- Sheet 5 of 13 Hotel Building Plans & Elevations;
- Sheet 6 of 13 Conference Center Plans;
- Sheet 7 of 13 Conference Center Elevations;
- Sheet 8 of 13 Grading & Utility Plans;
- Sheet 9 of 13 Erosion and Sediment Control Plan;
- Sheet 10 of 13 Vehicle Tracking Plan;
- Sheet 11 of 13 Site Details;
- Sheet 12 of 13 Stormwater Details; and
- Sheet 13 of 13 Water & Sewer Details.

INDEX OF ENCLOSURES:

In support of this supplemental submission, please find enclosed five (5) sets of the instant letter with the following materials:

- Exhibit A:** Response to Comments Memorandum prepared by Aryeh J. Siegel Architect dated December 28, 2021, providing responses to the Planning Comments Memorandum;
- Exhibit B:** Response to Comments Memorandum prepared by Hudson Land Design Professional Engineering, P.C. dated December 28, 2021, providing responses to the Engineering Comments Memorandum;



December 28, 2021

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Exhibit C: Response to Comments Memorandum prepared by Colliers Engineering & Design CT P.C., dated December 28, 2021, providing responses to the Traffic Comments Memorandum; and

Exhibit D: Revised Traffic and Parking Study prepared by Colliers Engineering & Design CT P.C., dated November 30, 2021, last revised December 28, 2021.¹⁰

We look forward to appearing at the Planning Board's January 11th regular meeting to continue the review of the Project and to continue the environmental review process. In the meantime, should the Planning Board or City Staff have any questions or comments with regard to the foregoing, please do not hesitate to contact me.

Very truly yours,

A handwritten signature in black ink, appearing to read 'T. Palmer', with a long horizontal flourish extending to the right.

Taylor M. Palmer

Enclosures

cc: Jennifer L. Gray, Esq.
John Clarke Planning and Design
Lanc & Tully, P.C.
Aryeh J. Siegel Architect
Michael A. Bodendorf, P.E. – Hudson Land Design Professional Engineering, P.C.
Colliers Engineering & Design CT, P.C.
Allison Fausner, Esq.

¹⁰ Note: Pursuant to the Applicant's discussion with the Planning Board regarding existing on-street and public parking in the vicinity of the Premises, the Applicant's Traffic consultant is also exploring additional potential parking concepts (including details considered by the Main Street Access Committee recommendations) to expand available parking in proximity to the Premises. In a forthcoming submission, the Applicant will also provide some venue comparables (for example, the Board referenced venues such as The Falcon in Marlboro, New York).

ARYEH SIEGEL
ARCHITECT

John Gunn - Planning Board Chairman
City of Beacon
One Municipal Plaza
Beacon, NY 12508

Re: 1113 Wolcott Avenue, Beacon, New York
Site Plan Application – Responses to Comments

December 28, 2021

Dear Chairman Gunn and Members of the Planning Board,

Below please find our responses to the comments included in John Clarke Planning and Design's Memorandum, dated December 9, 2021. Please refer to Hudson Land Design's response letter regarding Lanc & Tully's letter dated December 9, 2021.

John Clarke Planning and Design Comment Responses:

1. Comment acknowledged. Discussion of the uses will continue with the Planning Board.
2. Comment acknowledged. The Applicant is reviewing parking solutions to present to the Planning Board.

We are providing 2 ADA spaces for the hotel, and will look into the possibility of providing additional ADA spaces without losing the capacity to park for the hotel on site, at a minimum.

We have redesigned the south driveway to create a loop connected to the main driveway. The new driveway layout is shown on the site plan.

3. For Sheet 4
 - a The lighting specifications are shown on Sheet 4. No fixtures will be added to the church building.
 - b Canopy street trees and additional low landscaping have been added in front of the hotel.
 - c Additional plantings have been added to the rear parking lot to help screen views from the neighboring residences.
4. The hotel floor plans have been corrected to show 30 rooms instead of 31 rooms. Elevations have been added to the set.

5. Sheet 6 now shows a seating layout for the café. Note that the café is a non-simultaneous occupancy with the conference center. The café would not be occupied at the same time as a performance is taking place. A seating diagram shows a 350 person maximum occupancy layout.
6. Sheet 7 shows proposed exterior changes to the church.
7. Comment acknowledged. The LWRP has been reviewed and has been determined to be sufficient for the Planning Board to declare an LWRP Consistency Determination.

Lanc & Tully Comment Responses:

Sheet 1 – Site Plan

1. The additional L1 symbol has been removed.
2. The lighting is shown on the site plan.
3. The Index of Drawings has been revised.
4. The dumpster construction details are shown on the engineering plan.

Sheet 2 – Full Site Plan

1. The road has been labeled Beekman Street
2. Notes have been included in the view
3. Lighting along the pedestrian path to Beekman Street will be reviewed, and lighting will be shown on the full site plan along the path. We are waiting for additional survey information for the cemetery, and will provide a path location and lighting once we have that more detailed information on grave/headstone locations.

Sheet 4 – Landscape Plan

1. The planting schedule has been corrected
2. Specifications for the L-Path lights will be included in the next submission.

Please refer to Hudson Land Design's letter for responses to additional engineering comments.

Thank you. Please let me know if you have any questions.

Sincerely,



Aryeh Siegel
Aryeh Siegel, Architect



*Civil & Environmental Engineering Consultants
174 Main Street, Beacon, New York 12508 (Main Office and Mailing Address)
13 Chambers Street, Newburgh, NY 12550 (Satellite Office)
Phone: 845-440-6926 Fax: 845-440-6637
www.HudsonLandDesign.com*

December 28, 2021

Hon. John Gunn, Chairman
City of Beacon Planning Board
1 Municipal Plaza
Beacon, NY 12508

Re: 1113 Wolcott Avenue, Site Plan and Special Use Permit
1113 Wolcott Avenue
Tax Parcel: 5954-26-651901, ±2.28 ac.
City of Beacon, NY

Dear Chairman Gunn and Members of the Planning Board:

On behalf of the Applicant for the above referenced project, Hudson Land Design (HLD) has revised the plan set in response to Lanc & Tully's December 28, 2021 comment letter. Below is a point-by-point response to the comments received. Please note that Aryeh Siegel has prepared Sheets 1 through 7 of the plan set and has responded to comments that pertain his sheets under separate cover, as well as John Clarke Planning and Design's December 9, 2021 comment letter.

Lanc & Tully December 9, 2021 Comment Letter

General Comments

1. Comment noted.
2. Comment noted.
3. We have sited a trail location through the cemetery that avoids grave sites, and have scheduled a surveyor to locate grave sites and headstones within 15 feet of the trail location. Other grave sites and headstones that are further away from the trail location will not be survey located at this time.

Sheet 1 of 12 – Site Plan

1. Aryeh Siegel has responded to this comment under separate cover.
2. Aryeh Siegel has responded to this comment under separate cover.
3. Aryeh Siegel has responded to this comment under separate cover.
4. A trash enclosure detail has been added to Sheet 13 of the site plan set.

Sheet 2 of 12 – Full Site Plan

1. Aryeh Siegel has responded to this comment under separate cover.

2. Aryeh Siegel has responded to this comment under separate cover.
3. Aryeh Siegel has responded to this comment under separate cover. Low level trail lighting will be provided along the trail once the final location is set. The final location of the trail will be set once headstones and grave sites are survey located.

Sheet 4 of 12 – Landscape & Lighting Plan

1. Aryeh Siegel has responded to this comment under separate cover.
2. Aryeh Siegel has responded to this comment under separate cover.

Sheet 8 of 12 – Grading & Utility Plan

1. Comment noted. A Highway Work Permit application will be prepared and sent to the NYSDOT for work within their right of way.
2. The occupancy within the church building exceeds the minimum occupancy for Group A-1. Therefore, sprinklers will be required. A 6" fire line is now shown on the plans that will serve the church building.
3. The soil testing will be coordinated with Lanc & Tully's office as soon as possible and weather permitting.
4. The stormwater outfall now has a rip-rap lined channel down to a rip-rap energy dissipation device at the bottom of the steep slope to ensure that water doesn't flow onto the adjacent parcel. It is noted that the existing stone wall on the property line will help keep flow from entering the neighboring parcel. It is noted that runoff currently flows from this site to the neighboring parcel. The stormwater management system intercepts site runoff via proposed concrete curbing along the parking area and proposed catch basins which eliminates most of the site runoff from entering the neighboring parcel where in current conditions, does.
5. Comment noted.

Sheet 9 of 12 – Erosion & Sediment Control

1. Proposed erosion control will be shown for the pedestrian path once the final location is set per surveyed headstones and grave sites. A note has been added to the plans stating that erosion and sediment control to be provided.
2. The red dots are not part of the proposed plan. They have been removed from the plan.

Sheet 11 of 12 – Site and E&SC Details

1. The pavement restoration detail has been updated to reflect NYSDOT pavement requirements, and accounts for the concrete slab thickness via note #5.

Garbage truck, shuttle bus and delivery box truck turning movements are shown on the plan in response to John Clarke Planning and Design's comment 2.f. and Creighton Manning's Site plan comment 1. An additional sheet has been added to the plan set for the turning movements. The plan set now consists of 13 sheets.

Five (5) copies of a full set of revised plans are provided with this submission for review. We look forward to discussing this project at your next available planning board agenda. Should you have any questions, please feel free to contact me at 845-440-6926.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael A. Bodendorf". The signature is fluid and cursive, with the first name "Michael" written in a more compact, stylized script and the last name "Bodendorf" written in a more legible, though still cursive, style.

Michael A. Bodendorf, P.E.
Principal

cc: Prophecy Theater, LLC
Taylor M. Palmer, Esq.
Aryeh Siegel, AIA
Daniel G. Koehler, P.E. (HLD file)

December 28, 2021

Chairman John Gunn
Beacon Planning Board
City of Beacon City Hall
1 Municipal Plaza
Beacon, NY 12508

1113 Wolcott Avenue
City of Beacon, Dutchess County, New York
Colliers Engineering & Design Project No. 21004333A

Dear Chairman Gunn and Members of the Planning Board:

Our office has prepared a revised Traffic and Parking Study dated December 28, 2021, which incorporates additional information in response to comments contained in the letter from Creighton Manning Engineering (CM) dated December 13, 2021. For ease of review, specific responses to each of the CM comments are provided below and where appropriate, relevant sections of the Traffic and Parking Study. The items are numbered according to their review comments.

General Comment

The application has the potential to generate vehicle traffic that cannot be accommodated by the site itself during events. Use of city streets, private lots, and municipal lots will be necessary to accommodate the parking demand for an event of any size given the fact that the proposed off-street parking (31 spaces) will need to serve the hotel guests and employees on a daily basis. The Beacon train station and rideshare services such as taxis, Uber, and Lyft are viable options to reduce parking demand depending on the type of event, but this needs to be closely examined. Nearby off-site parking supply should be studied to confirm adequate parking supply during large events. How pedestrians will cross Wolcott Avenue to get to the event space after parking should also be studied. Further, the site design does not lend itself to an efficient drop-off/pick-up operation as there does not appear to be a sufficient area to maneuver without having to reverse at least once. Given the lack of a shoulder on Wolcott Avenue, drop-offs and pickups could occur in the travel lane, which is not desirable. Drop-off/pick-up operation should be documented.

Response: A discussion of pedestrian access, including crossings of Wolcott Avenue, have been added to the revised Traffic & Parking Study (see Section III.G). In addition, pick-up and drop-off operations have also been addressed in the revised Traffic Study (see Section III.H).

Site Plan

1. On-site vehicular circulation should be clarified. We have the following questions:

- Is the driveway to the west of the Event Building to be used by vehicles? If yes, what size vehicle and how will it enter/exit?

Response: This driveway was previously intended to be utilized for deliveries only. The updated Site Plan now shows this driveway to be utilized for drop-off/pick-up operations to the property with a loop connecting to the Main Driveway. This loop would be a counterclockwise circulation with vehicles entering from the Main Driveway and Exiting at the existing secondary driveway location. Further discussion of this is provided in Section III.H of the Traffic & Parking Study.

- What size vehicle will be making deliveries of supplies? Is there a designated loading zone? Please provide an Autoturn analysis for these vehicles making deliveries.

Response: It is anticipated that a 20 ft. single unit box truck will be the largest vehicle utilized for deliveries to the Site. However, a turning analysis for a 30 ft. box truck has been provided on the Site Plans. The designated loading zone will be located directly in front of the refuse enclosure.

- For events such as a wedding which might hire a shuttle bus, the vehicle will need to be able to turnaround on site. Please provide an Autoturn analysis for this maneuver.

Response: See Section III.H of the Traffic & Parking Study for discussion of pick-up/drop-off operations. A vehicle turning analysis for a large school bus has been included on the Site Plans.

- How will a garbage apparatus enter/exit the site for garbage pick-up?

Response: It is anticipated that garbage trucks will enter and exit via the Main Access driveway. A vehicle turning analysis for a garbage truck has been included on the Site Plans.

2. Please provide intersection and stopping sight distances for the existing driveway.

Response: A discussion of the Stopping and Intersection Sight Distances for the Site Access driveway has been included in Section III.F.5 of the Traffic & Parking Study. As indicated in the Study, all required sight distances will be satisfied for vehicles entering and exiting the driveway.

Traffic Impact Study

1. Please provide traffic count data for review.

Response: All traffic count data utilized in developing the Traffic & Parking Study is now included in Appendix E of the report.

2. What was the study period for the Saturday traffic counts?

Response: The study period and peak hour of traffic for Saturday is now identified in Section II.B of the Traffic & Parking Study.

3. CM reviewed the trip generation methodology:

- CM agrees with the 2.75 vehicle occupancy rate applied to the anticipated guest count-350-in order to determine the trip generation for an event. However, this does not account for staff and vendors that would be needed to facilitate an event. Please provide information on the number of staff and vendors that could be anticipated for an event of that size.

Response: The 350 persons maximum event occupancy is proposed to be inclusive of required staff to support these largest events. This has been clarified in the Traffic & Parking Study.

- A credit of 25% is applied to the trip generation to account for the patrons utilizing transit options such as the MetroNorth. Please explain how this percentage was determined.

Response: See Section III.B of the Traffic & Parking Study for further discussion of the 25% credit.

4. CM acknowledges that the intersection of NYS Route 9D/Beekman St/W Church St will operate with capacity constraints in the Friday No-Build condition and will continue to do so in the Build condition. The report evaluates the intersection with mitigation measures in the form of split phasing the Beekman St and W Church St approaches. If this mitigation is pursued, then signal modifications will be required in the form of protected left-turn arrows for these approaches. These modifications will be subject to NYSDOT review and approval.

Response: Comment noted. It is anticipated that further coordination with NYSDOT will be required as part of their review of the project under SEQRA.

5. The site will be supported by 31 off-street parking spaces. Based on the City of Beacon parking requirements, the peak parking demand for the site is 119 spaces. Thus, 88 spaces would need to be sourced from available public parking off-site. Similar to the trip generation methodology, a reduction of 25% was applied to the parking demand to account for patrons utilizing transit options. Please explain how this percentage was determined.

Response: See Section III.B for further discussion of this credit.

6. Collier's observed existing parking demand at the following public parking facilities:
- a. Tompkins Firehouse Parking Lot
 - b. City of Beacon Municipal Plaza Parking Lots
 - c. Beckman Street Metro North on-street parking between Railroad Drive and Wolcott Avenue
 - d. Cross Lot
 - e. Beacon Center Lot
 - f. Beacon Metro North Train Station Parking Lots (metered parking spaces)

The observations were conducted on Friday, September 24, 2021, Saturday, September 25, 2021, Friday November 5, 2021, and Saturday, November 6, 2021. Please provide parking observation data for review.

Response: See Section IV.B of the Traffic & Parking Study for further discussion of the parking observations conducted as well as updates to some of the available parking areas.

Sincerely,

Colliers Engineering & Design CT, P.C.



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

R:\Projects\2021\21004333A\Correspondence\OUT\211228RGD_CM 12.13.2021 Response.docx



Engineering
& Design

Traffic & Parking Study

December 28, 2021

1113 Wolcott Avenue

City of Beacon

Dutchess County, New York

Prepared for:

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

Prepared by:

A handwritten signature in black ink, appearing to read "R. D'Andrea".

Richard G. D'Andrea, P.E., PTOE
New York Professional Engineer
License No. 090241

Colliers Engineering & Design

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

Project No. 21004333A

Maser Consulting is now Colliers Engineering & Design

Accelerating success.

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I. Introduction

A. Project Description and Location

(Figure No. 1)

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

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

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

As shown on Figure No. 1, access to the development is proposed via an existing access connection from Wolcott Avenue that will provide access to the main parking area. A total of 31 off-street parking spaces will be provided primarily for use by hotel guests and employees. The existing secondary access driveway immediately south of the church is also proposed to remain for deliveries and emergency access.

B. Scope of Study

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

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

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

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

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

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

II. Existing Roadway and Traffic Descriptions

A. Project Description and Location

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

1. Wolcott Avenue (NYS Route 9D)

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

2. Main Street

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

3. Beekman Street

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

B. 2021 Existing Traffic Volumes

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

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

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

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

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

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

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

III. Evaluation of Future Traffic Conditions

A. 2024 No-Build Traffic Volumes

(Figure No. 4 through 9)

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

B. Site Generated Traffic Volumes

(Table No. 1)

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

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

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

It is also anticipated that a portion of the event attendees for the larger weekend events will arrive via other modes of transportation. This includes attendees attracted from the local area and therefore would be likely to arrive by non-vehicular transportation. 25% of the event attendees will be attracted from the local area and therefore would be likely to arrive by non-vehicular transportation. The Project also anticipates promoting the use of public transportation including use of Metro-North trains to the Beacon train station, which is within walking distance to the Project site. In addition, the Project will also promote the use of Dutchess County Buses, including the Poughkeepsie Transit Hub to Beacon bus route, the Beacon to Hopewell Junction bus route and the Beacon Free Loop bus, each of which have designated stops along Main Street and pass the Project site on Route 9D. Based on this, the anticipated event traffic generation has been reduced by 25% during each of the peak hours. Finally, in order to account for drop-off/pick-up trips during the entry and exit hours it has been assumed that 20% of the total entering or exiting traffic will be drop-off or pick-up trips and therefore will both enter and exit during the peak entry and peak exit periods. The resulting event conditions "new trips" accounting for these credits are summarized in Table No. 1.

It should be noted that the use of the 25% credit identified above is supported by 2019 American Community Survey Commuting data which indicates a Public Transportation usage of approximately 10% for the City of Beacon, with carpooling usage of approximately 10% and approximately 5% walking or bicycling. As indicated above, the Applicant plans to advertise and promote the use of public transportation and other non-vehicular means of transportation for event attendees and therefore the 25% credit was utilized as it is anticipated the percentage of these trips will be somewhat greater than indicated by the census data.

C. Arrival/Departure Distribution

(Figures No. 10 through 13)

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

distributions for each portion of the development including the fact that the onsite parking is anticipated to only accommodate the Hotel use.

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

Note that for the purposes of the analysis, it has been assumed that all traffic will enter and exit the Site access driveway location, however as discussed further in Section IV of this report, only 31 parking spaces will be provided on the Project site for the use of Hotel guests only. Therefore, additional café guests or event attendees will be required to utilize off-site parking and therefore will not actually enter the Site unless dropping off and/or picking up.

D. 2024 Build Conditions Traffic Volumes

(Figures No. 14 through 25)

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

E. Description of Analysis Procedures

(Appendix C)

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

Signalized Intersection Capacity Analysis

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

Unsignalized Intersection Capacity Analysis

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

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

F. Results of Analysis

(Tables No. 2 and 3)

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

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

1. Wolcott Avenue and Verplanck Avenue

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

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

The capacity analysis was recomputed using the 2024 No-Build Traffic volumes. These results indicate that the intersection is expected to experience an overall Level of Service "C " during each of the peak hours under future conditions without the project. Under the future build conditions, both Typical and Event conditions, similar overall Levels of Service are anticipated to be experienced.

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

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

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

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

3. Wolcott Avenue and Main Street/City Hall Driveway

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

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

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

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

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

The capacity analysis was recomputed using the 2024 No-Build and Build Traffic volumes. These results indicate that the intersection is expected to experience similar Levels of Service to existing conditions with some small increases in delay (less than 4 seconds per vehicle) as a result of the project generated traffic.

5. Wolcott Avenue and Site Access

As previously indicated, the Site is proposed to be access via the existing curb cut location to Wolcott Avenue which forms an unsignalized "T"-shaped intersection. The northbound and southbound Wolcott Avenue approaches each consist of one travel lane in each direction with a center two-way left turn lane provided.

Capacity analysis was conducted for this intersection utilizing the 2024 Build Traffic volumes. These results indicate that the intersection is expected to experience Levels of Service "B" or better during each of the peak hours. It should be noted that any modifications to the existing access configuration either at the main access location or at the delivery/emergency access location will require a Highway Work Permit to be obtained from the NYSDOT.

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

6. Wolcott Avenue and South Avenue

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

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

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

G. Pedestrian Access

Access to the Project by pedestrians, including those who may be parking offsite is provided in several manners. There are existing sidewalks along both sides of most roadways within the Study area. There are existing signalized crosswalks of Wolcott Avenue both at its signalized intersections with Beekman Street and Main Street providing signalized pedestrian access from the east side of Wolcott Avenue to the west side where the Project site is located. In addition, there are existing crosswalks crossing Wolcott Avenue which are supplemented with pedestrian activated Rectangular Rapid Flashing Beacon (RRFB) signs located at the intersections with

Beacon Street and Rombout Avenue. Any patrons utilizing the public parking available at the Tompkins lot on the east side of Wolcott Avenue would be likely to use the RRFB crosswalk at Beacon Street to cross Wolcott Avenue to Access the Project site. Similarly, any pedestrians coming from the Main Street area would be likely to utilize either the signalized pedestrian crossing at the Wolcott Avenue/Main Street intersection or the RRFB crosswalk at Beacon Street to cross to the west side of the roadway.

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

H. Site Circulation and Operations

As previously discussed, general vehicular access to the Project will be provided via the existing driveway connection to Wolcott Avenue and will accommodate both entering and exiting traffic. The existing southern access driveway is also proposed to remain, providing for exit only traffic. This driveway will be connected to the Main driveway via a newly constructed loop roadway that will provide a drop-off/pick-up area in front of the existing church building. It is anticipated that this will be utilized for smaller deliveries to the event spaces as well as accommodating drop-off/pick-up of patrons to the event space by rideshare vehicles, buses, etc. Vehicle maneuvering analyses of a Shuttle Bus and a 30 ft. Single Unit box truck have been included on the Site Plan showing that these vehicles can be accommodated within this proposed drop-off/pick-up area. It is noted that the Applicant anticipates that a 20 ft. single unit box truck will be the largest vehicle utilized for deliveries to the Site. However, the maneuvering analysis was prepared for a 30 ft. box truck is shown to be accommodate in the event that a larger vehicle is utilize din the future.

It is noted that the existing pedestrian pathway from Wolcott Avenue to the event space will cross this newly proposed drop-off/pick-up area driveway. This is typical of similar type venues and is not considered a major pedestrian/vehicular conflict point, however, the event staff should be responsible for the safe operation of the vehicular and pedestrian movements in this area during events.

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

IV. Parking Evaluation

A. Project Related Code Parking Requirements

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

Table No. 2 – City of Beacon Code Required Parking

Proposed Use	Size	City of Beacon Code Requirement	Required Spaces
Hotel	30 Rooms 1 Employee	1 Space/Room +1 Space/Employee	31 Spaces
Café	66 Patrons (954 Sq. Ft @ 15 sf/Patron)	1 Space/3 Patrons	22 Spaces ²
Event Space	350 Persons (Seats) ¹	1 Space/4 seats	88 Spaces
Total Required Parking Spaces			119 Spaces ²

Notes:

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

As indicated in the above table the Project would require a total of 119 parking spaces. As noted above, the Café use is proposed to be a non-simultaneous use with the Event Space. Therefore, the calculation of total required parking spaces for the Project is based on the critical event periods during which times the Café will be used as a complimentary space to the Event space, but no additional persons outside of those attending the events will be permitted in the Café during these times. As previously indicated, the Project proposes to provide 31 off-street parking spaces to accommodate the parking needs for the proposed Hotel use. Therefore, all additional parking for the proposed Café use and event related parking would be required to be accommodated by on-street and off-street public parking in the area.

It is also anticipated that the uses within the proposed development would permit for some amount of "Shared Parking" resulting from hotel guests frequenting the Café and also the events held in the Church building. It is anticipated that as many as 100% of the hotel guest could be attending an event. Depending on the hotel occupancy and type of event this could potentially reduce the parking requirements for the event to 58 parking spaces and the total parking requirement for the Site to 89 parking spaces, including 1 hotel employee parking space.

Furthermore, as previously discussed, it is also anticipated that a portion of the event attendees for the larger weekend events will arrive via other modes of transportation. This includes attendees attracted from the local area and therefore would be likely to arrive by non-vehicular transportation. The Project also anticipates promoting the use of public transportation including use of Metro-North trains to the Beacon train station, which is within walking distance to the Project site. In addition, the Project will also promote the use of Dutchess County Buses, including the Poughkeepsie Transit Hub to Beacon bus route, the Beacon to Hopewell Junction bus route and the Beacon Free Loop bus, each of which have designated stops along Main Street and pass the Project site on Route 9D. Based on this, it is anticipated that the overall parking demand of the project during these event conditions could be reduced by as much as 25% as discussed in Section III.B above. This would further reduce the parking requirement for the largest events to 44 parking spaces and the overall parking requirement for the Project to 75 parking spaces.

B. Review of Off-Site Parking Locations

The Project proposes to provide 31 off-street parking spaces on the Site primarily for the use of Hotel guests and employees as required by the City of Beacon code for that use. While as indicated above, there is expected to be some amount of “shared parking” between the Hotel and café/event space under both typical and event conditions, under both scenarios there will be a need for additional parking to be accommodated by off-site public parking in the vicinity of the Project.

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

- **Tomkins Firehouse Parking Lot – 70± Parking Spaces**
This lot is currently unstriped and therefore the number of parking spaces is an estimate.
- **City of Beacon Municipal Plaza (City Hall) Parking Lots – 100± Parking Spaces**
- **Beekman Street Metro North on-street parking between Railroad Drive and Wolcott Avenue – 70± on-street metered parking spaces**
This parking is operated by LAZ parking, parking can be paid electronically via LAZgo Parking App.
- **Cross Lot – 18 Parking Spaces (24 Hour Free Parking – City Lot)**
- **Cliff Lot – 19 Parking Spaces (24 Hour Free Parking – City Lot)**
- **Beacon Center Lot – 92 Parking Spaces (24 Hour Free Parking – City Lot)**
- **Beacon Metro North Train Station Parking lots metered parking spaces**
This parking is operated by LAZ parking, parking can be paid electronically via LAZgo Parking App.

The Tomkins Firehouse and City of Beacon Municipal Plaza parking lots have each recently been signed as available for public parking and are within 500 and 1,000 ft. respectively of the Project Site making these the most accessible public parking for the project. As previously noted, a walkway connection to Beekman Street is proposed to be provided through the Site as part of the Project. This will provide more convenient access to the Beekman Street on-street metered parking spaces of which the nearest spaces will be within the 350 ft. of the Hotel and Café/Event spaces with the more remote spaces approximately 1,200 ft. from these buildings. This will also

provide more convenient access to parking available at the Beacon Metro north station, however these metered spaces are more remote, in excess of 2,000 ft. from the Project site and less likely to be utilized. The Cross Street lot, Cliff Lot and Beacon Center Lot are all located within 1,500 – 1,900 ft. from the Project site. In total there are approximately 369 total parking spaces within 2,000 ft. walking distance of the Project site which can be utilized to accommodate the parking needs of the Project under the event conditions. There is also on-street public parking along Main Street within this distance from the Project, but this parking is known to have limited availability and therefore has been discounted from the parking analysis.

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

- **Tomkins Firehouse Parking Lot**
 - This parking lot was observed to be significantly underutilized during all time periods with 5 vehicles or less parked at any one time. This is likely due to its location further from the Main Street business district and the fact that it was only recently signed for public parking.
 - It is understood there are plans for future development on this property that will usurp some portion of the currently available parking and therefore these 70 parking spaces may not be available in the future.
- **City of Beacon Municipal Plaza (City Hall) Parking Lots**
 - This parking lot was observed to be significantly underutilized outside of Beacon City Hall business hours with less than 15 vehicles parked at any one time not including municipal vehicles.
 - Observations of this lot during Beacon City Hall business hours were not conducted.
- **Beekman Street Metro North on-street parking between Railroad Drive and Wolcott Avenue**
 - This parking was observed to be significantly underutilized during all time periods. It is noted that a review of historical aerial photography indicates a higher utilization of this parking on Weekdays prior to the COVID-19 pandemic, however it is anticipated that this parking would be mostly free on nights and weekends.
- **Cross Lot**
 - This parking was observed to be nearly fully occupied during all time periods. It is unlikely that this parking area could be relied upon for parking for the proposed project.
- **Cliff Lot**
 - This parking was observed to be nearly fully occupied during all time periods. It is unlikely that this parking area could be relied upon for parking for the proposed project.

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

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

C. Parking Recommendations

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

Dissemination of Parking Information

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

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

Dissemination of Public Transportation Information

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

Provision of Valet Parking

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

In addition to the above, the Applicant is continuing to explore other options for providing additional parking within proximity to the Site. As alternatives for additional parking materialize, additional information will be provided.

V. Summary and Conclusion

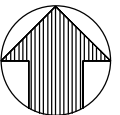
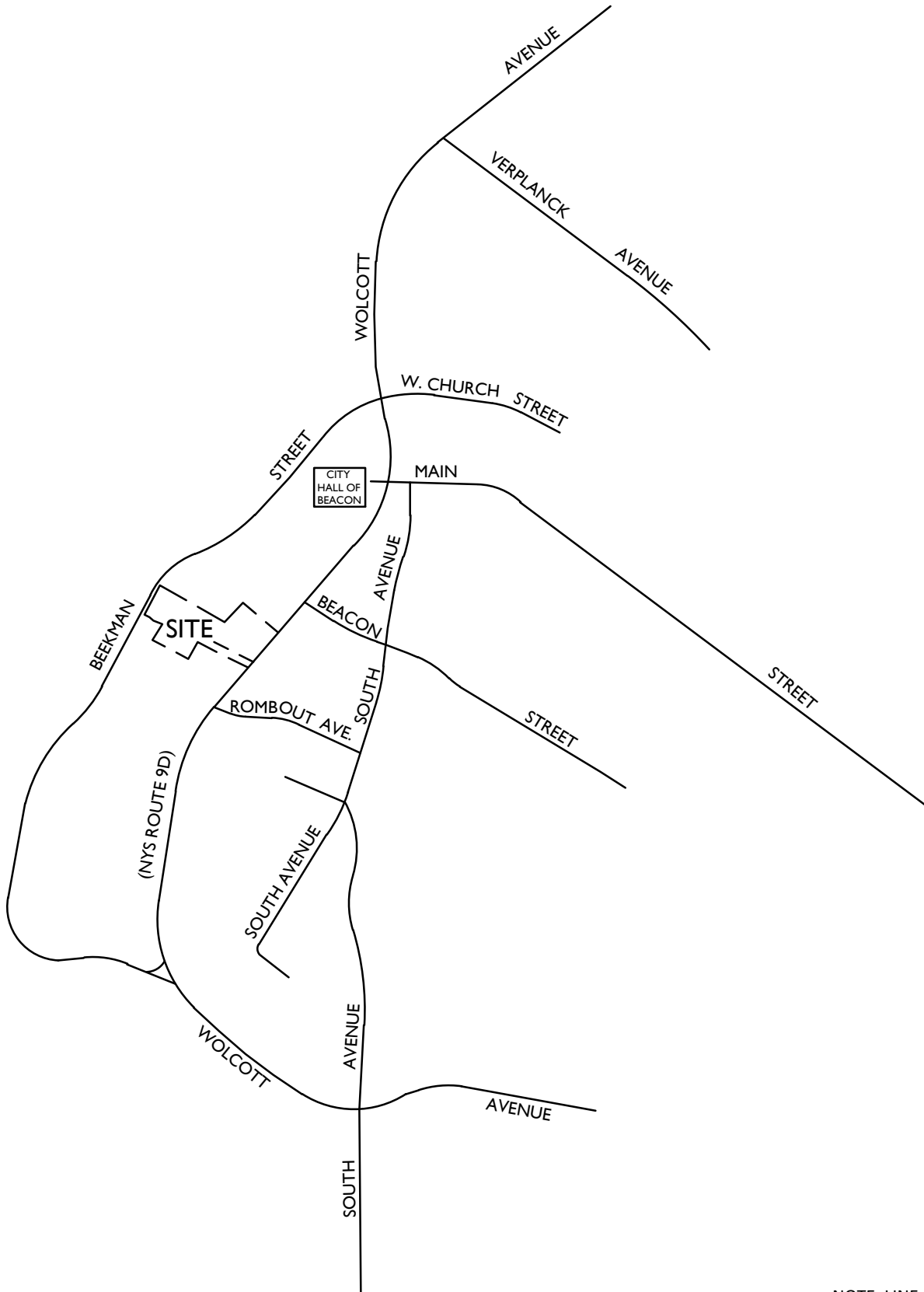
As summarized here-in the Project is not anticipated to have a significant impact on traffic conditions in the vicinity of the Project site. Recommendations for traffic signal phasing and timing modifications at the intersection of Wolcott Avenue (Route 9D) and Beekman Street should be explored regardless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

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

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

Appendix

Appendix A | Traffic Figures



NOTE: LINE DIAGRAM NOT TO SCALE



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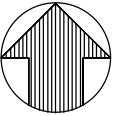
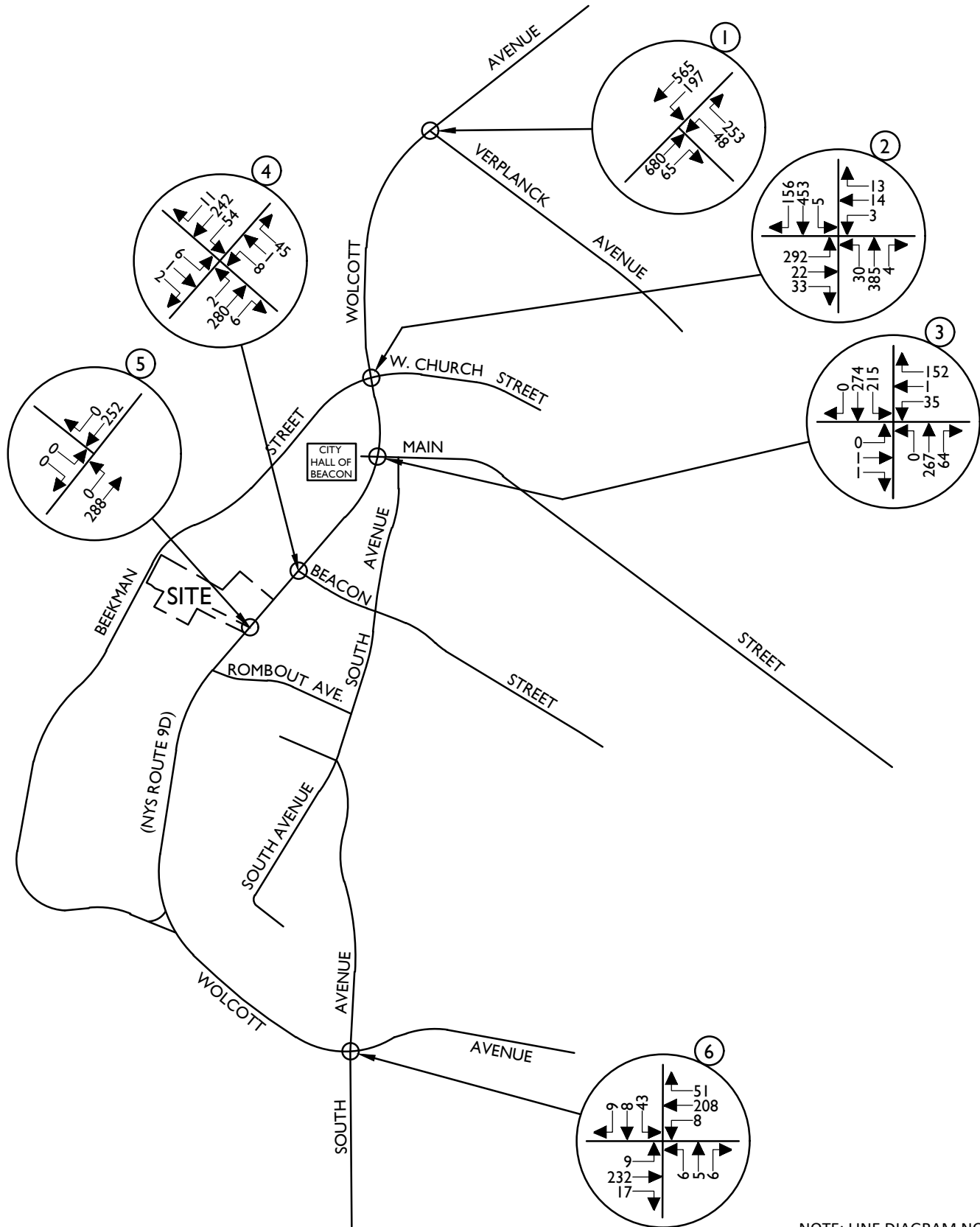
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174



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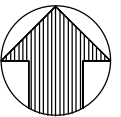
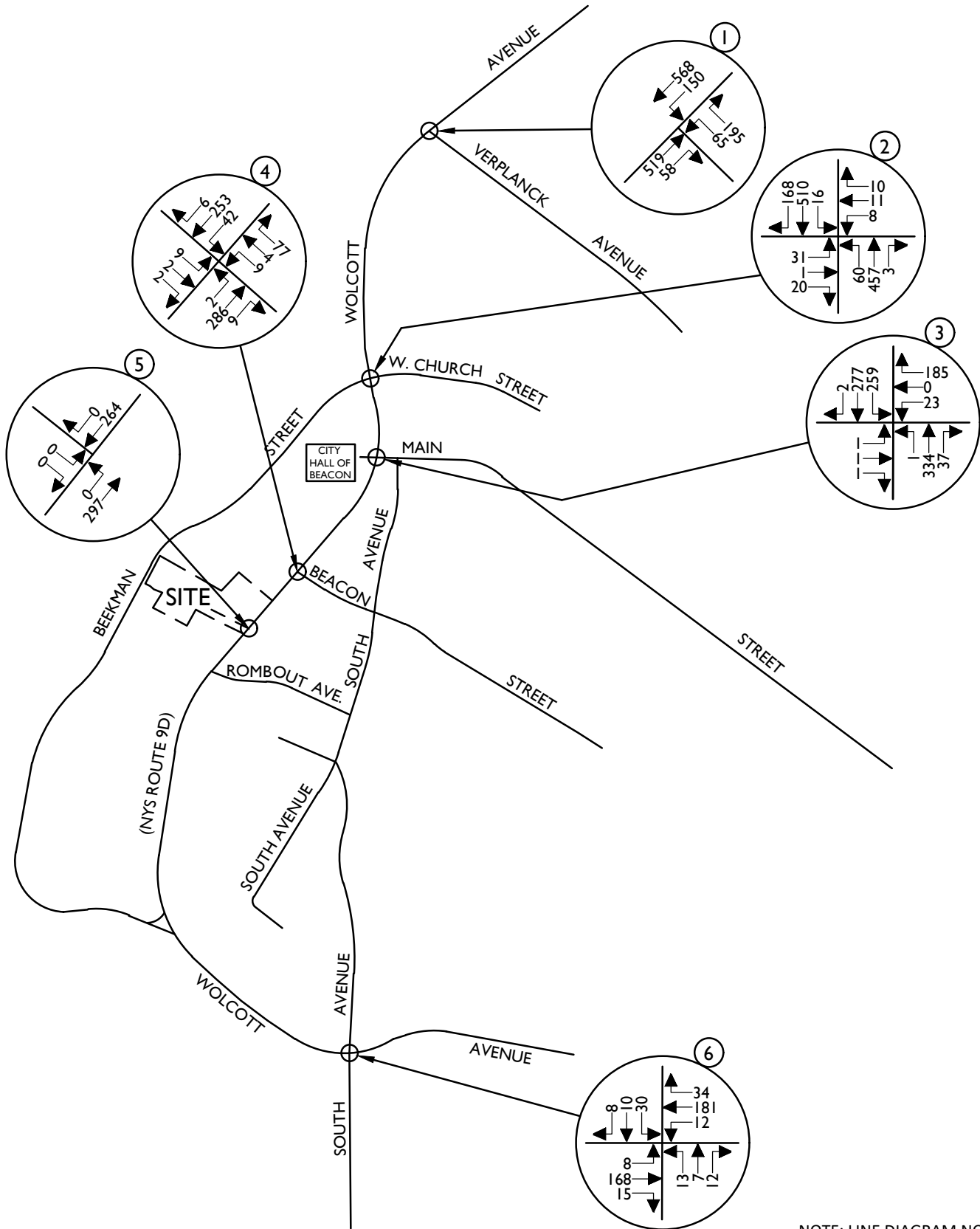
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SHEET TITLE:
**2021 EXISTING TRAFFIC VOLUMES
FRIDAY PM PEAK HOUR**

SHEET NUMBER:

2

175



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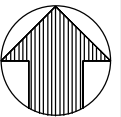
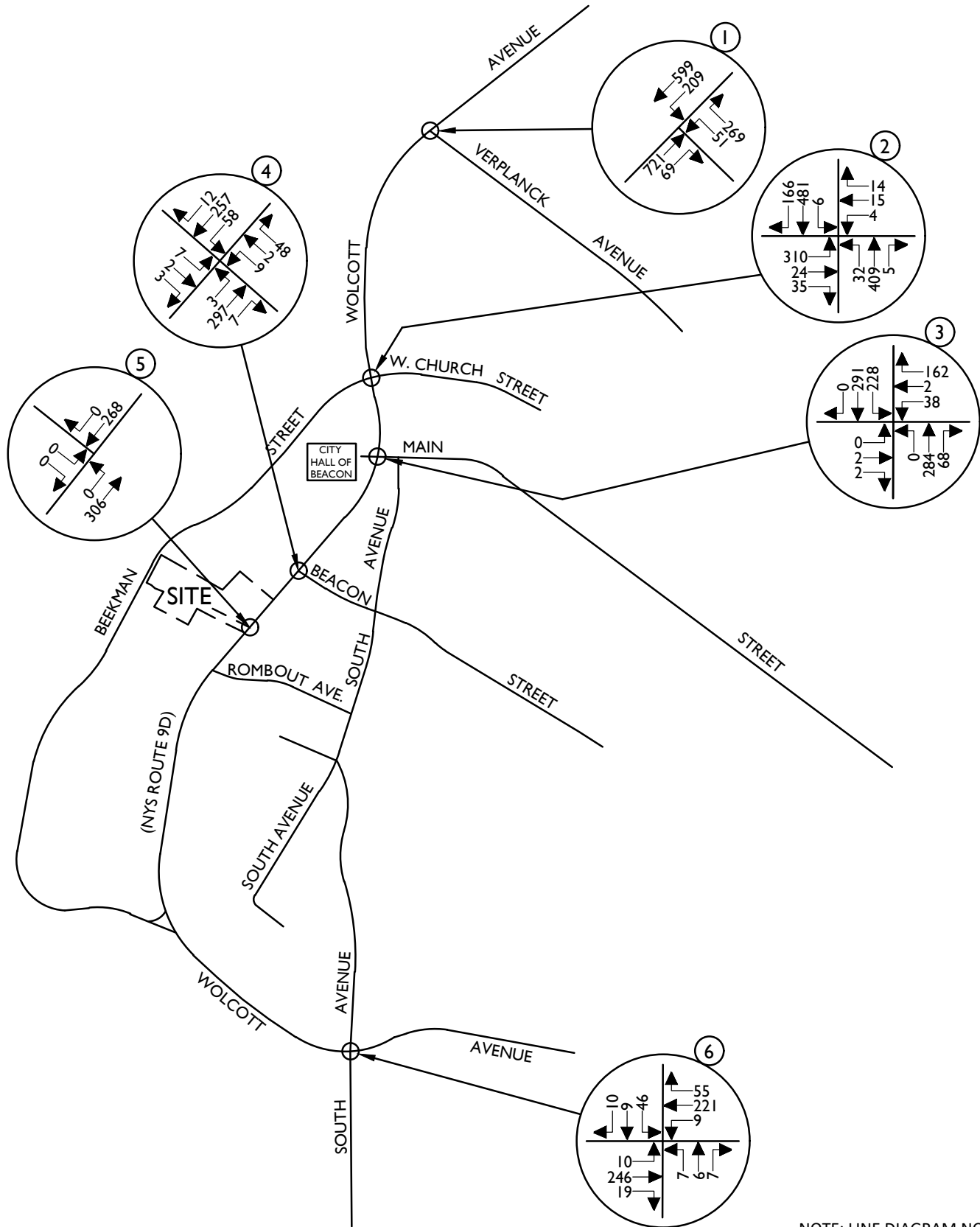
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AS SHOWN	10/5/21	R.H.	P.J.G.
PROJECT NUMBER:	DRAWING NAME:		
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SHEET TITLE:
**2021 EXISTING TRAFFIC VOLUMES
SATURDAY PEAK HOUR**

SHEET NUMBER:

3

176



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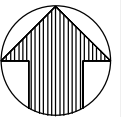
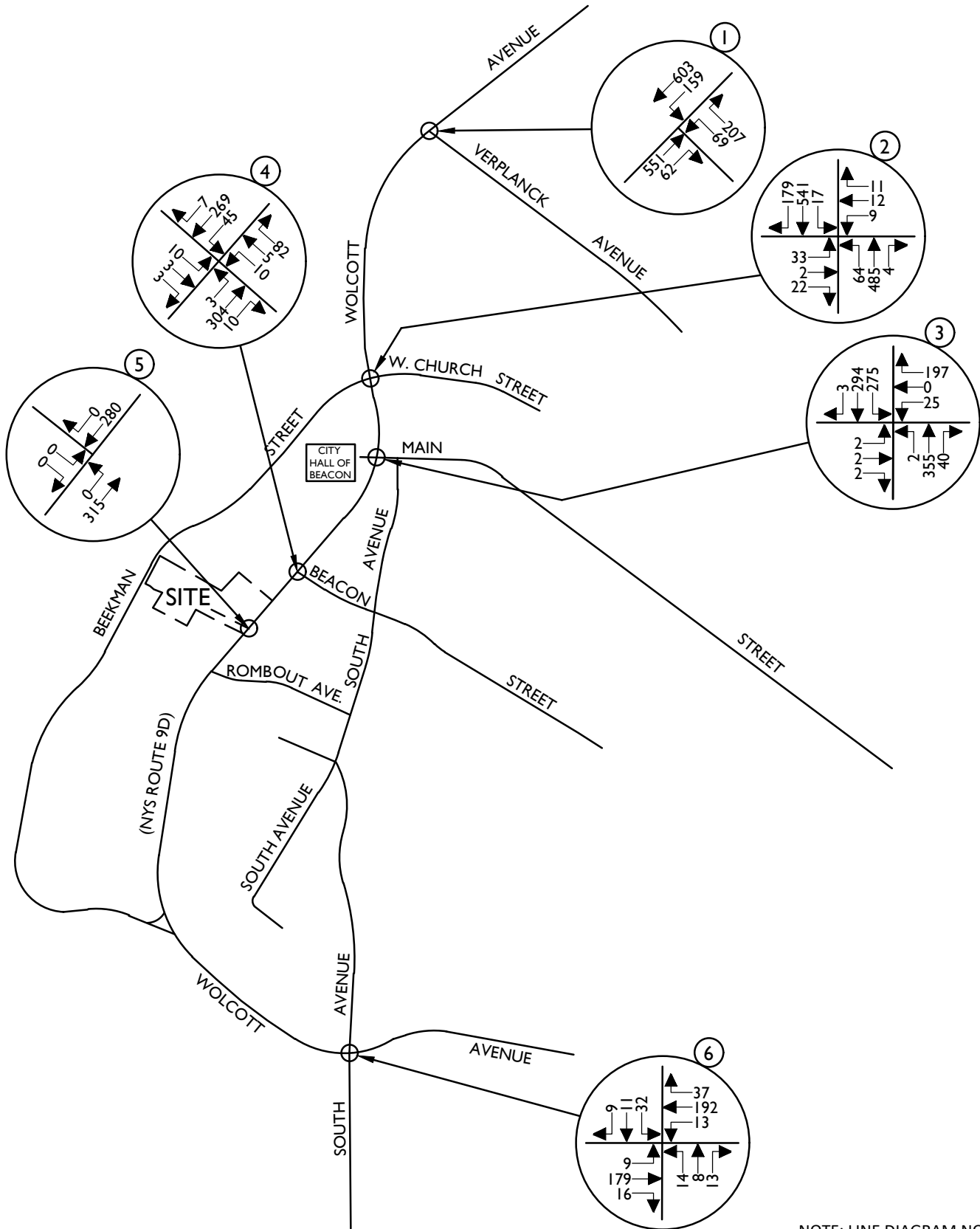
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AS SHOWN	10/5/21	R.H.	P.J.G.
PROJECT NUMBER:	DRAWING NAME:		
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SHEET TITLE:
**2024 PROJECTED TRAFFIC VOLUMES
FRIDAY PM PEAK HOUR**

SHEET NUMBER:

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PROJECT NUMBER:	DRAWING NAME:		
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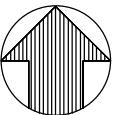
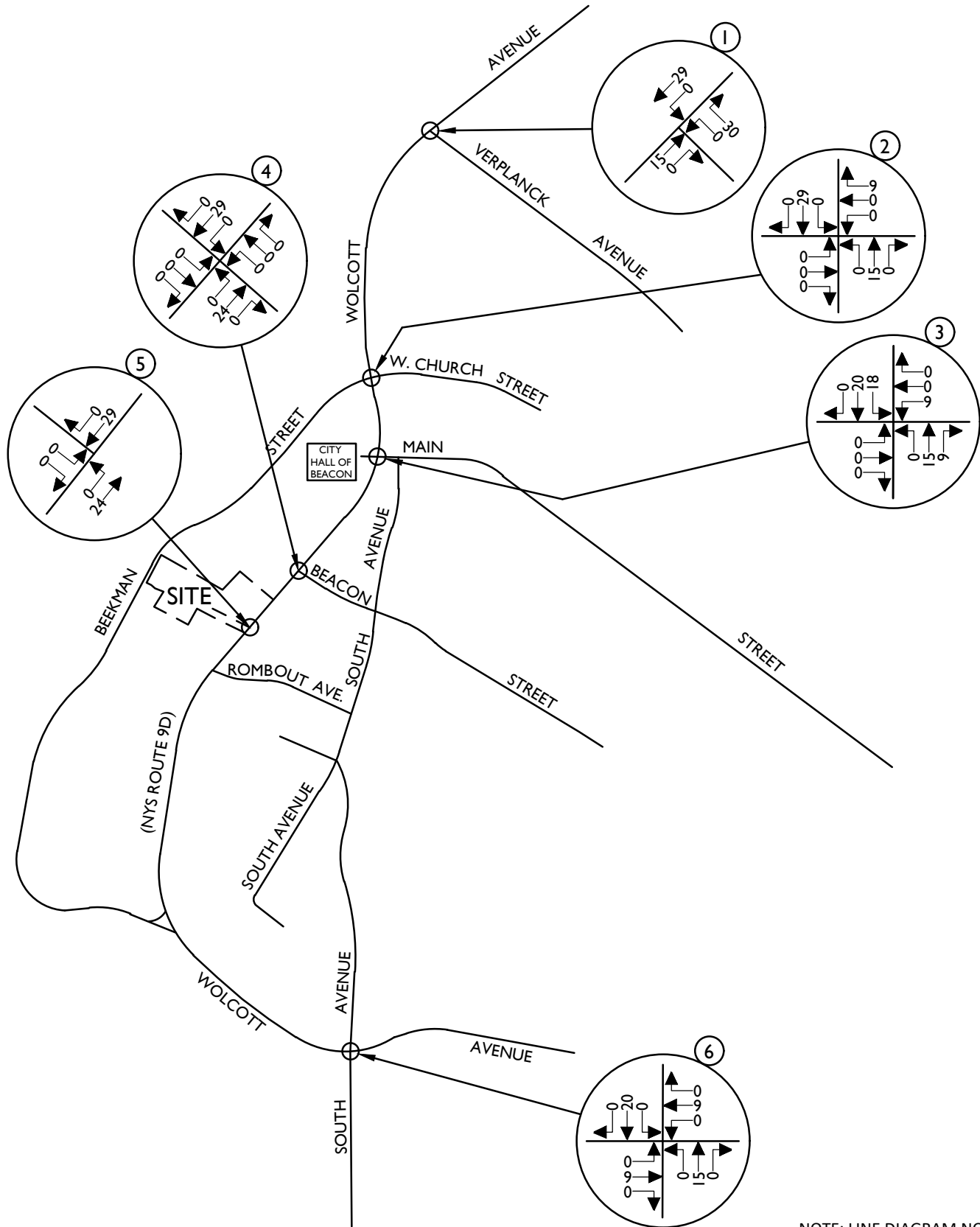
SHEET TITLE:

2024 PROJECTED TRAFFIC VOLUMES
SATURDAY PEAK HOUR

SHEET NUMBER:

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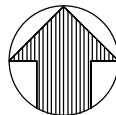
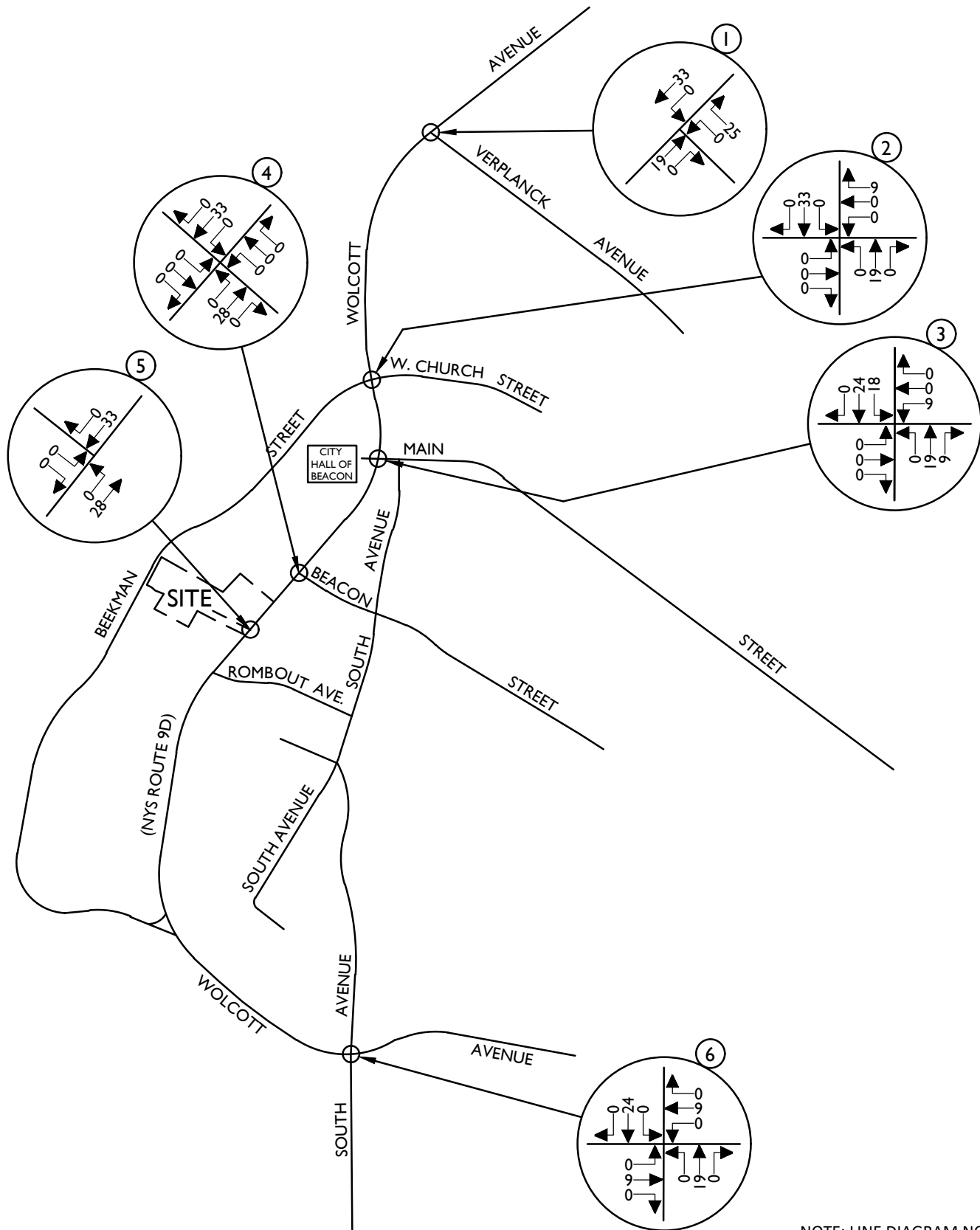
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SHEET TITLE:
**OTHER DEVELOPMENT
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FRIDAY PM PEAK HOUR**

SHEET NUMBER:

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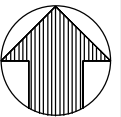
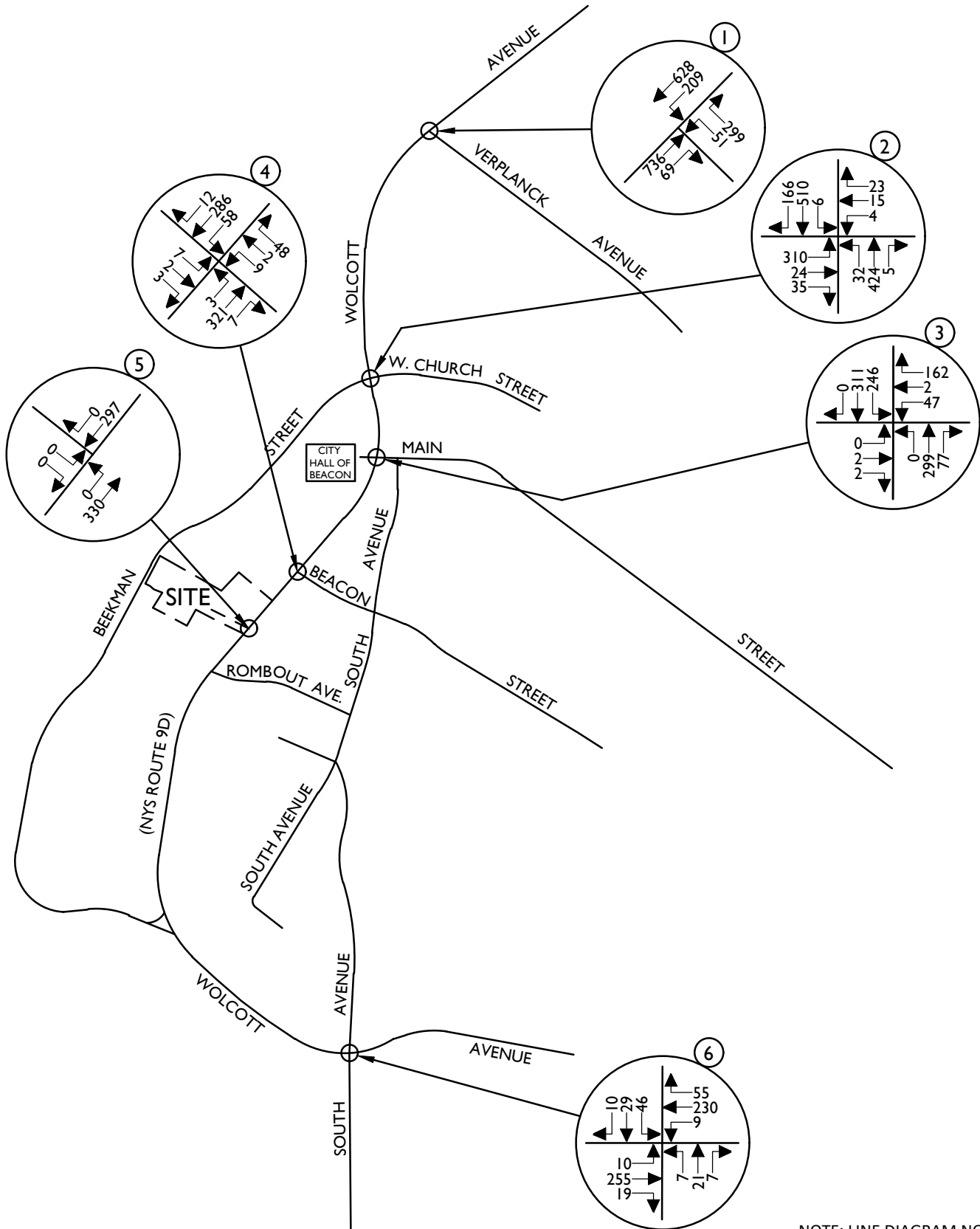
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PROJECT NUMBER:	DRAWING NAME:		
21004333A	211119RGD_FIGURE		

SHEET TITLE:
**OTHER DEVELOPMENT
TRAFFIC VOLUMES
SATURDAY PEAK HOUR**

SHEET NUMBER:

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AS SHOWN	10/5/21	R.H.	P.J.G.

PROJECT NUMBER:	DRAWING NAME:
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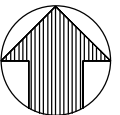
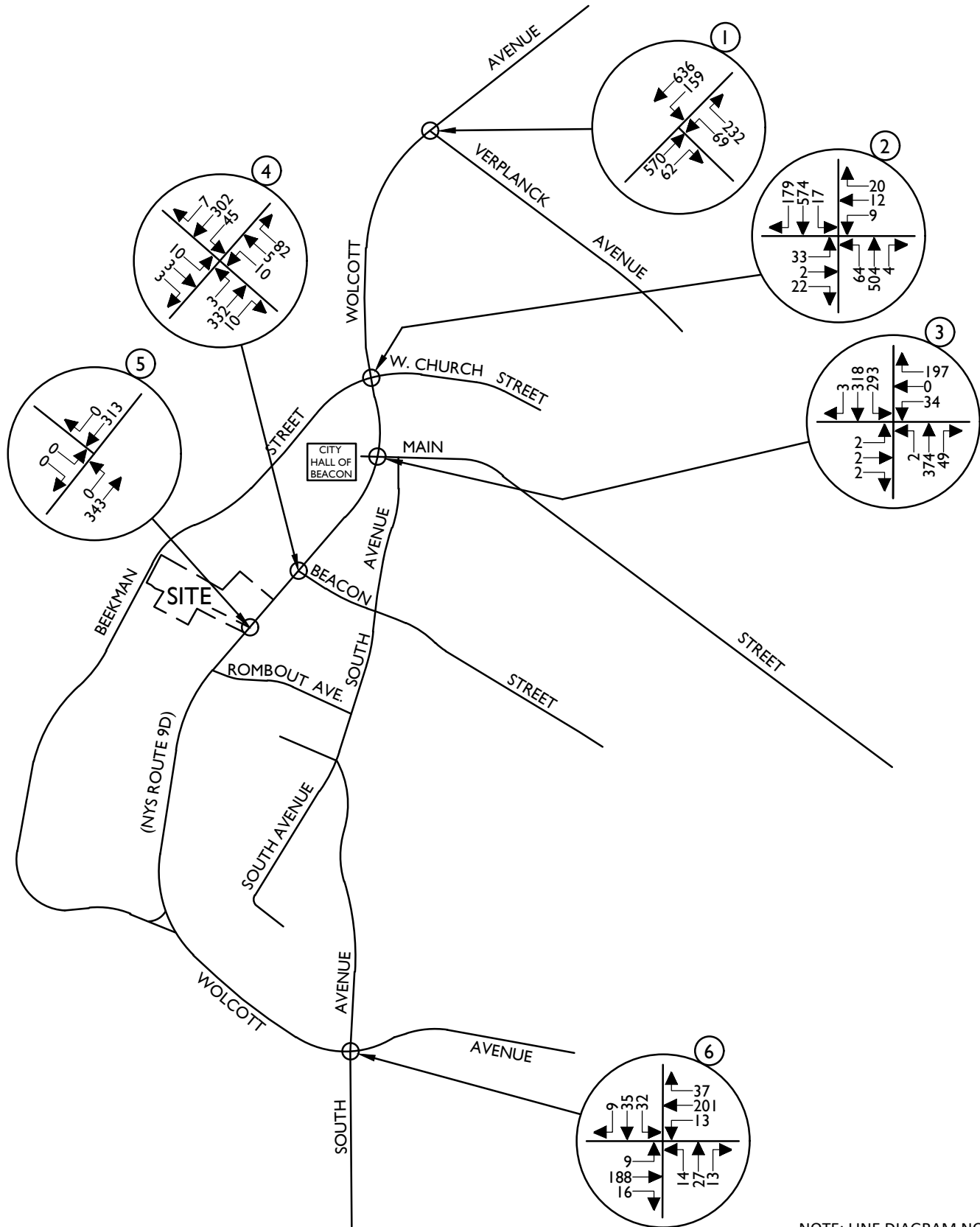
SHEET TITLE:

2024 NO-BUILD TRAFFIC VOLUMES
FRIDAY PM PEAK HOUR

SHEET NUMBER:

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PROJECT NUMBER:	DRAWING NAME:		
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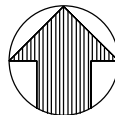
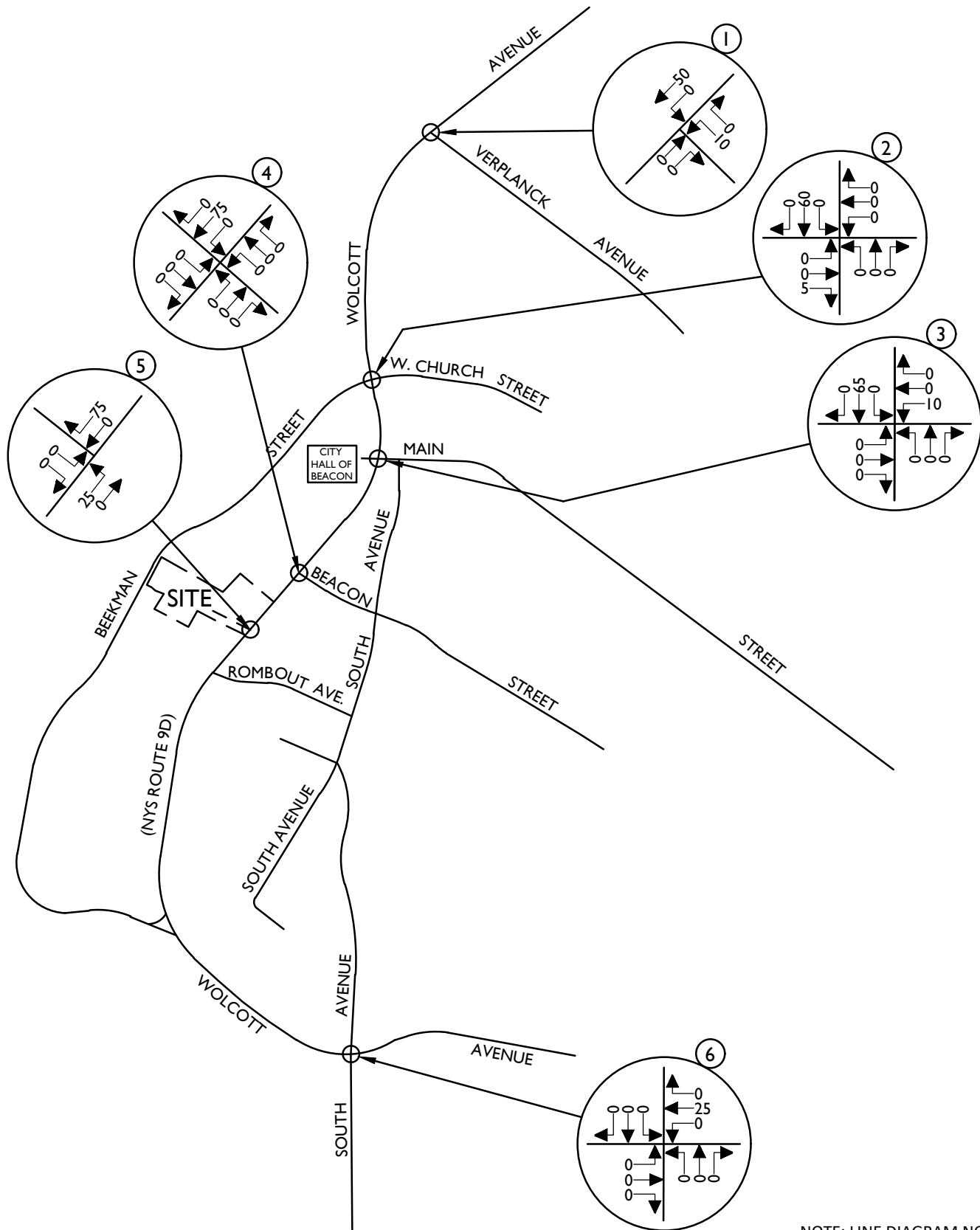
SHEET TITLE:

2024 NO-BUILD TRAFFIC VOLUMES
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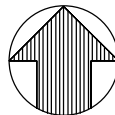
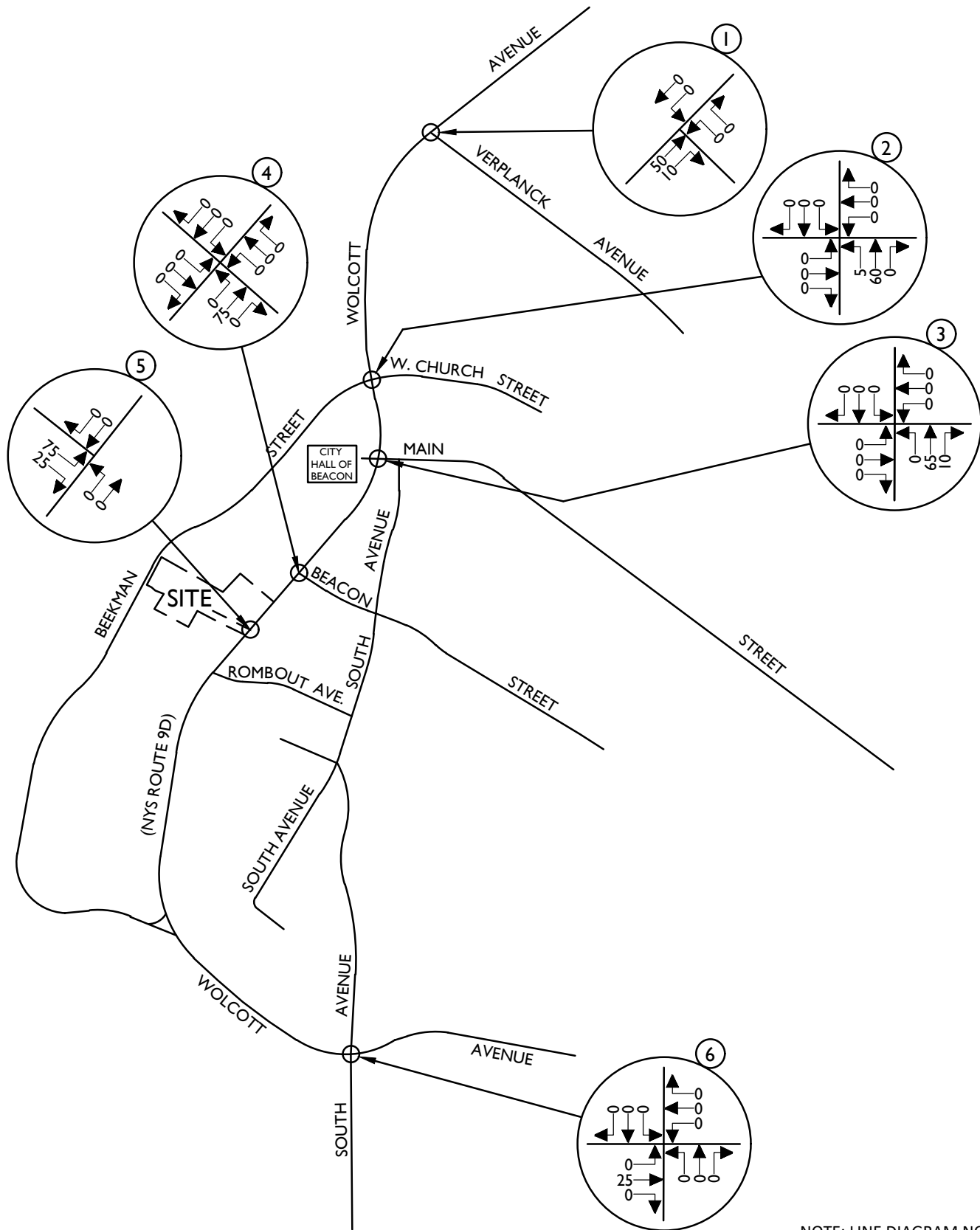
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	10/5/21	R.H.	P.J.G.
PROJECT NUMBER:	DRAWING NAME:		
21004333A	211119RGD_FIGURE		

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

SHEET NUMBER:

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PROJECT NUMBER: 21004333A DRAWING NAME: 211119RGD_FIGURE

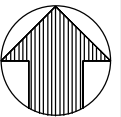
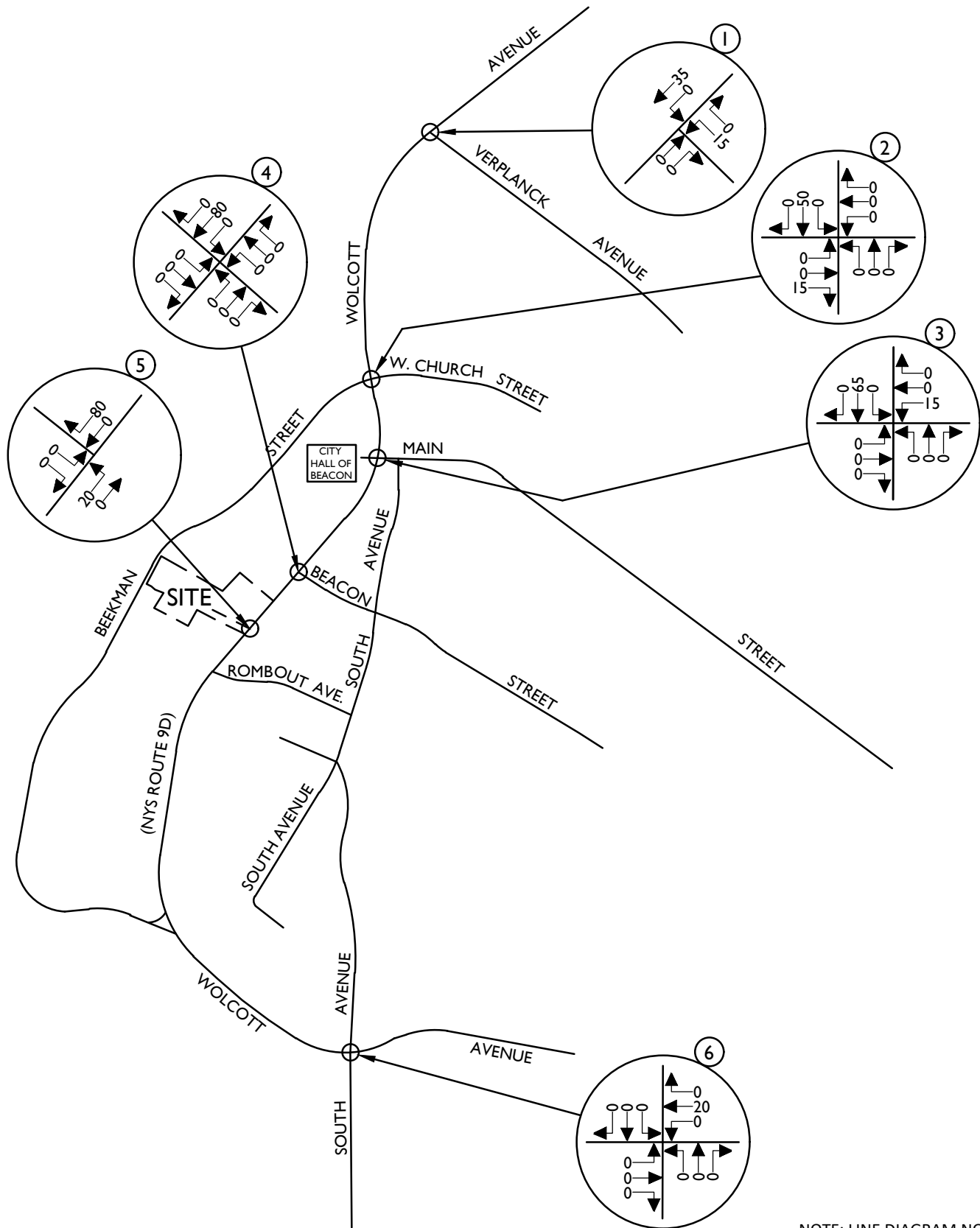
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HOTEL DEPARTURE DISTRIBUTION
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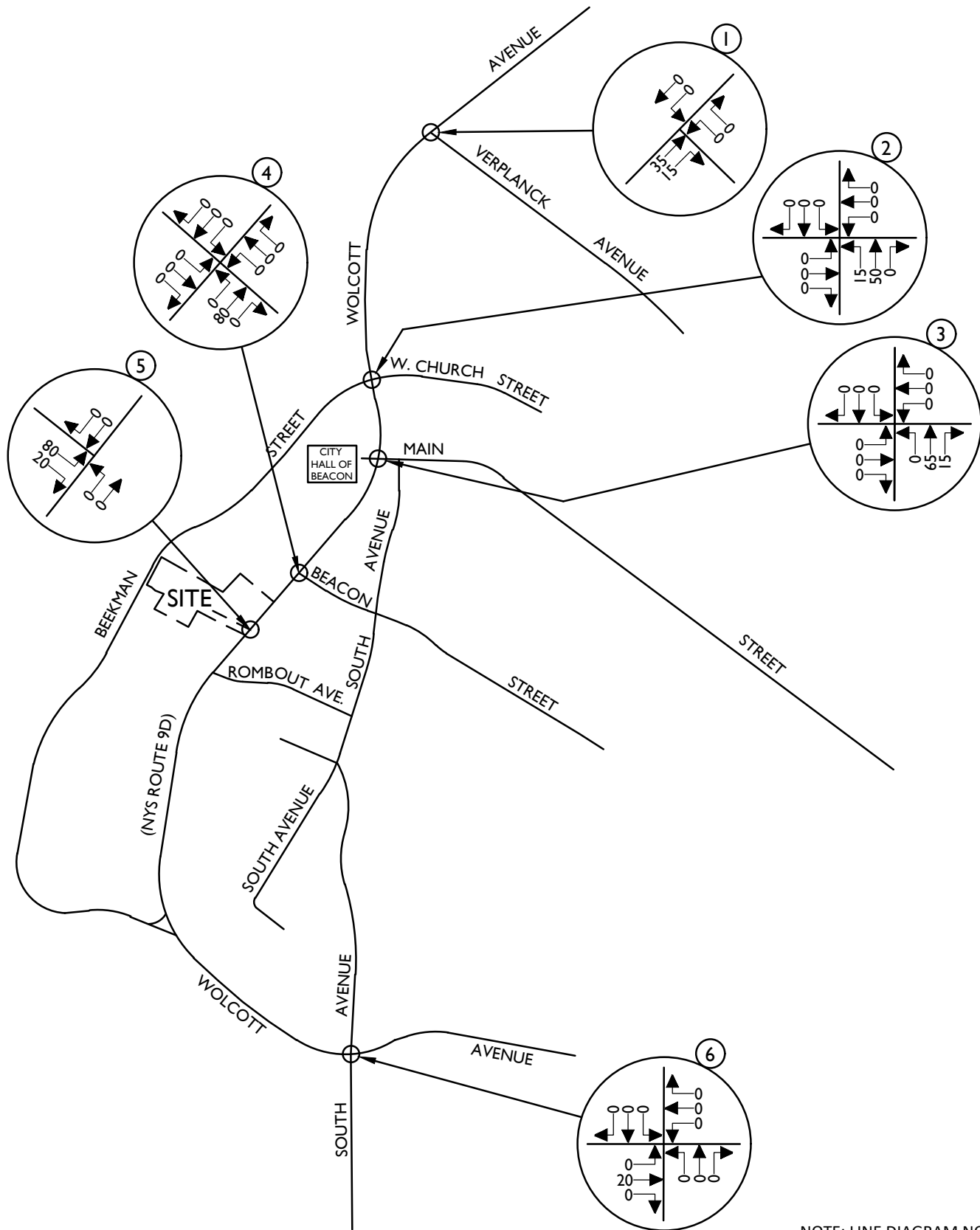
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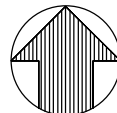
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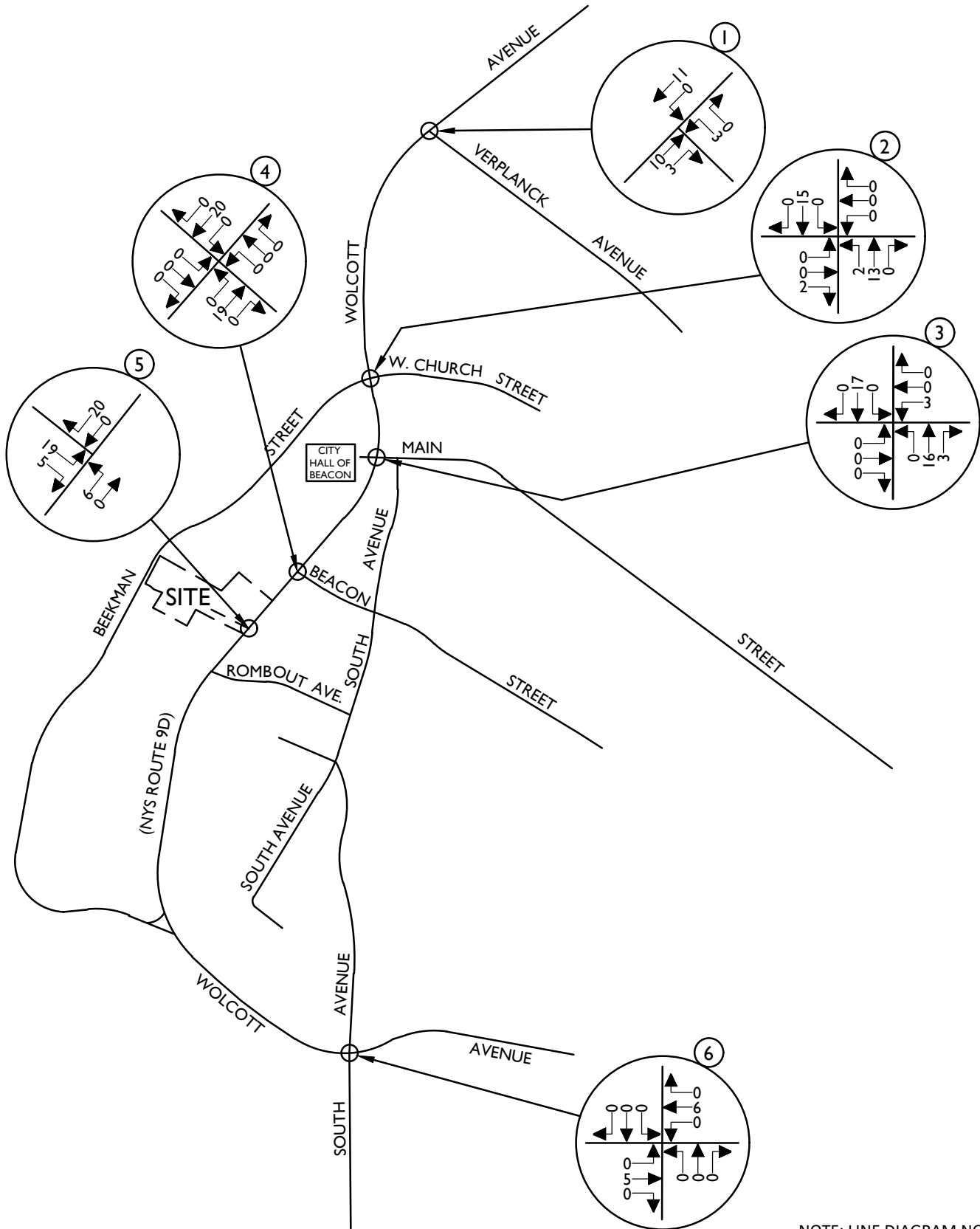
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
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PROJECT NUMBER:	DRAWING NAME:		
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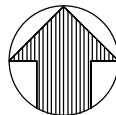
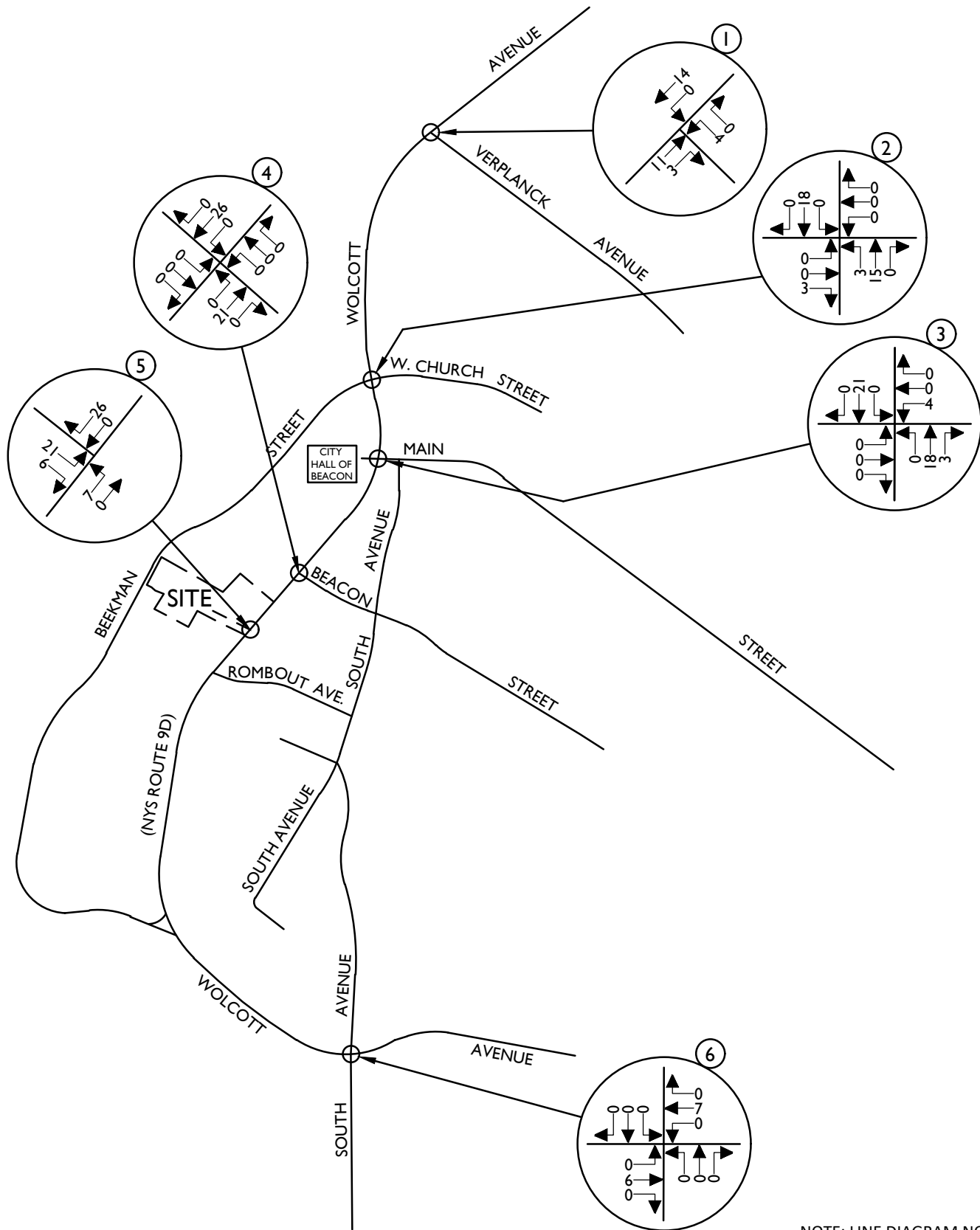
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PROJECT NUMBER:	DRAWING NAME:		
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SHEET NUMBER:	14



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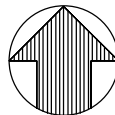
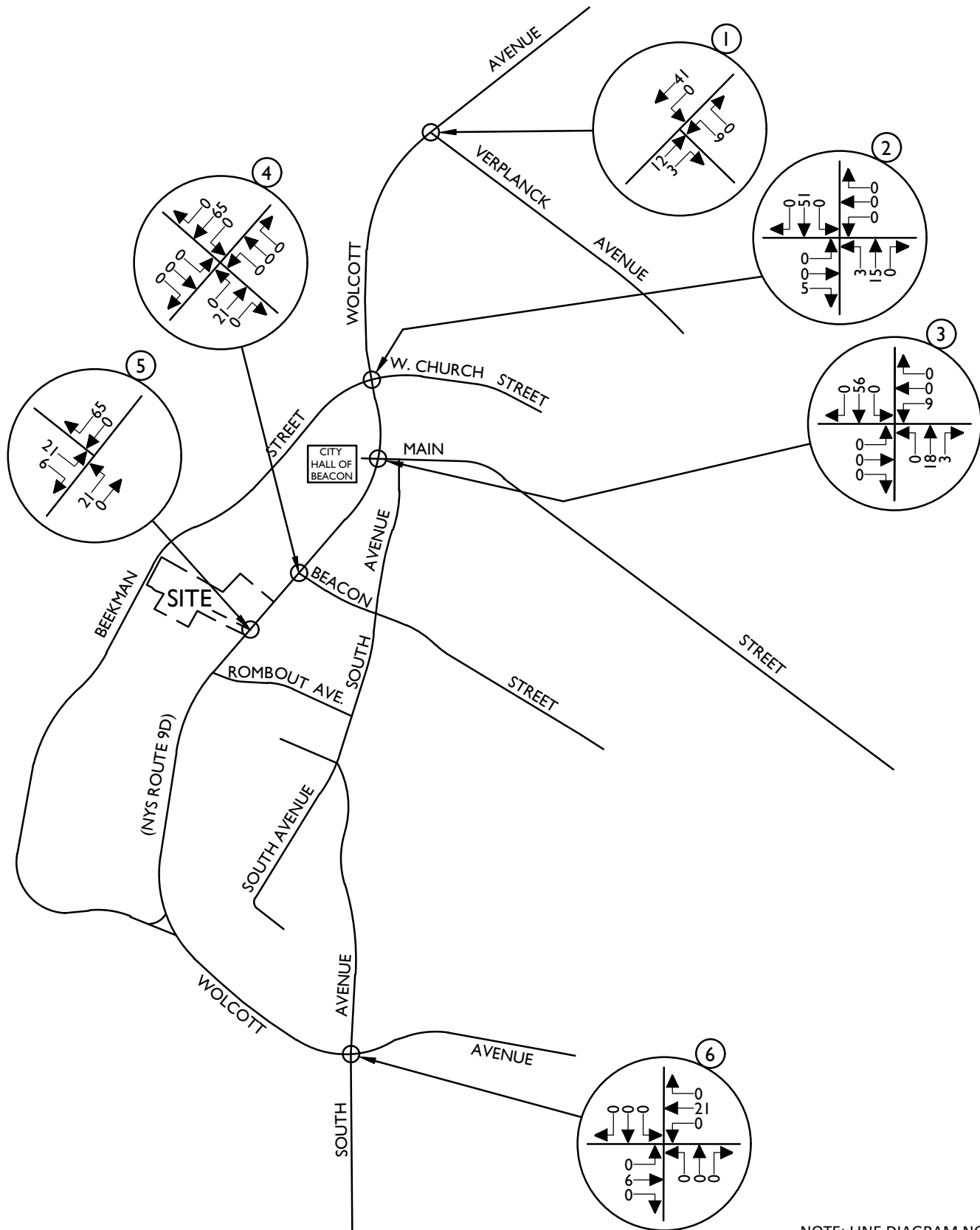
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SHEET TITLE:	TYPICAL CONDITIONS SITE GENERATED TRAFFIC VOLUMES SATURDAY PEAK HOUR
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SHEET NUMBER:

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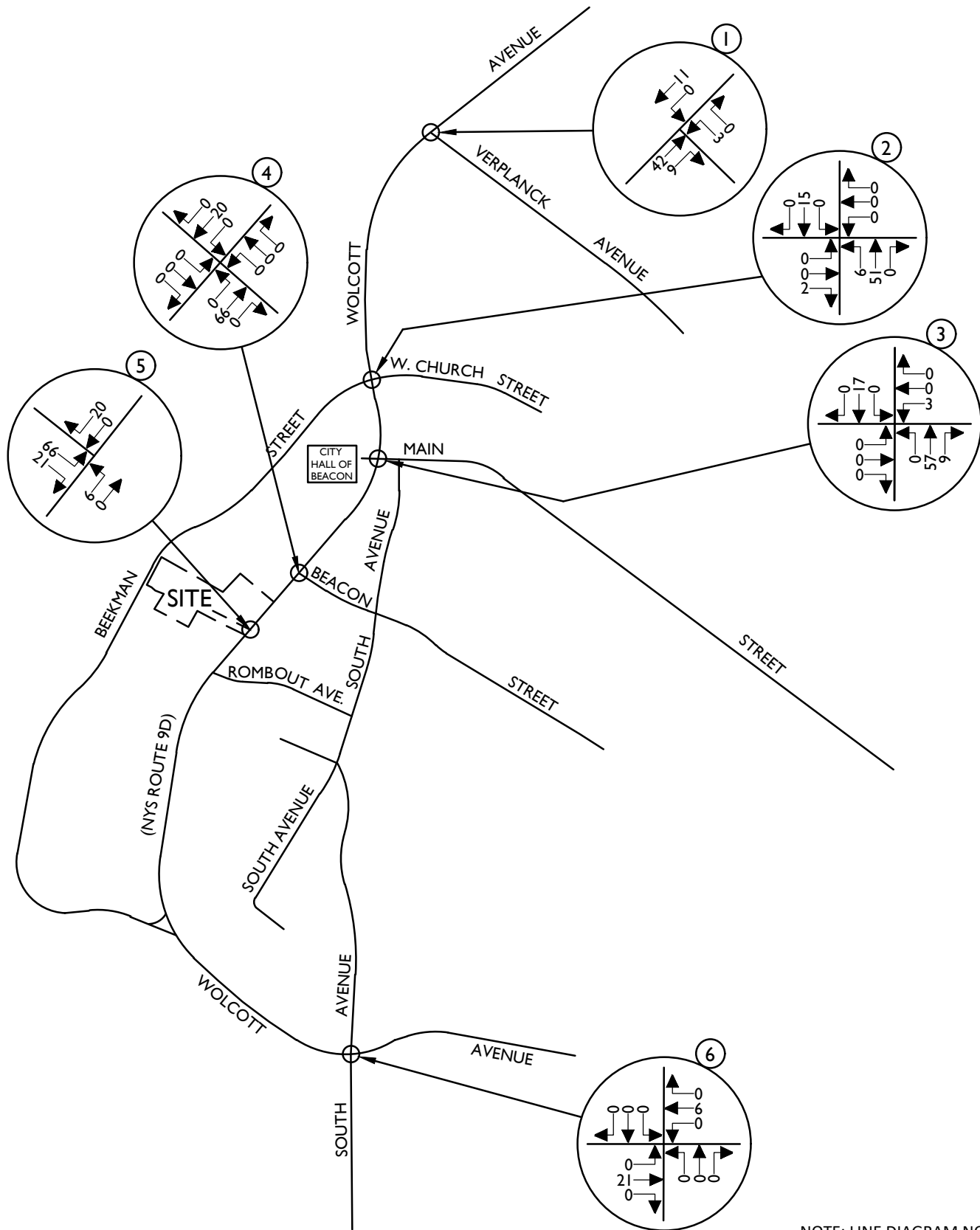
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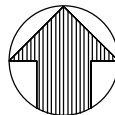
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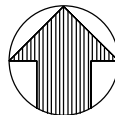
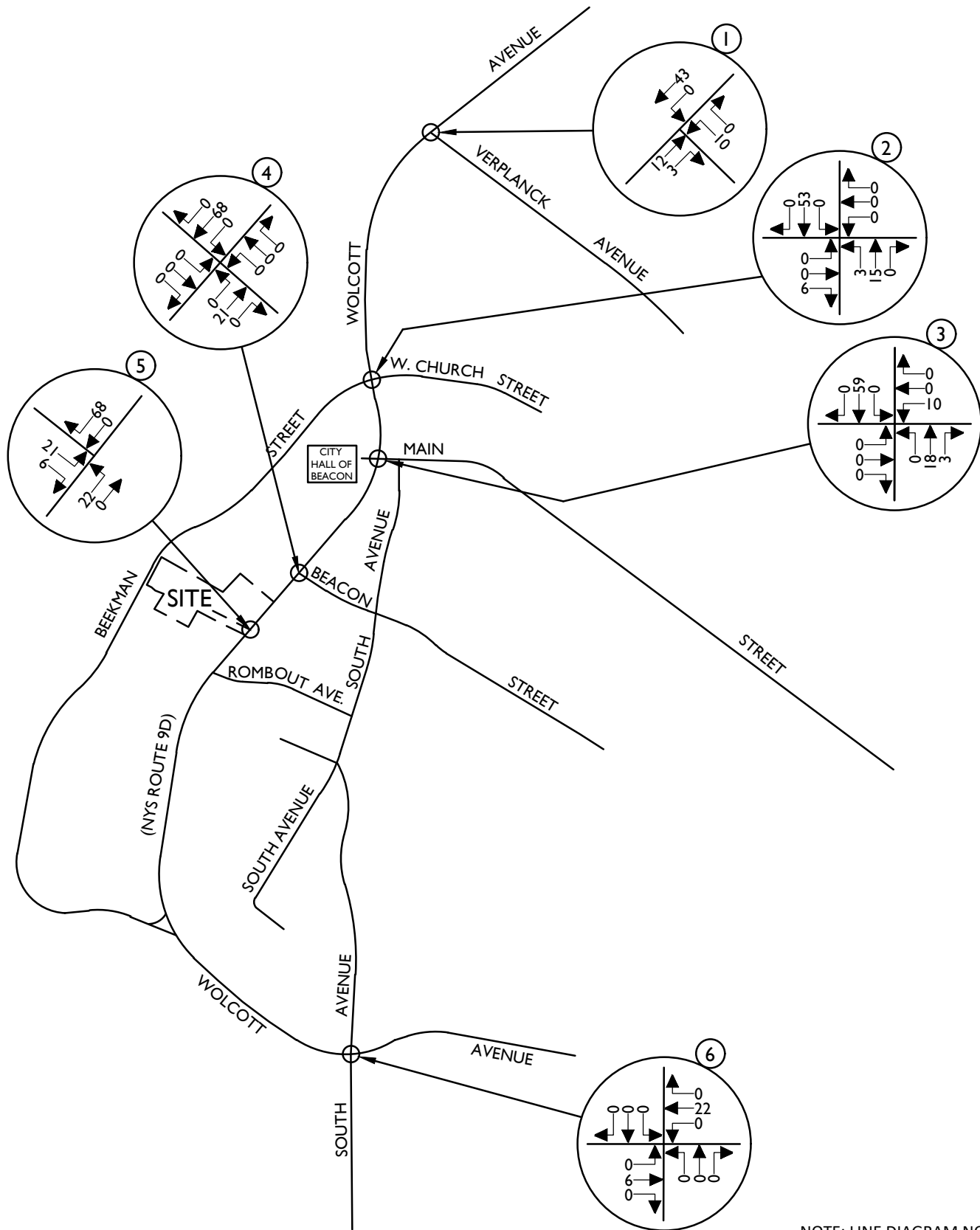
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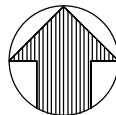
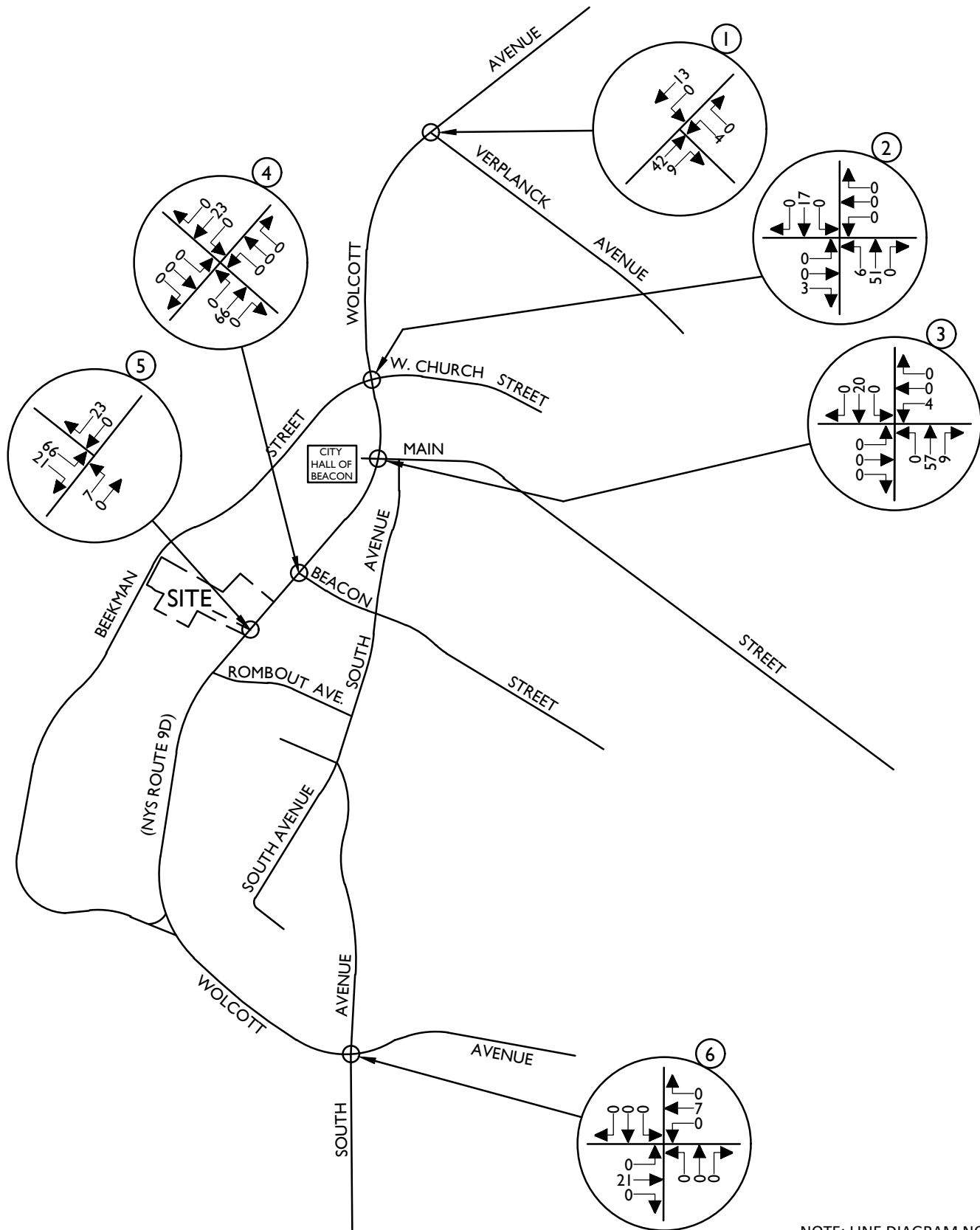
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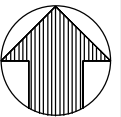
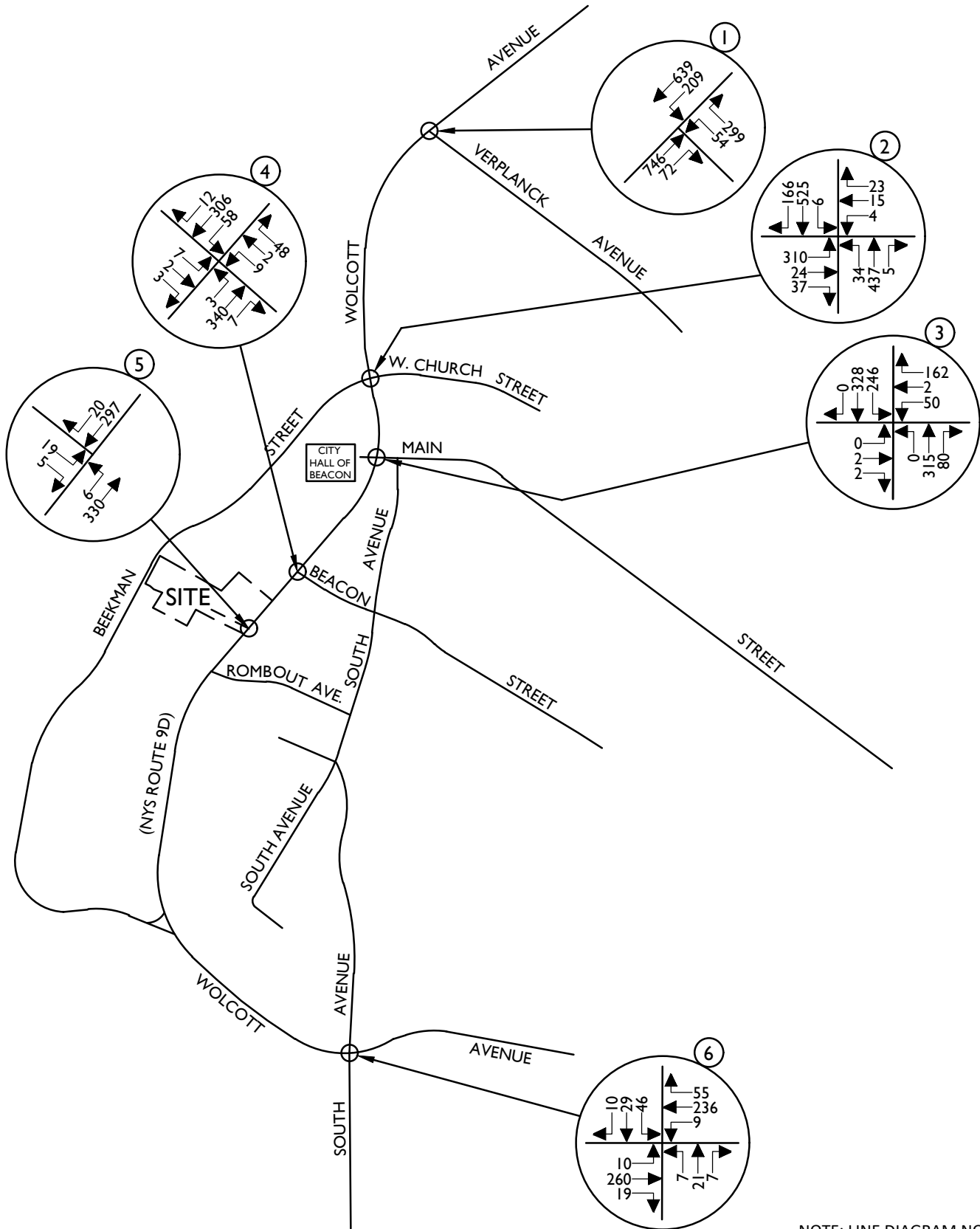
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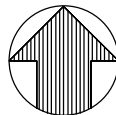
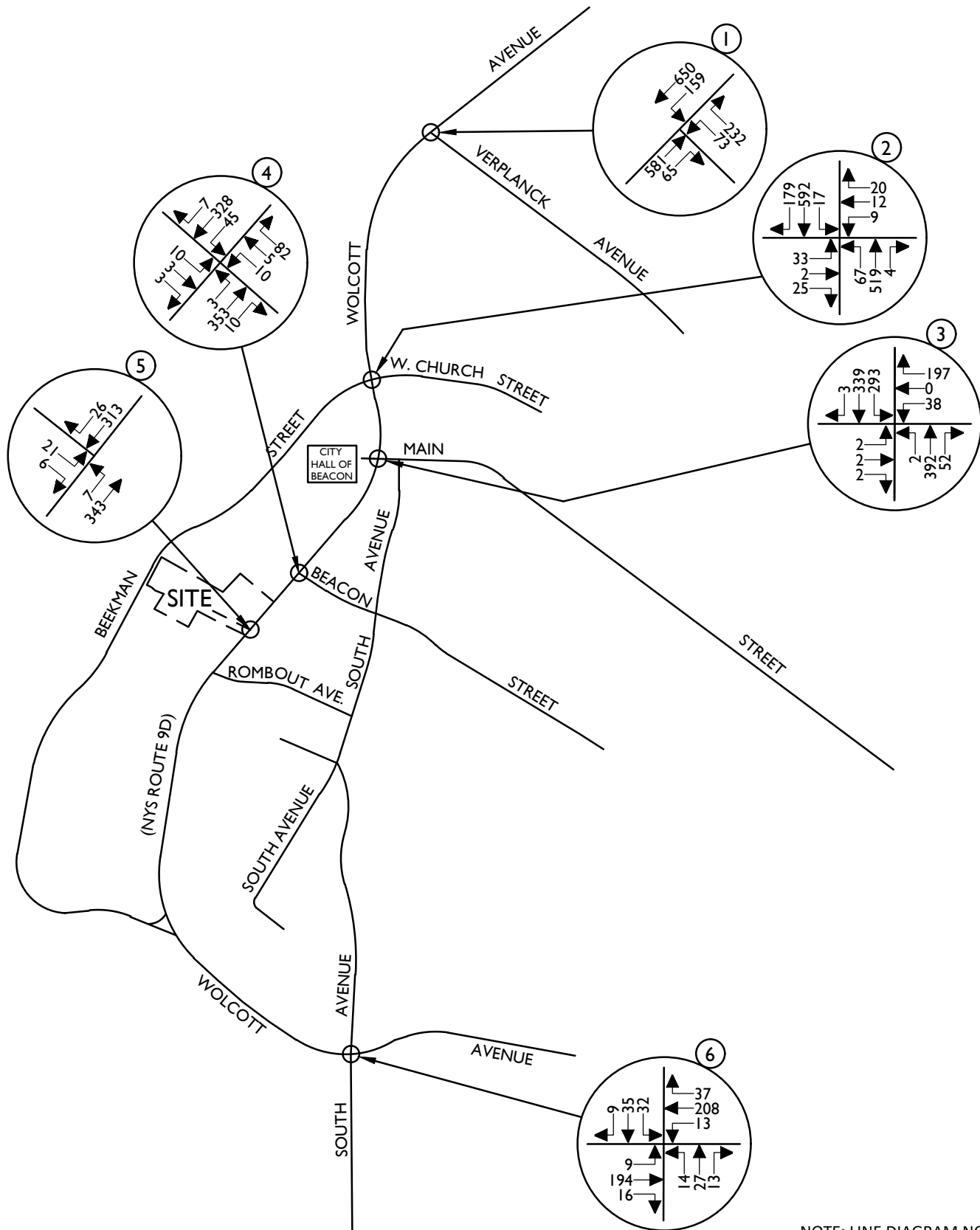
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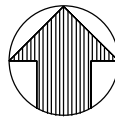
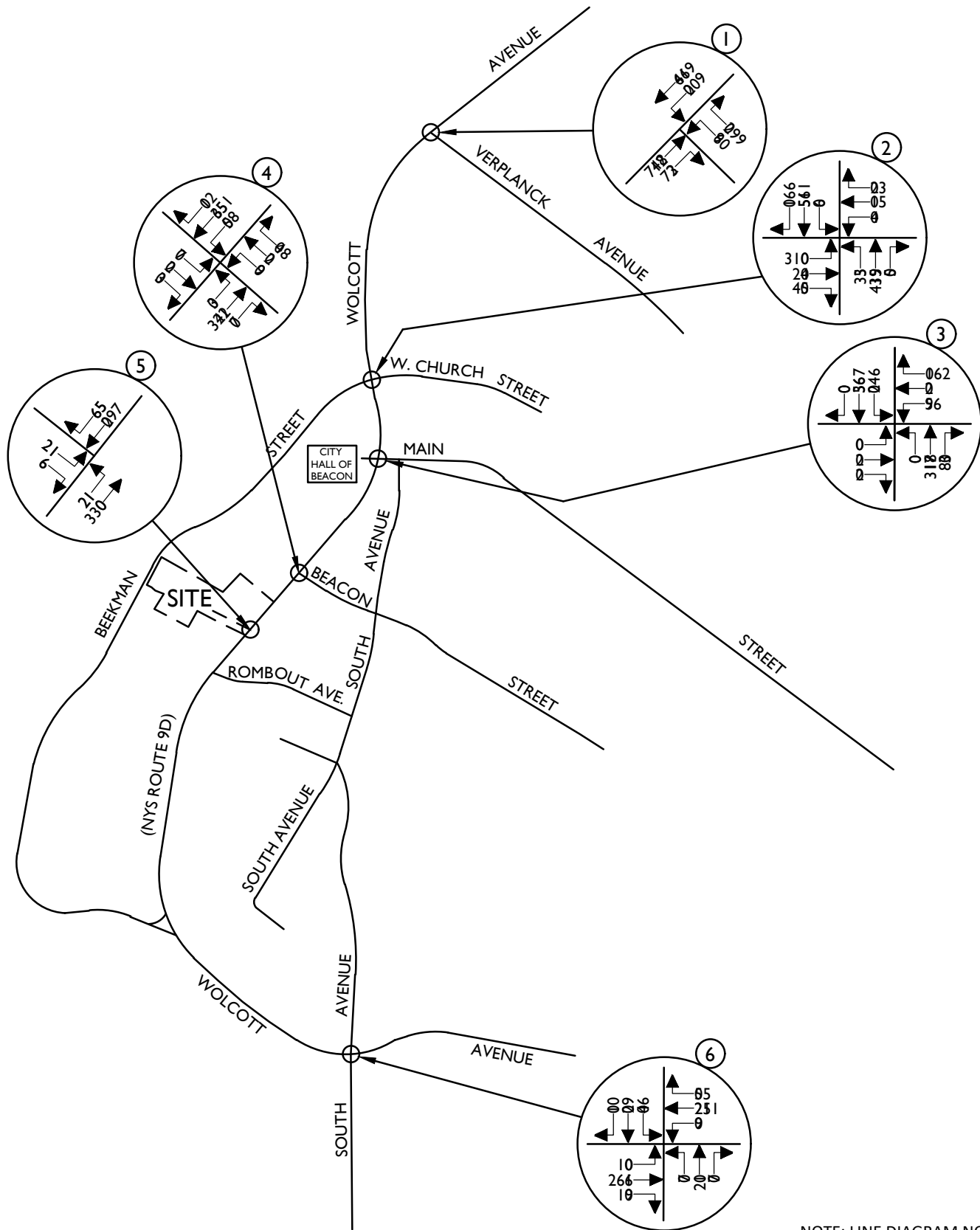
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SATURDAY PEAK HOUR**

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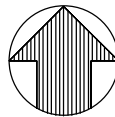
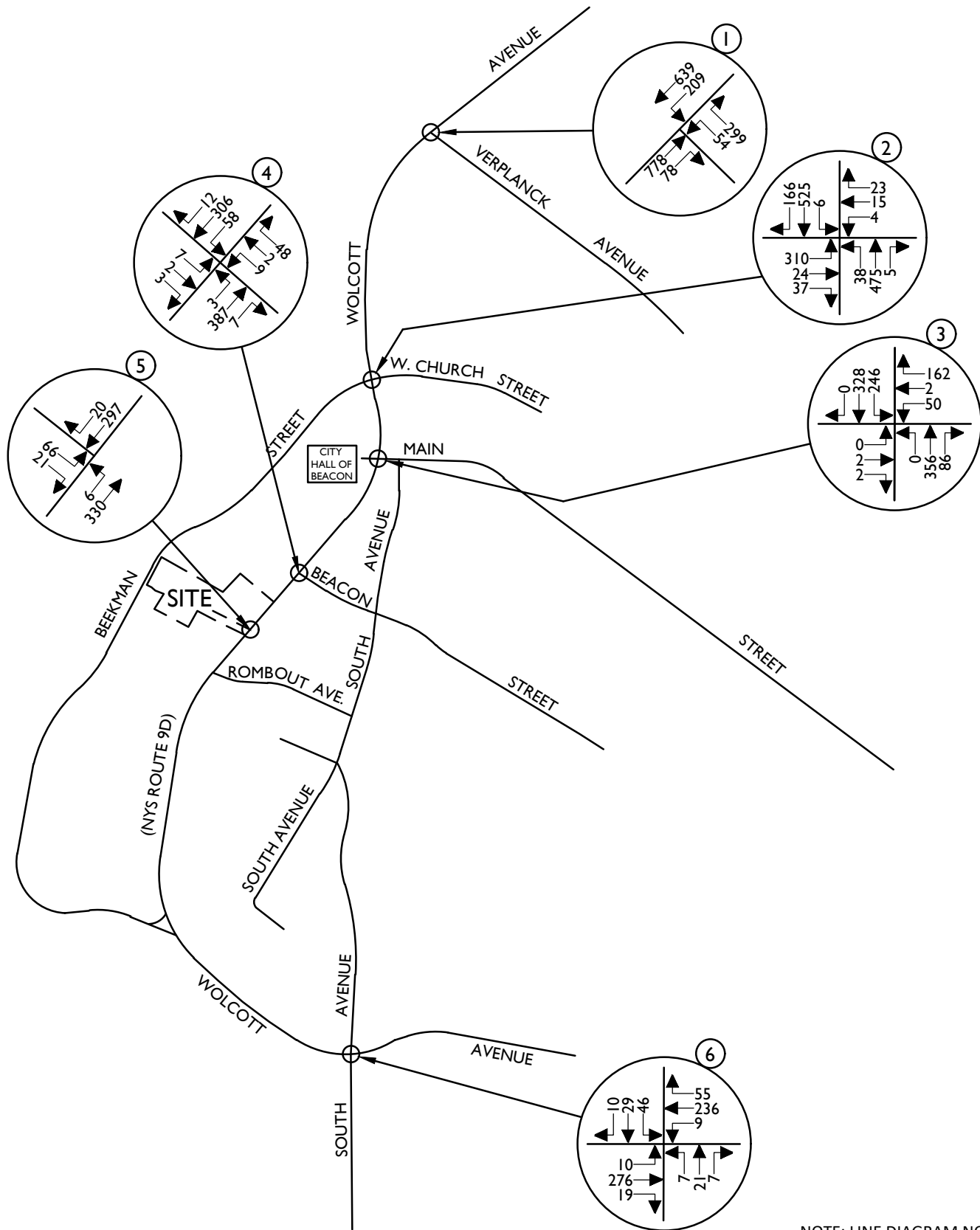
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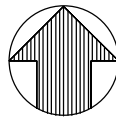
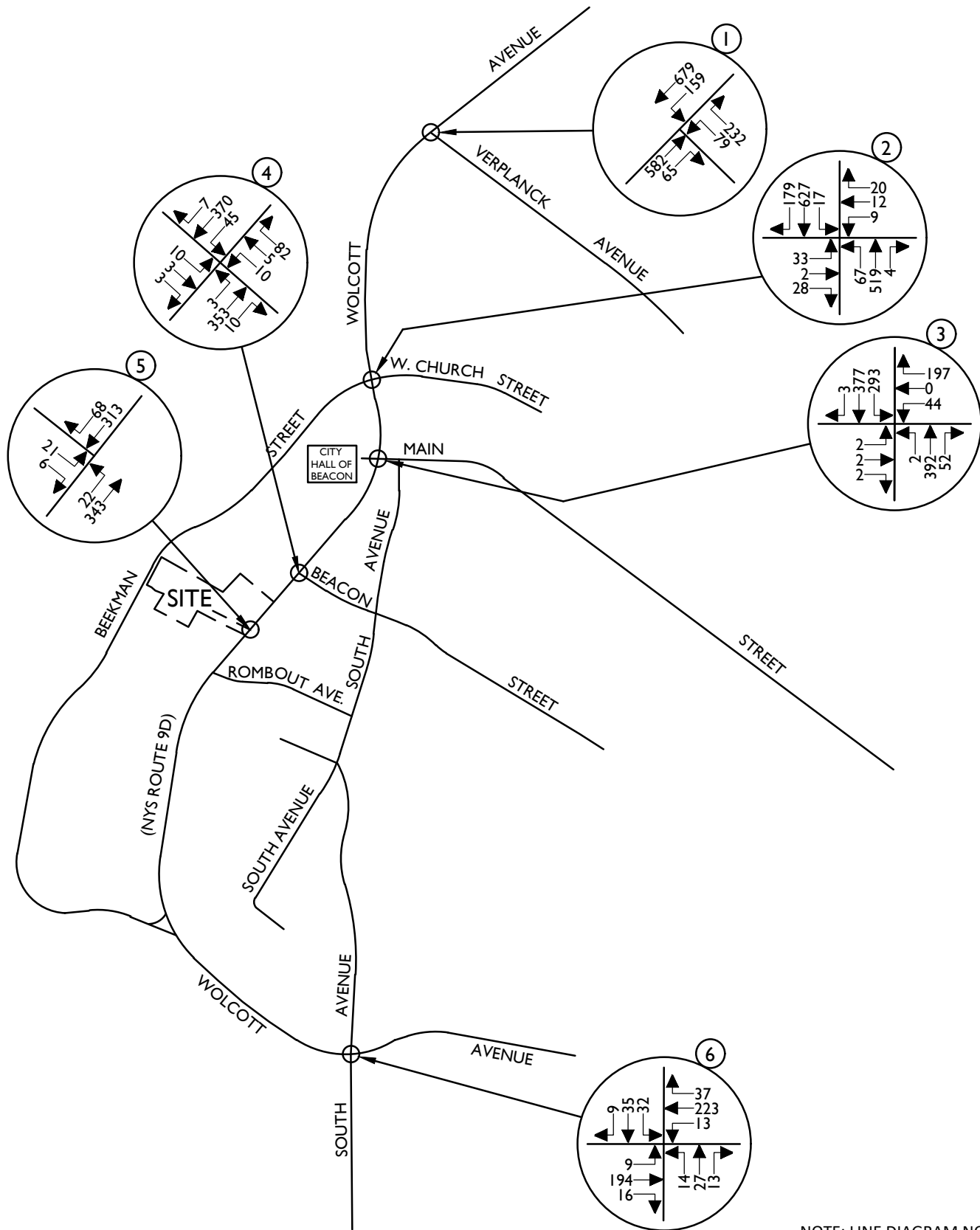
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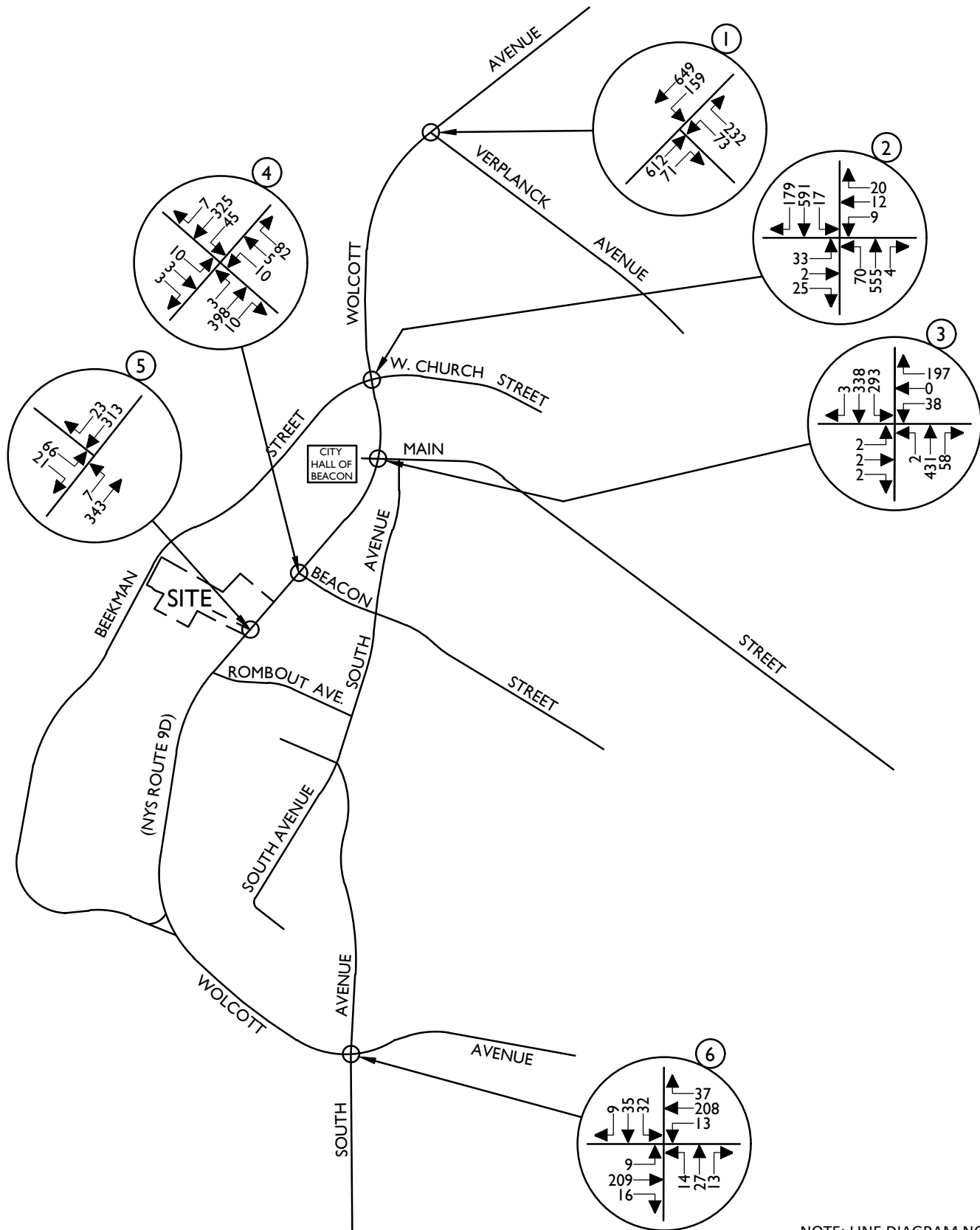
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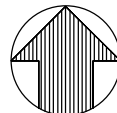
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	2024 BUILD TRAFFIC VOLUMES
	SATURDAY PEAK HOUR

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Appendix

Appendix B | Tables

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

1113 Wolcott Avenue City of Beacon, New York	Entry			Exit			Total Trips
	HTGR ¹	Volume	New Trips ²	HTGR1	HTGR ¹	New Trips ²	
Typical Conditions							
Weekday Peak PM Hour							
Hotel (30 Rooms)	0.37	11	9	0.40	12	8	17
Café (125 Seats)	0.12	15	12	0.10	12	9	21
Total	-	26	21	-	24	17	38
Saturday Midday Peak Hour							
Hotel (30 Rooms)	0.60	18	14	0.50	15	12	26
Café (125 Seats)	0.12	15	12	0.10	12	9	21
Total	-	33	26	-	27	21	47
Event Conditions							
Weekday Peak Event Entry Hour							
Hotel (30 Rooms)	0.37	11	6	0.40	12	8	14
Event (350 Persons)	1.02	127	90	0.20	25	15	105
Total	-	138	96	-	37	23	119
Weekday Peak Event Exit Hour							
Hotel (30 Rooms)	0.37	11	6	0.40	12	8	14
Event (350 Persons)	0.20	25	14	1.02	127	91	105
Total	-	36	20	-	139	99	119
Saturday Peak Event Entry Hour							
Hotel (30 Rooms)	0.50	15	8	0.40	12	6	14
Event (350 Persons)	1.02	127	88	0.20	25	13	101
Total	-	142	96	-	37	19	115
Saturday Peak Event Exit Hour							
Hotel (30 Rooms)	0.50	15	8	0.40	12	6	14
Event (350 Persons)	0.20	25	12	1.02	127	89	101
Total	-	40	20	-	139	95	115

NOTES:

- 1) The Hotel and Café Hourly Trip Generation Rates (HTGR) are based on data published by the Institute of Transportation Engineers (ITE) as contained in the Trip Generation Handbook, 10TH Edition, 2017. ITE Land Use Code - 310 - Hotel and Land Use - 932 - High-Turnover (Sit-Down) Restaurant. The Event traffic generation is based on a 4 Persons per Vehicle car occupancy ratio for the maximum of 300 guests. It is assumed that all guests will enter in a one hour period prior to the event and exit in a one hour period following the event.

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

				2021 Existing			2024 No-Build			2024 Build			2024 Build			2024 Build			
				v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	
1	NYS Route 9D & Verplanck Avenue			Signalized															
	Verplanck Avenue	WB	L	0.14	D	39.6	0.16	D	40.8	0.16	D	39.9	0.18	D	40.2	0.16	D	39.9	
			R	0.53	D	36.4	0.64	D	41.1	0.63	D	39.6	0.63	D	39.6	0.63	D	39.6	
	NYS Route 9D	NB	WB Approach	D	36.9	D	41.0	D	39.6	D	39.7	D	39.7	D	39.6	D	39.6		
			TR	0.83	C	30.8	0.88	D	35.2	0.91	D	38.5	0.93	D	38.8	0.95	D	45.3	
	NYS Route 9D	SB	NB Approach	C	30.8	D	35.2	D	38.5	D	38.5	D	38.8	D	38.8	D	45.3		
			L	0.54	C	25.3	0.63	C	31.9	0.66	C	34.6	0.66	D	35.1	0.72	D	45.2	
			T	0.46	A	8.8	0.51	A	9.3	0.52	A	9.6	0.55	A	10.0	0.52	A	9.6	
			SB Approach	B	13.0	B	14.9	B	15.8	B	16.0	B	18.4						
			Overall	C	24.4	C	27.7	C	29.1	C	29.2	C	33.2						
2	NYS Route 9D & Beekman Street/W. Church Street			Unsignalized															
	Beekman Street	EB	LT	2.17	F	573.4	2.33	F	647.2	2.33	F	648.2	2.34	F	659.2	2.34	F	650.6	
			R	0.08	B	17.1	0.08	B	17.2	0.09	B	17.3	0.10	B	17.4	0.09	B	17.4	
	W. Church Street	WB	EB Approach	F	520.9	F	587.9	F	585.5	F	582.1	F	587.6	F	587.6				
			LTR	0.09	B	18.4	0.12	B	18.5	0.12	B	18.5	0.12	B	18.6	0.12	B	18.6	
	NYS Route 9D	NB	WB Approach	B	18.4	B	18.5	B	18.5	B	18.6	B	18.6	B	18.6				
			L	0.16	B	17.1	0.21	B	19.0	0.23	B	19.6	0.28	C	21.0	0.26	B	19.8	
			TR	0.54	B	19	0.60	C	20.2	0.61	C	20.6	0.62	C	20.7	0.67	C	22	
			NB Approach	B	18.9	C	20.1	C	20.5	C	20.7	C	21.9						
	NYS Route 9D	SB	L	0.01	B	14.4	0.02	B	14.7	0.02	B	14.8	0.02	B	14.9	0.02	B	15.3	
			TR	0.83	C	31.3	0.92	D	40.6	0.94	D	44.0	0.99	D	53.5	0.94	D	44.4	
			SB Approach	C	31.2	D	40.4	D	43.7	D	53.2	D	44.2						
			Overall	F	172.5	F	191.1	F	189.6	F	190.0	F	186.0						
	<u>With Signal Timing & Phasing Modifications</u>																		
		Beekman Street	EB	LT	-	-	-	-	-	-	1.23	F	152.5	1.27	F	170.7	1.24	F	141.8
				R	-	-	-	-	-	-	0.15	C	22.1	0.17	C	23.3	0.15	C	22.2
		W. Church Street	WB	EB Approach	-	-	-	-	-	-	F	139.8	F	155.0	F	141.8			
				LTR	-	-	-	-	-	-	0.83	E	59.6	0.84	E	61.4	0.83	E	60.0
		NYS Route 9D	NB	WB Approach	-	-	-	-	-	-	E	59.6	E	61.4	E	60.0			
				L	-	-	-	-	-	-	0.20	B	16.1	0.22	B	16.7	0.22	B	16.2
				TR	-	-	-	-	-	-	0.61	B	15.1	0.59	B	14.8	0.66	B	16.1
				NB Approach	-	-	-	-	-	-	B	15.2	B	14.9	B	16.1			
	NYS Route 9D	SB	L	-	-	-	-	-	-	-	0.02	B	12.2	0.02	B	11.9	0.02	B	12.6
			TR	-	-	-	-	-	-	0.93	C	33.4	0.94	D	36.3	0.93	C	33.7	
			SB Approach	-	-	-	-	-	-	-	C	33.2	D	36.1	C	33.5			
			Overall	-	-	-	-	-	-	-	E	58.5	E	63.5	E	58.3			
3	NYS Route 9D & Main Street/City Hall			Signalized															
	City Hall	EB	LTR	0.02	C	23.7	0.03	C	23.7	0.03	C	23.7	0.03	C	23.7	0.03	C	23.7	
			EB Approach	C	23.7	C	23.7	C	23.7	C	23.7	C	23.7	C	23.7				
	Main Street	WB	LT	0.13	C	24.5	0.18	C	24.8	0.19	C	24.9	0.22	C	25.1	0.19	C	24.9	
			R	0.56	C	24.2	0.59	C	24.5	0.59	C	24.5	0.59	C	24.5	0.59	C	24.5	
	NYS Route 9D	NB	WB Approach	C	24.2	C	24.6	C	24.6	C	24.6	C	24.6	C	24.6	C	24.6		
			L	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	
			TR	0.41	A	8.8	0.47	A	9.5	0.49	A	9.8	0.49	A	9.8	0.55	B	10.6	
			NB Approach	A	8.8	A	9.5	A	9.8	A	9.8	A	9.8	B	10.6				
	NYS Route 9D	SB	L	0.38	B	10.8	0.47	B	13.0	0.48	B	13.7	0.49	B	13.8	0.52	B	15.7	
TR			0.30	A	7.7	0.34	A	8.1	0.36	A	8.2	0.40	A	8.7	0.36	A	8.2		
		SB Approach	A	9.0	B	10.2	B	10.6	B	10.6	B	10.7	B	11.4					
		Overall	B	11.6	B	12.5	B	12.7	B	12.8	B	13.3							

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

					2021 Existing			2024 No-Build			2024 Build			2024 Build			2024 Build		
					v/c	LOS	Delay	v/c	LOS	Delay	Typical Conditions			Event Entry Conditions			Event Exit Conditions		
4	NYS Route 9D & Beacon Street/West End Lofts				Unsignalized														
		West End Lofts	EB	LTR	0.04	C	17.9	0.06	C	20.4	0.07	C	21.9	0.07	C	23.3	0.07	C	23.9
		Beacon Street	WB	LTR	0.15	B	12.5	0.18	B	13.8	0.19	B	14.3	0.19	B	14.7	0.21	C	15.4
		NYS Route 9D	NB	LTR	0.00	A	7.8	0.00	A	7.9	0.00	A	8.0	0.00	A	8.1	0.00	A	8.0
	NYS Route 9D	SB	LTR	0.52	A	8.3	0.06	A	8.5	0.06	A	8.6	0.06	A	8.6	0.06	A	8.9	
5	NYS Route 9D & Site Access				Unsignalized														
			EB	LR	-	-	-	-	-	-	0.05	B	12.0	0.06	B	12.5	0.17	B	13.0
			NB	LT	-	-	-	-	-	-	0.01	A	8.0	0.02	A	8.2	0.01	A	8.0
6	NYS Route 9D & South Avenue				Signalized														
		NYS Route 9D	EB	LTR	0.33	C	23.4	0.37	C	24.0	0.37	C	24.1	0.37	C	24.1	0.39	C	24.5
		NYS Route 9D	WB	LTR	0.37	C	24.1	0.41	C	24.8	0.42	C	24.9	0.44	C	25.4	0.42	C	25.0
		South Avenue	NB	LTR	0.03	B	19.1	0.05	B	19.4	0.05	B	19.4	0.05	B	19.4	0.05	B	19.4
		South Avenue	SB	LTR	0.11	C	20.1	0.15	C	20.6	0.15	C	20.6	0.15	C	20.6	0.15	C	20.6
	Overall					C	23.2		C	23.7		C	23.8		C	24.0		C	24.0

NOTES:

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

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

				2021 Existing			2024 No-Build			2024 Build Typical Conditions			2024 Build Event Entry Conditions			2024 Build Event Exit Conditions		
				v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay
1	NYS Route 9D & Verplanck Avenue	Signalized																
			Verplanck Avenue WB L	0.20	D	40.4	0.21	D	40.6	0.22	D	40.8	0.24	D	41.1	0.22	D	40.8
			R	0.41	C	33.3	0.49	D	35.2	0.49	D	35.2	0.49	D	35.2	0.49	D	35.2
			WB Approach		D	35.1		D	36.4		D	36.5		D	36.7		D	36.5
			NYS Route 9D NB TR	0.64	C	22.6	0.70	C	24.6	0.72	C	25.2	0.72	C	25.3	0.76	C	27.0
			NB Approach		C	22.6		C	24.6		C	25.2		C	25.3		C	27.0
			NYS Route 9D SB L	0.31	B	13.3	0.36	B	15.7	0.37	B	16.4	0.37	B	16.4	0.39	B	18.3
			T	0.47	A	8.8	0.52	A	9.6	0.53	A	9.7	0.56	B	10.1	0.53	A	9.7
			SB Approach		A	9.7		B	10.8		B	11.0		B	11.3		B	11.4
			Overall		B	18.7		C	20.3		C	20.7		C	20.7		C	21.6
2	NYS Route 9D & Beekman Street/W. Church Street	Unsignalized																
			Beekman Street EB LT	0.17	C	25.0	0.19	C	25.1	0.18	C	25.0	0.19	C	25.1	0.19	C	25.1
			R	0.22	C	25.4	0.24	C	25.5	0.27	C	25.8	0.30	C	26.0	0.27	C	25.8
			EB Approach		C	25.2		C	25.2		C	25.3		C	25.5		C	25.4
			W. Church Street WB LTR	0.17	C	24.9	0.24	C	25.3	0.24	C	25.3	0.24	C	25.3	0.24	C	25.4
			WB Approach		C	24.9		C	25.3		C	25.3		C	25.3		C	25.4
			NYS Route 9D NB L	0.14	A	5.9	0.17	A	7.1	0.18	A	7.4	0.19	A	8.1	0.19	A	7.5
			TR	0.40	A	6.0	0.44	A	6.5	0.45	A	6.6	0.45	A	6.6	0.48	A	6.9
			NB Approach		A	6.0		A	6.5		A	6.7		A	6.8		A	7.0
			NYS Route 9D SB L	0.03	A	4.3	0.03	A	4.5	0.03	A	4.6	0.03	A	4.6	0.03	A	4.7
3	NYS Route 9D & Main Street/City Hall	Signalized																
			City Hall EB LTR	0.01	C	23.6	0.03	C	23.7	0.03	C	23.7	0.03	C	23.7	0.03	C	23.7
			EB Approach		C	23.6		C	23.7		C	23.7		C	23.7		C	23.7
			Main Street WB LT	0.09	C	24.1	0.13	C	24.3	0.14	C	24.4	0.16	C	24.6	0.14	C	24.4
			R	0.66	C	25.5	0.70	C	26.2	0.70	C	26.1	0.70	C	26.1	0.70	C	26.1
			WB Approach		C	25.4		C	25.9		C	25.9		C	25.9		C	25.9
			NYS Route 9D NB L	0.00	A	6.4	0.00	A	6.9	0.00	A	7.1	0.00	A	7.6	0.00	A	7.1
			TR	0.40	A	8.7	0.46	A	9.4	0.49	A	9.7	0.49	A	9.7	0.54	B	10.4
			NB Approach		A	8.7		A	9.4		A	9.7		A	9.7		B	10.4
			NYS Route 9D SB L	0.44	B	11.4	0.53	B	13.9	0.55	B	14.7	0.55	B	14.7	0.58	B	16.6
4	NYS Route 9D & Beacon Street/West End Lofts	Unsignalized																
			West End Lofts EB LTR	0.07	C	18.4	0.11	C	21.5	0.12	C	23.3	0.13	C	24.8	0.13	D	25.0
			Beacon Street WB LTR	0.17	B	12.1	0.21	B	13.3	0.21	B	13.7	0.21	B	13.9	0.23	B	14.5
			NYS Route 9D NB LTR	0.00	A	7.8	0.00	A	7.9	0.00	A	8.0	0.00	A	8.1	0.00	A	8.0
			NYS Route 9D SB LTR	0.04	A	8.1	0.04	A	8.3	0.04	A	8.3	0.04	A	8.3	0.05	A	8.5

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

			2021 Existing			2024 No-Build			2024 Build Typical Conditions			2024 Build Event Entry Conditions			2024 Build Event Exit Conditions		
			v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay
5	NYS Route 9D & Site Access	Unsignalized															
		EB LR	-	-	-	-	-	-	0.06	B	12.3	0.06	B	12.7	0.18	B	13.3
		NB LT	-	-	-	-	-	-	0.01	A	8.1	0.02	A	8.2	0.01	A	8.0
6	NYS Route 9D & South Avenue	Signalized															
		NYS Route 9D EB LTR	0.27	C	22.4	0.30	C	22.9	0.31	C	23.1	0.31	C	23.1	0.33	C	23.4
		NYS Route 9D WB LTR	0.31	C	23.0	0.34	C	23.5	0.35	C	23.7	0.37	C	24.0	0.35	C	23.7
		South Avenue NB LTR	0.08	B	19.7	0.12	C	20.2	0.12	C	20.2	0.12	C	20.2	0.12	C	20.2
		South Avenue SB LTR	0.08	B	19.7	0.13	C	20.3	0.13	C	20.3	0.13	C	20.3	0.13	C	20.3
		Overall		C	22.1		C	22.5		C	22.6		C	22.8		C	22.7

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. 3
Sight Distance Summary Table
Wolcott Avenue (NYS Route 9D) at Site Access

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

Notes:

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

Table No. 4
Area Parking Observations Summary

Time of Day	Observed Available Parking Spaces						
	Tompkins Lot	Municipal Plaza	Beekman St. On-Street	Cross Lot	Cliff Lot	Beacon Center Lot	Beacon Metro North Train Station
Total Spaces	70	100±	70±	18	19	92	---
Friday September 24, 2021							
1:00 PM	Not Observed This Day	Not Observed This Day	65	3	1	8	Not Specifically Counted
2:00 PM			65	3	1	7	
3:00 PM			65	3	-	6	
4:00 PM			65	2	2	10	
5:00 PM			66	-	1	12	
6:00 PM			67	1	-	15	
7:00 PM			70	2	-	18	
8:00 PM			70	5	3	22	
Saturday September 25, 2021							
1:00 PM	Not Observed This Day	Not Observed This Day	70	1	3	25	Not Specifically Counted
2:00 PM			70	-	3	20	
3:00 PM			70	1	2	21	
4:00 PM			70	1	1	19	
5:00 PM			70	-	-	16	
6:00 PM			70	-	-	18	
7:00 PM			70	-	-	20	
8:00 PM			70	1	1	19	
Friday November 5, 2021							
1:00 PM	65	Not Specifically Counted	64	2	2	5	Not Specifically Counted
2:00 PM	65		64	2	3	8	
3:00 PM	65		64	1	2	9	
4:00 PM	66		65	-	1	7	
5:00 PM	68	55	65	-	1	10	
6:00 PM	68	73	67	1	1	13	
7:00 PM	66	88	69	-	2	19	
8:00 PM	66	91	70	3	2	21	
Saturday November 6, 2021							
1:00 PM	65	88	70	2	3	22	Not Specifically Counted
2:00 PM	65	87	70	1	1	20	
3:00 PM	65	86	70	1	-	23	
4:00 PM	66	87	70	-	-	25	
5:00 PM	65	89	70	-	-	19	
6:00 PM	66	91	70	-	2	18	
7:00 PM	66	91	70	-	1	17	
8:00 PM	67	91	70	1	1	19	

Appendix

Appendix C | Level of Service Standards

Level of Service Standards

Level of Service for Signalized Intersections

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

- **LOS A** describes operations with a control delay of 10 s/veh or less and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is exceptionally favorable or the cycle length is very short. If it is due to favorable progression, most vehicles arrive during the green indication and travel through the intersection without stopping.
- **LOS B** describes operations with control delay between 10 and 20 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is highly favorable or the cycle length is short. More vehicles stop than with LOS A.
- **LOS C** describes operations with control delay between 20 and 35 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when progression is favorable or the cycle length is moderate.
- **LOS D** describes operations with control delay between 35 and 55 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high and either progression is ineffective or the cycle length is long.
- **LOS E** describes operations with control delay between 55 and 80 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high, progression is unfavorable, and the cycle length is long.
- **LOS F** describes operations with control delay exceeding 80 s/veh or a volume-to-capacity ratio greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long.

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

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

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

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

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

Level of Service Criteria

For Two-Way Stop-Controlled (TWSC) Unsignalized Intersections

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

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

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

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

The LOS criteria apply to each lane on a given approach and to each approach on the minor street. LOS is not calculated for major-street approaches or for the intersection as a whole.

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

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

Level of Service Criteria

For All-Way Stop-Controlled (AWSC) Unsignalized Intersections

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

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

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

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

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

Appendix

Appendix D | Capacity Analysis

2021 Existing Traffic Volumes
1: NYS Route 9D & Verplanck Avenue

Friday PM Existing
11/29/2021

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

2021 Existing Traffic Volumes
1: NYS Route 9D & Verplanck Avenue

Friday PM Existing
11/29/2021

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

Intersection Summary

Area Type: Other

Cycle Length: 120

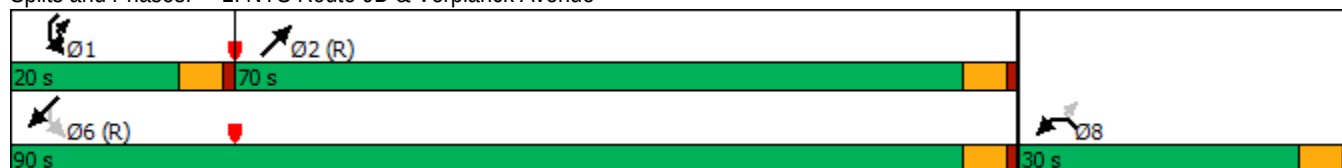
Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NET and 6:SWTL, Start of Green

Natural Cycle: 70

Control Type: Pretimed

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



2021 Existing Traffic Volumes
1: NYS Route 9D & Verplanck Avenue

Friday PM Existing
11/29/2021

								
Movement	NWL	NWR	NET	NER	SWL	SWT		
Lane Configurations								
Traffic Volume (veh/h)	48	253	680	65	197	565		
Future Volume (veh/h)	48	253	680	65	197	565		
Number	3	18	2	12	1	6		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1816	1816	1835	1872	1872	1872		
Adj Flow Rate, veh/h	52	275	739	71	214	614		
Adj No. of Lanes	1	1	1	0	1	1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	360	515	893	86	397	1326		
Arrive On Green	0.21	0.21	0.54	0.54	0.13	0.71		
Sat Flow, veh/h	1730	1544	1648	158	1783	1872		
Grp Volume(v), veh/h	52	275	0	810	214	614		
Grp Sat Flow(s),veh/h/ln	1730	1544	0	1807	1783	1872		
Q Serve(g_s), s	2.9	17.3	0.0	44.7	5.2	17.1		
Cycle Q Clear(g_c), s	2.9	17.3	0.0	44.7	5.2	17.1		
Prop In Lane	1.00	1.00		0.09	1.00			
Lane Grp Cap(c), veh/h	360	515	0	979	397	1326		
V/C Ratio(X)	0.14	0.53	0.00	0.83	0.54	0.46		
Avail Cap(c_a), veh/h	360	515	0	979	397	1326		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	38.8	32.4	0.0	22.8	20.1	7.6		
Incr Delay (d2), s/veh	0.8	3.9	0.0	8.0	5.2	1.2		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	1.5	8.0	0.0	24.2	4.6	9.1		
LnGrp Delay(d),s/veh	39.6	36.4	0.0	30.8	25.3	8.8		
LnGrp LOS	D	D		C	C	A		
Approach Vol, veh/h	327		810			828		
Approach Delay, s/veh	36.9		30.8			13.0		
Approach LOS	D		C			B		
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	20.0	70.0				90.0		30.0
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	15.0	65.0				85.0		25.0
Max Q Clear Time (g_c+I1), s	0.0	0.0				0.0		0.0
Green Ext Time (p_c), s	0.0	0.0				0.0		0.0
Intersection Summary								
HCM 2010 Ctrl Delay			24.4					
HCM 2010 LOS			C					

2021 Existing Traffic Volumes
2: NYS Route 9D & Beekman Street/W. Church Street

Friday PM Existing
11/29/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	292	22	33	3	14	13	30	385	4	5	453	156
Future Volume (vph)	292	22	33	3	14	13	30	385	4	5	453	156
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		2%			-10%			-6%			3%	
Storage Length (ft)	0		95	0		0	75		0	75		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.98		0.98			1.00			0.99	
Frt			0.850		0.941			0.998			0.962	
Flt Protected		0.956			0.995		0.950			0.950		
Satd. Flow (prot)	0	1761	1599	0	1764	0	1805	1915	0	1778	1770	0
Flt Permitted		0.718			0.969		0.174			0.388		
Satd. Flow (perm)	0	1322	1562	0	1717	0	331	1915	0	726	1770	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			85		14			1			23	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		584			328			388			335	
Travel Time (s)		13.3			7.5			8.8			7.6	
Confl. Peds. (#/hr)			2			13			1			6
Confl. Bikes (#/hr)						1			1			1
Peak Hour Factor	0.71	0.71	0.71	0.92	0.92	0.92	0.84	0.84	0.84	0.98	0.98	0.98
Heavy Vehicles (%)	2%	4%	0%	0%	7%	0%	3%	2%	0%	0%	1%	1%
Adj. Flow (vph)	411	31	46	3	15	14	36	458	5	5	462	159
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	442	46	0	32	0	36	463	0	5	621	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												Yes
Headway Factor	1.01	1.01	1.01	0.94	0.94	0.94	0.96	0.96	0.96	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2		2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83	83	20	83		83	6		83	6	
Trailing Detector (ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Position(ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Size(ft)	20	43	43	20	43		43	6		43	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		40	40		40		40			40		
Detector 2 Size(ft)		43	43		43		43			43		
Detector 2 Type		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex		

2021 Existing Traffic Volumes
2: NYS Route 9D & Beekman Street/W. Church Street

Friday PM Existing
11/29/2021

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

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 82.3

Natural Cycle: 80

Control Type: Semi Act-Uncoord

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

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



2021 Existing Traffic Volumes
2: NYS Route 9D & Beekman Street/W. Church Street

Friday PM Existing
11/29/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	292	22	33	3	14	13	30	385	4	5	453	156
Future Volume (veh/h)	292	22	33	3	14	13	30	385	4	5	453	156
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.96	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1842	1881	1995	1932	1995	1900	1919	1957	1872	1853	1872
Adj Flow Rate, veh/h	411	31	46	3	15	14	36	458	5	5	462	159
Adj No. of Lanes	0	1	1	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.71	0.71	0.71	0.92	0.92	0.92	0.84	0.84	0.84	0.98	0.98	0.98
Percent Heavy Veh, %	2	4	0	0	7	0	3	2	0	0	1	1
Cap, veh/h	196	8	582	48	180	140	228	848	9	349	557	192
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.03	0.45	0.45	0.01	0.43	0.43
Sat Flow, veh/h	305	23	1594	0	492	383	1810	1894	21	1782	1308	450
Grp Volume(v), veh/h	442	0	46	32	0	0	36	0	463	5	0	621
Grp Sat Flow(s),veh/h/ln	328	0	1594	875	0	0	1810	0	1915	1782	0	1758
Q Serve(g_s), s	0.0	0.0	1.6	0.0	0.0	0.0	0.9	0.0	14.5	0.1	0.0	25.8
Cycle Q Clear(g_c), s	30.0	0.0	1.6	30.0	0.0	0.0	0.9	0.0	14.5	0.1	0.0	25.8
Prop In Lane	0.93		1.00	0.09		0.44	1.00		0.01	1.00		0.26
Lane Grp Cap(c), veh/h	204	0	582	367	0	0	228	0	857	349	0	748
V/C Ratio(X)	2.17	0.00	0.08	0.09	0.00	0.00	0.16	0.00	0.54	0.01	0.00	0.83
Avail Cap(c_a), veh/h	204	0	582	367	0	0	399	0	857	557	0	748
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	32.3	0.0	17.1	18.3	0.0	0.0	16.8	0.0	16.6	14.3	0.0	21.0
Incr Delay (d2), s/veh	541.0	0.0	0.1	0.1	0.0	0.0	0.3	0.0	2.4	0.0	0.0	10.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	35.2	0.0	0.7	0.5	0.0	0.0	0.5	0.0	8.2	0.1	0.0	14.6
LnGrp Delay(d),s/veh	573.4	0.0	17.1	18.4	0.0	0.0	17.1	0.0	19.0	14.4	0.0	31.3
LnGrp LOS	F		B	B			B		B	B		C
Approach Vol, veh/h		488			32			499			626	
Approach Delay, s/veh		520.9			18.4			18.9			31.2	
Approach LOS		F			B			B			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.4	41.8		35.0	7.2	40.0		35.0				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0				
Max Q Clear Time (g_c+I1), s	2.1	16.5		32.0	2.9	27.8		32.0				
Green Ext Time (p_c), s	0.0	1.1		0.0	0.0	1.2		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			172.5									
HCM 2010 LOS			F									

2021 Existing Traffic Volumes
3: NYS Route 9D & Beacon City Hall/Main Street

Friday PM Existing
11/29/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1	1	35	1	152	0	267	64	215	274	0
Future Volume (vph)	0	1	1	35	1	152	0	267	64	215	274	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		1%			-8%			-3%			3%	
Storage Length (ft)	0		0	0		70	65		0	120		0
Storage Lanes	0		0	0		1	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98				0.96		0.98				
Frt		0.932				0.850		0.971				
Flt Protected					0.954					0.950		
Satd. Flow (prot)	0	1722	0	0	1885	1647	1928	1798	0	1743	1853	0
Flt Permitted										0.475		
Satd. Flow (perm)	0	1722	0	0	1976	1587	1928	1798	0	872	1853	0
Right Turn on Red			Yes			No			No			Yes
Satd. Flow (RTOR)		2										
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		133			350			693			388	
Travel Time (s)		3.0			8.0			15.8			8.8	
Confl. Peds. (#/hr)			9			15			21			12
Confl. Bikes (#/hr)			1						1			
Peak Hour Factor	0.60	0.60	0.60	0.91	0.91	0.91	0.79	0.79	0.79	0.88	0.88	0.88
Heavy Vehicles (%)	0%	0%	0%	0%	0%	2%	0%	2%	5%	2%	1%	0%
Adj. Flow (vph)	0	2	2	38	1	167	0	338	81	244	311	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	4	0	0	39	167	0	419	0	244	311	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.01	1.01	1.01	0.95	0.95	0.95	0.98	0.98	0.98	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	2	2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83		20	83	83	83	6		83	6	
Trailing Detector (ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Position(ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Size(ft)	20	43		20	43	43	43	6		43	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		40			40	40	40			40		
Detector 2 Size(ft)		43			43	43	43			43		
Detector 2 Type		Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		

2021 Existing Traffic Volumes
3: NYS Route 9D & Beacon City Hall/Main Street

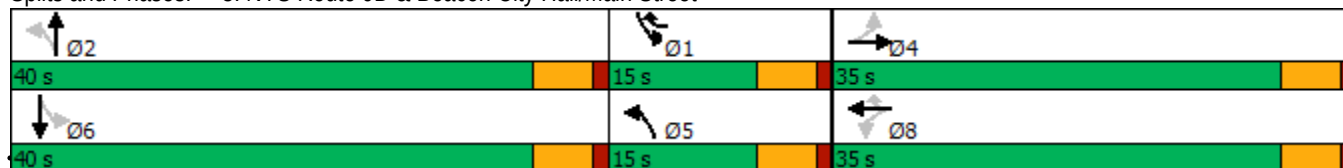
Friday PM Existing
11/29/2021

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

Intersection Summary

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

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



2021 Existing Traffic Volumes 1:42 pm 11/19/2021 Friday PM Existing
RGD

Synchro 8 Report
Page 8

2021 Existing Traffic Volumes
3: NYS Route 9D & Beacon City Hall/Main Street

Friday PM Existing
11/29/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1	1	35	1	152	0	267	64	215	274	0
Future Volume (veh/h)	0	1	1	35	1	152	0	267	64	215	274	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	0.96		0.94	1.00		0.96	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1890	1890	1890	1976	1976	1937	1928	1880	1928	1835	1853	1872
Adj Flow Rate, veh/h	0	2	2	38	1	167	0	338	81	244	311	0
Adj No. of Lanes	0	1	0	0	1	1	1	1	0	1	1	0
Peak Hour Factor	0.60	0.60	0.60	0.91	0.91	0.91	0.79	0.79	0.79	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	2	0	2	5	2	1	0
Cap, veh/h	0	106	106	290	6	301	762	824	198	640	1051	0
Arrive On Green	0.00	0.13	0.13	0.13	0.13	0.13	0.00	0.57	0.57	0.06	0.57	0.00
Sat Flow, veh/h	0	841	841	1389	50	1551	1837	1454	348	1747	1853	0
Grp Volume(v), veh/h	0	0	4	39	0	167	0	0	419	244	311	0
Grp Sat Flow(s),veh/h/ln	0	0	1681	1439	0	1551	1837	0	1802	1747	1853	0
Q Serve(g_s), s	0.0	0.0	0.1	1.4	0.0	1.8	0.0	0.0	8.1	0.0	5.4	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.1	1.5	0.0	1.8	0.0	0.0	8.1	0.0	5.4	0.0
Prop In Lane	0.00		0.50	0.97		1.00	1.00		0.19	1.00		0.00
Lane Grp Cap(c), veh/h	0	0	212	297	0	301	762	0	1022	640	1051	0
V/C Ratio(X)	0.00	0.00	0.02	0.13	0.00	0.56	0.00	0.00	0.41	0.38	0.30	0.00
Avail Cap(c_a), veh/h	0	0	817	818	0	859	943	0	1022	812	1051	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	23.6	24.3	0.0	22.6	0.0	0.0	7.5	10.4	7.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	1.6	0.0	0.0	1.2	0.4	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.1	0.6	0.0	2.6	0.0	0.0	4.3	2.8	3.0	0.0
LnGrp Delay(d),s/veh	0.0	0.0	23.7	24.5	0.0	24.2	0.0	0.0	8.8	10.8	7.7	0.0
LnGrp LOS			C	C		C			A	B	A	
Approach Vol, veh/h		4			206			419			555	
Approach Delay, s/veh		23.7			24.2			8.8			9.0	
Approach LOS		C			C			A			A	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.9	40.0		12.8	8.9	40.0		12.8				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0				
Max Q Clear Time (g_c+I1), s	2.0	10.1		2.1	0.0	7.4		3.8				
Green Ext Time (p_c), s	0.7	1.1		0.0	0.0	0.7		1.2				
Intersection Summary												
HCM 2010 Ctrl Delay				11.6								
HCM 2010 LOS				B								

2021 Existing Traffic Volumes
4: NYS Route 9D & Beacon Street/West End Lofts

Friday PM Existing
11/29/2021

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

2021 Existing Traffic Volumes
4: NYS Route 9D & Beacon Street/West End Lofts

Friday PM Existing
11/29/2021

Intersection												
Int Delay, s/veh	2.1											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	6	1	2	8	1	45	2	280	6	54	242	11
Future Vol, veh/h	6	1	2	8	1	45	2	280	6	54	242	11
Conflicting Peds, #/hr	0	0	2	0	0	4	0	0	3	0	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	-3	-	-	-4	-	-	4	-
Peak Hour Factor	81	81	81	66	66	66	69	69	69	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	5	0	2	2	0
Mvmt Flow	7	1	2	12	2	68	3	406	9	59	263	12

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

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

Minor Lane/Major Mvmt	NEL	NET	NERNWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	1296	-	-	562	291	1138	-
HCM Lane V/C Ratio	0.002	-	-	0.146	0.038	0.052	-
HCM Control Delay (s)	7.8	0	-	12.5	17.9	8.3	0
HCM Lane LOS	A	A	-	B	C	A	A
HCM 95th %tile Q(veh)	0	-	-	0.5	0.1	0.2	-

2021 Existing Traffic Volumes
6: South Avenue & NYS Route 9D

Friday PM Existing
11/29/2021

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

2021 Existing Traffic Volumes
6: South Avenue & NYS Route 9D

Friday PM Existing
11/29/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		23.5			23.6			14.4			18.0	
Queue Length 50th (ft)		149			167			6			31	
Queue Length 95th (ft)		220			218			20			53	
Internal Link Dist (ft)		161			436			114			223	
Turn Bay Length (ft)												
Base Capacity (vph)		833			846			789			670	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.34			0.38			0.03			0.11	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 45

Control Type: Pretimed

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

 Ø2 (R)	 Ø4
65 s	65 s
 Ø6 (R)	 Ø8
65 s	65 s

2021 Existing Traffic Volumes
6: South Avenue & NYS Route 9D

Friday PM Existing
11/29/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	232	17	8	208	51	6	5	6	43	8	9
Future Volume (veh/h)	9	232	17	8	208	51	6	5	6	43	8	9
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1843	1843	1843	1957	1891	1957	1910	1910	1910	1872	1816	1872
Adj Flow Rate, veh/h	10	258	19	10	251	61	7	6	7	54	10	11
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.90	0.90	0.90	0.83	0.83	0.83	0.85	0.85	0.85	0.79	0.79	0.79
Percent Heavy Veh, %	0	0	0	12	4	0	0	0	0	2	12	0
Cap, veh/h	40	766	55	39	669	159	281	242	262	515	96	97
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
Sat Flow, veh/h	25	1659	119	22	1449	344	528	525	567	1013	207	210
Grp Volume(v), veh/h	287	0	0	322	0	0	20	0	0	75	0	0
Grp Sat Flow(s),veh/h/ln	1803	0	0	1815	0	0	1620	0	0	1430	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	0.0	0.0
Cycle Q Clear(g_c), s	13.1	0.0	0.0	14.9	0.0	0.0	0.8	0.0	0.0	3.7	0.0	0.0
Prop In Lane	0.03		0.07	0.03		0.19	0.35		0.35	0.72		0.15
Lane Grp Cap(c), veh/h	861	0	0	866	0	0	785	0	0	708	0	0
V/C Ratio(X)	0.33	0.00	0.00	0.37	0.00	0.00	0.03	0.00	0.00	0.11	0.00	0.00
Avail Cap(c_a), veh/h	861	0	0	866	0	0	785	0	0	708	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	22.4	0.0	0.0	22.9	0.0	0.0	19.1	0.0	0.0	19.8	0.0	0.0
Incr Delay (d2), s/veh	1.0	0.0	0.0	1.2	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	0.0	0.0	7.8	0.0	0.0	0.4	0.0	0.0	1.6	0.0	0.0
LnGrp Delay(d),s/veh	23.4	0.0	0.0	24.1	0.0	0.0	19.1	0.0	0.0	20.1	0.0	0.0
LnGrp LOS	C			C			B			C		
Approach Vol, veh/h		287			322			20			75	
Approach Delay, s/veh		23.4			24.1			19.1			20.1	
Approach LOS		C			C			B			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		65.0		65.0		65.0		65.0				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		60.0		60.0		60.0		60.0				
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		0.0				
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay				23.2								
HCM 2010 LOS				C								

2021 Existing Traffic Volumes
1: NYS Route 9D & Verplanck Avenue

Saturday Existing
11/29/2021

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

2021 Existing Traffic Volumes
1: NYS Route 9D & Verplanck Avenue

Saturday Existing
11/29/2021



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

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NET and 6:SWTL, Start of Green

Natural Cycle: 60

Control Type: Pretimed

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



2021 Existing Traffic Volumes
1: NYS Route 9D & Verplanck Avenue

Saturday Existing
11/29/2021

								
Movement	NWL	NWR	NET	NER	SWL	SWT		
Lane Configurations								
Traffic Volume (veh/h)	65	195	519	58	150	568		
Future Volume (veh/h)	65	195	519	58	150	568		
Number	3	18	2	12	1	6		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1816	1816	1835	1872	1872	1872		
Adj Flow Rate, veh/h	71	212	564	63	163	617		
Adj No. of Lanes	1	1	1	0	1	1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	360	515	878	98	520	1326		
Arrive On Green	0.21	0.21	0.54	0.54	0.13	0.71		
Sat Flow, veh/h	1730	1544	1622	181	1783	1872		
Grp Volume(v), veh/h	71	212	0	627	163	617		
Grp Sat Flow(s),veh/h/ln	1730	1544	0	1803	1783	1872		
Q Serve(g_s), s	4.1	12.7	0.0	29.3	3.8	17.2		
Cycle Q Clear(g_c), s	4.1	12.7	0.0	29.3	3.8	17.2		
Prop In Lane	1.00	1.00		0.10	1.00			
Lane Grp Cap(c), veh/h	360	515	0	977	520	1326		
V/C Ratio(X)	0.20	0.41	0.00	0.64	0.31	0.47		
Avail Cap(c_a), veh/h	360	515	0	977	520	1326		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	39.2	30.9	0.0	19.3	11.8	7.6		
Incr Delay (d2), s/veh	1.2	2.4	0.0	3.2	1.6	1.2		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	2.1	5.8	0.0	15.3	2.0	9.2		
LnGrp Delay(d),s/veh	40.4	33.3	0.0	22.6	13.3	8.8		
LnGrp LOS	D	C		C	B	A		
Approach Vol, veh/h	283		627			780		
Approach Delay, s/veh	35.1		22.6			9.7		
Approach LOS	D		C			A		
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	20.0	70.0				90.0		30.0
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	15.0	65.0				85.0		25.0
Max Q Clear Time (g_c+I1), s	0.0	0.0				0.0		0.0
Green Ext Time (p_c), s	0.0	0.0				0.0		0.0
Intersection Summary								
HCM 2010 Ctrl Delay			18.7					
HCM 2010 LOS			B					

2021 Existing Traffic Volumes
2: NYS Route 9D & Beekman Street/W. Church Street

Saturday Existing
11/29/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	1	20	8	11	10	60	457	3	16	510	168
Future Volume (vph)	31	1	20	8	11	10	60	457	3	16	510	168
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		2%			-10%			-6%			3%	
Storage Length (ft)	0		95	0		0	75		0	75		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.96		0.99			1.00			0.99	
Frt			0.850		0.955			0.999			0.963	
Flt Protected		0.953			0.986		0.950			0.950		
Satd. Flow (prot)	0	1775	1599	0	1859	0	1771	1936	0	1778	1766	0
Flt Permitted		0.859			0.890		0.277			0.485		
Satd. Flow (perm)	0	1600	1533	0	1678	0	516	1936	0	908	1766	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			85		13						22	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		584			328			388			335	
Travel Time (s)		13.3			7.5			8.8			7.6	
Confl. Peds. (#/hr)			12			4			1			10
Confl. Bikes (#/hr)			3									
Peak Hour Factor	0.73	0.73	0.73	0.75	0.75	0.75	0.94	0.94	0.94	0.95	0.95	0.95
Heavy Vehicles (%)	1%	0%	0%	0%	0%	0%	5%	1%	0%	0%	1%	2%
Adj. Flow (vph)	42	1	27	11	15	13	64	486	3	17	537	177
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	43	27	0	39	0	64	489	0	17	714	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.01	1.01	1.01	0.94	0.94	0.94	0.96	0.96	0.96	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2		2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83	83	20	83		83	6		83	6	
Trailing Detector (ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Position(ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Size(ft)	20	43	43	20	43		43	6		43	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		40	40		40		40			40		
Detector 2 Size(ft)		43	43		43		43			43		
Detector 2 Type		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex		

2021 Existing Traffic Volumes
2: NYS Route 9D & Beekman Street/W. Church Street

Saturday Existing
11/29/2021

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

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 58.4

Natural Cycle: 60

Control Type: Semi Act-Uncoord

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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



2021 Existing Traffic Volumes
2: NYS Route 9D & Beekman Street/W. Church Street

Saturday Existing
11/29/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	1	20	8	11	10	60	457	3	16	510	168
Future Volume (veh/h)	31	1	20	8	11	10	60	457	3	16	510	168
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.90	0.94		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1863	1881	1995	1995	1995	1864	1938	1957	1872	1848	1872
Adj Flow Rate, veh/h	42	1	27	11	15	13	64	486	3	17	537	177
Adj No. of Lanes	0	1	1	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.73	0.73	0.73	0.75	0.75	0.75	0.94	0.94	0.94	0.95	0.95	0.95
Percent Heavy Veh, %	1	0	0	0	0	0	5	1	0	0	1	2
Cap, veh/h	242	4	121	107	71	49	457	1227	8	622	810	267
Arrive On Green	0.08	0.08	0.08	0.08	0.08	0.08	0.04	0.64	0.64	0.02	0.61	0.61
Sat Flow, veh/h	1396	52	1436	313	847	580	1775	1924	12	1782	1329	438
Grp Volume(v), veh/h	43	0	27	39	0	0	64	0	489	17	0	714
Grp Sat Flow(s),veh/h/ln	1447	0	1436	1739	0	0	1775	0	1936	1782	0	1767
Q Serve(g_s), s	0.3	0.0	1.0	0.0	0.0	0.0	0.7	0.0	7.0	0.2	0.0	15.2
Cycle Q Clear(g_c), s	1.4	0.0	1.0	1.1	0.0	0.0	0.7	0.0	7.0	0.2	0.0	15.2
Prop In Lane	0.98		1.00	0.28		0.33	1.00		0.01	1.00		0.25
Lane Grp Cap(c), veh/h	246	0	121	227	0	0	457	0	1234	622	0	1077
V/C Ratio(X)	0.17	0.00	0.22	0.17	0.00	0.00	0.14	0.00	0.40	0.03	0.00	0.66
Avail Cap(c_a), veh/h	841	0	750	961	0	0	687	0	1234	903	0	1077
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.7	0.0	24.5	24.6	0.0	0.0	5.8	0.0	5.0	4.3	0.0	7.3
Incr Delay (d2), s/veh	0.3	0.0	0.9	0.4	0.0	0.0	0.1	0.0	1.0	0.0	0.0	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.4	0.6	0.0	0.0	0.4	0.0	4.0	0.1	0.0	8.3
LnGrp Delay(d),s/veh	25.0	0.0	25.4	24.9	0.0	0.0	5.9	0.0	6.0	4.3	0.0	10.6
LnGrp LOS	C		C	C			A		A	A		B
Approach Vol, veh/h		70			39			553			731	
Approach Delay, s/veh		25.2			24.9			6.0			10.4	
Approach LOS		C			C			A			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.9	41.6		9.8	7.6	40.0		9.8				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0				
Max Q Clear Time (g_c+I1), s	2.2	9.0		3.4	2.7	17.2		3.1				
Green Ext Time (p_c), s	0.0	1.3		0.3	0.1	2.1		0.1				
Intersection Summary												
HCM 2010 Ctrl Delay			9.8									
HCM 2010 LOS			A									

2021 Existing Traffic Volumes
3: NYS Route 9D & Beacon City Hall/Main Street

Saturday Existing
11/29/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	1	1	23	0	185	1	334	37	259	277	2
Future Volume (vph)	1	1	1	23	0	185	1	334	37	259	277	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		1%			-8%			-3%			3%	
Storage Length (ft)	0		0	0		70	65		0	120		0
Storage Lanes	0		0	0		1	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98				0.97		0.98			1.00	
Frt		0.955				0.850		0.985			0.999	
Flt Protected		0.984			0.950		0.950			0.950		
Satd. Flow (prot)	0	1742	0	0	1877	1663	1832	1829	0	1760	1851	0
Flt Permitted		0.920					0.575			0.455		
Satd. Flow (perm)	0	1629	0	0	1976	1619	1109	1829	0	843	1851	0
Right Turn on Red			Yes			No			No			Yes
Satd. Flow (RTOR)		1										
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		133			350			693			388	
Travel Time (s)		3.0			8.0			15.8			8.8	
Confl. Peds. (#/hr)			14			6			48			11
Peak Hour Factor	0.71	0.71	0.71	0.89	0.89	0.89	0.88	0.88	0.88	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%	0%	2%	5%	1%	1%	0%
Adj. Flow (vph)	1	1	1	26	0	208	1	380	42	282	301	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	3	0	0	26	208	1	422	0	282	303	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.01	1.01	1.01	0.95	0.95	0.95	0.98	0.98	0.98	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	2	2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83		20	83	83	83	6		83	6	
Trailing Detector (ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Position(ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Size(ft)	20	43		20	43	43	43	6		43	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		40			40	40	40			40		
Detector 2 Size(ft)		43			43	43	43			43		
Detector 2 Type		Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		
Detector 2 Channel												

2021 Existing Traffic Volumes
3: NYS Route 9D & Beacon City Hall/Main Street

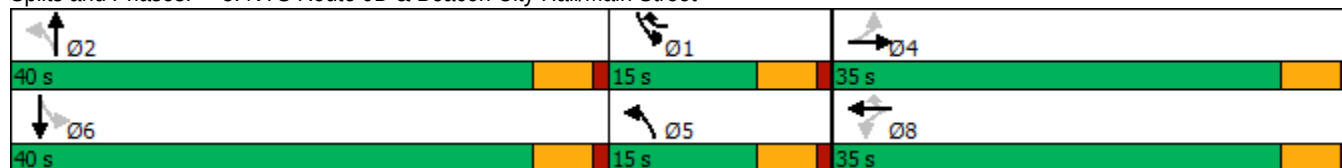
Saturday Existing
11/29/2021

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

Intersection Summary

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

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



2021 Existing Traffic Volumes
3: NYS Route 9D & Beacon City Hall/Main Street

Saturday Existing
11/29/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	1	1	23	0	185	1	334	37	259	277	2
Future Volume (veh/h)	1	1	1	23	0	185	1	334	37	259	277	2
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.94	0.95		0.98	0.99		0.96	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1890	1890	1890	1976	1976	1956	1928	1885	1928	1853	1853	1872
Adj Flow Rate, veh/h	1	1	1	26	0	208	1	380	42	282	301	2
Adj No. of Lanes	0	1	0	0	1	1	1	1	0	1	1	0
Peak Hour Factor	0.71	0.71	0.71	0.89	0.89	0.89	0.88	0.88	0.88	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	1	0	2	5	1	1	0
Cap, veh/h	115	97	67	297	0	313	765	940	104	643	1041	7
Arrive On Green	0.13	0.13	0.13	0.13	0.00	0.13	0.06	0.57	0.57	0.06	0.57	0.57
Sat Flow, veh/h	291	763	527	1418	0	1624	1837	1660	183	1765	1839	12
Grp Volume(v), veh/h	3	0	0	26	0	208	1	0	422	282	0	303
Grp Sat Flow(s),veh/h/ln	1581	0	0	1418	0	1624	1837	0	1843	1765	0	1851
Q Serve(g_s), s	0.0	0.0	0.0	0.9	0.0	3.3	0.0	0.0	8.0	0.0	0.0	5.3
Cycle Q Clear(g_c), s	0.1	0.0	0.0	1.0	0.0	3.3	0.0	0.0	8.0	0.0	0.0	5.3
Prop In Lane	0.33		0.33	1.00		1.00	1.00		0.10	1.00		0.01
Lane Grp Cap(c), veh/h	279	0	0	297	0	313	765	0	1043	643	0	1048
V/C Ratio(X)	0.01	0.00	0.00	0.09	0.00	0.66	0.00	0.00	0.40	0.44	0.00	0.29
Avail Cap(c_a), veh/h	804	0	0	803	0	895	944	0	1043	815	0	1048
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.6	0.0	0.0	24.0	0.0	23.1	6.4	0.0	7.6	11.0	0.0	7.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	2.4	0.0	0.0	1.2	0.5	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.4	0.0	3.3	0.0	0.0	4.3	3.5	0.0	2.8
LnGrp Delay(d),s/veh	23.6	0.0	0.0	24.1	0.0	25.5	6.4	0.0	8.7	11.4	0.0	7.7
LnGrp LOS	C			C		C	A		A	B		A
Approach Vol, veh/h		3			234			423			585	
Approach Delay, s/veh		23.6			25.4			8.7			9.5	
Approach LOS		C			C			A			A	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.0	40.0		12.9	9.0	40.0		12.9				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0				
Max Q Clear Time (g_c+I1), s	2.0	10.0		2.1	2.0	7.3		5.3				
Green Ext Time (p_c), s	0.9	1.1		0.0	0.0	0.7		1.3				
Intersection Summary												
HCM 2010 Ctrl Delay				12.2								
HCM 2010 LOS				B								

2021 Existing Traffic Volumes
4: NYS Route 9D & Beacon Street/West End Lofts

Saturday Existing
11/29/2021

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

2021 Existing Traffic Volumes
4: NYS Route 9D & Beacon Street/West End Lofts

Saturday Existing
11/29/2021

Intersection												
Int Delay, s/veh	2.5											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	9	2	2	9	4	77	2	286	9	42	253	6
Future Vol, veh/h	9	2	2	9	4	77	2	286	9	42	253	6
Conflicting Peds, #/hr	0	0	4	0	0	19	0	0	2	0	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	-3	-	-	-4	-	-	4	-
Peak Hour Factor	61	61	61	88	88	88	85	85	85	92	92	92
Heavy Vehicles, %	0	50	0	11	25	1	0	4	11	2	2	0
Mvmt Flow	15	3	3	10	5	88	2	336	11	46	275	7

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

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

Minor Lane/Major Mvmt	NEL	NET	NERNWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	1286	-	-	607	290	1208	-
HCM Lane V/C Ratio	0.002	-	-	0.168	0.073	0.038	-
HCM Control Delay (s)	7.8	0	-	12.1	18.4	8.1	0
HCM Lane LOS	A	A	-	B	C	A	A
HCM 95th %tile Q(veh)	0	-	-	0.6	0.2	0.1	-

2021 Existing Traffic Volumes
6: South Avenue & NYS Route 9D

Saturday Existing
11/29/2021

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

2021 Existing Traffic Volumes 1:42 pm 11/19/2021 Saturday Existing
RGD

Synchro 8 Report
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2021 Existing Traffic Volumes
6: South Avenue & NYS Route 9D

Saturday Existing
11/29/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		22.4			22.6			13.5			16.9	
Queue Length 50th (ft)		117			134			17			23	
Queue Length 95th (ft)		157			185			22			44	
Internal Link Dist (ft)		161			436			114			223	
Turn Bay Length (ft)												
Base Capacity (vph)		831			840			758			680	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.28			0.32			0.08			0.09	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 45

Control Type: Pretimed

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

 Ø2 (R)	 Ø4
65 s	65 s
 Ø6 (R)	 Ø8
65 s	65 s

2021 Existing Traffic Volumes
6: South Avenue & NYS Route 9D

Saturday Existing
11/29/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	168	15	12	181	34	13	7	12	30	10	8
Future Volume (veh/h)	8	168	15	12	181	34	13	7	12	30	10	8
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1843	1843	1843	1957	1885	1957	1910	1910	1910	1872	1805	1872
Adj Flow Rate, veh/h	10	205	18	14	213	40	24	13	22	37	12	10
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.82	0.82	0.82	0.85	0.85	0.85	0.55	0.55	0.55	0.82	0.82	0.82
Percent Heavy Veh, %	0	0	0	12	4	0	0	0	0	2	12	0
Cap, veh/h	45	749	64	51	687	125	320	178	273	452	145	113
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
Sat Flow, veh/h	35	1622	139	48	1488	271	610	385	591	883	315	244
Grp Volume(v), veh/h	233	0	0	267	0	0	59	0	0	59	0	0
Grp Sat Flow(s),veh/h/ln	1796	0	0	1807	0	0	1586	0	0	1442	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Cycle Q Clear(g_c), s	10.3	0.0	0.0	11.9	0.0	0.0	2.4	0.0	0.0	2.5	0.0	0.0
Prop In Lane	0.04		0.08	0.05		0.15	0.41		0.37	0.63		0.17
Lane Grp Cap(c), veh/h	858	0	0	863	0	0	771	0	0	711	0	0
V/C Ratio(X)	0.27	0.00	0.00	0.31	0.00	0.00	0.08	0.00	0.00	0.08	0.00	0.00
Avail Cap(c_a), veh/h	858	0	0	863	0	0	771	0	0	711	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	21.6	0.0	0.0	22.1	0.0	0.0	19.5	0.0	0.0	19.5	0.0	0.0
Incr Delay (d2), s/veh	0.8	0.0	0.0	0.9	0.0	0.0	0.2	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	0.0	0.0	6.2	0.0	0.0	1.2	0.0	0.0	1.2	0.0	0.0
LnGrp Delay(d),s/veh	22.4	0.0	0.0	23.0	0.0	0.0	19.7	0.0	0.0	19.7	0.0	0.0
LnGrp LOS	C			C			B			B		
Approach Vol, veh/h		233			267			59			59	
Approach Delay, s/veh		22.4			23.0			19.7			19.7	
Approach LOS		C			C			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		65.0		65.0		65.0		65.0				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		60.0		60.0		60.0		60.0				
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		0.0				
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay				22.1								
HCM 2010 LOS				C								

2024 No-Build Traffic Volumes
1: NYS Route 9D & Verplanck Avenue

Friday PM No-Build
11/29/2021

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

2024 No-Build Traffic Volumes
1: NYS Route 9D & Verplanck Avenue

Friday PM No-Build
11/29/2021

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

Intersection Summary

Area Type: Other

Cycle Length: 122

Actuated Cycle Length: 122

Offset: 0 (0%), Referenced to phase 2:NET and 6:SWTL, Start of Green

Natural Cycle: 80

Control Type: Pretimed

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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



2024 No-Build Traffic Volumes
1: NYS Route 9D & Verplanck Avenue

Friday PM No-Build
11/29/2021

								
Movement	NWL	NWR	NET	NER	SWL	SWT		
Lane Configurations								
Traffic Volume (veh/h)	51	299	736	69	209	628		
Future Volume (veh/h)	51	299	736	69	209	628		
Number	3	18	2	12	1	6		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1816	1816	1835	1872	1872	1872		
Adj Flow Rate, veh/h	55	325	800	75	227	683		
Adj No. of Lanes	1	1	1	0	1	1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	354	506	908	85	358	1335		
Arrive On Green	0.20	0.20	0.55	0.55	0.12	0.71		
Sat Flow, veh/h	1730	1544	1653	155	1783	1872		
Grp Volume(v), veh/h	55	325	0	875	227	683		
Grp Sat Flow(s),veh/h/ln	1730	1544	0	1807	1783	1872		
Q Serve(g_s), s	3.2	21.9	0.0	51.6	5.5	20.1		
Cycle Q Clear(g_c), s	3.2	21.9	0.0	51.6	5.5	20.1		
Prop In Lane	1.00	1.00		0.09	1.00			
Lane Grp Cap(c), veh/h	354	506	0	993	358	1335		
V/C Ratio(X)	0.16	0.64	0.00	0.88	0.63	0.51		
Avail Cap(c_a), veh/h	354	506	0	993	358	1335		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	39.8	34.9	0.0	24.0	23.6	7.9		
Incr Delay (d2), s/veh	0.9	6.1	0.0	11.2	8.3	1.4		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	1.6	10.2	0.0	28.6	5.2	10.8		
LnGrp Delay(d),s/veh	40.8	41.1	0.0	35.2	31.9	9.3		
LnGrp LOS	D	D		D	C	A		
Approach Vol, veh/h	380		875			910		
Approach Delay, s/veh	41.0		35.2			14.9		
Approach LOS	D		D			B		
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	20.0	72.0				92.0		30.0
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	15.0	67.0				87.0		25.0
Max Q Clear Time (g_c+I1), s	0.0	0.0				0.0		0.0
Green Ext Time (p_c), s	0.0	0.0				0.0		0.0
Intersection Summary								
HCM 2010 Ctrl Delay			27.7					
HCM 2010 LOS			C					

2024 No-Build Traffic Volumes
2: NYS Route 9D & Beekman Street/W. Church Street

Friday PM No-Build
11/29/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	310	24	35	4	15	23	32	424	5	6	510	166
Future Volume (vph)	310	24	35	4	15	23	32	424	5	6	510	166
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		2%			-10%			-6%			3%	
Storage Length (ft)	0		95	0		0	75		0	75		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.98		0.97			1.00			0.99	
Frt			0.850		0.925			0.998			0.963	
Flt Protected		0.956			0.996		0.950			0.950		
Satd. Flow (prot)	0	1760	1599	0	1737	0	1805	1915	0	1778	1772	0
Flt Permitted		0.709			0.966		0.115			0.342		
Satd. Flow (perm)	0	1306	1562	0	1684	0	219	1915	0	640	1772	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			85		25			1			21	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		584			328			388			335	
Travel Time (s)		13.3			7.5			8.8			7.6	
Confl. Peds. (#/hr)			2			13			1			6
Confl. Bikes (#/hr)						1			1			1
Peak Hour Factor	0.71	0.71	0.71	0.92	0.92	0.92	0.84	0.84	0.84	0.98	0.98	0.98
Heavy Vehicles (%)	2%	4%	0%	0%	7%	0%	3%	2%	0%	0%	1%	1%
Adj. Flow (vph)	437	34	49	4	16	25	38	505	6	6	520	169
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	471	49	0	45	0	38	511	0	6	689	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												Yes
Headway Factor	1.01	1.01	1.01	0.94	0.94	0.94	0.96	0.96	0.96	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2		2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83	83	20	83		83	6		83	6	
Trailing Detector (ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Position(ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Size(ft)	20	43	43	20	43		43	6		43	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		40	40		40		40			40		
Detector 2 Size(ft)		43	43		43		43			43		
Detector 2 Type		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex		

2024 No-Build Traffic Volumes
2: NYS Route 9D & Beekman Street/W. Church Street

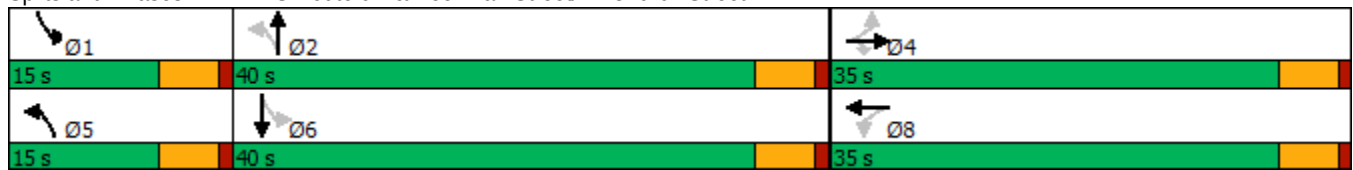
Friday PM No-Build
11/29/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)		0.0	0.0		0.0		0.0			0.0		
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	16.0		4.0	16.0	
Minimum Split (s)	20.0	20.0	20.0	21.0	21.0		9.0	21.0		9.0	21.0	
Total Split (s)	35.0	35.0	35.0	35.0	35.0		15.0	40.0		15.0	40.0	
Total Split (%)	38.9%	38.9%	38.9%	38.9%	38.9%		16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	30.0	30.0	30.0	30.0	30.0		10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		None	Max		None	Max	
Walk Time (s)				5.0	5.0							
Flash Dont Walk (s)				11.0	11.0							
Pedestrian Calls (#/hr)				0	0							
v/c Ratio		0.99	0.08		0.07		0.16	0.55		0.02	0.90	
Control Delay		67.7	1.9		11.7		11.1	18.2		9.5	39.5	
Queue Delay		0.0	0.0		0.0		0.0	3.8		0.0	0.0	
Total Delay		67.7	1.9		11.7		11.1	22.0		9.5	39.5	
Queue Length 50th (ft)		~282	0		7		9	164		1	346	
Queue Length 95th (ft)		#318	1		30		22	293		7	#589	
Internal Link Dist (ft)		504			248			308			255	
Turn Bay Length (ft)			95				75			75		
Base Capacity (vph)		478	626		632		305	931		456	769	
Starvation Cap Reductn		0	0		0		0	325		0	0	
Spillback Cap Reductn		0	0		0		0	0		0	0	
Storage Cap Reductn		0	0		0		0	0		0	0	
Reduced v/c Ratio		0.99	0.08		0.07		0.12	0.84		0.01	0.90	
Intersection Summary												
Area Type:	Other											
Cycle Length: 90												
Actuated Cycle Length: 82.3												
Natural Cycle: 90												
Control Type: Semi Act-Uncoord												
~ Volume exceeds capacity, queue is theoretically infinite.												
Queue shown is maximum after two cycles.												
# 95th percentile volume exceeds capacity, queue may be longer.												
Queue shown is maximum after two cycles.												

2024 No-Build Traffic Volumes
 2: NYS Route 9D & Beekman Street/W. Church Street

Friday PM No-Build
 11/29/2021

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



2024 No-Build Traffic Volumes
2: NYS Route 9D & Beekman Street/W. Church Street

Friday PM No-Build
11/29/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	310	24	35	4	15	23	32	424	5	6	510	166
Future Volume (veh/h)	310	24	35	4	15	23	32	424	5	6	510	166
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.96	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1842	1881	1995	1947	1995	1900	1919	1957	1872	1853	1872
Adj Flow Rate, veh/h	437	34	49	4	16	25	38	505	6	6	520	169
Adj No. of Lanes	0	1	1	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.71	0.71	0.71	0.92	0.92	0.92	0.84	0.84	0.84	0.98	0.98	0.98
Percent Heavy Veh, %	2	4	0	0	7	0	3	2	0	0	1	1
Cap, veh/h	193	8	581	48	144	180	181	846	10	317	565	184
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.03	0.45	0.45	0.01	0.43	0.43
Sat Flow, veh/h	299	23	1594	0	396	495	1810	1892	22	1782	1330	432
Grp Volume(v), veh/h	471	0	49	45	0	0	38	0	511	6	0	689
Grp Sat Flow(s),veh/h/ln	323	0	1594	890	0	0	1810	0	1915	1782	0	1762
Q Serve(g_s), s	0.0	0.0	1.7	0.0	0.0	0.0	1.0	0.0	16.6	0.2	0.0	30.4
Cycle Q Clear(g_c), s	30.0	0.0	1.7	30.0	0.0	0.0	1.0	0.0	16.6	0.2	0.0	30.4
Prop In Lane	0.93		1.00	0.09		0.56	1.00		0.01	1.00		0.25
Lane Grp Cap(c), veh/h	202	0	581	372	0	0	181	0	856	317	0	749
V/C Ratio(X)	2.33	0.00	0.08	0.12	0.00	0.00	0.21	0.00	0.60	0.02	0.00	0.92
Avail Cap(c_a), veh/h	202	0	581	372	0	0	350	0	856	523	0	749
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	32.4	0.0	17.2	18.4	0.0	0.0	18.5	0.0	17.2	14.7	0.0	22.3
Incr Delay (d2), s/veh	614.8	0.0	0.1	0.1	0.0	0.0	0.6	0.0	3.1	0.0	0.0	18.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	39.0	0.0	0.7	0.7	0.0	0.0	0.5	0.0	9.4	0.1	0.0	18.5
LnGrp Delay(d),s/veh	647.2	0.0	17.2	18.5	0.0	0.0	19.0	0.0	20.2	14.7	0.0	40.6
LnGrp LOS	F		B	B			B		C	B		D
Approach Vol, veh/h		520			45			549			695	
Approach Delay, s/veh		587.9			18.5			20.1			40.4	
Approach LOS		F			B			C			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.5	41.8		35.0	7.3	40.0		35.0				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0				
Max Q Clear Time (g_c+I1), s	2.2	18.6		32.0	3.0	32.4		32.0				
Green Ext Time (p_c), s	0.0	1.2		0.0	0.0	0.7		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			191.1									
HCM 2010 LOS			F									

2024 No-Build Traffic Volumes
3: NYS Route 9D & Beacon City Hall/Main Street

Friday PM No-Build
11/29/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2	2	47	2	162	0	299	77	246	311	0
Future Volume (vph)	0	2	2	47	2	162	0	299	77	246	311	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		1%			-8%			-3%			3%	
Storage Length (ft)	0		0	0		70	65		0	120		0
Storage Lanes	0		0	0		1	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98				0.96		0.98				
Frt		0.932				0.850		0.969				
Flt Protected					0.954					0.950		
Satd. Flow (prot)	0	1722	0	0	1885	1647	1928	1792	0	1743	1853	0
Flt Permitted					0.785					0.423		
Satd. Flow (perm)	0	1722	0	0	1551	1587	1928	1792	0	776	1853	0
Right Turn on Red			Yes			No			No			Yes
Satd. Flow (RTOR)		3										
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		133			350			693			388	
Travel Time (s)		3.0			8.0			15.8			8.8	
Confl. Peds. (#/hr)			9			15			21			12
Confl. Bikes (#/hr)			1						1			
Peak Hour Factor	0.60	0.60	0.60	0.91	0.91	0.91	0.79	0.79	0.79	0.88	0.88	0.88
Heavy Vehicles (%)	0%	0%	0%	0%	0%	2%	0%	2%	5%	2%	1%	0%
Adj. Flow (vph)	0	3	3	52	2	178	0	378	97	280	353	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	6	0	0	54	178	0	475	0	280	353	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.01	1.01	1.01	0.95	0.95	0.95	0.98	0.98	0.98	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	2	2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83		20	83	83	83	6		83	6	
Trailing Detector (ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Position(ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Size(ft)	20	43		20	43	43	43	6		43	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		40			40	40	40			40		
Detector 2 Size(ft)		43			43	43	43			43		
Detector 2 Type		Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		

2024 No-Build Traffic Volumes
3: NYS Route 9D & Beacon City Hall/Main Street

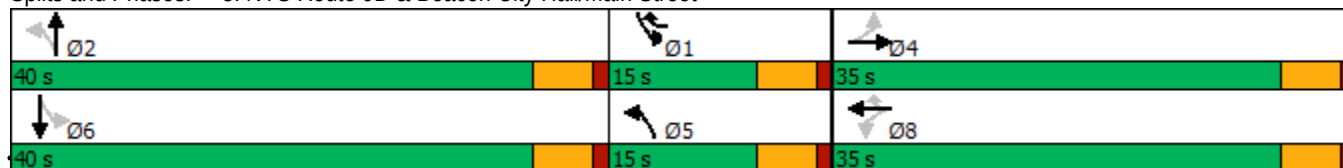
Friday PM No-Build
11/29/2021

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

Intersection Summary

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

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



2024 No-Build Traffic Volumes 1:42 pm 11/19/2021 Friday PM No-Build
RGD

Synchro 8 Report
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2024 No-Build Traffic Volumes
3: NYS Route 9D & Beacon City Hall/Main Street

Friday PM No-Build
11/29/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2	2	47	2	162	0	299	77	246	311	0
Future Volume (veh/h)	0	2	2	47	2	162	0	299	77	246	311	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	0.97		0.94	1.00		0.96	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1890	1890	1890	1976	1976	1937	1928	1879	1928	1835	1853	1872
Adj Flow Rate, veh/h	0	3	3	52	2	178	0	378	97	280	353	0
Adj No. of Lanes	0	1	0	0	1	1	1	1	0	1	1	0
Peak Hour Factor	0.60	0.60	0.60	0.91	0.91	0.91	0.79	0.79	0.79	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	2	0	2	5	2	1	0
Cap, veh/h	0	107	107	288	9	303	726	810	208	597	1049	0
Arrive On Green	0.00	0.13	0.13	0.13	0.13	0.13	0.00	0.57	0.57	0.06	0.57	0.00
Sat Flow, veh/h	0	841	841	1364	72	1551	1837	1430	367	1747	1853	0
Grp Volume(v), veh/h	0	0	6	54	0	178	0	0	475	280	353	0
Grp Sat Flow(s),veh/h/ln	0	0	1682	1436	0	1551	1837	0	1797	1747	1853	0
Q Serve(g_s), s	0.0	0.0	0.2	2.0	0.0	2.2	0.0	0.0	9.6	0.0	6.3	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.2	2.2	0.0	2.2	0.0	0.0	9.6	0.0	6.3	0.0
Prop In Lane	0.00		0.50	0.96		1.00	1.00		0.20	1.00		0.00
Lane Grp Cap(c), veh/h	0	0	214	297	0	303	726	0	1017	597	1049	0
V/C Ratio(X)	0.00	0.00	0.03	0.18	0.00	0.59	0.00	0.00	0.47	0.47	0.34	0.00
Avail Cap(c_a), veh/h	0	0	816	817	0	858	905	0	1017	767	1049	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	23.6	24.5	0.0	22.7	0.0	0.0	7.9	12.4	7.2	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.1	0.3	0.0	1.8	0.0	0.0	1.5	0.6	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.1	0.9	0.0	2.8	0.0	0.0	5.2	3.7	3.4	0.0
LnGrp Delay(d),s/veh	0.0	0.0	23.7	24.8	0.0	24.5	0.0	0.0	9.5	13.0	8.1	0.0
LnGrp LOS			C	C		C			A	B	A	
Approach Vol, veh/h		6			232			475			633	
Approach Delay, s/veh		23.7			24.6			9.5			10.2	
Approach LOS		C			C			A			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.0	40.0		12.9	9.0	40.0		12.9				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0				
Max Q Clear Time (g_c+I1), s	2.0	11.6		2.2	0.0	8.3		4.2				
Green Ext Time (p_c), s	0.9	1.3		0.0	0.0	0.9		1.3				
Intersection Summary												
HCM 2010 Ctrl Delay	12.5											
HCM 2010 LOS	B											

2024 No-Build Traffic Volumes
4: NYS Route 9D & Beacon Street/West End Lofts

Friday PM No-Build
11/29/2021

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

2024 No-Build Traffic Volumes
4: NYS Route 9D & Beacon Street/West End Lofts

Friday PM No-Build
11/29/2021

Intersection												
Int Delay, s/veh	2.2											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	7	2	3	9	2	48	3	321	7	58	286	12
Future Vol, veh/h	7	2	3	9	2	48	3	321	7	58	286	12
Conflicting Peds, #/hr	0	0	2	0	0	4	0	0	3	0	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	-3	-	-	-4	-	-	4	-
Peak Hour Factor	81	81	81	66	66	66	69	69	69	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	5	0	2	2	0
Mvmt Flow	9	2	4	14	3	73	4	465	10	63	311	13

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

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

Minor Lane/Major Mvmt	NEL	NET	NERNWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	1243	-	-	497	248	1081	-
HCM Lane V/C Ratio	0.003	-	-	0.18	0.06	0.058	-
HCM Control Delay (s)	7.9	0	-	13.8	20.4	8.5	0
HCM Lane LOS	A	A	-	B	C	A	A
HCM 95th %tile Q(veh)	0	-	-	0.7	0.2	0.2	-

2024 No-Build Traffic Volumes
6: South Avenue & NYS Route 9D

Friday PM No-Build
11/29/2021

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

2024 No-Build Traffic Volumes
6: South Avenue & NYS Route 9D

Friday PM No-Build
11/29/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		24.2			24.4			16.5			19.8	
Queue Length 50th (ft)		167			188			15			48	
Queue Length 95th (ft)		243			242			34			74	
Internal Link Dist (ft)		161			436			114			223	
Turn Bay Length (ft)												
Base Capacity (vph)		831			846			826			680	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.38			0.42			0.05			0.16	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 45

Control Type: Pretimed

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

 Ø2 (R)	 Ø4
65 s	65 s
 Ø6 (R)	 Ø8
65 s	65 s

2024 No-Build Traffic Volumes
6: South Avenue & NYS Route 9D

Friday PM No-Build
11/29/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	255	19	9	230	55	7	21	7	46	29	10
Future Volume (veh/h)	10	255	19	9	230	55	7	21	7	46	29	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1843	1843	1843	1957	1891	1957	1910	1910	1910	1872	1779	1872
Adj Flow Rate, veh/h	11	283	21	11	277	66	8	25	8	58	37	13
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.90	0.90	0.90	0.83	0.83	0.83	0.85	0.85	0.85	0.79	0.79	0.79
Percent Heavy Veh, %	0	0	0	12	4	0	0	0	0	2	12	0
Cap, veh/h	41	764	55	39	670	156	167	511	156	394	244	82
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
Sat Flow, veh/h	26	1655	120	23	1453	338	289	1108	339	761	530	177
Grp Volume(v), veh/h	315	0	0	354	0	0	41	0	0	108	0	0
Grp Sat Flow(s),veh/h/ln	1801	0	0	1814	0	0	1736	0	0	1467	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	0.0	0.0
Cycle Q Clear(g_c), s	14.6	0.0	0.0	16.8	0.0	0.0	1.6	0.0	0.0	5.2	0.0	0.0
Prop In Lane	0.03		0.07	0.03		0.19	0.20		0.20	0.54		0.12
Lane Grp Cap(c), veh/h	860	0	0	866	0	0	834	0	0	720	0	0
V/C Ratio(X)	0.37	0.00	0.00	0.41	0.00	0.00	0.05	0.00	0.00	0.15	0.00	0.00
Avail Cap(c_a), veh/h	860	0	0	866	0	0	834	0	0	720	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	22.8	0.0	0.0	23.4	0.0	0.0	19.3	0.0	0.0	20.2	0.0	0.0
Incr Delay (d2), s/veh	1.2	0.0	0.0	1.4	0.0	0.0	0.1	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.6	0.0	0.0	8.8	0.0	0.0	0.8	0.0	0.0	2.3	0.0	0.0
LnGrp Delay(d),s/veh	24.0	0.0	0.0	24.8	0.0	0.0	19.4	0.0	0.0	20.6	0.0	0.0
LnGrp LOS	C			C			B			C		
Approach Vol, veh/h		315			354			41			108	
Approach Delay, s/veh		24.0			24.8			19.4			20.6	
Approach LOS		C			C			B			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		65.0		65.0		65.0		65.0				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		60.0		60.0		60.0		60.0				
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		0.0				
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay				23.7								
HCM 2010 LOS				C								

2024 No-Build Traffic Volumes
1: NYS Route 9D & Verplanck Avenue

Saturday No-Build
11/29/2021

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

2024 No-Build Traffic Volumes
1: NYS Route 9D & Verplanck Avenue

Saturday No-Build
11/29/2021

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

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NET and 6:SWTL, Start of Green

Natural Cycle: 60

Control Type: Pretimed

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



2024 No-Build Traffic Volumes
1: NYS Route 9D & Verplanck Avenue

Saturday No-Build
11/29/2021

								
Movement	NWL	NWR	NET	NER	SWL	SWT		
Lane Configurations								
Traffic Volume (veh/h)	69	232	570	62	159	636		
Future Volume (veh/h)	69	232	570	62	159	636		
Number	3	18	2	12	1	6		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1816	1816	1835	1872	1872	1872		
Adj Flow Rate, veh/h	75	252	620	67	173	691		
Adj No. of Lanes	1	1	1	0	1	1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	360	515	882	95	479	1326		
Arrive On Green	0.21	0.21	0.54	0.54	0.13	0.71		
Sat Flow, veh/h	1730	1544	1628	176	1783	1872		
Grp Volume(v), veh/h	75	252	0	687	173	691		
Grp Sat Flow(s),veh/h/ln	1730	1544	0	1804	1783	1872		
Q Serve(g_s), s	4.3	15.6	0.0	33.8	4.1	20.5		
Cycle Q Clear(g_c), s	4.3	15.6	0.0	33.8	4.1	20.5		
Prop In Lane	1.00	1.00		0.10	1.00			
Lane Grp Cap(c), veh/h	360	515	0	977	479	1326		
V/C Ratio(X)	0.21	0.49	0.00	0.70	0.36	0.52		
Avail Cap(c_a), veh/h	360	515	0	977	479	1326		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	39.3	31.9	0.0	20.4	13.6	8.1		
Incr Delay (d2), s/veh	1.3	3.3	0.0	4.2	2.1	1.5		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	2.2	7.1	0.0	17.9	2.5	10.9		
LnGrp Delay(d),s/veh	40.6	35.2	0.0	24.6	15.7	9.6		
LnGrp LOS	D	D		C	B	A		
Approach Vol, veh/h	327		687			864		
Approach Delay, s/veh	36.4		24.6			10.8		
Approach LOS	D		C			B		
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	20.0	70.0				90.0		30.0
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	15.0	65.0				85.0		25.0
Max Q Clear Time (g_c+I1), s	0.0	0.0				0.0		0.0
Green Ext Time (p_c), s	0.0	0.0				0.0		0.0
Intersection Summary								
HCM 2010 Ctrl Delay			20.3					
HCM 2010 LOS			C					

2024 No-Build Traffic Volumes
2: NYS Route 9D & Beekman Street/W. Church Street

Saturday No-Build
11/29/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	2	22	9	12	20	64	504	4	17	574	179
Future Volume (vph)	33	2	22	9	12	20	64	504	4	17	574	179
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		2%			-10%			-6%			3%	
Storage Length (ft)	0		95	0		0	75		0	75		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.96		0.98			1.00			0.99	
Frt			0.850		0.934			0.999			0.964	
Flt Protected		0.955			0.989		0.950			0.950		
Satd. Flow (prot)	0	1780	1599	0	1815	0	1771	1936	0	1778	1768	0
Flt Permitted		0.824			0.911		0.232			0.449		
Satd. Flow (perm)	0	1536	1533	0	1672	0	432	1936	0	840	1768	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			85		27						20	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		584			328			388			335	
Travel Time (s)		13.3			7.5			8.8			7.6	
Confl. Peds. (#/hr)			12			4			1			10
Confl. Bikes (#/hr)			3									
Peak Hour Factor	0.73	0.73	0.73	0.75	0.75	0.75	0.94	0.94	0.94	0.95	0.95	0.95
Heavy Vehicles (%)	1%	0%	0%	0%	0%	0%	5%	1%	0%	0%	1%	2%
Adj. Flow (vph)	45	3	30	12	16	27	68	536	4	18	604	188
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	48	30	0	55	0	68	540	0	18	792	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												Yes
Headway Factor	1.01	1.01	1.01	0.94	0.94	0.94	0.96	0.96	0.96	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2		2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83	83	20	83		83	6		83	6	
Trailing Detector (ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Position(ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Size(ft)	20	43	43	20	43		43	6		43	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		40	40		40		40			40		
Detector 2 Size(ft)		43	43		43		43			43		
Detector 2 Type		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex		

2024 No-Build Traffic Volumes
2: NYS Route 9D & Beekman Street/W. Church Street

Saturday No-Build
11/29/2021



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

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 58.6

Natural Cycle: 65

Control Type: Semi Act-Uncoord

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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



2024 No-Build Traffic Volumes
2: NYS Route 9D & Beekman Street/W. Church Street

Saturday No-Build
11/29/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	2	22	9	12	20	64	504	4	17	574	179
Future Volume (veh/h)	33	2	22	9	12	20	64	504	4	17	574	179
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.90	0.94		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1864	1881	1995	1995	1995	1864	1938	1957	1872	1849	1872
Adj Flow Rate, veh/h	45	3	30	12	16	27	68	536	4	18	604	188
Adj No. of Lanes	0	1	1	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.73	0.73	0.73	0.75	0.75	0.75	0.94	0.94	0.94	0.95	0.95	0.95
Percent Heavy Veh, %	1	0	0	0	0	0	5	1	0	0	1	2
Cap, veh/h	239	12	126	97	56	74	402	1220	9	583	819	255
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.05	0.64	0.64	0.02	0.61	0.61
Sat Flow, veh/h	1350	139	1441	240	635	843	1775	1921	14	1782	1350	420
Grp Volume(v), veh/h	48	0	30	55	0	0	68	0	540	18	0	792
Grp Sat Flow(s),veh/h/ln	1489	0	1441	1718	0	0	1775	0	1935	1782	0	1770
Q Serve(g_s), s	0.0	0.0	1.1	0.0	0.0	0.0	0.8	0.0	8.2	0.2	0.0	18.4
Cycle Q Clear(g_c), s	1.5	0.0	1.1	1.6	0.0	0.0	0.8	0.0	8.2	0.2	0.0	18.4
Prop In Lane	0.94		1.00	0.22		0.49	1.00		0.01	1.00		0.24
Lane Grp Cap(c), veh/h	251	0	126	226	0	0	402	0	1229	583	0	1074
V/C Ratio(X)	0.19	0.00	0.24	0.24	0.00	0.00	0.17	0.00	0.44	0.03	0.00	0.74
Avail Cap(c_a), veh/h	838	0	749	947	0	0	628	0	1229	861	0	1074
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.7	0.0	24.5	24.8	0.0	0.0	6.9	0.0	5.3	4.5	0.0	8.1
Incr Delay (d2), s/veh	0.4	0.0	1.0	0.6	0.0	0.0	0.2	0.0	1.1	0.0	0.0	4.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.5	0.9	0.0	0.0	0.4	0.0	4.6	0.1	0.0	10.2
LnGrp Delay(d),s/veh	25.1	0.0	25.5	25.3	0.0	0.0	7.1	0.0	6.5	4.5	0.0	12.6
LnGrp LOS	C		C	C			A		A	A		B
Approach Vol, veh/h		78			55			608			810	
Approach Delay, s/veh		25.2			25.3			6.5			12.4	
Approach LOS		C			C			A			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.0	41.7		10.1	7.7	40.0		10.1				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0				
Max Q Clear Time (g_c+I1), s	2.2	10.2		3.5	2.8	20.4		3.6				
Green Ext Time (p_c), s	0.0	1.4		0.3	0.1	2.3		0.2				
Intersection Summary												
HCM 2010 Ctrl Delay			11.2									
HCM 2010 LOS			B									

2024 No-Build Traffic Volumes
3: NYS Route 9D & Beacon City Hall/Main Street

Saturday No-Build
11/29/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	2	2	34	0	197	2	374	49	293	318	3
Future Volume (vph)	2	2	2	34	0	197	2	374	49	293	318	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		1%			-8%			-3%			3%	
Storage Length (ft)	0		0	0		70	65		0	120		0
Storage Lanes	0		0	0		1	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98				0.97		0.98			1.00	
Frt		0.955				0.850		0.983			0.999	
Flt Protected		0.984			0.950		0.950			0.950		
Satd. Flow (prot)	0	1742	0	0	1877	1663	1832	1819	0	1760	1851	0
Flt Permitted		0.874					0.552			0.408		
Satd. Flow (perm)	0	1547	0	0	1976	1619	1065	1819	0	756	1851	0
Right Turn on Red			Yes			No			No			Yes
Satd. Flow (RTOR)		3									1	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		133			350			693			388	
Travel Time (s)		3.0			8.0			15.8			8.8	
Confl. Peds. (#/hr)			14			6			48			11
Peak Hour Factor	0.71	0.71	0.71	0.89	0.89	0.89	0.88	0.88	0.88	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%	0%	2%	5%	1%	1%	0%
Adj. Flow (vph)	3	3	3	38	0	221	2	425	56	318	346	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	9	0	0	38	221	2	481	0	318	349	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.01	1.01	1.01	0.95	0.95	0.95	0.98	0.98	0.98	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	2	2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83		20	83	83	83	6		83	6	
Trailing Detector (ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Position(ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Size(ft)	20	43		20	43	43	43	6		43	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		40			40	40	40			40		
Detector 2 Size(ft)		43			43	43	43			43		
Detector 2 Type		Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		
Detector 2 Channel												

2024 No-Build Traffic Volumes
3: NYS Route 9D & Beacon City Hall/Main Street

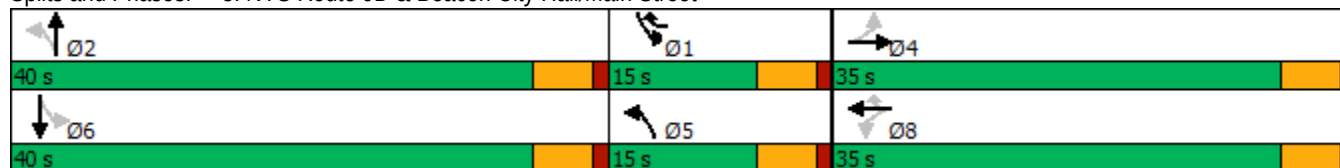
Saturday No-Build
11/29/2021

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

Intersection Summary

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

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



2024 No-Build Traffic Volumes
3: NYS Route 9D & Beacon City Hall/Main Street

Saturday No-Build
11/29/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	2	2	34	0	197	2	374	49	293	318	3
Future Volume (veh/h)	2	2	2	34	0	197	2	374	49	293	318	3
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.95	0.95		0.98	0.99		0.96	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1890	1890	1890	1976	1976	1956	1928	1884	1928	1853	1853	1872
Adj Flow Rate, veh/h	3	3	3	38	0	221	2	425	56	318	346	3
Adj No. of Lanes	0	1	0	0	1	1	1	1	0	1	1	0
Peak Hour Factor	0.71	0.71	0.71	0.89	0.89	0.89	0.88	0.88	0.88	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	1	0	2	5	1	1	0
Cap, veh/h	115	97	67	298	0	315	726	917	121	599	1037	9
Arrive On Green	0.13	0.13	0.13	0.13	0.00	0.13	0.06	0.57	0.57	0.06	0.57	0.57
Sat Flow, veh/h	290	761	526	1423	0	1624	1837	1622	214	1765	1834	16
Grp Volume(v), veh/h	9	0	0	38	0	221	2	0	481	318	0	349
Grp Sat Flow(s),veh/h/ln	1577	0	0	1423	0	1624	1837	0	1835	1765	0	1850
Q Serve(g_s), s	0.0	0.0	0.0	1.1	0.0	3.8	0.0	0.0	9.6	0.0	0.0	6.3
Cycle Q Clear(g_c), s	0.3	0.0	0.0	1.4	0.0	3.8	0.0	0.0	9.6	0.0	0.0	6.3
Prop In Lane	0.33		0.33	1.00		1.00	1.00		0.12	1.00		0.01
Lane Grp Cap(c), veh/h	279	0	0	298	0	315	726	0	1038	599	0	1046
V/C Ratio(X)	0.03	0.00	0.00	0.13	0.00	0.70	0.00	0.00	0.46	0.53	0.00	0.33
Avail Cap(c_a), veh/h	800	0	0	801	0	894	904	0	1038	770	0	1046
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.7	0.0	0.0	24.1	0.0	23.3	6.9	0.0	7.9	13.2	0.0	7.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	2.8	0.0	0.0	1.5	0.7	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	0.6	0.0	3.5	0.0	0.0	5.2	4.5	0.0	3.4
LnGrp Delay(d),s/veh	23.7	0.0	0.0	24.3	0.0	26.2	6.9	0.0	9.4	13.9	0.0	8.1
LnGrp LOS	C			C		C	A		A	B		A
Approach Vol, veh/h		9			259			483			667	
Approach Delay, s/veh		23.7			25.9			9.4			10.9	
Approach LOS		C			C			A			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.0	40.0		12.9	9.0	40.0		12.9				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0				
Max Q Clear Time (g_c+I1), s	2.0	11.6		2.3	2.0	8.3		5.8				
Green Ext Time (p_c), s	1.0	1.3		0.0	0.0	0.8		1.5				
Intersection Summary												
HCM 2010 Ctrl Delay				13.2								
HCM 2010 LOS				B								

2024 No-Build Traffic Volumes
4: NYS Route 9D & Beacon Street/West End Lofts

Saturday No-Build
11/29/2021

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

2024 No-Build Traffic Volumes
4: NYS Route 9D & Beacon Street/West End Lofts

Saturday No-Build
11/29/2021

Intersection												
Int Delay, s/veh	2.7											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	3	3	10	5	82	3	332	10	45	302	7
Future Vol, veh/h	10	3	3	10	5	82	3	332	10	45	302	7
Conflicting Peds, #/hr	0	0	4	0	0	19	0	0	2	0	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	-3	-	-	-4	-	-	4	-
Peak Hour Factor	61	61	61	88	88	88	85	85	85	92	92	92
Heavy Vehicles, %	0	50	0	11	25	1	0	4	11	2	2	0
Mvmt Flow	16	5	5	11	6	93	4	391	12	49	328	8

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

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

Minor Lane/Major Mvmt	NEL	NET	NERNWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	1228	-	-	546	244	1152	-
HCM Lane V/C Ratio	0.003	-	-	0.202	0.107	0.042	-
HCM Control Delay (s)	7.9	0	-	13.3	21.5	8.3	0
HCM Lane LOS	A	A	-	B	C	A	A
HCM 95th %tile Q(veh)	0	-	-	0.7	0.4	0.1	-

2024 No-Build Traffic Volumes
6: South Avenue & NYS Route 9D

Saturday No-Build
11/29/2021

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

2024 No-Build Traffic Volumes
6: South Avenue & NYS Route 9D

Saturday No-Build
11/29/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		23.0			23.2			16.9			19.2	
Queue Length 50th (ft)		133			151			38			41	
Queue Length 95th (ft)		176			206			39			67	
Internal Link Dist (ft)		161			436			114			223	
Turn Bay Length (ft)												
Base Capacity (vph)		830			839			794			691	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.31			0.35			0.12			0.13	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 45

Control Type: Pretimed

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

 Ø2 (R)	 Ø4
65 s	65 s
 Ø6 (R)	 Ø8
65 s	65 s

2024 No-Build Traffic Volumes
6: South Avenue & NYS Route 9D

Saturday No-Build
11/29/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	188	16	13	201	37	14	27	13	32	35	9
Future Volume (veh/h)	9	188	16	13	201	37	14	27	13	32	35	9
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1843	1843	1843	1957	1885	1957	1910	1910	1910	1872	1759	1872
Adj Flow Rate, veh/h	11	229	20	15	236	44	25	49	24	39	43	11
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.82	0.82	0.82	0.85	0.85	0.85	0.55	0.55	0.55	0.82	0.82	0.82
Percent Heavy Veh, %	0	0	0	12	4	0	0	0	0	2	12	0
Cap, veh/h	44	749	64	50	689	124	212	409	190	312	333	81
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
Sat Flow, veh/h	34	1623	138	46	1492	270	384	887	412	590	721	176
Grp Volume(v), veh/h	260	0	0	295	0	0	98	0	0	93	0	0
Grp Sat Flow(s),veh/h/ln	1795	0	0	1808	0	0	1683	0	0	1487	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	11.7	0.0	0.0	13.4	0.0	0.0	4.0	0.0	0.0	4.0	0.0	0.0
Prop In Lane	0.04		0.08	0.05		0.15	0.26		0.24	0.42		0.12
Lane Grp Cap(c), veh/h	857	0	0	863	0	0	812	0	0	726	0	0
V/C Ratio(X)	0.30	0.00	0.00	0.34	0.00	0.00	0.12	0.00	0.00	0.13	0.00	0.00
Avail Cap(c_a), veh/h	857	0	0	863	0	0	812	0	0	726	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	22.0	0.0	0.0	22.5	0.0	0.0	19.9	0.0	0.0	19.9	0.0	0.0
Incr Delay (d2), s/veh	0.9	0.0	0.0	1.1	0.0	0.0	0.3	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	0.0	0.0	7.1	0.0	0.0	2.1	0.0	0.0	2.0	0.0	0.0
LnGrp Delay(d),s/veh	22.9	0.0	0.0	23.5	0.0	0.0	20.2	0.0	0.0	20.3	0.0	0.0
LnGrp LOS	C			C			C			C		
Approach Vol, veh/h		260			295			98			93	
Approach Delay, s/veh		22.9			23.5			20.2			20.3	
Approach LOS		C			C			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		65.0		65.0		65.0		65.0				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		60.0		60.0		60.0		60.0				
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		0.0				
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay				22.5								
HCM 2010 LOS				C								

2024 Build Traffic Volumes
1: NYS Route 9D & Verplanck Avenue

Friday PM Build Typical
11/29/2021

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

2024 Build Traffic Volumes
1: NYS Route 9D & Verplanck Avenue

Friday PM Build Typical
11/29/2021

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

Intersection Summary

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

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



2024 Build Traffic Volumes
1: NYS Route 9D & Verplanck Avenue

Friday PM Build Typical
11/29/2021

								
Movement	NWL	NWR	NET	NER	SWL	SWT		
Lane Configurations								
Traffic Volume (veh/h)	54	299	746	72	209	639		
Future Volume (veh/h)	54	299	746	72	209	639		
Number	3	18	2	12	1	6		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1816	1816	1835	1872	1872	1872		
Adj Flow Rate, veh/h	59	325	811	78	227	695		
Adj No. of Lanes	1	1	1	0	1	1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	360	515	893	86	344	1326		
Arrive On Green	0.21	0.21	0.54	0.54	0.13	0.71		
Sat Flow, veh/h	1730	1544	1648	159	1783	1872		
Grp Volume(v), veh/h	59	325	0	889	227	695		
Grp Sat Flow(s),veh/h/ln	1730	1544	0	1807	1783	1872		
Q Serve(g_s), s	3.4	21.3	0.0	53.3	6.0	20.7		
Cycle Q Clear(g_c), s	3.4	21.3	0.0	53.3	6.0	20.7		
Prop In Lane	1.00	1.00		0.09	1.00			
Lane Grp Cap(c), veh/h	360	515	0	979	344	1326		
V/C Ratio(X)	0.16	0.63	0.00	0.91	0.66	0.52		
Avail Cap(c_a), veh/h	360	515	0	979	344	1326		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	38.9	33.8	0.0	24.8	25.1	8.1		
Incr Delay (d2), s/veh	1.0	5.8	0.0	13.7	9.6	1.5		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	1.7	9.9	0.0	30.1	7.8	11.2		
LnGrp Delay(d),s/veh	39.9	39.6	0.0	38.5	34.6	9.6		
LnGrp LOS	D	D		D	C	A		
Approach Vol, veh/h	384		889			922		
Approach Delay, s/veh	39.6		38.5			15.8		
Approach LOS	D		D			B		
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	20.0	70.0				90.0		30.0
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	15.0	65.0				85.0		25.0
Max Q Clear Time (g_c+I1), s	0.0	0.0				0.0		0.0
Green Ext Time (p_c), s	0.0	0.0				0.0		0.0
Intersection Summary								
HCM 2010 Ctrl Delay			29.1					
HCM 2010 LOS			C					

2024 Build Traffic Volumes
2: NYS Route 9D & Beekman Street/W. Church Street

Friday PM Build Typical

11/29/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	310	24	37	4	15	23	34	437	5	6	525	166
Future Volume (vph)	310	24	37	4	15	23	34	437	5	6	525	166
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		2%			-10%			-6%			3%	
Storage Length (ft)	0		95	0		0	75		0	75		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.98		0.97			1.00			0.99	
Frt			0.850		0.925			0.998			0.964	
Flt Protected		0.956			0.996		0.950			0.950		
Satd. Flow (prot)	0	1760	1599	0	1737	0	1805	1915	0	1778	1774	0
Flt Permitted		0.709			0.966		0.103			0.328		
Satd. Flow (perm)	0	1306	1562	0	1684	0	196	1915	0	614	1774	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			85		25			1			21	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		584			328			388			335	
Travel Time (s)		13.3			7.5			8.8			7.6	
Confl. Peds. (#/hr)			2			13			1			6
Confl. Bikes (#/hr)						1			1			1
Peak Hour Factor	0.71	0.71	0.71	0.92	0.92	0.92	0.84	0.84	0.84	0.98	0.98	0.98
Heavy Vehicles (%)	2%	4%	0%	0%	7%	0%	3%	2%	0%	0%	1%	1%
Adj. Flow (vph)	437	34	52	4	16	25	40	520	6	6	536	169
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	471	52	0	45	0	40	526	0	6	705	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												Yes
Headway Factor	1.01	1.01	1.01	0.94	0.94	0.94	0.96	0.96	0.96	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2		2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83	83	20	83		83	6		83	6	
Trailing Detector (ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Position(ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Size(ft)	20	43	43	20	43		43	6		43	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		40	40		40		40			40		
Detector 2 Size(ft)		43	43		43		43			43		
Detector 2 Type		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex		

2024 Build Traffic Volumes
2: NYS Route 9D & Beekman Street/W. Church Street

Friday PM Build Typical
11/29/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)		0.0	0.0		0.0		0.0			0.0		
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	16.0		4.0	16.0	
Minimum Split (s)	20.0	20.0	20.0	21.0	21.0		9.0	21.0		9.0	21.0	
Total Split (s)	35.0	35.0	35.0	35.0	35.0		15.0	40.0		15.0	40.0	
Total Split (%)	38.9%	38.9%	38.9%	38.9%	38.9%		16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	30.0	30.0	30.0	30.0	30.0		10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		None	Max		None	Max	
Walk Time (s)				5.0	5.0							
Flash Dont Walk (s)				11.0	11.0							
Pedestrian Calls (#/hr)				0	0							
v/c Ratio		0.99	0.08		0.07		0.17	0.56		0.02	0.92	
Control Delay		67.8	2.2		11.8		11.3	18.5		9.5	42.1	
Queue Delay		0.0	0.0		0.0		0.0	4.3		0.0	0.0	
Total Delay		67.8	2.2		11.8		11.3	22.8		9.5	42.1	
Queue Length 50th (ft)		~282	0		7		10	171		1	359	
Queue Length 95th (ft)		#319	2		30		22	304		7	#611	
Internal Link Dist (ft)		504			248			308			255	
Turn Bay Length (ft)			95				75			75		
Base Capacity (vph)		478	625		632		296	932		446	770	
Starvation Cap Reductn		0	0		0		0	321		0	0	
Spillback Cap Reductn		0	0		0		0	0		0	0	
Storage Cap Reductn		0	0		0		0	0		0	0	
Reduced v/c Ratio		0.99	0.08		0.07		0.14	0.86		0.01	0.92	
Intersection Summary												
Area Type:	Other											
Cycle Length: 90												
Actuated Cycle Length: 82.4												
Natural Cycle: 90												
Control Type: Semi Act-Uncoord												
~ Volume exceeds capacity, queue is theoretically infinite.												
Queue shown is maximum after two cycles.												
# 95th percentile volume exceeds capacity, queue may be longer.												
Queue shown is maximum after two cycles.												

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



2024 Build Traffic Volumes
2: NYS Route 9D & Beekman Street/W. Church Street

Friday PM Build Typical
11/29/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	310	24	37	4	15	23	34	437	5	6	525	166
Future Volume (veh/h)	310	24	37	4	15	23	34	437	5	6	525	166
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.96	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1842	1881	1995	1947	1995	1900	1919	1957	1872	1853	1872
Adj Flow Rate, veh/h	437	34	52	4	16	25	40	520	6	6	536	169
Adj No. of Lanes	0	1	1	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.71	0.71	0.71	0.92	0.92	0.92	0.84	0.84	0.84	0.98	0.98	0.98
Percent Heavy Veh, %	2	4	0	0	7	0	3	2	0	0	1	1
Cap, veh/h	193	8	581	48	144	180	172	847	10	308	570	180
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.03	0.45	0.45	0.01	0.42	0.42
Sat Flow, veh/h	299	23	1594	0	396	495	1810	1893	22	1782	1341	423
Grp Volume(v), veh/h	471	0	52	45	0	0	40	0	526	6	0	705
Grp Sat Flow(s),veh/h/ln	323	0	1594	890	0	0	1810	0	1915	1782	0	1764
Q Serve(g_s), s	0.0	0.0	1.8	0.0	0.0	0.0	1.0	0.0	17.2	0.2	0.0	31.6
Cycle Q Clear(g_c), s	30.0	0.0	1.8	30.0	0.0	0.0	1.0	0.0	17.2	0.2	0.0	31.6
Prop In Lane	0.93		1.00	0.09		0.56	1.00		0.01	1.00		0.24
Lane Grp Cap(c), veh/h	202	0	581	372	0	0	172	0	857	308	0	749
V/C Ratio(X)	2.33	0.00	0.09	0.12	0.00	0.00	0.23	0.00	0.61	0.02	0.00	0.94
Avail Cap(c_a), veh/h	202	0	581	372	0	0	339	0	857	513	0	749
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	32.5	0.0	17.2	18.4	0.0	0.0	18.9	0.0	17.3	14.8	0.0	22.7
Incr Delay (d2), s/veh	615.8	0.0	0.1	0.1	0.0	0.0	0.7	0.0	3.3	0.0	0.0	21.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	39.0	0.0	0.8	0.7	0.0	0.0	0.5	0.0	9.8	0.1	0.0	19.7
LnGrp Delay(d),s/veh	648.2	0.0	17.3	18.5	0.0	0.0	19.6	0.0	20.6	14.8	0.0	44.0
LnGrp LOS	F		B	B			B		C	B		D
Approach Vol, veh/h		523			45			566			711	
Approach Delay, s/veh		585.5			18.5			20.5			43.7	
Approach LOS		F			B			C			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.5	41.9		35.0	7.4	40.0		35.0				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0				
Max Q Clear Time (g_c+I1), s	2.2	19.2		32.0	3.0	33.6		32.0				
Green Ext Time (p_c), s	0.0	1.3		0.0	0.0	0.4		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			189.6									
HCM 2010 LOS			F									

2024 Build Traffic Volumes
3: NYS Route 9D & Beacon City Hall/Main Street

Friday PM Build Typical
11/29/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2	2	50	2	162	0	315	80	246	328	0
Future Volume (vph)	0	2	2	50	2	162	0	315	80	246	328	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		1%			-8%			-3%			3%	
Storage Length (ft)	0		0	0		70	65		0	120		0
Storage Lanes	0		0	0		1	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98				0.96		0.98				
Frt		0.932				0.850		0.970				
Flt Protected					0.954					0.950		
Satd. Flow (prot)	0	1722	0	0	1885	1647	1928	1794	0	1743	1853	0
Flt Permitted					0.771					0.404		
Satd. Flow (perm)	0	1722	0	0	1523	1587	1928	1794	0	741	1853	0
Right Turn on Red			Yes			No			No			Yes
Satd. Flow (RTOR)		3										
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		133			350			693			388	
Travel Time (s)		3.0			8.0			15.8			8.8	
Confl. Peds. (#/hr)			9			15			21			12
Confl. Bikes (#/hr)			1						1			
Peak Hour Factor	0.60	0.60	0.60	0.91	0.91	0.91	0.79	0.79	0.79	0.88	0.88	0.88
Heavy Vehicles (%)	0%	0%	0%	0%	0%	2%	0%	2%	5%	2%	1%	0%
Adj. Flow (vph)	0	3	3	55	2	178	0	399	101	280	373	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	6	0	0	57	178	0	500	0	280	373	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.01	1.01	1.01	0.95	0.95	0.95	0.98	0.98	0.98	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	2	2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83		20	83	83	83	6		83	6	
Trailing Detector (ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Position(ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Size(ft)	20	43		20	43	43	43	6		43	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		40			40	40	40			40		
Detector 2 Size(ft)		43			43	43	43			43		
Detector 2 Type		Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		

2024 Build Traffic Volumes
3: NYS Route 9D & Beacon City Hall/Main Street

Friday PM Build Typical

11/29/2021

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

Intersection Summary

Area Type: Other

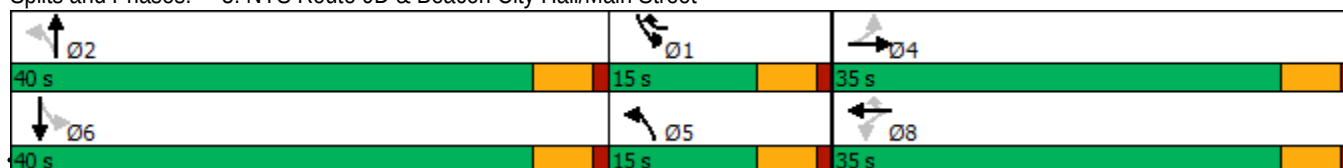
Cycle Length: 90

Actuated Cycle Length: 63.1

Natural Cycle: 70

Control Type: Semi Act-Uncoord

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



2024 Build Traffic Volumes 1:42 pm 11/19/2021 Friday PM Build Typical
RGD

Synchro 8 Report
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2024 Build Traffic Volumes
3: NYS Route 9D & Beacon City Hall/Main Street

Friday PM Build Typical
11/29/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2	2	50	2	162	0	315	80	246	328	0
Future Volume (veh/h)	0	2	2	50	2	162	0	315	80	246	328	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	0.97		0.94	1.00		0.96	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1890	1890	1890	1976	1976	1937	1928	1880	1928	1835	1853	1872
Adj Flow Rate, veh/h	0	3	3	55	2	178	0	399	101	280	373	0
Adj No. of Lanes	0	1	0	0	1	1	1	1	0	1	1	0
Peak Hour Factor	0.60	0.60	0.60	0.91	0.91	0.91	0.79	0.79	0.79	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	2	0	2	5	2	1	0
Cap, veh/h	0	107	107	288	9	303	709	812	206	579	1049	0
Arrive On Green	0.00	0.13	0.13	0.13	0.13	0.13	0.00	0.57	0.57	0.06	0.57	0.00
Sat Flow, veh/h	0	841	841	1366	68	1551	1837	1435	363	1747	1853	0
Grp Volume(v), veh/h	0	0	6	57	0	178	0	0	500	280	373	0
Grp Sat Flow(s),veh/h/ln	0	0	1682	1434	0	1551	1837	0	1798	1747	1853	0
Q Serve(g_s), s	0.0	0.0	0.2	2.1	0.0	2.2	0.0	0.0	10.3	0.0	6.8	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.2	2.3	0.0	2.2	0.0	0.0	10.3	0.0	6.8	0.0
Prop In Lane	0.00		0.50	0.96		1.00	1.00		0.20	1.00		0.00
Lane Grp Cap(c), veh/h	0	0	214	297	0	303	709	0	1018	579	1049	0
V/C Ratio(X)	0.00	0.00	0.03	0.19	0.00	0.59	0.00	0.00	0.49	0.48	0.36	0.00
Avail Cap(c_a), veh/h	0	0	816	816	0	858	889	0	1018	749	1049	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	23.6	24.6	0.0	22.7	0.0	0.0	8.1	13.1	7.3	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.1	0.3	0.0	1.8	0.0	0.0	1.7	0.6	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.1	0.9	0.0	2.8	0.0	0.0	5.5	3.8	3.7	0.0
LnGrp Delay(d),s/veh	0.0	0.0	23.7	24.9	0.0	24.5	0.0	0.0	9.8	13.7	8.2	0.0
LnGrp LOS			C	C		C			A	B	A	
Approach Vol, veh/h		6			235			500			653	
Approach Delay, s/veh		23.7			24.6			9.8			10.6	
Approach LOS		C			C			A			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.0	40.0		12.9	9.0	40.0		12.9				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0				
Max Q Clear Time (g_c+I1), s	2.0	12.3		2.2	0.0	8.8		4.3				
Green Ext Time (p_c), s	0.9	1.4		0.0	0.0	0.9		1.3				
Intersection Summary												
HCM 2010 Ctrl Delay				12.7								
HCM 2010 LOS				B								

2024 Build Traffic Volumes
4: NYS Route 9D & Beacon Street/West End Lofts

Friday PM Build Typical
11/29/2021

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

2024 Build Traffic Volumes
4: NYS Route 9D & Beacon Street/West End Lofts

Friday PM Build Typical
11/29/2021

Intersection												
Int Delay, s/veh	2.1											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	7	2	3	9	2	48	3	340	7	58	306	12
Future Vol, veh/h	7	2	3	9	2	48	3	340	7	58	306	12
Conflicting Peds, #/hr	0	0	2	0	0	4	0	0	3	0	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	-3	-	-	-4	-	-	4	-
Peak Hour Factor	81	81	81	66	66	66	69	69	69	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	5	0	2	2	0
Mvmt Flow	9	2	4	14	3	73	4	493	10	63	333	13

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

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

Minor Lane/Major Mvmt	NEL	NET	NERNWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	1220	-	-	475	228	1056	-
HCM Lane V/C Ratio	0.004	-	-	0.188	0.065	0.06	-
HCM Control Delay (s)	8	0	-	14.3	21.9	8.6	0
HCM Lane LOS	A	A	-	B	C	A	A
HCM 95th %tile Q(veh)	0	-	-	0.7	0.2	0.2	-

2024 Build Traffic Volumes
5: NYS Route 9D & Site Access

Friday PM Build Typical
11/29/2021

						
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	19	5	6	330	297	20
Future Volume (vph)	19	5	6	330	297	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.974				0.991	
Flt Protected	0.961			0.999		
Satd. Flow (prot)	1744	0	0	1861	1846	0
Flt Permitted	0.961			0.999		
Satd. Flow (perm)	1744	0	0	1861	1846	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	176			499	312	
Travel Time (s)	4.0			11.3	7.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	21	5	7	359	323	22
Shared Lane Traffic (%)						
Lane Group Flow (vph)	26	0	0	366	345	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane				Yes	Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					

2024 Build Traffic Volumes
5: NYS Route 9D & Site Access

Friday PM Build Typical
11/29/2021

Intersection

Int Delay, s/veh 0.5

Movement SEL SER NEL NET SWT SWR

Lane Configurations 

Traffic Vol, veh/h 19 5 6 330 297 20

Future Vol, veh/h 19 5 6 330 297 20

Conflicting Peds, #/hr 0 0 0 0 0 0

Sign Control Stop Stop Free Free Free Free

RT Channelized - None - None - None

Storage Length 0 - - - - -

Veh in Median Storage, # 0 - - 0 0 -

Grade, % 0 - - 0 0 -

Peak Hour Factor 92 92 92 92 92 92

Heavy Vehicles, % 2 2 2 2 2 2

Mvmt Flow 21 5 7 359 323 22

Major/Minor Minor2 Major1 Major2

Conflicting Flow All 707 334 345 0 - 0

Stage 1 334 - - - - -

Stage 2 373 - - - - -

Critical Hdwy 6.42 6.22 4.12 - - -

Critical Hdwy Stg 1 5.42 - - - - -

Critical Hdwy Stg 2 5.42 - - - - -

Follow-up Hdwy 3.518 3.318 2.218 - - -

Pot Cap-1 Maneuver 402 708 1214 - - -

Stage 1 725 - - - - -

Stage 2 696 - - - - -

Platoon blocked, % - - -

Mov Cap-1 Maneuver 399 708 1214 - - -

Mov Cap-2 Maneuver 505 - - - - -

Stage 1 720 - - - - -

Stage 2 696 - - - - -

Approach SE NE SW

HCM Control Delay, s 12 0.1 0

HCM LOS B

Minor Lane/Major Mvmt NEL NET SELn1 SWT SWR

Capacity (veh/h) 1214 - 537 - -

HCM Lane V/C Ratio 0.005 - 0.049 - -

HCM Control Delay (s) 8 0 12 - -

HCM Lane LOS A A B - -

HCM 95th %tile Q(veh) 0 - 0.2 - -

2024 Build Traffic Volumes
6: South Avenue & NYS Route 9D

Friday PM Build Typical
11/29/2021

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

2024 Build Traffic Volumes
6: South Avenue & NYS Route 9D

Friday PM Build Typical
11/29/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		24.3			24.6			16.5			19.8	
Queue Length 50th (ft)		171			193			15			48	
Queue Length 95th (ft)		247			247			34			74	
Internal Link Dist (ft)		161			436			114			223	
Turn Bay Length (ft)												
Base Capacity (vph)		832			846			826			680	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.39			0.43			0.05			0.16	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 45

Control Type: Pretimed

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

 Ø2 (R)	 Ø4
65 s	65 s
 Ø6 (R)	 Ø8
65 s	65 s

2024 Build Traffic Volumes
6: South Avenue & NYS Route 9D

Friday PM Build Typical
11/29/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	260	19	9	236	55	7	21	7	46	29	10
Future Volume (veh/h)	10	260	19	9	236	55	7	21	7	46	29	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1843	1843	1843	1957	1891	1957	1910	1910	1910	1872	1779	1872
Adj Flow Rate, veh/h	11	289	21	11	284	66	8	25	8	58	37	13
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.90	0.90	0.90	0.83	0.83	0.83	0.85	0.85	0.85	0.79	0.79	0.79
Percent Heavy Veh, %	0	0	0	12	4	0	0	0	0	2	12	0
Cap, veh/h	40	765	54	39	674	153	167	511	156	394	244	82
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
Sat Flow, veh/h	25	1659	118	23	1461	332	289	1108	339	761	530	177
Grp Volume(v), veh/h	321	0	0	361	0	0	41	0	0	108	0	0
Grp Sat Flow(s),veh/h/ln	1802	0	0	1815	0	0	1736	0	0	1467	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	0.0	0.0
Cycle Q Clear(g_c), s	15.0	0.0	0.0	17.2	0.0	0.0	1.6	0.0	0.0	5.2	0.0	0.0
Prop In Lane	0.03		0.07	0.03		0.18	0.20		0.20	0.54		0.12
Lane Grp Cap(c), veh/h	860	0	0	866	0	0	834	0	0	720	0	0
V/C Ratio(X)	0.37	0.00	0.00	0.42	0.00	0.00	0.05	0.00	0.00	0.15	0.00	0.00
Avail Cap(c_a), veh/h	860	0	0	866	0	0	834	0	0	720	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	22.9	0.0	0.0	23.5	0.0	0.0	19.3	0.0	0.0	20.2	0.0	0.0
Incr Delay (d2), s/veh	1.2	0.0	0.0	1.5	0.0	0.0	0.1	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.8	0.0	0.0	9.0	0.0	0.0	0.8	0.0	0.0	2.3	0.0	0.0
LnGrp Delay(d),s/veh	24.1	0.0	0.0	24.9	0.0	0.0	19.4	0.0	0.0	20.6	0.0	0.0
LnGrp LOS	C			C			B			C		
Approach Vol, veh/h		321			361			41			108	
Approach Delay, s/veh		24.1			24.9			19.4			20.6	
Approach LOS		C			C			B			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		65.0		65.0		65.0		65.0				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		60.0		60.0		60.0		60.0				
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		0.0				
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay				23.8								
HCM 2010 LOS				C								

2024 Build Traffic Volumes
1: NYS Route 9D & Verplanck Avenue

Friday PM Build Event Entry
11/29/2021

						
Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	60	299	748	72	209	669
Future Volume (vph)	60	299	748	72	209	669
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	5%		3%			-1%
Storage Length (ft)	85	0		0	340	
Storage Lanes	1	1		0	1	
Taper Length (ft)	86				86	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.988			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1725	1544	1813	0	1778	1872
Flt Permitted	0.950				0.077	
Satd. Flow (perm)	1725	1544	1813	0	144	1872
Right Turn on Red		No		No		
Satd. Flow (RTOR)						
Link Speed (mph)	30		30			30
Link Distance (ft)	427		462			529
Travel Time (s)	9.7		10.5			12.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	65	325	813	78	227	727
Shared Lane Traffic (%)						
Lane Group Flow (vph)	65	325	891	0	227	727
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			
Headway Factor	1.03	1.03	1.02	1.02	0.99	0.99
Turning Speed (mph)	15	9		9	15	
Turn Type	Prot	pm+ov	NA		pm+pt	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8			6	
Minimum Split (s)	21.0	9.0	15.0		9.0	15.0
Total Split (s)	30.0	20.0	70.0		20.0	90.0
Total Split (%)	25.0%	16.7%	58.3%		16.7%	75.0%
Maximum Green (s)	25.0	15.0	65.0		15.0	85.0
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0		5.0	5.0
Lead/Lag		Lead	Lag		Lead	
Lead-Lag Optimize?		Yes	Yes		Yes	
Walk Time (s)	5.0		5.0			
Flash Dont Walk (s)	11.0		11.0			
Pedestrian Calls (#/hr)	0		0			
v/c Ratio	0.18	0.56	0.91		0.74	0.55
Control Delay	40.7	34.3	39.3		38.9	10.3

2024 Build Traffic Volumes
1: NYS Route 9D & Verplanck Avenue

Friday PM Build Event Entry
11/29/2021

						
Lane Group	NWL	NWR	NET	NER	SWL	SWT
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	40.7	34.3	39.3		38.9	10.3
Queue Length 50th (ft)	42	197	597		99	240
Queue Length 95th (ft)	83	293	#891		#211	330
Internal Link Dist (ft)	347		382			449
Turn Bay Length (ft)	85				340	
Base Capacity (vph)	359	579	982		306	1326
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.18	0.56	0.91		0.74	0.55

Intersection Summary

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

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



								
Movement	NWL	NWR	NET	NER	SWL	SWT		
Lane Configurations								
Traffic Volume (veh/h)	60	299	748	72	209	669		
Future Volume (veh/h)	60	299	748	72	209	669		
Number	3	18	2	12	1	6		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1816	1816	1835	1872	1872	1872		
Adj Flow Rate, veh/h	65	325	813	78	227	727		
Adj No. of Lanes	1	1	1	0	1	1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	360	515	893	86	343	1326		
Arrive On Green	0.21	0.21	0.54	0.54	0.13	0.71		
Sat Flow, veh/h	1730	1544	1649	158	1783	1872		
Grp Volume(v), veh/h	65	325	0	891	227	727		
Grp Sat Flow(s),veh/h/ln	1730	1544	0	1807	1783	1872		
Q Serve(g_s), s	3.7	21.3	0.0	53.5	6.1	22.2		
Cycle Q Clear(g_c), s	3.7	21.3	0.0	53.5	6.1	22.2		
Prop In Lane	1.00	1.00		0.09	1.00			
Lane Grp Cap(c), veh/h	360	515	0	979	343	1326		
V/C Ratio(X)	0.18	0.63	0.00	0.91	0.66	0.55		
Avail Cap(c_a), veh/h	360	515	0	979	343	1326		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	39.1	33.8	0.0	24.9	25.4	8.3		
Incr Delay (d2), s/veh	1.1	5.8	0.0	13.9	9.7	1.6		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	1.9	9.9	0.0	30.3	7.9	11.9		
LnGrp Delay(d),s/veh	40.2	39.6	0.0	38.8	35.1	10.0		
LnGrp LOS	D	D		D	D	A		
Approach Vol, veh/h	390		891			954		
Approach Delay, s/veh	39.7		38.8			16.0		
Approach LOS	D		D			B		
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	20.0	70.0				90.0		30.0
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	15.0	65.0				85.0		25.0
Max Q Clear Time (g_c+I1), s	0.0	0.0				0.0		0.0
Green Ext Time (p_c), s	0.0	0.0				0.0		0.0
Intersection Summary								
HCM 2010 Ctrl Delay			29.2					
HCM 2010 LOS			C					

2024 Build Traffic Volumes
2: NYS Route 9D & Beekman Street/W. Church Street

Friday PM Build Event Entry

11/29/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	310	24	40	4	15	23	35	439	5	6	561	166
Future Volume (vph)	310	24	40	4	15	23	35	439	5	6	561	166
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		2%			-10%			-6%			3%	
Storage Length (ft)	0		95	0		0	75		0	75		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.98		0.97			1.00			0.99	
Frt			0.850		0.925			0.998			0.966	
Flt Protected		0.956			0.996		0.950			0.950		
Satd. Flow (prot)	0	1760	1599	0	1737	0	1805	1915	0	1778	1778	0
Flt Permitted		0.709			0.966		0.100			0.326		
Satd. Flow (perm)	0	1306	1562	0	1684	0	190	1915	0	610	1778	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			85		25			1			19	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		584			328			388			335	
Travel Time (s)		13.3			7.5			8.8			7.6	
Confl. Peds. (#/hr)			2			13			1			6
Confl. Bikes (#/hr)						1			1			1
Peak Hour Factor	0.71	0.71	0.71	0.92	0.92	0.92	0.84	0.84	0.84	0.98	0.98	0.98
Heavy Vehicles (%)	2%	4%	0%	0%	7%	0%	3%	2%	0%	0%	1%	1%
Adj. Flow (vph)	437	34	56	4	16	25	42	523	6	6	572	169
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	471	56	0	45	0	42	529	0	6	741	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.01	1.01	1.01	0.94	0.94	0.94	0.96	0.96	0.96	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2		2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83	83	20	83		83	6		83	6	
Trailing Detector (ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Position(ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Size(ft)	20	43	43	20	43		43	6		43	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		40	40		40		40			40		
Detector 2 Size(ft)		43	43		43		43			43		
Detector 2 Type		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex		

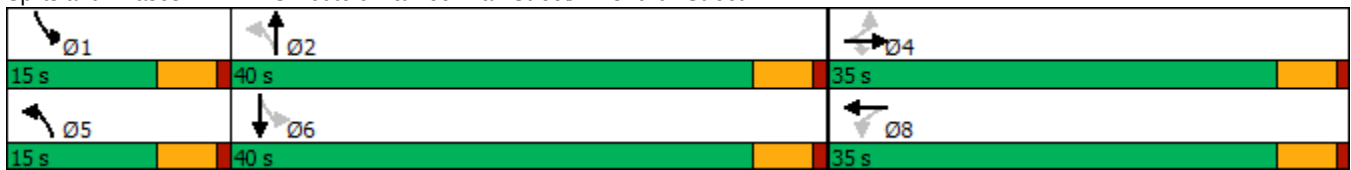
2024 Build Traffic Volumes
2: NYS Route 9D & Beekman Street/W. Church Street

Friday PM Build Event Entry

11/29/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)		0.0	0.0		0.0		0.0			0.0		
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	16.0		4.0	16.0	
Minimum Split (s)	20.0	20.0	20.0	21.0	21.0		9.0	21.0		9.0	21.0	
Total Split (s)	35.0	35.0	35.0	35.0	35.0		15.0	40.0		15.0	40.0	
Total Split (%)	38.9%	38.9%	38.9%	38.9%	38.9%		16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	30.0	30.0	30.0	30.0	30.0		10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		None	Max		None	Max	
Walk Time (s)				5.0	5.0							
Flash Dont Walk (s)				11.0	11.0							
Pedestrian Calls (#/hr)				0	0							
v/c Ratio		0.99	0.09		0.07		0.19	0.57		0.02	0.96	
Control Delay		68.0	2.5		11.8		11.5	18.6		9.5	50.4	
Queue Delay		0.0	0.0		0.0		0.0	4.6		0.0	0.0	
Total Delay		68.0	2.5		11.8		11.5	23.1		9.5	50.4	
Queue Length 50th (ft)		~282	0		7		10	172		1	~406	
Queue Length 95th (ft)		#319	4		30		23	306		7	#658	
Internal Link Dist (ft)		504			248			308			255	
Turn Bay Length (ft)			95				75			75		
Base Capacity (vph)		477	625		632		293	932		444	769	
Starvation Cap Reductn		0	0		0		0	322		0	0	
Spillback Cap Reductn		0	0		0		0	0		0	0	
Storage Cap Reductn		0	0		0		0	0		0	0	
Reduced v/c Ratio		0.99	0.09		0.07		0.14	0.87		0.01	0.96	
Intersection Summary												
Area Type:	Other											
Cycle Length: 90												
Actuated Cycle Length: 82.4												
Natural Cycle: 90												
Control Type: Semi Act-Uncoord												
~ Volume exceeds capacity, queue is theoretically infinite.												
Queue shown is maximum after two cycles.												
# 95th percentile volume exceeds capacity, queue may be longer.												
Queue shown is maximum after two cycles.												

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



2024 Build Traffic Volumes
2: NYS Route 9D & Beekman Street/W. Church Street

Friday PM Build Event Entry
11/29/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	310	24	40	4	15	23	35	439	5	6	561	166
Future Volume (veh/h)	310	24	40	4	15	23	35	439	5	6	561	166
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.96	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1842	1881	1995	1947	1995	1900	1919	1957	1872	1853	1872
Adj Flow Rate, veh/h	437	34	56	4	16	25	42	523	6	6	572	169
Adj No. of Lanes	0	1	1	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.71	0.71	0.71	0.92	0.92	0.92	0.84	0.84	0.84	0.98	0.98	0.98
Percent Heavy Veh, %	2	4	0	0	7	0	3	2	0	0	1	1
Cap, veh/h	193	8	580	48	144	180	148	848	10	306	579	171
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.03	0.45	0.45	0.01	0.42	0.42
Sat Flow, veh/h	299	23	1594	0	396	495	1810	1893	22	1782	1365	403
Grp Volume(v), veh/h	471	0	56	45	0	0	42	0	529	6	0	741
Grp Sat Flow(s),veh/h/ln	323	0	1594	890	0	0	1810	0	1915	1782	0	1768
Q Serve(g_s), s	0.0	0.0	1.9	0.0	0.0	0.0	1.1	0.0	17.4	0.2	0.0	34.2
Cycle Q Clear(g_c), s	30.0	0.0	1.9	30.0	0.0	0.0	1.1	0.0	17.4	0.2	0.0	34.2
Prop In Lane	0.93		1.00	0.09		0.56	1.00		0.01	1.00		0.23
Lane Grp Cap(c), veh/h	202	0	580	371	0	0	148	0	858	306	0	750
V/C Ratio(X)	2.34	0.00	0.10	0.12	0.00	0.00	0.28	0.00	0.62	0.02	0.00	0.99
Avail Cap(c_a), veh/h	202	0	580	371	0	0	313	0	858	511	0	750
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	32.5	0.0	17.3	18.4	0.0	0.0	19.9	0.0	17.4	14.9	0.0	23.5
Incr Delay (d2), s/veh	616.7	0.0	0.1	0.1	0.0	0.0	1.0	0.0	3.3	0.0	0.0	29.9
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	39.1	0.0	0.9	0.7	0.0	0.0	0.6	0.0	9.9	0.1	0.0	22.9
LnGrp Delay(d),s/veh	649.2	0.0	17.4	18.6	0.0	0.0	21.0	0.0	20.7	14.9	0.0	53.5
LnGrp LOS	F		B	B			C		C	B		D
Approach Vol, veh/h		527			45			571			747	
Approach Delay, s/veh		582.1			18.6			20.7			53.2	
Approach LOS		F			B			C			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.5	42.0		35.0	7.5	40.0		35.0				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0				
Max Q Clear Time (g_c+I1), s	2.2	19.4		32.0	3.1	36.2		32.0				
Green Ext Time (p_c), s	0.0	1.3		0.0	0.0	0.0		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			190.0									
HCM 2010 LOS			F									

2024 Build Traffic Volumes
3: NYS Route 9D & Beacon City Hall/Main Street

Friday PM Build Event Entry
11/29/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2	2	56	2	162	0	317	80	246	367	0
Future Volume (vph)	0	2	2	56	2	162	0	317	80	246	367	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		1%			-8%			-3%			3%	
Storage Length (ft)	0		0	0		70	65		0	120		0
Storage Lanes	0		0	0		1	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98				0.96		0.98				
Frt		0.932				0.850		0.970				
Flt Protected					0.954					0.950		
Satd. Flow (prot)	0	1722	0	0	1885	1647	1928	1794	0	1743	1853	0
Flt Permitted					0.743					0.402		
Satd. Flow (perm)	0	1722	0	0	1468	1587	1928	1794	0	738	1853	0
Right Turn on Red			Yes			No			No			Yes
Satd. Flow (RTOR)		3										
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		133			350			693			388	
Travel Time (s)		3.0			8.0			15.8			8.8	
Confl. Peds. (#/hr)			9			15			21			12
Confl. Bikes (#/hr)			1						1			
Peak Hour Factor	0.60	0.60	0.60	0.91	0.91	0.91	0.79	0.79	0.79	0.88	0.88	0.88
Heavy Vehicles (%)	0%	0%	0%	0%	0%	2%	0%	2%	5%	2%	1%	0%
Adj. Flow (vph)	0	3	3	62	2	178	0	401	101	280	417	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	6	0	0	64	178	0	502	0	280	417	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.01	1.01	1.01	0.95	0.95	0.95	0.98	0.98	0.98	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	2	2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83		20	83	83	83	6		83	6	
Trailing Detector (ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Position(ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Size(ft)	20	43		20	43	43	43	6		43	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		40			40	40	40			40		
Detector 2 Size(ft)		43			43	43	43			43		
Detector 2 Type		Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		

2024 Build Traffic Volumes
3: NYS Route 9D & Beacon City Hall/Main Street

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0	0.0	0.0			0.0		
Turn Type		NA		Perm	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8	1	5	2		1	6	
Permitted Phases	4			8		8	2			6		
Detector Phase	4	4		8	8	1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		8.0	8.0	4.0	4.0	31.0		4.0	35.0	
Minimum Split (s)	21.0	21.0		21.0	21.0	9.0	9.0	36.0		9.0	40.0	
Total Split (s)	35.0	35.0		35.0	35.0	15.0	15.0	40.0		15.0	40.0	
Total Split (%)	38.9%	38.9%		38.9%	38.9%	16.7%	16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	30.0	30.0		30.0	30.0	10.0	10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0			5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag						Lag	Lag	Lead		Lag	Lead	
Lead-Lag Optimize?						Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None	None	None	Max		None	Max	
Walk Time (s)	5.0	5.0						5.0				
Flash Dont Walk (s)	11.0	11.0						11.0				
Pedestrian Calls (#/hr)	0	0						0				
v/c Ratio		0.03			0.31	0.47		0.50		0.38	0.27	
Control Delay		21.2			30.8	21.8		12.6		6.1	3.4	
Queue Delay		0.0			0.0	0.0		0.0		0.0	0.2	
Total Delay		21.2			30.8	21.8		12.6		6.1	3.6	
Queue Length 50th (ft)		1			25	54		132		29	46	
Queue Length 95th (ft)		7			59	100		192		59	89	
Internal Link Dist (ft)		53			270			613			308	
Turn Bay Length (ft)						70				120		
Base Capacity (vph)		831			706	396		1008		753	1539	
Starvation Cap Reductn		0			0	0		0		0	530	
Spillback Cap Reductn		0			0	0		0		0	0	
Storage Cap Reductn		0			0	0		0		0	0	
Reduced v/c Ratio		0.01			0.09	0.45		0.50		0.37	0.41	

Intersection Summary

Area Type: Other

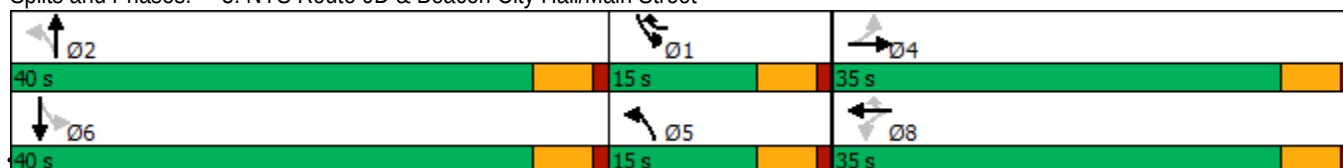
Cycle Length: 90

Actuated Cycle Length: 63.3

Natural Cycle: 70

Control Type: Semi Act-Uncoord

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



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RGD

Synchro 8 Report
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2024 Build Traffic Volumes
3: NYS Route 9D & Beacon City Hall/Main Street

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2	2	56	2	162	0	317	80	246	367	0
Future Volume (veh/h)	0	2	2	56	2	162	0	317	80	246	367	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	0.97		0.94	1.00		0.96	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1890	1890	1890	1976	1976	1937	1928	1880	1928	1835	1853	1872
Adj Flow Rate, veh/h	0	3	3	62	2	178	0	401	101	280	417	0
Adj No. of Lanes	0	1	0	0	1	1	1	1	0	1	1	0
Peak Hour Factor	0.60	0.60	0.60	0.91	0.91	0.91	0.79	0.79	0.79	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	2	0	2	5	2	1	0
Cap, veh/h	0	107	107	289	8	303	674	813	205	577	1048	0
Arrive On Green	0.00	0.13	0.13	0.13	0.13	0.13	0.00	0.57	0.57	0.06	0.57	0.00
Sat Flow, veh/h	0	841	841	1371	60	1551	1837	1437	362	1747	1853	0
Grp Volume(v), veh/h	0	0	6	64	0	178	0	0	502	280	417	0
Grp Sat Flow(s),veh/h/ln	0	0	1682	1431	0	1551	1837	0	1799	1747	1853	0
Q Serve(g_s), s	0.0	0.0	0.2	2.4	0.0	2.2	0.0	0.0	10.4	0.0	7.8	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.2	2.6	0.0	2.2	0.0	0.0	10.4	0.0	7.8	0.0
Prop In Lane	0.00		0.50	0.97		1.00	1.00		0.20	1.00		0.00
Lane Grp Cap(c), veh/h	0	0	214	297	0	303	674	0	1018	577	1048	0
V/C Ratio(X)	0.00	0.00	0.03	0.22	0.00	0.59	0.00	0.00	0.49	0.49	0.40	0.00
Avail Cap(c_a), veh/h	0	0	816	816	0	858	853	0	1018	748	1048	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	23.6	24.7	0.0	22.7	0.0	0.0	8.1	13.2	7.5	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.1	0.4	0.0	1.8	0.0	0.0	1.7	0.6	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.1	1.0	0.0	2.8	0.0	0.0	5.5	3.8	4.3	0.0
LnGrp Delay(d),s/veh	0.0	0.0	23.7	25.1	0.0	24.5	0.0	0.0	9.8	13.8	8.7	0.0
LnGrp LOS			C	C		C			A	B	A	
Approach Vol, veh/h		6			242			502			697	
Approach Delay, s/veh		23.7			24.6			9.8			10.7	
Approach LOS		C			C			A			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.0	40.0		12.9	9.0	40.0		12.9				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0				
Max Q Clear Time (g_c+I1), s	2.0	12.4		2.2	0.0	9.8		4.6				
Green Ext Time (p_c), s	0.9	1.4		0.0	0.0	1.0		1.4				
Intersection Summary												
HCM 2010 Ctrl Delay			12.8									
HCM 2010 LOS			B									

2024 Build Traffic Volumes
4: NYS Route 9D & Beacon Street/West End Lofts

Friday PM Build Event Entry
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Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	7	2	3	9	2	48	3	342	7	58	351	12
Future Volume (vph)	7	2	3	9	2	48	3	342	7	58	351	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			-3%			-4%			4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.964			0.890			0.997			0.996	
Flt Protected		0.971			0.992						0.993	
Satd. Flow (prot)	0	1778	0	0	1703	0	0	1843	0	0	1806	0
Flt Permitted		0.971			0.992						0.993	
Satd. Flow (perm)	0	1778	0	0	1703	0	0	1843	0	0	1806	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		162			281			312			693	
Travel Time (s)		3.7			6.4			7.1			15.8	
Confl. Peds. (#/hr)			2			4			3			2
Confl. Bikes (#/hr)			2									
Peak Hour Factor	0.81	0.81	0.81	0.66	0.66	0.66	0.69	0.69	0.69	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	5%	0%	2%	2%	0%
Adj. Flow (vph)	9	2	4	14	3	73	4	496	10	63	382	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	15	0	0	90	0	0	510	0	0	458	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	0.98	0.98	0.98	0.97	0.97	0.97	1.03	1.03	1.03
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											

2024 Build Traffic Volumes
4: NYS Route 9D & Beacon Street/West End Lofts

Friday PM Build Event Entry
11/29/2021

Intersection												
Int Delay, s/veh	2.1											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	7	2	3	9	2	48	3	342	7	58	351	12
Future Vol, veh/h	7	2	3	9	2	48	3	342	7	58	351	12
Conflicting Peds, #/hr	0	0	2	0	0	4	0	0	3	0	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	-3	-	-	-4	-	-	4	-
Peak Hour Factor	81	81	81	66	66	66	69	69	69	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	5	0	2	2	0
Mvmt Flow	9	2	4	14	3	73	4	496	10	63	382	13

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1068	1034	393	1032	1035	508	397	0	0	509	0	0
Stage 1	517	517	-	512	512	-	-	-	-	-	-	-
Stage 2	551	517	-	520	523	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	6.5	5.9	5.9	4.1	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	5.5	-	5.5	4.9	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	5.5	4.9	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.218	-	-
Pot Cap-1 Maneuver	201	234	660	253	278	593	1173	-	-	1056	-	-
Stage 1	545	537	-	597	588	-	-	-	-	-	-	-
Stage 2	522	537	-	592	582	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	163	214	658	233	254	590	1171	-	-	1053	-	-
Mov Cap-2 Maneuver	163	214	-	233	254	-	-	-	-	-	-	-
Stage 1	541	495	-	593	584	-	-	-	-	-	-	-
Stage 2	451	533	-	540	536	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	23.3	14.7	0.1	1.2
HCM LOS	C	B		

Minor Lane/Major Mvmt	NEL	NET	NERNWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	1171	-	-	461	211	1053	-
HCM Lane V/C Ratio	0.004	-	-	0.194	0.07	0.06	-
HCM Control Delay (s)	8.1	0	-	14.7	23.3	8.6	0
HCM Lane LOS	A	A	-	B	C	A	A
HCM 95th %tile Q(veh)	0	-	-	0.7	0.2	0.2	-



Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	21	6	21	330	297	65
Future Volume (vph)	21	6	21	330	297	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.968				0.976	
Flt Protected	0.963			0.997		
Satd. Flow (prot)	1736	0	0	1857	1818	0
Flt Permitted	0.963			0.997		
Satd. Flow (perm)	1736	0	0	1857	1818	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	176			499	312	
Travel Time (s)	4.0			11.3	7.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	23	7	23	359	323	71
Shared Lane Traffic (%)						
Lane Group Flow (vph)	30	0	0	382	394	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane				Yes	Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	60	60	60			60
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type: Other
Control Type: Unsignalized

Intersection						
Int Delay, s/veh	0.7					
Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	21	6	21	330	297	65
Future Vol, veh/h	21	6	21	330	297	65
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	23	7	23	359	323	71
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	764	359	394	0	-	0
Stage 1	359	-	-	-	-	-
Stage 2	405	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	372	685	1165	-	-	-
Stage 1	707	-	-	-	-	-
Stage 2	673	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	363	685	1165	-	-	-
Mov Cap-2 Maneuver	476	-	-	-	-	-
Stage 1	689	-	-	-	-	-
Stage 2	673	-	-	-	-	-
Approach	SE	NE		SW		
HCM Control Delay, s	12.5	0.5		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NEL	NET	SELn1	SWT	SWR	
Capacity (veh/h)	1165	-	511	-	-	
HCM Lane V/C Ratio	0.02	-	0.057	-	-	
HCM Control Delay (s)	8.2	0	12.5	-	-	
HCM Lane LOS	A	A	B	-	-	
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-	

2024 Build Traffic Volumes
6: South Avenue & NYS Route 9D

Friday PM Build Event Entry
11/29/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	261	19	9	251	55	7	21	7	46	29	10
Future Volume (vph)	10	261	19	9	251	55	7	21	7	46	29	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		6%			-6%			-1%			3%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor								1.00			0.99	
Frt		0.991			0.976			0.974			0.984	
Flt Protected		0.998			0.999			0.990			0.974	
Satd. Flow (prot)	0	1823	0	0	1843	0	0	1841	0	0	1696	0
Flt Permitted		0.984			0.988			0.961			0.842	
Satd. Flow (perm)	0	1797	0	0	1823	0	0	1781	0	0	1466	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			11			8			7	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		241			516			194			303	
Travel Time (s)		5.5			11.7			4.4			6.9	
Confl. Peds. (#/hr)							6					6
Peak Hour Factor	0.90	0.90	0.90	0.83	0.83	0.83	0.85	0.85	0.85	0.79	0.79	0.79
Heavy Vehicles (%)	0%	0%	0%	12%	4%	0%	0%	0%	0%	2%	12%	0%
Adj. Flow (vph)	11	290	21	11	302	66	8	25	8	58	37	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	322	0	0	379	0	0	41	0	0	108	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	0.96	0.96	0.96	0.99	0.99	0.99	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	21.0	21.0		21.0	21.0		21.0	21.0		21.0	21.0	
Total Split (s)	65.0	65.0		65.0	65.0		65.0	65.0		65.0	65.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	60.0	60.0		60.0	60.0		60.0	60.0		60.0	60.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
v/c Ratio		0.39			0.45			0.05			0.16	
Control Delay		24.4			25.1			16.5			19.8	

2024 Build Traffic Volumes
6: South Avenue & NYS Route 9D

Friday PM Build Event Entry
11/29/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		24.4			25.1			16.5			19.8	
Queue Length 50th (ft)		172			206			15			48	
Queue Length 95th (ft)		248			262			34			74	
Internal Link Dist (ft)		161			436			114			223	
Turn Bay Length (ft)												
Base Capacity (vph)		831			847			826			680	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.39			0.45			0.05			0.16	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 45

Control Type: Pretimed

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

 Ø2 (R)	 Ø4
65 s	65 s
 Ø6 (R)	 Ø8
65 s	65 s

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	261	19	9	251	55	7	21	7	46	29	10
Future Volume (veh/h)	10	261	19	9	251	55	7	21	7	46	29	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1843	1843	1843	1957	1890	1957	1910	1910	1910	1872	1779	1872
Adj Flow Rate, veh/h	11	290	21	11	302	66	8	25	8	58	37	13
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.90	0.90	0.90	0.83	0.83	0.83	0.85	0.85	0.85	0.79	0.79	0.79
Percent Heavy Veh, %	0	0	0	12	4	0	0	0	0	2	12	0
Cap, veh/h	40	765	54	38	683	146	167	511	156	394	244	82
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
Sat Flow, veh/h	25	1658	117	22	1480	317	289	1108	339	761	530	177
Grp Volume(v), veh/h	322	0	0	379	0	0	41	0	0	108	0	0
Grp Sat Flow(s),veh/h/ln	1801	0	0	1818	0	0	1736	0	0	1467	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	0.0	0.0
Cycle Q Clear(g_c), s	15.0	0.0	0.0	18.2	0.0	0.0	1.6	0.0	0.0	5.2	0.0	0.0
Prop In Lane	0.03		0.07	0.03		0.17	0.20		0.20	0.54		0.12
Lane Grp Cap(c), veh/h	860	0	0	868	0	0	834	0	0	720	0	0
V/C Ratio(X)	0.37	0.00	0.00	0.44	0.00	0.00	0.05	0.00	0.00	0.15	0.00	0.00
Avail Cap(c_a), veh/h	860	0	0	868	0	0	834	0	0	720	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	22.9	0.0	0.0	23.8	0.0	0.0	19.3	0.0	0.0	20.2	0.0	0.0
Incr Delay (d2), s/veh	1.2	0.0	0.0	1.6	0.0	0.0	0.1	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.8	0.0	0.0	9.5	0.0	0.0	0.8	0.0	0.0	2.3	0.0	0.0
LnGrp Delay(d),s/veh	24.1	0.0	0.0	25.4	0.0	0.0	19.4	0.0	0.0	20.6	0.0	0.0
LnGrp LOS	C			C			B			C		
Approach Vol, veh/h		322			379			41			108	
Approach Delay, s/veh		24.1			25.4			19.4			20.6	
Approach LOS		C			C			B			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		65.0		65.0		65.0		65.0				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		60.0		60.0		60.0		60.0				
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		0.0				
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay				24.0								
HCM 2010 LOS				C								

2024 Build Traffic Volumes
1: NYS Route 9D & Verplanck Avenue

Friday PM Build Event Exit
11/29/2021

						
Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	54	299	778	78	209	639
Future Volume (vph)	54	299	778	78	209	639
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	5%		3%			-1%
Storage Length (ft)	85	0		0	340	
Storage Lanes	1	1		0	1	
Taper Length (ft)	86				86	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.988			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1725	1544	1813	0	1778	1872
Flt Permitted	0.950				0.057	
Satd. Flow (perm)	1725	1544	1813	0	107	1872
Right Turn on Red		No		No		
Satd. Flow (RTOR)						
Link Speed (mph)	30		30			30
Link Distance (ft)	427		462			529
Travel Time (s)	9.7		10.5			12.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	59	325	846	85	227	695
Shared Lane Traffic (%)						
Lane Group Flow (vph)	59	325	931	0	227	695
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			
Headway Factor	1.03	1.03	1.02	1.02	0.99	0.99
Turning Speed (mph)	15	9		9	15	
Turn Type	Prot	pm+ov	NA		pm+pt	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8			6	
Minimum Split (s)	21.0	9.0	15.0		9.0	15.0
Total Split (s)	30.0	20.0	70.0		20.0	90.0
Total Split (%)	25.0%	16.7%	58.3%		16.7%	75.0%
Maximum Green (s)	25.0	15.0	65.0		15.0	85.0
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0		5.0	5.0
Lead/Lag		Lead	Lag		Lead	
Lead-Lag Optimize?		Yes	Yes		Yes	
Walk Time (s)	5.0		5.0			
Flash Dont Walk (s)	11.0		11.0			
Pedestrian Calls (#/hr)	0		0			
v/c Ratio	0.16	0.56	0.95		0.80	0.52
Control Delay	40.4	34.3	45.4		51.1	9.9

2024 Build Traffic Volumes
1: NYS Route 9D & Verplanck Avenue

Friday PM Build Event Exit
11/29/2021

						
Lane Group	NWL	NWR	NET	NER	SWL	SWT
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	40.4	34.3	45.4		51.1	9.9
Queue Length 50th (ft)	38	197	651		119	223
Queue Length 95th (ft)	76	293	#957		#247	307
Internal Link Dist (ft)	347		382			449
Turn Bay Length (ft)	85				340	
Base Capacity (vph)	359	579	982		284	1326
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.16	0.56	0.95		0.80	0.52

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NET and 6:SWTL, Start of Green

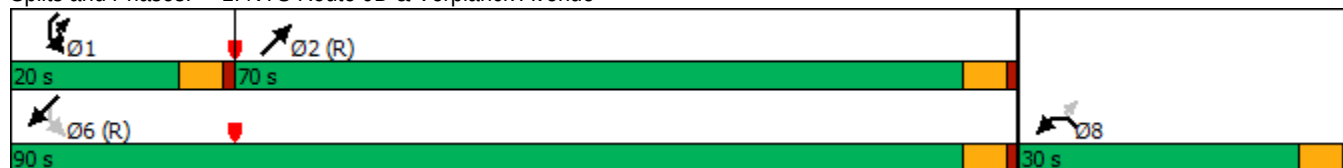
Natural Cycle: 90

Control Type: Pretimed

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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



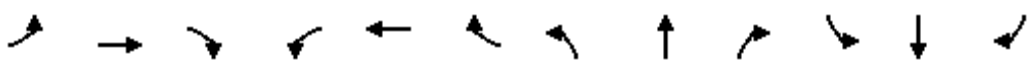
2024 Build Traffic Volumes
1: NYS Route 9D & Verplanck Avenue

Friday PM Build Event Exit
11/29/2021

								
Movement	NWL	NWR	NET	NER	SWL	SWT		
Lane Configurations								
Traffic Volume (veh/h)	54	299	778	78	209	639		
Future Volume (veh/h)	54	299	778	78	209	639		
Number	3	18	2	12	1	6		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1816	1816	1835	1872	1872	1872		
Adj Flow Rate, veh/h	59	325	846	85	227	695		
Adj No. of Lanes	1	1	1	0	1	1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	360	515	889	89	315	1326		
Arrive On Green	0.21	0.21	0.54	0.54	0.13	0.71		
Sat Flow, veh/h	1730	1544	1641	165	1783	1872		
Grp Volume(v), veh/h	59	325	0	931	227	695		
Grp Sat Flow(s),veh/h/ln	1730	1544	0	1806	1783	1872		
Q Serve(g_s), s	3.4	21.3	0.0	58.5	8.2	20.7		
Cycle Q Clear(g_c), s	3.4	21.3	0.0	58.5	8.2	20.7		
Prop In Lane	1.00	1.00		0.09	1.00			
Lane Grp Cap(c), veh/h	360	515	0	978	315	1326		
V/C Ratio(X)	0.16	0.63	0.00	0.95	0.72	0.52		
Avail Cap(c_a), veh/h	360	515	0	978	315	1326		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	38.9	33.8	0.0	26.0	31.9	8.1		
Incr Delay (d2), s/veh	1.0	5.8	0.0	19.3	13.3	1.5		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	1.7	9.9	0.0	34.2	8.3	11.2		
LnGrp Delay(d),s/veh	39.9	39.6	0.0	45.3	45.2	9.6		
LnGrp LOS	D	D		D	D	A		
Approach Vol, veh/h	384		931			922		
Approach Delay, s/veh	39.6		45.3			18.4		
Approach LOS	D		D			B		
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	20.0	70.0				90.0		30.0
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	15.0	65.0				85.0		25.0
Max Q Clear Time (g_c+I1), s	0.0	0.0				0.0		0.0
Green Ext Time (p_c), s	0.0	0.0				0.0		0.0
Intersection Summary								
HCM 2010 Ctrl Delay			33.2					
HCM 2010 LOS			C					

2024 Build Traffic Volumes
2: NYS Route 9D & Beekman Street/W. Church Street

Friday PM Build Event Exit
11/29/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	310	24	37	4	15	23	38	478	5	6	525	166
Future Volume (vph)	310	24	37	4	15	23	38	478	5	6	525	166
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		2%			-10%			-6%			3%	
Storage Length (ft)	0		95	0		0	75		0	75		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.98		0.97			1.00			0.99	
Frt			0.850		0.925			0.998			0.964	
Flt Protected		0.956			0.996		0.950			0.950		
Satd. Flow (prot)	0	1760	1599	0	1737	0	1805	1915	0	1778	1774	0
Flt Permitted		0.709			0.966		0.102			0.283		
Satd. Flow (perm)	0	1306	1562	0	1684	0	194	1915	0	530	1774	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			85		25			1			21	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		584			328			388			335	
Travel Time (s)		13.3			7.5			8.8			7.6	
Confl. Peds. (#/hr)			2			13			1			6
Confl. Bikes (#/hr)						1			1			1
Peak Hour Factor	0.71	0.71	0.71	0.92	0.92	0.92	0.84	0.84	0.84	0.98	0.98	0.98
Heavy Vehicles (%)	2%	4%	0%	0%	7%	0%	3%	2%	0%	0%	1%	1%
Adj. Flow (vph)	437	34	52	4	16	25	45	569	6	6	536	169
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	471	52	0	45	0	45	575	0	6	705	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												Yes
Headway Factor	1.01	1.01	1.01	0.94	0.94	0.94	0.96	0.96	0.96	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2		2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83	83	20	83		83	6		83	6	
Trailing Detector (ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Position(ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Size(ft)	20	43	43	20	43		43	6		43	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		40	40		40		40			40		
Detector 2 Size(ft)		43	43		43		43			43		
Detector 2 Type		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex		

2024 Build Traffic Volumes
2: NYS Route 9D & Beekman Street/W. Church Street

Friday PM Build Event Exit

11/29/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)		0.0	0.0		0.0		0.0			0.0		
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	16.0		4.0	16.0	
Minimum Split (s)	20.0	20.0	20.0	21.0	21.0		9.0	21.0		9.0	21.0	
Total Split (s)	35.0	35.0	35.0	35.0	35.0		15.0	40.0		15.0	40.0	
Total Split (%)	38.9%	38.9%	38.9%	38.9%	38.9%		16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	30.0	30.0	30.0	30.0	30.0		10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		None	Max		None	Max	
Walk Time (s)				5.0	5.0							
Flash Dont Walk (s)				11.0	11.0							
Pedestrian Calls (#/hr)				0	0							
v/c Ratio		0.99	0.08		0.07		0.19	0.62		0.02	0.92	
Control Delay		68.2	2.2		11.8		11.6	19.7		9.5	42.4	
Queue Delay		0.0	0.0		0.0		0.0	7.6		0.0	0.0	
Total Delay		68.2	2.2		11.8		11.6	27.3		9.5	42.4	
Queue Length 50th (ft)		~283	0		7		11	194		1	361	
Queue Length 95th (ft)		#319	2		30		24	341		7	#612	
Internal Link Dist (ft)		504			248			308			255	
Turn Bay Length (ft)			95				75			75		
Base Capacity (vph)		477	624		631		295	933		414	769	
Starvation Cap Reductn		0	0		0		0	311		0	0	
Spillback Cap Reductn		0	0		0		0	0		0	0	
Storage Cap Reductn		0	0		0		0	0		0	0	
Reduced v/c Ratio		0.99	0.08		0.07		0.15	0.92		0.01	0.92	
Intersection Summary												
Area Type:	Other											
Cycle Length: 90												
Actuated Cycle Length: 82.5												
Natural Cycle: 90												
Control Type: Semi Act-Uncoord												
~ Volume exceeds capacity, queue is theoretically infinite.												
Queue shown is maximum after two cycles.												
# 95th percentile volume exceeds capacity, queue may be longer.												
Queue shown is maximum after two cycles.												

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



2024 Build Traffic Volumes
2: NYS Route 9D & Beekman Street/W. Church Street

Friday PM Build Event Exit
11/29/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	310	24	37	4	15	23	38	478	5	6	525	166
Future Volume (veh/h)	310	24	37	4	15	23	38	478	5	6	525	166
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.96	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1842	1881	1995	1947	1995	1900	1919	1957	1872	1853	1872
Adj Flow Rate, veh/h	437	34	52	4	16	25	45	569	6	6	536	169
Adj No. of Lanes	0	1	1	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.71	0.71	0.71	0.92	0.92	0.92	0.84	0.84	0.84	0.98	0.98	0.98
Percent Heavy Veh, %	2	4	0	0	7	0	3	2	0	0	1	1
Cap, veh/h	193	8	579	47	144	180	174	850	9	276	568	179
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.03	0.45	0.45	0.01	0.42	0.42
Sat Flow, veh/h	299	23	1594	0	396	495	1810	1895	20	1782	1341	423
Grp Volume(v), veh/h	471	0	52	45	0	0	45	0	575	6	0	705
Grp Sat Flow(s),veh/h/ln	323	0	1594	890	0	0	1810	0	1915	1782	0	1764
Q Serve(g_s), s	0.0	0.0	1.8	0.0	0.0	0.0	1.1	0.0	19.5	0.2	0.0	31.7
Cycle Q Clear(g_c), s	30.0	0.0	1.8	30.0	0.0	0.0	1.1	0.0	19.5	0.2	0.0	31.7
Prop In Lane	0.93		1.00	0.09		0.56	1.00		0.01	1.00		0.24
Lane Grp Cap(c), veh/h	201	0	579	371	0	0	174	0	859	276	0	748
V/C Ratio(X)	2.34	0.00	0.09	0.12	0.00	0.00	0.26	0.00	0.67	0.02	0.00	0.94
Avail Cap(c_a), veh/h	201	0	579	371	0	0	337	0	859	481	0	748
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	32.5	0.0	17.3	18.5	0.0	0.0	19.0	0.0	17.9	15.3	0.0	22.8
Incr Delay (d2), s/veh	618.0	0.0	0.1	0.1	0.0	0.0	0.8	0.0	4.1	0.0	0.0	21.6
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	39.1	0.0	0.8	0.7	0.0	0.0	0.6	0.0	11.2	0.1	0.0	19.8
LnGrp Delay(d),s/veh	650.6	0.0	17.4	18.6	0.0	0.0	19.8	0.0	22.0	15.3	0.0	44.4
LnGrp LOS	F		B	B			B		C	B		D
Approach Vol, veh/h		523			45			620			711	
Approach Delay, s/veh		587.6			18.6			21.9			44.2	
Approach LOS		F			B			C			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.5	42.1		35.0	7.6	40.0		35.0				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0				
Max Q Clear Time (g_c+I1), s	2.2	21.5		32.0	3.1	33.7		32.0				
Green Ext Time (p_c), s	0.0	1.4		0.0	0.1	0.4		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			186.0									
HCM 2010 LOS			F									

2024 Build Traffic Volumes
3: NYS Route 9D & Beacon City Hall/Main Street

Friday PM Build Event Exit
11/29/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2	2	50	2	162	0	356	86	246	328	0
Future Volume (vph)	0	2	2	50	2	162	0	356	86	246	328	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		1%			-8%			-3%			3%	
Storage Length (ft)	0		0	0		70	65		0	120		0
Storage Lanes	0		0	0		1	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98				0.96		0.98				
Frt		0.932				0.850		0.971				
Flt Protected					0.954					0.950		
Satd. Flow (prot)	0	1722	0	0	1885	1647	1928	1797	0	1743	1853	0
Flt Permitted					0.771					0.360		
Satd. Flow (perm)	0	1722	0	0	1523	1587	1928	1797	0	661	1853	0
Right Turn on Red			Yes			No			No			Yes
Satd. Flow (RTOR)		3										
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		133			350			693			388	
Travel Time (s)		3.0			8.0			15.8			8.8	
Confl. Peds. (#/hr)			9			15			21			12
Confl. Bikes (#/hr)			1						1			
Peak Hour Factor	0.60	0.60	0.60	0.91	0.91	0.91	0.79	0.79	0.79	0.88	0.88	0.88
Heavy Vehicles (%)	0%	0%	0%	0%	0%	2%	0%	2%	5%	2%	1%	0%
Adj. Flow (vph)	0	3	3	55	2	178	0	451	109	280	373	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	6	0	0	57	178	0	560	0	280	373	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.01	1.01	1.01	0.95	0.95	0.95	0.98	0.98	0.98	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	2	2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83		20	83	83	83	6		83	6	
Trailing Detector (ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Position(ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Size(ft)	20	43		20	43	43	43	6		43	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		40			40	40	40			40		
Detector 2 Size(ft)		43			43	43	43			43		
Detector 2 Type		Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		

2024 Build Traffic Volumes
3: NYS Route 9D & Beacon City Hall/Main Street

Friday PM Build Event Exit

11/29/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0	0.0	0.0			0.0		
Turn Type		NA		Perm	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8	1	5	2		1	6	
Permitted Phases	4			8		8	2			6		
Detector Phase	4	4		8	8	1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		8.0	8.0	4.0	4.0	31.0		4.0	35.0	
Minimum Split (s)	21.0	21.0		21.0	21.0	9.0	9.0	36.0		9.0	40.0	
Total Split (s)	35.0	35.0		35.0	35.0	15.0	15.0	40.0		15.0	40.0	
Total Split (%)	38.9%	38.9%		38.9%	38.9%	16.7%	16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	30.0	30.0		30.0	30.0	10.0	10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0			5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag						Lag	Lag	Lead		Lag	Lead	
Lead-Lag Optimize?						Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None	None	None	Max		None	Max	
Walk Time (s)	5.0	5.0						5.0				
Flash Dont Walk (s)	11.0	11.0						11.0				
Pedestrian Calls (#/hr)	0	0						0				
v/c Ratio		0.03			0.27	0.47		0.55		0.41	0.24	
Control Delay		21.5			30.1	22.0		13.3		6.8	3.1	
Queue Delay		0.0			0.0	0.0		0.0		0.0	0.2	
Total Delay		21.5			30.1	22.0		13.3		6.8	3.3	
Queue Length 50th (ft)		1			22	54		153		28	39	
Queue Length 95th (ft)		7			54	100		217		56	75	
Internal Link Dist (ft)		53			270			613			308	
Turn Bay Length (ft)						70				120		
Base Capacity (vph)		833			735	392		1013		706	1544	
Starvation Cap Reductn		0			0	0		0		0	551	
Spillback Cap Reductn		0			0	0		0		0	0	
Storage Cap Reductn		0			0	0		0		0	0	
Reduced v/c Ratio		0.01			0.08	0.45		0.55		0.40	0.38	

Intersection Summary

Area Type: Other

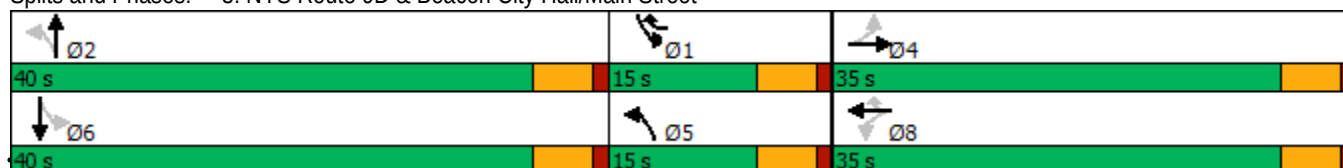
Cycle Length: 90

Actuated Cycle Length: 63.1

Natural Cycle: 70

Control Type: Semi Act-Uncoord

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



2024 Build Traffic Volumes 11:40 am 11/29/2021 Friday PM Build Event Exit
RGD

Synchro 8 Report
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2024 Build Traffic Volumes
3: NYS Route 9D & Beacon City Hall/Main Street

Friday PM Build Event Exit
11/29/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2	2	50	2	162	0	356	86	246	328	0
Future Volume (veh/h)	0	2	2	50	2	162	0	356	86	246	328	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	0.97		0.94	1.00		0.96	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1890	1890	1890	1976	1976	1937	1928	1880	1928	1835	1853	1872
Adj Flow Rate, veh/h	0	3	3	55	2	178	0	451	109	280	373	0
Adj No. of Lanes	0	1	0	0	1	1	1	1	0	1	1	0
Peak Hour Factor	0.60	0.60	0.60	0.91	0.91	0.91	0.79	0.79	0.79	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	2	0	2	5	2	1	0
Cap, veh/h	0	107	107	288	9	303	709	821	198	536	1049	0
Arrive On Green	0.00	0.13	0.13	0.13	0.13	0.13	0.00	0.57	0.57	0.06	0.57	0.00
Sat Flow, veh/h	0	841	841	1366	68	1551	1837	1451	351	1747	1853	0
Grp Volume(v), veh/h	0	0	6	57	0	178	0	0	560	280	373	0
Grp Sat Flow(s),veh/h/ln	0	0	1682	1434	0	1551	1837	0	1801	1747	1853	0
Q Serve(g_s), s	0.0	0.0	0.2	2.1	0.0	2.2	0.0	0.0	12.1	0.0	6.8	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.2	2.3	0.0	2.2	0.0	0.0	12.1	0.0	6.8	0.0
Prop In Lane	0.00		0.50	0.96		1.00	1.00		0.19	1.00		0.00
Lane Grp Cap(c), veh/h	0	0	214	297	0	303	709	0	1020	536	1049	0
V/C Ratio(X)	0.00	0.00	0.03	0.19	0.00	0.59	0.00	0.00	0.55	0.52	0.36	0.00
Avail Cap(c_a), veh/h	0	0	816	816	0	858	889	0	1020	707	1049	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	23.6	24.6	0.0	22.7	0.0	0.0	8.5	14.9	7.3	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.1	0.3	0.0	1.8	0.0	0.0	2.1	0.8	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.1	0.9	0.0	2.8	0.0	0.0	6.5	4.2	3.7	0.0
LnGrp Delay(d),s/veh	0.0	0.0	23.7	24.9	0.0	24.5	0.0	0.0	10.6	15.7	8.2	0.0
LnGrp LOS			C	C		C			B	B	A	
Approach Vol, veh/h		6			235			560			653	
Approach Delay, s/veh		23.7			24.6			10.6			11.4	
Approach LOS		C			C			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.0	40.0		12.9	9.0	40.0		12.9				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0				
Max Q Clear Time (g_c+I1), s	2.0	14.1		2.2	0.0	8.8		4.3				
Green Ext Time (p_c), s	0.9	1.5		0.0	0.0	0.9		1.3				
Intersection Summary												
HCM 2010 Ctrl Delay			13.3									
HCM 2010 LOS			B									

2024 Build Traffic Volumes
4: NYS Route 9D & Beacon Street/West End Lofts

Friday PM Build Event Exit
11/29/2021

												
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	7	2	3	9	2	48	3	387	7	58	306	12
Future Volume (vph)	7	2	3	9	2	48	3	387	7	58	306	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			-3%			-4%			4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.964			0.890			0.998			0.996	
Flt Protected		0.971			0.992						0.992	
Satd. Flow (prot)	0	1778	0	0	1703	0	0	1844	0	0	1805	0
Flt Permitted		0.971			0.992						0.992	
Satd. Flow (perm)	0	1778	0	0	1703	0	0	1844	0	0	1805	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		162			281			312			693	
Travel Time (s)		3.7			6.4			7.1			15.8	
Confl. Peds. (#/hr)			2			4			3			2
Confl. Bikes (#/hr)			2									
Peak Hour Factor	0.81	0.81	0.81	0.66	0.66	0.66	0.69	0.69	0.69	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	5%	0%	2%	2%	0%
Adj. Flow (vph)	9	2	4	14	3	73	4	561	10	63	333	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	15	0	0	90	0	0	575	0	0	409	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	0.98	0.98	0.98	0.97	0.97	0.97	1.03	1.03	1.03
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											

2024 Build Traffic Volumes
4: NYS Route 9D & Beacon Street/West End Lofts

Friday PM Build Event Exit
11/29/2021

Intersection												
Int Delay, s/veh	2.2											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	7	2	3	9	2	48	3	387	7	58	306	12
Future Vol, veh/h	7	2	3	9	2	48	3	387	7	58	306	12
Conflicting Peds, #/hr	0	0	2	0	0	4	0	0	3	0	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	-3	-	-	-4	-	-	4	-
Peak Hour Factor	81	81	81	66	66	66	69	69	69	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	5	0	2	2	0
Mvmt Flow	9	2	4	14	3	73	4	561	10	63	333	13

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1084	1050	344	1048	1051	573	348	0	0	574	0	0
Stage 1	468	468	-	577	577	-	-	-	-	-	-	-
Stage 2	616	582	-	471	474	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	6.5	5.9	5.9	4.1	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	5.5	-	5.5	4.9	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	5.5	4.9	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.218	-	-
Pot Cap-1 Maneuver	196	229	703	247	272	548	1222	-	-	999	-	-
Stage 1	579	565	-	557	556	-	-	-	-	-	-	-
Stage 2	481	502	-	624	607	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	157	209	701	227	249	545	1220	-	-	997	-	-
Mov Cap-2 Maneuver	157	209	-	227	249	-	-	-	-	-	-	-
Stage 1	575	520	-	553	552	-	-	-	-	-	-	-
Stage 2	411	498	-	569	558	-	-	-	-	-	-	-

Approach	SE		NW		NE		SW	
HCM Control Delay, s	23.9		15.4		0.1		1.4	
HCM LOS	C		C					

Minor Lane/Major Mvmt	NEL	NET	NERNWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	1220	-	-	435	205	997	-
HCM Lane V/C Ratio	0.004	-	-	0.206	0.072	0.063	-
HCM Control Delay (s)	8	0	-	15.4	23.9	8.9	0
HCM Lane LOS	A	A	-	C	C	A	A
HCM 95th %tile Q(veh)	0	-	-	0.8	0.2	0.2	-

2024 Build Traffic Volumes
5: NYS Route 9D & Site Access

Friday PM Build Event Exit
11/29/2021



Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	66	21	6	330	297	20
Future Volume (vph)	66	21	6	330	297	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.967				0.991	
Flt Protected	0.963			0.999		
Satd. Flow (prot)	1735	0	0	1861	1846	0
Flt Permitted	0.963			0.999		
Satd. Flow (perm)	1735	0	0	1861	1846	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	176			499	312	
Travel Time (s)	4.0			11.3	7.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	72	23	7	359	323	22
Shared Lane Traffic (%)						
Lane Group Flow (vph)	95	0	0	366	345	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane				Yes	Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	60	60	60			60
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type: Other
Control Type: Unsignalized

Intersection						
Int Delay, s/veh	1.6					
Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	66	21	6	330	297	20
Future Vol, veh/h	66	21	6	330	297	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	72	23	7	359	323	22
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	707	334	345	0	-	0
Stage 1	334	-	-	-	-	-
Stage 2	373	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	402	708	1214	-	-	-
Stage 1	725	-	-	-	-	-
Stage 2	696	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	399	708	1214	-	-	-
Mov Cap-2 Maneuver	505	-	-	-	-	-
Stage 1	720	-	-	-	-	-
Stage 2	696	-	-	-	-	-
Approach	SE	NE		SW		
HCM Control Delay, s	13	0.1		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NEL	NET	SELn1	SWT	SWR	
Capacity (veh/h)	1214	-	543	-	-	
HCM Lane V/C Ratio	0.005	-	0.174	-	-	
HCM Control Delay (s)	8	0	13	-	-	
HCM Lane LOS	A	A	B	-	-	
HCM 95th %tile Q(veh)	0	-	0.6	-	-	

2024 Build Traffic Volumes
6: South Avenue & NYS Route 9D

Friday PM Build Event Exit
11/29/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	276	19	9	236	55	7	21	7	46	29	10
Future Volume (vph)	10	276	19	9	236	55	7	21	7	46	29	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		6%			-6%			-1%			3%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor								1.00			0.99	
Frt		0.992			0.975			0.974			0.984	
Flt Protected		0.998			0.998			0.990			0.974	
Satd. Flow (prot)	0	1825	0	0	1840	0	0	1841	0	0	1696	0
Flt Permitted		0.985			0.987			0.961			0.842	
Satd. Flow (perm)	0	1801	0	0	1819	0	0	1781	0	0	1466	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			12			8			7	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		241			516			194			303	
Travel Time (s)		5.5			11.7			4.4			6.9	
Confl. Peds. (#/hr)							6					6
Peak Hour Factor	0.90	0.90	0.90	0.83	0.83	0.83	0.85	0.85	0.85	0.79	0.79	0.79
Heavy Vehicles (%)	0%	0%	0%	12%	4%	0%	0%	0%	0%	2%	12%	0%
Adj. Flow (vph)	11	307	21	11	284	66	8	25	8	58	37	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	339	0	0	361	0	0	41	0	0	108	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	0.96	0.96	0.96	0.99	0.99	0.99	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	21.0	21.0		21.0	21.0		21.0	21.0		21.0	21.0	
Total Split (s)	65.0	65.0		65.0	65.0		65.0	65.0		65.0	65.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	60.0	60.0		60.0	60.0		60.0	60.0		60.0	60.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
v/c Ratio		0.41			0.43			0.05			0.16	
Control Delay		24.8			24.6			16.5			19.8	

2024 Build Traffic Volumes
6: South Avenue & NYS Route 9D

Friday PM Build Event Exit
11/29/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		24.8			24.6			16.5			19.8	
Queue Length 50th (ft)		184			193			15			48	
Queue Length 95th (ft)		263			247			34			74	
Internal Link Dist (ft)		161			436			114			223	
Turn Bay Length (ft)												
Base Capacity (vph)		832			846			826			680	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.41			0.43			0.05			0.16	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 45

Control Type: Pretimed

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

 Ø2 (R)	 Ø4
65 s	65 s
 Ø6 (R)	 Ø8
65 s	65 s

2024 Build Traffic Volumes
6: South Avenue & NYS Route 9D

Friday PM Build Event Exit
11/29/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	276	19	9	236	55	7	21	7	46	29	10
Future Volume (veh/h)	10	276	19	9	236	55	7	21	7	46	29	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1843	1843	1843	1957	1891	1957	1910	1910	1910	1872	1779	1872
Adj Flow Rate, veh/h	11	307	21	11	284	66	8	25	8	58	37	13
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.90	0.90	0.90	0.83	0.83	0.83	0.85	0.85	0.85	0.79	0.79	0.79
Percent Heavy Veh, %	0	0	0	12	4	0	0	0	0	2	12	0
Cap, veh/h	40	770	52	39	674	153	167	511	156	394	244	82
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
Sat Flow, veh/h	24	1668	112	23	1460	332	289	1108	339	761	530	177
Grp Volume(v), veh/h	339	0	0	361	0	0	41	0	0	108	0	0
Grp Sat Flow(s),veh/h/ln	1804	0	0	1814	0	0	1736	0	0	1467	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	0.0	0.0
Cycle Q Clear(g_c), s	16.0	0.0	0.0	17.2	0.0	0.0	1.6	0.0	0.0	5.2	0.0	0.0
Prop In Lane	0.03		0.06	0.03		0.18	0.20		0.20	0.54		0.12
Lane Grp Cap(c), veh/h	861	0	0	866	0	0	834	0	0	720	0	0
V/C Ratio(X)	0.39	0.00	0.00	0.42	0.00	0.00	0.05	0.00	0.00	0.15	0.00	0.00
Avail Cap(c_a), veh/h	861	0	0	866	0	0	834	0	0	720	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	23.2	0.0	0.0	23.5	0.0	0.0	19.3	0.0	0.0	20.2	0.0	0.0
Incr Delay (d2), s/veh	1.4	0.0	0.0	1.5	0.0	0.0	0.1	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.3	0.0	0.0	9.0	0.0	0.0	0.8	0.0	0.0	2.3	0.0	0.0
LnGrp Delay(d),s/veh	24.5	0.0	0.0	25.0	0.0	0.0	19.4	0.0	0.0	20.6	0.0	0.0
LnGrp LOS	C			C			B			C		
Approach Vol, veh/h		339			361			41			108	
Approach Delay, s/veh		24.5			25.0			19.4			20.6	
Approach LOS		C			C			B			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		65.0		65.0		65.0		65.0				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		60.0		60.0		60.0		60.0				
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		0.0				
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay				24.0								
HCM 2010 LOS				C								

2024 Build Traffic Volumes
1: NYS Route 9D & Verplanck Avenue

Saturday Build Typical
11/29/2021

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

2024 Build Traffic Volumes
1: NYS Route 9D & Verplanck Avenue

Saturday Build Typical
11/29/2021

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

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NET and 6:SWTL, Start of Green

Natural Cycle: 60

Control Type: Pretimed

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



2024 Build Traffic Volumes
1: NYS Route 9D & Verplanck Avenue

Saturday Build Typical
11/29/2021

								
Movement	NWL	NWR	NET	NER	SWL	SWT		
Lane Configurations								
Traffic Volume (veh/h)	73	232	581	65	159	650		
Future Volume (veh/h)	73	232	581	65	159	650		
Number	3	18	2	12	1	6		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1816	1816	1835	1872	1872	1872		
Adj Flow Rate, veh/h	79	252	632	71	173	707		
Adj No. of Lanes	1	1	1	0	1	1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	360	515	878	99	468	1326		
Arrive On Green	0.21	0.21	0.54	0.54	0.13	0.71		
Sat Flow, veh/h	1730	1544	1621	182	1783	1872		
Grp Volume(v), veh/h	79	252	0	703	173	707		
Grp Sat Flow(s),veh/h/ln	1730	1544	0	1803	1783	1872		
Q Serve(g_s), s	4.5	15.6	0.0	35.2	4.1	21.2		
Cycle Q Clear(g_c), s	4.5	15.6	0.0	35.2	4.1	21.2		
Prop In Lane	1.00	1.00		0.10	1.00			
Lane Grp Cap(c), veh/h	360	515	0	976	468	1326		
V/C Ratio(X)	0.22	0.49	0.00	0.72	0.37	0.53		
Avail Cap(c_a), veh/h	360	515	0	976	468	1326		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	39.4	31.9	0.0	20.7	14.2	8.2		
Incr Delay (d2), s/veh	1.4	3.3	0.0	4.6	2.2	1.5		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	2.3	7.1	0.0	18.6	2.6	11.4		
LnGrp Delay(d),s/veh	40.8	35.2	0.0	25.2	16.4	9.7		
LnGrp LOS	D	D		C	B	A		
Approach Vol, veh/h	331		703			880		
Approach Delay, s/veh	36.5		25.2			11.0		
Approach LOS	D		C			B		
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	20.0	70.0				90.0		30.0
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	15.0	65.0				85.0		25.0
Max Q Clear Time (g_c+I1), s	0.0	0.0				0.0		0.0
Green Ext Time (p_c), s	0.0	0.0				0.0		0.0
Intersection Summary								
HCM 2010 Ctrl Delay			20.7					
HCM 2010 LOS			C					

2024 Build Traffic Volumes
2: NYS Route 9D & Beekman Street/W. Church Street

Saturday Build Typical
11/29/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	1	25	9	12	20	67	519	4	17	592	179
Future Volume (vph)	33	1	25	9	12	20	67	519	4	17	592	179
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		2%			-10%			-6%			3%	
Storage Length (ft)	0		95	0		0	75		0	75		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.96		0.98			1.00			0.99	
Frt			0.850		0.934			0.999			0.965	
Flt Protected		0.953			0.989		0.950			0.950		
Satd. Flow (prot)	0	1775	1599	0	1815	0	1771	1936	0	1778	1771	0
Flt Permitted		0.842			0.912		0.220			0.439		
Satd. Flow (perm)	0	1568	1533	0	1673	0	410	1936	0	822	1771	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			85		27						20	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		584			328			388			335	
Travel Time (s)		13.3			7.5			8.8			7.6	
Confl. Peds. (#/hr)			12			4			1			10
Confl. Bikes (#/hr)			3									
Peak Hour Factor	0.73	0.73	0.73	0.75	0.75	0.75	0.94	0.94	0.94	0.95	0.95	0.95
Heavy Vehicles (%)	1%	0%	0%	0%	0%	0%	5%	1%	0%	0%	1%	2%
Adj. Flow (vph)	45	1	34	12	16	27	71	552	4	18	623	188
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	46	34	0	55	0	71	556	0	18	811	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.01	1.01	1.01	0.94	0.94	0.94	0.96	0.96	0.96	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2		2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83	83	20	83		83	6		83	6	
Trailing Detector (ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Position(ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Size(ft)	20	43	43	20	43		43	6		43	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		40	40		40		40			40		
Detector 2 Size(ft)		43	43		43		43			43		
Detector 2 Type		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex		

2024 Build Traffic Volumes
2: NYS Route 9D & Beekman Street/W. Church Street

Saturday Build Typical
11/29/2021

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

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 58.6

Natural Cycle: 70

Control Type: Semi Act-Uncoord

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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



2024 Build Traffic Volumes
2: NYS Route 9D & Beekman Street/W. Church Street

Saturday Build Typical
11/29/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	1	25	9	12	20	67	519	4	17	592	179
Future Volume (veh/h)	33	1	25	9	12	20	67	519	4	17	592	179
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.90	0.94		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1863	1881	1995	1995	1995	1864	1938	1957	1872	1849	1872
Adj Flow Rate, veh/h	45	1	34	12	16	27	71	552	4	18	623	188
Adj No. of Lanes	0	1	1	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.73	0.73	0.73	0.75	0.75	0.75	0.94	0.94	0.94	0.95	0.95	0.95
Percent Heavy Veh, %	1	0	0	0	0	0	5	1	0	0	1	2
Cap, veh/h	248	4	126	97	56	74	391	1221	9	572	824	249
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.05	0.64	0.64	0.02	0.61	0.61
Sat Flow, veh/h	1426	48	1441	239	635	843	1775	1921	14	1782	1361	411
Grp Volume(v), veh/h	46	0	34	55	0	0	71	0	556	18	0	811
Grp Sat Flow(s),veh/h/ln	1474	0	1441	1717	0	0	1775	0	1935	1782	0	1772
Q Serve(g_s), s	0.0	0.0	1.3	0.0	0.0	0.0	0.8	0.0	8.5	0.2	0.0	19.2
Cycle Q Clear(g_c), s	1.4	0.0	1.3	1.6	0.0	0.0	0.8	0.0	8.5	0.2	0.0	19.2
Prop In Lane	0.98		1.00	0.22		0.49	1.00		0.01	1.00		0.23
Lane Grp Cap(c), veh/h	253	0	126	227	0	0	391	0	1230	572	0	1073
V/C Ratio(X)	0.18	0.00	0.27	0.24	0.00	0.00	0.18	0.00	0.45	0.03	0.00	0.76
Avail Cap(c_a), veh/h	831	0	748	946	0	0	614	0	1230	850	0	1073
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.7	0.0	24.6	24.8	0.0	0.0	7.2	0.0	5.4	4.6	0.0	8.3
Incr Delay (d2), s/veh	0.3	0.0	1.1	0.5	0.0	0.0	0.2	0.0	1.2	0.0	0.0	5.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.5	0.9	0.0	0.0	0.4	0.0	4.9	0.1	0.0	10.7
LnGrp Delay(d),s/veh	25.0	0.0	25.8	25.3	0.0	0.0	7.4	0.0	6.6	4.6	0.0	13.2
LnGrp LOS	C		C	C			A		A	A		B
Approach Vol, veh/h		80			55			627			829	
Approach Delay, s/veh		25.3			25.3			6.7			13.1	
Approach LOS		C			C			A			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.0	41.7		10.1	7.7	40.0		10.1				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0				
Max Q Clear Time (g_c+I1), s	2.2	10.5		3.4	2.8	21.2		3.6				
Green Ext Time (p_c), s	0.0	1.5		0.4	0.1	2.3		0.2				
Intersection Summary												
HCM 2010 Ctrl Delay			11.6									
HCM 2010 LOS			B									

2024 Build Traffic Volumes
3: NYS Route 9D & Beacon City Hall/Main Street

Saturday Build Typical
11/29/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	2	2	38	0	197	2	392	52	293	339	3
Future Volume (vph)	2	2	2	38	0	197	2	392	52	293	339	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		1%			-8%			-3%			3%	
Storage Length (ft)	0		0	0		70	65		0	120		0
Storage Lanes	0		0	0		1	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98				0.97		0.98			1.00	
Frt		0.955				0.850		0.982			0.999	
Flt Protected		0.984			0.950		0.950			0.950		
Satd. Flow (prot)	0	1742	0	0	1877	1663	1832	1817	0	1760	1851	0
Flt Permitted		0.872			0.833		0.531			0.383		
Satd. Flow (perm)	0	1544	0	0	1646	1619	1024	1817	0	710	1851	0
Right Turn on Red			Yes			No			No			Yes
Satd. Flow (RTOR)		3									1	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		133			350			693			388	
Travel Time (s)		3.0			8.0			15.8			8.8	
Confl. Peds. (#/hr)			14			6			48			11
Peak Hour Factor	0.71	0.71	0.71	0.89	0.89	0.89	0.88	0.88	0.88	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%	0%	2%	5%	1%	1%	0%
Adj. Flow (vph)	3	3	3	43	0	221	2	445	59	318	368	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	9	0	0	43	221	2	504	0	318	371	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.01	1.01	1.01	0.95	0.95	0.95	0.98	0.98	0.98	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	2	2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83		20	83	83	83	6		83	6	
Trailing Detector (ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Position(ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Size(ft)	20	43		20	43	43	43	6		43	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		40			40	40	40			40		
Detector 2 Size(ft)		43			43	43	43			43		
Detector 2 Type		Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		
Detector 2 Channel												

2024 Build Traffic Volumes
3: NYS Route 9D & Beacon City Hall/Main Street

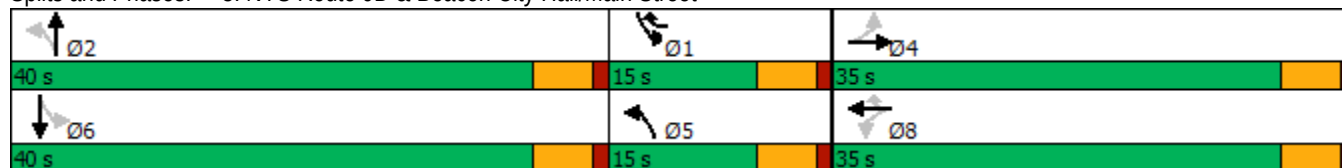
Saturday Build Typical
11/29/2021

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

Intersection Summary

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

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



2024 Build Traffic Volumes
3: NYS Route 9D & Beacon City Hall/Main Street

Saturday Build Typical
11/29/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	2	2	38	0	197	2	392	52	293	339	3
Future Volume (veh/h)	2	2	2	38	0	197	2	392	52	293	339	3
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.95	0.95		0.98	0.99		0.96	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1890	1890	1890	1976	1976	1956	1928	1884	1928	1853	1853	1872
Adj Flow Rate, veh/h	3	3	3	43	0	221	2	445	59	318	368	3
Adj No. of Lanes	0	1	0	0	1	1	1	1	0	1	1	0
Peak Hour Factor	0.71	0.71	0.71	0.89	0.89	0.89	0.88	0.88	0.88	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	1	0	2	5	1	1	0
Cap, veh/h	115	97	67	299	0	315	708	916	121	582	1038	8
Arrive On Green	0.13	0.13	0.13	0.13	0.00	0.13	0.06	0.57	0.57	0.06	0.57	0.57
Sat Flow, veh/h	290	761	526	1423	0	1624	1837	1620	215	1765	1835	15
Grp Volume(v), veh/h	9	0	0	43	0	221	2	0	504	318	0	371
Grp Sat Flow(s),veh/h/ln	1577	0	0	1423	0	1624	1837	0	1835	1765	0	1850
Q Serve(g_s), s	0.0	0.0	0.0	1.3	0.0	3.8	0.0	0.0	10.2	0.0	0.0	6.7
Cycle Q Clear(g_c), s	0.3	0.0	0.0	1.6	0.0	3.8	0.0	0.0	10.2	0.0	0.0	6.7
Prop In Lane	0.33		0.33	1.00		1.00	1.00		0.12	1.00		0.01
Lane Grp Cap(c), veh/h	279	0	0	299	0	315	708	0	1037	582	0	1046
V/C Ratio(X)	0.03	0.00	0.00	0.14	0.00	0.70	0.00	0.00	0.49	0.55	0.00	0.35
Avail Cap(c_a), veh/h	800	0	0	801	0	894	886	0	1037	754	0	1046
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.7	0.0	0.0	24.2	0.0	23.3	7.1	0.0	8.1	13.9	0.0	7.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	2.8	0.0	0.0	1.6	0.8	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	0.7	0.0	3.5	0.0	0.0	5.5	4.6	0.0	3.7
LnGrp Delay(d),s/veh	23.7	0.0	0.0	24.4	0.0	26.1	7.1	0.0	9.7	14.7	0.0	8.3
LnGrp LOS	C			C		C	A		A	B		A
Approach Vol, veh/h		9			264			506			689	
Approach Delay, s/veh		23.7			25.9			9.7			11.2	
Approach LOS		C			C			A			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.0	40.0		12.9	9.0	40.0		12.9				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0				
Max Q Clear Time (g_c+I1), s	2.0	12.2		2.3	2.0	8.7		5.8				
Green Ext Time (p_c), s	1.0	1.3		0.0	0.0	0.9		1.5				
Intersection Summary												
HCM 2010 Ctrl Delay				13.4								
HCM 2010 LOS				B								

2024 Build Traffic Volumes
4: NYS Route 9D & Beacon Street/West End Lofts

Saturday Build Typical
11/29/2021

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

2024 Build Traffic Volumes
4: NYS Route 9D & Beacon Street/West End Lofts

Saturday Build Typical
11/29/2021

Intersection												
Int Delay, s/veh	2.6											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	3	3	10	5	82	3	353	10	45	328	7
Future Vol, veh/h	10	3	3	10	5	82	3	353	10	45	328	7
Conflicting Peds, #/hr	0	0	4	0	0	19	0	0	2	0	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	-3	-	-	-4	-	-	4	-
Peak Hour Factor	61	61	61	88	88	88	85	85	85	92	92	92
Heavy Vehicles, %	0	50	0	11	25	1	0	4	11	2	2	0
Mvmt Flow	16	5	5	11	6	93	4	415	12	49	357	8

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

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

Minor Lane/Major Mvmt	NEL	NET	NERNWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	1199	-	-	524	223	1128	-
HCM Lane V/C Ratio	0.003	-	-	0.21	0.118	0.043	-
HCM Control Delay (s)	8	0	-	13.7	23.3	8.3	0
HCM Lane LOS	A	A	-	B	C	A	A
HCM 95th %tile Q(veh)	0	-	-	0.8	0.4	0.1	-

2024 Build Traffic Volumes
5: NYS Route 9D & Site Access

Saturday Build Typical
11/29/2021



Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	21	6	7	343	313	26
Future Volume (vph)	21	6	7	343	313	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.968				0.990	
Flt Protected	0.963			0.999		
Satd. Flow (prot)	1736	0	0	1861	1844	0
Flt Permitted	0.963			0.999		
Satd. Flow (perm)	1736	0	0	1861	1844	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	176			499	312	
Travel Time (s)	4.0			11.3	7.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	23	7	8	373	340	28
Shared Lane Traffic (%)						
Lane Group Flow (vph)	30	0	0	381	368	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane				Yes	Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	60	60	60			60
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type: Other
Control Type: Unsignalized

2024 Build Traffic Volumes
5: NYS Route 9D & Site Access

Saturday Build Typical
11/29/2021

Intersection

Int Delay, s/veh 0.6

Movement SEL SER NEL NET SWT SWR

Lane Configurations

Traffic Vol, veh/h 21 6 7 343 313 26

Future Vol, veh/h 21 6 7 343 313 26

Conflicting Peds, #/hr 0 0 0 0 0 0

Sign Control Stop Stop Free Free Free Free

RT Channelized - None - None - None

Storage Length 0 - - - - -

Veh in Median Storage, # 0 - - 0 0 -

Grade, % 0 - - 0 0 -

Peak Hour Factor 92 92 92 92 92 92

Heavy Vehicles, % 2 2 2 2 2 2

Mvmt Flow 23 7 8 373 340 28

Major/Minor Minor2 Major1 Major2

Conflicting Flow All 743 354 368 0 - 0

Stage 1 354 - - - - -

Stage 2 389 - - - - -

Critical Hdwy 6.42 6.22 4.12 - - -

Critical Hdwy Stg 1 5.42 - - - - -

Critical Hdwy Stg 2 5.42 - - - - -

Follow-up Hdwy 3.518 3.318 2.218 - - -

Pot Cap-1 Maneuver 383 690 1191 - - -

Stage 1 710 - - - - -

Stage 2 685 - - - - -

Platoon blocked, % - - -

Mov Cap-1 Maneuver 380 690 1191 - - -

Mov Cap-2 Maneuver 490 - - - - -

Stage 1 704 - - - - -

Stage 2 685 - - - - -

Approach SE NE SW

HCM Control Delay, s 12.3 0.2 0

HCM LOS B

Minor Lane/Major Mvmt NEL NET SELn1 SWT SWR

Capacity (veh/h) 1191 - 524 - -

HCM Lane V/C Ratio 0.006 - 0.056 - -

HCM Control Delay (s) 8 0 12.3 - -

HCM Lane LOS A A B - -

HCM 95th %tile Q(veh) 0 - 0.2 - -

2024 Build Traffic Volumes
6: South Avenue & NYS Route 9D

Saturday Build Typical
11/29/2021

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

2024 Build Traffic Volumes
6: South Avenue & NYS Route 9D

Saturday Build Typical
11/29/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		23.1			23.5			16.9			19.2	
Queue Length 50th (ft)		138			157			38			41	
Queue Length 95th (ft)		181			213			39			67	
Internal Link Dist (ft)		161			436			114			223	
Turn Bay Length (ft)												
Base Capacity (vph)		830			840			794			691	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.32			0.36			0.12			0.13	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 45

Control Type: Pretimed

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

 Ø2 (R)	 Ø4
65 s	65 s
 Ø6 (R)	 Ø8
65 s	65 s

2024 Build Traffic Volumes
6: South Avenue & NYS Route 9D

Saturday Build Typical
11/29/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	194	16	13	208	37	14	27	13	32	35	9
Future Volume (veh/h)	9	194	16	13	208	37	14	27	13	32	35	9
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1843	1843	1843	1957	1885	1957	1910	1910	1910	1872	1759	1872
Adj Flow Rate, veh/h	11	237	20	15	245	44	25	49	24	39	43	11
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.82	0.82	0.82	0.85	0.85	0.85	0.55	0.55	0.55	0.82	0.82	0.82
Percent Heavy Veh, %	0	0	0	12	4	0	0	0	0	2	12	0
Cap, veh/h	44	752	62	49	694	121	212	409	190	312	333	81
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
Sat Flow, veh/h	32	1630	134	44	1504	262	384	887	412	590	721	176
Grp Volume(v), veh/h	268	0	0	304	0	0	98	0	0	93	0	0
Grp Sat Flow(s),veh/h/ln	1796	0	0	1810	0	0	1683	0	0	1487	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	12.1	0.0	0.0	13.9	0.0	0.0	4.0	0.0	0.0	4.0	0.0	0.0
Prop In Lane	0.04		0.07	0.05		0.14	0.26		0.24	0.42		0.12
Lane Grp Cap(c), veh/h	858	0	0	864	0	0	812	0	0	726	0	0
V/C Ratio(X)	0.31	0.00	0.00	0.35	0.00	0.00	0.12	0.00	0.00	0.13	0.00	0.00
Avail Cap(c_a), veh/h	858	0	0	864	0	0	812	0	0	726	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	22.1	0.0	0.0	22.6	0.0	0.0	19.9	0.0	0.0	19.9	0.0	0.0
Incr Delay (d2), s/veh	1.0	0.0	0.0	1.1	0.0	0.0	0.3	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	0.0	0.0	7.3	0.0	0.0	2.1	0.0	0.0	2.0	0.0	0.0
LnGrp Delay(d),s/veh	23.1	0.0	0.0	23.7	0.0	0.0	20.2	0.0	0.0	20.3	0.0	0.0
LnGrp LOS	C			C			C			C		
Approach Vol, veh/h		268			304			98			93	
Approach Delay, s/veh		23.1			23.7			20.2			20.3	
Approach LOS		C			C			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		65.0		65.0		65.0		65.0				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		60.0		60.0		60.0		60.0				
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		0.0				
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay				22.6								
HCM 2010 LOS				C								

2024 Build Traffic Volumes
1: NYS Route 9D & Verplanck Avenue

Saturday Build Event Entry
11/29/2021

						
Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	79	232	582	65	159	679
Future Volume (vph)	79	232	582	65	159	679
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	5%		3%			-1%
Storage Length (ft)	85	0		0	340	
Storage Lanes	1	1		0	1	
Taper Length (ft)	86				86	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.986			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1725	1544	1809	0	1778	1872
Flt Permitted	0.950				0.197	
Satd. Flow (perm)	1725	1544	1809	0	369	1872
Right Turn on Red		No		No		
Satd. Flow (RTOR)						
Link Speed (mph)	30		30			30
Link Distance (ft)	427		462			529
Travel Time (s)	9.7		10.5			12.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	86	252	633	71	173	738
Shared Lane Traffic (%)						
Lane Group Flow (vph)	86	252	704	0	173	738
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			
Headway Factor	1.03	1.03	1.02	1.02	0.99	0.99
Turning Speed (mph)	15	9		9	15	
Turn Type	Prot	pm+ov	NA		pm+pt	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8			6	
Minimum Split (s)	21.0	9.0	15.0		9.0	15.0
Total Split (s)	30.0	20.0	70.0		20.0	90.0
Total Split (%)	25.0%	16.7%	58.3%		16.7%	75.0%
Maximum Green (s)	25.0	15.0	65.0		15.0	85.0
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0		5.0	5.0
Lead/Lag		Lead	Lag		Lead	
Lead-Lag Optimize?		Yes	Yes		Yes	
Walk Time (s)	5.0		5.0			
Flash Dont Walk (s)	11.0		11.0			
Pedestrian Calls (#/hr)	0		0			
v/c Ratio	0.24	0.44	0.72		0.40	0.56
Control Delay	41.7	31.0	25.9		8.4	10.4

2024 Build Traffic Volumes
1: NYS Route 9D & Verplanck Avenue

Saturday Build Event Entry
11/29/2021

						
Lane Group	NWL	NWR	NET	NER	SWL	SWT
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	41.7	31.0	25.9		8.4	10.4
Queue Length 50th (ft)	56	144	392		39	246
Queue Length 95th (ft)	104	222	545		62	338
Internal Link Dist (ft)	347		382			449
Turn Bay Length (ft)	85				340	
Base Capacity (vph)	359	579	979		437	1326
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.24	0.44	0.72		0.40	0.56

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NET and 6:SWTL, Start of Green

Natural Cycle: 60

Control Type: Pretimed

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



2024 Build Traffic Volumes
1: NYS Route 9D & Verplanck Avenue

Saturday Build Event Entry
11/29/2021

								
Movement	NWL	NWR	NET	NER	SWL	SWT		
Lane Configurations								
Traffic Volume (veh/h)	79	232	582	65	159	679		
Future Volume (veh/h)	79	232	582	65	159	679		
Number	3	18	2	12	1	6		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1816	1816	1835	1872	1872	1872		
Adj Flow Rate, veh/h	86	252	633	71	173	738		
Adj No. of Lanes	1	1	1	0	1	1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	360	515	878	98	467	1326		
Arrive On Green	0.21	0.21	0.54	0.54	0.13	0.71		
Sat Flow, veh/h	1730	1544	1621	182	1783	1872		
Grp Volume(v), veh/h	86	252	0	704	173	738		
Grp Sat Flow(s),veh/h/ln	1730	1544	0	1803	1783	1872		
Q Serve(g_s), s	5.0	15.6	0.0	35.2	4.1	22.8		
Cycle Q Clear(g_c), s	5.0	15.6	0.0	35.2	4.1	22.8		
Prop In Lane	1.00	1.00		0.10	1.00			
Lane Grp Cap(c), veh/h	360	515	0	976	467	1326		
V/C Ratio(X)	0.24	0.49	0.00	0.72	0.37	0.56		
Avail Cap(c_a), veh/h	360	515	0	976	467	1326		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	39.6	31.9	0.0	20.7	14.2	8.4		
Incr Delay (d2), s/veh	1.6	3.3	0.0	4.6	2.2	1.7		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	2.5	7.1	0.0	18.7	2.6	12.3		
LnGrp Delay(d),s/veh	41.1	35.2	0.0	25.3	16.4	10.1		
LnGrp LOS	D	D		C	B	B		
Approach Vol, veh/h	338		704			911		
Approach Delay, s/veh	36.7		25.3			11.3		
Approach LOS	D		C			B		
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	20.0	70.0				90.0		30.0
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	15.0	65.0				85.0		25.0
Max Q Clear Time (g_c+I1), s	0.0	0.0				0.0		0.0
Green Ext Time (p_c), s	0.0	0.0				0.0		0.0
Intersection Summary								
HCM 2010 Ctrl Delay			20.7					
HCM 2010 LOS			C					

2024 Build Traffic Volumes
2: NYS Route 9D & Beekman Street/W. Church Street

Saturday Build Event Entry
11/29/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	2	28	9	12	20	67	519	4	17	627	179
Future Volume (vph)	33	2	28	9	12	20	67	519	4	17	627	179
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		2%			-10%			-6%			3%	
Storage Length (ft)	0		95	0		0	75		0	75		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.96		0.98			1.00			0.99	
Frt			0.850		0.934			0.999			0.967	
Flt Protected		0.955			0.989		0.950			0.950		
Satd. Flow (prot)	0	1780	1599	0	1815	0	1771	1936	0	1778	1775	0
Flt Permitted		0.699			0.911		0.172			0.446		
Satd. Flow (perm)	0	1303	1533	0	1672	0	321	1936	0	835	1775	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			85		27						19	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		584			328			388			335	
Travel Time (s)		13.3			7.5			8.8			7.6	
Confl. Peds. (#/hr)			12			4			1			10
Confl. Bikes (#/hr)			3									
Peak Hour Factor	0.73	0.73	0.73	0.75	0.75	0.75	0.94	0.94	0.94	0.95	0.95	0.95
Heavy Vehicles (%)	1%	0%	0%	0%	0%	0%	5%	1%	0%	0%	1%	2%
Adj. Flow (vph)	45	3	38	12	16	27	71	552	4	18	660	188
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	48	38	0	55	0	71	556	0	18	848	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												Yes
Headway Factor	1.01	1.01	1.01	0.94	0.94	0.94	0.96	0.96	0.96	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2		2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83	83	20	83		83	6		83	6	
Trailing Detector (ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Position(ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Size(ft)	20	43	43	20	43		43	6		43	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		40	40		40		40			40		
Detector 2 Size(ft)		43	43		43		43			43		
Detector 2 Type		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex		

2024 Build Traffic Volumes
2: NYS Route 9D & Beekman Street/W. Church Street

Saturday Build Event Entry
11/29/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)		0.0	0.0		0.0		0.0			0.0		
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	16.0		4.0	16.0	
Minimum Split (s)	20.0	20.0	20.0	21.0	21.0		9.0	21.0		9.0	21.0	
Total Split (s)	35.0	35.0	35.0	35.0	35.0		15.0	40.0		15.0	40.0	
Total Split (%)	38.9%	38.9%	38.9%	38.9%	38.9%		16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	30.0	30.0	30.0	30.0	30.0		10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		None	Max		None	Max	
Walk Time (s)				5.0	5.0							
Flash Dont Walk (s)				11.0	11.0							
Pedestrian Calls (#/hr)				0	0							
v/c Ratio		0.30	0.15		0.24		0.18	0.39		0.03	0.76	
Control Delay		31.3	2.5		18.8		4.0	6.3		3.3	18.9	
Queue Delay		0.0	0.0		0.0		0.0	0.4		0.0	0.0	
Total Delay		31.3	2.5		18.8		4.0	6.8		3.3	18.9	
Queue Length 50th (ft)		18	0		10		6	63		2	257	
Queue Length 95th (ft)		37	0		30		17	220		6	#546	
Internal Link Dist (ft)		504			248			308			255	
Turn Bay Length (ft)			95				75			75		
Base Capacity (vph)		621	775		811		472	1438		762	1123	
Starvation Cap Reductn		0	0		0		0	429		0	0	
Spillback Cap Reductn		0	0		0		0	0		0	0	
Storage Cap Reductn		0	0		0		0	0		0	0	
Reduced v/c Ratio		0.08	0.05		0.07		0.15	0.55		0.02	0.76	

Intersection Summary

Area Type: Other

Cycle Length: 90

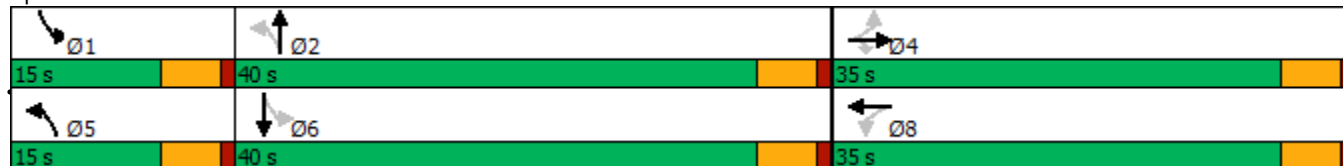
Actuated Cycle Length: 63.3

Natural Cycle: 70

Control Type: Semi Act-Uncoord

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

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



2024 Build Traffic Volumes
2: NYS Route 9D & Beekman Street/W. Church Street

Saturday Build Event Entry
11/29/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	2	28	9	12	20	67	519	4	17	627	179
Future Volume (veh/h)	33	2	28	9	12	20	67	519	4	17	627	179
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.90	0.95		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1864	1881	1995	1995	1995	1864	1938	1957	1872	1849	1872
Adj Flow Rate, veh/h	45	3	38	12	16	27	71	552	4	18	660	188
Adj No. of Lanes	0	1	1	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.73	0.73	0.73	0.75	0.75	0.75	0.94	0.94	0.94	0.95	0.95	0.95
Percent Heavy Veh, %	1	0	0	0	0	0	5	1	0	0	1	2
Cap, veh/h	240	12	127	97	56	74	366	1220	9	571	836	238
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.05	0.63	0.63	0.02	0.61	0.61
Sat Flow, veh/h	1349	139	1442	238	636	843	1775	1921	14	1782	1382	394
Grp Volume(v), veh/h	48	0	38	55	0	0	71	0	556	18	0	848
Grp Sat Flow(s),veh/h/ln	1488	0	1442	1717	0	0	1775	0	1935	1782	0	1776
Q Serve(g_s), s	0.0	0.0	1.4	0.0	0.0	0.0	0.8	0.0	8.5	0.2	0.0	20.9
Cycle Q Clear(g_c), s	1.5	0.0	1.4	1.6	0.0	0.0	0.8	0.0	8.5	0.2	0.0	20.9
Prop In Lane	0.94		1.00	0.22		0.49	1.00		0.01	1.00		0.22
Lane Grp Cap(c), veh/h	252	0	127	228	0	0	366	0	1229	571	0	1075
V/C Ratio(X)	0.19	0.00	0.30	0.24	0.00	0.00	0.19	0.00	0.45	0.03	0.00	0.79
Avail Cap(c_a), veh/h	837	0	748	944	0	0	589	0	1229	849	0	1075
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.7	0.0	24.7	24.8	0.0	0.0	7.9	0.0	5.4	4.6	0.0	8.6
Incr Delay (d2), s/veh	0.4	0.0	1.3	0.5	0.0	0.0	0.3	0.0	1.2	0.0	0.0	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	0.7	0.0	0.6	0.9	0.0	0.0	0.5	0.0	4.9	0.1	0.0	11.7
LnGrp Delay(d),s/veh	25.1	0.0	26.0	25.3	0.0	0.0	8.1	0.0	6.6	4.6	0.0	14.5
LnGrp LOS	C		C	C			A		A	A		B
Approach Vol, veh/h		86			55			627			866	
Approach Delay, s/veh		25.5			25.3			6.8			14.3	
Approach LOS		C			C			A			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.0	41.7		10.1	7.7	40.0		10.1				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0				
Max Q Clear Time (g_c+I1), s	2.2	10.5		3.5	2.8	22.9		3.6				
Green Ext Time (p_c), s	0.0	1.5		0.4	0.1	2.4		0.2				
Intersection Summary												
HCM 2010 Ctrl Delay			12.4									
HCM 2010 LOS			B									

2024 Build Traffic Volumes
3: NYS Route 9D & Beacon City Hall/Main Street

Saturday Build Event Entry
11/29/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	2	2	44	0	197	2	392	52	293	377	3
Future Volume (vph)	2	2	2	44	0	197	2	392	52	293	377	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		1%			-8%			-3%			3%	
Storage Length (ft)	0		0	0		70	65		0	120		0
Storage Lanes	0		0	0		1	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98				0.97		0.98			1.00	
Frt		0.955				0.850		0.982			0.999	
Flt Protected		0.984			0.950		0.950			0.950		
Satd. Flow (prot)	0	1742	0	0	1877	1663	1832	1817	0	1760	1851	0
Flt Permitted		0.870			0.800		0.498			0.381		
Satd. Flow (perm)	0	1540	0	0	1581	1619	960	1817	0	706	1851	0
Right Turn on Red			Yes			No			No			Yes
Satd. Flow (RTOR)		3										
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		133			350			693			388	
Travel Time (s)		3.0			8.0			15.8			8.8	
Confl. Peds. (#/hr)			14			6			48			11
Peak Hour Factor	0.71	0.71	0.71	0.89	0.89	0.89	0.88	0.88	0.88	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%	0%	2%	5%	1%	1%	0%
Adj. Flow (vph)	3	3	3	49	0	221	2	445	59	318	410	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	9	0	0	49	221	2	504	0	318	413	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.01	1.01	1.01	0.95	0.95	0.95	0.98	0.98	0.98	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	2	2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83		20	83	83	83	6		83	6	
Trailing Detector (ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Position(ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Size(ft)	20	43		20	43	43	43	6		43	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		40			40	40	40			40		
Detector 2 Size(ft)		43			43	43	43			43		
Detector 2 Type		Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		
Detector 2 Channel												

2024 Build Traffic Volumes
3: NYS Route 9D & Beacon City Hall/Main Street

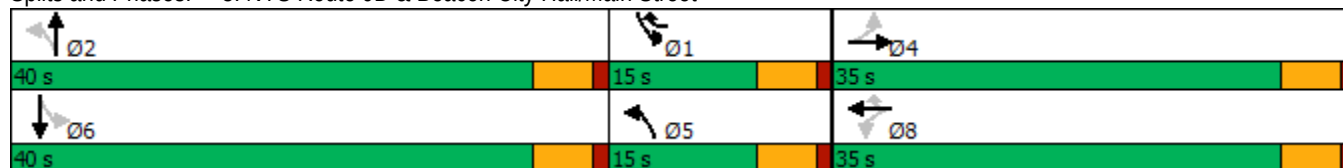
Saturday Build Event Entry
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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0	0.0	0.0			0.0		
Turn Type	Perm	NA		Perm	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8	1	5	2		1	6	
Permitted Phases	4			8		8	2			6		
Detector Phase	4	4		8	8	1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		8.0	8.0	4.0	4.0	31.0		4.0	35.0	
Minimum Split (s)	21.0	21.0		21.0	21.0	9.0	9.0	36.0		9.0	40.0	
Total Split (s)	35.0	35.0		35.0	35.0	15.0	15.0	40.0		15.0	40.0	
Total Split (%)	38.9%	38.9%		38.9%	38.9%	16.7%	16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	30.0	30.0		30.0	30.0	10.0	10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0			5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag						Lag	Lag	Lead		Lag	Lead	
Lead-Lag Optimize?						Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None	None	None	Max		None	Max	
Walk Time (s)	5.0	5.0						5.0				
Flash Dont Walk (s)	11.0	11.0						11.0				
Pedestrian Calls (#/hr)	0	0						0				
v/c Ratio		0.05			0.23	0.57	0.00	0.49		0.44	0.28	
Control Delay		23.2			29.4	24.8	3.5	12.2		7.3	5.8	
Queue Delay		0.0			0.0	0.0	0.0	0.0		0.0	0.2	
Total Delay		23.2			29.4	24.8	3.5	12.2		7.3	6.0	
Queue Length 50th (ft)		2			19	69	0	131		32	44	
Queue Length 95th (ft)		11			47	121	2	220		65	176	
Internal Link Dist (ft)		53			270			613			308	
Turn Bay Length (ft)						70	65			120		
Base Capacity (vph)		743			761	394	833	1021		726	1466	
Starvation Cap Reductn		0			0	0	0	0		0	445	
Spillback Cap Reductn		0			0	0	0	0		0	0	
Storage Cap Reductn		0			0	0	0	0		0	0	
Reduced v/c Ratio		0.01			0.06	0.56	0.00	0.49		0.44	0.40	

Intersection Summary

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

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



2024 Build Traffic Volumes
3: NYS Route 9D & Beacon City Hall/Main Street

Saturday Build Event Entry
11/29/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	2	2	44	0	197	2	392	52	293	377	3
Future Volume (veh/h)	2	2	2	44	0	197	2	392	52	293	377	3
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.95	0.95		0.98	1.00		0.96	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1890	1890	1890	1976	1976	1956	1928	1884	1928	1853	1853	1872
Adj Flow Rate, veh/h	3	3	3	49	0	221	2	445	59	318	410	3
Adj No. of Lanes	0	1	0	0	1	1	1	1	0	1	1	0
Peak Hour Factor	0.71	0.71	0.71	0.89	0.89	0.89	0.88	0.88	0.88	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	1	0	2	5	1	1	0
Cap, veh/h	115	97	67	299	0	315	674	916	121	582	1038	8
Arrive On Green	0.13	0.13	0.13	0.13	0.00	0.13	0.06	0.57	0.57	0.06	0.57	0.57
Sat Flow, veh/h	291	761	526	1423	0	1624	1837	1620	215	1765	1837	13
Grp Volume(v), veh/h	9	0	0	49	0	221	2	0	504	318	0	413
Grp Sat Flow(s),veh/h/ln	1577	0	0	1423	0	1624	1837	0	1835	1765	0	1851
Q Serve(g_s), s	0.0	0.0	0.0	1.6	0.0	3.8	0.0	0.0	10.2	0.0	0.0	7.7
Cycle Q Clear(g_c), s	0.3	0.0	0.0	1.9	0.0	3.8	0.0	0.0	10.2	0.0	0.0	7.7
Prop In Lane	0.33		0.33	1.00		1.00	1.00		0.12	1.00		0.01
Lane Grp Cap(c), veh/h	280	0	0	299	0	315	674	0	1037	582	0	1046
V/C Ratio(X)	0.03	0.00	0.00	0.16	0.00	0.70	0.00	0.00	0.49	0.55	0.00	0.39
Avail Cap(c_a), veh/h	800	0	0	801	0	894	853	0	1037	754	0	1046
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.7	0.0	0.0	24.3	0.0	23.3	7.6	0.0	8.1	13.9	0.0	7.5
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.3	0.0	2.8	0.0	0.0	1.6	0.8	0.0	1.1
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	0.1	0.0	0.0	0.8	0.0	3.5	0.0	0.0	5.5	4.6	0.0	4.2
LnGrp Delay(d),s/veh	23.7	0.0	0.0	24.6	0.0	26.1	7.6	0.0	9.7	14.7	0.0	8.6
LnGrp LOS	C			C		C	A		A	B		A
Approach Vol, veh/h		9			270			506			731	
Approach Delay, s/veh		23.7			25.9			9.7			11.3	
Approach LOS		C			C			A			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.0	40.0		12.9	9.0	40.0		12.9				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0				
Max Q Clear Time (g_c+I1), s	2.0	12.2		2.3	2.0	9.7		5.8				
Green Ext Time (p_c), s	1.0	1.3		0.0	0.0	1.0		1.5				
Intersection Summary												
HCM 2010 Ctrl Delay				13.4								
HCM 2010 LOS				B								

2024 Build Traffic Volumes
4: NYS Route 9D & Beacon Street/West End Lofts

Saturday Build Event Entry
11/29/2021

												
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	10	3	3	10	5	82	3	353	10	45	370	7
Future Volume (vph)	10	3	3	10	5	82	3	353	10	45	370	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			-3%			-4%			4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.974			0.886			0.996			0.998	
Flt Protected		0.970			0.995						0.995	
Satd. Flow (prot)	0	1638	0	0	1646	0	0	1853	0	0	1813	0
Flt Permitted		0.970			0.995						0.995	
Satd. Flow (perm)	0	1638	0	0	1646	0	0	1853	0	0	1813	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		162			281			312			693	
Travel Time (s)		3.7			6.4			7.1			15.8	
Confl. Peds. (#/hr)			4			19			2			3
Confl. Bikes (#/hr)												1
Peak Hour Factor	0.61	0.61	0.61	0.88	0.88	0.88	0.85	0.85	0.85	0.92	0.92	0.92
Heavy Vehicles (%)	0%	50%	0%	11%	25%	1%	0%	4%	11%	2%	2%	0%
Adj. Flow (vph)	16	5	5	11	6	93	4	415	12	49	402	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	26	0	0	110	0	0	431	0	0	459	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	0.98	0.98	0.98	0.97	0.97	0.97	1.03	1.03	1.03
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											

2024 Build Traffic Volumes
4: NYS Route 9D & Beacon Street/West End Lofts

Saturday Build Event Entry
11/29/2021

Intersection												
Int Delay, s/veh	2.6											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	3	3	10	5	82	3	353	10	45	370	7
Future Vol, veh/h	10	3	3	10	5	82	3	353	10	45	370	7
Conflicting Peds, #/hr	0	0	4	0	0	19	0	0	2	0	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	-3	-	-	-4	-	-	4	-
Peak Hour Factor	61	61	61	88	88	88	85	85	85	92	92	92
Heavy Vehicles, %	0	50	0	11	25	1	0	4	11	2	2	0
Mvmt Flow	16	5	5	11	6	93	4	415	12	49	402	8

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1005	944	413	944	942	442	413	0	0	429	0	0
Stage 1	507	507	-	431	431	-	-	-	-	-	-	-
Stage 2	498	437	-	513	511	-	-	-	-	-	-	-
Critical Hdwy	7.1	7	6.2	6.61	6.15	5.91	4.1	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	6	-	5.61	5.15	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	6	-	5.61	5.15	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4.45	3.3	3.599	4.225	3.309	2.2	-	-	2.218	-	-
Pot Cap-1 Maneuver	222	219	643	273	282	641	1157	-	-	1130	-	-
Stage 1	552	468	-	629	586	-	-	-	-	-	-	-
Stage 2	558	505	-	575	545	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	174	205	639	252	264	630	1154	-	-	1128	-	-
Mov Cap-2 Maneuver	174	205	-	252	264	-	-	-	-	-	-	-
Stage 1	548	441	-	625	582	-	-	-	-	-	-	-
Stage 2	461	501	-	531	513	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	24.8	13.9	0.1	0.9
HCM LOS	C	B		

Minor Lane/Major Mvmt	NEL	NET	NERNWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	1154	-	-	514	208	1128	-
HCM Lane V/C Ratio	0.003	-	-	0.214	0.126	0.043	-
HCM Control Delay (s)	8.1	0	-	13.9	24.8	8.3	0
HCM Lane LOS	A	A	-	B	C	A	A
HCM 95th %tile Q(veh)	0	-	-	0.8	0.4	0.1	-



Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	21	6	22	343	313	68
Future Volume (vph)	21	6	22	343	313	68
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.968				0.976	
Flt Protected	0.963			0.997		
Satd. Flow (prot)	1736	0	0	1857	1818	0
Flt Permitted	0.963			0.997		
Satd. Flow (perm)	1736	0	0	1857	1818	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	176			499	312	
Travel Time (s)	4.0			11.3	7.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	23	7	24	373	340	74
Shared Lane Traffic (%)						
Lane Group Flow (vph)	30	0	0	397	414	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane				Yes	Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	60	60	60			60
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection						
Int Delay, s/veh	0.7					
Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	21	6	22	343	313	68
Future Vol, veh/h	21	6	22	343	313	68
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	23	7	24	373	340	74
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	798	377	414	0	-	0
Stage 1	377	-	-	-	-	-
Stage 2	421	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	355	670	1145	-	-	-
Stage 1	694	-	-	-	-	-
Stage 2	662	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	346	670	1145	-	-	-
Mov Cap-2 Maneuver	463	-	-	-	-	-
Stage 1	676	-	-	-	-	-
Stage 2	662	-	-	-	-	-
Approach	SE	NE		SW		
HCM Control Delay, s	12.7	0.5		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NEL	NET	SELn1	SWT	SWR	
Capacity (veh/h)	1145	-	497	-	-	
HCM Lane V/C Ratio	0.021	-	0.059	-	-	
HCM Control Delay (s)	8.2	0	12.7	-	-	
HCM Lane LOS	A	A	B	-	-	
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-	

2024 Build Traffic Volumes
6: South Avenue & NYS Route 9D

Saturday Build Event Entry
11/29/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	194	16	13	223	37	14	27	13	32	35	9
Future Volume (vph)	9	194	16	13	223	37	14	27	13	32	35	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		6%			-6%			-1%			3%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor								0.99			0.99	
Frt		0.990			0.981			0.967			0.984	
Flt Protected		0.998			0.998			0.987			0.979	
Satd. Flow (prot)	0	1821	0	0	1845	0	0	1822	0	0	1686	0
Flt Permitted		0.983			0.981			0.926			0.866	
Satd. Flow (perm)	0	1794	0	0	1814	0	0	1701	0	0	1491	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			8			17			7	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		241			516			194			303	
Travel Time (s)		5.5			11.7			4.4			6.9	
Confl. Peds. (#/hr)							6					6
Peak Hour Factor	0.82	0.82	0.82	0.85	0.85	0.85	0.55	0.55	0.55	0.82	0.82	0.82
Heavy Vehicles (%)	0%	0%	0%	12%	4%	0%	0%	0%	0%	2%	12%	0%
Adj. Flow (vph)	11	237	20	15	262	44	25	49	24	39	43	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	268	0	0	321	0	0	98	0	0	93	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	0.96	0.96	0.96	0.99	0.99	0.99	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	21.0	21.0		21.0	21.0		21.0	21.0		21.0	21.0	
Total Split (s)	65.0	65.0		65.0	65.0		65.0	65.0		65.0	65.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	60.0	60.0		60.0	60.0		60.0	60.0		60.0	60.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
v/c Ratio		0.32			0.38			0.12			0.13	
Control Delay		23.2			23.9			16.9			19.2	

2024 Build Traffic Volumes
6: South Avenue & NYS Route 9D

Saturday Build Event Entry
11/29/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		23.2			23.9			16.9			19.2	
Queue Length 50th (ft)		138			169			38			41	
Queue Length 95th (ft)		181			227			39			67	
Internal Link Dist (ft)		161			436			114			223	
Turn Bay Length (ft)												
Base Capacity (vph)		830			841			794			691	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.32			0.38			0.12			0.13	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 45

Control Type: Pretimed

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

 Ø2 (R)	 Ø4
65 s	65 s
 Ø6 (R)	 Ø8
65 s	65 s

2024 Build Traffic Volumes
6: South Avenue & NYS Route 9D

Saturday Build Event Entry
11/29/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	194	16	13	223	37	14	27	13	32	35	9
Future Volume (veh/h)	9	194	16	13	223	37	14	27	13	32	35	9
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1843	1843	1843	1957	1885	1957	1910	1910	1910	1872	1759	1872
Adj Flow Rate, veh/h	11	237	20	15	262	44	25	49	24	39	43	11
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.82	0.82	0.82	0.85	0.85	0.85	0.55	0.55	0.55	0.82	0.82	0.82
Percent Heavy Veh, %	0	0	0	12	4	0	0	0	0	2	12	0
Cap, veh/h	44	752	62	48	704	115	212	409	190	312	333	81
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
Sat Flow, veh/h	32	1629	134	40	1525	249	384	887	412	590	721	176
Grp Volume(v), veh/h	268	0	0	321	0	0	98	0	0	93	0	0
Grp Sat Flow(s),veh/h/ln	1796	0	0	1814	0	0	1683	0	0	1487	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	12.1	0.0	0.0	14.8	0.0	0.0	4.0	0.0	0.0	4.0	0.0	0.0
Prop In Lane	0.04		0.07	0.05		0.14	0.26		0.24	0.42		0.12
Lane Grp Cap(c), veh/h	858	0	0	866	0	0	812	0	0	726	0	0
V/C Ratio(X)	0.31	0.00	0.00	0.37	0.00	0.00	0.12	0.00	0.00	0.13	0.00	0.00
Avail Cap(c_a), veh/h	858	0	0	866	0	0	812	0	0	726	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	22.1	0.0	0.0	22.8	0.0	0.0	19.9	0.0	0.0	19.9	0.0	0.0
Incr Delay (d2), s/veh	1.0	0.0	0.0	1.2	0.0	0.0	0.3	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	0.0	0.0	7.8	0.0	0.0	2.1	0.0	0.0	2.0	0.0	0.0
LnGrp Delay(d),s/veh	23.1	0.0	0.0	24.0	0.0	0.0	20.2	0.0	0.0	20.3	0.0	0.0
LnGrp LOS	C			C			C			C		
Approach Vol, veh/h		268			321			98			93	
Approach Delay, s/veh		23.1			24.0			20.2			20.3	
Approach LOS		C			C			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		65.0		65.0		65.0		65.0				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		60.0		60.0		60.0		60.0				
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		0.0				
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay				22.8								
HCM 2010 LOS				C								

2024 Build Traffic Volumes
1: NYS Route 9D & Verplanck Avenue

Saturday Build Event Exit
11/29/2021

						
Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	73	232	612	71	159	649
Future Volume (vph)	73	232	612	71	159	649
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	5%		3%			-1%
Storage Length (ft)	85	0		0	340	
Storage Lanes	1	1		0	1	
Taper Length (ft)	86				86	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.986			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1725	1544	1809	0	1778	1872
Flt Permitted	0.950				0.172	
Satd. Flow (perm)	1725	1544	1809	0	322	1872
Right Turn on Red		No		No		
Satd. Flow (RTOR)						
Link Speed (mph)	30		30			30
Link Distance (ft)	427		462			529
Travel Time (s)	9.7		10.5			12.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	79	252	665	77	173	705
Shared Lane Traffic (%)						
Lane Group Flow (vph)	79	252	742	0	173	705
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			
Headway Factor	1.03	1.03	1.02	1.02	0.99	0.99
Turning Speed (mph)	15	9		9	15	
Turn Type	Prot	pm+ov	NA		pm+pt	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8			6	
Minimum Split (s)	21.0	9.0	15.0		9.0	15.0
Total Split (s)	30.0	20.0	70.0		20.0	90.0
Total Split (%)	25.0%	16.7%	58.3%		16.7%	75.0%
Maximum Green (s)	25.0	15.0	65.0		15.0	85.0
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0		5.0	5.0
Lead/Lag		Lead	Lag		Lead	
Lead-Lag Optimize?		Yes	Yes		Yes	
Walk Time (s)	5.0		5.0			
Flash Dont Walk (s)	11.0		11.0			
Pedestrian Calls (#/hr)	0		0			
v/c Ratio	0.22	0.44	0.76		0.42	0.53
Control Delay	41.4	31.0	27.6		8.9	10.0

2024 Build Traffic Volumes
1: NYS Route 9D & Verplanck Avenue

Saturday Build Event Exit
11/29/2021

						
Lane Group	NWL	NWR	NET	NER	SWL	SWT
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	41.4	31.0	27.6		8.9	10.0
Queue Length 50th (ft)	51	144	428		39	228
Queue Length 95th (ft)	96	222	594		62	314
Internal Link Dist (ft)	347		382			449
Turn Bay Length (ft)	85				340	
Base Capacity (vph)	359	579	979		410	1326
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.22	0.44	0.76		0.42	0.53

Intersection Summary

Area Type: Other

Cycle Length: 120

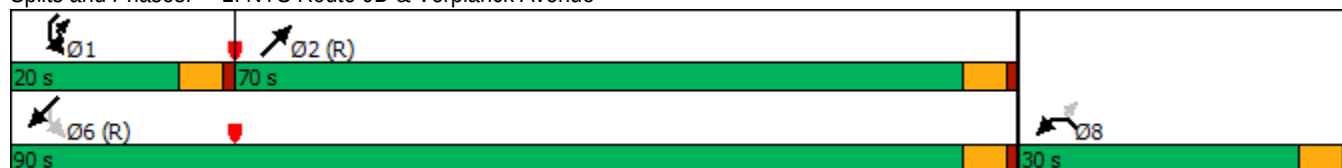
Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NET and 6:SWTL, Start of Green

Natural Cycle: 65

Control Type: Pretimed

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



2024 Build Traffic Volumes
1: NYS Route 9D & Verplanck Avenue

Saturday Build Event Exit
11/29/2021

								
Movement	NWL	NWR	NET	NER	SWL	SWT		
Lane Configurations								
Traffic Volume (veh/h)	73	232	612	71	159	649		
Future Volume (veh/h)	73	232	612	71	159	649		
Number	3	18	2	12	1	6		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1816	1816	1835	1872	1872	1872		
Adj Flow Rate, veh/h	79	252	665	77	173	705		
Adj No. of Lanes	1	1	1	0	1	1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	360	515	875	101	441	1326		
Arrive On Green	0.21	0.21	0.54	0.54	0.13	0.71		
Sat Flow, veh/h	1730	1544	1615	187	1783	1872		
Grp Volume(v), veh/h	79	252	0	742	173	705		
Grp Sat Flow(s),veh/h/ln	1730	1544	0	1802	1783	1872		
Q Serve(g_s), s	4.5	15.6	0.0	38.5	4.1	21.1		
Cycle Q Clear(g_c), s	4.5	15.6	0.0	38.5	4.1	21.1		
Prop In Lane	1.00	1.00		0.10	1.00			
Lane Grp Cap(c), veh/h	360	515	0	976	441	1326		
V/C Ratio(X)	0.22	0.49	0.00	0.76	0.39	0.53		
Avail Cap(c_a), veh/h	360	515	0	976	441	1326		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	39.4	31.9	0.0	21.4	15.7	8.2		
Incr Delay (d2), s/veh	1.4	3.3	0.0	5.6	2.6	1.5		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	2.3	7.1	0.0	20.5	2.9	11.3		
LnGrp Delay(d),s/veh	40.8	35.2	0.0	27.0	18.3	9.7		
LnGrp LOS	D	D		C	B	A		
Approach Vol, veh/h	331		742			878		
Approach Delay, s/veh	36.5		27.0			11.4		
Approach LOS	D		C			B		
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	20.0	70.0				90.0		30.0
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	15.0	65.0				85.0		25.0
Max Q Clear Time (g_c+I1), s	0.0	0.0				0.0		0.0
Green Ext Time (p_c), s	0.0	0.0				0.0		0.0
Intersection Summary								
HCM 2010 Ctrl Delay			21.6					
HCM 2010 LOS			C					

2024 Build Traffic Volumes
2: NYS Route 9D & Beekman Street/W. Church Street

Saturday Build Event Exit
11/29/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	2	25	9	12	20	70	555	4	17	591	179
Future Volume (vph)	33	2	25	9	12	20	70	555	4	17	591	179
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		2%			-10%			-6%			3%	
Storage Length (ft)	0		95	0		0	75		0	75		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.96		0.98			1.00			0.99	
Frt			0.850		0.934			0.999			0.965	
Flt Protected		0.955			0.989		0.950			0.950		
Satd. Flow (prot)	0	1780	1599	0	1815	0	1771	1936	0	1778	1771	0
Flt Permitted		0.824			0.911		0.221			0.414		
Satd. Flow (perm)	0	1536	1533	0	1672	0	412	1936	0	775	1771	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			85		27						20	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		584			328			388			335	
Travel Time (s)		13.3			7.5			8.8			7.6	
Confl. Peds. (#/hr)			12			4			1			10
Confl. Bikes (#/hr)			3									
Peak Hour Factor	0.73	0.73	0.73	0.75	0.75	0.75	0.94	0.94	0.94	0.95	0.95	0.95
Heavy Vehicles (%)	1%	0%	0%	0%	0%	0%	5%	1%	0%	0%	1%	2%
Adj. Flow (vph)	45	3	34	12	16	27	74	590	4	18	622	188
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	48	34	0	55	0	74	594	0	18	810	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.01	1.01	1.01	0.94	0.94	0.94	0.96	0.96	0.96	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2		2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83	83	20	83		83	6		83	6	
Trailing Detector (ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Position(ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Size(ft)	20	43	43	20	43		43	6		43	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		40	40		40		40			40		
Detector 2 Size(ft)		43	43		43		43			43		
Detector 2 Type		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex		

2024 Build Traffic Volumes
2: NYS Route 9D & Beekman Street/W. Church Street

Saturday Build Event Exit

11/29/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)		0.0	0.0		0.0		0.0			0.0		
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	16.0		4.0	16.0	
Minimum Split (s)	20.0	20.0	20.0	21.0	21.0		9.0	21.0		9.0	21.0	
Total Split (s)	35.0	35.0	35.0	35.0	35.0		15.0	40.0		15.0	40.0	
Total Split (%)	38.9%	38.9%	38.9%	38.9%	38.9%		16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	30.0	30.0	30.0	30.0	30.0		10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		None	Max		None	Max	
Walk Time (s)				5.0	5.0							
Flash Dont Walk (s)				11.0	11.0							
Pedestrian Calls (#/hr)				0	0							
v/c Ratio		0.24	0.12		0.23		0.16	0.39		0.03	0.63	
Control Delay		28.3	1.3		19.0		3.5	6.0		3.3	14.3	
Queue Delay		0.0	0.0		0.0		0.0	0.3		0.0	0.0	
Total Delay		28.3	1.3		19.0		3.5	6.3		3.3	14.3	
Queue Length 50th (ft)		18	0		10		6	69		2	236	
Queue Length 95th (ft)		37	0		31		18	241		6	#510	
Internal Link Dist (ft)		504			248			308			255	
Turn Bay Length (ft)			95				75			75		
Base Capacity (vph)		815	853		900		562	1541		770	1276	
Starvation Cap Reductn		0	0		0		0	418		0	0	
Spillback Cap Reductn		0	0		0		0	0		0	0	
Storage Cap Reductn		0	0		0		0	0		0	0	
Reduced v/c Ratio		0.06	0.04		0.06		0.13	0.53		0.02	0.63	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 58.7

Natural Cycle: 70

Control Type: Semi Act-Uncoord

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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



2024 Build Traffic Volumes
2: NYS Route 9D & Beekman Street/W. Church Street

Saturday Build Event Exit
11/29/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	2	25	9	12	20	70	555	4	17	591	179
Future Volume (veh/h)	33	2	25	9	12	20	70	555	4	17	591	179
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.90	0.94		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1864	1881	1995	1995	1995	1864	1938	1957	1872	1849	1872
Adj Flow Rate, veh/h	45	3	34	12	16	27	74	590	4	18	622	188
Adj No. of Lanes	0	1	1	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.73	0.73	0.73	0.75	0.75	0.75	0.94	0.94	0.94	0.95	0.95	0.95
Percent Heavy Veh, %	1	0	0	0	0	0	5	1	0	0	1	2
Cap, veh/h	239	12	127	97	56	74	392	1222	8	546	823	249
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.05	0.64	0.64	0.02	0.60	0.60
Sat Flow, veh/h	1350	139	1441	239	635	843	1775	1922	13	1782	1361	411
Grp Volume(v), veh/h	48	0	34	55	0	0	74	0	594	18	0	810
Grp Sat Flow(s),veh/h/ln	1488	0	1441	1717	0	0	1775	0	1935	1782	0	1772
Q Serve(g_s), s	0.0	0.0	1.3	0.0	0.0	0.0	0.9	0.0	9.3	0.2	0.0	19.3
Cycle Q Clear(g_c), s	1.5	0.0	1.3	1.7	0.0	0.0	0.9	0.0	9.3	0.2	0.0	19.3
Prop In Lane	0.94		1.00	0.22		0.49	1.00		0.01	1.00		0.23
Lane Grp Cap(c), veh/h	251	0	127	227	0	0	392	0	1230	546	0	1072
V/C Ratio(X)	0.19	0.00	0.27	0.24	0.00	0.00	0.19	0.00	0.48	0.03	0.00	0.76
Avail Cap(c_a), veh/h	836	0	747	944	0	0	613	0	1230	823	0	1072
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.7	0.0	24.7	24.8	0.0	0.0	7.2	0.0	5.5	4.7	0.0	8.3
Incr Delay (d2), s/veh	0.4	0.0	1.1	0.5	0.0	0.0	0.2	0.0	1.4	0.0	0.0	5.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.5	0.9	0.0	0.0	0.5	0.0	5.4	0.1	0.0	10.7
LnGrp Delay(d),s/veh	25.1	0.0	25.8	25.4	0.0	0.0	7.5	0.0	6.9	4.7	0.0	13.3
LnGrp LOS	C		C	C			A		A	A		B
Approach Vol, veh/h		82			55			668			828	
Approach Delay, s/veh		25.4			25.4			7.0			13.1	
Approach LOS		C			C			A			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.0	41.8		10.1	7.8	40.0		10.1				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0				
Max Q Clear Time (g_c+I1), s	2.2	11.3		3.5	2.9	21.3		3.7				
Green Ext Time (p_c), s	0.0	1.6		0.4	0.1	2.3		0.2				
Intersection Summary												
HCM 2010 Ctrl Delay			11.6									
HCM 2010 LOS			B									

2024 Build Traffic Volumes
3: NYS Route 9D & Beacon City Hall/Main Street

Saturday Build Event Exit
11/29/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	2	2	38	0	197	2	431	58	293	338	3
Future Volume (vph)	2	2	2	38	0	197	2	431	58	293	338	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		1%			-8%			-3%			3%	
Storage Length (ft)	0		0	0		70	65		0	120		0
Storage Lanes	0		0	0		1	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98				0.97		0.98			1.00	
Frt		0.955				0.850		0.982			0.999	
Flt Protected		0.984			0.950		0.950			0.950		
Satd. Flow (prot)	0	1742	0	0	1877	1663	1832	1817	0	1760	1851	0
Flt Permitted		0.872			0.833		0.532			0.341		
Satd. Flow (perm)	0	1544	0	0	1646	1619	1026	1817	0	632	1851	0
Right Turn on Red			Yes			No			No			Yes
Satd. Flow (RTOR)		3									1	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		133			350			693			388	
Travel Time (s)		3.0			8.0			15.8			8.8	
Confl. Peds. (#/hr)			14			6			48			11
Peak Hour Factor	0.71	0.71	0.71	0.89	0.89	0.89	0.88	0.88	0.88	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%	0%	2%	5%	1%	1%	0%
Adj. Flow (vph)	3	3	3	43	0	221	2	490	66	318	367	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	9	0	0	43	221	2	556	0	318	370	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.01	1.01	1.01	0.95	0.95	0.95	0.98	0.98	0.98	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	2	2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83		20	83	83	83	6		83	6	
Trailing Detector (ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Position(ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Size(ft)	20	43		20	43	43	43	6		43	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		40			40	40	40			40		
Detector 2 Size(ft)		43			43	43	43			43		
Detector 2 Type		Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		
Detector 2 Channel												

2024 Build Traffic Volumes
3: NYS Route 9D & Beacon City Hall/Main Street

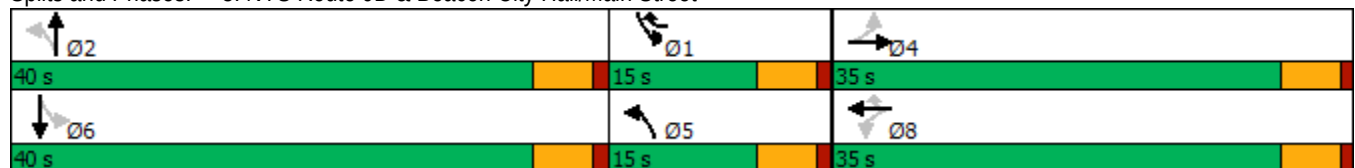
Saturday Build Event Exit
11/29/2021

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0	0.0	0.0			0.0		
Turn Type	Perm	NA		Perm	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8	1	5	2		1	6	
Permitted Phases	4			8		8	2			6		
Detector Phase	4	4		8	8	1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		8.0	8.0	4.0	4.0	31.0		4.0	35.0	
Minimum Split (s)	21.0	21.0		21.0	21.0	9.0	9.0	36.0		9.0	40.0	
Total Split (s)	35.0	35.0		35.0	35.0	15.0	15.0	40.0		15.0	40.0	
Total Split (%)	38.9%	38.9%		38.9%	38.9%	16.7%	16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	30.0	30.0		30.0	30.0	10.0	10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0			5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag						Lag	Lag	Lead		Lag	Lead	
Lead-Lag Optimize?						Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None	None	None	Max		None	Max	
Walk Time (s)	5.0	5.0						5.0				
Flash Dont Walk (s)	11.0	11.0						11.0				
Pedestrian Calls (#/hr)	0	0						0				
v/c Ratio		0.05			0.19	0.57	0.00	0.55		0.47	0.25	
Control Delay		23.3			28.9	24.8	3.5	13.0		8.5	5.5	
Queue Delay		0.0			0.0	0.0	0.0	0.0		3.4	0.2	
Total Delay		23.3			28.9	24.8	3.5	13.0		11.9	5.7	
Queue Length 50th (ft)		2			17	69	0	150		32	38	
Queue Length 95th (ft)		11			43	121	2	247		63	152	
Internal Link Dist (ft)		53			270			613			308	
Turn Bay Length (ft)						70	65			120		
Base Capacity (vph)		744			791	390	869	1019		678	1469	
Starvation Cap Reductn		0			0	0	0	0		263	460	
Spillback Cap Reductn		0			0	0	0	0		0	0	
Storage Cap Reductn		0			0	0	0	0		0	0	
Reduced v/c Ratio		0.01			0.05	0.57	0.00	0.55		0.77	0.37	

Intersection Summary

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

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



2024 Build Traffic Volumes
3: NYS Route 9D & Beacon City Hall/Main Street

Saturday Build Event Exit
11/29/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	2	2	38	0	197	2	431	58	293	338	3
Future Volume (veh/h)	2	2	2	38	0	197	2	431	58	293	338	3
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.95	0.95		0.98	0.99		0.96	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1890	1890	1890	1976	1976	1956	1928	1884	1928	1853	1853	1872
Adj Flow Rate, veh/h	3	3	3	43	0	221	2	490	66	318	367	3
Adj No. of Lanes	0	1	0	0	1	1	1	1	0	1	1	0
Peak Hour Factor	0.71	0.71	0.71	0.89	0.89	0.89	0.88	0.88	0.88	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	1	0	2	5	1	1	0
Cap, veh/h	115	97	67	299	0	315	709	914	123	546	1038	8
Arrive On Green	0.13	0.13	0.13	0.13	0.00	0.13	0.06	0.57	0.57	0.06	0.57	0.57
Sat Flow, veh/h	290	761	526	1423	0	1624	1837	1617	218	1765	1835	15
Grp Volume(v), veh/h	9	0	0	43	0	221	2	0	556	318	0	370
Grp Sat Flow(s),veh/h/ln	1577	0	0	1423	0	1624	1837	0	1834	1765	0	1850
Q Serve(g_s), s	0.0	0.0	0.0	1.3	0.0	3.8	0.0	0.0	11.7	0.0	0.0	6.7
Cycle Q Clear(g_c), s	0.3	0.0	0.0	1.6	0.0	3.8	0.0	0.0	11.7	0.0	0.0	6.7
Prop In Lane	0.33		0.33	1.00		1.00	1.00		0.12	1.00		0.01
Lane Grp Cap(c), veh/h	279	0	0	299	0	315	709	0	1037	546	0	1046
V/C Ratio(X)	0.03	0.00	0.00	0.14	0.00	0.70	0.00	0.00	0.54	0.58	0.00	0.35
Avail Cap(c_a), veh/h	800	0	0	801	0	894	887	0	1037	718	0	1046
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.7	0.0	0.0	24.2	0.0	23.3	7.1	0.0	8.4	15.6	0.0	7.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	2.8	0.0	0.0	2.0	1.0	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	0.7	0.0	3.5	0.0	0.0	6.4	5.0	0.0	3.7
LnGrp Delay(d),s/veh	23.7	0.0	0.0	24.4	0.0	26.1	7.1	0.0	10.4	16.6	0.0	8.2
LnGrp LOS	C			C		C	A		B	B		A
Approach Vol, veh/h		9			264			558			688	
Approach Delay, s/veh		23.7			25.9			10.4			12.1	
Approach LOS		C			C			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.0	40.0		12.9	9.0	40.0		12.9				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0				
Max Q Clear Time (g_c+I1), s	2.0	13.7		2.3	2.0	8.7		5.8				
Green Ext Time (p_c), s	1.0	1.5		0.0	0.0	0.9		1.5				
Intersection Summary												
HCM 2010 Ctrl Delay				13.9								
HCM 2010 LOS				B								

2024 Build Traffic Volumes
4: NYS Route 9D & Beacon Street/West End Lofts

Saturday Build Event Exit
11/29/2021

												
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	10	3	3	10	5	82	3	398	10	45	325	7
Future Volume (vph)	10	3	3	10	5	82	3	398	10	45	325	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			-3%			-4%			4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.974			0.886			0.997			0.997	
Flt Protected		0.970			0.995						0.994	
Satd. Flow (prot)	0	1638	0	0	1646	0	0	1855	0	0	1810	0
Flt Permitted		0.970			0.995						0.994	
Satd. Flow (perm)	0	1638	0	0	1646	0	0	1855	0	0	1810	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		162			281			312			693	
Travel Time (s)		3.7			6.4			7.1			15.8	
Confl. Peds. (#/hr)			4			19			2			3
Confl. Bikes (#/hr)												1
Peak Hour Factor	0.61	0.61	0.61	0.88	0.88	0.88	0.85	0.85	0.85	0.92	0.92	0.92
Heavy Vehicles (%)	0%	50%	0%	11%	25%	1%	0%	4%	11%	2%	2%	0%
Adj. Flow (vph)	16	5	5	11	6	93	4	468	12	49	353	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	26	0	0	110	0	0	484	0	0	410	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	0.98	0.98	0.98	0.97	0.97	0.97	1.03	1.03	1.03
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											

2024 Build Traffic Volumes
4: NYS Route 9D & Beacon Street/West End Lofts

Saturday Build Event Exit
11/29/2021

Intersection												
Int Delay, s/veh	2.6											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	3	3	10	5	82	3	398	10	45	325	7
Future Vol, veh/h	10	3	3	10	5	82	3	398	10	45	325	7
Conflicting Peds, #/hr	0	0	4	0	0	19	0	0	2	0	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	-3	-	-	-4	-	-	4	-
Peak Hour Factor	61	61	61	88	88	88	85	85	85	92	92	92
Heavy Vehicles, %	0	50	0	11	25	1	0	4	11	2	2	0
Mvmt Flow	16	5	5	11	6	93	4	468	12	49	353	8

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1009	948	364	948	946	495	364	0	0	482	0	0
Stage 1	458	458	-	484	484	-	-	-	-	-	-	-
Stage 2	551	490	-	464	462	-	-	-	-	-	-	-
Critical Hdwy	7.1	7	6.2	6.61	6.15	5.91	4.1	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	6	-	5.61	5.15	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	6	-	5.61	5.15	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4.45	3.3	3.599	4.225	3.309	2.2	-	-	2.218	-	-
Pot Cap-1 Maneuver	221	217	685	272	280	601	1206	-	-	1081	-	-
Stage 1	587	494	-	593	559	-	-	-	-	-	-	-
Stage 2	522	477	-	607	570	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	171	203	681	251	262	590	1203	-	-	1079	-	-
Mov Cap-2 Maneuver	171	203	-	251	262	-	-	-	-	-	-	-
Stage 1	583	465	-	589	555	-	-	-	-	-	-	-
Stage 2	426	474	-	560	536	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	25	14.5	0.1	1
HCM LOS	D	B		

Minor Lane/Major Mvmt	NEL	NET	NERNWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	1203	-	-	490	206	1079	-
HCM Lane V/C Ratio	0.003	-	-	0.225	0.127	0.045	-
HCM Control Delay (s)	8	0	-	14.5	25	8.5	0
HCM Lane LOS	A	A	-	B	D	A	A
HCM 95th %tile Q(veh)	0	-	-	0.9	0.4	0.1	-

2024 Build Traffic Volumes
5: NYS Route 9D & Site Access

Saturday Build Event Exit
11/29/2021



Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	66	21	7	343	313	23
Future Volume (vph)	66	21	7	343	313	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.967				0.991	
Flt Protected	0.963			0.999		
Satd. Flow (prot)	1735	0	0	1861	1846	0
Flt Permitted	0.963			0.999		
Satd. Flow (perm)	1735	0	0	1861	1846	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	176			499	312	
Travel Time (s)	4.0			11.3	7.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	72	23	8	373	340	25
Shared Lane Traffic (%)						
Lane Group Flow (vph)	95	0	0	381	365	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane				Yes	Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	60	60	60			60
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection						
Int Delay, s/veh	1.6					
Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	66	21	7	343	313	23
Future Vol, veh/h	66	21	7	343	313	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	72	23	8	373	340	25
Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	742	353	365	0	-	0
Stage 1	353	-	-	-	-	-
Stage 2	389	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	383	691	1194	-	-	-
Stage 1	711	-	-	-	-	-
Stage 2	685	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	380	691	1194	-	-	-
Mov Cap-2 Maneuver	490	-	-	-	-	-
Stage 1	705	-	-	-	-	-
Stage 2	685	-	-	-	-	-
Approach	SE	NE	SW			
HCM Control Delay, s	13.3	0.2	0			
HCM LOS	B					
Minor Lane/Major Mvmt	NEL	NET SELn1	SWT	SWR		
Capacity (veh/h)	1194	- 527	-	-		
HCM Lane V/C Ratio	0.006	- 0.179	-	-		
HCM Control Delay (s)	8	0 13.3	-	-		
HCM Lane LOS	A	A B	-	-		
HCM 95th %tile Q(veh)	0	- 0.6	-	-		

2024 Build Traffic Volumes
6: South Avenue & NYS Route 9D

Saturday Build Event Exit
11/29/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	209	16	13	208	37	14	27	13	32	35	9
Future Volume (vph)	9	209	16	13	208	37	14	27	13	32	35	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		6%			-6%			-1%			3%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor								0.99			0.99	
Frt		0.991			0.980			0.967			0.984	
Flt Protected		0.998			0.998			0.987			0.979	
Satd. Flow (prot)	0	1823	0	0	1844	0	0	1822	0	0	1686	0
Flt Permitted		0.985			0.979			0.926			0.866	
Satd. Flow (perm)	0	1799	0	0	1809	0	0	1701	0	0	1491	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			9			17			7	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		241			516			194			303	
Travel Time (s)		5.5			11.7			4.4			6.9	
Confl. Peds. (#/hr)							6					6
Peak Hour Factor	0.82	0.82	0.82	0.85	0.85	0.85	0.55	0.55	0.55	0.82	0.82	0.82
Heavy Vehicles (%)	0%	0%	0%	12%	4%	0%	0%	0%	0%	2%	12%	0%
Adj. Flow (vph)	11	255	20	15	245	44	25	49	24	39	43	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	286	0	0	304	0	0	98	0	0	93	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	0.96	0.96	0.96	0.99	0.99	0.99	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	21.0	21.0		21.0	21.0		21.0	21.0		21.0	21.0	
Total Split (s)	65.0	65.0		65.0	65.0		65.0	65.0		65.0	65.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	60.0	60.0		60.0	60.0		60.0	60.0		60.0	60.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
v/c Ratio		0.34			0.36			0.12			0.13	
Control Delay		23.5			23.5			16.9			19.2	

2024 Build Traffic Volumes
6: South Avenue & NYS Route 9D

Saturday Build Event Exit
11/29/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		23.5			23.5			16.9			19.2	
Queue Length 50th (ft)		149			157			38			41	
Queue Length 95th (ft)		194			213			39			67	
Internal Link Dist (ft)		161			436			114			223	
Turn Bay Length (ft)												
Base Capacity (vph)		832			839			794			691	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.34			0.36			0.12			0.13	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 45

Control Type: Pretimed

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

 Ø2 (R)	 Ø4
65 s	65 s
 Ø6 (R)	 Ø8
65 s	65 s

2024 Build Traffic Volumes
6: South Avenue & NYS Route 9D

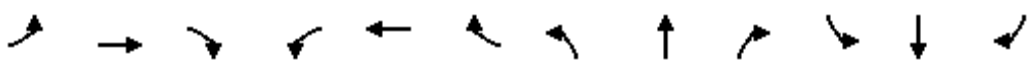
Saturday Build Event Exit
11/29/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	209	16	13	208	37	14	27	13	32	35	9
Future Volume (veh/h)	9	209	16	13	208	37	14	27	13	32	35	9
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1843	1843	1843	1957	1885	1957	1910	1910	1910	1872	1759	1872
Adj Flow Rate, veh/h	11	255	20	15	245	44	25	49	24	39	43	11
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.82	0.82	0.82	0.85	0.85	0.85	0.55	0.55	0.55	0.82	0.82	0.82
Percent Heavy Veh, %	0	0	0	12	4	0	0	0	0	2	12	0
Cap, veh/h	42	759	58	49	694	121	212	409	190	312	333	81
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
Sat Flow, veh/h	29	1645	126	44	1503	262	384	887	412	590	721	176
Grp Volume(v), veh/h	286	0	0	304	0	0	98	0	0	93	0	0
Grp Sat Flow(s),veh/h/ln	1800	0	0	1809	0	0	1683	0	0	1487	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	13.0	0.0	0.0	13.9	0.0	0.0	4.0	0.0	0.0	4.0	0.0	0.0
Prop In Lane	0.04		0.07	0.05		0.14	0.26		0.24	0.42		0.12
Lane Grp Cap(c), veh/h	860	0	0	864	0	0	812	0	0	726	0	0
V/C Ratio(X)	0.33	0.00	0.00	0.35	0.00	0.00	0.12	0.00	0.00	0.13	0.00	0.00
Avail Cap(c_a), veh/h	860	0	0	864	0	0	812	0	0	726	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	22.4	0.0	0.0	22.6	0.0	0.0	19.9	0.0	0.0	19.9	0.0	0.0
Incr Delay (d2), s/veh	1.0	0.0	0.0	1.1	0.0	0.0	0.3	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	0.0	0.0	7.3	0.0	0.0	2.1	0.0	0.0	2.0	0.0	0.0
LnGrp Delay(d),s/veh	23.4	0.0	0.0	23.7	0.0	0.0	20.2	0.0	0.0	20.3	0.0	0.0
LnGrp LOS	C			C			C			C		
Approach Vol, veh/h		286			304			98			93	
Approach Delay, s/veh		23.4			23.7			20.2			20.3	
Approach LOS		C			C			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		65.0		65.0		65.0		65.0				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		60.0		60.0		60.0		60.0				
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		0.0				
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay				22.7								
HCM 2010 LOS				C								

2024 Build Traffic Volumes With Improvements
2: NYS Route 9D & Beekman Street/W. Church Street

Friday PM Build Typical

11/29/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	310	24	37	4	15	23	34	437	5	6	525	166
Future Volume (vph)	310	24	37	4	15	23	34	437	5	6	525	166
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		2%			-10%			-6%			3%	
Storage Length (ft)	0		95	0		0	75		0	75		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.97		0.96			1.00			0.99	
Frt			0.850		0.925			0.998			0.964	
Flt Protected		0.956			0.996		0.950			0.950		
Satd. Flow (prot)	0	1760	1599	0	1713	0	1805	1915	0	1778	1774	0
Flt Permitted		0.956			0.996		0.135			0.354		
Satd. Flow (perm)	0	1760	1557	0	1713	0	257	1915	0	663	1774	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			145		25			1			21	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		584			328			388			335	
Travel Time (s)		13.3			7.5			8.8			7.6	
Confl. Peds. (#/hr)			2			13			1			6
Confl. Bikes (#/hr)						1			1			1
Peak Hour Factor	0.71	0.71	0.71	0.92	0.92	0.92	0.84	0.84	0.84	0.98	0.98	0.98
Heavy Vehicles (%)	2%	4%	0%	0%	7%	0%	3%	2%	0%	0%	1%	1%
Adj. Flow (vph)	437	34	52	4	16	25	40	520	6	6	536	169
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	471	52	0	45	0	40	526	0	6	705	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												Yes
Headway Factor	1.01	1.01	1.01	0.94	0.94	0.94	0.96	0.96	0.96	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2		2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83	83	20	83		83	6		83	6	
Trailing Detector (ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Position(ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Size(ft)	20	43	43	20	43		43	6		43	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		40	40		40		40			40		
Detector 2 Size(ft)		43	43		43		43			43		
Detector 2 Type		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex		

2024 Build Traffic Volumes With Improvements
2: NYS Route 9D & Beekman Street/W. Church Street

Friday PM Build Typical

11/29/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)		0.0	0.0		0.0		0.0			0.0		
Turn Type	Split	NA	Perm	Split	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4				2			6		
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	16.0		4.0	16.0	
Minimum Split (s)	20.0	20.0	20.0	9.0	9.0		9.0	21.0		9.0	21.0	
Total Split (s)	20.0	20.0	20.0	15.0	15.0		15.0	40.0		15.0	40.0	
Total Split (%)	22.2%	22.2%	22.2%	16.7%	16.7%		16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	15.0	15.0	15.0	10.0	10.0		10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		None	Min		None	Min	
v/c Ratio		1.27	0.12		0.25		0.14	0.52		0.01	0.84	
Control Delay		170.0	0.5		24.9		9.7	15.3		9.0	31.3	
Queue Delay		0.0	0.0		0.0		0.0	1.4		0.0	0.0	
Total Delay		170.0	0.5		24.9		9.7	16.7		9.0	31.3	
Queue Length 50th (ft)		~346	0		10		9	153		1	334	
Queue Length 95th (ft)		#399	0		41		22	300		7	#600	
Internal Link Dist (ft)		504			248			308			255	
Turn Bay Length (ft)			95				75			75		
Base Capacity (vph)		372	443		263		361	1065		515	886	
Starvation Cap Reductn		0	0		0		0	335		0	0	
Spillback Cap Reductn		0	0		0		0	0		0	0	
Storage Cap Reductn		0	0		0		0	0		0	0	
Reduced v/c Ratio		1.27	0.12		0.17		0.11	0.72		0.01	0.80	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 73.8

Natural Cycle: 90

Control Type: Semi Act-Uncoord

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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



RGD

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2024 Build Traffic Volumes With Improvements
2: NYS Route 9D & Beekman Street/W. Church Street

Friday PM Build Typical

11/29/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	310	24	37	4	15	23	34	437	5	6	525	166
Future Volume (veh/h)	310	24	37	4	15	23	34	437	5	6	525	166
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.86	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1842	1881	1995	1947	1995	1900	1919	1957	1872	1853	1872
Adj Flow Rate, veh/h	437	34	52	4	16	25	40	520	6	6	536	169
Adj No. of Lanes	0	1	1	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.71	0.71	0.71	0.92	0.92	0.92	0.84	0.84	0.84	0.98	0.98	0.98
Percent Heavy Veh, %	2	4	0	0	7	0	3	2	0	0	1	1
Cap, veh/h	354	28	345	5	19	30	197	859	10	332	576	181
Arrive On Green	0.22	0.22	0.22	0.03	0.03	0.03	0.03	0.45	0.45	0.01	0.43	0.43
Sat Flow, veh/h	1633	127	1591	144	574	897	1810	1893	22	1782	1341	423
Grp Volume(v), veh/h	471	0	52	45	0	0	40	0	526	6	0	705
Grp Sat Flow(s),veh/h/ln	1760	0	1591	1615	0	0	1810	0	1915	1782	0	1764
Q Serve(g_s), s	15.0	0.0	1.8	1.9	0.0	0.0	0.8	0.0	14.3	0.1	0.0	26.3
Cycle Q Clear(g_c), s	15.0	0.0	1.8	1.9	0.0	0.0	0.8	0.0	14.3	0.1	0.0	26.3
Prop In Lane	0.93		1.00	0.09		0.56	1.00		0.01	1.00		0.24
Lane Grp Cap(c), veh/h	382	0	345	54	0	0	197	0	869	332	0	757
V/C Ratio(X)	1.23	0.00	0.15	0.83	0.00	0.00	0.20	0.00	0.61	0.02	0.00	0.93
Avail Cap(c_a), veh/h	382	0	345	234	0	0	403	0	970	579	0	893
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	27.1	0.0	21.9	33.2	0.0	0.0	15.6	0.0	14.2	12.2	0.0	18.8
Incr Delay (d2), s/veh	125.7	0.0	0.2	26.4	0.0	0.0	0.5	0.0	0.9	0.0	0.0	14.6
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	20.6	0.0	0.8	1.2	0.0	0.0	0.4	0.0	7.7	0.1	0.0	15.8
LnGrp Delay(d),s/veh	152.8	0.0	22.1	59.6	0.0	0.0	16.1	0.0	15.1	12.2	0.0	33.4
LnGrp LOS	F		C	E			B		B	B		C
Approach Vol, veh/h		523			45			566			711	
Approach Delay, s/veh		139.8			59.6			15.2			33.2	
Approach LOS		F			E			B			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.4	36.4		20.0	7.1	34.7		7.3				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	10.0	35.0		15.0	10.0	35.0		10.0				
Max Q Clear Time (g_c+I1), s	2.1	16.3		17.0	2.8	28.3		3.9				
Green Ext Time (p_c), s	0.0	1.3		0.0	0.0	1.4		0.1				
Intersection Summary												
HCM 2010 Ctrl Delay			58.5									
HCM 2010 LOS			E									

2024 Build Traffic Volumes With Improvements
2: NYS Route 9D & Beekman Street/W. Church Street

Friday PM Build Event Entry

11/29/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	310	24	40	4	15	23	35	439	5	6	561	166
Future Volume (vph)	310	24	40	4	15	23	35	439	5	6	561	166
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		2%			-10%			-6%			3%	
Storage Length (ft)	0		95	0		0	75		0	75		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.97		0.96			1.00			0.99	
Frt			0.850		0.925			0.998			0.966	
Flt Protected		0.956			0.996		0.950			0.950		
Satd. Flow (prot)	0	1760	1599	0	1713	0	1805	1915	0	1778	1778	0
Flt Permitted		0.956			0.996		0.117			0.356		
Satd. Flow (perm)	0	1760	1557	0	1713	0	222	1915	0	666	1778	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			145		25			1			19	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		584			328			388			335	
Travel Time (s)		13.3			7.5			8.8			7.6	
Confl. Peds. (#/hr)			2			13			1			6
Confl. Bikes (#/hr)						1			1			1
Peak Hour Factor	0.71	0.71	0.71	0.92	0.92	0.92	0.84	0.84	0.84	0.98	0.98	0.98
Heavy Vehicles (%)	2%	4%	0%	0%	7%	0%	3%	2%	0%	0%	1%	1%
Adj. Flow (vph)	437	34	56	4	16	25	42	523	6	6	572	169
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	471	56	0	45	0	42	529	0	6	741	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												Yes
Headway Factor	1.01	1.01	1.01	0.94	0.94	0.94	0.96	0.96	0.96	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2		2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83	83	20	83		83	6		83	6	
Trailing Detector (ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Position(ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Size(ft)	20	43	43	20	43		43	6		43	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		40	40		40		40			40		
Detector 2 Size(ft)		43	43		43		43			43		
Detector 2 Type		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex		

2024 Build Traffic Volumes With Improvements
2: NYS Route 9D & Beekman Street/W. Church Street

Friday PM Build Event Entry

11/29/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)		0.0	0.0		0.0		0.0			0.0		
Turn Type	Split	NA	Perm	Split	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4				2			6		
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	16.0		4.0	16.0	
Minimum Split (s)	20.0	20.0	20.0	9.0	9.0		9.0	21.0		9.0	21.0	
Total Split (s)	20.0	20.0	20.0	15.0	15.0		15.0	40.0		15.0	40.0	
Total Split (%)	22.2%	22.2%	22.2%	16.7%	16.7%		16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	15.0	15.0	15.0	10.0	10.0		10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	
Lead/Lag												
							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		None	Min		None	Min	
v/c Ratio		1.30	0.13		0.25		0.16	0.51		0.01	0.86	
Control Delay		185.0	0.6		25.0		9.9	15.1		9.0	33.4	
Queue Delay		0.0	0.0		0.0		0.0	1.7		0.0	0.0	
Total Delay		185.0	0.6		25.0		9.9	16.9		9.0	33.4	
Queue Length 50th (ft)		~346	0		10		9	155		1	364	
Queue Length 95th (ft)		#399	0		41		23	301		7	#648	
Internal Link Dist (ft)		504			248			308			255	
Turn Bay Length (ft)			95				75			75		
Base Capacity (vph)		362	435		256		342	1038		518	862	
Starvation Cap Reductn		0	0		0		0	334		0	0	
Spillback Cap Reductn		0	0		0		0	0		0	0	
Storage Cap Reductn		0	0		0		0	0		0	0	
Reduced v/c Ratio		1.30	0.13		0.18		0.12	0.75		0.01	0.86	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 75.2

Natural Cycle: 90

Control Type: Semi Act-Uncoord

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

15 s	40 s	20 s	15 s	15 s	40 s	15 s	40 s

RGD

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2024 Build Traffic Volumes With Improvements
2: NYS Route 9D & Beekman Street/W. Church Street

Friday PM Build Event Entry

11/29/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	310	24	40	4	15	23	35	439	5	6	561	166
Future Volume (veh/h)	310	24	40	4	15	23	35	439	5	6	561	166
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.86	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1842	1881	1995	1947	1995	1900	1919	1957	1872	1853	1872
Adj Flow Rate, veh/h	437	34	56	4	16	25	42	523	6	6	572	169
Adj No. of Lanes	0	1	1	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.71	0.71	0.71	0.92	0.92	0.92	0.84	0.84	0.84	0.98	0.98	0.98
Percent Heavy Veh, %	2	4	0	0	7	0	3	2	0	0	1	1
Cap, veh/h	343	27	334	5	19	30	190	889	10	346	607	179
Arrive On Green	0.21	0.21	0.21	0.03	0.03	0.03	0.03	0.47	0.47	0.01	0.44	0.44
Sat Flow, veh/h	1633	127	1591	143	573	895	1810	1893	22	1782	1365	403
Grp Volume(v), veh/h	471	0	56	45	0	0	42	0	529	6	0	741
Grp Sat Flow(s),veh/h/ln	1760	0	1591	1611	0	0	1810	0	1915	1782	0	1768
Q Serve(g_s), s	15.0	0.0	2.1	2.0	0.0	0.0	0.9	0.0	14.4	0.1	0.0	28.6
Cycle Q Clear(g_c), s	15.0	0.0	2.1	2.0	0.0	0.0	0.9	0.0	14.4	0.1	0.0	28.6
Prop In Lane	0.93		1.00	0.09		0.56	1.00		0.01	1.00		0.23
Lane Grp Cap(c), veh/h	370	0	334	54	0	0	190	0	900	346	0	786
V/C Ratio(X)	1.27	0.00	0.17	0.84	0.00	0.00	0.22	0.00	0.59	0.02	0.00	0.94
Avail Cap(c_a), veh/h	370	0	334	226	0	0	386	0	939	585	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	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	28.2	0.0	23.1	34.3	0.0	0.0	16.1	0.0	13.9	11.9	0.0	19.0
Incr Delay (d2), s/veh	142.5	0.0	0.2	27.1	0.0	0.0	0.6	0.0	0.9	0.0	0.0	17.4
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	21.8	0.0	0.9	1.3	0.0	0.0	0.5	0.0	7.7	0.1	0.0	17.6
LnGrp Delay(d),s/veh	170.7	0.0	23.3	61.4	0.0	0.0	16.7	0.0	14.8	11.9	0.0	36.3
LnGrp LOS	F		C	E			B		B	B		D
Approach Vol, veh/h		527			45			571			747	
Approach Delay, s/veh		155.0			61.4			14.9			36.1	
Approach LOS		F			E			B			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.4	38.5		20.0	7.3	36.7		7.4				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	10.0	35.0		15.0	10.0	35.0		10.0				
Max Q Clear Time (g_c+I1), s	2.1	16.4		17.0	2.9	30.6		4.0				
Green Ext Time (p_c), s	0.0	1.3		0.0	0.1	1.1		0.1				
Intersection Summary												
HCM 2010 Ctrl Delay			63.5									
HCM 2010 LOS			E									

d

Friday PM Build Event Exit

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

11/29/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	310	24	37	4	15	23	38	478	5	6	525	166
Future Volume (vph)	310	24	37	4	15	23	38	478	5	6	525	166
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		2%			-10%			-6%			3%	
Storage Length (ft)	0		95	0		0	75		0	75		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25			25			86			86		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.97		0.96			1.00			0.99	
Frt			0.850		0.925			0.998			0.964	
Flt Protected		0.956			0.996		0.950			0.950		
Satd. Flow (prot)	0	1760	1599	0	1713	0	1805	1915	0	1778	1774	0
Flt Permitted		0.956			0.996		0.135			0.311		
Satd. Flow (perm)	0	1760	1557	0	1713	0	257	1915	0	582	1774	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			145		25			1			21	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		584			328			388			335	
Travel Time (s)		13.3			7.5			8.8			7.6	
Confl. Peds. (#/hr)			2			13			1			6
Confl. Bikes (#/hr)						1			1			1
Peak Hour Factor	0.71	0.71	0.71	0.92	0.92	0.92	0.84	0.84	0.84	0.98	0.98	0.98
Heavy Vehicles (%)	2%	4%	0%	0%	7%	0%	3%	2%	0%	0%	1%	1%
Adj. Flow (vph)	437	34	52	4	16	25	45	569	6	6	536	169
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	471	52	0	45	0	45	575	0	6	705	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.01	1.01	1.01	0.94	0.94	0.94	0.96	0.96	0.96	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2		2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83	83	20	83		83	6		83	6	
Trailing Detector (ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Position(ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Size(ft)	20	43	43	20	43		43	6		43	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		40	40		40		40			40		
Detector 2 Size(ft)		43	43		43		43			43		
Detector 2 Type		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex		

d 11:40 am 11/29/2021 Friday PM Build Event Exit
RGDSynchro 8 Report
Page 1

d
2: NYS Route 9D & Beekman Street/W. Church Street

Friday PM Build Event Exit

11/29/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)		0.0	0.0		0.0		0.0			0.0		
Turn Type	Split	NA	Perm	Split	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4				2			6		
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	16.0		4.0	16.0	
Minimum Split (s)	20.0	20.0	20.0	9.0	9.0		9.0	21.0		9.0	21.0	
Total Split (s)	20.0	20.0	20.0	15.0	15.0		15.0	40.0		15.0	40.0	
Total Split (%)	22.2%	22.2%	22.2%	16.7%	16.7%		16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	15.0	15.0	15.0	10.0	10.0		10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		None	Min		None	Min	
v/c Ratio		1.27	0.12		0.25		0.16	0.56		0.02	0.84	
Control Delay		170.3	0.5		25.0		9.8	16.2		9.0	31.4	
Queue Delay		0.0	0.0		0.0		0.0	1.9		0.0	0.0	
Total Delay		170.3	0.5		25.0		9.8	18.1		9.0	31.4	
Queue Length 50th (ft)		~346	0		10		10	174		1	334	
Queue Length 95th (ft)		#400	0		41		24	336		7	#602	
Internal Link Dist (ft)		504			248			308			255	
Turn Bay Length (ft)			95				75			75		
Base Capacity (vph)		372	443		262		360	1066		482	885	
Starvation Cap Reductn		0	0		0		0	324		0	0	
Spillback Cap Reductn		0	0		0		0	0		0	0	
Storage Cap Reductn		0	0		0		0	0		0	0	
Reduced v/c Ratio		1.27	0.12		0.17		0.13	0.77		0.01	0.80	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 73.9

Natural Cycle: 90

Control Type: Semi Act-Uncoord

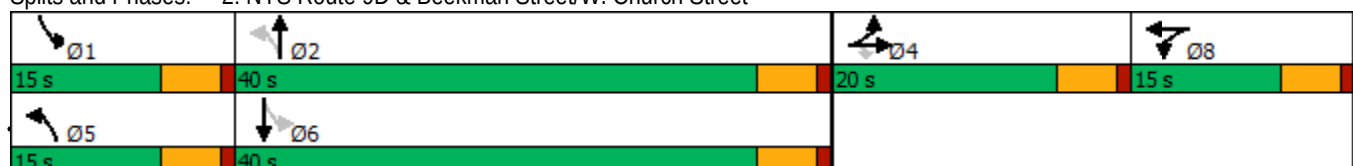
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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



RGD

Page 2

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	310	24	37	4	15	23	38	478	5	6	525	166
Future Volume (veh/h)	310	24	37	4	15	23	38	478	5	6	525	166
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.86	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1842	1881	1995	1947	1995	1900	1919	1957	1872	1853	1872
Adj Flow Rate, veh/h	437	34	52	4	16	25	45	569	6	6	536	169
Adj No. of Lanes	0	1	1	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.71	0.71	0.71	0.92	0.92	0.92	0.84	0.84	0.84	0.98	0.98	0.98
Percent Heavy Veh, %	2	4	0	0	7	0	3	2	0	0	1	1
Cap, veh/h	353	27	344	5	19	30	201	864	9	301	575	181
Arrive On Green	0.22	0.22	0.22	0.03	0.03	0.03	0.03	0.46	0.46	0.01	0.43	0.43
Sat Flow, veh/h	1633	127	1591	144	574	897	1810	1895	20	1782	1341	423
Grp Volume(v), veh/h	471	0	52	45	0	0	45	0	575	6	0	705
Grp Sat Flow(s),veh/h/ln	1760	0	1591	1615	0	0	1810	0	1915	1782	0	1764
Q Serve(g_s), s	15.0	0.0	1.8	1.9	0.0	0.0	1.0	0.0	16.2	0.1	0.0	26.4
Cycle Q Clear(g_c), s	15.0	0.0	1.8	1.9	0.0	0.0	1.0	0.0	16.2	0.1	0.0	26.4
Prop In Lane	0.93		1.00	0.09		0.56	1.00		0.01	1.00		0.24
Lane Grp Cap(c), veh/h	380	0	344	54	0	0	201	0	873	301	0	757
V/C Ratio(X)	1.24	0.00	0.15	0.83	0.00	0.00	0.22	0.00	0.66	0.02	0.00	0.93
Avail Cap(c_a), veh/h	380	0	344	233	0	0	401	0	966	547	0	890
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	27.2	0.0	22.0	33.3	0.0	0.0	15.6	0.0	14.7	12.6	0.0	18.9
Incr Delay (d2), s/veh	127.8	0.0	0.2	26.6	0.0	0.0	0.6	0.0	1.4	0.0	0.0	14.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	20.7	0.0	0.8	1.2	0.0	0.0	0.5	0.0	8.8	0.1	0.0	15.8
LnGrp Delay(d),s/veh	155.0	0.0	22.2	60.0	0.0	0.0	16.2	0.0	16.1	12.6	0.0	33.7
LnGrp LOS	F		C	E			B		B	B		C
Approach Vol, veh/h		523			45			620			711	
Approach Delay, s/veh		141.8			60.0			16.1			33.5	
Approach LOS		F			E			B			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.4	36.6		20.0	7.3	34.8		7.3				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	10.0	35.0		15.0	10.0	35.0		10.0				
Max Q Clear Time (g_c+I1), s	2.1	18.2		17.0	3.0	28.4		3.9				
Green Ext Time (p_c), s	0.0	1.5		0.0	0.1	1.4		0.1				
Intersection Summary												
HCM 2010 Ctrl Delay			58.3									
HCM 2010 LOS			E									

Appendix

Appendix E | Traffic Volume Data

Maser Consulting

400 Columbus Avenue, Suite 180 E
Valhalla, NY 10595

Customer Loyalty through Client Satisfaction

File Name : 1-North_Ave_and_W_Church_St-Bekkman_St_-_Friday_880295_09-24-2021

Site Code :

Start Date : 9/24/2021

Page No : 1

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

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

Maser Consulting

400 Columbus Avenue, Suite 180 E
Valhalla, NY 10595

Customer Loyalty through Client Satisfaction

File Name : 1-North_Ave_and_W_Church_St-Bekkman_St_-_Friday_880295_09-24-2021

Site Code :

Start Date : 9/24/2021

Page No : 2

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

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

Maser Consulting

400 Columbus Avenue, Suite 180 E
Valhalla, NY 10595

Customer Loyalty through Client Satisfaction

File Name : 1-North_Ave_and_W_Church_St-Bekkman_St_-_Friday_880295_09-24-2021

Site Code :

Start Date : 9/24/2021

Page No : 3

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

Maser Consulting

400 Columbus Avenue, Suite 180 E
Valhalla, NY 10595

Customer Loyalty through Client Satisfaction

File Name : 1-North_Ave_and_W_Church_St-Beekman_St_-_Saturday_880298_09-25-2021

Site Code :

Start Date : 9/25/2021

Page No : 1

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

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

Maser Consulting

400 Columbus Avenue, Suite 180 E
Valhalla, NY 10595

Customer Loyalty through Client Satisfaction

File Name : 1-North_Ave_and_W_Church_St-Beekman_St_-_Saturday_880298_09-25-2021

Site Code :

Start Date : 9/25/2021

Page No : 2

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

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

Maser Consulting

400 Columbus Avenue, Suite 180 E
Valhalla, NY 10595

Customer Loyalty through Client Satisfaction

File Name : 1-North_Ave_and_W_Church_St-Beekman_St_-_Saturday_880298_09-25-2021

Site Code :

Start Date : 9/25/2021

Page No : 3

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

Maser Consulting

400 Columbus Avenue, Suite 180 E
Valhalla, NY 10595

Customer Loyalty through Client Satisfaction

File Name : 2-Main_St_and_North_Ave-Walcott_Ave_-_Friday_880304_09-24-2021

Site Code :

Start Date : 9/24/2021

Page No : 1

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

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

Maser Consulting

400 Columbus Avenue, Suite 180 E
Valhalla, NY 10595

Customer Loyalty through Client Satisfaction

File Name : 2-Main_St_and_North_Ave-Walcott_Ave_-_Friday_880304_09-24-2021

Site Code :

Start Date : 9/24/2021

Page No : 2

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

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

Maser Consulting

400 Columbus Avenue, Suite 180 E
Valhalla, NY 10595

Customer Loyalty through Client Satisfaction

File Name : 2-Main_St_and_North_Ave-Walcott_Ave_-_Friday_880304_09-24-2021

Site Code :

Start Date : 9/24/2021

Page No : 3

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

Maser Consulting

400 Columbus Avenue, Suite 180 E
Valhalla, NY 10595

Customer Loyalty through Client Satisfaction

File Name : 2-_Main_St_and_North_Ave-Wolcott_Ave_-_Saturday_880306_09-25-2021

Site Code :

Start Date : 9/25/2021

Page No : 1

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

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

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400 Columbus Avenue, Suite 180 E
Valhalla, NY 10595

Customer Loyalty through Client Satisfaction

File Name : 2-_Main_St_and_North_Ave-Wolcott_Ave_-_Saturday_880306_09-25-2021

Site Code :

Start Date : 9/25/2021

Page No : 2

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

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

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400 Columbus Avenue, Suite 180 E
Valhalla, NY 10595

Customer Loyalty through Client Satisfaction

File Name : 2-_Main_St_and_North_Ave-Wolcott_Ave_-_Saturday_880306_09-25-2021

Site Code :

Start Date : 9/25/2021

Page No : 3

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

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400 Columbus Avenue, Suite 180 E
Valhalla, NY 10595

Customer Loyalty through Client Satisfaction

File Name : 3-Wolcott__Ave_and_Beacon_St-Liam_Dr_-_Friday_880310_09-24-2021

Site Code :

Start Date : 9/24/2021

Page No : 1

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

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

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400 Columbus Avenue, Suite 180 E
Valhalla, NY 10595

Customer Loyalty through Client Satisfaction

File Name : 3-Wolcott__Ave_and_Beacon_St-Liam_Dr_-_Friday_880310_09-24-2021

Site Code :

Start Date : 9/24/2021

Page No : 2

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

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

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Valhalla, NY 10595

Customer Loyalty through Client Satisfaction

File Name : 3-Wolcott__Ave_and_Beacon_St-Liam_Dr_-_Friday_880310_09-24-2021

Site Code :

Start Date : 9/24/2021

Page No : 3

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

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400 Columbus Avenue, Suite 180 E
Valhalla, NY 10595

Customer Loyalty through Client Satisfaction

File Name : 3-Wolcott_Ave_and_Beacon_St-Liam_Dr_-_Saturday_880316_09-25-2021

Site Code :

Start Date : 9/25/2021

Page No : 1

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

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

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400 Columbus Avenue, Suite 180 E
Valhalla, NY 10595

Customer Loyalty through Client Satisfaction

File Name : 3-Wolcott_Ave_and_Beacon_St-Liam_Dr_-_Saturday_880316_09-25-2021

Site Code :

Start Date : 9/25/2021

Page No : 2

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

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

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Valhalla, NY 10595

Customer Loyalty through Client Satisfaction

File Name : 3-Wolcott_Ave_and_Beacon_St-Liam_Dr_-_Saturday_880316_09-25-2021

Site Code :

Start Date : 9/25/2021

Page No : 3

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

NYS DOT VOLUME DATA SUMMARY

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

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

NOTES:

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

NYSDOT CLASSIFICATION DATA SUMMARY

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

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

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

VEHICLE CLASSIFICATION CODES:

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

NOTES:

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

NYSDOT SPEED DATA SUMMARY

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

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

NOTES:

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



Engineering
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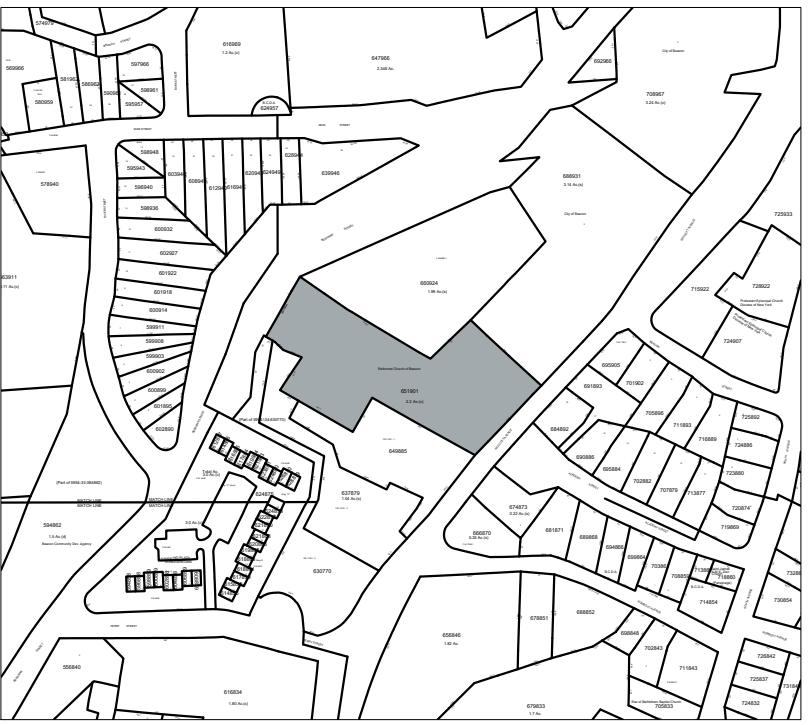
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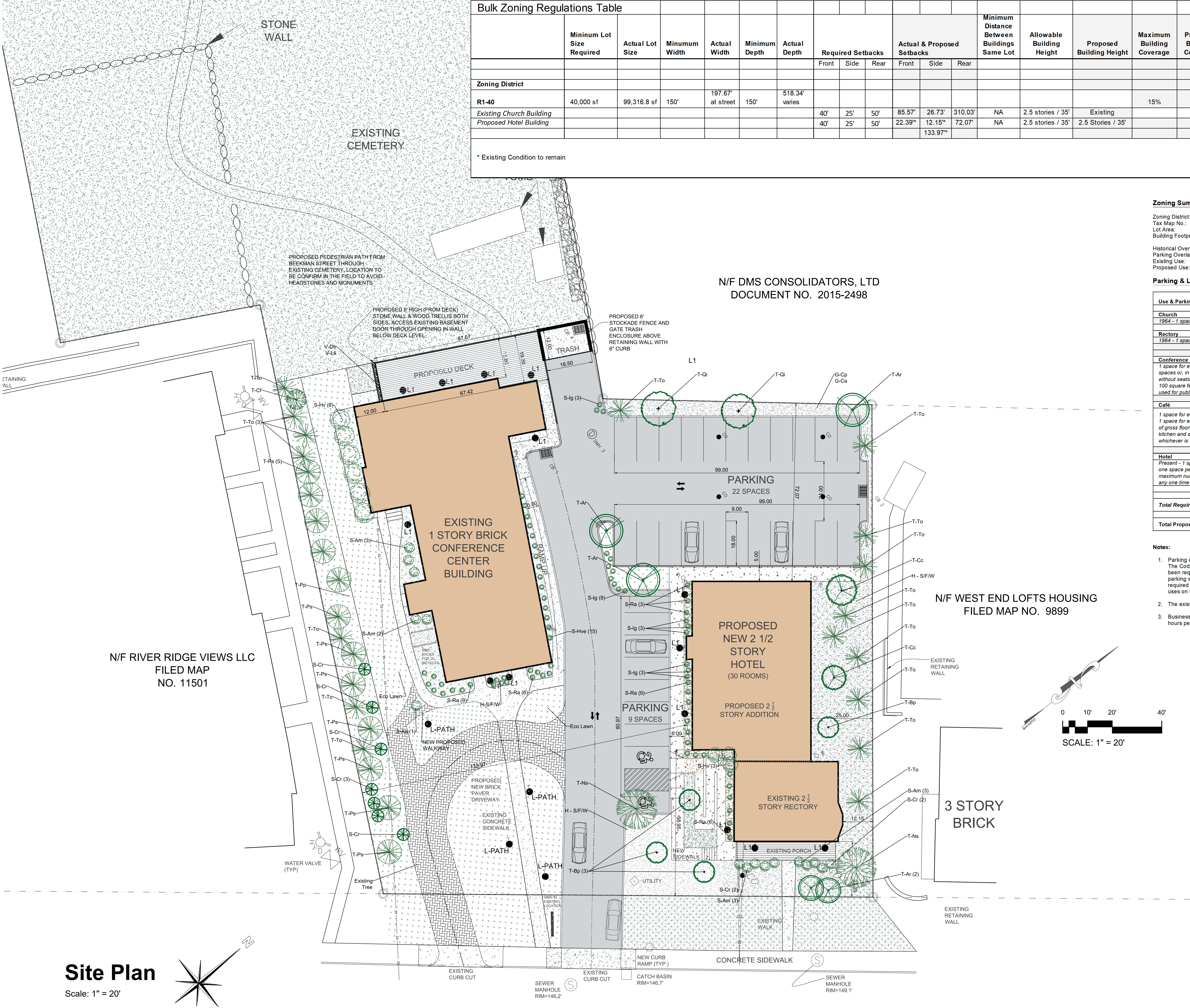


*Civil/Site • Traffic/Transportation • Governmental • Survey/Geospatial
Infrastructure • Geotechnical/Environmental • Telecommunications • Utilities/Energy*



Location Map
Scale: 1" = 400'

Bulk Zoning Regulations Table																	
	Minimum Lot Size Required	Actual Lot Size	Minumum Width	Actual Width	Minimum Depth	Actual Depth	Required Setbacks			Actual & Proposed Setbacks			Minimum Distance Between Buildings Same Lot	Allowable Building Height	Proposed Building Height	Maximum Building Coverage	Proposed Building Coverage
							Front	Side	Rear	Front	Side	Rear					
Zoning District																	
R1-40	40,000 sf	99,316.8 sf	150'	197.67' at street	150'	518.34' varies										15%	1%
Existing Church Building							40'	25'	50'	85.57'	26.73'	310.03'	NA	2.5 stories / 35'	Existing		
Proposed Hotel Building							40'	25'	50'	22.39"	12.15"	72.07'	NA	2.5 stories / 35'	2.5 Stories / 35'		
											133.97"						
* Existing Condition to remain																	



Zoning Summary

Zoning District:	R1-40
Tax Map No.:	5954-26-651901
Lot Area:	2.28 Acres
Building Footprint:	10,279 square feet (existing church building + proposed hotel building)
Historical Overlay District:	Yes
Parking Overlay District:	Yes
Existing Use:	Church / Rectory
Proposed Use:	Hotel, Event Space accessory to the Hotel Use

Parking & Loading

Use & Parking Requirements	1964 Units	1964 Parking Requirement	Proposed Units	Current Parking Requirement
Church				
1964 - 1 space per 5 seats	336 occupants	68 parking spaces		
Rectory				
1964 - 1 space per dwelling unit	1 dwelling unit	1 parking space		
Conference Center				
1 space for each 4 seats or pew spaces or, in places or, in places without seats, 1 space for each 100 square feet of floor space used for public assembly			350 occupants	88 parking spaces
Café				
1 space for each 3 patron seats or 1 space for each 150 square feet of gross floor area, excluding kitchen and storage areas, whichever is greater			Non-simultaneous use with conference center	0 parking spaces
Hotel				
Present - 1 space per room plus one space per employee for the maximum number of employees at any one time			30 rooms plus 1 employee	31 parking spaces
Total Required Parking Spaces		69 Parking Spaces		119 Parking Spaces
Total Proposed Parking Spaces				31 Parking Space (Note 1)

- Notes:**
- Parking is required per Beacon Zoning Code Section 223-26 (B.2). The building was in existence on April 20, 1964. The Code permits no more than 25% greater intensity than the use existing in 1964. 69 parking spaces would have been required in 1964 for the uses in existence at that time. The 1964 exception would allow for a total of 66 parking spaces. 119 parking spaces are required for the current proposed hotel and event space uses. The total required parking is subject to a determination from the Building Inspector regarding shared parking for 2 or multiple uses on the same lot.
 - The existing use in 1964 was a Church with 336 seats, plus the Rectory.
 - Business hours: 8am – 11pm Monday through Sunday inclusive for the Conference Center. The Hotel is open 24 hours per day.

REVISIONS:			
NO.	DATE	DESCRIPTION	BY
1	08/31/21	REVISED PER PLANNING BOARD COMMENTS	AJS
2	09/28/21	REVISED PER PLANNING BOARD COMMENTS	AJS
3	11/30/21	REVISED PER PLANNING BOARD COMMENTS	AJS
4	12/28/21	REVISED PER PLANNING BOARD COMMENTS	AJS

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Sheet 10 of 13	Vehicle Tracking Plan
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Sheet 13 of 13	Water & Sewer Details

Owner:
Prophecy Theater, LLC
36 South Brett Street
Beacon, NY 12508

Architect:
Aryeh Siegel, Architect
84 Mason Circle
Beacon, New York 12508

Site / Civil Engineer:
Hudson Land Design
174 Main Street
Beacon, New York 12508

Surveyor:
Robert Oswald
175 WALSH ROAD PO BOX 1
LAGRANGEVILLE, NEW YORK 12540

Landscape Designer:
Landscape Restorations
7 Creek Drive
Beacon, New York 12508

1113 Wolcott Avenue
Beacon, New York
Scale: 1" = 20'
June 29, 2021



REVISIONS:			
NO.	DATE	DESCRIPTION	BY
1	08/31/21	ADDED PER PLANNING BOARD COMMENTS	AJS
2	09/28/21	REVISED PER PLANNING BOARD COMMENTS	AJS
3	11/30/21	REVISED PER PLANNING BOARD COMMENTS	AJS
4	12/28/21	REVISED PER PLANNING BOARD COMMENTS	AJS

Site Plan
Scale: 1" = 30'

Special Use Permit Application

Sheet 2 of 13 - Full Site Plan

Owner:
Prophecy Theater, LLC
36 South Brett Street
Beacon, NY 12508

Architect:
Aryeh Siegel, Architect
84 Mason Circle
Beacon, New York 12508

Site / Civil Engineer:
Hudson Land Design
174 Main Street
Beacon, New York 12508

Surveyor:
Robert Oswald
175 WALSH ROAD PO BOX 1
LAGRANGEVILLE, NEW YORK 12540

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Beacon, New York 12508

1113 Wolcott Avenue
Beacon, New York
Scale: 1" = 30'
June 29, 2021





POLE MOUNTED LIGHT (L1A)

STERNBERG LIGHTING "1527LED Omega™ Medium Scale" POLE MOUNTED 2700K LED FIXTURE. LOW GLARE CUTOFF SHIELD, DARK SKY COMPLIANT. COLOR: BLACK. PHOTOCELL CONTROL. OR APPROVED EQUAL. MOUNTING HEIGHT ON BLACK ALUMINUM "CONCORD" POLE = 12 FEET



WALL MOUNTED HOUSE LIGHT (L1)
HUBBARDTON FORGE WALL MOUNTED FIXTURE. MODEL "Hood Outdoor Dark Sky Wall Sconce". 60W, 2700K. COLOR: COASTAL BLACK. OR APPROVED EQUAL. MOUNTING HEIGHT = 7 FEET. NOTE THAT THE MANUFACTURER DOES NOT PROVIDE FOOTCANDLE DIAGRAMS FOR THIS FIXTURE



PATH LIGHT (L-PATH)

DWELED Chamber Outdoor Post Lantern. 3000K. COLOR: BRONZE. OR APPROVED EQUAL. DARK SKY COMPLIANT. 30" HIGH POST MOUNTED. NOTE THAT THE MANUFACTURER DOES NOT PROVIDE FOOTCANDLE DIAGRAMS FOR THIS FIXTURE

NOTE: ALL EXTERIOR LIGHTING ON THE SITE SHALL BE DIRECTED AND/OR SHIELDED SO AS NOT TO CAUSE ANY OBJECTIONABLE GLARE OBSERVABLE FROM NEIGHBORING STREETS AND PROPERTIES. THE SOURCE (BULBS) OF SUCH LIGHTING SHALL NOT BE VISIBLE FROM SAID NEIGHBORING STREETS AND PROPERTIES. PHOTOMETRIC DIAGRAM ARE SHOWN WITH SHIELDED CONDITIONS.

Planting Schedule

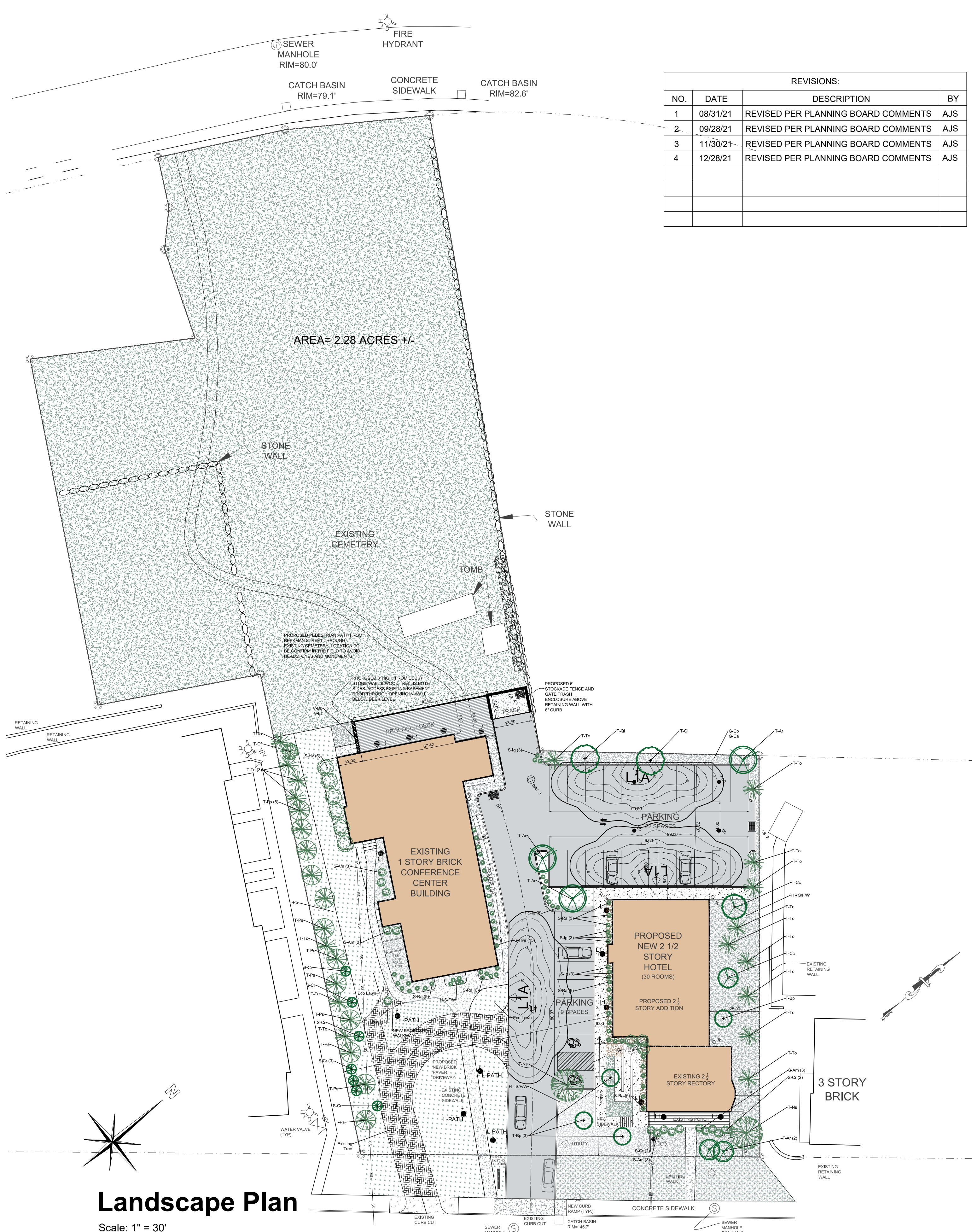
Symbol	Quantity	Type	Common Name	Botanical Name	Size
T-Ar	3	Tree	Red Maple	Acer rubrum	7'-8'
T-Bp	3	Tree	Grey Birch	Betula populifolia	7'-8'
T-Cc	2	Tree	Eastern Redbud	Cercis canadensis	6'-7'
T-Cf	1	Tree	Flowering Dogwood	Cornus florida	6'-7'
T-Ns	2	Tree	Blackgum	Nyssa sylvatica	7'-8'
T-Ps	12	Tree	White Pine	Pinus strobus	7'-8'
T-Pp	1	Tree	Wild Red Cherry	Prunus pensylvanica	7'-8'
T-Ql	2	Tree	Bear Oak	Quercus ilicifolia	7'-8'
T-To	14	Tree	Arborvitae 'Nigra'	Thuja occidentalis 'Nigra'	7'-8'
S-Aa	1	Shrub	Chokeberry	Aronia arbutifolia	3 Gallon
S-Am	5	Shrub	Black Chokeberry	Aronia melanocarpa	3 Gallon
S-Cr	7	Shrub	Gray Dogwood American	Cornus racemosa	3 Gallon
S-Hve	15	Shrub	Ozark Witch-hazel	Hamamelis vernalis	3 Gallon
S-Hv	9	Shrub	Witch-hazel	Hamamelis virginiana	3 Gallon
S-Ig	14	Shrub	Inkberry	Ilex glabra	3 Gallon
S-Ra	33	Shrub	Low-grow Sumac	Rhus aromatica	3 Gallon
H-S/F/W	15	Fern	Christmas Fern	Polystichum aristichoides	1 Gallon
H-S/F/W	20	Herbaceous	White Wood Aster	Aster divaricatus	Plugs
H-S/F/W	20	Herbaceous	Wild Geranium	Geranium maculatum	Plugs
H-S/F/W	20	Herbaceous	Creeping Phlox	Phlox stifferia	Plugs
H-S/F/W	20	Herbaceous	Blue-stemmed Goldenrod	Solidago caesia	Plugs
H-S/F/W	20	Herbaceous	Blue Wood Aster	Symphytichum cordifolia	Plugs
H-S/F/W	20	Herbaceous	Frost Aster	Symphytichum pilosum	Plugs
V-Db	25	Vine	Climbing Hydrangea	Decumaria barbara	Plugs
V-Ls	25	Vine	Trumpet Honeysuckle	Lonicera sempervirens	Plugs
G-Ca	100	Grass	Appalachian Sedge	Carex appalachica	Plugs
G-Cp	100	Grass	Pennsylvania Sedge	Carex pennsylvanica	Plugs
G-Eg	10	Grass	Eco Grass	Eco Lawn	Seed

Planting and Landscape Notes

- Contractors shall enter and exit site through pre-approved routes only.
- No non-native plant species shall be introduced onto the site. All species shall be indigenous to the northeast region of North America.
- If a straight specie is specified, no cultivars will be accepted without prior approval of designer.
- No plants will be accepted that display mechanical injury, disease or specie irregularities.
- Soil shall be prepped by removing all construction debris, loose roots and stones larger than 3".
- All plants must be labeled when delivered to site.
- Areas to be planted shall be marked and labeled by designer.
- All plant locations and orientations in the field require approval from designer and owner prior to installation.
- Test tree-pit for drainage before planting. Do not plant tree in pit if water is still evident after one hour. Contact site engineer or landscape designer if this condition is encountered.
- All tree-planting to be coordinated with as-built utilities. Trees to be located minimum of 5' from active lines.
- All trees shall be ball and burlap unless otherwise specified on Plant List.
- Each new tree hole tree shall be twice the width of the rootball.
- Burlap, wire, cords, ties and any wrapping materials must be removed from all rootballs before backfilling.
- Plant all plants so top of rootball is slightly above surrounding soil(small and large plants)
- No planting shall be done in muddy, rainy or frozen conditions.
- All plants calling for "Overflowing" in the notes shall not be accepted by designer if plants are thin.
- If planting is delayed for more than 3 hours after delivery, set plants in shade. Protect from weather and mechanical damage. Keep roots moist and cover with mulch.
- Contractors shall leave site neat and orderly during course of project, and store materials and equipment in owner-approved locations away from all trees and plants. Store all unplanted plant material away from damaging sun.
- If site conditions conflict with intended design, contractor shall alert Owner and designer.
- No substitutions are to be made without the written or verbal consent of landscape designer and owner.
- Create a size-specific water-well around each plant, 3' from center of tree, and mulch from the outside. Do not mulch crown.
- Water thoroughly after planting each plant. Water schedule to be determined.
- Spray for deer if planted in fall. Sometimes bucks mark their territory with their antlers.
- Keep planting areas weed-free until plant is established.
- Eco Lawn seeding shall be implemented by contractor familiar with this specie mix and with the process and approved by designer. This is not the same as casting contractor grass seed.
- Previous/Permeable Pavers and associated grass seeding shall be installed by contractor with experience in this process. This process requires establishment

Illustrated Plant List

 A. COLORED NAME Christmas Fern J. 1995 Fern	 A. COLORED NAME Appalachian Sedge J. 1995 Grass	 A. COLORED NAME Pennsylvania Sedge J. 1995 Grass	 A. COLORED NAME Eco Lawn J. 1995 Grass
 A. COLORED NAME White Wood Aster J. 1995 Herbaceous	 A. COLORED NAME Wild Geranium J. 1995 Herbaceous	 A. COLORED NAME Creeping Phlox J. 1995 Herbaceous	 A. COLORED NAME Blue-stemmed Goldenrod J. 1995 Herbaceous
 A. COLORED NAME Blue Wood Aster J. 1995 Herbaceous	 A. COLORED NAME Frost Aster J. 1995 Herbaceous	 A. COLORED NAME Queen Flower J. 1995 Herbaceous	 A. COLORED NAME Chokeberry J. 1995 Shrub
 A. COLORED NAME Black Chokeberry J. 1995 Shrub	 A. COLORED NAME Gray Dogwood J. 1995 Shrub	 A. COLORED NAME Ozark Witch-hazel J. 1995 Shrub	 A. COLORED NAME American Witch-hazel J. 1995 Shrub
 A. COLORED NAME Box Glabra J. 1995 Shrub	 A. COLORED NAME Fragrant Sumac J. 1995 Shrub	 A. COLORED NAME Red Maple J. 1995 Tree	 A. COLORED NAME Grey Birch J. 1995 Tree
 A. COLORED NAME Eastern Redbud J. 1995 Tree	 A. COLORED NAME Flowering Dogwood J. 1995 Tree	 A. COLORED NAME Blackgum J. 1995 Tree	 A. COLORED NAME White Pine J. 1995 Tree
 A. COLORED NAME Wild Red Cherry J. 1995 Tree	 A. COLORED NAME Bear Oak J. 1995 Tree	 A. COLORED NAME Arborvitae Nigra J. 1995 Tree	 A. COLORED NAME Blackhaw J. 1995 Tree
 A. COLORED NAME Climbing Hydrangea J. 1995 Vine	 A. COLORED NAME Trumpet Honeysuckle J. 1995 Vine		



Landscape Plan

Scale: 1" = 30'

Special Use Permit Application

Sheet 4 of 13 - Landscape and Lighting Plan

Owner:
Prophecy Theater, LLC
36 South Brett Street
Beacon, NY 12508

Architect:
Aryeh Siegel, Architect
84 Mason Circle
Beacon, New York 12508

Site / Civil Engineer:
Hudson Land Design
174 Main Street
Beacon, New York 12508

Surveyor:
Robert Oswald
175 WALSH ROAD PO BOX 1
LAGRANGEVILLE, NEW YORK 12540

Landscape Designer:
Landscape Restorations
7 Creek Drive
Beacon, New York 12508

1113 Wolcott Avenue
Beacon, New York
Scale: 1" = 30'
June 29, 2021



Elevation: Side Facing Church

Scale: $\frac{3}{32}$ " = 1'-0"

Elevation: Rear

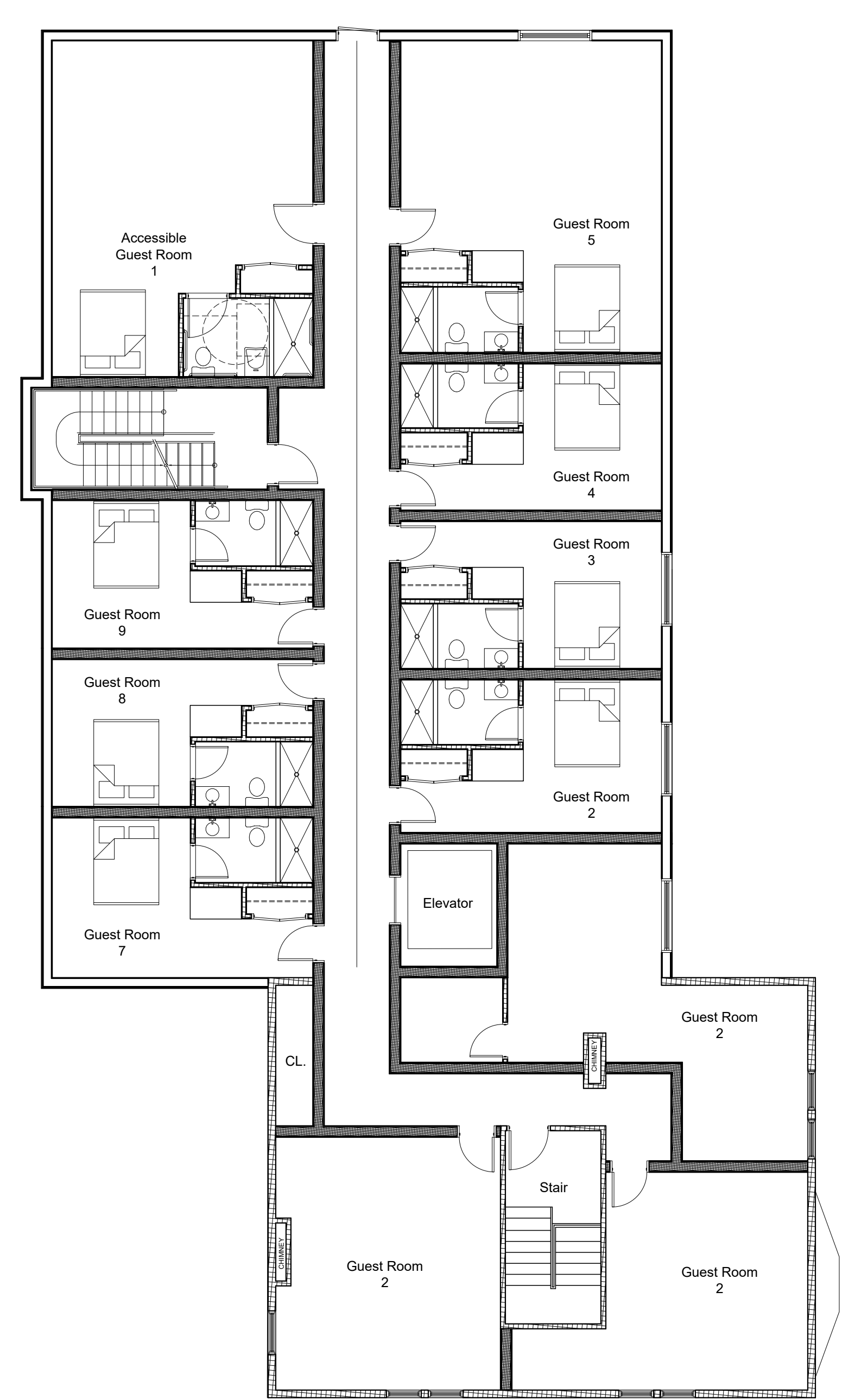
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Elevation: Side

Scale: $\frac{3}{32}$ " = 1'-0"

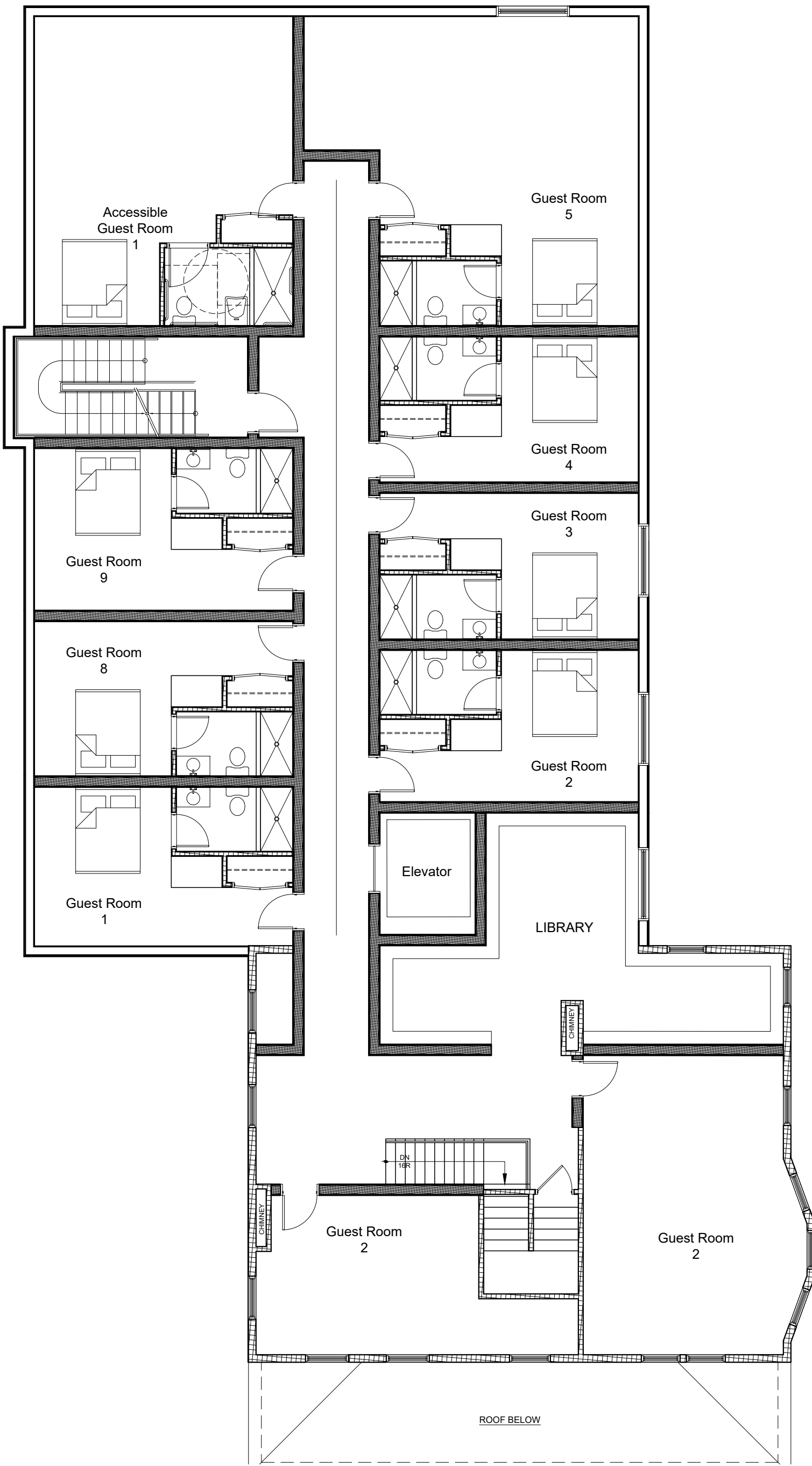
Elevation: Front - Facing Wolcott

Scale: $\frac{3}{32}$ " = 1'-0"



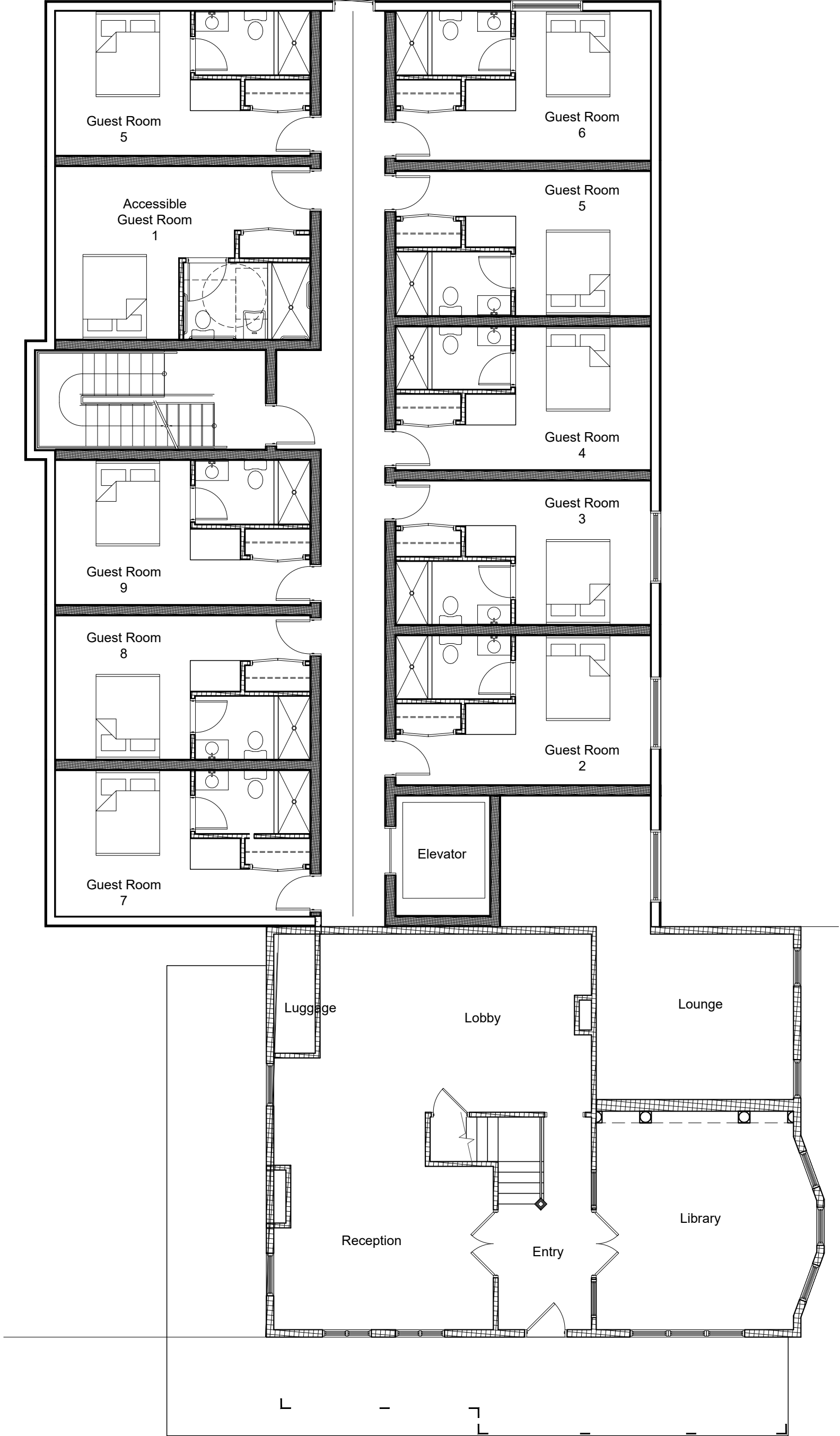
3rd Floor Plan: Hotel

Scale: $\frac{1}{8}$ " = 1'-0"



2nd Floor Plan: Hotel

Scale: $\frac{1}{8}$ " = 1'-0"



1st Floor Plan: Hotel

Scale: $\frac{1}{8}$ " = 1'-0"



View



View



View

Special Use Permit Application

Sheet 5 of 13 - Hotel Plans & Elevations

Owner:
Prophecy Theater, LLC
36 South Brett Street
Beacon, NY 12508

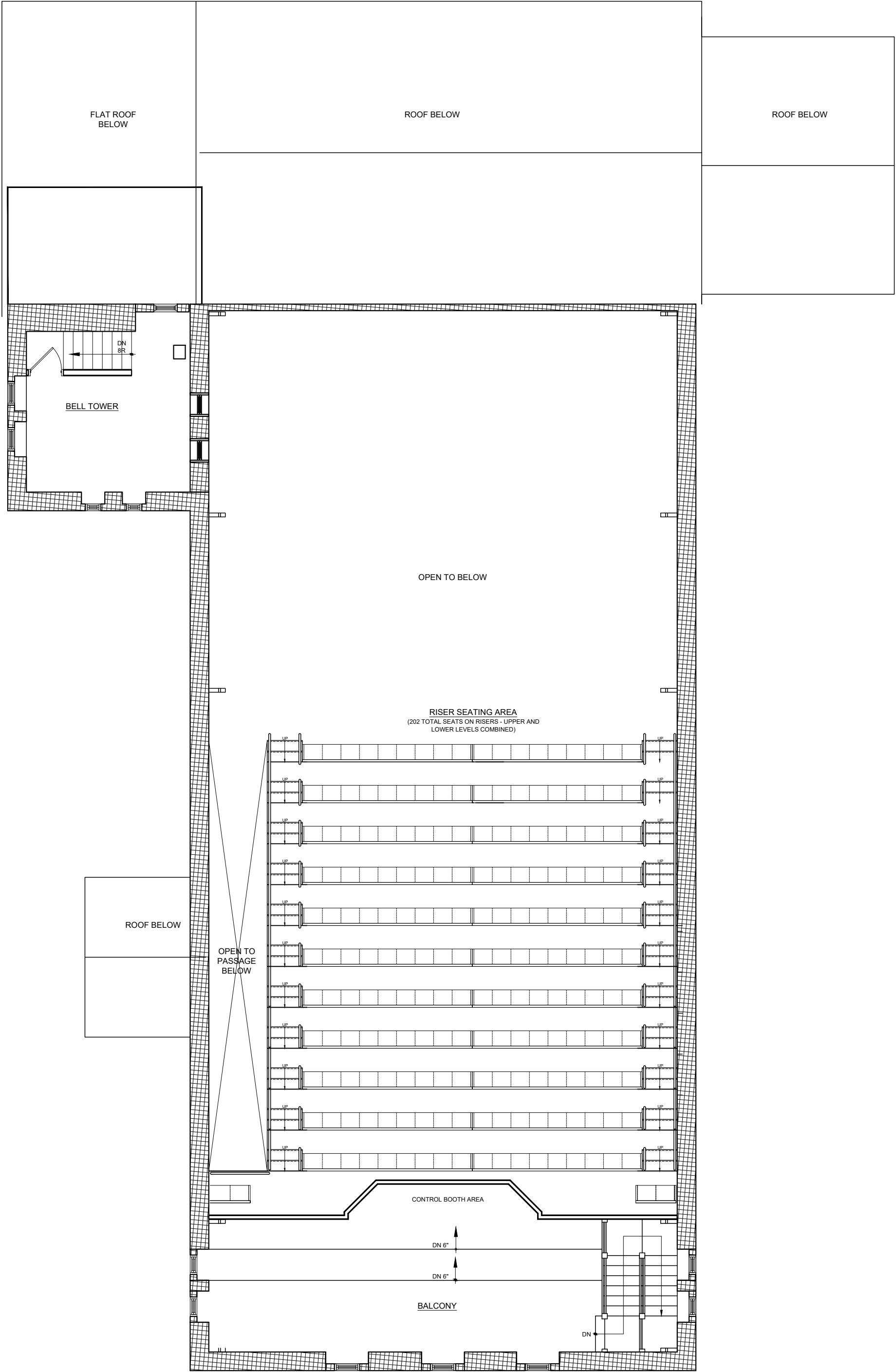
Architect:
Aryeh Siegel, Architect
84 Mason Circle
Beacon, New York 12508

Site / Civil Engineer:
Hudson Land Design
174 Main Street
Beacon, New York 12508

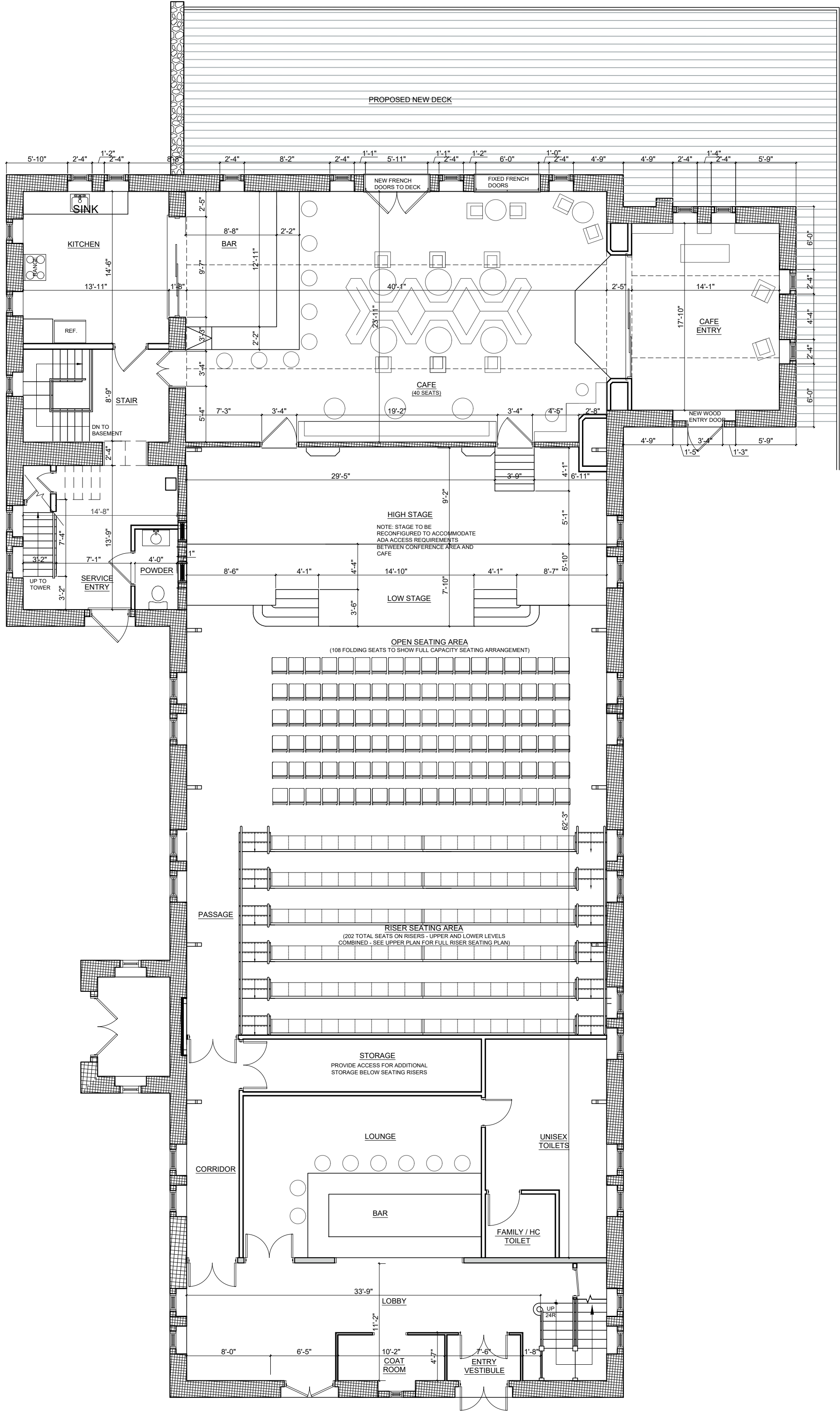
Surveyor:
Robert Oswald
175 WALSH ROAD PO BOX 1
LAGRANGEVILLE, NEW YORK 12540

Landscape Designer:
Landscape Restorations
7 Creek Drive
Beacon, New York 12508

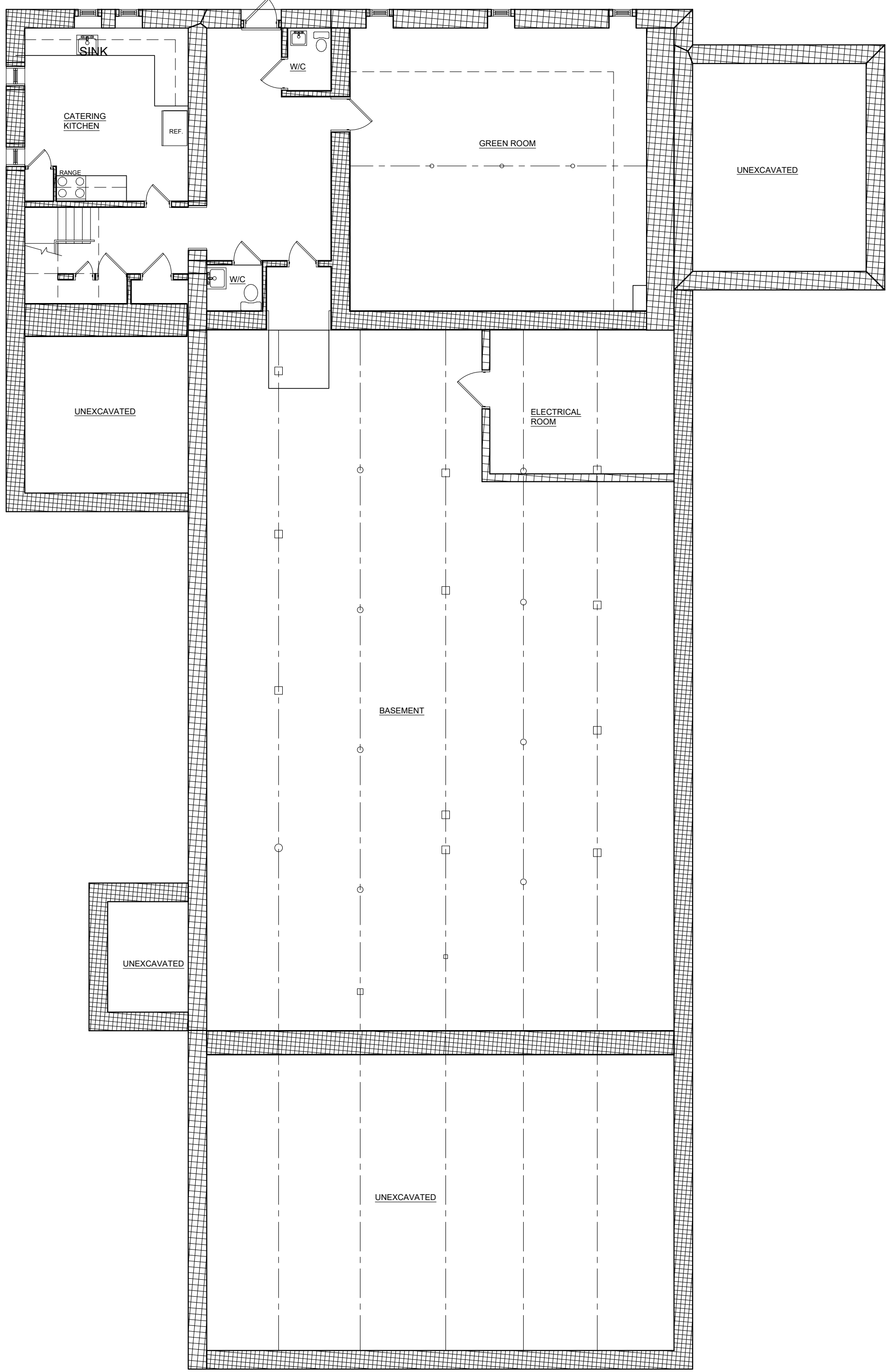
1113 Wolcott Avenue
Beacon, New York
Scale: AS NOTED
April 29, 2021



Upper Level Plan: Conference Center
Scale: $\frac{1}{8}" = 1'-0"$



Main Level Plan: Conference Center
Scale: $\frac{1}{8}" = 1'-0"$



Basement Plan: Conference Center
Scale: $\frac{1}{8}" = 1'-0"$

Special Use Permit Application

Sheet 6 of 13 - Conference Center Plans

Owner:
Prophecy Theater, LLC
36 South Brett Street
Beacon, NY 12508

Architect:
Aryeh Siegel, Architect
84 Mason Circle
Beacon, New York 12508

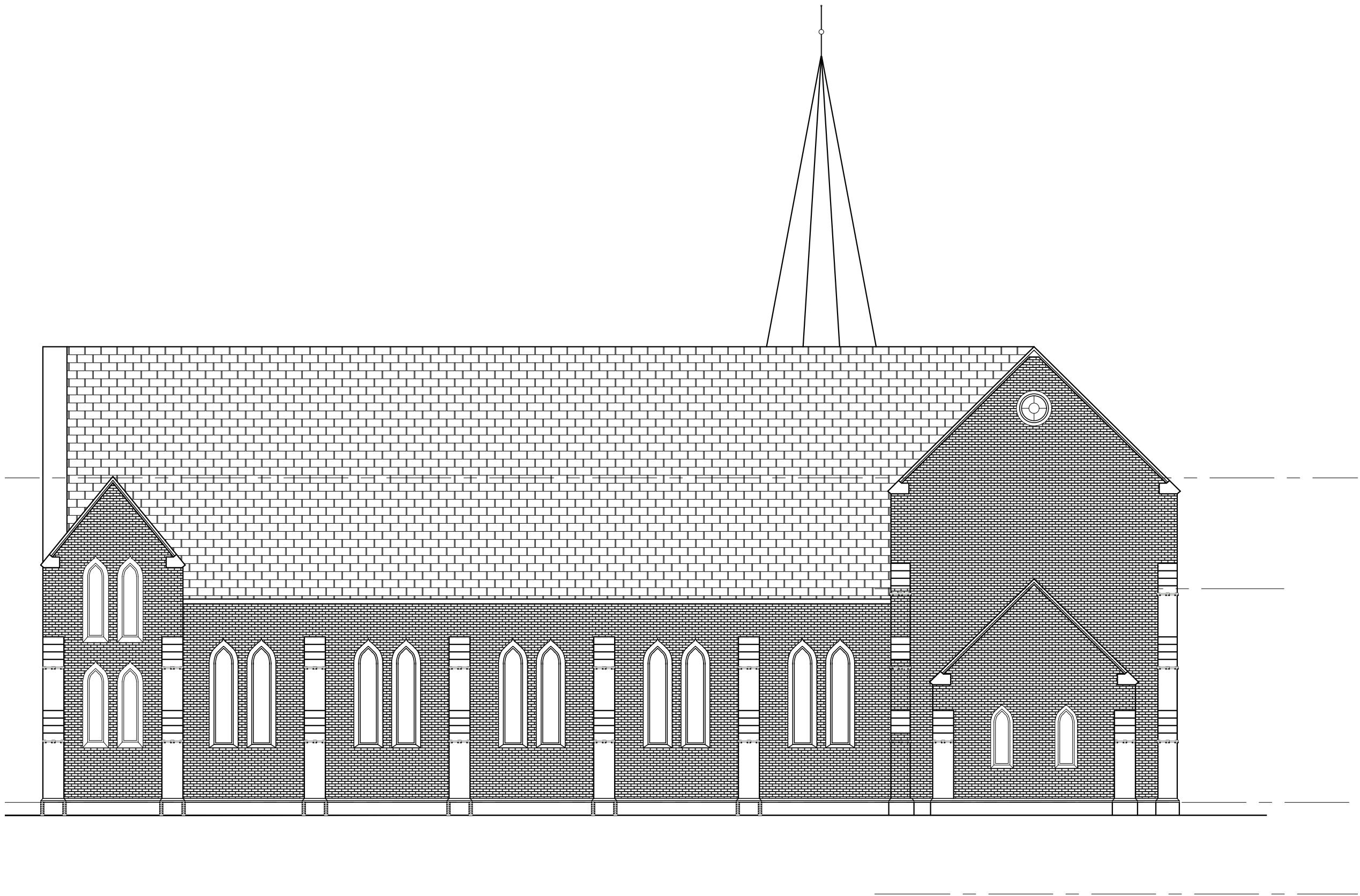
Site / Civil Engineer:
Hudson Land Design
174 Main Street
Beacon, New York 12508

Surveyor:
Robert Oswald
175 WALSH ROAD PO BOX 1
LAGRANGEVILLE, NEW YORK 12540

Landscape Designer:
Landscape Restorations
7 Creek Drive
Beacon, New York 12508

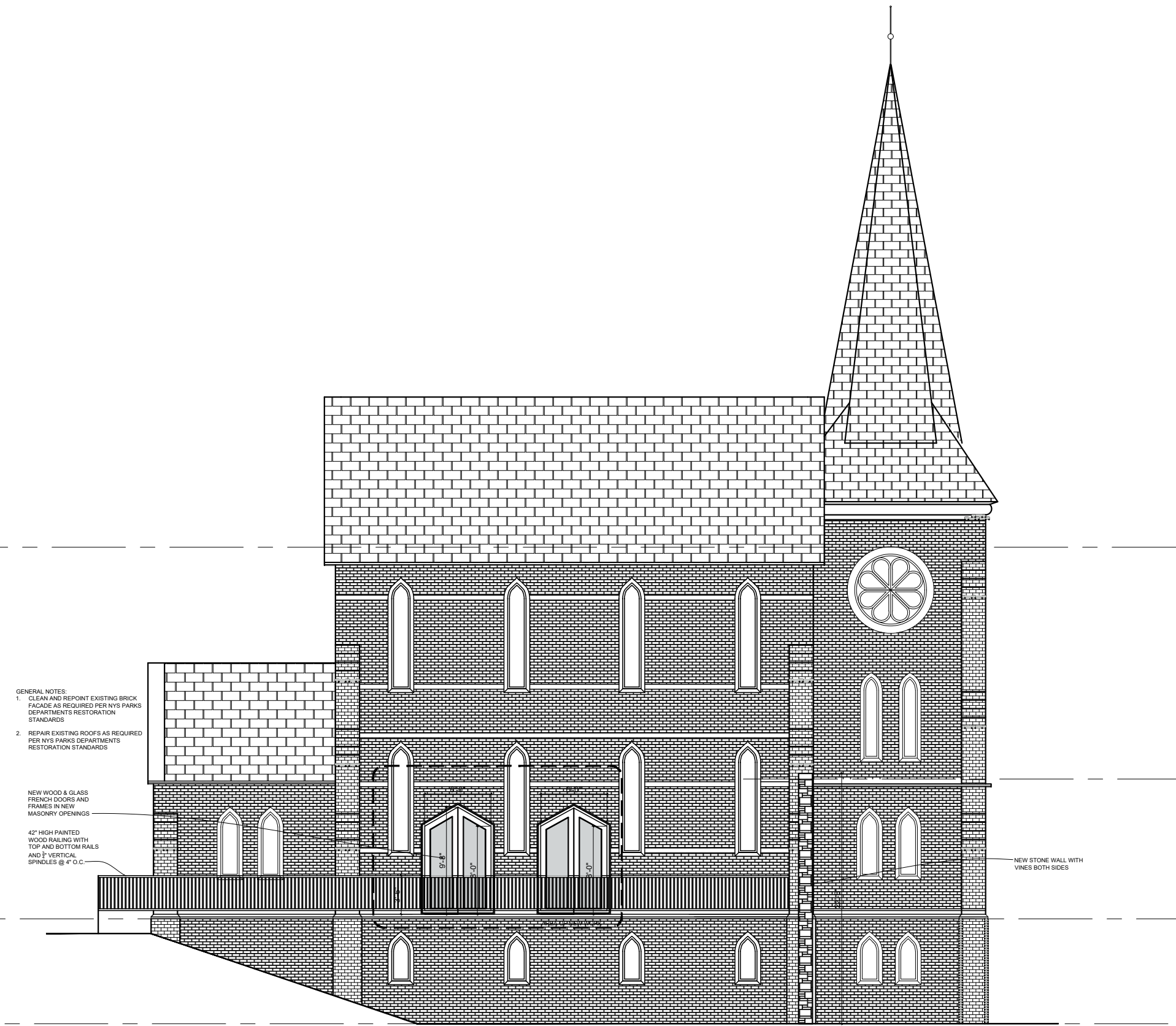
1113 Wolcott Avenue
Beacon, New York
Scale: $\frac{1}{8}" = 1'-0"$
April 29, 2021

REVISIONS:			
NO.	DATE	DESCRIPTION	BY
1	08/31/21	REVISED PER PLANNING BOARD COMMENTS	AJS
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4	12/28/21	REVISED PER PLANNING BOARD COMMENTS	AJS



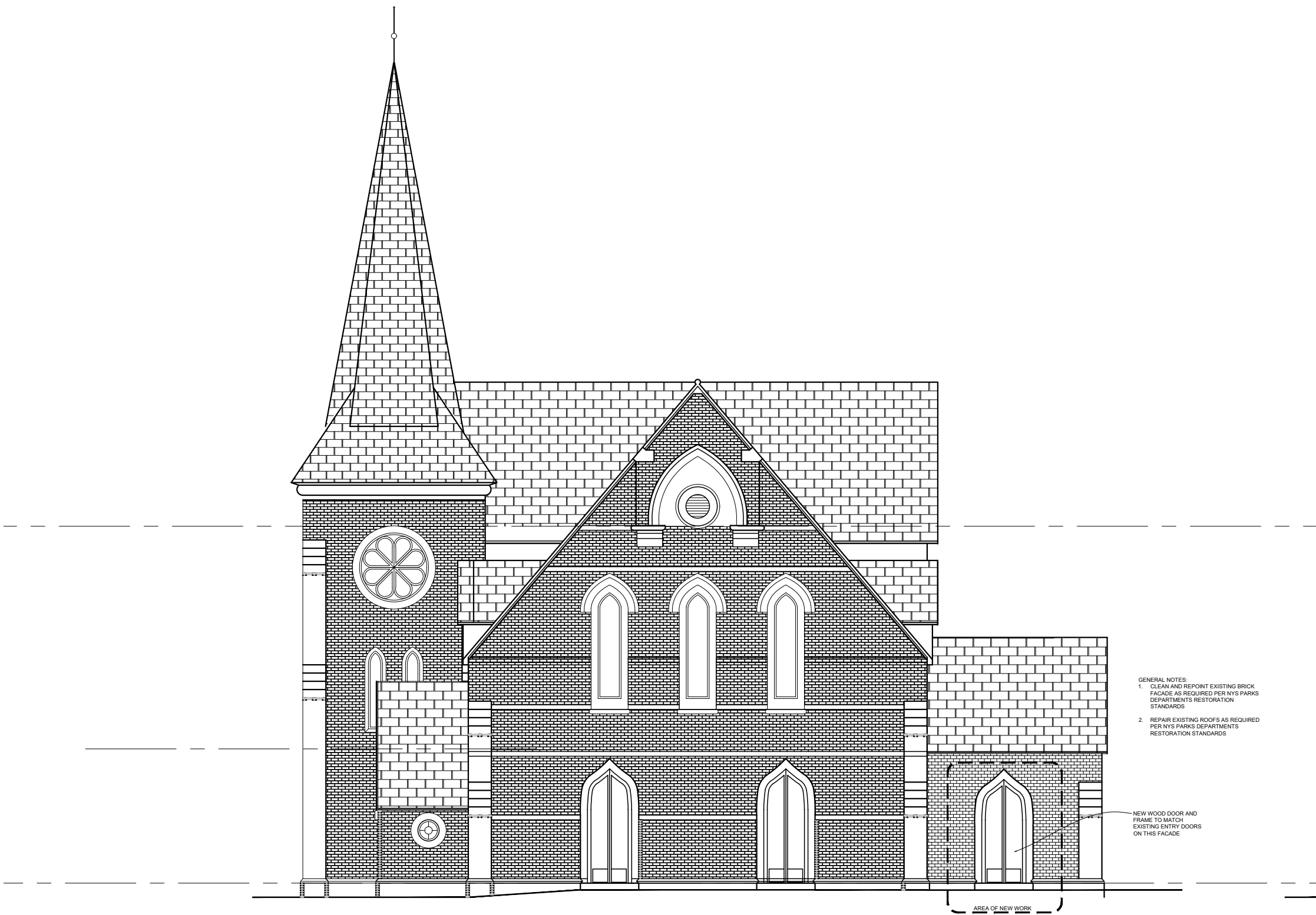
Elevation: Conference Center Building - Side

Scale: $\frac{3}{32}$ " = 1'-0"



Elevation: Conference Center Building - Rear

Scale: $\frac{3}{32}$ " = 1'-0"



Elevation: Conference Center Building - Front

Scale: $\frac{3}{32}$ " = 1'-0"



Elevation: Conference Center Building - Side

Scale: $\frac{3}{32}$ " = 1'-0"

Special Use Permit Application

Sheet 7 of 13 - Conference Center Elevations

Owner:
Prophecy Theater, LLC
36 South Brett Street
Beacon, NY 12508

Architect:
Aryeh Siegel, Architect
84 Mason Circle
Beacon, New York 12508

Site / Civil Engineer:
Hudson Land Design
174 Main Street
Beacon, New York 12508

Surveyor:
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175 WALSH ROAD PO BOX 1
LAGRANGEVILLE, NEW YORK 12540

Landscape Designer:
Landscape Restorations
7 Creek Drive
Beacon, New York 12508

1113 Wolcott Avenue
Beacon, New York
Scale: $\frac{3}{32}$ " = 1'-0"
April 29, 2021



ROCK REMOVAL NOTES:

1. ROCK REMOVAL (IF NECESSARY) SHALL BE ACCOMPLISHED BY MECHANICAL METHODS AS MUCH AS POSSIBLE AND SHALL ONLY BE PERMITTED BETWEEN 8:00AM AND 5:00 PM ON ANY DAY WHICH ROCK REMOVAL IS PERMITTED.
2. ACCEPTABLE ROCK REMOVAL METHODS ARE RIPPING, HYDRAULIC HAMMER OR DRILLING HOLES WITH USE OF EXPANSIVE TOOLS AND/OR WEDGES. IF MECHANICAL METHODS BECOME INEFFECTIVE DUE TO HARD ROCK, AND IT IS DETERMINED THAT BLASTING IS REQUIRED, IT SHALL BE BROUGHT TO THE ATTENTION OF THE CITY OF BEACON BUILDING DEPARTMENT. NO BLASTING SHALL COMMENCE UNTIL A BLASTING PROTOCOL IS SUBMITTED TO THE CITY OF BEACON BUILDING DEPARTMENT FOR REVIEW AND APPROVAL.
3. BLASTING PROTOCOL SHALL BE IN ACCORDANCE WITH §111 OF THE CITY OF BEACON CODE.

LEGEND:

---	EXISTING PROPERTY LINE
---	ADJOINING PROPERTY LINE
---	EXISTING EASEMENT LINE
---	EXISTING STREAM
---	EXISTING WETLAND BOUNDARY
---	100' WETLAND BUFFER
---	EXISTING MAJOR CONTOUR
---	EXISTING MINOR CONTOUR
---	EXISTING TREE LINE
---	EXISTING OVER HEAD WIRE
---	EXISTING UTILITY POLE
---	EXISTING SEWER SERVICE LINE
---	EXISTING SEWER LINE
---	EXISTING SEWER MANHOLE
---	EXISTING SEWER CLEAN OUT
---	EXISTING WATER LINE
---	EXISTING WATER SERVICE LINE
---	EXISTING WELL
---	EXISTING HYDRANT
---	EXISTING WATER SHUT OFF VALVE
---	EXISTING WATER VALVE
---	EXISTING STORM WATER LINE
---	EXISTING ROOF LEADER
---	EXISTING CATCH BASIN
---	PROPOSED PROPERTY LINE
---	PROPOSED SET BACK LINE
---	PROPOSED MAJOR CONTOUR
---	PROPOSED MINOR CONTOUR
---	PROPOSED EASEMENT
---	PROPOSED TREE LINE
---	PROPOSED SEWER LINE
---	PROPOSED SEWER SERVICE LINE
---	PROPOSED SEWER MANHOLE
---	PROPOSED SDS SOLID LINE
---	PROPOSED SEWER CLEAN OUT
---	PROPOSED SDS LATERAL
---	PROPOSED STORM WATER LINE
---	PROPOSED ROOF LEADER LINE
---	PROPOSED ROOF LEADER
---	PROPOSED WATER LINE
---	PROPOSED WATER SERVICE LINE
---	PROPOSED WELL
---	PROPOSED HYDRANT
---	PROPOSED WATER SHUT OFF VALVE
---	PROPOSED WATER VALVE

INSPECTION SCHEDULE & LONG TERM MAINTENANCE OF STORMWATER STRUCTURES

CATCH BASINS AND PIPING:

ALL CATCH BASINS SHALL BE INSPECTED AFTER EACH STORM EVENT FOR SEDIMENT ACCUMULATION, AND DEBRIS, AND REMOVE AS NECESSARY. WHEN SEDIMENT ACCUMULATION WITHIN THE CATCH BASIN SUMP REACHES 1/2 OF THE SUMP DEPTH, IT SHALL BE REMOVED. ASSOCIATED PIPING SHALL BE INSPECTED ANNUALLY AND ACCUMULATED SEDIMENT SHALL BE REMOVED AS NEEDED.

RIP RAP OUTLET PROTECTION:

RIP RAP OUTLET PROTECTION SHALL BE INSPECTED AFTER EACH STORM AND CLEARED OF ANY SEDIMENT AND/OR DEBRIS. IF THE RIP RAP STONE BECOMES SILTED WITH SEDIMENT, IT MAY REQUIRE REMOVAL OF THE RIP RAP STONE SO THAT THE SEDIMENT CAN BE REMOVED PROPERLY. REPLACE RIP RAP STONE AS REQUIRED.

UNDERGROUND INFILTRATION/DETENTION/INFILTRATION:

BEST MANAGEMENT PRACTICE FOR MAINTAINING OPTIMUM PERFORMANCE OF THE UNDERGROUND INFILTRATION SYSTEM IS A COMBINATION OF THE FOLLOWING:

1. PROPER MAINTENANCE OF THE INLET ROW,
2. REMOVAL OF ACCUMULATED SEDIMENT FROM THE UPSTREAM CATCH BASIN AND STORMWATER COLLECTION SYSTEM, AND
3. MAINTAINING THE SITE IMPERVIOUS AND LAWN AREAS IN A STABLE CONDITION. ANY FUTURE LAND DISTURBANCE ASSOCIATED WITH MAINTENANCE OF THE BUILDINGS AND GROUNDS SHALL CAREFULLY PREPARE AN EROSION AND SEDIMENT CONTROL PLAN TO LIMIT TRANSPORT OF SEDIMENT LADEN RUNOFF TO THE COLLECTION SYSTEM.

THE CULTEC SYSTEM SHALL BE EQUIPPED WITH AN INSPECTION PORT LOCATED ON THE INLET ROW. THE INSPECTION PORT IS A CIRCULAR CAST BOX PLACED IN A RECTANGULAR CONCRETE COLLAR. WHEN THE LID IS REMOVED, A 6-INCH PIPE WITH A SCREW-IN PLUG WILL BE EXPOSED. REMOVE THE PLUG. THIS WILL PROVIDE ACCESS TO THE CULTEC CHAMBER ROW BELOW FROM THE SURFACE. THROUGH THIS ACCESS, THE SEDIMENT MAY BE MEASURED AT THIS LOCATION. A STADIA ROD MAY BE USED TO MEASURE THE DEPTH OF SEDIMENT IF ANY IN THIS ROW. ADDITIONALLY, CCTV INSPECTION OF THIS ROW CAN BE DEPLOYED THROUGH THIS ACCESS PORT TO DETERMINE IF ANY SEDIMENT HAS ACCUMULATED. IF THE DEPTH OF SEDIMENT IS IN EXCESS OF 3 INCHES, THEN THIS ROW SHOULD BE CLEANED WITH HIGH PRESSURE WATER THROUGH A CULVERT CLEANING NOZZLE. THIS WOULD BE CARRIED OUT THROUGH THE UPSTREAM STRUCTURES. THE INLET ROW IS PLACED ON A POLYETHYLENE LINER TO PREVENT SCOURING OF THE WASHED STONE BENEATH THIS ROW. THIS FACILITATES THE FLUSHING OF THIS ROW WITH HIGH PRESSURE WATER THROUGH A CULVERT CLEANING NOZZLE. THE NOZZLE IS DEPLOYED THROUGH THE UPSTREAM STRUCTURE AND EXTENDED TO THE END OF THE ROW. THE WATER IS TURNED ON AND THE INLET ROW IS BACK-FLUSHED INTO THE STRUCTURE WHERE IT IS REMOVED BY USING A VACUUM TRUCK.

MAINTENANCE GUIDELINES:

1. THE OWNER SHALL KEEP A MAINTENANCE LOG WHICH SHALL INCLUDE DETAILS OF ANY EVENTS WHICH WOULD HAVE AN EFFECT ON THE SYSTEM'S OPERATIONAL CAPACITY.
2. THE OPERATION AND MAINTENANCE PROCEDURE SHALL BE REVIEWED PERIODICALLY AND CHANGED TO MEET SITE CONDITIONS.
3. MAINTENANCE OF THE STORMWATER MANAGEMENT SYSTEM SHALL BE PERFORMED BY QUALIFIED WORKERS AND SHALL FOLLOW APPLICABLE OCCUPATIONAL HEALTH AND SAFETY REQUIREMENTS.
4. DEBRIS REMOVED FROM THE STORMWATER MANAGEMENT SYSTEM SHALL BE DISPOSED OF IN ACCORDANCE WITH APPLICABLE LAWS AND REGULATIONS.

SUGGESTED MAINTENANCE SCHEDULE (TO BE RE-ASSESSED BY THE OPERATOR PERIODICALLY BASED ON SITE CONDITIONS AND EVALUATION OF SYSTEM FUNCTIONALITY):

1. YEAR 1: INSPECT INLETS AND OUTLETS MONTHLY FOR ANY CLOGGING, AND REMOVE DEBRIS AS MAY BE NECESSARY. INSPECT THE SURFACE AROUND THE CHAMBERS FOR ANY DEPRESSIONS.
2. YEAR 2 AND AFTER: INSPECT INLETS AND OUTLETS EVERY SPRING AND FALL FOR ANY CLOGGING, AND REMOVE DEBRIS AS MAY BE NECESSARY. INSPECT THE SURFACE AROUND THE CHAMBERS FOR ANY DEPRESSIONS.
3. 2 YEARS AFTER COMMISSIONING: INSPECT THE INTERIOR OF THE STORMWATER MANAGEMENT CHAMBERS THROUGH INSPECTION PORT FOR DEFICIENCIES USING CCTV OR COMPARABLE TECHNIQUE.
4. 9 YEARS AFTER COMMISSIONING, AND EVERY 9 YEARS THEREAFTER (OR AS MAY BE NEEDED): CLEAN STORMWATER MANAGEMENT CHAMBERS AND FEED CONNECTORS OF ANY DEBRIS. INSPECT THE INTERIOR OF THE STORMWATER MANAGEMENT CHAMBERS THROUGH INSPECTION PORT FOR DEFICIENCIES USING CCTV OR COMPARABLE TECHNIQUE.
5. 45 YEARS AFTER COMMISSIONING: A PROFESSIONAL ENGINEER SHALL ASSESS THE REMAINING LIFE EXPECTANCY OF THE STORMWATER MANAGEMENT CHAMBERS AND RECOMMEND ACTIONS TO REHABILITATE, RESTORE OR REPLACE THE STORMWATER MANAGEMENT CHAMBERS AS MAY BE REQUIRED.
6. ANNUALLY: CONFIRM THAT NO UNAUTHORIZED MODIFICATIONS HAVE BEEN PERFORMED TO THE SITE THAT MAY IMPACT THE ADEQUATE FUNCTIONING OF THE SYSTEM.
7. PERIODICALLY: MONITOR WATER LEVELS IN THE CHAMBER SYSTEM FOLLOWING SIGNIFICANT STORM EVENTS. DEWATERING OF THE SYSTEM SHOULD TAKE NO LONGER THAN 24 HOURS.

THE FACILITY OWNER SHALL PROVIDE FOR THE PERIODIC INSPECTION OF THE STORMWATER FACILITIES IN ACCORDANCE WITH THE SWPPP, AND SHALL HAVE THE UTILITIES INSPECTED ON A YEARLY BASIS BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW YORK, TO DETERMINE THE CONDITION AND INTEGRITY OF THE STORMWATER CONTROL MEASURES. THE INSPECTING PROFESSIONAL SHALL PREPARE AND SUBMIT TO THE CITY OF BEACON WITHIN 30 DAYS OF THE INSPECTION, BUT NOT LATER THAN JUNE 1 OF EACH YEAR, A WRITTEN REPORT OF THE FINDINGS INCLUDING RECOMMENDATIONS FOR THOSE ACTIONS NECESSARY FOR THE CONTINUATION OF THE STORMWATER CONTROL MEASURES. SEE "APPENDIX O" OF THE STORMWATER POLLUTION PREVENTION PLAN FOR DETAILED OPERATIONS AND MAINTENANCE PROCEDURES.

SNOW REMOVAL AND STORAGE NOTES:

1. SNOW SHALL BE REMOVED WITHIN 8 HOURS AFTER A SNOW EVENT.

SITE SPECIFIC NOTES:

1. THE CONTRACTOR SHALL PERFORM A UTILITIES CALL-OUT PRIOR TO CONSTRUCTION TO VERIFY ALL UNDERGROUND UTILITY LOCATIONS BY CONTACTING UFPO @ 1-800-962-7962. SPECIFIC ATTENTION SHALL BE PAID TO THE LOCATIONS OF THE GAS, WATER AND SEWER MAINS WITH RESPECT TO THE PROPOSED LOCATIONS FOR THE SERVICE LINES.
2. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS AND INVERTS OF ALL DRAINAGE, SANITARY SEWER, WATER AND GAS LINES AND STRUCTURES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOT ASSUME THAT ALL LOCATIONS AS SHOWN ON THE PLAN ARE CORRECT.
3. THE PROPOSED LOT SHALL BE SERVED BY THE CITY OF BEACON MUNICIPAL WATER AND SEWER SERVICES. AS SUCH, THE CONTRACTOR SHALL CONTACT THE CITY OF BEACON WATER AND SEWER DEPARTMENTS TO SCHEDULE A PRE-CONSTRUCTION MEETING TO ENSURE THAT THE ARRANGEMENTS FOR WATER SUPPLY AND SEWAGE DISPOSAL ARE COMMENCED IN ACCORDANCE WITH THE APPROVED PLANS AND AMENDMENTS THERETO AND GENERALLY ACCEPTED STANDARDS.
4. THE WATER SERVICE LINE AND METER SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF BEACON WATER DEPARTMENT REQUIREMENTS.
5. THE NEW WATER SERVICE LINE SHALL BE CLASS 52 DIP, SIZE TO BE DETERMINED.
6. THE SEWER SERVICE LATERAL SHALL BE 6" SDR-35 PVC PIPE WITH PITCH AS SHOWN ON THE PLAN.
7. STREET CLOSURE FOR WATER, SEWER AND GAS SERVICE CONNECTIONS AND DRIVEWAY CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH CITY OF BEACON AND NYSDOT REQUIREMENTS. A PLAN SHALL BE IN PLACE FOR MAINTENANCE AND PROTECTION OF TRAFFIC.
8. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO CONSTRUCTION. WOLCOTT AVENUE SHALL BE KEPT CLEAN AND SWEEPED DURING CONSTRUCTION.
9. SUMP PUMPS TO BE PROVIDED FOR FOOTING DRAINS, AS REQUIRED. THE TYPES OF PUMPS AND METHODS USED TO ENSURE PROPER DRAINAGE SHALL BE ACCEPTABLE TO THE CITY OF BEACON BUILDING DEPARTMENT.
10. THE BUILDING DEPARTMENT SHALL HAVE THE RIGHT TO INSPECT THE EXISTING BUILDING TO CONFIRM THAT THERE ARE NOT EXISTING STORMWATER CONNECTIONS TO THE CITY'S SANITARY SEWER SYSTEM PRIOR TO THE MAP BEING SIGNED.
11. WATER AND SEWER FOR THE RECTORY WILL BE ABANDONED IN ACCORDANCE WITH CITY REQUIREMENTS.
12. IN ORDER TO PROTECT THE FEDERALLY-LISTED ENDANGERED INDIANA BAT (MYOTIS SODALIS) AND THE FEDERALLY-LISTED THREATENED NORTHERN LONG-EARED BAT (MYOTIS SEPTENTRIONALIS), THE CLEARING OF POTENTIAL ROOSTING TREES SHALL OCCUR ONLY BETWEEN NOVEMBER 1 AND MARCH 31. ORANGE CONSTRUCTION FENCING SHALL BE USED TO SEPARATE AREAS TO BE GRADED FROM AREAS NOT TO BE DISTURBED. NO ARTIFICIAL DYES, COLORING, INSECTICIDE, OR ALGAEICIDE SUCH AS COPPER SULFATE SHALL BE USED IN STORMWATER CONTROL STRUCTURES.

SIGHT DISTANCE NOTE:

MAIN ENTRANCE:
THE SIGHT DISTANCES AT THE PROPOSED DRIVEWAY LOCATION WERE ANALYZED. BASED ON FIELD MEASUREMENTS, THE EXISTING SIGHT DISTANCES ARE APPROXIMATELY 433 FEET LOOKING LEFT (NORTH) AND 544 FEET RIGHT (SOUTH) FROM THE PROPOSED ACCESS. EXISTING STOPPING SIGHT DISTANCES ARE APPROXIMATELY 336 FEET LOOKING LEFT (NORTH) AND 534 FEET RIGHT (SOUTH) FROM THE PROPOSED ACCESS. SIGHT DISTANCES ARE BASED ON AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) CRITERIA THE STOPPING SIGHT DISTANCE (200 FEET) AND INTERSECTION SIGHT DISTANCE (335 FEET) FOR THE 30 MPH POSTED SPEED LIMIT ALONG ROUTE 90 WILL BE SATISFIED. AVAILABLE NYSDOT SPEED DATA FOR ROUTE 90 IN THIS AREA INDICATES THAT THE 85th PERCENTILE SPEEDS ARE APPROXIMATELY 37 TO 38 MPH. FOR A 40 MPH DESIGN SPEED, AASHTO REQUIRES A MINIMUM 305 FOOT STOPPING SIGHT DISTANCE. 385 FEET MINIMUM INTERSECTION SIGHT DISTANCE LEFT, 445 FEET MINIMUM INTERSECTION SIGHT DISTANCE RIGHT, AND TO ALLOW FOR THE SAFE OPERATION OF THE INTERSECTION, THIS REQUIRED STOPPING SIGHT DISTANCE WILL ALSO BE SATISFIED. IT SHOULD BE NOTED THAT SOME PRUNING/CLEARING OF VEGETATION IMMEDIATELY NORTH OF THE PROPOSED DRIVEWAY LOCATION ON THE WEST SIDE OF ROUTE 90 SHOULD BE COMPLETED IN ORDER TO MAXIMIZE THE SIGHT DISTANCE LOOKING TO THE NORTH FROM THE SITE DRIVEWAY.

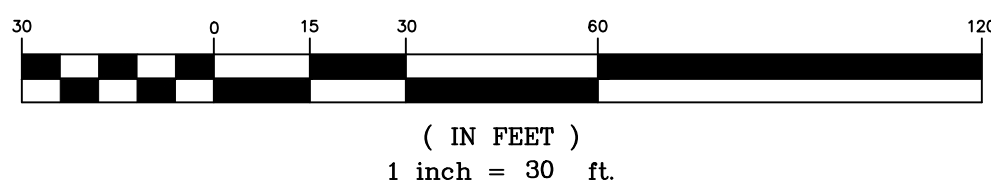
SOUTHERLY EGRESS ONLY LOOP:
THE SIGHT DISTANCES AT THE PROPOSED DRIVEWAY LOCATION WERE ANALYZED. BASED ON FIELD MEASUREMENTS, THE EXISTING SIGHT DISTANCES ARE APPROXIMATELY 389 FEET LOOKING LEFT (NORTH) AND 536 FEET RIGHT (SOUTH) FROM THE PROPOSED ACCESS. EXISTING STOPPING SIGHT DISTANCES ARE APPROXIMATELY 331 FEET LOOKING LEFT (NORTH) AND 501 FEET RIGHT (SOUTH) FROM THE PROPOSED ACCESS. SIGHT DISTANCES ARE BASED ON AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) CRITERIA THE STOPPING SIGHT DISTANCE (200 FEET) AND INTERSECTION SIGHT DISTANCE (335 FEET) FOR THE 30 MPH POSTED SPEED LIMIT ALONG ROUTE 90 WILL BE SATISFIED. AVAILABLE NYSDOT SPEED DATA FOR ROUTE 90 IN THIS AREA INDICATES THAT THE 85th PERCENTILE SPEEDS ARE APPROXIMATELY 37 TO 38 MPH. FOR A 40 MPH DESIGN SPEED, AASHTO REQUIRES A MINIMUM 305 FOOT STOPPING SIGHT DISTANCE. 385 FEET MINIMUM INTERSECTION SIGHT DISTANCE LEFT, 445 FEET MINIMUM INTERSECTION SIGHT DISTANCE RIGHT, AND TO ALLOW FOR THE SAFE OPERATION OF THE INTERSECTION, THIS REQUIRED STOPPING SIGHT DISTANCE WILL ALSO BE SATISFIED.

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2	11/30/21	PER PLANNING BOARD COMMENTS	MAB				
3	12/28/21	PER PLANNING BOARD COMMENTS	MAB				

GRADING & UTILITY PLAN

SCALE: 1" = 30'

GRAPHIC SCALE



HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
174 MAIN ST., BEACON, NEW YORK 12508
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845-440-6926
F: 845-440-6637

GRADING & UTILITY PLAN

1113 WOLCOTT AVENUE

1113 WOLCOTT AVENUE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 5954-26-651901

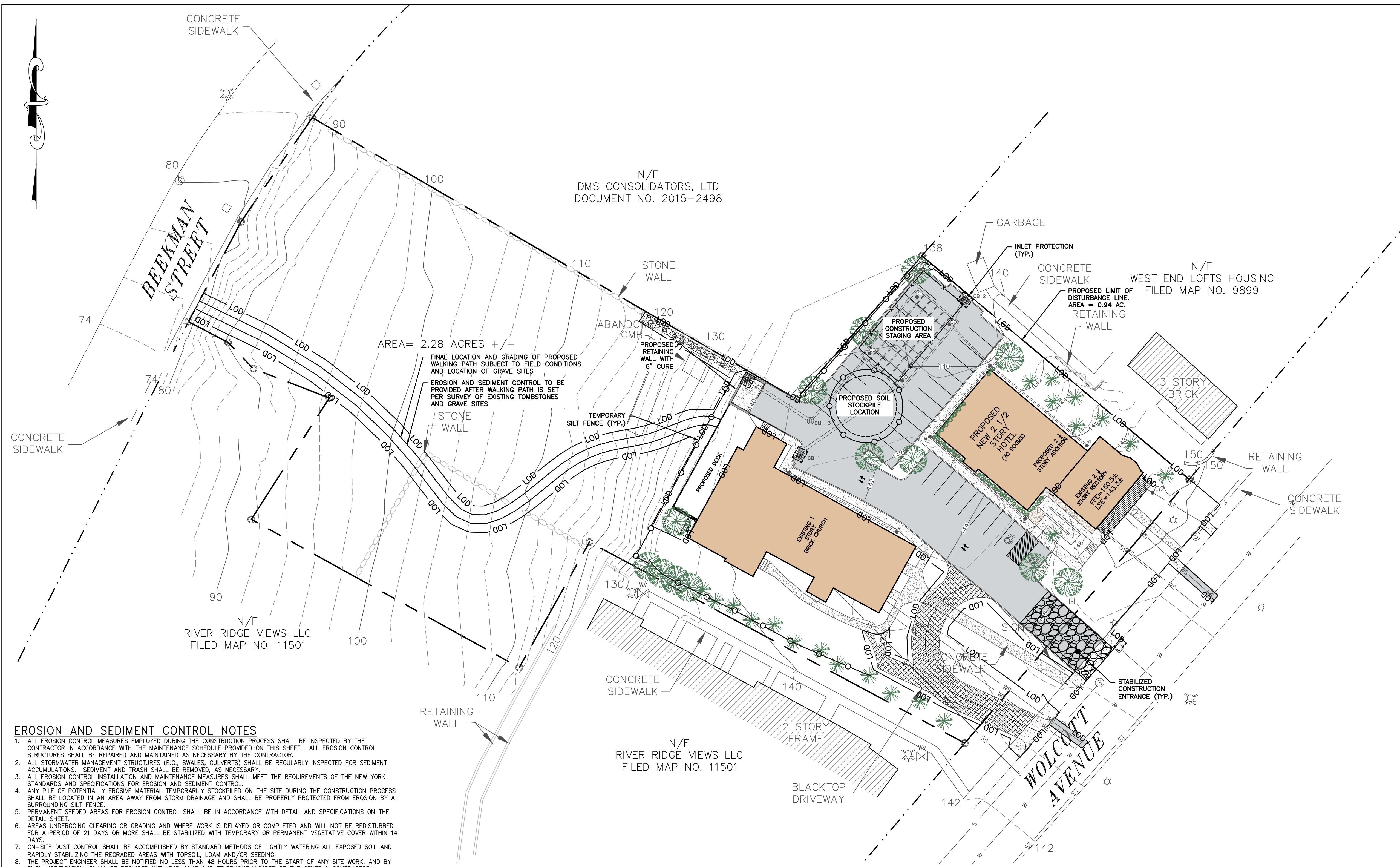
JOB #: 2021-022

DATE: 6/29/2021

SCALE: 1" = 30'

TITLE: GU-1

SHEET: 8 OF 13



- EROSION AND SEDIMENT CONTROL NOTES**
1. ALL EROSION CONTROL MEASURES EMPLOYED DURING THE CONSTRUCTION PROCESS SHALL BE INSPECTED BY THE CONTRACTOR IN ACCORDANCE WITH THE MAINTENANCE SCHEDULE PROVIDED ON THIS SHEET. ALL EROSION CONTROL STRUCTURES SHALL BE REPAIRED AND MAINTAINED AS NECESSARY BY THE CONTRACTOR.
 2. ALL STORMWATER MANAGEMENT STRUCTURES (E.G., SWALES, CULVERTS) SHALL BE REGULARLY INSPECTED FOR SEDIMENT ACCUMULATIONS. SEDIMENT AND TRASH SHALL BE REMOVED, AS NECESSARY.
 3. ALL EROSION CONTROL INSTALLATION AND MAINTENANCE MEASURES SHALL MEET THE REQUIREMENTS OF THE NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL.
 4. ANY PILE OF POTENTIALLY EROSION MATERIAL TEMPORARILY STOCKPILED ON THE SITE DURING THE CONSTRUCTION PROCESS SHALL BE LOCATED IN AN AREA AWAY FROM STORM DRAINAGE AND SHALL BE PROPERLY PROTECTED FROM EROSION BY A SURROUNDING SILT FENCE.
 5. PERMANENT SEEDED AREAS FOR EROSION CONTROL SHALL BE IN ACCORDANCE WITH DETAIL AND SPECIFICATIONS ON THE DETAIL SHEET.
 6. AREAS UNDERGOING CLEARING OR GRADING AND WHERE WORK IS DELAYED OR COMPLETED AND WILL NOT BE REDISTURBED FOR A PERIOD OF 21 DAYS OR MORE SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT VEGETATIVE COVER WITHIN 14 DAYS.
 7. ON-SITE DUST CONTROL SHALL BE ACCOMPLISHED BY STANDARD METHODS OF LIGHTLY WATERING ALL EXPOSED SOIL AND RAPIDLY STABILIZING THE REGRADED AREAS WITH TOPSOIL, LOAM AND/OR SEEDING.
 8. THE PROJECT ENGINEER SHALL BE NOTIFIED NO LESS THAN 48 HOURS PRIOR TO THE START OF ANY SITE WORK, AND BY SUCH NOTIFICATION, SHALL BE PROVIDED WITH THE NAME AND TELEPHONE NUMBER OF THE GENERAL CONTRACTOR RESPONSIBLE FOR SUCH WORK.
 9. THE CITY MAY INSPECT EROSION AND SEDIMENT CONTROL PRACTICES ON THE SITE DURING CONSTRUCTION AND RECOMMEND THAT THE CONTRACTOR INSTALL ADDITIONAL EROSION CONTROL MEASURES IF DEEMED NECESSARY TO PROTECT ANY UNDISTURBED AREAS OF THE SITE. ANY SUCH REQUESTS SHALL BE MADE DIRECTLY TO THE CONTRACTOR AND QUALIFIED PROFESSIONAL, AND FOLLOWED UP WITH A WRITTEN NOTIFICATION TO THE DEVELOPER. IN ADDITION, THE CITY SHALL BE CONSULTED ON ANY SPECIAL ADDITIONS OR DELETIONS OF EROSION CONTROL MEASURES WARRANTED BY CHANGING FIELD CONDITIONS. THE NOTICE OF INTENT (NOI) MAY NEED TO BE UPDATED AS A RESULT OF THE CHANGES.
 10. THE CONTRACTOR/OWNER SHALL MAINTAIN A RECORD OF ALL EROSION AND SEDIMENT CONTROL INSPECTION REPORTS AT THE SITE IN A LOG BOOK. THE SITE LOG BOOK SHALL BE MAINTAINED ON SITE AND BE MADE AVAILABLE TO THE PERMITTING AUTHORITY/CONTRACTOR OWNER/CONTRACTOR SHALL, ON A MONTHLY BASIS, POST AT THE SITE A SUMMARY OF THE SITE INSPECTION ACTIVITIES IN A PUBLICLY ACCESSIBLE LOCATION.
 11. THE OWNER SHALL FILE A NOI WITH THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC) PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES AND A NOTICE OF TERMINATION (NOT) WITH THE NYSDEC FOLLOWING CONSTRUCTION ACTIVITIES.
 12. IF GROUNDWATER IS ENCOUNTERED DURING CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL CONSTRUCT A DEWATERING PIT IN ACCORDANCE WITH NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL (AKA SUMP PIT) TO FILTER WATER FOR PUMPING TO A SUITABLE LOCATION.
 13. WHEN ALL DISTURBED AREAS ARE STABLE, ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED PER THE APPROVAL OF THE CITY AND QUALIFIED PROFESSIONAL.
 14. UPON COMPLETION OF CONSTRUCTION, THE PARCEL OWNER(S) AND SUBSEQUENTLY THE HOMEOWNERS ASSOCIATION SHALL BE RESPONSIBLE FOR THE INSPECTION AND MAINTENANCE OF THE STORMWATER MANAGEMENT SYSTEM. THE STORMWATER MANAGEMENT SYSTEM SHALL BE INSPECTED QUARTERLY AND AFTER EACH SIGNIFICANT RAINFALL EVENT. THE OWNER(S) SHALL MAINTAIN A RECORD OF INSPECTION AND MAINTENANCE REPORTS AT THE SITE. REFER TO THE SWPPP FOR INSPECTION REQUIREMENTS AND FUTURE MAINTENANCE.

- SOIL RESTORATION NOTES:**
1. THE CONTRACTOR SHALL EMPLOY SOIL RESTORATION TO ALL DISTURBED AREAS THAT WILL REMAIN LANDSCAPED.
 2. FOR HEAVY TRAFFIC AREAS, FULL SOIL RESTORATION WILL BE REQUIRED. FULL SOIL RESTORATION CONSISTS OF USE OF A BULLDOZER WITH A DEEP RIPPER ATTACHED TO IT. THE RIPPER SHALL BE DONE TO A DEPTH OF 12"-24". COMPOST IS PLACED OVER THE RIPPED SOIL, THEN WORKED INTO THE SOIL WITH A DEEP SUB-SOILER.
 3. FOR LIGHT TRAFFIC AREAS, SOIL RESTORATION MAY BE ACCOMPLISHED BY MEANS OF TILLING THE SOIL WITH A DISK TYPE TILLER PULLED BY A TRACTOR OR PLACEMENT OF TOPSOIL OVER THE EXISTING SOIL A.O.B.E..

LEGEND:	
	EXISTING PROPERTY LINE
	ADJOINING PROPERTY LINE
	EXISTING EASEMENT LINE
	EXISTING STREAM
	EXISTING WETLAND BOUNDARY
	100' WETLAND BUFFER
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	EXISTING TREE LINE
	EXISTING OVER HEAD WIRE
	EXISTING UTILITY POLE
	EXISTING SEWER SERVICE LINE
	EXISTING SEWER LINE
	EXISTING SEWER MANHOLE
	EXISTING SEWER CLEAN OUT
	EXISTING WATER LINE
	EXISTING WATER SERVICE LINE
	EXISTING WELL
	EXISTING HYDRANT
	EXISTING WATER SHUT OFF VALVE
	EXISTING WATER VALVE
	EXISTING STORM WATER LINE
	EXISTING ROOF LEADER
	EXISTING CATCH BASIN
	PROPOSED PROPERTY LINE
	PROPOSED SET BACK LINE
	PROPOSED MAJOR CONTOUR
	PROPOSED MINOR CONTOUR
	PROPOSED EASEMENT
	PROPOSED TREE LINE
	PROPOSED SEWER LINE
	PROPOSED SEWER SERVICE LINE
	PROPOSED SEWER MANHOLE
	PROPOSED SEWER CLEAN OUT
	PROPOSED SDS LATERAL
	PROPOSED SDS SOLID LINE
	PROPOSED STORM WATER LINE
	PROPOSED ROOF LEADER LINE
	PROPOSED ROOF LEADER
	PROPOSED WATER LINE
	PROPOSED WATER SERVICE LINE
	PROPOSED WELL
	PROPOSED HYDRANT
	PROPOSED WATER SHUT OFF VALVE
	PROPOSED WATER VALVE
	PROPOSED SILT FENCE
	PROPOSED LIMIT OF DISTURBANCE
	PROPOSED CONSTRUCTION ENTRANCE

INSPECTION SCHEDULE & MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES

PERMANENT AND TEMPORARY VEGETATION:
INSPECT ALL AREAS THAT HAVE RECEIVED VEGETATION EVERY SEVEN DAYS AND AFTER EVERY STORM EVENT WITH RAINFALL THAT EQUALS OR EXCEEDS 0.5 INCH. ALL AREAS DAMAGED BY EROSION OR WHERE SEED HAS NOT ESTABLISHED SHALL BE REPAIRED AND RESTABILIZED IMMEDIATELY.

STABILIZED CONSTRUCTION ENTRANCE:
INSPECT THE ENTRANCE PAD EVERY SEVEN DAYS AND AFTER EVERY STORM EVENT WITH RAINFALL THAT EQUALS OR EXCEEDS 0.5 INCH. CHECK FOR MUD, SEDIMENT BUILD-UP AND PAD INTEGRITY. MAKE DAILY INSPECTIONS DURING WET WEATHER. REGRADE PAD AS NEEDED FOR RUNOFF CONTROL. WASH AND REPLACE STONE AS NEEDED. THE STONE IN THE ENTRANCE SHOULD BE WASHED OR REPLACED WHENEVER THE ENTRANCE FAILS TO REDUCE MUD BEING CARRIED OFF SITE BY VEHICLES. IMMEDIATELY REMOVE MUD AND SEDIMENT TRACKED OR WASHED ONTO PUBLIC ROADS BY BRUSHING OR SWEEPING. REMOVE TEMPORARY CONSTRUCTION ENTRANCE AS SOON AS THEY ARE NO LONGER NEEDED TO PROVIDE ACCESS TO THE SITE AS DIRECTED BY PROJECT ENGINEER.

SILT FENCE:
INSPECT FOR DAMAGE EVERY SEVEN DAYS AND AFTER EVERY STORM EVENT WITH RAINFALL THAT EQUALS OR EXCEEDS 0.5 INCH. MAKE ALL REPAIRS IMMEDIATELY. REMOVE SEDIMENT FROM THE UP-SLOPE FACE OF THE FENCE BEFORE IT ACCUMULATES TO A HEIGHT EQUAL TO ONE-QUARTER THE HEIGHT OF THE FENCE. IF FENCE FABRIC TEARS, BEGINS TO DECOMPOSE, OR IN ANY WAY BECOMES INEFFECTIVE, REPLACE THE AFFECTED SECTION OF FENCE IMMEDIATELY.

SOIL STOCKPILE:
INSPECT SEDIMENT CONTROL BARRIERS (SILT FENCE) AND VEGETATION FOR DAMAGE EVERY SEVEN DAYS AND AFTER EVERY STORM EVENT WITH RAINFALL THAT EQUALS OR EXCEEDS 0.5 INCH. MAKE ALL REPAIRS IMMEDIATELY. REMOVE SEDIMENT FROM THE UP-SLOPE FACE OF THE SEDIMENT CONTROL BARRIER BEFORE IT ACCUMULATES TO A HEIGHT EQUAL TO ONE-QUARTER THE HEIGHT OF THE SEDIMENT CONTROL BARRIER. IF SEDIMENT CONTROL BARRIER TEARS, BEGINS TO DECOMPOSE, OR IN ANY WAY BECOMES INEFFECTIVE, REPLACE THE AFFECTED SECTION OF SEDIMENT CONTROL BARRIER IMMEDIATELY. REVEGETATE DISTURBED AREA TO STABILIZE SOIL STOCKPILE. REMOVE THE SEDIMENT CONTROL BARRIER WHEN THE SOIL STOCKPILE HAS BEEN REMOVED.

DUST CONTROL:
SCHEDULE CONSTRUCTION OPERATIONS TO MINIMIZE THE AMOUNT OF DISTURBED AREAS AT ANY ONE TIME DURING THE COURSE OF WORKS. APPLY TEMPORARY SOIL STABILIZATION PRACTICES SUCH AS MULCHING, SEEDING, AND SPRAYING (WATER). STRUCTURAL MEASURES (MULCH, SEEDING) SHALL BE INSTALLED IN DISTURBED AREAS BEFORE SIGNIFICANT BLOWING PROBLEMS DEVELOP. WATER SHALL BE SPRAYED AS NEEDED. REPEAT AS NEEDED, BUT AVOID EXCESSIVE SPRAYING, WHICH COULD CREATE RUNOFF AND EROSION PROBLEMS.

CHECK DAM:
(IF REQUIRED) INSPECT CHECK DAMS EVERY SEVEN DAYS AND AFTER EVERY STORM EVENT WITH RAINFALL THAT EQUALS OR EXCEEDS 0.5 INCH. IF SIGNIFICANT EROSION OCCURS BETWEEN STRUCTURES, A LINE OF STONE OR OTHER SUITABLE MATERIAL SHOULD BE INSTALLED IN THAT PORTION OF THE CHANNEL. REMOVE SEDIMENT ACCUMULATED BEHIND THE DAM AS NEEDED TO ALLOW CHANNEL TO DRAIN THROUGH THE STONE CHECK DAM AND PREVENT LARGE FLOWS FROM CARRYING SEDIMENT OVER THE DAM. REPLACE STONES AS NEEDED TO MAINTAIN THE DESIGN CROSS SECTION OF THE STRUCTURES. REMOVE CHECK DAMS AS PER APPROVAL OF THE PROJECT ENGINEER.

EROSION CONTROL BLANKET:
(IF REQUIRED) INSPECT THE BLANKET EVERY SEVEN DAYS AND AFTER EVERY STORM EVENT WITH RAINFALL THAT EQUALS OR EXCEEDS 0.5 INCH. REPLACE WIRE STAPLES AS REQUIRED, REPAIR AND RESEED WHERE CRACKS AND DAMAGED VEGETATION IS EVIDENT. WHEN DAMAGED BEYOND REPAIR OR NO LONGER FUNCTIONING, THE BLANKET SHALL BE REPLACED.

DEWATERING PITS:
(IF REQUIRED) - INSPECT DAILY DURING OPERATION FOR CLOGGING OR OVERFLOW. CLEAR INLET AND DISCHARGE PIPES OF OBSTRUCTIONS. IF A FILTER MATERIAL BECOMES CLOGGED WITH SEDIMENT, PIT SHALL BE DISMANTLED AND NEW PITS SHALL BE CONSTRUCTED AS NEEDED.

SEDIMENT TRAP:
(IF REQUIRED) SEDIMENT SHALL BE REMOVED AND THE TRAP RESTORED TO THE ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO ONE-HALF OF THE DESIGN DEPTH OF THE TRAP. SEDIMENT REMOVED FROM THE TRAP SHALL BE DEPOSITED IN A PROTECTED AREA IN SUCH A MANNER THAT IT WILL NOT ERODE.

CATCH BASINS:
ALL CATCH BASINS SHALL BE INSPECTED AFTER EACH STORM EVENT FOR SEDIMENT ACCUMULATION, AND DEBRIS, AND REMOVE AS NECESSARY. THE INLET PROTECTION SHALL BE INSPECTED FOR SEDIMENT ACCUMULATION AND REPLACED AS NECESSARY. WHEN SEDIMENT ACCUMULATION WITHIN THE CATCH BASIN SUMP REACHES 1/2 OF THE SUMP DEPTH, IT SHALL BE REMOVED.

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EROSION & SEDIMENT CONTROL PLAN

SCALE: 1" = 30'

GRAPHIC SCALE

HUDSON LAND DESIGN

PROFESSIONAL ENGINEERING P.C.

174 MAIN ST., BEACON, NEW YORK 12508

13 CHAMBERS ST., NEWBURGH, NEW YORK 12550

PH: 845-440-6926

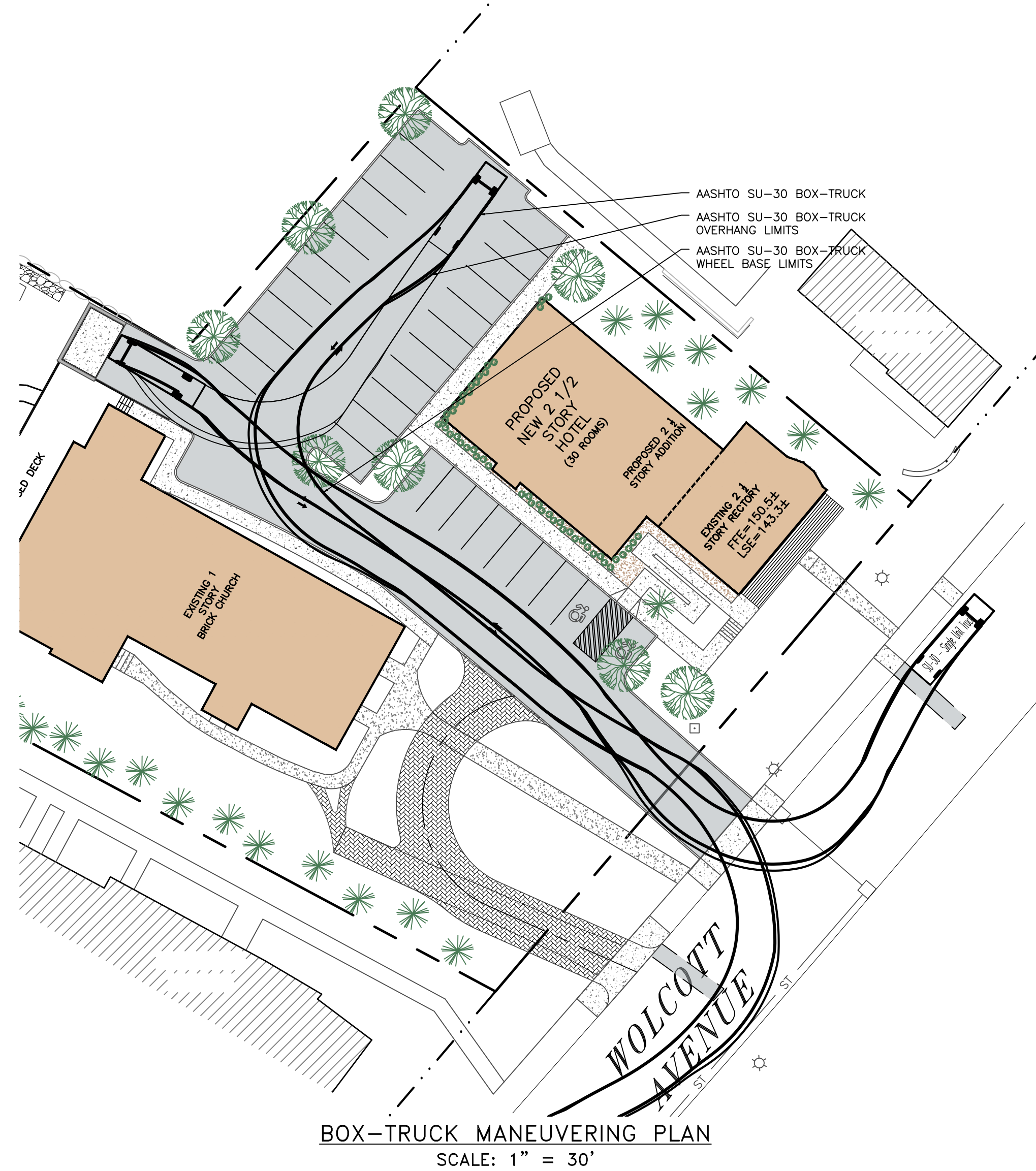
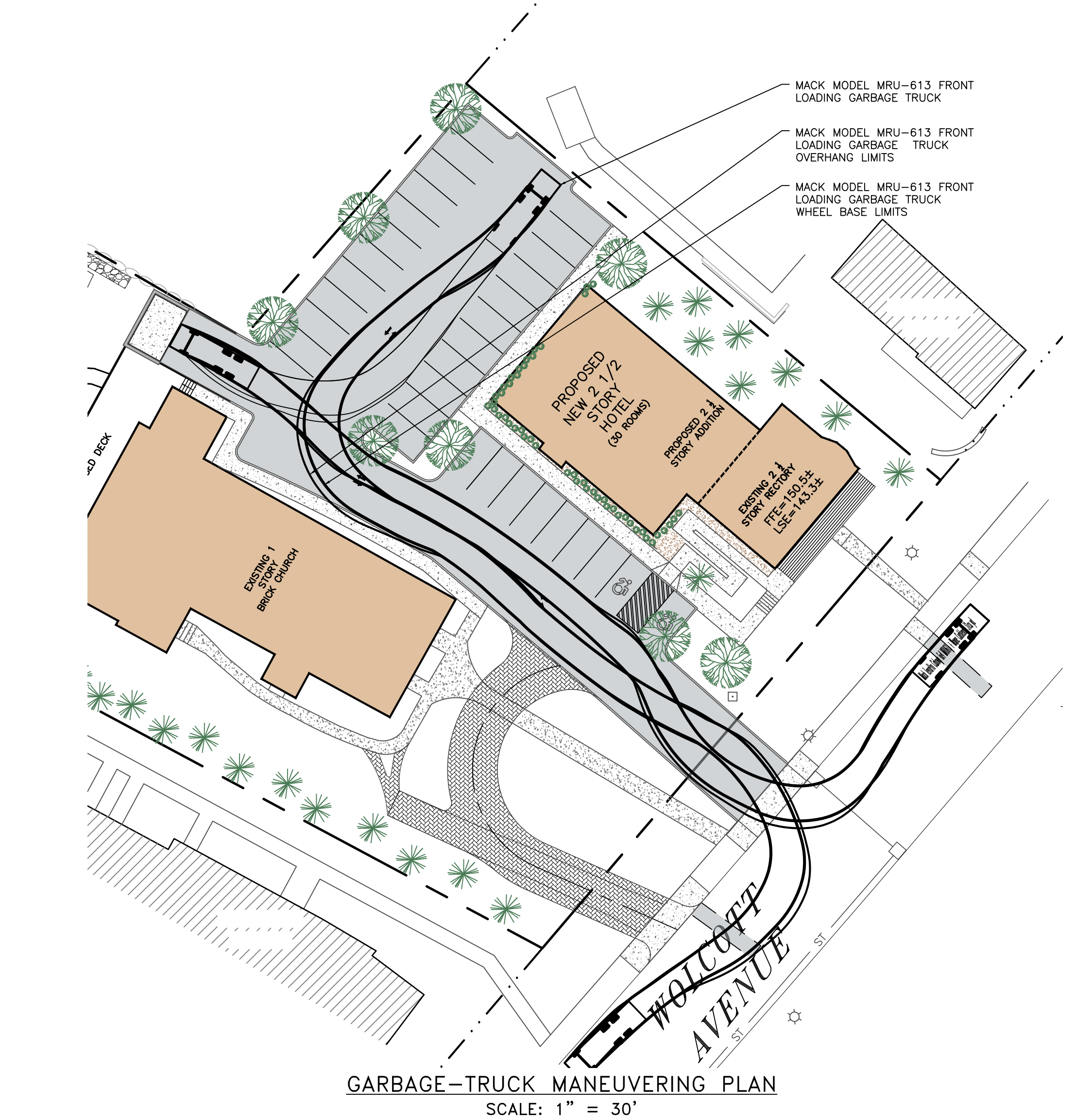
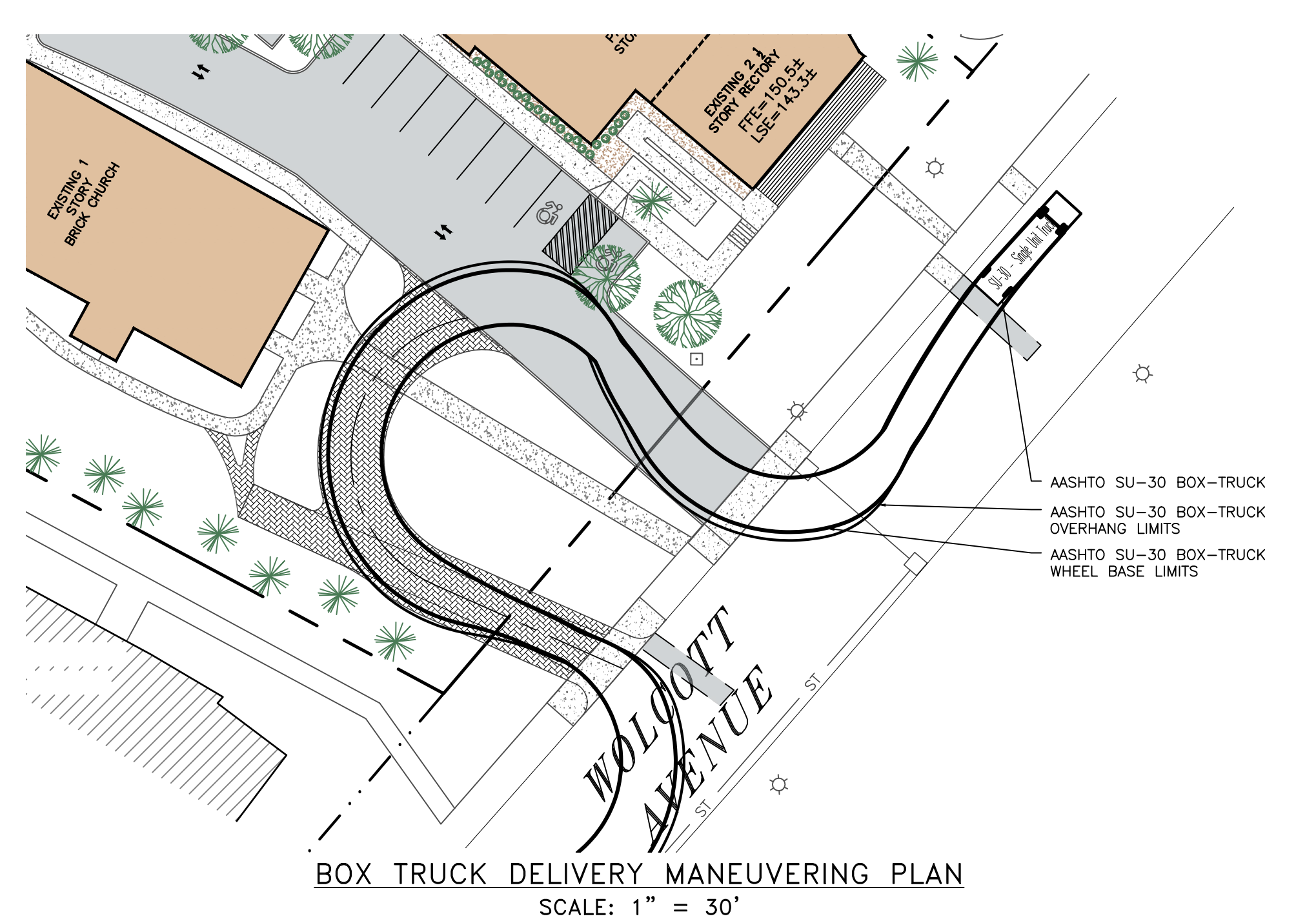
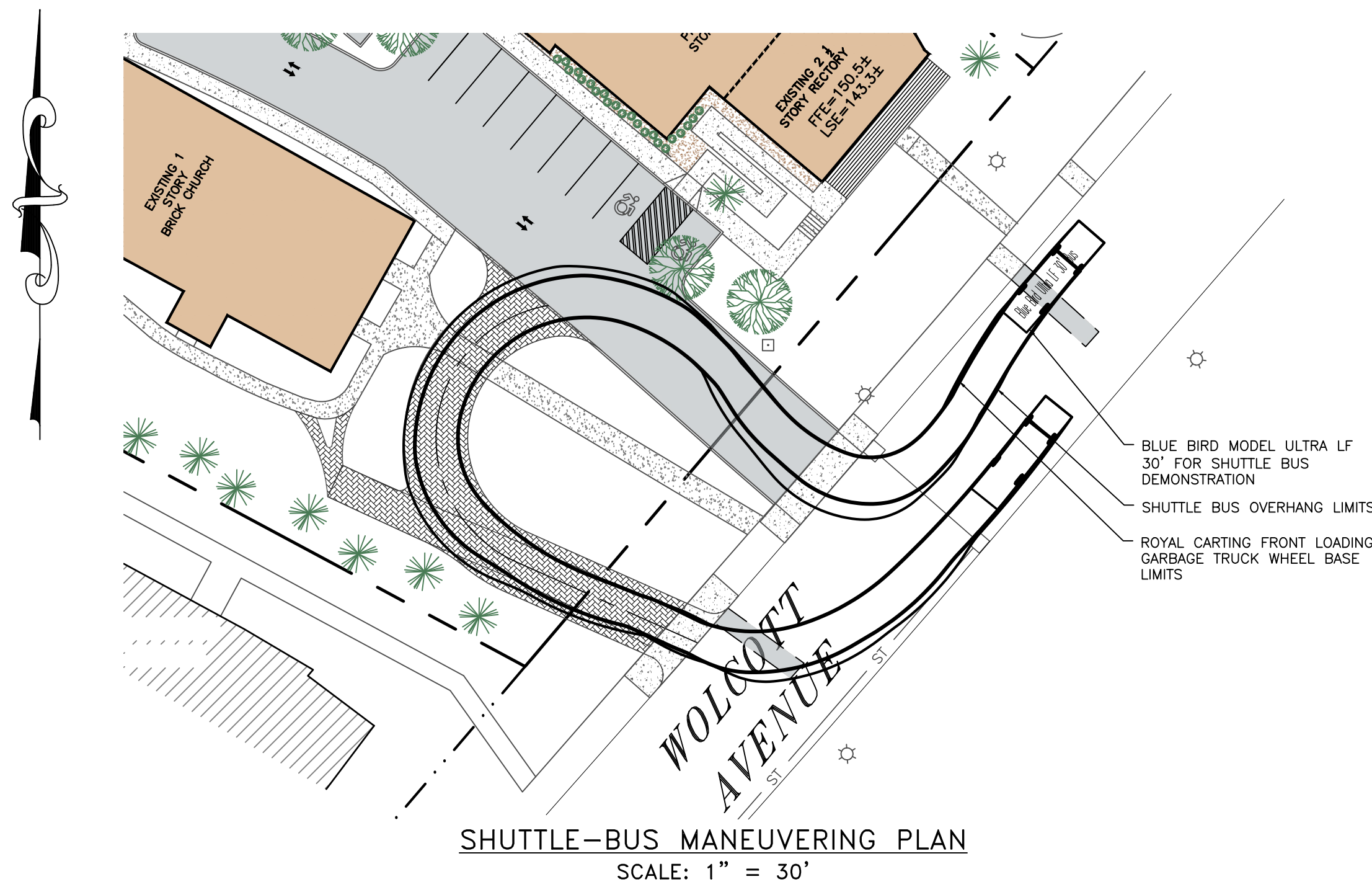
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EROSION & SEDIMENT CONTROL PLAN

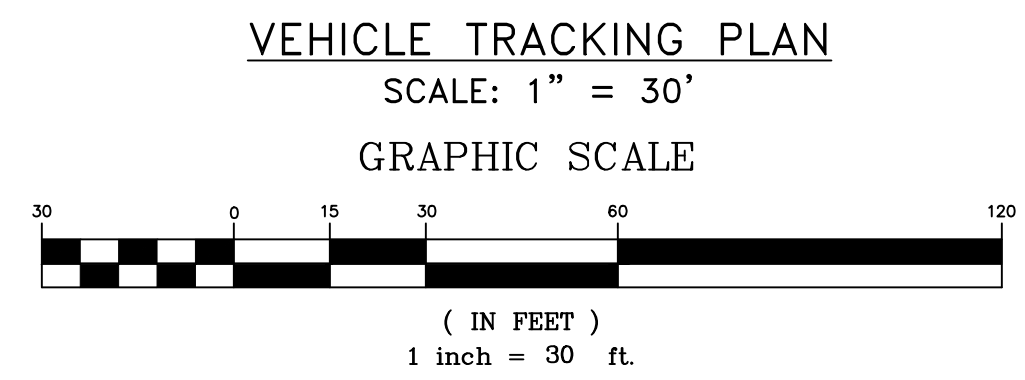
1113 WOLCOTT AVENUE

1113 WOLCOTT AVENUE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 5954-26-651901

JOB #:	2021-022
DATE:	6/29/2021
SCALE:	1" = 30'
TITLE:	EC-1
SHEET:	9 OF 13



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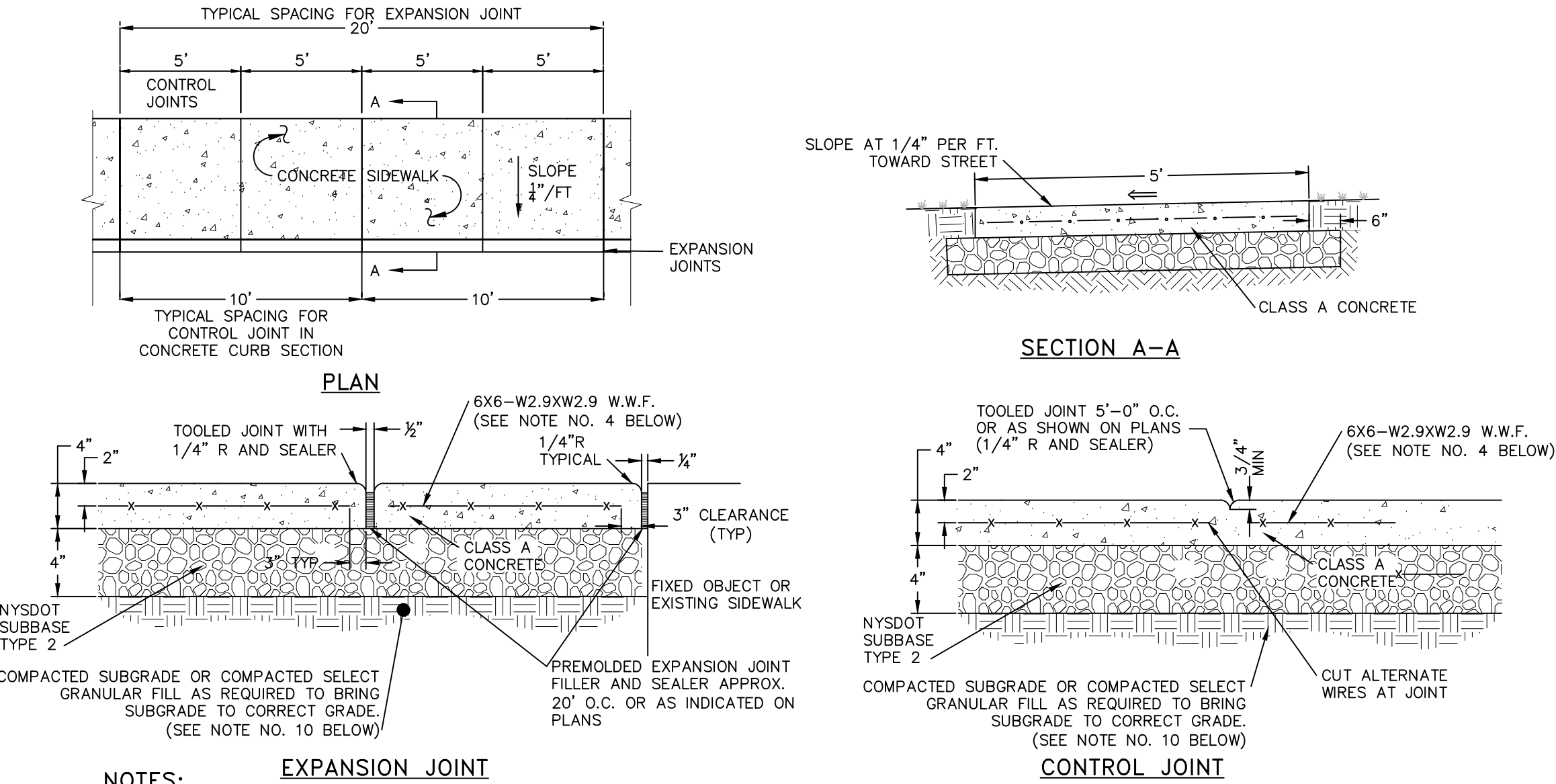


HUDSON
LAND DESIGN
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PROFESSIONAL ENGINEERING P.C.
174 MAIN ST., BEACON, NEW YORK 12508
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845-440-6926
F: 845-440-6637

VEHICLE TRACKING PLAN
1113 WOLCOTT AVENUE
1113 WOLCOTT AVENUE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 5954-26-651901

JOB #:	2021:022
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TITLE:	VHC-1
SHEET:	10 OF 13

SITE DETAILS

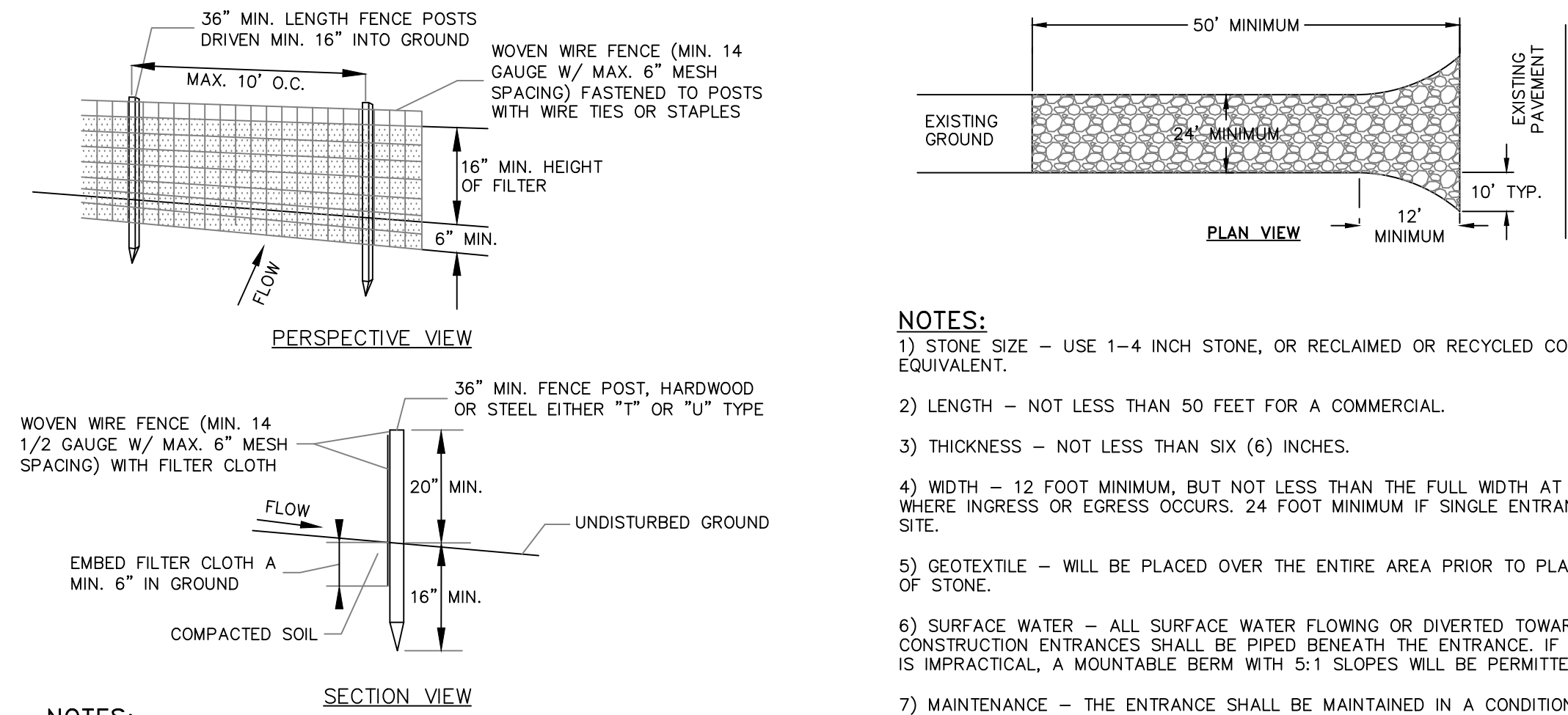


NOTES:

- 10' SPACING OF CONTROL JOINTS SHALL BE USED FOR CAST IN PLACE CONCRETE CURBS.
- MATERIAL AND METHODS OF CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION (NYSDOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, DATED JANUARY 2, 2002, AND ALL ADDENDA THERETO; THE ONLY EXCEPTION BEING THAT THE WORK OF THIS CONTRACT SHALL BE MEASURED IN ENGLISH UNITS.
- ALL CONCRETE SHALL BE 3,500 PSI CLASS A CONCRETE. CONCRETE MATERIALS, PLACEMENT, AND CONSTRUCTION SHALL CONFORM WITH SECTION 500 OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
- REINFORCING STEEL FOR CONCRETE SHALL CONFORM WITH SECTION 556 - REINFORCING STEEL FOR CONCRETE STRUCTURES OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS AND AS SPECIFICALLY CALLED OUT IN THE DRAWINGS.
- ALL EXPOSED SURFACED SHALL HAVE A BROOM TEXTURED FINISH.
- EXPANSION JOINTS SHALL BE LOCATED A MAXIMUM OF 20' ON CENTER, OR AS INDICATED ON PLANS.
- JOINTS SHALL NOT BE SAW CUT.
- EXPOSED CONCRETE SURFACES SHALL BE TREATED WITH "SUREBOND"/"SAFEbond"/"SB-7000 INTENSIFIER BRIGHT PROTECTOR AND SIDEWALK SEALER, OR EQUAL. RATE AND METHOD OF APPLICATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- SUBBASE MATERIAL SHALL CONFORM WITH SECTION 304 OF THE ABOVE REFERENCED NYSDOT STANDARD.
- WHERE IT IS NECESSARY TO PLACE FILL FOR PURPOSES OF BRINGING THE SUBGRADE ELEVATION UP TO A SPECIFIED GRADE, THE FILL MATERIAL PLACED SHALL BE IN CONFORMANCE WITH SECTION 203-EXCAVATION AND EMBANKMENT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
- ALL WORK SHALL CONFORM WITH SECTION 608-SIDEWALK, DRIVEWAYS, AND BICYCLE PATHS OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.

CONCRETE SIDEWALK DETAIL
NOT TO SCALE

EROSION AND SEDIMENT CONTROL DETAILS

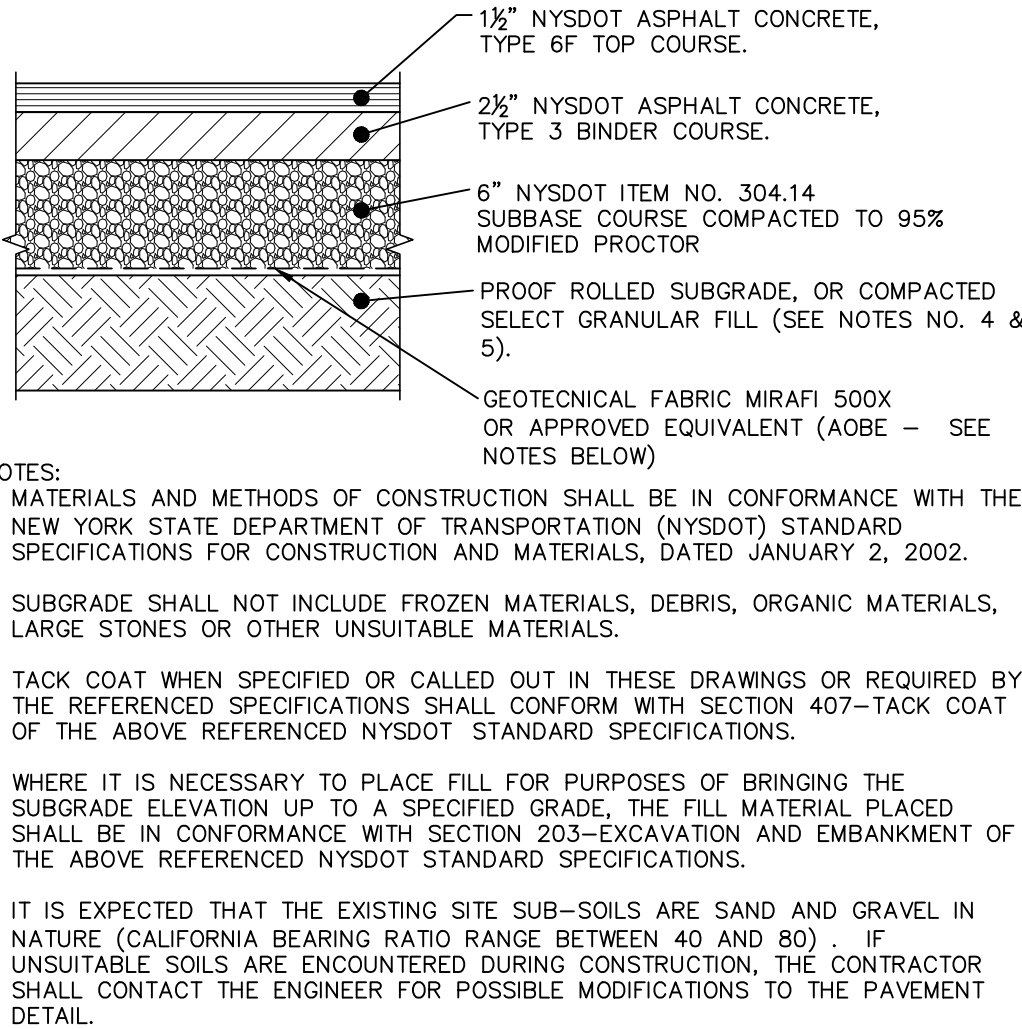


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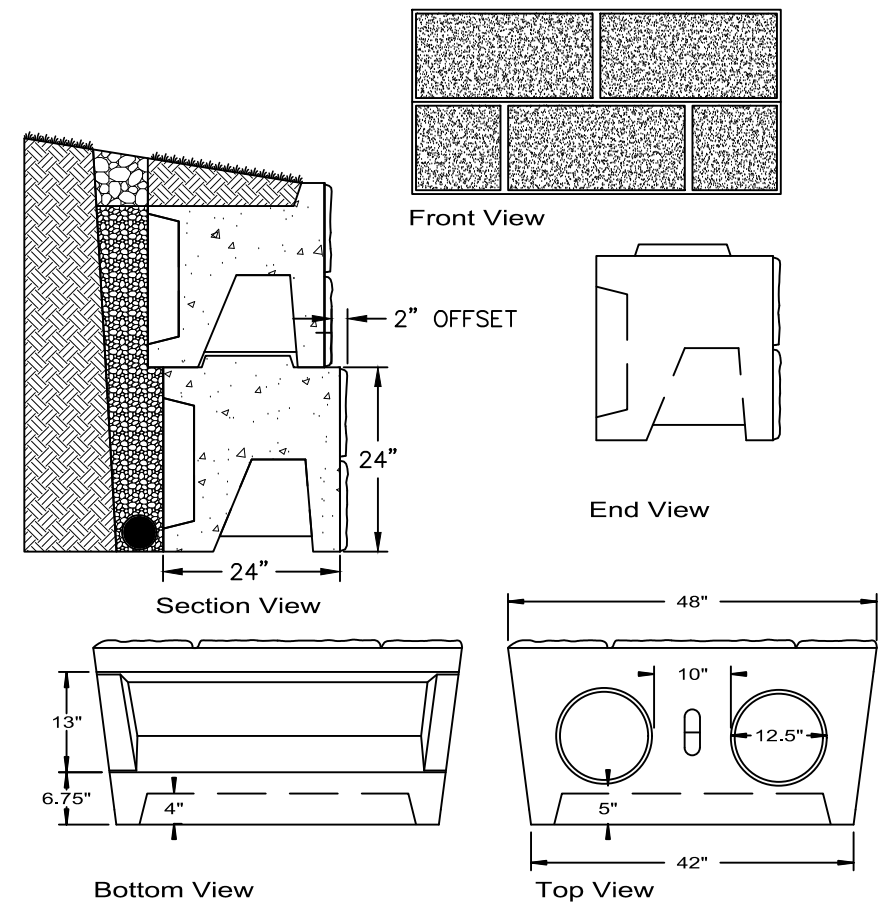
- FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24\"/>
- WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N OR APPROVED EQUAL.
- PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE OR APPROVED EQUAL.
- MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

SILT FENCE DETAIL
NOT TO SCALE

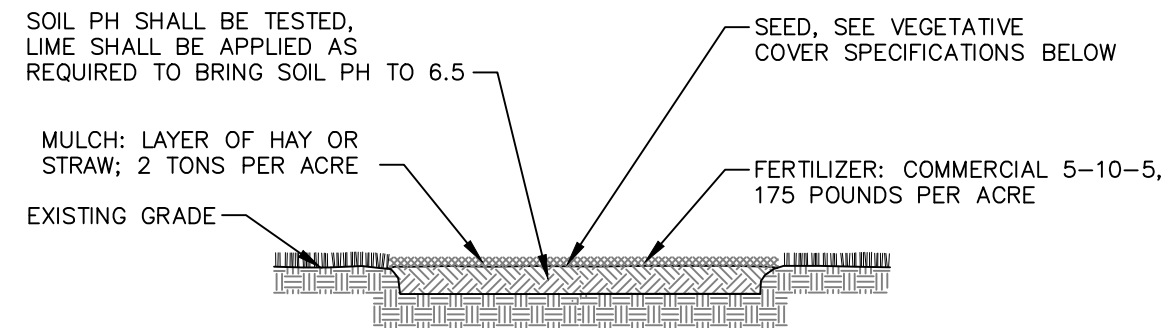
STABILIZED CONSTRUCTION ENTRANCE DETAIL
NOT TO SCALE



PAVEMENT SECTION DETAIL
NOT TO SCALE



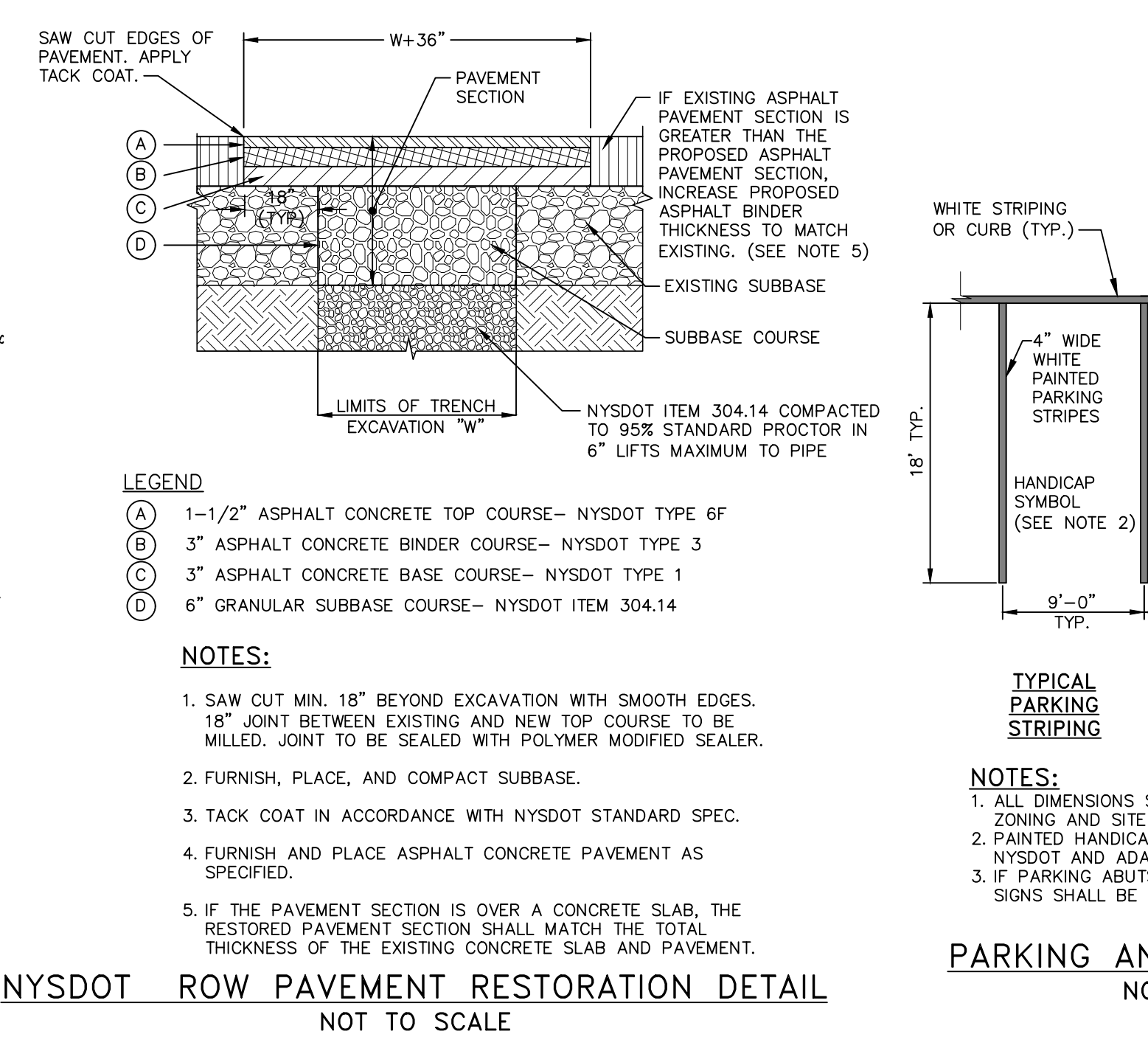
WOODARD'S CONCRETE BLOCK WALL DETAIL
NOT TO SCALE



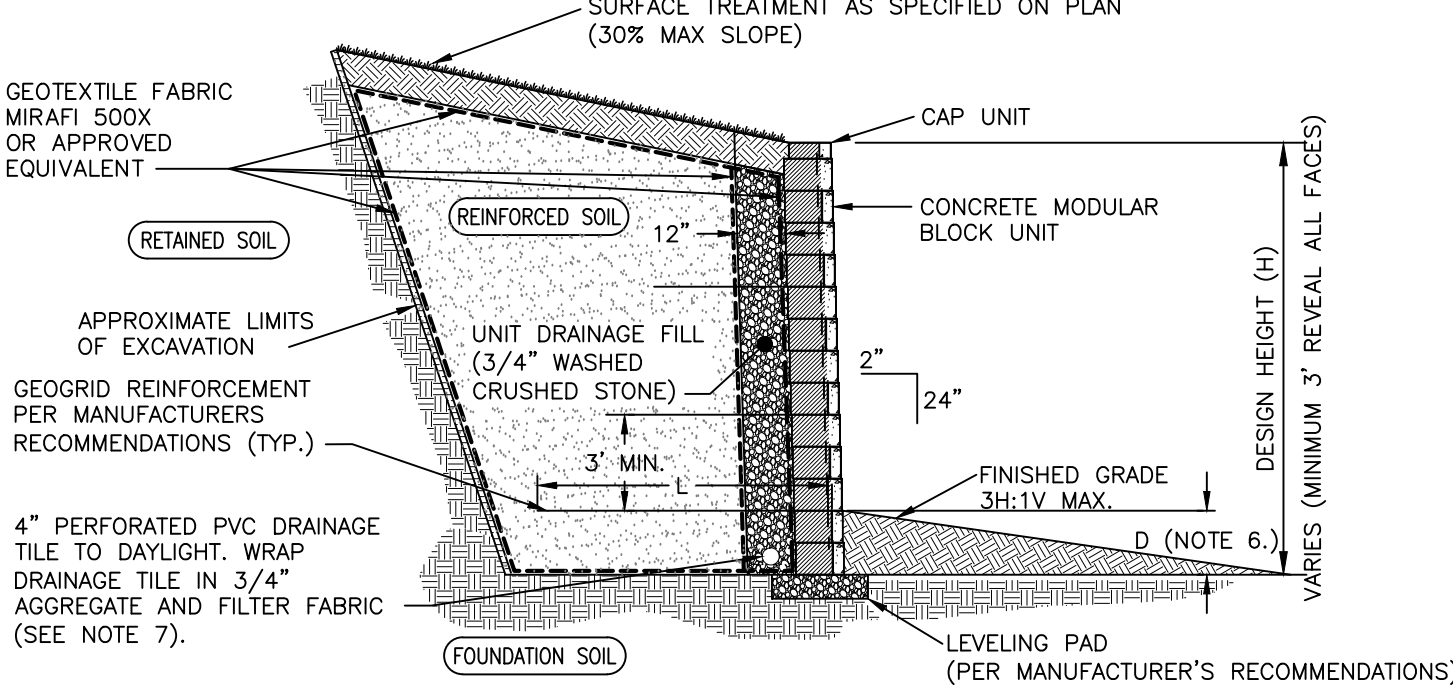
NOTES:

- TOPSOIL, SEED, MULCH, AND FERTILIZE DISTURBED SOIL AREAS THAT WILL BE LEFT EXPOSED FOR 14 DAYS OR MORE.
- SEED MIXTURE FOR USE ON LAWNS IN SUNNY AREAS:
65% KENTUCKY BLUE GRASS BLEND
20% PERENNIAL RYEGRASS
15% FINE FESCUE
114 POUNDS PER ACRE
35 POUNDS PER ACRE
28 POUNDS PER ACRE
175 POUNDS PER ACRE
- SEED MIXTURE FOR USE IN SHADY AREAS:
80% BLEND OF SHADE TOLERANT KENTUCKY BLUEGRASS
20% FINE FESCUE
138 POUNDS PER ACRE
37 POUNDS PER ACRE
175 POUNDS PER ACRE
- SEED BETWEEN APRIL 1ST AND MAY 15TH OR AUGUST 15TH AND OCTOBER 15TH. SEEDING MAY OCCUR BETWEEN MAY 15TH AND AUGUST 15TH IF ADEQUATE IRRIGATION IS PROVIDED.
- TOPSOIL SHALL HAVE AT LEAST 6% BY WEIGHT OF FINE TEXTURED STABLE ORGANIC MATERIAL, AND NO GREATER THAN 20% TOPSOIL SHALL HAVE NOT LESS THAN 20% FINE TEXTURED MATERIAL (PASSING THE NO. 200 SIEVE) AND NOT MORE THAN 15% CLAY.

TOPSOIL, SEED AND MULCH DETAIL
NOT TO SCALE



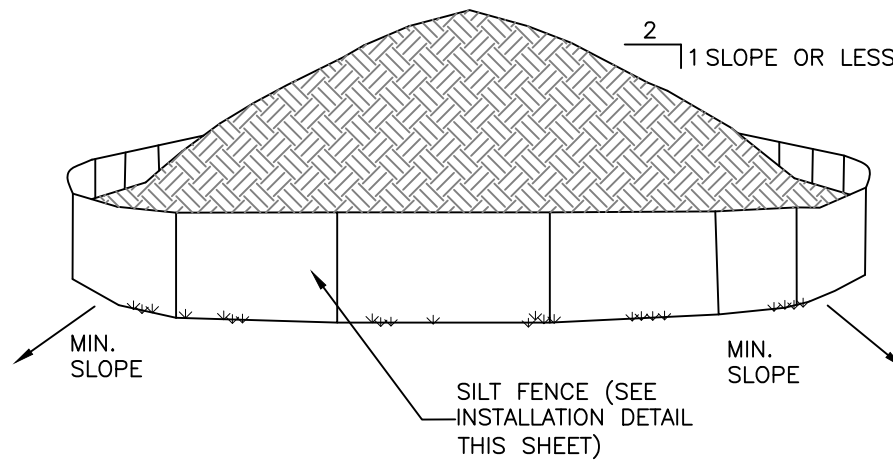
NYSDOT ROW PAVEMENT RESTORATION DETAIL
NOT TO SCALE



MODULAR RETAINING WALL NOTES:

- MODULAR RETAINING WALL MANUFACTURED BY WOODARD'S OR APPROVED EQUAL.
- GRID TYPE SHALL BE AS SPECIFIED BY THE MANUFACTURER.
- GRID SPACING AND LENGTH VARY BASED ON OVERALL WALL HEIGHT, SOIL AND LOADING CONDITIONS. WALLS OF LIMITED HEIGHT (I.E., 4' OR LESS) MAY NOT REQUIRE THE INSTALLATION OF GRID.
- LEVELING PAD DEPTH SHALL BE SPECIFIED BY THE MANUFACTURER BASED ON ENGINEERING DESIGN SPECIFIC FOR THE SITE.
- MANUFACTURER TO PROVIDE FINAL ENGINEERING CALCULATIONS AND DETAILS TO THE OWNER FOR REVIEW BY THE OWNERS ENGINEER.
- D SHALL BE PER MANUFACTURER'S RECOMMENDATIONS.
- RELOCATE PERFORATED PIPE WITHIN STONE CROSS SECTION FOR STEPPED WALLS TO ACHIEVE CONTINUOUS FLOW TOWARD DISCHARGE POINT.
- SEE MANUFACTURER'S DETAILS AND INSTALLATION GUIDELINES FOR FURTHER REQUIREMENTS.

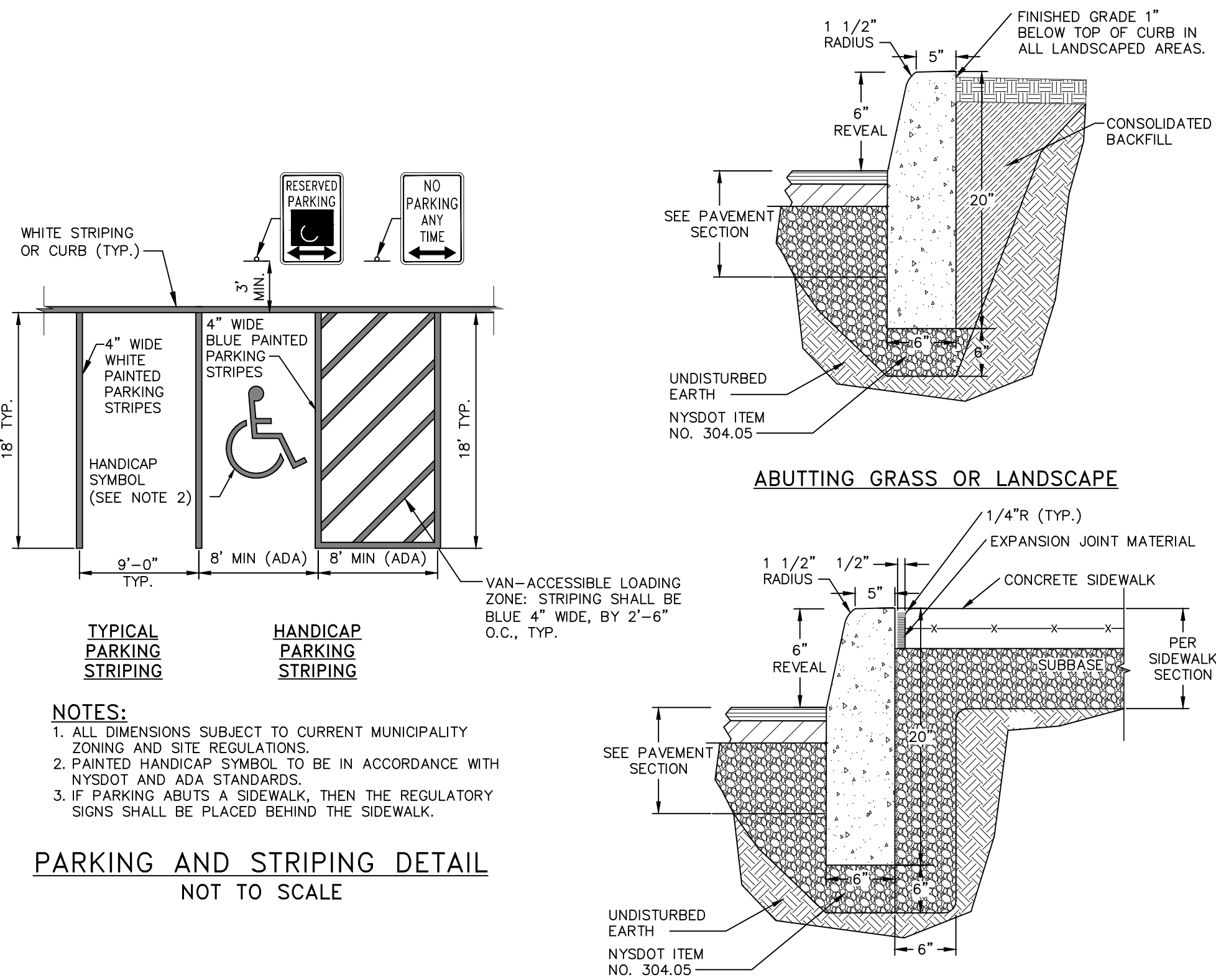
CONCRETE MODULAR RETAINING WALL DETAIL
NOT TO SCALE



NOTES:

- AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
- EACH PILE SHALL BE SURROUNDED WITH SILT FENCING, THEN STABILIZED WITH VEGETATION OR COVERED.

TEMPORARY SOIL STOCKPILE DETAIL
NOT TO SCALE



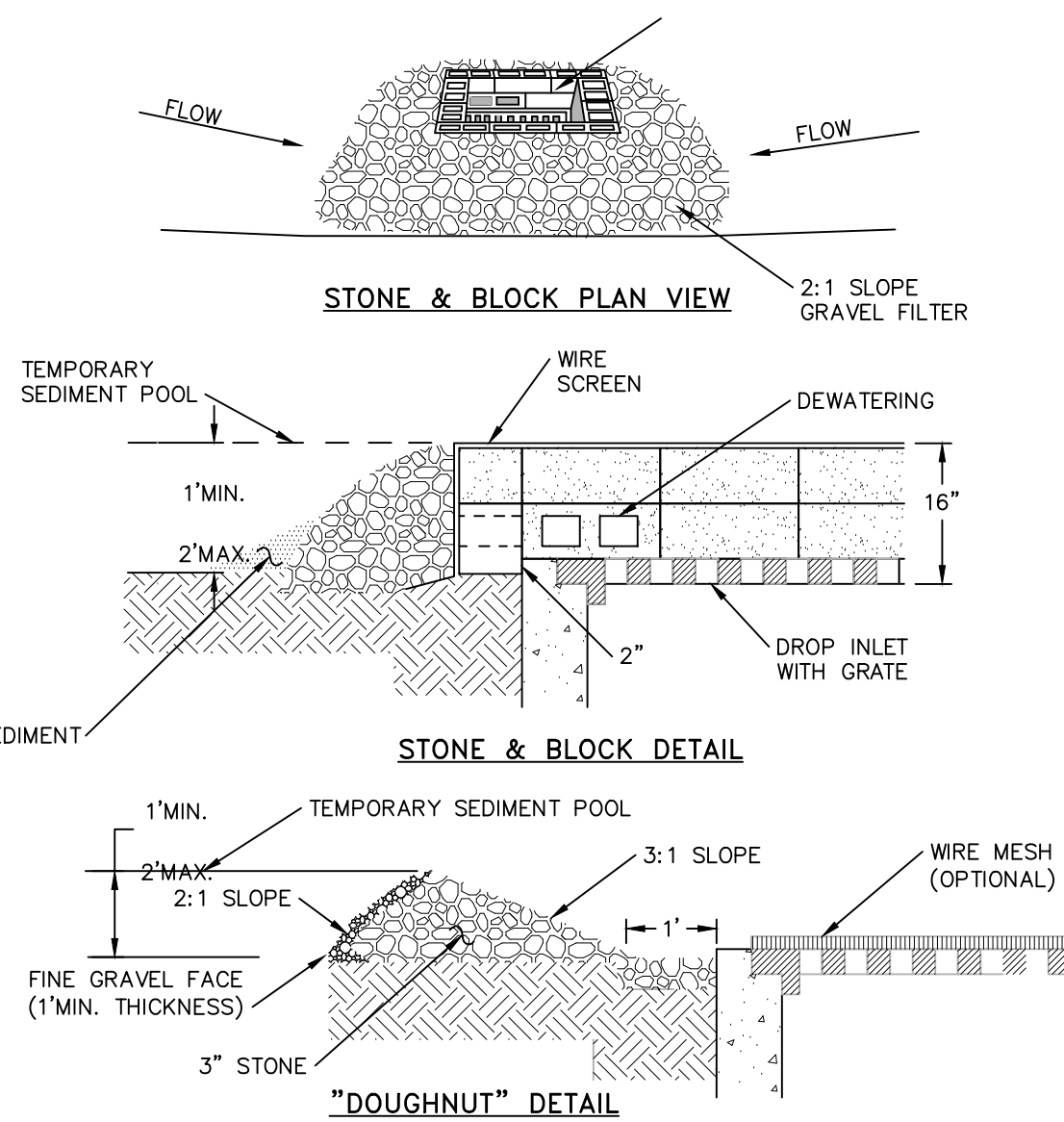
PARKING AND STRIPING DETAIL
NOT TO SCALE

ABUTTING SIDEWALK

NOTES:

- CONCRETE CURB SHALL BE 4,000 PSI CAST-IN-PLACE, AND IN ACCORDANCE WITH NYSDOT STANDARD SPECIFICATION SECTION 609.
- EXPANSION JOINTS OF 1/2\"/>
- FOR MOUNTABLE CURBS ABUTTING SIDEWALK OR OTHER HARDSCAPE, REFER TO "ABUTTING SIDEWALK" DETAIL.

CAST-IN-PLACE CONCRETE CURB DETAIL
NOT TO SCALE



NOTES:

- LAY ONE BLOCK ON EACH SIDE OF THE STRUCTURE ON ITS SIDE FOR DEWATERING. FOUNDATION SHALL BE 2 INCHES MINIMUM BELOW REST OF INLET AND BLOCKS SHALL BE PLACED AGAINST INLET FOR SUPPORT.
- HARDWARE CLOTH OR 1/2\"/>
- USE CLEAN STONE OR GRAVEL 1/2-3/4 INCH IN DIAMETER PLACED 2 INCHES BELOW TOP OF THE BLOCK ON A 2:1 SLOPE OR FLATTER.
- FOR STONE STRUCTURES ONLY, A 1 FOOT THICK LAYER OF THE FILTER STONE WILL BE PLACED AGAINST THE 3 INCH STONE AS SHOWN ON THE DRAWINGS. MAXIMUM DRAINAGE AREA 1 ACRE

CATCH BASIN INLET PROTECTION DETAIL
NOT TO SCALE

DRAWN BY: ESR				CHECKED BY: MAB			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	8/31/21	PER PLANNING BOARD COMMENTS	CMB				
2	11/30/21	PER PLANNING BOARD COMMENTS	MAB				
3	12/28/21	PER PLANNING BOARD COMMENTS	MAB				



HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
174 MAIN ST., BEACON, NEW YORK 12508
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845-440-6926
F: 845-440-6637

SITE AND E&SC CONSTRUCTION DETAILS

1113 WOLCOTT AVENUE

1113 WOLCOTT AVENUE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 5954-26-651901

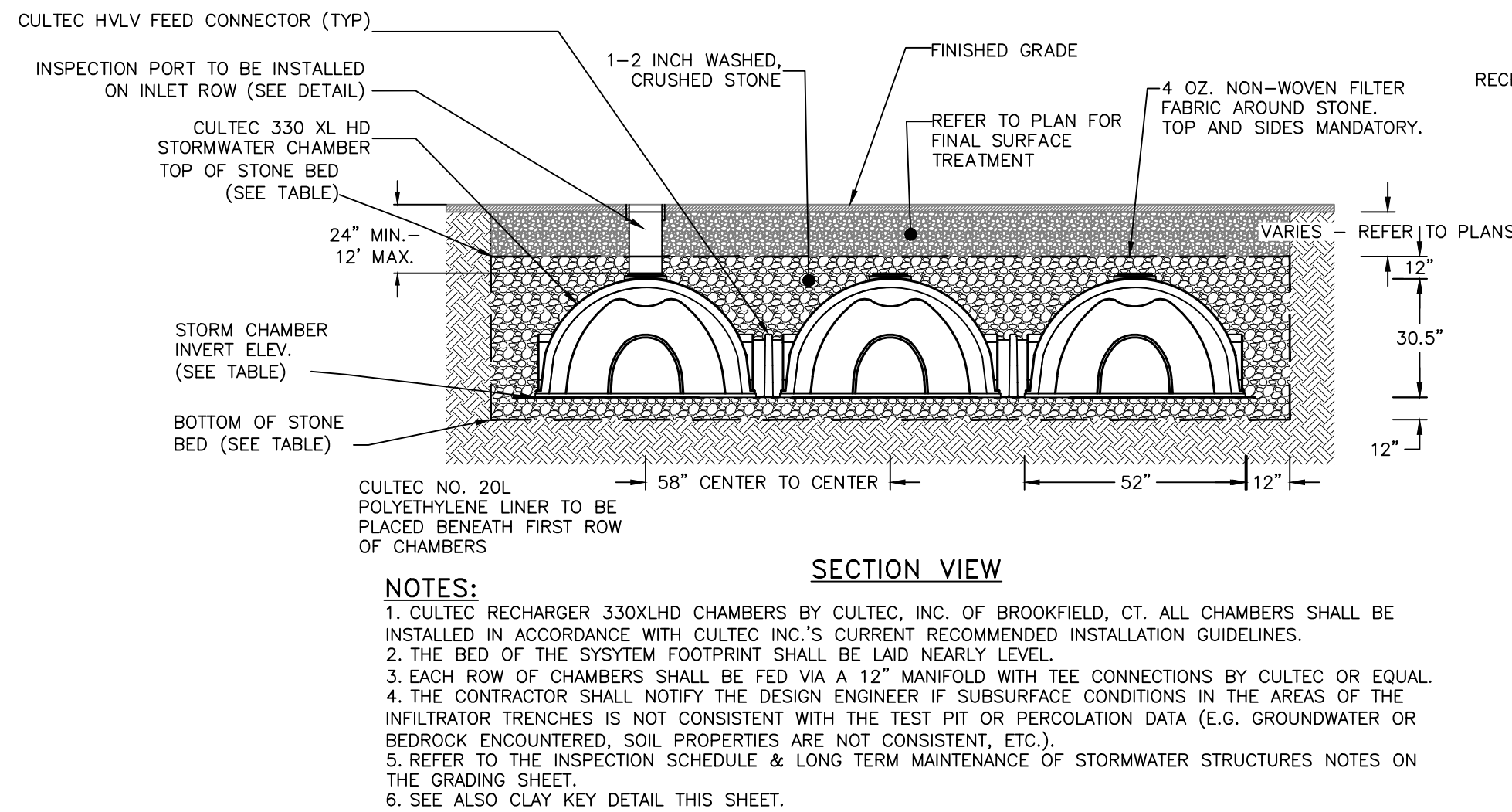
JOB #: 2021-022

DATE: 6/29/2021

SCALE: AS SHOWN

TITLE: CD-1

SHEET: 11 OF 13

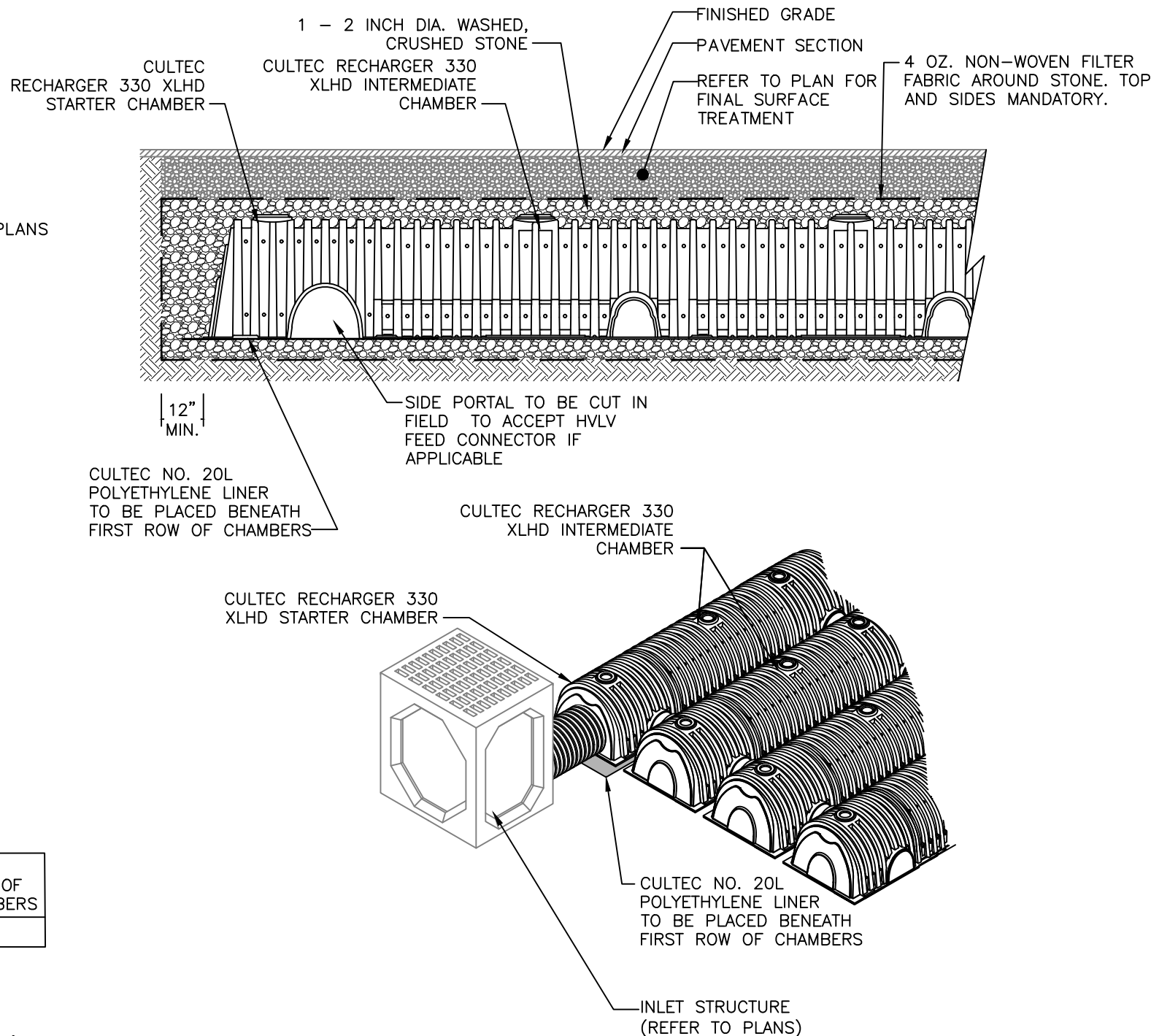


SECTION VIEW

- NOTES:
1. CULTREC RECHARGER 330XLHD CHAMBERS BY CULTREC, INC. OF BROOKFIELD, CT. ALL CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH CULTREC INC.'S CURRENT RECOMMENDED INSTALLATION GUIDELINES.
 2. THE BED OF THE SYSTEM FOOTPRINT SHALL BE LAID NEARLY LEVEL.
 3. EACH ROW OF CHAMBERS SHALL BE FED VIA A 12" MANIFOLD WITH TEE CONNECTIONS BY CULTREC OR EQUAL.
 4. THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IF SUBSURFACE CONDITIONS IN THE AREAS OF THE INFILTRATOR TRENCHES IS NOT CONSISTENT WITH THE TEST PIT OR PERCOLATION DATA (E.G. GROUNDWATER OR BEDROCK ENCOUNTERED, SOIL PROPERTIES ARE NOT CONSISTENT, ETC.).
 5. REFER TO THE INSPECTION SCHEDULE & LONG TERM MAINTENANCE OF STORMWATER STRUCTURES NOTES ON THE GRADING SHEET.
 6. SEE ALSO CLAY KEY DETAIL THIS SHEET.

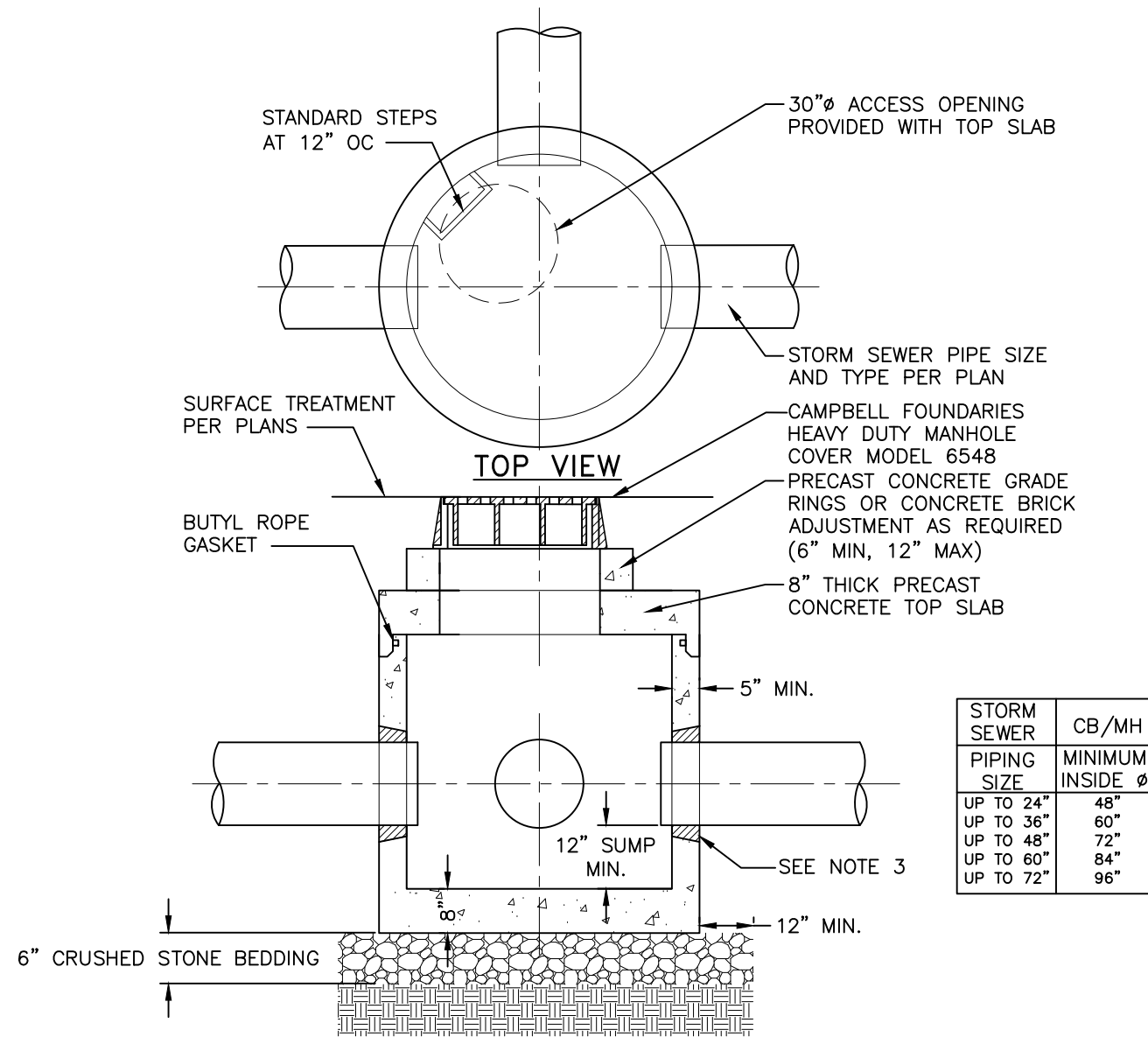
BOTTOM OF STONE BED ELEVATION	CHAMBER INVERT	TOP OF STONE BED ELEVATION	STONE BED FOOTPRINT	STONE BED DIMENSIONS	NO. OF CHAMBERS
134.0	134.5	137.54	1,601 S.F.	30.5'X52.5'	42

UNDERGROUND INFILTRATION/DETENTION SYSTEM DETAIL
NOT TO SCALE



CATCH BASIN DETAIL
NOT TO SCALE

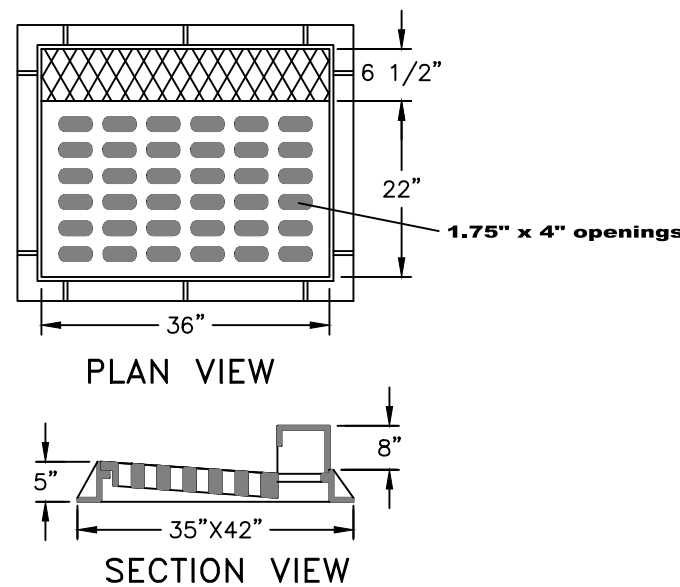
- NOTES:
1. PRECAST CONCRETE CATCH BASIN WITH CONCRETE STRENGTH OF 4,000 PSI @ 28 DAYS.
 2. THE ENDS OF ALL PIPES SHALL BE CUT OFF FLUSH WITH THE INSIDE SURFACE OF THE CATCH BASIN AND PARGED AROUND.
 3. PIPES SHALL BE PARGED AROUND INTERIOR AND EXTERIOR PRIOR TO BACKFILLING OF STRUCTURE. CONNECTIONS MADE WITHIN 10 FEET OF A WATER MAIN (OR SERVICE LINE) OR A SEWER MAIN (OR SERVICE LATERAL) SHALL BE MADE WATERTIGHT.
 4. PROVIDE A MINIMUM 0.1' DROP BETWEEN INLET AND OUTLET INVERTS (MATCH CROWNS FOR PIPES WITH DIFFERENT SIZE) UNLESS OTHERWISE NOTED ON THE PLAN.
 5. CATCH BASINS WITH AN INTERIOR DEPTH OF 4' AND GREATER SHALL BE FURNISHED WITH STEEL REINFORCED POLYPROPYLENE PLASTIC STEPS AT 12" INTERVALS.
 6. HDPE PIPE SHALL BE PROVIDED WITH WATERTIGHT CONNECTIONS. ADS MODEL N12 WT IB OR APPROVED EQUAL.



SIDE VIEW

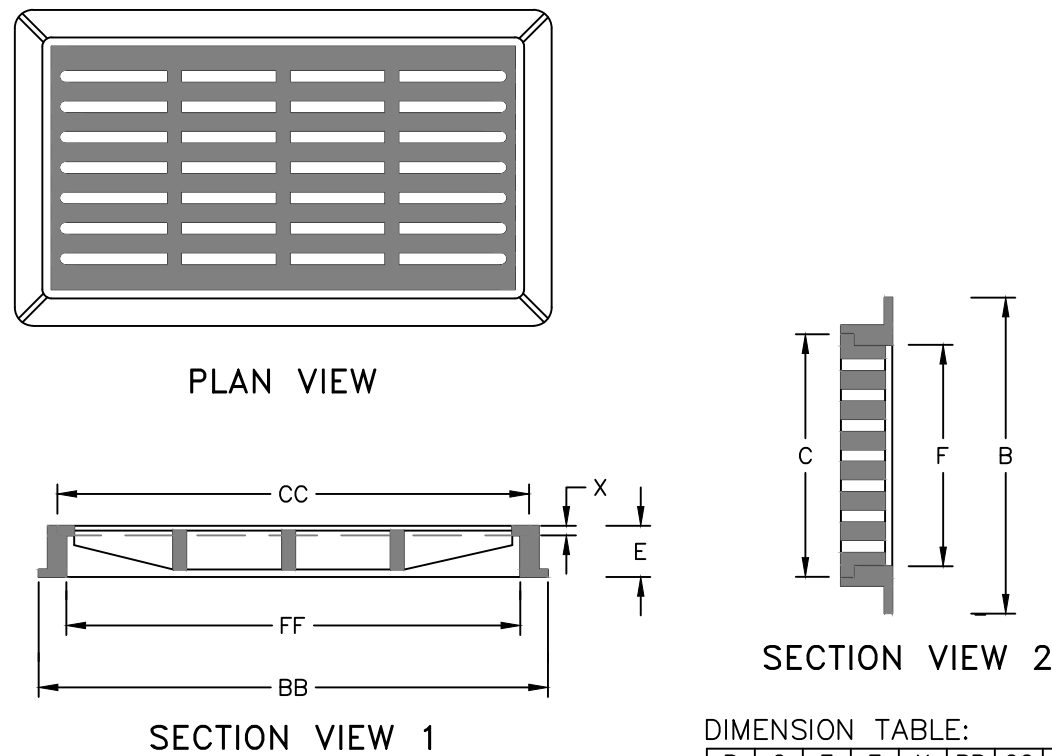
- NOTES:
1. PRECAST CONCRETE MANHOLE WITH CONCRETE STRENGTH OF 4,000 PSI @ 28 DAYS.
 2. THE ENDS OF ALL PIPES SHALL BE CUT OFF FLUSH WITH THE INSIDE SURFACE OF THE MANHOLE AND PARGED AROUND.
 3. PIPES SHALL BE PARGED AROUND INTERIOR AND EXTERIOR PRIOR TO BACKFILLING OF STRUCTURE.
 4. CONCRETE STRUCTURE AND CASTING SHALL BE RATED FOR H20 TRAFFIC LOADING.
 5. INLET FRAME SHALL BE FULLY SUPPORTED ON THE CONCRETE STRUCTURE FOR H20 LOADING.
 6. MANHOLES WITH AN INTERIOR DEPTH OF 4' AND GREATER SHALL BE FURNISHED WITH STEEL REINFORCED POLYPROPYLENE PLASTIC STEPS AT 12" INTERVALS.

STORMWATER MANHOLE DETAIL
NOT TO SCALE



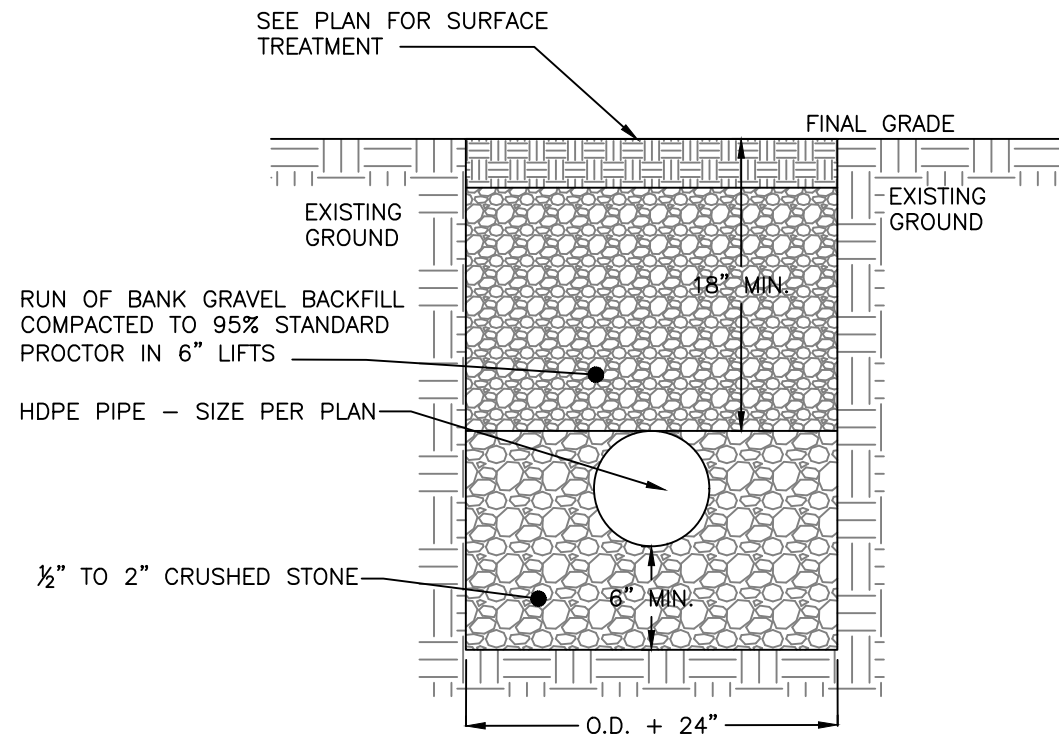
- NOTES:
1. HEAVY DUTY RECTANGULAR STORMWATER INLET GRATE TO BE CAMPBELL FOUNDRY MODEL 2541, OR APPROVED EQUAL.
 2. CATCH BASINS TO RECEIVE CURB INLETS ARE: CB 1&2, CB 4 TO RECEIVE A FLAT GRATE

CAST IRON STORMWATER CURB INLET GRATE DETAIL
NOT TO SCALE



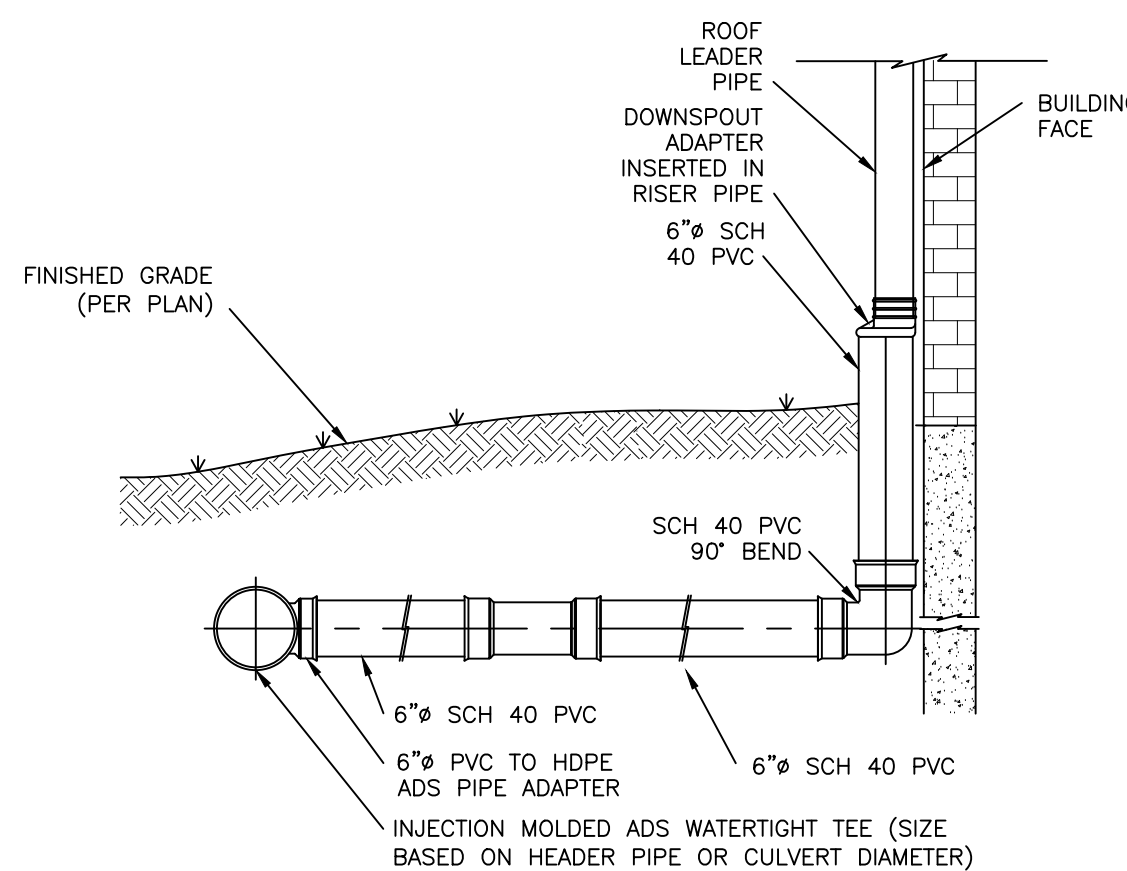
- NOTES:
1. HEAVY DUTY RECTANGULAR STORMWATER INLET GRATE TO BE CAMPBELL FOUNDRY MODEL 3433, OR APPROVED EQUAL.
 2. STMH1 AND STMH 2 RECEIVE SOLID CAST IRON COVERS.

CAST IRON STORMWATER FLAT INLET GRATE DETAIL
NOT TO SCALE



- NOTES:
1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.

STORMWATER PIPE IN TRENCH DETAIL
NOT TO SCALE



- NOTES:
1. ROOF LEADER LOCATIONS AND SIZES TO BE DETERMINED BY THE PROJECT ARCHITECT. DOWNSPOUT ADAPTER TO MATCH DOWNSPOUT SIZE.
 2. PVC JOINT CONNECTIONS SHALL BE MADE WITH PVC CEMENT.
 3. ROOF DRAINAGE HEADER PIPES SHALL BE AS NOTED ON THE UTILITY SHEET.
 4. SUBSTITUTIONS OF PIPE MATERIAL SHALL BE BROUGHT TO THE DESIGN ENGINEER'S ATTENTION FOR REVIEW.

ROOF LEADER CONNECTION DETAIL
NOT TO SCALE

DRAWN BY: ESR				CHECKED BY: MAB			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	8/31/21	PER PLANNING BOARD COMMENTS	CMB				
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3	12/28/21	PER PLANNING BOARD COMMENTS	MAB				



SEAL

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LAND DESIGN
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PROFESSIONAL ENGINEERING P.C.
174 MAIN ST., BEACON, NEW YORK 12508
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845-440-6926
F: 845-440-6637

STORMWATER CONSTRUCTION DETAILS

1113 WOLCOTT AVENUE

1113 WOLCOTT AVENUE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 5954-26-651901

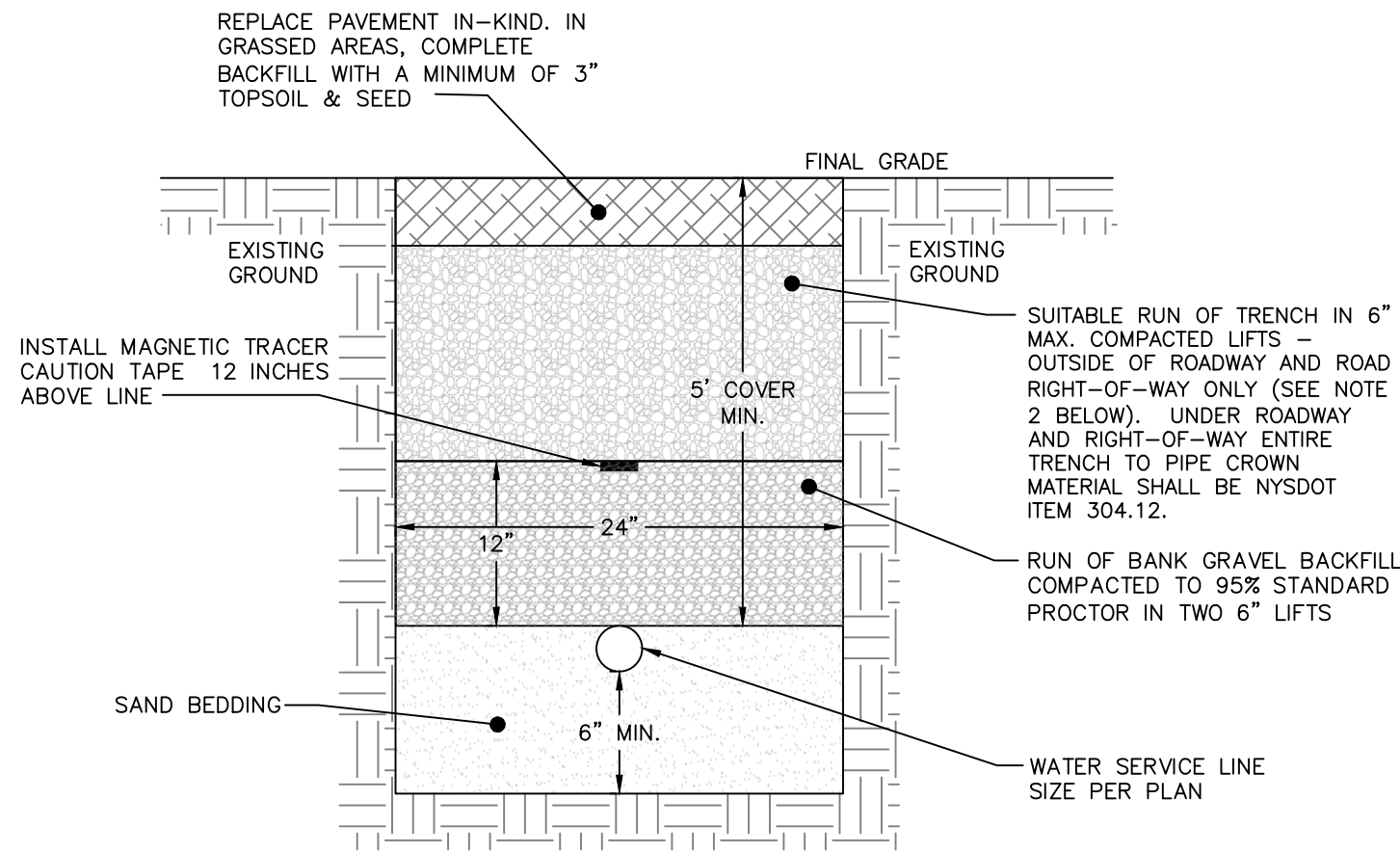
JOB #: 2021-022

DATE: 6/29/2021

SCALE: AS SHOWN

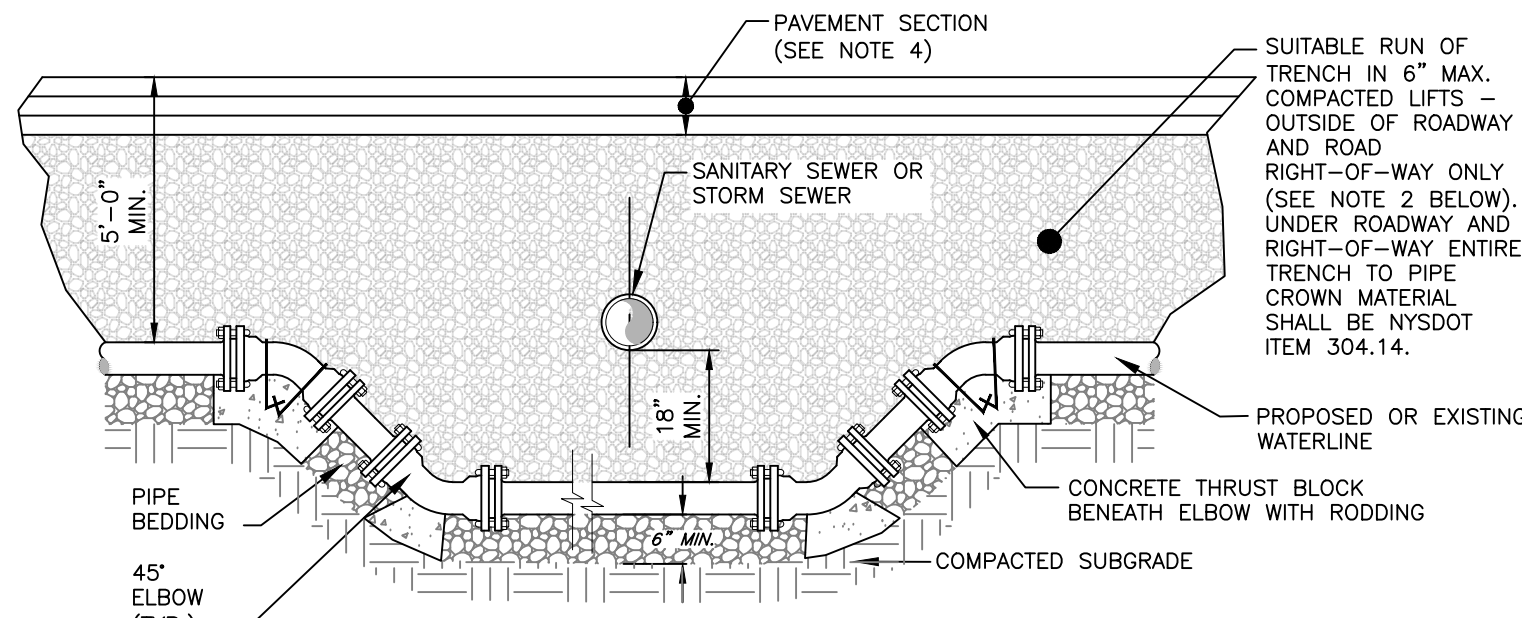
TITLE: CD-2

SHEET: 12 OF 13



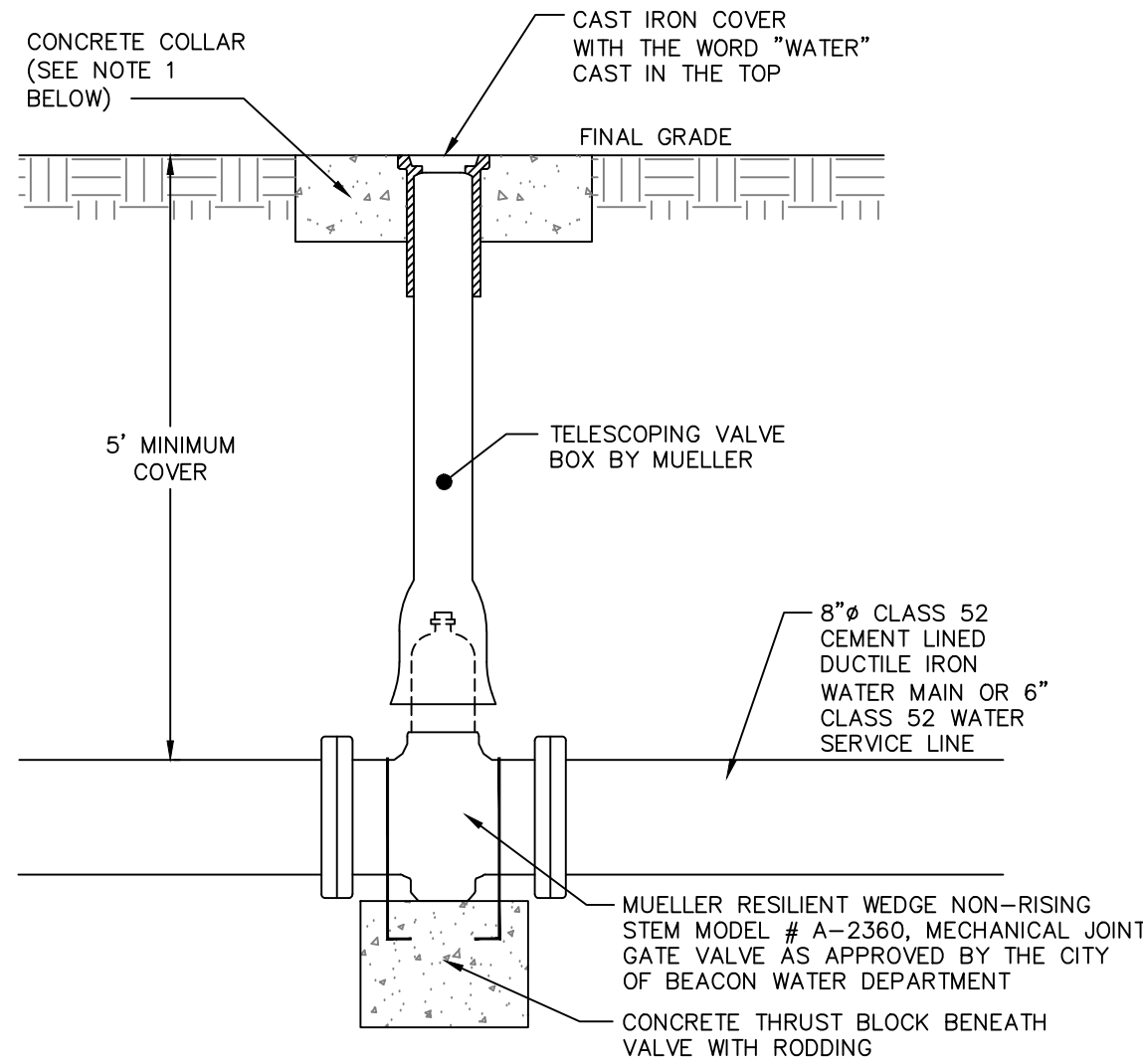
- NOTES:**
1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.
 2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, ELONGATED PARTICLES, LARGE STONES OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED AND USED.
 3. IN AREAS WHERE 5' COVER REQUIREMENT CANNOT BE MET, THE CONTRACTOR SHALL PROVIDE PIPE INSULATION TO PREVENT FREEZING.

WATER SERVICE LINE TRENCH DETAIL
NOT TO SCALE



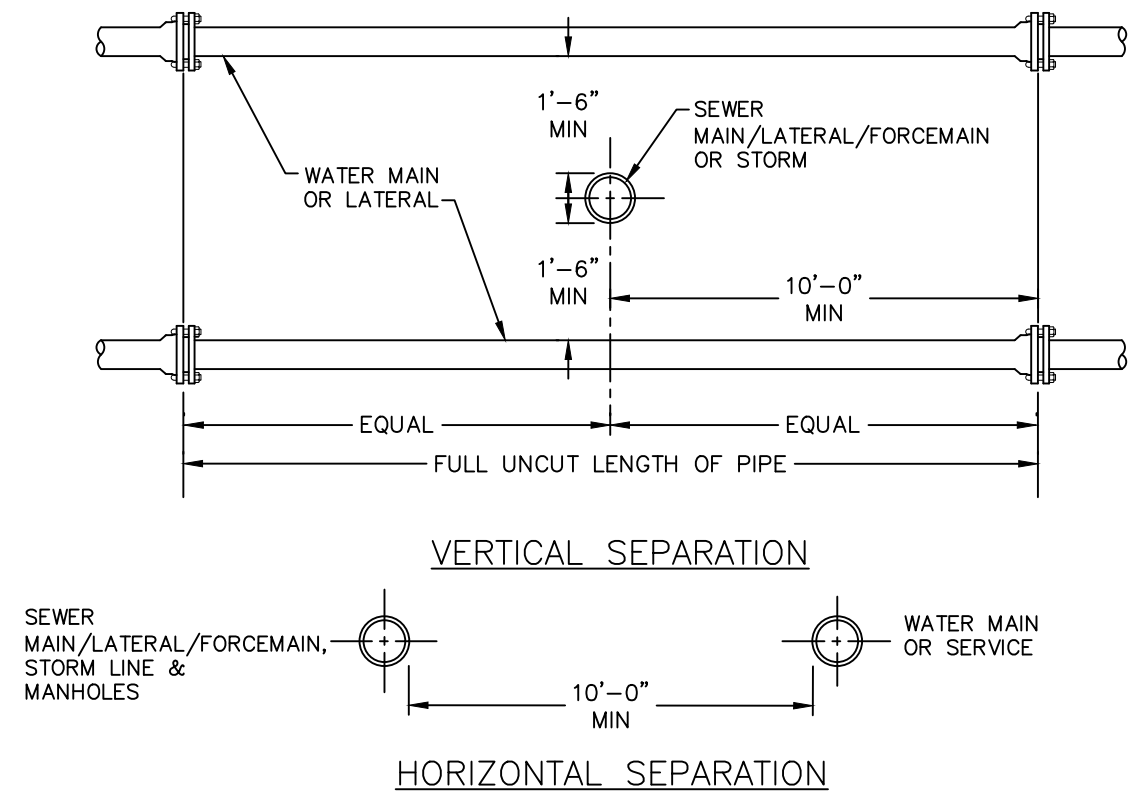
- NOTES:**
1. WHEN THE ELEVATION OF THE SANITARY OR STORM SEWER CAN NOT BE VARIED TO MEET THE ABOVE REQUIREMENTS, THE WATER SERVICE LINE OR MAIN SHALL BE RELOCATED TO PROVIDE THIS REQUIRED SEPARATION OR RECONSTRUCTED WITH MECHANICAL JOINT PIPE FOR A DISTANCE OF TEN (10) FEET ON EACH SIDE OF THE SEWER. ONE FULL LENGTH OF WATERMAIN SHALL BE CENTERED OVER THE SEWER SO THAT BOTH JOINTS WILL BE AS FAR AWAY FROM THE SEWER AS POSSIBLE.
 2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, ELONGATED PARTICLES, LARGE STONES OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED AND USED.
 3. THE RELOCATED WATER MAIN/SERVICE LINE SHALL BE DISINFECTED IN ACCORDANCE WITH AWWA, NYSDOH AND DDOH STANDARDS.
 4. PAVEMENT RESTORATION SHALL BE IN ACCORDANCE WITH THE PAVEMENT RESTORATION DETAIL.
 5. ALL REPLACED WATERMAIN SHALL BE 12" CLASS 52 DUCTILE IRON.

WATER LINE OFFSET DETAIL
NOT TO SCALE



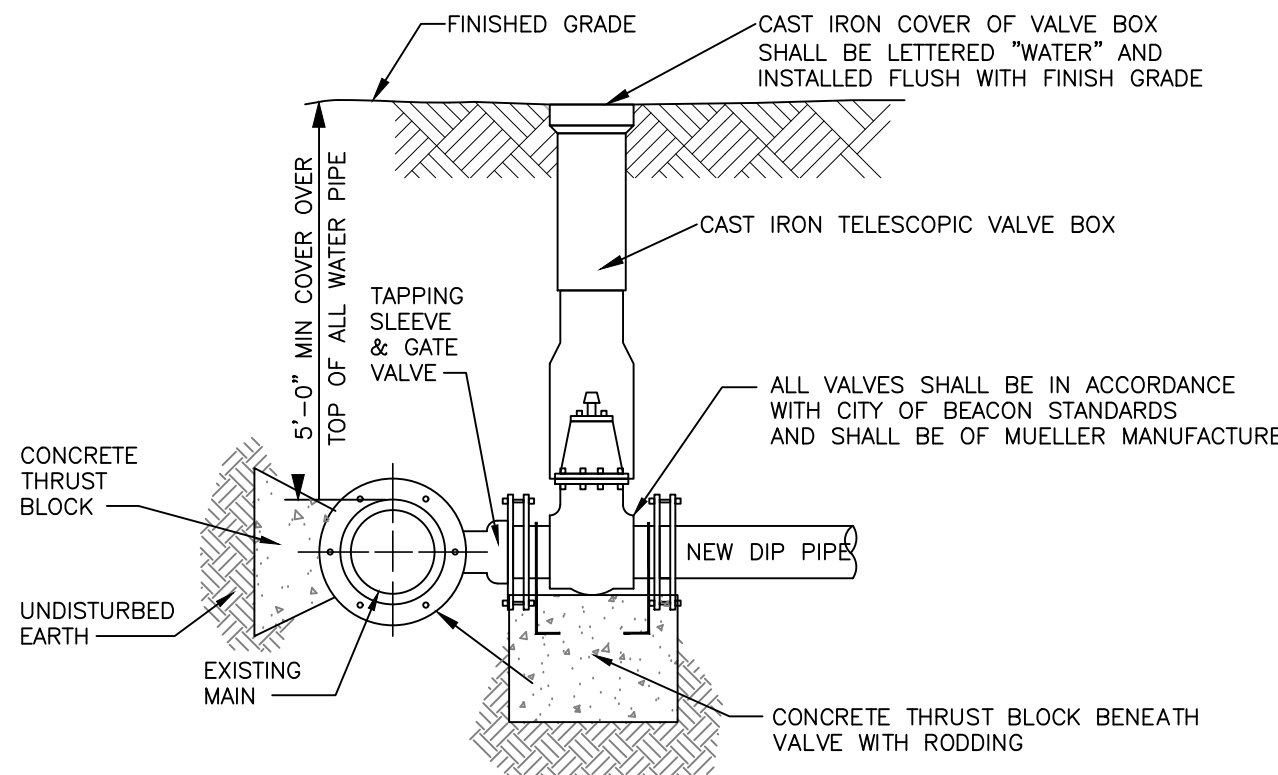
- NOTES:**
1. CONCRETE COLLAR TO BE PROVIDED IN AREAS THAT ARE NOT PAVED. THE COLLAR SHALL BE 6" FROM THE COVER AND SHALL EXTEND 6" BELOW FINAL GRADE.

GATE VALVE DETAIL
NOT TO SCALE



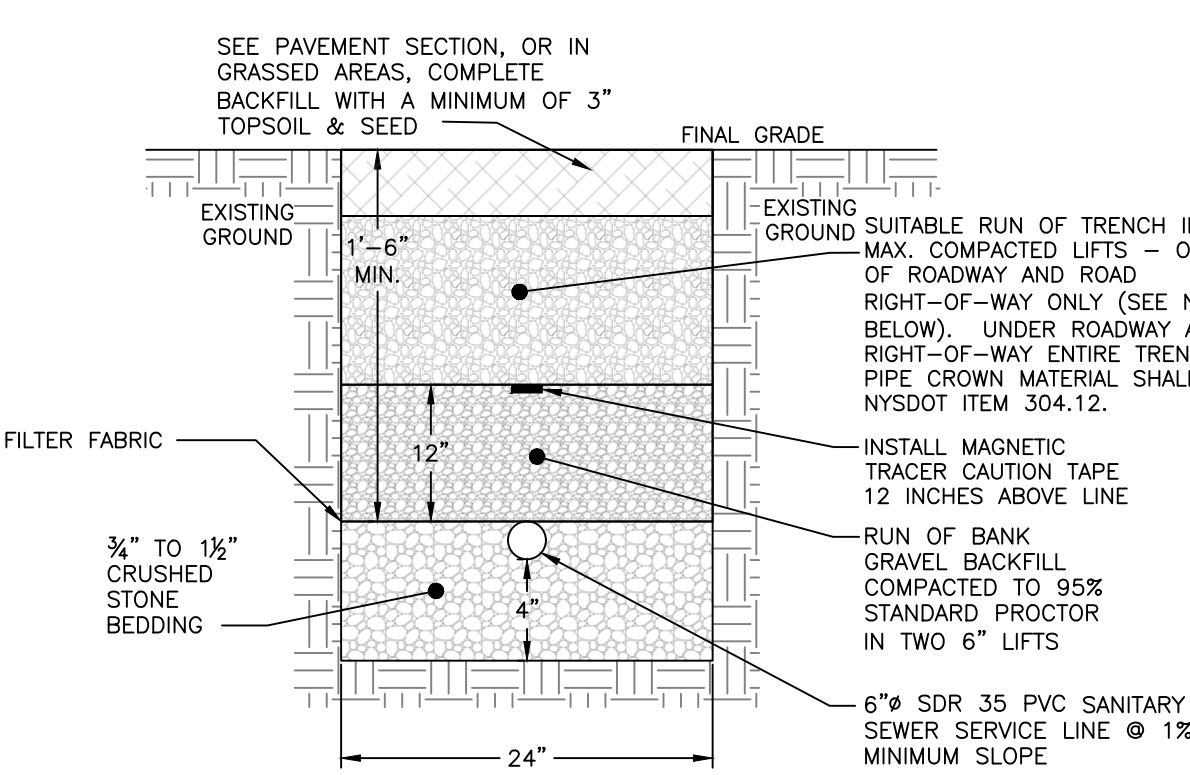
- NOTE:**
- NO DEVIATION IN THE SEPARATION REQUIREMENTS WILL BE PERMITTED WITHOUT THE EXPRESS APPROVAL OF THE DUTCHESS COUNTY DEPARTMENT OF HEALTH AND THE CITY OF BEACON. CONCRETE ENCASUREMENT OF WATERLINE OR OFFSETTING OF WATERLINE SHALL BE REQUIRED WHERE SEPARATION DISTANCES CANNOT BE MAINTAINED.

WATER LINE SEPARATION DETAIL
NOT TO SCALE



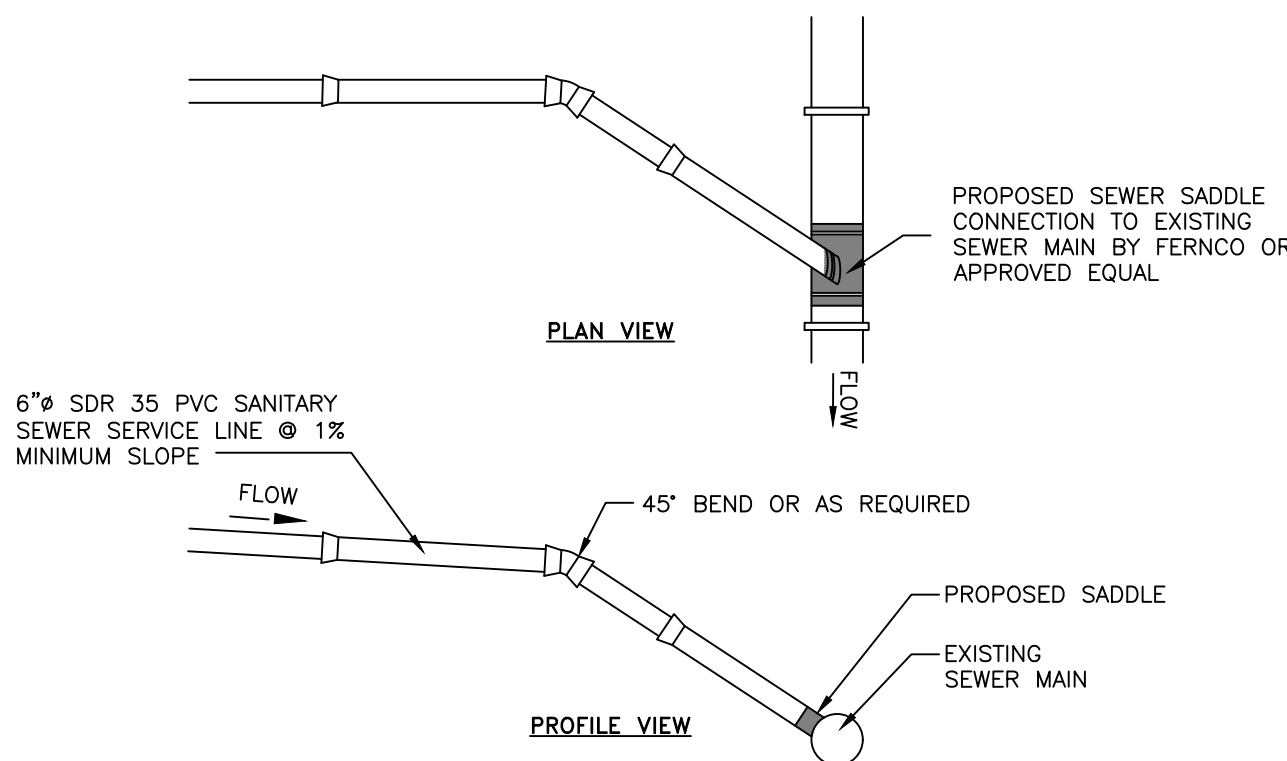
- NOTES:**
1. ALL VALVES SHALL OPEN BY TURNING LEFT (COUNTERCLOCKWISE) AND HAVE A 2-INCH SQUARE-OPERATING NUT PAINTED RED.
 2. ALL VALVES SHALL BE M.J. RESILIENT WEDGE TYPE WITH "O" RING PACKING, DESIGNED FOR A WORKING PRESSURE OF 150 PSI AND BE IN FULL CONFORMANCE WITH AWWA C500.
 3. TAPPING SLEEVE AND GATE VALVE SHOWN ARE MUELLER H-615, AND T-2630 RESPECTIVELY.

TAPPING SLEEVE DETAIL
NOT TO SCALE



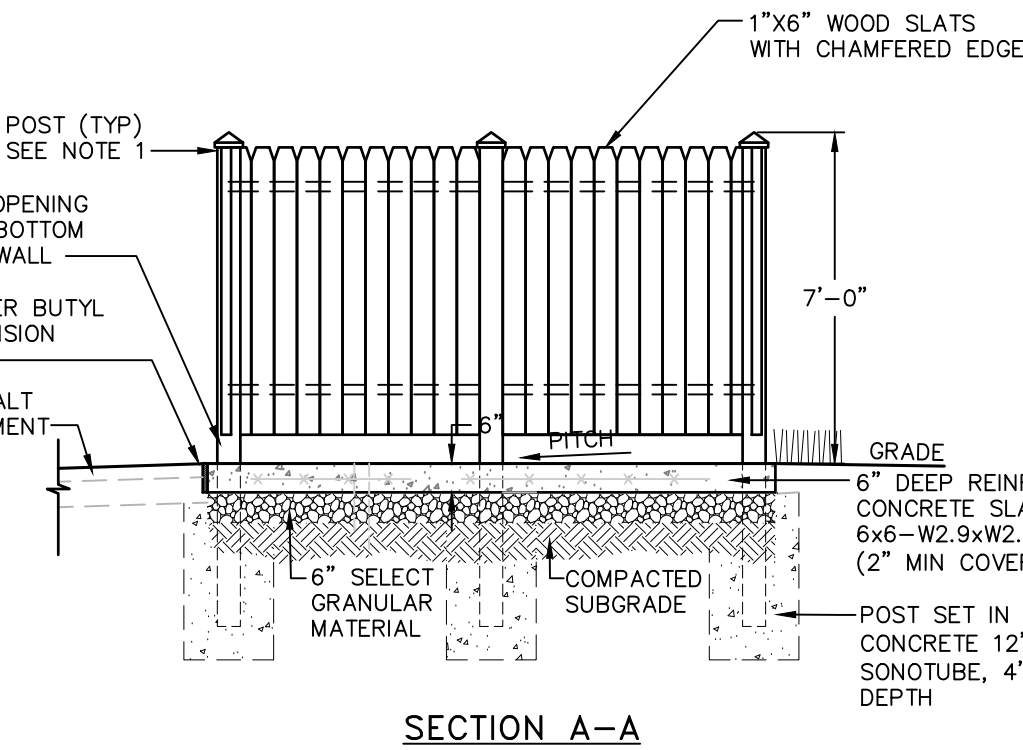
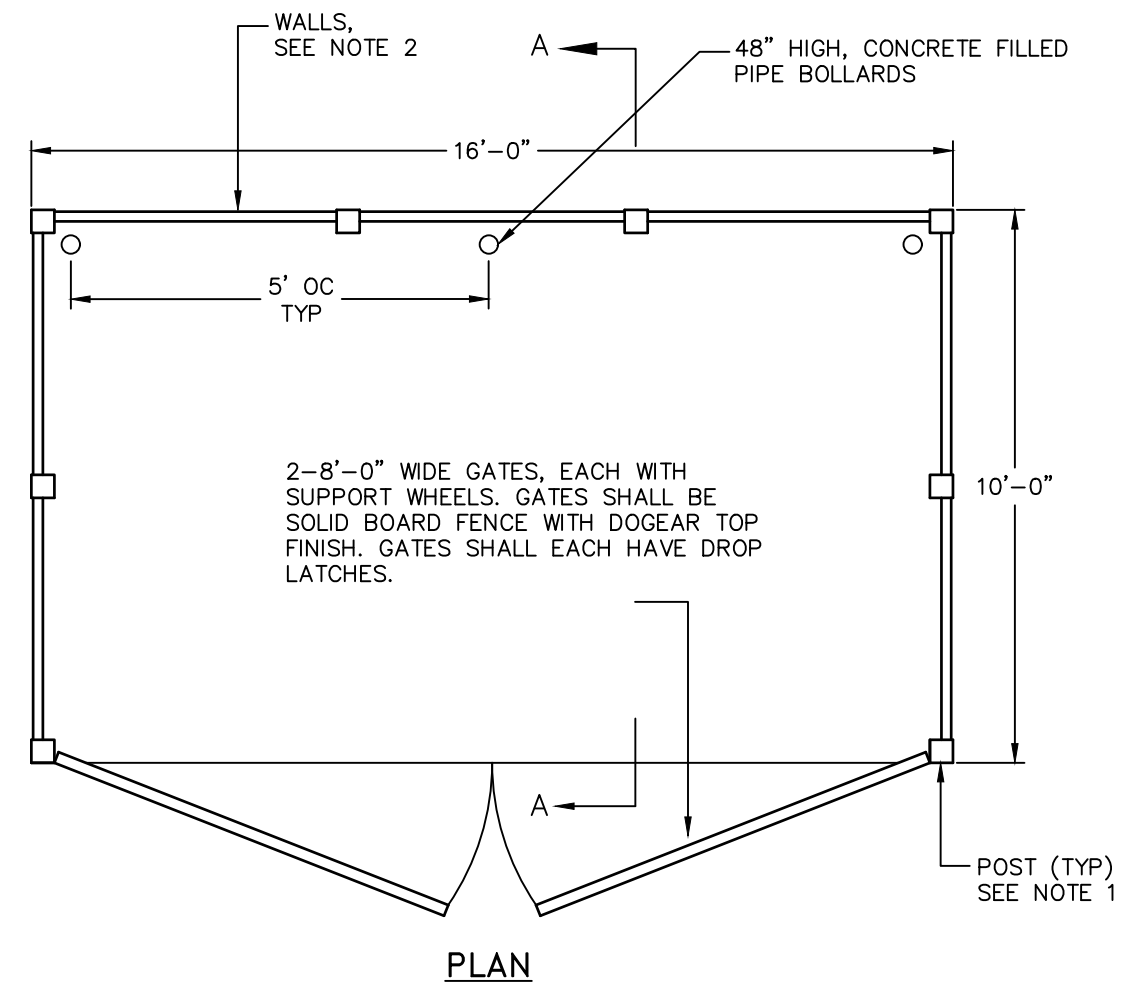
- NOTES:**
1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.
 2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, LARGE STONES OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED AND USED.

SANITARY SEWER SERVICE LINE TRENCH DETAIL
NOT TO SCALE



- NOTES:**
1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.
 2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, LARGE STONES OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED AND USED.

SANITARY SEWER SERVICE CONNECTION DETAIL
NOT TO SCALE



- NOTES:**
1. POSTS SHALL HAVE A DECORATIVE CAP, CONSISTENT WITH THE ARTS & CRAFTS STYLE, AS APPROVED BY OWNER. POST SPACING SHALL BE AS REQUIRED BY WALL CONSTRUCTION.
 2. WALLS OF DUMPSTER ENCLOSURE SHALL BE A SOLID WOOD PRIVACY FENCING NATURAL STAIL OR PAINT TO COMPLEMENT BUILDING.

TRASH ENCLOSURE DETAILS
NOT TO SCALE

DRAWN BY: ESR				CHECKED BY: MAB			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	8/31/21	PER PLANNING BOARD COMMENTS	CMB				
2	11/30/21	PER PLANNING BOARD COMMENTS	MAB				
3	12/28/21	PER PLANNING BOARD COMMENTS	MAB				

		WATER & SEWER CONSTRUCTION DETAILS	JOB #: 2021-022
	HUDSON LAND DESIGN PROFESSIONAL ENGINEERING P.C. 174 MAIN ST., BEACON, NEW YORK 12508 13 CHAMBERS ST., NEWBURGH, NEW YORK 12550 PH: 845-440-6926 F: 845-440-6637	1113 WOLCOTT AVENUE 1113 WOLCOTT AVENUE CITY OF BEACON DUTCHESS COUNTY, NEW YORK TAX ID: 5954-26-651901	DATE: 6/29/2021
			SCALE: AS SHOWN
			TITLE: CD-3
			SHEET: 13 OF 13

LANC & TULLY

ENGINEERING AND SURVEYING, P.C.

John J. O'Rourke, P.E., Principal
David E. Higgins, P.E., Principal
John Queenan, P.E., Principal

Rodney C. Knowlton, L.S., Principal
Jerry A. Woods, L.S., Principal

John D. Russo, P.E., Principal
John Lenc, P.E., L.S.
Arthur R. Tully, P.E.

January 5, 2022

Mr. John Gunn
Beacon Planning Board Chair
City of Beacon
1 Municipal Plaza
Beacon, NY 12508

RE: 1113 Wolcott Avenue
Tax No. 5954-26-651901
Special Use & Site Plan
City of Beacon

Dear Mr. Gunn:

My office has received the following in regard to the above application:

- Submission documents for project containing the following:
 - Correspondence/Project Narrative dated December 28, 2021, from Cuddy & Feder to Planning Board.
 - Response correspondence dated December 28, 2021, from Aryeh Siegel, Architect.
 - Response correspondence dated December 28, 2021, from Hudson Land Design.
 - Response correspondence dated December 28, 2021, from Colliers Engineering & Design.
 - Traffic & Parking Study, dated December 28, 2021, as prepared by Colliers Engineering and Design.
- Plans titled "1113 Wolcott Avenue", consisting of 13 sheets, with Sheets 1 through 7 having the latest revision date of December 28, 2021, as prepared by Aryeh Siegel and Sheets 8 through 13 having the latest revision date of December 28, 2021, as prepared by Hudson Land Design.

The proposed project is located on Wolcott Avenue in the R1-40 Zone and Historic District & Landmark Overlay District (HDLO). The existing 2.28± acre parcel contains a church (Reformed Dutch Church of Fishkill Landing), parsonage building and a cemetery. The applicant is proposing to convert the church into a conference center with dining facilities, and to construct a 30-room hotel on the parcel, along with providing 31 on site spaces for parking as related to the hotel.

Based on our review of the above documents and plans, we would like to offer the following comments:

General Comments:

1. Section IV – Parking Evaluation, Paragraph "B" of the "Traffic & Parking" study prepared for the project notes that an estimated 70 parking spaces for the Tomkins

House Firehouse Parking Lot. As discussed at the last Planning Board meeting, the City will be expanding upon the existing firehouse to the north, which will require the relocation of the 14+ parking spaces on that side of the firehouse to be relocated to the gravel parking lot, with those spaces being designated to the fire department. This should be taken into account as to what will actually be available in the Tomkins Hose parking lot. We would further recommend that a sketch layout of the parking lot be provided as part of the study to show how 70± spaces were determined for this parking lot, as we believe this is higher than what could actually be achieved.

2. The Planning Board may wish to consider the traffic and Parking study being sent to NYSDOT sooner than later to get their input at this time to determine if they may have any comments that may impact the project.
3. A certified survey, with topography, shall be submitted for the entire parcel. The survey shall show all existing structures located on the site along with any other special features that may be present on the site, such as head stones in the cemetery. ***Applicant's engineer notes that this will be provided in a future submission.***

Sheet 1 of 12 – Site Plan:

1. As previously noted, there is an “L1” symbol located on the DMS Consolidators parcel that should be removed. Although the applicant's consultant notes that this has been removed, this symbol is still appearing on the plan.
2. As previously noted, the site plan shall show the location of all light poles and lighting. The “Landscape and Lighting Plan” shows additional light poles that are not shown on the site plan. Although the applicant's consultant notes that all lights are shown, the lights poles (L1A) are not shown on the plan.
3. As previously noted, the title for Sheet 4 in the “Index of Drawings” should be updated to reflect the actual sheet title within the plan set.
4. In the left corner of the site plan, there is a leader note that states “Existing Tree” with the leader pointing to the brick paver area. If there is an existing tree in this location to which it is pointing, then the tree should be shown, and the note expanded upon to state that it is being removed. If this is in error, then the note and leader shall be removed from the plan.

Sheet 2 of 12 – Full Site Plan:

1. Additional lighting shall be provided along the pedestrian path to Beekman Street. ***The applicant's consultant notes that this will be reviewed.*** We strongly recommend that lighting be provided along this pedestrian path, as there will more than likely be attendees at the events that will be leaving the site during night hours headed to the street parking on Beekman Street or to the train station.

Sheet 4 of 10 – Landscape & Lighting Plan:

1. Note No. 26 under "Planting and Landscaping Notes" appears to have been cutoff. The plan shall be revised so that the entire note is present and legible.

Sheet 8 of 12 – Grading & Utility Plan:

1. The applicant will be required to apply for a road opening permit with NYSDOT for the proposed work within the NYSDOT right of way along Wolcott Avenue for the proposed 6" water line to the proposed hotel and the sidewalk replacement and site entrance. ***Applicant's Engineer notes that a Highway Work Permit will be prepared and sent to NYSDOT.***
2. Plan shows an underground stormwater management structure to be constructed in the parking lot located to the east of the hotel. Based upon the construction details provided on Sheet 9, it appears that the proposed system will be an infiltration system. Soil testing will need to be conducted as part of the design of this system and the testing shall require witnessing by the City Engineer's office. The applicant's consultant shall contact the City Engineer's office to schedule the soil testing to allow for the witnessing of the required soil testing. ***Applicant's engineer notes that the soil testing will be coordinated with the City Engineer's office, weather permitting.***

Sheet 9 of 12 – Erosion & Sediment Control:

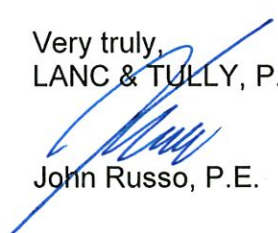
2. The plan shall be updated to include erosion control for the pedestrian path to be constructed towards Beekman Street. ***Applicant's Engineer notes that erosion control for the construction of the path will be shown once the final location of the path is determined.***

Sheet 11 of 12 – Site and E&SC Details:

1. Construction details shall be added to the plans for the proposed "Brick Paver Driveway" located in front of the church. The design for the brick paver system shall be done to ensure that the drive can support a fire truck.

This completes our review at this time. Further comments may be provided based on future submissions. **A written response letter addressing each of the above comments should be provided with the next submission.** If you have any questions, or require any additional information, please do not hesitate to contact our office.

Very truly,
LANC & TULLY, P.C.



John Russo, P.E.

cc: John Clarke, Planner
Jennifer Gray, Esq.
David Buckley, Building Inspector

To: John Gunn, Chair, and the City of Beacon Planning Board

Date: January 6, 2022

Re: **1113 Wolcott Avenue Street Site Plan and Special Permit**

I have reviewed the cover letter from Cuddy+Feder, response letters from Aryeh Siegel, Hudson Land Design, and Colliers Engineering and Design, a revised Traffic and Parking Study from Colliers Engineering and Design, and a 13-sheet Site Plan set, all dated December 28, 2021.

Proposal

The applicant is proposing to construct a 2½-story, 30-room hotel as an expansion to the existing parsonage and renovate the historic church as a conference center/event space and rear café. The 2.28-acre site is in the R1-40 zoning district, in the Historic District and Landmark Overlay (HDLO) zone, and within the Local Waterfront Revitalization Program (LWRP) boundary.

Comments and Recommendations

1. The Building Inspector has determined that a dining facility and a conference center/event space are permitted accessory uses to a hotel in the HDLO district. The Planning Board still has the ability to not approve the Special Permit for these uses or limit the intensity of operations, based on the specifics of the site in relation to the Special Permit standards in 223-24.7D and 223-18B.
2. Adequate parking and access details for the varied uses remain serious concerns, including:
 - a. The 31 parking spaces only covers the hotel use. If the hotel is full, there will be little or no parking available for non-hotel café customers during the day or for event space participants during scheduled times. The Traffic and Parking Study cites remote public lots to the north and on-street parking along Beekman Street down the hill, but none of those locations are nearly as convenient as on-street parking along Academy Street directly across Wolcott Avenue to the east or the end of Rombout Avenue just to the south. How is this parking on nearby residential streets and random crossings of Wolcott Avenue to be avoided?
 - b. It is difficult to assume that patrons will walk up the steep hill through the cemetery from Beekman Street and the Metro-North lots. The Site Plan will need additional details for the path through the cemetery, including lighting and potential stairs.
 - c. The Traffic and Parking Study suggests a reduced event parking demand with a 25% deduction for transit use and walking. The Study assumes 2.75 occupants per vehicle for its event traffic generation calculation and yet the minimum parking requirement is only 1 space for every 4 occupants, so it seems that the parking standard may already factor in a reduction for transportation alternatives.
 - d. Since ADA access cannot be conveniently handled by remote parking, two on-site ADA spaces are not sufficient for an event capacity up to 350. The plans should also indicate how the church and café will be ADA accessible?

- e. The new loop driveway is proposed to handle shuttle buses and car drop-offs/pick-ups for event participants. With a width of 16 feet and excessive parking demand, it is likely to be used for extended waiting and vehicle idling and also for bus parking, unloading, and overflow parking. Pulling onto the grass could be a problem and the concern is that in practice this will turn into an informal parking area in the front yard of the historic church. One of design standards in Section 134-7C states that "it is not appropriate to disrupt the relationship between an historic building and its front yard or landscape..."
 - f. The Traffic and Parking Study uses 66 café patrons for its parking count, but the cover letter cites 40 patrons. The café capacity should include the availability of deck seating, which should be shown on the plans.
3. For Sheet 4:
- a. A very large Sycamore tree is located near the sidewalk on the southeast corner of the property. However, the proposed loop drive would now remove this beautiful tree, which is an essential part of the historic church landscape. This should be unacceptable.
 - b. At least two canopy trees should be provided in front of the hotel next to the sidewalk to act as street trees for Wolcott Avenue, continuing the pattern of street trees in front of River Ridge and West End Lofts.
 - c. New light fixtures should not be attached to the front side of the church (the Sheet 4 lighting for the church does not match sheets 1 and 2). There are already historically compatible lights over the front two doors and any new attached lights toward the back should be consistent with them.
 - d. The applicant and Board should also consider historically compatible designs for the other proposed lights, using as examples the existing street lights along the front sidewalk.
4. On the Sheet 5 Floor Plans, 31 guest rooms are still shown. The hotel elevations will need materials and colors identified.
5. All exterior construction must meet the standards in Chapter 134, Historic Preservation, and will require a Certificate of Appropriateness.

If you have any questions or need additional information, please feel free to contact me.

John Clarke, Beacon Planning Consultant

- c:
- Dave Buckley, Building Inspector
 - Jennifer L. Gray, Esq., City Attorney
 - Arthur R. Tully, P.E., City Engineer
 - John Russo, P.E., City Engineer
 - Aryeh Siegel, Project Architect
 - Michael Bodendorf, P.E., Project Engineer

City of Beacon Planning Board Agenda
01/11/2022

Title:

Zoning Board of Appeals - No applications submitted for the January meeting

ATTACHMENTS