



COURTROOM  
1 MUNICIPAL PLAZA  
BEACON, NY 12508  
COURTROOM, CITY HALL  
1 MUNICIPAL PLAZA  
BEACON, NY 12508  
THE PLANNING BOARD WILL  
MEET IN THE MUNICIPAL  
CENTER COURTROOM AT 7:00  
P.M. A WORK SESSION WILL  
TAKE PLACE AT 7:00 P.M. 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 NO LATER THAN 7:30 P.M.

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

**February 8, 2022**  
**7:00 PM**  
**Planning Board Agenda**

**Regular Meeting**

1. Continue public hearing on applications for Subdivision (lot merger) Approval and Site Plan Approval, three-story mixed-use residential and commercial development, 364 Main Street, submitted by O'Donnell Construction Corp.
2. 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 - February Agenda
2. Consider request for one 90-day extension of Subdivision Approval, Monell Place, submitted by Allison Cross and Henry Nye

**Architectural Review**

**City of Beacon Planning Board Agenda**  
**02/08/2022**

**Title:**

Continue public hearing on applications for Subdivision (lot merger) Approval 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 Sheet 10 Construction Plan.pdf](#)

[364 Main Street Sheet 11 Construction Plan.pdf](#)

[364 Main Street Sheet 12 Construction Plan.pdf](#)

[364 Main Street Sheet 13 Erosion & Sediment Control.pdf](#)

[364 Main Street Sheet 14 Erosion & Sediment Control 2.pdf](#)

[364 Main Street Survey.pdf](#)

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

[364 Main Street Exhibit A - Signed Site Plan Application Form.pdf](#)

[364 Main Street Exhibit B - FINAL Signed FEAF.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 Sheet 1 Site Plan.pdf](#)

[364 Main Street Sheet 2 Existing Conditions Demo.pdf](#)

[364 Main Street Sheet 4 Building Plans.pdf](#)

[364 Main Street Sheet 6 Utility Plan.pdf](#)



[364 Main Street Sheet 7 Lighting.pdf](#)

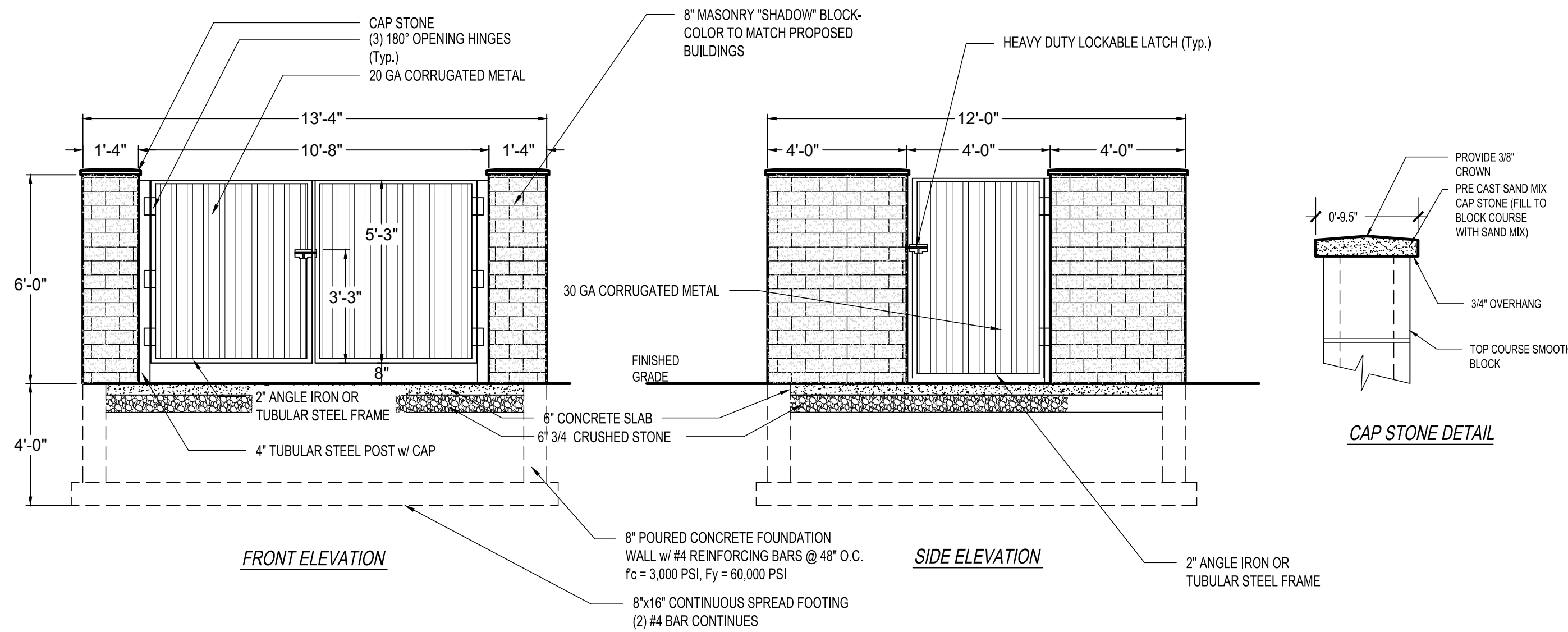
[364 Main Street Sheet 8 Refuse Truck Movement Plan.pdf](#)

[364 Main Street Sheet 9 Truck Movement Plan.pdf](#)

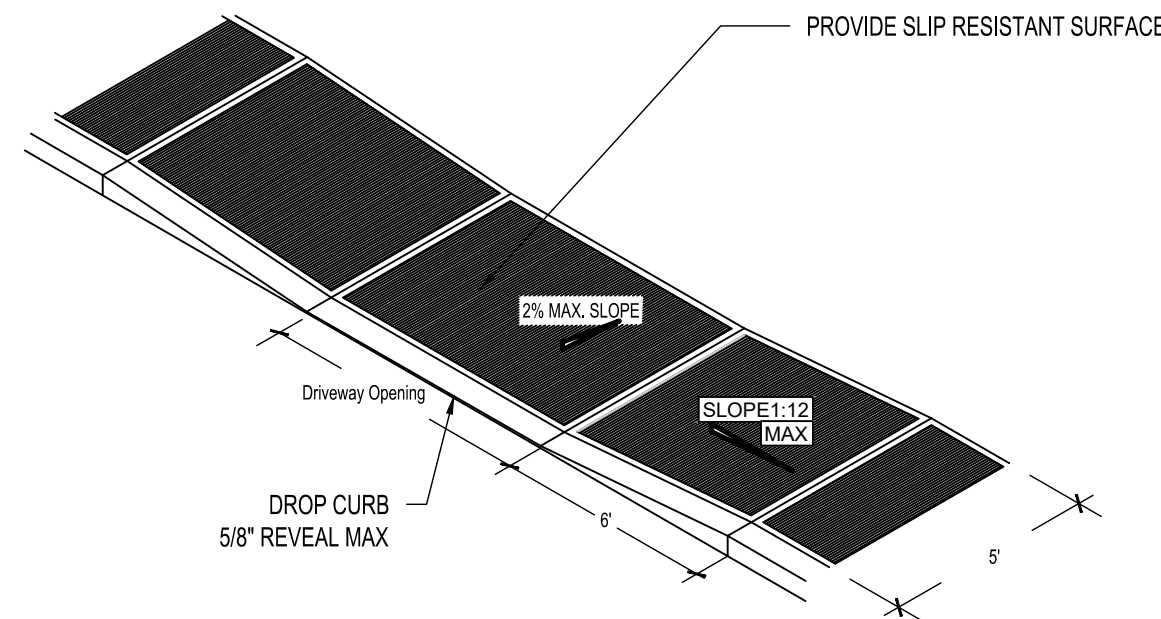
[Engineer Review Letter.pdf](#)

[Planner Review Letter.pdf](#)

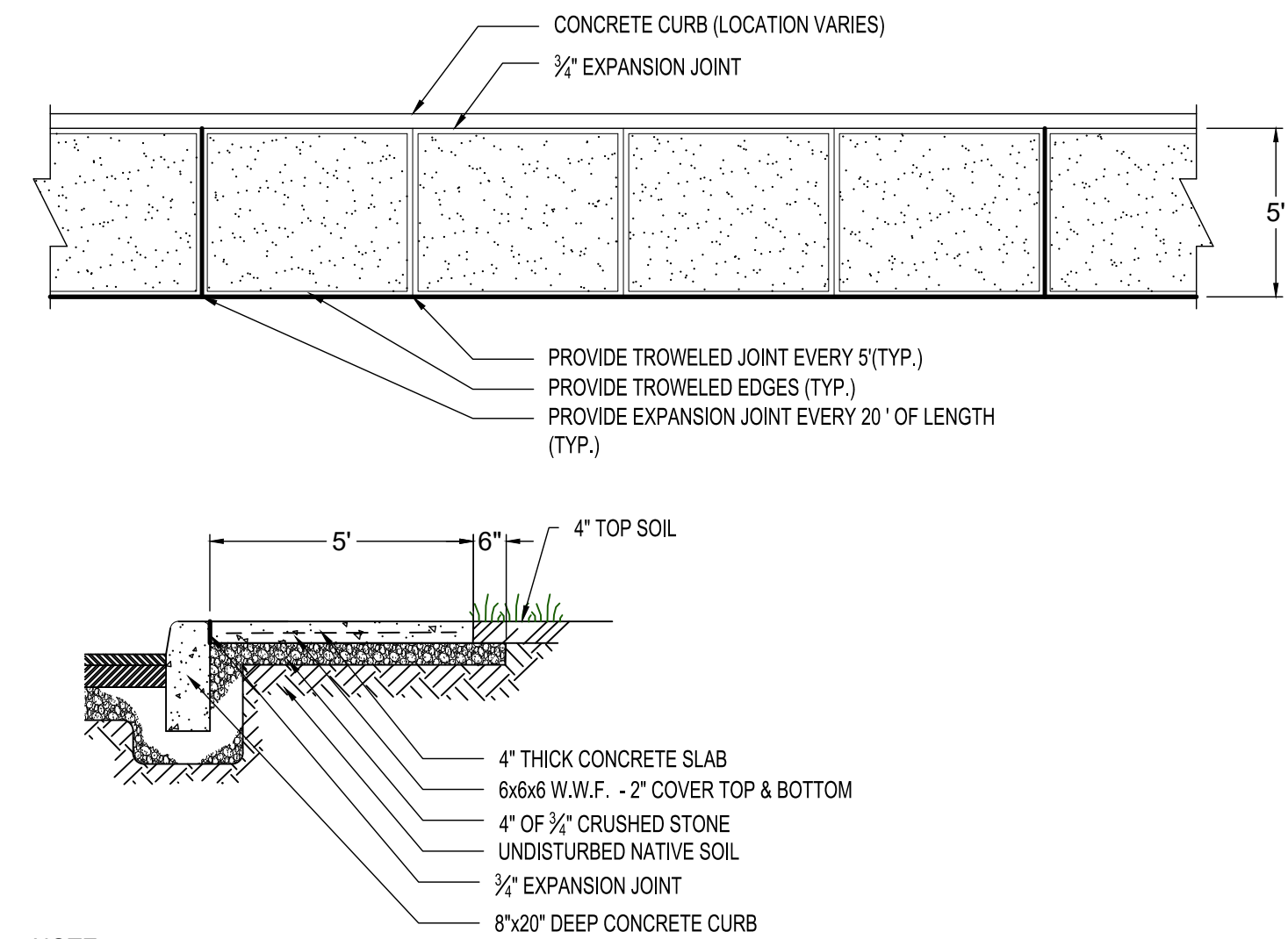
[Traffic Engineer Review Letter.pdf](#)



1 REFUSE ENCLOSURE DETAIL  
NOT TO SCALE

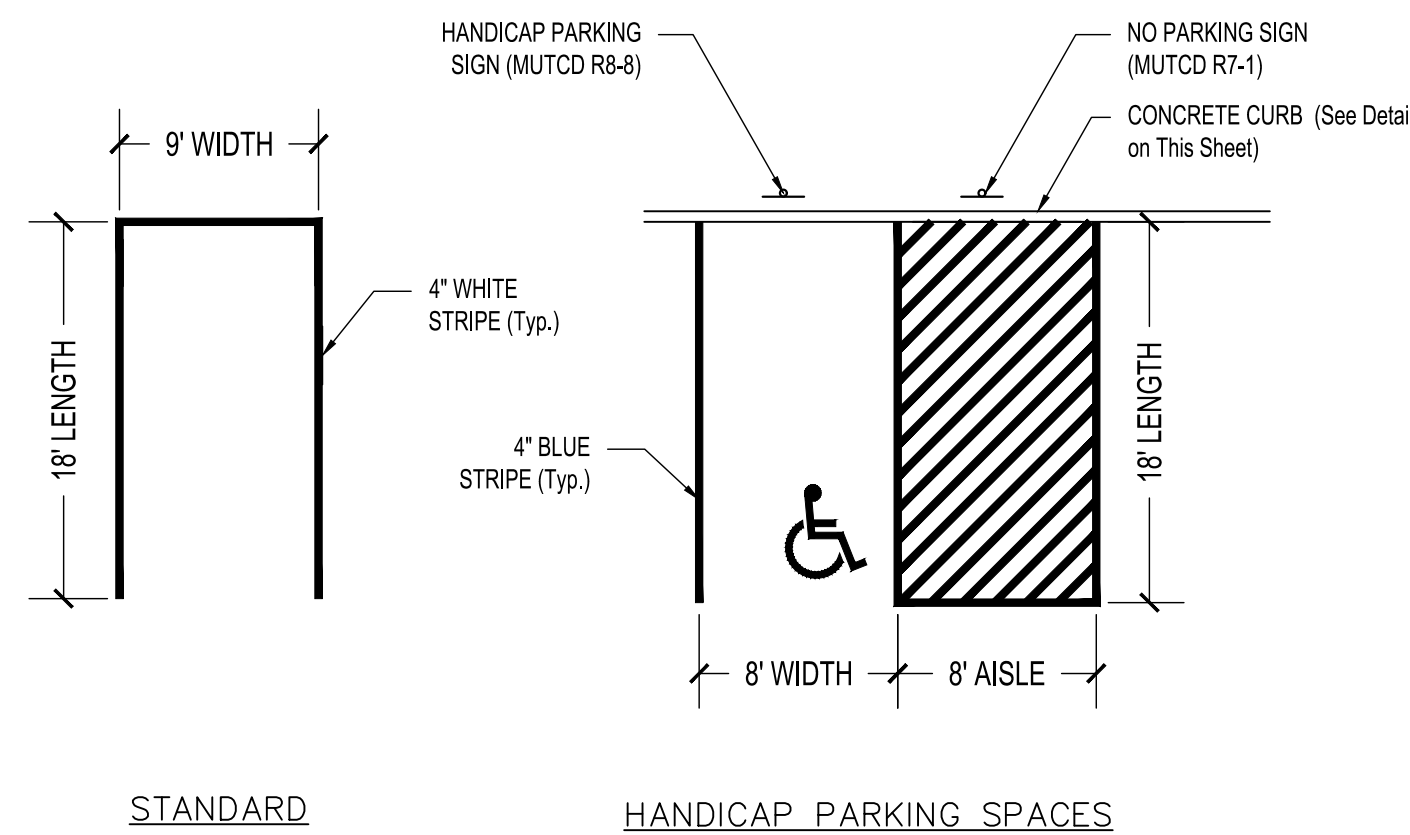


2 ADA RAMP & SIDEWALK DETAIL  
NOT TO SCALE

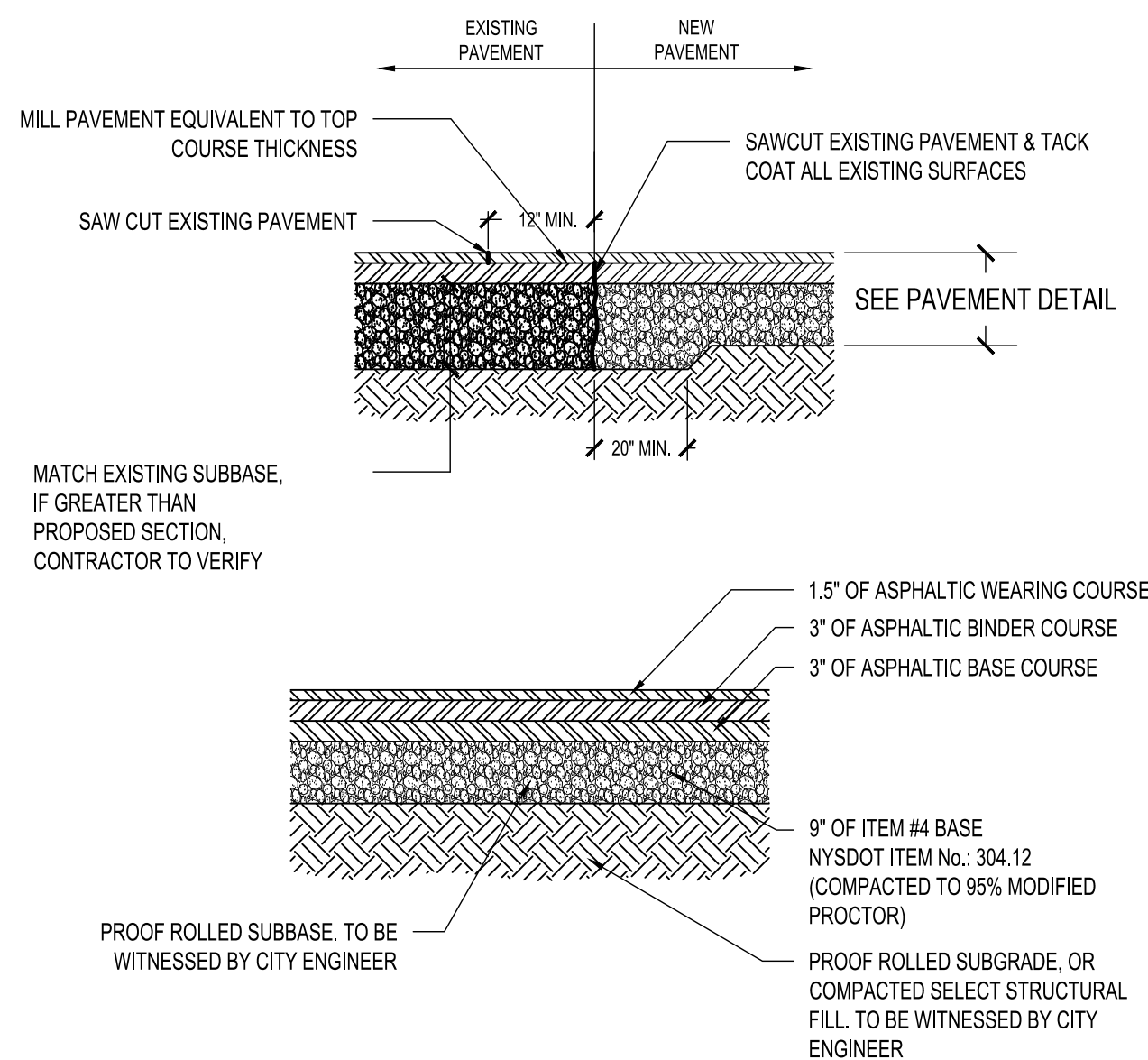


- NOTE:
1. ALL CONCRETE SHALL HAVE A 28 COMPRESSIVE STRENGTH OF 4,000 PSI
  2. ALL EXPOSED SURFACES SHALL HAVE A BROOM TEXTURED FINISH
  3. ALL SIDEWALK SHALL BE 6\"
  4. EXPANSION JOINTS SHALL BE LOCATED AS MAXIMUM OF 20'-0\"

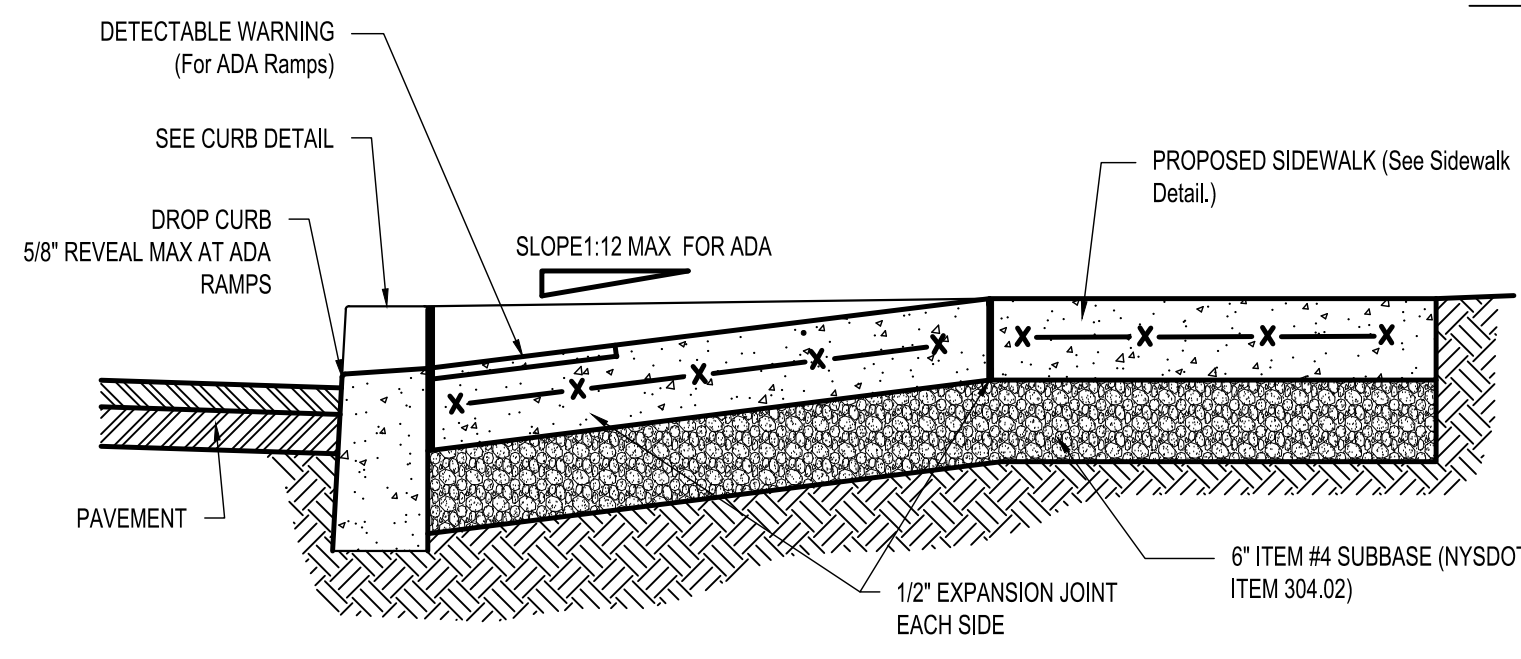
3 SIDEWALK & CURB DETAILS  
NOT TO SCALE



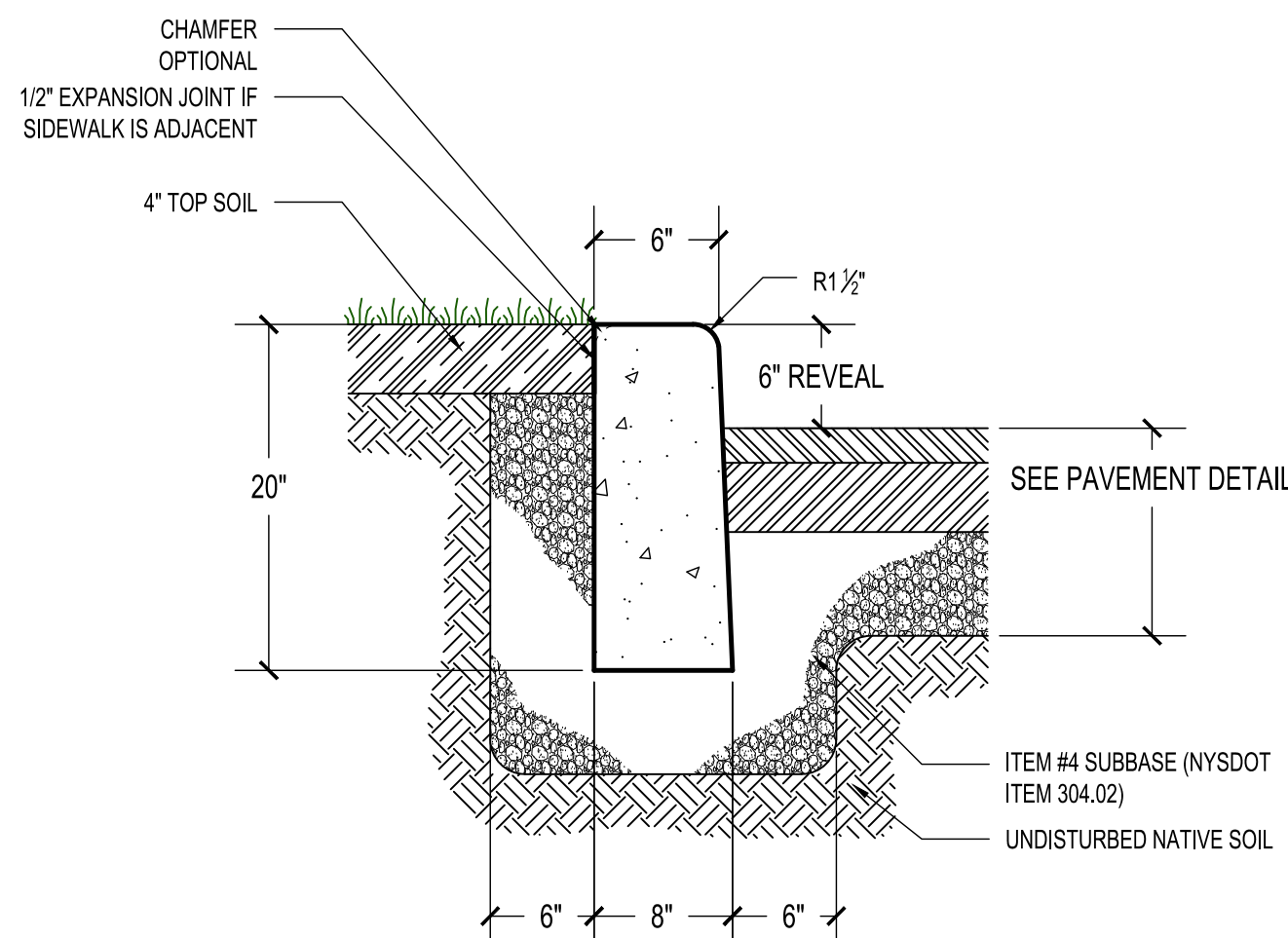
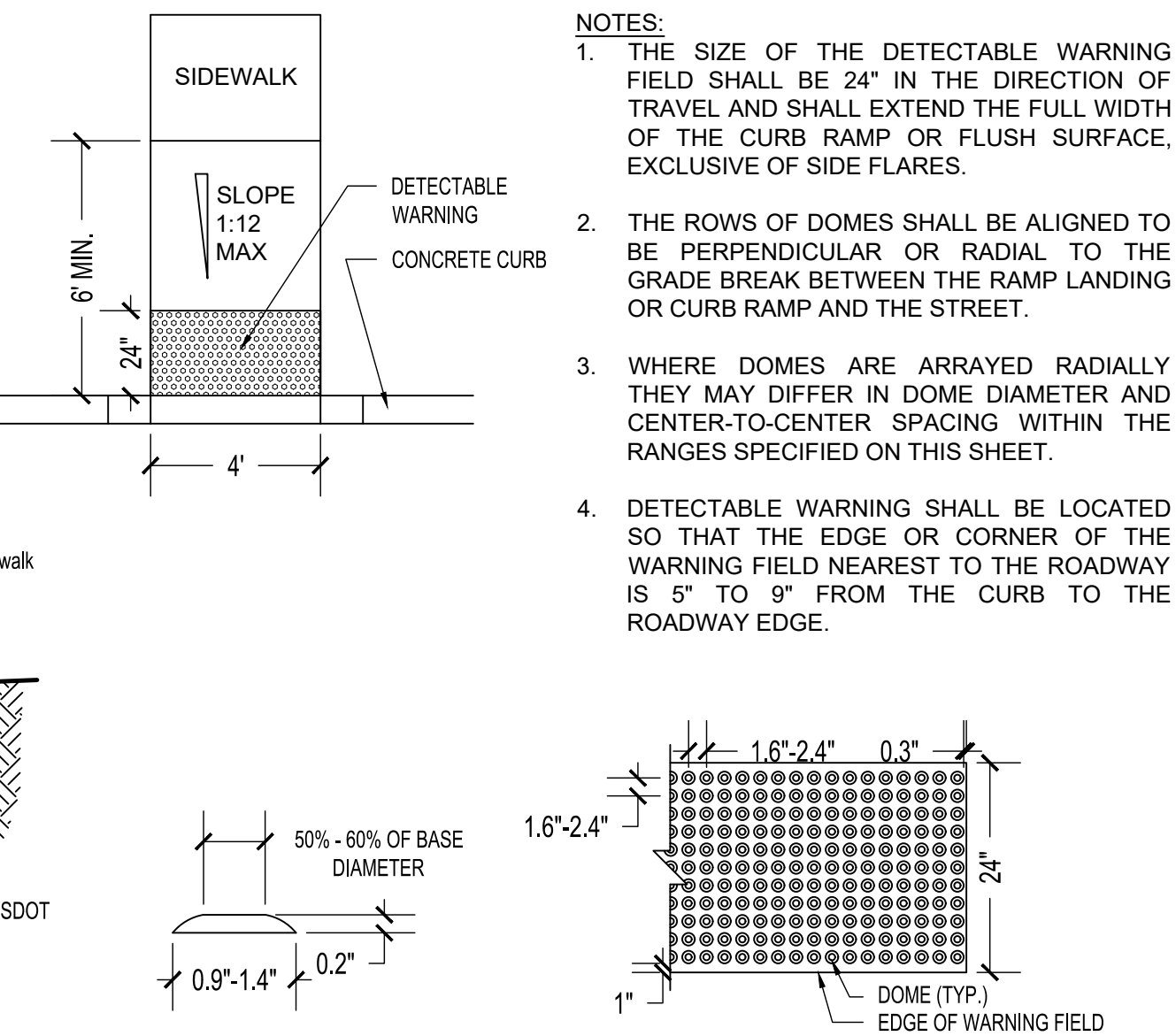
4 PARKING STALL DETAIL  
NOT TO SCALE



5 PARKING LOT PAVEMENT SECTION  
NOT TO SCALE



6 ADA RAMP DETAIL  
NOT TO SCALE



- NOTE:
1. CONCRETE SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF 4,000 PSI
  2. EXPANSION JOINTS OF 1/2\"

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

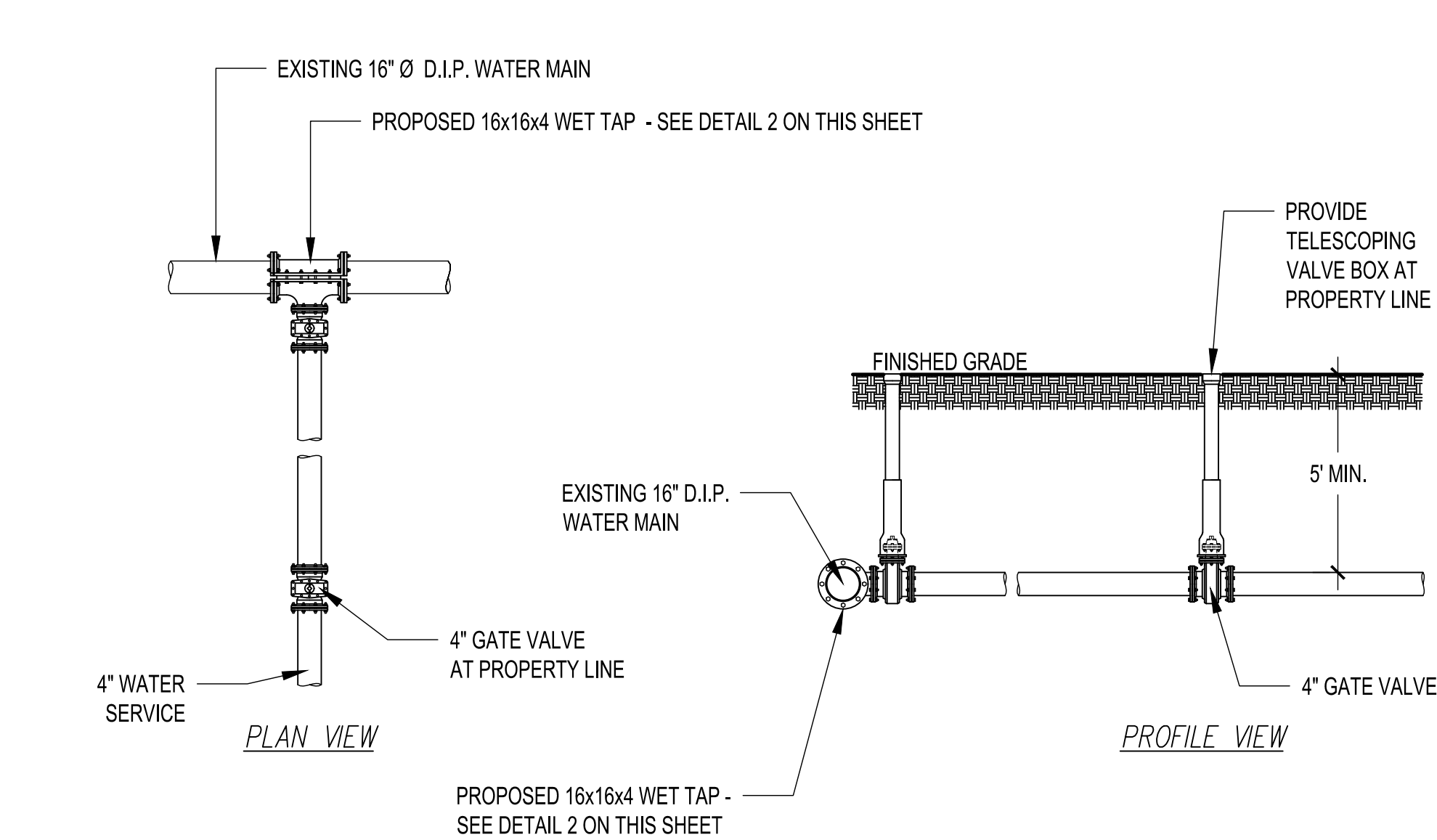
| SIGN SCHEDULE |              |       |            |          |        |              |       |            |          |
|---------------|--------------|-------|------------|----------|--------|--------------|-------|------------|----------|
| SYMBOL        | MUTCD NUMBER | PANEL | SIZE (WxH) | QUANTITY | SYMBOL | MUTCD NUMBER | PANEL | SIZE (WxH) | QUANTITY |
|               | NY R7-8      |       | 12 x 18    | 8        |        | R6-2L        |       | 12" x 18"  | 1        |
|               |              |       | 12 x 6     | 8        |        |              |       | 30"x 30"   | 1        |
|               | R7-1         |       | 12 x 18    | 3        |        | R1-1         |       | 36x36      | 3        |
|               | R1-1         |       | 36x36      | 3        |        |              |       |            |          |

8 PROPOSED SIGNAGE  
NOT TO SCALE

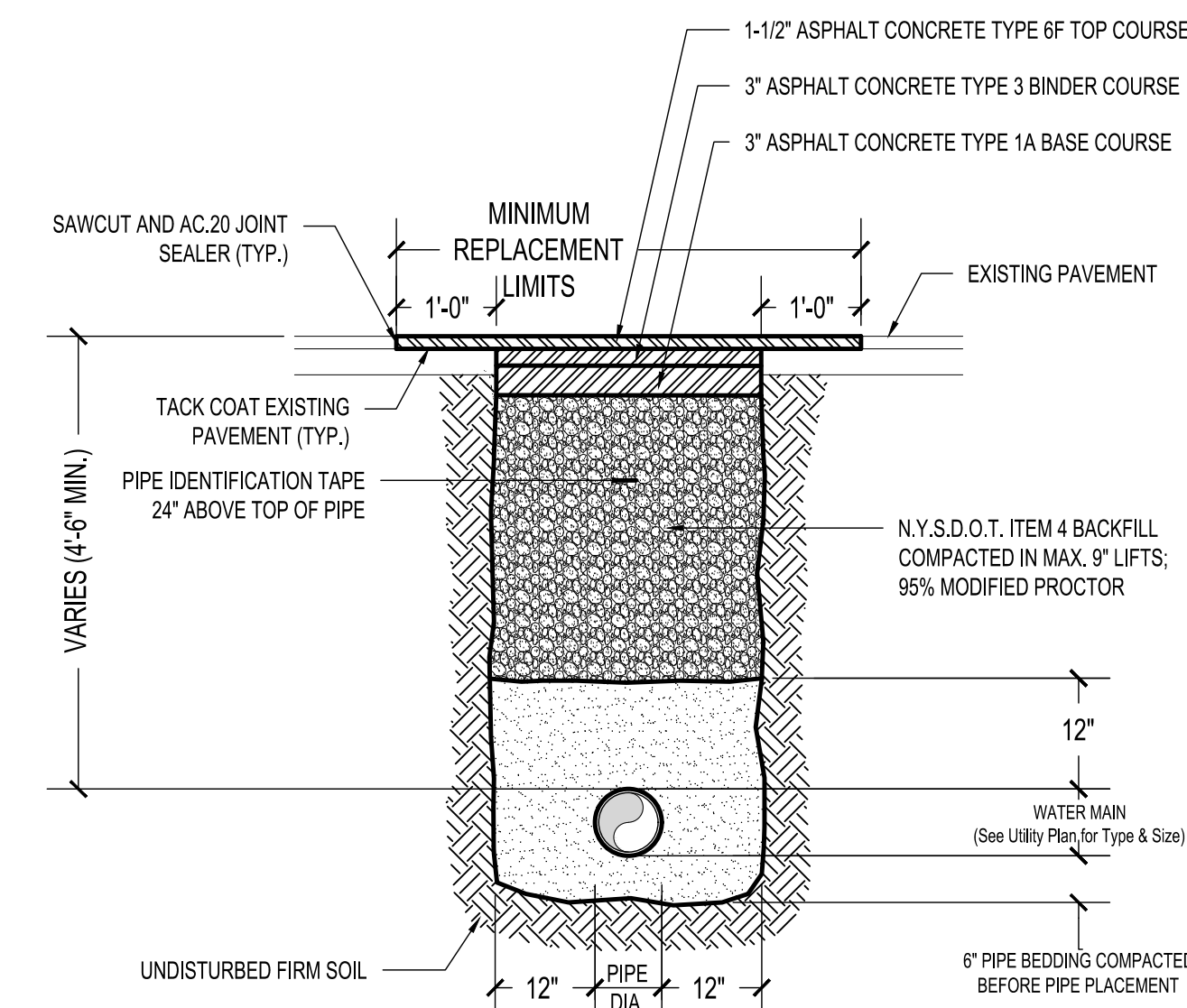
IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW FOR ANY PERSONS TO ALTER THESE PLANS, SPECIFICATIONS, OR REPORTS IN ANY WAY, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR.

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|----------------------------------------------------------------------------|--------------------|
| Mark A. Day, PE                                                            |                    |
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| 01-07-21                                                                   |                    |
| 12-21-21                                                                   |                    |
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| 08-27-21                                                                   |                    |
| 07-20-21                                                                   |                    |
| Project No. 2020.475                                                       | License No. 069646 |
| <b>DAY STOKOSA</b><br>ENGINEERING P.C.                                     |                    |
| 3 Van Wyck<br>Lane Suite 2<br>Wappingers Falls, New York<br>(845)-223-3202 |                    |
| PROJECT<br>364 Main Street<br>City of Beacon Dutchess County, New York     |                    |
| DRAWING<br><b>Construction Details</b>                                     |                    |
| SCALE<br>As Noted                                                          | DRAWN BY<br>MAD    |
| DATE<br>04-02-21                                                           | CHECKED BY<br>MAD  |
| CD.1<br>10 of 14                                                           |                    |

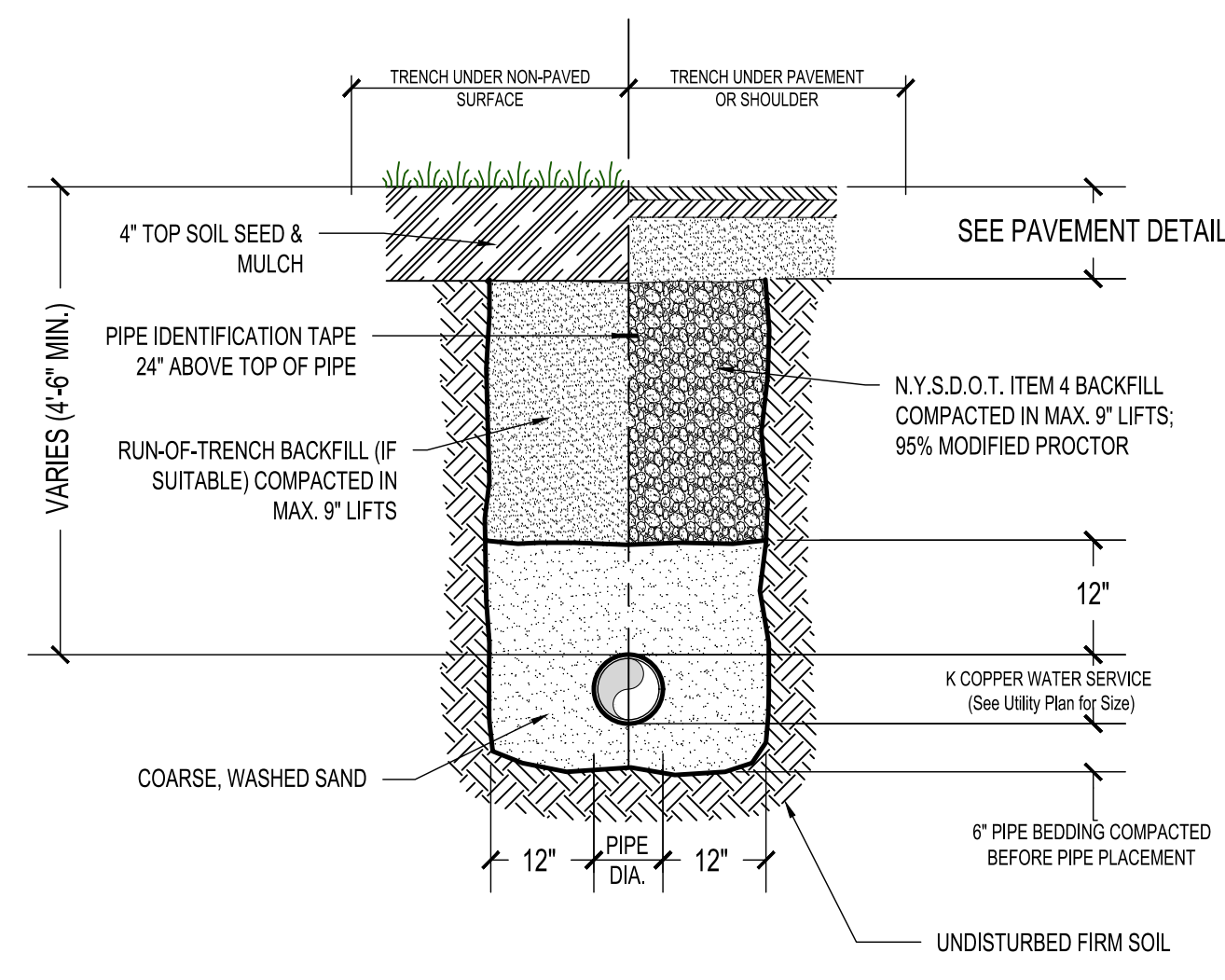




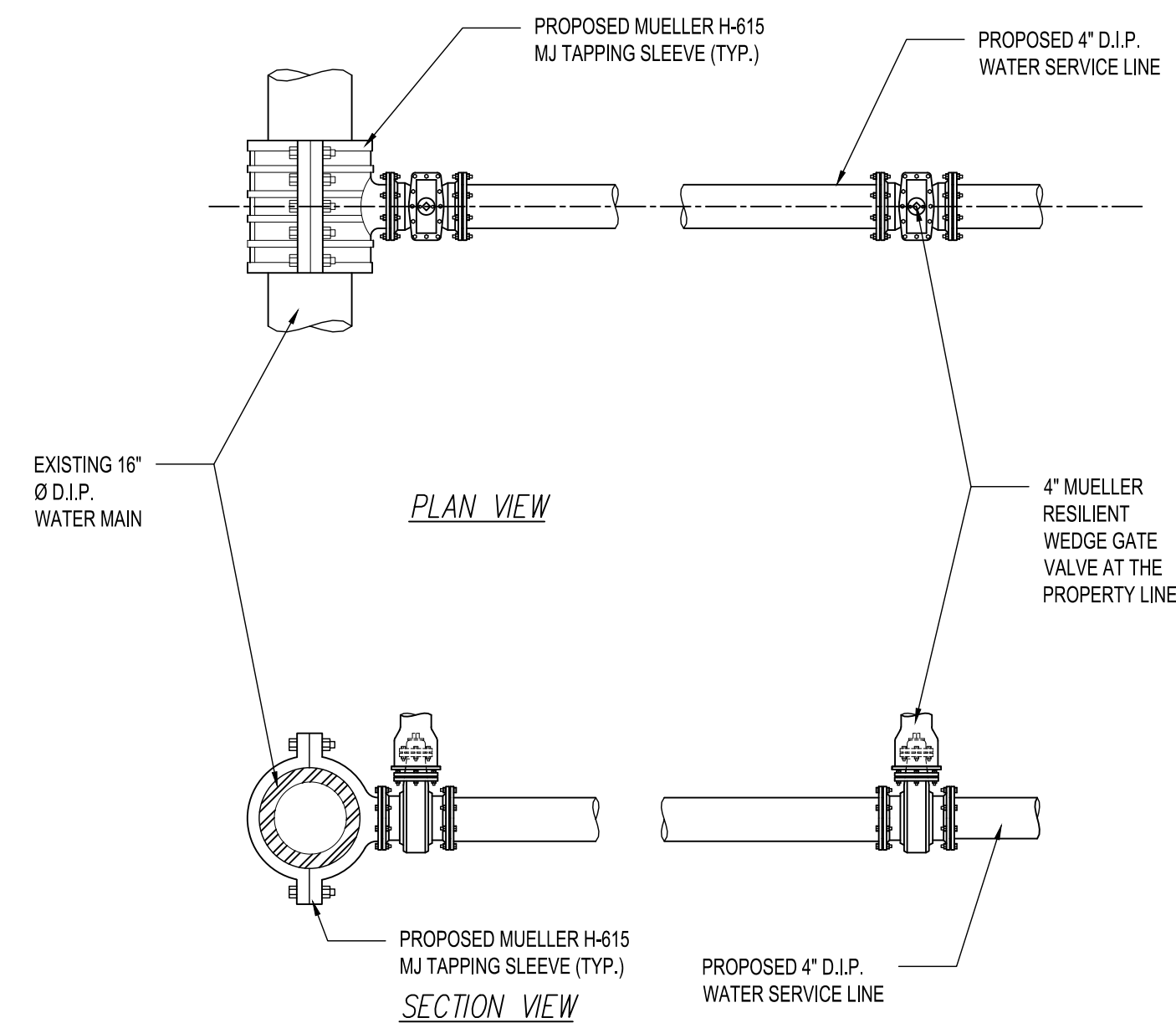
**1 WET TAP AND VALVE INSTALLATION DETAIL**  
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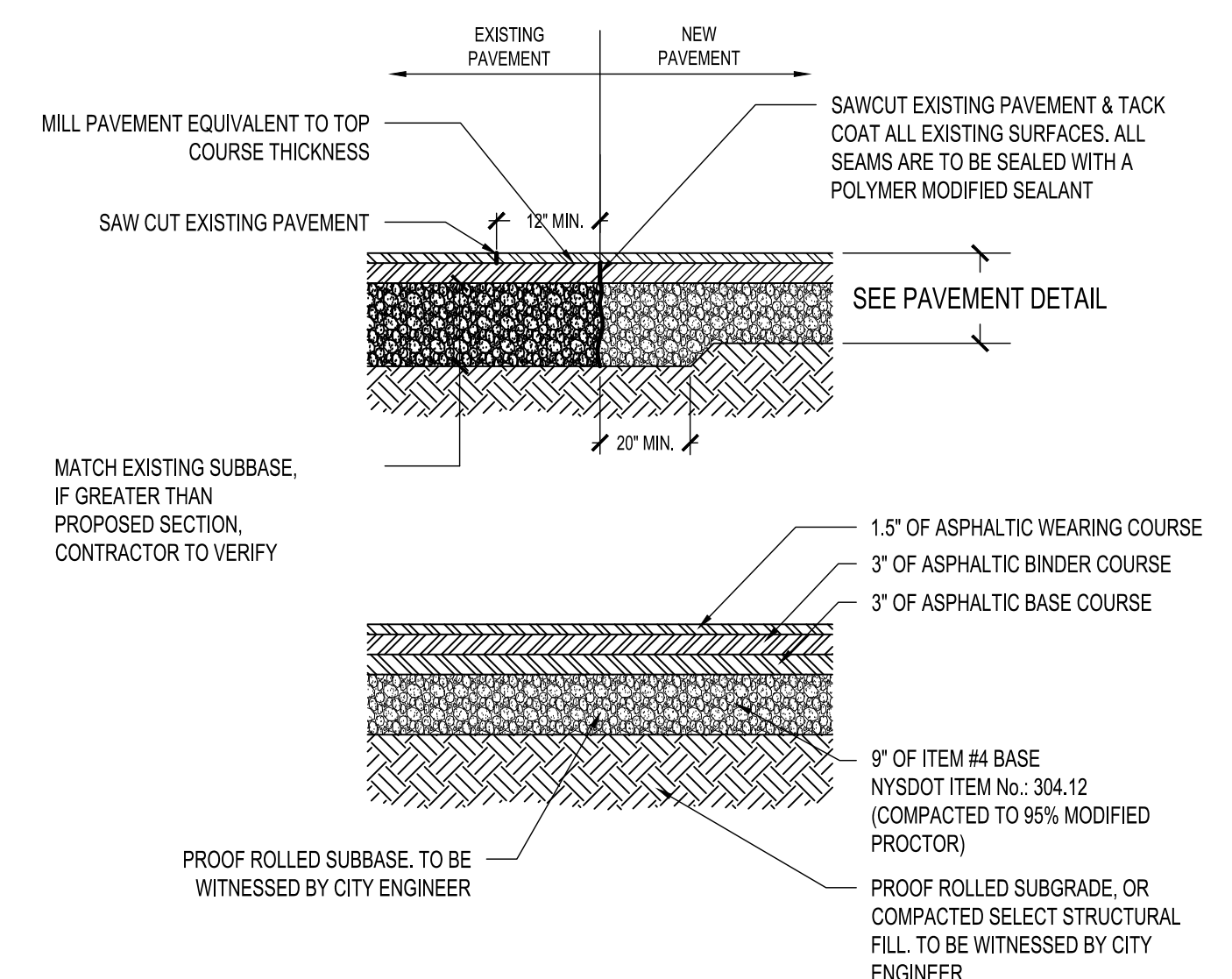
**4 UTILITY TRENCH DETAIL (Below Existing Pavement)**  
NOT TO SCALE



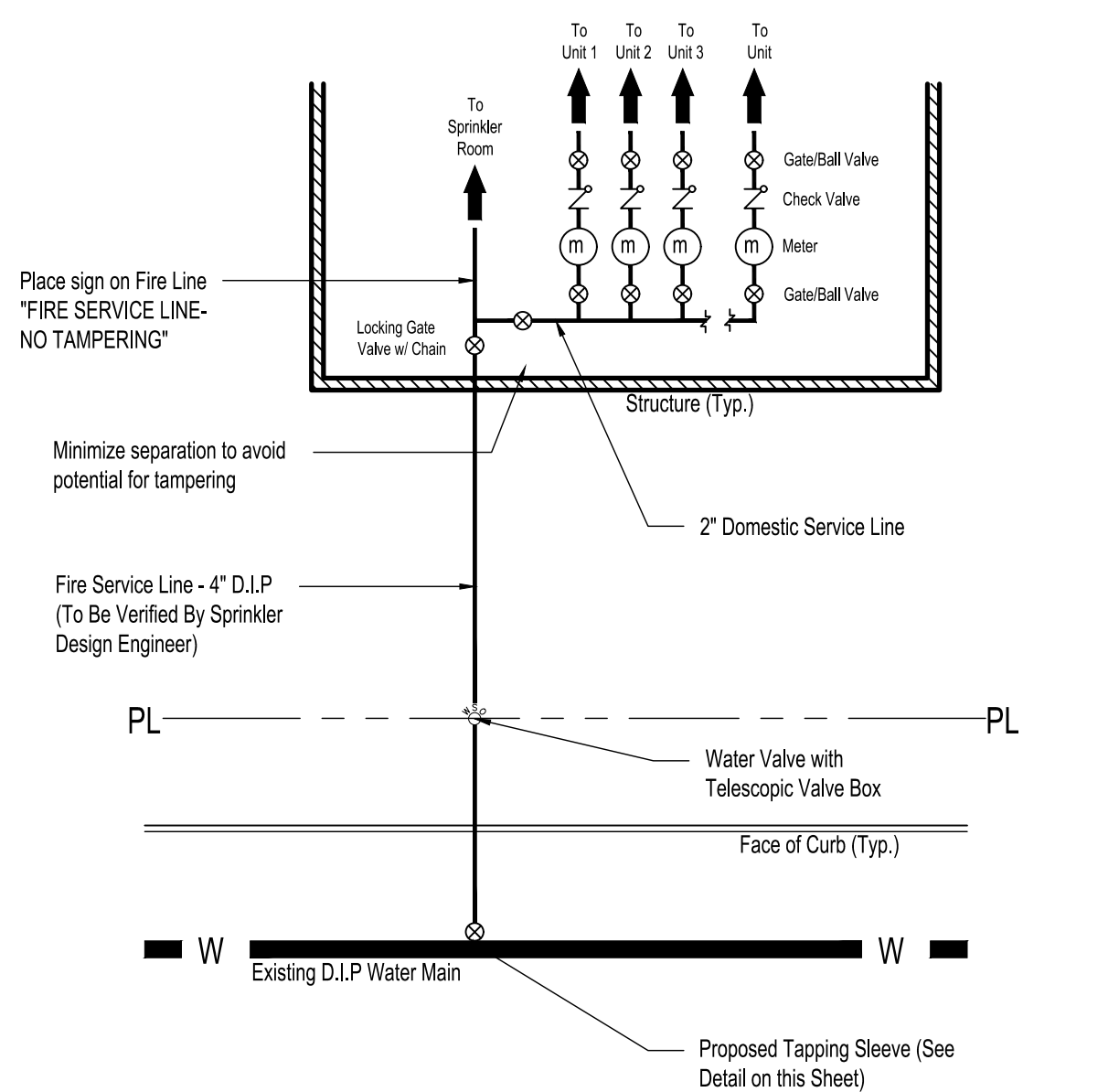
**5 TYPICAL WATER SERVICE (BELOW 2" DIA.) DETAIL**  
NOT TO SCALE



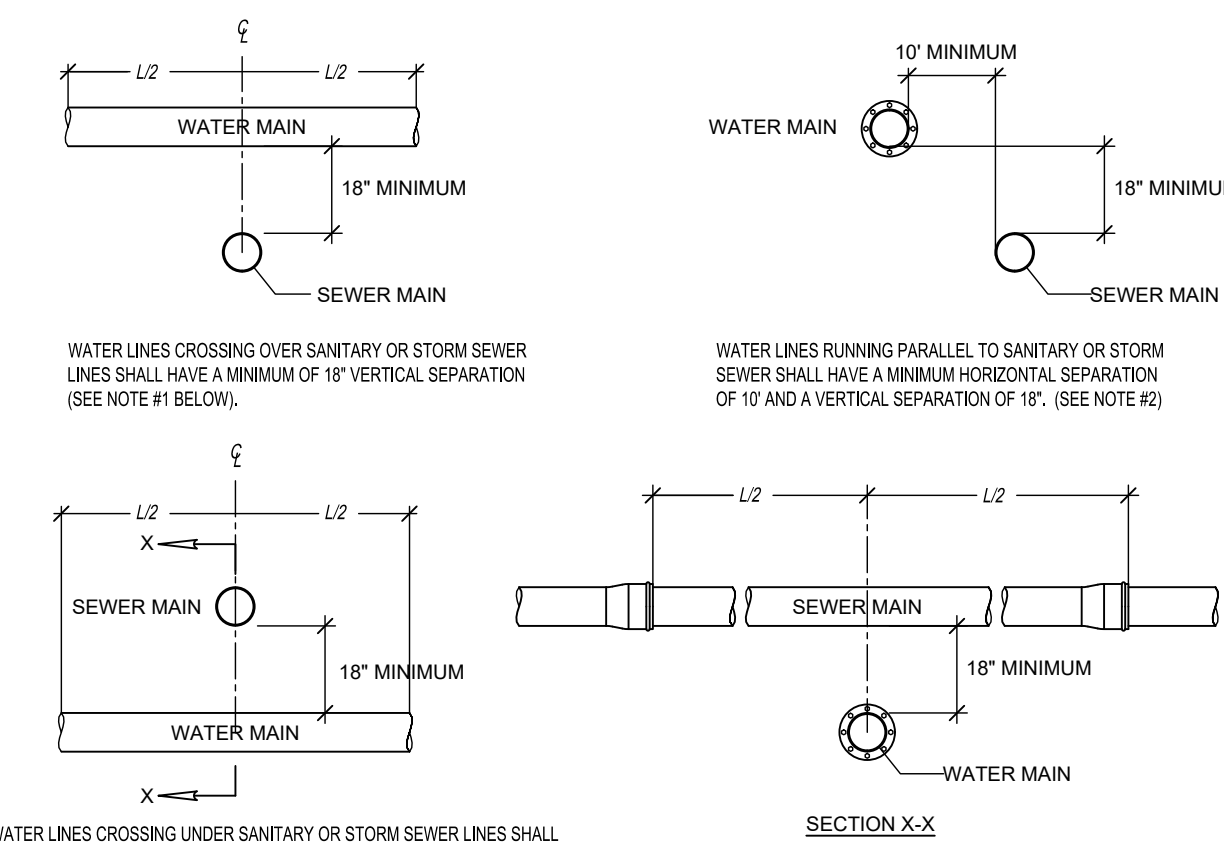
**2 TAPPING SLEEVE AND VALVE INSTALLATION DETAIL**  
NOT TO SCALE



**6 PAVEMENT SECTION**  
NOT TO SCALE

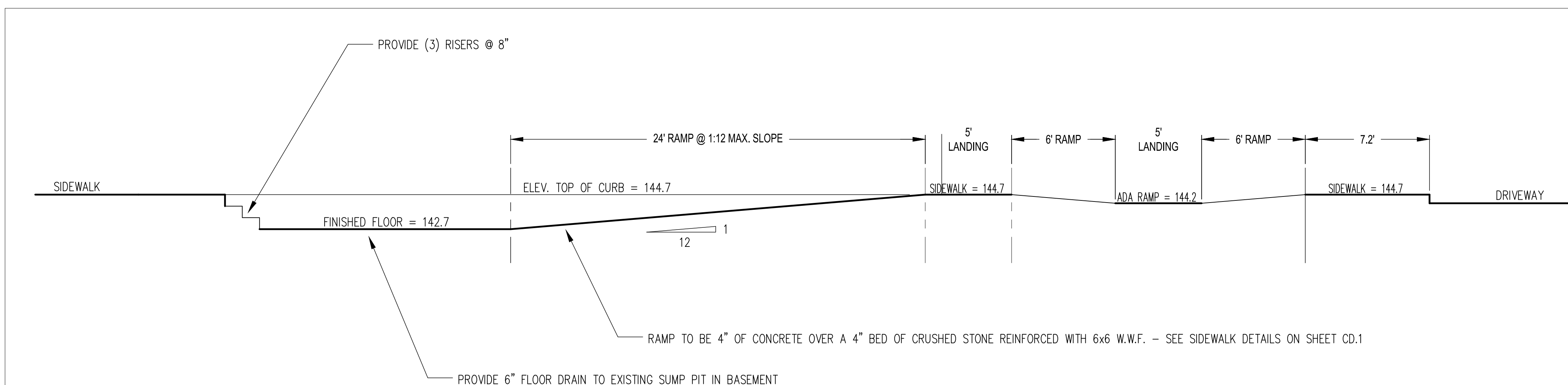


**3 WATER SERVICE DETAIL**  
NOT TO SCALE



- 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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| 01-07-21             |                    |
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| 11-27-21             |                    |
| 08-27-21             |                    |
| 07-20-21             |                    |
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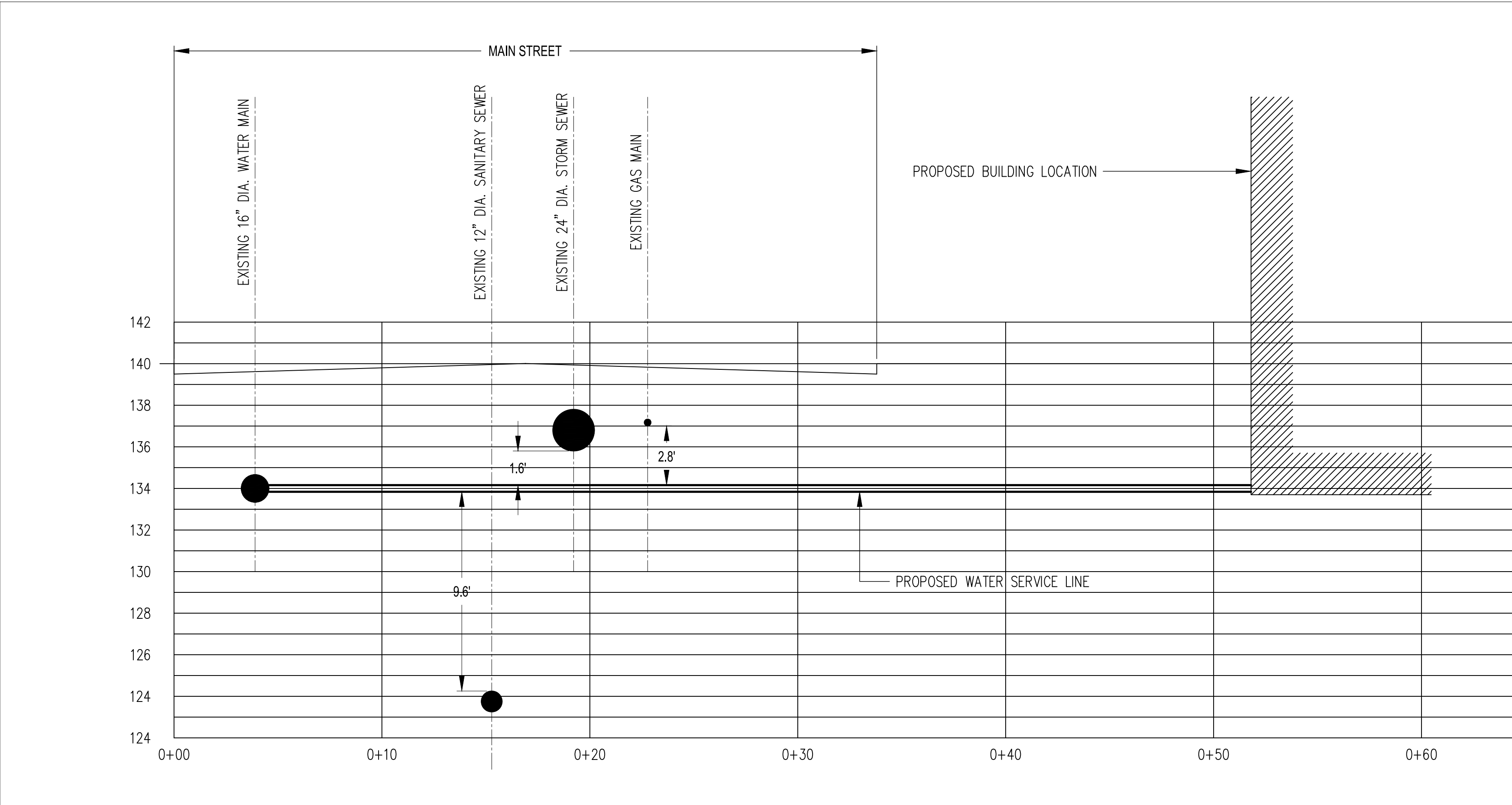
3 Van Wyck  
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(845)-223-3202

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

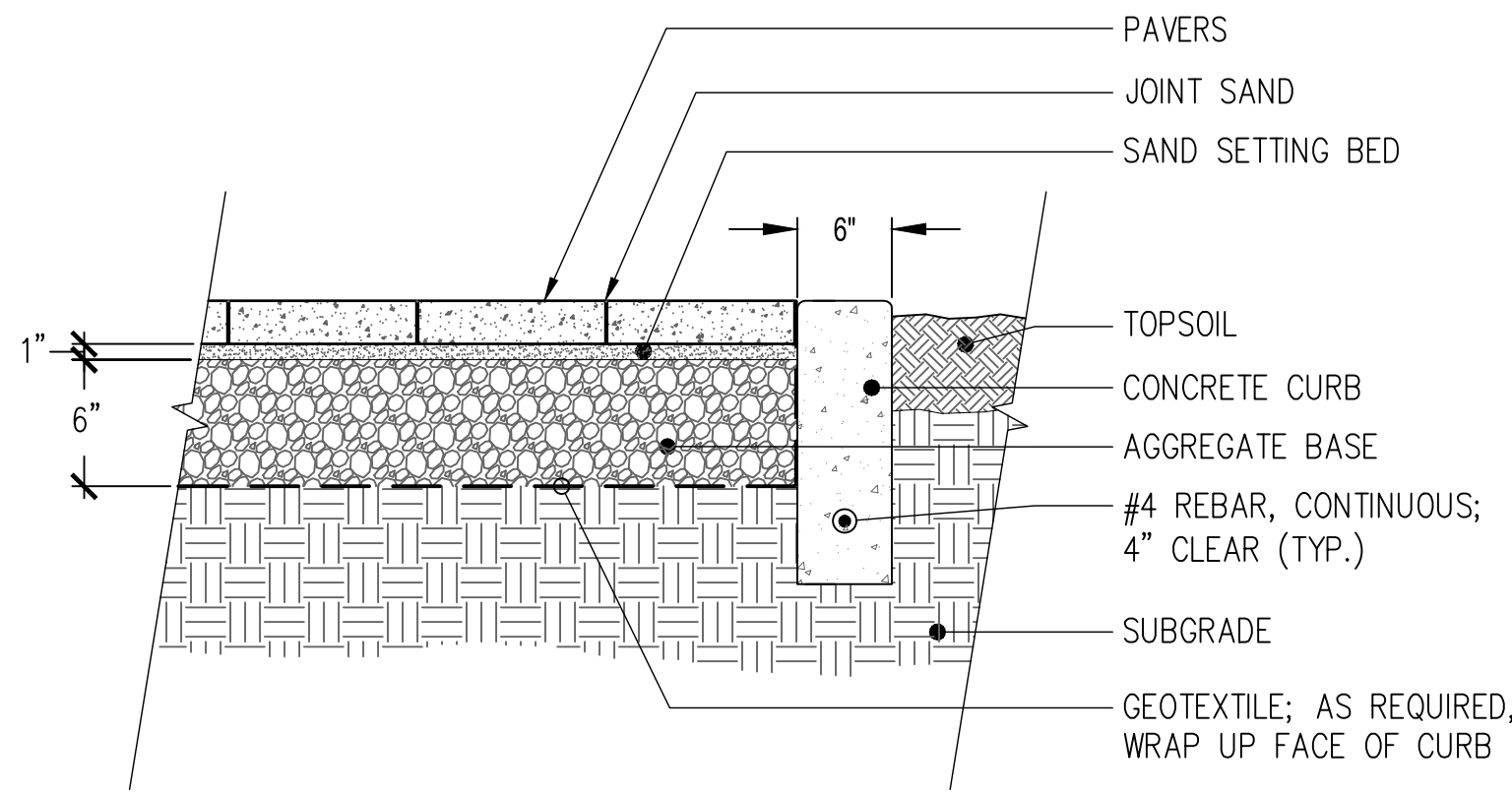
DRAWING  
**Construction Details**

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| DATE<br>04-02-21  | CHECKED BY<br>MAD | 11 of 14                   |





8 WATER LINE PROFILE  
1" = 4" (HORIZONTAL & VERTICAL)



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

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ENGINEERING P.C.

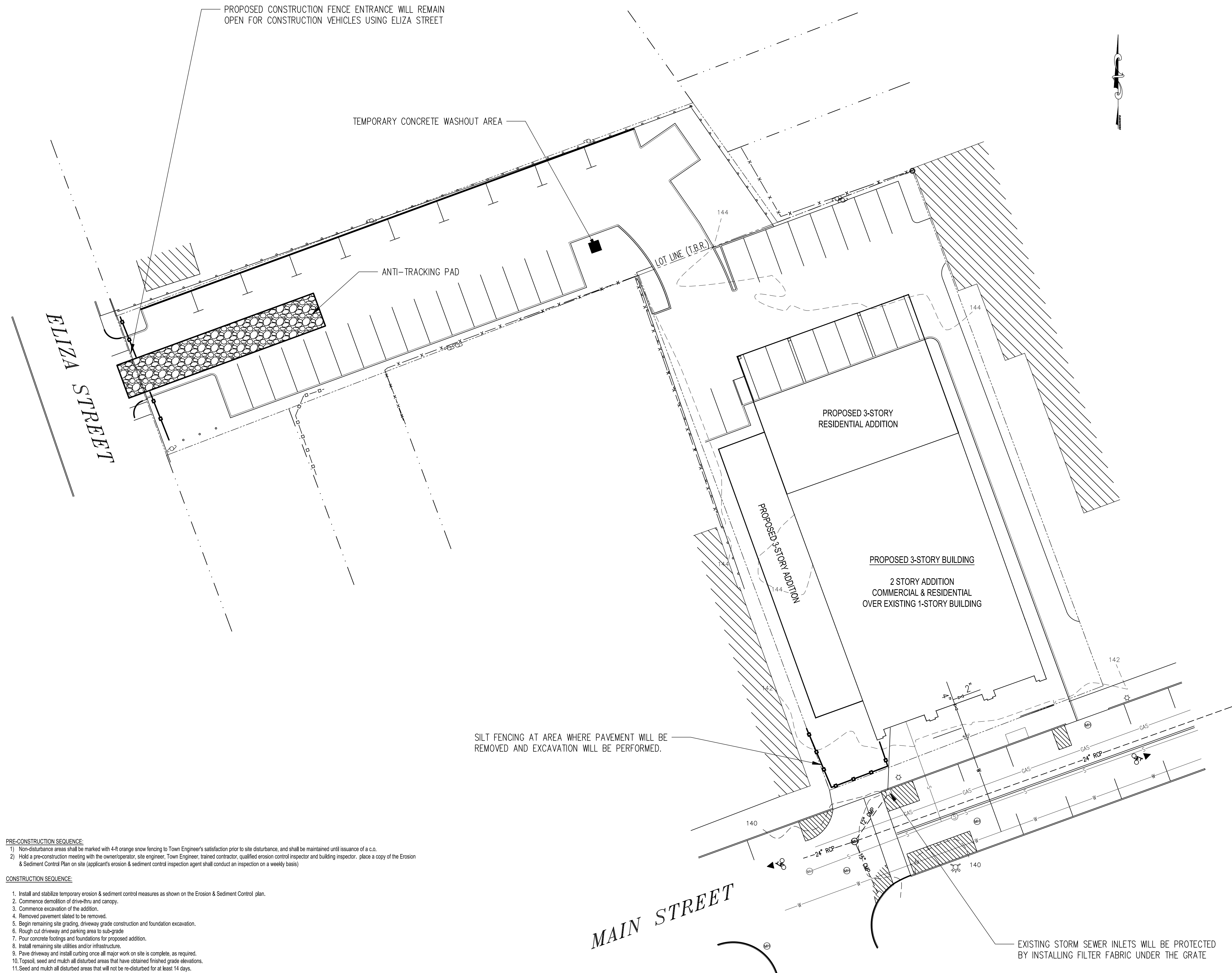
3 Van Wyck  
Lane Suite 2  
Wappingers Falls, New York  
(845)-223-3202

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

DRAWING  
**Construction Details**

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| SCALE<br>As Noted | DRAWN BY<br>MAD   | DRAWING NO.<br><b>CD.3</b><br>12 of 14 |
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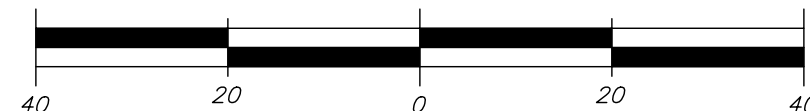


**PRE-CONSTRUCTION SEQUENCE:**

1. Non-disturbance areas shall be marked with 4-ft orange snow fencing to Town Engineer's satisfaction prior to site disturbance, and shall be maintained until issuance of a c.o.
2. Hold a pre-construction meeting with the owner/operator, site engineer, Town Engineer, trained contractor, qualified erosion control inspector and building inspector. place a copy of the Erosion & Sediment Control Plan on site (applicant's erosion & sediment control inspection agent shall conduct an inspection on a weekly basis)

**CONSTRUCTION SEQUENCE:**

1. Install and stabilize temporary erosion & sediment control measures as shown on the Erosion & Sediment Control plan.
2. Commence demolition of drive-bins and canopy.
3. Commence excavation of the addition.
4. Removed pavement slated to be removed.
5. Begin remaining site grading, driveway grade construction and foundation excavation.
6. Rough out driveway and parking area to sub-grade.
7. Pour concrete footings and foundations for proposed addition.
8. Install remaining site utilities and/or infrastructure.
9. Pave driveway and install curbing once all major work on site is complete, as required.
10. Topsoil, seed and mulch all disturbed areas that have obtained finished grade elevations.
11. Seed and mulch all disturbed areas that will not be re-disturbed for at least 14 days.
12. Remove temporary erosion and sediment control measures.
13. Finalize building construction.
14. Pave parking area and drives with final top-coat of asphalt.
15. Strip parking spaces, as required by the Site Plan.
16. Main Street and Eliza Street shall be swept daily during construction if and when site-generated debris is deposited on the streets.



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ENGINEERING P.C.

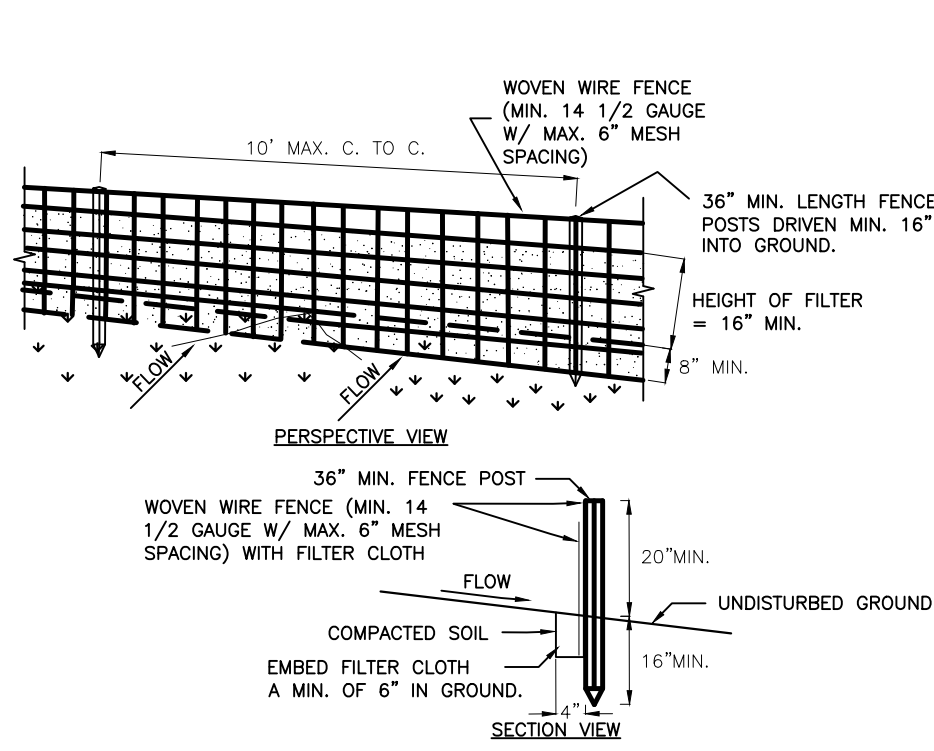
3 Van Wyck  
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Wappingers Falls, New York  
(845)-223-3202

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

DRAWING  
**Erosion & Sediment Control Plan**

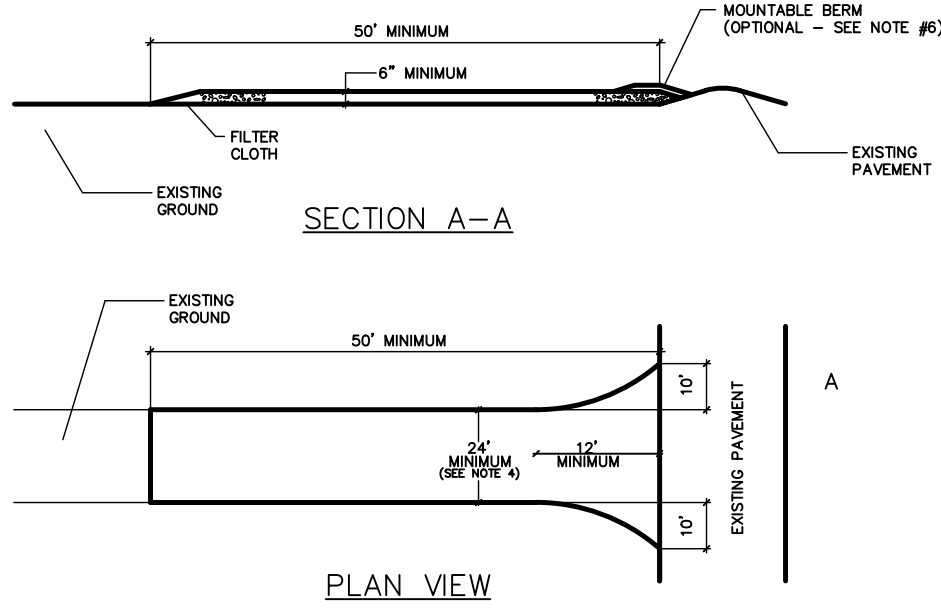
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| DATE<br>04-02-21  | CHECKED BY<br>MAD |                                         |





#### 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, ENVIROFENCE, 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 HOLES OR GORES OCCUR. 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 PIPED 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, DISPOSED, 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.

## 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 affecting 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.

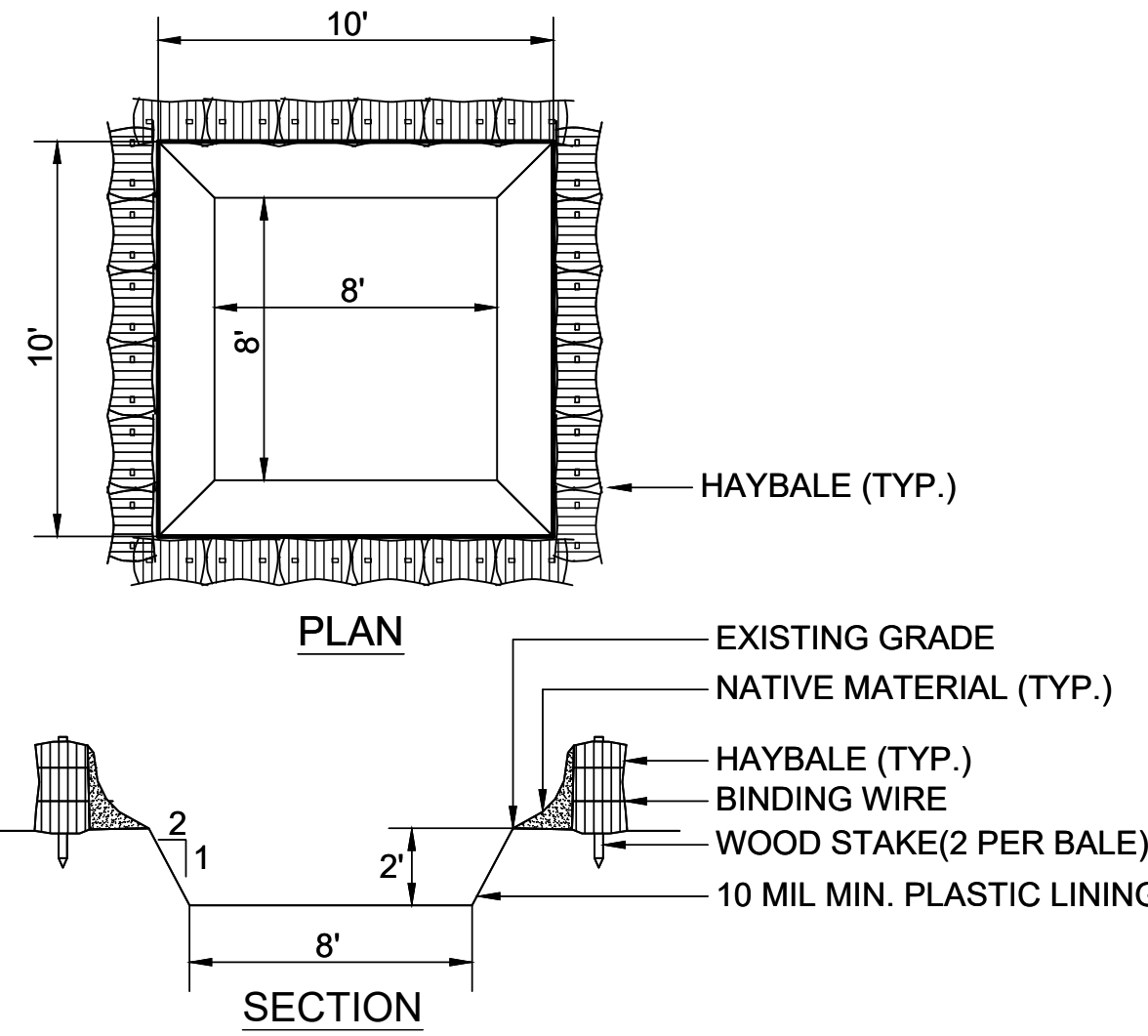
- Solid Waste Disposal**  
No solid materials, including building materials, are allowed to be discharged from the site with stormwater. All solid waste, including disposable materials incidental to the major construction activities, must be collected and placed in containers. The containers will be 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



#### CONSTRUCTION SPECIFICATIONS

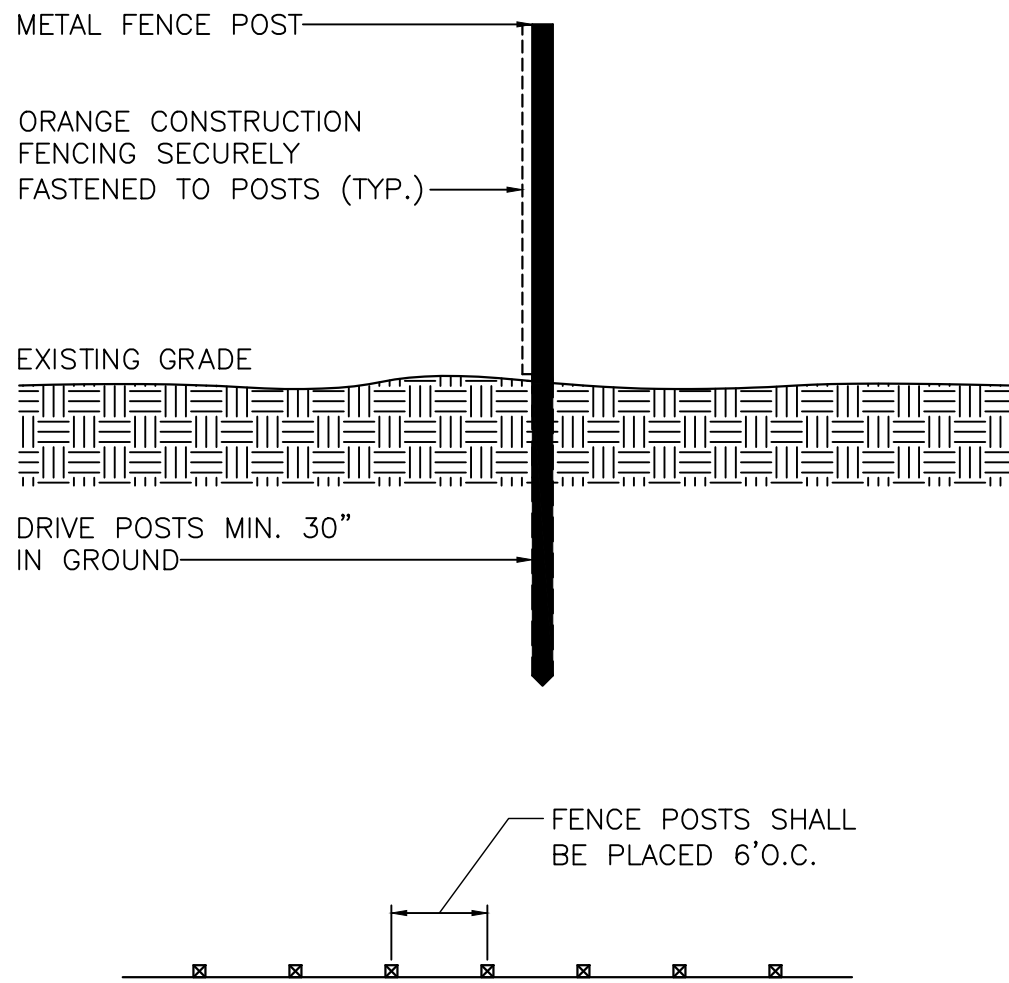
- THE LINER SHALL BE PLASTIC SHEETING WITH A MINIMUM THICKNESS OF 10 MILS WITH NO HOLES OR TEARS, AND ANCHORED BEYOND THE TOP OF THE PIT WITH AN EARTHEN BERM, SAND BAGS, STONE, OR OTHER STRUCTURAL APPURTENANCE EXCEPT AT THE ACCESS POINT.
- LOCATE THE FACILITY A MINIMUM OF 100 FEET FROM DRAINAGE SWALES, STORM DRAIN INLETS, WETLANDS, STREAMS AND OTHER SURFACE WATERS. PREVENT SURFACE WATER FROM ENTERING THE STRUCTURE EXCEPT FOR THE ACCESS ROAD. PROVIDE APPROPRIATE ACCESS WITH A GRAVEL ACCESS ROAD SLOPED DOWN TO THE STRUCTURE. SIGNS SHALL BE PLACED TO DIRECT DRIVERS TO THE FACILITY AFTER THEIR LOAD IS DISCHARGED. .
- ALL CONCRETE WASHOUT FACILITIES SHALL BE INSPECTED DAILY. DAMAGED OR LEAKING FACILITIES SHALL BE DEACTIVATED AND REPAIRED OR REPLACED IMMEDIATELY. EXCESS RAINWATER THAT HAS ACCUMULATED OVER HARDENED CONCRETE SHOULD BE PUMPED TO A STABILIZED AREA, SUCH AS A GRASS FILTER STRIP.
- ACCUMULATED HARDENED MATERIAL SHALL BE REMOVED WHEN 75% OF THE STORAGE CAPACITY OF THE STRUCTURE IS FILLED. ANY EXCESS WASH WATER SHALL BE PUMPED INTO A CONTAINMENT VESSEL AND PROPERLY DISPOSED OF OFF SITE.
- DISPOSE OF THE HARDENED MATERIAL OFF-SITE IN A CONSTRUCTION/DEMOLITION LANDFILL. ON-SITE DISPOSAL MAY BE ALLOWED IF THIS HAS BEEN APPROVED AND ACCEPTED AS PART OF THE PROJECTS SWPPP. IN THAT CASE, THE MATERIAL SHOULD BE RECYCLED AS SPECIFIED, OR BURIED AND COVERED WITH A MINIMUM OF 2 FEET OF CLEAN COMPACTED EARTH/ILL THAT IS PERMANENTLY STABILIZED TO PREVENT EROSION.
- THE PLASTIC LINER SHALL BE REPLACED WITH EACH CLEANING OF THE WASHOUT FACILITY.
- INSPECT THE PROJECT SITE FREQUENTLY TO ENSURE THAT NO CONCRETE DISCHARGES ARE TAKING PLACE IN NON-DESIGNATED AREAS.

## TEMPORARY CONCRETE WASHOUT BASIN DETAIL

NOT TO SCALE

## 1 SILT FENCE DETAIL

NOT TO SCALE



## 2 ANTI-TRACKING PAD DETAIL

NOT TO SCALE

- 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.
- SILT FENCE SHALL BE INSTALLED AS SHOWN ON THIS DRAWING PRIOR TO BEGINNING ANY CLEARING, GRUBBING AND EARTHWORK.
- EXPOSED SLOPES AND ALL GRADED AREAS SHALL BE SEEDDED 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 20% RYE GRASS

- GRASS SEED MIX MAY BE APPLIED BY EITHER MECHANICAL OR HYDROSEEDING METHODS. HYDROSEEDING SHALL BE PERFORMED IN ACCORDANCE WITH THE CURRENT EDITION OF THE NYS DOT STANDARD SPECIFICATIONS, CONSTRUCTION AND MATERIALS, SECTION 810-1.02, METHOD No. 1.
- SEEDING 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.

## 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.
- SEEDING 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:

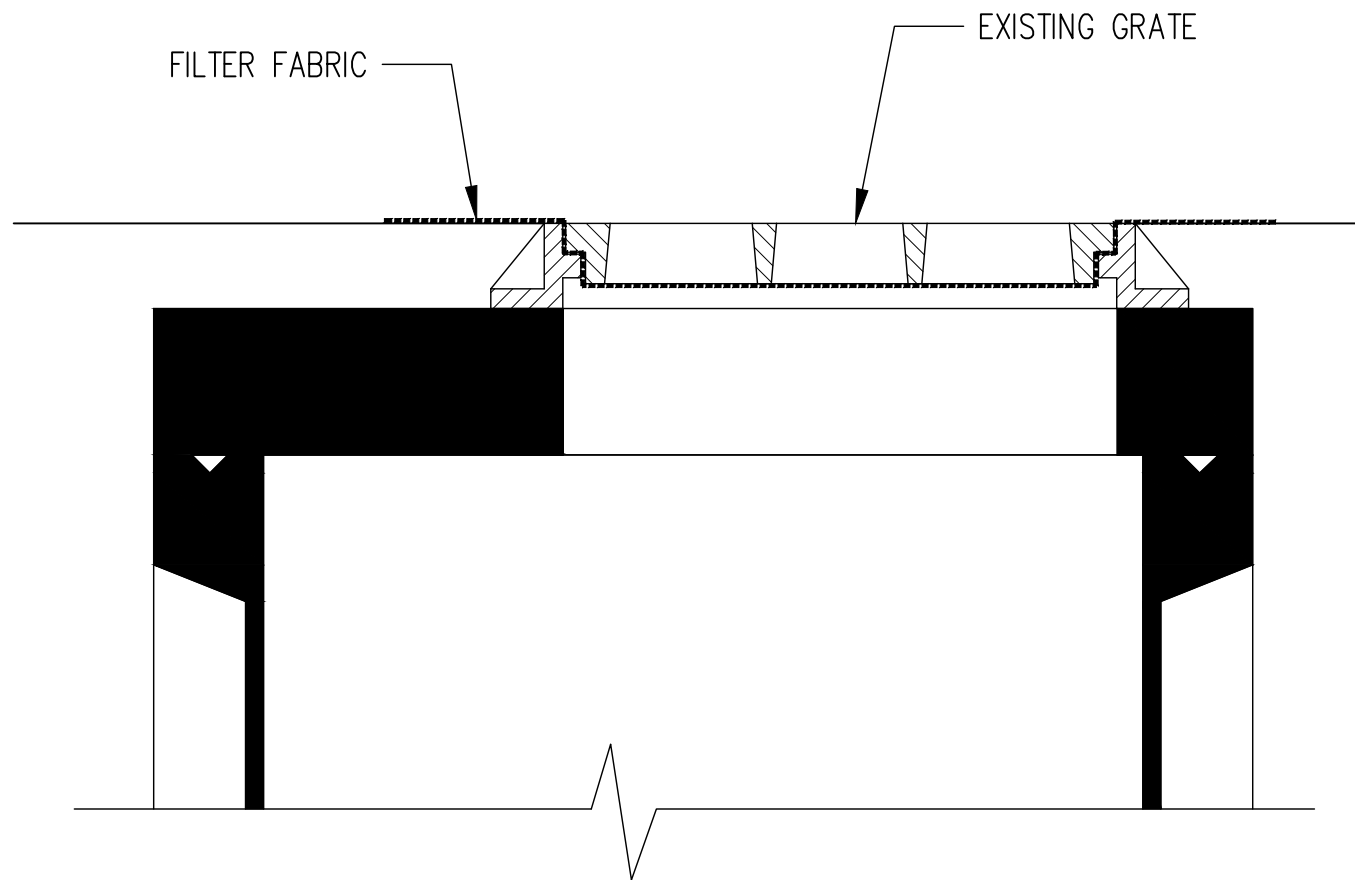
- PERMANENT AND TEMPORARY VEGETATION:**  
INSPECT ALL AREAS THAT HAVE RECEIVED VEGETATION EVERY SEVEN DAYS. ALL AREAS DAMAGED BY EROSION OR WHERE SEED HAS NOT ESTABLISHED SHALL BE REPAIRED AND RESTABILIZED IMMEDIATELY.
- STABILIZED CONSTRUCTION ENTRANCE:**  
INSPECT THE ENTRANCE PAD EVERY SEVEN DAYS. 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



- THE FILTER FABRIC SHALL HAVE AN EOS OF 40-85.
- THE FILTER SHALL BE PLACED UNDER THE EXISTING GRATE AND HELD FIRMLY AT THE FRAME BY THE WEIGHT OF THE GRATE.
- THE FILTER SHALL BE A CONTINUOUS PIECE WITH NO JOINTS OR SEAMS.

## 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    |
|             |                    |
|             |                    |
| 01-07-21    |                    |
| 12-21-21    |                    |
| 11-27-21    |                    |
| 08-27-21    |                    |
| 07-20-21    |                    |
| Revision    |                    |
| 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<br><b>Erosion &amp; Sediment Control Details</b> |                   |                          |
| SCALE<br>As Noted                                        | DRAWN BY<br>MAD   | <b>ESC.2</b><br>14 of 14 |
| DATE<br>04-02-21                                         | CHECKED BY<br>MAD |                          |



DESCRIPTION OF A CERTAIN PARCEL OF LAND SITUATED IN THE CITY OF BEACON,  
COUNTY OF DUTCHESS AND THE STATE OF NEW YORK.

[illegible]

CERTIFICATION:  
TO O'DONNELL CONSTRUCTION CORP., TEG FEDERAL CREDIT UNION,  
AND FIRST AMERICAN TITLE INSURANCE COMPANY  
THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY  
ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2016  
MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND  
SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS,  
INCLUDES ITEMS 2.3, 4.8, 13.14, 16, 18, AND 19 OF TABLE A THEROF.  
THE FIELDWORK WAS COMPLETED ON FEBRUARY 20, 2017

PROPERTY INFO:  
ELIZA STREET, BEACON NEW YORK, 12504

ENCROACHMENTS:  
AT THE TIME OF THE SURVEY THERE ARE NO VISIBLE  
ENCROACHMENTS ONTO THE SUBJECT PROPERTY

GENERAL NOTES:

1. THERE IS NO EVIDENCE OF RECENT EARTH MOVING WORK BUILDING CONSTRUCTION, OR BUILDING ADDITIONS OBSERVED IN THE PROCESS OF CONDUCTING FIELDWORK
2. THERE ARE NO WETLANDS ON THIS PARCEL OF LAND
3. THERE IS DIRECT ACCESS TO THE SUBJECT PROPERTY VIA ELIZA STREET, A PUBLIC RIGHT OF WAY

**PARKING:**  
17 REGULAR PARKING SPACES  
NO HANDICAP PARKING SPACES

**SURVEYORS LEGAL:**  
1. THERE IS NO EVIDENCE OF RECENT EARTH MOVING WORK BUILDING CONSTRUCTION, OR BUILDING ADDITIONS OBSERVED IN THE PROCESS OF CONDUCTING FIELDWORK

CERTIFIED TO:

1. O'DONNELL CONSTRUCTION CORP.
2. TEG FEDERAL CREDIT UNION
3. FIRST AMERICAN TITLE INSURANCE COMPANY

NOTES:

1. THE ABOVE ANSWERS ARE BASED ON THE DOCUMENT AND SHOULD NOT BE SUBJECT TO ANY FURTHER REVISION.
2. THE ABOVE ANSWERS ARE BASED ON THE DOCUMENT AND SHOULD NOT BE SUBJECT TO ANY FURTHER REVISION.
3. THE ABOVE ANSWERS ARE BASED ON THE DOCUMENT AND SHOULD NOT BE SUBJECT TO ANY FURTHER REVISION.
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9. THE ABOVE ANSWERS ARE BASED ON THE DOCUMENT AND SHOULD NOT BE SUBJECT TO ANY FURTHER REVISION.
10. THE ABOVE ANSWERS ARE BASED ON THE DOCUMENT AND SHOULD NOT BE SUBJECT TO ANY FURTHER REVISION.

FILE NO. 2017015

FILE NO. 2017-015

*LOTLINE CHANGE  
FOR  
THE LANDS OF*

**O'DONNELL CONSTRUCTION CORP.**  
CITY OF BEACON  
SCALE: 1" = 20'  
UPDATE UTILITIES: JUNE 18, 2021  
UPDATE SPOT ELEVATIONS: DECEMBER 13, 2021  
ENGINEER'S COMMENTS: DECEMBER 17, 2021

**ROBERT V. OSWALD**  
LAND SURVEYING

ROAD, LAGRANGEVILLE NEW YORK, 12540  
-226-6436 FAX (845) 226-1315

LIBRARY  
# 030031  
LICENSE NO. 50031



VICINITY MAP  
NOT TO SCALE

## PROPERTY DESCRIPTION:

DESCRIPTION OF A CERTAIN PARCEL OF LAND SITUATED IN THE CITY OF BEACON,  
COUNTY OF DUTCHESS AND THE STATE OF NEW YORK.

[illegible]

CERTIFICATION: TO O'DONNELL CONSTRUCTION CORP., TEG FEDERAL CREDIT UNION, AND FIRST AMERICAN TITLE INSURANCE COMPANY. THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2016 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, INCLUDES ITEMS 2.3.4-6,13.14,16.18, AND 19 OF TABLE A, THEREOF. THE SURVEY WAS COMPLETED ON FEBRUARY 20, 2017.

PROPERTY INFO:  
365 MAIN STREET, BEACON NEW YORK, 12504

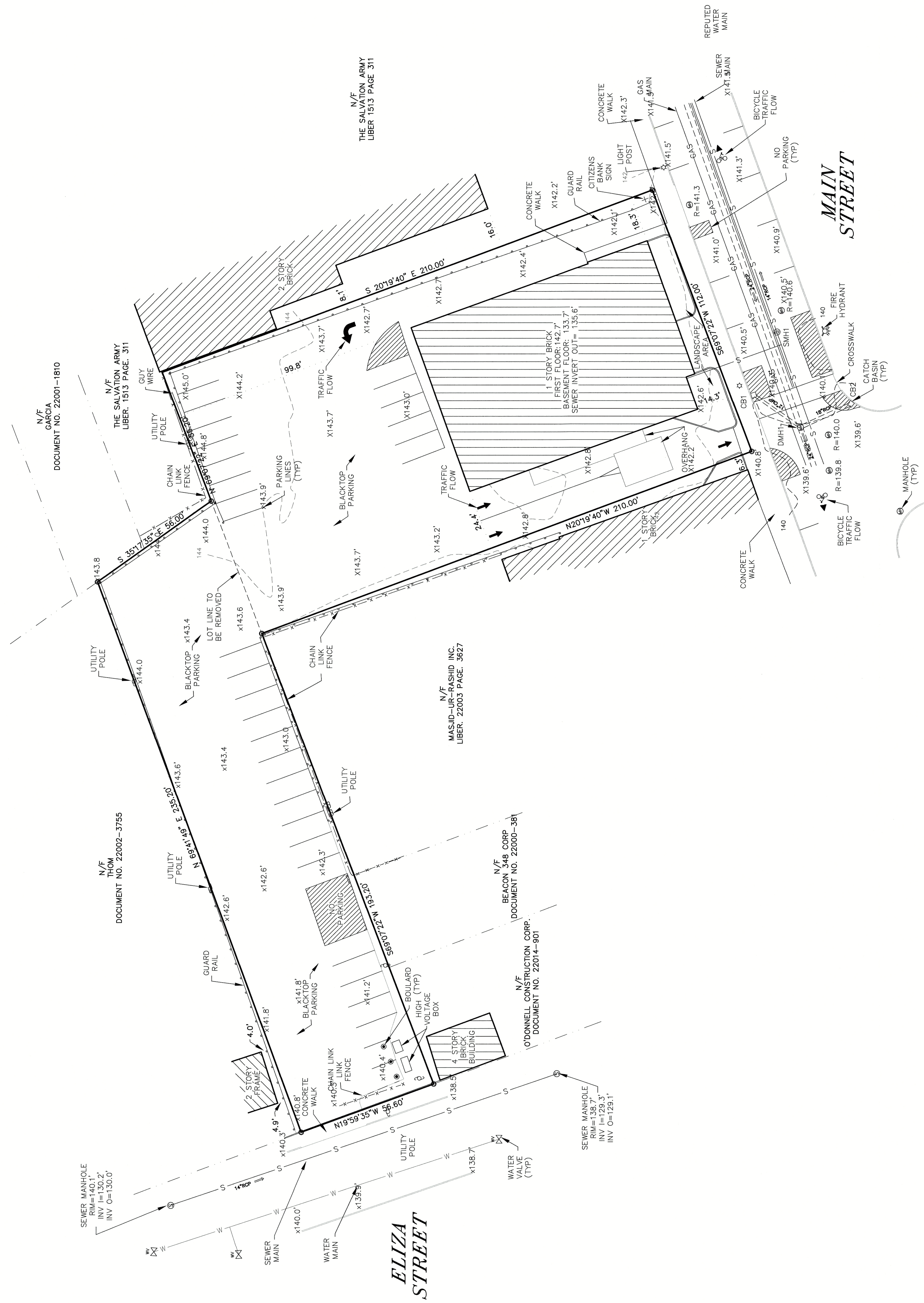
ENCROACHMENTS:  
AT THE TIME OF THE SURVEY THERE ARE NO VISIBLE  
ENCROACHMENTS ONTO THE SUBJECT PROPERTY

GENERAL NOTES:  
1. THERE IS NO EVIDENCE OF RECENT EARTH MOVING WORK BUILDING CONSTRUCTION, OR BUILDING ADDITIONS OBSERVED IN THE PROCESS OF CONDUCTING FIELDWORK  
2. THERE ARE NO WETLANDS ON THIS PARCEL OF LAND  
3. THERE IS DIRECT ACCESS TO THE SUBJECT PROPERTY VIA MAIN STREET, A PUBLIC RIGHT OF WAY

**PARKING:**  
13 REGULAR PARKING SPACES  
NO HANDICAP PARKING SPACES

**SURVEYORS LEGAL:**  
1. THERE IS NO EVIDENCE OF RECENT EARTH MOVING WORK BUILDING CONSTRUCTION, OR BUILDING ADDITIONS OBSERVED IN THE PROCESS OF CONDUCTING FIELDWORK

| SURVEY KEY:                                                           |                                                                                                                           |
|-----------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| SMH1<br>RM=140.7°<br>INV. =135.1° (12° RGP)<br>INV. =123.1° (14° RGP) | DMH1<br>RM=140.1°<br>INV. =135.1° (12° RGP)<br>INV. =137.3° (15° RGP)<br>INV. =135.9° (24° RGP)<br>INV. =135.8° (24° RGP) |
|                                                                       | CBI<br>RM=140.1°<br>INV. =135.8° (12° RGP)<br>CBI2<br>RM=139.7°<br>INV. =137.1° (15° RGP)                                 |



AREA= 0.54 ACRES (+/-)





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](mailto:tpalmer@cuddyfeder.com)

January 25, 2022

**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 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 January 11, 2022, 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 January 6, 2022 (the "Engineering Comments Memorandum"); the City's Planning Consultant, John Clarke Planning and Design, dated January 6, 2022 (the "Planning Comments Memorandum"); and the City's Traffic Consultant, Creighton Manning, dated January 7, 2022 (the "Traffic Comments Memorandum").

**UPDATED BUILDING PROGRAM:**

Based on this Board's comments at the January 11<sup>th</sup> meeting, the Applicant has updated the Site Plan set to incorporate additional features that will further activate the Main Street frontage. As is more fully detailed in the enclosed Site Plan set, the landscaped plaza and paved area along Main Street has been expanded to gain back space lost in the prior proposed version.<sup>1</sup>

<sup>1</sup> Note: The Applicant's Landscape Designer is revising the Landscape Plan (Sheet 3 of the Site Plan set) to accommodate the increased plaza space along Main Street. Please note that any plantings shown on the revised plans are placeholders and may change. An updated Landscape Plan will be provided in the next submission. As was discussed in the prior supplemental submission, the Applicant will maintain the existing front stone portion of the building.





January 25, 2022

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Additionally, the planting bed situated along the Salvation Army property has been extended to end flush with the building in order to discourage vehicles from parking in the driveway. Furthermore, as requested by the Board and in addition to benches, bike racks are proposed along the western side of the landscaped plaza. 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.<sup>2</sup> As with the prior site plans, it is respectfully submitted that the refined proposal satisfies the landscaping requirement in the Central Main Street (“CMS”) Zoning District.

In addition to the adjustments noted above, the refined building program now consists of an approximately 37,365 sq. ft. mixed-use development, which includes the following updates:<sup>3</sup>

- The commercial area on the first floor was increased to 10,638 sq. ft.;
- Tenant amenities were added to the roof top, including deck and garden areas. The space above the storage area was identified as a potential location for solar panels;<sup>4</sup>
- Additional green space was added to the site plan, which includes additional landscaping along the Salvation Army property line; and
- Two (2) storefront doors were eliminated on the Main Street side of the façade.

The above-referenced project refinements are reflected in the enclosed, updated Site Plan Application Form, as well as in the updated Full Environmental Assessment Form (“Full EAF”).

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<sup>2</sup> Note: The landscaped plaza comprises approximately eleven percent (11%) of the property. The overall measured landscaped area is 4,109 square feet. The overall site area is 36,954 square feet.  $4,109/36,954 = 0.1112$ . The measured landscaped area includes all planted areas on the site. Please also note that the requirement for landscaping can be reduced to five percent (5%) if the landscaped area is accessible to the public. Since a large portion of the landscaped area is accessible to the public, the Applicant respectfully submits that the landscaping requirement is met by both the eleven (11%) total landscape coverage, and if reduced by the Board, it would also satisfy the five (5%) requirement as well.

<sup>3</sup> Note: The Applicant is also proposing a 6’ high wood stockade privacy fencing to the north, rear side of the Eliza Street parking lot. In response to concerns raised at the Board meeting regarding upkeep of the fence, the Applicant respectfully submits that a solid concrete panel fence is unnecessary and cumbersome in comparison with the wood stockade fence. The stockade fence can be easily maintained and replaced in sections should any become damaged.

<sup>4</sup> Note: The garden area will be detailed in a subsequent submittal along with a revised landscape design.





January 25, 2022

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See **Exhibit A** – Updated Application for Site Plan Approval Form; **Exhibit B** – Full EAF.<sup>5</sup>

Additionally, the City of Beacon Building Inspector has confirmed that a loading space is not required by the City of Beacon Zoning Code because the Premises are located within the CMS Zoning District and the provisions of Section 223-26.H (Off-street Loading Requirements) do not apply within the CMS District. Accordingly, the plan is in compliance with the Zoning Code and no designated loading space is required. Loading and unloading as part of deliveries to first floor commercial tenant(s) and residential move in/out operations will be managed by the Applicant on an as needed basis in order to limit disruptions to parking on the Site.

**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.<sup>6</sup>

In addition, as this Board is aware, the Project was referred to the Architectural Review Board (“ARB”) Subcommittee at the December 14<sup>th</sup> meeting. The Applicant has since appeared before the ARB Subcommittee on January 19, 2022. In response to the ARB Subcommittee’s comments, the Applicant is presently revising the plans to incorporate various changes to the eastern façade facing Salvation Army, as well as coordinating the preparation of photorealistic renderings that demonstrate the building’s relation to the surrounding area.

**EASEMENT ACCESS & BEACON NATURAL FOODS MARKET:**

As the Applicant previously reviewed with the Board and the Planning Board attorney, the title review of the Premises revealed that the adjacent property, presently occupied by Beacon Natural Foods Market, *does not* have any formal written agreement or legal right to use the Applicant’s Premises as a means of ingress/egress into its own parking lot. The Applicant has previously communicated with the owner of the Beacon Natural Foods Market regarding potential easement

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<sup>5</sup> Note: The refined building program does not change any information that would require an update to the Application for Subdivision Lot Merger Approval appended to the Applicant’s August 31, 2021 supplemental submission to this Board.

<sup>6</sup> Note: In accordance with the Engineer and Planning Comments Memoranda, the Subdivision Plat is being submitted at the proper scale and all information detailed therein is legible. As with the previous submission, the revised Subdivision Plat identifies the existing property line that is proposed to be eliminated.





January 25, 2022

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access for the same, to which Beacon Natural Foods Market indicated no immediate desire to establish an easement. It was understood that the property may have been in the process of being sold. Following the Board's further recommendation at the January 11<sup>th</sup> meeting, we understand that the Applicant again contacted Beacon Natural Foods Market in person and via electronic correspondence in order to discuss potential easement access. Notwithstanding the Applicant's offers to discuss a formal easement agreement, as the Applicant also discussed with the Board, if the Beacon Natural Foods Market remains unreceptive, the Applicant has agreed to include a note on the plan that would allow the subsequent owner of the Beacon Natural Foods Market property to seek an easement from the Applicant for delivery access.

**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 Memorandum, the Planning Comments Memorandum, and the Traffic Comments Memorandum:

- Response to Comments Memorandum prepared by Aryeh J. Siegel Architect dated January 25, 2022 (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 January 25, 2022 (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 January 25, 2022 (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;<sup>7</sup>

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<sup>7</sup> 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.





January 25, 2022

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- Exhibit B:** Updated Full Environmental Assessment Form (“EAF”);
- Exhibit C:** Response to Comments Memorandum prepared by Aryeh J. Siegel Architect dated January 25, 2022, providing responses to the Planning Comments Memorandum;
- Exhibit D:** Response to Comments Memorandum prepared by Day Stokosa Engineering, P.C. dated January 25, 2022, providing responses to the Engineering Comments Memoranda; and
- Exhibit E:** Response to Comments Memorandum prepared by Colliers Engineering & Design CT, P.C., dated January 25, 2022, 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 Siegal, Architect, dated April 2, 2021, last revised January 25, 2022, unless otherwise noted, numbered and titled as follows:<sup>8</sup>

- |                  |                                              |
|------------------|----------------------------------------------|
| ○ Sheet 1 of 14  | Site Plan;                                   |
| ○ Sheet 2 of 14  | Existing Conditions & Demolition Plan;       |
| ○ Sheet 4 of 14  | Building Plans;                              |
| ○ Sheet 6 of 14  | UP.1 - Utility Plan; <sup>9</sup>            |
| ○ Sheet 7 of 14  | LP.1 - Lighting Plan; <sup>10</sup>          |
| ○ Sheet 8 of 14  | VM.1 - Refuse Truck Movement Plan;           |
| ○ Sheet 9 of 14  | VM.2 - 30’ Truck Movement Plan;              |
| ○ Sheet 10 of 14 | CD.1 - Construction Details;                 |
| ○ Sheet 11 of 14 | CD.2 - Construction Details;                 |
| ○ Sheet 12 of 14 | CD.3 - Construction Details;                 |
| ○ Sheet 13 of 14 | ESC.1 - Erosion & Sediment Control Plan; and |
| ○ Sheet 14 of 14 | ESC.2 - Erosion & Sediment Control Details.  |

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<sup>8</sup> Note: The Applicant is presently revising Sheets 3: Landscape Plan & Planting Schedule and 5: Building Elevations & Renderings in order to respond to the ARB Subcommittee’s comments and provide further details for the expanded landscape plaza.

<sup>9</sup> Note: As requested by Mr. Russo, the Site Plan Set has been updated so that sheet numbers are provided in numerical order.

<sup>10</sup> Note: In accordance with the Engineer and Planning Comments Memoranda, the lighting plan has been revised to remove one (1) light pole because there are no other locations in the rear parking area where a relocated pole will not cause light intrusion onto a neighboring property. This is true even for a fully shielded light fixture.





January 25, 2022  
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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 February 8<sup>th</sup> regular meeting for further review of the Project, at which time the Applicant respectfully requests that the Planning Board close the Site Plan and Subdivision Public Hearings and consider approving the Application. 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 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  
Mark A. Day, P.E. – Day Stokosa Engineering, P.C.  
Colliers Engineering & Design CT, P.C.  
Allison Fausner, Esq.



**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: 1/25/2022  
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 Elisa 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.

TOTAL: 3,607 +/- sq. ft.

Dwelling Units (by type): Existing 0

TOTAL: 20

Proposed 10,638 +/- sq. ft.

Proposed 20 multi-family units

**ITEMS TO ACCOMPANY THIS APPLICATION**

- a. 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.
- b. 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.
- c. One electronic and five (5) **folded** paper copies of additional sketches, renderings or other information.
- d. An application fee, payable to the City of Beacon, computed per the attached fee schedule.
- e. An initial escrow amount, payable to the City of Beacon, as set forth in the attached fee schedule.

4902890.v1



**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

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

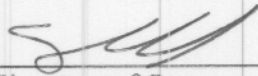
Project Tax Grid # 6054-29-006819 & 6054-29-004836

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



**CITY OF BEACON  
SITE PLAN SPECIFICATION FORM**

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

| <b>PLEASE INDICATE WHETHER THE SITE PLAN DRAWINGS SHOW THE SUBJECT INFORMATION BY PLACING A CHECK MARK IN THE APPROPRIATE BOXES BELOW.</b>                                                                                                     |            |           |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-----------|
|                                                                                                                                                                                                                                                | <b>YES</b> | <b>NO</b> |
| 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:                    | ✓          |           |
| <b>LEGAL DATA</b>                                                                                                                                                                                                                              |            |           |
| 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.                                                                                                                                                                                              |            |           |
| <b>NATURAL FEATURES</b>                                                                                                                                                                                                                        |            |           |
| 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. | ✓          |           |
| <b>EXISTING STRUCTURES, UTILITIES, ETC.</b>                                                                                                                                                                                                    |            |           |
| 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.                                                                | ✓          |           |

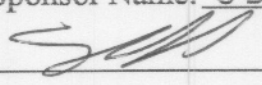
| <b>PROPOSED DEVELOPMENT</b>                                                                                                                         | <b>YES</b> | <b>NO</b> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|------------|-----------|
| 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.                                                                                                             | ✓          |           |
| <b>MISCELLANEOUS</b>                                                                                                                                |            |           |
| 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: 1/25/2022

**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 A**Name 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) 

|                            |
|----------------------------|
| <b>FOR OFFICE USE ONLY</b> |
| 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<br><br>O'Donnell Construction Corp.                            | Telephone Contact Information<br><br>845-590-0622                                                          |
| Principal Place of Business of Entity<br><br>P.O. Box 526, Fishkill, NY 12524 | Place and Date of incorporation<br>New York<br>New York State Dept. of State (7/20/1995)                   |
| Method of Incorporation<br><br>Domestic Business Corporation                  | Official place where the documents and papers of incorporation were filed<br>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 <sup>nd</sup> 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<br>O'Donnell Construction Corp.              | Telephone Contact Information<br>845-590-0622                                                        |
| Principal Business Address<br>P.O. Box 526, Fishkill, New York 12524 | Place and Date of Incorporation<br>New York State Dept. of State (7/20/1995)                         |
| Method of Incorporation<br>Domestic Business Corporation             | Official place where the documents and papers of incorporation were filed<br>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) 

**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:<br>364 MAIN STREET - APPLICATION FOR SITE PLAN AND SUBDIVISION APPROVAL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                    |                                |
| Project Location (describe, and attach a general location map):<br>364 MAIN STREET, BEACON, NEW YORK 12508                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                    |                                |
| Brief Description of Proposed Action (include purpose or need):<br>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 10,638 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:<br>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):<br>TAYLOR M. PALMER, ESQ., - CUDDY & FEDER LLP - ATTORNEY FOR APPLICANT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                    | Telephone: 914-761-1300        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                    | E-Mail: TPALMER@CUDDYFEDER.COM |
| Address:<br>300 WESTAGE BUSINESS CENTER, SUITE 300                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                    |                                |
| City/PO:<br>FISHKILL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | State:<br>NEW YORK | Zip Code:<br>12524             |
| Property Owner (if not same as sponsor):<br>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, <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No or Village Board of Trustees                                                                                                                                                                                                                                                                                                                                                                                                |                                                  |                                          |
| b. City, Town or Village Planning Board or Commission <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                                                                                                                                                                                                                                                                                                                    | PB- SITE PLAN<br>PB - SUBDIVISION                | 05/25/2021 AMENDED 1/5/2022<br>8/31/2021 |
| c. City, Town or Village Zoning Board of Appeals <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                                                                                                                                                                                                                                                                                                                                                                                                         |                                                  |                                          |
| d. Other local agencies <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                                                                                                                                                                                                                                                                                                                                                  | BUILDING DEPARTMENT- BUILDING PERMIT             | 03/1/2022                                |
| e. County agencies <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                  |                                          |
| f. Regional agencies <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                  |                                          |
| g. State agencies <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                  |                                          |
| h. Federal agencies <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                  |                                          |
| i. Coastal Resources.<br>i. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No<br><br>ii. Is the project site located in a community with an approved Local Waterfront Revitalization Program? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No<br>iii. Is the project site within a Coastal Erosion Hazard Area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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):

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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):

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### 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 3,607 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? <span style="float: right;"><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</span><br>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)? <span style="float: right;"><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</span><br>If Yes,                                            |  |
| i. Total number of structures _____ 1<br>ii. Dimensions (in feet) of largest proposed structure: _____ 38' height; _____ 89.0' width; and _____ 156' length<br>iii. Approximate extent of building space to be heated or cooled: _____ 37,365 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? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span><br>If Yes,                                                                                                                                                                                                                                                                                                                                                     |  |
| i. Purpose of the impoundment: _____<br>ii. If a water impoundment, the principal source of the water: <input type="checkbox"/> Ground water <input type="checkbox"/> Surface water streams <input type="checkbox"/> Other specify: _____<br>iii. If other than water, identify the type of impounded/contained liquids and their source. _____<br>iv. Approximate size of the proposed impoundment. Volume: _____ million gallons; surface area: _____ acres<br>v. Dimensions of the proposed dam or impounding structure: _____ height; _____ length<br>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? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span><br>(Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite)<br>If Yes:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |
| i. What is the purpose of the excavation or dredging? _____<br>ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?<br>• Volume (specify tons or cubic yards): _____<br>• Over what duration of time? _____<br>iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them. _____<br>_____<br>_____<br>iv. Will there be onsite dewatering or processing of excavated materials? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span><br>If yes, describe. _____<br>_____<br>_____<br>v. What is the total area to be dredged or excavated? _____ acres<br>vi. What is the maximum area to be worked at any one time? _____ acres<br>vii. What would be the maximum depth of excavation or dredging? _____ feet<br>viii. Will the excavation require blasting? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span><br>ix. Summarize site reclamation goals and plan: _____<br>_____<br>_____<br>_____ |  |

|                                                                                                                                                                                                                                                                                                            |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 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? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span><br>If Yes: |  |
| i. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): _____<br>_____<br>_____                                                                                                                                          |  |

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: \_\_\_\_\_

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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: \_\_\_\_\_ 4,583.9 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.

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

i. Total anticipated liquid waste generation per day: \_\_\_\_\_ 4,583.9 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



|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                             |                                                                                                                                 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• Do existing sewer lines serve the project site? _____</li> <li>• Will a line extension within an existing district be necessary to serve the project? _____</li> </ul> <p>If Yes:</p> <ul style="list-style-type: none"> <li>• Describe extensions or capacity expansions proposed to serve this project: _____<br/>         _____<br/>         _____</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No<br><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                                                  |                                                                                                                                 |
| <p>iv. Will a new wastewater (sewage) treatment district be formed to serve the project site? _____</p> <p>If Yes:</p> <ul style="list-style-type: none"> <li>• Applicant/sponsor for new district: _____</li> <li>• Date application submitted or anticipated: _____</li> <li>• What is the receiving water for the wastewater discharge? _____</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                                                                                                                         |                                                                                                                                 |
| <p>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): _____<br/>         _____<br/>         _____</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                             |                                                                                                                                 |
| <p>vi. Describe any plans or designs to capture, recycle or reuse liquid waste: _____<br/>         _____<br/>         _____</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                             |                                                                                                                                 |
| <p>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? _____</p> <p>If Yes:</p> <p>i. How much impervious surface will the project create in relation to total size of project parcel?</p> <p style="margin-left: 40px;">_____ Square feet or _____ acres (impervious surface)</p> <p style="margin-left: 40px;">_____ Square feet or _____ acres (parcel size)</p> <p>ii. Describe types of new point sources. _____</p> <p>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)? _____<br/>         _____</p> <ul style="list-style-type: none"> <li>• If to surface waters, identify receiving water bodies or wetlands: _____<br/>         _____</li> <li>• Will stormwater runoff flow to adjacent properties? _____</li> </ul> | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes <input type="checkbox"/> No<br><input type="checkbox"/> Yes <input type="checkbox"/> No |                                                                                                                                 |
| <p>iv. Does the proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater? _____</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                             |                                                                                                                                 |
| <p>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? _____</p> <p>If Yes, identify:</p> <p>i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles) _____</p> <p>ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers) _____</p> <p>iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation) _____</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes <input type="checkbox"/> No                                                             |                                                                                                                                 |
| <p>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? _____</p> <p>If Yes:</p> <p>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) _____</p> <p>ii. In addition to emissions as calculated in the application, the project will generate:</p> <ul style="list-style-type: none"> <li>• _____ Tons/year (short tons) of Carbon Dioxide (CO<sub>2</sub>)</li> <li>• _____ Tons/year (short tons) of Nitrous Oxide (N<sub>2</sub>O)</li> <li>• _____ Tons/year (short tons) of Perfluorocarbons (PFCs)</li> <li>• _____ Tons/year (short tons) of Sulfur Hexafluoride (SF<sub>6</sub>)</li> <li>• _____ Tons/year (short tons) of Carbon Dioxide equivalent of Hydrofluorocarbons (HFCs)</li> <li>• _____ Tons/year (short tons) of Hazardous Air Pollutants (HAPs)</li> </ul>                                                                                  |                                                                                                                                                                                             | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes <input type="checkbox"/> No |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                         |                                                                                                                                                                                                                                  |                                                                                                                                                                                                         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span></p> <p>If Yes:</p> <p>i. Estimate methane generation in tons/year (metric): _____</p> <p>ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring): _____</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                         |                                                                                                                                                                                                                                  |                                                                                                                                                                                                         |
| <p>i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span></p> <p>If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust): _____</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                         |                                                                                                                                                                                                                                  |                                                                                                                                                                                                         |
| <p>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? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span></p> <p>If Yes:</p> <p>i. When is the peak traffic expected (Check all that apply): <input type="checkbox"/> Morning <input type="checkbox"/> Evening <input type="checkbox"/> Weekend<br/> <input type="checkbox"/> Randomly between hours of _____ to _____.</p> <p>ii. For commercial activities only, projected number of truck trips/day and type (e.g., semi trailers and dump trucks): _____</p> <p>iii. Parking spaces: Existing _____ Proposed _____ Net increase/decrease _____</p> <p>iv. Does the proposed action include any shared use parking? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span></p> <p>v. If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe: _____</p> <p>vi. Are public/private transportation service(s) or facilities available within ½ mile of the proposed site? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span></p> <p>vii. Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span></p> <p>viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span></p> |                                                                                                                                                                                                         |                                                                                                                                                                                                                                  |                                                                                                                                                                                                         |
| <p>k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy? <span style="float: right;"><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</span></p> <p>If Yes:</p> <p>i. Estimate annual electricity demand during operation of the proposed action: _____<br/> TBD</p> <p>ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other):<br/> CENTRAL HUDSON GAS AND ELECTRIC CO.</p> <p>iii. Will the proposed action require a new, or an upgrade, to an existing substation? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                         |                                                                                                                                                                                                                                  |                                                                                                                                                                                                         |
| <p>l. Hours of operation. Answer all items which apply.</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> <p>i. During Construction:</p> <ul style="list-style-type: none"> <li>• Monday - Friday: _____ 7 AM - 5 PM</li> <li>• Saturday: _____ 9 AM - 5 PM</li> <li>• Sunday: _____ 9 AM - 5 PM</li> <li>• Holidays: _____ N/A</li> </ul> </td> <td style="width: 50%; vertical-align: top;"> <p>ii. During Operations:</p> <ul style="list-style-type: none"> <li>• Monday - Friday: _____ TBD</li> <li>• Saturday: _____ TBD</li> <li>• Sunday: _____ TBD</li> <li>• Holidays: _____ TBD</li> </ul> </td> </tr> </table>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                         | <p>i. During Construction:</p> <ul style="list-style-type: none"> <li>• Monday - Friday: _____ 7 AM - 5 PM</li> <li>• Saturday: _____ 9 AM - 5 PM</li> <li>• Sunday: _____ 9 AM - 5 PM</li> <li>• Holidays: _____ N/A</li> </ul> | <p>ii. During Operations:</p> <ul style="list-style-type: none"> <li>• Monday - Friday: _____ TBD</li> <li>• Saturday: _____ TBD</li> <li>• Sunday: _____ TBD</li> <li>• Holidays: _____ TBD</li> </ul> |
| <p>i. During Construction:</p> <ul style="list-style-type: none"> <li>• Monday - Friday: _____ 7 AM - 5 PM</li> <li>• Saturday: _____ 9 AM - 5 PM</li> <li>• Sunday: _____ 9 AM - 5 PM</li> <li>• Holidays: _____ N/A</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <p>ii. During Operations:</p> <ul style="list-style-type: none"> <li>• Monday - Friday: _____ TBD</li> <li>• Saturday: _____ TBD</li> <li>• Sunday: _____ TBD</li> <li>• Holidays: _____ TBD</li> </ul> |                                                                                                                                                                                                                                  |                                                                                                                                                                                                         |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <p>m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both? <span style="float: right;"><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</span></p> <p>If yes:</p> <p>i. Provide details including sources, time of day and duration:</p> <p>Ambient noise levels will increase slightly during construction only.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
| <p>ii. Will the proposed action remove existing natural barriers that could act as a noise barrier or screen? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span></p> <p>Describe: _____</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
| <p>n. Will the proposed action have outdoor lighting? <span style="float: right;"><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</span></p> <p>If yes:</p> <p>i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures: <span style="border: 1px solid red; padding: 2px;">See Lighting Plan</span></p> <p>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.</p>                                                                                                                                                                                                                                                                                                                                                                                                        |  |
| <p>ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span></p> <p>Describe: _____</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |
| <p>o. Does the proposed action have the potential to produce odors for more than one hour per day? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span></p> <p>If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures: _____</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
| <p>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? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span></p> <p>If Yes:</p> <p>i. Product(s) to be stored _____</p> <p>ii. Volume(s) _____ per unit time _____ (e.g., month, year)</p> <p>iii. Generally, describe the proposed storage facilities: _____</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| <p>q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span></p> <p>If Yes:</p> <p>i. Describe proposed treatment(s): _____</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
| <p>ii. Will the proposed action use Integrated Pest Management Practices? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| <p>r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)? <span style="float: right;"><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</span></p> <p>If Yes:</p> <p>i. Describe any solid waste(s) to be generated during construction or operation of the facility:</p> <ul style="list-style-type: none"> <li>• Construction: _____ 1.0 tons per _____ MONTH (unit of time)</li> <li>• Operation : _____ 0.3 tons per _____ MONTH (unit of time)</li> </ul> <p>ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:</p> <ul style="list-style-type: none"> <li>• Construction: RECYCLING _____</li> <li>• Operation: RECYCLING _____</li> </ul> <p>iii. Proposed disposal methods/facilities for solid waste generated on-site:</p> <ul style="list-style-type: none"> <li>• Construction: APPROVED CONTRACTOR TO AN APPROVED SITE _____</li> <li>• Operation: APPROVED CONTRACTOR TO AN APPROVED SITE _____</li> </ul> |  |



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              |



|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                      |                                            |                      |                                                   |                   |                                                    |                      |             |            |                        |                                     |       |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|--------------------------------------------|----------------------|---------------------------------------------------|-------------------|----------------------------------------------------|----------------------|-------------|------------|------------------------|-------------------------------------|-------|--|
| v. Is the project site subject to an institutional control limiting property uses? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span>                                                                                                                                                                                                                                                                                                                                                                                                    |                      |                                            |                      |                                                   |                   |                                                    |                      |             |            |                        |                                     |       |  |
| <ul style="list-style-type: none"> <li>If yes, DEC site ID number: _____</li> <li>Describe the type of institutional control (e.g., deed restriction or easement): _____</li> <li>Describe any use limitations: _____</li> <li>Describe any engineering controls: _____</li> <li>Will the project affect the institutional or engineering controls in place? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span></li> <li>Explain: _____</li> </ul>                                                                                                  |                      |                                            |                      |                                                   |                   |                                                    |                      |             |            |                        |                                     |       |  |
| <b>E.2. Natural Resources On or Near Project Site</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                      |                                            |                      |                                                   |                   |                                                    |                      |             |            |                        |                                     |       |  |
| a. What is the average depth to bedrock on the project site? <span style="float: right;"><u>GREATER THAN 7.0</u> feet</span>                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                      |                                            |                      |                                                   |                   |                                                    |                      |             |            |                        |                                     |       |  |
| b. Are there bedrock outcroppings on the project site? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span><br>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: 70%;"><u>KuB-KNICKERBOCKER-URBAN</u></td> <td style="width: 30%; 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>&gt;5'</u> feet                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                      |                                            |                      |                                                   |                   |                                                    |                      |             |            |                        |                                     |       |  |
| e. Drainage status of project site soils: <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;"><input type="checkbox"/> Well Drained:</td> <td style="width: 70%; text-align: right;">_____ % of site</td> </tr> <tr> <td><input type="checkbox"/> Moderately Well Drained:</td> <td style="text-align: right;">_____ % of site</td> </tr> <tr> <td><input checked="" type="checkbox"/> Poorly Drained</td> <td style="text-align: right;"><u>100</u> % of site</td> </tr> </table>                                                                          |                      | <input type="checkbox"/> Well Drained:     | _____ % of site      | <input type="checkbox"/> Moderately Well Drained: | _____ % of site   | <input checked="" type="checkbox"/> Poorly Drained | <u>100</u> % of site |             |            |                        |                                     |       |  |
| <input type="checkbox"/> Well Drained:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | _____ % of site      |                                            |                      |                                                   |                   |                                                    |                      |             |            |                        |                                     |       |  |
| <input type="checkbox"/> Moderately Well Drained:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | _____ % of site      |                                            |                      |                                                   |                   |                                                    |                      |             |            |                        |                                     |       |  |
| <input checked="" type="checkbox"/> 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%;"><input checked="" type="checkbox"/> 0-10%:</td> <td style="width: 60%; text-align: right;"><u>100</u> % of site</td> </tr> <tr> <td><input type="checkbox"/> 10-15%:</td> <td style="text-align: right;">_____ % of site</td> </tr> <tr> <td><input type="checkbox"/> 15% or greater:</td> <td style="text-align: right;">_____ % of site</td> </tr> </table>                                                                            |                      | <input checked="" type="checkbox"/> 0-10%: | <u>100</u> % of site | <input type="checkbox"/> 10-15%:                  | _____ % of site   | <input type="checkbox"/> 15% or greater:           | _____ % of site      |             |            |                        |                                     |       |  |
| <input checked="" type="checkbox"/> 0-10%:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <u>100</u> % of site |                                            |                      |                                                   |                   |                                                    |                      |             |            |                        |                                     |       |  |
| <input type="checkbox"/> 10-15%:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | _____ % of site      |                                            |                      |                                                   |                   |                                                    |                      |             |            |                        |                                     |       |  |
| <input type="checkbox"/> 15% or greater:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | _____ % of site      |                                            |                      |                                                   |                   |                                                    |                      |             |            |                        |                                     |       |  |
| g. Are there any unique geologic features on the project site? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span><br>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)? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span>                                                                                                                                                                                                                                                                                                                                                            |                      |                                            |                      |                                                   |                   |                                                    |                      |             |            |                        |                                     |       |  |
| ii. Do any wetlands or other waterbodies adjoin the project site? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span>                                                                                                                                                                                                                                                                                                                                                                                                                     |                      |                                            |                      |                                                   |                   |                                                    |                      |             |            |                        |                                     |       |  |
| 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? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span>                                                                                                                                                                                                                                                                                                                                                     |                      |                                            |                      |                                                   |                   |                                                    |                      |             |            |                        |                                     |       |  |
| 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? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span><br>If yes, name of impaired water body/bodies and basis for listing as impaired: _____                                                                                                                                                                                                                                                                          |                      |                                            |                      |                                                   |                   |                                                    |                      |             |            |                        |                                     |       |  |
| i. Is the project site in a designated Floodway? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span>                                                                                                                                                                                                                                                                                                                                                                                                                                      |                      |                                            |                      |                                                   |                   |                                                    |                      |             |            |                        |                                     |       |  |
| j. Is the project site in the 100-year Floodplain? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span>                                                                                                                                                                                                                                                                                                                                                                                                                                    |                      |                                            |                      |                                                   |                   |                                                    |                      |             |            |                        |                                     |       |  |
| k. Is the project site in the 500-year Floodplain? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span>                                                                                                                                                                                                                                                                                                                                                                                                                                    |                      |                                            |                      |                                                   |                   |                                                    |                      |             |            |                        |                                     |       |  |
| l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span><br>If Yes:                                                                                                                                                                                                                                                                                                                                                                |                      |                                            |                      |                                                   |                   |                                                    |                      |             |            |                        |                                     |       |  |
| i. Name of aquifer: _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                      |                                            |                      |                                                   |                   |                                                    |                      |             |            |                        |                                     |       |  |



|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| m. Identify the predominant wildlife species that occupy or use the project site: _____<br>BIRDS _____ SQUIRRELS _____<br>SMALL MAMMALS _____<br>RACCOON _____                                                                                                                                                                                                                                                                                                                                                                     |  |
| n. Does the project site contain a designated significant natural community? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span><br>If Yes:<br>i. Describe the habitat/community (composition, function, and basis for designation): _____<br>ii. Source(s) of description or evaluation: _____<br>iii. Extent of community/habitat:<br>• Currently: _____ acres<br>• Following completion of project as proposed: _____ acres<br>• 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? <span style="float: right;"><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</span><br>If Yes:<br>i. Species and listing (endangered or threatened): _____<br>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? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span><br>If Yes:<br>i. Species and listing: _____                                                                                                                                                                                                                                              |  |
| q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span><br>If yes, give a brief description of how the proposed action may affect that use: _____                                                                                                                                                                                                                          |  |
| <b>E.3. Designated Public Resources On or Near Project Site</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |
| 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? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span><br>If Yes, provide county plus district name/number: _____                                                                                                                                                                               |  |
| b. Are agricultural lands consisting of highly productive soils present? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span><br>i. If Yes: acreage(s) on project site: _____<br>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? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span><br>If Yes:<br>i. Nature of the natural landmark: <input type="checkbox"/> Biological Community <input type="checkbox"/> Geological Feature<br>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? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span><br>If Yes:<br>i. CEA name: _____<br>ii. Basis for designation: _____<br>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, Eligibl...

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 6 NYCRR 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

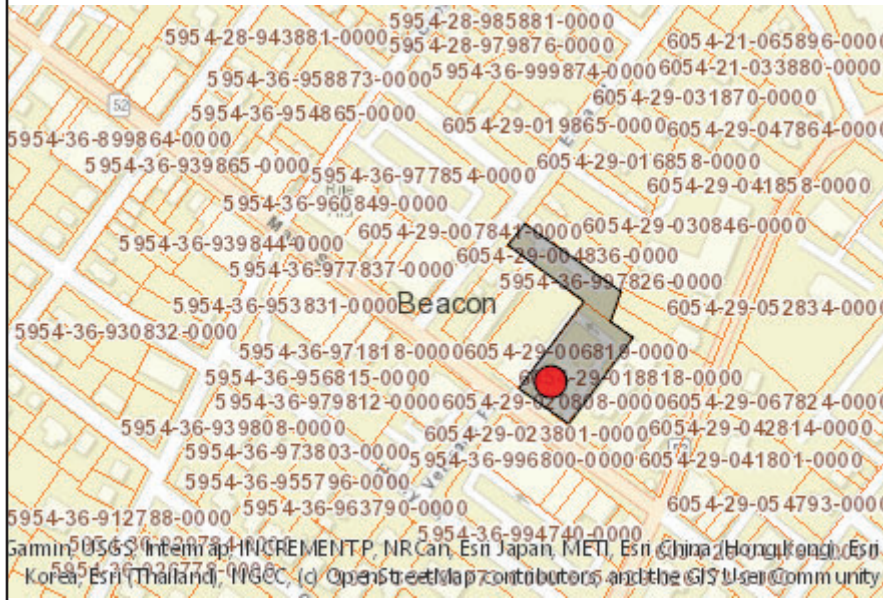
I certify that the information provided is true to the best of my knowledge.

Applicant/Sponsor Name O'DONNELL CONSTRUCTION CORP. Date 1/24/25

Signature  BY: SEAN O'DONNELL Title MANAGING MEMBER

PRINT FORM

Page 13 of 13



**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                                                                                                                                                                                                                                                                                    |

# ARYEH SIEGEL

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## 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*

January 25, 2022

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 January 6, 2022. Please refer to Day & Stokoska's response letter regarding Lanc & Tully's letter dated January 6, 2022.

### **John Clarke Planning and Design Comment Responses:**

#### **1. Sheet 1 – Site Plan**

- a The landscaped plaza area in front of the building has been redesigned to gain back the 4 feet lost in the previous version, plus additional paved area was added by extending the defined plaza area to the property line. The concern about “stepping” the paved area in the extension to the property line is alleviated by curving the paving back to the line of the existing adjacent building.

Note that the landscape plan is being redesigned and will be submitted for the next meeting. The plantings shown on the revised site plan are placeholders, and may change.

The landscaped area is approximately 11%. The overall measured landscaped area is 4,109 square feet. The overall site area is 36,954 square feet.  $4,109/36,954 = 0.1112$ . The measured landscaped area includes all planted areas on the site. Note that the requirement for landscaping can be reduced to 5% if the landscaped area is accessible to the public. Since a large portion of the landscaped area is accessible to the public, the Applicant contends that the landscaping requirement is met by both the 11% total landscape coverage, and the reduced 5% requirement.

- b The landscaping strip on the eastern side of the property has been extended towards the front building plane.

- c The existing tree well and tree are shown on the site plan.
- d The parking area at Eliza Street is no longer obscured on the prints
- e The plan shows a bike rack at the front. Another may be added at the rear as we develop revised details for the landscaping.
- f Details will be shown for the rear fence, front gate, and railing. Benches are movable and not permanent. The owner may or may not place benches or other furniture in the plaza depending on tenant requirements.

Note that the Board requested, at the previous meeting in December, that the plaza be designed to allow for a variety of uses and activities.

2. Sheet 3 – Landscape Plan

- a Note that the landscape plan is being redesigned and will be submitted for the next meeting. The plantings shown on the revised site plan are placeholders, and may change.

- b The Planting Schedule will be revised and printed property

3. Sheet 4 and 5 Building Plans

- a The roof plan was updated to show a tenant deck area, planted areas to be more fully developed in the next submission, and a potential solar array area (subject to revision depending on feasibility and input from a solar company)

- b The rooftop mounted mechanical equipment will be concealed from view. The stair and elevator bulkheads will be shown on the elevation drawings, although due to their setback location on the roof, they will not be very visible from the street in most cases

4. The lighting plan has been amended to address the existing light pole.

5. The printed version of the Lot Line change is submitted herein at the correct scale.

**Lanc & Tully Comment Response**

**General Comments**

- 1. Comment acknowledged
- 2. The Drawing Index has been updated to show 14 drawings
- 3. A construction detail will be added for the paving at the front of the site



**Lot Line Change Plan**

1. Signed and sealed original copies were submitted last month. The plans submitted in the drawing sets were copies for reference
2. The plans are submitted to the correct scale with this submittal
3. A construction detail will be added for the paving at the front of the site

**Site Plan Sheet 1 of 14**

1. Required signage for accessible parking will be shown
2. Parking layout for the Eliza Street lot is shown

**Landscape Plan Sheet 3 of 14**

1. The Landscape Plan is being redesigned and will be shown correctly for the next submittal
2. The plans will include construction details for the planting of trees and shrubs

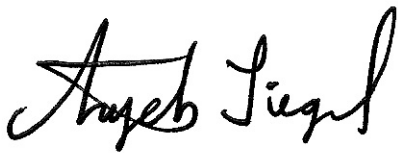
**Building Plans Sheet 4 of 14**

1. The Area Table has been corrected

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,

A handwritten signature in black ink that reads "Aryeh Siegel". The signature is fluid and cursive, with the first name "Aryeh" and last name "Siegel" clearly distinguishable.

Aryeh Siegel  
*Aryeh Siegel, Architect*

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

January 25, 2022

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 – January 6, 2022:**

**General Comments:**

1. Comment noted.
2. The Drawing Index has been updated to reflect all sheets within the plan set. The sheet numbering has been corrected.
3. A detail has been added to sheet CD.3 for brick pavers.

**Full EAF:**

1. The Full Environmental Assessment Form has been revised.

**Lot Line Change 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. Aryeh Siegel has responded to this comment under separate cover.

#### **Site Plan (Sheet 1 of 14):**

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

#### **Landscape Plan (Sheet 3 of 14):**

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

#### **Building Plan (Sheet 4 of 14):**

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

#### **Utility Plan (Sheet 6 of 14):**

1. The wet tap and valve have been identified 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):**

1. The pole mounted fixture has been removed from the plans. There is no other location in the rear parking area where a relocated pole will not cause light intrusion onto a neighboring property. This is true even with a fully shielded light fixture.

#### **Construction Details (Sheet 11 of 14):**

1. The utility trench detail has been revised to include proper pavement thickness.
2. The wet tap and valve installation detail and the taping sleeve and valve installation detail have been revised to show the wet tap valve at the wet tap tee.



### **Erosion & Sediment (Sheet 13 of 14):**

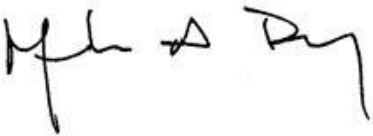
1. The fence has been revised so it does not run across the entrances from Eliza Street and Main Street.
2. A note has been added to the "CONSTRUCTION SEQUENCE" notes that Main Street and Eliza Street shall be swept daily during construction if and when site-generated debris is deposited on the streets.

### **Erosion & Control Details (Sheet 14 of 14):**

1. The filter fabric drop inlet protection detail on ESC.2 has been revised to reflect the note on ESC.2.
2. A detail has been provided for the temporary concrete washout identified on ESC.2.

Please feel free to contact me if you have any questions about the information in this response letter or in the plan set.

Sincerely 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 "Dy".

Mark A. Day, PE

January 25, 2022

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 & Members of the Planning Board,

Our office has reviewed the latest comments regarding the above referenced project contained in the Creighton Manning (CM) letter dated January 7, 2021. Based on our review of the CM letter, all outstanding items relative to traffic have been addressed with the exception of the provision of a loading space on the Site. The CM letter notes the following regarding the provision of a loading space:

*"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."*

The City of Beacon Building Inspector has confirmed that a loading space is not required by code within the CMS district and that the provisions of Code Section 223-26.H – Off-street Loading Requirements do not apply within the CMS district. Therefore, the plan is code compliant and no designated loading space is proposed to be provided. Loading/Unloading as part of deliveries to first floor commercial tenant(s) and residential move in/out operations will be managed by the Applicant on an as needed basis in order to limit disruptions to parking on the Site. This also provides the greatest amount of parking on-site to support the commercial and residential spaces.

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\220125RGD\_CM 1.07.22 Response.docx

Bergmann has joined Colliers Engineering & Design



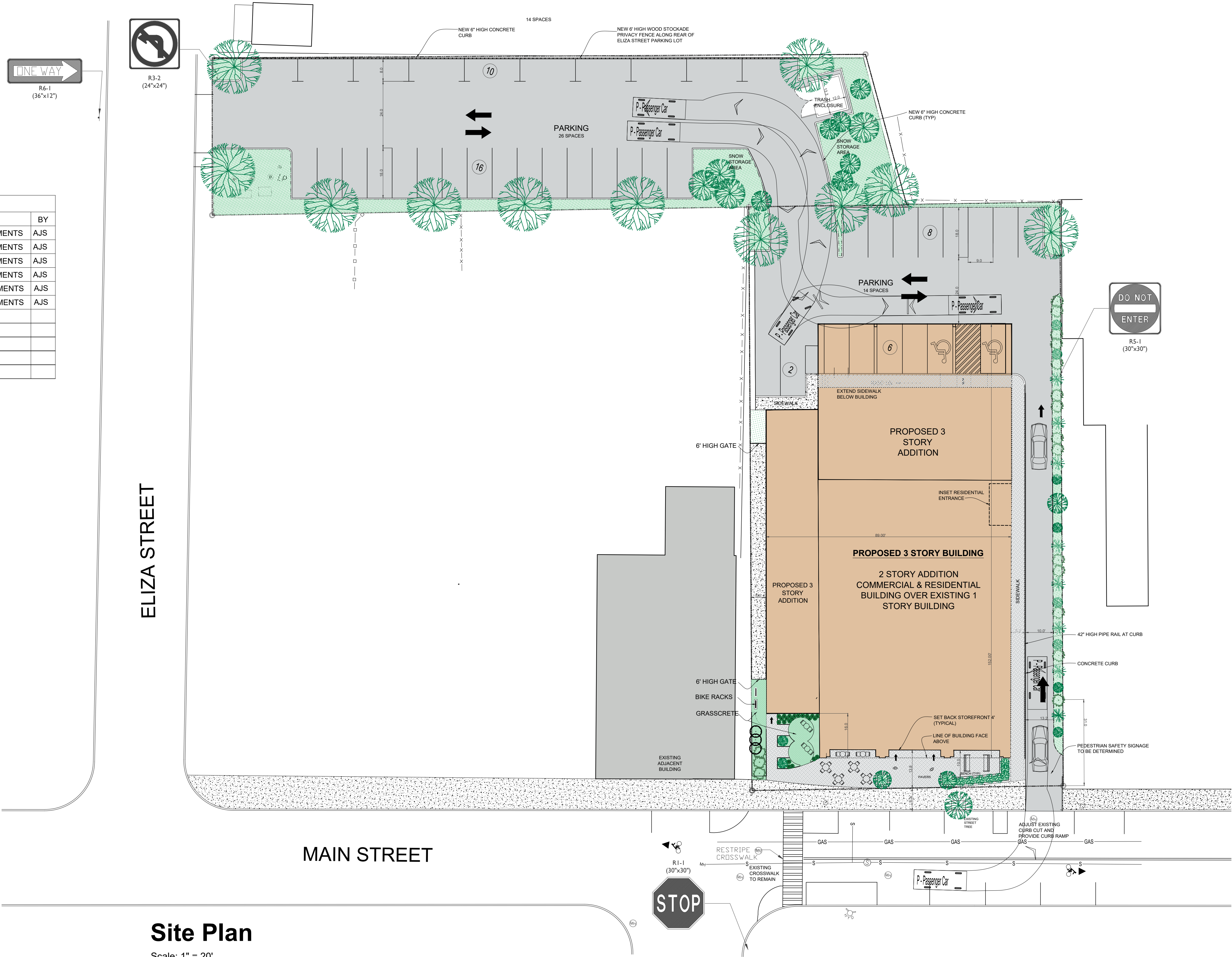
Bulk Zoning Regulations Table - Parking Lot

|                 | 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 |
| 6          | 01/25/22 | REVISED PER PLANNING BOARD COMMENTS | AJS |
|            |          |                                     |     |
|            |          |                                     |     |
|            |          |                                     |     |
|            |          |                                     |     |



Site Plan

Scale: 1" = 20'



Location Plan

Not to Scale

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                                   |

Parking & Loading

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

- 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 14          | Site Plan                             |
| Sheet 2 of 14          | Existing Conditions & Demolition Plan |
| Sheet 3 of 14          | Landscape Plan                        |
| Sheet 4 of 14          | Building Plans                        |
| Sheet 5 of 14          | Building Elevations & Renderings      |
| Sheet 6 of 14 - UP.1   | Utility Plan                          |
| Sheet 7 of 14 - LP.1   | Lighting Plan                         |
| Sheet 8 of 14 - VM.1   | Refuse Truck Movement Plan            |
| Sheet 9 of 14 - VM.2   | 30' Truck Movement Plan               |
| Sheet 10 of 14 - CD.1  | Construction Details                  |
| Sheet 11 of 14 - CD.2  | Construction Details                  |
| Sheet 12 of 14 - CD.3  | Construction Details                  |
| Sheet 13 of 14 - ESC.1 | Erosion & Sediment Control Plan       |
| Sheet 14 of 14 - ESC.2 | Erosion & Sediment Control Details    |

Site Plan Application  
Sheet 1 of 14 - Site Plan

Owner:  
**O'Donnell & Son**  
P.O. Box 526  
Fishkill, NY 12524

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

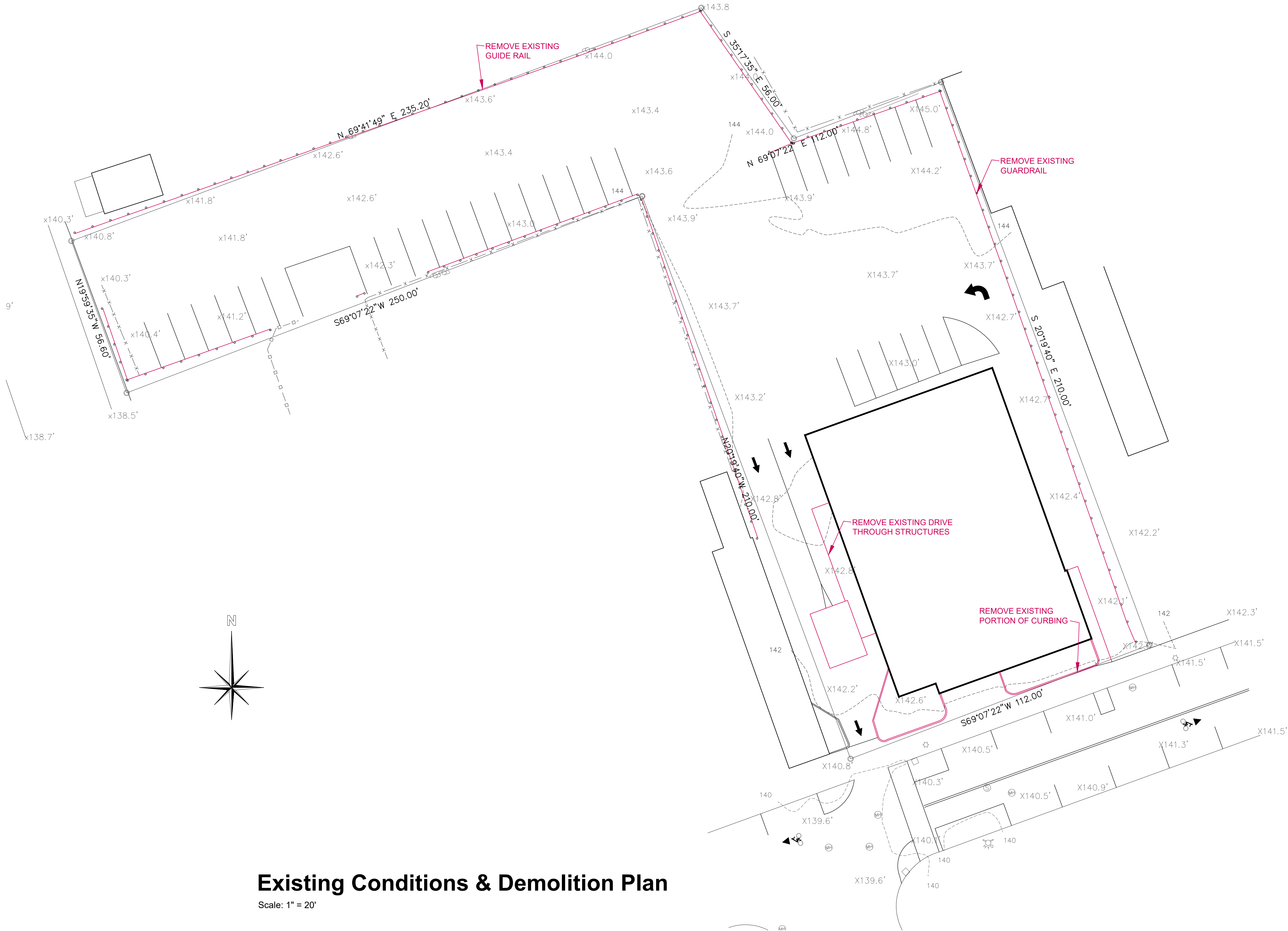
Site / Civil Engineer:  
**Day & Stokosa Engineering P.C**  
3 Van Wyck Lane  
Wappingers Falls, New York 12590

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

**364 Main Street**  
Beacon, New York  
Scale: 1" = 20'  
October 4, 2021



| 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 |
| 6          | 01/25/22 | REVISED PER PLANNING BOARD COMMENTS | AJS |
|            |          |                                     |     |
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|            |          |                                     |     |
|            |          |                                     |     |



**Existing Conditions & Demolition Plan**

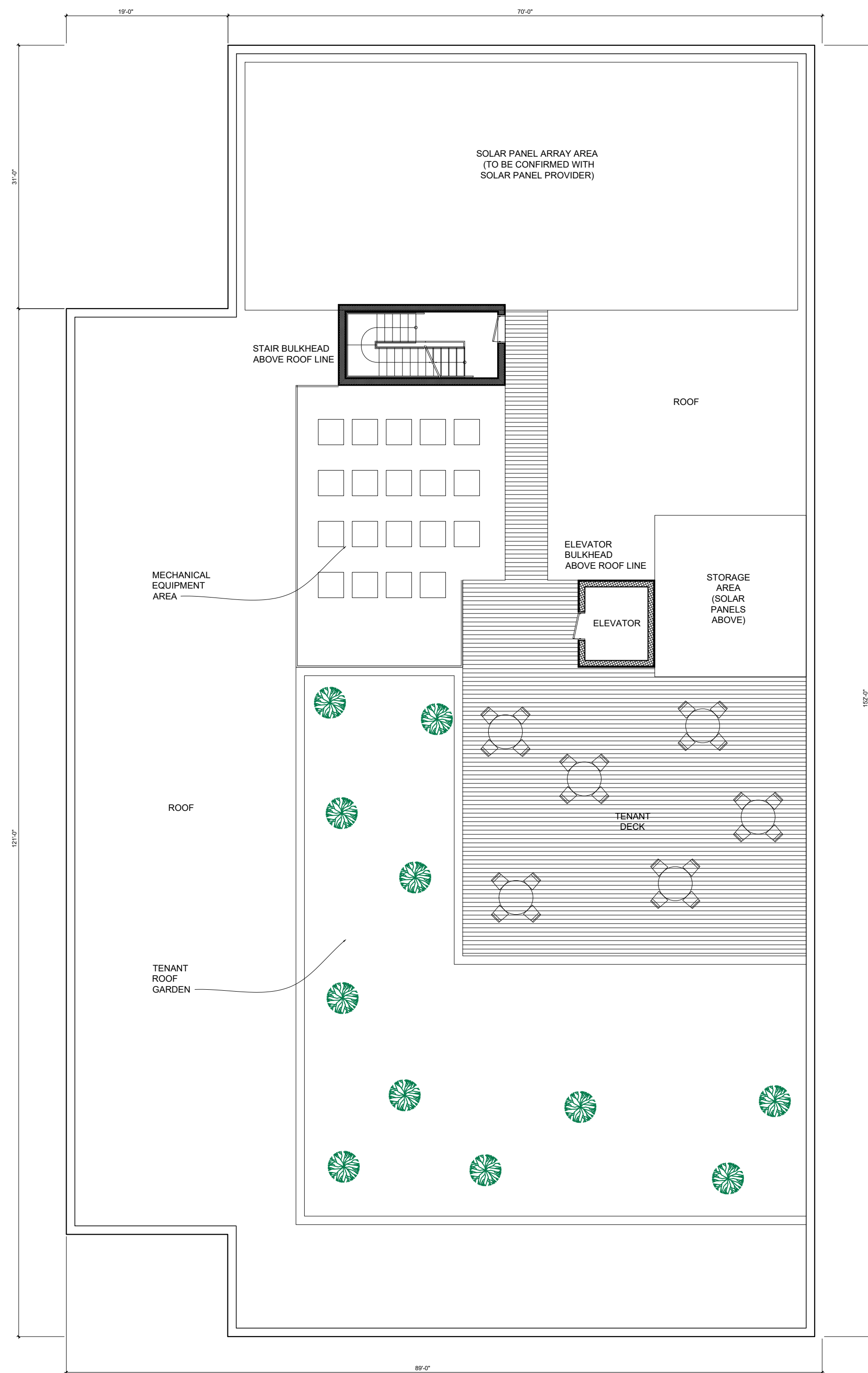
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**Site Plan Application**  
Sheet 2 of 14 - Existing Conditions & Demolition Plan



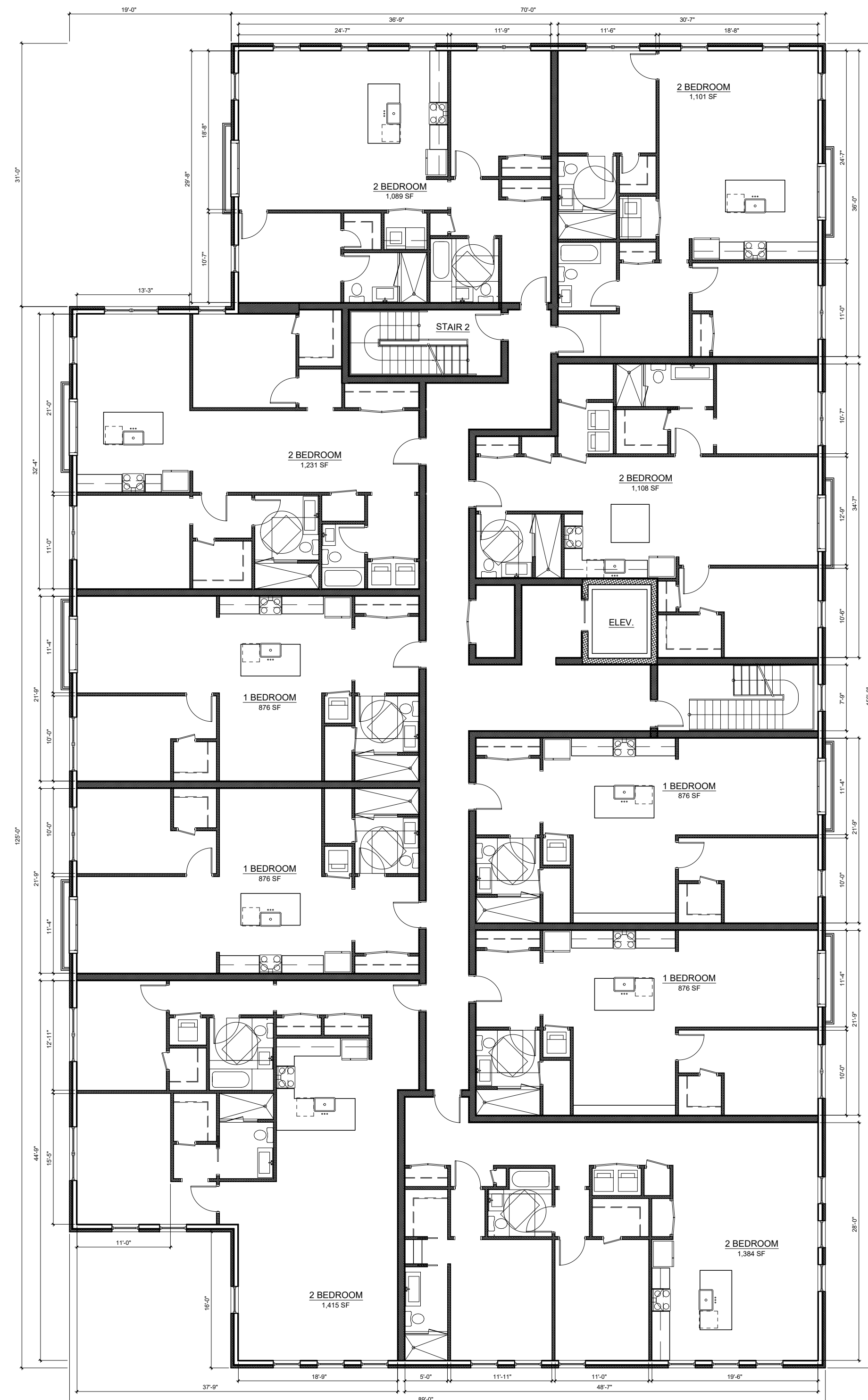
| Area Summary Table |                                                                                                                        |                        |
|--------------------|------------------------------------------------------------------------------------------------------------------------|------------------------|
| Floor              | Space                                                                                                                  | Area (Net Square Feet) |
| 1                  | Commercial 1                                                                                                           | 5,711                  |
|                    | Commercial 2                                                                                                           | 1,489                  |
|                    | Commercial 3                                                                                                           | 1,525                  |
|                    | <b>All Commercial</b>                                                                                                  | <b>10,639</b>          |
|                    | <i>Note that all commercial space includes demising walls. It is not the total of the individual commercial spaces</i> |                        |
|                    | 1st Floor Residential                                                                                                  | 1,607                  |
|                    |                                                                                                                        |                        |
|                    |                                                                                                                        |                        |
| 2                  | Residential                                                                                                            | 12,560                 |
|                    |                                                                                                                        |                        |
| 3                  | Residential                                                                                                            | 12,560                 |
|                    |                                                                                                                        | <b>37,365</b>          |

| REVISIONS: |          |                                     |     |
|------------|----------|-------------------------------------|-----|
| NO.        | DATE     | DESCRIPTION                         | BY  |
| 1          | 07/27/21 | REVISED PER PLANNING BOARD COMMENTS | AJS |
| 2          | 10/26/21 | 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 |
| 6          | 01/25/22 | REVISED PER PLANNING BOARD COMMENTS | AJS |
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|            |          |                                     |     |



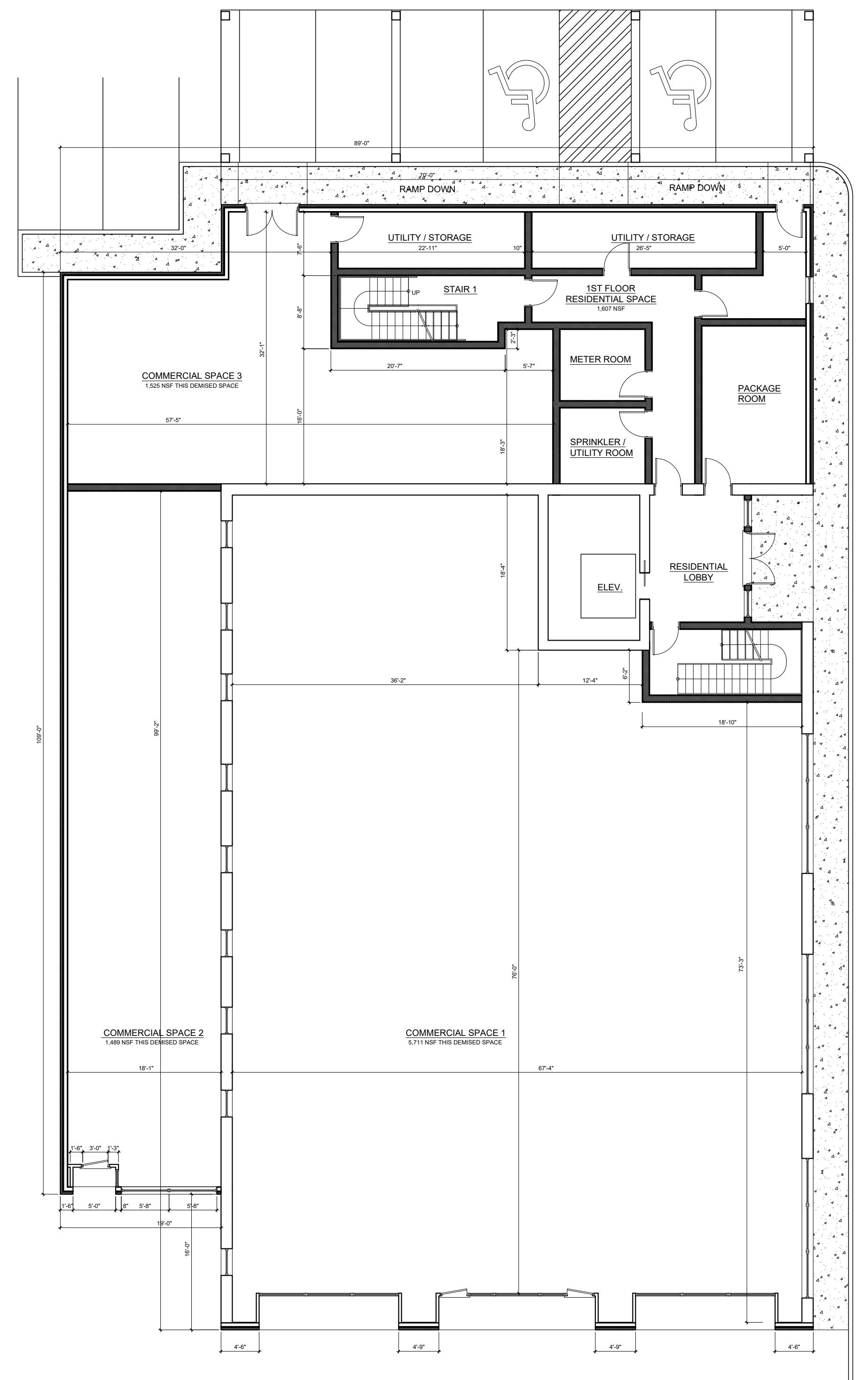
## Roof Plan

Scale:  $\frac{3}{32}" = 1'-0"$



## 2nd & 3rd Floor Plans

Scale:  $\frac{3}{32}" = 1'-0"$



## 1st Floor Plan

Scale:  $\frac{3}{32}" = 1'-0"$

# Site Plan Application

Sheet 4 of 14 - Building Plans

## 364 Main Street

Beacon, New York

Scale:  $\frac{3}{32}" = 1'-0"$   
May 25, 2021

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

**Architect:**  
**Aryeh Siegel, Architect**  
84 Mason Circle  
Fishkill, NY 12524

Architect:  
**Aryeh Siegel, Architect**

84 Mason Circle  
Beacon, New York 12508

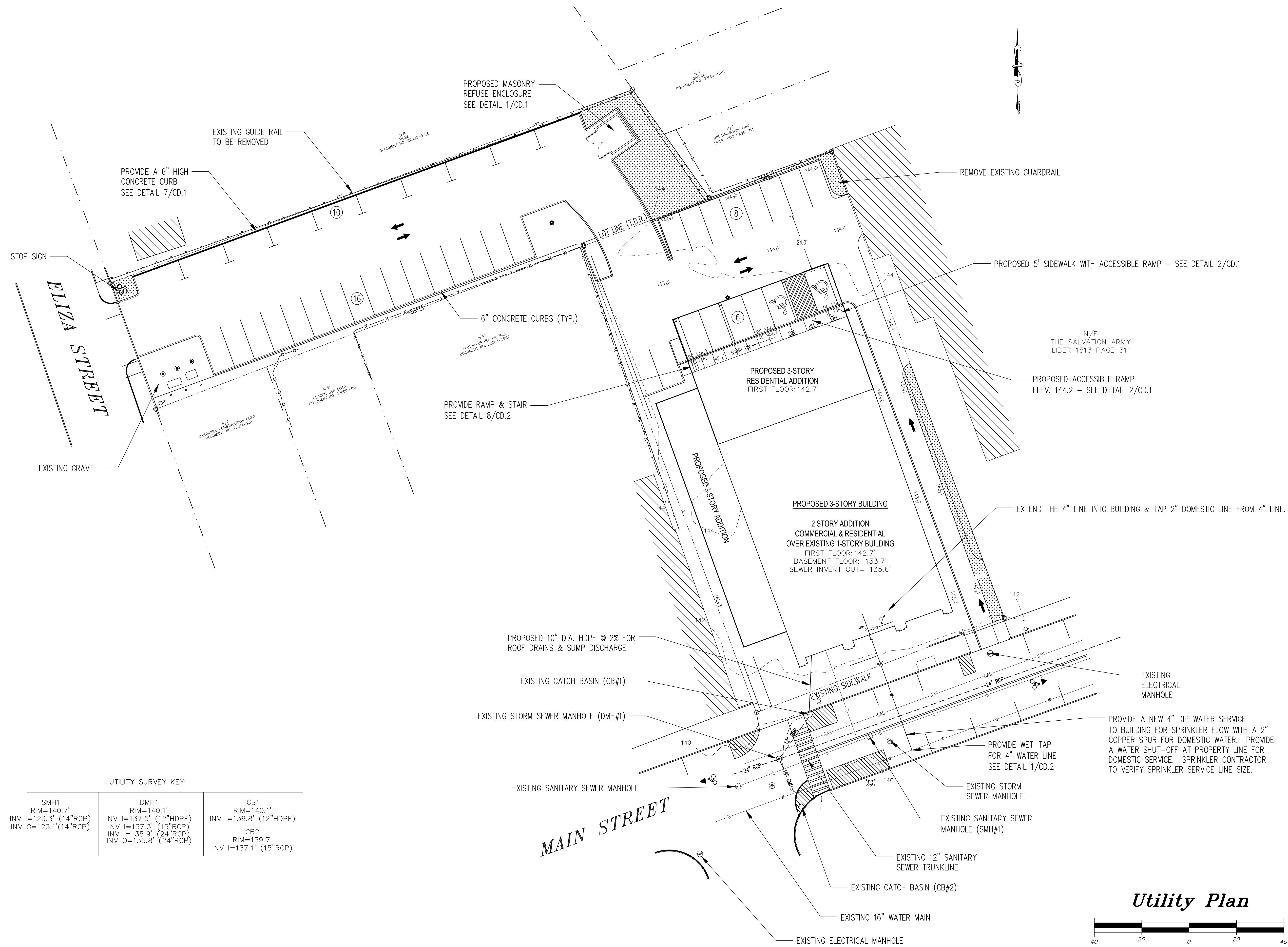
Site / Civil Engineer:  
**Day & Stokosa Engineering P.C**

3 Van Wyck Lane  
Wappingers Falls, New York 12590

*Landscape Designer:*  
**Landscape Restorations**

7 Creek Drive  
Beacon, New York 12508





| UTILITY SURVEY KEY:                                                  |                                                                                                                         |                                                                                               |
|----------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| SMH1<br>RIM=140.7'<br>INV I=123.3' (14"RCP)<br>INV O=123.1' (14"RCP) | DMH1<br>RIM=140.1'<br>INV I=137.5' (12"HDPE)<br>INV I=137.3' (15"RCP)<br>INV I=135.9' (24"RCP)<br>INV O=135.8' (24"RCP) | CB1<br>RIM=140.1'<br>INV I=138.8' (12"HDPE)<br><br>CB2<br>RIM=139.7'<br>INV I=137.1' (15"RCP) |

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.

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 |                    |
|                 |                    |
| 01-07-21        |                    |
| 12-21-21        |                    |
| 11-27-21        |                    |
| 08-27-21        |                    |
| 07-20-21        |                    |
| 2020.475        | License No. 069646 |

**DAY|STOKOSA**  
ENGINEERING P.C.

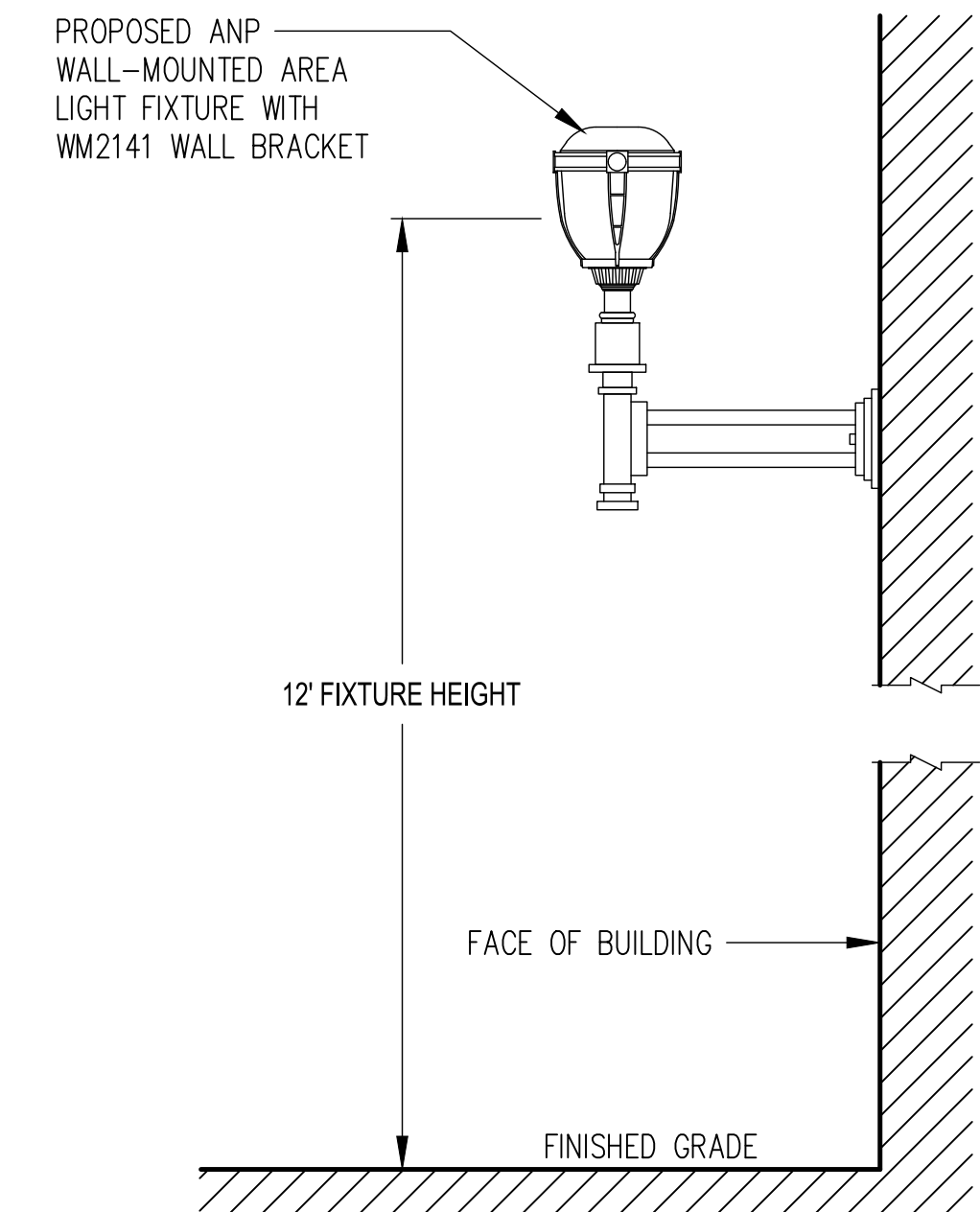
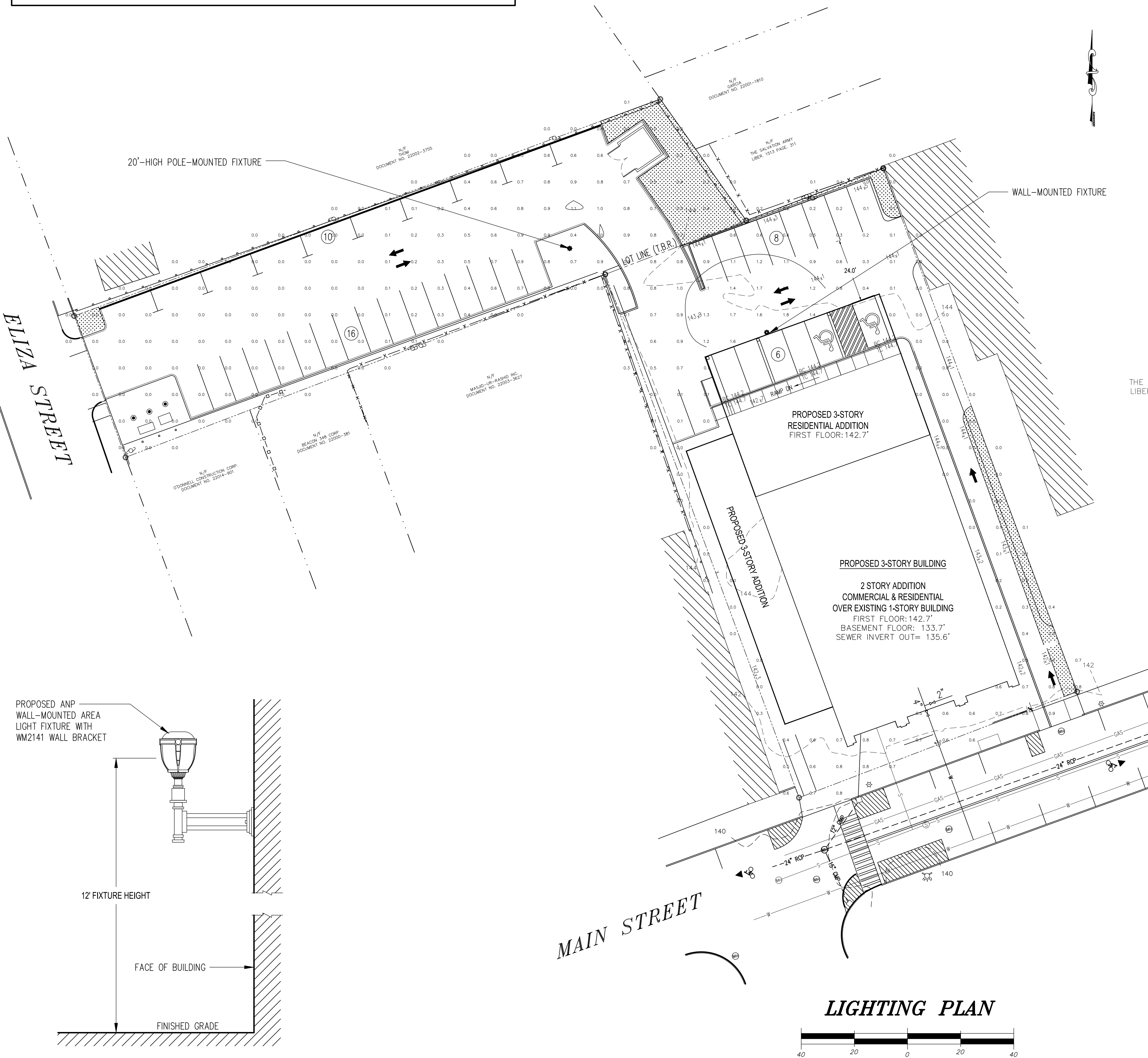
3 Van Wyck  
Lane Suite 2  
Wappingers Falls, New York  
(845)-223-3202

|                                                             |                   |                     |
|-------------------------------------------------------------|-------------------|---------------------|
| PROJECT                                                     |                   |                     |
| 364 Main Street<br>City of Beacon Dutchess County, New York |                   |                     |
| DRAWING                                                     |                   |                     |
| Utility Plan                                                |                   |                     |
| SCALE<br>1" = 20'                                           | DRAWN BY<br>MAD   | DRAWING NO.<br>UP.1 |
| DATE<br>04-02-21                                            | CHECKED BY<br>MAD | 6 of 14             |



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 |



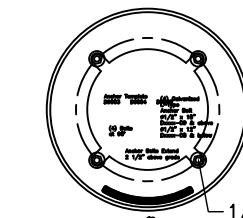
4 WALL-MOUNTED LIGHT FIXTURE DETAIL  
NOT TO SCALE



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



FIXTURE DETAILS

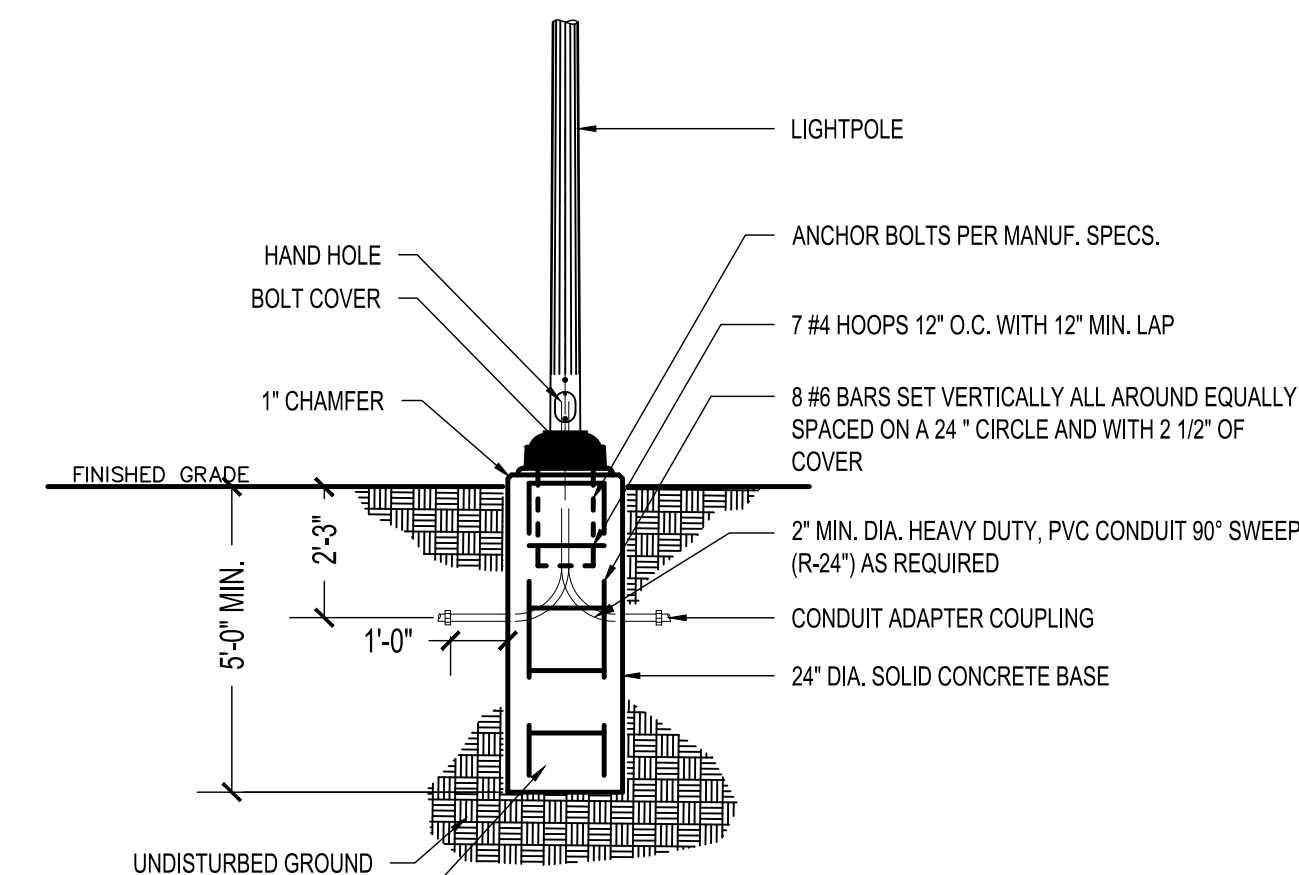
Materials  
Cast Aluminum Fitter  
Electrical  
4kv Pulse Rated Socket  
The Ballast used shall be of the  
High Power Factor design

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



- 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

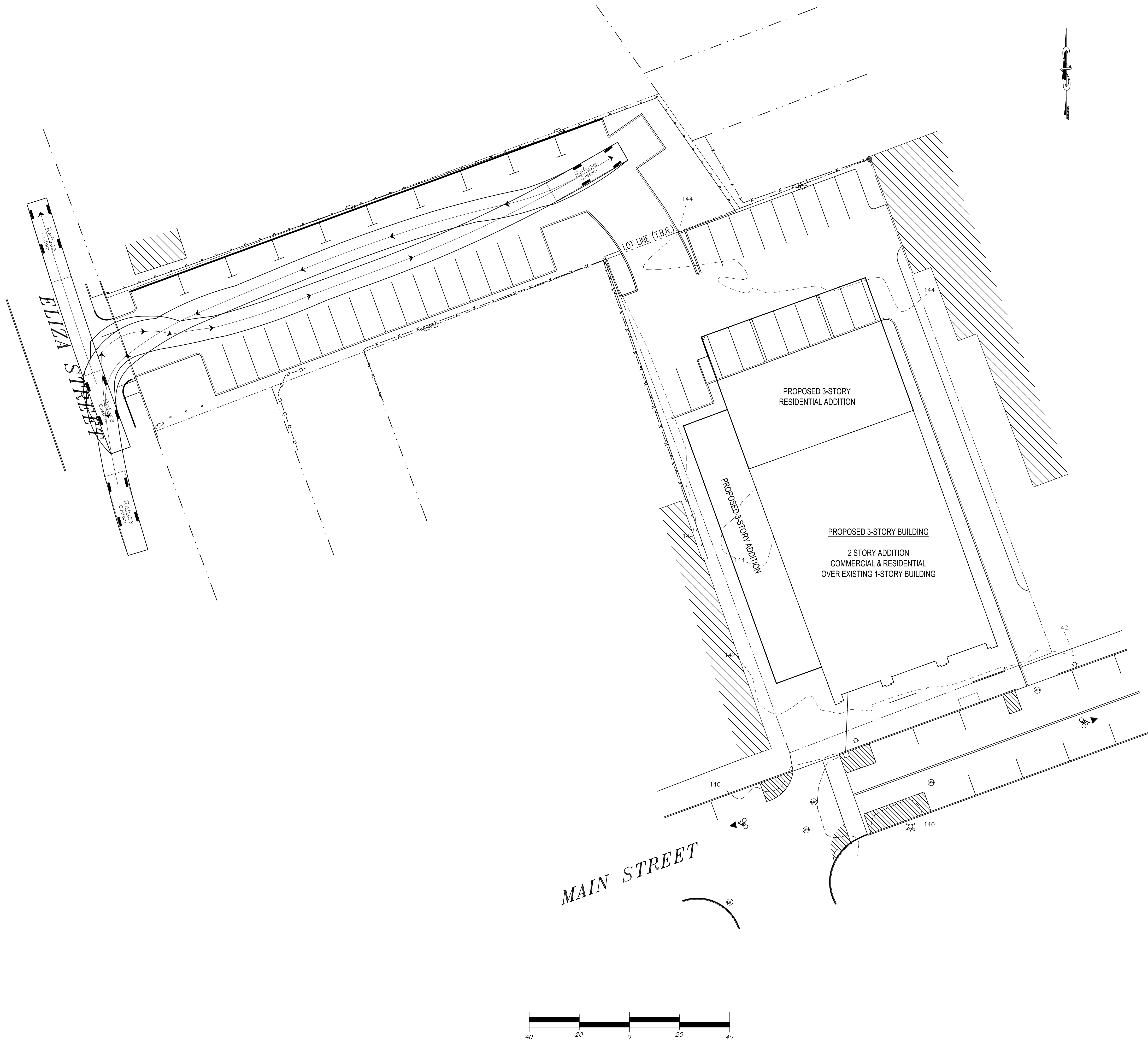
PARKING AND ACCESS EASEMENTS:

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

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                                                            |                   |
|                                                                            |                   |
| 01-07-21                                                                   | 12-21-21          |
| 11-27-21                                                                   | 08-27-21          |
| 07-20-21                                                                   | 2020.475          |
| License No. 069646                                                         |                   |
| <b>DAY STOKOSA</b><br>ENGINEERING P.C.                                     |                   |
| 3 Van Wyck<br>Lane Suite 2<br>Wappingers Falls, New York<br>(845)-223-3202 |                   |
| PROJECT<br>364 Main Street<br>City of Beacon Dutchess County, New York     |                   |
| DRAWING<br><b>Lighting Plan</b>                                            |                   |
| SCALE<br>1" = 20'                                                          | DRAWN BY<br>MAD   |
| DATE<br>04-02-21                                                           | CHECKED BY<br>MAD |
| LP.1<br>7 of 14                                                            |                   |





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|                 |                    |
|-----------------|--------------------|
| Mark A. Day, PE |                    |
|                 |                    |
| 01-07-21        |                    |
| 12-21-21        |                    |
| 11-27-21        |                    |
| 08-27-21        |                    |
| 07-20-21        |                    |
| Revisions       |                    |
| 2020.475        | License No. 069646 |

**DAY|STOKOSA**  
ENGINEERING P.C.

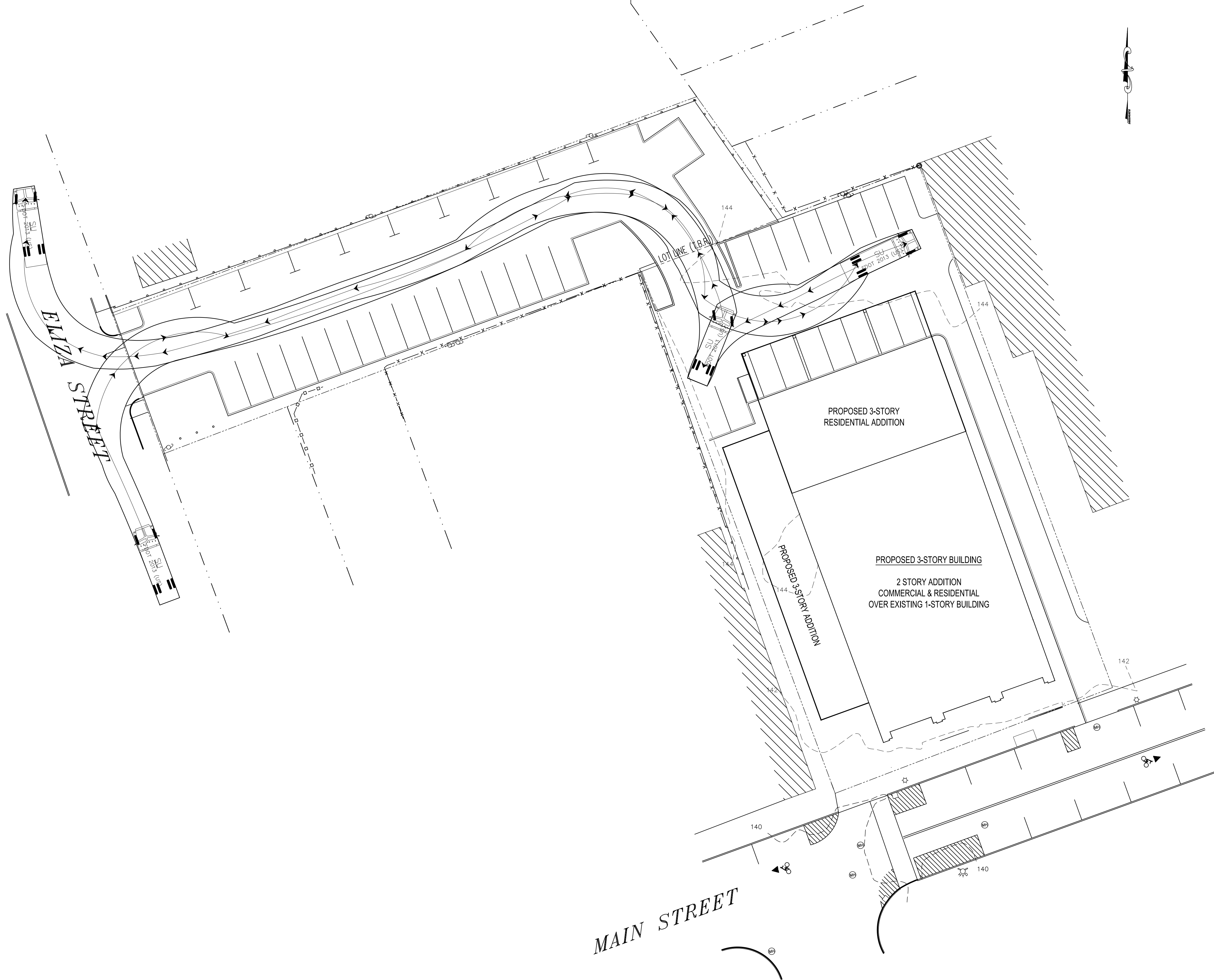
3 Van Wyck  
Lane Suite 2  
Wappingers Falls, New York  
(845)-223-3202

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

DRAWING  
**Refuse Truck Movement Plan**

|                   |                   |                                       |
|-------------------|-------------------|---------------------------------------|
| SCALE<br>1" = 20' | DRAWN BY<br>MAD   | DRAWING NO.<br><b>VM.1</b><br>8 of 14 |
| DATE<br>04-02-21  | CHECKED BY<br>MAD |                                       |





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    |
|             |                    |
|             |                    |
|             |                    |
|             | 01-07-21           |
|             | 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  
**30' Truck Movement Plan**

|                   |                   |                            |
|-------------------|-------------------|----------------------------|
| SCALE<br>1" = 20' | DRAWN BY<br>MAD   | DRAWING NO.<br><b>VM.2</b> |
| DATE<br>04-02-21  | CHECKED BY<br>MAD | 9 of 14                    |

# 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 Lanc, P.E., L.S.  
Arthur R. Tully, P.E.

February 3, 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 January 25, 2022, from Taylor Palmer, Esq. of Cuddy & Feder, LLP.
- Response correspondence dated January 25, 2022, from Aryeh Siegel, Architect.
- Response correspondence dated January 25, 2022, from Day/Stokosa Engineering.
- Response correspondence dated January 25, 2022, from Colliers Engineering.
- Updated Application for Site Plan Approval form. Dated January 25, 2022.
- A Full Environmental Assessment Form (EAF) dated January 24, 2022.
- Plan titled "Lot Line Change for The Lands of O'Donnell Construction Corp.", with the latest revision date of December 17, 2021, as prepared by Robert Oswald Land Surveying.
- Plans titled "364 Main Street", consisting of Sheets 1, 2 and 4 of 14, with the latest revision date of January 25, 2022, as prepared by Aryeh Siegel, Architect, and Sheets 6 through 14 of 14 with the latest revision date of January 7, 2022, 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 2<sup>nd</sup> 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 (10,638 sf) and a residential common area (1,607 sf) on the 1<sup>st</sup> floor, and 20 residential apartments to be located on the 2<sup>nd</sup> and 3<sup>rd</sup> floors totaling 25,120 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.

Lot Line Change Plan:

1. Note No. 3 on the lower left side of the plan shall be completed or removed.
2. Is there a utility easement associated with the number of utility poles that run along the south side of the parking lot off of Eliza Street? If so, this should be shown on the plan.

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.  
***Applicant's consultant notes that this will be provided on a future submission.***
2. A light pole is shown in the south-west corner of the parking lot, in the grass island adjacent to Eliza Street. Although this light pole is shown here, it does not appear on the Lighting Plan (Sheet 7 of 14). Is this light pole actually proposed? If so, then the lighting plan shall be updated to reflect this light pole.
3. The utility poles along the south side of the parking lot off of Eliza Street shall be shown on the plan, as it may impact the landscaping layout along edge of the parking lot.

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. ***Applicant's consultant notes that landscaping is being redesigned and will be submitted with a future submission.***
2. The plan shall include construction details for the planting of trees and shrubs. ***Applicant's consultant notes that this will be provided on a future submission.***

Utility Plan – Sheet 6 of 14 (UP.1):

1. A valve shall be shown at the wet tap location within Main Street.
2. If a valve is to be located on the 4" line prior to entering the building, the water shut off valve shown at the back of the sidewalk should be removed, or vice-versa.

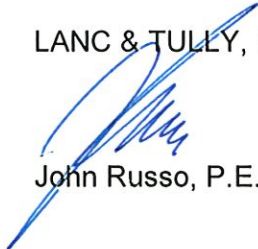
Lighting Plan – Sheet 7 of 14 (LP.1):

1. The plan should be updated to reflect the light pole noted in Comment No. 2 for Sheet 1 above.
2. The applicant should provide additional lighting within the Eliza Street parking lot towards the west side for the proposed parking at this end of the parking lot. As there is an excess of parking on the lot in comparison to what is required, we would recommend that one of the parking stalls be replaced with a landscaped island with a light pole.

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: February 3, 2022

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

I have reviewed the January 25, 2022 cover letter from Cuddy+Feder, January 25, 2022 revised Site Plan Application, January 25, 2022 response letter from Day Stokosa Engineering, January 25, 2022 response letter from Aryeh Siegel, Revised January 24, 2022 Long EAF Part 1, January 25, 2022 traffic/parking response letter by Colliers Engineering and Design, December 17, 2021 Lot Line Change sheet, and 12 sheets of a 14-sheet Site Plan set, with sheets 1, 2, and 4 dated January 25, 2022 and sheets 6-14 dated January 7, 2022.

### **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 10,638 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 and pavers area in front the building have been expanded since the last submission and appear more usable as a space that will enhance street life along Main Street. The applicant should provide specific area measurements, showing on the plans how the landscaped area was calculated to satisfy the minimum requirement.
  - b. The new frontage for the eastern storefront does not meet the minimum 8-foot sidewalk clearway between the proposed curving planter and the existing street tree well (see Section 223-41.18 H(2)).
  - c. The parking table's commercial square footage should match the EAF and other documents.
  - d. Details should be provided for the rear fence, front gate, benches, and east side railing.
2. Updated landscape plans, architectural illustrations, streetscape context renderings, and more detailed roof plans will be provided as part of the next submission.
3. The Lighting Plan should provide some full cutoff, non-glaring light fixtures near the Eliza Street parking lot entrance, along the eastern sidewalk, and at the side residential entrance, or offer evidence that the existing street lighting in the area is sufficient for site safety.
4. If the Natural Market is not interested in a rear access easement, the applicant has agreed to put a note on the plans that would allow for future owners to seek a negotiated access agreement.
5. The Lot Line Change sheet lists as property info 365 Main Street, not 364.



Page 2, February 3, 2022 memo for 364 Main Street

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

February 7, 2022



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

RE: **Site Plan, Traffic and Parking Study Review #5 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 Chairperson Gunn:

Creighton Manning Engineering, LLP (CM) has performed a review of the documents enclosed in the "2201125\_364 Main Street PB Submission" (Submittal Package). Since CM's fourth review letter, dated January 7, 2022, the project has been modified such that the commercial space on the first floor is 1,819 square feet larger. Therefore, the proposed project now consists of a 10,638-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.

Comment from Review Letters 1-4 have been addressed. The comments herein are new comments based on the most recent iteration of the development plan.

#### **Site Plan**

1. The proposed development now includes a 10,638-square-foot commercial space. The Site Plan still indicates the parking requirements for the previous development plan which included an 8,819-square-foot commercial space. Based on the new development plan, the commercial space will require 22 spaces. Along with the 20 spaces required for the apartments, the site now requires 42 parking spaces. Please update the Parking and Loading Table on the Site Plan.

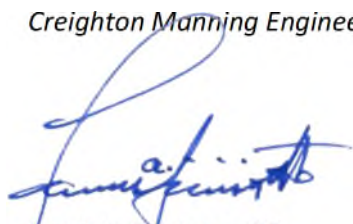
#### **Traffic Impact Study**

1. The most recent Traffic Impact Study considered a 9,451-square-foot commercial space. Based on ITE Trip Generation rates, the site would generate 28 total trips during the weekday morning peak hour, 75 total trips during the weekday evening peak hour, and 62 total trips during the Saturday midday peak hour. The proposed development now includes a 10,638-square-foot commercial space. Based on ITE Trip Generation rates, the commercial use would generate 30 total trips during the weekday morning peak hour, 81 total trips during the weekday evening peak hour, and 72 total trips during the Saturday midday peak hour.
2. Colliers did not provide an updated Traffic Impact Study which considered the increased commercial use square-footage. However, the level of service analysis conducted for the 9,451-square-foot commercial space indicates that the study intersections will operate at an acceptable LOS B or better during all study periods. When compared to the trip generation of the previously considered commercial use's square-footage, the greatest increase in trip generation is 10 trips during the Saturday midday peak hour. Qualitatively, the study intersections will likely continue to operate at acceptable levels of service with the increase in site-generated trips.

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

N:\Projects\2021\121-295 Beacon - 2021 Traffic Reviews\Working\Correspondence\364 Main Street\364 Main Street\_Review 5.docx



**City of Beacon Planning Board Agenda**  
**02/08/2022**

**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 Sheet 2 Full Site Plan.pdf](#)

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

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

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

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

[1113 Wolcott Avenue Sheet 11 Site Details.pdf](#)

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

[1113 Wolcott Avenue Sheet 13 Water & Sewer Details.pdf](#)

[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 Sheet 1 Site Plan.pdf](#)

[Engineer Review Letter.pdf](#)

[Planner Review Letter.pdf](#)

[1113 Wolcott Avenue Sheet 2 Revised.pdf](#)

[1113 Wolcott Avenue Sheet 4 Revised.pdf](#)

Traffic Engineer Review Letter.pdf





| 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 |
| 5          | 01/25/22 | 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

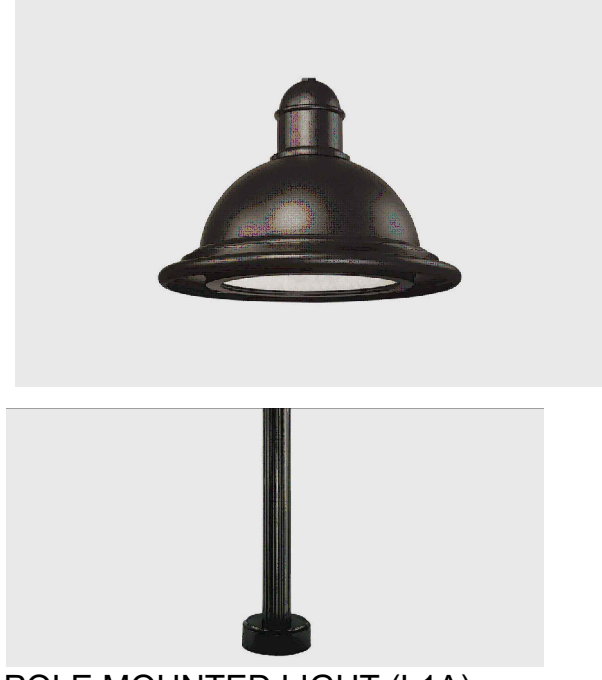
Site / Civil Engineer:  
**Hudson Land Design**  
174 Main Street  
Beacon, New York 12508

Surveyor:  
**Robert Oswald**  
175 WALSH ROAD PO BOX 1  
LAGRANGEVILLE, NEW YORK 12540

Landscape Designer:  
**Landscape Restorations**  
7 Creek Drive  
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



WALL MOUNTED HOUSE LIGHT (L2)

MATCH EXISTING BUILDING MOUNTED LIGHTS ON CHURCH. PROVIDE CUSTOM FABRICATED LIGHTING IF A SUITABLE MATCH CANNOT BE FOUND FROM AVAILABLE MANUFACTURERS.



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 DIAGRAMS ARE SHOWN WITH SHIELDED CONDITIONS.

## Planting Schedule

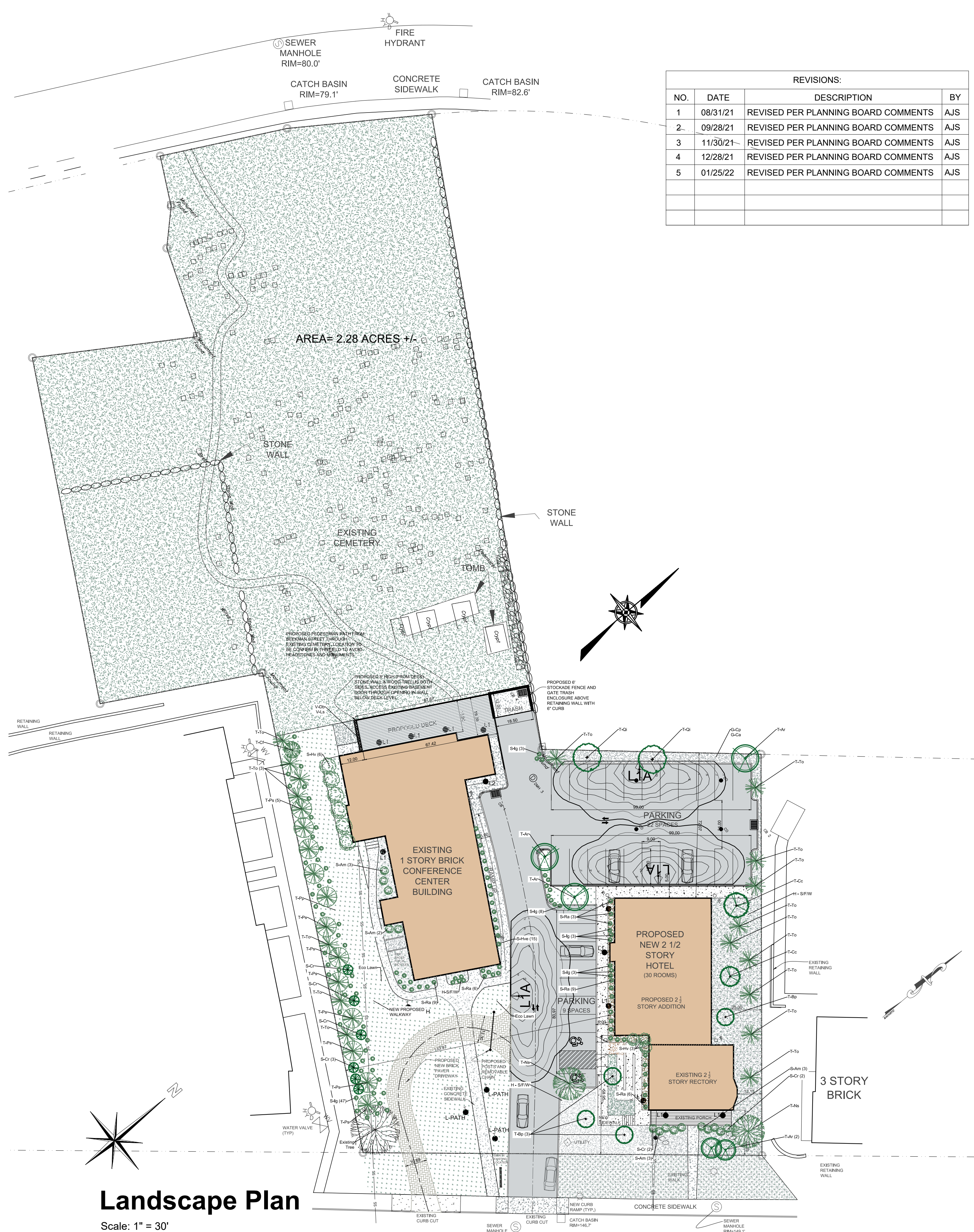
| Symbol  | Quantity | Type       | Common Name            | Botanical Name             | Size     | Planting Time          |
|---------|----------|------------|------------------------|----------------------------|----------|------------------------|
| T-Ar    | 3        | Tree       | Red Maple              | Acer rubrum                | 7'-8"    | Spring/Fall            |
| T-Bp    | 3        | Tree       | Grey Birch             | Betula populifolia         | 7'-8"    | Spring/Fall            |
| T-Cc    | 2        | Tree       | Eastern Redbud         | Cercis canadensis          | 6'-7"    | Spring/Fall            |
| T-Cf    | 1        | Tree       | Flowering Dogwood      | Cornus florida             | 6'-7"    | Spring/Fall            |
| T-Ns    | 2        | Tree       | Blackgum               | Nyssa sylvatica            | 7'-8"    | Spring/Fall            |
| T-Pp    | 12       | Tree       | White Pine             | Pinus strobus              | 7'-8"    | Spring/Fall            |
| T-Pp    | 1        | Tree       | Wild Red Cherry        | Prunus pensylvanica        | 7'-8"    | Spring/Fall            |
| T-Qi    | 2        | Tree       | Bear Oak               | Quercus illicifolia        | 7'-8"    | Spring/Fall            |
| T-To    | 14       | Tree       | Arbutus 'Nigra'        | Thuja occidentalis 'Nigra' | 7'-8"    | Spring/Fall            |
| S-Am    | 5        | Shrub      | Black Chokeberry       | Aronia melanocarpa         | 3 Gallon | Spring/Fall            |
| S-Cr    | 7        | Shrub      | Gray Dogwood American  | Cornus racemosa            | 3 Gallon | Spring/Fall            |
| S-He    | 15       | Shrub      | Ozark Witch-hazel      | Hamamelis vernalis         | 3 Gallon | Spring/Fall            |
| S-Hv    | 9        | Shrub      | Witch-hazel            | Hamamelis virginiana       | 3 Gallon | Spring/Fall            |
| S-Ig    | 61       | Shrub      | Inkberry               | Ilex glabra                | 3 Gallon | Spring/Fall            |
| S-Ra    | 33       | Shrub      | Low-grow Sumac         | Rhus aromatica             | 3 Gallon | Spring/Fall            |
| H-S/F/W | 15       | Fern       | Christmas Fern         | Polystichum aristichoides  | 1 Gallon | Spring, Summer or Fall |
| H-S/F/W | 20       | Herbaceous | White Wood Aster       | Aster divaricatus          | Plugs    | Spring, Summer or Fall |
| H-S/F/W | 20       | Herbaceous | Wild Geranium          | Geranium maculatum         | Plugs    | Spring, Summer or Fall |
| H-S/F/W | 20       | Herbaceous | Creeping Phlox         | Phlox stollifera           | Plugs    | Spring, Summer or Fall |
| H-S/F/W | 20       | Herbaceous | Blue-stemmed Goldenrod | Solidago caesia            | Plugs    | Spring, Summer or Fall |
| H-S/F/W | 20       | Herbaceous | Blue Wood Aster        | Symphyotrichum cordifolia  | Plugs    | Spring, Summer or Fall |
| H-S/F/W | 20       | Herbaceous | Frost Aster            | Symphyotrichum pilosum     | Plugs    | Spring, Summer or Fall |
| V-Ob    | 25       | Vine       | Climbing Hydrangea     | Decumaria barbara          | Plugs    | Spring, Summer or Fall |
| V-Ls    | 25       | Vine       | Trumpet Honeysuckle    | Lonicera sempervirens      | Plugs    | Spring, Summer or Fall |
| G-Ca    | 100      | Grass      | Appalachian Sedge      | Carex appalachica          | Plugs    | Spring, Summer or Fall |
| G-Cp    | 100      | Grass      | Pennsylvania Sedge     | Carex pennsylvanica        | Plugs    | Spring, Summer or Fall |
| G-Eg    | 10       | Grass      | Eco Grass              | Eco Lawn                   | Seed     | Spring/Fall            |

## 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.
- PerVIOUS/Permeable Pavers and associated grass seeding shall be installed by contractor with experience in this process. This process requires establishment maintenance, in order to succeed.
- Bermed areas shall be built with designer directing construction.
- Street tree and surrounding tree-pit shall be installed by contractor experienced with these materials and approved by designer.
- All plants require regular watering for the first two seasons to succeed.

## Illustrated Plant List

|                                                                                                                  |                                                                                                           |                                                                                                          |                                                                                                            |
|------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| <br>Polystichum aristichoides...<br>A. COMMON NAME: Christmas Fern<br>A. TYPE: Fern<br>B. IMAGES: [Image]        | <br>Carex appalachica<br>A. COMMON NAME: Appalachian Sedge<br>A. TYPE: Grass<br>B. IMAGES: [Image]        | <br>Carex pennsylvanica<br>A. COMMON NAME: Pennsylvania Sedge<br>A. TYPE: Grass<br>B. IMAGES: [Image]    | <br>Eco Lawn<br>A. COMMON NAME: Eco Grass<br>A. TYPE: Grass<br>B. IMAGES: [Image]                          |
| <br>Aster divaricatus<br>A. COMMON NAME: White Wood Aster<br>A. TYPE: Herbaceous<br>B. IMAGES: [Image]           | <br>Geranium maculatum<br>A. COMMON NAME: Wild Geranium<br>A. TYPE: Herbaceous<br>B. IMAGES: [Image]      | <br>Phlox stollifera<br>A. COMMON NAME: Creeping Phlox<br>A. TYPE: Herbaceous<br>B. IMAGES: [Image]      | <br>Solidago caesia<br>A. COMMON NAME: Blue-stemmed Goldenrod<br>A. TYPE: Herbaceous<br>B. IMAGES: [Image] |
| <br>Symphyotrichum cordifolia...<br>A. COMMON NAME: Blue Wood Aster<br>A. TYPE: Herbaceous<br>B. IMAGES: [Image] | <br>Symphyotrichum pilosum<br>A. COMMON NAME: Frost Aster<br>A. TYPE: Herbaceous<br>B. IMAGES: [Image]    | <br>Tiarella cordifolia<br>A. COMMON NAME: Foam Flower<br>A. TYPE: Herbaceous<br>B. IMAGES: [Image]      | <br>Aronia melanocarpa<br>A. COMMON NAME: Black Chokeberry<br>A. TYPE: Shrub<br>B. IMAGES: [Image]         |
| <br>Cornus racemosa<br>A. COMMON NAME: Gray Dogwood<br>A. TYPE: Shrub<br>B. IMAGES: [Image]                      | <br>Hamamelis vernalis<br>A. COMMON NAME: Ozark Witch-hazel<br>A. TYPE: Shrub<br>B. IMAGES: [Image]       | <br>Hamamelis virginiana<br>A. COMMON NAME: American Witch-hazel<br>A. TYPE: Shrub<br>B. IMAGES: [Image] | <br>Ilex glabra<br>A. COMMON NAME: Shrub<br>A. TYPE: Shrub<br>B. IMAGES: [Image]                           |
| <br>Rhus aromatica Le Gro<br>A. COMMON NAME: Fragrant Sumac<br>A. TYPE: Shrub<br>B. IMAGES: [Image]              | <br>Acer rubra<br>A. COMMON NAME: Red Maple<br>A. TYPE: Tree<br>B. IMAGES: [Image]                        | <br>Betula populifolia<br>A. COMMON NAME: Grey Birch<br>A. TYPE: Tree<br>B. IMAGES: [Image]              | <br>Cercis canadensis<br>A. COMMON NAME: Eastern Redbud<br>A. TYPE: Tree<br>B. IMAGES: [Image]             |
| <br>Cornus florida<br>A. COMMON NAME: Flowering Dogwood<br>A. TYPE: Tree<br>B. IMAGES: [Image]                   | <br>Nyssa sylvatica<br>A. COMMON NAME: Blackgum<br>A. TYPE: Tree<br>B. IMAGES: [Image]                    | <br>Pinus strobus<br>A. COMMON NAME: White Pine<br>A. TYPE: Tree<br>B. IMAGES: [Image]                   | <br>Prunus pensylvanica<br>A. COMMON NAME: Wild Red Cherry<br>A. TYPE: Tree<br>B. IMAGES: [Image]          |
| <br>Quercus illicifolia<br>A. COMMON NAME: Bear Oak<br>A. TYPE: Tree<br>B. IMAGES: [Image]                       | <br>Thuja occidentalis 'Nigra'<br>A. COMMON NAME: Arborvitae Nigra<br>A. TYPE: Tree<br>B. IMAGES: [Image] | <br>Viburnum prunifolium<br>A. COMMON NAME: Blackhaw<br>A. TYPE: Tree<br>B. IMAGES: [Image]              | <br>Decumaria barbara<br>A. COMMON NAME: Climbing Hydrangea<br>A. TYPE: Vine<br>B. IMAGES: [Image]         |
| <br>Lonicera sempervirens<br>A. COMMON NAME: Trumpet Honeysuckle<br>A. TYPE: Vine<br>B. IMAGES: [Image]          |                                                                                                           |                                                                                                          |                                                                                                            |



## 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

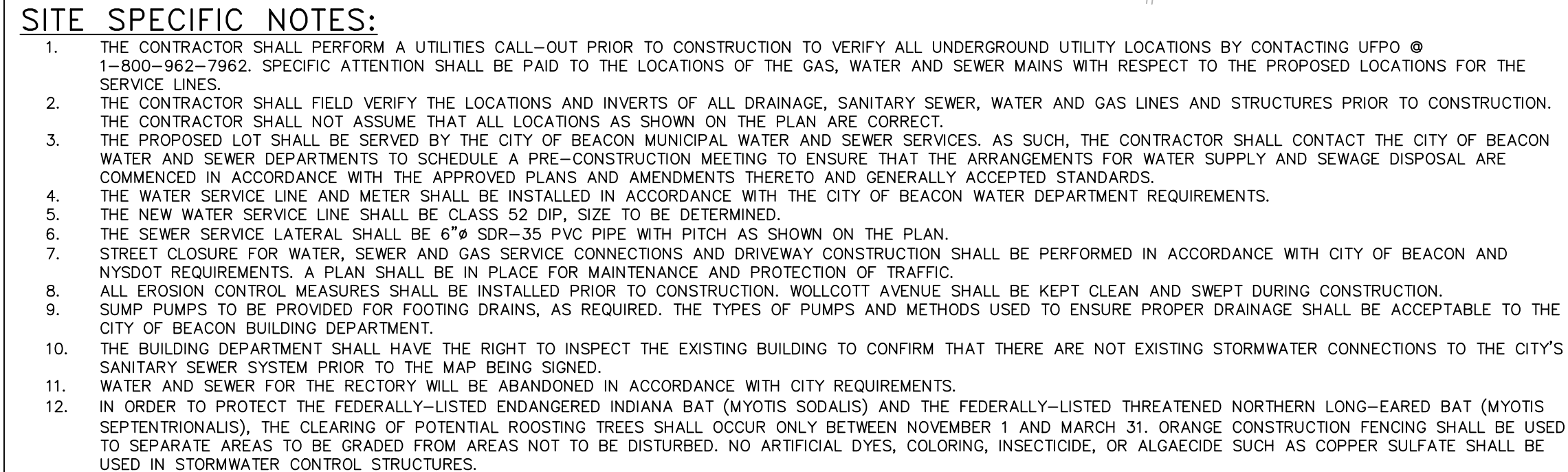
Site / Civil Engineer:  
**Hudson Land Design**  
174 Main Street  
Beacon, New York 12508

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





|               |          |                             |     |     |                 |             |    |  |  |
|---------------|----------|-----------------------------|-----|-----|-----------------|-------------|----|--|--|
| DRAWN BY: ESR |          |                             |     |     | CHECKED BY: MAB |             |    |  |  |
| REVISED:      |          |                             |     |     | 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 |     |                 |             |    |  |  |
| 4             | 1/25/22  | PER PLANNING BOARD COMMENTS | CMB |     |                 |             |    |  |  |
|               |          |                             |     |     |                 |             |    |  |  |
|               |          |                             |     |     |                 |             |    |  |  |

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
3. 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.
4. BLASTING PROTOCOL SHALL BE IN ACCORDANCE WITH §111 OF THE CITY OF BEACON CODE.

|  |                               |
|--|-------------------------------|
|  | 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          |

1. SNOW SHALL BE REMOVED WITHIN 8 HOURS AFTER A SNOW EVENT

THE SIGHT DISTANCES AT THE PROPOSED DRYDEN 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 9D WILL BE SATISFIED. AVAILABLE NYSOT SPEED DATA FOR ROUTE 9D 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.

( IN FEET )  
1 inch = 30 ft.

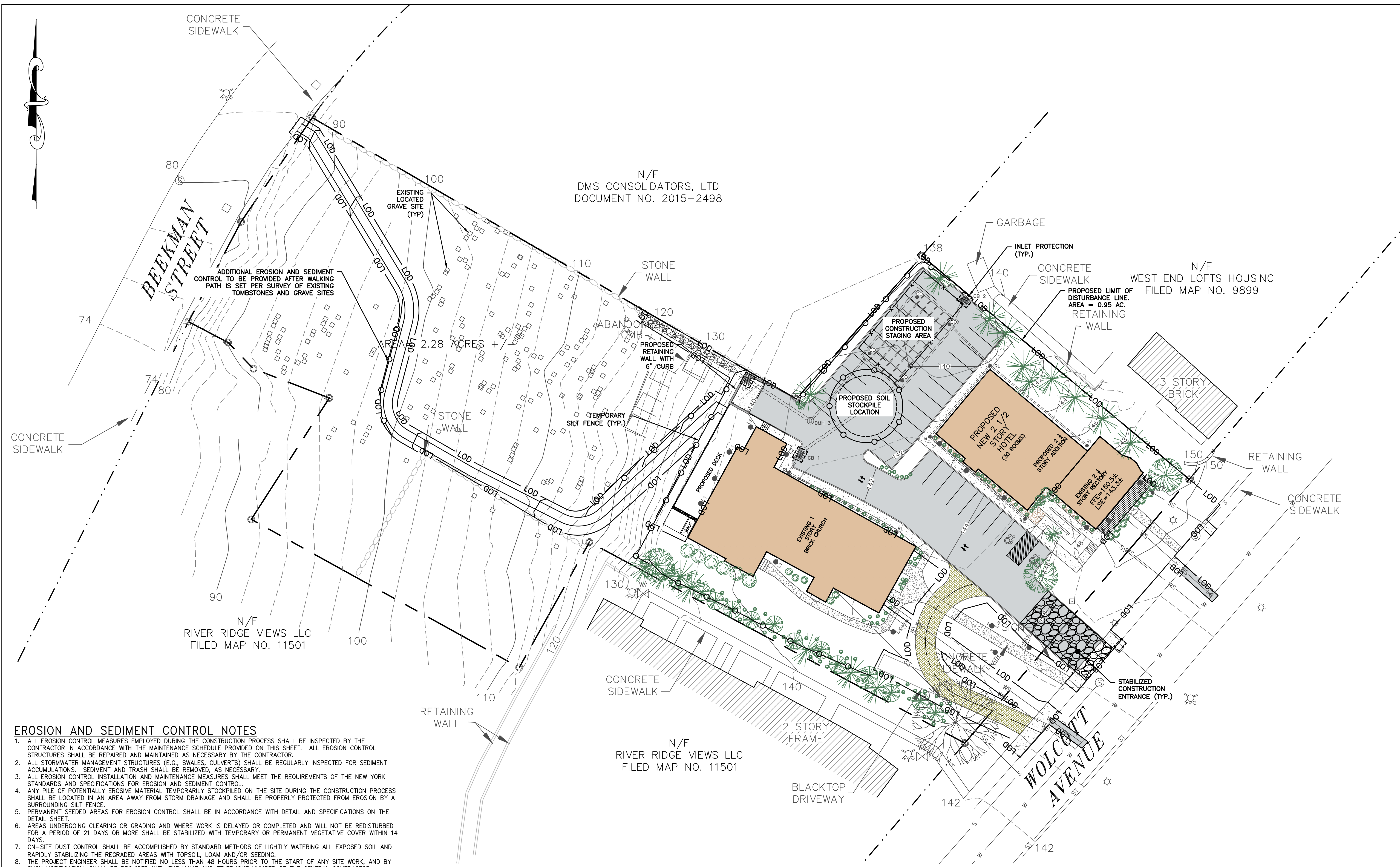


UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION LAW

1113 WOLCOTT AVENUE  
CITY OF BEACON  
DUTCHESS COUNTY, NEW YORK  
TAX ID: 5954-26-651901

SHEET: 8 OF 13





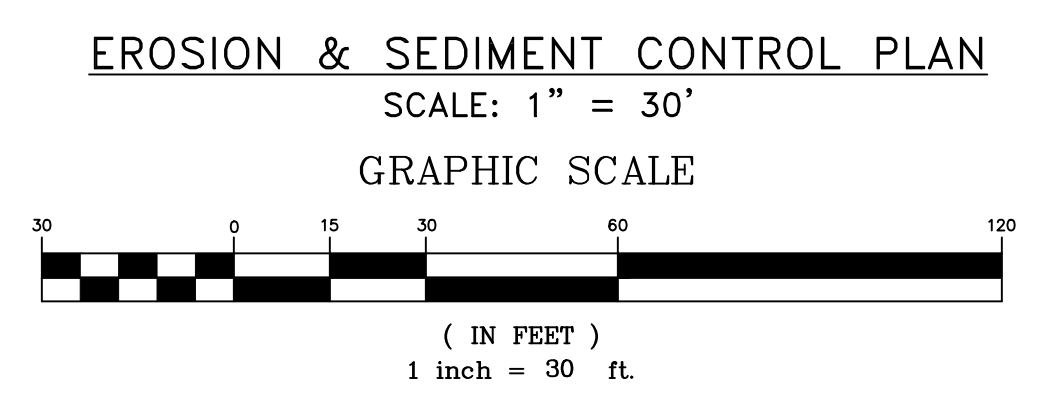
- EROSION AND SEDIMENT CONTROL NOTES**
- ALL EROSION CONTROL MEASURES EMPLOYED DURING THE CONSTRUCTION PROCESS SHALL BE INSPECTED BY THE CONTRACTOR IN ACCORDANCE WITH THE MAINTENANCE SCHEDULE PROVIDED ON THIS SHEET. ALL EROSION CONTROL STRUCTURES SHALL BE REPAIRED AND MAINTAINED AS NECESSARY BY THE CONTRACTOR.
  - ALL STORMWATER MANAGEMENT STRUCTURES (E.G., SWALES, CULVERTS) SHALL BE REGULARLY INSPECTED FOR SEDIMENT ACCUMULATIONS. SEDIMENT AND TRASH SHALL BE REMOVED, AS NECESSARY.
  - ALL EROSION CONTROL INSTALLATION AND MAINTENANCE MEASURES SHALL MEET THE REQUIREMENTS OF THE NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL.
  - 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.
  - PERMANENT SEEDED AREAS FOR EROSION CONTROL SHALL BE IN ACCORDANCE WITH DETAIL AND SPECIFICATIONS ON THE DETAIL SHEET.
  - 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.
  - 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.
  - 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.
  - 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.
  - 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.
  - 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.
  - 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.
  - 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.
  - 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:**
- THE CONTRACTOR SHALL EMPLOY SOIL RESTORATION TO ALL DISTURBED AREAS THAT WILL REMAIN LANDSCAPED.
  - 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.
  - 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.

| 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 |                 |      |             |    |
| 4             | 1/25/22  | PER PLANNING BOARD COMMENTS | MAB |                 |      |             |    |
|               |          |                             |     |                 |      |             |    |
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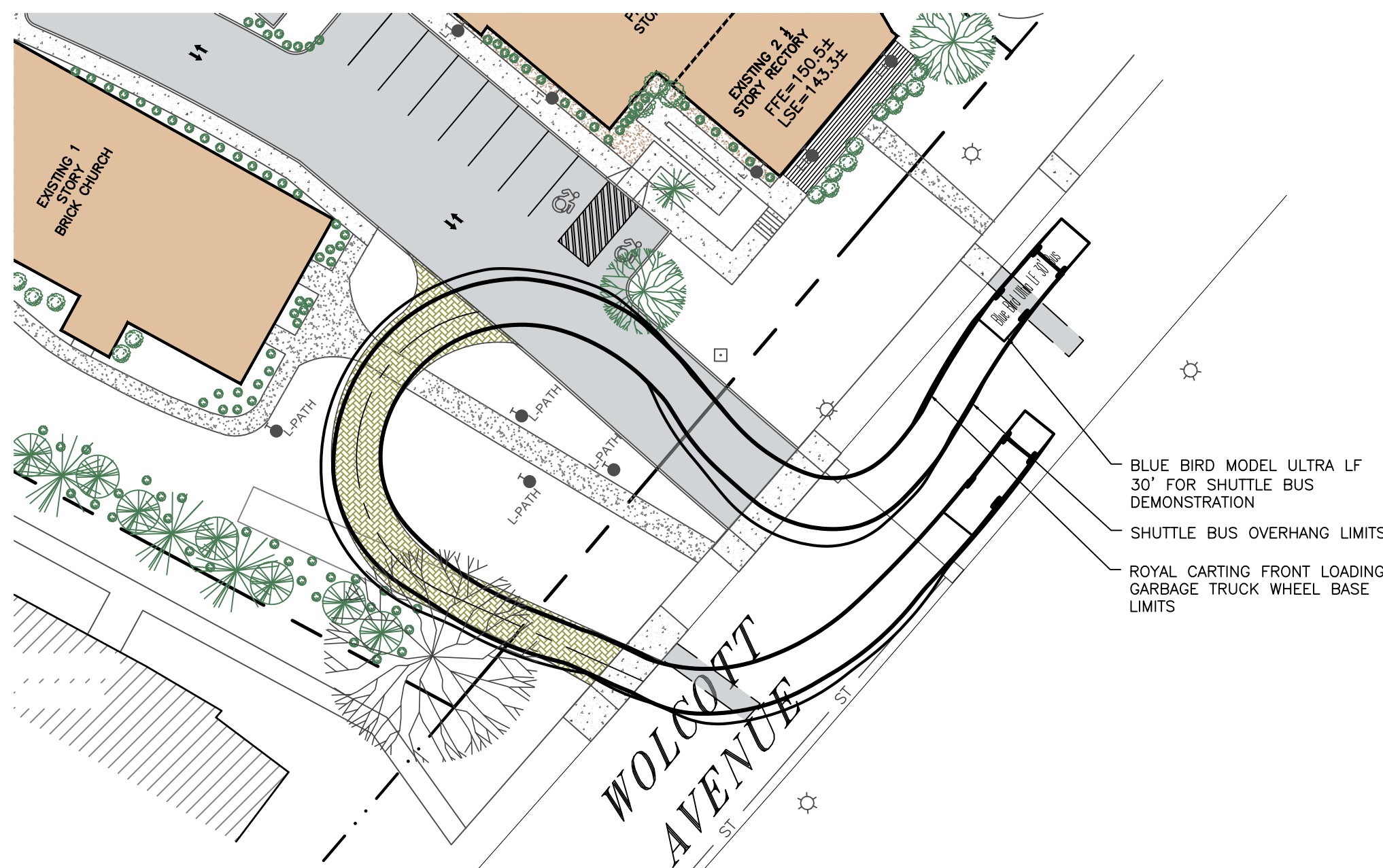


**HUDSON LAND DESIGN**

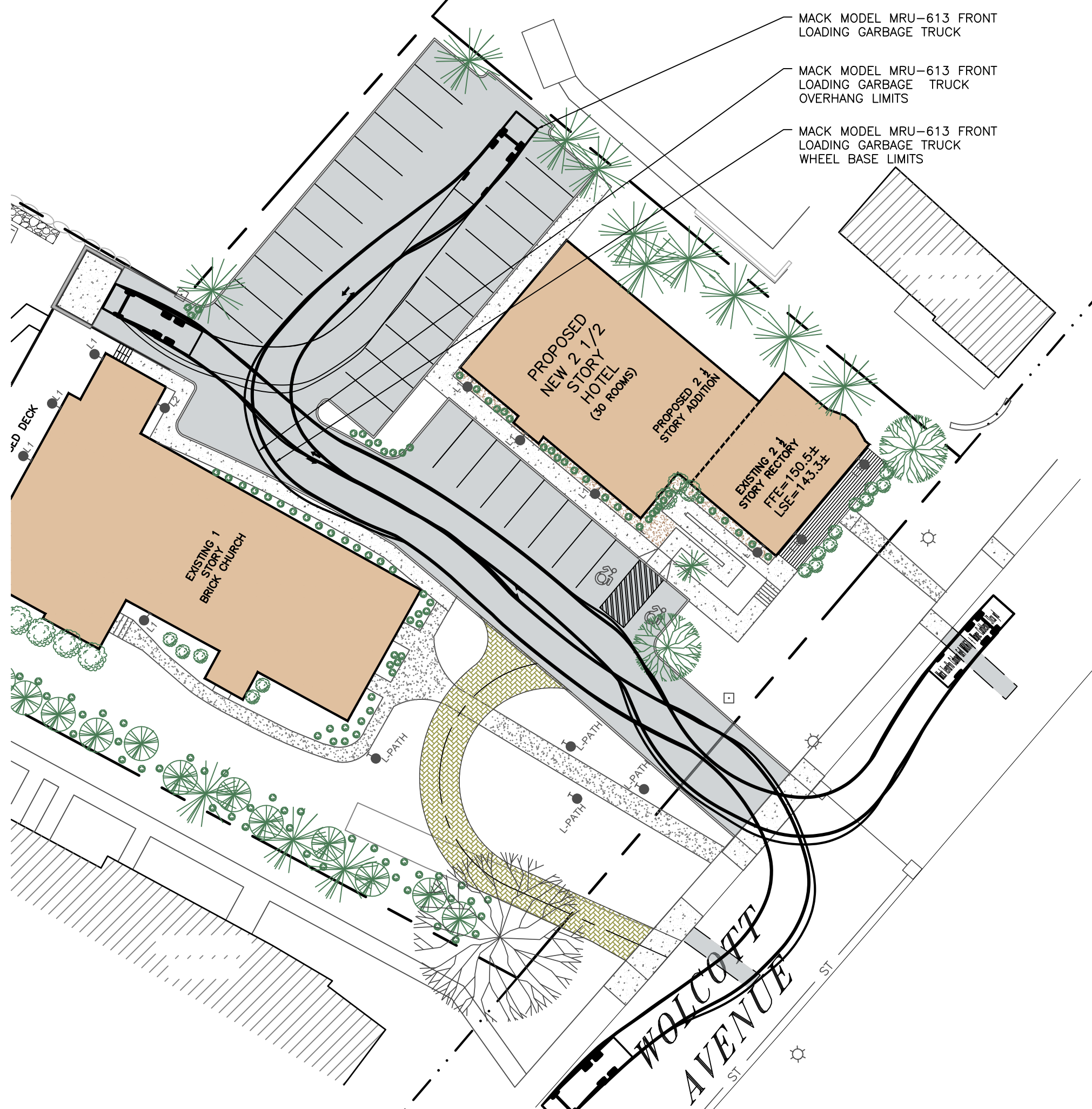
HUDSON LAND DESIGN  
PROFESSIONAL ENGINEERING P.C.  
174 MAIN ST., BEACON, NEW YORK 12508  
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550  
P: 845-440-6926  
F: 845-440-6637

| EROSION & SEDIMENT CONTROL PLAN                                                              |  | JOB #: 2021-022 |
|----------------------------------------------------------------------------------------------|--|-----------------|
| 1113 WOLCOTT AVENUE                                                                          |  | DATE: 6/29/2021 |
| 1113 WOLCOTT AVENUE<br>CITY OF BEACON<br>DUTCHESS COUNTY, NEW YORK<br>TAX ID: 5954-26-651901 |  | SCALE: 1" = 30' |
|                                                                                              |  | TITLE: EC-1     |
|                                                                                              |  | SHEET: 9 OF 13  |

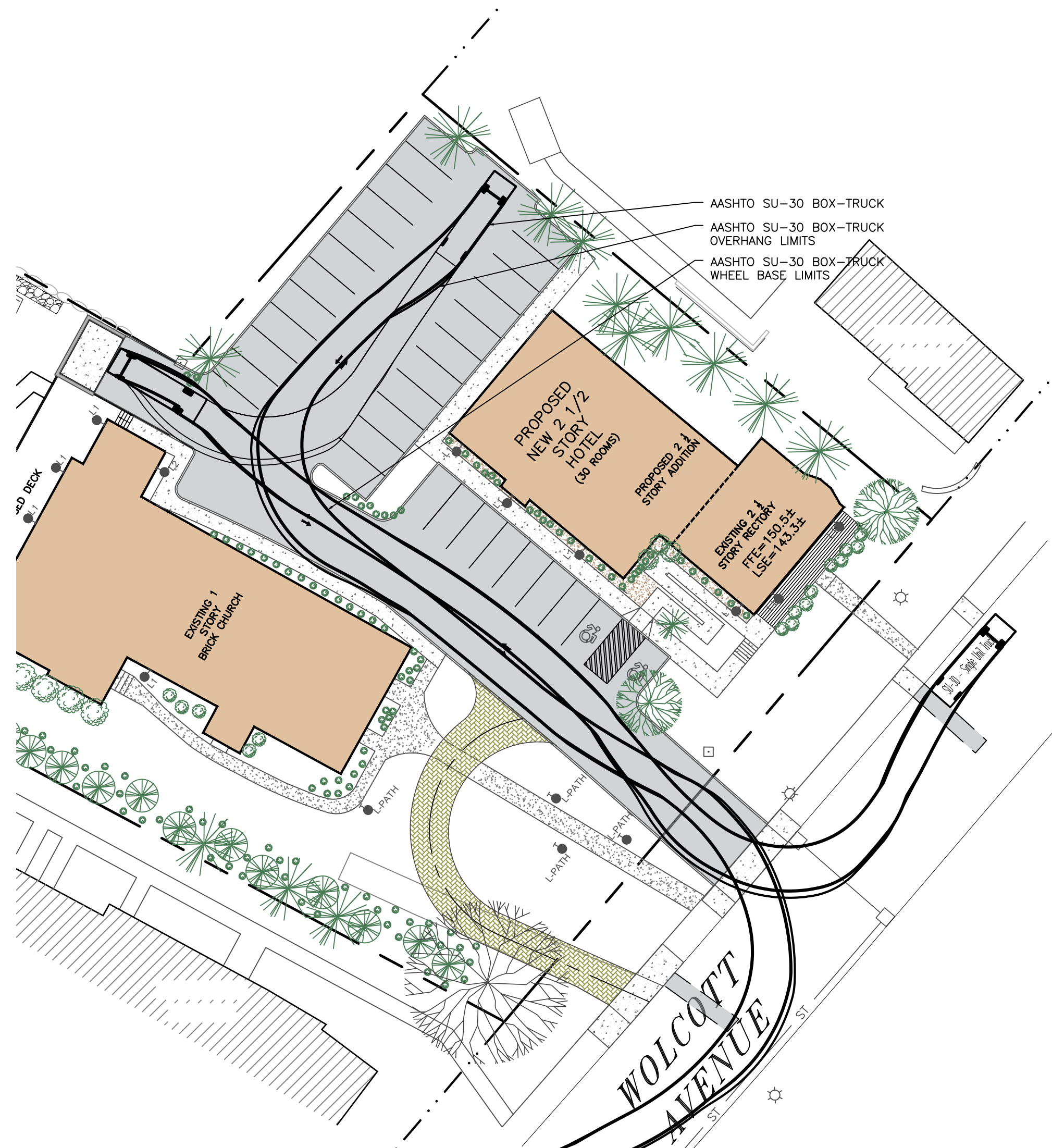




SHUTTLE-BUS MANEUVERING PLAN  
SCALE: 1" = 30'



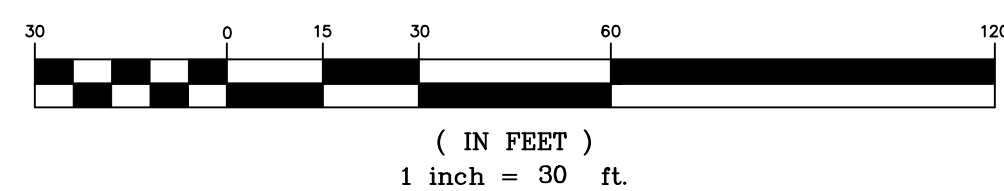
GARBAGE-TRUCK MANEUVERING PLAN  
SCALE: 1" = 30'



BOX-TRUCK MANEUVERING PLAN  
SCALE: 1" = 30'

| DRAWN BY: ESR |          |                             |     | CHECKED BY: MAB |      |             |    |
|---------------|----------|-----------------------------|-----|-----------------|------|-------------|----|
| REVISIONS:    |          |                             |     | REVISIONS:      |      |             |    |
| NO.           | DATE     | DESCRIPTION                 | BY  | NO.             | DATE | DESCRIPTION | BY |
| 1             | 12/28/21 | SHEET CREATED               | CMB |                 |      |             |    |
| 2             | 1/25/22  | PER PLANNING BOARD COMMENTS | MAB |                 |      |             |    |
|               |          |                             |     |                 |      |             |    |
|               |          |                             |     |                 |      |             |    |
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|               |          |                             |     |                 |      |             |    |
|               |          |                             |     |                 |      |             |    |

VEHICLE TRACKING PLAN  
SCALE: 1" = 30'  
GRAPHIC SCALE



**HUDSON**  
LAND DESIGN  
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F: 845-440-6637

VEHICLE TRACKING PLAN  
1113 WOLCOTT AVENUE

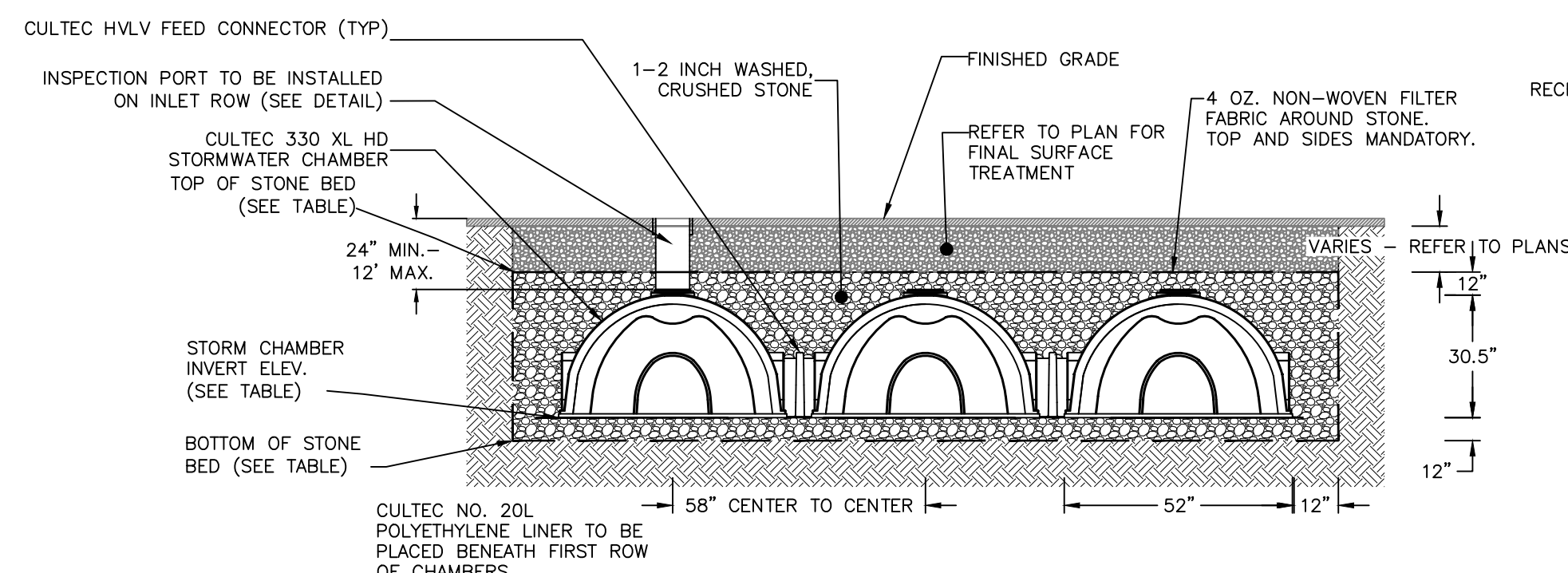
1113 WOLCOTT AVENUE  
CITY OF BEACON  
DUTCHESS COUNTY, NEW YORK  
TAX ID: 5954-26-651901

JOB #: 2021:022  
DATE: 6/29/2021  
SCALE: 1" = 30'  
TITLE: VHC-1  
SHEET: 10 OF 13









## NOTES:

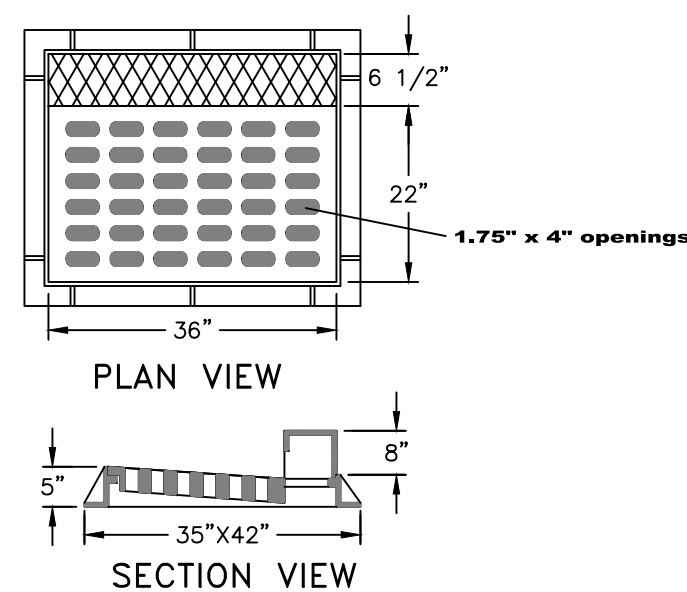
1. CULTREC RECHARGER 330XLHD CHAMBERS BY CULTREC, INC. OF BROOKFIELD, CT. ALL CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH CULTREC INC.'S CURRENT RECOMMENDED INSTALLATION GUIDELINES.
2. THE BED OF THE SYSTEM FOOTPRINT SHALL BE LAID NEARLY LEVEL.
3. EACH ROW OF CHAMBERS SHALL BE FED VIA A 12" MANIFOLD 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.

## SECTION VIEW

| 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

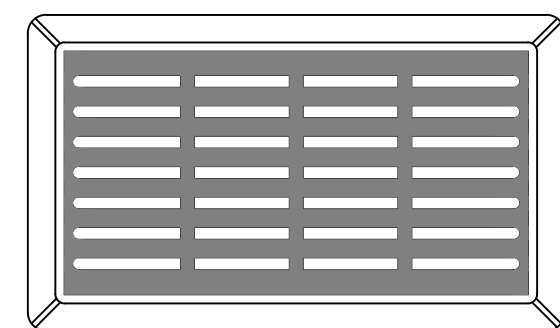


## NOTES:

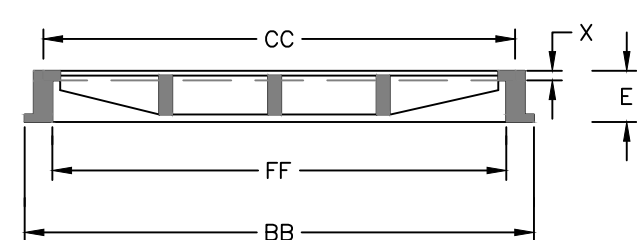
1. HEAVY DUTY RECTANGULAR STORMWATER INLET GRATE TO BE CAMPBELL FOUNDRY MODEL 2541, OR APPROVED EQUAL.
2. CATCH BASINS TO RECEIVE CURB INLETS ARE: CB 1&2, CB 4 TO RECEIVE A FLAT GRATE

### CAST IRON STORMWATER CURB INLET GRATE DETAIL

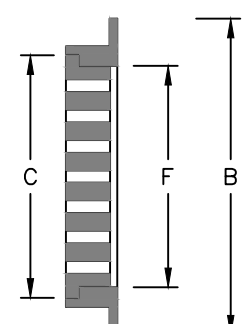
NOT TO SCALE



## PLAN VIEW



## SECTION VIEW 1



## SECTION VIEW 2

## DIMENSION TABLE:

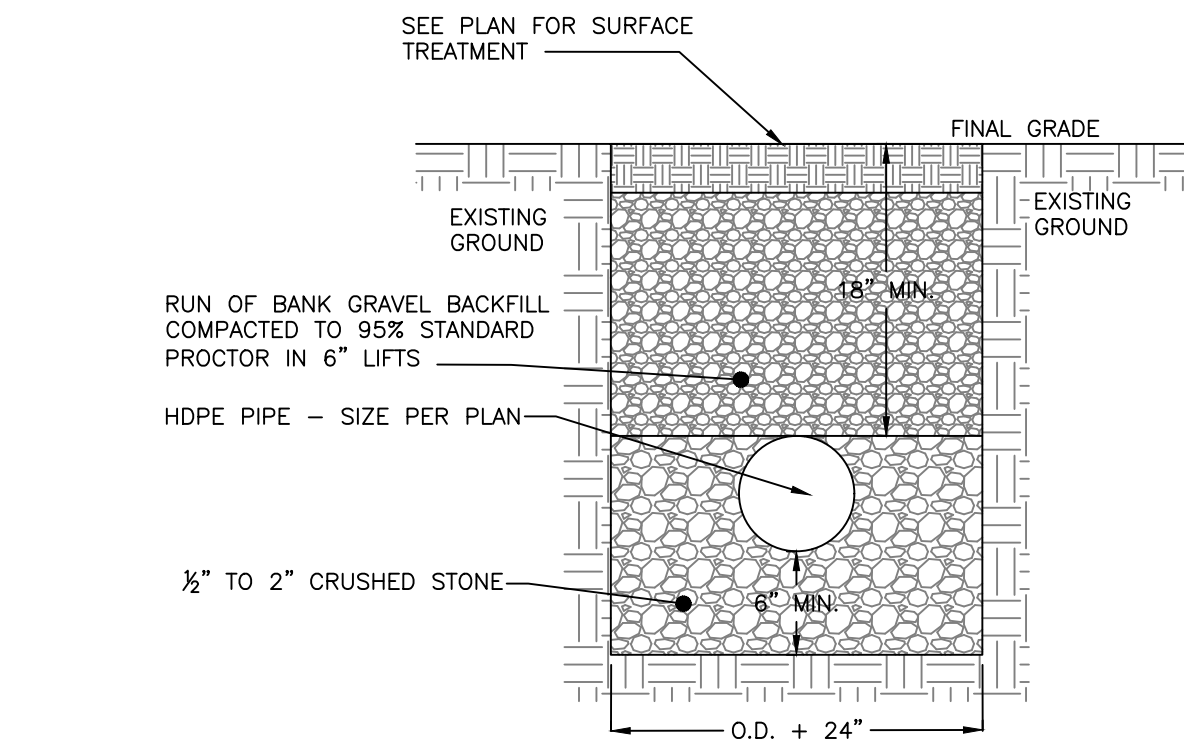
| B   | C   | E  | F   | X  | BB  | CC  | FF  |
|-----|-----|----|-----|----|-----|-----|-----|
| 30" | 24" | 4" | 22" | 1" | 41" | 36" | 34" |

## 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

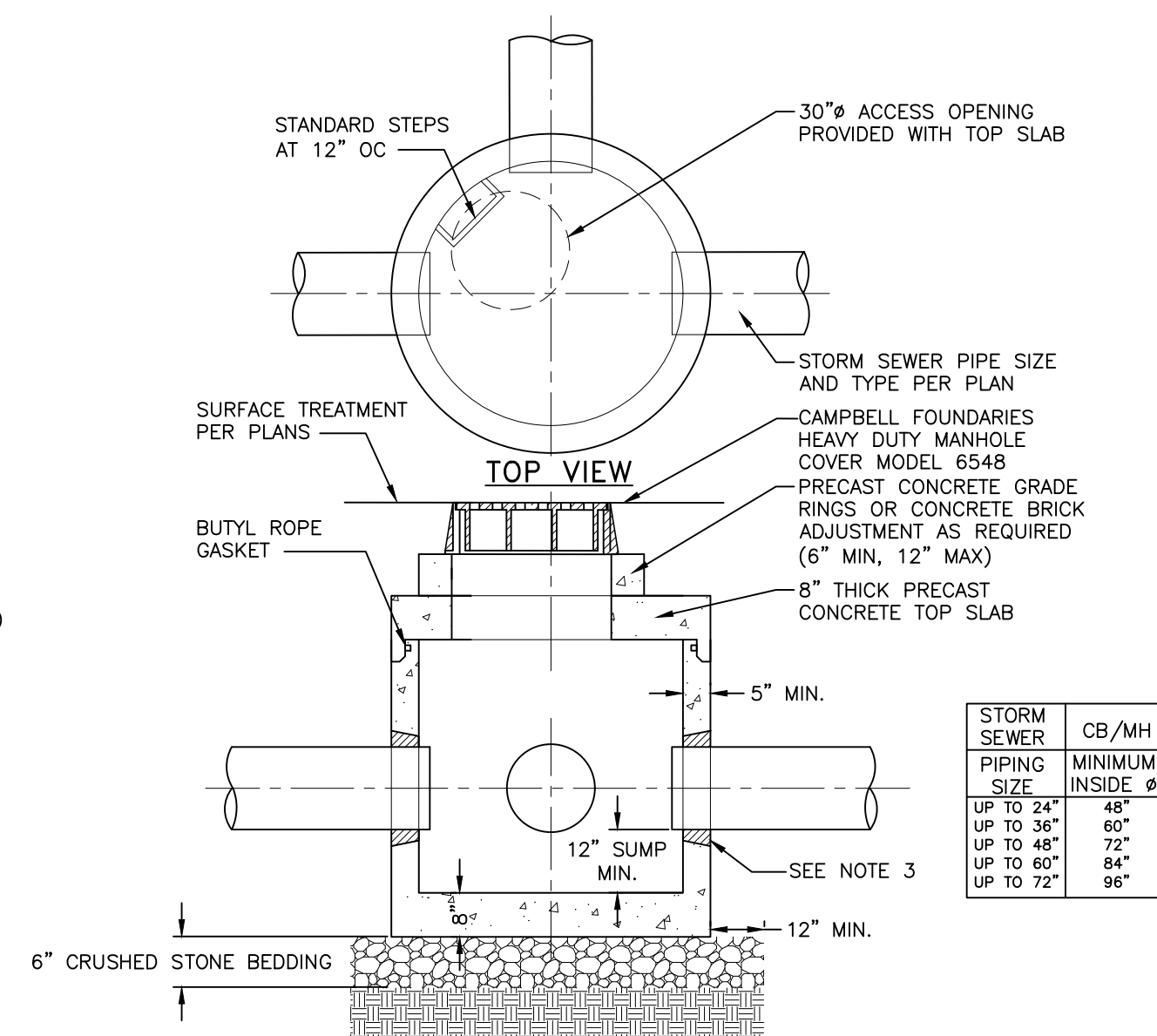


## NOTES:

1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.

### STORMWATER PIPE IN TRENCH DETAIL

NOT TO SCALE

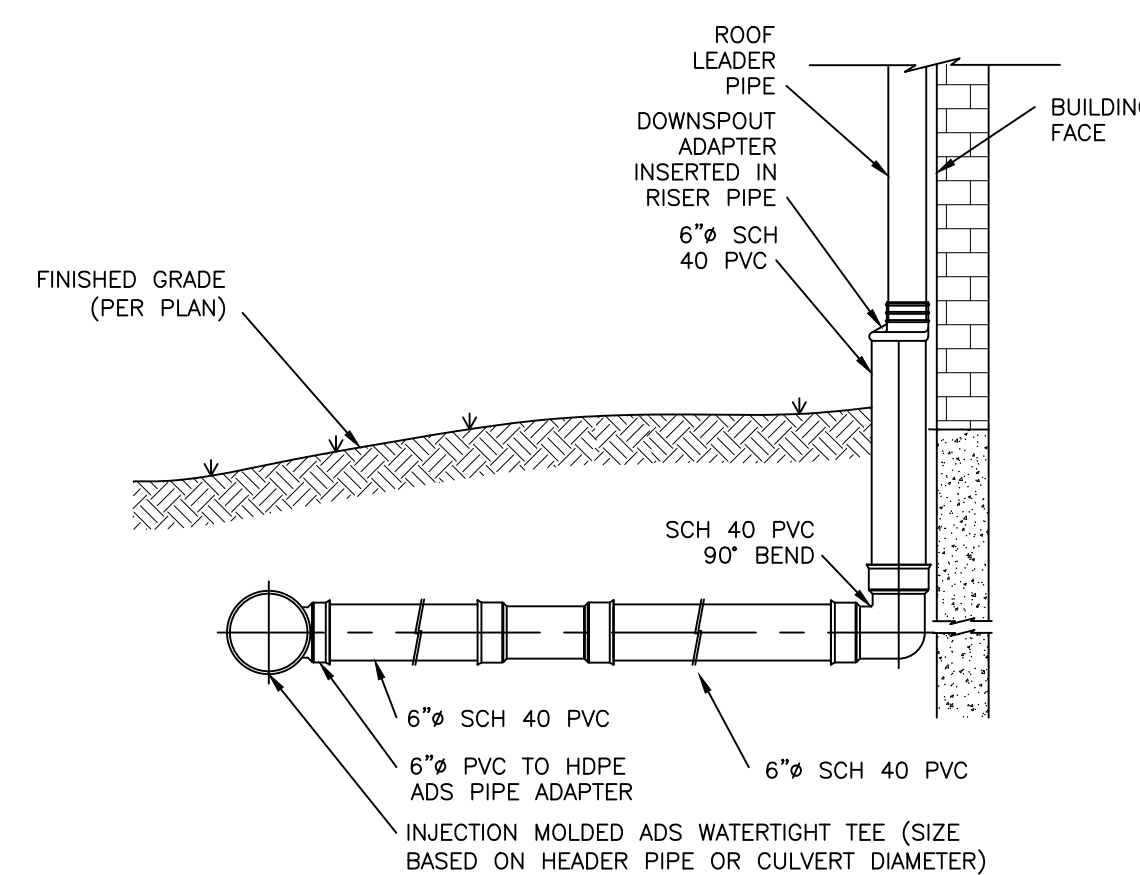


## NOTES:

1. 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. 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.

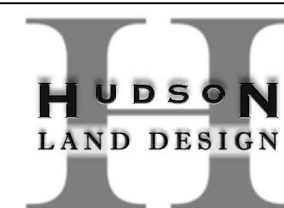
### ROOF LEADER CONNECTION DETAIL

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 |     |                 |             |    |  |  |
| 4             | 1/25/22  | PER PLANNING BOARD COMMENTS | MAB |     |                 |             |    |  |  |



SEAL



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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

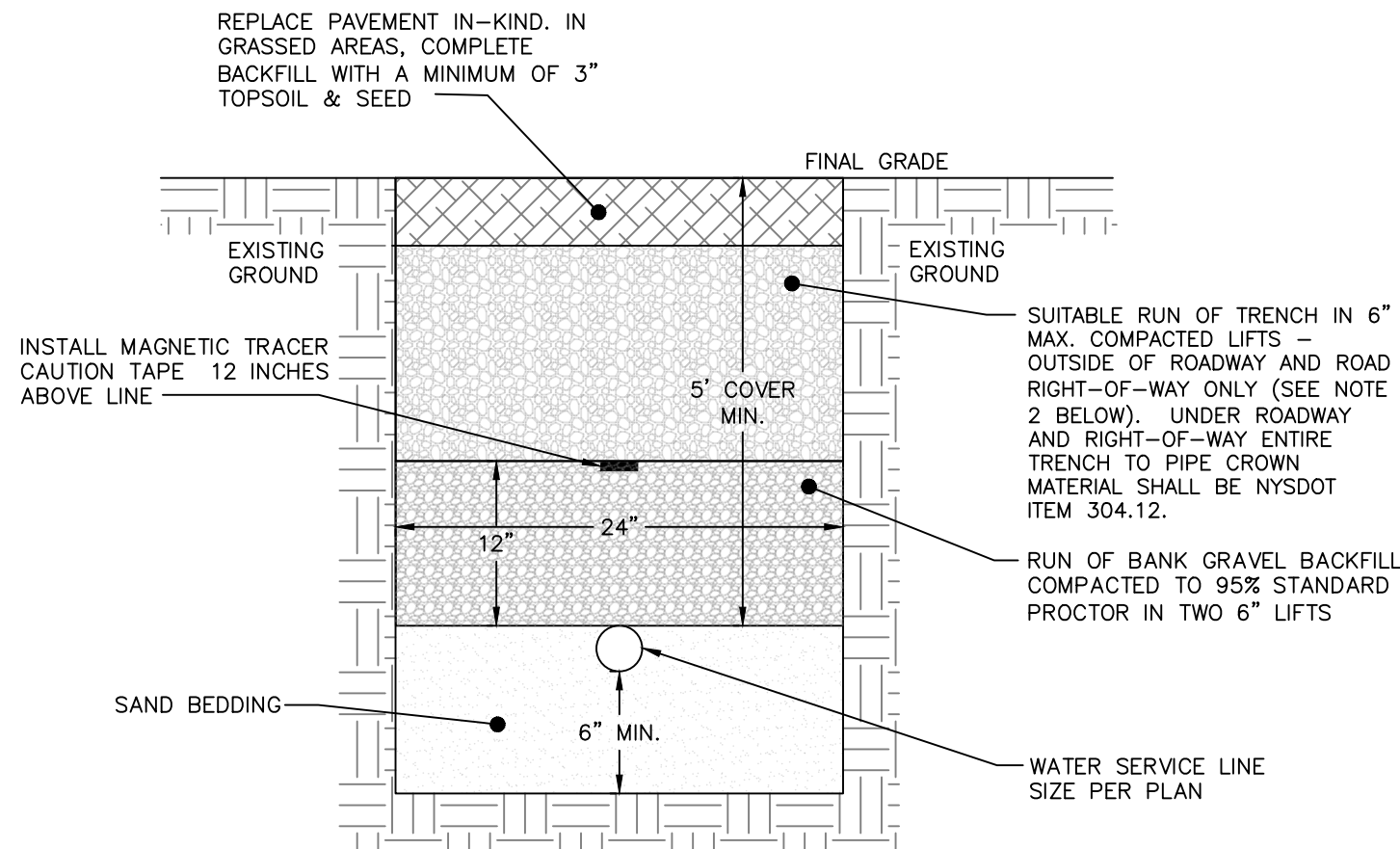
DATE: 6/29/2021

SCALE: AS SHOWN

TITLE: CD-2

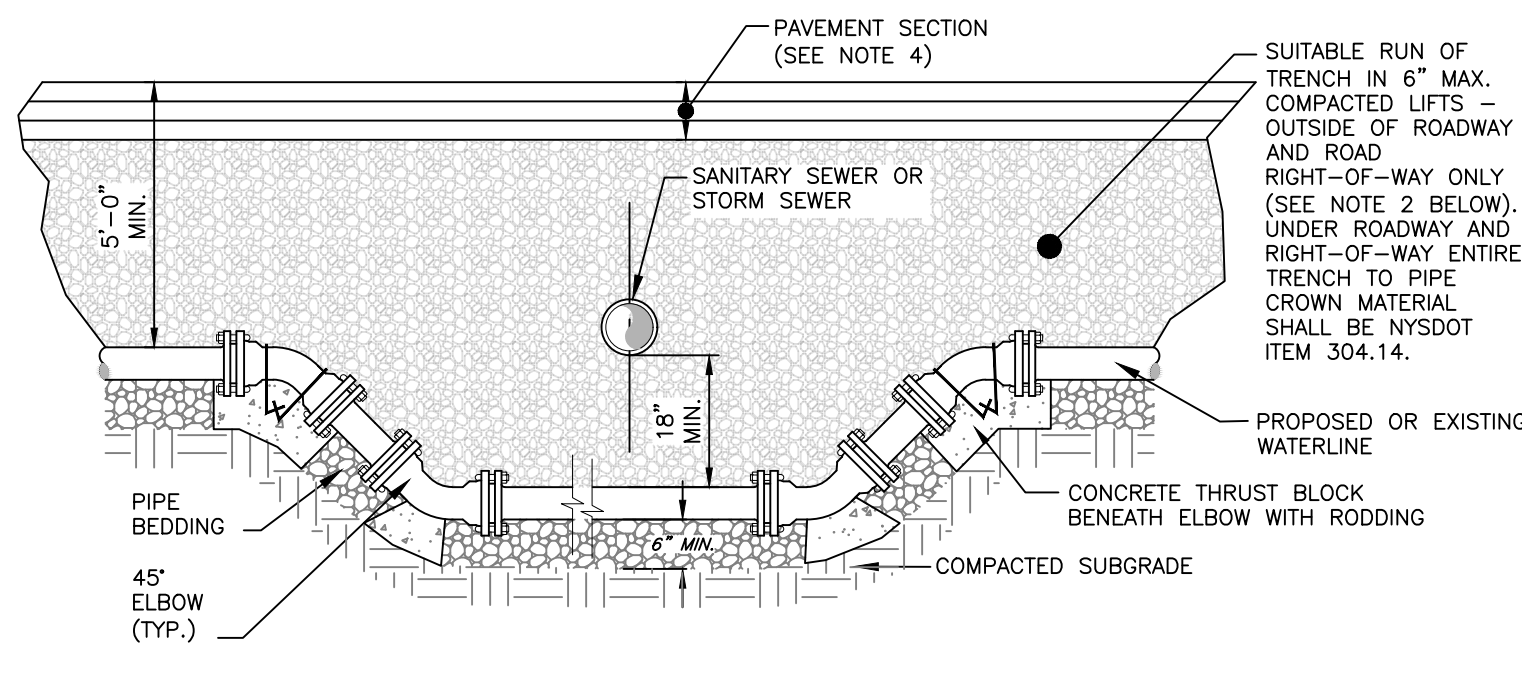
SHEET: 12 OF 13





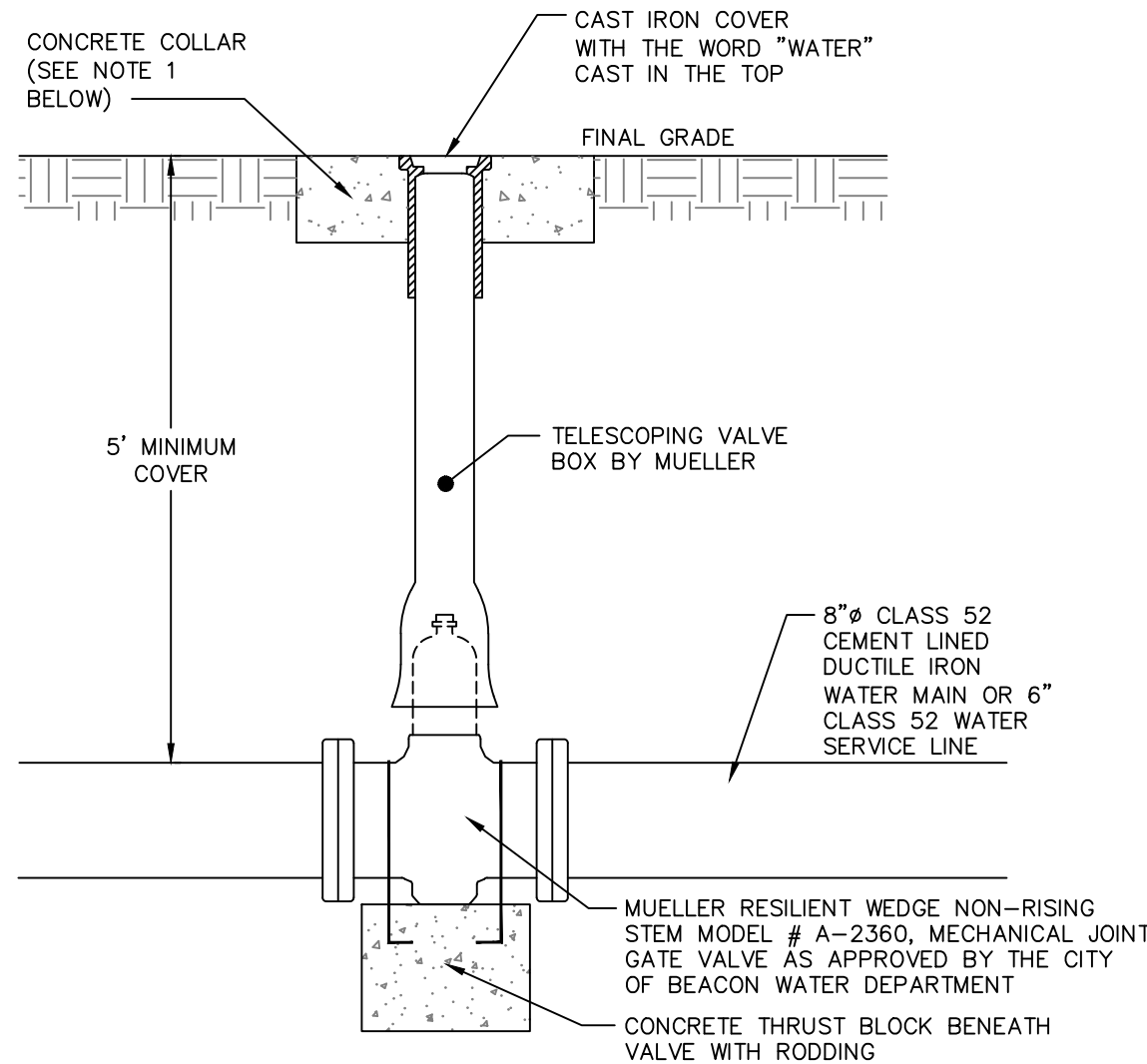
- NOTES:**
1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.
  2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, ELONGATED PARTICLES, LARGE STONES OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL 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



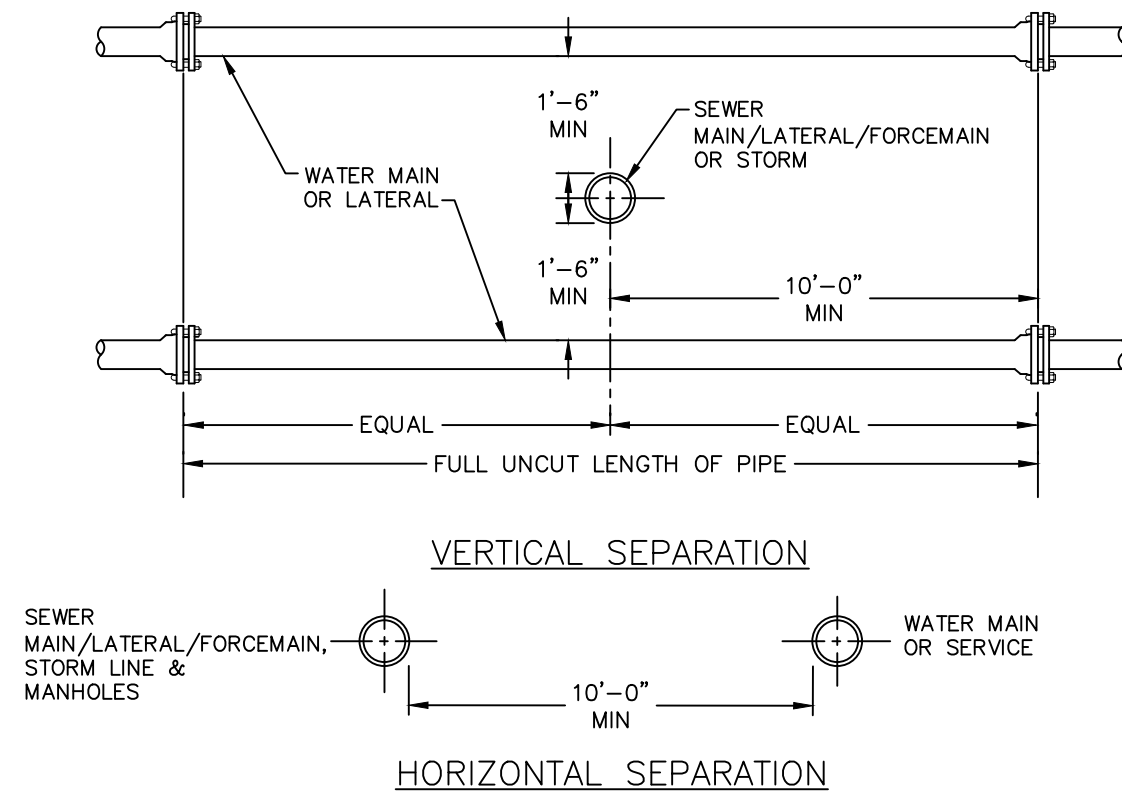
- NOTES:**
1. WHEN THE ELEVATION OF THE SANITARY OR STORM SEWER CAN NOT BE VARIED TO MEET THE ABOVE REQUIREMENTS, THE WATER SERVICE LINE OR MAIN SHALL BE RELOCATED TO PROVIDE THIS REQUIRED SEPARATION OR RECONSTRUCTED WITH MECHANICAL JOINT PIPE FOR A DISTANCE OF TEN (10) FEET ON EACH SIDE OF THE SEWER. 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



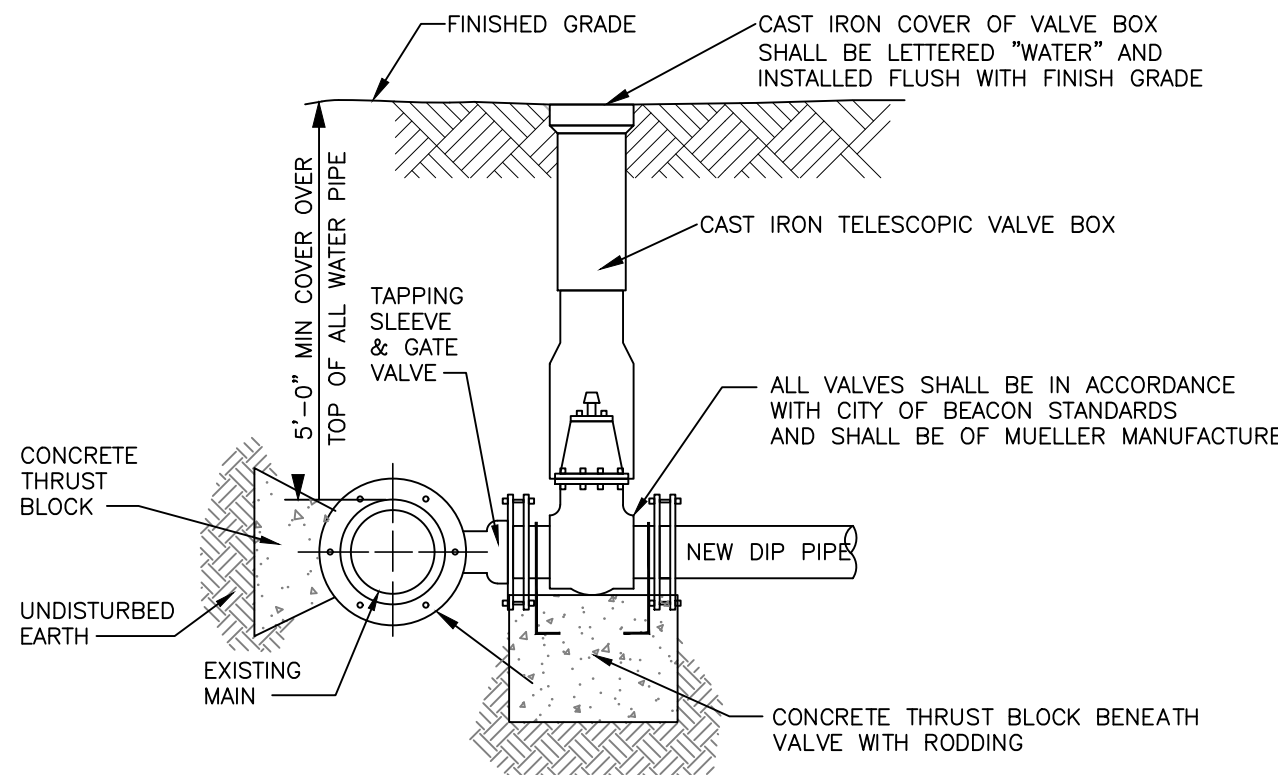
- NOTES:**
1. CONCRETE COLLAR TO BE PROVIDED IN AREAS THAT ARE NOT PAVED. THE COLLAR SHALL BE 6" FROM THE COVER AND SHALL EXTEND 6" BELOW FINAL GRADE.

**GATE VALVE DETAIL**  
NOT TO SCALE



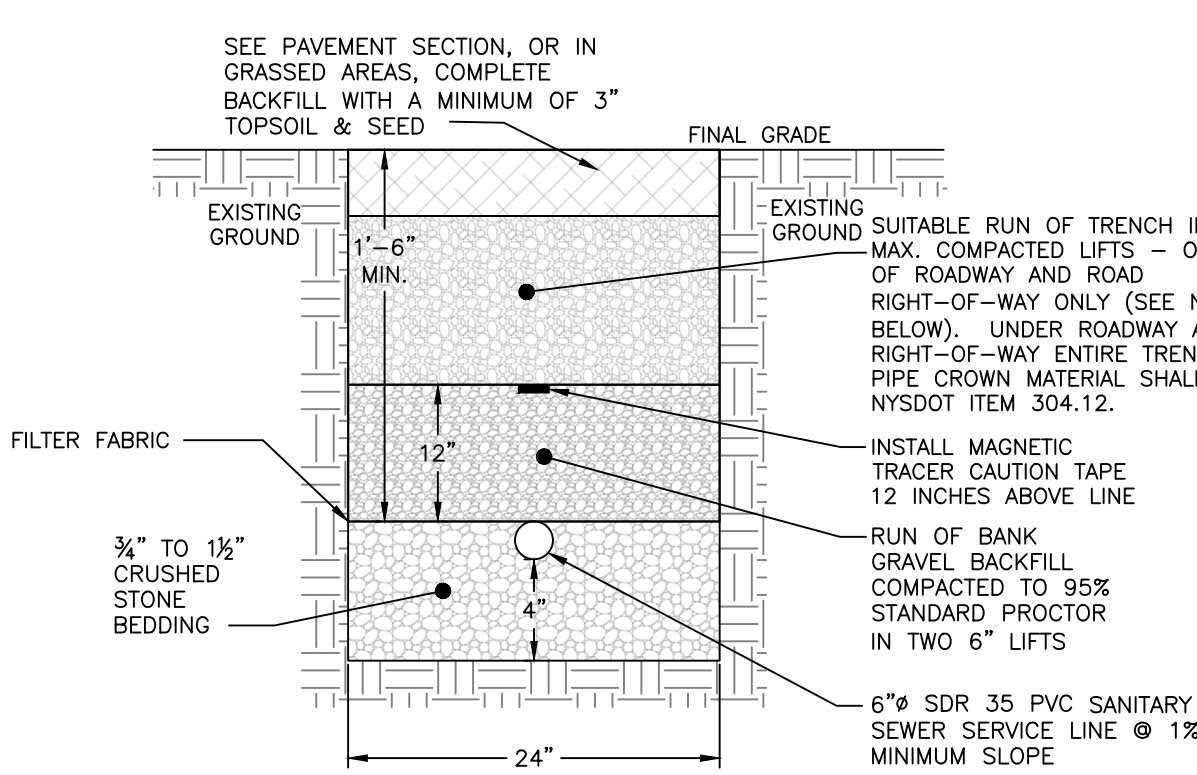
- NOTE:**
- NO DEVIATION IN THE SEPARATION REQUIREMENTS WILL BE PERMITTED WITHOUT THE EXPRESS APPROVAL OF THE DUTCHESS COUNTY DEPARTMENT OF HEALTH AND THE CITY OF BEACON. CONCRETE ENCASMENT OF WATERLINE OR OFFSETTING OF WATERLINE SHALL BE REQUIRED WHERE SEPARATION DISTANCES CANNOT BE MAINTAINED.

**WATER LINE SEPARATION DETAIL**  
NOT TO SCALE



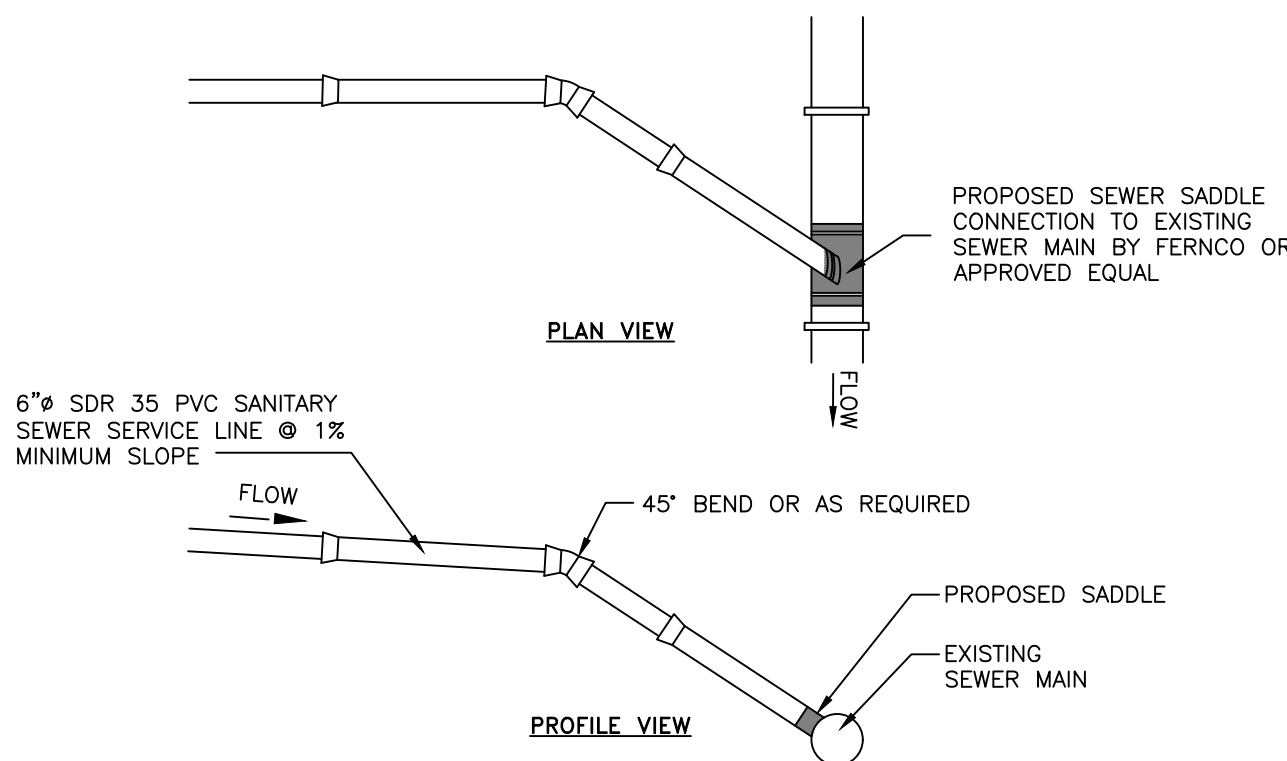
- NOTES:**
1. ALL VALVES SHALL OPEN BY TURNING LEFT (COUNTERCLOCKWISE) AND HAVE A 2-INCH SQUARE-OPERATING NUT PAINTED RED.
  2. ALL VALVES SHALL BE M.J. RESILIENT WEDGE TYPE WITH "O" RING PACKING, DESIGNED FOR A WORKING PRESSURE OF 150 PSI AND BE IN FULL CONFORMANCE WITH AWWA C500.
  3. TAPPING SLEEVE AND GATE VALVE SHOWN ARE MUELLER H-615, AND T-2630 RESPECTIVELY.

**TAPPING SLEEVE DETAIL**  
NOT TO SCALE



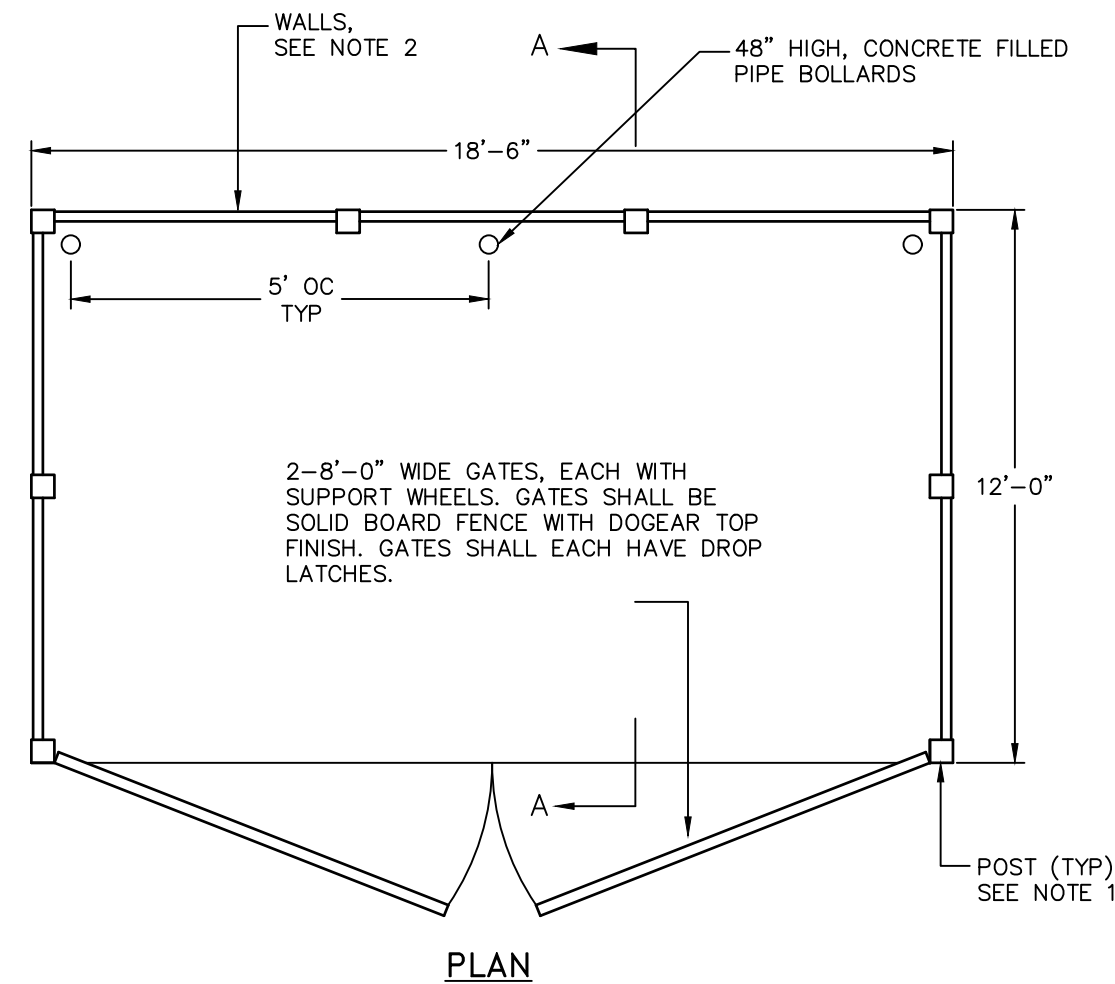
- NOTES:**
1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.
  2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, LARGE STONES OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED AND USED.

**SANITARY SEWER SERVICE LINE TRENCH DETAIL**  
NOT TO SCALE

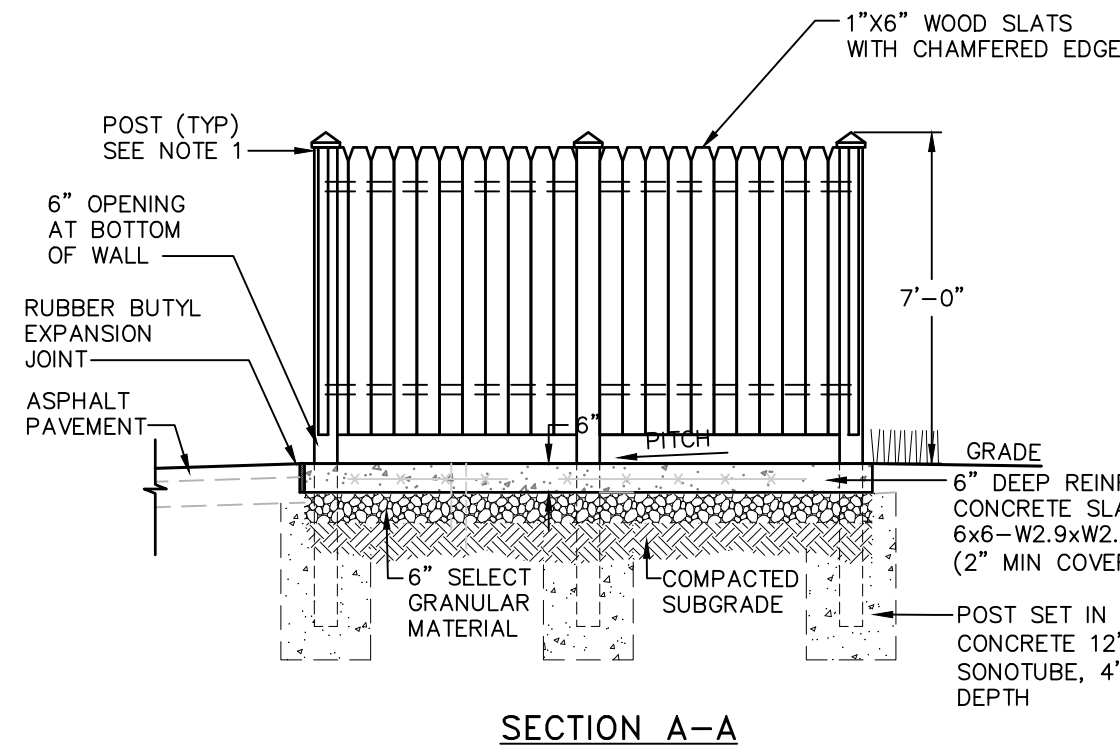


- NOTES:**
1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.
  2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, LARGE STONES OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED AND USED.

**SANITARY SEWER SERVICE CONNECTION DETAIL**  
NOT TO SCALE



**TRASH ENCLOSURE DETAILS**  
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.

| DRAWN BY: ESR |          |                             |     | CHECKED BY: MAB |      |             |    |
|---------------|----------|-----------------------------|-----|-----------------|------|-------------|----|
| REVISIONS:    |          |                             |     | REVISIONS:      |      |             |    |
| NO.           | DATE     | DESCRIPTION                 | BY  | NO.             | DATE | DESCRIPTION | BY |
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|               |          |                             |     |                 |      |             |    |
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SEAL



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PH: 845-440-6926  
F: 845-440-6637

WATER & SEWER 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-3

SHEET: 13 OF 13





445 Hamilton Avenue, 14th Floor  
White Plains, New York 10601  
T 914 761 1300  
F 914 761 5372  
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Taylor M. Palmer, Esq.  
[tpalmer@cuddyfeder.com](mailto:tpalmer@cuddyfeder.com)

January 25, 2022

**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 January 11, 2022, 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 January 5, 2022 (the “Engineering Comments Memorandum”); the City’s Planning Consultant, John Clarke Planning and Design, dated January 6, 2022 (the “Planning Comments Memorandum”); and the City’s Traffic Consultant, Creighton Manning, dated January 10, 2022 (the “Traffic Comments Memorandum”).

**THE REVISED SITE PLAN & UPDATED LOOP DRIVE:**

Based on the Board’s comments at the January 11<sup>th</sup> meeting, the Applicant has revised the Site Plan, which includes modifications to the loop drive. Importantly, the loop drive has been redesigned in order to further promote and enhance the historic nature of the site and improve the aesthetics of the property, in particular as viewed from Wolcott Avenue. Specifically, the driveway has been narrowed as much as possible such that a shuttle bus and smaller delivery vehicles can adequately maneuver through the loop. Additionally, the connection to the southerly walkway and spur have been removed from the loop.<sup>1</sup>

Consistent with the architectural and design features presently existing on the Premises, the

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<sup>1</sup> Note: Larger delivery vehicles will need to use the main driveway and parking lot for deliveries.



January 25, 2022

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Applicant is also proposing a brick paved driveway that will improve the relationship between the historic structures and the surrounding landscape. Additional plantings have also been located along the driveway to prevent any vehicles from parking in the front yard. Of note, the proposed driveway work will not remove the large Sycamore tree located on the Premises, thus preserving an essential aspect of the historic landscape. Canopy trees and low landscaping have been added in front of the hotel, thereby continuing the pattern of street trees in front of adjacent properties. The light fixtures proposed above the café entrance will also be historically compatible with the existing light fixtures located on the front faced of the church. Moreover, the survey has been updated to show the location of head stones/grave sites and the pedestrian path connecting Wolcott Avenue and Beekman Street has been revised accordingly.<sup>2</sup>

#### **RESPONSE TO TRAFFIC COMMENTS & ZONING BOARD OF APPEALS PROCEDURE:**

In further support of this Application, the Applicant's traffic consultant, Colliers Engineering & Design (Colliers), has provided responses to the Traffic Comment Memorandum, which is accompanied by a Sight Distance Analysis and Event Conditions Sensitivity Analysis. See **Exhibit C** – Response to Comments Memorandum prepared by Colliers Engineering & Design CT P.C., dated January 24, 2022. As is further detailed therein, the loop driveway will be managed by project staff during events to ensure shuttles, buses, and passenger cars using this area for drop-off/pick-up operations do not park or stand in this area. As noted above, other measures including landscaping along the loop driveway are being proposed to ensure that vehicles cannot utilize the area immediately off the pavement for parking of vehicles. Moreover, all deliveries to the Premises are anticipated to be infrequent and limited in duration, thus time restrictions on deliveries are unnecessary. As is also detailed within Colliers' Response to Comments Memorandum, the maximum seating occupancy for the café is fifty (50) seats. Considering that the December 28, 2021 Traffic & Parking Study assumed a seating capacity of 125 seat, the results of that Study are conservative and actual traffic operating conditions are likely better than the results indicated therein.

As shown in the Sight Distance Analysis, the required stopping and intersection sight distances will generally be satisfied at both the main driveway and loop exit driveway locations.<sup>3</sup> Furthermore, the Event Conditions Sensitivity Analysis, assuming a ten percent (10%) credit for

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<sup>2</sup> Note: Further design details of the pedestrian pathway (i.e., grading and stair locations/materials) will be provided in a future submittal. In addition, the Applicant is in contact with the Beacon Historical Society to obtain any documentation and/or historic maps that exist for the cemetery.

<sup>3</sup> Note: Although the sight distance looking left (north) from the loop driveway exit location was measured to be approximately 4 ft. short of the required intersection sight distance, the minimum required stopping sight distance is exceeded and it is Colliers' opinion that this shortfall in the sight distance will not impact the safe operation of this driveway intersection.





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non-vehicular traffic, indicates that the additional traffic volumes associated with events, such as those proposed in this Application, do not significantly change the future traffic operating conditions associated with the proposal.

Additionally, for the Board's consideration, following the Applicant's outreach to the Building Department on January 7, 2022, the Building Department recently requested that the Applicant prepare a formal written request for a determination regarding what if any variance relief is necessary in connection with the off-street parking proposal for the project. This request for a determination will also address the Zoning Code Section 223-26(B) exception to the off-street parking requirements for existing buildings constructed prior to April 20, 1964 (the "1964 parking exception"). 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.

Provided the above, we understand that a determination from the Building Department is forthcoming, a copy of which will be forwarded to the Planning Board for its review. Accordingly, as was discussed at the January 10<sup>th</sup> Planning Board meeting, the Applicant respectfully requests that this Board consider referring the Application with a positive recommendation to the Zoning Board of Appeals ("ZBA") in order for the Applicant to review the proposal with the ZBA and to seek any necessary relief for off-street parking.

#### **REFERRAL TO THE ARB SUBCOMMITTEE AND COMMUNITY OUTREACH INITIATIVES:**

In addition, as this Board is aware, the Project was referred to the Architectural Review Board ("ARB") Subcommittee. The Applicant has since appeared before the ARB Subcommittee on January 19, 2022. In response to the ARB Subcommittee's comments, the Applicant is presently revising the plans to incorporate various design changes to the church and hotel. The Applicant is scheduled to appear again before the ARB Subcommittee on February 11<sup>th</sup>.

Furthermore, the Applicant has been in contact with surrounding property owners to provide them with information and invite further discussion regarding this Application to improve and adaptively re-use the Premises. Of note, the Applicant has already hosted a productive meeting with the River Ridge Views Homeowner's Association on January 15<sup>th</sup>. The Applicant has also scheduled a meeting with the tenants of the West End Lofts on January 26<sup>th</sup>.

#### **ADDITIONAL RESPONSES TO COMMENTS MEMORANDA:**

To further assist this Board in its review of the Application, the Applicant respectfully submits the following memoranda prepared by its Consultants providing annotated responses to the



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applicable comments noted in the Engineering Comments Memoranda and the Planning Comments Memoranda:

- Response to Comments Memorandum prepared by Aryeh J. Siegel Architect dated January 24, 2022, providing responses to the Planning Comments Memoranda (the “Architect Response to Comments Memorandum”). See **Exhibit A** – Architect Response to Comments Memorandum;
- Response to Comments Memorandum prepared by Hudson Land Design Professional Engineering, P.C. (“HLD”) dated January 25, 2022 (the “HLD Response to Comments Memorandum”). See **Exhibit B** – HLD Response to Comments Memorandum; and
- Response to Comments Memorandum prepared by Colliers Engineering & Design dated January 24, 2022 (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 January 25, 2022, numbered and titled as follows:<sup>4</sup>

- Sheet 1 of 13      Site Plan;<sup>5</sup>
- Sheet 2 of 13      Full Site Plan;
- Sheet 4 of 13      Landscape Plan & Planting Schedule;
- 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.

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<sup>4</sup> **Note:** The Applicant is presently revising Sheets 3: Existing Conditions & Demolition Plan, 5: Hotel Building Plans & Elevations, 6: Conference Center Plans, and 7: Conference Center Elevations in order to respond to the ARB Subcommittee’s comments.

<sup>5</sup> **Note:** The hotel floor plans have been revised to reflect 30 rooms. Elevations have been added to the Site Plan set. Plan and elevation drawings are not included in this submission but will be submitted to this Board following review by the ARB Subcommittee.





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**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 January 24, 2022, providing responses to the Planning Comments Memorandum;
- Exhibit B:** Response to Comments Memorandum prepared by Hudson Land Design Professional Engineering, P.C. dated January 25, 2022, providing responses to the Engineering Comments Memorandum; and
- Exhibit C:** Response to Comments Memorandum prepared by Colliers Engineering & Design CT P.C., dated January 24, 2022, providing responses to the Traffic Comments Memorandum.<sup>6</sup>

We look forward to appearing at the Planning Board's February 8<sup>th</sup> regular meeting to continue the review of the Project and to continue the environmental review process, at which point the Applicant respectfully request the Board consider referring the Application to the Zoning Board of Appeals with a positive recommendation. The Applicant also respectfully requests that this Board consider setting the public hearing on the Application.

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, sweeping horizontal line extending to the right.

Taylor M. Palmer

Enclosures

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<sup>6</sup> 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 meeting, the Applicant will also discuss some venue comparables (for example, the Board referenced venues such as The Falcon in Marlboro, New York).



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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.



# ARYEH SIEGEL

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## 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*

January 24, 2022

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 January 6, 2022. Please refer to Hudson Land Design's response letter regarding Lanc & Tully's letter dated January 5, 2022.

### **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 loop driveway to reduce it's width and impact on the site. The brick paved drive connection will fit with the Church building and site, and will not disrupt the relationship between the historic building and it's front yard or landscape.

3. For Sheet 4
  - a The sycamore tree is not impacted by the driveway work. The tree is not intended to be removed,
  - b Canopy street trees and additional low landscaping have been added in front of the hotel.
  - c The applicant proposes to match the existing wall mounted light fixtures at the front church entrance for the proposed light at the new café entrance
  - d Path lights are complementary with the historic nature of the site, although they are more modern in design

4. The hotel floor plans have been corrected to show 30 rooms instead of 31 rooms. Elevations have been added to the set. Plan and elevation drawings are not included in this submission, but will be included after review by the ARB Subcommittee.
5. Exterior construction will require a Certificate of Appropriateness. The Applicant met with the ARB Subcommittee and has a follow up meeting scheduled for February 11, 2022.

**Lanc & Tully Comment Responses:**

**Sheet 1 – Site Plan**

1. The additional L1 symbol has been removed.
2. The lighting is shown on the landscape plan in order not to interfere with information shown on the site plan
3. The Index of Drawings has been revised.
4. The existing tree is located on the site plan per a recent survey

**Sheet 2 – Full Site Plan**

1. 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 have received additional survey information for the cemetery, and updated the path location on the site plan. We will address the path lighting and submit that for the following meeting.

**Sheet 4 – Landscape Plan**

1. Landscape notes have been revised for legibility

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*

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January 25, 2022

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 January 5, 2022 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 January 6, 2022 comment letter.

**Lanc & Tully January 5, 2022 Comment Letter**

General Comments

1. Colliers Engineering has responded to this comment under separate cover.
2. Comment noted. Colliers Engineering has responded to this comment under separate cover. We assume that the DOT was included under SEQR circulation. Colliers will follow up with the DOT to determine who received the SEQR package, and if not will make a formal submission to their department.
3. The survey has been updated to show the location of head stones/grave sites as well as the Sycamore Tree in front of the church. The pedestrian path location has been revised based upon the located head stones. Further design (i.e. grading and stair locations/materials) will be provided in a future submittal.

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.

Sheet 4 of 12 – Landscape & Lighting Plan

1. 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. Correspondence will be provided when the submittal is made.
2. The soil testing will be coordinated with Lanc & Tully's office as soon as possible and weather permitting. We will continue to watch the weather in the next several weeks for a warming trend.

Sheet 9 of 12 – Erosion & Sediment Control

1. Erosion control is now shown for the new trail location, which will be further updated once full design is completed.
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 paver detail has been provided on sheet 11 with an adequate subbase such that it will support a 75,000 lb fire truck.

**John Clarke Planning and Design January 6, 2022 Comment Memorandum**

2e. The loop driveway has been narrowed as much as possible such that the shuttle bus and smaller delivery vehicles can adequately maneuver through the loop. Larger delivery vehicles will need to use the main driveway and parking lot for deliveries. The connection to the southerly walk and spur have been removed from the loop.

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,



Michael A. Bodendorf, P.E.  
Principal

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



January 24, 2022

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:

This letter is in response to comments contained in the letters from Creighton Manning Engineering (CM) dated January 10, 2022 and Lanc & Tully Engineering and Surveying, P.C. dated January 5, 2022. For ease of review, specific responses to each of the CM and Lanc & Tully comments are provided below and the items are numbered according to their review comments.

## Creighton Manning Engineering Letter January 10, 2022

### Site Plan

1. On site vehicular circulation should be clarified:

CM Review #2 Follow-Up Comment: Based on Colliers' description of operations, CM understands that the southernmost existing driveway will operate as an egress-only driveway. CM agrees that this operation is beneficial as it will allow for vehicles dropping-off and picking-up to more easily enter and exit the site. However, if the southernmost driveway will be egress-only, it should be signed and striped as such with "Do Not Enter" (R5-1) Signs. These signs could be utilized for the posting of "Stop" (R1-1) Signs.

**Response:** **Comment noted. These signs will be added to the site plans. Final approval of this driveway configuration will require a NYSDOT Highway Work Permit.**

CM Review # 2 Follow-Up Comment: Colliers' vehicles size assumption for deliveries is reasonable. Upon review of the Vehicle Tracking Plan, a 30-ft single-unit box truck is able to circulate the site. However, it is evident on the Vehicle Tracking Plan that the delivery vehicle will encroach into the opposing travel lane at the Main Driveway when entering/exiting the site and will require reverse maneuvers within the site. For these reasons, CM recommends that the Applicant agree to schedule deliveries during off-peak hours only.

**Response:** **Deliveries to the Site utilizing a 30 ft. single-unit box truck will be rare. It is anticipated that most deliveries will be via small delivery vehicles. All deliveries are expected to be limited in nature, mainly for the café' use**

**and/or special events and will be short duration. The vehicle tracking plan showing a 30 ft. single-unit box truck was provided to identify the tracking path of the largest anticipated delivery vehicle. However, since all deliveries are anticipated to be infrequent and limited in duration, it is our opinion that time restrictions on deliveries are not necessary at this location.**

CM Review #2 Follow-Up Comment: Upon review of the Vehicle Tracking Plan, a school bus is able to circulate the site. However, it is evident on the Vehicle Tracking Plan that the vehicle will encroach into the opposing travel lane at the Main Driveway when entering/exiting the site. Regarding pick- up/drop-off operations, it is recommended that signage be installed to restrict these vehicles from parking or dwelling for an extended period of time in the loop roadway.

**Response:** The Applicant would prefer to not post signage as suggested. Rather, the Applicant has indicated that the loop driveway will be managed by project staff during events to ensure shuttles, buses, and passenger cars using this area for drop-off/pick-up operations do not park or stand in this area. Other measures including landscaping along the loop driveway are being proposed to ensure that vehicles cannot utilize the area immediately off the pavement for parking of vehicles.

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

CM Review #2 Follow-Up Comment: It is unclear which driveway was evaluated for adequate sight distance. Please perform a sight distance evaluation for each driveway accounting for the proposed maneuvers at each driveway. Furthermore, the sight distance should account for the recommended intersection sight distance and driver-eye height for a single-unit truck given that deliveries and patron pick-up/drop-off will be completed by these types of vehicles.

**Response:** The December 28, 2021 Traffic Study only looked at the Sight Distances for the Main Driveway location as summarized in Table No. 3 of that study. The sight distances for the proposed location for the loop driveway exit have now been reviewed and are summarized in Table No. 3-R attached. As summarized in this table the required stopping and intersection sight distances will generally be satisfied at both the Main driveway and Loop exit driveway locations. It should be noted that the sight distance looking left (north) from the Loop driveway exit location was measured to be approximately 415 ft., which is 4 ft. short of the required intersection sight distance of 419 ft. at this location. However, the minimum required stopping sight distance is exceeded and it is our opinion that this 4 ft. shortfall in the sight distance will not impact the safe operation of this driveway intersection.



## Traffic Impact & Parking Study

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

CM Review #2 Follow-Up Comment: As identified in Section II.B, turning movement counts were conducted on Friday, September 24, 2021, and Saturday, September, 25, 2021, from 12PM to 8PM. These study periods capture midday and evening typical peak traffic periods. CM has no further comment.

**Response:** Item addressed. No further response required.

3. CM reviewed the trip generation methodology:

CM Review #2 Follow-Up Comment: Vendors and employees will have a vehicle occupancy rate of 1.0. Please provide in more detail the number of attendees, vendors, and employees. Please update traffic assessment based on the updated trip generation.

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

CM Review #2 Follow-Up Comment: CM understands and agrees with the source of the 25% credit. However, it is important to note that this figure pertains to commuting, not necessarily to special events like those being contemplated as part of this application. The lack of a designated shuttle between the train station and the site could lower this figure in reality. A lower percentage would mean a higher personal vehicle share, increasing both site trip generation and parking demand. We recommend that more information be provided to support the 25% credit in light of the parking shortfall.

**Response:** The Applicant and our office maintain that the 25% Credit is appropriate for the various reasons previously identified in our December 28, 2021 Traffic & Parking Study. However, a sensitivity analysis has been prepared assuming a 10% credit for non-vehicular traffic. The associated project generated traffic for this sensitivity analysis is summarized on Table No. 1-S attached. The result traffic volumes at each of the study area intersection are summarized in attached Figures No. 16-S through 19-S and 22-S through 25-S. The analysis results associated with this sensitivity analysis are summarized in Table No.

**2-S for the Friday and Saturday Peak Event Entry and Exit Periods. The results indicate that the additional volumes associated with this sensitivity analysis do not significantly change the future traffic operating conditions associated with the Build-Out of the project under these event conditions with a lower non-vehicular traffic 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.

CM Review #2 Follow-Up Comment: It is recommended that project materials be submitted to the NYSDOT as early as possible so that any approved mitigation can be implemented in line with proposed construction. It would be helpful for the City to be copied on the correspondence with the NYSDOT.

**Response:** Typically, the City would make the initial circulation of Project related materials to NYSDOT as part of the Lead Agency Circulation in order to initiate their review. Regardless, a submission to NYSDOT by the Applicant will be prepared and a copy of the submission will be circulated to the City as well.

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.

CM Review #2 Follow-Up Comment: CM understands and agrees with the source of the 25% credit. However, it is important to note that this figure pertains to commuting, not necessarily to special events like those being contemplated as part of this application. The lack of a designated shuttle between the train station and the site could lower this figure in reality. A lower percentage would mean a higher personal vehicle share, increasing both site trip generation and parking demand. We recommend that more information be provided to support the 25% credit in light of the parking shortfall.

**Response:** As previously noted associated with the Traffic Analysis a sensitivity analysis was conducted utilizing a 10% non-vehicular traffic credit. Applying this same 10% credit to the parking requirements for the Project maximum capacity events, the total estimated parking for the Project, including hotel parking, would be 83 parking spaces, with 52 parking spaces required off-site. Note that this assumes 100% of the hotel guest will also attend these larger events. This is compared to the 75 total parking spaces that would be



**required, 44 of which would be required to accommodate off-site, utilizing the 25% credit noted in the December 28, 2021 Traffic & Parking study. Therefore, with the lower 10% credit approximately 8 additional parking spaces would be required to be accommodated off-site.**

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.

CM Review #2 Follow-Up Comment: Colliers is proposing that the site will require 75 parking spaces during an event's peak demand, which would be supported by the 31 spaces provided on-site and 44 spaces sourced from public parking. Colliers arrived at this number using the City of Beacon Zoning Code requirements for the 30-room Hotel with one employee and the 350-person Event Space. Thus, these uses will require 31 spaces and 88 spaces, respectively, for a total of 119. Colliers assumed that 100% of the hotel patrons would be associated with the event, therefore the 88 spaces required for the event could be reduced to 58. Lastly, Colliers applied the 25% credit for modes of traffic other than personal vehicles to arrive at 44 spaces that would be sourced from public parking.

As noted in Review #1, Colliers conducted a parking survey of six parking field locations. In general, these surveys were conducted on the following days:

- Friday, September 24, 2021 | 1PM-8PM
- Saturday, September 25, 2021 | 1PM-8PM
- Friday, November 5, 2021 | 1PM-8PM
- Saturday, November 6, 2021 | 1PM-8PM

Colliers identified the Tompkins Firehouse Parking Lot and City of Beacon Municipal Plaza (City Hall) Parking Lots as the most viable locations due to their proximity to the subject site and their reserve parking capacity. There are existing pedestrian accommodations for patrons to walk to and from these lots and the subject site. Based on Colliers parking survey, these lots currently have reserve capacity to accommodate the 44 spaces to be sourced from off-site locations.

CM notes that the surface of the Tompkins Firehouse Parking Lot is mix of asphalt, gravel, and grass/soil with no delineation of parking spaces. The number of spaces provided in the lot, 70, was estimated by Colliers. This estimation should be explained for clarity. Furthermore, the approximated number of spaces provided in the lot will be reduced by at least 14 spaces when the Tompkins Firehouse is expanded on the north side. CM agrees that this is a viable location currently in terms of proximity and reserve capacity; however, the increased use of the lot by the proposed development could further deteriorate the lot surface, and it could prove to be only a short-term solution with the expansion of the firehouse.

The City of Beacon Municipal Plaza Lot was not studied during hours of operations for City Hall. Therefore, it is unclear if this lot could accommodate parking for the subject site prior to 5PM on a typical Friday, which would be necessary for the restaurant/bar/café that will be open to the public. If this lot is to be identified as a possible location, the parking study of the lot should include the time period between 1PM-5PM.

**Response:** The estimate of 70 parking spaces identified in the Tompkins Parking lot was based on information presented by the Main Street Access committee, which had identified this lot as a potential location for additional public parking in proximity to Main Street. We understand that use of the entirety or some portion of this lot for public parking could be temporary based on future further development of the Tompkins Firehouse. Even without the use of this lot the parking observations indicate sufficient parking within the study area to support the Project, although the remaining available parking may be more remote.

The City of Beacon Municipal Plaza Parking lot was not observed during either Friday observations prior to 5 PM because limited available parking was noted during those periods. However, as requested, additional data was collected during the 1PM – 5PM time period on Friday January 21, 2022. This data is summarized in the below Table. It should be noted that there are 100 parking spaces in this Municipal Plaza Lot. These include 10 handicap spaces, 10 designated police parking spaces and 4 designated spaces for City Officials. This would reduce the effective available public parking to 76 parking spaces.



#### Municipal Plaza Parking Observations – Friday January 21, 2022

| Time | Occupied Spaces | Available Spaces |
|------|-----------------|------------------|
| 1 PM | 56              | 20               |
| 2 PM | 53              | 23               |
| 3 PM | 55              | 21               |
| 4 PM | 50              | 26               |
| 5 PM | 40              | 36               |

**Based on the observations of the Municipal Plaza parking lot, there is some availability of public parking during the Friday 1PM – 5PM time period.**

#### Review # 2 Comments

1. The number of patrons and seats for the proposed restaurant/bar/café differs throughout the submittal materials. The cover letter prepared by Cuddy + Feder refers to 40 patrons, the parking study section refers to 66 patrons, and Table 1 on the Traffic and Parking Study refers to 125 seats. Please confirm the number of patrons and/or seats being proposed for this use.

**Response:** The Applicant has confirmed that the maximum number of seats within the café under typical conditions will be 50 seats. The December 28, 2021 Traffic & Parking Study assumes a seating capacity of 125 Seats for the Café. Therefore, the results of the traffic study for typical conditions are conservative and actually traffic operating conditions, during non-event time periods, would be somewhat better than the results analysis results indicated in the study.

## Lanc & Tully Engineering & Surveying, P.C. Letter dated January 5, 2022

### 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.

**Response:** See response to Creighton Manning Traffic & Parking Study Comment 6 above. A layout for the parking within the Tompkins lot has not been prepared as part of this submission, but will be provided at a later date.

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.

**Response:** Typically, the City would make the initial circulation of Project related materials to NYSDOT as part of the Lead Agency Circulation in order to initiate their review. Regardless, a submission to NYSDOT by the Applicant will be prepared and a copy of the submission will be circulated to the City as well.

Sincerely,

Colliers Engineering & Design CT, P.C.



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

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# Attachment 1

Sight Distance Analysis  
Table No. 3-R



Table No. 3-R  
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.) |
| <b>Main Access Driveway</b>                   |                 |                                |          |                               |                                   |
| Left Turn From Minor Road<br>(Site Access)    | Looking Left    | 435                            | 435      | 278                           | 419                               |
|                                               | Looking Right   | 545                            | 545      | 278                           | 419                               |
| Left Turn From Major Road<br>(Wolcott Avenue) | Left Turn Entry | 450                            | 450      | 278                           | 307                               |
|                                               | Rear End        | 500                            | 500      | 278                           | -                                 |
| <b>Loop Exit Driveway</b>                     |                 |                                |          |                               |                                   |
| Left Turn From Minor Road<br>(545)            | Looking Left    | 415                            | 415      | 278                           | 419                               |
|                                               | Looking Right   | 600                            | 600      | 278                           | 419                               |
| Left Turn From Major Road<br>(435)            | Left Turn Entry | 430                            | 430      | 278                           | 307                               |
|                                               | Rear End        | 500                            | 500      | 278                           | -                                 |

Notes:

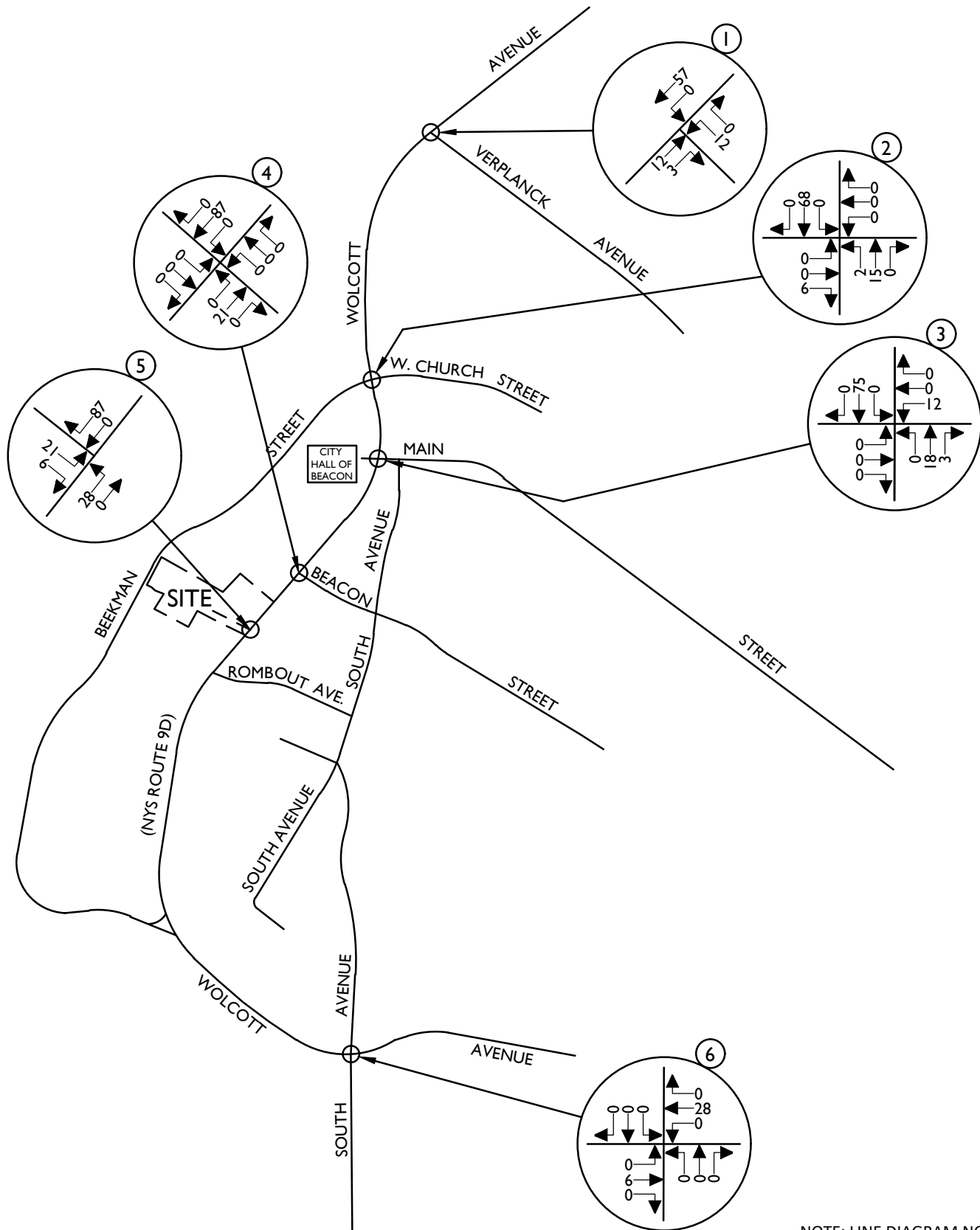
- 1) AASHTO Sight Distances are based on a 38 MPH operating speed along the roadway in the vicinity of the Site Access location
- 2) Available Sight Distances shown are for existing conditions and for future conditions after completion any improvements such as Vegetative Pruning/Clearing .

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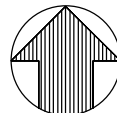


# Attachment 2

## Event Conditions Sensitivity Analysis



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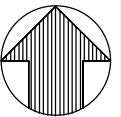
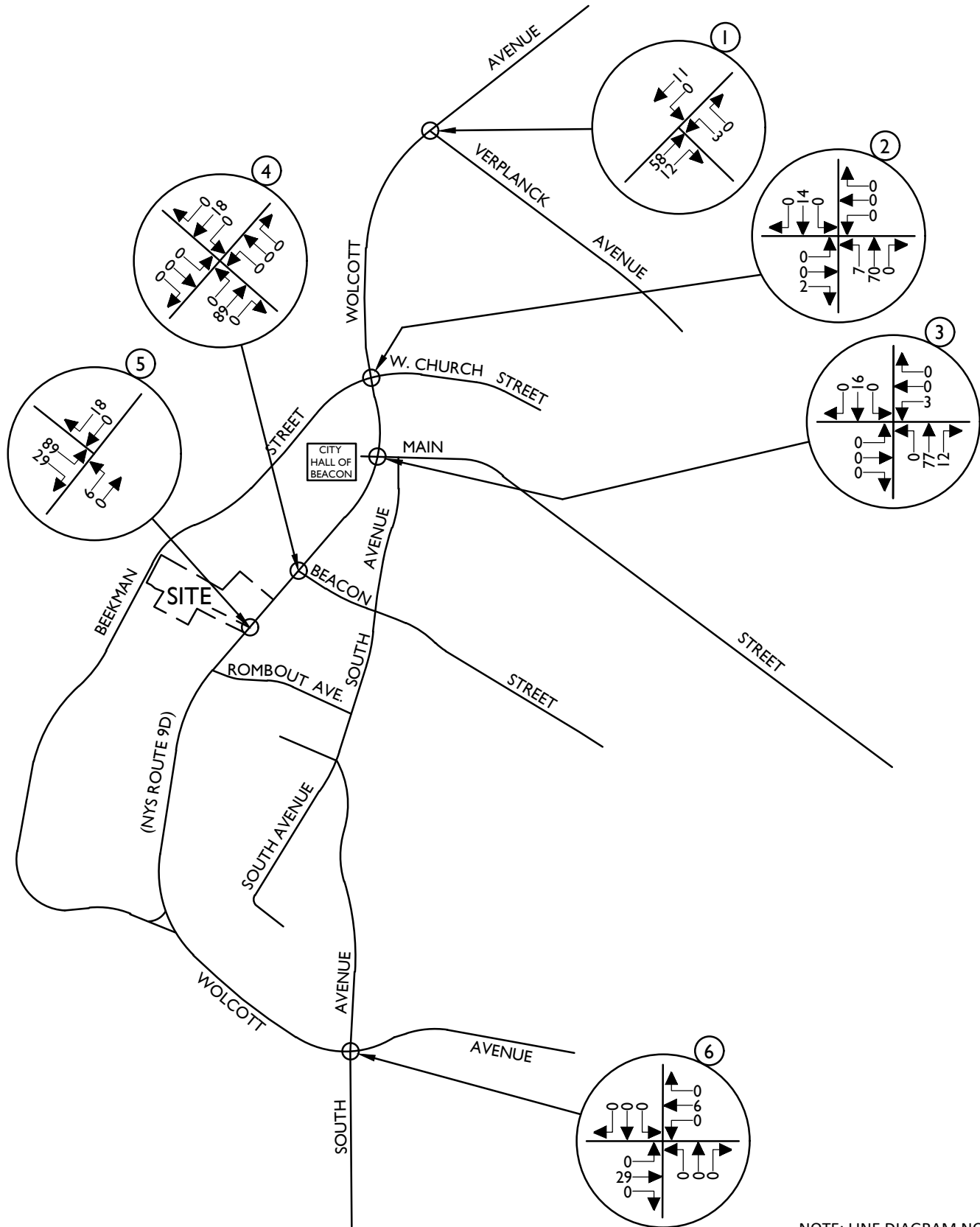
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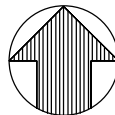
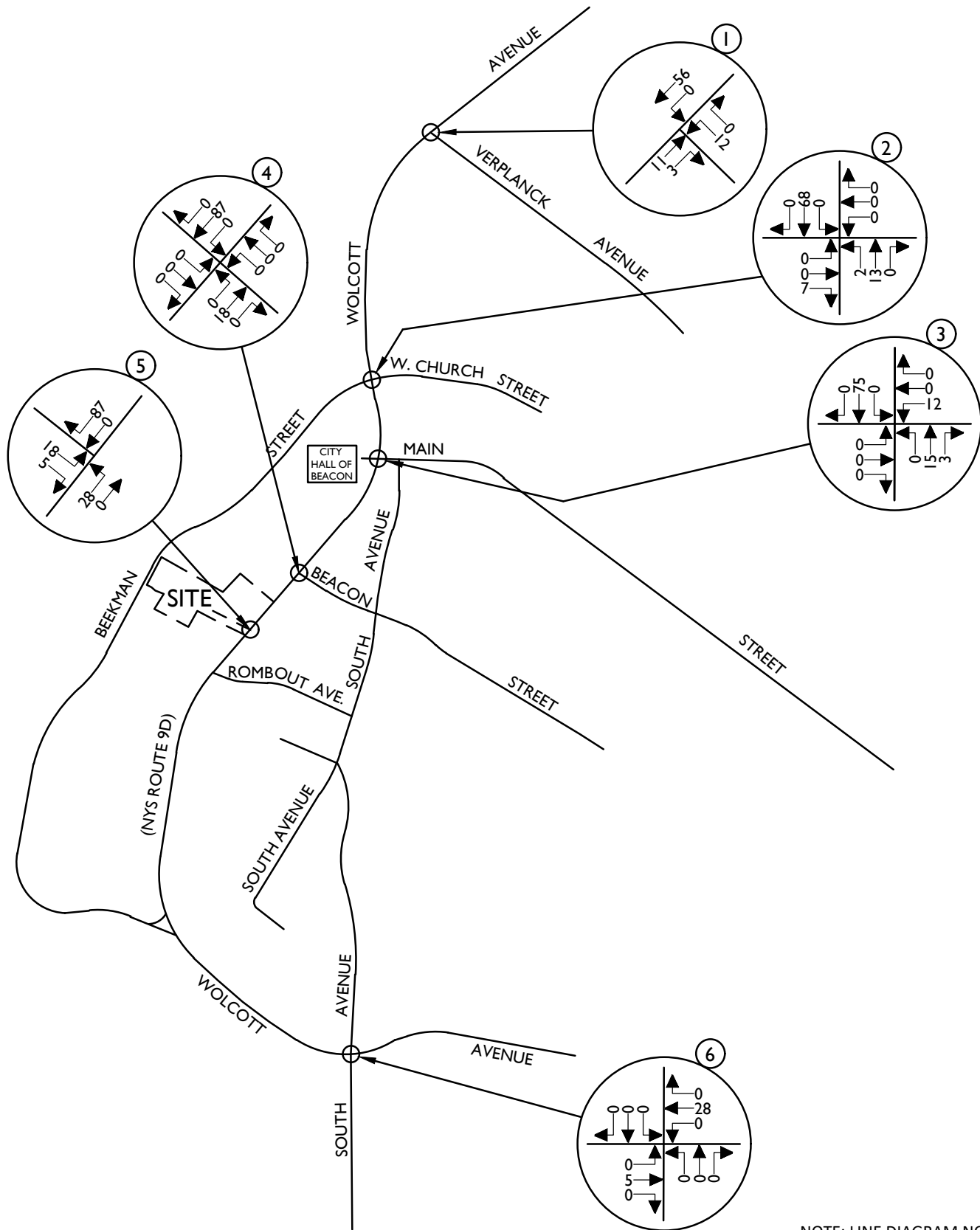
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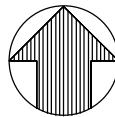
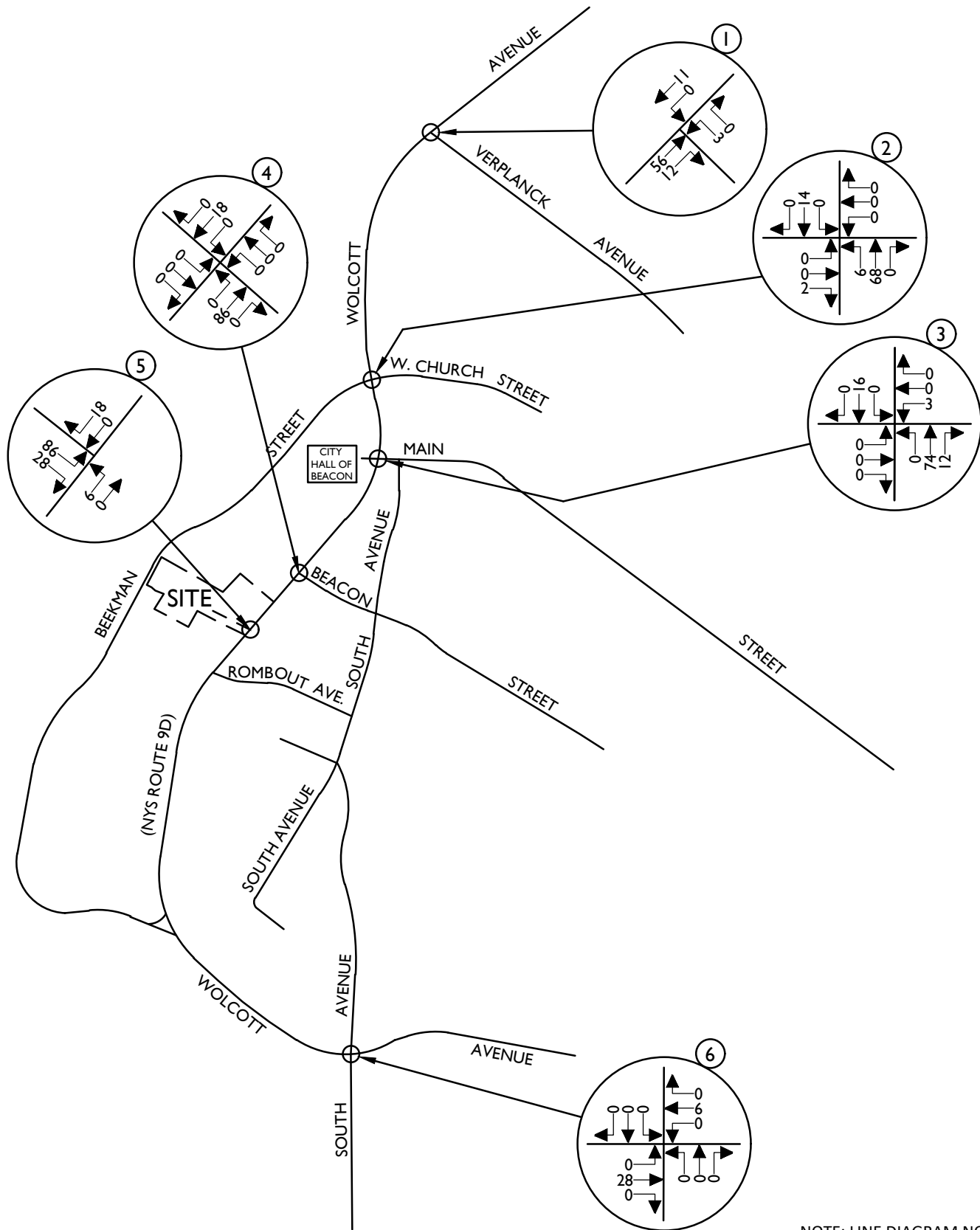
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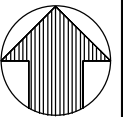
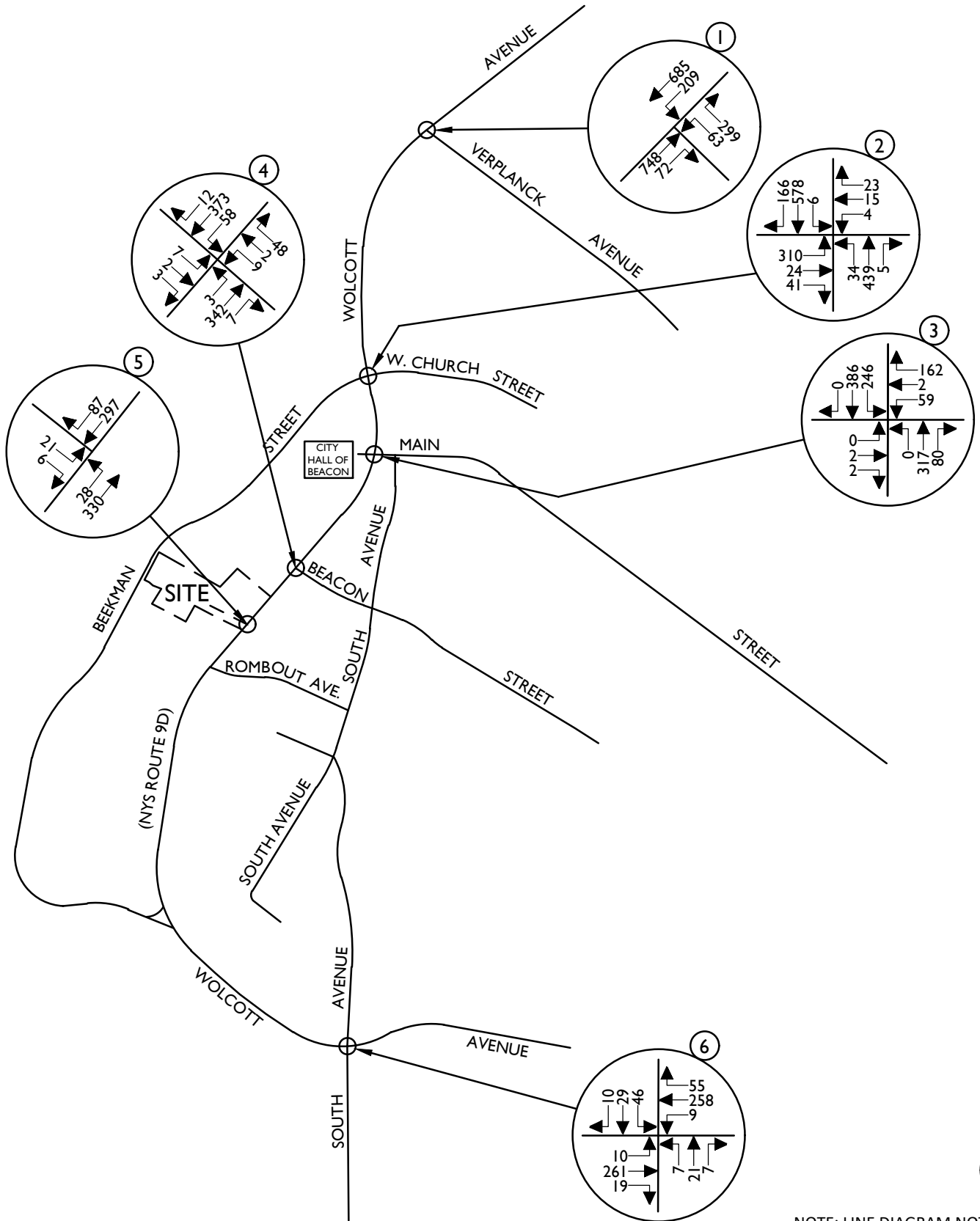
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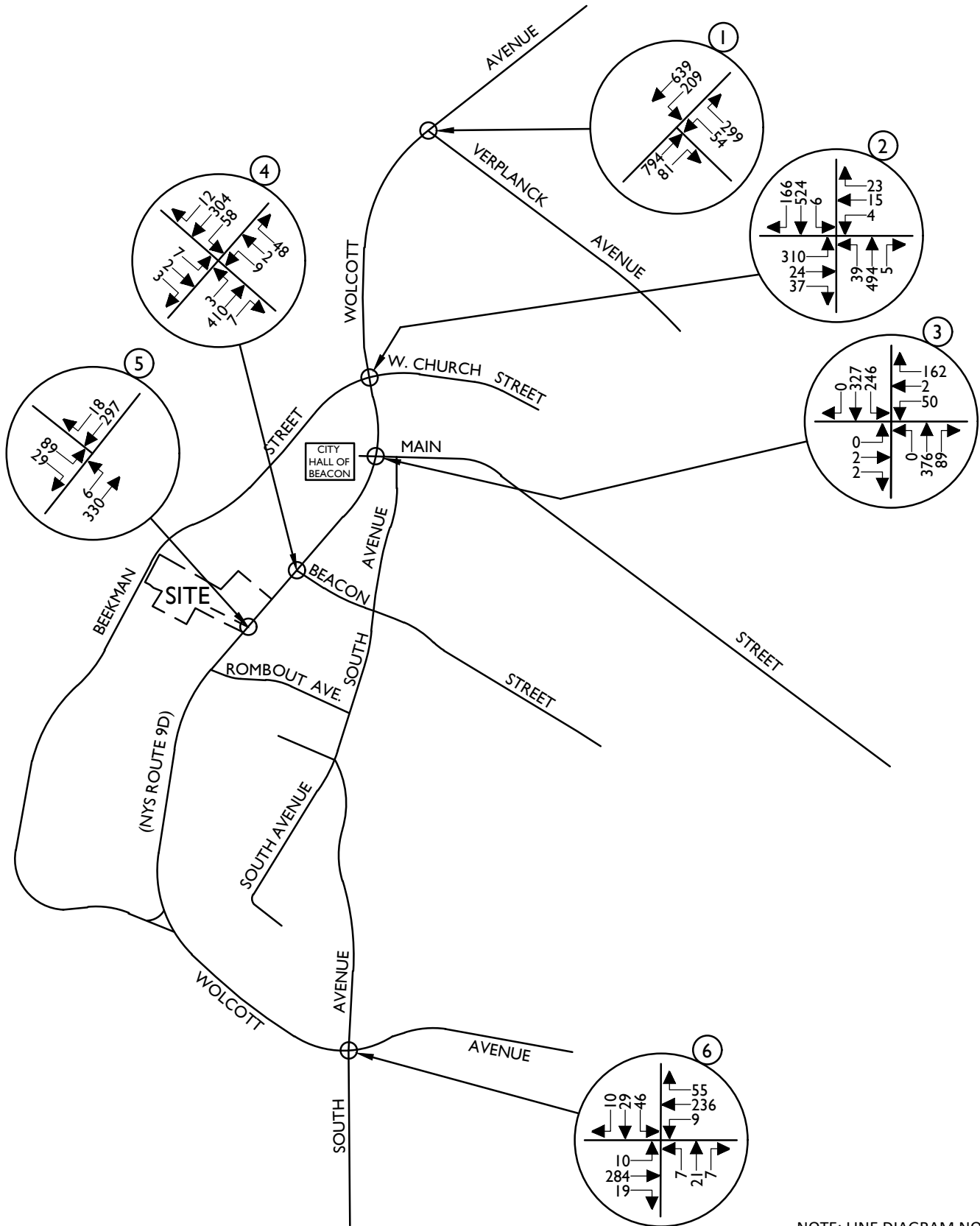
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2024 BUILD TRAFFIC VOLUMES  
FRIDAY PM PEAK HOUR**

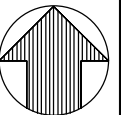
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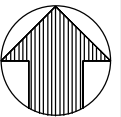
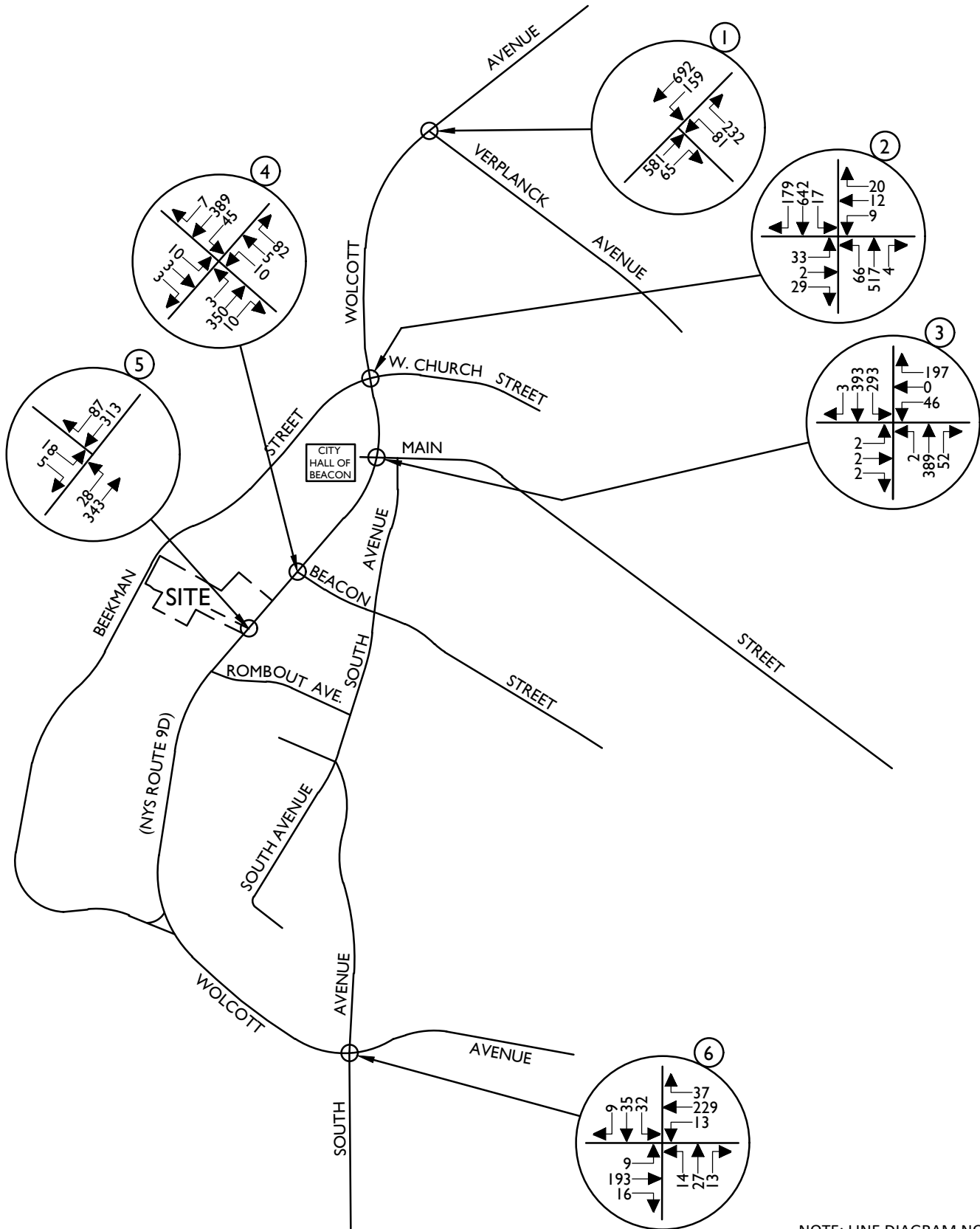
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|              | 2024 BUILD TRAFFIC VOLUMES |
|              | FRIDAY PM PEAK HOUR        |

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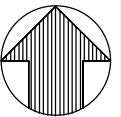
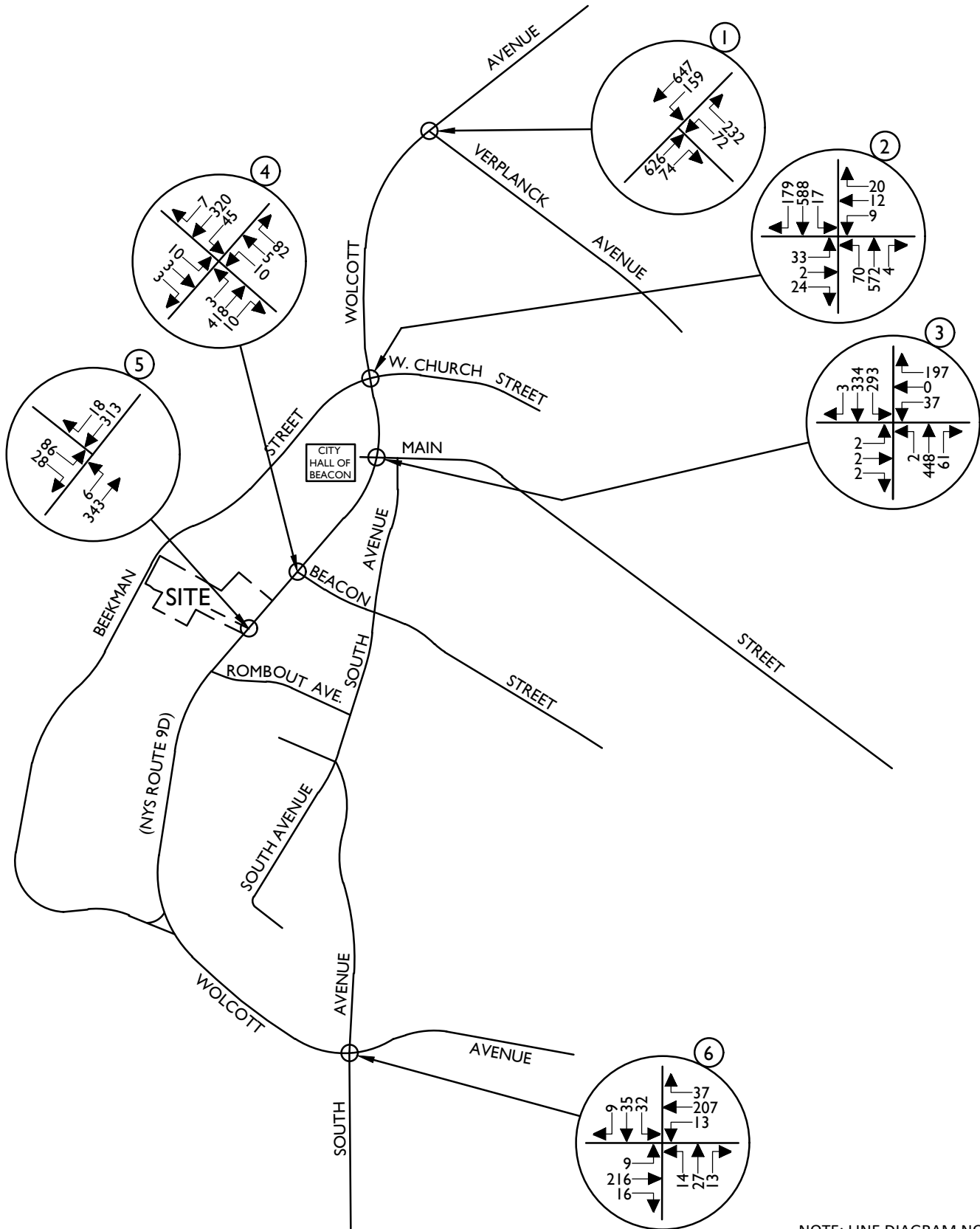
## TRAFFIC IMPACT STUDY

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| SHEET TITLE: | EVENT ENTRY<br>2024 BUILD TRAFFIC VOLUMES<br>SATURDAY PEAK HOUR |
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**EVENT EXIT  
2024 BUILD TRAFFIC VOLUMES  
SATURDAY PEAK HOUR**

SHEET NUMBER:

25-S

105

**Table No. 1-S**  
**Hourly Trip Generation Rates (HTGR) and**  
**Anticipated Site Generated Traffic Volumes**  
**Event Conditions Sensitivity Analysis**

| 1113 Wolcott Avenue<br>City of Beacon, New York | Entry             |        |                        | Exit  |        |                        | Total Trips |
|-------------------------------------------------|-------------------|--------|------------------------|-------|--------|------------------------|-------------|
|                                                 | HTGR <sup>1</sup> | Volume | New Trips <sup>2</sup> | HTGR1 | Volume | New Trips <sup>2</sup> |             |
| Event Conditions Sensitivity Analysis           |                   |        |                        |       |        |                        |             |
| Weekday Peak Event Entry Hour                   |                   |        |                        |       |        |                        |             |
| Hotel<br>(30 Rooms)                             | 0.37              | 11     | 6                      | 0.40  | 12     | 8                      | 14          |
| Event<br>(350 Persons)                          | 1.02              | 127    | 109                    | 0.20  | 25     | 19                     | 128         |
| Total                                           | -                 | 138    | 115                    | -     | 37     | 27                     | 142         |
| Weekday Peak Event Exit Hour                    |                   |        |                        |       |        |                        |             |
| Hotel<br>(30 Rooms)                             | 0.37              | 11     | 6                      | 0.40  | 12     | 8                      | 14          |
| Event<br>(350 Persons)                          | 0.20              | 25     | 18                     | 1.02  | 127    | 110                    | 128         |
| Total                                           | -                 | 36     | 24                     | -     | 139    | 118                    | 142         |
| Saturday Peak Event Entry Hour                  |                   |        |                        |       |        |                        |             |
| Hotel<br>(30 Rooms)                             | 0.50              | 15     | 8                      | 0.40  | 12     | 6                      | 14          |
| Event<br>(350 Persons)                          | 1.02              | 127    | 107                    | 0.20  | 25     | 17                     | 124         |
| Total                                           | -                 | 142    | 115                    | -     | 37     | 23                     | 138         |
| Saturday Peak Event Exit Hour                   |                   |        |                        |       |        |                        |             |
| Hotel<br>(30 Rooms)                             | 0.50              | 15     | 8                      | 0.40  | 12     | 6                      | 14          |
| Event<br>(350 Persons)                          | 0.20              | 25     | 16                     | 1.02  | 127    | 108                    | 124         |
| Total                                           | -                 | 40     | 24                     | -     | 139    | 114                    | 138         |

**NOTES:**

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

**Table No. 2-5**  
**Level of Service Summary Table**  
**Friday PM Peak Hour - Sensitivity Analysis**

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



**Table No. 2-5**  
**Level of Service Summary Table**  
**Friday PM Peak Hour - Sensitivity Analysis**

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

**NOTES:**

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

**Table No. 2-5**  
**Level of Service Summary Table**  
**Saturday Peak Hour - Sensitivity Analysis**

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

**Table No. 2-5**  
**Level of Service Summary Table**  
**Saturday Peak Hour - Sensitivity Analysis**

|   |                                |                     | 2021 Existing |     |       | 2024 No-Build |     |       | 2024 Build<br>Typical Conditions |     |       | 2024 Build Sensitivity<br>Event Entry Conditions |     |       | 2024 Build Sensitivity<br>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 &<br>Site Access  | Unsignalized        |               |     |       |               |     |       |                                  |     |       |                                                  |     |       |                                                 |     |       |
|   |                                | EB LR               | -             | -   | -     | -             | -   | -     | 0.06                             | B   | 12.3  | 0.05                                             | B   | 12.8  | 0.23                                            | B   | 13.8  |
|   |                                | NB LT               | -             | -   | -     | -             | -   | -     | 0.01                             | A   | 8.1   | 0.03                                             | A   | 8.3   | 0.01                                            | A   | 8.0   |
| 6 | NYS Route 9D &<br>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   | 23.0  | 0.34                                            | C   | 23.6  |
|   |                                | NYS Route 9D WB LTR | 0.31          | C   | 23.0  | 0.34          | C   | 23.5  | 0.35                             | C   | 23.7  | 0.38                                             | C   | 24.2  | 0.35                                            | C   | 23.7  |
|   |                                | South Avenue NB LTR | 0.08          | B   | 19.7  | 0.12          | C   | 20.2  | 0.12                             | C   | 20.2  | 0.12                                             | C   | 20.2  | 0.12                                            | C   | 20.2  |
|   |                                | South Avenue SB LTR | 0.08          | B   | 19.7  | 0.13          | C   | 20.3  | 0.13                             | C   | 20.3  | 0.13                                             | C   | 20.3  | 0.13                                            | C   | 20.3  |
|   |                                | Overall             |               | C   | 22.1  |               | C   | 22.5  |                                  | C   | 22.6  |                                                  | C   | 22.8  |                                                 | C   | 22.8  |

**NOTES:**

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



2024 Build Traffic Volumes - Sensitivity  
1: NYS Route 9D & Verplanck Avenue

Friday PM Build Event Entry  
01/24/2022

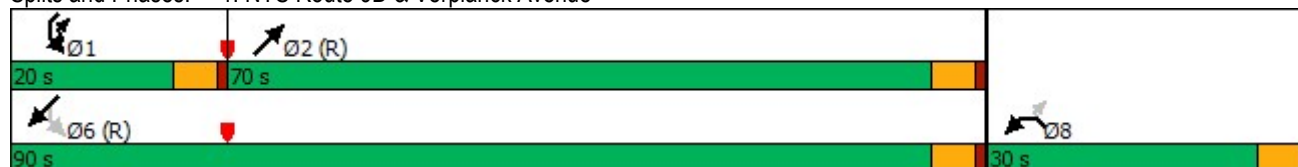
|                            |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------------------------------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

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

#### Intersection Summary

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

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



|                              |  |  |  |  |  |  |   |      |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---|------|
| Movement                     | NWL                                                                               | NWR                                                                               | NET                                                                               | NER                                                                               | SWL                                                                               | SWT                                                                               |   |      |
| Lane Configurations          |  |  |  |                                                                                   |  |  |   |      |
| Traffic Volume (veh/h)       | 63                                                                                | 299                                                                               | 748                                                                               | 72                                                                                | 209                                                                               | 685                                                                               |   |      |
| Future Volume (veh/h)        | 63                                                                                | 299                                                                               | 748                                                                               | 72                                                                                | 209                                                                               | 685                                                                               |   |      |
| Number                       | 3                                                                                 | 18                                                                                | 2                                                                                 | 12                                                                                | 1                                                                                 | 6                                                                                 |   |      |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |   |      |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   |   |      |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |   |      |
| Adj Sat Flow, veh/h/ln       | 1816                                                                              | 1816                                                                              | 1835                                                                              | 1872                                                                              | 1872                                                                              | 1872                                                                              |   |      |
| Adj Flow Rate, veh/h         | 68                                                                                | 325                                                                               | 813                                                                               | 78                                                                                | 227                                                                               | 745                                                                               |   |      |
| Adj No. of Lanes             | 1                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 |   |      |
| Peak Hour Factor             | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              |   |      |
| Percent Heavy Veh, %         | 2                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                 |   |      |
| Cap, veh/h                   | 360                                                                               | 515                                                                               | 893                                                                               | 86                                                                                | 343                                                                               | 1326                                                                              |   |      |
| Arrive On Green              | 0.21                                                                              | 0.21                                                                              | 0.54                                                                              | 0.54                                                                              | 0.13                                                                              | 0.71                                                                              |   |      |
| Sat Flow, veh/h              | 1730                                                                              | 1544                                                                              | 1649                                                                              | 158                                                                               | 1783                                                                              | 1872                                                                              |   |      |
| Grp Volume(v), veh/h         | 68                                                                                | 325                                                                               | 0                                                                                 | 891                                                                               | 227                                                                               | 745                                                                               |   |      |
| Grp Sat Flow(s),veh/h/ln     | 1730                                                                              | 1544                                                                              | 0                                                                                 | 1807                                                                              | 1783                                                                              | 1872                                                                              |   |      |
| Q Serve(g_s), s              | 3.9                                                                               | 21.3                                                                              | 0.0                                                                               | 53.5                                                                              | 6.1                                                                               | 23.1                                                                              |   |      |
| Cycle Q Clear(g_c), s        | 3.9                                                                               | 21.3                                                                              | 0.0                                                                               | 53.5                                                                              | 6.1                                                                               | 23.1                                                                              |   |      |
| Prop In Lane                 | 1.00                                                                              | 1.00                                                                              |                                                                                   | 0.09                                                                              | 1.00                                                                              |                                                                                   |   |      |
| Lane Grp Cap(c), veh/h       | 360                                                                               | 515                                                                               | 0                                                                                 | 979                                                                               | 343                                                                               | 1326                                                                              |   |      |
| V/C Ratio(X)                 | 0.19                                                                              | 0.63                                                                              | 0.00                                                                              | 0.91                                                                              | 0.66                                                                              | 0.56                                                                              |   |      |
| Avail Cap(c_a), veh/h        | 360                                                                               | 515                                                                               | 0                                                                                 | 979                                                                               | 343                                                                               | 1326                                                                              |   |      |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |   |      |
| Upstream Filter(I)           | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |   |      |
| Uniform Delay (d), s/veh     | 39.1                                                                              | 33.8                                                                              | 0.0                                                                               | 24.9                                                                              | 25.4                                                                              | 8.5                                                                               |   |      |
| Incr Delay (d2), s/veh       | 1.2                                                                               | 5.8                                                                               | 0.0                                                                               | 13.9                                                                              | 9.7                                                                               | 1.7                                                                               |   |      |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |   |      |
| %ile BackOfQ(50%),veh/ln     | 2.0                                                                               | 9.9                                                                               | 0.0                                                                               | 30.3                                                                              | 7.9                                                                               | 12.4                                                                              |   |      |
| LnGrp Delay(d),s/veh         | 40.3                                                                              | 39.6                                                                              | 0.0                                                                               | 38.8                                                                              | 35.1                                                                              | 10.2                                                                              |   |      |
| LnGrp LOS                    | D                                                                                 | D                                                                                 |                                                                                   | D                                                                                 | D                                                                                 | B                                                                                 |   |      |
| Approach Vol, veh/h          | 393                                                                               |                                                                                   | 891                                                                               |                                                                                   |                                                                                   | 972                                                                               |   |      |
| Approach Delay, s/veh        | 39.7                                                                              |                                                                                   | 38.8                                                                              |                                                                                   |                                                                                   | 16.0                                                                              |   |      |
| Approach LOS                 | D                                                                                 |                                                                                   | D                                                                                 |                                                                                   |                                                                                   | B                                                                                 |   |      |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7 | 8    |
| Assigned Phs                 | 1                                                                                 | 2                                                                                 |                                                                                   |                                                                                   |                                                                                   | 6                                                                                 |   | 8    |
| Phs Duration (G+Y+Rc), s     | 20.0                                                                              | 70.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 90.0                                                                              |   | 30.0 |
| Change Period (Y+Rc), s      | 5.0                                                                               | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 5.0                                                                               |   | 5.0  |
| Max Green Setting (Gmax), s  | 15.0                                                                              | 65.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 85.0                                                                              |   | 25.0 |
| Max Q Clear Time (g_c+l1), 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 - Sensitivity  
2: NYS Route 9D & Beekman Street/W. Church Street

Friday PM Build Event Entry  
01/24/2022

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

2024 Build Traffic Volumes - Sensitivity  
2: NYS Route 9D & Beekman Street/W. Church Street

Friday PM Build Event Entry  
01/24/2022

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

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 82.4

Natural Cycle: 90

Control Type: Semi Act-Uncoord

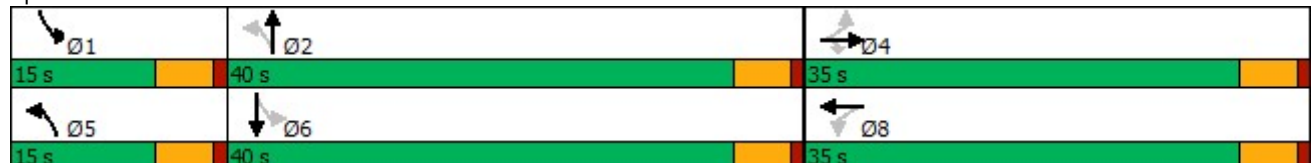
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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



|                              |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |                                                                                   |  |  |                                                                                   |  |                                                                                   |  |  |                                                                                     |  |  |                                                                                     |
| Traffic Volume (veh/h)       | 310                                                                               | 24                                                                                | 41                                                                                | 4                                                                                 | 15                                                                                | 23                                                                                | 34                                                                                 | 439                                                                                 | 5                                                                                   | 6                                                                                   | 578                                                                                 | 166                                                                                 |
| Future Volume (veh/h)        | 310                                                                               | 24                                                                                | 41                                                                                | 4                                                                                 | 15                                                                                | 23                                                                                | 34                                                                                 | 439                                                                                 | 5                                                                                   | 6                                                                                   | 578                                                                                 | 166                                                                                 |
| Number                       | 7                                                                                 | 4                                                                                 | 14                                                                                | 3                                                                                 | 8                                                                                 | 18                                                                                | 5                                                                                  | 2                                                                                   | 12                                                                                  | 1                                                                                   | 6                                                                                   | 16                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 0.96                                                                              | 1.00                                                                               |                                                                                     | 0.98                                                                                | 1.00                                                                                |                                                                                     | 0.97                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       | 1881                                                                              | 1842                                                                              | 1881                                                                              | 1995                                                                              | 1947                                                                              | 1995                                                                              | 1900                                                                               | 1919                                                                                | 1957                                                                                | 1872                                                                                | 1853                                                                                | 1872                                                                                |
| Adj Flow Rate, veh/h         | 437                                                                               | 34                                                                                | 58                                                                                | 4                                                                                 | 16                                                                                | 25                                                                                | 40                                                                                 | 523                                                                                 | 6                                                                                   | 6                                                                                   | 590                                                                                 | 169                                                                                 |
| Adj No. of Lanes             | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                  | 1                                                                                   | 0                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Peak Hour Factor             | 0.71                                                                              | 0.71                                                                              | 0.71                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.84                                                                               | 0.84                                                                                | 0.84                                                                                | 0.98                                                                                | 0.98                                                                                | 0.98                                                                                |
| Percent Heavy Veh, %         | 2                                                                                 | 4                                                                                 | 0                                                                                 | 0                                                                                 | 7                                                                                 | 0                                                                                 | 3                                                                                  | 2                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 1                                                                                   |
| Cap, veh/h                   | 193                                                                               | 8                                                                                 | 581                                                                               | 48                                                                                | 144                                                                               | 180                                                                               | 140                                                                                | 847                                                                                 | 10                                                                                  | 306                                                                                 | 584                                                                                 | 167                                                                                 |
| Arrive On Green              | 0.36                                                                              | 0.36                                                                              | 0.36                                                                              | 0.36                                                                              | 0.36                                                                              | 0.36                                                                              | 0.03                                                                               | 0.45                                                                                | 0.45                                                                                | 0.01                                                                                | 0.42                                                                                | 0.42                                                                                |
| Sat Flow, veh/h              | 299                                                                               | 23                                                                                | 1594                                                                              | 0                                                                                 | 396                                                                               | 495                                                                               | 1810                                                                               | 1893                                                                                | 22                                                                                  | 1782                                                                                | 1376                                                                                | 394                                                                                 |
| Grp Volume(v), veh/h         | 471                                                                               | 0                                                                                 | 58                                                                                | 45                                                                                | 0                                                                                 | 0                                                                                 | 40                                                                                 | 0                                                                                   | 529                                                                                 | 6                                                                                   | 0                                                                                   | 759                                                                                 |
| Grp Sat Flow(s),veh/h/ln     | 323                                                                               | 0                                                                                 | 1594                                                                              | 890                                                                               | 0                                                                                 | 0                                                                                 | 1810                                                                               | 0                                                                                   | 1915                                                                                | 1782                                                                                | 0                                                                                   | 1770                                                                                |
| Q Serve(g_s), s              | 0.0                                                                               | 0.0                                                                               | 2.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 1.0                                                                                | 0.0                                                                                 | 17.4                                                                                | 0.2                                                                                 | 0.0                                                                                 | 35.0                                                                                |
| Cycle Q Clear(g_c), s        | 30.0                                                                              | 0.0                                                                               | 2.0                                                                               | 30.0                                                                              | 0.0                                                                               | 0.0                                                                               | 1.0                                                                                | 0.0                                                                                 | 17.4                                                                                | 0.2                                                                                 | 0.0                                                                                 | 35.0                                                                                |
| Prop In Lane                 | 0.93                                                                              |                                                                                   | 1.00                                                                              | 0.09                                                                              |                                                                                   | 0.56                                                                              | 1.00                                                                               |                                                                                     | 0.01                                                                                | 1.00                                                                                |                                                                                     | 0.22                                                                                |
| Lane Grp Cap(c), veh/h       | 202                                                                               | 0                                                                                 | 581                                                                               | 372                                                                               | 0                                                                                 | 0                                                                                 | 140                                                                                | 0                                                                                   | 857                                                                                 | 306                                                                                 | 0                                                                                   | 752                                                                                 |
| V/C Ratio(X)                 | 2.33                                                                              | 0.00                                                                              | 0.10                                                                              | 0.12                                                                              | 0.00                                                                              | 0.00                                                                              | 0.29                                                                               | 0.00                                                                                | 0.62                                                                                | 0.02                                                                                | 0.00                                                                                | 1.01                                                                                |
| Avail Cap(c_a), veh/h        | 202                                                                               | 0                                                                                 | 581                                                                               | 372                                                                               | 0                                                                                 | 0                                                                                 | 307                                                                                | 0                                                                                   | 857                                                                                 | 511                                                                                 | 0                                                                                   | 752                                                                                 |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 0.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 0.00                                                                              | 1.00                                                                               | 0.00                                                                                | 1.00                                                                                | 1.00                                                                                | 0.00                                                                                | 1.00                                                                                |
| Uniform Delay (d), s/veh     | 32.5                                                                              | 0.0                                                                               | 17.3                                                                              | 18.4                                                                              | 0.0                                                                               | 0.0                                                                               | 20.0                                                                               | 0.0                                                                                 | 17.4                                                                                | 14.9                                                                                | 0.0                                                                                 | 23.7                                                                                |
| Incr Delay (d2), s/veh       | 615.8                                                                             | 0.0                                                                               | 0.1                                                                               | 0.1                                                                               | 0.0                                                                               | 0.0                                                                               | 1.1                                                                                | 0.0                                                                                 | 3.3                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 35.2                                                                                |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 39.0                                                                              | 0.0                                                                               | 0.9                                                                               | 0.7                                                                               | 0.0                                                                               | 0.0                                                                               | 0.5                                                                                | 0.0                                                                                 | 9.9                                                                                 | 0.1                                                                                 | 0.0                                                                                 | 24.3                                                                                |
| LnGrp Delay(d),s/veh         | 648.2                                                                             | 0.0                                                                               | 17.4                                                                              | 18.5                                                                              | 0.0                                                                               | 0.0                                                                               | 21.1                                                                               | 0.0                                                                                 | 20.7                                                                                | 14.9                                                                                | 0.0                                                                                 | 58.9                                                                                |
| LnGrp LOS                    | F                                                                                 |                                                                                   | B                                                                                 | B                                                                                 |                                                                                   |                                                                                   | C                                                                                  |                                                                                     | C                                                                                   | B                                                                                   |                                                                                     | F                                                                                   |
| Approach Vol, veh/h          | 529                                                                               |                                                                                   |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 569                                                                                |                                                                                     |                                                                                     | 765                                                                                 |                                                                                     |                                                                                     |
| Approach Delay, s/veh        | 579.1                                                                             |                                                                                   |                                                                                   | 18.5                                                                              |                                                                                   |                                                                                   | 20.7                                                                               |                                                                                     |                                                                                     | 58.5                                                                                |                                                                                     |                                                                                     |
| Approach LOS                 | F                                                                                 |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                   | C                                                                                  |                                                                                     |                                                                                     | E                                                                                   |                                                                                     |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 | 1                                                                                 | 2                                                                                 | 4                                                                                 |                                                                                   | 5                                                                                 | 6                                                                                 | 8                                                                                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 5.5                                                                               | 41.9                                                                              | 35.0                                                                              |                                                                                   | 7.4                                                                               | 40.0                                                                              | 35.0                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 10.0                                                                              | 35.0                                                                              | 30.0                                                                              |                                                                                   | 10.0                                                                              | 35.0                                                                              | 30.0                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), s | 2.2                                                                               | 19.4                                                                              | 32.0                                                                              |                                                                                   | 3.0                                                                               | 37.0                                                                              | 32.0                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 0.0                                                                               | 1.3                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          |                                                                                   |                                                                                   |                                                                                   | 190.6                                                                             |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                 |                                                                                   |                                                                                   |                                                                                   | F                                                                                 |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |



2024 Build Traffic Volumes - Sensitivity  
3: NYS Route 9D & Beacon City Hall/Main Street

Friday PM Build Event Entry  
01/24/2022

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

2024 Build Traffic Volumes - Sensitivity  
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                                                                                 |
| Permitted Phases        | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 8                                                                                 | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase          | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 | 1                                                                                 | 5                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 4.0                                                                               | 4.0                                                                               |                                                                                   | 8.0                                                                               | 8.0                                                                               | 4.0                                                                               | 4.0                                                                                | 31.0                                                                                |                                                                                     | 4.0                                                                                 | 35.0                                                                                |                                                                                     |
| Minimum Split (s)       | 21.0                                                                              | 21.0                                                                              |                                                                                   | 21.0                                                                              | 21.0                                                                              | 9.0                                                                               | 9.0                                                                                | 36.0                                                                                |                                                                                     | 9.0                                                                                 | 40.0                                                                                |                                                                                     |
| Total Split (s)         | 35.0                                                                              | 35.0                                                                              |                                                                                   | 35.0                                                                              | 35.0                                                                              | 15.0                                                                              | 15.0                                                                               | 40.0                                                                                |                                                                                     | 15.0                                                                                | 40.0                                                                                |                                                                                     |
| Total Split (%)         | 38.9%                                                                             | 38.9%                                                                             |                                                                                   | 38.9%                                                                             | 38.9%                                                                             | 16.7%                                                                             | 16.7%                                                                              | 44.4%                                                                               |                                                                                     | 16.7%                                                                               | 44.4%                                                                               |                                                                                     |
| Maximum Green (s)       | 30.0                                                                              | 30.0                                                                              |                                                                                   | 30.0                                                                              | 30.0                                                                              | 10.0                                                                              | 10.0                                                                               | 35.0                                                                                |                                                                                     | 10.0                                                                                | 35.0                                                                                |                                                                                     |
| Yellow Time (s)         | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                | 4.0                                                                                 |                                                                                     | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |
| All-Red Time (s)        | 1.0                                                                               | 1.0                                                                               |                                                                                   | 1.0                                                                               | 1.0                                                                               | 1.0                                                                               | 1.0                                                                                | 1.0                                                                                 |                                                                                     | 1.0                                                                                 | 1.0                                                                                 |                                                                                     |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                | 5.0                                                                                 |                                                                                     | 5.0                                                                                 | 5.0                                                                                 |                                                                                     |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lag                                                                               | Lag                                                                                | Lead                                                                                |                                                                                     | Lag                                                                                 | Lead                                                                                |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               | Yes                                                                                | Yes                                                                                 |                                                                                     | Yes                                                                                 | Yes                                                                                 |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              | None                                                                              | None                                                                               | Max                                                                                 |                                                                                     | None                                                                                | Max                                                                                 |                                                                                     |
| Walk Time (s)           | 5.0                                                                               | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flash Dont Walk (s)     | 11.0                                                                              | 11.0                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 11.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Pedestrian Calls (#/hr) | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| v/c Ratio               |                                                                                   | 0.03                                                                              |                                                                                   |                                                                                   | 0.32                                                                              | 0.46                                                                              |                                                                                    | 0.50                                                                                |                                                                                     | 0.38                                                                                | 0.29                                                                                |                                                                                     |
| Control Delay           |                                                                                   | 21.2                                                                              |                                                                                   |                                                                                   | 31.1                                                                              | 21.7                                                                              |                                                                                    | 12.7                                                                                |                                                                                     | 6.2                                                                                 | 3.5                                                                                 |                                                                                     |
| Queue Delay             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                    | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.3                                                                                 |                                                                                     |
| Total Delay             |                                                                                   | 21.2                                                                              |                                                                                   |                                                                                   | 31.1                                                                              | 21.7                                                                              |                                                                                    | 12.7                                                                                |                                                                                     | 6.2                                                                                 | 3.8                                                                                 |                                                                                     |
| Queue Length 50th (ft)  |                                                                                   | 1                                                                                 |                                                                                   |                                                                                   | 26                                                                                | 54                                                                                |                                                                                    | 133                                                                                 |                                                                                     | 29                                                                                  | 50                                                                                  |                                                                                     |
| Queue Length 95th (ft)  |                                                                                   | 7                                                                                 |                                                                                   |                                                                                   | 61                                                                                | 100                                                                               |                                                                                    | 193                                                                                 |                                                                                     | 60                                                                                  | 97                                                                                  |                                                                                     |
| Internal Link Dist (ft) |                                                                                   | 53                                                                                |                                                                                   |                                                                                   | 270                                                                               |                                                                                   |                                                                                    | 613                                                                                 |                                                                                     |                                                                                     | 308                                                                                 |                                                                                     |
| Turn Bay Length (ft)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 70                                                                                |                                                                                    |                                                                                     |                                                                                     | 120                                                                                 |                                                                                     |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 829                                                                               |                                                                                   |                                                                                   | 693                                                                               | 398                                                                               |                                                                                    | 1006                                                                                |                                                                                     | 751                                                                                 | 1536                                                                                |                                                                                     |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                    | 0                                                                                   |                                                                                     | 0                                                                                   | 520                                                                                 |                                                                                     |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                    | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                    | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Reduced v/c Ratio       |                                                                                   | 0.01                                                                              |                                                                                   |                                                                                   | 0.10                                                                              | 0.45                                                                              |                                                                                    | 0.50                                                                                |                                                                                     | 0.37                                                                                | 0.43                                                                                |                                                                                     |

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 63.4

Natural Cycle: 70

Control Type: Semi Act-Uncoord

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

|                                                                                        |                                                                                        |                                                                                         |
|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
|  Ø2 |  Ø1 |  Ø4 |
| 40 s                                                                                   | 15 s                                                                                   | 35 s                                                                                    |
|  Ø6 |  Ø5 |  Ø8 |
| 40 s                                                                                   | 15 s                                                                                   | 35 s                                                                                    |

2024 Build Traffic Volumes - Sensitivity  
3: NYS Route 9D & Beacon City Hall/Main Street

Friday PM Build Event Entry  
01/24/2022

|                              |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |                                                                                   |  |                                                                                   |                                                                                   |  |  |  |  |                                                                                     |  |  |                                                                                     |
| Traffic Volume (veh/h)       | 0                                                                                 | 2                                                                                 | 2                                                                                 | 59                                                                                | 2                                                                                 | 162                                                                               | 0                                                                                  | 317                                                                                 | 80                                                                                  | 246                                                                                 | 386                                                                                 | 0                                                                                   |
| Future Volume (veh/h)        | 0                                                                                 | 2                                                                                 | 2                                                                                 | 59                                                                                | 2                                                                                 | 162                                                                               | 0                                                                                  | 317                                                                                 | 80                                                                                  | 246                                                                                 | 386                                                                                 | 0                                                                                   |
| Number                       | 7                                                                                 | 4                                                                                 | 14                                                                                | 3                                                                                 | 8                                                                                 | 18                                                                                | 5                                                                                  | 2                                                                                   | 12                                                                                  | 1                                                                                   | 6                                                                                   | 16                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 0.94                                                                              | 0.97                                                                              |                                                                                   | 0.94                                                                              | 1.00                                                                               |                                                                                     | 0.96                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       | 1890                                                                              | 1890                                                                              | 1890                                                                              | 1976                                                                              | 1976                                                                              | 1937                                                                              | 1928                                                                               | 1880                                                                                | 1928                                                                                | 1835                                                                                | 1853                                                                                | 1872                                                                                |
| Adj Flow Rate, veh/h         | 0                                                                                 | 3                                                                                 | 3                                                                                 | 65                                                                                | 2                                                                                 | 178                                                                               | 0                                                                                  | 401                                                                                 | 101                                                                                 | 280                                                                                 | 439                                                                                 | 0                                                                                   |
| Adj No. of Lanes             | 0                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                  | 1                                                                                   | 0                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Peak Hour Factor             | 0.60                                                                              | 0.60                                                                              | 0.60                                                                              | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.79                                                                               | 0.79                                                                                | 0.79                                                                                | 0.88                                                                                | 0.88                                                                                | 0.88                                                                                |
| Percent Heavy Veh, %         | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 2                                                                                 | 0                                                                                  | 2                                                                                   | 5                                                                                   | 2                                                                                   | 1                                                                                   | 0                                                                                   |
| Cap, veh/h                   | 0                                                                                 | 107                                                                               | 107                                                                               | 290                                                                               | 7                                                                                 | 304                                                                               | 656                                                                                | 813                                                                                 | 205                                                                                 | 577                                                                                 | 1048                                                                                | 0                                                                                   |
| Arrive On Green              | 0.00                                                                              | 0.13                                                                              | 0.13                                                                              | 0.13                                                                              | 0.13                                                                              | 0.13                                                                              | 0.00                                                                               | 0.57                                                                                | 0.57                                                                                | 0.06                                                                                | 0.57                                                                                | 0.00                                                                                |
| Sat Flow, veh/h              | 0                                                                                 | 841                                                                               | 841                                                                               | 1372                                                                              | 58                                                                                | 1551                                                                              | 1837                                                                               | 1437                                                                                | 362                                                                                 | 1747                                                                                | 1853                                                                                | 0                                                                                   |
| Grp Volume(v), veh/h         | 0                                                                                 | 0                                                                                 | 6                                                                                 | 67                                                                                | 0                                                                                 | 178                                                                               | 0                                                                                  | 0                                                                                   | 502                                                                                 | 280                                                                                 | 439                                                                                 | 0                                                                                   |
| Grp Sat Flow(s),veh/h/ln     | 0                                                                                 | 0                                                                                 | 1682                                                                              | 1430                                                                              | 0                                                                                 | 1551                                                                              | 1837                                                                               | 0                                                                                   | 1799                                                                                | 1747                                                                                | 1853                                                                                | 0                                                                                   |
| Q Serve(g_s), s              | 0.0                                                                               | 0.0                                                                               | 0.2                                                                               | 2.5                                                                               | 0.0                                                                               | 2.2                                                                               | 0.0                                                                                | 0.0                                                                                 | 10.4                                                                                | 0.0                                                                                 | 8.3                                                                                 | 0.0                                                                                 |
| Cycle Q Clear(g_c), s        | 0.0                                                                               | 0.0                                                                               | 0.2                                                                               | 2.7                                                                               | 0.0                                                                               | 2.2                                                                               | 0.0                                                                                | 0.0                                                                                 | 10.4                                                                                | 0.0                                                                                 | 8.3                                                                                 | 0.0                                                                                 |
| Prop In Lane                 | 0.00                                                                              |                                                                                   | 0.50                                                                              | 0.97                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                               |                                                                                     | 0.20                                                                                | 1.00                                                                                |                                                                                     | 0.00                                                                                |
| Lane Grp Cap(c), veh/h       | 0                                                                                 | 0                                                                                 | 215                                                                               | 297                                                                               | 0                                                                                 | 304                                                                               | 656                                                                                | 0                                                                                   | 1018                                                                                | 577                                                                                 | 1048                                                                                | 0                                                                                   |
| V/C Ratio(X)                 | 0.00                                                                              | 0.00                                                                              | 0.03                                                                              | 0.23                                                                              | 0.00                                                                              | 0.59                                                                              | 0.00                                                                               | 0.00                                                                                | 0.49                                                                                | 0.49                                                                                | 0.42                                                                                | 0.00                                                                                |
| Avail Cap(c_a), veh/h        | 0                                                                                 | 0                                                                                 | 816                                                                               | 815                                                                               | 0                                                                                 | 858                                                                               | 835                                                                                | 0                                                                                   | 1018                                                                                | 747                                                                                 | 1048                                                                                | 0                                                                                   |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 0.00                                                                              | 0.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 1.00                                                                              | 0.00                                                                               | 0.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 0.00                                                                                |
| Uniform Delay (d), s/veh     | 0.0                                                                               | 0.0                                                                               | 23.6                                                                              | 24.8                                                                              | 0.0                                                                               | 22.7                                                                              | 0.0                                                                                | 0.0                                                                                 | 8.1                                                                                 | 13.2                                                                                | 7.6                                                                                 | 0.0                                                                                 |
| Incr Delay (d2), s/veh       | 0.0                                                                               | 0.0                                                                               | 0.1                                                                               | 0.4                                                                               | 0.0                                                                               | 1.8                                                                               | 0.0                                                                                | 0.0                                                                                 | 1.7                                                                                 | 0.6                                                                                 | 1.2                                                                                 | 0.0                                                                                 |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 0.0                                                                               | 0.0                                                                               | 0.1                                                                               | 1.1                                                                               | 0.0                                                                               | 2.8                                                                               | 0.0                                                                                | 0.0                                                                                 | 5.5                                                                                 | 3.8                                                                                 | 4.5                                                                                 | 0.0                                                                                 |
| LnGrp Delay(d),s/veh         | 0.0                                                                               | 0.0                                                                               | 23.7                                                                              | 25.2                                                                              | 0.0                                                                               | 24.5                                                                              | 0.0                                                                                | 0.0                                                                                 | 9.8                                                                                 | 13.8                                                                                | 8.9                                                                                 | 0.0                                                                                 |
| LnGrp LOS                    |                                                                                   |                                                                                   | C                                                                                 | C                                                                                 |                                                                                   | C                                                                                 |                                                                                    |                                                                                     | A                                                                                   | B                                                                                   | A                                                                                   |                                                                                     |
| Approach Vol, veh/h          |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   | 245                                                                               |                                                                                   |                                                                                    | 502                                                                                 |                                                                                     |                                                                                     | 719                                                                                 |                                                                                     |
| Approach Delay, s/veh        |                                                                                   | 23.7                                                                              |                                                                                   |                                                                                   | 24.7                                                                              |                                                                                   |                                                                                    | 9.8                                                                                 |                                                                                     |                                                                                     | 10.8                                                                                |                                                                                     |
| Approach LOS                 |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 | 1                                                                                 | 2                                                                                 |                                                                                   | 4                                                                                 | 5                                                                                 | 6                                                                                 |                                                                                    | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 9.0                                                                               | 40.0                                                                              |                                                                                   | 12.9                                                                              | 9.0                                                                               | 40.0                                                                              |                                                                                    | 12.9                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 10.0                                                                              | 35.0                                                                              |                                                                                   | 30.0                                                                              | 10.0                                                                              | 35.0                                                                              |                                                                                    | 30.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), s | 2.0                                                                               | 12.4                                                                              |                                                                                   | 2.2                                                                               | 0.0                                                                               | 10.3                                                                              |                                                                                    | 4.7                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 0.9                                                                               | 1.4                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 1.1                                                                               |                                                                                    | 1.4                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| <b>Intersection Summary</b>  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          |                                                                                   |                                                                                   | 12.8                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                 |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |



2024 Build Traffic Volumes - Sensitivity  
4: NYS Route 9D & Beacon Street/West End Lofts

Friday PM Build Event Entry  
01/24/2022

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

| Intersection             |        |                                                                                   |          |       |                                                                                   |      |        |                                                                                   |      |       |                                                                                     |      |
|--------------------------|--------|-----------------------------------------------------------------------------------|----------|-------|-----------------------------------------------------------------------------------|------|--------|-----------------------------------------------------------------------------------|------|-------|-------------------------------------------------------------------------------------|------|
| Int Delay, s/veh         | 2.1    |                                                                                   |          |       |                                                                                   |      |        |                                                                                   |      |       |                                                                                     |      |
| Movement                 | SEL    | SET                                                                               | SER      | NWL   | NWT                                                                               | NWR  | NEL    | NET                                                                               | NER  | SWL   | SWT                                                                                 | SWR  |
| Lane Configurations      |        |  |          |       |  |      |        |  |      |       |  |      |
| Traffic Vol, veh/h       | 7      | 2                                                                                 | 3        | 9     | 2                                                                                 | 48   | 3      | 342                                                                               | 7    | 58    | 373                                                                                 | 12   |
| Future Vol, veh/h        | 7      | 2                                                                                 | 3        | 9     | 2                                                                                 | 48   | 3      | 342                                                                               | 7    | 58    | 373                                                                                 | 12   |
| Conflicting Peds, #/hr   | 0      | 0                                                                                 | 2        | 0     | 0                                                                                 | 4    | 0      | 0                                                                                 | 3    | 0     | 0                                                                                   | 2    |
| Sign Control             | Stop   | Stop                                                                              | Stop     | Stop  | Stop                                                                              | Stop | Free   | Free                                                                              | Free | Free  | Free                                                                                | Free |
| RT Channelized           | -      | -                                                                                 | None     | -     | -                                                                                 | None | -      | -                                                                                 | None | -     | -                                                                                   | None |
| Storage Length           | -      | -                                                                                 | -        | -     | -                                                                                 | -    | -      | -                                                                                 | -    | -     | -                                                                                   | -    |
| Veh in Median Storage, # | -      | 0                                                                                 | -        | -     | 0                                                                                 | -    | -      | 0                                                                                 | -    | -     | 0                                                                                   | -    |
| Grade, %                 | -      | 0                                                                                 | -        | -     | -3                                                                                | -    | -      | -4                                                                                | -    | -     | 4                                                                                   | -    |
| Peak Hour Factor         | 81     | 81                                                                                | 81       | 66    | 66                                                                                | 66   | 69     | 69                                                                                | 69   | 92    | 92                                                                                  | 92   |
| Heavy Vehicles, %        | 0      | 0                                                                                 | 0        | 0     | 0                                                                                 | 0    | 0      | 5                                                                                 | 0    | 2     | 2                                                                                   | 0    |
| Mvmt Flow                | 9      | 2                                                                                 | 4        | 14    | 3                                                                                 | 73   | 4      | 496                                                                               | 10   | 63    | 405                                                                                 | 13   |
|                          |        |                                                                                   |          |       |                                                                                   |      |        |                                                                                   |      |       |                                                                                     |      |
| Major/Minor              | Minor2 |                                                                                   | Minor1   |       | Major1                                                                            |      | Major2 |                                                                                   |      |       |                                                                                     |      |
| Conflicting Flow All     | 1091   | 1057                                                                              | 416      | 1055  | 1058                                                                              | 508  | 420    | 0                                                                                 | 0    | 509   | 0                                                                                   | 0    |
| Stage 1                  | 540    | 540                                                                               | -        | 512   | 512                                                                               | -    | -      | -                                                                                 | -    | -     | -                                                                                   | -    |
| Stage 2                  | 551    | 517                                                                               | -        | 543   | 546                                                                               | -    | -      | -                                                                                 | -    | -     | -                                                                                   | -    |
| Critical Hdwy            | 7.1    | 6.5                                                                               | 6.2      | 6.5   | 5.9                                                                               | 5.9  | 4.1    | -                                                                                 | -    | 4.12  | -                                                                                   | -    |
| Critical Hdwy Stg 1      | 6.1    | 5.5                                                                               | -        | 5.5   | 4.9                                                                               | -    | -      | -                                                                                 | -    | -     | -                                                                                   | -    |
| Critical Hdwy Stg 2      | 6.1    | 5.5                                                                               | -        | 5.5   | 4.9                                                                               | -    | -      | -                                                                                 | -    | -     | -                                                                                   | -    |
| Follow-up Hdwy           | 3.5    | 4                                                                                 | 3.3      | 3.5   | 4                                                                                 | 3.3  | 2.2    | -                                                                                 | -    | 2.218 | -                                                                                   | -    |
| Pot Cap-1 Maneuver       | 194    | 227                                                                               | 641      | 245   | 270                                                                               | 593  | 1150   | -                                                                                 | -    | 1056  | -                                                                                   | -    |
| Stage 1                  | 530    | 524                                                                               | -        | 597   | 588                                                                               | -    | -      | -                                                                                 | -    | -     | -                                                                                   | -    |
| Stage 2                  | 522    | 537                                                                               | -        | 578   | 571                                                                               | -    | -      | -                                                                                 | -    | -     | -                                                                                   | -    |
| Platoon blocked, %       |        |                                                                                   |          |       |                                                                                   |      |        | -                                                                                 | -    |       | -                                                                                   | -    |
| Mov Cap-1 Maneuver       | 157    | 207                                                                               | 639      | 225   | 247                                                                               | 590  | 1148   | -                                                                                 | -    | 1053  | -                                                                                   | -    |
| Mov Cap-2 Maneuver       | 157    | 207                                                                               | -        | 225   | 247                                                                               | -    | -      | -                                                                                 | -    | -     | -                                                                                   | -    |
| Stage 1                  | 526    | 482                                                                               | -        | 593   | 584                                                                               | -    | -      | -                                                                                 | -    | -     | -                                                                                   | -    |
| Stage 2                  | 451    | 533                                                                               | -        | 526   | 525                                                                               | -    | -      | -                                                                                 | -    | -     | -                                                                                   | -    |
|                          |        |                                                                                   |          |       |                                                                                   |      |        |                                                                                   |      |       |                                                                                     |      |
|                          |        |                                                                                   |          |       |                                                                                   |      |        |                                                                                   |      |       |                                                                                     |      |
| Approach                 | SE     |                                                                                   | NW       |       | NE                                                                                |      | SW     |                                                                                   |      |       |                                                                                     |      |
| HCM Control Delay, s     | 24     |                                                                                   | 14.8     |       | 0.1                                                                               |      | 1.1    |                                                                                   |      |       |                                                                                     |      |
| HCM LOS                  | C      |                                                                                   | B        |       |                                                                                   |      |        |                                                                                   |      |       |                                                                                     |      |
|                          |        |                                                                                   |          |       |                                                                                   |      |        |                                                                                   |      |       |                                                                                     |      |
| Minor Lane/Major Mvmt    | NEL    | NET                                                                               | NERNWLn1 | SELn1 | SWL                                                                               | SWT  | SWR    |                                                                                   |      |       |                                                                                     |      |
| Capacity (veh/h)         | 1148   | -                                                                                 | -        | 456   | 204                                                                               | 1053 | -      | -                                                                                 |      |       |                                                                                     |      |
| HCM Lane V/C Ratio       | 0.004  | -                                                                                 | -        | 0.196 | 0.073                                                                             | 0.06 | -      | -                                                                                 |      |       |                                                                                     |      |
| HCM Control Delay (s)    | 8.1    | 0                                                                                 | -        | 14.8  | 24                                                                                | 8.6  | 0      | -                                                                                 |      |       |                                                                                     |      |
| HCM Lane LOS             | A      | A                                                                                 | -        | B     | C                                                                                 | A    | A      | -                                                                                 |      |       |                                                                                     |      |
| HCM 95th %tile Q(veh)    | 0      | -                                                                                 | -        | 0.7   | 0.2                                                                               | 0.2  | -      | -                                                                                 |      |       |                                                                                     |      |

|                            |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Lane Group                 | SEL                                                                               | SER                                                                               | NEL                                                                               | NET                                                                               | SWT                                                                               | SWR                                                                               |
| Lane Configurations        |  |                                                                                   |                                                                                   |  |  |                                                                                   |
| Traffic Volume (vph)       | 21                                                                                | 6                                                                                 | 28                                                                                | 330                                                                               | 297                                                                               | 87                                                                                |
| Future Volume (vph)        | 21                                                                                | 6                                                                                 | 28                                                                                | 330                                                                               | 297                                                                               | 87                                                                                |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |
| Frt                        | 0.968                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.969                                                                             |                                                                                   |
| Flt Protected              | 0.963                                                                             |                                                                                   |                                                                                   | 0.996                                                                             |                                                                                   |                                                                                   |
| Satd. Flow (prot)          | 1736                                                                              | 0                                                                                 | 0                                                                                 | 1855                                                                              | 1805                                                                              | 0                                                                                 |
| Flt Permitted              | 0.963                                                                             |                                                                                   |                                                                                   | 0.996                                                                             |                                                                                   |                                                                                   |
| Satd. Flow (perm)          | 1736                                                                              | 0                                                                                 | 0                                                                                 | 1855                                                                              | 1805                                                                              | 0                                                                                 |
| Link Speed (mph)           | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                | 30                                                                                |                                                                                   |
| Link Distance (ft)         | 176                                                                               |                                                                                   |                                                                                   | 499                                                                               | 312                                                                               |                                                                                   |
| Travel Time (s)            | 4.0                                                                               |                                                                                   |                                                                                   | 11.3                                                                              | 7.1                                                                               |                                                                                   |
| Peak Hour Factor           | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              |
| Adj. Flow (vph)            | 23                                                                                | 7                                                                                 | 30                                                                                | 359                                                                               | 323                                                                               | 95                                                                                |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Lane Group Flow (vph)      | 30                                                                                | 0                                                                                 | 0                                                                                 | 389                                                                               | 418                                                                               | 0                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                |
| Lane Alignment             | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Left                                                                              | Right                                                                             |
| Median Width(ft)           | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                | 12                                                                                |                                                                                   |
| Link Offset(ft)            | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |
| Crosswalk Width(ft)        | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                | 16                                                                                |                                                                                   |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               | Yes                                                                               |                                                                                   |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |
| Turning Speed (mph)        | 60                                                                                | 60                                                                                | 60                                                                                |                                                                                   |                                                                                   | 60                                                                                |
| Sign Control               | Stop                                                                              |                                                                                   |                                                                                   | Free                                                                              | Free                                                                              |                                                                                   |
| Intersection Summary       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Area Type:                 | Other                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Control Type:              | Unsignalized                                                                      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |



Intersection

Int Delay, s/veh 0.7

| Movement                 | SEL                                                                               | SER  | NEL  | NET                                                                               | SWT                                                                               | SWR  |
|--------------------------|-----------------------------------------------------------------------------------|------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------|
| Lane Configurations      |  |      |      |  |  |      |
| Traffic Vol, veh/h       | 21                                                                                | 6    | 28   | 330                                                                               | 297                                                                               | 87   |
| Future Vol, veh/h        | 21                                                                                | 6    | 28   | 330                                                                               | 297                                                                               | 87   |
| Conflicting Peds, #/hr   | 0                                                                                 | 0    | 0    | 0                                                                                 | 0                                                                                 | 0    |
| Sign Control             | Stop                                                                              | Stop | Free | Free                                                                              | Free                                                                              | Free |
| RT Channelized           | -                                                                                 | None | -    | None                                                                              | -                                                                                 | None |
| Storage Length           | 0                                                                                 | -    | -    | -                                                                                 | -                                                                                 | -    |
| Veh in Median Storage, # | 0                                                                                 | -    | -    | 0                                                                                 | 0                                                                                 | -    |
| Grade, %                 | 0                                                                                 | -    | -    | 0                                                                                 | 0                                                                                 | -    |
| Peak Hour Factor         | 92                                                                                | 92   | 92   | 92                                                                                | 92                                                                                | 92   |
| Heavy Vehicles, %        | 2                                                                                 | 2    | 2    | 2                                                                                 | 2                                                                                 | 2    |
| Mvmt Flow                | 23                                                                                | 7    | 30   | 359                                                                               | 323                                                                               | 95   |

| Major/Minor          | Minor2 | Major1 | Major2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 790    | 371    | 418    |
| Stage 1              | 371    | -      | -      |
| Stage 2              | 419    | -      | -      |
| Critical Hdwy        | 6.42   | 6.22   | 4.12   |
| Critical Hdwy Stg 1  | 5.42   | -      | -      |
| Critical Hdwy Stg 2  | 5.42   | -      | -      |
| Follow-up Hdwy       | 3.518  | 3.318  | 2.218  |
| Pot Cap-1 Maneuver   | 359    | 675    | 1141   |
| Stage 1              | 698    | -      | -      |
| Stage 2              | 664    | -      | -      |
| Platoon blocked, %   |        |        |        |
| Mov Cap-1 Maneuver   | 347    | 675    | 1141   |
| Mov Cap-2 Maneuver   | 464    | -      | -      |
| Stage 1              | 675    | -      | -      |
| Stage 2              | 664    | -      | -      |

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

| Minor Lane/Major Mvmt | NEL   | NETSELn1 | SWT   | SWR |
|-----------------------|-------|----------|-------|-----|
| Capacity (veh/h)      | 1141  | -        | 499   | -   |
| HCM Lane V/C Ratio    | 0.027 | -        | 0.059 | -   |
| HCM Control Delay (s) | 8.2   | 0        | 12.7  | -   |
| HCM Lane LOS          | A     | A        | B     | -   |
| HCM 95th %tile Q(veh) | 0.1   | -        | 0.2   | -   |

2024 Build Traffic Volumes - Sensitivity  
6: South Avenue & NYS Route 9D

Friday PM Build Event Entry  
01/24/2022

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

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Internal Link Dist (ft) |                                                                                   | 161                                                                               |                                                                                   |                                                                                   | 436                                                                               |                                                                                   |                                                                                    | 114                                                                                 |                                                                                     |                                                                                     | 223                                                                                 |                                                                                     |
| Turn Bay Length (ft)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 831                                                                               |                                                                                   |                                                                                   | 847                                                                               |                                                                                   |                                                                                    | 826                                                                                 |                                                                                     |                                                                                     | 680                                                                                 |                                                                                     |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Reduced v/c Ratio       |                                                                                   | 0.39                                                                              |                                                                                   |                                                                                   | 0.46                                                                              |                                                                                   |                                                                                    | 0.05                                                                                |                                                                                     |                                                                                     | 0.16                                                                                |                                                                                     |

#### Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 45

Control Type: Pretimed

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

|                                                                                          |                                                                                      |
|------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
|  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                                                                                 | 258                                                                               | 55                                                                                | 7                                                                                  | 21                                                                                  | 7                                                                                   | 46                                                                                  | 29                                                                                  | 10                                                                                  |
| Future Volume (veh/h)        | 10                                                                                | 261                                                                               | 19                                                                                | 9                                                                                 | 258                                                                               | 55                                                                                | 7                                                                                  | 21                                                                                  | 7                                                                                   | 46                                                                                  | 29                                                                                  | 10                                                                                  |
| Number                       | 7                                                                                 | 4                                                                                 | 14                                                                                | 3                                                                                 | 8                                                                                 | 18                                                                                | 5                                                                                  | 2                                                                                   | 12                                                                                  | 1                                                                                   | 6                                                                                   | 16                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                               |                                                                                     | 0.99                                                                                | 0.99                                                                                |                                                                                     | 0.99                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       | 1843                                                                              | 1843                                                                              | 1843                                                                              | 1957                                                                              | 1890                                                                              | 1957                                                                              | 1910                                                                               | 1910                                                                                | 1910                                                                                | 1872                                                                                | 1779                                                                                | 1872                                                                                |
| Adj Flow Rate, veh/h         | 11                                                                                | 290                                                                               | 21                                                                                | 11                                                                                | 311                                                                               | 66                                                                                | 8                                                                                  | 25                                                                                  | 8                                                                                   | 58                                                                                  | 37                                                                                  | 13                                                                                  |
| Adj No. of Lanes             | 0                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                  | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Peak Hour Factor             | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.83                                                                              | 0.83                                                                              | 0.83                                                                              | 0.85                                                                               | 0.85                                                                                | 0.85                                                                                | 0.79                                                                                | 0.79                                                                                | 0.79                                                                                |
| Percent Heavy Veh, %         | 0                                                                                 | 0                                                                                 | 0                                                                                 | 12                                                                                | 4                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 2                                                                                   | 12                                                                                  | 0                                                                                   |
| Cap, veh/h                   | 40                                                                                | 765                                                                               | 54                                                                                | 38                                                                                | 687                                                                               | 143                                                                               | 167                                                                                | 511                                                                                 | 156                                                                                 | 394                                                                                 | 244                                                                                 | 82                                                                                  |
| Arrive On Green              | 0.46                                                                              | 0.46                                                                              | 0.46                                                                              | 0.46                                                                              | 0.46                                                                              | 0.46                                                                              | 0.46                                                                               | 0.46                                                                                | 0.46                                                                                | 0.46                                                                                | 0.46                                                                                | 0.46                                                                                |
| Sat Flow, veh/h              | 25                                                                                | 1658                                                                              | 117                                                                               | 21                                                                                | 1489                                                                              | 309                                                                               | 289                                                                                | 1108                                                                                | 339                                                                                 | 761                                                                                 | 530                                                                                 | 177                                                                                 |
| Grp Volume(v), veh/h         | 322                                                                               | 0                                                                                 | 0                                                                                 | 388                                                                               | 0                                                                                 | 0                                                                                 | 41                                                                                 | 0                                                                                   | 0                                                                                   | 108                                                                                 | 0                                                                                   | 0                                                                                   |
| Grp Sat Flow(s),veh/h/ln     | 1801                                                                              | 0                                                                                 | 0                                                                                 | 1819                                                                              | 0                                                                                 | 0                                                                                 | 1736                                                                               | 0                                                                                   | 0                                                                                   | 1467                                                                                | 0                                                                                   | 0                                                                                   |
| Q Serve(g_s), s              | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 3.5                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Cycle Q Clear(g_c), s        | 15.0                                                                              | 0.0                                                                               | 0.0                                                                               | 18.8                                                                              | 0.0                                                                               | 0.0                                                                               | 1.6                                                                                | 0.0                                                                                 | 0.0                                                                                 | 5.2                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Prop In Lane                 | 0.03                                                                              |                                                                                   | 0.07                                                                              | 0.03                                                                              |                                                                                   | 0.17                                                                              | 0.20                                                                               |                                                                                     | 0.20                                                                                | 0.54                                                                                |                                                                                     | 0.12                                                                                |
| Lane Grp Cap(c), veh/h       | 860                                                                               | 0                                                                                 | 0                                                                                 | 868                                                                               | 0                                                                                 | 0                                                                                 | 834                                                                                | 0                                                                                   | 0                                                                                   | 720                                                                                 | 0                                                                                   | 0                                                                                   |
| V/C Ratio(X)                 | 0.37                                                                              | 0.00                                                                              | 0.00                                                                              | 0.45                                                                              | 0.00                                                                              | 0.00                                                                              | 0.05                                                                               | 0.00                                                                                | 0.00                                                                                | 0.15                                                                                | 0.00                                                                                | 0.00                                                                                |
| Avail Cap(c_a), veh/h        | 860                                                                               | 0                                                                                 | 0                                                                                 | 868                                                                               | 0                                                                                 | 0                                                                                 | 834                                                                                | 0                                                                                   | 0                                                                                   | 720                                                                                 | 0                                                                                   | 0                                                                                   |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 0.00                                                                              | 0.00                                                                              | 1.00                                                                              | 0.00                                                                              | 0.00                                                                              | 1.00                                                                               | 0.00                                                                                | 0.00                                                                                | 1.00                                                                                | 0.00                                                                                | 0.00                                                                                |
| Uniform Delay (d), s/veh     | 22.9                                                                              | 0.0                                                                               | 0.0                                                                               | 23.9                                                                              | 0.0                                                                               | 0.0                                                                               | 19.3                                                                               | 0.0                                                                                 | 0.0                                                                                 | 20.2                                                                                | 0.0                                                                                 | 0.0                                                                                 |
| Incr Delay (d2), s/veh       | 1.2                                                                               | 0.0                                                                               | 0.0                                                                               | 1.7                                                                               | 0.0                                                                               | 0.0                                                                               | 0.1                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.4                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 7.8                                                                               | 0.0                                                                               | 0.0                                                                               | 9.9                                                                               | 0.0                                                                               | 0.0                                                                               | 0.8                                                                                | 0.0                                                                                 | 0.0                                                                                 | 2.3                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| LnGrp Delay(d),s/veh         | 24.1                                                                              | 0.0                                                                               | 0.0                                                                               | 25.6                                                                              | 0.0                                                                               | 0.0                                                                               | 19.4                                                                               | 0.0                                                                                 | 0.0                                                                                 | 20.6                                                                                | 0.0                                                                                 | 0.0                                                                                 |
| LnGrp LOS                    | C                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | B                                                                                  |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |                                                                                     |
| Approach Vol, veh/h          | 322                                                                               |                                                                                   |                                                                                   | 388                                                                               |                                                                                   |                                                                                   | 41                                                                                 |                                                                                     |                                                                                     | 108                                                                                 |                                                                                     |                                                                                     |
| Approach Delay, s/veh        | 24.1                                                                              |                                                                                   |                                                                                   | 25.6                                                                              |                                                                                   |                                                                                   | 19.4                                                                               |                                                                                     |                                                                                     | 20.6                                                                                |                                                                                     |                                                                                     |
| Approach LOS                 | C                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | B                                                                                  |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 | 2                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 6                                                                                  |                                                                                     |                                                                                     | 8                                                                                   |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 65.0                                                                              |                                                                                   |                                                                                   | 65.0                                                                              |                                                                                   |                                                                                   | 65.0                                                                               |                                                                                     |                                                                                     | 65.0                                                                                |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                                |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 60.0                                                                              |                                                                                   |                                                                                   | 60.0                                                                              |                                                                                   |                                                                                   | 60.0                                                                               |                                                                                     |                                                                                     | 60.0                                                                                |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), s | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Intersection Summary         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          | 24.1                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                 | C                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |



2024 Build Traffic Volumes - Sensitivity  
1: NYS Route 9D & Verplanck Avenue

Friday PM Build Event Exit  
01/24/2022

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



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

#### Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NET and 6:SWTL, Start of Green

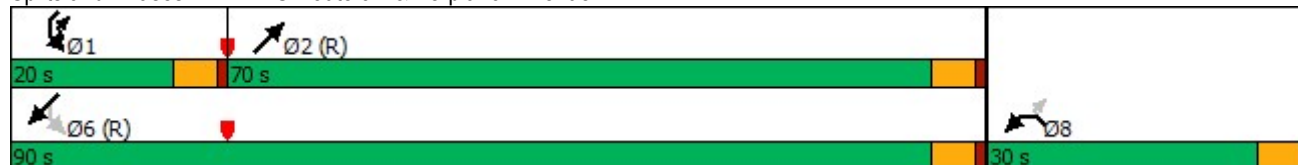
Natural Cycle: 90

Control Type: Pretimed

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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



|                              |  |  |  |  |  |  |   |      |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---|------|
| Movement                     | NWL                                                                               | NWR                                                                               | NET                                                                               | NER                                                                               | SWL                                                                               | SWT                                                                               |   |      |
| Lane Configurations          |  |  |  |                                                                                   |  |  |   |      |
| Traffic Volume (veh/h)       | 54                                                                                | 299                                                                               | 794                                                                               | 81                                                                                | 209                                                                               | 639                                                                               |   |      |
| Future Volume (veh/h)        | 54                                                                                | 299                                                                               | 794                                                                               | 81                                                                                | 209                                                                               | 639                                                                               |   |      |
| Number                       | 3                                                                                 | 18                                                                                | 2                                                                                 | 12                                                                                | 1                                                                                 | 6                                                                                 |   |      |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |   |      |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   |   |      |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |   |      |
| Adj Sat Flow, veh/h/ln       | 1816                                                                              | 1816                                                                              | 1835                                                                              | 1872                                                                              | 1872                                                                              | 1872                                                                              |   |      |
| Adj Flow Rate, veh/h         | 59                                                                                | 325                                                                               | 863                                                                               | 88                                                                                | 227                                                                               | 695                                                                               |   |      |
| Adj No. of Lanes             | 1                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 |   |      |
| Peak Hour Factor             | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              |   |      |
| Percent Heavy Veh, %         | 2                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                 |   |      |
| Cap, veh/h                   | 360                                                                               | 515                                                                               | 887                                                                               | 90                                                                                | 301                                                                               | 1326                                                                              |   |      |
| Arrive On Green              | 0.21                                                                              | 0.21                                                                              | 0.54                                                                              | 0.54                                                                              | 0.13                                                                              | 0.71                                                                              |   |      |
| Sat Flow, veh/h              | 1730                                                                              | 1544                                                                              | 1638                                                                              | 167                                                                               | 1783                                                                              | 1872                                                                              |   |      |
| Grp Volume(v), veh/h         | 59                                                                                | 325                                                                               | 0                                                                                 | 951                                                                               | 227                                                                               | 695                                                                               |   |      |
| Grp Sat Flow(s),veh/h/ln     | 1730                                                                              | 1544                                                                              | 0                                                                                 | 1805                                                                              | 1783                                                                              | 1872                                                                              |   |      |
| Q Serve(g_s), s              | 3.4                                                                               | 21.3                                                                              | 0.0                                                                               | 61.2                                                                              | 9.3                                                                               | 20.7                                                                              |   |      |
| Cycle Q Clear(g_c), s        | 3.4                                                                               | 21.3                                                                              | 0.0                                                                               | 61.2                                                                              | 9.3                                                                               | 20.7                                                                              |   |      |
| Prop In Lane                 | 1.00                                                                              | 1.00                                                                              |                                                                                   | 0.09                                                                              | 1.00                                                                              |                                                                                   |   |      |
| Lane Grp Cap(c), veh/h       | 360                                                                               | 515                                                                               | 0                                                                                 | 978                                                                               | 301                                                                               | 1326                                                                              |   |      |
| V/C Ratio(X)                 | 0.16                                                                              | 0.63                                                                              | 0.00                                                                              | 0.97                                                                              | 0.75                                                                              | 0.52                                                                              |   |      |
| Avail Cap(c_a), veh/h        | 360                                                                               | 515                                                                               | 0                                                                                 | 978                                                                               | 301                                                                               | 1326                                                                              |   |      |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |   |      |
| Upstream Filter(I)           | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |   |      |
| Uniform Delay (d), s/veh     | 38.9                                                                              | 33.8                                                                              | 0.0                                                                               | 26.6                                                                              | 35.1                                                                              | 8.1                                                                               |   |      |
| Incr Delay (d2), s/veh       | 1.0                                                                               | 5.8                                                                               | 0.0                                                                               | 22.9                                                                              | 15.9                                                                              | 1.5                                                                               |   |      |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |   |      |
| %ile BackOfQ(50%),veh/ln     | 1.7                                                                               | 9.9                                                                               | 0.0                                                                               | 36.6                                                                              | 8.5                                                                               | 11.2                                                                              |   |      |
| LnGrp Delay(d),s/veh         | 39.9                                                                              | 39.6                                                                              | 0.0                                                                               | 49.5                                                                              | 51.0                                                                              | 9.6                                                                               |   |      |
| LnGrp LOS                    | D                                                                                 | D                                                                                 |                                                                                   | D                                                                                 | D                                                                                 | A                                                                                 |   |      |
| Approach Vol, veh/h          | 384                                                                               |                                                                                   | 951                                                                               |                                                                                   |                                                                                   | 922                                                                               |   |      |
| Approach Delay, s/veh        | 39.6                                                                              |                                                                                   | 49.5                                                                              |                                                                                   |                                                                                   | 19.8                                                                              |   |      |
| Approach LOS                 | D                                                                                 |                                                                                   | D                                                                                 |                                                                                   |                                                                                   | B                                                                                 |   |      |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7 | 8    |
| Assigned Phs                 | 1                                                                                 | 2                                                                                 |                                                                                   |                                                                                   |                                                                                   | 6                                                                                 |   | 8    |
| Phs Duration (G+Y+Rc), s     | 20.0                                                                              | 70.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 90.0                                                                              |   | 30.0 |
| Change Period (Y+Rc), s      | 5.0                                                                               | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 5.0                                                                               |   | 5.0  |
| Max Green Setting (Gmax), s  | 15.0                                                                              | 65.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 85.0                                                                              |   | 25.0 |
| Max Q Clear Time (g_c+l1), s | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                               |   | 0.0  |
| Green Ext Time (p_c), s      | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                               |   | 0.0  |
| Intersection Summary         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |   |      |
| HCM 2010 Ctrl Delay          | 35.7                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |   |      |
| HCM 2010 LOS                 | D                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |   |      |

2024 Build Traffic Volumes - Sensitivity  
2: NYS Route 9D & Beekman Street/W. Church Street

Friday PM Build Event Exit  
01/24/2022

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



2024 Build Traffic Volumes - Sensitivity  
2: NYS Route 9D & Beekman Street/W. Church Street

Friday PM Build Event Exit  
01/24/2022

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

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 82.5

Natural Cycle: 90

Control Type: Semi Act-Uncoord

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

|                                                                                        |                                                                                        |                                                                                         |
|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
|  Ø1 |  Ø2 |  Ø4 |
| 15 s                                                                                   | 40 s                                                                                   | 35 s                                                                                    |
|  Ø5 |  Ø6 |  Ø8 |
| 15 s                                                                                   | 40 s                                                                                   | 35 s                                                                                    |

|                              |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |                                                                                   |  |  |                                                                                   |  |                                                                                   |  |  |                                                                                     |  |  |                                                                                     |
| Traffic Volume (veh/h)       | 310                                                                               | 24                                                                                | 37                                                                                | 4                                                                                 | 15                                                                                | 23                                                                                | 39                                                                                 | 494                                                                                 | 5                                                                                   | 6                                                                                   | 524                                                                                 | 166                                                                                 |
| Future Volume (veh/h)        | 310                                                                               | 24                                                                                | 37                                                                                | 4                                                                                 | 15                                                                                | 23                                                                                | 39                                                                                 | 494                                                                                 | 5                                                                                   | 6                                                                                   | 524                                                                                 | 166                                                                                 |
| Number                       | 7                                                                                 | 4                                                                                 | 14                                                                                | 3                                                                                 | 8                                                                                 | 18                                                                                | 5                                                                                  | 2                                                                                   | 12                                                                                  | 1                                                                                   | 6                                                                                   | 16                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 0.96                                                                              | 1.00                                                                               |                                                                                     | 0.98                                                                                | 1.00                                                                                |                                                                                     | 0.97                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       | 1881                                                                              | 1842                                                                              | 1881                                                                              | 1995                                                                              | 1947                                                                              | 1995                                                                              | 1900                                                                               | 1919                                                                                | 1957                                                                                | 1872                                                                                | 1853                                                                                | 1872                                                                                |
| Adj Flow Rate, veh/h         | 437                                                                               | 34                                                                                | 52                                                                                | 4                                                                                 | 16                                                                                | 25                                                                                | 46                                                                                 | 588                                                                                 | 6                                                                                   | 6                                                                                   | 535                                                                                 | 169                                                                                 |
| Adj No. of Lanes             | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                  | 1                                                                                   | 0                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Peak Hour Factor             | 0.71                                                                              | 0.71                                                                              | 0.71                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.84                                                                               | 0.84                                                                                | 0.84                                                                                | 0.98                                                                                | 0.98                                                                                | 0.98                                                                                |
| Percent Heavy Veh, %         | 2                                                                                 | 4                                                                                 | 0                                                                                 | 0                                                                                 | 7                                                                                 | 0                                                                                 | 3                                                                                  | 2                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 1                                                                                   |
| Cap, veh/h                   | 193                                                                               | 8                                                                                 | 579                                                                               | 47                                                                                | 144                                                                               | 180                                                                               | 175                                                                                | 851                                                                                 | 9                                                                                   | 264                                                                                 | 568                                                                                 | 179                                                                                 |
| Arrive On Green              | 0.36                                                                              | 0.36                                                                              | 0.36                                                                              | 0.36                                                                              | 0.36                                                                              | 0.36                                                                              | 0.03                                                                               | 0.45                                                                                | 0.45                                                                                | 0.01                                                                                | 0.42                                                                                | 0.42                                                                                |
| Sat Flow, veh/h              | 299                                                                               | 23                                                                                | 1594                                                                              | 0                                                                                 | 396                                                                               | 495                                                                               | 1810                                                                               | 1896                                                                                | 19                                                                                  | 1782                                                                                | 1341                                                                                | 423                                                                                 |
| Grp Volume(v), veh/h         | 471                                                                               | 0                                                                                 | 52                                                                                | 45                                                                                | 0                                                                                 | 0                                                                                 | 46                                                                                 | 0                                                                                   | 594                                                                                 | 6                                                                                   | 0                                                                                   | 704                                                                                 |
| Grp Sat Flow(s),veh/h/ln     | 323                                                                               | 0                                                                                 | 1594                                                                              | 890                                                                               | 0                                                                                 | 0                                                                                 | 1810                                                                               | 0                                                                                   | 1915                                                                                | 1782                                                                                | 0                                                                                   | 1764                                                                                |
| Q Serve(g_s), s              | 0.0                                                                               | 0.0                                                                               | 1.8                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 1.2                                                                                | 0.0                                                                                 | 20.5                                                                                | 0.2                                                                                 | 0.0                                                                                 | 31.6                                                                                |
| Cycle Q Clear(g_c), s        | 30.0                                                                              | 0.0                                                                               | 1.8                                                                               | 30.0                                                                              | 0.0                                                                               | 0.0                                                                               | 1.2                                                                                | 0.0                                                                                 | 20.5                                                                                | 0.2                                                                                 | 0.0                                                                                 | 31.6                                                                                |
| Prop In Lane                 | 0.93                                                                              |                                                                                   | 1.00                                                                              | 0.09                                                                              |                                                                                   | 0.56                                                                              | 1.00                                                                               |                                                                                     | 0.01                                                                                | 1.00                                                                                |                                                                                     | 0.24                                                                                |
| Lane Grp Cap(c), veh/h       | 201                                                                               | 0                                                                                 | 579                                                                               | 371                                                                               | 0                                                                                 | 0                                                                                 | 175                                                                                | 0                                                                                   | 860                                                                                 | 264                                                                                 | 0                                                                                   | 747                                                                                 |
| V/C Ratio(X)                 | 2.34                                                                              | 0.00                                                                              | 0.09                                                                              | 0.12                                                                              | 0.00                                                                              | 0.00                                                                              | 0.26                                                                               | 0.00                                                                                | 0.69                                                                                | 0.02                                                                                | 0.00                                                                                | 0.94                                                                                |
| Avail Cap(c_a), veh/h        | 201                                                                               | 0                                                                                 | 579                                                                               | 371                                                                               | 0                                                                                 | 0                                                                                 | 337                                                                                | 0                                                                                   | 860                                                                                 | 469                                                                                 | 0                                                                                   | 747                                                                                 |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 0.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 0.00                                                                              | 1.00                                                                               | 0.00                                                                                | 1.00                                                                                | 1.00                                                                                | 0.00                                                                                | 1.00                                                                                |
| Uniform Delay (d), s/veh     | 32.6                                                                              | 0.0                                                                               | 17.3                                                                              | 18.5                                                                              | 0.0                                                                               | 0.0                                                                               | 19.0                                                                               | 0.0                                                                                 | 18.2                                                                                | 15.5                                                                                | 0.0                                                                                 | 22.8                                                                                |
| Incr Delay (d2), s/veh       | 618.5                                                                             | 0.0                                                                               | 0.1                                                                               | 0.1                                                                               | 0.0                                                                               | 0.0                                                                               | 0.8                                                                                | 0.0                                                                                 | 4.5                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 21.5                                                                                |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 39.1                                                                              | 0.0                                                                               | 0.8                                                                               | 0.7                                                                               | 0.0                                                                               | 0.0                                                                               | 0.6                                                                                | 0.0                                                                                 | 11.8                                                                                | 0.1                                                                                 | 0.0                                                                                 | 19.7                                                                                |
| LnGrp Delay(d),s/veh         | 651.0                                                                             | 0.0                                                                               | 17.4                                                                              | 18.6                                                                              | 0.0                                                                               | 0.0                                                                               | 19.8                                                                               | 0.0                                                                                 | 22.7                                                                                | 15.6                                                                                | 0.0                                                                                 | 44.3                                                                                |
| LnGrp LOS                    | F                                                                                 |                                                                                   | B                                                                                 | B                                                                                 |                                                                                   |                                                                                   | B                                                                                  |                                                                                     | C                                                                                   | B                                                                                   |                                                                                     | D                                                                                   |
| Approach Vol, veh/h          | 523                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 45                                                                                |                                                                                    | 640                                                                                 |                                                                                     | 710                                                                                 |                                                                                     |                                                                                     |
| Approach Delay, s/veh        | 588.0                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 18.6                                                                              |                                                                                    | 22.5                                                                                |                                                                                     | 44.0                                                                                |                                                                                     |                                                                                     |
| Approach LOS                 | F                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   | B                                                                                 |                                                                                    | C                                                                                   |                                                                                     | D                                                                                   |                                                                                     |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 | 1                                                                                 | 2                                                                                 | 4                                                                                 |                                                                                   | 5                                                                                 | 6                                                                                 | 8                                                                                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 5.5                                                                               | 42.1                                                                              | 35.0                                                                              |                                                                                   | 7.6                                                                               | 40.0                                                                              | 35.0                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 10.0                                                                              | 35.0                                                                              | 30.0                                                                              |                                                                                   | 10.0                                                                              | 35.0                                                                              | 30.0                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), s | 2.2                                                                               | 22.5                                                                              | 32.0                                                                              |                                                                                   | 3.2                                                                               | 33.6                                                                              | 32.0                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 0.0                                                                               | 1.4                                                                               | 0.0                                                                               |                                                                                   | 0.1                                                                               | 0.4                                                                               | 0.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          |                                                                                   | 184.6                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                 |                                                                                   | F                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

2024 Build Traffic Volumes - Sensitivity  
3: NYS Route 9D & Beacon City Hall/Main Street

Friday PM Build Event Exit  
01/24/2022

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



2024 Build Traffic Volumes - Sensitivity  
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                                                                                 |
| Permitted Phases        | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 8                                                                                 | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase          | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 | 1                                                                                 | 5                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 4.0                                                                               | 4.0                                                                               |                                                                                   | 8.0                                                                               | 8.0                                                                               | 4.0                                                                               | 4.0                                                                                | 31.0                                                                                |                                                                                     | 4.0                                                                                 | 35.0                                                                                |                                                                                     |
| Minimum Split (s)       | 21.0                                                                              | 21.0                                                                              |                                                                                   | 21.0                                                                              | 21.0                                                                              | 9.0                                                                               | 9.0                                                                                | 36.0                                                                                |                                                                                     | 9.0                                                                                 | 40.0                                                                                |                                                                                     |
| Total Split (s)         | 35.0                                                                              | 35.0                                                                              |                                                                                   | 35.0                                                                              | 35.0                                                                              | 15.0                                                                              | 15.0                                                                               | 40.0                                                                                |                                                                                     | 15.0                                                                                | 40.0                                                                                |                                                                                     |
| Total Split (%)         | 38.9%                                                                             | 38.9%                                                                             |                                                                                   | 38.9%                                                                             | 38.9%                                                                             | 16.7%                                                                             | 16.7%                                                                              | 44.4%                                                                               |                                                                                     | 16.7%                                                                               | 44.4%                                                                               |                                                                                     |
| Maximum Green (s)       | 30.0                                                                              | 30.0                                                                              |                                                                                   | 30.0                                                                              | 30.0                                                                              | 10.0                                                                              | 10.0                                                                               | 35.0                                                                                |                                                                                     | 10.0                                                                                | 35.0                                                                                |                                                                                     |
| Yellow Time (s)         | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                | 4.0                                                                                 |                                                                                     | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |
| All-Red Time (s)        | 1.0                                                                               | 1.0                                                                               |                                                                                   | 1.0                                                                               | 1.0                                                                               | 1.0                                                                               | 1.0                                                                                | 1.0                                                                                 |                                                                                     | 1.0                                                                                 | 1.0                                                                                 |                                                                                     |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                | 5.0                                                                                 |                                                                                     | 5.0                                                                                 | 5.0                                                                                 |                                                                                     |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lag                                                                               | Lag                                                                                | Lead                                                                                |                                                                                     | Lag                                                                                 | Lead                                                                                |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               | Yes                                                                                | Yes                                                                                 |                                                                                     | Yes                                                                                 | Yes                                                                                 |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              | None                                                                              | None                                                                               | Max                                                                                 |                                                                                     | None                                                                                | Max                                                                                 |                                                                                     |
| Walk Time (s)           | 5.0                                                                               | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flash Dont Walk (s)     | 11.0                                                                              | 11.0                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 11.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Pedestrian Calls (#/hr) | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| v/c Ratio               |                                                                                   | 0.03                                                                              |                                                                                   |                                                                                   | 0.27                                                                              | 0.47                                                                              |                                                                                    | 0.58                                                                                |                                                                                     | 0.42                                                                                | 0.24                                                                                |                                                                                     |
| Control Delay           |                                                                                   | 21.5                                                                              |                                                                                   |                                                                                   | 30.1                                                                              | 21.9                                                                              |                                                                                    | 13.9                                                                                |                                                                                     | 7.5                                                                                 | 3.1                                                                                 |                                                                                     |
| Queue Delay             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                    | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.2                                                                                 |                                                                                     |
| Total Delay             |                                                                                   | 21.5                                                                              |                                                                                   |                                                                                   | 30.1                                                                              | 21.9                                                                              |                                                                                    | 13.9                                                                                |                                                                                     | 7.5                                                                                 | 3.3                                                                                 |                                                                                     |
| Queue Length 50th (ft)  |                                                                                   | 1                                                                                 |                                                                                   |                                                                                   | 22                                                                                | 54                                                                                |                                                                                    | 164                                                                                 |                                                                                     | 28                                                                                  | 39                                                                                  |                                                                                     |
| Queue Length 95th (ft)  |                                                                                   | 7                                                                                 |                                                                                   |                                                                                   | 54                                                                                | 100                                                                               |                                                                                    | 231                                                                                 |                                                                                     | 56                                                                                  | 75                                                                                  |                                                                                     |
| Internal Link Dist (ft) |                                                                                   | 53                                                                                |                                                                                   |                                                                                   | 270                                                                               |                                                                                   |                                                                                    | 613                                                                                 |                                                                                     |                                                                                     | 308                                                                                 |                                                                                     |
| Turn Bay Length (ft)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 70                                                                                |                                                                                    |                                                                                     |                                                                                     | 120                                                                                 |                                                                                     |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 831                                                                               |                                                                                   |                                                                                   | 734                                                                               | 391                                                                               |                                                                                    | 1011                                                                                |                                                                                     | 678                                                                                 | 1544                                                                                |                                                                                     |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                    | 0                                                                                   |                                                                                     | 0                                                                                   | 551                                                                                 |                                                                                     |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                    | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                    | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Reduced v/c Ratio       |                                                                                   | 0.01                                                                              |                                                                                   |                                                                                   | 0.08                                                                              | 0.46                                                                              |                                                                                    | 0.58                                                                                |                                                                                     | 0.41                                                                                | 0.37                                                                                |                                                                                     |

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 63.2

Natural Cycle: 70

Control Type: Semi Act-Uncoord

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

|                                                                                        |                                                                                        |                                                                                         |
|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
|  Ø2 |  Ø1 |  Ø4 |
| 40 s                                                                                   | 15 s                                                                                   | 35 s                                                                                    |
|  Ø6 |  Ø5 |  Ø8 |
| 40 s                                                                                   | 15 s                                                                                   | 35 s                                                                                    |

2024 Build Traffic Volumes - Sensitivity  
3: NYS Route 9D & Beacon City Hall/Main Street

Friday PM Build Event Exit  
01/24/2022

|                              |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |                                                                                   |  |                                                                                   |                                                                                   |  |  |  |  |                                                                                     |  |  |                                                                                     |
| Traffic Volume (veh/h)       | 0                                                                                 | 2                                                                                 | 2                                                                                 | 50                                                                                | 2                                                                                 | 162                                                                               | 0                                                                                  | 376                                                                                 | 89                                                                                  | 246                                                                                 | 327                                                                                 | 0                                                                                   |
| Future Volume (veh/h)        | 0                                                                                 | 2                                                                                 | 2                                                                                 | 50                                                                                | 2                                                                                 | 162                                                                               | 0                                                                                  | 376                                                                                 | 89                                                                                  | 246                                                                                 | 327                                                                                 | 0                                                                                   |
| Number                       | 7                                                                                 | 4                                                                                 | 14                                                                                | 3                                                                                 | 8                                                                                 | 18                                                                                | 5                                                                                  | 2                                                                                   | 12                                                                                  | 1                                                                                   | 6                                                                                   | 16                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 0.94                                                                              | 0.97                                                                              |                                                                                   | 0.94                                                                              | 1.00                                                                               |                                                                                     | 0.96                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       | 1890                                                                              | 1890                                                                              | 1890                                                                              | 1976                                                                              | 1976                                                                              | 1937                                                                              | 1928                                                                               | 1880                                                                                | 1928                                                                                | 1835                                                                                | 1853                                                                                | 1872                                                                                |
| Adj Flow Rate, veh/h         | 0                                                                                 | 3                                                                                 | 3                                                                                 | 55                                                                                | 2                                                                                 | 178                                                                               | 0                                                                                  | 476                                                                                 | 113                                                                                 | 280                                                                                 | 372                                                                                 | 0                                                                                   |
| Adj No. of Lanes             | 0                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                  | 1                                                                                   | 0                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Peak Hour Factor             | 0.60                                                                              | 0.60                                                                              | 0.60                                                                              | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.79                                                                               | 0.79                                                                                | 0.79                                                                                | 0.88                                                                                | 0.88                                                                                | 0.88                                                                                |
| Percent Heavy Veh, %         | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 2                                                                                 | 0                                                                                  | 2                                                                                   | 5                                                                                   | 2                                                                                   | 1                                                                                   | 0                                                                                   |
| Cap, veh/h                   | 0                                                                                 | 107                                                                               | 107                                                                               | 288                                                                               | 9                                                                                 | 303                                                                               | 710                                                                                | 825                                                                                 | 196                                                                                 | 516                                                                                 | 1049                                                                                | 0                                                                                   |
| Arrive On Green              | 0.00                                                                              | 0.13                                                                              | 0.13                                                                              | 0.13                                                                              | 0.13                                                                              | 0.13                                                                              | 0.00                                                                               | 0.57                                                                                | 0.57                                                                                | 0.06                                                                                | 0.57                                                                                | 0.00                                                                                |
| Sat Flow, veh/h              | 0                                                                                 | 841                                                                               | 841                                                                               | 1366                                                                              | 68                                                                                | 1551                                                                              | 1837                                                                               | 1457                                                                                | 346                                                                                 | 1747                                                                                | 1853                                                                                | 0                                                                                   |
| Grp Volume(v), veh/h         | 0                                                                                 | 0                                                                                 | 6                                                                                 | 57                                                                                | 0                                                                                 | 178                                                                               | 0                                                                                  | 0                                                                                   | 589                                                                                 | 280                                                                                 | 372                                                                                 | 0                                                                                   |
| Grp Sat Flow(s),veh/h/ln     | 0                                                                                 | 0                                                                                 | 1682                                                                              | 1434                                                                              | 0                                                                                 | 1551                                                                              | 1837                                                                               | 0                                                                                   | 1803                                                                                | 1747                                                                                | 1853                                                                                | 0                                                                                   |
| Q Serve(g_s), s              | 0.0                                                                               | 0.0                                                                               | 0.2                                                                               | 2.1                                                                               | 0.0                                                                               | 2.2                                                                               | 0.0                                                                                | 0.0                                                                                 | 13.0                                                                                | 0.0                                                                                 | 6.7                                                                                 | 0.0                                                                                 |
| Cycle Q Clear(g_c), s        | 0.0                                                                               | 0.0                                                                               | 0.2                                                                               | 2.3                                                                               | 0.0                                                                               | 2.2                                                                               | 0.0                                                                                | 0.0                                                                                 | 13.0                                                                                | 0.0                                                                                 | 6.7                                                                                 | 0.0                                                                                 |
| Prop In Lane                 | 0.00                                                                              |                                                                                   | 0.50                                                                              | 0.96                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                               |                                                                                     | 0.19                                                                                | 1.00                                                                                |                                                                                     | 0.00                                                                                |
| Lane Grp Cap(c), veh/h       | 0                                                                                 | 0                                                                                 | 214                                                                               | 297                                                                               | 0                                                                                 | 303                                                                               | 710                                                                                | 0                                                                                   | 1020                                                                                | 516                                                                                 | 1049                                                                                | 0                                                                                   |
| V/C Ratio(X)                 | 0.00                                                                              | 0.00                                                                              | 0.03                                                                              | 0.19                                                                              | 0.00                                                                              | 0.59                                                                              | 0.00                                                                               | 0.00                                                                                | 0.58                                                                                | 0.54                                                                                | 0.35                                                                                | 0.00                                                                                |
| Avail Cap(c_a), veh/h        | 0                                                                                 | 0                                                                                 | 816                                                                               | 816                                                                               | 0                                                                                 | 858                                                                               | 889                                                                                | 0                                                                                   | 1020                                                                                | 687                                                                                 | 1049                                                                                | 0                                                                                   |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 0.00                                                                              | 0.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 1.00                                                                              | 0.00                                                                               | 0.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 0.00                                                                                |
| Uniform Delay (d), s/veh     | 0.0                                                                               | 0.0                                                                               | 23.6                                                                              | 24.6                                                                              | 0.0                                                                               | 22.7                                                                              | 0.0                                                                                | 0.0                                                                                 | 8.7                                                                                 | 15.9                                                                                | 7.3                                                                                 | 0.0                                                                                 |
| Incr Delay (d2), s/veh       | 0.0                                                                               | 0.0                                                                               | 0.1                                                                               | 0.3                                                                               | 0.0                                                                               | 1.8                                                                               | 0.0                                                                                | 0.0                                                                                 | 2.4                                                                                 | 0.9                                                                                 | 0.9                                                                                 | 0.0                                                                                 |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 0.0                                                                               | 0.0                                                                               | 0.1                                                                               | 0.9                                                                               | 0.0                                                                               | 2.8                                                                               | 0.0                                                                                | 0.0                                                                                 | 7.1                                                                                 | 4.3                                                                                 | 3.7                                                                                 | 0.0                                                                                 |
| LnGrp Delay(d),s/veh         | 0.0                                                                               | 0.0                                                                               | 23.7                                                                              | 24.9                                                                              | 0.0                                                                               | 24.5                                                                              | 0.0                                                                                | 0.0                                                                                 | 11.0                                                                                | 16.8                                                                                | 8.2                                                                                 | 0.0                                                                                 |
| LnGrp LOS                    |                                                                                   |                                                                                   | C                                                                                 | C                                                                                 |                                                                                   | C                                                                                 |                                                                                    |                                                                                     | B                                                                                   | B                                                                                   | A                                                                                   |                                                                                     |
| Approach Vol, veh/h          |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   | 235                                                                               |                                                                                   |                                                                                    | 589                                                                                 |                                                                                     |                                                                                     | 652                                                                                 |                                                                                     |
| Approach Delay, s/veh        |                                                                                   | 23.7                                                                              |                                                                                   |                                                                                   | 24.6                                                                              |                                                                                   |                                                                                    | 11.0                                                                                |                                                                                     |                                                                                     | 11.9                                                                                |                                                                                     |
| Approach LOS                 |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    | B                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 | 1                                                                                 | 2                                                                                 |                                                                                   | 4                                                                                 | 5                                                                                 | 6                                                                                 |                                                                                    | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 9.0                                                                               | 40.0                                                                              |                                                                                   | 12.9                                                                              | 9.0                                                                               | 40.0                                                                              |                                                                                    | 12.9                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 10.0                                                                              | 35.0                                                                              |                                                                                   | 30.0                                                                              | 10.0                                                                              | 35.0                                                                              |                                                                                    | 30.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), s | 2.0                                                                               | 15.0                                                                              |                                                                                   | 2.2                                                                               | 0.0                                                                               | 8.7                                                                               |                                                                                    | 4.3                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 0.9                                                                               | 1.6                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.9                                                                               |                                                                                    | 1.3                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| <b>Intersection Summary</b>  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          |                                                                                   |                                                                                   | 13.6                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                 |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

2024 Build Traffic Volumes - Sensitivity  
4: NYS Route 9D & Beacon Street/West End Lofts

Friday PM Build Event Exit  
01/24/2022

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



2024 Build Traffic Volumes - Sensitivity  
4: NYS Route 9D & Beacon Street/West End Lofts

Friday PM Build Event Exit  
01/24/2022

| Intersection             |        |      |          |       |        |       |        |      |      |       |      |      |
|--------------------------|--------|------|----------|-------|--------|-------|--------|------|------|-------|------|------|
| Int Delay, s/veh         | 2.2    |      |          |       |        |       |        |      |      |       |      |      |
| Movement                 | SEL    | SET  | SER      | NWL   | NWT    | NWR   | NEL    | NET  | NER  | SWL   | SWT  | SWR  |
| Lane Configurations      |        | ↕    |          |       | ↕      |       |        | ↕    |      |       | ↕    |      |
| Traffic Vol, veh/h       | 7      | 2    | 3        | 9     | 2      | 48    | 3      | 410  | 7    | 58    | 304  | 12   |
| Future Vol, veh/h        | 7      | 2    | 3        | 9     | 2      | 48    | 3      | 410  | 7    | 58    | 304  | 12   |
| Conflicting Peds, #/hr   | 0      | 0    | 2        | 0     | 0      | 4     | 0      | 0    | 3    | 0     | 0    | 2    |
| Sign Control             | Stop   | Stop | Stop     | Stop  | Stop   | Stop  | Free   | Free | Free | Free  | Free | Free |
| RT Channelized           | -      | -    | None     | -     | -      | None  | -      | -    | None | -     | -    | None |
| Storage Length           | -      | -    | -        | -     | -      | -     | -      | -    | -    | -     | -    | -    |
| Veh in Median Storage, # | -      | 0    | -        | -     | 0      | -     | -      | 0    | -    | -     | 0    | -    |
| Grade, %                 | -      | 0    | -        | -     | -3     | -     | -      | -4   | -    | -     | 4    | -    |
| Peak Hour Factor         | 81     | 81   | 81       | 66    | 66     | 66    | 69     | 69   | 69   | 92    | 92   | 92   |
| Heavy Vehicles, %        | 0      | 0    | 0        | 0     | 0      | 0     | 0      | 5    | 0    | 2     | 2    | 0    |
| Mvmt Flow                | 9      | 2    | 4        | 14    | 3      | 73    | 4      | 594  | 10   | 63    | 330  | 13   |
|                          |        |      |          |       |        |       |        |      |      |       |      |      |
| Major/Minor              | Minor2 |      | Minor1   |       | Major1 |       | Major2 |      |      |       |      |      |
| Conflicting Flow All     | 1114   | 1080 | 341      | 1078  | 1081   | 606   | 345    | 0    | 0    | 607   | 0    | 0    |
| Stage 1                  | 465    | 465  | -        | 610   | 610    | -     | -      | -    | -    | -     | -    | -    |
| Stage 2                  | 649    | 615  | -        | 468   | 471    | -     | -      | -    | -    | -     | -    | -    |
| Critical Hdwy            | 7.1    | 6.5  | 6.2      | 6.5   | 5.9    | 5.9   | 4.1    | -    | -    | 4.12  | -    | -    |
| Critical Hdwy Stg 1      | 6.1    | 5.5  | -        | 5.5   | 4.9    | -     | -      | -    | -    | -     | -    | -    |
| Critical Hdwy Stg 2      | 6.1    | 5.5  | -        | 5.5   | 4.9    | -     | -      | -    | -    | -     | -    | -    |
| Follow-up Hdwy           | 3.5    | 4    | 3.3      | 3.5   | 4      | 3.3   | 2.2    | -    | -    | 2.218 | -    | -    |
| Pot Cap-1 Maneuver       | 187    | 220  | 706      | 237   | 263    | 527   | 1225   | -    | -    | 971   | -    | -    |
| Stage 1                  | 581    | 566  | -        | 537   | 540    | -     | -      | -    | -    | -     | -    | -    |
| Stage 2                  | 462    | 485  | -        | 626   | 609    | -     | -      | -    | -    | -     | -    | -    |
| Platoon blocked, %       |        |      |          |       |        |       |        | -    | -    |       | -    | -    |
| Mov Cap-1 Maneuver       | 148    | 201  | 704      | 218   | 240    | 524   | 1223   | -    | -    | 969   | -    | -    |
| Mov Cap-2 Maneuver       | 148    | 201  | -        | 218   | 240    | -     | -      | -    | -    | -     | -    | -    |
| Stage 1                  | 577    | 520  | -        | 533   | 536    | -     | -      | -    | -    | -     | -    | -    |
| Stage 2                  | 392    | 482  | -        | 569   | 559    | -     | -      | -    | -    | -     | -    | -    |
|                          |        |      |          |       |        |       |        |      |      |       |      |      |
| Approach                 | SE     |      | NW       |       | NE     |       | SW     |      |      |       |      |      |
| HCM Control Delay, s     | 25     |      | 15.9     |       | 0.1    |       | 1.4    |      |      |       |      |      |
| HCM LOS                  | D      |      | C        |       |        |       |        |      |      |       |      |      |
|                          |        |      |          |       |        |       |        |      |      |       |      |      |
| Minor Lane/Major Mvmt    | NEL    | NET  | NERNWLn1 | SELn1 | SWL    | SWT   | SWR    |      |      |       |      |      |
| Capacity (veh/h)         | 1223   | -    | -        | 418   | 195    | 969   | -      | -    |      |       |      |      |
| HCM Lane V/C Ratio       | 0.004  | -    | -        | 0.214 | 0.076  | 0.065 | -      | -    |      |       |      |      |
| HCM Control Delay (s)    | 8      | 0    | -        | 15.9  | 25     | 9     | 0      | -    |      |       |      |      |
| HCM Lane LOS             | A      | A    | -        | C     | D      | A     | A      | -    |      |       |      |      |
| HCM 95th %tile Q(veh)    | 0      | -    | -        | 0.8   | 0.2    | 0.2   | -      | -    |      |       |      |      |

|                             |  |  |  |  |  |  |
|-----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Lane Group                  | SEL                                                                               | SER                                                                               | NEL                                                                               | NET                                                                               | SWT                                                                               | SWR                                                                               |
| Lane Configurations         |  |                                                                                   |                                                                                   |  |  |                                                                                   |
| Traffic Volume (vph)        | 89                                                                                | 29                                                                                | 6                                                                                 | 330                                                                               | 297                                                                               | 18                                                                                |
| Future Volume (vph)         | 89                                                                                | 29                                                                                | 6                                                                                 | 330                                                                               | 297                                                                               | 18                                                                                |
| Ideal Flow (vphpl)          | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              |
| Lane Util. Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |
| Frt                         | 0.967                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.992                                                                             |                                                                                   |
| Flt Protected               | 0.964                                                                             |                                                                                   |                                                                                   | 0.999                                                                             |                                                                                   |                                                                                   |
| Satd. Flow (prot)           | 1736                                                                              | 0                                                                                 | 0                                                                                 | 1861                                                                              | 1848                                                                              | 0                                                                                 |
| Flt Permitted               | 0.964                                                                             |                                                                                   |                                                                                   | 0.999                                                                             |                                                                                   |                                                                                   |
| Satd. Flow (perm)           | 1736                                                                              | 0                                                                                 | 0                                                                                 | 1861                                                                              | 1848                                                                              | 0                                                                                 |
| Link Speed (mph)            | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                | 30                                                                                |                                                                                   |
| Link Distance (ft)          | 176                                                                               |                                                                                   |                                                                                   | 499                                                                               | 312                                                                               |                                                                                   |
| Travel Time (s)             | 4.0                                                                               |                                                                                   |                                                                                   | 11.3                                                                              | 7.1                                                                               |                                                                                   |
| Peak Hour Factor            | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              |
| Adj. Flow (vph)             | 97                                                                                | 32                                                                                | 7                                                                                 | 359                                                                               | 323                                                                               | 20                                                                                |
| Shared Lane Traffic (%)     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Lane Group Flow (vph)       | 129                                                                               | 0                                                                                 | 0                                                                                 | 366                                                                               | 343                                                                               | 0                                                                                 |
| Enter Blocked Intersection  | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                |
| Lane Alignment              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Left                                                                              | Right                                                                             |
| Median Width(ft)            | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                | 12                                                                                |                                                                                   |
| Link Offset(ft)             | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |
| Crosswalk Width(ft)         | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                | 16                                                                                |                                                                                   |
| Two way Left Turn Lane      |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               | Yes                                                                               |                                                                                   |
| Headway Factor              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |
| Turning Speed (mph)         | 60                                                                                | 60                                                                                | 60                                                                                |                                                                                   |                                                                                   | 60                                                                                |
| Sign Control                | Stop                                                                              |                                                                                   |                                                                                   | Free                                                                              | Free                                                                              |                                                                                   |
| <b>Intersection Summary</b> |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Area Type:                  | Other                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Control Type:               | Unsignalized                                                                      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |

Intersection

Int Delay, s/veh 2.1

Movement SEL SER NEL NET SWT SWR

|                          |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Lane Configurations      | W    |      |      | W    | W    |      |
| Traffic Vol, veh/h       | 89   | 29   | 6    | 330  | 297  | 18   |
| Future Vol, veh/h        | 89   | 29   | 6    | 330  | 297  | 18   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 97   | 32   | 7    | 359  | 323  | 20   |

Major/Minor Minor2 Major1 Major2

|                      |       |       |       |   |   |   |
|----------------------|-------|-------|-------|---|---|---|
| Conflicting Flow All | 706   | 333   | 343   | 0 | - | 0 |
| Stage 1              | 333   | -     | -     | - | - | - |
| Stage 2              | 373   | -     | -     | - | - | - |
| Critical Hdwy        | 6.42  | 6.22  | 4.12  | - | - | - |
| Critical Hdwy Stg 1  | 5.42  | -     | -     | - | - | - |
| Critical Hdwy Stg 2  | 5.42  | -     | -     | - | - | - |
| Follow-up Hdwy       | 3.518 | 3.318 | 2.218 | - | - | - |
| Pot Cap-1 Maneuver   | 402   | 709   | 1216  | - | - | - |
| Stage 1              | 726   | -     | -     | - | - | - |
| Stage 2              | 696   | -     | -     | - | - | - |
| Platoon blocked, %   |       |       |       | - | - | - |
| Mov Cap-1 Maneuver   | 399   | 709   | 1216  | - | - | - |
| Mov Cap-2 Maneuver   | 505   | -     | -     | - | - | - |
| Stage 1              | 721   | -     | -     | - | - | - |
| Stage 2              | 696   | -     | -     | - | - | - |

Approach SE NE SW

|                      |      |     |   |
|----------------------|------|-----|---|
| HCM Control Delay, s | 13.7 | 0.1 | 0 |
| HCM LOS              | B    |     |   |

Minor Lane/Major Mvmt NEL NETSELn1 SWT SWR

|                       |       |   |       |   |   |
|-----------------------|-------|---|-------|---|---|
| Capacity (veh/h)      | 1216  | - | 543   | - | - |
| HCM Lane V/C Ratio    | 0.005 | - | 0.236 | - | - |
| HCM Control Delay (s) | 8     | 0 | 13.7  | - | - |
| HCM Lane LOS          | A     | A | B     | - | - |
| HCM 95th %tile Q(veh) | 0     | - | 0.9   | - | - |



2024 Build Traffic Volumes - Sensitivity  
6: South Avenue & NYS Route 9D

Friday PM Build Event Exit  
01/24/2022

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

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Internal Link Dist (ft) |                                                                                   | 161                                                                               |                                                                                   |                                                                                   | 436                                                                               |                                                                                   |                                                                                    | 114                                                                                 |                                                                                     |                                                                                     | 223                                                                                 |                                                                                     |
| Turn Bay Length (ft)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 833                                                                               |                                                                                   |                                                                                   | 846                                                                               |                                                                                   |                                                                                    | 826                                                                                 |                                                                                     |                                                                                     | 680                                                                                 |                                                                                     |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Reduced v/c Ratio       |                                                                                   | 0.42                                                                              |                                                                                   |                                                                                   | 0.43                                                                              |                                                                                   |                                                                                    | 0.05                                                                                |                                                                                     |                                                                                     | 0.16                                                                                |                                                                                     |

#### Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 45

Control Type: Pretimed

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

|                                                                                          |                                                                                      |
|------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
|  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                                                                                | 284                                                                               | 19                                                                                | 9                                                                                 | 236                                                                               | 55                                                                                | 7                                                                                  | 21                                                                                  | 7                                                                                   | 46                                                                                  | 29                                                                                  | 10                                                                                  |
| Future Volume (veh/h)        | 10                                                                                | 284                                                                               | 19                                                                                | 9                                                                                 | 236                                                                               | 55                                                                                | 7                                                                                  | 21                                                                                  | 7                                                                                   | 46                                                                                  | 29                                                                                  | 10                                                                                  |
| Number                       | 7                                                                                 | 4                                                                                 | 14                                                                                | 3                                                                                 | 8                                                                                 | 18                                                                                | 5                                                                                  | 2                                                                                   | 12                                                                                  | 1                                                                                   | 6                                                                                   | 16                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                               |                                                                                     | 0.99                                                                                | 0.99                                                                                |                                                                                     | 0.99                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       | 1843                                                                              | 1843                                                                              | 1843                                                                              | 1957                                                                              | 1891                                                                              | 1957                                                                              | 1910                                                                               | 1910                                                                                | 1910                                                                                | 1872                                                                                | 1779                                                                                | 1872                                                                                |
| Adj Flow Rate, veh/h         | 11                                                                                | 316                                                                               | 21                                                                                | 11                                                                                | 284                                                                               | 66                                                                                | 8                                                                                  | 25                                                                                  | 8                                                                                   | 58                                                                                  | 37                                                                                  | 13                                                                                  |
| Adj No. of Lanes             | 0                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                  | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Peak Hour Factor             | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.83                                                                              | 0.83                                                                              | 0.83                                                                              | 0.85                                                                               | 0.85                                                                                | 0.85                                                                                | 0.79                                                                                | 0.79                                                                                | 0.79                                                                                |
| Percent Heavy Veh, %         | 0                                                                                 | 0                                                                                 | 0                                                                                 | 12                                                                                | 4                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 2                                                                                   | 12                                                                                  | 0                                                                                   |
| Cap, veh/h                   | 39                                                                                | 772                                                                               | 50                                                                                | 39                                                                                | 674                                                                               | 153                                                                               | 167                                                                                | 511                                                                                 | 156                                                                                 | 394                                                                                 | 244                                                                                 | 82                                                                                  |
| Arrive On Green              | 0.46                                                                              | 0.46                                                                              | 0.46                                                                              | 0.46                                                                              | 0.46                                                                              | 0.46                                                                              | 0.46                                                                               | 0.46                                                                                | 0.46                                                                                | 0.46                                                                                | 0.46                                                                                | 0.46                                                                                |
| Sat Flow, veh/h              | 23                                                                                | 1673                                                                              | 109                                                                               | 23                                                                                | 1460                                                                              | 332                                                                               | 289                                                                                | 1108                                                                                | 339                                                                                 | 761                                                                                 | 530                                                                                 | 177                                                                                 |
| Grp Volume(v), veh/h         | 348                                                                               | 0                                                                                 | 0                                                                                 | 361                                                                               | 0                                                                                 | 0                                                                                 | 41                                                                                 | 0                                                                                   | 0                                                                                   | 108                                                                                 | 0                                                                                   | 0                                                                                   |
| Grp Sat Flow(s),veh/h/ln     | 1805                                                                              | 0                                                                                 | 0                                                                                 | 1814                                                                              | 0                                                                                 | 0                                                                                 | 1736                                                                               | 0                                                                                   | 0                                                                                   | 1467                                                                                | 0                                                                                   | 0                                                                                   |
| Q Serve(g_s), s              | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 3.5                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Cycle Q Clear(g_c), s        | 16.5                                                                              | 0.0                                                                               | 0.0                                                                               | 17.2                                                                              | 0.0                                                                               | 0.0                                                                               | 1.6                                                                                | 0.0                                                                                 | 0.0                                                                                 | 5.2                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Prop In Lane                 | 0.03                                                                              |                                                                                   | 0.06                                                                              | 0.03                                                                              |                                                                                   | 0.18                                                                              | 0.20                                                                               |                                                                                     | 0.20                                                                                | 0.54                                                                                |                                                                                     | 0.12                                                                                |
| Lane Grp Cap(c), veh/h       | 862                                                                               | 0                                                                                 | 0                                                                                 | 866                                                                               | 0                                                                                 | 0                                                                                 | 834                                                                                | 0                                                                                   | 0                                                                                   | 720                                                                                 | 0                                                                                   | 0                                                                                   |
| V/C Ratio(X)                 | 0.40                                                                              | 0.00                                                                              | 0.00                                                                              | 0.42                                                                              | 0.00                                                                              | 0.00                                                                              | 0.05                                                                               | 0.00                                                                                | 0.00                                                                                | 0.15                                                                                | 0.00                                                                                | 0.00                                                                                |
| Avail Cap(c_a), veh/h        | 862                                                                               | 0                                                                                 | 0                                                                                 | 866                                                                               | 0                                                                                 | 0                                                                                 | 834                                                                                | 0                                                                                   | 0                                                                                   | 720                                                                                 | 0                                                                                   | 0                                                                                   |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 0.00                                                                              | 0.00                                                                              | 1.00                                                                              | 0.00                                                                              | 0.00                                                                              | 1.00                                                                               | 0.00                                                                                | 0.00                                                                                | 1.00                                                                                | 0.00                                                                                | 0.00                                                                                |
| Uniform Delay (d), s/veh     | 23.3                                                                              | 0.0                                                                               | 0.0                                                                               | 23.5                                                                              | 0.0                                                                               | 0.0                                                                               | 19.3                                                                               | 0.0                                                                                 | 0.0                                                                                 | 20.2                                                                                | 0.0                                                                                 | 0.0                                                                                 |
| Incr Delay (d2), s/veh       | 1.4                                                                               | 0.0                                                                               | 0.0                                                                               | 1.5                                                                               | 0.0                                                                               | 0.0                                                                               | 0.1                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.4                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 8.7                                                                               | 0.0                                                                               | 0.0                                                                               | 9.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.8                                                                                | 0.0                                                                                 | 0.0                                                                                 | 2.3                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| LnGrp Delay(d),s/veh         | 24.7                                                                              | 0.0                                                                               | 0.0                                                                               | 25.0                                                                              | 0.0                                                                               | 0.0                                                                               | 19.4                                                                               | 0.0                                                                                 | 0.0                                                                                 | 20.6                                                                                | 0.0                                                                                 | 0.0                                                                                 |
| LnGrp LOS                    | C                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | B                                                                                  |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |                                                                                     |
| Approach Vol, veh/h          |                                                                                   | 348                                                                               |                                                                                   |                                                                                   | 361                                                                               |                                                                                   |                                                                                    | 41                                                                                  |                                                                                     |                                                                                     | 108                                                                                 |                                                                                     |
| Approach Delay, s/veh        |                                                                                   | 24.7                                                                              |                                                                                   |                                                                                   | 25.0                                                                              |                                                                                   |                                                                                    | 19.4                                                                                |                                                                                     |                                                                                     | 20.6                                                                                |                                                                                     |
| Approach LOS                 |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    | B                                                                                   |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 |                                                                                   | 2                                                                                 |                                                                                   | 4                                                                                 |                                                                                   | 6                                                                                 |                                                                                    | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     |                                                                                   | 65.0                                                                              |                                                                                   | 65.0                                                                              |                                                                                   | 65.0                                                                              |                                                                                    | 65.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      |                                                                                   | 5.0                                                                               |                                                                                   | 5.0                                                                               |                                                                                   | 5.0                                                                               |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  |                                                                                   | 60.0                                                                              |                                                                                   | 60.0                                                                              |                                                                                   | 60.0                                                                              |                                                                                    | 60.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), s |                                                                                   | 0.0                                                                               |                                                                                   | 0.0                                                                               |                                                                                   | 0.0                                                                               |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      |                                                                                   | 0.0                                                                               |                                                                                   | 0.0                                                                               |                                                                                   | 0.0                                                                               |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| <b>Intersection Summary</b>  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          |                                                                                   |                                                                                   |                                                                                   | 24.0                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                 |                                                                                   |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |





2024 Build Traffic Volumes With Improvements - Sensitivity  
2: NYS Route 9D & Beekman Street/W. Church Street

Friday PM Build Event Entry  
01/24/2022

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

2024 Build Traffic Volumes With Improvements - Sensitivity  
2: NYS Route 9D & Beekman Street/W. Church Street

Friday PM Build Event Entry  
01/24/2022

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

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 75.1

Natural Cycle: 90

Control Type: Semi Act-Uncoord

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

|                                                                                        |                                                                                        |                                                                                        |                                                                                          |
|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
|  Ø1 |  Ø2 |  Ø4 |  Ø8 |
| 15 s                                                                                   | 40 s                                                                                   | 20 s                                                                                   | 15 s                                                                                     |
|  Ø5 |  Ø6 |                                                                                        |                                                                                          |
| 15 s                                                                                   | 40 s                                                                                   |                                                                                        |                                                                                          |

|                              |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |                                                                                   |  |  |                                                                                   |  |                                                                                   |  |  |                                                                                     |  |  |  |
| Traffic Volume (veh/h)       | 310                                                                               | 24                                                                                | 41                                                                                | 4                                                                                 | 15                                                                                | 23                                                                                | 34                                                                                 | 439                                                                                 | 5                                                                                   | 6                                                                                   | 578                                                                                 | 166                                                                                 |
| Future Volume (veh/h)        | 310                                                                               | 24                                                                                | 41                                                                                | 4                                                                                 | 15                                                                                | 23                                                                                | 34                                                                                 | 439                                                                                 | 5                                                                                   | 6                                                                                   | 578                                                                                 | 166                                                                                 |
| Number                       | 7                                                                                 | 4                                                                                 | 14                                                                                | 3                                                                                 | 8                                                                                 | 18                                                                                | 5                                                                                  | 2                                                                                   | 12                                                                                  | 1                                                                                   | 6                                                                                   | 16                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 0.86                                                                              | 1.00                                                                               |                                                                                     | 0.98                                                                                | 1.00                                                                                |                                                                                     | 0.97                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       | 1881                                                                              | 1842                                                                              | 1881                                                                              | 1995                                                                              | 1947                                                                              | 1995                                                                              | 1900                                                                               | 1919                                                                                | 1957                                                                                | 1872                                                                                | 1853                                                                                | 1872                                                                                |
| Adj Flow Rate, veh/h         | 437                                                                               | 34                                                                                | 58                                                                                | 4                                                                                 | 16                                                                                | 25                                                                                | 40                                                                                 | 523                                                                                 | 6                                                                                   | 6                                                                                   | 590                                                                                 | 169                                                                                 |
| Adj No. of Lanes             | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                  | 1                                                                                   | 0                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Peak Hour Factor             | 0.71                                                                              | 0.71                                                                              | 0.71                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.84                                                                               | 0.84                                                                                | 0.84                                                                                | 0.98                                                                                | 0.98                                                                                | 0.98                                                                                |
| Percent Heavy Veh, %         | 2                                                                                 | 4                                                                                 | 0                                                                                 | 0                                                                                 | 7                                                                                 | 0                                                                                 | 3                                                                                  | 2                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 1                                                                                   |
| Cap, veh/h                   | 339                                                                               | 26                                                                                | 330                                                                               | 5                                                                                 | 19                                                                                | 30                                                                                | 184                                                                                | 901                                                                                 | 10                                                                                  | 352                                                                                 | 622                                                                                 | 178                                                                                 |
| Arrive On Green              | 0.21                                                                              | 0.21                                                                              | 0.21                                                                              | 0.03                                                                              | 0.03                                                                              | 0.03                                                                              | 0.03                                                                               | 0.48                                                                                | 0.48                                                                                | 0.01                                                                                | 0.45                                                                                | 0.45                                                                                |
| Sat Flow, veh/h              | 1633                                                                              | 127                                                                               | 1591                                                                              | 143                                                                               | 572                                                                               | 894                                                                               | 1810                                                                               | 1893                                                                                | 22                                                                                  | 1782                                                                                | 1376                                                                                | 394                                                                                 |
| Grp Volume(v), veh/h         | 471                                                                               | 0                                                                                 | 58                                                                                | 45                                                                                | 0                                                                                 | 0                                                                                 | 40                                                                                 | 0                                                                                   | 529                                                                                 | 6                                                                                   | 0                                                                                   | 759                                                                                 |
| Grp Sat Flow(s),veh/h/ln     | 1760                                                                              | 0                                                                                 | 1591                                                                              | 1609                                                                              | 0                                                                                 | 0                                                                                 | 1810                                                                               | 0                                                                                   | 1915                                                                                | 1782                                                                                | 0                                                                                   | 1770                                                                                |
| Q Serve(g_s), s              | 15.0                                                                              | 0.0                                                                               | 2.2                                                                               | 2.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.8                                                                                | 0.0                                                                                 | 14.5                                                                                | 0.1                                                                                 | 0.0                                                                                 | 29.7                                                                                |
| Cycle Q Clear(g_c), s        | 15.0                                                                              | 0.0                                                                               | 2.2                                                                               | 2.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.8                                                                                | 0.0                                                                                 | 14.5                                                                                | 0.1                                                                                 | 0.0                                                                                 | 29.7                                                                                |
| Prop In Lane                 | 0.93                                                                              |                                                                                   | 1.00                                                                              | 0.09                                                                              |                                                                                   | 0.56                                                                              | 1.00                                                                               |                                                                                     | 0.01                                                                                | 1.00                                                                                |                                                                                     | 0.22                                                                                |
| Lane Grp Cap(c), veh/h       | 365                                                                               | 0                                                                                 | 330                                                                               | 54                                                                                | 0                                                                                 | 0                                                                                 | 184                                                                                | 0                                                                                   | 912                                                                                 | 352                                                                                 | 0                                                                                   | 800                                                                                 |
| V/C Ratio(X)                 | 1.29                                                                              | 0.00                                                                              | 0.18                                                                              | 0.84                                                                              | 0.00                                                                              | 0.00                                                                              | 0.22                                                                               | 0.00                                                                                | 0.58                                                                                | 0.02                                                                                | 0.00                                                                                | 0.95                                                                                |
| Avail Cap(c_a), veh/h        | 365                                                                               | 0                                                                                 | 330                                                                               | 223                                                                               | 0                                                                                 | 0                                                                                 | 379                                                                                | 0                                                                                   | 927                                                                                 | 588                                                                                 | 0                                                                                   | 857                                                                                 |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 0.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 0.00                                                                              | 1.00                                                                               | 0.00                                                                                | 1.00                                                                                | 1.00                                                                                | 0.00                                                                                | 1.00                                                                                |
| Uniform Delay (d), s/veh     | 28.6                                                                              | 0.0                                                                               | 23.6                                                                              | 34.7                                                                              | 0.0                                                                               | 0.0                                                                               | 16.4                                                                               | 0.0                                                                                 | 13.7                                                                                | 11.8                                                                                | 0.0                                                                                 | 19.0                                                                                |
| Incr Delay (d2), s/veh       | 149.5                                                                             | 0.0                                                                               | 0.3                                                                               | 27.0                                                                              | 0.0                                                                               | 0.0                                                                               | 0.6                                                                                | 0.0                                                                                 | 0.9                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 18.8                                                                                |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 22.4                                                                              | 0.0                                                                               | 1.0                                                                               | 1.3                                                                               | 0.0                                                                               | 0.0                                                                               | 0.4                                                                                | 0.0                                                                                 | 7.7                                                                                 | 0.1                                                                                 | 0.0                                                                                 | 18.5                                                                                |
| LnGrp Delay(d),s/veh         | 178.2                                                                             | 0.0                                                                               | 23.8                                                                              | 61.7                                                                              | 0.0                                                                               | 0.0                                                                               | 17.0                                                                               | 0.0                                                                                 | 14.6                                                                                | 11.8                                                                                | 0.0                                                                                 | 37.8                                                                                |
| LnGrp LOS                    | F                                                                                 |                                                                                   | C                                                                                 | E                                                                                 |                                                                                   |                                                                                   | B                                                                                  |                                                                                     | B                                                                                   | B                                                                                   |                                                                                     | D                                                                                   |
| Approach Vol, veh/h          | 529                                                                               |                                                                                   |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 569                                                                                |                                                                                     |                                                                                     | 765                                                                                 |                                                                                     |                                                                                     |
| Approach Delay, s/veh        | 161.3                                                                             |                                                                                   |                                                                                   | 61.7                                                                              |                                                                                   |                                                                                   | 14.8                                                                               |                                                                                     |                                                                                     | 37.6                                                                                |                                                                                     |                                                                                     |
| Approach LOS                 | F                                                                                 |                                                                                   |                                                                                   | E                                                                                 |                                                                                   |                                                                                   | B                                                                                  |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 | 1                                                                                 | 2                                                                                 | 4                                                                                 |                                                                                   | 5                                                                                 | 6                                                                                 | 8                                                                                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 5.5                                                                               | 39.4                                                                              | 20.0                                                                              |                                                                                   | 7.2                                                                               | 37.7                                                                              | 7.4                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 10.0                                                                              | 35.0                                                                              | 15.0                                                                              |                                                                                   | 10.0                                                                              | 35.0                                                                              | 10.0                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), s | 2.1                                                                               | 16.5                                                                              | 17.0                                                                              |                                                                                   | 2.8                                                                               | 31.7                                                                              | 4.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 0.0                                                                               | 1.3                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.9                                                                               | 0.1                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          |                                                                                   |                                                                                   |                                                                                   | 65.7                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                 |                                                                                   |                                                                                   |                                                                                   | E                                                                                 |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

2024 Build Traffic Volumes With Improvements - Sensitivity  
2: NYS Route 9D & Beekman Street/W. Church Street

Friday PM Build Event Exit  
01/24/2022

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



2024 Build Traffic Volumes With Improvements - Sensitivity  
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|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Permitted Phases        | 4                                                                                 |                                                                                   |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector Phase          | 4                                                                                 | 4                                                                                 | 4                                                                                 | 8                                                                                 | 8                                                                                 |                                                                                   | 5                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                                | 16.0                                                                                |                                                                                     | 4.0                                                                                 | 16.0                                                                                |                                                                                     |
| Minimum Split (s)       | 20.0                                                                              | 20.0                                                                              | 20.0                                                                              | 9.0                                                                               | 9.0                                                                               |                                                                                   | 9.0                                                                                | 21.0                                                                                |                                                                                     | 9.0                                                                                 | 21.0                                                                                |                                                                                     |
| Total Split (s)         | 20.0                                                                              | 20.0                                                                              | 20.0                                                                              | 15.0                                                                              | 15.0                                                                              |                                                                                   | 15.0                                                                               | 40.0                                                                                |                                                                                     | 15.0                                                                                | 40.0                                                                                |                                                                                     |
| Total Split (%)         | 22.2%                                                                             | 22.2%                                                                             | 22.2%                                                                             | 16.7%                                                                             | 16.7%                                                                             |                                                                                   | 16.7%                                                                              | 44.4%                                                                               |                                                                                     | 16.7%                                                                               | 44.4%                                                                               |                                                                                     |
| Maximum Green (s)       | 15.0                                                                              | 15.0                                                                              | 15.0                                                                              | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                               | 35.0                                                                                |                                                                                     | 10.0                                                                                | 35.0                                                                                |                                                                                     |
| Yellow Time (s)         | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                                | 4.0                                                                                 |                                                                                     | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |
| All-Red Time (s)        | 1.0                                                                               | 1.0                                                                               | 1.0                                                                               | 1.0                                                                               | 1.0                                                                               |                                                                                   | 1.0                                                                                | 1.0                                                                                 |                                                                                     | 1.0                                                                                 | 1.0                                                                                 |                                                                                     |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               |                                                                                   | 5.0                                                                                | 5.0                                                                                 |                                                                                     | 5.0                                                                                 | 5.0                                                                                 |                                                                                     |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lead                                                                               | Lag                                                                                 |                                                                                     | Lead                                                                                | Lag                                                                                 |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Yes                                                                                | Yes                                                                                 |                                                                                     | Yes                                                                                 | Yes                                                                                 |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode             | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              |                                                                                   | None                                                                               | Min                                                                                 |                                                                                     | None                                                                                | Min                                                                                 |                                                                                     |
| v/c Ratio               |                                                                                   | 1.27                                                                              | 0.12                                                                              |                                                                                   | 0.24                                                                              |                                                                                   | 0.16                                                                               | 0.58                                                                                |                                                                                     | 0.02                                                                                | 0.84                                                                                |                                                                                     |
| Control Delay           |                                                                                   | 169.5                                                                             | 0.5                                                                               |                                                                                   | 25.0                                                                              |                                                                                   | 9.8                                                                                | 16.6                                                                                |                                                                                     | 9.0                                                                                 | 31.5                                                                                |                                                                                     |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               |                                                                                   | 0.0                                                                                | 2.1                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Delay             |                                                                                   | 169.5                                                                             | 0.5                                                                               |                                                                                   | 25.0                                                                              |                                                                                   | 9.8                                                                                | 18.7                                                                                |                                                                                     | 9.0                                                                                 | 31.5                                                                                |                                                                                     |
| Queue Length 50th (ft)  |                                                                                   | ~346                                                                              | 0                                                                                 |                                                                                   | 10                                                                                |                                                                                   | 10                                                                                 | 182                                                                                 |                                                                                     | 1                                                                                   | 334                                                                                 |                                                                                     |
| Queue Length 95th (ft)  |                                                                                   | #400                                                                              | 0                                                                                 |                                                                                   | 42                                                                                |                                                                                   | 24                                                                                 | 351                                                                                 |                                                                                     | 7                                                                                   | #602                                                                                |                                                                                     |
| Internal Link Dist (ft) |                                                                                   | 504                                                                               |                                                                                   |                                                                                   | 248                                                                               |                                                                                   |                                                                                    | 308                                                                                 |                                                                                     |                                                                                     | 255                                                                                 |                                                                                     |
| Turn Bay Length (ft)    |                                                                                   |                                                                                   | 95                                                                                |                                                                                   |                                                                                   |                                                                                   | 75                                                                                 |                                                                                     |                                                                                     | 75                                                                                  |                                                                                     |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 372                                                                               | 444                                                                               |                                                                                   | 263                                                                               |                                                                                   | 360                                                                                | 1068                                                                                |                                                                                     | 469                                                                                 | 887                                                                                 |                                                                                     |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                  | 319                                                                                 |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Reduced v/c Ratio       |                                                                                   | 1.27                                                                              | 0.12                                                                              |                                                                                   | 0.17                                                                              |                                                                                   | 0.13                                                                               | 0.79                                                                                |                                                                                     | 0.01                                                                                | 0.79                                                                                |                                                                                     |

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 73.8

Natural Cycle: 90

Control Type: Semi Act-Uncoord

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

|                                                                                        |                                                                                        |                                                                                        |                                                                                          |
|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
|  Ø1 |  Ø2 |  Ø4 |  Ø8 |
| 15 s                                                                                   | 40 s                                                                                   | 20 s                                                                                   | 15 s                                                                                     |
|  Ø5 |  Ø6 |                                                                                        |                                                                                          |
| 15 s                                                                                   | 40 s                                                                                   |                                                                                        |                                                                                          |

|                              |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |                                                                                   |  |  |                                                                                   |  |                                                                                   |  |  |                                                                                     |  |  |  |
| Traffic Volume (veh/h)       | 310                                                                               | 24                                                                                | 37                                                                                | 4                                                                                 | 15                                                                                | 23                                                                                | 39                                                                                 | 494                                                                                 | 5                                                                                   | 6                                                                                   | 524                                                                                 | 166                                                                                 |
| Future Volume (veh/h)        | 310                                                                               | 24                                                                                | 37                                                                                | 4                                                                                 | 15                                                                                | 23                                                                                | 39                                                                                 | 494                                                                                 | 5                                                                                   | 6                                                                                   | 524                                                                                 | 166                                                                                 |
| Number                       | 7                                                                                 | 4                                                                                 | 14                                                                                | 3                                                                                 | 8                                                                                 | 18                                                                                | 5                                                                                  | 2                                                                                   | 12                                                                                  | 1                                                                                   | 6                                                                                   | 16                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 0.86                                                                              | 1.00                                                                               |                                                                                     | 0.98                                                                                | 1.00                                                                                |                                                                                     | 0.97                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       | 1881                                                                              | 1842                                                                              | 1881                                                                              | 1995                                                                              | 1947                                                                              | 1995                                                                              | 1900                                                                               | 1919                                                                                | 1957                                                                                | 1872                                                                                | 1853                                                                                | 1872                                                                                |
| Adj Flow Rate, veh/h         | 437                                                                               | 34                                                                                | 52                                                                                | 4                                                                                 | 16                                                                                | 25                                                                                | 46                                                                                 | 588                                                                                 | 6                                                                                   | 6                                                                                   | 535                                                                                 | 169                                                                                 |
| Adj No. of Lanes             | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                  | 1                                                                                   | 0                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Peak Hour Factor             | 0.71                                                                              | 0.71                                                                              | 0.71                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.84                                                                               | 0.84                                                                                | 0.84                                                                                | 0.98                                                                                | 0.98                                                                                | 0.98                                                                                |
| Percent Heavy Veh, %         | 2                                                                                 | 4                                                                                 | 0                                                                                 | 0                                                                                 | 7                                                                                 | 0                                                                                 | 3                                                                                  | 2                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 1                                                                                   |
| Cap, veh/h                   | 353                                                                               | 27                                                                                | 344                                                                               | 5                                                                                 | 19                                                                                | 30                                                                                | 202                                                                                | 864                                                                                 | 9                                                                                   | 289                                                                                 | 574                                                                                 | 181                                                                                 |
| Arrive On Green              | 0.22                                                                              | 0.22                                                                              | 0.22                                                                              | 0.03                                                                              | 0.03                                                                              | 0.03                                                                              | 0.03                                                                               | 0.46                                                                                | 0.46                                                                                | 0.01                                                                                | 0.43                                                                                | 0.43                                                                                |
| Sat Flow, veh/h              | 1633                                                                              | 127                                                                               | 1591                                                                              | 144                                                                               | 574                                                                               | 897                                                                               | 1810                                                                               | 1896                                                                                | 19                                                                                  | 1782                                                                                | 1341                                                                                | 423                                                                                 |
| Grp Volume(v), veh/h         | 471                                                                               | 0                                                                                 | 52                                                                                | 45                                                                                | 0                                                                                 | 0                                                                                 | 46                                                                                 | 0                                                                                   | 594                                                                                 | 6                                                                                   | 0                                                                                   | 704                                                                                 |
| Grp Sat Flow(s),veh/h/ln     | 1760                                                                              | 0                                                                                 | 1591                                                                              | 1615                                                                              | 0                                                                                 | 0                                                                                 | 1810                                                                               | 0                                                                                   | 1915                                                                                | 1782                                                                                | 0                                                                                   | 1764                                                                                |
| Q Serve(g_s), s              | 15.0                                                                              | 0.0                                                                               | 1.8                                                                               | 1.9                                                                               | 0.0                                                                               | 0.0                                                                               | 1.0                                                                                | 0.0                                                                                 | 17.0                                                                                | 0.1                                                                                 | 0.0                                                                                 | 26.3                                                                                |
| Cycle Q Clear(g_c), s        | 15.0                                                                              | 0.0                                                                               | 1.8                                                                               | 1.9                                                                               | 0.0                                                                               | 0.0                                                                               | 1.0                                                                                | 0.0                                                                                 | 17.0                                                                                | 0.1                                                                                 | 0.0                                                                                 | 26.3                                                                                |
| Prop In Lane                 | 0.93                                                                              |                                                                                   | 1.00                                                                              | 0.09                                                                              |                                                                                   | 0.56                                                                              | 1.00                                                                               |                                                                                     | 0.01                                                                                | 1.00                                                                                |                                                                                     | 0.24                                                                                |
| Lane Grp Cap(c), veh/h       | 380                                                                               | 0                                                                                 | 344                                                                               | 54                                                                                | 0                                                                                 | 0                                                                                 | 202                                                                                | 0                                                                                   | 873                                                                                 | 289                                                                                 | 0                                                                                   | 756                                                                                 |
| V/C Ratio(X)                 | 1.24                                                                              | 0.00                                                                              | 0.15                                                                              | 0.83                                                                              | 0.00                                                                              | 0.00                                                                              | 0.23                                                                               | 0.00                                                                                | 0.68                                                                                | 0.02                                                                                | 0.00                                                                                | 0.93                                                                                |
| Avail Cap(c_a), veh/h        | 380                                                                               | 0                                                                                 | 344                                                                               | 233                                                                               | 0                                                                                 | 0                                                                                 | 401                                                                                | 0                                                                                   | 966                                                                                 | 535                                                                                 | 0                                                                                   | 890                                                                                 |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 0.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 0.00                                                                              | 1.00                                                                               | 0.00                                                                                | 1.00                                                                                | 1.00                                                                                | 0.00                                                                                | 1.00                                                                                |
| Uniform Delay (d), s/veh     | 27.2                                                                              | 0.0                                                                               | 22.0                                                                              | 33.3                                                                              | 0.0                                                                               | 0.0                                                                               | 15.6                                                                               | 0.0                                                                                 | 14.9                                                                                | 12.8                                                                                | 0.0                                                                                 | 18.9                                                                                |
| Incr Delay (d2), s/veh       | 127.8                                                                             | 0.0                                                                               | 0.2                                                                               | 26.6                                                                              | 0.0                                                                               | 0.0                                                                               | 0.6                                                                                | 0.0                                                                                 | 1.7                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 14.8                                                                                |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 20.7                                                                              | 0.0                                                                               | 0.8                                                                               | 1.2                                                                               | 0.0                                                                               | 0.0                                                                               | 0.5                                                                                | 0.0                                                                                 | 9.3                                                                                 | 0.1                                                                                 | 0.0                                                                                 | 15.8                                                                                |
| LnGrp Delay(d),s/veh         | 155.0                                                                             | 0.0                                                                               | 22.2                                                                              | 60.0                                                                              | 0.0                                                                               | 0.0                                                                               | 16.2                                                                               | 0.0                                                                                 | 16.6                                                                                | 12.8                                                                                | 0.0                                                                                 | 33.6                                                                                |
| LnGrp LOS                    | F                                                                                 |                                                                                   | C                                                                                 | E                                                                                 |                                                                                   |                                                                                   | B                                                                                  |                                                                                     | B                                                                                   | B                                                                                   |                                                                                     | C                                                                                   |
| Approach Vol, veh/h          | 523                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 45                                                                                |                                                                                    |                                                                                     |                                                                                     | 640                                                                                 | 710                                                                                 |                                                                                     |
| Approach Delay, s/veh        | 141.8                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 60.0                                                                              |                                                                                    |                                                                                     |                                                                                     | 16.6                                                                                | 33.5                                                                                |                                                                                     |
| Approach LOS                 | F                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   | E                                                                                 |                                                                                    |                                                                                     |                                                                                     | B                                                                                   | C                                                                                   |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 | 1                                                                                 | 2                                                                                 | 4                                                                                 |                                                                                   | 5                                                                                 | 6                                                                                 | 8                                                                                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 5.4                                                                               | 36.6                                                                              | 20.0                                                                              |                                                                                   | 7.4                                                                               | 34.7                                                                              | 7.3                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 10.0                                                                              | 35.0                                                                              | 15.0                                                                              |                                                                                   | 10.0                                                                              | 35.0                                                                              | 10.0                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), s | 2.1                                                                               | 19.0                                                                              | 17.0                                                                              |                                                                                   | 3.0                                                                               | 28.3                                                                              | 3.9                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 0.0                                                                               | 1.5                                                                               | 0.0                                                                               |                                                                                   | 0.1                                                                               | 1.4                                                                               | 0.1                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          |                                                                                   |                                                                                   | 58.0                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                 |                                                                                   |                                                                                   | E                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

2024 Build Traffic Volumes - Sensitivity  
1: NYS Route 9D & Verplanck Avenue

Saturday Build Event Entry  
01/24/2022

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



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

#### Intersection Summary

Area Type: Other

Cycle Length: 120

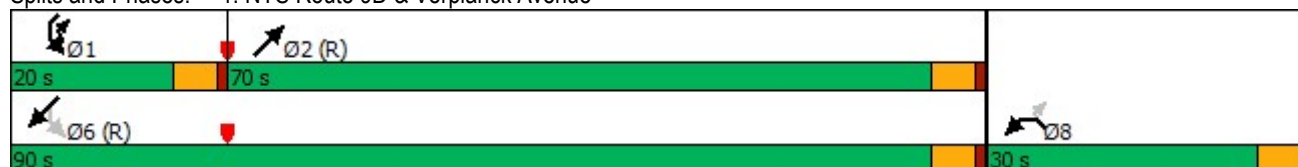
Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NET and 6:SWTL, Start of Green

Natural Cycle: 60

Control Type: Pretimed

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





|                              |  |  |  |  |  |  |   |      |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---|------|
| Movement                     | NWL                                                                               | NWR                                                                               | NET                                                                               | NER                                                                               | SWL                                                                               | SWT                                                                               |   |      |
| Lane Configurations          |  |  |  |                                                                                   |  |  |   |      |
| Traffic Volume (veh/h)       | 81                                                                                | 232                                                                               | 581                                                                               | 65                                                                                | 159                                                                               | 692                                                                               |   |      |
| Future Volume (veh/h)        | 81                                                                                | 232                                                                               | 581                                                                               | 65                                                                                | 159                                                                               | 692                                                                               |   |      |
| Number                       | 3                                                                                 | 18                                                                                | 2                                                                                 | 12                                                                                | 1                                                                                 | 6                                                                                 |   |      |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |   |      |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   |   |      |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |   |      |
| Adj Sat Flow, veh/h/ln       | 1816                                                                              | 1816                                                                              | 1835                                                                              | 1872                                                                              | 1872                                                                              | 1872                                                                              |   |      |
| Adj Flow Rate, veh/h         | 88                                                                                | 252                                                                               | 632                                                                               | 71                                                                                | 173                                                                               | 752                                                                               |   |      |
| Adj No. of Lanes             | 1                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 |   |      |
| Peak Hour Factor             | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              |   |      |
| Percent Heavy Veh, %         | 2                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                 |   |      |
| Cap, veh/h                   | 360                                                                               | 515                                                                               | 878                                                                               | 99                                                                                | 468                                                                               | 1326                                                                              |   |      |
| Arrive On Green              | 0.21                                                                              | 0.21                                                                              | 0.54                                                                              | 0.54                                                                              | 0.13                                                                              | 0.71                                                                              |   |      |
| Sat Flow, veh/h              | 1730                                                                              | 1544                                                                              | 1621                                                                              | 182                                                                               | 1783                                                                              | 1872                                                                              |   |      |
| Grp Volume(v), veh/h         | 88                                                                                | 252                                                                               | 0                                                                                 | 703                                                                               | 173                                                                               | 752                                                                               |   |      |
| Grp Sat Flow(s),veh/h/ln     | 1730                                                                              | 1544                                                                              | 0                                                                                 | 1803                                                                              | 1783                                                                              | 1872                                                                              |   |      |
| Q Serve(g_s), s              | 5.1                                                                               | 15.6                                                                              | 0.0                                                                               | 35.2                                                                              | 4.1                                                                               | 23.5                                                                              |   |      |
| Cycle Q Clear(g_c), s        | 5.1                                                                               | 15.6                                                                              | 0.0                                                                               | 35.2                                                                              | 4.1                                                                               | 23.5                                                                              |   |      |
| Prop In Lane                 | 1.00                                                                              | 1.00                                                                              |                                                                                   | 0.10                                                                              | 1.00                                                                              |                                                                                   |   |      |
| Lane Grp Cap(c), veh/h       | 360                                                                               | 515                                                                               | 0                                                                                 | 976                                                                               | 468                                                                               | 1326                                                                              |   |      |
| V/C Ratio(X)                 | 0.24                                                                              | 0.49                                                                              | 0.00                                                                              | 0.72                                                                              | 0.37                                                                              | 0.57                                                                              |   |      |
| Avail Cap(c_a), veh/h        | 360                                                                               | 515                                                                               | 0                                                                                 | 976                                                                               | 468                                                                               | 1326                                                                              |   |      |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |   |      |
| Upstream Filter(I)           | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |   |      |
| Uniform Delay (d), s/veh     | 39.6                                                                              | 31.9                                                                              | 0.0                                                                               | 20.7                                                                              | 14.2                                                                              | 8.5                                                                               |   |      |
| Incr Delay (d2), s/veh       | 1.6                                                                               | 3.3                                                                               | 0.0                                                                               | 4.6                                                                               | 2.2                                                                               | 1.8                                                                               |   |      |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |   |      |
| %ile BackOfQ(50%),veh/ln     | 2.6                                                                               | 7.1                                                                               | 0.0                                                                               | 18.6                                                                              | 2.6                                                                               | 12.6                                                                              |   |      |
| LnGrp Delay(d),s/veh         | 41.2                                                                              | 35.2                                                                              | 0.0                                                                               | 25.2                                                                              | 16.4                                                                              | 10.3                                                                              |   |      |
| LnGrp LOS                    | D                                                                                 | D                                                                                 |                                                                                   | C                                                                                 | B                                                                                 | B                                                                                 |   |      |
| Approach Vol, veh/h          | 340                                                                               |                                                                                   | 703                                                                               |                                                                                   |                                                                                   | 925                                                                               |   |      |
| Approach Delay, s/veh        | 36.7                                                                              |                                                                                   | 25.2                                                                              |                                                                                   |                                                                                   | 11.4                                                                              |   |      |
| Approach LOS                 | D                                                                                 |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | B                                                                                 |   |      |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7 | 8    |
| Assigned Phs                 | 1                                                                                 | 2                                                                                 |                                                                                   |                                                                                   |                                                                                   | 6                                                                                 |   | 8    |
| Phs Duration (G+Y+Rc), s     | 20.0                                                                              | 70.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 90.0                                                                              |   | 30.0 |
| Change Period (Y+Rc), s      | 5.0                                                                               | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 5.0                                                                               |   | 5.0  |
| Max Green Setting (Gmax), s  | 15.0                                                                              | 65.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 85.0                                                                              |   | 25.0 |
| Max Q Clear Time (g_c+l1), 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 - Sensitivity  
2: NYS Route 9D & Beekman Street/W. Church Street

Saturday Build Event Entry  
01/24/2022

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

2024 Build Traffic Volumes - Sensitivity  
2: NYS Route 9D & Beekman Street/W. Church Street

Saturday Build Event Entry  
01/24/2022

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

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 61

Natural Cycle: 75

Control Type: Semi Act-Uncoord

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

|                                                                                        |                                                                                        |                                                                                         |
|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
|  Ø1 |  Ø2 |  Ø4 |
| 15 s                                                                                   | 40 s                                                                                   | 35 s                                                                                    |
|  Ø5 |  Ø6 |  Ø8 |
| 15 s                                                                                   | 40 s                                                                                   | 35 s                                                                                    |

|                              |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |                                                                                   |  |  |                                                                                   |  |                                                                                   |  |  |                                                                                     |  |  |                                                                                     |
| Traffic Volume (veh/h)       | 33                                                                                | 2                                                                                 | 28                                                                                | 9                                                                                 | 12                                                                                | 20                                                                                | 66                                                                                 | 517                                                                                 | 4                                                                                   | 17                                                                                  | 642                                                                                 | 179                                                                                 |
| Future Volume (veh/h)        | 33                                                                                | 2                                                                                 | 28                                                                                | 9                                                                                 | 12                                                                                | 20                                                                                | 66                                                                                 | 517                                                                                 | 4                                                                                   | 17                                                                                  | 642                                                                                 | 179                                                                                 |
| Number                       | 7                                                                                 | 4                                                                                 | 14                                                                                | 3                                                                                 | 8                                                                                 | 18                                                                                | 5                                                                                  | 2                                                                                   | 12                                                                                  | 1                                                                                   | 6                                                                                   | 16                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 0.98                                                                              |                                                                                   | 0.90                                                                              | 0.95                                                                              |                                                                                   | 0.98                                                                              | 1.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 0.99                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       | 1881                                                                              | 1864                                                                              | 1881                                                                              | 1995                                                                              | 1995                                                                              | 1995                                                                              | 1864                                                                               | 1938                                                                                | 1957                                                                                | 1872                                                                                | 1849                                                                                | 1872                                                                                |
| Adj Flow Rate, veh/h         | 45                                                                                | 3                                                                                 | 38                                                                                | 12                                                                                | 16                                                                                | 27                                                                                | 70                                                                                 | 550                                                                                 | 4                                                                                   | 18                                                                                  | 676                                                                                 | 188                                                                                 |
| Adj No. of Lanes             | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                  | 1                                                                                   | 0                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Peak Hour Factor             | 0.73                                                                              | 0.73                                                                              | 0.73                                                                              | 0.75                                                                              | 0.75                                                                              | 0.75                                                                              | 0.94                                                                               | 0.94                                                                                | 0.94                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                |
| Percent Heavy Veh, %         | 1                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 5                                                                                  | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 2                                                                                   |
| Cap, veh/h                   | 240                                                                               | 12                                                                                | 127                                                                               | 97                                                                                | 56                                                                                | 74                                                                                | 355                                                                                | 1220                                                                                | 9                                                                                   | 573                                                                                 | 842                                                                                 | 234                                                                                 |
| Arrive On Green              | 0.09                                                                              | 0.09                                                                              | 0.09                                                                              | 0.09                                                                              | 0.09                                                                              | 0.09                                                                              | 0.05                                                                               | 0.63                                                                                | 0.63                                                                                | 0.02                                                                                | 0.61                                                                                | 0.61                                                                                |
| Sat Flow, veh/h              | 1349                                                                              | 139                                                                               | 1442                                                                              | 238                                                                               | 636                                                                               | 843                                                                               | 1775                                                                               | 1921                                                                                | 14                                                                                  | 1782                                                                                | 1390                                                                                | 387                                                                                 |
| Grp Volume(v), veh/h         | 48                                                                                | 0                                                                                 | 38                                                                                | 55                                                                                | 0                                                                                 | 0                                                                                 | 70                                                                                 | 0                                                                                   | 554                                                                                 | 18                                                                                  | 0                                                                                   | 864                                                                                 |
| Grp Sat Flow(s),veh/h/ln     | 1488                                                                              | 0                                                                                 | 1442                                                                              | 1717                                                                              | 0                                                                                 | 0                                                                                 | 1775                                                                               | 0                                                                                   | 1935                                                                                | 1782                                                                                | 0                                                                                   | 1777                                                                                |
| Q Serve(g_s), s              | 0.0                                                                               | 0.0                                                                               | 1.4                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.8                                                                                | 0.0                                                                                 | 8.5                                                                                 | 0.2                                                                                 | 0.0                                                                                 | 21.6                                                                                |
| Cycle Q Clear(g_c), s        | 1.5                                                                               | 0.0                                                                               | 1.4                                                                               | 1.6                                                                               | 0.0                                                                               | 0.0                                                                               | 0.8                                                                                | 0.0                                                                                 | 8.5                                                                                 | 0.2                                                                                 | 0.0                                                                                 | 21.6                                                                                |
| Prop In Lane                 | 0.94                                                                              |                                                                                   | 1.00                                                                              | 0.22                                                                              |                                                                                   | 0.49                                                                              | 1.00                                                                               |                                                                                     | 0.01                                                                                | 1.00                                                                                |                                                                                     | 0.22                                                                                |
| Lane Grp Cap(c), veh/h       | 252                                                                               | 0                                                                                 | 127                                                                               | 228                                                                               | 0                                                                                 | 0                                                                                 | 355                                                                                | 0                                                                                   | 1228                                                                                | 573                                                                                 | 0                                                                                   | 1076                                                                                |
| V/C Ratio(X)                 | 0.19                                                                              | 0.00                                                                              | 0.30                                                                              | 0.24                                                                              | 0.00                                                                              | 0.00                                                                              | 0.20                                                                               | 0.00                                                                                | 0.45                                                                                | 0.03                                                                                | 0.00                                                                                | 0.80                                                                                |
| Avail Cap(c_a), veh/h        | 837                                                                               | 0                                                                                 | 748                                                                               | 945                                                                               | 0                                                                                 | 0                                                                                 | 579                                                                                | 0                                                                                   | 1228                                                                                | 850                                                                                 | 0                                                                                   | 1076                                                                                |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 0.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 0.00                                                                              | 1.00                                                                               | 0.00                                                                                | 1.00                                                                                | 1.00                                                                                | 0.00                                                                                | 1.00                                                                                |
| Uniform Delay (d), s/veh     | 24.7                                                                              | 0.0                                                                               | 24.7                                                                              | 24.8                                                                              | 0.0                                                                               | 0.0                                                                               | 8.2                                                                                | 0.0                                                                                 | 5.4                                                                                 | 4.6                                                                                 | 0.0                                                                                 | 8.8                                                                                 |
| Incr Delay (d2), s/veh       | 0.4                                                                               | 0.0                                                                               | 1.3                                                                               | 0.5                                                                               | 0.0                                                                               | 0.0                                                                               | 0.3                                                                                | 0.0                                                                                 | 1.2                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 6.4                                                                                 |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 0.7                                                                               | 0.0                                                                               | 0.6                                                                               | 0.9                                                                               | 0.0                                                                               | 0.0                                                                               | 0.5                                                                                | 0.0                                                                                 | 4.9                                                                                 | 0.1                                                                                 | 0.0                                                                                 | 12.2                                                                                |
| LnGrp Delay(d),s/veh         | 25.1                                                                              | 0.0                                                                               | 26.0                                                                              | 25.3                                                                              | 0.0                                                                               | 0.0                                                                               | 8.4                                                                                | 0.0                                                                                 | 6.6                                                                                 | 4.6                                                                                 | 0.0                                                                                 | 15.1                                                                                |
| LnGrp LOS                    | C                                                                                 |                                                                                   | C                                                                                 | C                                                                                 |                                                                                   |                                                                                   | A                                                                                  |                                                                                     | A                                                                                   | A                                                                                   |                                                                                     | B                                                                                   |
| Approach Vol, veh/h          | 86                                                                                |                                                                                   |                                                                                   |                                                                                   | 55                                                                                |                                                                                   |                                                                                    |                                                                                     | 624                                                                                 |                                                                                     | 882                                                                                 |                                                                                     |
| Approach Delay, s/veh        | 25.5                                                                              |                                                                                   |                                                                                   |                                                                                   | 25.3                                                                              |                                                                                   |                                                                                    |                                                                                     | 6.8                                                                                 |                                                                                     | 14.9                                                                                |                                                                                     |
| Approach LOS                 | C                                                                                 |                                                                                   |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    |                                                                                     | A                                                                                   |                                                                                     | B                                                                                   |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 | 1                                                                                 | 2                                                                                 |                                                                                   |                                                                                   | 4                                                                                 | 5                                                                                 | 6                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 6.0                                                                               | 41.7                                                                              |                                                                                   |                                                                                   | 10.1                                                                              | 7.7                                                                               | 40.0                                                                               | 10.1                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 5.0                                                                               | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 10.0                                                                              | 35.0                                                                              |                                                                                   |                                                                                   | 30.0                                                                              | 10.0                                                                              | 35.0                                                                               | 30.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), s | 2.2                                                                               | 10.5                                                                              |                                                                                   |                                                                                   | 3.5                                                                               | 2.8                                                                               | 23.6                                                                               | 3.6                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 0.0                                                                               | 1.5                                                                               |                                                                                   |                                                                                   | 0.4                                                                               | 0.1                                                                               | 2.4                                                                                | 0.2                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          |                                                                                   |                                                                                   | 12.7                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                 |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |



2024 Build Traffic Volumes - Sensitivity  
3: NYS Route 9D & Beacon City Hall/Main Street

Saturday Build Event Entry  
01/24/2022

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

2024 Build Traffic Volumes - Sensitivity  
3: NYS Route 9D & Beacon City Hall/Main Street

Saturday Build Event Entry  
01/24/2022

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

Intersection Summary

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

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

|      |      |      |
|------|------|------|
|      |      |      |
| 40 s | 15 s | 35 s |
|      |      |      |
| 40 s | 15 s | 35 s |

2024 Build Traffic Volumes - Sensitivity  
3: NYS Route 9D & Beacon City Hall/Main Street

Saturday Build Event Entry  
01/24/2022

|                              |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |                                                                                   |  |                                                                                   |                                                                                   |  |  |  |  |                                                                                     |  |  |                                                                                     |
| Traffic Volume (veh/h)       | 2                                                                                 | 2                                                                                 | 2                                                                                 | 46                                                                                | 0                                                                                 | 197                                                                               | 2                                                                                  | 389                                                                                 | 52                                                                                  | 293                                                                                 | 393                                                                                 | 3                                                                                   |
| Future Volume (veh/h)        | 2                                                                                 | 2                                                                                 | 2                                                                                 | 46                                                                                | 0                                                                                 | 197                                                                               | 2                                                                                  | 389                                                                                 | 52                                                                                  | 293                                                                                 | 393                                                                                 | 3                                                                                   |
| Number                       | 7                                                                                 | 4                                                                                 | 14                                                                                | 3                                                                                 | 8                                                                                 | 18                                                                                | 5                                                                                  | 2                                                                                   | 12                                                                                  | 1                                                                                   | 6                                                                                   | 16                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 0.98                                                                              |                                                                                   | 0.95                                                                              | 0.95                                                                              |                                                                                   | 0.98                                                                              | 1.00                                                                               |                                                                                     | 0.96                                                                                | 0.99                                                                                |                                                                                     | 0.99                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       | 1890                                                                              | 1890                                                                              | 1890                                                                              | 1976                                                                              | 1976                                                                              | 1956                                                                              | 1928                                                                               | 1884                                                                                | 1928                                                                                | 1853                                                                                | 1853                                                                                | 1872                                                                                |
| Adj Flow Rate, veh/h         | 3                                                                                 | 3                                                                                 | 3                                                                                 | 52                                                                                | 0                                                                                 | 221                                                                               | 2                                                                                  | 442                                                                                 | 59                                                                                  | 318                                                                                 | 427                                                                                 | 3                                                                                   |
| Adj No. of Lanes             | 0                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                  | 1                                                                                   | 0                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Peak Hour Factor             | 0.71                                                                              | 0.71                                                                              | 0.71                                                                              | 0.89                                                                              | 0.89                                                                              | 0.89                                                                              | 0.88                                                                               | 0.88                                                                                | 0.88                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Percent Heavy Veh, %         | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 1                                                                                 | 0                                                                                  | 2                                                                                   | 5                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Cap, veh/h                   | 115                                                                               | 97                                                                                | 67                                                                                | 299                                                                               | 0                                                                                 | 315                                                                               | 661                                                                                | 915                                                                                 | 122                                                                                 | 584                                                                                 | 1039                                                                                | 7                                                                                   |
| Arrive On Green              | 0.13                                                                              | 0.13                                                                              | 0.13                                                                              | 0.13                                                                              | 0.00                                                                              | 0.13                                                                              | 0.06                                                                               | 0.57                                                                                | 0.57                                                                                | 0.06                                                                                | 0.57                                                                                | 0.57                                                                                |
| Sat Flow, veh/h              | 291                                                                               | 761                                                                               | 526                                                                               | 1423                                                                              | 0                                                                                 | 1624                                                                              | 1837                                                                               | 1619                                                                                | 216                                                                                 | 1765                                                                                | 1838                                                                                | 13                                                                                  |
| Grp Volume(v), veh/h         | 9                                                                                 | 0                                                                                 | 0                                                                                 | 52                                                                                | 0                                                                                 | 221                                                                               | 2                                                                                  | 0                                                                                   | 501                                                                                 | 318                                                                                 | 0                                                                                   | 430                                                                                 |
| Grp Sat Flow(s),veh/h/ln     | 1577                                                                              | 0                                                                                 | 0                                                                                 | 1423                                                                              | 0                                                                                 | 1624                                                                              | 1837                                                                               | 0                                                                                   | 1835                                                                                | 1765                                                                                | 0                                                                                   | 1851                                                                                |
| Q Serve(g_s), s              | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 1.7                                                                               | 0.0                                                                               | 3.8                                                                               | 0.0                                                                                | 0.0                                                                                 | 10.1                                                                                | 0.0                                                                                 | 0.0                                                                                 | 8.1                                                                                 |
| Cycle Q Clear(g_c), s        | 0.3                                                                               | 0.0                                                                               | 0.0                                                                               | 2.0                                                                               | 0.0                                                                               | 3.8                                                                               | 0.0                                                                                | 0.0                                                                                 | 10.1                                                                                | 0.0                                                                                 | 0.0                                                                                 | 8.1                                                                                 |
| Prop In Lane                 | 0.33                                                                              |                                                                                   | 0.33                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                               |                                                                                     | 0.12                                                                                | 1.00                                                                                |                                                                                     | 0.01                                                                                |
| Lane Grp Cap(c), veh/h       | 280                                                                               | 0                                                                                 | 0                                                                                 | 299                                                                               | 0                                                                                 | 315                                                                               | 661                                                                                | 0                                                                                   | 1037                                                                                | 584                                                                                 | 0                                                                                   | 1046                                                                                |
| V/C Ratio(X)                 | 0.03                                                                              | 0.00                                                                              | 0.00                                                                              | 0.17                                                                              | 0.00                                                                              | 0.70                                                                              | 0.00                                                                               | 0.00                                                                                | 0.48                                                                                | 0.54                                                                                | 0.00                                                                                | 0.41                                                                                |
| Avail Cap(c_a), veh/h        | 800                                                                               | 0                                                                                 | 0                                                                                 | 801                                                                               | 0                                                                                 | 894                                                                               | 839                                                                                | 0                                                                                   | 1037                                                                                | 756                                                                                 | 0                                                                                   | 1046                                                                                |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 0.00                                                                              | 0.00                                                                              | 1.00                                                                              | 0.00                                                                              | 1.00                                                                              | 1.00                                                                               | 0.00                                                                                | 1.00                                                                                | 1.00                                                                                | 0.00                                                                                | 1.00                                                                                |
| Uniform Delay (d), s/veh     | 23.7                                                                              | 0.0                                                                               | 0.0                                                                               | 24.4                                                                              | 0.0                                                                               | 23.3                                                                              | 7.8                                                                                | 0.0                                                                                 | 8.1                                                                                 | 13.8                                                                                | 0.0                                                                                 | 7.6                                                                                 |
| Incr Delay (d2), s/veh       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.3                                                                               | 0.0                                                                               | 2.8                                                                               | 0.0                                                                                | 0.0                                                                                 | 1.6                                                                                 | 0.8                                                                                 | 0.0                                                                                 | 1.2                                                                                 |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 0.1                                                                               | 0.0                                                                               | 0.0                                                                               | 0.8                                                                               | 0.0                                                                               | 3.5                                                                               | 0.0                                                                                | 0.0                                                                                 | 5.5                                                                                 | 4.6                                                                                 | 0.0                                                                                 | 4.4                                                                                 |
| LnGrp Delay(d),s/veh         | 23.7                                                                              | 0.0                                                                               | 0.0                                                                               | 24.6                                                                              | 0.0                                                                               | 26.1                                                                              | 7.8                                                                                | 0.0                                                                                 | 9.7                                                                                 | 14.6                                                                                | 0.0                                                                                 | 8.8                                                                                 |
| LnGrp LOS                    | C                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   | C                                                                                 | A                                                                                  |                                                                                     | A                                                                                   | B                                                                                   |                                                                                     | A                                                                                   |
| Approach Vol, veh/h          | 9                                                                                 |                                                                                   |                                                                                   | 273                                                                               |                                                                                   |                                                                                   | 503                                                                                |                                                                                     |                                                                                     | 748                                                                                 |                                                                                     |                                                                                     |
| Approach Delay, s/veh        | 23.7                                                                              |                                                                                   |                                                                                   | 25.9                                                                              |                                                                                   |                                                                                   | 9.7                                                                                |                                                                                     |                                                                                     | 11.3                                                                                |                                                                                     |                                                                                     |
| Approach LOS                 | C                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | A                                                                                  |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 | 1                                                                                 | 2                                                                                 | 4                                                                                 |                                                                                   | 5                                                                                 | 6                                                                                 | 8                                                                                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 9.0                                                                               | 40.0                                                                              | 12.9                                                                              |                                                                                   | 9.0                                                                               | 40.0                                                                              | 12.9                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 10.0                                                                              | 35.0                                                                              | 30.0                                                                              |                                                                                   | 10.0                                                                              | 35.0                                                                              | 30.0                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), s | 2.0                                                                               | 12.1                                                                              | 2.3                                                                               |                                                                                   | 2.0                                                                               | 10.1                                                                              | 5.8                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 1.0                                                                               | 1.3                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 1.1                                                                               | 1.6                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          | 13.4                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                 | B                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

2024 Build Traffic Volumes - Sensitivity  
4: NYS Route 9D & Beacon Street/West End Lofts

Saturday Build Event Entry  
01/24/2022

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



2024 Build Traffic Volumes - Sensitivity  
4: NYS Route 9D & Beacon Street/West End Lofts

Saturday Build Event Entry  
01/24/2022

| Intersection             |        |                                                                                   |          |       |                                                                                   |       |        |                                                                                   |      |       |                                                                                     |      |
|--------------------------|--------|-----------------------------------------------------------------------------------|----------|-------|-----------------------------------------------------------------------------------|-------|--------|-----------------------------------------------------------------------------------|------|-------|-------------------------------------------------------------------------------------|------|
| Int Delay, s/veh         | 2.5    |                                                                                   |          |       |                                                                                   |       |        |                                                                                   |      |       |                                                                                     |      |
| Movement                 | SEL    | SET                                                                               | SER      | NWL   | NWT                                                                               | NWR   | NEL    | NET                                                                               | NER  | SWL   | SWT                                                                                 | SWR  |
| Lane Configurations      |        |  |          |       |  |       |        |  |      |       |  |      |
| Traffic Vol, veh/h       | 10     | 3                                                                                 | 3        | 10    | 5                                                                                 | 82    | 3      | 350                                                                               | 10   | 45    | 389                                                                                 | 7    |
| Future Vol, veh/h        | 10     | 3                                                                                 | 3        | 10    | 5                                                                                 | 82    | 3      | 350                                                                               | 10   | 45    | 389                                                                                 | 7    |
| Conflicting Peds, #/hr   | 0      | 0                                                                                 | 4        | 0     | 0                                                                                 | 19    | 0      | 0                                                                                 | 2    | 0     | 0                                                                                   | 3    |
| Sign Control             | Stop   | Stop                                                                              | Stop     | Stop  | Stop                                                                              | Stop  | Free   | Free                                                                              | Free | Free  | Free                                                                                | Free |
| RT Channelized           | -      | -                                                                                 | None     | -     | -                                                                                 | None  | -      | -                                                                                 | None | -     | -                                                                                   | None |
| Storage Length           | -      | -                                                                                 | -        | -     | -                                                                                 | -     | -      | -                                                                                 | -    | -     | -                                                                                   | -    |
| Veh in Median Storage, # | -      | 0                                                                                 | -        | -     | 0                                                                                 | -     | -      | 0                                                                                 | -    | -     | 0                                                                                   | -    |
| Grade, %                 | -      | 0                                                                                 | -        | -     | -3                                                                                | -     | -      | -4                                                                                | -    | -     | 4                                                                                   | -    |
| Peak Hour Factor         | 61     | 61                                                                                | 61       | 88    | 88                                                                                | 88    | 85     | 85                                                                                | 85   | 92    | 92                                                                                  | 92   |
| Heavy Vehicles, %        | 0      | 50                                                                                | 0        | 11    | 25                                                                                | 1     | 0      | 4                                                                                 | 11   | 2     | 2                                                                                   | 0    |
| Mvmt Flow                | 16     | 5                                                                                 | 5        | 11    | 6                                                                                 | 93    | 4      | 412                                                                               | 12   | 49    | 423                                                                                 | 8    |
|                          |        |                                                                                   |          |       |                                                                                   |       |        |                                                                                   |      |       |                                                                                     |      |
| Major/Minor              | Minor2 |                                                                                   | Minor1   |       | Major1                                                                            |       | Major2 |                                                                                   |      |       |                                                                                     |      |
| Conflicting Flow All     | 1023   | 962                                                                               | 434      | 962   | 960                                                                               | 439   | 434    | 0                                                                                 | 0    | 426   | 0                                                                                   | 0    |
| Stage 1                  | 528    | 528                                                                               | -        | 428   | 428                                                                               | -     | -      | -                                                                                 | -    | -     | -                                                                                   | -    |
| Stage 2                  | 495    | 434                                                                               | -        | 534   | 532                                                                               | -     | -      | -                                                                                 | -    | -     | -                                                                                   | -    |
| Critical Hdwy            | 7.1    | 7                                                                                 | 6.2      | 6.61  | 6.15                                                                              | 5.91  | 4.1    | -                                                                                 | -    | 4.12  | -                                                                                   | -    |
| Critical Hdwy Stg 1      | 6.1    | 6                                                                                 | -        | 5.61  | 5.15                                                                              | -     | -      | -                                                                                 | -    | -     | -                                                                                   | -    |
| Critical Hdwy Stg 2      | 6.1    | 6                                                                                 | -        | 5.61  | 5.15                                                                              | -     | -      | -                                                                                 | -    | -     | -                                                                                   | -    |
| Follow-up Hdwy           | 3.5    | 4.45                                                                              | 3.3      | 3.599 | 4.225                                                                             | 3.309 | 2.2    | -                                                                                 | -    | 2.218 | -                                                                                   | -    |
| Pot Cap-1 Maneuver       | 216    | 213                                                                               | 626      | 266   | 276                                                                               | 643   | 1136   | -                                                                                 | -    | 1133  | -                                                                                   | -    |
| Stage 1                  | 538    | 457                                                                               | -        | 631   | 588                                                                               | -     | -      | -                                                                                 | -    | -     | -                                                                                   | -    |
| Stage 2                  | 560    | 507                                                                               | -        | 562   | 535                                                                               | -     | -      | -                                                                                 | -    | -     | -                                                                                   | -    |
| Platoon blocked, %       |        |                                                                                   |          |       |                                                                                   |       |        | -                                                                                 | -    |       | -                                                                                   | -    |
| Mov Cap-1 Maneuver       | 169    | 199                                                                               | 622      | 246   | 258                                                                               | 632   | 1133   | -                                                                                 | -    | 1131  | -                                                                                   | -    |
| Mov Cap-2 Maneuver       | 169    | 199                                                                               | -        | 246   | 258                                                                               | -     | -      | -                                                                                 | -    | -     | -                                                                                   | -    |
| Stage 1                  | 534    | 430                                                                               | -        | 627   | 584                                                                               | -     | -      | -                                                                                 | -    | -     | -                                                                                   | -    |
| Stage 2                  | 463    | 503                                                                               | -        | 518   | 503                                                                               | -     | -      | -                                                                                 | -    | -     | -                                                                                   | -    |
|                          |        |                                                                                   |          |       |                                                                                   |       |        |                                                                                   |      |       |                                                                                     |      |
|                          |        |                                                                                   |          |       |                                                                                   |       |        |                                                                                   |      |       |                                                                                     |      |
| Approach                 | SE     |                                                                                   | NW       |       | NE                                                                                |       | SW     |                                                                                   |      |       |                                                                                     |      |
| HCM Control Delay, s     | 25.5   |                                                                                   | 14       |       | 0.1                                                                               |       | 0.8    |                                                                                   |      |       |                                                                                     |      |
| HCM LOS                  | D      |                                                                                   | B        |       |                                                                                   |       |        |                                                                                   |      |       |                                                                                     |      |
|                          |        |                                                                                   |          |       |                                                                                   |       |        |                                                                                   |      |       |                                                                                     |      |
| Minor Lane/Major Mvmt    | NEL    | NET                                                                               | NERNWLn1 | SELn1 | SWL                                                                               | SWT   | SWR    |                                                                                   |      |       |                                                                                     |      |
| Capacity (veh/h)         | 1133   | -                                                                                 | -        | 511   | 202                                                                               | 1131  | -      | -                                                                                 |      |       |                                                                                     |      |
| HCM Lane V/C Ratio       | 0.003  | -                                                                                 | -        | 0.216 | 0.13                                                                              | 0.043 | -      | -                                                                                 |      |       |                                                                                     |      |
| HCM Control Delay (s)    | 8.2    | 0                                                                                 | -        | 14    | 25.5                                                                              | 8.3   | 0      | -                                                                                 |      |       |                                                                                     |      |
| HCM Lane LOS             | A      | A                                                                                 | -        | B     | D                                                                                 | A     | A      | -                                                                                 |      |       |                                                                                     |      |
| HCM 95th %tile Q(veh)    | 0      | -                                                                                 | -        | 0.8   | 0.4                                                                               | 0.1   | -      | -                                                                                 |      |       |                                                                                     |      |



| Lane Group                 | SEL   | SER   | NEL  | NET   | SWT   | SWR   |
|----------------------------|-------|-------|------|-------|-------|-------|
| Lane Configurations        |       |       |      |       |       |       |
| Traffic Volume (vph)       | 18    | 5     | 28   | 343   | 313   | 87    |
| Future Volume (vph)        | 18    | 5     | 28   | 343   | 313   | 87    |
| Ideal Flow (vphpl)         | 1900  | 1900  | 1900 | 1900  | 1900  | 1900  |
| Lane Util. Factor          | 1.00  | 1.00  | 1.00 | 1.00  | 1.00  | 1.00  |
| Frt                        | 0.973 |       |      |       | 0.971 |       |
| Flt Protected              | 0.962 |       |      | 0.996 |       |       |
| Satd. Flow (prot)          | 1744  | 0     | 0    | 1855  | 1809  | 0     |
| Flt Permitted              | 0.962 |       |      | 0.996 |       |       |
| Satd. Flow (perm)          | 1744  | 0     | 0    | 1855  | 1809  | 0     |
| Link Speed (mph)           | 30    |       |      | 30    | 30    |       |
| Link Distance (ft)         | 176   |       |      | 499   | 312   |       |
| Travel Time (s)            | 4.0   |       |      | 11.3  | 7.1   |       |
| Peak Hour Factor           | 0.92  | 0.92  | 0.92 | 0.92  | 0.92  | 0.92  |
| Adj. Flow (vph)            | 20    | 5     | 30   | 373   | 340   | 95    |
| Shared Lane Traffic (%)    |       |       |      |       |       |       |
| Lane Group Flow (vph)      | 25    | 0     | 0    | 403   | 435   | 0     |
| Enter Blocked Intersection | No    | No    | No   | No    | No    | No    |
| Lane Alignment             | Left  | Right | Left | Left  | Left  | Right |
| Median Width(ft)           | 12    |       |      | 12    | 12    |       |
| Link Offset(ft)            | 0     |       |      | 0     | 0     |       |
| Crosswalk Width(ft)        | 16    |       |      | 16    | 16    |       |
| Two way Left Turn Lane     |       |       |      | Yes   | Yes   |       |
| Headway Factor             | 1.00  | 1.00  | 1.00 | 1.00  | 1.00  | 1.00  |
| Turning Speed (mph)        | 60    | 60    | 60   |       |       | 60    |
| Sign Control               | Stop  |       |      | Free  | Free  |       |

#### Intersection Summary

Area Type: Other  
Control Type: Unsignalized

Intersection

Int Delay, s/veh 0.7

Movement SEL SER NEL NET SWT SWR

Lane Configurations 

Traffic Vol, veh/h 18 5 28 343 313 87

Future Vol, veh/h 18 5 28 343 313 87

Conflicting Peds, #/hr 0 0 0 0 0 0

Sign Control Stop Stop Free Free Free Free

RT Channelized - None - None - None

Storage Length 0 - - - - -

Veh in Median Storage, # 0 - - 0 0 -

Grade, % 0 - - 0 0 -

Peak Hour Factor 92 92 92 92 92 92

Heavy Vehicles, % 2 2 2 2 2 2

Mvmt Flow 20 5 30 373 340 95

Major/Minor Minor2 Major1 Major2

Conflicting Flow All 821 388 435 0 - 0

Stage 1 388 - - - - -

Stage 2 433 - - - - -

Critical Hdwy 6.42 6.22 4.12 - - -

Critical Hdwy Stg 1 5.42 - - - - -

Critical Hdwy Stg 2 5.42 - - - - -

Follow-up Hdwy 3.518 3.318 2.218 - - -

Pot Cap-1 Maneuver 344 660 1125 - - -

Stage 1 686 - - - - -

Stage 2 654 - - - - -

Platoon blocked, % - - -

Mov Cap-1 Maneuver 332 660 1125 - - -

Mov Cap-2 Maneuver 452 - - - - -

Stage 1 663 - - - - -

Stage 2 654 - - - - -

Approach SE NE SW

HCM Control Delay, s 12.8 0.6 0

HCM LOS B

Minor Lane/Major Mvmt NEL NET SELn1 SWT SWR

Capacity (veh/h) 1125 - 485 - -

HCM Lane V/C Ratio 0.027 - 0.052 - -

HCM Control Delay (s) 8.3 0 12.8 - -

HCM Lane LOS A A B - -

HCM 95th %tile Q(veh) 0.1 - 0.2 - -

2024 Build Traffic Volumes - Sensitivity  
6: South Avenue & NYS Route 9D

Saturday Build Event Entry  
01/24/2022

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



|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Internal Link Dist (ft) |                                                                                   | 161                                                                               |                                                                                   |                                                                                   | 436                                                                               |                                                                                   |                                                                                    | 114                                                                                 |                                                                                     |                                                                                     | 223                                                                                 |                                                                                     |
| Turn Bay Length (ft)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 830                                                                               |                                                                                   |                                                                                   | 842                                                                               |                                                                                   |                                                                                    | 794                                                                                 |                                                                                     |                                                                                     | 691                                                                                 |                                                                                     |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Reduced v/c Ratio       |                                                                                   | 0.32                                                                              |                                                                                   |                                                                                   | 0.39                                                                              |                                                                                   |                                                                                    | 0.12                                                                                |                                                                                     |                                                                                     | 0.13                                                                                |                                                                                     |

#### Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 45

Control Type: Pretimed

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

|                                                                                          |                                                                                      |
|------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
|  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)       | 9                                                                                 | 193                                                                               | 16                                                                                | 13                                                                                | 229                                                                               | 37                                                                                | 14                                                                                 | 27                                                                                  | 13                                                                                  | 32                                                                                  | 35                                                                                  | 9                                                                                   |
| Future Volume (veh/h)        | 9                                                                                 | 193                                                                               | 16                                                                                | 13                                                                                | 229                                                                               | 37                                                                                | 14                                                                                 | 27                                                                                  | 13                                                                                  | 32                                                                                  | 35                                                                                  | 9                                                                                   |
| Number                       | 7                                                                                 | 4                                                                                 | 14                                                                                | 3                                                                                 | 8                                                                                 | 18                                                                                | 5                                                                                  | 2                                                                                   | 12                                                                                  | 1                                                                                   | 6                                                                                   | 16                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                               |                                                                                     | 0.99                                                                                | 1.00                                                                                |                                                                                     | 0.99                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       | 1843                                                                              | 1843                                                                              | 1843                                                                              | 1957                                                                              | 1885                                                                              | 1957                                                                              | 1910                                                                               | 1910                                                                                | 1910                                                                                | 1872                                                                                | 1759                                                                                | 1872                                                                                |
| Adj Flow Rate, veh/h         | 11                                                                                | 235                                                                               | 20                                                                                | 15                                                                                | 269                                                                               | 44                                                                                | 25                                                                                 | 49                                                                                  | 24                                                                                  | 39                                                                                  | 43                                                                                  | 11                                                                                  |
| Adj No. of Lanes             | 0                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                  | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Peak Hour Factor             | 0.82                                                                              | 0.82                                                                              | 0.82                                                                              | 0.85                                                                              | 0.85                                                                              | 0.85                                                                              | 0.55                                                                               | 0.55                                                                                | 0.55                                                                                | 0.82                                                                                | 0.82                                                                                | 0.82                                                                                |
| Percent Heavy Veh, %         | 0                                                                                 | 0                                                                                 | 0                                                                                 | 12                                                                                | 4                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 2                                                                                   | 12                                                                                  | 0                                                                                   |
| Cap, veh/h                   | 44                                                                                | 751                                                                               | 62                                                                                | 47                                                                                | 708                                                                               | 112                                                                               | 212                                                                                | 409                                                                                 | 190                                                                                 | 312                                                                                 | 333                                                                                 | 81                                                                                  |
| Arrive On Green              | 0.46                                                                              | 0.46                                                                              | 0.46                                                                              | 0.46                                                                              | 0.46                                                                              | 0.46                                                                              | 0.46                                                                               | 0.46                                                                                | 0.46                                                                                | 0.46                                                                                | 0.46                                                                                | 0.46                                                                                |
| Sat Flow, veh/h              | 32                                                                                | 1627                                                                              | 135                                                                               | 39                                                                                | 1533                                                                              | 244                                                                               | 384                                                                                | 887                                                                                 | 412                                                                                 | 590                                                                                 | 721                                                                                 | 176                                                                                 |
| Grp Volume(v), veh/h         | 266                                                                               | 0                                                                                 | 0                                                                                 | 328                                                                               | 0                                                                                 | 0                                                                                 | 98                                                                                 | 0                                                                                   | 0                                                                                   | 93                                                                                  | 0                                                                                   | 0                                                                                   |
| Grp Sat Flow(s),veh/h/ln     | 1795                                                                              | 0                                                                                 | 0                                                                                 | 1816                                                                              | 0                                                                                 | 0                                                                                 | 1683                                                                               | 0                                                                                   | 0                                                                                   | 1487                                                                                | 0                                                                                   | 0                                                                                   |
| Q Serve(g_s), s              | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Cycle Q Clear(g_c), s        | 12.0                                                                              | 0.0                                                                               | 0.0                                                                               | 15.2                                                                              | 0.0                                                                               | 0.0                                                                               | 4.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 4.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Prop In Lane                 | 0.04                                                                              |                                                                                   | 0.08                                                                              | 0.05                                                                              |                                                                                   | 0.13                                                                              | 0.26                                                                               |                                                                                     | 0.24                                                                                | 0.42                                                                                |                                                                                     | 0.12                                                                                |
| Lane Grp Cap(c), veh/h       | 857                                                                               | 0                                                                                 | 0                                                                                 | 867                                                                               | 0                                                                                 | 0                                                                                 | 812                                                                                | 0                                                                                   | 0                                                                                   | 726                                                                                 | 0                                                                                   | 0                                                                                   |
| V/C Ratio(X)                 | 0.31                                                                              | 0.00                                                                              | 0.00                                                                              | 0.38                                                                              | 0.00                                                                              | 0.00                                                                              | 0.12                                                                               | 0.00                                                                                | 0.00                                                                                | 0.13                                                                                | 0.00                                                                                | 0.00                                                                                |
| Avail Cap(c_a), veh/h        | 857                                                                               | 0                                                                                 | 0                                                                                 | 867                                                                               | 0                                                                                 | 0                                                                                 | 812                                                                                | 0                                                                                   | 0                                                                                   | 726                                                                                 | 0                                                                                   | 0                                                                                   |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 0.00                                                                              | 0.00                                                                              | 1.00                                                                              | 0.00                                                                              | 0.00                                                                              | 1.00                                                                               | 0.00                                                                                | 0.00                                                                                | 1.00                                                                                | 0.00                                                                                | 0.00                                                                                |
| Uniform Delay (d), s/veh     | 22.1                                                                              | 0.0                                                                               | 0.0                                                                               | 22.9                                                                              | 0.0                                                                               | 0.0                                                                               | 19.9                                                                               | 0.0                                                                                 | 0.0                                                                                 | 19.9                                                                                | 0.0                                                                                 | 0.0                                                                                 |
| Incr Delay (d2), s/veh       | 0.9                                                                               | 0.0                                                                               | 0.0                                                                               | 1.3                                                                               | 0.0                                                                               | 0.0                                                                               | 0.3                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.4                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 6.2                                                                               | 0.0                                                                               | 0.0                                                                               | 8.0                                                                               | 0.0                                                                               | 0.0                                                                               | 2.1                                                                                | 0.0                                                                                 | 0.0                                                                                 | 2.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| LnGrp Delay(d),s/veh         | 23.0                                                                              | 0.0                                                                               | 0.0                                                                               | 24.2                                                                              | 0.0                                                                               | 0.0                                                                               | 20.2                                                                               | 0.0                                                                                 | 0.0                                                                                 | 20.3                                                                                | 0.0                                                                                 | 0.0                                                                                 |
| LnGrp LOS                    | C                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | C                                                                                  |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |                                                                                     |
| Approach Vol, veh/h          | 266                                                                               |                                                                                   |                                                                                   | 328                                                                               |                                                                                   |                                                                                   | 98                                                                                 |                                                                                     |                                                                                     | 93                                                                                  |                                                                                     |                                                                                     |
| Approach Delay, s/veh        | 23.0                                                                              |                                                                                   |                                                                                   | 24.2                                                                              |                                                                                   |                                                                                   | 20.2                                                                               |                                                                                     |                                                                                     | 20.3                                                                                |                                                                                     |                                                                                     |
| Approach LOS                 | C                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | C                                                                                  |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 | 2                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 6                                                                                  |                                                                                     |                                                                                     | 8                                                                                   |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 65.0                                                                              |                                                                                   |                                                                                   | 65.0                                                                              |                                                                                   |                                                                                   | 65.0                                                                               |                                                                                     |                                                                                     | 65.0                                                                                |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                                |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 60.0                                                                              |                                                                                   |                                                                                   | 60.0                                                                              |                                                                                   |                                                                                   | 60.0                                                                               |                                                                                     |                                                                                     | 60.0                                                                                |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), 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 - Sensitivity  
1: NYS Route 9D & Verplanck Avenue

Saturday Build Event Exit  
01/24/2022

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



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

#### Intersection Summary

Area Type: Other

Cycle Length: 120

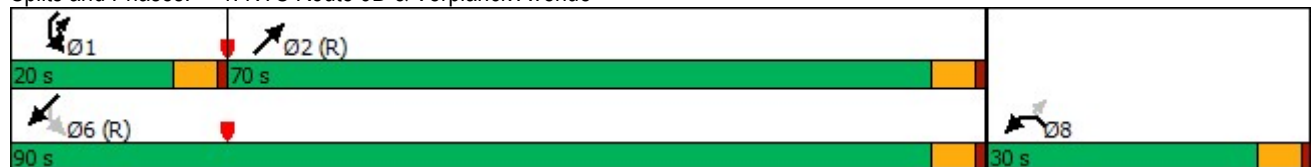
Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NET and 6:SWTL, Start of Green

Natural Cycle: 65

Control Type: Pretimed

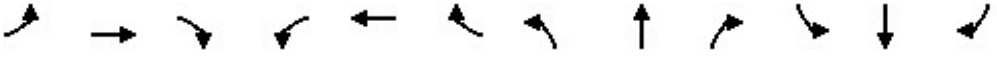
Splits and Phases: 1: NYS Route 9D & Verplanck Avenue



|                              |  |  |  |  |  |  |   |      |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---|------|
| Movement                     | NWL                                                                               | NWR                                                                               | NET                                                                               | NER                                                                               | SWL                                                                               | SWT                                                                               |   |      |
| Lane Configurations          |  |  |  |                                                                                   |  |  |   |      |
| Traffic Volume (veh/h)       | 72                                                                                | 232                                                                               | 626                                                                               | 74                                                                                | 159                                                                               | 647                                                                               |   |      |
| Future Volume (veh/h)        | 72                                                                                | 232                                                                               | 626                                                                               | 74                                                                                | 159                                                                               | 647                                                                               |   |      |
| Number                       | 3                                                                                 | 18                                                                                | 2                                                                                 | 12                                                                                | 1                                                                                 | 6                                                                                 |   |      |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |   |      |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   |   |      |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |   |      |
| Adj Sat Flow, veh/h/ln       | 1816                                                                              | 1816                                                                              | 1835                                                                              | 1872                                                                              | 1872                                                                              | 1872                                                                              |   |      |
| Adj Flow Rate, veh/h         | 78                                                                                | 252                                                                               | 680                                                                               | 80                                                                                | 173                                                                               | 703                                                                               |   |      |
| Adj No. of Lanes             | 1                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 |   |      |
| Peak Hour Factor             | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              |   |      |
| Percent Heavy Veh, %         | 2                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                 |   |      |
| Cap, veh/h                   | 360                                                                               | 515                                                                               | 873                                                                               | 103                                                                               | 429                                                                               | 1326                                                                              |   |      |
| Arrive On Green              | 0.21                                                                              | 0.21                                                                              | 0.54                                                                              | 0.54                                                                              | 0.13                                                                              | 0.71                                                                              |   |      |
| Sat Flow, veh/h              | 1730                                                                              | 1544                                                                              | 1612                                                                              | 190                                                                               | 1783                                                                              | 1872                                                                              |   |      |
| Grp Volume(v), veh/h         | 78                                                                                | 252                                                                               | 0                                                                                 | 760                                                                               | 173                                                                               | 703                                                                               |   |      |
| Grp Sat Flow(s),veh/h/ln     | 1730                                                                              | 1544                                                                              | 0                                                                                 | 1801                                                                              | 1783                                                                              | 1872                                                                              |   |      |
| Q Serve(g_s), s              | 4.5                                                                               | 15.6                                                                              | 0.0                                                                               | 40.1                                                                              | 4.1                                                                               | 21.0                                                                              |   |      |
| Cycle Q Clear(g_c), s        | 4.5                                                                               | 15.6                                                                              | 0.0                                                                               | 40.1                                                                              | 4.1                                                                               | 21.0                                                                              |   |      |
| Prop In Lane                 | 1.00                                                                              | 1.00                                                                              |                                                                                   | 0.11                                                                              | 1.00                                                                              |                                                                                   |   |      |
| Lane Grp Cap(c), veh/h       | 360                                                                               | 515                                                                               | 0                                                                                 | 976                                                                               | 429                                                                               | 1326                                                                              |   |      |
| V/C Ratio(X)                 | 0.22                                                                              | 0.49                                                                              | 0.00                                                                              | 0.78                                                                              | 0.40                                                                              | 0.53                                                                              |   |      |
| Avail Cap(c_a), veh/h        | 360                                                                               | 515                                                                               | 0                                                                                 | 976                                                                               | 429                                                                               | 1326                                                                              |   |      |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |   |      |
| Upstream Filter(I)           | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |   |      |
| Uniform Delay (d), s/veh     | 39.4                                                                              | 31.9                                                                              | 0.0                                                                               | 21.8                                                                              | 16.5                                                                              | 8.2                                                                               |   |      |
| Incr Delay (d2), s/veh       | 1.4                                                                               | 3.3                                                                               | 0.0                                                                               | 6.1                                                                               | 2.8                                                                               | 1.5                                                                               |   |      |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |   |      |
| %ile BackOfQ(50%),veh/ln     | 2.3                                                                               | 7.1                                                                               | 0.0                                                                               | 21.5                                                                              | 3.0                                                                               | 11.3                                                                              |   |      |
| LnGrp Delay(d),s/veh         | 40.8                                                                              | 35.2                                                                              | 0.0                                                                               | 27.9                                                                              | 19.3                                                                              | 9.7                                                                               |   |      |
| LnGrp LOS                    | D                                                                                 | D                                                                                 |                                                                                   | C                                                                                 | B                                                                                 | A                                                                                 |   |      |
| Approach Vol, veh/h          | 330                                                                               |                                                                                   | 760                                                                               |                                                                                   |                                                                                   | 876                                                                               |   |      |
| Approach Delay, s/veh        | 36.5                                                                              |                                                                                   | 27.9                                                                              |                                                                                   |                                                                                   | 11.6                                                                              |   |      |
| Approach LOS                 | D                                                                                 |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | B                                                                                 |   |      |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7 | 8    |
| Assigned Phs                 | 1                                                                                 | 2                                                                                 |                                                                                   |                                                                                   |                                                                                   | 6                                                                                 |   | 8    |
| Phs Duration (G+Y+Rc), s     | 20.0                                                                              | 70.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 90.0                                                                              |   | 30.0 |
| Change Period (Y+Rc), s      | 5.0                                                                               | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 5.0                                                                               |   | 5.0  |
| Max Green Setting (Gmax), s  | 15.0                                                                              | 65.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 85.0                                                                              |   | 25.0 |
| Max Q Clear Time (g_c+l1), 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 Build Traffic Volumes - Sensitivity  
2: NYS Route 9D & Beekman Street/W. Church Street

Saturday Build Event Exit  
01/24/2022

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

2024 Build Traffic Volumes - Sensitivity  
2: NYS Route 9D & Beekman Street/W. Church Street

Saturday Build Event Exit  
01/24/2022

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

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 58.7

Natural Cycle: 70

Control Type: Semi Act-Uncoord

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

|                                                                                        |                                                                                        |                                                                                         |
|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
|  Ø1 |  Ø2 |  Ø4 |
| 15 s                                                                                   | 40 s                                                                                   | 35 s                                                                                    |
|  Ø5 |  Ø6 |  Ø8 |
| 15 s                                                                                   | 40 s                                                                                   | 35 s                                                                                    |



2024 Build Traffic Volumes - Sensitivity  
2: NYS Route 9D & Beekman Street/W. Church Street

Saturday Build Event Exit  
01/24/2022

|                              |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |                                                                                   |  |  |                                                                                   |  |                                                                                   |  |  |                                                                                     |  |  |                                                                                     |
| Traffic Volume (veh/h)       | 33                                                                                | 2                                                                                 | 24                                                                                | 9                                                                                 | 12                                                                                | 20                                                                                | 70                                                                                 | 572                                                                                 | 4                                                                                   | 17                                                                                  | 588                                                                                 | 179                                                                                 |
| Future Volume (veh/h)        | 33                                                                                | 2                                                                                 | 24                                                                                | 9                                                                                 | 12                                                                                | 20                                                                                | 70                                                                                 | 572                                                                                 | 4                                                                                   | 17                                                                                  | 588                                                                                 | 179                                                                                 |
| Number                       | 7                                                                                 | 4                                                                                 | 14                                                                                | 3                                                                                 | 8                                                                                 | 18                                                                                | 5                                                                                  | 2                                                                                   | 12                                                                                  | 1                                                                                   | 6                                                                                   | 16                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 0.98                                                                              |                                                                                   | 0.90                                                                              | 0.94                                                                              |                                                                                   | 0.98                                                                              | 1.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 0.99                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       | 1881                                                                              | 1864                                                                              | 1881                                                                              | 1995                                                                              | 1995                                                                              | 1995                                                                              | 1864                                                                               | 1938                                                                                | 1957                                                                                | 1872                                                                                | 1849                                                                                | 1872                                                                                |
| Adj Flow Rate, veh/h         | 45                                                                                | 3                                                                                 | 33                                                                                | 12                                                                                | 16                                                                                | 27                                                                                | 74                                                                                 | 609                                                                                 | 4                                                                                   | 18                                                                                  | 619                                                                                 | 188                                                                                 |
| Adj No. of Lanes             | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                  | 1                                                                                   | 0                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Peak Hour Factor             | 0.73                                                                              | 0.73                                                                              | 0.73                                                                              | 0.75                                                                              | 0.75                                                                              | 0.75                                                                              | 0.94                                                                               | 0.94                                                                                | 0.94                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                |
| Percent Heavy Veh, %         | 1                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 5                                                                                  | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 2                                                                                   |
| Cap, veh/h                   | 239                                                                               | 12                                                                                | 127                                                                               | 97                                                                                | 56                                                                                | 74                                                                                | 394                                                                                | 1222                                                                                | 8                                                                                   | 533                                                                                 | 822                                                                                 | 250                                                                                 |
| Arrive On Green              | 0.09                                                                              | 0.09                                                                              | 0.09                                                                              | 0.09                                                                              | 0.09                                                                              | 0.09                                                                              | 0.05                                                                               | 0.64                                                                                | 0.64                                                                                | 0.02                                                                                | 0.60                                                                                | 0.60                                                                                |
| Sat Flow, veh/h              | 1350                                                                              | 139                                                                               | 1441                                                                              | 239                                                                               | 635                                                                               | 843                                                                               | 1775                                                                               | 1923                                                                                | 13                                                                                  | 1782                                                                                | 1359                                                                                | 413                                                                                 |
| Grp Volume(v), veh/h         | 48                                                                                | 0                                                                                 | 33                                                                                | 55                                                                                | 0                                                                                 | 0                                                                                 | 74                                                                                 | 0                                                                                   | 613                                                                                 | 18                                                                                  | 0                                                                                   | 807                                                                                 |
| Grp Sat Flow(s),veh/h/ln     | 1488                                                                              | 0                                                                                 | 1441                                                                              | 1717                                                                              | 0                                                                                 | 0                                                                                 | 1775                                                                               | 0                                                                                   | 1936                                                                                | 1782                                                                                | 0                                                                                   | 1772                                                                                |
| Q Serve(g_s), s              | 0.0                                                                               | 0.0                                                                               | 1.2                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.9                                                                                | 0.0                                                                                 | 9.8                                                                                 | 0.2                                                                                 | 0.0                                                                                 | 19.1                                                                                |
| Cycle Q Clear(g_c), s        | 1.5                                                                               | 0.0                                                                               | 1.2                                                                               | 1.7                                                                               | 0.0                                                                               | 0.0                                                                               | 0.9                                                                                | 0.0                                                                                 | 9.8                                                                                 | 0.2                                                                                 | 0.0                                                                                 | 19.1                                                                                |
| Prop In Lane                 | 0.94                                                                              |                                                                                   | 1.00                                                                              | 0.22                                                                              |                                                                                   | 0.49                                                                              | 1.00                                                                               |                                                                                     | 0.01                                                                                | 1.00                                                                                |                                                                                     | 0.23                                                                                |
| Lane Grp Cap(c), veh/h       | 251                                                                               | 0                                                                                 | 127                                                                               | 227                                                                               | 0                                                                                 | 0                                                                                 | 394                                                                                | 0                                                                                   | 1230                                                                                | 533                                                                                 | 0                                                                                   | 1072                                                                                |
| V/C Ratio(X)                 | 0.19                                                                              | 0.00                                                                              | 0.26                                                                              | 0.24                                                                              | 0.00                                                                              | 0.00                                                                              | 0.19                                                                               | 0.00                                                                                | 0.50                                                                                | 0.03                                                                                | 0.00                                                                                | 0.75                                                                                |
| Avail Cap(c_a), veh/h        | 836                                                                               | 0                                                                                 | 747                                                                               | 944                                                                               | 0                                                                                 | 0                                                                                 | 615                                                                                | 0                                                                                   | 1230                                                                                | 810                                                                                 | 0                                                                                   | 1072                                                                                |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 0.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 0.00                                                                              | 1.00                                                                               | 0.00                                                                                | 1.00                                                                                | 1.00                                                                                | 0.00                                                                                | 1.00                                                                                |
| Uniform Delay (d), s/veh     | 24.7                                                                              | 0.0                                                                               | 24.6                                                                              | 24.8                                                                              | 0.0                                                                               | 0.0                                                                               | 7.2                                                                                | 0.0                                                                                 | 5.6                                                                                 | 4.7                                                                                 | 0.0                                                                                 | 8.3                                                                                 |
| Incr Delay (d2), s/veh       | 0.4                                                                               | 0.0                                                                               | 1.1                                                                               | 0.5                                                                               | 0.0                                                                               | 0.0                                                                               | 0.2                                                                                | 0.0                                                                                 | 1.4                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 4.9                                                                                 |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 0.7                                                                               | 0.0                                                                               | 0.5                                                                               | 0.9                                                                               | 0.0                                                                               | 0.0                                                                               | 0.5                                                                                | 0.0                                                                                 | 5.6                                                                                 | 0.1                                                                                 | 0.0                                                                                 | 10.7                                                                                |
| LnGrp Delay(d),s/veh         | 25.1                                                                              | 0.0                                                                               | 25.7                                                                              | 25.4                                                                              | 0.0                                                                               | 0.0                                                                               | 7.4                                                                                | 0.0                                                                                 | 7.1                                                                                 | 4.8                                                                                 | 0.0                                                                                 | 13.2                                                                                |
| LnGrp LOS                    | C                                                                                 |                                                                                   | C                                                                                 | C                                                                                 |                                                                                   |                                                                                   | A                                                                                  |                                                                                     | A                                                                                   | A                                                                                   |                                                                                     | B                                                                                   |
| Approach Vol, veh/h          | 81                                                                                |                                                                                   | 55                                                                                |                                                                                   |                                                                                   | 687                                                                               |                                                                                    |                                                                                     | 825                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Approach Delay, s/veh        | 25.4                                                                              |                                                                                   | 25.4                                                                              |                                                                                   |                                                                                   | 7.1                                                                               |                                                                                    |                                                                                     | 13.0                                                                                |                                                                                     |                                                                                     |                                                                                     |
| Approach LOS                 | C                                                                                 |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | A                                                                                 |                                                                                    |                                                                                     | B                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 | 1                                                                                 | 2                                                                                 | 4                                                                                 |                                                                                   | 5                                                                                 | 6                                                                                 | 8                                                                                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 6.0                                                                               | 41.8                                                                              | 10.1                                                                              |                                                                                   | 7.8                                                                               | 40.0                                                                              | 10.1                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 10.0                                                                              | 35.0                                                                              | 30.0                                                                              |                                                                                   | 10.0                                                                              | 35.0                                                                              | 30.0                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), s | 2.2                                                                               | 11.8                                                                              | 3.5                                                                               |                                                                                   | 2.9                                                                               | 21.1                                                                              | 3.7                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 0.0                                                                               | 1.7                                                                               | 0.4                                                                               |                                                                                   | 0.1                                                                               | 2.3                                                                               | 0.2                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          |                                                                                   |                                                                                   | 11.6                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                 |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

2024 Build Traffic Volumes - Sensitivity  
3: NYS Route 9D & Beacon City Hall/Main Street

Saturday Build Event Exit  
01/24/2022

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

2024 Build Traffic Volumes - Sensitivity  
3: NYS Route 9D & Beacon City Hall/Main Street

Saturday Build Event Exit  
01/24/2022

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

Intersection Summary

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

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

|                                                                                        |                                                                                        |                                                                                         |
|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
|  Ø2 |  Ø1 |  Ø4 |
| 40 s                                                                                   | 15 s                                                                                   | 35 s                                                                                    |
|  Ø6 |  Ø5 |  Ø8 |
| 40 s                                                                                   | 15 s                                                                                   | 35 s                                                                                    |

2024 Build Traffic Volumes - Sensitivity  
3: NYS Route 9D & Beacon City Hall/Main Street

Saturday Build Event Exit  
01/24/2022

|                              |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |                                                                                   |  |                                                                                   |                                                                                   |  |  |  |  |                                                                                     |  |  |                                                                                     |
| Traffic Volume (veh/h)       | 2                                                                                 | 2                                                                                 | 2                                                                                 | 37                                                                                | 0                                                                                 | 197                                                                               | 2                                                                                  | 448                                                                                 | 61                                                                                  | 293                                                                                 | 334                                                                                 | 3                                                                                   |
| Future Volume (veh/h)        | 2                                                                                 | 2                                                                                 | 2                                                                                 | 37                                                                                | 0                                                                                 | 197                                                                               | 2                                                                                  | 448                                                                                 | 61                                                                                  | 293                                                                                 | 334                                                                                 | 3                                                                                   |
| Number                       | 7                                                                                 | 4                                                                                 | 14                                                                                | 3                                                                                 | 8                                                                                 | 18                                                                                | 5                                                                                  | 2                                                                                   | 12                                                                                  | 1                                                                                   | 6                                                                                   | 16                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 0.98                                                                              |                                                                                   | 0.95                                                                              | 0.95                                                                              |                                                                                   | 0.98                                                                              | 0.99                                                                               |                                                                                     | 0.96                                                                                | 1.00                                                                                |                                                                                     | 0.99                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       | 1890                                                                              | 1890                                                                              | 1890                                                                              | 1976                                                                              | 1976                                                                              | 1956                                                                              | 1928                                                                               | 1884                                                                                | 1928                                                                                | 1853                                                                                | 1853                                                                                | 1872                                                                                |
| Adj Flow Rate, veh/h         | 3                                                                                 | 3                                                                                 | 3                                                                                 | 42                                                                                | 0                                                                                 | 221                                                                               | 2                                                                                  | 509                                                                                 | 69                                                                                  | 318                                                                                 | 363                                                                                 | 3                                                                                   |
| Adj No. of Lanes             | 0                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                  | 1                                                                                   | 0                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Peak Hour Factor             | 0.71                                                                              | 0.71                                                                              | 0.71                                                                              | 0.89                                                                              | 0.89                                                                              | 0.89                                                                              | 0.88                                                                               | 0.88                                                                                | 0.88                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Percent Heavy Veh, %         | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 1                                                                                 | 0                                                                                  | 2                                                                                   | 5                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Cap, veh/h                   | 115                                                                               | 97                                                                                | 67                                                                                | 299                                                                               | 0                                                                                 | 315                                                                               | 712                                                                                | 913                                                                                 | 124                                                                                 | 531                                                                                 | 1037                                                                                | 9                                                                                   |
| Arrive On Green              | 0.13                                                                              | 0.13                                                                              | 0.13                                                                              | 0.13                                                                              | 0.00                                                                              | 0.13                                                                              | 0.06                                                                               | 0.57                                                                                | 0.57                                                                                | 0.06                                                                                | 0.57                                                                                | 0.57                                                                                |
| Sat Flow, veh/h              | 290                                                                               | 761                                                                               | 526                                                                               | 1423                                                                              | 0                                                                                 | 1624                                                                              | 1837                                                                               | 1615                                                                                | 219                                                                                 | 1765                                                                                | 1835                                                                                | 15                                                                                  |
| Grp Volume(v), veh/h         | 9                                                                                 | 0                                                                                 | 0                                                                                 | 42                                                                                | 0                                                                                 | 221                                                                               | 2                                                                                  | 0                                                                                   | 578                                                                                 | 318                                                                                 | 0                                                                                   | 366                                                                                 |
| Grp Sat Flow(s),veh/h/ln     | 1577                                                                              | 0                                                                                 | 0                                                                                 | 1423                                                                              | 0                                                                                 | 1624                                                                              | 1837                                                                               | 0                                                                                   | 1834                                                                                | 1765                                                                                | 0                                                                                   | 1850                                                                                |
| Q Serve(g_s), s              | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 1.3                                                                               | 0.0                                                                               | 3.8                                                                               | 0.0                                                                                | 0.0                                                                                 | 12.4                                                                                | 0.0                                                                                 | 0.0                                                                                 | 6.6                                                                                 |
| Cycle Q Clear(g_c), s        | 0.3                                                                               | 0.0                                                                               | 0.0                                                                               | 1.6                                                                               | 0.0                                                                               | 3.8                                                                               | 0.0                                                                                | 0.0                                                                                 | 12.4                                                                                | 0.0                                                                                 | 0.0                                                                                 | 6.6                                                                                 |
| Prop In Lane                 | 0.33                                                                              |                                                                                   | 0.33                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                               |                                                                                     | 0.12                                                                                | 1.00                                                                                |                                                                                     | 0.01                                                                                |
| Lane Grp Cap(c), veh/h       | 279                                                                               | 0                                                                                 | 0                                                                                 | 299                                                                               | 0                                                                                 | 315                                                                               | 712                                                                                | 0                                                                                   | 1037                                                                                | 531                                                                                 | 0                                                                                   | 1046                                                                                |
| V/C Ratio(X)                 | 0.03                                                                              | 0.00                                                                              | 0.00                                                                              | 0.14                                                                              | 0.00                                                                              | 0.70                                                                              | 0.00                                                                               | 0.00                                                                                | 0.56                                                                                | 0.60                                                                                | 0.00                                                                                | 0.35                                                                                |
| Avail Cap(c_a), veh/h        | 800                                                                               | 0                                                                                 | 0                                                                                 | 801                                                                               | 0                                                                                 | 894                                                                               | 890                                                                                | 0                                                                                   | 1037                                                                                | 703                                                                                 | 0                                                                                   | 1046                                                                                |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 0.00                                                                              | 0.00                                                                              | 1.00                                                                              | 0.00                                                                              | 1.00                                                                              | 1.00                                                                               | 0.00                                                                                | 1.00                                                                                | 1.00                                                                                | 0.00                                                                                | 1.00                                                                                |
| Uniform Delay (d), s/veh     | 23.7                                                                              | 0.0                                                                               | 0.0                                                                               | 24.2                                                                              | 0.0                                                                               | 23.3                                                                              | 7.1                                                                                | 0.0                                                                                 | 8.5                                                                                 | 16.4                                                                                | 0.0                                                                                 | 7.3                                                                                 |
| Incr Delay (d2), s/veh       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.2                                                                               | 0.0                                                                               | 2.8                                                                               | 0.0                                                                                | 0.0                                                                                 | 2.2                                                                                 | 1.1                                                                                 | 0.0                                                                                 | 0.9                                                                                 |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 0.1                                                                               | 0.0                                                                               | 0.0                                                                               | 0.7                                                                               | 0.0                                                                               | 3.5                                                                               | 0.0                                                                                | 0.0                                                                                 | 6.7                                                                                 | 5.1                                                                                 | 0.0                                                                                 | 3.6                                                                                 |
| LnGrp Delay(d),s/veh         | 23.7                                                                              | 0.0                                                                               | 0.0                                                                               | 24.4                                                                              | 0.0                                                                               | 26.1                                                                              | 7.1                                                                                | 0.0                                                                                 | 10.7                                                                                | 17.5                                                                                | 0.0                                                                                 | 8.2                                                                                 |
| LnGrp LOS                    | C                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   | C                                                                                 | A                                                                                  |                                                                                     | B                                                                                   | B                                                                                   |                                                                                     | A                                                                                   |
| Approach Vol, veh/h          |                                                                                   | 9                                                                                 |                                                                                   |                                                                                   | 263                                                                               |                                                                                   |                                                                                    | 580                                                                                 |                                                                                     |                                                                                     | 684                                                                                 |                                                                                     |
| Approach Delay, s/veh        |                                                                                   | 23.7                                                                              |                                                                                   |                                                                                   | 25.9                                                                              |                                                                                   |                                                                                    | 10.7                                                                                |                                                                                     |                                                                                     | 12.5                                                                                |                                                                                     |
| Approach LOS                 |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    | B                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 | 1                                                                                 | 2                                                                                 |                                                                                   | 4                                                                                 | 5                                                                                 | 6                                                                                 |                                                                                    | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 9.0                                                                               | 40.0                                                                              |                                                                                   | 12.9                                                                              | 9.0                                                                               | 40.0                                                                              |                                                                                    | 12.9                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 10.0                                                                              | 35.0                                                                              |                                                                                   | 30.0                                                                              | 10.0                                                                              | 35.0                                                                              |                                                                                    | 30.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), s | 2.0                                                                               | 14.4                                                                              |                                                                                   | 2.3                                                                               | 2.0                                                                               | 8.6                                                                               |                                                                                    | 5.8                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 1.0                                                                               | 1.6                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.9                                                                               |                                                                                    | 1.5                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| <b>Intersection Summary</b>  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          |                                                                                   |                                                                                   |                                                                                   | 14.2                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                 |                                                                                   |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |



2024 Build Traffic Volumes - Sensitivity  
4: NYS Route 9D & Beacon Street/West End Lofts

Saturday Build Event Exit  
01/24/2022

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

2024 Build Traffic Volumes - Sensitivity  
4: NYS Route 9D & Beacon Street/West End Lofts

Saturday Build Event Exit  
01/24/2022

| Intersection             |        |      |          |       |        |       |        |      |      |       |      |      |
|--------------------------|--------|------|----------|-------|--------|-------|--------|------|------|-------|------|------|
| Int Delay, s/veh         | 2.6    |      |          |       |        |       |        |      |      |       |      |      |
| Movement                 | SEL    | SET  | SER      | NWL   | NWT    | NWR   | NEL    | NET  | NER  | SWL   | SWT  | SWR  |
| Lane Configurations      |        | ↕    |          |       | ↕      |       |        | ↕    |      |       | ↕    |      |
| Traffic Vol, veh/h       | 10     | 3    | 3        | 10    | 5      | 82    | 3      | 418  | 10   | 45    | 320  | 7    |
| Future Vol, veh/h        | 10     | 3    | 3        | 10    | 5      | 82    | 3      | 418  | 10   | 45    | 320  | 7    |
| Conflicting Peds, #/hr   | 0      | 0    | 4        | 0     | 0      | 19    | 0      | 0    | 2    | 0     | 0    | 3    |
| Sign Control             | Stop   | Stop | Stop     | Stop  | Stop   | Stop  | Free   | Free | Free | Free  | Free | Free |
| RT Channelized           | -      | -    | None     | -     | -      | None  | -      | -    | None | -     | -    | None |
| Storage Length           | -      | -    | -        | -     | -      | -     | -      | -    | -    | -     | -    | -    |
| Veh in Median Storage, # | -      | 0    | -        | -     | 0      | -     | -      | 0    | -    | -     | 0    | -    |
| Grade, %                 | -      | 0    | -        | -     | -3     | -     | -      | -4   | -    | -     | 4    | -    |
| Peak Hour Factor         | 61     | 61   | 61       | 88    | 88     | 88    | 85     | 85   | 85   | 92    | 92   | 92   |
| Heavy Vehicles, %        | 0      | 50   | 0        | 11    | 25     | 1     | 0      | 4    | 11   | 2     | 2    | 0    |
| Mvmt Flow                | 16     | 5    | 5        | 11    | 6      | 93    | 4      | 492  | 12   | 49    | 348  | 8    |
|                          |        |      |          |       |        |       |        |      |      |       |      |      |
| Major/Minor              | Minor2 |      | Minor1   |       | Major1 |       | Major2 |      |      |       |      |      |
| Conflicting Flow All     | 1028   | 967  | 359      | 967   | 965    | 519   | 359    | 0    | 0    | 506   | 0    | 0    |
| Stage 1                  | 453    | 453  | -        | 508   | 508    | -     | -      | -    | -    | -     | -    | -    |
| Stage 2                  | 575    | 514  | -        | 459   | 457    | -     | -      | -    | -    | -     | -    | -    |
| Critical Hdwy            | 7.1    | 7    | 6.2      | 6.61  | 6.15   | 5.91  | 4.1    | -    | -    | 4.12  | -    | -    |
| Critical Hdwy Stg 1      | 6.1    | 6    | -        | 5.61  | 5.15   | -     | -      | -    | -    | -     | -    | -    |
| Critical Hdwy Stg 2      | 6.1    | 6    | -        | 5.61  | 5.15   | -     | -      | -    | -    | -     | -    | -    |
| Follow-up Hdwy           | 3.5    | 4.45 | 3.3      | 3.599 | 4.225  | 3.309 | 2.2    | -    | -    | 2.218 | -    | -    |
| Pot Cap-1 Maneuver       | 214    | 212  | 690      | 264   | 274    | 584   | 1211   | -    | -    | 1059  | -    | -    |
| Stage 1                  | 590    | 497  | -        | 578   | 547    | -     | -      | -    | -    | -     | -    | -    |
| Stage 2                  | 507    | 464  | -        | 610   | 573    | -     | -      | -    | -    | -     | -    | -    |
| Platoon blocked, %       |        |      |          |       |        |       |        | -    | -    |       | -    | -    |
| Mov Cap-1 Maneuver       | 165    | 198  | 686      | 244   | 256    | 574   | 1208   | -    | -    | 1057  | -    | -    |
| Mov Cap-2 Maneuver       | 165    | 198  | -        | 244   | 256    | -     | -      | -    | -    | -     | -    | -    |
| Stage 1                  | 586    | 467  | -        | 574   | 543    | -     | -      | -    | -    | -     | -    | -    |
| Stage 2                  | 412    | 461  | -        | 563   | 539    | -     | -      | -    | -    | -     | -    | -    |
|                          |        |      |          |       |        |       |        |      |      |       |      |      |
| Approach                 | SE     |      | NW       |       | NE     |       | SW     |      |      |       |      |      |
| HCM Control Delay, s     | 25.7   |      | 14.8     |       | 0.1    |       | 1      |      |      |       |      |      |
| HCM LOS                  | D      |      | B        |       |        |       |        |      |      |       |      |      |
|                          |        |      |          |       |        |       |        |      |      |       |      |      |
| Minor Lane/Major Mvmt    | NEL    | NET  | NERNWLn1 | SELn1 | SWL    | SWT   | SWR    |      |      |       |      |      |
| Capacity (veh/h)         | 1208   | -    | -        | 477   | 200    | 1057  | -      | -    |      |       |      |      |
| HCM Lane V/C Ratio       | 0.003  | -    | -        | 0.231 | 0.131  | 0.046 | -      | -    |      |       |      |      |
| HCM Control Delay (s)    | 8      | 0    | -        | 14.8  | 25.7   | 8.6   | 0      | -    |      |       |      |      |
| HCM Lane LOS             | A      | A    | -        | B     | D      | A     | A      | -    |      |       |      |      |
| HCM 95th %tile Q(veh)    | 0      | -    | -        | 0.9   | 0.4    | 0.1   | -      | -    |      |       |      |      |

2024 Build Traffic Volumes - Sensitivity  
5: NYS Route 9D & Site Access

Saturday Build Event Exit  
01/24/2022

|                             |  |  |  |  |  |  |
|-----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Lane Group                  | SEL                                                                               | SER                                                                               | NEL                                                                               | NET                                                                               | SWT                                                                               | SWR                                                                               |
| Lane Configurations         |  |                                                                                   |                                                                                   |  |  |                                                                                   |
| Traffic Volume (vph)        | 86                                                                                | 28                                                                                | 6                                                                                 | 343                                                                               | 313                                                                               | 18                                                                                |
| Future Volume (vph)         | 86                                                                                | 28                                                                                | 6                                                                                 | 343                                                                               | 313                                                                               | 18                                                                                |
| Ideal Flow (vphpl)          | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              |
| Lane Util. Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |
| Frt                         | 0.967                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.992                                                                             |                                                                                   |
| Flt Protected               | 0.964                                                                             |                                                                                   |                                                                                   | 0.999                                                                             |                                                                                   |                                                                                   |
| Satd. Flow (prot)           | 1736                                                                              | 0                                                                                 | 0                                                                                 | 1861                                                                              | 1848                                                                              | 0                                                                                 |
| Flt Permitted               | 0.964                                                                             |                                                                                   |                                                                                   | 0.999                                                                             |                                                                                   |                                                                                   |
| Satd. Flow (perm)           | 1736                                                                              | 0                                                                                 | 0                                                                                 | 1861                                                                              | 1848                                                                              | 0                                                                                 |
| Link Speed (mph)            | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                | 30                                                                                |                                                                                   |
| Link Distance (ft)          | 176                                                                               |                                                                                   |                                                                                   | 499                                                                               | 312                                                                               |                                                                                   |
| Travel Time (s)             | 4.0                                                                               |                                                                                   |                                                                                   | 11.3                                                                              | 7.1                                                                               |                                                                                   |
| Peak Hour Factor            | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              |
| Adj. Flow (vph)             | 93                                                                                | 30                                                                                | 7                                                                                 | 373                                                                               | 340                                                                               | 20                                                                                |
| Shared Lane Traffic (%)     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Lane Group Flow (vph)       | 123                                                                               | 0                                                                                 | 0                                                                                 | 380                                                                               | 360                                                                               | 0                                                                                 |
| Enter Blocked Intersection  | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                |
| Lane Alignment              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Left                                                                              | Right                                                                             |
| Median Width(ft)            | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                | 12                                                                                |                                                                                   |
| Link Offset(ft)             | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |
| Crosswalk Width(ft)         | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                | 16                                                                                |                                                                                   |
| Two way Left Turn Lane      |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               | Yes                                                                               |                                                                                   |
| Headway Factor              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |
| Turning Speed (mph)         | 60                                                                                | 60                                                                                | 60                                                                                |                                                                                   |                                                                                   | 60                                                                                |
| Sign Control                | Stop                                                                              |                                                                                   |                                                                                   | Free                                                                              | Free                                                                              |                                                                                   |
| <b>Intersection Summary</b> |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Area Type:                  | Other                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Control Type:               | Unsignalized                                                                      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |

Intersection

Int Delay, s/veh 2

Movement SEL SER NEL NET SWT SWR

|                          |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Lane Configurations      | W    |      |      | W    | W    |      |
| Traffic Vol, veh/h       | 86   | 28   | 6    | 343  | 313  | 18   |
| Future Vol, veh/h        | 86   | 28   | 6    | 343  | 313  | 18   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 93   | 30   | 7    | 373  | 340  | 20   |

Major/Minor Minor2 Major1 Major2

|                      |       |       |       |   |   |   |
|----------------------|-------|-------|-------|---|---|---|
| Conflicting Flow All | 737   | 350   | 360   | 0 | - | 0 |
| Stage 1              | 350   | -     | -     | - | - | - |
| Stage 2              | 387   | -     | -     | - | - | - |
| Critical Hdwy        | 6.42  | 6.22  | 4.12  | - | - | - |
| Critical Hdwy Stg 1  | 5.42  | -     | -     | - | - | - |
| Critical Hdwy Stg 2  | 5.42  | -     | -     | - | - | - |
| Follow-up Hdwy       | 3.518 | 3.318 | 2.218 | - | - | - |
| Pot Cap-1 Maneuver   | 386   | 693   | 1199  | - | - | - |
| Stage 1              | 713   | -     | -     | - | - | - |
| Stage 2              | 686   | -     | -     | - | - | - |
| Platoon blocked, %   |       |       |       | - | - | - |
| Mov Cap-1 Maneuver   | 383   | 693   | 1199  | - | - | - |
| Mov Cap-2 Maneuver   | 493   | -     | -     | - | - | - |
| Stage 1              | 708   | -     | -     | - | - | - |
| Stage 2              | 686   | -     | -     | - | - | - |

Approach SE NE SW

|                      |      |     |   |
|----------------------|------|-----|---|
| HCM Control Delay, s | 13.8 | 0.1 | 0 |
| HCM LOS              | B    |     |   |

Minor Lane/Major Mvmt NEL NETSELn1 SWT SWR

|                       |       |   |       |   |   |
|-----------------------|-------|---|-------|---|---|
| Capacity (veh/h)      | 1199  | - | 531   | - | - |
| HCM Lane V/C Ratio    | 0.005 | - | 0.233 | - | - |
| HCM Control Delay (s) | 8     | 0 | 13.8  | - | - |
| HCM Lane LOS          | A     | A | B     | - | - |
| HCM 95th %tile Q(veh) | 0     | - | 0.9   | - | - |



2024 Build Traffic Volumes - Sensitivity  
6: South Avenue & NYS Route 9D

Saturday Build Event Exit  
01/24/2022

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

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Internal Link Dist (ft) |                                                                                   | 161                                                                               |                                                                                   |                                                                                   | 436                                                                               |                                                                                   |                                                                                    | 114                                                                                 |                                                                                     |                                                                                     | 223                                                                                 |                                                                                     |
| Turn Bay Length (ft)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 832                                                                               |                                                                                   |                                                                                   | 838                                                                               |                                                                                   |                                                                                    | 794                                                                                 |                                                                                     |                                                                                     | 691                                                                                 |                                                                                     |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Reduced v/c Ratio       |                                                                                   | 0.35                                                                              |                                                                                   |                                                                                   | 0.36                                                                              |                                                                                   |                                                                                    | 0.12                                                                                |                                                                                     |                                                                                     | 0.13                                                                                |                                                                                     |

#### Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 45

Control Type: Pretimed

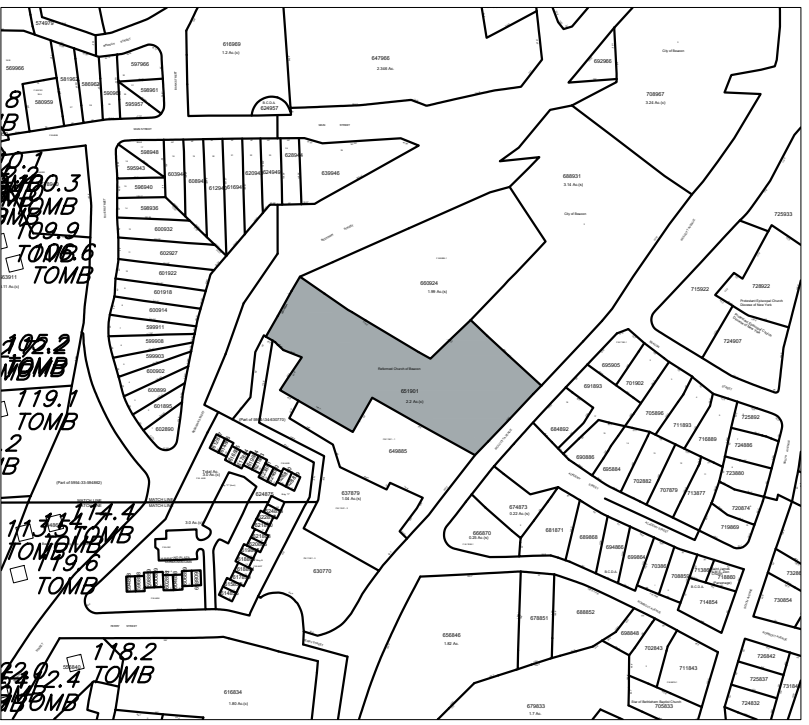
Splits and Phases: 6: South Avenue & NYS Route 9D

|                                                                                          |                                                                                      |
|------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
|  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)       | 9                                                                                 | 216                                                                               | 16                                                                                | 13                                                                                | 207                                                                               | 37                                                                                | 14                                                                                 | 27                                                                                  | 13                                                                                  | 32                                                                                  | 35                                                                                  | 9                                                                                   |
| Future Volume (veh/h)        | 9                                                                                 | 216                                                                               | 16                                                                                | 13                                                                                | 207                                                                               | 37                                                                                | 14                                                                                 | 27                                                                                  | 13                                                                                  | 32                                                                                  | 35                                                                                  | 9                                                                                   |
| Number                       | 7                                                                                 | 4                                                                                 | 14                                                                                | 3                                                                                 | 8                                                                                 | 18                                                                                | 5                                                                                  | 2                                                                                   | 12                                                                                  | 1                                                                                   | 6                                                                                   | 16                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                               |                                                                                     | 0.99                                                                                | 1.00                                                                                |                                                                                     | 0.99                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       | 1843                                                                              | 1843                                                                              | 1843                                                                              | 1957                                                                              | 1885                                                                              | 1957                                                                              | 1910                                                                               | 1910                                                                                | 1910                                                                                | 1872                                                                                | 1759                                                                                | 1872                                                                                |
| Adj Flow Rate, veh/h         | 11                                                                                | 263                                                                               | 20                                                                                | 15                                                                                | 244                                                                               | 44                                                                                | 25                                                                                 | 49                                                                                  | 24                                                                                  | 39                                                                                  | 43                                                                                  | 11                                                                                  |
| Adj No. of Lanes             | 0                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                  | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Peak Hour Factor             | 0.82                                                                              | 0.82                                                                              | 0.82                                                                              | 0.85                                                                              | 0.85                                                                              | 0.85                                                                              | 0.55                                                                               | 0.55                                                                                | 0.55                                                                                | 0.82                                                                                | 0.82                                                                                | 0.82                                                                                |
| Percent Heavy Veh, %         | 0                                                                                 | 0                                                                                 | 0                                                                                 | 12                                                                                | 4                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 2                                                                                   | 12                                                                                  | 0                                                                                   |
| Cap, veh/h                   | 41                                                                                | 762                                                                               | 57                                                                                | 49                                                                                | 693                                                                               | 121                                                                               | 212                                                                                | 409                                                                                 | 190                                                                                 | 312                                                                                 | 333                                                                                 | 81                                                                                  |
| Arrive On Green              | 0.46                                                                              | 0.46                                                                              | 0.46                                                                              | 0.46                                                                              | 0.46                                                                              | 0.46                                                                              | 0.46                                                                               | 0.46                                                                                | 0.46                                                                                | 0.46                                                                                | 0.46                                                                                | 0.46                                                                                |
| Sat Flow, veh/h              | 28                                                                                | 1652                                                                              | 123                                                                               | 44                                                                                | 1501                                                                              | 263                                                                               | 384                                                                                | 887                                                                                 | 412                                                                                 | 590                                                                                 | 721                                                                                 | 176                                                                                 |
| Grp Volume(v), veh/h         | 294                                                                               | 0                                                                                 | 0                                                                                 | 303                                                                               | 0                                                                                 | 0                                                                                 | 98                                                                                 | 0                                                                                   | 0                                                                                   | 93                                                                                  | 0                                                                                   | 0                                                                                   |
| Grp Sat Flow(s),veh/h/ln     | 1802                                                                              | 0                                                                                 | 0                                                                                 | 1808                                                                              | 0                                                                                 | 0                                                                                 | 1683                                                                               | 0                                                                                   | 0                                                                                   | 1487                                                                                | 0                                                                                   | 0                                                                                   |
| Q Serve(g_s), s              | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Cycle Q Clear(g_c), s        | 13.5                                                                              | 0.0                                                                               | 0.0                                                                               | 13.8                                                                              | 0.0                                                                               | 0.0                                                                               | 4.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 4.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Prop In Lane                 | 0.04                                                                              |                                                                                   | 0.07                                                                              | 0.05                                                                              |                                                                                   | 0.15                                                                              | 0.26                                                                               |                                                                                     | 0.24                                                                                | 0.42                                                                                |                                                                                     | 0.12                                                                                |
| Lane Grp Cap(c), veh/h       | 860                                                                               | 0                                                                                 | 0                                                                                 | 863                                                                               | 0                                                                                 | 0                                                                                 | 812                                                                                | 0                                                                                   | 0                                                                                   | 726                                                                                 | 0                                                                                   | 0                                                                                   |
| V/C Ratio(X)                 | 0.34                                                                              | 0.00                                                                              | 0.00                                                                              | 0.35                                                                              | 0.00                                                                              | 0.00                                                                              | 0.12                                                                               | 0.00                                                                                | 0.00                                                                                | 0.13                                                                                | 0.00                                                                                | 0.00                                                                                |
| Avail Cap(c_a), veh/h        | 860                                                                               | 0                                                                                 | 0                                                                                 | 863                                                                               | 0                                                                                 | 0                                                                                 | 812                                                                                | 0                                                                                   | 0                                                                                   | 726                                                                                 | 0                                                                                   | 0                                                                                   |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 0.00                                                                              | 0.00                                                                              | 1.00                                                                              | 0.00                                                                              | 0.00                                                                              | 1.00                                                                               | 0.00                                                                                | 0.00                                                                                | 1.00                                                                                | 0.00                                                                                | 0.00                                                                                |
| Uniform Delay (d), s/veh     | 22.5                                                                              | 0.0                                                                               | 0.0                                                                               | 22.6                                                                              | 0.0                                                                               | 0.0                                                                               | 19.9                                                                               | 0.0                                                                                 | 0.0                                                                                 | 19.9                                                                                | 0.0                                                                                 | 0.0                                                                                 |
| Incr Delay (d2), s/veh       | 1.1                                                                               | 0.0                                                                               | 0.0                                                                               | 1.1                                                                               | 0.0                                                                               | 0.0                                                                               | 0.3                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.4                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 7.0                                                                               | 0.0                                                                               | 0.0                                                                               | 7.3                                                                               | 0.0                                                                               | 0.0                                                                               | 2.1                                                                                | 0.0                                                                                 | 0.0                                                                                 | 2.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| LnGrp Delay(d),s/veh         | 23.6                                                                              | 0.0                                                                               | 0.0                                                                               | 23.7                                                                              | 0.0                                                                               | 0.0                                                                               | 20.2                                                                               | 0.0                                                                                 | 0.0                                                                                 | 20.3                                                                                | 0.0                                                                                 | 0.0                                                                                 |
| LnGrp LOS                    | C                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | C                                                                                  |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |                                                                                     |
| Approach Vol, veh/h          | 294                                                                               |                                                                                   |                                                                                   | 303                                                                               |                                                                                   |                                                                                   | 98                                                                                 |                                                                                     |                                                                                     | 93                                                                                  |                                                                                     |                                                                                     |
| Approach Delay, s/veh        | 23.6                                                                              |                                                                                   |                                                                                   | 23.7                                                                              |                                                                                   |                                                                                   | 20.2                                                                               |                                                                                     |                                                                                     | 20.3                                                                                |                                                                                     |                                                                                     |
| Approach LOS                 | C                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | C                                                                                  |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 | 2                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 6                                                                                  |                                                                                     |                                                                                     | 8                                                                                   |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 65.0                                                                              |                                                                                   |                                                                                   | 65.0                                                                              |                                                                                   |                                                                                   | 65.0                                                                               |                                                                                     |                                                                                     | 65.0                                                                                |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                                |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 60.0                                                                              |                                                                                   |                                                                                   | 60.0                                                                              |                                                                                   |                                                                                   | 60.0                                                                               |                                                                                     |                                                                                     | 60.0                                                                                |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), 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                                                                                 |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

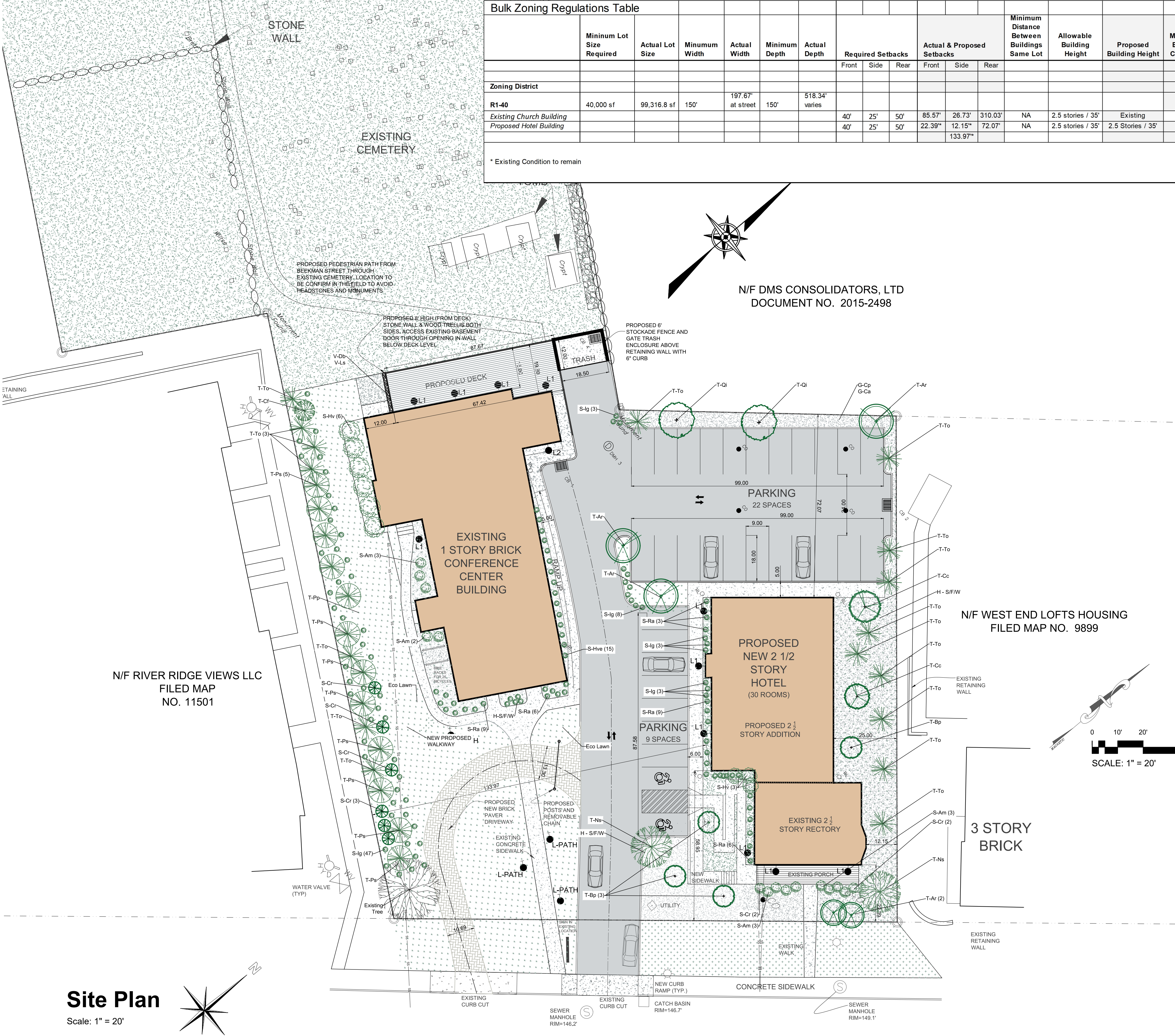






Location Map  
Scale: 1" = 400'

| Bulk Zoning Regulations Table  |                           |                 |               |                   |               |                |                   |      |      |                            |        |         |                                             |                           |
|--------------------------------|---------------------------|-----------------|---------------|-------------------|---------------|----------------|-------------------|------|------|----------------------------|--------|---------|---------------------------------------------|---------------------------|
| Zoning District                | Minimum Lot Size Required | Actual Lot Size | Minimum Width | Actual Width      | Minimum Depth | Actual Depth   | Required Setbacks |      |      | Actual & Proposed Setbacks |        |         | Minimum Distance Between Buildings Same Lot | Allowable Building Height |
|                                |                           |                 |               |                   |               |                | Front             | Side | Rear | Front                      | Side   | Rear    |                                             |                           |
| R1-40                          | 40,000 sf                 | 99,316.8 sf     | 150'          | 197.67' at street | 150'          | 518.34' varies |                   |      |      |                            |        |         |                                             |                           |
| Existing Church Building       |                           |                 |               |                   |               |                | 40'               | 25'  | 50'  | 85.57'                     | 26.73' | 310.03' | NA                                          | 2.5 stories / 35'         |
| Proposed Hotel Building        |                           |                 |               |                   |               |                | 40'               | 25'  | 50'  | 22.39"                     | 12.15" | 72.07'  | NA                                          | 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:

1. Parking is required per Beacon Zoning Code Section 223-26 (B.2). The building was in existence on April 20, 1964. The Code permits no more than 25% greater intensity than the use existing in 1964. 69 parking spaces would have been required in 1964 for the uses in existence at that time. The 1964 exception would allow for a total of 86 parking spaces. 119 parking spaces are required for the current proposed hotel and event space uses. The total required parking is subject to a determination from the Building Inspector regarding shared parking for 2 or multiple uses on the same lot.
2. The existing use in 1964 was a Church with 336 seats, plus the Rectory.
3. Business hours: 8am – 11pm Monday through Sunday inclusive for the Conference Center. The Hotel is open 24 hours per day.

| REVISIONS: |          |                                     |     |
|------------|----------|-------------------------------------|-----|
| NO.        | DATE     | DESCRIPTION                         | BY  |
| 1          | 08/31/21 | REVISED PER PLANNING BOARD COMMENTS | AJS |
| 2          | 09/28/21 | REVISED PER PLANNING BOARD COMMENTS | AJS |
| 3          | 11/30/21 | REVISED PER PLANNING BOARD COMMENTS | AJS |
| 4          | 12/28/21 | REVISED PER PLANNING BOARD COMMENTS | AJS |
| 5          | 01/25/22 | REVISED PER PLANNING BOARD COMMENTS | AJS |

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| Sheet 4 of 13  | Landscape & Lighting Plan             |
| 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               |
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Site Plan

Scale: 1" = 20'

WOLCOTT AVENUE

Special Use Permit Application

Sheet 1 of 13 - Site Plan

Owner:  
**Prophecy Theater, LLC**  
36 South Brett Street  
Beacon, NY 12508

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

Site / Civil Engineer:  
**Hudson Land Design**  
174 Main Street  
Beacon, New York 12508

Surveyor:  
**Robert Oswald**  
175 WALSH ROAD PO BOX 1  
LAGRANGEVILLE, NEW YORK 12540

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

**1113 Wolcott Avenue**  
Beacon, New York  
Scale: 1" = 20'  
June 29, 2021



# 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.

February 1, 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 January 25, 2022, from Cuddy & Feder to Planning Board.
  - Response correspondence dated January 24, 2022, from Aryeh Siegel, Architect.
  - Response correspondence dated January 25, 2022, from Hudson Land Design.
  - Response correspondence dated January 24, 2022, from Colliers Engineering & Design. The response also included additional information as to sight distance and additional traffic analysis during event conditions.
- Plans titled "1113 Wolcott Avenue", consisting of sheets 1, 2, and 4 of 13, with the latest revision date of January 25, 2022, as prepared by Aryeh Siegel, Architect, along with sheets 8 thru 13 of 13, with the latest revision date of January 25, 2022, 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. 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. ***The applicant's traffic consultant has noted that a parking layout for the Tompkins Hose parking lot will be submitted with a future submission.***

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. ***The applicant's traffic consultant has noted that a submission will be made to NYSOT by the applicant and a copy of the submission will be circulated to the City.***
3. The plans shall be updated to clearly reflect the concrete sidewalk along the east side of Beekman Street.

Sheet 1 of 13 – Site Plan:

1. To the left front side of the church is a note and leader for “New Proposed Walk”. The leader currently points at the Eco Lawn. The leader should be redirected to the walkway. It should be further noted that the location of the note should be shifted as it is covering what appears to be a path light.
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.

Sheet 2 of 13 – Full Site Plan:

1. Additional lighting shall be provided along the pedestrian path to Beekman Street. ***The applicant's consultant notes that this is being reviewed and will be part of a future submission.***

Sheet 4 of 13 – Landscape & Lighting Plan:

1. The pedestrian path out to Beekman Street shown on the Landscape Plan does not match that as shown on Sheets 1 and 2 of the plan set. The pedestrian path shall be coordinated on all sheets.

Sheet 8 of 13 – Grading & Utility Plan:

1. The plan shall be updated to show any proposed grading along the pedestrian path out to Beekman Street.
2. 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.***

3. 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 13 – 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.***

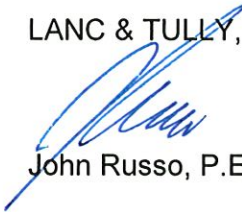
Sheet 11 of 13 – Site and E&SC Details:

1. The note for the "Concrete Paver Detail" shall be revised to reflect the 2020 Fire Code of New York State.

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: February 3, 2022

Re: **1113 Wolcott Avenue Street Site Plan and Special Permit**

I have reviewed the January 25, 2022 cover letter from Cuddy+Feder, January 24, 2022 response letter from Aryeh Siegel, January 25, 2022 response letter from Hudson Land Design, January 24, 2022 response information from Colliers Engineering and Design, and sheets 1, 2, 4, and 8-13 of a 13-sheet Site Plan set, all dated January 25, 2022.

### **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 can approve or not approve a 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 is a specific Special Permit condition 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 suggested a reduced event parking demand with a 25% or perhaps 10% deduction for transit use and walking. The Study assumed 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 already factors 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 project architect also agreed to reconsider the ADA switch-back ramp to the hotel.

- e. The new loop driveway in front lawn of the church is proposed to handle deliveries, shuttle buses, and car drop-offs/pick-ups for event participants. With excessive parking demand during peak use, it is likely to be jammed with waiting vehicles, unloading, bus parking, and overflow circulation. Pulling onto the grass could be a problem and the concern is that in practice this will turn into a constant traffic and parking problem 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...”

The applicant should consider the two other drop-off options suggested at the last meeting. A one-way entrance drive north of the hotel could allow circulation through the parking lot with drop-offs next to the church on a one-way exit drive. A shorter one-way drop-off loop in front of the hotel with an exit at the existing driveway is also possible. Both options would avoid a disruptive new driveway with parked or idling vehicles and additional traffic control signs in front of the historic church.

- f. The café capacity should include the availability of deck seating, which should be shown on the plans.

3. For Sheet 4:

- a. 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.
  - b. The applicant and Board should also consider historically compatible designs for the proposed parking lot and front lawn lights, using as compatible examples the existing street lights along the front sidewalk.
4. All exterior construction must meet the standards in Chapter 134, Historic Preservation, and will require a Certificate of Appropriateness. The Architectural Review Subcommittee is scheduled to meet on February 11 to continue its review process.

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





| REVISIONS: |          |                                     |     |
|------------|----------|-------------------------------------|-----|
| NO.        | DATE     | DESCRIPTION                         | BY  |
| 1          | 08/31/21 | ADDED PER PLANNING BOARD COMMENTS   | AJS |
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|            |          |                                     |     |
|            |          |                                     |     |

Site Plan  
Scale: 1" = 30'

# Special Use Permit Application

Sheet 2 of 13 - Full Site Plan

Owner:  
**Prophecy Theater, LLC**  
36 South Brett Street  
Beacon, NY 12508

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

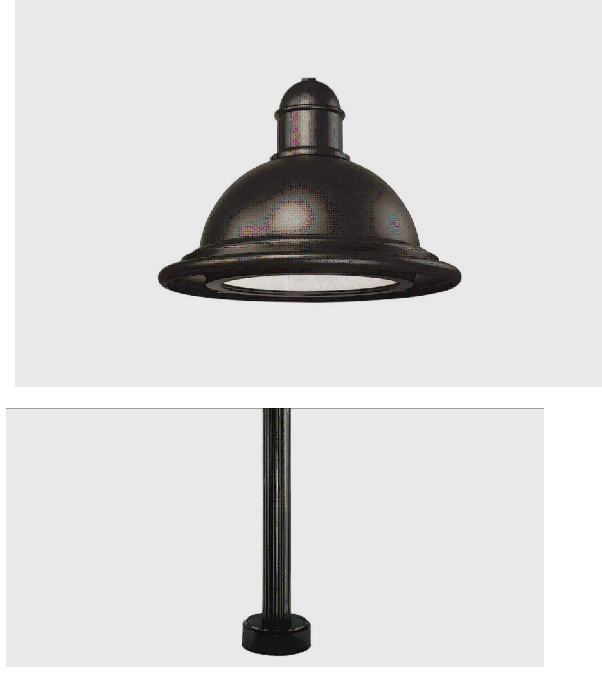
Site / Civil Engineer:  
**Hudson Land Design**  
174 Main Street  
Beacon, New York 12508

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





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



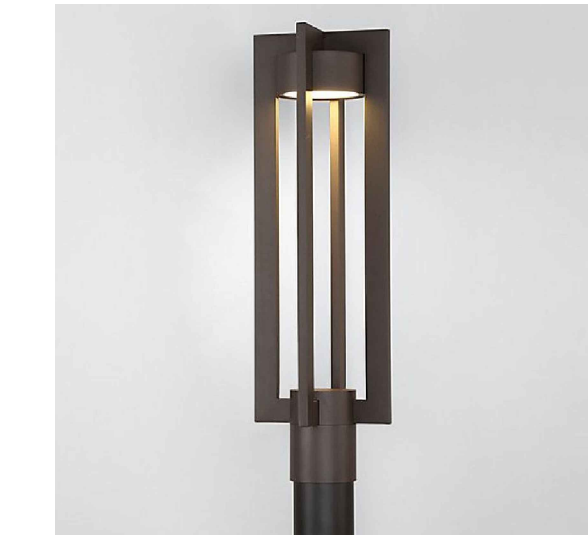
WALL MOUNTED HOUSE LIGHT (L1)

HUBBARDTON FORGE WALL MOUNTED FIXTURE. MODEL "Hood Outdoor Dark Sky Wall Sconce", 50W, 2700K. COLOR: COASTAL BLACK, OR APPROVED EQUAL. MOUNTING HEIGHT = 7 FEET. NOTE THAT THE MANUFACTURER DOES NOT PROVIDE FOOTCANDLE DIAGRAMS FOR THIS FIXTURE



WALL MOUNTED HOUSE LIGHT (L2)

MATCH EXISTING BUILDINGS MOUNTED LIGHTS ON CHURCH. PROVIDE CUSTOM FABRICATED LIGHTING IF A SUITABLE MATCH CANNOT BE FOUND FROM AVAILABLE MANUFACTURERS.



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.

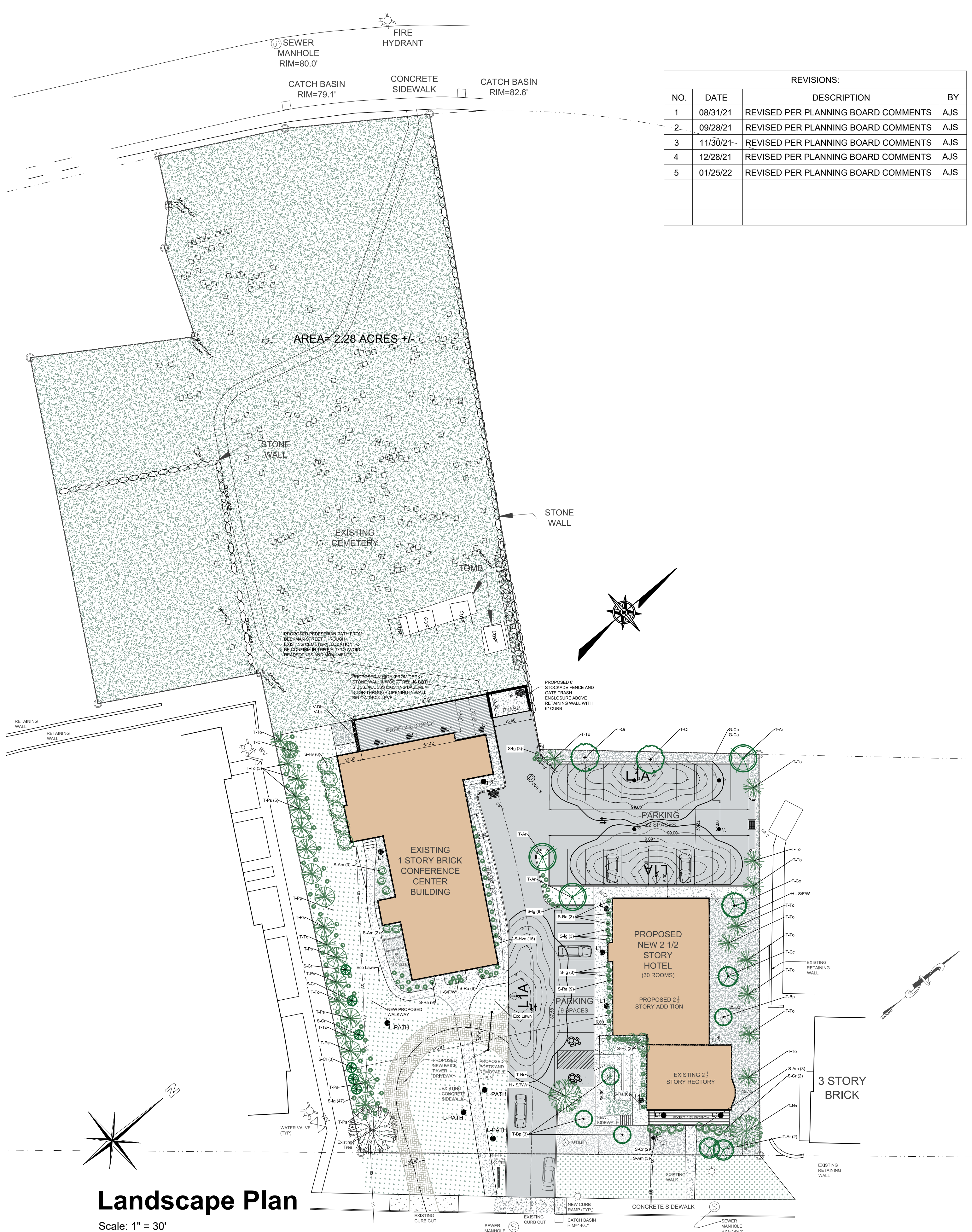
## Planting Schedule

| Symbol  | Quantity | Type       | Common Name            | Botanical Name             | Size     | Planting Time          |
|---------|----------|------------|------------------------|----------------------------|----------|------------------------|
| T-Ar    | 3        | Tree       | Red Maple              | Acer rubrum                | 7'-8"    | Spring/Fall            |
| T-Bp    | 3        | Tree       | Grey Birch             | Betula populifolia         | 7'-8"    | Spring/Fall            |
| T-Cc    | 2        | Tree       | Eastern Redbud         | Cercis canadensis          | 6'-7"    | Spring/Fall            |
| T-Cf    | 1        | Tree       | Flowering Dogwood      | Comus florida              | 6'-7"    | Spring/Fall            |
| T-Ns    | 2        | Tree       | Blackgum               | Nyssa sylvatica            | 7'-8"    | Spring/Fall            |
| T-Pp    | 12       | Tree       | White Pine             | Pinus strobus              | 7'-8"    | Spring/Fall            |
| T-Pp    | 1        | Tree       | Wild Red Cherry        | Prunus pensylvanica        | 7'-8"    | Spring/Fall            |
| T-Qi    | 2        | Tree       | Bear Oak               | Quercus illicifolia        | 7'-8"    | Spring/Fall            |
| T-To    | 14       | Tree       | Abroniae 'Nigra'       | Thuja occidentalis 'Nigra' | 7'-8"    | Spring/Fall            |
| S-Am    | 5        | Shrub      | Black Chokeberry       | Aronia melanocarpa         | 3 Gallon | Spring/Fall            |
| S-Cr    | 7        | Shrub      | Gray Dogwood American  | Comus racemosa             | 3 Gallon | Spring/Fall            |
| S-He    | 15       | Shrub      | Ozark Witch-hazel      | Hamamelis vernalis         | 3 Gallon | Spring/Fall            |
| S-Hv    | 9        | Shrub      | Witch-hazel            | Hamamelis virginiana       | 3 Gallon | Spring/Fall            |
| S-Ig    | 61       | Shrub      | Inkberry               | Ilex glabra                | 3 Gallon | Spring/Fall            |
| S-Ra    | 33       | Shrub      | Low-grow Sumac         | Rhus aromatica             | 3 Gallon | Spring/Fall            |
| H-S/F/W | 15       | Fern       | Christmas Fern         | Polystichum aristichoides  | 1 Gallon | Spring, Summer or Fall |
| H-S/F/W | 20       | Herbaceous | White Wood Aster       | Aster divaricatus          | Plugs    | Spring, Summer or Fall |
| H-S/F/W | 20       | Herbaceous | Wild Geranium          | Geranium maculatum         | Plugs    | Spring, Summer or Fall |
| H-S/F/W | 20       | Herbaceous | Creeping Phlox         | Phlox stolonifera          | Plugs    | Spring, Summer or Fall |
| H-S/F/W | 20       | Herbaceous | Blue-stemmed Goldenrod | Solidago caesia            | Plugs    | Spring, Summer or Fall |
| H-S/F/W | 20       | Herbaceous | Blue Wood Aster        | Symphytotrichum cordifolia | Plugs    | Spring, Summer or Fall |
| H-S/F/W | 20       | Herbaceous | Frost Aster            | Symphytotrichum pilosum    | Plugs    | Spring, Summer or Fall |
| V-Db    | 25       | Vine       | Climbing Hydrangea     | Decumaria barbara          | Plugs    | Spring, Summer or Fall |
| V-Ls    | 25       | Vine       | Trumpet Honeysuckle    | Lonicera sempervirens      | Plugs    | Spring, Summer or Fall |
| G-Ca    | 100      | Grass      | Appalachian Sedge      | Carex appalachica          | Plugs    | Spring, Summer or Fall |
| G-Cp    | 100      | Grass      | Pennsylvania Sedge     | Carex pennsylvanica        | Plugs    | Spring, Summer or Fall |
| G-Eg    | 10       | Grass      | Eco Grass              | Eco Lawn                   | Seed     | Spring/Fall            |

## 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.
- PerVIOUS/Permeable Pavers and associated grass seeding shall be installed by contractor with experience in this process. This process requires establishment maintenance, in order to succeed.
- Bermed areas shall be built with designer directing construction.
- Street tree and surrounding tree-pit shall be installed by contractor experienced with these materials and approved by designer.
- All plants require regular watering for the first two seasons to succeed.

## Illustrated Plant List



| REVISIONS: |          |                                     |     |
|------------|----------|-------------------------------------|-----|
| NO.        | DATE     | DESCRIPTION                         | BY  |
| 1          | 08/31/21 | REVISED PER PLANNING BOARD COMMENTS | AJS |
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|            |          |                                     |     |
|            |          |                                     |     |

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

**1113 Wolcott Avenue**  
Beacon, New York  
Scale: 1" = 30'  
June 29, 2021



February 7, 2022



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

RE: Site Plan, Traffic and Parking Study Review #3 for **Proposed 30-Room Hotel, Restaurant and Conference Center Redevelopment**, 1113 Wolcott Avenue, City of Beacon, Dutchess County, New York; CM Project No. 121-295

Dear Chairperson Gunn:

Creighton Manning Engineering, LLP (CM) is in receipt of the 220125\_1113 Wolcott Avenue PB Supplemental Submission (Submittal Package). CM reviewed the following documents enclosed in the Submittal Package:

- Cover Letter prepared by Cuddy + Feder, LLP, dated January 25, 2022
- Plans prepared by Aryeh Siegel, Architect, and Hudson Land Design Professional Engineering, PC last revised January 25, 2022
- Comment Response Letter prepared by Colliers Engineering & Design, January 24, 2022

The subject site is comprised of one lot, which is presently developed and occupied by the Reformed Church of Beacon. The general footprint of the existing buildings will remain. The site will provide 31 off-street parking spaces inclusive of two ADA-accessible spaces. Site access is now provided via two exiting driveways on Wolcott Avenue. There is also a proposed pedestrian path passing through the existing cemetery connecting the subject site with Beekman Street.

Please find our most recent comments in bold. Please note that previous comments that have been addressed have been removed. Furthermore, comments from Review #1 and Colliers' responses pertaining to those comments have been removed for clarity.

#### Site Plan

##### Review #1 Comments

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

- **CM Review #2 Follow-Up Comment:** Based on Colliers' description of operations, CM understands that the southernmost existing driveway will operate as an egress-only driveway. CM agrees that this operation is beneficial as it will allow for vehicles dropping-off and picking-up to more easily enter and exit the site. However, if the southernmost driveway will be egress-only, it should be signed and striped as such with "Do Not Enter" (R5-1) Signs. These signs could be utilized for the posting of "Stop" (R1-1) Signs.
- *Colliers' 1/24/2022 Response: Comment noted. These signs will be added to the site plans. Final approval of this driveway configuration will require a NYSDOT Highway Work Permit.*
- **CM Review #3 Follow-Up Comment:** CM notes that these signs are absent from the plans in the Submittal Package.
- **CM Review #2 Follow-Up Comment:** Colliers' vehicle size assumption for deliveries is reasonable. Upon review of the Vehicle Tracking Plan, a 30-ft single-unit box truck is able to circulate the site. However, it is evident on the Vehicle Tracking Plan that the delivery vehicle will encroach into the opposing travel lane at the Main Driveway when entering/exiting the site and it will require reverse maneuvers

within the site. For these reasons, CM recommends that the Applicant agree to schedule deliveries during off-peak hours only.

- *Colliers' 1/24/2022 Response: Deliveries to the Site utilizing a 30 ft. single-unit box truck will be rare. It is anticipated that most deliveries will be via small delivery vehicles. All deliveries are expected to be limited in nature, mainly for the café use and/or special events and will be short duration. The vehicle tracking plan showing a 30 ft. single-unit box truck was provided to identify the tracking path of the largest anticipated delivery vehicle. However, since all deliveries are anticipated to be infrequent and limited in duration, it is our opinion that time restrictions on deliveries are not necessary at this location.*
  - **CM Review #3 Follow-Up Comment:** The previous comment regarding vehicle encroachment into the opposing travel lane has not been addressed. The NYSDOT allows minor commercial driveways to have a maximum width of 30-ft. CM recommends that a driveway configuration that considers a wider driveway and a NYSDOT Type 4 driveway entrance be investigated in order to mitigate vehicle encroachment into opposing travel lanes when entering and exiting the site. Please elaborate on the frequency of deliveries and the typical times these deliveries will occur. Has the applicant identified a vendor for food deliveries? If so, can that vendor elaborate on the vehicle types used for deliveries?
  - **CM Review #2 Follow-Up Comment:** Upon review of the Vehicle Tracking Plan, a school bus is able to circulate the site. However, it is evident on the Vehicle Tracking Plan that the vehicle will encroach into the opposing travel lane at the Main Driveway when entering/exiting the site. Regarding pick-up/drop-off operations, it is recommended that signage be installed to restrict these vehicles from parking or dwelling for an extended period of time in the loop roadway.
  - *Colliers' 1/24/2022 Response: The Applicant would prefer to not post signage as suggested. Rather, the Applicant has indicated that the loop driveway will be managed by project staff during events to ensure shuttles, buses, and passenger cars using this area for drop-off/pick-up operations do not park or stand in this area. Other measures including landscaping along the loop driveway are being proposed to ensure that vehicles cannot utilize the area immediately off the pavement for parking of vehicles.*
  - **CM Review #3 Follow-Up Comment:** As noted in the previous comment, CM recommends that an alternate driveway configuration be investigated in order to mitigate vehicle encroachment into opposing lanes. The plans included in the Submittal package do not indicate any landscaping or hardscape features to impede vehicles from straddling the edge travel in order to park.
  - **CM Review #2 Follow-Up Comment:** Upon review of the Vehicle Tracking Plan, a front-end loading garbage truck is able to circulate the site. However, it is evident on the Vehicle Tracking Plan that the garbage apparatus will encroach on the opposing travel lane at the Main Driveway when entering/exiting the site and it will require reverse maneuvers within the site. For these reasons, CM recommends that the Applicant agree to schedule garbage pickup during off-peak hours only.
  - **CM Review #3 Follow-Up Comment:** Colliers did not provide a response to this comment. As noted in the previous comment, CM recommends that an alternate driveway configuration be investigated in order to mitigate vehicle encroachment into opposing lanes. CM continues to recommend that the Applicant agree to schedule garbage pickup during off-peak hours only.
2. Please provide intersection and stopping sight distances for the existing driveway.
- **CM Review #2 Follow-Up Comment:** It is unclear which driveway was evaluated for adequate sight distance. Please perform a sight distance evaluation for each driveway accounting for the proposed maneuvers at each driveway. Furthermore, the sight distance should account for the recommended

intersection sight distance and driver-eye height for a single-unit truck given that deliveries and patron pick-up/drop-off will be completed by these types of vehicles.

- *Colliers' 1/24/2022 Response: The December 28, 2021 Traffic Study only looked at the Sight Distances for the Main Driveway location as summarized in Table No. 3 of that study. The sight distance for the proposed location for the loop driveway exit have now been reviewed and are summarized in Table No. 3-R attached. As summarized in this table the required stopping and intersection sight distances will generally be satisfied at both the Main driveway and Loop exit driveway locations. It should be noted that the sight distance looking left (north) from the Loop driveway exit location was measured to be approximately 415 ft., which is 4 ft. short of the required intersection sight distance of 419 ft. at this location. However, the minimum required stopping sight distance is exceeded and it is our opinion that this 4 ft. shortfall in the sight distance will not impact the safe operation of this driveway intersection.*
- **CM Review #3 Follow-Up Comment:** CM notes that the even though the intersection sight distance is short by 4-ft, the driveway is not critically limited as the available intersection sight distance exceeds the recommended stopping sight distance.

#### Traffic Impact & Parking Study

##### Review #1 Comments

##### 3. CM reviewed the trip generation methodology:

- **CM Review #2 Follow-Up Comment:** Vendors and employees will have a vehicle occupancy rate of 1.0. Please provide in more detail the number of attendees, vendors, and employees. Please update traffic assessment based on the updated trip generation.
- *Colliers' 1/24/2022 Response: It is anticipated that vendors and employees would arrive before or depart after the events and therefore would not be coincident with peak arrival hour and peak exit hour of attendees. Furthermore, the analysis conservatively assumes all attendees will arrive and depart within the one-hour period prior to or following events. Typically, arrivals and departures are spread over a greater time period. The analysis also assumes that all event entering and/or exiting traffic will be coincident with the Friday or Saturday Peak Hours of traffic, which is possible based on event timing, but is not anticipated to be a regular occurrence for the larger events. Therefore, it is our opinion that believe the analysis is representative of the future traffic conditions after completion of the Project and is actually somewhat conservative.*
- **CM Review #3 Follow-Up Comment:** CM generally agrees with the statements above. However, to provide clarity on the number of site-generated trips and vehicle occupancy rates being applied, it would be beneficial for the applicant to provide an approximate breakdown of the number of attendees, vendors, and staff.
- **CM Review #2 Follow-Up Comment:** CM understands and agrees with the source of the 25% credit. However, it is important to note that this figure pertains to commuting, not necessarily to special events like those being contemplated as part of this application. The lack of a designated shuttle between the train station and the site could lower this figure in reality. A lower percentage would mean a higher personal vehicle share, increasing both site trip generation and parking demand. We recommend that more information be provided to support the 25% credit in light of the parking shortfall.
- *Colliers' 1/24/2022 Response: The Applicant and our office maintain that the 25% Credit is appropriate for the various reasons previously identified in our December 28, 2021 Traffic & Parking Study. However, a sensitivity analysis has been prepared assuming a 10% credit for non-vehicular traffic. The associated project generated traffic for this sensitivity analysis is summarized on Table No. 1-S attached. The result traffic volumes at each of the study area intersection are summarized in attached*

*Figures No. 16-S through 19-S and 22-S through 25-S. The analysis results associated with this sensitivity analysis are summarized in Table No. 2-S for the Friday and Saturday Peak Event Entry and Exit Periods. The results indicate that the additional volumes associated with this sensitivity analysis do not significantly change the future traffic operating conditions associated with the Build-Out of the project under these event conditions with a lower non-vehicular traffic credit.*

- **CM Review #3 Follow-Up Comment:** CM agrees with the 10% credit being taken for non-vehicular traffic. The level of service reports provided by Colliers indicate that the reduction in credit being taken results in minor increases in delay.
4. **CM Review #2 Follow-Up Comment:** It is recommended that project materials be submitted to the NYSDOT as early as possible so that any approved mitigation can be implemented in line with proposed construction. It would be helpful for the City to be copied on the correspondence with the NYSDOT.
- *Colliers' 1/24/2022 Response: Typically, the City would make the initial circulation of Project related materials to NYSDOT as part of the Lead Agency Circulation in order to initiate their review. Regardless, a submission to the NYSDOT by the Applicant will be prepared and a copy of the submission will be circulated to the City as well.*
  - **CM Review #3 Follow-Up Comment:** Comment addressed. No further response necessary.
5. **CM Review #2 Follow-Up Comment:** CM understands and agrees with the source of the 25% credit. However, it is important to note that this figure pertains to commuting, not necessarily to special events like those being contemplated as part of this application. The lack of a designated shuttle between the train station and the site could lower this figure in reality. A lower percentage would mean a higher personal vehicle share, increasing both site trip generation and parking demand. We recommend that more information be provided to support the 25% credit in light of the parking shortfall.
- *Colliers' 1/24/2022 Response: As previously noted associated with the Traffic Analysis a sensitivity analysis was conducted utilizing a 10% non-vehicular traffic credit. Applying this same 10% credit to the parking requirements for the Project maximum capacity events, the total estimated parking for the Project, including hotel parking, would be 83 parking spaces, with 52 parking spaces required off-site. Note that this assumes 100% of the hotel guest will also attend these larger events. This is compared to the 75 total parking spaces that would be required, 44 of which would be required to accommodate off-site, utilizing the 25% credit noted in the December 28, 2021 Traffic & Parking study. Therefore, with the lower 10% credit approximately 8 additional parking spaces would be required to be accommodated off-site.*
  - **CM Review #3 Follow-Up Comment:** Based on CM's understanding of Colliers' calculations, the 52 parking spaces required off-site was determined by:
    - i. Using the City of Beacon Zoning Code, the event space requires 88 spaces and the hotel requires 31 spaces for a total of 119 spaces.
    - ii. Colliers assumes that the parking requirements for the hotel can be omitted as 100% of the hotel will be occupied by event occupants. Thus, the required parking would be 89 spaces (88 for the 350 person event space and 1 for the hotel employee).
    - iii. Colliers then reduced the 89 spaces by the spaces provided on-site to arrive at the number of spaces required off-site, 58.
    - iv. Colliers then reduced the spaces required off-site by 10% to take credit for event occupants not arriving by personal car. Thus, they state that 52 spaces are required off-site.
  - CM disagrees with the how Colliers considers the internal capture for the hotel use. Colliers' method assumes that one hotel room would be used by four event occupants and those four occupants



would be arriving in one vehicle. Rather, CM proposes that the development requires 72 spaces off-site. Below is a detailed explanation on how that number was arrived upon:

- i. 10% of event occupants will arrive via non-vehicular modes. Therefore:  $350 - (350 \times 0.10) = 315$  event occupants will arrive via personal vehicles.
- ii. 100% of the hotel rooms will be occupied by event occupants. Assuming two (2) event occupants per room there will be 255 event occupants arriving via personal vehicles.
- iii. Utilizing the City of Beacon Zoning Code for a Conference Center (1 space for each 4 seats), remaining 255 event occupants will require 64 parking spaces. Because the internal capture for hotel occupants was accounted for in ii., the 30 spaces intended for the hotel cannot be credited to the 64 parking spaces. Therefore, 64 spaces will need to be identified off-site.

6. CM Review #2 Follow-Up Comment: Colliers is proposing that the site will require 75 parking spaces during an event's peak demand, which would be supported by the 31 spaces provided on-site and 44 spaces sourced from public parking. Colliers arrived at this number using the City of Beacon Zoning Code requirements for the 30-room Hotel with one employee and the 350-person Event Space. Thus, these uses will require 31 spaces and 88 spaces, respectively, for a total of 119. Colliers assumed that 100% of the hotel patrons would be associated with the event, therefore the 88 spaces required for the event could be reduced to 58. Lastly, Colliers applied the 25% credit for modes of traffic other than personal vehicles to arrive at 44 spaces that would be sourced from public parking.

As noted in Review #1, Colliers conducted a parking survey of six parking field locations. In general, these surveys were conducted on the following days:

- Friday, September 24, 2021 | 1PM-8PM
- Saturday, September 25, 2021 | 1PM-8PM
- Friday, November 5, 2021 | 1PM-8PM
- Saturday, November 6, 2021 | 1PM-8PM

Colliers identified the Tompkins Firehouse Parking Lot and City of Beacon Municipal Plaza (City Hall) Parking Lots as the most viable locations due to their proximity to the subject site and their reserve parking capacity. There are existing pedestrian accommodations for patrons to walk to and from these lots and the subject site. Based on Colliers parking survey, these lots currently have reserve capacity to accommodate the 44 spaces to be sourced from off-site locations.

CM notes that the surface of the Tompkins Firehouse Parking Lot is mix of asphalt, gravel, and grass/soil with no delineation of parking spaces. The number of spaces provided in the lot, 70, was estimated by Colliers. This estimation should be explained for clarity. Furthermore, the approximated number of spaces provided in the lot will be reduced by at least 14 spaces when the Tompkins Firehouse is expanded on the north side. CM agrees that this is a viable location *currently* in terms of proximity and reserve capacity; however, the increased use of the lot by the proposed development could further deteriorate the lot surface, and it could prove to be only a short-term solution with the expansion of the firehouse.

The City of Beacon Municipal Plaza Lot was not studied during hours of operations for City Hall. Therefore, it is unclear if this lot could accommodate parking for the subject site prior to 5PM on a typical Friday, which would be necessary for the restaurant/bar/café that will be open to the public. If this lot is to be identified as a possible location, the parking study of the lot should include the time period between 1PM-5PM.

- *Colliers' 1/24/2022 Response: The estimate of 70 parking spaces identified in the Tompkins Parking lot was based on information presented by the Main Street Access committee, which had identified this lot as a potential location for additional public parking in proximity to Main Street. We understand that use of the entirety or some portion of this lot for public parking could be temporary based on future further development of the Tompkins Firehouse. Even without the use of this lot the parking observations indicate sufficient parking within the study area to support the Project, although the remaining available parking may be more remote.*

*The City of Beacon Municipal Plaza Parking lot was not observed during either Friday observations prior to 5 PM because limited available parking was noted during those periods. However, as requested, additional data was collected during the 1PM – 5PM time period on Friday January 21, 2022. This data is summarized in the below Table. It should be noted that there are 100 parking spaces in this Municipal Plaza Lot. These include 10 handicap spaces, 10 designated police parking spaces and 4 designated spaces for City Officials. This would reduce the effective available public parking to 76 parking spaces.*

*Based on the observations of the Municipal Plaza parking lot, there is some availability of public parking during the Friday 1PM – 5PM time period.*

- **CM Review #3 Follow-Up Comment:** Based on the off-site parking requirements calculated by CM, 64, the Tompkins lot would be 98% utilized. When the lot capacity is reduced by the anticipated 14+ spaces, the lot will be over capacity. In this case, the municipal lot could provide the necessary supply to meet the demand.

**CM notes that the Café/Restaurant/Bar will require 17 parking spaces. In conjunction with the hotel use, the site will require 48 parking spaces in a typical non-event scenario. In this scenario, 17 spaces will be sourced off-site. If sourced from the Tompkins lot, they would require 25% of its capacity. Based on the future condition, where the lot's capacity is reduced by 14+, they would require 30% of the lot's capacity.**

Review #2 Comments:

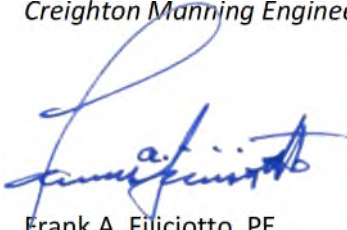
1. The number of patrons and seats for the proposed restaurant/bar/café differs throughout the submittal materials. The cover letter prepared by Cuddy + Feder refers to 40 patrons, the parking study section refers to 66 patrons, and Table 1 on the Traffic and Parking Study refers to 125 seats. Please confirm the number of patrons and/or seats being proposed for this use.
  - *Colliers' 1/24/2022 Response: The Applicant has confirmed that the maximum number of seats within the café under typical conditions will be 50 seats. The December 28, 2021 Traffic & Parking Study assumes a seating capacity of 125 Seats for the Café. Therefore, the results of the traffic study for typical conditions are conservative and actually traffic operating conditions, during non-event time periods, would be somewhat better than the results analysis results indicated in the study.*

**CM Review #3 Follow-Up Comment:** Comment addressed. No further response necessary.

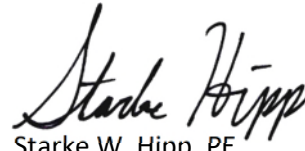
If you have any questions about the above comments, please do not hesitate to contact our office at (914) 800-9201. In an effort to make the comment-response process as efficient as possible, we are available to attend a meeting via Zoom to discuss the project and the issues raised in this letter.

Respectfully,

*Creighton Manning Engineering, LLP*



Frank A. Filiciotto, PE  
Associate



Starke W. Hipp, PE  
Project Engineer

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**City of Beacon Planning Board Agenda**  
**02/08/2022**

**Title:**

Zoning Board of Appeals - February Agenda

**ATTACHMENTS**

[February Agenda.pdf](#)



**CITY OF BEACON**  
**ONE MUNICIPAL PLAZA - SUITE 1**  
**BEACON, NEW YORK 12508**  
*Phone (845) 838-5002 Fax (845) 838-5026*

The Zoning Board of Appeals will meet on **Tuesday, February 15, 2022** in the Municipal Center courtroom, located at One Municipal Plaza, Beacon, New York. A training work session will take place at 7:00 PM and the regular meeting and public hearings will begin immediately thereafter, but not later than 7:30 PM.

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

**Miscellaneous Business**

1. Consider request for a six (6) month extension of Area Variance, 10 Herbert Street, submitted by Katherine Baker and Gamble Staempfli

**City of Beacon Planning Board Agenda**  
**02/08/2022**

**Title:**

Consider request for one 90-day extension of Subdivision Approval, Monell Place, submitted by Allison Cross and Henry Nye

**ATTACHMENTS**

[Monell Place Subdivison Extension Request\\_2022-0126.pdf](#)



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

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January 26, 2022

Chairman John Gunn and Members of the Planning Board  
City of Beacon Planning Board  
1 Municipal Plaza  
Beacon, NY 12508

Re: Monell Place 2 Lot Subdivision  
Request for Extension of Subdivision & Certificate of Appropriateness Approval  
Tax parcel: 5955-04-586132 ( $\pm 2.91$  acres)  
City of Beacon, NY

Dear Chairman Gunn and Members of the Planning Board:

On behalf of the co-Applicants, Allison Cross and Henry Nye, we are writing to request a second 90-day extension of the May 11, 2021 Preliminary & Final Subdivision Plat and Certificate of Appropriateness Approval Resolution (the "Approval Resolution"). This request is timely, as 90 days (three (3) months) have not elapsed since the date of the last extension request.

The Applicant has completed all of the required resolution items and is now ready to provide final plans and Subdivision Plat for Chairman's signature. The 90-day extension granted by the planning board on November 9, 2021 expires on February 7, 2022. In the event that the Planning Board Chairman does not have a chance to sign the plans before the expiration date, we respectfully submit this formal request for one (1) 90-day extension of the Approval Resolution, thus extending to May 8, 2022, the date by which the Applicant must satisfy the remaining conditions set forth in the Approval Resolution in order for the Final Subdivision Plat to be signed by the Chairman of the Planning Board.

This Board has the authority to grant the requested extension pursuant to City of Beacon Code Section 195-14(D).

We respectfully request that you please place this matter on the Planning Board's February 8, 2022 Planning Board Agenda for consideration of the Applicant's request for one (1) 90-day extension. Thank you in advance for your consideration in this matter.

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 larger, more prominent script than the last name "Bodendorf".

Michael A. Bodendorf, P.E.  
Principal

cc: Allison Cross & Henry Nye  
Taylor M. Palmer, Esq.  
Daniel G. Koehler, P.E. (HLD file)