COURTROOM
1 MUNICIPAL PLAZA
BEACON, NY 12508

Len Warner
Karen Quiana
Kevin Byrne
James Vermeulen
J. Randall Williams
David Jensen
Chair John Gunn

July 14, 2026
7:00 PM
Planning Board Agenda

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.

Approval of June 9, 2026, minutes

Regular Meeting

1. Continue public hearing and continue review of application for Site Plan Approval, 1154 North Avenue, Commercial, submitted by Hudson Vox LLC.
2. Continue Public Hearing and continue review of application for Amended Site Plan Approval, 393 Fishkill Avenue, 397 Fishkill Avenue, and 7 Conklin Street, Commercial Mix-Use, submitted by 397 Fishkill Avenue, LLC and 393 Fishkill Avenue, LLC. ***ADJOURNED AT THE REQUEST OF THE APPLICANT***
3. Public hearing and continue review of application for Subdivision Approval, 84 Anderson Street, Residential, submitted by Sadhna Gupta.
4. Public hearing and continue review of application for Subdivision Approval, 108 Liberty Street, Residential, submitted by Stephen Spaccarelli and Claire Tipley.
5. Continue review of applications for Subdivision Approval and Site Plan Approval, Mixed-Use Commercial and Residential, 321 Main Street, submitted by Arpa Gavigan Developments LLC.
6. Review of application for Amended Site Plan Approval, Edgewater Place, Residential, submitted by Scenic Beacon Developments, LLC.
7. Review application for Amended Site Plan Approval, 248 Tioronda Avenue, Residential, submitted by Beacon 248 Holdings, LLC.
8. Continue review of application for Amended Site Plan Approval, 364 Main Street, Mixed-Use Commercial and Residential, submitted by 364 Main BCN LLC.

Miscellaneous Business

1. Mirbeau of Beacon, LLC request to discuss the lighting design along Mirbeau Lane, from Grandview to the cottage locations.

Architectural Review

1. Certificate of Appropriateness: 213 Main Street, Sign
2. New Single-Family House: Rombout Avenue (Tax Grid #5954-35-854793)
3. Certificate of Appropriateness: 53 Russell Avenue, Facade
4. Certificate of Appropriateness: 425 Main Street, Facade

City of Beacon Planning Board Agenda
07/14/2026

Title:

Continue public hearing and continue review of application for Site Plan Approval, 1154 North Avenue, Commercial, submitted by Hudson Vox LLC.

ATTACHMENTS

1154 North PB 7.14.26 Comment Response Letter_260630.pdf

1154 North PB 7.14.26 - Response to Barton & Loguidice Noise Analysis.pdf

1154 North PB 7.14.26 Letter from the Applicant.pdf

1154 North PB 7.14.26 Occupancy Calculations_260621.pdf

1154 North PB 7.14.26 Sprinkler Analysis_260621.pdf

1154 North PB 7.14.26 Operating Hours Analysis and Compatibility Statement.pdf

1154 North PB 7.14.26 Occupancy Management, Premises Monitoring, and Emergency Egress Plan - r2.pdf

1154 North PB 7.14.26 Submission 5_260630 plans.pdf

1154 North sign permit app 6.24.26.pdf

1154 North PB 7.14.26 public comment Denysyk.pdf

1154 North PB 7.14.26 PH public comment Harle.pdf

1154 North PB 7.14.26 PH public comment Zellinger.pdf

1154 North PB 7.14.26 Noise Review Comments B&L 06 26 2026.pdf

Lanc & Tully 1154 North Ave 07-10-26.pdf

KARC Review PB_1154 North Avenue_2026.07.13.pdf

1154 North Avenue - Amended Site Plan Resolution (4900-2169-8234.1).pdf

ARYEH SIEGEL
ARCHITECT

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

Re: 1154 North Avenue, Beacon, New York
Site Plan Application – Responses to Comments

June 30, 2026

Dear Chairman Gunn and Members of the Planning Board,

Below please find our responses to the comments included in KARC Planning Consultant's Memorandum, June 4, 2026, and Lanc & Tully's comment letter dated June 3, 2026.

KARC Planning Consultant's Comment Responses:

1. **Signage.** §223-15(E)(1) permits one wall sign facing the principal street of access in nonresidential districts. The applicant has revised the signage proposal accordingly. The Building Inspector shall determine whether a separate sign permit is required in addition to site plan approval.

   Response: Comment acknowledged. The Applicant has submitted a separate Sign Permit Application to the Building Inspector.

2. **Emergency Egress Hours of Operation**. While the restriction of the rear door to emergency egress only is identified in the submitted Management Plan, a corresponding note shall be added to the site plan. The hours of operation shall also be noted on the site plan.

   Response: The egress only door is called out on the plan. Revised hours of operation have been added to the plans.

3. **Noise Attenuation**. Consistent with the submitted Acoustic Report, the following conditions shall be incorporated into the plan set: (a) additional sound system tuning and testing shall be conducted upon project completion to verify compliance with applicable noise standards; and (b) the maximum permissible PA system volume shall be established based on the results of post-construction compliance testing.

   Response: The conditions regarding post-construction testing and compliance verification have been added to the plan notes.

84 Mason Circle | ajs@ajsarch.com | *Tel* 845 838 2490
Beacon, New York 12508 | www.ajsarch.com | *Fax* 845 838 2657

Lanc & Tully Comment Responses:

General Comments

1. The project will require permitting from the NYSDOT for proposed work within the States highway boundary along North Avenue (Route 9D). ***Applicant states that their engineer will coordinate with the NYSDOT regarding permitting for proposed work.*** Copies of all permitting with NYSDOT shall be submitted to the City of Beacon.

   Response: Comment acknowledged. The Applicant's engineer will coordinate with the DOT regarding permitting for the proposed work and provide copies of all permitting to the City of Beacon.

2. The applicant's architect should meet with the City's Building Department to determine if sprinkler will be required for the proposed use and occupancy. This may have an impact on the size of the water service feeding the building, which is unknown at this time. ***The applicant has resubmitted a "Sprinkler Requirement Analysis" to the City Building Inspector and await the Building Inspector's determination.***

   Response: After reviewing the first sprinkler requirement analysis with the building inspector, an updated analysis of the sprinkler requirements demonstrating that sprinklers are not required for this project has been resubmitted to the Building Inspector, and we await his determination.

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

Sincerely,



Aryeh Siegel
Aryeh Siegel, Architect

Response to Barton & Loguidice Noise Analysis

Drafted: July 1, 2026

We thank the City of Beacon for providing the report from Barton & Loguidice, to review our initial report from Walters Storyk Design Group (WSDG). The applicant and WSDG agree with and accept all conditions stated in Barton & Loguidice's analysis.

Upon receiving the report from Barton & Loguidice, we consulted with WSDG to provide further post-construction testing criteria of the city code's "plainly audible" requirement.

Post-Construction Testing Criteria (per WSDG)

The noise code states "plainly audible" as an imprecise target due to background noise and receptor sensitivity variability. Typically we define audibility as an averaged signal that is significantly measurable above the background noise of the system. Note that peak values can be audible even if average levels are 10dB below the ambient level. Therefore for purposes of post-construction testing, we recommend source levels within the space should not be measurable at receiver property lines more than 3-6 dB above ambient levels (average) taken with similar conditions (time of day, season, general environmental conditions, etc.).

Letter from the Applicant

June 23rd, 2026

Chairman John Gunn and Members of the Planning Board:

We understand that a private-room karaoke venue may be an unfamiliar concept to some people. We also understand that, when a new use is proposed in a small city like Beacon, people naturally ask hard questions. Will it be noisy? Will it be orderly? Will it fit here? Will it respect the surrounding neighborhood?

Those are fair questions. We have taken them seriously throughout this process.

As we enter our sixth month before the Planning Board, I felt it was important that you hear directly from us, not only as applicants, but as the people who will own, operate, and live with the consequences of this business.

We are not outside investors looking at Beacon as a line item. We are not passing through. We have lived in Beacon for six years, and we are raising our four-year-old son here. This is our home. That matters to us.

Because any precedent created by approving The Howl is not something we can simply walk away from. It is something we will live with as residents, as parents, as neighbors, and as members of this community.

We would never want to create something that makes Beacon feel less like Beacon. We would never want to bring disorder, noise, or a chaotic element into the city we chose to raise our child in. The entire concept of The Howl has been designed in the opposite direction: structure instead of chaos, private rooms instead of uncontrolled crowds, soundproofed spaces instead of spillover noise, reservations and staff oversight instead of a free-for-all.

At its core, The Howl is not built around alcohol. It is not built around large crowds. It is built around a simple human experience: people gathering in a room, letting their guard down, singing badly or beautifully, laughing with friends, celebrating birthdays, embarrassing themselves a little, cheering each other on, and creating memories.

Yes, there will be drinks. Yes, there will be visitors to Beacon. Yes, weekend and overnight guests will be part of our customer base, just as they are for many Main Street businesses. That is an economic reality of operating a small business in Beacon.

But The Howl is being created for residents who want something fun to do without leaving town. For parents planning a birthday party. For couples looking for something after dinner besides

another bar. For coworkers celebrating a milestone. For musicians, theater kids, shy singers, confident singers, and people who swear they will never sing until the first chorus starts.

Long before we submitted this application, I was traveling to Japan for business and kept finding myself struck by the private-room karaoke venues there. In Tokyo, karaoke is not treated as a novelty. It is part of the social fabric. It is structured, joyful, a little ridiculous, and completely disarming.

Groups of coworkers, friends, couples, people of different ages and backgrounds, all walking out lighter than when they went in. Something had happened in that room. They had let go for a while. They had connected. It might have been silly, but it was not trivial.

I saw it in Japan. In Koreatown, The East Village, Brooklyn, and Flushing. The rooms looked different from place to place, but the core experience was always the same: togetherness, bonding, self-effacing bravery, high fives, laughter, and a room full of people giving each other permission to be less guarded.

Over time, I began to believe the experience could be made even better. More intuitive. More comfortable. More private. More customizable. A place where guests could control not only the songs, but the feeling of the room - the lighting, the sound, the mood, the experience itself.

Why Beacon?

Because Beacon is a city of music.

Pete Seeger's legacy is here. The Towne Crier is here. Quinn's is here. Music is in the parks, in the bars, in the schools, in the drum circles, in the homes, and in the people.

Because Beacon is also a city of many overlapping communities: artists, musicians, families, longtime residents, newer residents, Beacon-born graduates, former New Yorkers, young parents, retirees, weekend visitors, theater people, working people, and people with wildly different tastes who still share the same sidewalks, schools, shops, restaurants, and views of the mountain.

As with the city we all call home, Karaoke is also a celebration of music. It is also a meeting place for different generations, backgrounds, languages, and tastes. It includes the song someone grew up with, the song someone secretly loves, the song someone's parents sang, the song their child knows by heart, the show tune, the rock anthem, the alt-country ballad, the 90s guilty pleasure, the Broadway number, the punk song, the Spanish-language classic, the K-pop hit, the Motown standard.

Karaoke is inclusive by design. You do not have to be a professional musician. You do not even have to be good. You just have to be willing to participate and be yourself.

That is why we believe this concept fits Beacon. Beacon deserves more places where people can gather across age, background, and social circle and actually do something together.

The Howl is intended to be that kind of place. A place that is fun, but orderly. A place that is lively, but controlled. A place that welcomes visitors, but is rooted in Beacon. A place where residents can feel ownership, not displacement.

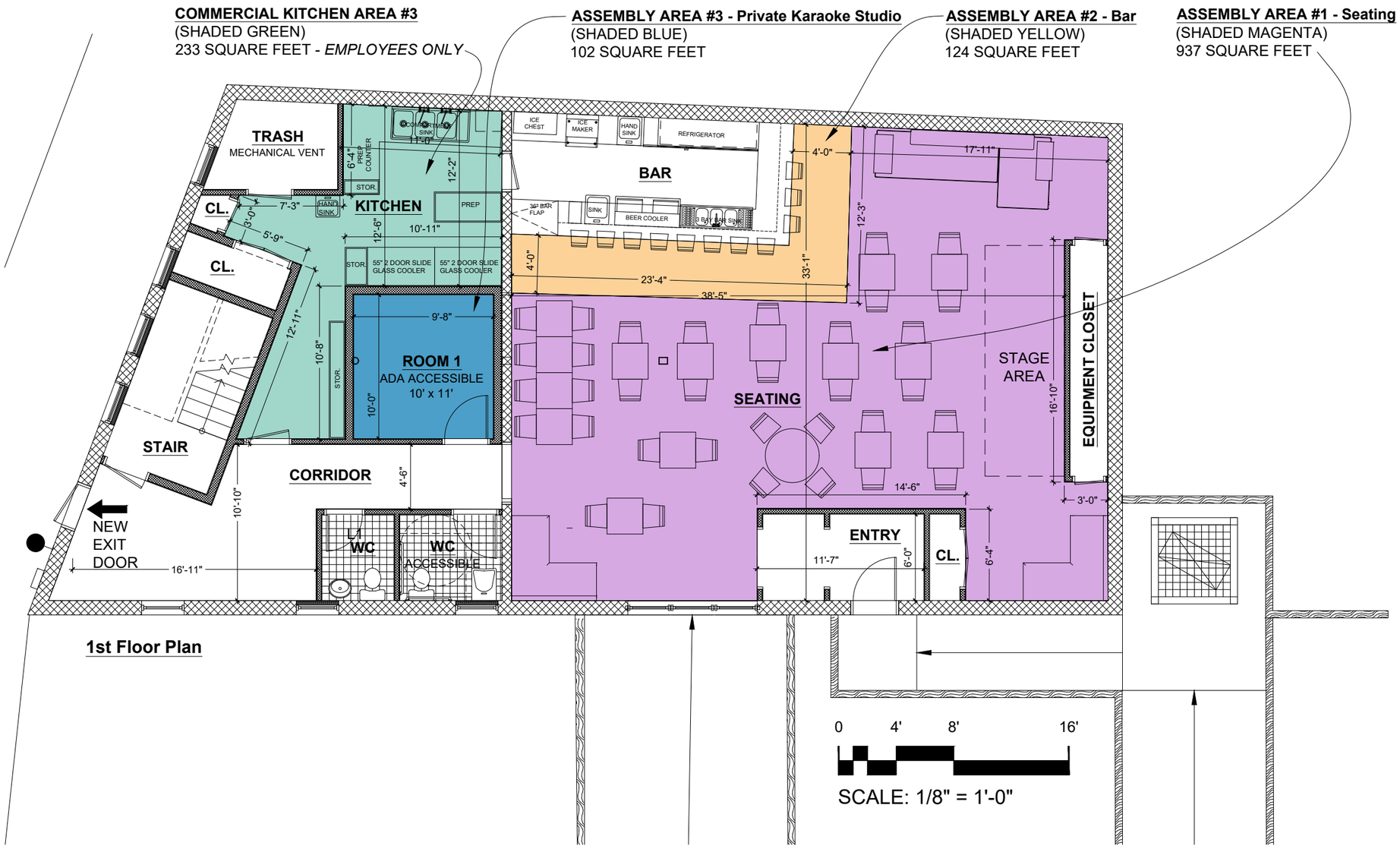
We know that approval of this application is not a referendum on whether karaoke is fun. It is a land-use decision. It is a question of compatibility, mitigation, operations, and trust.

We have designed The Howl carefully because we understand what is at stake. We have listened throughout this process because we respect the Board's role and the community's concerns. We have invested in soundproofing, planning, professional review, operational controls, and a business model that depends on order rather than excess.

But beyond the plans, drawings, reports, and conditions, I hope you will also see the people behind this application. We are residents. We are parents. We are small-business founders. We are trying to build something joyful in the city we love.

And if approved, we will operate The Howl with the same care, seriousness, and respect that we have brought to this process - because Beacon is not just where this business will be located. Beacon is where we live.

Sincerely,
Eric Weitner & Leah Cheng



1st Floor Plan

1ST FLOOR

ASSEMBLY AREA 1 - SEATING
62 OCCUPANTS (937 SF @ 15 SF/OCCUPANT)

ASSEMBLY AREA 2 - BAR
17 OCCUPANTS (124 SF @ 7 SF/OCCUPANT)

ASSEMBLY AREA 3 - PRIVATE KARAOKE STUDIO
7 OCCUPANTS (102 SF @ 15 SF/OCCUPANT)

COMMERCIAL KITCHEN 4 - KITCHEN
2 OCCUPANTS (233 SF @ 200 SF/OCCUPANT)

TOTAL OCCUPANCY - 1ST FLOOR = 88 OCCUPANTS

2ND FLOOR

ASSEMBLY AREA 1 & 2 - PRIVATE KARAOKE STUDIOS
82 OCCUPANTS (1,229 SF @ 15 SF/OCCUPANT)

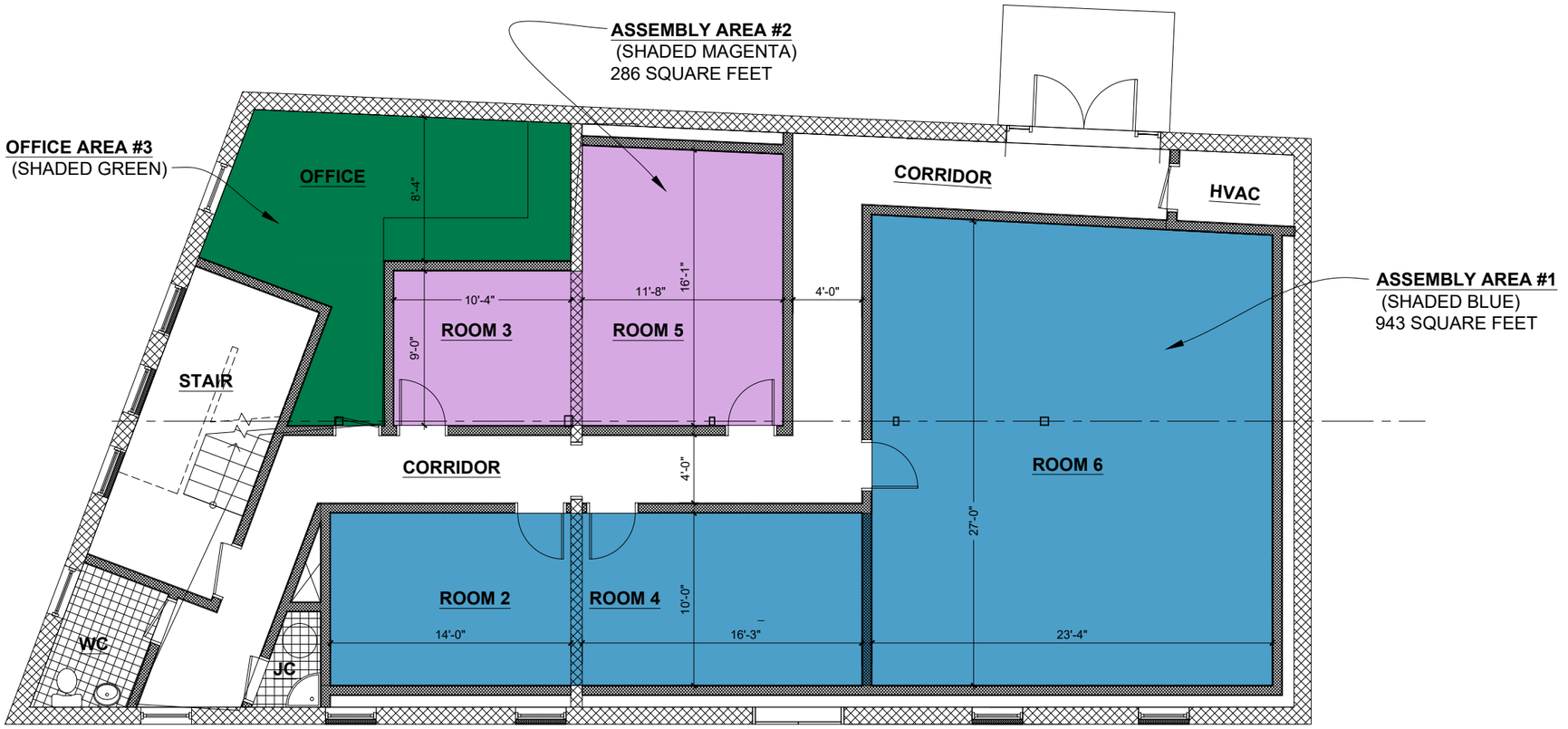
BUSINESS AREA 1 - OFFICE
2 OCCUPANTS (217 SF @ 150 SF/OCCUPANT)

TOTAL OCCUPANCY - 2ND FLOOR = 84 OCCUPANTS

TOTAL BUILDING OCCUPANCY = 172 OCCUPANTS

Occupancy Calculations - 1st Floor

1154 North Avenue
Beacon, NY
Scale: 1/8" = 1'-0"
June 21, 2026
Aryeh Siegel Architect



2nd Floor Plan

0 4' 8' 16'

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

2ND FLOOR

ASSEMBLY AREA 1 & 2 - PRIVATE KARAOKE STUDIOS
82 OCCUPANTS (1,229 SF @ 15 SF/OCCUPANT)

BUSINESS AREA 1 - OFFICE
2 OCCUPANTS (217 SF @ 150 SF/OCCUPANT)

TOTAL OCCUPANCY - 2ND FLOOR = 84 OCCUPANTS

Occupancy Calculations - 2nd Floor

1154 North Avenue
Beacon, NY
Scale: 1/8" = 1'-0"
June 21, 2026
Aryeh Siegel Architect

Sprinkler Requirement Analysis

June 21, 2026

The Howl

1154 North Avenue Renovation

This report demonstrates that an automatic sprinkler system is not required for this project because none of the conditions are present that create a requirement for sprinklers per Building Code of NY State section 903.2.1.2. At least one condition must be present to require sprinklers.

1. The fire areas do not exceed 5,000 square feet
2. The occupant load of each fire area is less than 100 people
3. The fire areas are both at a level of exit discharge

Occupant Load Calculation

1st floor

Assembly area 1 - Seating
62 occupants (937 sf @ 15 sf/occupant)

Assembly area 2 - Bar
17 occupants (124 sf @ 7 sf/occupant)

Assembly area 3 - Private Karaoke Studio
7 occupants (102 sf @ 15 sf/occupant)

Commercial kitchen 4 - Kitchen
2 occupants (233 sf @ 200 sf/occupant)

Total occupancy - 1st floor = 88 occupants

2nd floor

Assembly areas 1 & 2 - Private Karaoke Studios
82 occupants (1,229 sf @ 15 sf/occupant)

Business area 1 - Office
2 occupants (217 sf @ 150 sf/occupant)

Total occupancy - 2nd floor = 84 occupants

Total building occupancy = 172 occupants

84 Mason Circle
Beacon, New York 12508
ajs@ajsarch.com
www.ajsarch.com
Tel 845 838 2490
Fax 845 838 2657

Fire Separation
The 1st and 2nd floors will be separated by a 2-hour rated floor/ceiling assembly, and the stair is enclosed in fire rated construction.

Therefore, each floor is a separate Fire Area with its own exit discharge at the level of each floor.

Sprinkler Requirement
The requirement for sprinklers for both Alteration Level 3 and for Change of Use depends on the requirement for sprinklers in the Building Code of New York State, per the language of the Code excerpts below.

Conclusion
As demonstrated below, the Building Code of New York State does not require automatic sprinklers for the proposed project because none of the three specified conditions exist which would have required sprinklers to be installed.

Since the Building Code of New York State does not require automatic sprinklers for this use as applicable for new construction, automatic sprinklers are not required by the Existing Building Code.

The following **New York State Existing Building Code** sections describe the conditions under which an automatic sprinkler system is required to be installed:

Alteration Level 3

904.1.4 Groups A, B, E, F-1, H, I-1, I-3, I-4, M, R-1, R-2, R-4, S-1 and S-2.

In buildings with occupancies in Groups A, B, E, F-1, H, I-1, I-3, I-4, M, R-1, R-2, R-4, S-1 and S-2 work areas shall be provided with automatic sprinkler protection where all of the following conditions occur:

1. *The work area is required to be provided with automatic sprinkler protection in accordance with the Building Code of New York State as applicable to new construction.*

2. The building site has sufficient municipal water supply for design and installation of an automatic sprinkler system.

3. Exception: If the building site does not have sufficient municipal water supply for design of an automatic sprinkler system, work areas shall be protected by an automatic smoke detection system throughout all occupiable spaces other than sleeping units or individual dwelling units that activates the occupant notification system in accordance with Sections 907.4, 907.5 and 907.6 of the Building Code of New York State.

Change of Use

1011.2.1 Automatic sprinkler system.

The installation of an automatic sprinkler system shall be required where there is a change of occupancy classification *and Chapter 9 of the current Building Code of New York State requires an automatic sprinkler system* based on the new occupancy or where there is a change of occupancy within the space where there is a different fire protection system threshold requirement in Chapter 9 of the current Building Code of New York State than exists in the current building or space. The installation of the automatic sprinkler system shall be required within the area of the change of occupancy and areas of the building not separated horizontally and vertically from the change of occupancy by a nonrated permanent partition and horizontal assemblies, fire partition, smoke partition, smoke barrier, fire barrier or fire wall.

Exceptions:

1. An automatic sprinkler system shall not be required in a one- or two-family dwelling constructed in accordance with the Residential Code of New York State.
2. Automatic sprinkler system shall not be required in a townhouse constructed in accordance with the Residential Code of New York State.
3. The townhouse shall be separated from adjoining units in accordance with Section R302.2 of the Residential Code of New York State.

The foregoing sections from the NYS Existing Building Code both refer to the Building Code of NYS regarding the conditions that trigger the requirement for sprinklers. The applicable Building Code sections follow below.

The following **Building Code of New York State** sections describe the conditions under which an automatic sprinkler system is required to be installed.

Our comments describing the proposed conditions in relation to the requirement conditions are shown in BLUE UPPER CASE after each condition:

303.3 Assembly Group A-2.
Group A-2 occupancy includes assembly uses intended for food and/or drink consumption, including but not limited to:

- Banquet halls
- Casinos (gaming areas)
- Nightclubs
- Restaurants, cafeterias and similar dining facilities (including associated commercial kitchens)
- Taverns and bars

[F] 903.2.1.2 Group A-2.
An automatic sprinkler system shall be provided throughout stories containing Group A-2 occupancies and throughout all stories from the Group A-2 occupancy to and including the levels of exit discharge serving that occupancy where one of the following conditions exists:

1. The fire area exceeds 5,000 square feet

    A. THE FIRE AREAS DO **NOT** EXCEED 5,000 SQUARE FEET. THE FIRE AREA FOR EACH FLOOR IS 2,238 SQUARE FEET. EACH FLOOR IS A SEPARATE FIRE AREA SEPARATED BY 2 HOUR RATED HORIZONTAL CONSTRUCTION BETWEEN FLOORS

2. The fire area has an occupant load of 100 or more.

    A. THE FIRE AREAS DO **NOT** HAVE AN OCCUPANT LOAD OF 100 OR MORE. EACH FIRE AREA HAS LESS THAN 100 OCCUPANTS.

3. The fire area is located on a floor other than a level of exit discharge serving such occupancies.

    A. THE FIRE AREA IS **NOT** LOCATED ON A FLOOR OTHER THAN A LEVEL OF EXIT DISCHARGE SERVING SUCH OCCUPANCIES. THERE IS AN EXIT ON BOTH LEVELS OF THE BUILDING. THEREFORE, EACH FIRE AREA IS LOCATED ON A LEVEL WITH AN EXIT

Operating Hours Analysis and Compatibility Statement

1. Purpose

The Howl respectfully submits this statement in support of its proposed hours of operation. We understand that the Planning Board's review of operating hours is focused on neighborhood compatibility, late-night impacts, public safety, and the orderly dispersal of patrons. We share those concerns and have designed The Howl's business model, physical layout, and operating plan specifically to reduce the types of impacts commonly associated with conventional late-night bars.

Our proposed hours are:

Wednesday:	2:00 pm – 11:00 pm*
Thursday:	2:00 pm – 12:00 am
Friday:	12:00 pm – 1:30 am
Saturday:	12:00 pm – 1:30 am
Sunday:	12:00 pm – 11:00 pm*

In response to the Board's comments at the prior meeting, we have made the following change:

- We are no longer proposing extended Sunday hours on holiday weekends. Sunday hours will remain 12:00 pm to 11:00 pm regardless of whether the following Monday is a holiday.
- We moved back Wednesday closing time from 12:00am to 11:00pm.

2. The proposed hours are essential to the use

Karaoke is fundamentally an evening-based social activity. While The Howl will operate during daytime and early evening hours for families, private events, youth parties, and community-oriented programming, the core private-room karaoke use depends on evening and late-evening demand. Patrons typically choose karaoke after dinner, after a date, after a show, after work, or as a second activity following a meal or gathering elsewhere in Beacon.

For that reason, the later hours are not incidental to the business model. They are a necessary part of the use. A karaoke venue that closes too early would lose a substantial portion of its intended customer base, particularly on Friday and Saturday nights when social and recreational activity naturally occurs later.

The Howl is also intended to serve overnight visitors and weekend guests who come to Beacon and currently have limited evening recreation options other than conventional bars. Our concept provides a structured, indoor, activity-based alternative. Rather than simply offering alcohol service, The Howl gives patrons a defined entertainment use with private rooms, timed reservations, staff supervision, and a controlled interior environment.

3. The proposed hours are consistent with the existing Main Street commercial pattern

The proposed hours are not out of character with Main Street. Several existing establishments in the area operate with comparable or later hours, particularly on Friday and Saturday nights. Examples include:

Establishment	Weekday / Sunday Hours	Friday / Saturday Hours
Happy Valley Arcade Bar	Generally open until 11:00 pm	Open until approximately 1:30 am
Piggy Bank	Generally open until 10:00 or 11:00 pm	Open until approximately 2:00 am
The Vinyl Room	Generally open until 10:00 or 11:00 pm	Open until approximately 2:00 am

The Howl's proposed Friday and Saturday closing time of 1:30 am is therefore within the established operating pattern of nearby Main Street hospitality and entertainment uses. The proposed Sunday closing time of 11:00 pm is also consistent with the Board's expressed concern regarding holiday weekend Sundays, as we are no longer requesting that Sundays operate as Saturdays.

Our requested hours should be evaluated in that context. We are not seeking to introduce a new late-night condition into an otherwise inactive commercial area. We are proposing hours that align with existing Main Street activity while offering a more controlled, reservation-based, indoor entertainment model.

4. The Howl is designed to reduce noise and late-night disturbance

The Howl differs from a conventional open bar in several important ways:

1. The primary entertainment use occurs inside sound-treated private karaoke rooms. These rooms are being designed and constructed specifically to contain sound within the building. The substantial cost of constructing a soundproofed environment is a central feature of the project, not an afterthought. The purpose of that investment is to allow patrons to enjoy music and singing indoors while minimizing exterior noise impacts.
2. The private-room format naturally disperses patrons throughout the interior rather than concentrating activity in one open bar area. Guests are typically in reserved rooms, seated with their group, and engaged in a timed activity. This produces a more orderly operating environment than a traditional bar where patrons may congregate in one large open room or cycle frequently between the interior and exterior. The business model encourages guests to stay in a controlled indoor setting.
3. The Howl will not rely on outdoor entertainment, outdoor amplified sound, or outdoor crowd activity. The use is strictly indoors.

5. Curtailing the hours may not reduce late-night impacts

If The Howl is required to close substantially earlier than comparable Main Street establishments, patrons who are not ready to end their evening are likely to relocate to other nearby bars that remain open later. That would not necessarily reduce late-night activity in the area. It may simply move patrons from a controlled, sound-treated, reservation-based entertainment venue into less structured late-night environments.

The Howl offers an alternative to that pattern. It keeps patrons indoors, engaged in a defined activity, and under staff supervision. In that respect, allowing The Howl to operate within the existing Main Street late-night framework may reduce, rather than increase, the likelihood of sidewalk congregation, aimless bar-hopping, or post-closing dispersal issues.

6. The proposed hours are necessary to support the project's financial feasibility

The Howl is making a significant investment in the building as a tenant, including the construction of private karaoke rooms, sound isolation measures, specialized audio/visual infrastructure, accessibility improvements, and interior buildout work. These improvements are far more capital-intensive than a standard bar or restaurant fit-out.

The proposed hours are crucial in supporting that investment. Friday and Saturday late-evening periods are expected to be among the most important revenue windows for the business. Reducing those hours would disproportionately affect the project's ability to generate the revenue needed to support the specialized buildout and long-term operation of the venue.

The requested hours are directly tied to the nature of the use and the cost of making that use compatible with the surrounding area. The soundproofing and interior design measures that help protect neighbors require a business model with sufficient operating hours to support them.

7. The Howl will operate with active management controls

The Howl is committed to operating as a responsible Main Street business. Our operating model will include active management practices intended to reduce late-night impacts, including:

- Staff supervision of guest arrival and departure.
- Reservation-based management of private karaoke rooms.
- Interior-focused entertainment with no outdoor amplified sound.
- Monitoring of the premises full perimeter during later operating periods.
- Prompt staff response to any patron behavior that could create noise or sidewalk congestion.
- Coordination with local officials if operational concerns arise after opening.

We recognize that late-night operations require active management. The Howl's model is built around that principle. The private-room format, timed reservations, staff oversight, and sound-treated construction all support a more controlled environment than a conventional late-night bar.

8. Requested determination

For the reasons stated above, The Howl requests approval of the proposed operating hours:

Wednesday:	2:00 pm – 11:00 pm
Thursday:	2:00 pm – 12:00 am
Friday:	12:00 pm – 1:30 am
Saturday:	12:00 pm – 1:30 am
Sunday:	12:00 pm – 11:00 pm

These hours are consistent with the nature of the proposed use, consistent with the existing Main Street commercial pattern, and necessary to support the significant investment required to create a sound-treated, activity-based entertainment venue. The Howl's format provides Beacon residents and visitors with a managed, indoor, post-dinner entertainment option that can help keep late-night activity contained within a supervised commercial setting rather than dispersing patrons into less structured late-night environments.

We respectfully submit that the proposed hours are reasonable, compatible with the surrounding commercial district, and appropriate for approval.

Occupancy Management, Premises Monitoring, and Emergency Egress Plan

Revised: June 26, 2026

1. Purpose

This plan describes the operational procedures that The Howl will use to prevent exterior congregation, maintain safe ingress and egress, monitor the premises during operating hours, and respond to emergencies. The procedures are intended to supplement, and not replace, any requirements imposed by the City of Beacon Planning Board, Building Department, Fire Inspector, Police Department, New York State Uniform Fire Prevention and Building Code, or any final certificate of occupancy conditions.

2. General Operating Model

The Howl will primarily operate by advance online reservation through thehowlbeacon.com. Advance reservations will allow management to control arrival times, private-room assignments, room turnover, and room capacity. Each private room has a defined capacity range and a distinct guest experience; the reservation model is intended to reduce unscheduled arrivals, exterior queuing, and uncontrolled patron flow.

Walk-ins may be accommodated only when capacity is available and only in a manner consistent with the occupancy limits established by the approved certificate of occupancy and applicable building/fire code requirements. Walk-ins who cannot be accommodated immediately will be directed either to wait inside the lounge/bar area, provided capacity is available, or to leave the premises and receive a text notification when space or a reserved room is ready.

3. Capacity Management

The Howl will not admit patrons in excess of the occupancy limits established by the approved certificate of occupancy and applicable building/fire code requirements. The online booking platform will support capacity control by managing reservation start times, room assignments, and private-room occupancy. Management will monitor patron counts during operating hours, including private-room occupancy and lounge/bar occupancy, to ensure the premises remain within approved capacity limits.

Staff will be trained to recognize and address capacity-related issues, including early arrivals, walk-in surges, delayed room turnover, and patrons attempting to gather outside while waiting for entry. If the lounge/bar area is at capacity, additional patrons will not be permitted to wait inside and will instead be directed to leave the premises and await a text notification.

4. Occupancy Management and Exterior Congregation

Patrons arriving before their reservation time will be directed to wait inside the lounge/bar area, provided capacity is available, or to leave the premises and receive a text notification when their room is ready. Patrons will not be permitted to wait, queue, loiter, smoke, or congregate on sidewalks, at the rear of the building, near emergency exits, in drive aisles, or in any area that would obstruct pedestrian circulation, neighboring properties, emergency access, or required means of egress.

Under no circumstances may patrons gather at the rear of the building. The rear exit is designated for emergency egress only and will not be used for routine patron entry or exit. Management and staff will enforce

this policy during operating hours through staff direction, posted signage, perimeter checks, and security-camera monitoring. Patrons who fail to comply may be refused service or asked to leave the premises.

5. Smoking Policy

Smoking will not be permitted on the premises, nor directly outside the venue. If patrons are looking for a place to smoke, they will be asked to leave the premises.

As with exterior congregation, our No Smoking policy will be reinforced through staff direction, perimeter checks, and postage signage.

6. Normal Ingress and Non-Emergency Egress

During normal, non-emergency operations, patrons will be directed to enter and leave through the Main Entrance on the west/front side of the building. Other exterior doors will be designated for emergency egress and staff/service use only, as applicable, and will remain code-compliant, unobstructed, and available for emergency use at all times.

Signage will be posted to direct patrons to the Main Entrance for routine entry and exit and to prohibit use of emergency exits except in an emergency. Staff will monitor patron circulation to ensure that normal entry and exit do not result in exterior congregation, obstruction of sidewalks, or use of the rear of the building as a gathering area.

7. Emergency Egress Routes

The Howl anticipates maintaining the following points of egress, subject to final approval by the City of Beacon Building Department, Fire Inspector, and applicable code officials:

1. **Main Entrance:** First floor, west/front side of building
2. **Dedicated Emergency Exit:** First floor, north side of building
3. **Dedicated Emergency Exit:** Second floor, east/rear side of building

Required egress paths will be maintained free of obstructions at all times. Illuminated exit signage will be provided where required by applicable code and final approved plans. In the event of an emergency, management will ensure that rear and side exterior egress lighting is turned on if evacuation is required.

The garage door should not be relied upon as a required code-compliant means of egress unless confirmed by the applicable code officials; however, staff may open it during an emergency when safe and appropriate to provide an additional discharge point.

Primary Emergency Egress Direction by Area

Area / Occupant Group	Primary Direction of Travel
Second-floor guests in Rooms 4, 5, and 6	Exit through the second-floor east/rear emergency exit, proceed down the exterior walkway to the north of the building, and then continue west toward North Avenue.
Second-floor guests in Rooms 2 and 3	Proceed down the interior stairs, exit through the first-floor north emergency exit, and then continue west toward North Avenue.
First-floor guests in Room 1, restrooms, and north side of building	Exit through the first-floor north emergency exit and then continue west toward North Avenue.
First-floor guests in lounge and bar area	Exit through the Main Entrance and then continue west toward North Avenue.

8. Exterior Assembly and Emergency Vehicle Access

After exiting the building, staff will direct patrons away from the structure and toward a safe exterior assembly area near North Avenue, clear of emergency exits, fire lanes, drive aisles, and responding emergency vehicles. Patrons will not be permitted to congregate at the rear of the building following an evacuation.

Emergency vehicle access will not be obstructed by patrons, deliveries, or staff vehicles. Staff will monitor exterior areas to ensure that sidewalks, drive aisles, exits, and emergency access areas remain clear. In the event of an emergency, a designated staff member or owner will call 911 and, when safe to do so, meet responding emergency personnel at the front entrance to provide information regarding the location and nature of the incident.

9. Staff Roles During Emergency

During operating hours, management will designate staff responsibilities for emergency response. One or both owners will be present on the premises during all operating hours. The following assignments may be adjusted based on staffing levels, the nature of the emergency, and direction from emergency responders:

- **Manager/Owner on Duty:** Serves as the incident lead; calls 911 or confirms that 911 has been called; communicates with first responders; determines whether evacuation or shelter-in-place is appropriate unless directed otherwise by emergency responders; ensures exterior egress paths are lit.
- **First-Floor Staff Lead:** Directs first-floor patrons to the nearest safe exit and, when safe to do so, confirms that first-floor restrooms and common areas are cleared.
- **Second-Floor Staff Lead:** Directs second-floor patrons from private rooms and corridors to the nearest safe exit and assists with orderly movement from the second floor.
- **Exterior Monitor:** Directs patrons away from exits, prevents congregation at the rear or sides of the building, and helps keep emergency access routes clear.

10. Emergency Response Procedure

In the event of a fire, smoke condition, medical emergency, security incident, power outage, environmental condition, or other emergency, staff will immediately notify the Manager/Owner on Duty. The Manager/Owner on Duty will call 911 or confirm that 911 has been called. Staff will not attempt to manage emergencies beyond their training and will prioritize life safety, evacuation where appropriate, and clear communication with responding emergency personnel.

In an evacuation, staff will direct patrons to the nearest safe and unobstructed exit. Staff will avoid directing patrons toward any route affected by fire, smoke, structural hazards, crowding, or other unsafe conditions. Staff will not permit patrons to re-enter the building until authorized by emergency responders or the appropriate authority.

11. Pre-Opening and Operating Checks

Before opening to the public each operating day, the Manager/Owner on Duty will confirm that exit paths are unobstructed, exit doors are operational, illuminated exit signs are visible, emergency lighting is functional to the extent observable, and no furniture, equipment, deliveries, or stored materials block any required means of egress. Any obstruction or safety concern will be corrected before patrons are admitted to the affected area.

During operating hours, staff will conduct routine interior and exterior checks to ensure that patrons are not congregating outside the building, emergency exits remain unobstructed, and the rear of the building is not being used for patron gathering. Security cameras will monitor the front, rear, and sides of the property as an additional tool for management oversight.

12. Accessibility and Mobility Assistance

Staff will be trained to assist patrons who may require additional assistance during an emergency, including patrons with mobility, vision, hearing, or other accessibility needs. Staff will not physically carry patrons except where necessary to prevent imminent harm and where safe to do so; instead, staff will communicate conditions to first responders and assist patrons in reaching the nearest safe egress route or area as directed by applicable emergency procedures and code requirements.

13. Enforcement

All staff will be trained on the operating protocols outlined in this plan. One or both owners will be present on the premises during all operating hours. Staff will conduct routine perimeter checks to ensure that no individuals are congregating outside the building, at the rear of the building, near emergency exits, or in areas that could obstruct circulation or emergency access.

Patrons who do not comply with posted policies or staff direction may be refused service, removed from the premises, or prohibited from re-entering. Management will treat exterior congregation, obstruction of egress, repeated nuisance behavior, or refusal to follow staff direction as safety and operational concerns requiring immediate correction.

14. Incident Documentation

Management will maintain an incident log documenting material occupancy-management, security, medical, fire, or emergency events, including date, time, nature of incident, staff response, whether emergency services were contacted, and any corrective actions taken. The incident log will be used by management to identify patterns, adjust staffing or procedures, and support ongoing compliance with operational commitments made during the Planning Board review process.

15. Coordination with Authorities and Final Approvals

This plan is intended to describe The Howl's operational approach and should be read together with the final approved architectural plans, certificate of occupancy, fire/life-safety requirements, signage requirements, and any conditions imposed by the Planning Board or other reviewing agencies. The Howl will coordinate final occupancy, egress, exit signage, emergency lighting, fire alarm, and related life-safety requirements with the project architect, Building Department, Fire Inspector, and other applicable authorities before opening to the public.

REVISIONS:			
NO.	DATE	DESCRIPTION	BY
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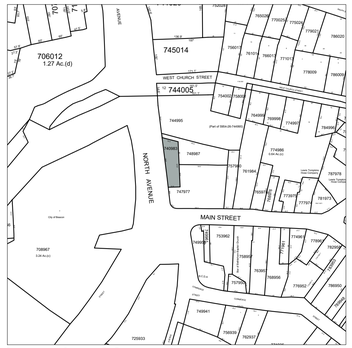
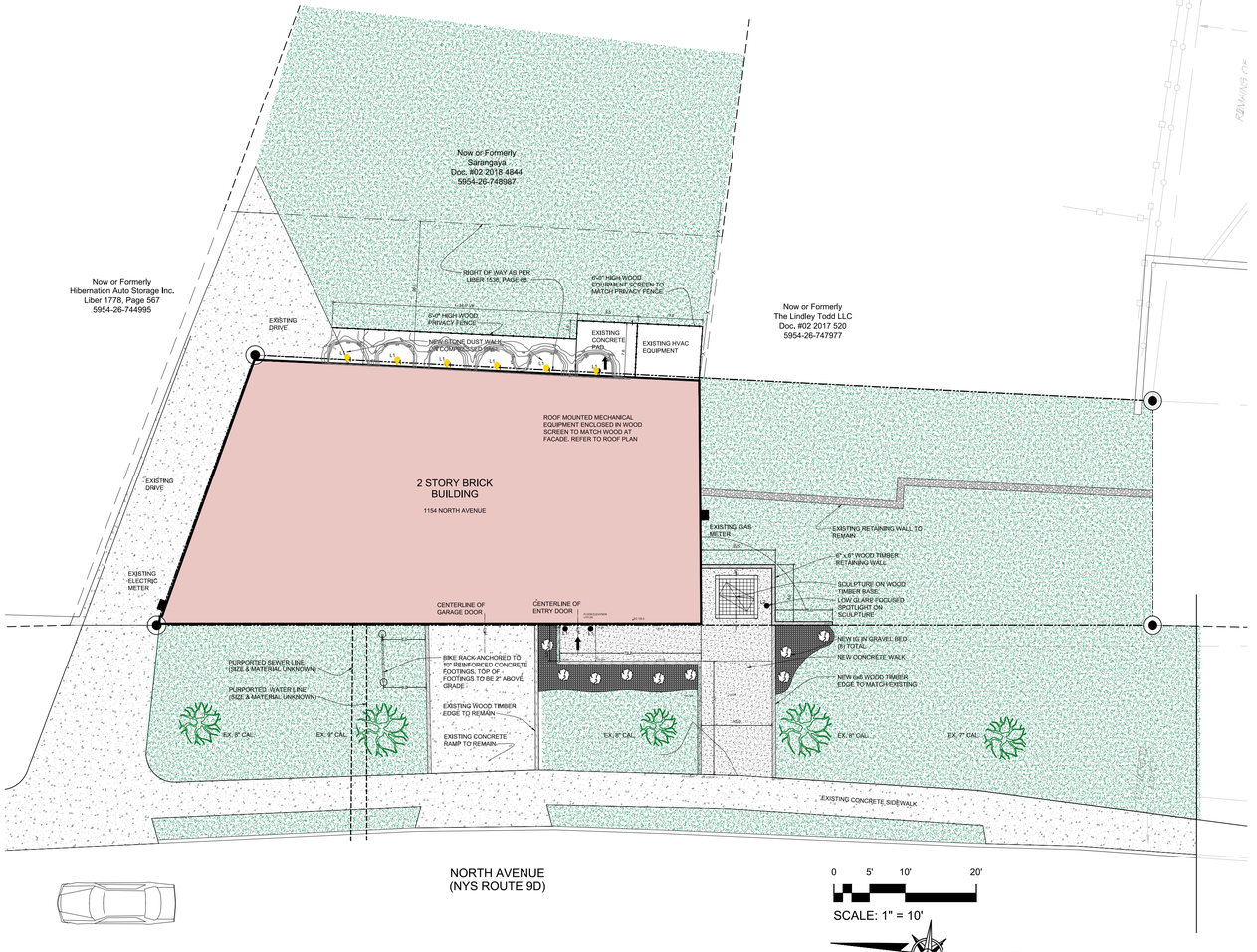
Bulk Zoning Regulations Table

	Required Setbacks			Existing Setbacks (No Change)			Minimum Lot Depth	Proposed Lot Depth	Allowable Building Height	Proposed Building Height	Minimum Landscaped Area	Proposed Landscaped Area	Lot Area
	Front	Side	Rear	Front	Side	Rear							
Zoning District													
CMS	0'-10'	0'	20'	0.2'	0.2' 63.5'	0.3'	75'	85' existing	3 stories / 38' & 4th Story w/ Special Permit	Existing - No Change	10% 5% if open to public	2% + Landscaping in the DOT ROW	4,646 SF



Location Map

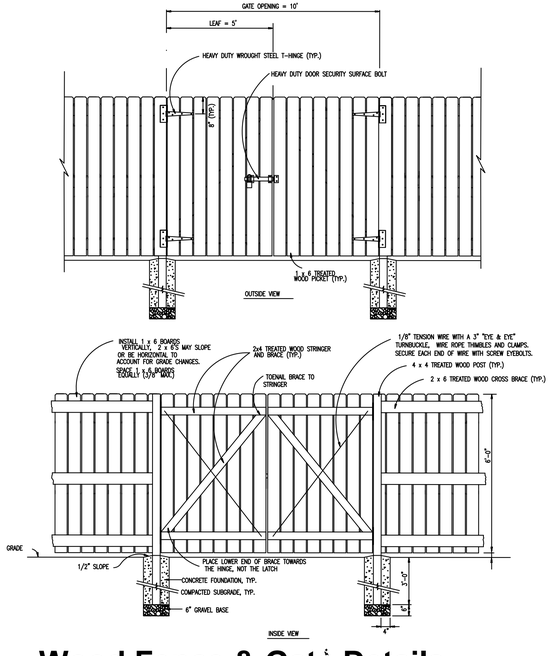
Scale: 1" = 200'



Site Plan

Scale: 1" = 10'

SITE PLAN INFORMATION BASED ON A SURVEY BY JOHNSON SURVEYING, LS, DATED 6-25-2023



Wood Fence & Gate Details

Not to Scale

Zoning Summary

Zoning District:	CMS (Central Main Street)
Tax Map No.:	5954-26-740983
Lot Area:	4,636 sf
Building Footprint:	2,259 sf
Historical Overlay District:	No
Existing Use:	Gallery
Proposed Use:	Karaoke Bar / Studio

Parking & Loading

Use & Parking Requirements	Proposed Area / Count	Parking Requirement
Commercial		
0 spaces (minimum) 3 spaces per 1,000 sf GFA (maximum)	4,418 gsf	0 parking spaces minimum 12 parking spaces maximum
Total		0 parking spaces minimum 20 parking spaces maximum
Total Provided		**0 parking spaces** See Notes Below

Notes:

1. There is no space available for off-street parking on the parcel.
2. Hours of Operation:
   Wednesday: 2:00 pm – 11:00 pm
   Thursday: 2:00 pm – 12:00 am
   Friday: 12:00 pm – 1:30 am
   Saturday: 12:00 pm – 1:30 am
   Sunday: 12:00 pm – 11:00 pm
3. The venue will be engineered to ensure sound levels do not exceed 55 dBA during daytime hours and are not plainly audible within neighboring buildings at night, in accordance with the City of Beacon Noise Control Code. The Applicant has retained an acoustic engineer to analyze the existing acoustics and specify noise mitigation measures to meet or exceed the City of Beacon Code requirements. Construction details for noise mitigation will be included in the Construction Documents submitted for the Building Permit Application.
4. Additional sound system tuning and testing shall be conducted upon project completion to verify compliance with applicable noise standards
5. The maximum permissible PA system volume shall be established based on the results of post-construction compliance testing

Index of Drawings

Sheet 1 of 5	Site Plan
Sheet 2 of 5	Existing Conditions Plan & Lighting Specifications
Sheet 3 of 5	Building Plans, Elevations & Renderings
Sheet 4 of 5	Grading & Landscaping Plan
Sheet 5 of 5	Construction Details

Site Plan Application

Sheet 1 of 5 - Site Plan

Owner:
The Lindley, LLC
4 Cross Street
Beacon, New York 12508

Applicant:
Hudson Vox, LLC

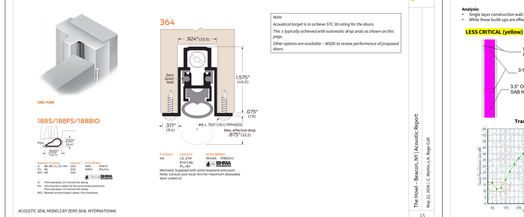
Architect:
Aryeh Siegel, Architect
84 Mason Circle
Beacon, New York 12508

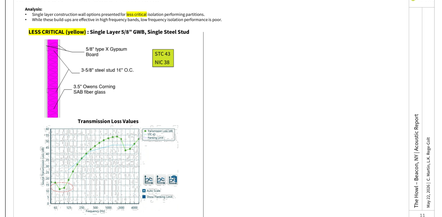
Site / Civil Engineer:
Hudson Land Design
174 Main Street
Beacon, New York 12508

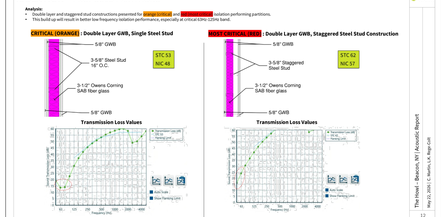
Surveyor:
Johnson Surveying
10 Meadow Lane
Pleasant Valley, NY 12569

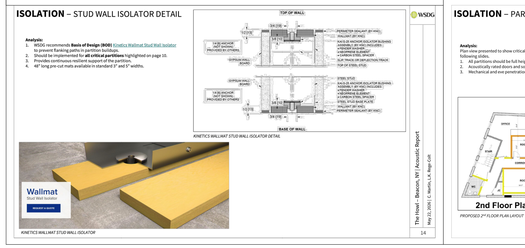
The Howl - 1154 North Avenue

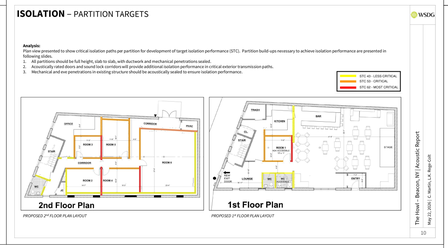
Beacon, New York
Scale: 1" = 10'
December 21, 2025

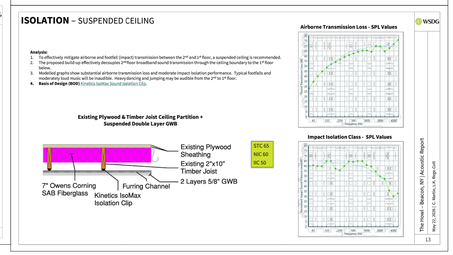












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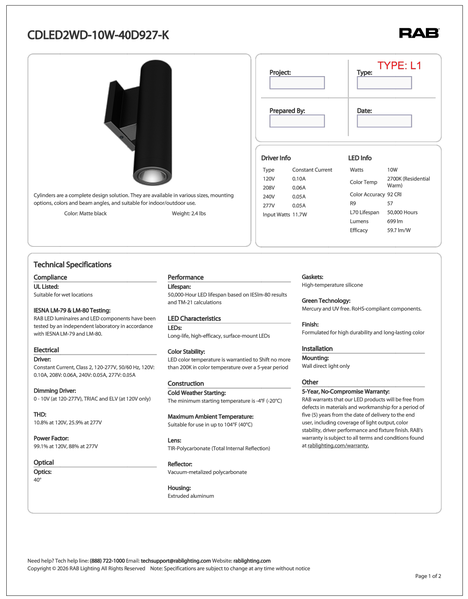
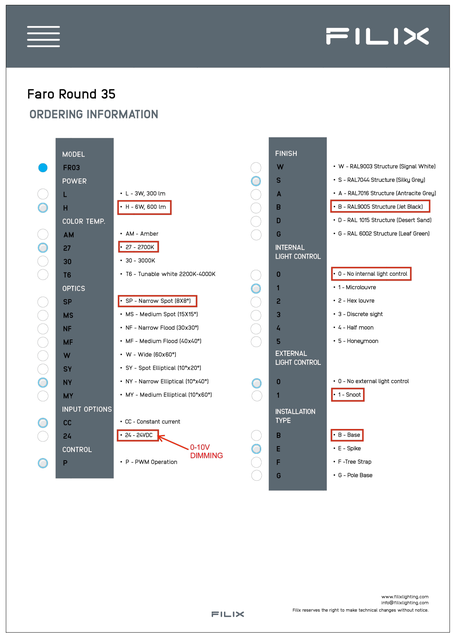


L1: WALL MOUNTED LIGHT

2700K. CRI 80.
COLOR: BLACK.
MOUNTING HEIGHT = 8 FEET.
DARK SKY COMPLIANT

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. AVERAGE LIGHTING LEVELS ON SITE WILL NOT EXCEED THE MAXIMUM AVERAGE OF 1 FOOTCANDLE. EXTERIOR LIGHTS ARE CAPABLE OF BEING DIMMED & SHALL BE CONTROLLED BY A PHOTOCELL (DUSK-TO-DAWN) SENSOR.





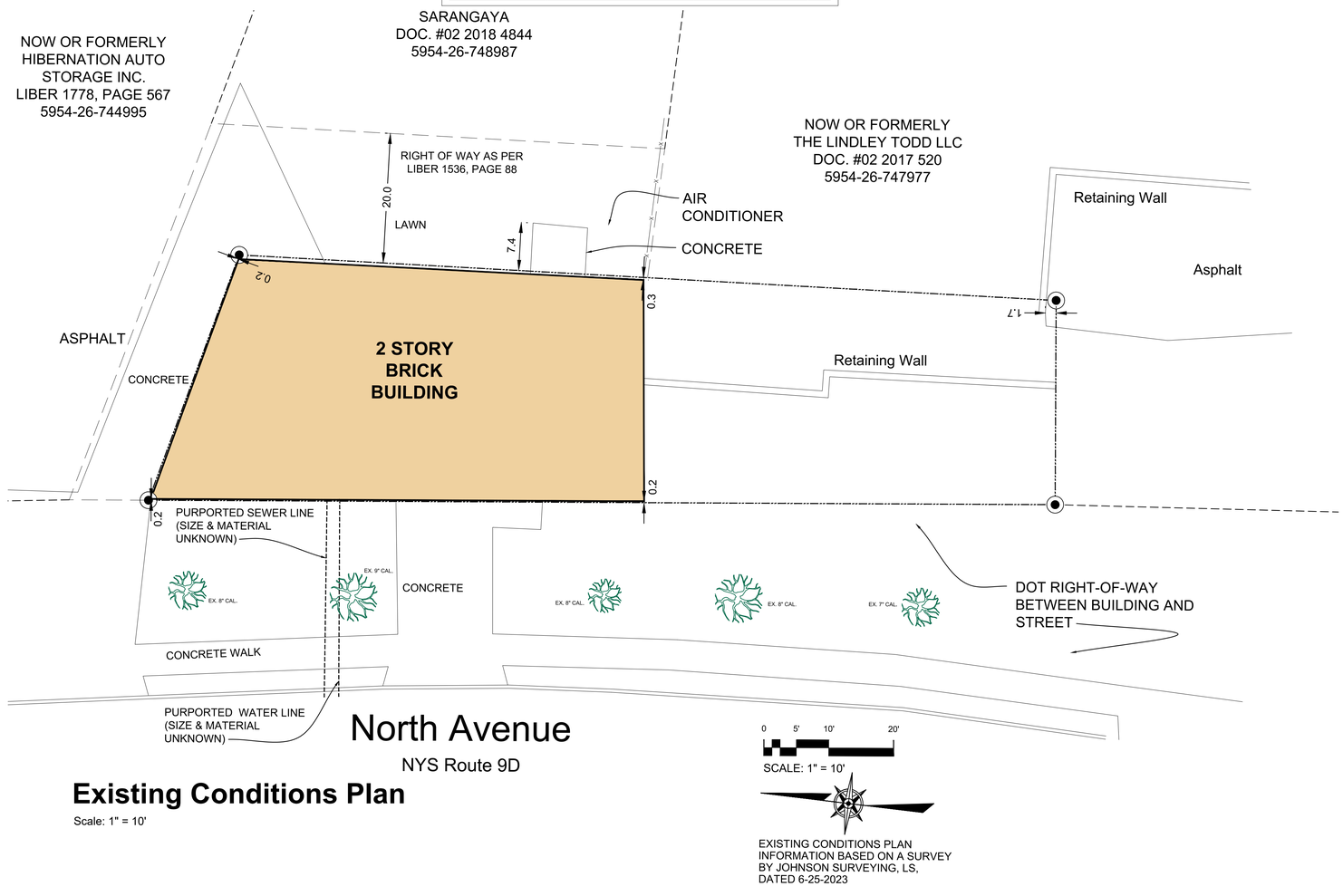
L2: NARROW BEAM SPOT LIGHT

2700K. MOUNT FIXTURE IN SCULPTURE BASE POINTED AT SCULPTURE. NOTE THAT THE MANUFACTURER DOES NOT PROVIDE FOOTCANDLE DIAGRAMS FOR THIS FIXTURE. THE FIXTURE IS SHADED AND DOES NOT EMIT GLARE

ACOUSTIC DETAILS

SELECTED DETAILS FROM THE WSDG ACOUSTIC REPORT

ACOUSTIC DETAILS WILL BE INCORPORATED INTO THE CONSTRUCTION DRAWINGS



Existing Conditions Plan

Scale: 1" = 10'

EXISTING CONDITIONS PLAN INFORMATION BASED ON A SURVEY BY JOHNSON SURVEYING, LS, DATED 6-25-2023

Site Plan Application

Sheet 2 of 5 - Existing Conditions Plan & Lighting Specifications

Owner:
The Lindley, LLC
4 Cross Street
Beacon, New York 12508

Applicant:
Hudson Vox, LLC

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

Site / Civil Engineer:
Hudson Land Design
174 Main Street
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Surveyor:
Johnson Surveying
10 Meadow Lane
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The Howl - 1154 North Avenue
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Scale: 1" = 10'
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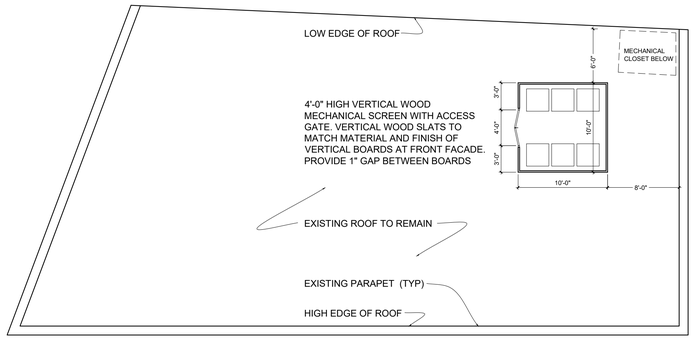

Roof Plan

Scale: $\frac{1}{8}$" = 1'-0"

NOTE: THE NUMBER OF ROOFTOP MECHANICAL UNITS IS ASSUMED BASED ON INITIAL MECHANICAL ASSESSMENT. IF MORE UNITS ARE REQUIRED FOR THE FINAL SYSTEM DESIGN, EXTEND THE MECHANICAL ENCLOSURE TO THE NORTH TO CREATE THE MINIMUM REQUIRED EQUIPMENT CLEARANCES

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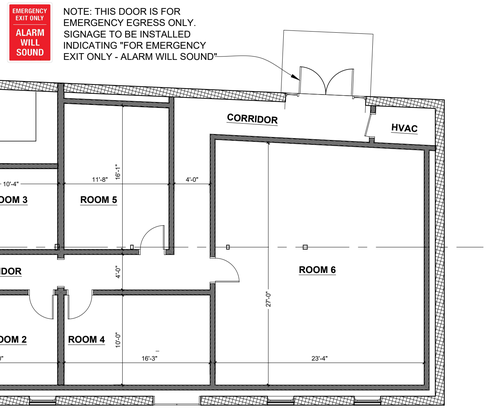
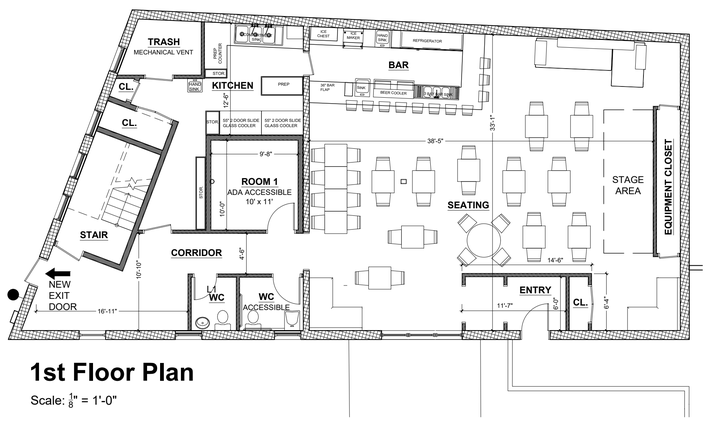


2nd Floor Plan

Scale: $\frac{1}{8}$" = 1'-0"

EXTERIOR FACING SIDE OF WALLS ADJACENT TO EXTERIOR WALLS TO BE PAINTED WHITE



1st Floor Plan

Scale: $\frac{1}{8}$" = 1'-0"

MATERIALS

- EXISTING BRICK
- EXISTING WINDOWS
- NEW **THERMOWOOD** PINE VERTICAL WOOD BOARDS OVER EXISTING WHITE STUCCO. STUCCO TO RECEIVE APPLIED WATERPROOFING. 6" X $\frac{5}{4}$" WOOD BOARDS TO BE INSTALLED ON HORIZONTAL PRESSURE TREATED STAND-OFFS TO ALLOW MOISTURE TO PASS FROM TOP TO BOTTOM
- SCULPTURE BASE - 6X6 WOOD TIMBER
- RETAINING WALL - 6X6 WOOD TIMBER
- 6X6 WOOD TIMBER BORDER AT NEW SIDEWALK TO MATCH EXISTING BORDER

DISPLAY BOX SPECIFICATIONS:

- TEMPERED GLASS DOOR PANEL IN BLACK METAL FRAME
- BLACK METAL BOX RECESS MOUNTED IN WOOD CLADDING
- DIMENSIONS: 42 X 24 X 4"
- SURFACE MOUNTED TO WOOD CLADDING
- CONCEALED LED FIXTURE AT TOP OF BOX - 2700K STRIP LIGHT

SIGN SPECIFICATIONS:

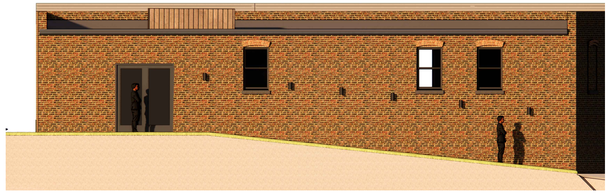
- SIGN TYPE: INDIVIDUALLY FABRICATED, FACE-LIT (INTERNALLY ILLUMINATED) CHANNEL LETTERS WITH MEDIUM WARM WHITE LED ILLUMINATION (4000K), ACRYLIC FACES, AND OPAQUE RETURNS.
- NO HALO / BACKLIGHTING OR ANIMATION.
- DIMENSIONS: 151" X 24" X 5"
- FONT: "NORTH TYPEFACE"



Sculpture



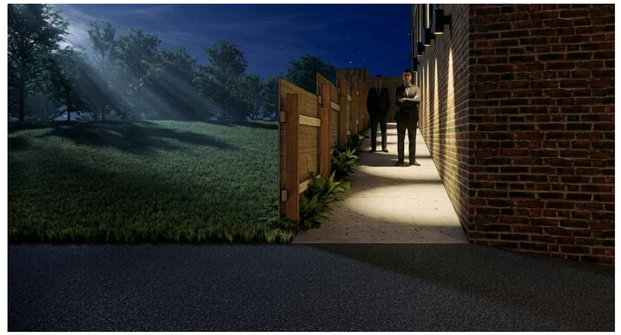
View 2



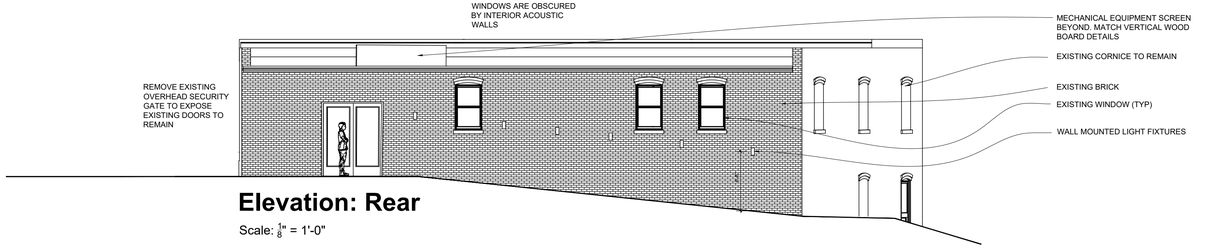
View 3



View 1

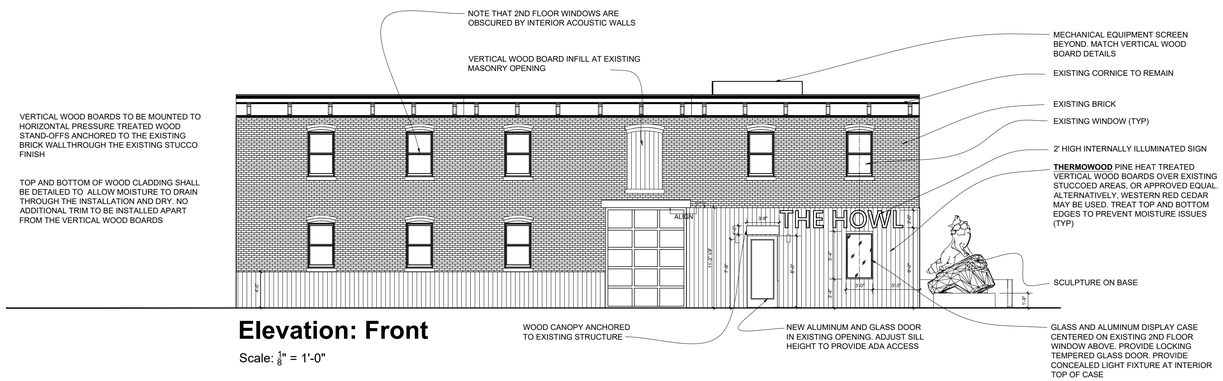


View 4



Elevation: Rear

Scale: $\frac{1}{8}$" = 1'-0"



Elevation: Front

Scale: $\frac{1}{8}$" = 1'-0"

Site Plan Application

Sheet 3 of 5 - Floor Plans & Elevations

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The Howl - 1154 North Avenue
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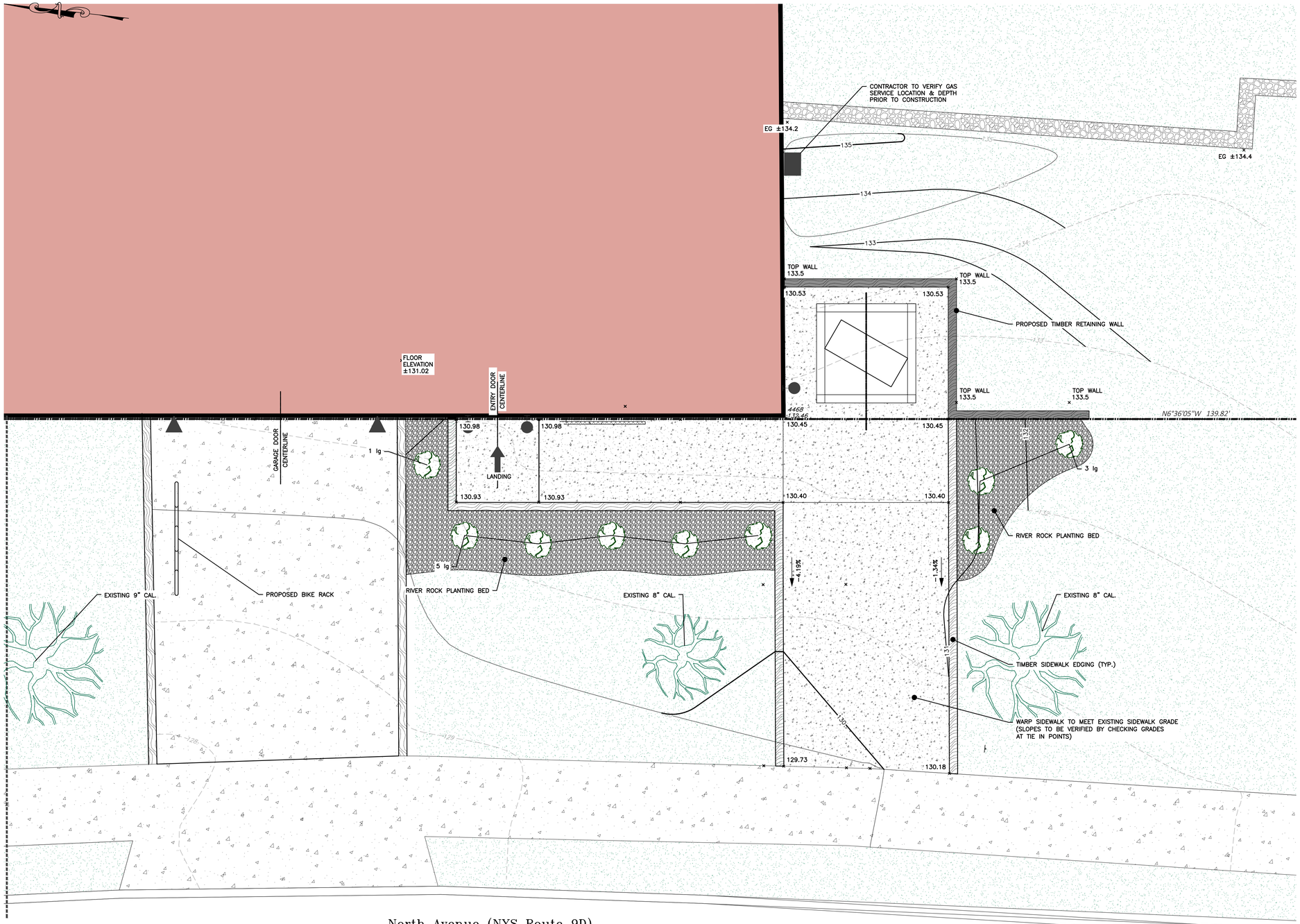
Scale: $\frac{1}{8}$" = 1'-0"
February 6, 2026



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
- EG 130.1 — EXISTING GRADE SPOT ELEVATION
- 129.27 — FINISHED GRADE SPOT ELEVATION

MAP REFERENCES:

1. EXISTING FEATURES PER BOUNDARY SURVEY PREPARED BY BRENDAN JOHNSON, PLS. EXISTING TREE LOCATIONS PER FIELD LOCATION. TOPOGRAPHY EXTRAPOLATED FROM BOUNDARY SURVEY SHOTS AND IS NOT BASED ON A CERTIFIED TOPOGRAPHIC SURVEY.

PLANTING SCHEDULE:

SHRUBS

KEY	QTY	BOTANICAL NAME	COMMON NAME	CALIPER	SPACING
Ig	9	ILEX GLABRA	INKBERRY	2 GALLON	3 FT

LANDSCAPE NOTES:

1. THE LANDSCAPE CONTRACTOR SHALL CAREFULLY COORDINATE CONSTRUCTION ACTIVITIES WITH THAT OF THE EARTHWORK CONTRACTOR AND OTHER SITE DEVELOPMENT.
2. THE CONTRACTOR SHALL VERIFY DRAWING DIMENSIONS WITH ACTUAL FIELD CONDITIONS AND INSPECT RELATED WORK AND ADJACENT SURFACES. THE CONTRACTOR SHALL VERIFY THE ACCURACY OF ALL FINISH GRADES WITHIN THE WORK AREA. THE CONTRACTOR SHALL REPORT TO THE ENGINEER AND OWNER ALL CONDITIONS WHICH PREVENT PROPER EXECUTION OF THIS WORK.
3. THE EXACT LOCATION OF ALL EXISTING UTILITIES, STRUCTURES AND UNDERGROUND UTILITIES, WHICH MAY NOT BE INDICATED ON THE DRAWINGS, SHALL BE DETERMINED BY THE CONTRACTOR. THE CONTRACTOR SHALL PROTECT EXISTING STRUCTURES AND UTILITY SERVICES AND IS RESPONSIBLE FOR THEIR REPLACEMENT IF DAMAGED.
4. THE CONTRACTOR SHALL KEEP THE PREMISES FREE FROM RUBBISH AND ALL DEBRIS AT ALL TIMES AND SHALL ARRANGE MATERIAL STORAGE SO AS NOT TO INTERFERE WITH THE OPERATION OF THE PROJECT. ALL UNUSED MATERIALS, RUBBISH AND DEBRIS SHALL BE REMOVED FROM THE SITE.
5. NO TREES OR SHRUBS SHALL BE PLANTED ON EXISTING OR PROPOSED UTILITY LINES.
6. QUALITY ASSURANCE:
   A. PLANT NAMES SHALL CONFORM TO THE LATEST EDITION OF "STANDARDIZED PLANT NAMES" AS ADOPTED BY THE AMERICAN JOINT COMMITTEE ON HORTICULTURAL NOMENCLATURE.
   B. SIZE AND GRADING: PLANT SIZES AND GRADING SHALL CONFORM TO THE LATEST EDITION OF "AMERICAN STANDARD FOR NURSERY STOCK" AS SPONSORED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC (AAN), UNLESS OTHERWISE SPECIFIED.
   C. NURSERY SOURCE: OBTAIN FRESHLY DUG, HEALTHY, VIGOROUS PLANTS NURSERY GROWN UNDER CLIMACTIC CONDITIONS SIMILAR TO THOSE IN THE LOCALITY OF THE PROJECT FOR A MINIMUM OF 2 YEARS. PLANTS SHALL HAVE BEEN LINED OUT IN ROWS, ANNUALLY CULTIVATED, SPRAYED, PRUNED AND FERTILIZED IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICE. ALL PLANTS SHALL HAVE BEEN TRANSPLANTED OR ROOT PRUNED AT LEAST ONCE IN THE PAST 3 YEARS. BALLED AND BURLAPPED PLANTS MUST COME FROM SOIL WHICH WILL HOLD A FIRM ROOT BALL. HEELED IN PLANTS AND PLANTS FROM COLD STORAGE ARE NOT ACCEPTABLE.
   D. SUBSTITUTIONS: DO NOT MAKE SUBSTITUTIONS OF TREES AND/OR SHRUB MATERIALS. IF REQUIRED LANDSCAPE MATERIAL IS NOT OBTAINABLE, SUBMIT PROOF OF NON-AVAILABILITY AND PROPOSAL FOR USE OF EQUIVALENT MATERIAL.
7. SEEDING & PLANTING SEASONS AND TIMING CONDITIONS:
   A. UNLESS OTHERWISE DIRECTED IN WRITING, SEED LAWNS FROM MARCH 15 TO JUNE 15, AND FROM AUGUST 15 TO OCTOBER 15.
   B. UNLESS OTHERWISE DIRECTED IN WRITING PLANT TREES AND SHRUBS FROM MARCH 15 TO JUNE 1, AND FROM AUGUST 15 TO OCTOBER 30.
8. ALL LANDSCAPING SHALL BE MAINTAINED THROUGHOUT THE LIFE OF THE SITE.

GENERAL CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL PERFORM A UTILITIES CALL-OUT PRIOR TO CONSTRUCTION TO VERIFY ALL UNDERGROUND UTILITY LOCATIONS BY CONTACTING UFPO @ 1-800-962-7962.
2. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS AND INVERTS OF ALL CATCH BASINS & STORM SEWER LINES, SANITARY MANHOLES & SEWER LINES, WATERLINES AND OTHER UNDERGROUND UTILITY LINES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOT ASSUME THAT ALL LOCATIONS AS SHOWN ON THE PLAN ARE CORRECT. INVESTIGATIVE TEST PITS MAY BE REQUIRED TO VERIFY LOCATIONS.
3. ALL EXISTING & PROPOSED UTILITIES (TELEPHONE, ELECTRIC, GAS, CABLE, WATER, SEWER, ETC.) SHALL BE IDENTIFIED PRIOR TO CONSTRUCTION. ALL SUCH UTILITY DESIGNS SHALL BE DEVELOPED IN COOPERATION WITH THE RESPECTIVE UTILITY COMPANIES. CONFLICTS SHALL BE BROUGHT TO THE DESIGN ENGINEERS ATTENTION

ADA CONSTRUCTION NOTES:

1. ADA ACCESSIBLE COMPONENTS AND ACCESS ROUTES FOR THE SITE MUST COMPLY WITH ALL APPLICABLE STATE AND LOCAL ACCESSIBILITY LAWS AND REGULATIONS AND THE CURRENT ADA STANDARDS. FINISHED SURFACES ALONG THE ACCESSIBLE ROUTE FROM PARKING SPACE OR PEDESTRIAN ACCESS TO POINTS OF ACCESSIBLE BUILDING INGRESS/OR EGRESS, MUST COMPLY WITH ADA REQUIREMENTS. THESE INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:
   1.1. LANDINGS – MUST BE PROVIDED AT EACH END OF RAMPS, MUST PROVIDE POSITIVE DRAINAGE, AND MUST NOT EXCEED 1:48 IN ANY DIRECTION.
   1.2. PATH OF TRAVEL ALONG ACCESSIBLE ROUTE – MUST PROVIDE A 36-INCH OR GREATER UNOBSTRUCTED WIDTH OF TRAVEL. THE SLOPE MUST BE NO GREATER THAN 1:20 IN THE DIRECTION OF TRAVEL, AND MUST NOT EXCEED 1:48 IN CROSS SLOPE. WHERE PATH OF TRAVEL WILL BE GREATER THAN 1:20, ADA RAMP STANDARDS MUST BE MET WITH A MAXIMUM SLOPE OF 1:12, FOR A MAXIMUM RISE OF 30 INCHES. RAMPS MUST HAVE ADA HAND RAILS AND LANDINGS AT BOTH THE TOP AND BOTTOM OF EACH RAMP, WITH CROSS SLOPES NO MORE THAN 1:48 IN ANY DIRECTION.
   1.3. DOORWAYS – MUST HAVE A LANDING AREA ON THE EXTERIOR SIDE OF THE DOOR THAT IS SLOPED AWAY FROM THE DOOR NO MORE THAN 1:48 AND MUST BE NO LESS THAN 60 INCHES LONG.
2. WHEN THE PROPOSED CONSTRUCTION INCLUDES CONNECTION TO EXISTING ADA COMPONENTS, CONTRACTOR MUST VERIFY EXISTING ELEVATIONS SHOWN. NOTIFY THE DESIGN ENGINEER IMMEDIATELY IF THERE ARE ANY DISCREPANCIES OR FIELD CONDITIONS THAT DIFFER FROM WHAT IS SHOWN BEFORE COMMENCING WORK. CONSTRUCTED IMPROVEMENTS MUST COMPLY WITH THE MAXIMUM AND MINIMUM ADA REQUIREMENTS.
3. THE CONTRACTOR MUST VERIFY THE SLOPES OF THE FORMWORK PRIOR TO POURING CONCRETE. CONTRACTOR IS RESPONSIBLE FOR ALL COSTS TO REMOVE, REPAIR AND REPLACE NON-CONFORMING CONCRETE.

DRAWN BY: CMB				CHECKED BY: DGK			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	3/31/26	PER PLANNING BOARD COMMENTS	CMB				
2	4/28/26	PER PLANNING BOARD COMMENTS	CMB				
3	5/26/26	NO CHANGE THIS SHEET	CMB				
4	6/30/26	NO CHANGE THIS SHEET	CMB				

GRAPHIC SCALE

3 0 1.5 3 6 12

(IN FEET)
1 inch = 3 ft.

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SEAL

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

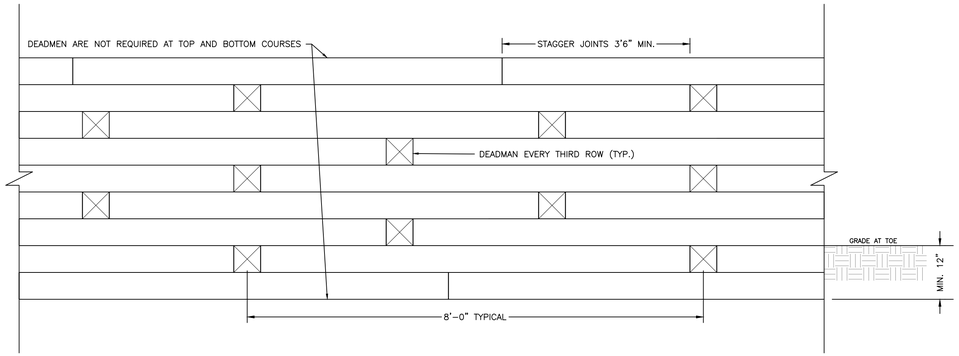
GRADING & LANDSCAPING PLAN

THE HOWL

1154 NORTH AVENUE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 5954-26-740983

JOB #:	2025:055
DATE:	1/27/2026
SCALE:	1" = 3'
TITLE:	GR-1
SHEET:	4 OF 5

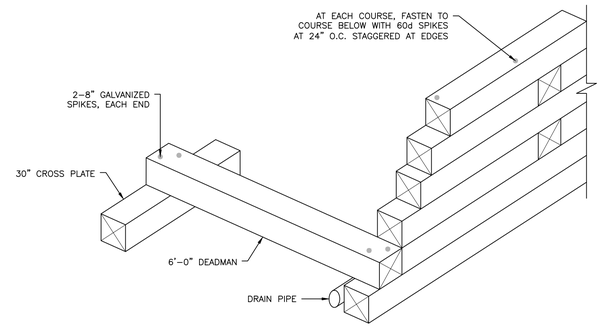
UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION LAW

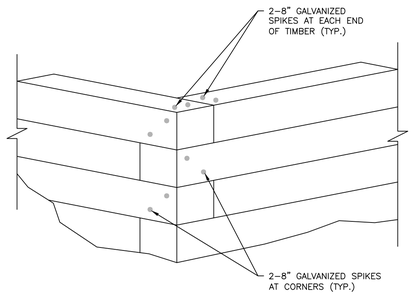


NOTES:

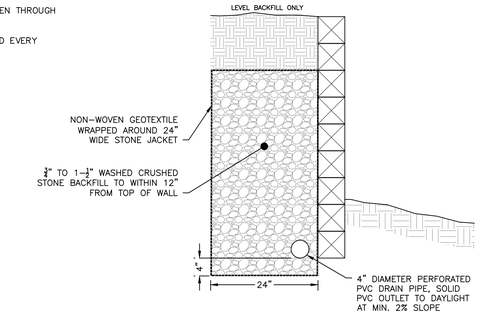
1. WALL COMPOSED OF 6" X 6" PRESSURE TREATED LANDSCAPE TIMBER (UC4A GRADE).
2. FOR FOUNDATION, EXCAVATE A TRENCH 6"–12" DEEP AND FILL WITH 4" OF WASHED CRUSHED STONE WITH NON–WOVEN GEOTEXTILE FOR DRAINAGE.
3. FOR BASE COURSE USE THE LARGEST 6" X 6" TIMBERS, LEVELING THEM METICULOUSLY. SECURE TO GROUND USING 3–FOOT LENGTHS OF #4 REBAR ($\frac{1}{2}$" DIAMETER) DRIVEN THROUGH PRE–DRILLED HOLES, SPACED MAX. 3 FEET APART.
4. FASTEN TIMBER COURSES USING 8–INCH GALVANIZED SPIKES AT 24" O.C. STAGGERED AT EDGES.
5. FOR WALLS 2–FEET IN HEIGHT OR GREATER, INSTALL "DEADMEN" 6–FOOT TIMBER SECTIONS PERPENDICULAR TO THE WALL, BURIED IN THE BACK FILL, TYPICALLY SPACED EVERY 8–FEET AND STAGGERED BETWEEN COURSES.
6. INSTALL PERFORATED DRAIN PIPE BEHIND THE BASE COURSE SURROUNDED BY STONE TO ALLEVIATE HYDROSTATIC PRESSURE.
7. USE WASHED CRUSHED STONE DIRECTLY BEHIND TIMBER WALL, SEPARATING IT FROM THE SOIL WITH NON–WOVEN GEOTEXTILE FABRIC TO PREVENT CLOGGING.
8. STAGGER JOINTS 3'–6" TO ENSURE STRUCTURAL INTEGRITY.
9. ALWAYS TREAT CUT ENDS OF TREATED TIMBER WITH A PRESERVATIVE LIKE COPPER NAPHTHENATE.

TYPICAL TIMBER RETAINING WALL DETAIL
NOT TO SCALE

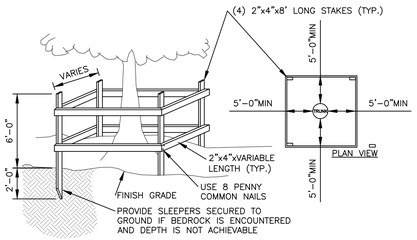




TYPICAL TIMBER RETAINING WALL FASTENERS & DEADMAN DETAIL
NOT TO SCALE

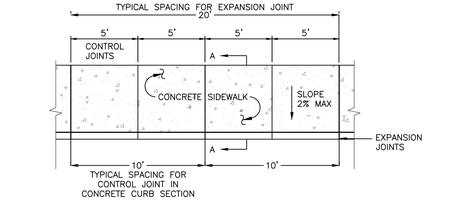


TIMBER RETAINING WALL BACKFILL AND DRAINAGE DETAIL
NOT TO SCALE

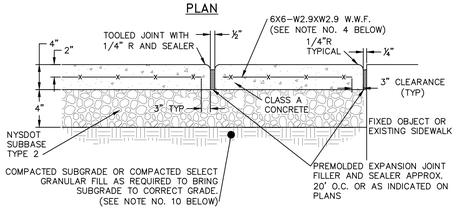


NOTES:
1. TREES TO REMAIN NOTED ON EXISTING CONDITIONS PLAN.
2. NOT ALL TREES TO REMAIN REQUIRE PROTECTION. TREE PROTECTION TO BE UTILIZED ON TREES WHERE CONSTRUCTION TRAFFIC WOULD COMPACT THE ROOT ZONE OF THE TREE.

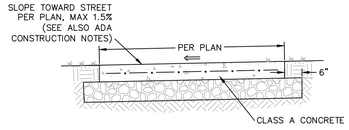
TEMPORARY TREE PROTECTION DETAIL
NOT TO SCALE



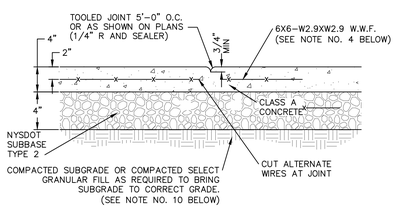
PLAN



EXPANSION JOINT



SECTION A–A

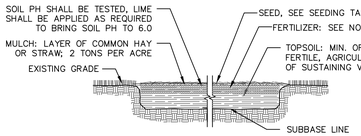


CONTROL JOINT

NOTES:

1. 10' SPACING OF CONTROL JOINTS SHALL BE USED FOR CAST IN PLACE CONCRETE CURBS.
2. MATERIAL AND METHODS OF CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION (NYSDOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, LATEST REVISION.
3. ALL CONCRETE SHALL BE 4,000 PSI CLASS A CONCRETE. CONCRETE MATERIALS, PLACEMENT, AND CONSTRUCTION SHALL CONFORM WITH SECTION 500 OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
4. REINFORCING STEEL FOR CONCRETE SHALL CONFORM WITH SECTION 556 – REINFORCING STEEL FOR CONCRETE STRUCTURES OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS AND AS SPECIFICALLY CALLED OUT IN THE DRAWINGS.
5. ALL EXPOSED SURFACED SHALL HAVE A BROOM TEXTURED FINISH.
6. EXPANSION JOINTS SHALL BE LOCATED A MAXIMUM OF 20' ON CENTER, OR AS INDICATED ON PLANS.
7. JOINTS SHALL NOT BE SAW CUT.
8. EXPOSED CONCRETE SURFACES SHALL BE TREATED WITH "SUREBOND"/"SAFEBOND"SB–7000 INTENSIFIER BRIGHT PROTECTOR AND SIDEWALK SEALER, OR EQUAL. RATE AND METHOD OF APPLICATION SHALL BE IN ACCORDANCE WITH MANUFACTURE'S RECOMMENDATIONS.
9. SUBBASE MATERIAL SHALL CONFORM WITH SECTION 304 OF THE ABOVE REFERENCED NYSDOT STANDARD.
10. WHERE IT IS NECESSARY TO PLACE FILL FOR PURPOSE OF BRINGING THE SUBGRADE ELEVATION UP TO A SPECIFIED GRADE, THE FILL MATERIAL PLACED SHALL BE IN CONFORMATION WITH SECTION 203–EXCAVATION AND EMBANKMENT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
11. ALL WORK SHALL CONFORM WITH SECTION 608–SIDEWALK, DRIVEWAYS, AND BICYCLE PATHS OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
12. CONCRETE SHALL BE SEALED WITH A SALT RESISTANT SEALER.

CONCRETE SIDEWALK DETAIL
NOT TO SCALE

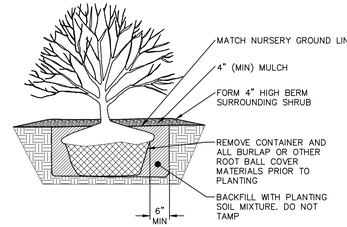


NOTES:
1. COMPACTED SECTIONS REQUIRE CHISELING OR DISKING TO PROVIDE AN ADEQUATE ROOTING ZONE TO A MINIMUM DEPTH OF 12". REMOVE ALL STONES AND OTHER DEBRIS FROM THE SURFACE THAT ARE GREATER THAN 4 INCHES, OR THAT WILL INTERFERE WITH FUTURE MOWING OR MAINTENANCE.
2. SOIL AMENDMENTS SHOULD BE INCORPORATED INTO THE UPPER 2" OF SOILS BASED ON SOIL TESTING. IF SOIL MUST BE FERTILIZED BEFORE RESULTS OF A SOIL TEST CAN BE OBTAINED TO DETERMINE FERTILIZER NEEDS, APPLY COMMERCIAL FERTILIZER AT 600 POUNDS PER ACRE 5–5–10 OR EQUIVALENT. FERTILIZER SHALL NOT BE APPLIED BETWEEN DECEMBER 1 AND APRIL 1 ANNUALLY, AND SHALL NOT BE APPLIED WITHIN 20 FEET OF A SURFACE WATER. ALL APPLICATION OF FERTILIZER SHALL BE IN ACCORDANCE WITH NUTRIENT RUNOFF LAW – ECL ARTICLE 17, TITLE 21.
3. PERMANENT SEEDINGS MAY BE MADE ANY TIME OF YEAR IF PROPERLY MULCHED AND ADEQUATE MOISTURE IS PROVIDED. LATE JUNE THROUGH EARLY AUGUST IS NOT OPTIMAL SEEDING PERIOD AS PORTIONS OF THE SEEDING MAY FAIL DUE TO DROUGHT AND HEAT. THESE AREAS MAY NEED RESEEDING IN LATE SUMMER/FALL OR THE FOLLOWING SPRING.
4. WATERING MAY BE ESSENTIAL TO ESTABLISH A NEW SEEDING WHEN A DROUGHT CONDITION OCCURS SHORTLY AFTER A NEW SEEDING EMERGES. DO NOT EXCEED THE APPLICATION RATE FOR THE SEED OR SUBSOIL.

SEEDING TABLE

TYPE	GENERAL PURPOSE:	SHADED AREAS:	SANDY/GRAVELLY AREAS:
SEED MIXES	CREEPING RED FESCUE---20 LBS./ACRE CHEWINGS FESCUE------20 LBS./ACRE PERENNIAL RYEGRASS-----5 LBS./ACRE RED CLOVER----------10 LBS./ACRE	CREEPING RED FESCUE---10 LBS./ACRE PERENNIAL RYEGRASS----10 LBS./ACRE	SWITCHGRASS-------4 LBS./ACRE BIG BLUESTEM------ 4 LBS./ACRE LITTLE BLUESTEM-----2 LBS./ACRE INDIANGRASS---------4 LBS./ACRE COASTAL PANICGRASS---2 LBS./ACRE SIDEOATS GRAMA------2 LBS./ACRE WILDFLOWER MIX------0.5 LBS/ACRE
NOTES: ALL SEEDING RATES ARE FOR PURE LIVE SEED (PLS). LBS. = POUNDS (WEIGHT).			

PERMANENT TOPSOIL, SEED, FERTILIZER, AND MULCH DETAIL (FOR ESTABLISHING LAWNS)
NOT TO SCALE



NOTE
1. WATER PER NURSERY SPECIFICATIONS IMMEDIATELY FOLLOWING PLANTING.
2. DETAIL IS FOR BOTH BALL & BURLAPPED OR CONTAINERED SHRUBS.

SHRUB PLANTING DETAIL
NOT TO SCALE

DRAWN BY: CMB				CHECKED BY: DGK			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	3/31/26	PER PLANNING BOARD COMMENTS	CMB				
2	4/28/26	PER PLANNING BOARD COMMENTS	CMB				
3	5/26/26	NO CHANGE THIS SHEET	CMB				
4	6/30/26	NO CHANGE THIS SHEET	CMB				

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SEAL

HUDSON LAND DESIGN
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174 MAIN ST., BEACON, NEW YORK 12508
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845–440–6926

CONSTRUCTION DETAILS

THE HOWL

1154 NORTH AVENUE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 5954–26–740983

JOB #:	2025:055
DATE:	1/27/2026
SCALE:	AS SHOWN
TITLE:	CD–1
SHEET:	5 OF 5

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

ARYEH SIEGEL
ARCHITECT

Mercedes Perez
Planning Board Secretary
City of Beacon
One Municipal Plaza
Beacon, NY 12508

Re: The Howl - 1154 North Avenue
Sign Permit Application

June 26, 2006

Dear Mercedes,

We are submitting the attached Sign Permit Application per Bryan Murphy's direction. We'll also include this Application in our full Planning Board submittal on Tuesday so the Board sees that we responded to the comment.

Please find enclosed

- Sign Permit Application for the proposed signage. The sign matches the sign on the Planning Board elevations
- 11x17 reduced copy of the Site Plan Sheet 2 - Elevation to show the design and specifications for the proposed sign
- Electronic copies sent by email by the Applicant

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

Sincerely,



Aryeh Siegel
Aryeh Siegel, Architect

84 Mason Circle
Beacon, New York 12508
ajs@ajsarch.com
www.ajsarch.com
Tel 845 838 2490
Fax 845 838 2657

CITY OF BEACON

BUILDING DEPARTMENT
1 Municipal Plaza, Beacon, NY, 12508
Ph: (845) 838-5020 | Fax: (845) 838-5026
Email: building@beaconny.gov

Application for Sign Permit

INSTRUCTIONS

a. ***This application must be completely filled in and submitted to the Building Inspector.***

b. ***This application must be accompanied by two copies of colored rendering of proposed sign.***

c. ***The plan must include dimensions and square foot calculations.***

d. ***The work covered by this application may not be commenced before the issuance of a sign permit.***

e. ***Upon approval of this application, the Building Department will issue a sign permit to the applicant together with approved, duplicate copy of drawings. Such permit and approved drawings shall be kept on the premises available for inspection throughout the progress of the work.***

f. ***All electrical work to be done by an electrician licensed to work in the City of Beacon and shall comply with the City of Beacon Electrical Code.***

g. ***All work to be done in accordance with the plans and specification and no person shall make any change in said plans and specifications without the written consent of the Building Department.***

BUILDING DEPARTMENT

City of Beacon

Approved: _____ **20**____

Disapproved:_____ **20**____

_____

Building Inspector

Application for Sign Permit

Date: 6/24/26

Address of Sign: 1154 North Avenue, Beacon, NY 12508

Property Owner

Name: The Lindley LLC **Phone:** (617) 335-4446

Address: 4 Cross St., Beacon, NY 12508

Business Owner

Name of Business Owner: Eric Weitner **Phone:** (212) 365-4861

Name of Business: Hudson Vox LLC

Sign Company

Name: Quick Signage **Phone:** (913) 421-6865

Address: 2 University Plaza Suite 100, Hackensack, NJ 07601

Type of Sign:

_____ **Ground ($35)** __X__ **Wall ($25)** _____ **Temporary Sign ($10)**

Sign Content: 'The Howl' text, backlit and with a raceway

Height of Sign (if Applicable): 2 feet **Sign Dimensions:** 151" x 24"

Type of Materials to be Used: Acrylic and Aluminium

Means of Anchoring: Mechanical anchorage to brick masonry using masonry anchors

APPLICATION IS HEREBY MADE to the Building Department for the issuance of a Sign Permit pursuant to the City of Beacon Code of Ordinances. The applicant agrees to comply with all applicable laws, ordinances, and regulations.

_____

(Signature of Property Owner)

City of Beacon
Building Department

APPLICATION PROCESSING RESTRICTION LAW
Affidavit of Property Owner

Property Owner: The Lindley LLC
(Applicant)

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

Joseph Donovan, Janet St. Goar

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

Please see attached

Applicant Address: 4 Cross Street, Beacon NY 12508
Project Address: 1154 North Avenue, Beacon NY 12508
Project Tax Grid #: 5954-26-740983
Type of Application: Signage permit

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

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

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

Signature of Owner

Member
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)	___	___	_____

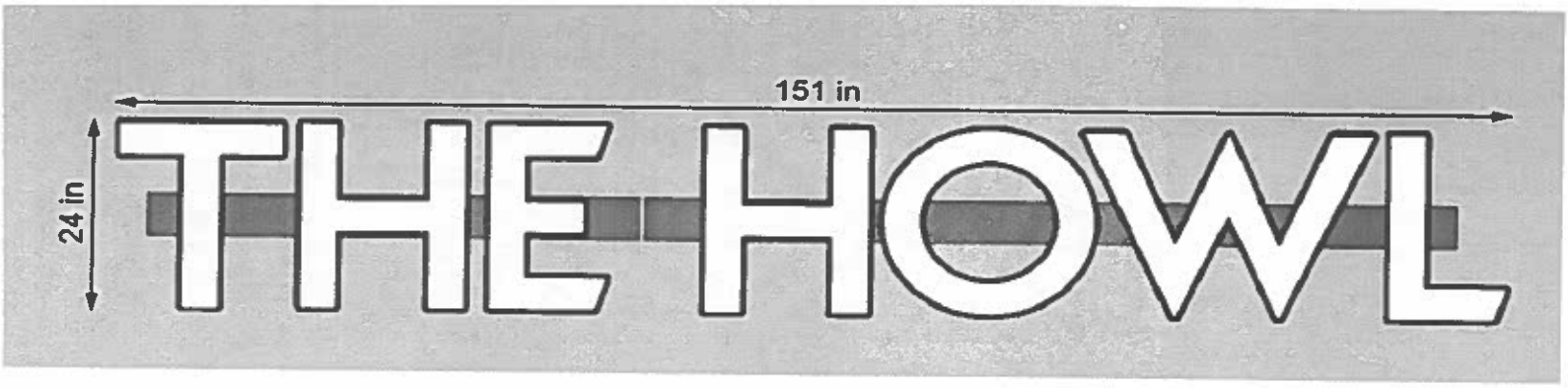
Beacon Property List

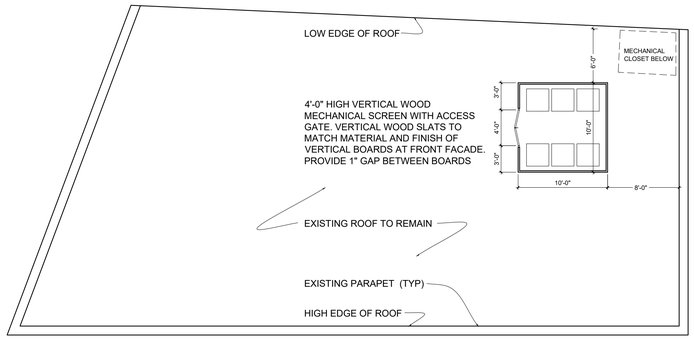
Location
Hudson Todd LLC
172 Main St
19 Paye St
10 Cross St
23 Beacon St
6 Commerce St
Beacon Todd LLC
18-20 W Main St
The Lindley LLC
1154 North Ave
13 W Church St
139 Main St
7 High St
Main St, The Lindley Todd LLC
134 Main St
142 Main St
144-146 Main St
150 Main St
152 Main St
160 Main St (unimproved)
127 Main St (unimproved)
129 Main St
131-137 Main St
145 Main St
149 Main St
15 W.Church (unimproved)
17 W.Church (unimproved)
19 W.Church (unimproved)
23 W.Church (unimproved)

9 Cross St

8 Cross St

12 Cross St


151 in
24 in
THE HOWL

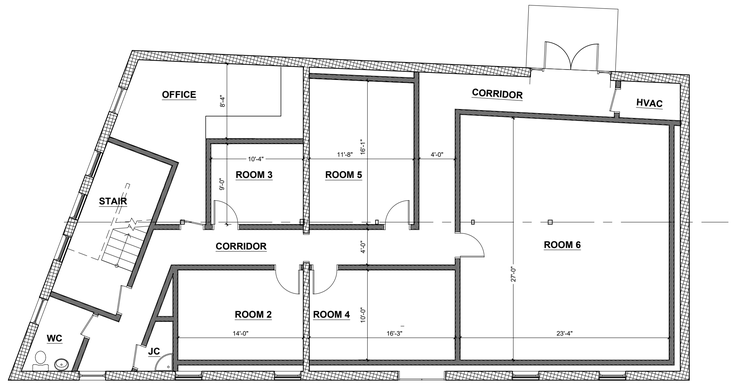


Roof Plan

Scale: $\frac{1}{8}$" = 1'-0"

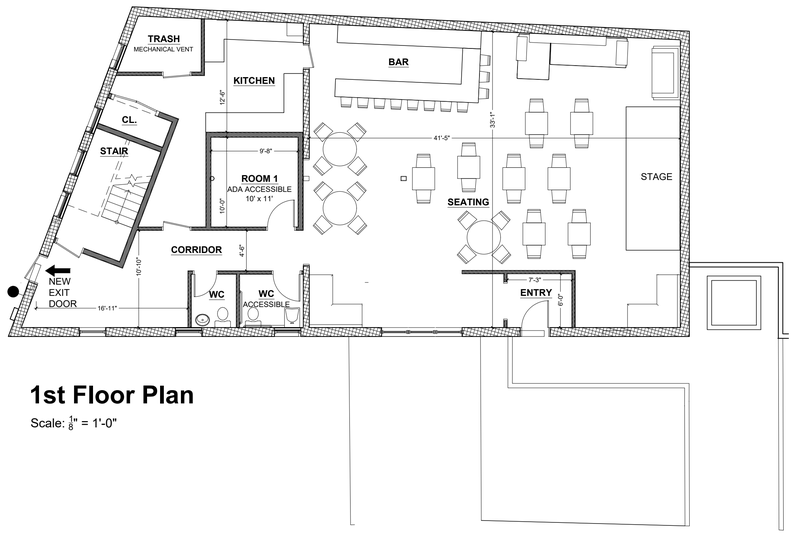
NOTE: THE NUMBER OF ROOFTOP MECHANICAL UNITS IS ASSUMED BASED ON INITIAL MECHANICAL ASSESSMENT. IF MORE UNITS ARE REQUIRED FOR THE FINAL SYSTEM DESIGN, EXTEND THE MECHANICAL ENCLOSURE TO THE NORTH TO CREATE THE MINIMUM REQUIRED EQUIPMENT CLEARANCES

REVISIONS:			
NO.	DATE	DESCRIPTION	BY
1	03/31/26	REVISED PER PLANNING BOARD COMMENTS	AJS
2	04/28/26	REVISED PER PLANNING BOARD COMMENTS	AJS
3	05/26/26	REVISED PER PLANNING BOARD COMMENTS	AJS



2nd Floor Plan

Scale: $\frac{1}{8}$" = 1'-0"



1st Floor Plan

Scale: $\frac{1}{8}$" = 1'-0"

MATERIALS

- EXISTING BRICK
- EXISTING WINDOWS
- NEW **THERMOWOOD** PINE VERTICAL WOOD BOARDS OVER EXISTING WHITE STUCCO. STUCCO TO RECEIVE APPLIED WATERPROOFING. 6" X $\frac{3}{4}$" WOOD BOARDS TO BE INSTALLED ON HORIZONTAL PRESSURE TREATED STAND-OFFS TO ALLOW MOISTURE TO PASS FROM TOP TO BOTTOM
- SCULPTURE BASE - 6X6 WOOD TIMBER
- RETAINING WALL - 6X6 WOOD TIMBER
- 6X6 WOOD TIMBER BORDER AT NEW SIDEWALK TO MATCH EXISTING BORDER

DISPLAY BOX SPECIFICATIONS:

- TEMPERED GLASS DOOR PANEL IN BLACK METAL FRAME
- BLACK METAL BOX RECESS MOUNTED IN WOOD CLADDING
- DIMENSIONS: 42 X 24 X 4"
- SURFACE MOUNTED TO WOOD CLADDING
- CONCEALED LED FIXTURE AT TOP OF BOX - 2700K STRIP LIGHT

SIGN SPECIFICATIONS:

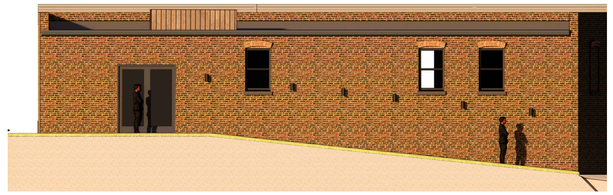
- SIGN TYPE: INDIVIDUALLY FABRICATED, FACE-LIT (INTERNALLY ILLUMINATED) CHANNEL LETTERS WITH MEDIUM WARM WHITE LED ILLUMINATION (4000K), ACRYLIC FACES, AND OPAQUE RETURNS.
- NO HALO / BACKLIGHTING OR ANIMATION.
- DIMENSIONS: 151" X 24" X 5"
- FONT: "NORTH TYPEFACE"



Sculpture



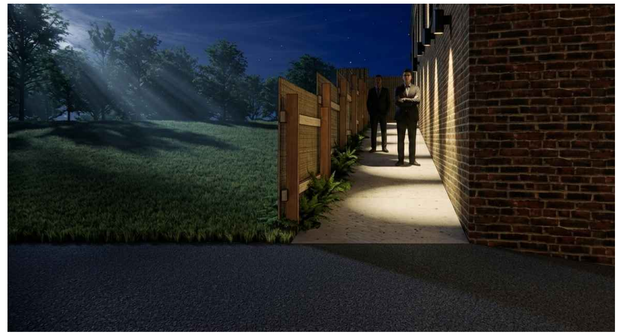
View 2



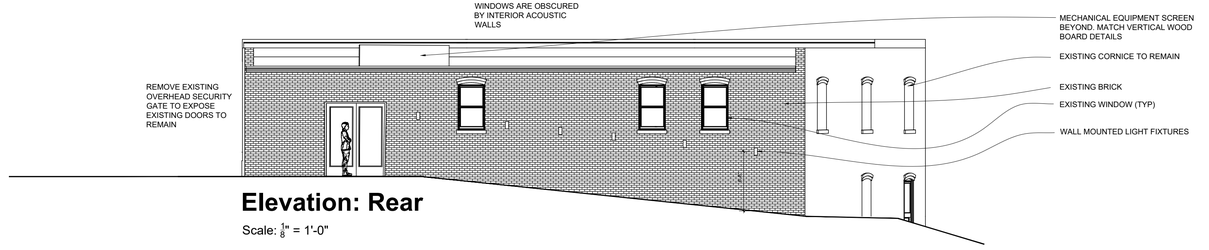
View 3



View 1

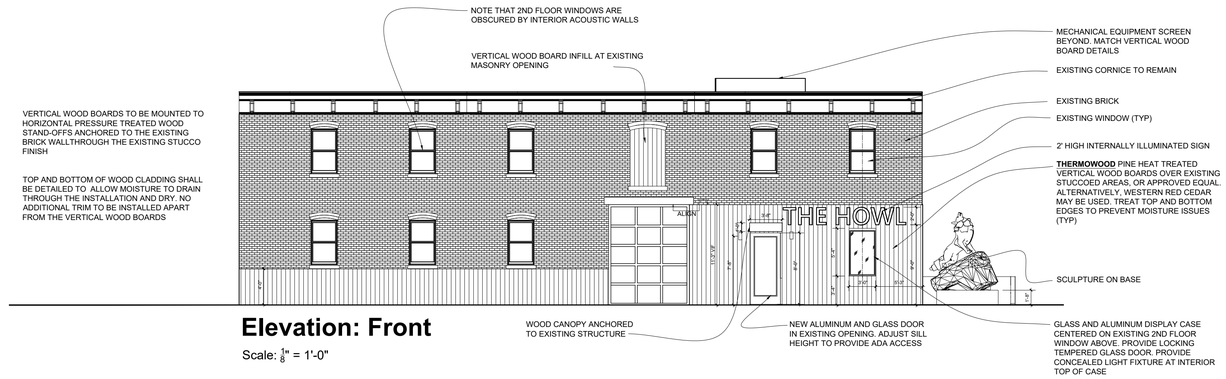


View 4



Elevation: Rear

Scale: $\frac{1}{8}$" = 1'-0"



Elevation: Front

Scale: $\frac{1}{8}$" = 1'-0"

Site Plan Application

Sheet 3 of 5 - Floor Plans & Elevations

Owner:
The Lindley, LLC
4 Cross Street
Beacon, New York 12508

Applicant:
Hudson Vox, LLC

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:
Johnson Surveying
10 Meadow Lane
Pleasant Valley, NY 12569

The Howl - 1154 North Avenue

Beacon, New York
Scale: $\frac{1}{8}$" = 1'-0"
February 6, 2026

ADD ACOUSTIC DETAILS

From: Lana Denysyk
To: Mercedes Perez
Subject: The Howl Public Support Letter
Date: Tuesday, June 23, 2026 9:22:16 AM

Dear Members of the Beacon Planning Board,

I am writing as a resident of Beacon to express my enthusiastic support for the proposed private karaoke bar, The Howl.

While Beacon boasts an incredible array of dining and nightlife options, our community is currently underserved when it comes to interactive, experiential entertainment for adults. The Howl introduces a unique, social concept that fills this gap perfectly, offering residents a memorable way to gather, celebrate, and connect.

From a community standpoint, a venue like this provides a crucial "stay-local" incentive. Rather than traveling to neighboring cities or New York City for novel evening entertainment, residents can keep their spending right here in Beacon, benefiting our local economy.

The Howl will bring positive energy to our downtown district and diversify our nighttime economy in a refreshing way. I strongly encourage the Planning Board to approve this project and welcome this vibrant new addition to our city.

Thank you for your time and your continued dedication to Beacon's growth.

Best,

Lana Denysyk

From:	Matt Harle
To:	Mercedes Perez
Subject:	Support for The Howl
Date:	Saturday, July 11, 2026 12:50:13 PM

Dear Members of the Planning Board,

My name is Matt Harle, and I'm a local resident and artist. I wanted to take a moment to share my support for Eric Weitner and Leah Cheng.

For two months this Spring, I sublet the 1154 North Ave. property from Eric and Leah as a space to show my art. I found them to be very supportive of my project and generally pleasant to deal with (Eric in fact came to both my opening and closing receptions). While I feel unqualified to weigh-in on the specifics of their proposal, I can say that their plans for The Howl sound promising, and that I have been impressed with Eric and Leah's interest in, and desire to contribute to, the local creative scene. I have also been encouraged by their openness to allowing their project to evolve as they grow to understand the community's needs. And I am personally pleased with the prospect of a new music and performance space in Beacon. In conclusion, I have found Leah and Eric to be generous and personable, and I feel that The Howl has the potential to be a valuable addition to the Beacon community.

Thank you for your time and consideration.

Best regards,

Matt Harle

RE: 1154 North Avenue, Hudson Vox LLC
To: Beacon Planning Board
From: James Zellinger, resident West Church

PUBLIC COMMENT – July 14, 2026

Context

My house is located across the back parking lot from 1154 North Avenue. The venue is roughly 100 ft from my back yard. Two bedrooms in my house lie on the west side of the house and one on the south side; all overlook the venue with clear sightlines.

Considerations

The most recent packet of documents submitted for 1154 North Avenue does little to alter their previous proposal. The only practical change is the removal of a Monday holiday increase to the Sunday hours. The other concerns (noise, parking, neighborhood impacts) all referenced by members of the public have not been adequately addressed. Instead, the applicant has described their "need" for the hours proposed as a critical function of their business plan, and their ties to the community.

Hours

The applicant has relied on comparisons to local bars as justification for the proposed hours. These comparisons are not apples to apples. Quinn's has an enormous parking lot behind it and is located on Main Street with the stage on the Main Street side. TVR, also on Main Street, much smaller and has limited capability for routine music events and also has parking surrounding the building. The Piggy Bank has a large parking lot, is again on Main Street and is located near other later evening businesses. Happy Valley is also on Main Street and only occasionally has live music. All of these venues are on the Central or East side of Main Street, all face Main Street directionally, and all have some sort of immediate parking availability that does not directly impact residential neighborhoods. Additionally, every bar used as an example have experienced the exact impactful behavior we are warning against (which John Gunn mentioned in the last meeting). They have all experienced spill over, unruly customers, loud patrons, and substantial noise beyond their doors. Thankfully these businesses are on Main Street and not abutting residential neighborhoods.

In contrast, 1154 is not on Main Street, does not have a clearly understood and acceptable parking area near the venue, and is much larger than any of the comparator businesses, exacerbating the potential impact. Furthermore, the building is located in an area that does not have routine, late evening programming or businesses**. It would be a substantial and noticeable outlier for our area.**

"172 occupants" – This number dwarfs TVR (99), Quinn's (100), The Piggy Bank (100), and Happy Valley (85).

"We are not seeking to introduce a new late-night condition into an otherwise inactive commercial area. We are proposing hours that align with existing Main Street activity while offering a more controlled, reservation-based, indoor entertainment model."

Incorrect. The area in question does not have an established late-night persona. All of the examples stated in the application are on the other side of town and are located directly on Main Street. The closest late-night (10p on weekends) venue is Meyer's Old Dutch, more than two full blocks away.

"The Howl offers an alternative to that pattern. It keeps patrons indoors, engaged in a defined activity, and under staff supervision. In that respect, allowing The Howl to operate within the existing Main Street late-night framework may reduce, rather than increase, the likelihood of sidewalk congregation, aimless bar-hopping, or post-closing dispersal issues."

The idea that adding a bar / karaoke venue to a quiet section of Beacon will somehow reduce the sidewalk congregation and congestion is absurd. It doesn't happen now because the businesses in the area are not centered on late night activity, no bars, no late-night restaurants, one coffee shop that closes at 7p. You can't go from 0 people on the street to less than 0.

Revenue

The hours stated are proposed as a *requirement* for the success of the business. They state that the patrons expect a business to be open late on weeknights and later on weekends. The viability of the business should not demand concessions from the local community. The proposal is asking for us to up-end our lives in service to what they feel is necessary for revenue. Instead of realizing the issues surrounding this location, they are pushing against the local residents.

"proposed hours are essential to the use"

The business plan should not depend on substantial impacts to the immediate neighborhood. If the venue cannot operate successfully without impacting the local residents, it is on the applicant to change their business plan, not for the community or Planning Board to bend to their demands.

"The proposed hours are crucial in supporting that investment. Friday and Saturday late-evening periods are expected to be among the most important revenue windows for the business. Reducing those hours would disproportionately affect the project's ability to generate the revenue needed to support the specialized buildout and long-term operation of the venue."

If the hours are crucial to the business investment, it is the sole obligation of the applicant to locate the business in an amenable area to accommodate those hours without impacting the community in a negative way. Make no mistake, this is not the problem of the Planning Board or the immediate neighborhood to make this business work by giving up their commitment and defense of a livable community. This is a decision by the applicant to locate in a residential area. They have created this issue by selecting a building that borders a residential neighborhood.

"I saw it in Japan. In Koreatown, The East Village, Brooklyn, and Flushing."

It takes but a few minutes to see numerous stories detailing noise and negative impacts in each of the US areas highlighted by the applicant as optimal or typical.

E.V. – "from loud music and bass vibrations to lines and street noise outside establishments…cited 2,500 noise complaints filed"

BK – "took the most noisy nights award with complaints lodged on 93 different days" Velvet Rope Lounge
KT – "100+ residents oppose karaoke liquor license" and "Venue refused to turn music down aggrieving neighbors" (Korea Daily)

The NYC statutes seem to be more aggressive than Beacon with higher fines, yet the issues persist. Between 10p and 7a music from bars may not exceed 42 db when measured inside nearby residences AND may not exceed 7 db over the surrounding area sound level when measured on a public street 15 or more feet from the source (311.nyc.gov)

Ties to the Community

I find the personal applicant letter immaterial as the presumption that living here and having kids here is something unique to the applicant. The people impacted by the venue live here and many of us have kids. In fact, I believe that all have lived here far longer than 6 years. Myself and my immediate neighbors, 20+ years. One neighbor more than 40 years. I have children here, many of my neighbors have children. Being a resident and having children is not a distinguishing characteristic and is irrelevant to the proposal.

"The Howl with the same care, seriousness, and respect that we have brought to this process - because Beacon is not just where this business will be located. Beacon is where we live."

With all due respect, the applicant may live in Beacon, but no one is proposing a bar next to their property. I dare say that anyone speaking in favor of this project would pause if the proposal adjoined their property line.

I urge the Planning Board to consider the people that live in this neighborhood and the unwanted impacts this venue would bring to them, their children, and their environment. From noise, to parking, to unruly patrons, this is very much a decision about a business with serious practical impacts and the local residents directly in the firing line of those impacts. The hours proposed are the most significant threat to the neighborhood; are not in keeping with the area, and do not have precedent so close to a residential neighborhood; they must be limited, especially on week nights. If the venue cannot operate successfully without extremely late-night weekday and weekend hours, it is for them alone to reconsider their proposal.

Barton &Loguidice

June 26, 2026

Mr. Ben Swanson
Deputy City Administrator
1 Municipal Plaza
Beacon, NY 12508

RE: Professional Consulting Services – Noise Study Review. 1154 North Avenue Beacon, NY 12508

File: 703.5480

Dear Mr. Swanson:

Barton & Loguidice, D.P.C. (B&L) is pleased to provide this review of the noise study completed by the Walters-Storyk Design Group (WSDG) and submitted to the City on behalf of The Howl Karaoke Bar proposed to be located at 1154 North Avenue in the City of Beacon.

The study provides a detailed design of wall, roof, doors, utilities and other elements. Overall, the proposed design elements for mitigation are comprehensive and should provide the results anticipated pending proper construction. A few comments, cautions and recommendations follow:

The roof of the existing structure is identified, by the applicant, as providing an assumed sound mitigation performance. We agree providing insulation and gypsum board is appropriate to assist with sound propagation through the roof as indicated in the study. However, gauging the performance of the mitigation methods for these sounds will rely on the results of the post construction performance monitoring, and potential modifications, if necessary, to ensure compliance and validation of the performance assumptions.

Attention to detail, proper, and complete installation during construction is vital as details are sometimes overlooked during the construction process even though they are crucial to reduce sound transmission and vibration. Particular attention needs to be paid to:

- Stud wall isolators, and door seals as part of partitions.
- Insulation thickness and complete void coverage
- Neoprene gaskets, sponge rubber gaskets and outlet backer pads proposed for ductwork, hanging utilities and other utility penetrations.

Predictions of sound emanating from the Public Address (PA) system were made using computer software at a predicted maximum sound level of 95 dBA. In most cases, modern sound/noise models are within an acceptable range of predictability and useful for planning and design, however, the PA system has the potential for complaints as it is difficult to ensure 95 dBA compliance. As the study indicates, measured peak levels can read 10 to 12 dB above average. Therefore, post construction monitoring is especially important when it comes to the PA system. This is indicated on the Summary Page of the study as a recommendation and we agree with that premise.

As the study concludes, ideal operating conditions include the partitions built up as described and detailed in the acoustic report, the structural repairs and modifications being made, and operation of the facility with the doors being closed. We agree with this statement and that the proposed monitoring upon project completion be undertaken.

The acoustic report recommends, “Post construction isolation compliance testing and sound system tuning to ensure code compliance for daytime/nighttime sound system send levels”. We strongly agree with this recommendation. We also recommend a clear enforceable mechanism, or language, is built into the approval conditions to require the applicant to make adjustments to the sound system(s) in a reasonable time frame should post monitoring determine that sound levels exceed the City of Beacon Noise Code.

Additionally, In accordance with the City Noise Code subsection 149-10 Sound Production at Commercial Establishments, sounds such as music and patron noise emanating from the establishment during nighttime hours may not be plainly audible inside the dwelling with closed doors and windows. Since “plainly audible”, could be subjective, it may be advantageous to establish a baseline, in decibels (A-weighted) or determine what that may be ahead of time.

If you have any questions, please do not hesitate to contact me at our Albany Office at (518) 218-1801 extension 2016.

Sincerely,

BARTON & LOGUIDICE, D.P.C.

Thomas C. Baird, P.E.
Sr. Associate

LANC & TULLY
Engineering and Surveying, D.P.C.

July 10, 2026

Mr. John Gunn
Beacon Planning Board Chair
City of Beacon
1 Municipal Plaza
Beacon, NY 12589

RE: The Howl – 1154 North Ave.
Tax No. 5954-26-740983
City of Beacon

Dear Mr. Gunn:

My office has received the following regarding the proposed project, The Howl, to be located at 1154 North Avenue:

- Submission correspondence dated June 30, 2026, from Aryeh Siegel, Architect.
- Response correspondence dated June 30, 2026, from Aryeh Siegel, Architect.
- Document titled "Sprinkler requirement Analysis", dated June 21, 2026, as prepared by Aryeh Siegel, Architect.
- Document titled "Occupancy Management, Premises Monitoring, and Emergency Egress Plan, with the latest revision date of June 26, 2026.
- Document titled "Operating Hours Analysis and Compatibility Statement", as prepared by applicant.
- Letter from the Applicant, dated June 23, 2026.
- Sign Permit Application for project, dated June 26, 2026, as submitted by Aryeh Siegel, Architect.
- Plan set titled "The Howl – 1154 North Avenue", as prepared by Aryeh Siegel, Architect, and Hudson Land Design, with the latest revision date of June 30, 2026, and consisting of the following drawings:
  - Sheet 1 of 5 – Site Plan
  - Sheet 2 of 5 – Existing Conditions Plan
  - Sheet 3 of 5 – Floor Plans & Elevations
  - Sheet 4 of 5 – Grading & Landscaping Plan
  - Sheet 5 of 5 – Details Plan

The proposed project entails the renovation of the existing 2-story building from an art gallery to a lounge and entertainment venue. The project is located in the Central Main Street (CMS) Zoning District and is located on a 0.106± acre parcel.

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

General Comments:

1. The project will require permitting from the NYSDOT for proposed work within the States highway boundary along North Avenue (Route 9D). ***Applicant states that their engineer will coordinate with the NYSDOT regarding permitting for proposed work.*** Copies of all permitting with NYSDOT shall be submitted to the City of Beacon.

2. The applicant's architect should meet with the City's Building Department to determine if sprinkler will be required for the proposed use and occupancy. This may have an impact on the size of the water service feeding the building, which is unknown at this time. ***The applicant has resubmitted a "Sprinkler Requirement Analysis" to the City Building Inspector and await the Building Inspector's determination.***

3. The Applicant is providing further post-construction testing criteria to address the city's "plainly audible" requirement. The applicant's noise consultant is recommending "*Source levels within the space should not be measurable at receiver property lines more than 3-6 dB above ambient levels (average) taken with similar conditions (time of day, season, general environmental conditions, etc.)*". If the City's noise consultant finds this language to be acceptable, we would recommend that this additional testing requirement be added as a note to the plans.

4. Although the applicant has adjusted some of the hours of operation based upon the Planning Board's concerns but are still requesting to allow for Friday and Saturday hours to operate until 1:30am. The applicant has submitted a document titled "Operating Hours Analysis and Compatibility Statement" to further justify the proposed operating hours, which the Board should discuss and determine the appropriate hours.

This completes our review at this time. Further comments may be provided based on future submissions when more detailed plans are prepared for the project. **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.

Respectfully,

LANC & TULLY, P.C.

John Russo, P.E.

cc: Natalie Quinn, Planner
Jennifer Gray, Esq.
Bryan Murphy, Building Inspector

KARC
PLANNING CONSULTANTS, INC.

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

FR: KARC Planning Consultants, Inc.

DATE: July 13, 2026

RE: 1154 North Avenue (The Howl) Site Plan Application, Hudson Vox LLC

I have reviewed the following materials regarding the proposed change of use and façade modifications at 1154 North Avenue:

- Transmittal Letter by Aryeh Siegel, dated June 30, 2026
- Letter from Applicant by Eric Weitner & Leah Cheng, dated June 23, 2026
- Comment Response Letter by Aryeh Siegel, dated June 30, 2026
- Occupancy Mgmt, Premises Monitoring, and Emergency Egress Plan, revised June 26, 2026
- Operating Hours Analysis and Compatibility Statement
- Response to Barton & Loguidice Noise Analysis, dated July 1, 2026
- Occupancy calculation diagrams (2 sheets) by Aryeh Siegel, dated June 21 2026
- Site Plan, Lighting, & Floor Plans (3 sheets) by Aryeh Siegel Architect, last revised June 30, 2026
- Grading & Landscaping Plan (2 sheets) by Hudson Land Design, last revised June 30, 2026
- Sprinkler Requirement Analysis by Aryeh Siegel Architect, June 21, 2026
- Sign Permit Application and Cover letter by Aryeh Siegel, dated June 26, 2026
- Noise Study Review by Thomas Baird P.E. of Barton & Loguidice, dated June 26, 2026

Project Description:

The applicant is seeking site plan approval for a change of use and façade modifications to an existing two-story commercial building, with the proposed use described as a facility for karaoke suites and immersive live-performance experiences. Minor site work is proposed, largely within the existing easement area and proposed sculpture area along North Avenue. The project site (Parcel #5954-26-740983) is 0.10 acres and is located in the Central Main Street (CMS) zoning district.

Comments & Recommendations:

1. **Noise Attenuation**. The applicant has responded comprehensively to the comments of the Board's noise consultant, Barton & Loguidice, and has agreed to incorporate the recommended post-construction testing and compliance measures into the project. To ensure implementation of the approved acoustic design and continued compliance with the City of Beacon Noise Code, the following shall be incorporated as conditions of Site Plan Approval:

a. Upon completion of construction and prior to commencement of operations, post-construction acoustic performance testing and sound system tuning shall be conducted to verify compliance with the City of Beacon Noise Code and the assumptions of the approved acoustic report. If post-construction testing demonstrates that sound levels exceed the applicable requirements of the City of Beacon Noise Code, the applicant shall implement any necessary adjustments or additional mitigation measures within a reasonable timeframe to achieve compliance.

b. The maximum permissible sound system (PA) volume shall be established based on the results of the post-construction testing and calibrated accordingly for daytime and nighttime operations.

c. Post-construction compliance testing shall utilize the methodology proposed by the applicant's acoustical consultant, including verification that average source levels at adjacent property lines do not exceed ambient sound levels by more than 3 to 6 dBA under comparable environmental conditions.

All previous planning comments have been satisfactorily addressed. Subject to the incorporation of the above conditions of approval, I find the application to be consistent with the applicable Site Plan Approval standards and zoning code requirements. Should you have any questions, please do not hesitate to contact me.

Natalie Quinn
Beacon Planning Consultant

Cc: Bryan Murphy, Building Inspector
Jennifer L. Gray, Esq., City Attorney
John Russo, P.E., City Engineer

City of Beacon Planning Board
1154 North Avenue
July 14, 2026

RESOLUTION

PLANNING BOARD
BEACON, NEW YORK

AMENDED SITE PLAN APPROVAL FOR
1154 NORTH AVENUE

Parcel No. 5954-26-740983

WHEREAS, the Beacon Planning Board received an application for Site Plan Approval from Hudson Vox LLC (the "Applicant") on behalf of property owner The Lindley LLC, to convert an existing two-story building from an art gallery to a lounge and entertainment venue including minor exterior improvements (the "Project" or "Proposed Action"), on property located at 1154 North Avenue in the Central Main Street ("CMS") Zoning District in the City of Beacon, Dutchess County, New York and designated on the Tax Map of the City of Beacon as Parcel ID# **5954-26-740983** (the "Property"); and

WHEREAS, on March 12, 2019 the Beacon Planning Board granted Site Plan Approval to allow the two-story building to be used as two art studios with minor exterior improvements and site work; and

WHEREAS, the Planning Board is the approval authority for the Amended Site Plan pursuant to the City of Beacon Zoning Code § 225-25; and

WHEREAS, the application for an Amended Site Plan consists of application forms, correspondence, professional studies and reports, plans and drawings, and the Short Environmental Assessment Form ("SEAF"); and

WHEREAS, the Project is shown on an Amended Site Plan set entitled "The Howl – 1154 North Avenue," including five sheets (1 through 5) prepared by Hudson Land Design Professional Engineering, P.C., last revised June 30, 2026:

Sheet	**Title**
1	*Site Plan;*
2	*Existing Conditions Plan;*
3	*Floor Plans & Elevations;*
4	*Grading & Landscape Plan;*
5	*Details*; and

WHEREAS, the Proposed Action is a Type II action pursuant to Section 617.5(c)(18) of the New York State Environmental Quality Review Act ("SEQRA"), and accordingly, no further environmental review is required; and

WHEREAS, the Planning Board reviewed the Project at its meetings on March 10, 2026, April 14, 2026, May 12, 2026, June 9, 2026 and July 14, 2026; and

WHEREAS, on May 12, 2026, the Planning Board opened a duly noticed public hearing on the Project, at which time all those interested were given an opportunity to be heard and the public hearing was closed on July 14, 2026; and

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

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

NOW THEREFORE, BE IT RESOLVED, that the Planning Board hereby grants Amended Site Plan Approval, as shown on the application materials referenced above, subject to the following conditions set forth below and any other requirements which must be met by law:

A. The following conditions shall be fulfilled prior to the signing of the Site Plan by the Chairman of the Planning Board.

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

2. The Applicant shall seek and obtain all required permits and/or approvals from the appropriate agencies for the Project, including NYSDOT, and shall meet all conditions contained in such approvals, as required therein.

3. The comments contained in the City Engineer's letter to the Planning Board dated July 10, 2026, and all comments in any subsequent letter(s) issued, shall be fulfilled to the satisfaction of the City Engineer.

4. The comments contained in the City Planner's letter to the Planning Board dated July 13, 2026, and all comments in any subsequent letter(s) issued, shall be fulfilled to the satisfaction of the City Planner.

5. All existing and proposed easements shall be shown on the Site Plan to the satisfaction of the City Engineer and City Attorney.

6. It shall be verified at the proposed Floor Plans include all recommendations set forth set forth in the Acoustic Report dated May 28, 2026 submitted by WSDG.

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

B. Prior to the issuance of a Building Permit, the following conditions shall be fulfilled:

1. The Applicant shall file a performance guaranty with the City of Beacon to guarantee the satisfactory construction, installation, and completion of all required public improvements in an amount acceptable to the City Engineer based on review of a cost estimate to be prepared by the Applicant's professional engineer.

C. Prior to the Issuance of the Certificate of Occupancy, the following conditions shall be fulfilled to the satisfaction of the Building Inspector:

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

2. Upon completion of construction and prior to commencement of operations, post-construction acoustic performance testing and sound system tuning shall be conducted to verify compliance with the City of Beacon Noise Code and the assumptions of the approved acoustic report.

3. Post-construction compliance testing shall verify that average source levels are not measurable at receiver property lines at levels that exceed 6 dBA above average ambient levels under comparable environmental conditions.

4. If post-construction testing demonstrates that sound levels exceed the applicable requirements of the City of Beacon Noise Code, the applicant shall implement any necessary adjustments or additional mitigation measures within a reasonable timeframe to achieve compliance.

5. The maximum permissible sound system (PA) volume shall be established based on the results of the post-construction testing and calibrated accordingly for daytime and nighttime operations.

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

1. All notes set forth on the Site Plans listed above shall be deemed to be a condition of this approval as if fully set forth in this Resolution.

2. The hours of operation shall be as set forth on the Site Plan.

3. Continued operation of the use permitted herein is conditioned on continued compliance with the conditions set forth herein and all other local and State laws and regulations.

4. Upon completion of construction and prior to commencement of operations, post-construction acoustic performance testing and sound system tuning shall be conducted to verify compliance with the City of Beacon Noise Code and the assumptions of the approved acoustic report.

5. Post-construction compliance testing shall verify that average source levels are not measurable at receiver property lines at levels that exceed 6 dBA above average ambient levels under comparable environmental conditions.

6. If post-construction testing demonstrates that sound levels exceed the applicable requirements of the City of Beacon Noise Code, the applicant shall implement any necessary adjustments or additional mitigation measures within a reasonable timeframe to achieve compliance.

7. The maximum permissible sound system (PA) volume shall be established based on the results of the post-construction testing and calibrated accordingly for daytime and nighttime operations.

8. The Building Inspector and the City Engineer shall have the right to direct the Applicant to cause the placement, cleaning and/or repair of sedimentation and erosion control devices wherever and whenever deemed necessary during construction.

9. The Applicant shall be responsible for the payment of all application review costs incurred by the City in its review and approval of this project. Such fees shall be paid by the Applicant within thirty (30) days of each notification by the City that such fees are due. If such fees are not paid within said thirty (30) day period, and an extension therefore has not been granted by the City, this resolution shall be rendered null and void.

10. As used herein, the term "Applicant" shall include its successors and assigns, and where applicable its contractors and employees.

11. If any of the conditions enumerated in this resolution upon which this approval is granted are found to be invalid or unenforceable, then the integrity of this resolution and the remaining conditions shall remain valid and intact.

12. The approvals granted by this resolution do not supersede the authority of any other entity.

13. Pursuant to the City of Beacon Code § 223-25.J, the Amended Site Plan Approval granted herein shall expire in the event the Applicant does not submit

a bona fide building permit application to the Building Department within one year of the adoption date of this Resolution, provided however, that the Planning Board may extend such time period from time to time for good cause shown upon written request from the Applicant.

14. Any proposed revision to the approved Amended Site Plan Drawings, except revisions determined by the Building Inspector and City Engineer to be field changes, shall be submitted to the Planning Board. The Planning Board, in its discretion, shall determine the appropriate procedures for consideration of the proposed revision, and whether such revision is material enough to require further environmental analysis and/or further project review, as the Board may deem appropriate.

15. The Planning Board shall retain continuing jurisdiction, including jurisdiction to amend, supplement or otherwise modify the conditions herein subject to a duly noticed public hearing upon referral from the Building Inspector after a finding by the Building Inspector that material and essential conditions of this Approval have been continually violated resulting in adverse impacts to the immediate neighborhood.

Resolution Adopted: July 14, 2026
Beacon, New York

_____ _____, 2026
John Gunn, Chairman Date
City of Beacon Planning Board

Motion by _____, seconded by _____:

Kevin Byrne	Voting ____	Leonard Warner	Voting ____
David Jensen	Voting ____	J. Randall Williams	Voting ____
Karen Quiana	Voting ____	John Gunn, Chairman	Voting ____
James Vermeulen	Voting ____		

Resolution: Approved
Denied

City of Beacon Planning Board Agenda
07/14/2026

Title:

Continue Public Hearing and continue review of application for Amended Site Plan Approval, 393 Fishkill Avenue, 397 Fishkill Avenue, and 7 Conklin Street, Commercial Mix-Use, submitted by 397 Fishkill Avenue, LLC and 393 Fishkill Avenue, LLC. ***ADJOURNED AT THE REQUEST OF THE APPLICANT***

ATTACHMENTS

397 Fishkill PB 7.14.26 - Request for Adjournment.pdf

CUDDY +FEDER LLP

300 Westage Business Center, Suite 380
Fishkill, New York 12524
T 845 896 2229
F 845 896 3672
cuddyfeder.com

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

June 30, 2026

VIA HAND DELIVERY
AND EMAIL
Hon. John Gunn
and Members of the Planning Board
City of Beacon
1 Municipal Plaza
Beacon, New York 12508

Re: 397 Fishkill Avenue, LLC and 393 Fishkill Avenue, LLC
Application for Amended Site Plan Approval – Mixed-Use Building
Request for Adjournment
Property: 393 & 397 Fishkill Avenue and 7 Conklin Street, Beacon, New York
Tax IDs: 6055-80-392032, 6055-80-399035 & 6055-80-394041

Dear Chairman Gunn and Members of the Planning Board:

On behalf of 397 Fishkill Avenue, LLC and 393 Fishkill Avenue, LLC (the "Applicant"), the owners of the above-referenced Property, and in furtherance of the Applicant's pending Application for Amended Site Plan Approval (the "Application"), we respectfully request that the Planning Board adjourn the Application and the associated public hearing to this Board's August 11, 2026 meeting Agenda for continued review.

At this time, the Applicant is still working to update the site plan in response to the comments from this Board and from the Zoning Board of Appeals, and the Applicant's consultants require some additional time to finalize the requested site sections and renderings to fully respond to these comments.

We look forward to appearing at this Board's regular meeting on August 11, 2026 for the continued public hearing and to continue the Board's review of the Project, at which time the Applicant will present the plan revisions to be detailed in a forthcoming submittal. In the meantime, should this Board or City Staff have any questions or comments with regard to the foregoing, please do not hesitate to contact me. Thank you in advance for your consideration in this matter.

Very truly yours,

Taylor M. Palmer

cc: Jennifer L. Gray, Esq., City of Beacon Planning Board Attorney

City of Beacon Planning Board Agenda
07/14/2026

Title:

Public hearing and continue review of application for Subdivision Approval, 84 Anderson Street, Residential, submitted by Sadhna Gupta.

ATTACHMENTS

84 Anderson PB 7.14.26_Cover Letter_2026-0630.pdf

84 Anderson PB 7.14.26 Sheets_2026-0630.pdf

Lanc & Tully 84 Anderson Street 07-10-26_0001.pdf

KARC Review PB_84 Anderson St_2026.07.13.pdf

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
www.HudsonLandDesign.com

June 30, 2026

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

Re: 84 Anderson Street Subdivision
Sadhna Gupta (Applicant)
84 Anderson Street
Tax Parcel ID: 6054-31-371850 (±0.53 acres) & 6054-31-358838 (±0.34 acres)
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) is pleased to submit copies of the following documents in support of the Project:

- Four (4) copies of the Subdivision Plan Set (Sheets 1 through 7 of 7)

The documents have been prepared and/or updated in response to comments from the Planning Board and from the City's consultants for the Planning Board's continued review and consideration of the Application. The following are point-by-point responses to each comment contained within the letters prepared by the City's consultants:

Lanc & Tully Review Letter, Dated June 3, 2026:

General Comments:

1. Comment acknowledged. An area variance granting relief of 3.6 feet from 85 feet to 81.4 feet for the lot width of Lot A was granted by the City of Beacon Zoning Board of Appeals (ZBA) at its June 16th, 2026 meeting.

KARC Planning Consultants, Inc. Review Letter, Dated June 4, 2026:

1. Comment acknowledged. An area variance granting relief of 3.6 feet from 85 feet to 81.4 feet for the lot width of Lot A was granted by the City of Beacon ZBA at its June 16th, 2026 meeting.

A footnote regarding the issuance of the area variance has been added to Sheet SP-1 beneath the bulk table.

We look forward to continuing our discussions regarding this Application at your July 14, 2026 meeting. Should you have any questions, please feel free to contact me on my direct line at 845-765-8955.

Sincerely,

Daniel G. Koehler, P.E.
Principal

cc: Sadhna Gupta, Applicant (via email)
HLD file

84 ANDERSON STREET

RESIDENTIAL SUBDIVISION

84 ANDERSON STREET
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK

PARCEL INFORMATION:
TAX ID: 6054-31-371850 & PORTION OF 6054-31-358838
PARCEL 371850 LOT AREA: ±0.526 ACRES
ZONING DISTRICT: R1-10



SITE LOCATION MAP SCALE: 1" = 400'

ADJOINING OWNERS WITHIN 200'
PARCEL: OWNER & ADDRESS
1. SADHNA GUPTA, 17 WESTON ROAD, WESTPORT CT 06880
2. CITY OF BEACON SCHOOL DISTRICT, 10 EDUCATION DRIVE, BEACON NY 12508
3. ANN MCGOWAN, 335 EAST 86TH STREET 5A, NEW YORK NY 10028
4. ANDREY NETBOY, 85 ANDERSON STREET, BEACON NY 12508
5. PHILOMENA KIERNAN, 80 OVERLOOK AVENUE, BEACON NY 12508
6. TRACY DROSS, 72 OVERLOOK AVENUE, BEACON NY 12508
7. CHARLES DEL BENE JR, 54 OVERLOOK AVENUE, BEACON NY 12508
8. GREGORY MARTIN WHITE, 65 ANDERSON STREET, BEACON NY 12508
9. CRAIG HEITCZMAN, 30 TILLOTT STREET, BEACON NY 12508
10. THOMAS CERCHIARA, 10 TILLOT STREET, BEACON NY 12508
11. WILLIAM TOBAR, 48 ANDERSON STREET, CORNWALL ON THE HUDSON NY 12520
12. CHRISTOPHER WOLFE, 52 ANDERSON STREET, BEACON NY 12508
13. ANA JOANES, 60 ANDERSON STREET, BEACON NY 12508

PROJECT ENGINEER:
HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
174 MAIN STREET
BEACON, NEW YORK 12508
PH: 845-440-6926

OWNER/APPLICANT:
SADHNA GUPTA
17 WESTON ROAD
WESTPORT CT 06880

PROJECT SURVEYOR:
RAPPA & BURNETT
LAND SURVEYORS, P.C.
6 CIRCLE DRIVE
WALDEN NY 12586
PH: 845-802-3687

DRAWING INDEX:

SHEET 1: COVER SHEET (CV-1)
SHEET 2: EXISTING CONDITIONS & REMOVALS PLAN (XC-1)
SHEET 3: PRELIMINARY SUBDIVISION PLAT (PL-1)
SHEET 4: SUBDIVISION PLAN (SP-1)
SHEET 5: EROSION & SEDIMENT CONTROL PLAN (ESC-1)
SHEET 6: CONSTRUCTION DETAILS (CD-1)
SHEET 7: CONSTRUCTION DETAILS (CD-2)

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

_____ _____
SADHNA GUPTA DATE

I HEREBY DECLARE THIS MAP TO BE PREPARED IN ACCORDANCE WITH THE CODE OF PRACTICE OF THE NEW YORK STATE ASSOCIATION OF PROFESSIONAL LAND SURVEYORS, ADOPTED OCTOBER, 1996 AND REVISED THROUGH JULY 18, 1997

BY: _____
JOSEPH RAPPA JR., L.S. N.Y. State Lic. no. 051206

DCDBCH STANDARD NOTE:

FOR PERMISSION TO FILE
THIS PLAN DOES NOT CONSTITUTE A REALTY SUBDIVISION AS DEFINED BY ARTICLE XI, TITLE II, SECTION 1115 OF THE PUBLIC HEALTH LAW OF THE STATE OF NEW YORK, AND ARTICLE XI OF THE DUTCHESS COUNTY SANITARY CODE. PERMISSION IS HEREBY GRANTED FOR THE FILING OF THIS MAP WITH THE CLERK OF DUTCHESS COUNTY. APPROVAL FOR ARRANGEMENTS FOR WATER SUPPLY AND/OR SEWAGE DISPOSAL IS NEITHER SOUGHT NOR GRANTED.

_____ _____
AUTHORIZED REPRESENTATIVE OF THE COMMISSIONER OF HEALTH DATE

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE _____ DAY OF _____, 20_____, SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS _____ DAY OF _____, 20_____, BY

_____ CHAIRMAN

_____ SECRETARY

IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.

DRAWN BY: CMB				CHECKED BY: DGK			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	5/26/26	PER PLANNING BOARD COMMENTS	CMB				
2	6/30/26	PER PLANNING BOARD COMMENTS	CMB				

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STATE OF NEW YORK DANIEL G. KERBERT 082716 LICENSED PROFESSIONAL ENGINEER
SEAL

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

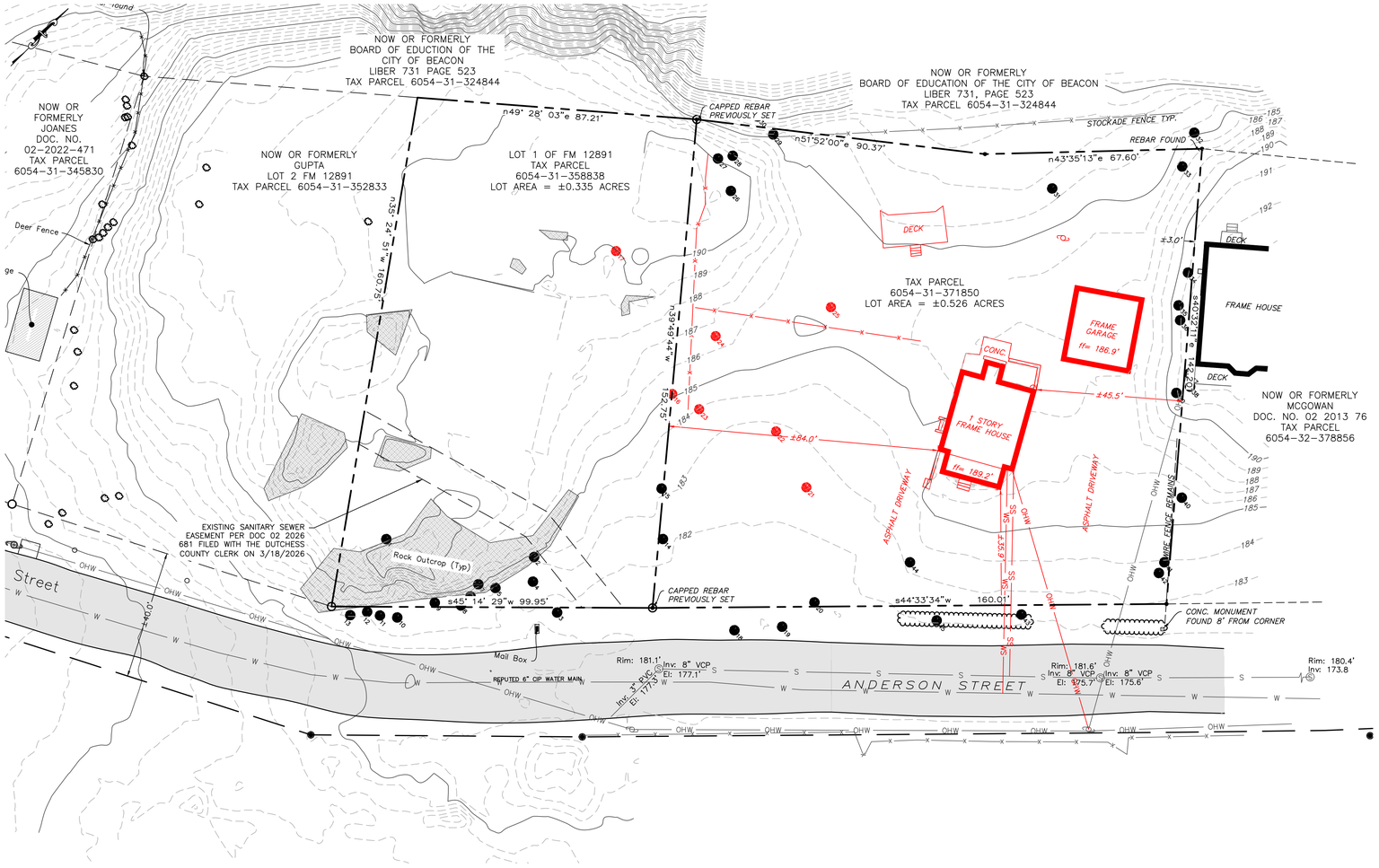
COVER SHEET

84 ANDERSON STREET SUBDIVISION
REVISION TO FILED MAP 12891

84 ANDERSON STREET
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-31-371850

JOB #:	2026:009
DATE:	4/28/2026
SCALE:	AS SHOWN
TITLE:	CV-1
SHEET:	1 OF 7

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



LEGEND:

- EXISTING PROPERTY LINE
- ADJOINING PROPERTY LINE
- EXISTING EASEMENT LINE
- EXISTING STREAM
- EXISTING WETLAND BOUNDARY
- 100' WETLAND BUFFER
- 250 EXISTING MAJOR CONTOUR
- 252 EXISTING MINOR CONTOUR
- EXISTING TREE LINE
- OHW EXISTING OVER HEAD WIRE
- EXISTING UTILITY POLE
- SS EXISTING SEWER SERVICE LINE
- EXISTING SEWER LINE
- EXISTING SEWER MANHOLE
- EXISTING SEWER CLEAN OUT
- W EXISTING WATER LINE
- WS 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
- TO BE REMOVED

PROJECT INFORMATION:

PARCEL OWNER:	SADHNA GUPTA, 17 WESTON ROAD, WESTPORT CT 06880
PROJECT ENGINEER:	HUDSON LAND DESIGN P.C., 174 MAIN STREET, BEACON NY 12508
PARCEL LOCATION:	84 & 74 ANDERSON STREET, BEACON NY 12508
TAX PARCEL ID:	6054-31-371850 (±0.526 AC) & 6054-31-358838 (±0.335 AC)
PARCEL AREA:	±0.861-ACRE TOTAL
WATER SUPPLY:	MUNICIPAL
SEWAGE DISPOSAL:	MUNICIPAL

MAP REFERENCES:

1. BOUNDARY AND TOPOGRAPHIC SURVEY PER "BOUNDARY & TOPOGRAPHIC SURVEY PREPARED OF 84 ANDERSON STREET" PREPARED BY RAPPA AND BURNETT LAND SURVEYORS, P.C., DATED MARCH 16, 2026.
2. LOT 1 OF FILED MAP 12891 PER MAP FILED AT DUTCHESS COUNTY CLERK'S OFFICE ON 3/11/2026 "74 ANDERSON STREET SUBDIVISION" PREPARED BY HUDSON LAND DESIGN PROFESSIONAL ENGINEERING P.C.

SURVEY NOTES:

1. COPYRIGHT RAPPA & BURNETT LAND SURVEYORS, P.C. ALL RIGHTS RESERVED. REPRODUCTION OR COPYING OF THIS DOCUMENT MAY BE A VIOLATION OF COPYRIGHT LAW UNLESS PERMISSION OF THE AUTHOR AND / OR COPYRIGHT HOLDER IS OBTAINED.
2. UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY MAP BEARING A LICENSED LAND SURVEYOR'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW.
3. ONLY BOUNDARY SURVEY MAPS WITH THE SURVEYOR'S EMBOSSED OR RED INKED SEAL ARE GENUINE, TRUE AND CORRECT COPIES OF THE SURVEYOR'S ORIGINAL WORK AND OPINION. A COPY OF THIS DOCUMENT WITHOUT A PROPER APPLICATION OF THE SURVEYOR'S EMBOSSED OR RED INKED SEAL SHOULD BE ASSUMED TO BE AN UNAUTHORIZED COPY.
4. CERTIFICATIONS ON THIS BOUNDARY SURVEY MAP SIGNIFY THAT THE MAP WAS PREPARED IN ACCORDANCE WITH THE CURRENT EXISTING CODE OF PRACTICE FOR LAND SURVEYS ADOPTED BY THE NEW YORK STATE ASSOCIATION OF PROFESSIONAL LAND SURVEYORS, INC. THE CERTIFICATION IS LIMITED TO PERSONS FOR WHOM THE BOUNDARY SURVEY MAP IS PREPARED, TO THE TITLE COMPANY, TO THE GOVERNMENTAL AGENCY, AND TO THE LENDING INSTITUTION LISTED ON THIS BOUNDARY SURVEY MAP.
5. THE CERTIFICATIONS HEREIN ARE NOT TRANSFERABLE.
6. THE LOCATIONS OF UNDERGROUND IMPROVEMENTS OR ENCROACHMENTS ARE NOT ALWAYS KNOWN AND OFTEN MUST BE ESTIMATED. IF ANY UNDERGROUND IMPROVEMENTS OR ENCROACHMENTS EXIST OR ARE SHOWN, THE IMPROVEMENTS OR ENCROACHMENTS ARE NOT COVERED BY THIS CERTIFICATE.
7. SUBJECT TO THE FINDINGS OF A CURRENT TITLE SEARCH.
8. SUBJECT TO COVENANTS, EASEMENTS, RESTRICTIONS, CONDITIONS, AND AGREEMENTS OF RECORD IF ANY.
9. SUBJECT TO ANY RIGHT, TITLE OR INTEREST THE PUBLIC MAY HAVE FOR HIGHWAY USE.
10. BEARINGS AND NORTH SHOWN HEREON ARE REFERENCED TO NAD 83-NY EAST USING REAL-TIME KINEMATIC GPS OBSERVATIONS.
11. CONTOUR INTERVAL IS ONE FOOT AND IS REFERENCED TO NAVD88. THE TOPOGRAPHY SHOWN HEREON IS DERIVED FROM UAV PHOTOGRAMMETRY UTILIZING BASE-ROVER GPS WITH AN ON-SITE BASE AND 10 INDEPENDENT CHECK POINTS. CHECK POINTS HAVE THE FOLLOWING ACCURACY: HRMS 0.093' (NORTHING), 0.089' (EASTING), VRMS 0.137' (ELEVATION).
12. PARCEL AREA NOTED HEREON DERIVED FROM BOTH MEASURED AND RECORD EVIDENCE.
13. BEARINGS AND DISTANCES SHOWN HEREON ARE FOR COMPUTATIONAL PURPOSES ONLY.

DEMOLITION NOTES:

1. PRIOR TO DEMOLISHING ANY BUILDINGS/STRUCTURES, THE CONTRACTOR SHALL PERFORM A PRE-DEMOLITION SURVEY IN ACCORDANCE WITH STATE AND FEDERAL REGULATIONS GOVERNING THE DISPOSAL OF SOLID WASTE. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND APPROVALS BY THE AUTHORITY HAVING JURISDICTION. ALL DEBRIS RESULTING FROM DEMOLITION ACTIVITIES SHALL BE DISPOSED OF OFF-SITE AT A FACILITY APPROVED TO RECEIVE THE DEBRIS.
2. CONFORM TO APPLICABLE CODE FOR DEMOLITION OF STRUCTURES, SAFETY OF ADJACENT STRUCTURES, DUST CONTROL, RUNOFF CONTROL, AND HAULING, DISPOSAL AND STORAGE OF DEBRIS.
3. PROVIDE, ERECT, AND MAINTAIN TEMPORARY BARRIERS AND SECURITY DEVICES.
4. MAINTAIN EXISTING UTILITIES TO REMAIN IN SERVICE AND PROTECT THEM AGAINST DAMAGE DURING SELECTIVE DEMOLITION OPERATIONS. DO NOT INTERRUPT EXISTING UTILITIES SERVING OPERATING FACILITIES, EXCEPT WHEN AUTHORIZED IN WRITING BY OWNER AND AUTHORITIES HAVING JURISDICTION.
5. NOTIFY ADJACENT OWNERS OF WORK THAT MAY AFFECT THEIR PROPERTY, POTENTIAL NOISE, UTILITY OUTAGE, OR DISRUPTION. COORDINATE WITH OWNER.
6. PREVENT MOVEMENT OR SETTLEMENT OF ADJACENT STRUCTURES. PROVIDE BRACING AND SHORING.
7. LOCATE AND IDENTIFY ALL EXISTING UTILITIES WITHIN THE CONSTRUCTION AREA. DISCONNECT AND SEAL OR CAP OFF UTILITY SERVICES THAT WILL BE AFFECTED BY THIS PROJECT. NOTIFY AFFECTED UTILITY COMPANIES BEFORE STARTING WORK AND COMPLY WITH THEIR REQUIREMENTS. VERIFY THAT UTILITIES HAVE BEEN DISCONNECTED AND CAPPED.
8. DEMOLISH AND REMOVE COMPONENTS IN AN ORDERLY AND CAREFUL MANNER.
9. PROTECT EXISTING FEATURES THAT ARE NOT TO BE DEMOLISHED.
10. CONDUCT OPERATIONS WITH MINIMUM INTERFERENCE TO PUBLIC OR PRIVATE ACCESSES.
11. MAINTAIN EGRESS AND ACCESS AT ALL TIMES. DO NOT CLOSE OR OBSTRUCT ROADWAYS, OR SIDEWALKS WITHOUT PERMITS.
12. CEASE OPERATIONS IMMEDIATELY IF ADJACENT STRUCTURES APPEAR TO BE IN DANGER. NOTIFY AUTHORITY HAVING JURISDICTION.
13. ROUGH GRADE AND COMPACT AREAS AFFECTED BY DEMOLITION TO MAINTAIN SITE GRADES AND CONTOURS.
14. FIELD VERIFY EXISTING CONDITIONS AND CORRELATE WITH REQUIREMENTS INDICATED ON DEMOLITION PLAN TO DETERMINE EXTENT OF SELECTIVE DEMOLITION REQUIRED.
15. MAINTAIN EXISTING UTILITIES TO REMAIN IN SERVICE AND PROTECT THEM AGAINST DAMAGE DURING SELECTIVE DEMOLITION OPERATION.
16. CONDUCT DEMOLITION OPERATIONS AND REMOVE DEBRIS TO ENSURE MINIMUM INTERFERENCE WITH SELECTIVE DEMOLITION OPERATIONS.
17. CONDUCT DEMOLITION OPERATIONS TO PREVENT INJURY TO PEOPLE AND DAMAGE TO ADJACENT BUILDINGS AND FACILITIES TO REMAIN. ENSURE SAFE PASSAGE OF PEOPLE AROUND SELECTIVE DEMOLITION AREA.
18. USE WATER MIST, TEMPORARY ENCLOSURES AND OTHER SUITABLE METHODS TO LIMIT THE SPREAD OF DUST AND DIRT. COMPLY WITH GOVERNING ENVIRONMENTAL PROTECTION REGULATIONS. DO NOT USE WATER WHEN IT MAY DAMAGE EXISTING CONSTRUCTION, SUCH AS ICE, FLOODING, AND POLLUTION.
19. REMOVE AND TRANSPORT DEBRIS IN A MANNER THAT WILL PREVENT SPILLAGE ON ADJACENT SURFACES AND AREAS.
20. CLEAN ADJACENT STRUCTURES AND IMPROVEMENTS OF DUST, DIRT AND DEBRIS CAUSED BY SELECTIVE DEMOLITION OPERATIONS. RETURN ADJACENT AREAS TO CONDITION EXISTING BEFORE START OF SELECTIVE DEMOLITIONS.
21. PROMPTLY DISPOSE OF DEMOLISHED MATERIALS. DO NOT ALLOW DEMOLISHED MATERIALS TO ACCUMULATE ON-SITE. DO NOT BURN DEMOLISHED MATERIALS ON-SITE.

INDIANA BAT PROTECTION NOTES:

1. TREE CLEARING SHALL BE RESTRICTED TO THE PERIOD BETWEEN OCTOBER 1 AND MARCH 31.
2. THE LIMITS OF DISTURBANCE SHALL BE DEMARCATED BY INSTALLING ORANGE CONSTRUCTION FENCE FOR THE GENERAL IMPROVEMENT AND INFRASTRUCTURE CONSTRUCTION ACTIVITIES AND FOR THE INDIVIDUAL LOT CONSTRUCTION. THESE LIMITS SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.
3. DUST CONTROL DURING CONSTRUCTION SHALL BE IMPLEMENTED. THIS INCLUDES USE OF CONSTRUCTION ENTRANCES, APPLYING LIGHT WATER, AND ESTABLISHING VEGETATION.
4. STREET LIGHTS ARE NOT PERMITTED, RESIDENTIAL LIGHTING SHALL BE DIRECTED DOWNWARD TO REDUCE IMPACTS TO BATS FORAGING FOR FOOD.

TREE PROTECTION NOTES:

1. THE CONTRACTOR SHALL PROVIDE TREE PROTECTION ON THE TREES TO BE SAVED DURING CONSTRUCTION, REFER TO DETAIL ON SHEET CD-2.
2. IF THE NOTED TREES CANNOT BE SAVED, A NEW TREE SHALL BE PLANTED ON THE PARCEL.

EXISTING TREE & REMOVAL SCHEDULE:

1.	6" MAPLE	16.	24" BLACK WALNUT	TBR	31. 24" MAPLE
2.	10" QUAD MAPLE	17.	24" OAK	TBR	32. 18" MAPLE
3.	21" BLACK WALNUT	18.	21" BLACK WALNUT		33. 21" MAPLE
4.	10" FIR	19.	18" BLACK WALNUT		34. 13" MAPLE
5.	9" FIR	20.	24" BLACK WALNUT		35. 17" BLACK WALNUT
6.	10" DEAD FIR	21.	22" BLACK WALNUT	TBR	36. 22" OAK
7.	10" MAPLE	22.	15" RED MAPLE	TBR	37. 25" TWIN MAPLE
8.	8" DEAD FIR	23.	16" BLACK WALNUT	TBR	38. 12" MAPLE
9.	6" FIR	24.	30" MAPLE	TBR	39. 12" MAPLE
10.	10" MAPLE	25.	28" BLACK WALNUT	TBR	40. 10" CEDAR
11.	7" FIR	26.	8" MAPLE		41. 7" MAPLE
12.	14" OAK	27.	22" MAPLE		42. 6" TWIN MAPLE
13.	8" FIR	28.	26" MAPLE		43. 8" MAPLE
14.	24" BLACK WALNUT	29.	10" MAPLE		44. 18" MAPLE
15.	21" BLACK WALNUT	30.	7" MAPLE		45. 8" MAPLE

NOTES:
1. TREE LOCATIONS, SIZES AND IDENTIFICATION BY HUDSON LAND DESIGN PERSONNEL. TREES ON LOT 1 WERE LOCATED ON MARCH 18, 2025. TREES ON LOTS A & B WERE LOCATED ON APRIL 27, 2026.
2. TBR = TO BE REMOVED

OWNER'S CONSENT:

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

_____ _____
SADHNA GUPTA DATE

I HEREBY DECLARE THIS MAP TO BE PREPARED IN ACCORDANCE WITH THE CODE OF PRACTICE OF THE NEW YORK STATE ASSOCIATION OF PROFESSIONAL LAND SURVEYORS, ADOPTED OCTOBER, 1996 AND REVISED THROUGH JULY 18, 1997

BY: _____
JOSEPH RAPPA JR., L.S. *N.Y. State Lic. no. 051206*

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE _____ DAY OF _____, 20_____, SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS _____ DAY OF _____, 20_____, BY

_____ CHAIRMAN

_____ SECRETARY

IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.

DRAWN BY: CMB				CHECKED BY: DGK			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	5/26/26	PER PLANNING BOARD COMMENTS	CMB				
2	6/30/26	PER PLANNING BOARD COMMENTS	CMB				

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

Dig Safely. New York. Call 811 before you dig

SEAL

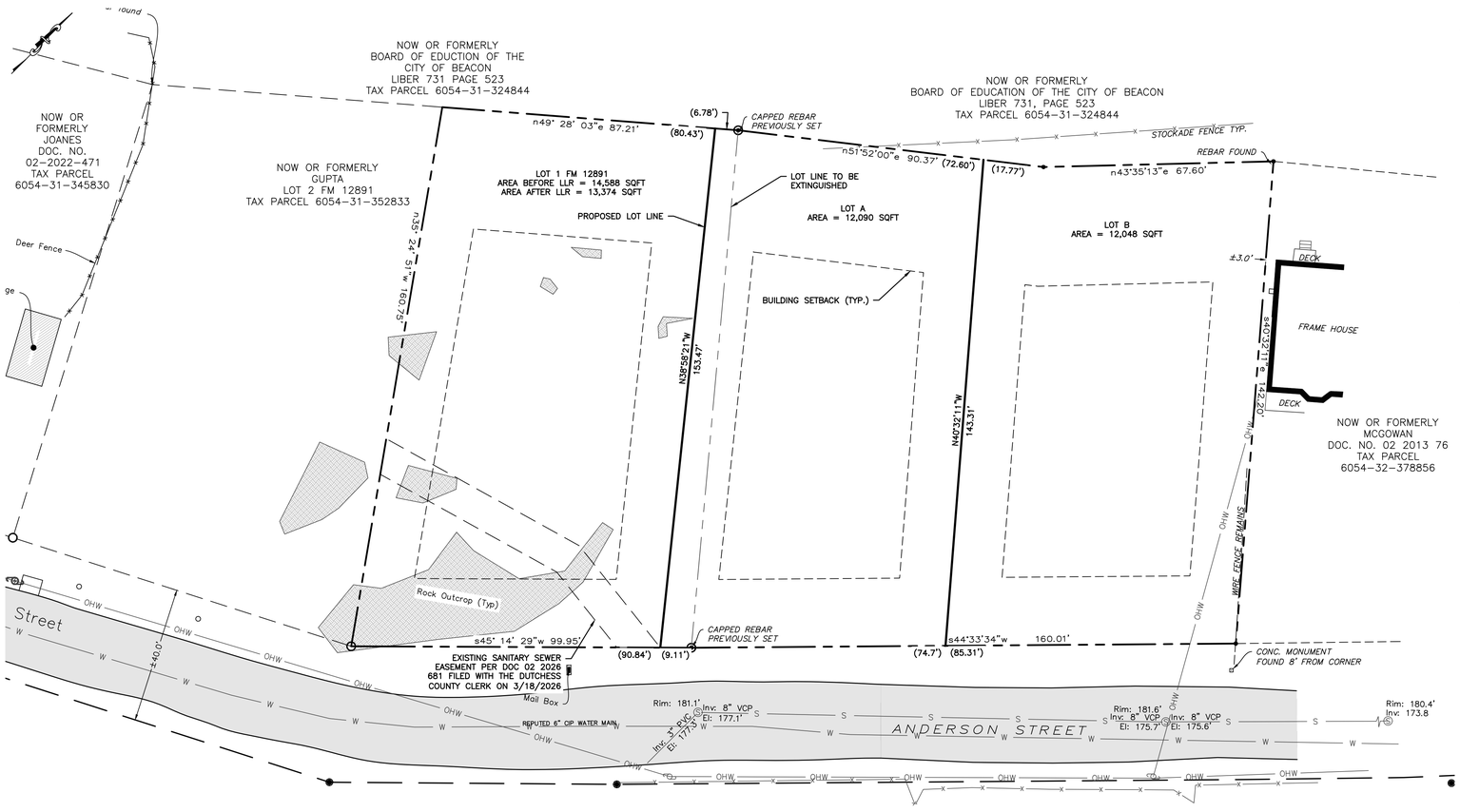
HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
174 MAIN ST., BEACON, NEW YORK 12508
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845-440-6926

EXISTING CONDITIONS & REMOVALS PLAN

84 ANDERSON STREET SUBDIVISION
REVISION TO FILED MAP 12891
84 ANDERSON STREET
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-31-371850

JOB #: 2026:009
DATE: 4/28/2026
SCALE: 1" = 20'
TITLE: XC-1
SHEET: 2 OF 7

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



LEGEND:

- EXISTING PROPERTY LINE
- ADJOINING PROPERTY LINE
- EXISTING EASEMENT LINE
- EXISTING STREAM
- EXISTING WETLAND BOUNDARY
- 100' WETLAND BUFFER
- 250 EXISTING MAJOR CONTOUR
- 252 EXISTING MINOR CONTOUR
- EXISTING TREE LINE
- OHW EXISTING OVER HEAD WIRE
- EXISTING UTILITY POLE
- SS EXISTING SEWER SERVICE LINE
- S EXISTING SEWER LINE
- EXISTING SEWER MANHOLE
- EXISTING SEWER CLEAN OUT
- W EXISTING WATER LINE
- WS EXISTING WATER SERVICE LINE
- EXISTING WELL
- EXISTING HYDRANT
- WV EXISTING WATER SHUT OFF VALVE
- EXISTING WATER VALVE
- EXISTING STORM WATER LINE
- RL EXISTING ROOF LEADER
- EXISTING CATCH BASIN

- PROPOSED PROPERTY LINE
- PROPOSED SET BACK LINE
- 250 PROPOSED MAJOR CONTOUR
- 252 PROPOSED MINOR CONTOUR
- PROPOSED EASEMENT
- PROPOSED TREE LINE
- S PROPOSED SEWER LINE
- SS PROPOSED SEWER SERVICE LINE
- PROPOSED SEWER MANHOLE
- PROPOSED SEWER CLEAN OUT
- PROPOSED SDS LATERAL
- PROPOSED SDS SOLID LINE
- ST PROPOSED STORM WATER LINE
- RL PROPOSED ROOF LEADER LINE
- W PROPOSED ROOF LEADER
- PROPOSED WATER LINE
- WS PROPOSED WATER SERVICE LINE
- PROPOSED WELL
- PROPOSED HYDRANT
- WV PROPOSED WATER SHUT OFF VALVE
- PROPOSED WATER VALVE

SCHEDULE OF REGULATIONS (R1-10 ZONING DISTRICT) AND LOT CONFORMANCE TABLE:

PARAMETER	REQUIREMENT
LOT AREA:	10,000 SQFT MIN./UNIT
LOT WIDTH:	85 FEET MINIMUM
LOT DEPTH:	100 FEET MINIMUM
YARD SETBACKS (RESIDENTIAL USE):	
FRONT YARD:	20 FEET
SIDE YARD:	15 FEET
REAR YARD:	35 FEET MINIMUM
MAX. BUILDING HEIGHT:	35 FT, 2.5 STORIES
MAX. BUILDING COVERAGE:	25% MAX.

MAP REFERENCE:

1. BOUNDARY AND TOPOGRAPHIC SURVEY PER "BOUNDARY & TOPOGRAPHIC SURVEY PREPARED OF 84 ANDERSON STREET" PREPARED BY RAPPA AND BURNETT LAND SURVEYORS, P.C., DATED MARCH 16, 2026.
2. LOT 1 OF FILED MAP 12891 PER MAP FILED AT DUTCHESS COUNTY CLERK'S OFFICE ON 3/11/2026 "74 ANDERSON STREET SUBDIVISION" PREPARED BY HUDSON LAND DESIGN PROFESSIONAL ENGINEERING P.C.

TOTAL PARCEL AREA:

±37,505 S.F. OR ±0.861 ACRE

TAX MAP REFERENCE:

CITY OF BEACON 130200-6054-31-371850
CITY OF BEACON 130200-6054-31-358838

HORIZONTAL DATUM:

NAD 83-NY EAST

VERTICAL DATUM:

NAVD 88

FLOOD BOUNDARY:

SUBJECT PARCEL IS LOCATED IN ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANGE FLOODPLAIN) PER PANEL 36027C0464E DATED MAY 2, 2012.

WETLAND NOTE:

NO NYSDEC OR FEDERAL WETLANDS WERE FOUND ONSITE.

ENCROACHMENT NOTE:

THE FILING OF THIS PLAT DOES NOT CONSTITUTE ANY ENDORSEMENT, APPROVAL OR AUTHORIZATION OF ANY KIND FOR THE CONTINUATION OR REMOVAL OF ANY EXISTING ENCROACHMENTS ON THE SUBJECT PROPERTY.

OWNER'S CONSENT:

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

_____ _____
SADHNA GUPTA DATE

I HEREBY DECLARE THIS MAP TO BE PREPARED IN ACCORDANCE WITH THE CODE OF PRACTICE OF THE NEW YORK STATE ASSOCIATION OF PROFESSIONAL LAND SURVEYORS, ADOPTED OCTOBER, 1996 AND REVISED THROUGH JULY 18, 1997

BY: _____
JOSEPH RAPPA JR., L.S. *N.Y. State Lic. no. 051206*

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE

_____ DAY OF _____, 20_____, SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS _____ DAY OF _____, 20_____, BY

_____ CHAIRMAN

_____ SECRETARY

IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.

DRAWN BY: CMB				CHECKED BY: DGK			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	5/26/26	PER PLANNING BOARD COMMENTS	CMB				
2	6/30/26	PER PLANNING BOARD COMMENTS	CMB				

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

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SEAL

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

PRELIMINARY SUBDIVISION PLAT

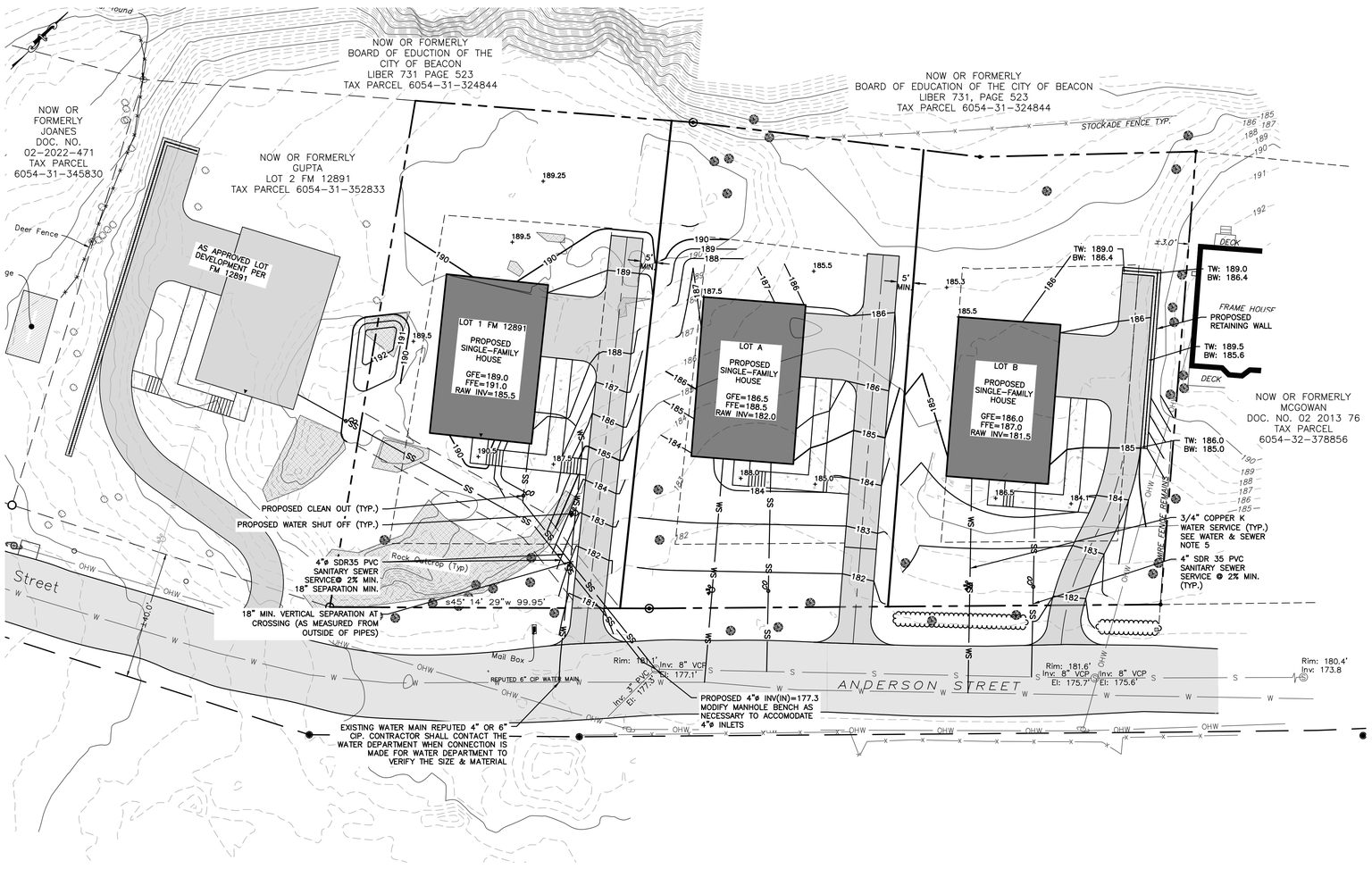
84 ANDERSON STREET SUBDIVISION

REVISION TO FILED MAP 12891

84 ANDERSON STREET
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-31-371850

JOB #: 2026:009
DATE: 4/28/2026
SCALE: 1" = 20'
TITLE: PL-1
SHEET: 3 OF 7

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



SCHEDULE OF REGULATIONS (R1-10 ZONING DISTRICT) AND LOT CONFORMANCE TABLE:

PARAMETER	REQUIREMENT	LOT 1	LOT A	LOT B
LOT AREA:	10,000 SQFT MIN./UNIT	±13,374 SQFT	±12,090 SQFT	±12,048 SQFT
LOT WIDTH:	85 FEET MINIMUM	±85.0 FEET	±81.4 FEET*	±85.0 FEET
LOT DEPTH:	100 FEET MINIMUM	±153.5 FEET	±143.3 FEET	±142.2 FEET
YARD SETBACKS (RESIDENTIAL USE):				
FRONT YARD:	20 FEET	51.4 FEET	44.8 FEET	38.0 FEET
SIDE YARD:	15 FEET	18.7 FEET	15.8 FEET	15.0 FEET
REAR YARD:	35 FEET MINIMUM	53.0 FEET	52.5 FEET	50.5 FEET
MAX. BUILDING HEIGHT:	35 FT, 2.5 STORIES	≤35 FEET	≤35 FEET	≤35 FEET
MAX. BUILDING COVERAGE:	25% MAX.	±12.0%	±13.2%	±13.2%

*AN AREA VARIANCE GRANTING RELIEF OF 3.6 FEET FROM 85 FEET TO 81.4 FEET FOR THE LOT WIDTH OF LOT A WAS GRANTED BY THE CITY OF BEACON ZONING BOARD OF APPEALS AT ITS JUNE 16TH 2026 MEETING.

LEGEND:

- EXISTING PROPERTY LINE
- ADJOINING PROPERTY LINE
- EXISTING EASEMENT LINE
- EXISTING STREAM
- EXISTING WETLAND BOUNDARY
- 100' WETLAND BUFFER
- 250 EXISTING MAJOR CONTOUR
- 252 EXISTING MINOR CONTOUR
- EXISTING TREE LINE
- OHW EXISTING OVER HEAD WIRE
- EXISTING UTILITY POLE
- SS EXISTING SEWER SERVICE LINE
- EXISTING SEWER LINE
- EXISTING SEWER MANHOLE
- EXISTING SEWER CLEAN OUT
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- EXISTING WELL
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- PROPOSED HYDRANT
- PROPOSED WATER SHUT OFF VALVE
- PROPOSED WATER VALVE

WATER & SEWER NOTES:

1. ALL WATER & SEWER CONNECTIONS SHALL COMPLY WITH CITY WATER AND SEWER DISTRICT REQUIREMENTS.
2. THE PROPOSED BUILDING SHALL BE SET AT SUCH ELEVATION TO ENSURE GRAVITY FLOW FROM THE RAW SEWER LINE TO THE POINT OF CONNECTION WITH THE EXISTING SEWER MAIN, WHILE MAINTAINING PROPER EARTH COVER ABOVE ALL PIPING.
3. NO CELLAR, ROOF, OR FOOTING DRAINS SHALL BE DISCHARGED INTO THE SANITARY SEWER SYSTEM.
4. THE APPLICANT/APPLICANT'S PLUMBER SHALL ACQUIRE WATER METERS AND MXU UNITS (SIGNAL SENDING AND RECEIVING UNIT) FOR THE AMI SYSTEM (ADVANCED METERING INFRASTRUCTURE) FROM THE CITY OF BEACON WATER DEPARTMENT. THE MXU UNIT SHALL BE INSTALLED ON THE EXTERIOR OF THE BUILDING AND SHALL BE LOCATED 2 TO 3 FEET ABOVE THE EXTERIOR GROUND ELEVATION.
5. VERIFY PRESSURE WITH CITY OF BEACON WATER DEPARTMENT PRIOR TO CONSTRUCTION. INCREASE SERVICE LINE SIZE IF NEEDED TO MAINTAIN MINIMUM PRESSURE WITHIN THE STRUCTURE.

GENERAL CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL PERFORM A UTILITIES CALL-OUT PRIOR TO CONSTRUCTION TO VERIFY ALL UNDERGROUND UTILITY LOCATIONS BY CONTACTING UFPO @ 1-800-962-7962.
2. WATER, SEWER AND STORM SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PLANS. ALL OTHER UTILITIES (TELEPHONE, ELECTRIC, GAS, CABLE, ETC.) SHALL BE INCORPORATED FOLLOWING SITE PLAN APPROVAL. ALL SUCH UTILITY DESIGNS SHALL BE DEVELOPED IN COORDINATION WITH THE RESPECTIVE UTILITY COMPANIES.
3. THE CONTRACTOR SHALL FIELD VERIFY THE SIZE, LOCATION, DEPTH AND CONDITION OF ALL UTILITIES AND REPORT ANY DISCREPANCIES TO THE ENGINEER. THE CONTRACTOR SHALL NOT ASSUME THAT ALL LOCATIONS AS SHOWN ON THE PLAN ARE CORRECT.
4. THE CONTRACTOR SHALL CONSTRUCT ALL IMPROVEMENTS AS SHOWN ON PLANS. ANY FIELD CONDITIONS THAT MAY RESULT IN A VARIATION FROM THE PLAN SET SHALL BE BROUGHT TO THE ENGINEERS ATTENTION IN WRITING. VARIATIONS FROM THE PLAN WITHOUT APPROVAL FROM THE ENGINEER WILL BE CONSIDERED DEFICIENT.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ON-SITE OR OFF-SITE DAMAGES TO VEGETATION OR PROPERTY CAUSED BY HIS OPERATIONS. SUCH DAMAGES SHALL BE REPAIRED OR REPLACED AT THE CONTRACTORS COST TO THE SATISFACTION OF THE ENGINEER, PROPERTY OWNER OR AGENCY HAVING JURISDICTION.
6. THE CONTRACTOR SHALL SECURE ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION.
7. THE CONTRACTOR SHALL KEEP THE SITE IN A CLEAN AND ORDERLY MANNER.

SITE SPECIFIC NOTES:

1. THE CONTRACTOR SHALL PERFORM A UTILITIES CALL-OUT PRIOR TO CONSTRUCTION TO VERIFY ALL UNDERGROUND UTILITY LOCATIONS BY CONTACTING UFPO @ 1-800-962-7962.
2. THE CONTRACTOR SHALL CONTACT THE CITY OF BEACON WATER AND SEWER DEPARTMENTS TO SCHEDULE A PRE-CONSTRUCTION METING TO ENSURE THAT THE ARRANGEMENTS FOR WATER SUPPLY AND SEWAGE DISPOSAL ARE COMMENCED IN ACCORDANCE WITH THE APPROVED PLANS AND AMENDMENTS THERETO AND GENERALLY ACCEPTED STANDARDS.
3. THE PROPOSED LOTS SHALL BE SERVED BY THE CITY OF BEACON MUNICIPAL WATER AND SEWER SERVICES.
4. THE WATER SERVICE LINE AND METER SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF BEACON WATER DEPARTMENT REQUIREMENTS.
5. THE WATER SERVICE LINE TO EACH LOT SHALL BE 3/4"ø K-COPPER.
6. THE SEWER SERVICE LINES TO EACH LOT SHALL BE 4"ø SDR 35 PVC PIPE WITH PITCH AS SHOWN ON THE PLAN (MINIMUM OF ¼" PER FOOT SHALL BE MAINTAINED).
7. A ROAD OPENING PERMIT SHALL BE REQUIRED FOR THE INSTALLATION OF THE PROPOSED WATER AND SEWER SERVICES FOR THE NEW BUILDING. STREET CLOSURE FOR WATER AND SEWER SERVICE CONNECTIONS SHALL BE PERFORMED IN ACCORDANCE WITH CITY OF BEACON REQUIREMENTS.
8. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO CONSTRUCTION. THE PROPOSED DRIVEWAY SHALL HAVE A STABILIZED CONSTRUCTION ENTRANCE.
9. SUMP PUMP TO BE PROVIDED FOR FOOTING DRAINS. THE TYPE OF PUMP AND METHODS USED TO ENSURE PROPER DRAINAGE SHALL BE ACCEPTABLE TO THE CITY OF BEACON BUILDING DEPARTMENT. BACKFLOW PREVENTION DEVICES SHALL BE PLACED ON THE FOOTING DRAINS TO PREVENT BACKFLOW INTO THE FOOTING DRAIN. SUMP PUMP DISCHARGE SHALL NOT ENTER THE SANITARY SEWER SYSTEM.
10. THE PROPOSED DRIVEWAY SIGHT DISTANCE SHALL BE IN COMPLIANCE WITH THE CITY OF BEACON'S 192-9(B) CODE AND THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION REQUIREMENTS. THE STATE UTILIZES THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) GUIDELINES FOR INTERSECTION SIGHT DISTANCES. FOR ROADS WITH A SPEED LIMIT OF 30 MPH, AASHTO DESIGN TABLES CALL FOR A SIGHT DISTANCE OF 290 FEET TO THE LEFT AND 335 FEET TO THE RIGHT. IN CASES WHERE INTERSECTION SIGHT DISTANCE IS DEFICIENT, A MINIMUM STOPPING SIGHT DISTANCE OF 200 FEET IS REQUIRED. THE MEASURED SIGHT DISTANCE IS AS FOLLOWS:

LOT 1: INTERSECTION SIGHT DISTANCE RIGHT = ±200 FEET
INTERSECTION SIGHT DISTANCE LEFT = ±285 FEET
STOPPING SIGHT DISTANCE (WESTBOUND) = ±480 FEET
STOPPING SIGHT DISTANCE (EASTBOUND) = ±240 FEET

LOT A: INTERSECTION SIGHT DISTANCE RIGHT = ±225 FEET
INTERSECTION SIGHT DISTANCE LEFT = ±425 FEET
STOPPING SIGHT DISTANCE (WESTBOUND) = ±395 FEET
STOPPING SIGHT DISTANCE (EASTBOUND) = ±325 FEET

LOT B: INTERSECTION SIGHT DISTANCE RIGHT = ±290 FEET
INTERSECTION SIGHT DISTANCE LEFT = ±360 FEET
STOPPING SIGHT DISTANCE (WESTBOUND) = ±330 FEET
STOPPING SIGHT DISTANCE (EASTBOUND) = ±380 FEET

11. BEDROCK SHALL REMOVED BY MECHANICAL MEANS. NO BLASTING SHALL BE PERMITTED WITHOUT APPROVAL FROM THE BUILDING DEPARTMENT.

INFILTRATION AND INFLOW MITIGATION NOTES:

1. AT AN INSPECTION PERFORMED ON APRIL 20, 2026, HUDSON LAND DESIGN OBSERVED NO ILLICIT STORMWATER OR SUMP PUMP CONNECTIONS TO THE CITY OF BEACON'S SANITARY SEWER COLLECTION SYSTEM.

RETAINING WALL NOTES:

1. THE DESIGN OF THE RETAINING WALL SHALL BE COMPLETED BY A NYS LICENSED ENGINEER, AND SUBMITTED TO THE CITY OF BEACON FOR REVIEW.
2. TOP WALL AND BOTTOM WALL ELEVATIONS SHOWN. BOTTOM WALL REPRESENTS THE FINAL GRADE AT EXPOSED FACE OF WALL.
3. RETAINING WALL SHALL INCLUDE FALL PROTECTION.

OWNER'S CONSENT:

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

_____ _____
SADHNA GUPTA DATE

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE _____ DAY OF _____, 20_____, SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS _____ DAY OF _____, 20_____, BY

_____ CHAIRMAN

_____ SECRETARY

IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.

DRAWN BY: CMB				CHECKED BY: DGK			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	5/26/26	PER PLANNING BOARD COMMENTS	CMB				
2	6/30/26	PER PLANNING BOARD COMMENTS	CMB				

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

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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

SUBDIVISION PLAN

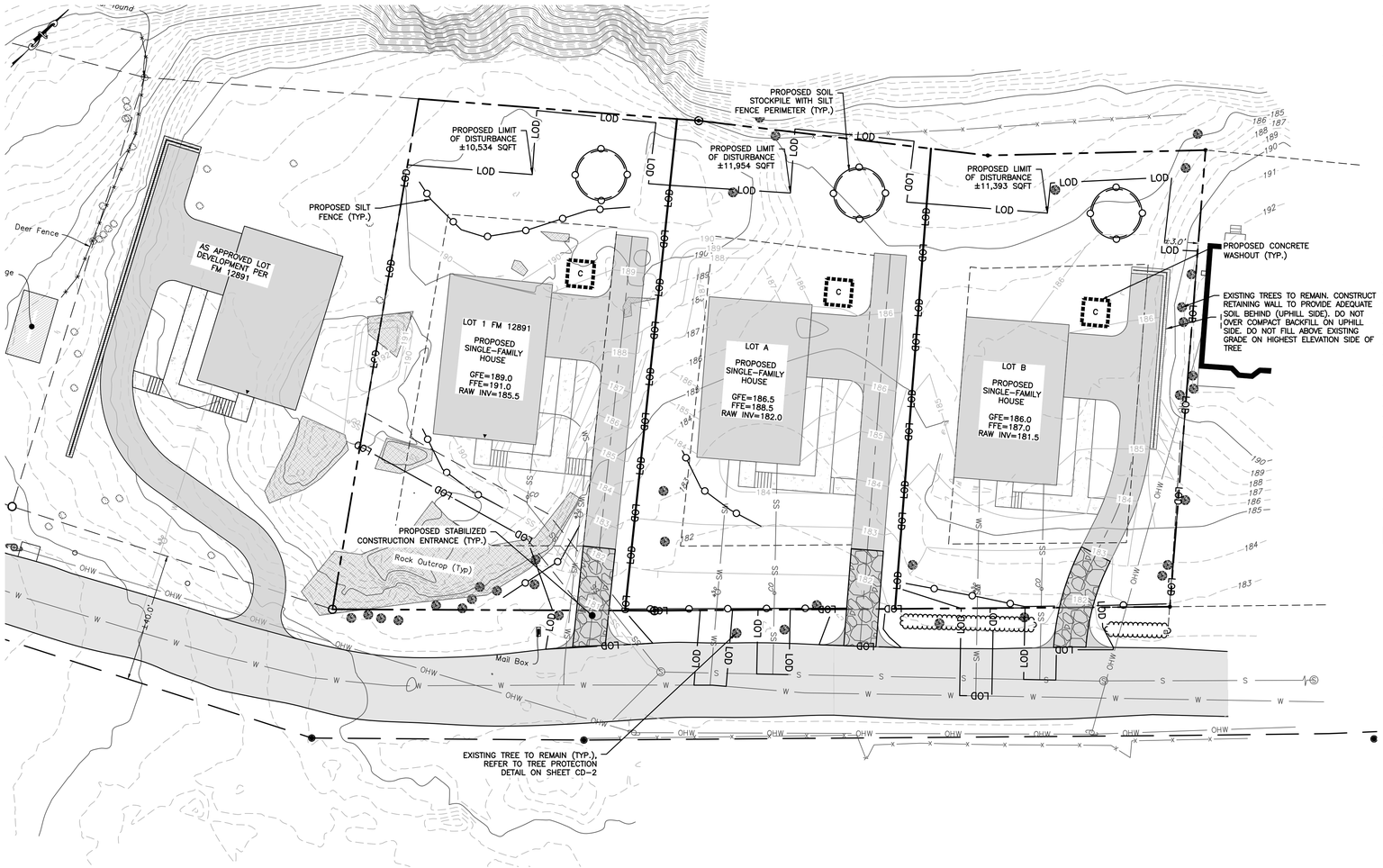
84 ANDERSON STREET SUBDIVISION

REVISION TO FILED MAP 12891

84 ANDERSON STREET
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-31-371850

JOB #:	2026:009
DATE:	4/28/2026
SCALE:	1" = 20'
TITLE:	SP-1
SHEET:	4 OF 7

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



LEGEND:

- EXISTING PROPERTY LINE
- ADJOINING PROPERTY LINE
- EXISTING EASEMENT LINE
- EXISTING STREAM
- EXISTING WETLAND BOUNDARY
- 100' WETLAND BUFFER
- EXISTING MAJOR CONTOUR
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- PROPOSED WELL
- PROPOSED HYDRANT
- PROPOSED WATER SHUT OFF VALVE
- PROPOSED WATER VALVE
- PROPOSED SILT FENCE
- PROPOSED LIMIT OF DISTURBANCE
- PROPOSED CATCH BASIN INLET PROTECTION
- PROPOSED CONSTRUCTION ENTRANCE

EROSION AND SEDIMENT CONTROL NOTES:

1. ALL EROSION CONTROL MEASURES EMPLOYED DURING THE CONSTRUCTION PROCESS SHALL BE INSPECTED BY THE CONTRACTOR IN ACCORDANCE WITH THE MAINTENANCE SCHEDULE. ALL EROSION CONTROL STRUCTURES SHALL BE REPAIRED AND MAINTAINED AS NECESSARY BY THE CONTRACTOR.
2. ALL STORMWATER MANAGEMENT STRUCTURES (E.G. CATCH BASINS) SHALL BE REGULARLY INSPECTED FOR SEDIMENT ACCUMULATIONS. CATCH BASINS SHALL BE CLEANED WHEN SEDIMENT DEPTH REACHES A MAXIMUM OF ONE-HALF THE AVAILABLE SUMP DEPTH.
3. ALL EROSION CONTROL INSTALLATION AND MAINTENANCE MEASURES SHALL MEET THE REQUIREMENTS OF THE NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL.
4. ANY PILE OF POTENTIALLY EROSIVE MATERIAL TEMPORARILY STOCKPILED ON THE SITE DURING THE CONSTRUCTION PROCESS SHALL BE LOCATED IN AN AREA AWAY FROM STORM DRAINAGE AND SHALL BE PROPERLY PROTECTED FROM EROSION BY A SURROUNDING SILT FENCE.
5. PERMANENT SEEDED AREAS FOR EROSION CONTROL SHALL BE IN ACCORDANCE WITH DETAIL AND SPECIFICATIONS ON THIS PLAN.
6. AREAS UNDERGOING CLEARING OR GRADING AND WHERE WORK IS DELAYED OR COMPLETED AND WILL NOT BE REDISTURBED FOR A PERIOD OF 21 DAYS OR MORE SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT VEGETATIVE COVER WITHIN 14 DAYS.
7. ON-SITE DUST CONTROL SHALL BE ACCOMPLISHED BY STANDARD METHODS OF LIGHTLY WATERING ALL EXPOSED SOIL AND RAPIDLY STABILIZING THE REGRADED AREAS WITH TOPSOIL, LOAM AND/OR SEEDING.
8. THE CITY ENGINEER AND PROJECT ENGINEER SHALL BE NOTIFIED NO LESS THAN 48 HOURS PRIOR TO THE START OF ANY SITE WORK, AND BY SUCH NOTIFICATION, SHALL BE PROVIDED WITH THE NAME AND TELEPHONE NUMBER OF THE GENERAL CONTRACTOR RESPONSIBLE FOR SUCH WORK.
9. THE CITY AND/OR ITS REPRESENTATIVES 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 PROJECT ENGINEER SHALL BE CONSULTED ON ANY SPECIAL ADDITIONS OR DELETIONS OF EROSION CONTROL MEASURES WARRANTED BY CHANGING FIELD CONDITIONS.
10. 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 TO FILTER WATER FOR PUMPING TO A SUITABLE LOCATION.
11. WHEN ALL DISTURBED AREAS ARE STABLE, ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED.

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.

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE

_____ DAY OF _____, 20_____, SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS _____ DAY OF _____, 20_____, BY

_____ CHAIRMAN

_____ SECRETARY

IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.

OWNER'S CONSENT:

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

_____ _____
SADHNA GUPTA DATE

DRAWN BY: CMB				CHECKED BY: DGK			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	5/26/26	PER PLANNING BOARD COMMENTS	CMB				
2	6/30/26	PER PLANNING BOARD COMMENTS	CMB				

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

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STATE OF NEW YORK DANIEL G. KOSENDA 082716 LICENSED PROFESSIONAL ENGINEER
SEAL

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

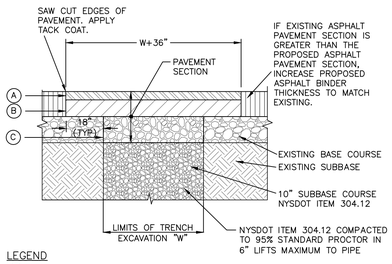
EROSION & SEDIMENT CONTROL PLAN

84 ANDERSON STREET SUBDIVISION
REVISION TO FILED MAP 12891

84 ANDERSON STREET
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-31-371850

JOB #:	2026:009
DATE:	4/28/2026
SCALE:	1" = 20'
TITLE:	ESC-1
SHEET:	5 OF 7

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



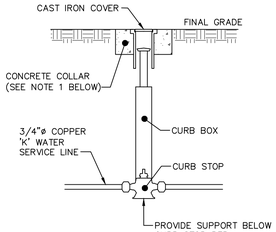
LEGEND

(A) 1.5" ASPHALT CONCRETE TOP COURSE– NYSDOT TYPE F1
(B) 3.0" ASPHALT CONCRETE BINDER COURSE– NYSDOT TYPE F9
(C) 3.0" ASPHALT BASE COURSE– NYSDOT TYPE F9

NOTES:

1. SAW CUT MIN. 18" BEYOND EXCAVATION WITH SMOOTH EDGES. 18" JOINT BETWEEN EXISTING AND NEW TOP COURSE TO BE MILLED. JOINT TO BE SEALED WITH POLYMER MODIFIED SEALER.
2. FURNISH, PLACE, AND COMPACT SUBBASE.
3. TACK COAT IN ACCORDANCE WITH NYSDOT STANDARD SPEC.
4. FURNISH AND PLACE ASPHALT CONCRETE PAVEMENT AS SPECIFIED.

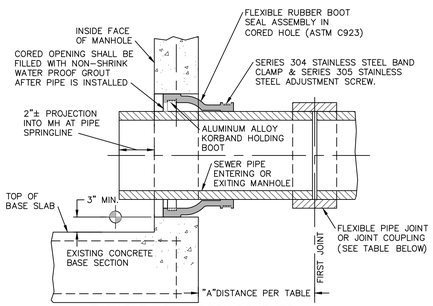
PAVEMENT RESTORATION DETAIL
NOT TO SCALE



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.
2. CURB STOP TO BE COMPRESSION TYPE BY MUELLER.
3. AREA AROUND CURB BOX TO BE BACKFILLED WITH GRAVELLY MATERIAL.

WATER SHUT–OFF VALVE DETAIL
NOT TO SCALE



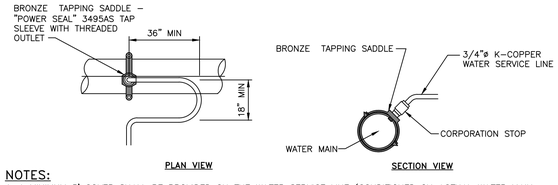
FLEXIBLE JOINT REQUIREMENTS

SEWER PIPE TYPE	FLEXIBLE JOINT TYPE IN & OUT	"A"DISTANCE (FEET)
DUCTILE IRON	STD RUBBER GASKET PIPE JOINT ONLY	10' MAX
PVC	STD RUBBER GASKET PIPE JOINT ONLY	3' MAX

NOTE:

REFERENCE MANHOLE DETAIL(S) FOR REQUIRED INVERT CHANNEL CONFIGURATION.

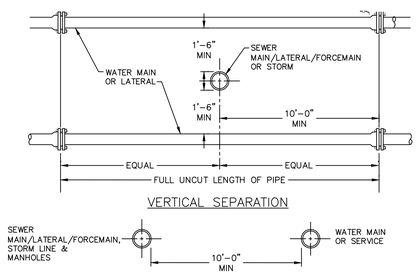
CORED HOLE AND INSERTED BOOT DETAIL
NOT TO SCALE



NOTES:

1. A MINIMUM 5' COVER SHALL BE PROVIDED ON THE WATER SERVICE LINE (CONDITIONED ON ACTUAL WATER MAIN DEPTH).
2. CORPORATION STOP TO BE COMPRESSION TYPE BY MUELLER.
3. WATER SERVICE LINE TO HAVE A "GOOSENECK" NEAR CORPORATION STOP.
4. CORPORATION STOP TO BE INSTALLED IN THE UPPER HALF OF THE WATER MAIN AT AN ANGLE OF APPROXIMATELY 45° FROM HORIZONTAL.
5. THE CONTRACTOR SHALL INSTALL A FULL BODIED STAINLESS STEEL TAPPING SLEEVE AT THE PROPOSED WATER SERVICE LOCATION.

WATER SERVICE CONNECTION DETAIL
NOT TO SCALE



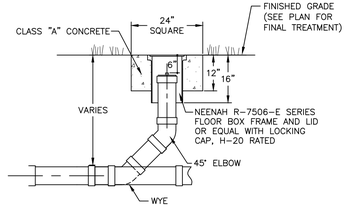
VERTICAL SEPARATION

HORIZONTAL SEPARATION

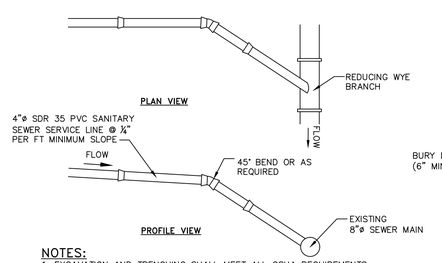
NOTE:

1. 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 ENCASEMENT OF WATERLINE OR OFFSETTING OF WATERLINE SHALL BE REQUIRED WHERE SEPARATION DISTANCES CANNOT BE MAINTAINED.

WATER LINE SEPARATION DETAIL
NOT TO SCALE



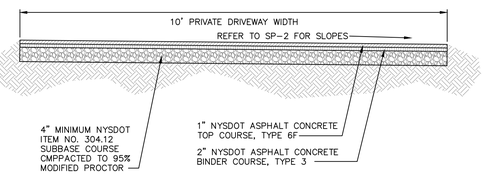
CLEANOUT DETAIL
NOT TO SCALE



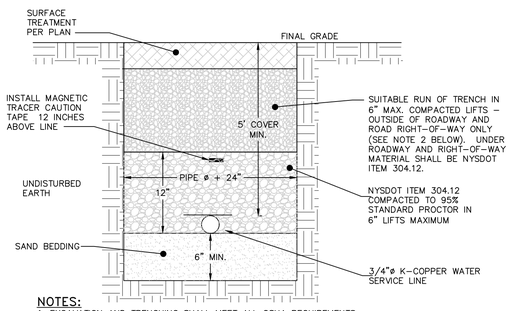
NOTES:

1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.
2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, ENLOGATED 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. TAPPING SADDLE FOR CONNECTION OF THE PROPOSED SERVICE LINE TO THE EXISTING SEWER MAIN TO BE A 4" PREDCO HUB TAP SADDLE – MODEL #HTS4/E.

SANITARY SEWER SERVICE CONNECTION DETAIL
NOT TO SCALE



PAVED DRIVEWAY SECTION DETAIL
NOT TO SCALE



NOTES:

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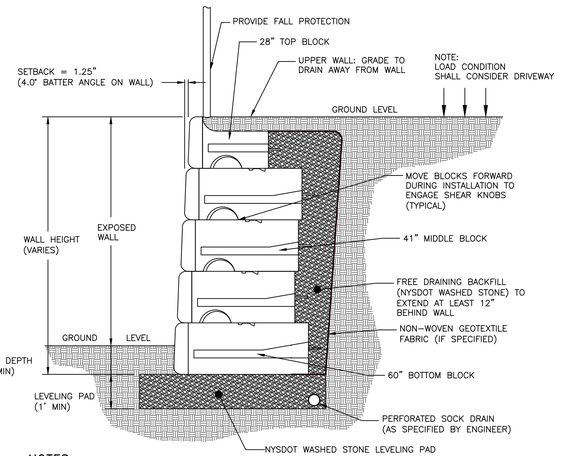
2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, ENLOGATED PARTICLES, LARGE STONES OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED AND USED.
3. IN AREAS WHERE 5' COVER REQUIREMENT CANNOT BE MET, THE CONTRACTOR SHALL PROVIDE PIPE INSULATION TO PREVENT FREEZING.
4. IF WATER SERVICE AND SEWER SERVICE LINE CROSSINGS ARE NEEDED, PROVIDE 18" OF VERTICAL SEPARATION

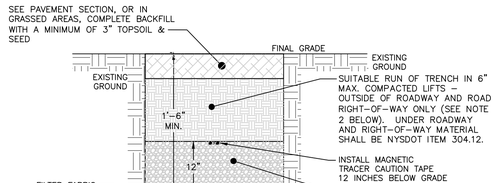
WATER SERVICE LINE TRENCH DETAIL
NOT TO SCALE



NOTES:

1. RETAINING WALL MANUFACTURED BY REDI–ROCK OR APPROVED EQUAL.
2. THIS DETAIL FOR SITE PLAN APPROVAL ONLY TO SHOW GENERAL WALL ASSEMBLY.
3. RETAINING WALL AND FALL PROTECTION SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW YORK TO BE SUBMITTED TO THE CITY OF BEACON BUILDING DEPARTMENT FOR REVIEW PRIOR TO CONSTRUCTION.
4. A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW YORK SHALL CERTIFY TO THE CITY OF BEACON BUILDING DEPARTMENT THAT THE WALL WAS CONSTRUCTED IN ACCORDANCE WITH THE APPROVED.

TYPICAL REDI–ROCK GRAVITY WALL
NOT TO SCALE



NOTES:

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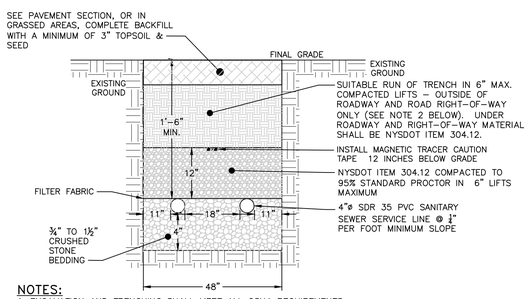
2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, LARGE STONES OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED AND USED.

SANITARY SEWER SERVICE LINE TRENCH DETAIL
NOT TO SCALE



NOTES:

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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 (TWO LINES) DETAIL
NOT TO SCALE

OWNER'S CONSENT:

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

_____ _____
SADHNA GUPTA DATE

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE _____ DAY OF _____, 20_____, SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS _____ DAY OF _____, 20_____, BY

_____ CHAIRMAN

_____ SECRETARY

IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.

DRAWN BY: CMB				CHECKED BY: DGK			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	5/26/26	PER PLANNING BOARD COMMENTS	CMB				
2	6/30/26	PER PLANNING BOARD COMMENTS	CMB				

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SEAL

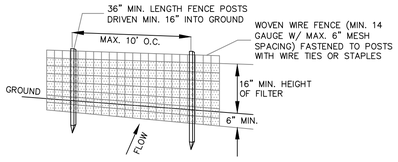
HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
174 MAIN ST., BEACON, NEW YORK 12508
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845–440–6926

CONSTRUCTION DETAILS

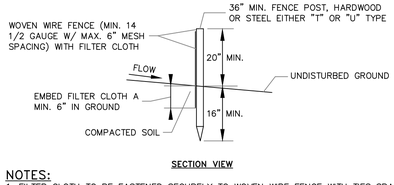
84 ANDERSON STREET SUBDIVISION
REVISION TO FILED MAP 12891
84 ANDERSON STREET
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054–31–371850

JOB #: 2026:009
DATE: 4/28/2026
SCALE: AS SHOWN
TITLE: CD–1
SHEET: 6 OF 7

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



PERSPECTIVE VIEW



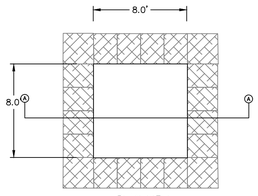
SECTION VIEW

NOTES:

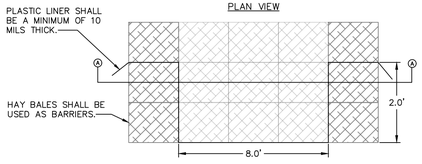
1. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
2. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N OR APPROVED EQUAL.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

SILT FENCE DETAIL

NOT TO SCALE



PLAN VIEW



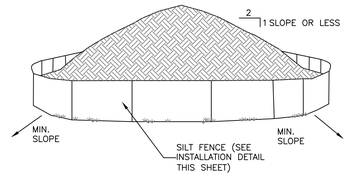
SECTION VIEW

NOTES:

1. WASHOUT STATION SHALL BE LOCATED 100' FROM ANY STORMWATER FEATURE ON SITE OR NATURAL WATERWAYS OR WETLANDS.
2. INSPECT WASHOUT STATION DAILY AND REPLACE PLASTIC LINER WHEN ANY RIPS OR TEARS ARE OBSERVED.
3. REPLACE WASHOUT STATION WHEN IT IS AT 75% OF ITS CAPACITY WITH HARDENED MATERIAL.
4. WATER ACCUMULATION IN WASHOUT AREA FROM RAINWATER SHALL BE PUMPED FROM THE STATION INTO A GRASSED AREA.

CONCRETE WASHOUT STATION DETAIL

NOT TO SCALE

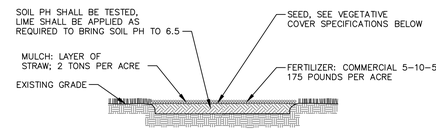


NOTES:

1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
2. EACH PILE SHALL BE SURROUNDED WITH SILT FENCING, THEN STABILIZED WITH VEGETATION OR COVERED.

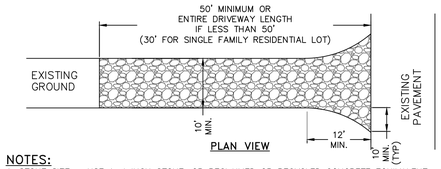
TEMPORARY SOIL STOCKPILE DETAIL

NOT TO SCALE



TEMPORARY SEEDING DETAIL

NOT TO SCALE



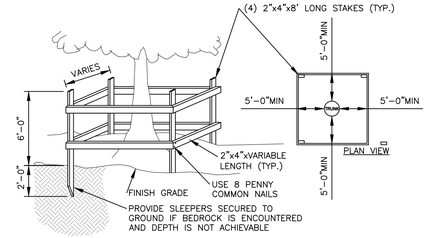
PLAN VIEW

NOTES:

1. STONE SIZE – USE 1-4 INCH STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. THICKNESS – NOT LESS THAN SIX (6) INCHES.
3. WIDTH – 12 FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. 24 FOOT MINIMUM IF SINGLE ENTRANCE TO LARGE COMMERCIAL OF RESIDENTIAL SITE.
4. GEOTEXTILE – WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
5. SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
6. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURE USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACTED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
7. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
8. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

STABILIZED CONSTRUCTION ENTRANCE DETAIL

NOT TO SCALE



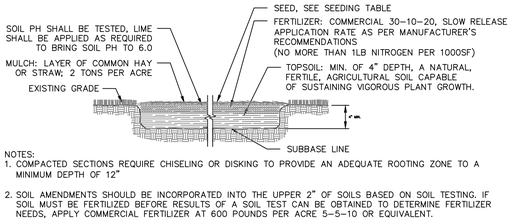
PLAN VIEW

NOTES:

1. TREES TO REMAIN NOTED ON EXISTING CONDITIONS PLAN.
2. NOT ALL TREES TO REMAIN REQUIRE PROTECTION. TREE PROTECTION TO BE UTILIZED ON TREES WHERE CONSTRUCTION TRAFFIC WOULD COMPACT THE ROOT ZONE OF THE TREE.

TEMPORARY TREE PROTECTION DETAIL

NOT TO SCALE



NOTES:

1. COMPACTED SECTIONS REQUIRE CHISELING OR DISKING TO PROVIDE AN ADEQUATE ROOTING ZONE TO A MINIMUM DEPTH OF 12"
2. SOIL AMENDMENTS SHOULD BE INCORPORATED INTO THE UPPER 2" OF SOILS BASED ON SOIL TESTING. IF SOIL MUST BE FERTILIZED BEFORE RESULTS OF A SOIL TEST CAN BE OBTAINED TO DETERMINE FERTILIZER NEEDS, APPLY COMMERCIAL FERTILIZER AT 600 POUNDS PER ACRE 5-5-10 OR EQUIVALENT.
3. PERMANENT SEEDINGS MAY BE MADE ANY TIME OF YEAR IF PROPERLY MULCHED AND ADEQUATE MOISTURE IS PROVIDED. LATE JUNE THROUGH EARLY AUGUST IS NOT OPTIMAL SEEDING PERIOD AS PORTIONS OF THE SEEDING MAY FAIL DUE TO DROUGHT AND HEAT. THESE AREAS MAY NEED RESEEDING IN LATE SUMMER/FALL OR THE FOLLOWING SPRING.
4. WATERING MAY BE ESSENTIAL TO ESTABLISH A NEW SEEDING WHEN A DROUGHT CONDITION OCCURS SHORTLY AFTER A NEW SEEDING EMERGES. DO NOT EXCEED THE APPLICATION RATE FOR THE SEED OR SUBSOIL.

SEEDING TABLE

TYPE	SUNNY SITE:	SUNNY DROUGHTY SITE:	SHADY DRY SITE:	SHADY WET SITE:
OPTION A	65% CREEPING RED FESCUE 20% PERENNIAL RYE GRASS 15% FINE FESCUE 175 LBS PER ACRE	65% FINE FESCUE 15% PERENNIAL RYE GRASS 20% CREEPING FESCUE 220 LBS PER ACRE	65% FINE FESCUE 15% PERENNIAL RYE GRASS 20% CREEPING FESCUE 220 LBS PER ACRE	70% CREEPING RED FESCUE 30% BLEND OF SHADE-TOLERANT HARD FESCUE 130 POUNDS PER ACRE
OPTION B	100% CREEPING RED FESCUE 200 LBS PER ACRE	100% CREEPING RED FESCUE 200 LBS PER ACRE	80% BLEND OF SHADE-TOLERANT CEREAL RYE 20% PERENNIAL RYE 175 LBS PER ACRE	100% CHEWINGS FESCUE 200 LBS PER ACRE
OPTION C			100% CREEPING RED FESCUE 200 LBS PER ACRE	

TOPSOIL SEED, FERTILIZER AND MULCH DETAIL

NOT TO SCALE

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE

_____ DAY OF _____, 20_____, SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS _____ DAY OF _____, 20_____, BY

_____ CHAIRMAN

_____ SECRETARY

IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.

OWNER'S CONSENT:

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

_____ _____
SADHNA GUPTA DATE

DRAWN BY: CMB				CHECKED BY: DGK			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	5/26/26	PER PLANNING BOARD COMMENTS	CMB				
2	6/30/26	PER PLANNING BOARD COMMENTS	CMB				

Dig Safely. New York. Call 811 before you dig

STATE OF NEW YORK DANIEL G. KOSEMEN 082716 LICENSED PROFESSIONAL ENGINEER

SEAL

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

CONSTRUCTION DETAILS

84 ANDERSON STREET SUBDIVISION

REVISION TO FILED MAP 12891

84 ANDERSON STREET
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-31-371850

JOB #:	2026:009
DATE:	4/28/2026
SCALE:	AS SHOWN
TITLE:	CD-2
SHEET:	7 OF 7

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

LANC & TULLY
Engineering and Surveying, D.P.C.

July 10, 2026

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

RE: 84 Anderson Street
Tax Nos. 6054-31-358838 & 371850
City of Beacon, NY

Dear Mr. Gunn:

My office has received the following regarding the proposed subdivision at 84 Anderson Street:

- Correspondence dated June 30, 2026, from Hudson Land Design.
- Plan set titled "84 Anderson Street Subdivision", consisting of 7 sheets, as prepared by Hudson Land Design, with the latest revision date of June 30, 2026.

The proposed project is the subdivision of an existing lot into two lots, as well as the shifting of a lot line on an existing parcel. The project site consists of two single tax parcels that are located in R1-10 Zone. Based on our review of the above documents and plans, we would like to offer the following comments:

1. Sheet 3 of 7 is titled "Preliminary Subdivision Plat". The word "Preliminary" should be removed from the title.

2. A note shall be added to Sheets 3 and 4 of the plan set reflecting the variance granted by the City of Beacon ZBA for the reduction in the lot width of Lot "A".

This completes our review at this time. Further comments may be provided based on future submissions. If you have any questions, or require any additional information, please do not hesitate to contact our office.

Respectfully,

LANC & TULLY, P.C.

John Russo, P.E.

cc: Natalie Quinn, Planner
Jennifer Gray, Esq.
Bryan Murphy, Building Inspector

P.O. Box 687, Goshen, N.Y. 10924 | (845) 294-3700
www.lanctully.com

KARC
PLANNING CONSULTANTS, INC.

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

FR: KARC Planning Consultants, Inc.

DATE: July 13, 2026

RE: 84 Anderson Street Subdivision Application, Sadhna Gupta

I have reviewed the following material regarding the proposed subdivision located at 84 Anderson St:

- Cover letter by Hudson Land Design, dated June 30, 2026
- Subdivision Plan Set (7 sheets) by Hudson Land Design, last revised June 30, 2026

Project Description:
The subject property is a developed single-family residential parcel located at 84 Anderson Street in the City of Beacon, Dutchess County (Tax ID No. 130200-6054-31-371850-0000). The property contains approximately 0.526 acres (22,912 square feet) and is located within the R1-10 Zoning District. The applicant is seeking approval to subdivide the parcel at 84 Anderson Street and facilitate a lot line adjustment with the adjoining parcel at 74 Anderson Street, resulting in a total of three residential lots. The existing residence, garage, and deck located on the subject property would be demolished, and each of the three (3) resulting lots would be developed with the construction of a new single-family residence.

Recommendation:
All previous planning comments have been satisfactorily addressed. The application is sufficient for approval from a planning and zoning compliance perspective.

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

Natalie Quinn
Beacon Planning Consultant

Cc: Bryan Murphy, Building Inspector
Jennifer L. Gray, Esq., City Attorney
John Russo, P.E., City Engineer

City of Beacon Planning Board Agenda
07/14/2026

Title:

Public hearing and continue review of application for Subdivision Approval, 108 Liberty Street, Residential, submitted by Stephen Spaccarelli and Claire Tipley.

ATTACHMENTS

108 Liberty PB 7.14.26_Response Letter_2026-0630.pdf

108 Liberty PB 7.14.26 I&I Report 2026-0622.pdf

108 Liberty PB 7.14.26 Spaccarelli-Tipley tree assessment 6-19-26.pdf

108 Liberty PB 7.14.26 Subdivision Set_2026-0626.pdf

Lanc & Tully 108 Liberty Street 07-10-26.pdf

KARC Review PB_108 Liberty Street_2026.07.13.pdf

108 Liberty PB 7.14.26 PH public comment Travis.pdf

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
www.HudsonLandDesign.com

June 30, 2026

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

Re: 108 Liberty Street Subdivision
Stephen Spaccarelli and Claire Tipley (Applicants)
108 Liberty Street
Tax Parcel ID: 6054-31-266830 (±0.55 acres)
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) is pleased to submit copies of the following documents in support of the Project:

- Four (4) copies of the Subdivision Plan Set (Sheets 1 through 7 of 7)
- Four (4) copies of a tree preservation recommendation letter from Kinsley Tree Care.
- Four (4) copies of an Inflow and Infiltration report.

The documents have been prepared and/or updated in response to comments from the Planning Board and from the City's consultants for the Planning Board's continued review and consideration of the Application. The following are point-by-point responses to each comment contained within the letters prepared by the City's consultants:

Lanc & Tully Review Letter, Dated June 3, 2026:

General Comments:

1. Comment acknowledged. An Inflow & Infiltration report has been provided with this submission.

Existing Conditions & Removals Plan (Sheet 2 of 7):

1. Comment acknowledged. The water, sewer and storm utilities have labeled as to their respective size and material.

2. Comment acknowledged. Inverts and rim elevations of the water, sewer and storm utilities are provided on the revised plan.

Subdivision Plan (Sheet 4 of 7):

1. Comment acknowledged. The information is provided on this sheet.
2. Setback of the house is set to meet the difference between the frontage of existing house at 108 Liberty and the side setback of the first town house on Angela Court. This will allow the applicant to save the 3 mature Norway Spruce trees along the front of lot. This was discussed at the June planning board meeting and found to be acceptable.
3. The proposed driveway location set to save the three mature Norway Spruce trees along the front of lot.
4. Size and materials of the proposed utilities to the proposed dwelling are noted on the plan.
5. The proposed sidewalk has been extended to the north edge of the property; however, it should be noted that the arborist has recommended not constructing the sidewalk as it can impact the root zone of the Spruces.

KARC Planning Consultants, Inc. Review Letter, Dated June 4, 2026:

1. The total property area was included on the Subdivision Application. The Applicants/Owners are not a business entity. Therefore, this portion of the Application remains blank.
2. Sheet PL-1 has been revised to clearly state "Preliminary Plat."
3. Comment Acknowledged. See responses to Lanc & Tully's Subdivision Plan comments # 3 & 4.
4. Comment Acknowledged. The applicant is seeking an area variance for the driveway setback to preserve the three mature Spruce trees. Plans and supporting materials are being submitted to the Zoning Board of Appeals along with the Planning Board submittal.
5. Comment acknowledged. See responses to Lanc & Tully's Subdivision Plan comments # 3 & 4.

A letter from an arborist is provided with this submission. Recommended tree preservation notes have been added to EC-1 and a driveway detail has been added to sheet CD-1. A sewer pump station report will be provided in a future submission that will also be reviewed by the Dutchess County Department of Health. We look forward to continuing our discussions regarding this Application at your July 14, 2026 meeting. Should you have any questions, please feel free to contact me at 845-795-8956.

Sincerely,



Michael A. Bodendorf, P.E.
Principal

cc: Stephen Spaccarelli and Claire Tipley, Applicants (via email)
HLD file

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

INFILTRATION AND INFLOW (I&I) REPORT

June 30, 2026

City of Beacon Planning Board
Mr. John Gunn, Chairman, & Members of the Planning Board
1 Municipal Center
Beacon, NY 12508

Re: Infiltration and Inflow Investigation Report
108 Liberty Street -Residential Subdivision
Tax ID: 6054-31-266830 (±0.55 Acres Total)
City of Beacon, New York

As required by the City of Beacon code §179-6, Hudson Land Design has conducted an infiltration and inflow investigation (I&I study) of the existing dwelling located at 108 Liberty Street to determine if any cross-connections to the City's sanitary sewage system exist on the site. Cross-Connection, aka illicit inflows, encompass any type of connection that conveys/discharges non-sanitary wastewater (stormwater or groundwater) into the City of Beacon public sanitary sewer collection system. Types of illicit inflows can include: stormwater runoff from roof leaders, pumped groundwater from sump pumps, cross connections from site drains, and other prohibited sources.

On May 27th, 2026, Hudson Land Design personnel visited the subject property at 108 Liberty Street to conduct an I&I study. Below is a summary of the investigation carried out during the visit and the conclusions obtained from the study.

The project site is a developed residential parcel located on the westerly side of Liberty Street. The subject parcel contains within its boundaries the following buildings/structures:

- A single-family 2-story brick residential dwelling with full basement and an enclosed porch on its front (Liberty Street facing) side;
- A small tool shed, located on the northerly side of the 2-story dwelling; and
- A larger shed, located on the property's backyard area.

For the first phase of the study, the exterior of the existing buildings were visually inspected to determine if any stormwater collection practices (gutters and downspouts) were present on the buildings, and to determine if the practices had cross-connections to the City's sanitary sewer collection system.

The exterior of the existing dwelling and sheds were visually inspected, and it was determined that the structures do not have any stormwater collection practices. Based upon our observations, the existing dwelling does not have any rain gutters, downspouts, or header leaders along any part of the structure. The exterior of the two (2) existing sheds were also visually inspected and, similar to the existing dwelling, no stormwater collection practices were observed on either of the accessory structures.

Refer below to photos taken during the Phase I inspection at the project site.

View of the front (easterly) side of the existing dwelling. No rain gutters or downspouts were observed on the dwelling or the covered porch.



View of the northerly side of the existing dwelling and the small shed. No rain gutters or downspouts were observed either on the dwelling or the shed.



View of the rear (westerly) side of the existing dwelling. No rain gutters or downspouts were observed.



View of the southerly side of the existing dwelling. No rain gutters or downspouts were observed.



For the second part of the study (Phase II), the interior of the dwelling was inspected to determine if any cross-connections exist within the structure. Types of cross-connections that can be found inside of residential structures can included: sump pumps, floor drains, or other non-sanitary wastewater discharges that could connect to the internal sewer plumbing or any other type of connection that conveys non-sanitary wastewater to the public sanitary sewer system.

The basement of the existing dwelling was accessed and visually inspected to determine if any cross-connections were present in the dwelling. During the inspection, the outlet point for the dwelling's sewer system (where all internal sewer plumbing conveys to before leaving the dwelling) was found and then traced back to determine if any connections from anything other than from the dwelling's water fixtures exist. The sewer outlet point, located and passing through the front (easterly) foundation wall, was found and it was determined that no connections, other than from the dwelling's water fixtures, exist on the internal sewer plumbing and the sewer service line. The basement was also carefully inspected to determine if any floor drains and/or sump pumps were present in the basement. Based upon our observations, no illicit discharges/cross-connections, sump pumps, or floor drains were found in and/or around the existing dwelling at 108 Liberty Street.

Refer below to photos taken during the Phase II inspection at the project site.

View of the dwelling's sewer outlet point. The raw sewage line for the existing dwelling passes through the front foundation wall of the dwelling facing towards Liberty Street.



Through our investigation, HLD did not find any cross-connections to the City of Beacon sanitary sewer collection system from the subject parcel. Therefore, it is our determination that the site does not have any illicit connections to the City sewer system.

Should you have any questions, please feel free to call me at 845-765-8956.

Sincerely,

Michael A. Bodendorf, P.E.
Principal

cc: Stephen Spaccarelli & Claire Tipley, Owners (via email)
HLD file

To: Stephen Spaccerelli and Claire Tipley
98 Liberty Street
Beacon, NY 12508

From: Kingsley Tree Care LLC; Ian Kingsley
16 Reservoir Lane
Cold Spring, NY 10516

Date: 6/19/26

Tree Assessment

Hello,

Please find below the prepared health assessment of the three Norway spruce at the proposed building site at 108 Liberty Street in Beacon, NY

Trees in Question: Three mature Norway spruces at the front of the property along Liberty Street

Current Tree Health Status: All three trees are in good health and show no current signs of stress or major defects

Recommendations to mitigate construction disturbance include:

- Install tree protection fencing and orange safety fencing around the root zones to minimize soil compaction and accidental disturbance during construction. Fencing should be placed at a 6' radius from the trunk where feasible
- Schedule water service line and sanitary sewer service line excavations during the winter months when the trees are dormant.
- Provide supplemental watering following excavation activities to reduce stress and support recovery.
- Route the sanitary sewer service line closer to the northernmost 24-inch diameter Spruce rather than the adjacent 30-inch diameter Spruce. The smaller tree is farther removed from other anticipated disturbances and is therefore better positioned to tolerate a closer root-zone impact.
- Install a permeable driveway using a minimal-dig design to protect the root zones. Construction should be limited to the low-impact removal of surface organic material, followed by the installation of a permeable geotextile overlain by a cellular confinement (geocell) system filled with clean, open-graded aggregate. Subgrade compaction should be avoided entirely, as the geocell system provides the necessary structural support while preserving soil porosity, gas exchange, and water infiltration. Edge restraints should be installed using above-grade or another minimally invasive method to avoid root disturbance.
- Cut back the privet growing beneath the spruces, but avoid excavation of the shrub roots, as this would unnecessarily disturb the trees' root systems.
- Construction of a new sidewalk is not recommended, as it would increase the area of root-zone disturbance.

Based on my assessment, adherence to these recommendations provides a strong likelihood that all three Norway Spruces can be successfully preserved and maintain good health throughout and following construction activities.
These mature trees represent a significant landscape asset who's environmental, aesthetic, and screening benefits cannot be readily replaced. Preserving them will maintain the established character of the site, provide continued shade and stormwater benefits, and avoid the loss of decades of growth that would require many years to replicate with new plantings. Given their current good health and the availability of practical measures to mitigate construction impacts, efforts to preserve these trees are both feasible and worthwhile.

If there are any other questions or concerns going forward please let me know.

108 LIBERTY STREET

RESIDENTIAL SUBDIVISION

108 LIBERTY STREET
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK

PARCEL INFORMATION:
TAX ID: 6054-31-266830
TOTAL LOT AREA: ±0.55 ACRES
ZONING DISTRICT: R1-5



SITE LOCATION MAP SCALE: 1" = 400'

OWNER/APPLICANT:
STEPHEN SPACCARELLI
& CLAIRE TIPLEY
98 LIBERTY STREET
BEACON, NY 12508

PROJECT ENGINEER:
HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
174 MAIN STREET
BEACON, NEW YORK 12508
PH: 845-440-6926

PROJECT SURVEYOR:
ROBERT V. OSWALD
LAND SURVEYING
175 WALSH ROAD
LAGRANGEVILLE, NEW YORK 12540
PH: 845-226-6436

DRAWING INDEX:
SHEET 1: COVER SHEET (CV-1)
SHEET 2: EXISTING CONDITIONS & REMOVALS PLAN (XC-1)
SHEET 3: PRELIMINARY PLAT (PL-1)
SHEET 4: SUBDIVISION PLAN (SP-1)
SHEET 5: EROSION & SEDIMENT CONTROL PLAN (ESC-1)
SHEET 6: CONSTRUCTION DETAILS (CD-1)
SHEET 7: CONSTRUCTION DETAILS (CD-2)

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

_____ _____
STEPHEN SPACCARELLI & CLAIRE TIPLEY DATE

I HEREBY CERTIFY THAT THE SURVEY SHOWN HEREON IS BASED ON AN ACTUAL FIELD SURVEY COMPLETED ON JANUARY 7, 2026.

BY: _____
ROBERT V. OSWALD, L.S. N.Y. State Lic. no. 50031

DCDBCH STANDARD NOTE:

FOR PERMISSION TO FILE
THIS PLAN DOES NOT CONSTITUTE A REALTY SUBDIVISION AS DEFINED BY ARTICLE XI, TITLE II, SECTION 1115 OF THE PUBLIC HEALTH LAW OF THE STATE OF NEW YORK, AND ARTICLE XI OF THE DUTCHESS COUNTY SANITARY CODE. PERMISSION IS HEREBY GRANTED FOR THE FILING OF THIS MAP WITH THE CLERK OF DUTCHESS COUNTY. APPROVAL FOR ARRANGEMENTS FOR WATER SUPPLY AND/OR SEWAGE DISPOSAL IS NEITHER SOUGHT NOR GRANTED.

_____ _____
AUTHORIZED REPRESENTATIVE OF THE COMMISSIONER OF HEALTH DATE

STANDARD NOTES FOR PROJECTS W/CENTRAL WATER & SEWER

THE DESIGN, CONSTRUCTION AND INSTALLATION SHALL BE IN ACCORDANCE WITH THIS PLAN AND GENERALLY ACCEPTED STANDARDS IN EFFECT AT THE TIME OF CONSTRUCTION WHICH INCLUDE:

"NEW YORK STATE DESIGN STANDARDS FOR INTERMEDIATE SIZED WASTEWATER TREATMENT SYSTEMS", NYSDEC

"RECOMMENDED STANDARDS FOR SEWAGE TREATMENT WORKS, (TEN STATES)."

"RECOMMENDED STANDARDS FOR WATER WORKS, (TEN STATES)."

"NEW YORK STATE DEPARTMENT OF HEALTH AND DUTCHESS COUNTY ENVIRONMENTAL HEALTH SERVICES DIVISION POLICIES, PROCEDURES AND STANDARDS."

"DUTCHESS COUNTY AND NEW YORK STATE SANITARY CODES."

"DUTCHESS COUNTY ENVIRONMENTAL HEALTH SERVICES DIVISION CERTIFICATE OF APPROVAL LETTER."

THIS PLAN IS APPROVED AS MEETING THE APPROPRIATE AND APPLIED TECHNICAL STANDARDS, GUIDELINES, POLICIES AND PROCEDURES FOR ARRANGEMENT OF SEWAGE DISPOSAL AND WATER SUPPLY FACILITIES.

UPON COMPLETION OF THE FACILITIES, THE FINISHED WORKS SHALL BE INSPECTED, TESTED, AND CERTIFIED COMPLETE TO THE DC EHSD BY THE NEW YORK STATE LICENSED PROFESSIONAL ENGINEER SUPERVISING CONSTRUCTION. NO PART OF THE FACILITIES SHALL BE PLACED INTO SERVICE UNTIL ACCEPTED BY THE DC EHSD.

APPROVAL OF ANY PLAN(S) OR AMENDMENT THERETO SHALL BE VALID FOR A PERIOD OF FIVE (5) YEARS FROM THE DATE OF APPROVAL. FOLLOWING THE EXPIRATION OF SAID APPROVAL, THE PLAN(S) SHALL BE RE-SUBMITTED TO THE COMMISSIONER OF HEALTH FOR CONSIDERATION FOR RE-APPROVAL. RE-SUBMISSION OR REVISED SUBMISSION OF PLANS AND/OR ASSOCIATED DOCUMENTS SHALL BE SUBJECT TO COMPLIANCE WITH THE TECHNICAL STANDARDS, GUIDELINES, POLICIES AND PROCEDURES IN EFFECT AT THE TIME OF THE RE-SUBMISSION.

NO CELLAR, FOOTING, FLOOR, GARAGE, COOLER OR ROOF DRAINS SHALL BE DISCHARGED INTO THE SEWAGE COLLECTION SYSTEM.

ALL BUILDINGS SHALL BE CONSTRUCTED AT AN ELEVATION HIGH ENOUGH TO ENSURE GRAVITY FLOW TO THE SEWAGE COLLECTION SYSTEM.

ALL REQUIRED EROSION & SEDIMENT CONTROL AND STORMWATER POLLUTION PREVENTION WATER QUALITY & QUANTITY CONTROL STRUCTURES, PERMANENT AND TEMPORARY, ARE SHOWN ON THE PLANS.

THE DC EHSD SHALL BE NOTIFIED SIXTY DAYS PRIOR TO ANY CHANGE IN USE; USE CHANGES MAY REQUIRE RE-APPROVAL BY THE DC EHSD.

NO BUILDINGS ARE TO BE OCCUPIED AND THE NEW WATER SYSTEM SHALL NOT BE PLACED INTO SERVICE, UNTIL A "COMPLETED WORKS APPROVAL" IS ISSUED UNDER SECTION 5-1.22(D) OF PART 5 OF THE NEW YORK STATE SANITARY CODE (10NYCRR5).

NO BUILDINGS ARE TO BE OCCUPIED AND THE NEW WASTEWATER COLLECTION SYSTEM SHALL NOT BE PLACED INTO SERVICE UNTIL, A "CERTIFICATE OF CONSTRUCTION COMPLIANCE" IS ISSUED UNDER SECTION 19.7 OF ARTICLE 19 OF THE DUTCHESS COUNTY SANITARY CODE.

ALL SERVICE LINES ARE THE RESPONSIBILITY OF THE OWNER UP TO THE PROPERTY LINE. THE WATER AND SEWER COMPANIES SHALL BE RESPONSIBLE FOR ALL VALVES AND PIPES WHICH ARE NOT ON THE OWNER'S PROPERTY.

THE UNDERSIGNED OWNERS OF THE PROPERTY HEREON STATE THAT THEY ARE FAMILIAR WITH THIS MAP, ITS CONTENTS AND ITS LEGENDS AND HEREBY CONSENT TO ALL SAID TERMS AND CONDITIONS AS STATED HEREON.

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE _____ DAY OF _____, 20_____, SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS _____ DAY OF _____, 20____, BY

_____ CHAIRMAN

_____ SECRETARY

IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.

DRAWN BY: CMB				CHECKED BY: MAB			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	6/30/26	PER PLANNING BOARD COMMENTS	CMB				

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SEAL

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

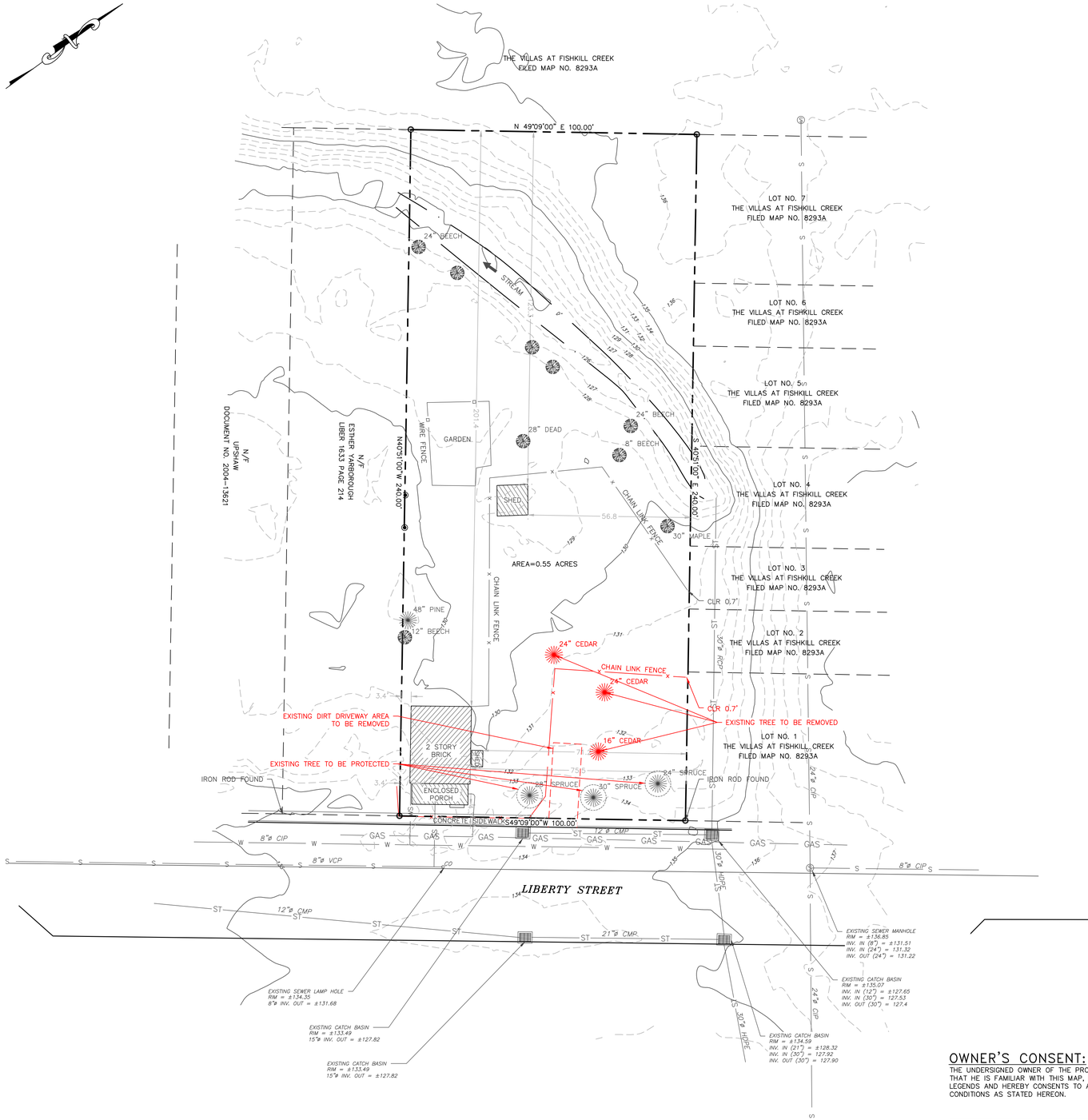
COVER SHEET

108 LIBERTY STREET

108 LIBERTY STREET
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-31-266830

JOB #:	2026:013
DATE:	5/26/26
SCALE:	AS SHOWN
TITLE:	CV-1
SHEET:	1 OF 7

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



LEGEND:

- EXISTING PROPERTY LINE
- ADJOINING PROPERTY LINE
- EXISTING EASEMENT LINE
- EXISTING STREAM
- EXISTING WETLAND BOUNDARY
- 100' WETLAND BUFFER
- 250 EXISTING MAJOR CONTOUR
- 252 EXISTING MINOR CONTOUR
- EXISTING TREE LINE
- OHW EXISTING OVER HEAD WIRE
- EXISTING UTILITY POLE
- SS EXISTING SEWER SERVICE LINE
- S EXISTING SEWER LINE
- EXISTING SEWER MANHOLE
- EXISTING SEWER CLEAN OUT
- W EXISTING WATER LINE
- WS EXISTING WATER SERVICE LINE
- EXISTING WELL
- EXISTING HYDRANT
- EXISTING WATER SHUT OFF VALVE
- EXISTING WATER VALVE
- ST EXISTING STORM WATER LINE
- RL EXISTING ROOF LEADER
- EXISTING CATCH BASIN

PROJECT INFORMATION:

PARCEL OWNER:	STEPHEN SPACCARELLI & CLAIRE TIPLEY, 98 LIBERTY ST, BEACON NY 12508
PROJECT ENGINEER:	HUDSON LAND DESIGN P.C., 174 MAIN STREET, BEACON NY 12508
PARCEL LOCATION:	108 LIBERTY STREET, BEACON NY 12508
TAX PARCEL ID:	6054-31-266830
PARCEL AREA:	±0.55-ACRE
WATER SUPPLY:	MUNICIPAL
SEWAGE DISPOSAL:	MUNICIPAL

MAP REFERENCES:

1. PARCEL BOUNDARY AND SITE FEATURES PER MAP ENTITLED "MAP OF SURVEY FOR THE LANDS OF SPACCARELLI & TIPLEY" PREPARED BY ROBERT V. OSWALD LAND SURVEYING, P.C., DATED JANUARY 7, 2026.

SURVEY NOTES:

1. SUBJECT TO ANY EASEMENTS AND/OR RIGHTS OF WAY THAT AN ACCURATE UP TO DATE ABSTRACT OF TITLE MAY SHOW.
2. SURVEY AS PER RECORD DEED, EXISTING MONUMENTATION, RECORDED AND UNRECORDED MAPS.
3. MAP REFERENCE: FILED MAP #8275, DUTCHESS COUNTY, NY "SUBDIVISION OF PROPERTY OF ALEXANDER A. AND RALPH J. MARTIGNETTI"
4. MAP REFERENCE: FILED MAP #343, DUTCHESS COUNTY, NY "MAP OF LOTS AT MATTANWAN N.Y. BELONGING TO L.J. SHAW AND JOHN P SCHENCE"

DEMOLITION NOTES:

1. PRIOR TO DEMOLISHING ANY BUILDINGS/STRUCTURES, THE CONTRACTOR SHALL PERFORM A PRE-DEMOLITION SURVEY IN ACCORDANCE WITH STATE AND FEDERAL REGULATIONS GOVERNING THE DISPOSAL OF SOLID WASTE. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND APPROVALS BY THE AUTHORITY HAVING JURISDICTION. ALL DEBRIS RESULTING FROM DEMOLITION ACTIVITIES SHALL BE DISPOSED OF OFF-SITE AT A FACILITY APPROVED TO RECEIVE THE DEBRIS.
2. CONFORM TO APPLICABLE CODE FOR DEMOLITION OF STRUCTURES, SAFETY OF ADJACENT STRUCTURES, DUST CONTROL, RUNOFF CONTROL, AND HAULING, DISPOSAL AND STORAGE OF DEBRIS.
3. PROVIDE, ERECT, AND MAINTAIN TEMPORARY BARRIERS AND SECURITY DEVICES.
4. MAINTAIN EXISTING UTILITIES TO REMAIN IN SERVICE AND PROTECT THEM AGAINST DAMAGE DURING SELECTIVE DEMOLITION OPERATIONS. DO NOT INTERRUPT EXISTING UTILITIES SERVING OPERATING FACILITIES, EXCEPT WHEN AUTHORIZED IN WRITING BY OWNER AND AUTHORITIES HAVING JURISDICTION.
5. NOTIFY ADJACENT OWNERS OF WORK THAT MAY AFFECT THEIR PROPERTY, POTENTIAL NOISE, UTILITY OUTAGE, OR DISRUPTION. COORDINATE WITH OWNER.
6. PREVENT MOVEMENT OR SETTLEMENT OF ADJACENT STRUCTURES. PROVIDE BRACING AND SHORING.
7. LOCATE AND IDENTIFY ALL EXISTING UTILITIES WITHIN THE CONSTRUCTION AREA. DISCONNECT AND SEAL OR CAP OFF UTILITY SERVICES THAT WILL BE AFFECTED BY THIS PROJECT. NOTIFY AFFECTED UTILITY COMPANIES BEFORE STARTING WORK AND COMPLY WITH THEIR REQUIREMENTS. VERIFY THAT UTILITIES HAVE BEEN DISCONNECTED AND CAPPED.
8. DEMOLISH AND REMOVE COMPONENTS IN AN ORDERLY AND CAREFUL MANNER.
9. PROTECT EXISTING FEATURES THAT ARE NOT TO BE DEMOLISHED.
10. CONDUCT OPERATIONS WITH MINIMUM INTERFERENCE TO PUBLIC OR PRIVATE ACCESSES.
11. MAINTAIN EGRESS AND ACCESS AT ALL TIMES. DO NOT CLOSE OR OBSTRUCT ROADWAYS, OR SIDEWALKS WITHOUT PERMITS.
12. CEASE OPERATIONS IMMEDIATELY IF ADJACENT STRUCTURES APPEAR TO BE IN DANGER. NOTIFY AUTHORITY HAVING JURISDICTION.
13. ROUGH GRADE AND COMPACT AREAS AFFECTED BY DEMOLITION TO MAINTAIN SITE GRADES AND CONTOURS.
14. FIELD VERIFY EXISTING CONDITIONS AND CORRELATE WITH REQUIREMENTS INDICATED ON DEMOLITION PLAN TO DETERMINE EXTENT OF SELECTIVE DEMOLITION REQUIRED.
15. MAINTAIN EXISTING UTILITIES TO REMAIN IN SERVICE AND PROTECT THEM AGAINST DAMAGE DURING SELECTIVE DEMOLITION OPERATION.
16. CONDUCT DEMOLITION OPERATIONS AND REMOVE DEBRIS TO ENSURE MINIMUM INTERFERENCE WITH SELECTIVE DEMOLITION OPERATIONS.
17. CONDUCT DEMOLITION OPERATIONS TO PREVENT INJURY TO PEOPLE AND DAMAGE TO ADJACENT BUILDINGS AND FACILITIES TO REMAIN. ENSURE SAFE PASSAGE OF PEOPLE AROUND SELECTIVE DEMOLITION AREA.
18. USE WATER MIST, TEMPORARY ENCLOSURES AND OTHER SUITABLE METHODS TO LIMIT THE SPREAD OF DUST AND DIRT. COMPLY WITH GOVERNING ENVIRONMENTAL PROTECTION REGULATIONS. DO NOT USE WATER WHEN IT MAY DAMAGE EXISTING CONSTRUCTION, SUCH AS ICE, FLOODING, AND POLLUTION.
19. REMOVE AND TRANSPORT DEBRIS IN A MANNER THAT WILL PREVENT SPILLAGE ON ADJACENT SURFACES AND AREAS.
20. CLEAN ADJACENT STRUCTURES AND IMPROVEMENTS OF DUST, DIRT AND DEBRIS CAUSED BY SELECTIVE DEMOLITION OPERATIONS. RETURN ADJACENT AREAS TO CONDITION EXISTING BEFORE START OF SELECTIVE DEMOLITIONS.
21. PROMPTLY DISPOSE OF DEMOLISHED MATERIALS. DO NOT ALLOW DEMOLISHED MATERIALS TO ACCUMULATE ON-SITE. DO NOT BURN DEMOLISHED MATERIALS ON-SITE.

INDIANA BAT PROTECTION NOTES:

1. TREE CLEARING SHALL BE RESTRICTED TO THE PERIOD BETWEEN OCTOBER 1 AND MARCH 31.
2. THE LIMITS OF DISTURBANCE SHALL BE DEMARCATED BY INSTALLING ORANGE CONSTRUCTION FENCE FOR THE GENERAL IMPROVEMENT AND INFRASTRUCTURE CONSTRUCTION ACTIVITIES AND FOR THE INDIVIDUAL LOT CONSTRUCTION. THESE LIMITS SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.
3. DUST CONTROL DURING CONSTRUCTION SHALL BE IMPLEMENTED. THIS INCLUDES USE OF CONSTRUCTION ENTRANCES, APPLYING LIGHT WATER, AND ESTABLISHING VEGETATION.
4. STREET LIGHTS ARE NOT PERMITTED. RESIDENTIAL LIGHTING SHALL BE DIRECTED DOWNWARD TO REDUCE IMPACTS TO BATS FORAGING FOR FOOD.

ARBORIST RECOMMENDED TREE PROTECTION NOTES:

1. INSTALL TREE PROTECTION FENCING AND ORANGE SAFETY FENCING AROUND THE ROOT ZONES TO MINIMIZE SOIL COMPACTION AND ACCIDENTAL DISTURBANCE DURING CONSTRUCTION. FENCING SHOULD BE PLACED AT A 6' RADIUS FROM THE TRUNK WHERE FEASIBLE
2. SCHEDULE WATER SERVICE LINE AND SANITARY SEWER SERVICE LINE EXCAVATIONS DURING THE WINTER MONTHS WHEN THE TREES ARE DORMANT.
3. PROVIDE SUPPLEMENTAL WATERING FOLLOWING EXCAVATION ACTIVITIES TO REDUCE STRESS AND SUPPORT RECOVERY.
4. ROUTE THE SANITARY SEWER SERVICE LINE CLOSER TO THE NORTHERNMOST 24-INCH DIAMETER SPRUCE RATHER THAN THE ADJACENT 30-INCH DIAMETER SPRUCE. THE SMALLER TREE IS FARTHER REMOVED FROM OTHER ANTICIPATED DISTURBANCES AND IS THEREFORE BETTER POSITIONED TO INSTALL A GRAVEL DRIVEWAY TO MINIMIZE SOIL DISTURBANCE AND MAINTAIN WATER INFILTRATION TO THE ROOT ZONES.
5. INSTALL A PERMEABLE DRIVEWAY USING A MINIMAL-DIG DESIGN TO PROTECT THE ROOT ZONES. CONSTRUCTION SHOULD BE LIMITED TO THE LOW-IMPACT REMOVAL OF SURFACE ORGANIC MATERIAL, FOLLOWED BY THE INSTALLATION OF A PERMEABLE GEOTEXTILE OVERLAIN BY A CELLULAR CONFINEMENT (GEOCELL) SYSTEM FILLED WITH CLEAN, OPEN-GRADED AGGREGATE. SUBGRADE COMPACTION SHOULD BE AVOIDED ENTIRELY, AS THE GEOCELL SYSTEM PROVIDES THE NECESSARY STRUCTURAL SUPPORT WHILE PRESERVING SOIL POROSITY, GAS EXCHANGE, AND WATER INFILTRATION. EDGE RESTRAINTS SHOULD BE INSTALLED USING ABOVE-GRADE OR ANOTHER MINIMALLY INVASIVE METHOD TO AVOID ROOT DISTURBANCE.
6. CUT BACK THE PRIVET GROWING BENEATH THE SPRUCES, BUT AVOID EXCAVATION OF THE SHRUB ROOTS, AS THIS WOULD UNNECESSARILY DISTURB THE TREES' ROOT SYSTEMS.
7. CONSTRUCTION OF A NEW SIDEWALK IS NOT RECOMMENDED, AS IT WOULD INCREASE THE AREA OF ROOT-ZONE DISTURBANCE.

OWNER'S CONSENT:

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

_____ _____
STEPHEN SPACCARELLI & CLAIRE TIPLEY DATE

I HEREBY CERTIFY THAT THE SURVEY SHOWN HEREON IS BASED ON AN ACTUAL FIELD SURVEY COMPLETED ON JANUARY 7, 2026.

BY: _____
ROBERT V. OSWALD, L.S. *N.Y. State Lic. no. 50031*

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE _____ DAY OF _____, 20_____, SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS _____ DAY OF _____, 20____, BY

_____ CHAIRMAN

_____ SECRETARY

IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.

DRAWN BY: CMB				CHECKED BY: MAB			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	6/30/26	PER PLANNING BOARD COMMENTS	CMB				

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

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13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845-440-6926

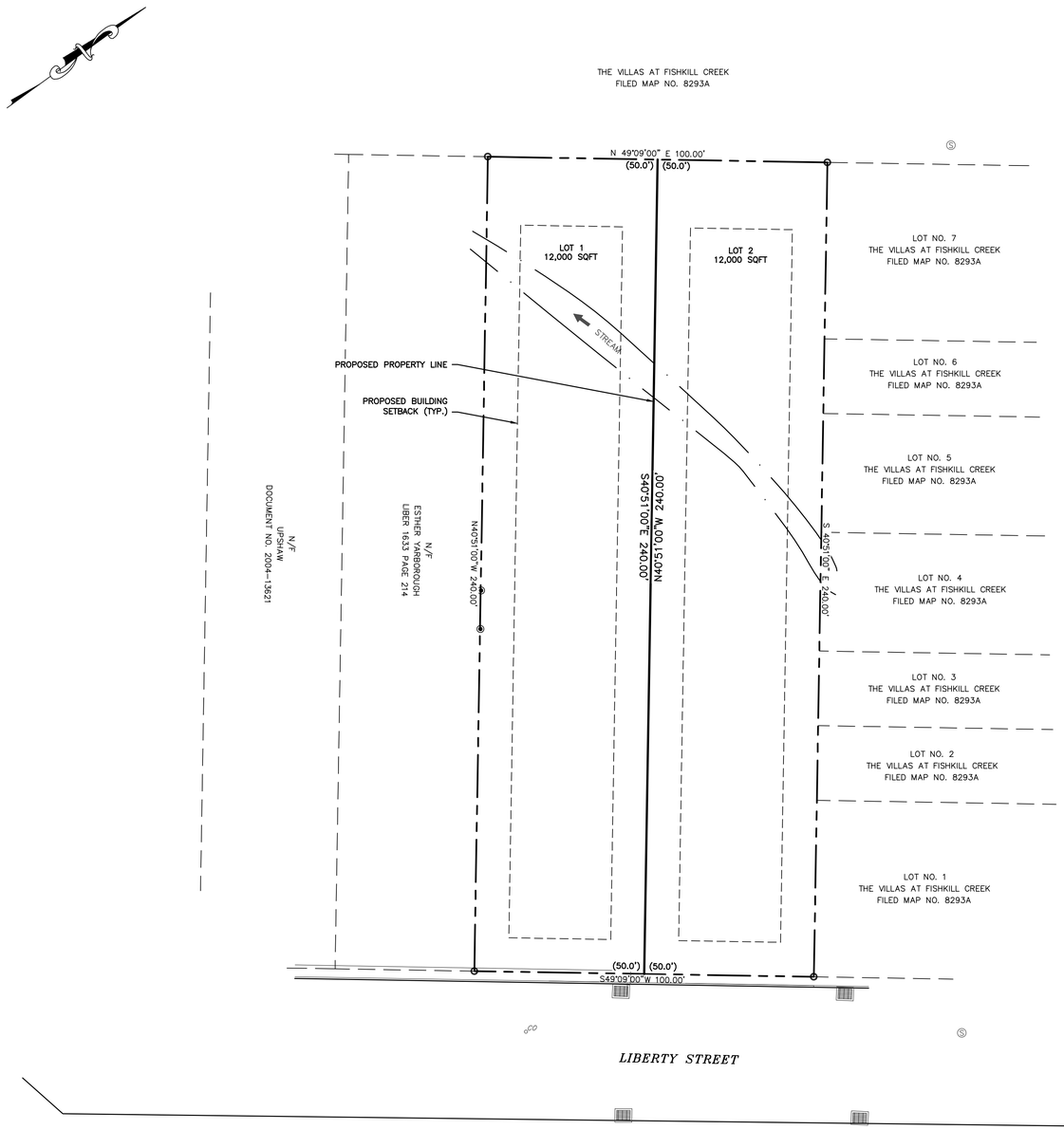
EXISTING CONDITIONS & REMOVALS PLAN

108 LIBERTY STREET

108 LIBERTY STREET
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-31-266830

JOB #:	2026:013
DATE:	5/26/26
SCALE:	1" = 20'
TITLE:	XC-1
SHEET:	2 OF 7

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



LEGEND:

- EXISTING PROPERTY LINE
- ADJOINING PROPERTY LINE
- EXISTING EASEMENT LINE
- EXISTING STREAM
- EXISTING WETLAND BOUNDARY
- 100' WETLAND BUFFER
- 250 EXISTING MAJOR CONTOUR
- 252 EXISTING MINOR CONTOUR
- EXISTING TREE LINE
- OHW EXISTING OVER HEAD WIRE
- EXISTING UTILITY POLE
- SS SS EXISTING SEWER SERVICE LINE
- S EXISTING SEWER LINE
- EXISTING SEWER MANHOLE
- EXISTING SEWER CLEAN OUT
- W EXISTING WATER LINE
- WS WS EXISTING WATER SERVICE LINE
- EXISTING WELL
- EXISTING HYDRANT
- EXISTING WATER SHUT OFF VALVE
- EXISTING WATER VALVE
- ST EXISTING STORM WATER LINE
- EXISTING ROOF LEADER
- EXISTING CATCH BASIN

- PROPOSED PROPERTY LINE
- PROPOSED SET BACK LINE
- 250 PROPOSED MAJOR CONTOUR
- 252 PROPOSED MINOR CONTOUR
- PROPOSED EASEMENT
- PROPOSED TREE LINE
- S PROPOSED SEWER LINE
- SS SS PROPOSED SEWER SERVICE LINE
- PROPOSED SEWER MANHOLE
- PROPOSED SEWER CLEAN OUT
- PROPOSED SDS LATERAL
- PROPOSED SDS SOLID LINE
- ST PROPOSED STORM WATER LINE
- RL PROPOSED ROOF LEADER LINE
- PROPOSED ROOF LEADER
- W PROPOSED WATER LINE
- WS WS PROPOSED WATER SERVICE LINE
- PROPOSED WELL
- PROPOSED HYDRANT
- PROPOSED WATER SHUT OFF VALVE
- PROPOSED WATER VALVE

SCHEDULE OF REGULATIONS (R1-5 ZONING DISTRICT) AND LOT CONFORMANCE TABLE:

PARAMETER	REQUIREMENT
LOT AREA:	5,000 SQFT MIN.
LOT AREA PER UNIT:	2,500 SQFT MIN.
LOT WIDTH:	50 FEET MINIMUM
LOT DEPTH:	100 FEET MINIMUM
YARD SETBACKS (RESIDENTIAL USE):	
FRONT YARD:	10 FEET
SIDE YARD:	10 FEET
REAR YARD:	20 FEET MINIMUM
MAX. BUILDING HEIGHT:	35 FT, 2.5 STORIES
MAX. BUILDING COVERAGE:	40%
MAX. UNITS/BUILDING:	2 MAX

MAP REFERENCE:

PARCEL BOUNDARY AND SITE FEATURES PER MAP ENTITLED "MAP OF SURVEY FOR THE LANDS OF SPACCARELLI & TIPLEY" PREPARED BY ROBERT V. OSWALD LAND SURVEYING, P.C., DATED JANUARY 7, 2026.

TOTAL PARCEL AREA:

±24,000 S.F. OR ±0.55 ACRE

TAX MAP REFERENCE:

CITY OF BEACON 130200-6054-31-266830

FLOOD BOUNDARY:

SUBJECT PARCEL IS LOCATED IN ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANGE FLOODPLAIN) PER PANEL 36027C0464E DATED MAY 2, 2012.

WETLAND NOTE:

NO NYSDEC OR FEDERAL WETLANDS WERE FOUND ONSITE.

OWNER'S CONSENT:

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

_____ _____
STEPHEN SPACCARELLI & CLAIRE TIPLEY DATE

I HEREBY CERTIFY THAT THE SURVEY SHOWN HEREON IS BASED ON AN ACTUAL FIELD SURVEY COMPLETED ON JANUARY 7, 2026.

BY: _____
ROBERT V. OSWALD, L.S. *N.Y. State Lic. no. 50031*

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13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845-440-6926

PRELIMINARY PLAT

108 LIBERTY STREET

108 LIBERTY STREET
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-31-266830

JOB #:	2026:013
DATE:	5/26/26
SCALE:	1" = 20'
TITLE:	PL-1
SHEET:	3 OF 7

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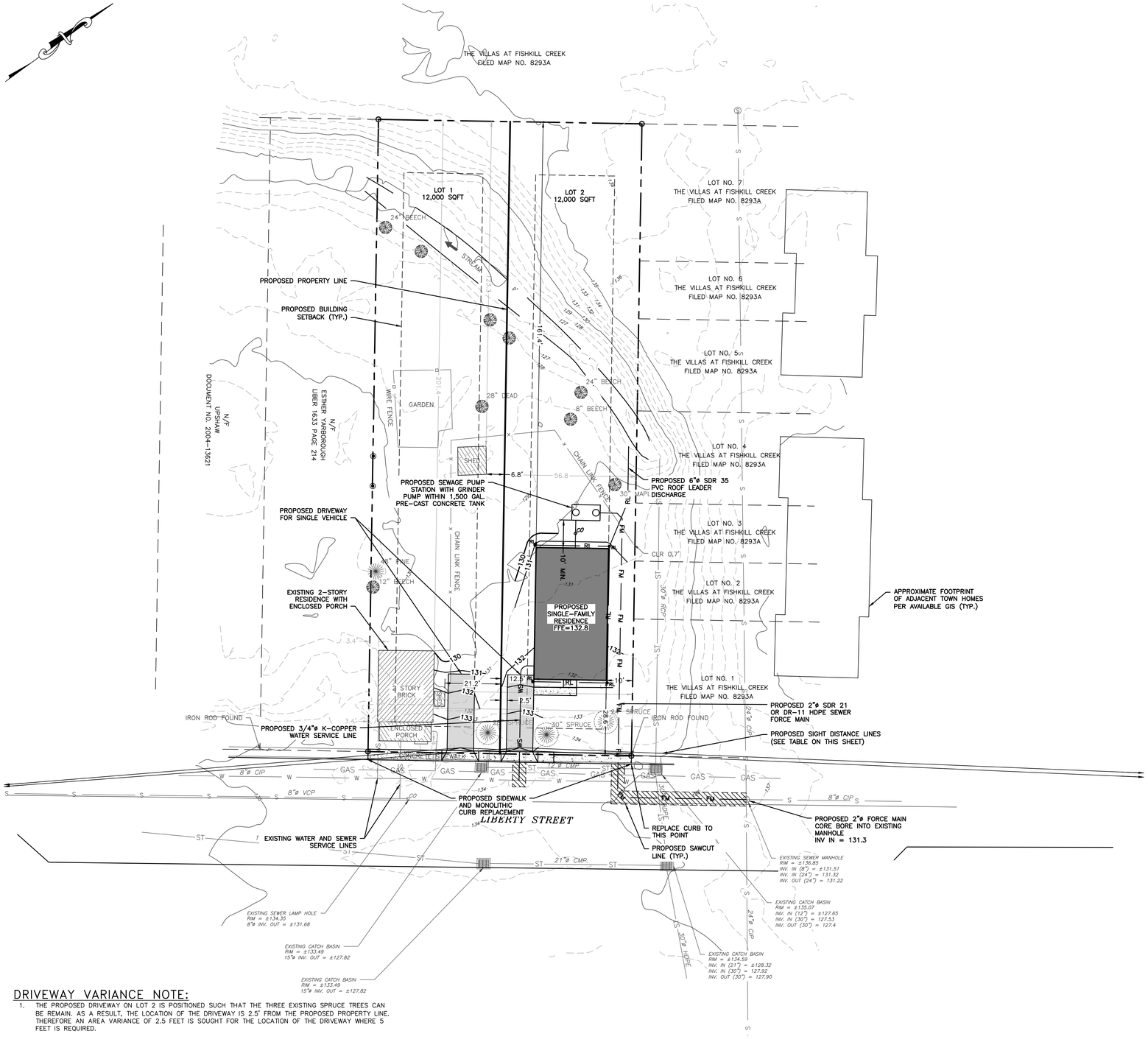

LEGEND:

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	PROPOSED HYDRANT
	PROPOSED WATER SHUT OFF VALVE
	PROPOSED WATER VALVE

SCHEDULE OF REGULATIONS (R1-5 ZONING DISTRICT) AND LOT CONFORMANCE TABLE:

PARAMETER	REQUIREMENT	LOT 1	LOT 2
LOT AREA:	5,000 SQFT MIN.	±12,000 SQFT	±12,000 SQFT
LOT AREA PER UNIT:	2,500 SQFT MIN.	±12,000 SQFT	±12,000 SQFT
LOT WIDTH:	50 FEET MINIMUM	±50 FEET	±50 FEET
LOT DEPTH:	100 FEET MINIMUM	±240 FEET	±240 FEET
YARD SETBACKS (RESIDENTIAL USE):			
FRONT YARD:	10 FEET	±4.3 FEET*	±28.6 FEET
SIDE YARD:	10 FEET	±3.4 FEET*	±10.0 FEET
REAR YARD:	20 FEET MINIMUM	±201.4 FEET	±161.4 FEET
MAX. BUILDING HEIGHT:	35 FT, 2.5 STORIES	2 STORIES	2 STORIES
MAX. BUILDING COVERAGE:	6.92%	11.46%	
MAX. UNITS/BUILDING:	2 MAX	1 UNIT	1 UNIT

* EXISTING NON-CONFORMING.

WATER & SEWER NOTES:

1. ALL WATER & SEWER CONNECTIONS SHALL COMPLY WITH CITY WATER AND SEWER DISTRICT REQUIREMENTS.
2. THE PROPOSED BUILDING SHALL BE SET AT SUCH ELEVATION TO ENSURE GRAVITY FLOW FROM THE RAW SEWER LINE TO THE POINT OF CONNECTION WITH THE EXISTING SEWER MAIN, WHILE MAINTAINING PROPER EARTH COVER ABOVE ALL PIPING.
3. NO CELLAR, ROOF, OR FOOTING DRAINS SHALL BE DISCHARGED INTO THE SANITARY SEWER SYSTEM.
4. THE APPLICANT/APPLICANT'S PLUMBER SHALL ACQUIRE WATER METERS AND MXU UNITS (SIGNAL SENDING AND RECEIVING UNIT) FOR THE AMI SYSTEM (ADVANCED METERING INFRASTRUCTURE) FROM THE CITY OF BEACON WATER DEPARTMENT. THE MXU UNIT SHALL BE INSTALLED ON THE EXTERIOR OF THE BUILDING AND SHALL BE LOCATED 2 TO 3 FEET ABOVE THE EXTERIOR GROUND ELEVATION.

GENERAL CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL PERFORM A UTILITIES CALL-OUT PRIOR TO CONSTRUCTION TO VERIFY ALL UNDERGROUND UTILITY LOCATIONS BY CONTACTING UFPO @ 1-800-962-7962.
2. WATER, SEWER AND STORM SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PLANS. ALL OTHER UTILITIES (TELEPHONE, ELECTRIC, GAS, CABLE, ETC.) SHALL BE INCORPORATED FOLLOWING SITE PLAN APPROVAL. ALL SUCH UTILITY DESIGNS SHALL BE DEVELOPED IN COORDINATION WITH THE RESPECTIVE UTILITY COMPANIES.
3. THE CONTRACTOR SHALL FIELD VERIFY THE SIZE, LOCATION, DEPTH AND CONDITION OF ALL UTILITIES AND REPORT ANY DISCREPANCIES TO THE ENGINEER. THE CONTRACTOR SHALL NOT ASSUME THAT ALL LOCATIONS AS SHOWN ON THE PLAN ARE CORRECT.
4. THE CONTRACTOR SHALL CONSTRUCT ALL IMPROVEMENTS AS SHOWN ON PLANS. ANY FIELD CONDITIONS THAT MAY RESULT IN A VARIATION FROM THE PLAN SET SHALL BE BROUGHT TO THE ENGINEERS ATTENTION IN WRITING. VARIATIONS FROM THE PLAN WITHOUT APPROVAL FROM THE ENGINEER WILL BE CONSIDERED DEFICIENT.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ON-SITE OR OFF-SITE DAMAGES TO VEGETATION OR PROPERTY CAUSED BY HIS OPERATIONS. SUCH DAMAGES SHALL BE REPAIRED OR REPLACED AT THE CONTRACTORS COST TO THE SATISFACTION OF THE ENGINEER, PROPERTY OWNER OR AGENCY HAVING JURISDICTION.
6. THE CONTRACTOR SHALL SECURE ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION.
7. THE CONTRACTOR SHALL KEEP THE SITE IN A CLEAN AND ORDERLY MANNER.

SITE SPECIFIC NOTES:

1. THE CONTRACTOR SHALL PERFORM A UTILITIES CALL-OUT PRIOR TO CONSTRUCTION TO VERIFY ALL UNDERGROUND UTILITY LOCATIONS BY CONTACTING UFPO @ 1-800-962-7962.
2. THE CONTRACTOR SHALL CONTACT THE CITY OF BEACON WATER AND SEWER DEPARTMENTS TO SCHEDULE A PRE-CONSTRUCTION MEETING TO ENSURE THAT THE ARRANGEMENTS FOR WATER SUPPLY AND SEWAGE DISPOSAL ARE COMMENCED IN ACCORDANCE WITH THE APPROVED PLANS AND AMENDMENTS THERETO AND GENERALLY ACCEPTED STANDARDS.
3. THE PROPOSED LOTS SHALL BE SERVED BY THE CITY OF BEACON MUNICIPAL WATER AND SEWER SERVICES.
4. THE WATER SERVICE LINE AND METER SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF BEACON WATER DEPARTMENT REQUIREMENTS.
5. THE WATER SERVICE LINE TO EACH LOT SHALL BE 3/4"ø K-COPPER.
6. THE SEWER SERVICE LINES TO EACH LOT SHALL BE 4"ø SDR 35 PVC PIPE WITH PITCH AS SHOWN ON THE PLAN (MINIMUM OF ¼" PER FOOT SHALL BE MAINTAINED).
7. A ROAD OPENING PERMIT SHALL BE REQUIRED FOR THE INSTALLATION OF THE PROPOSED WATER AND SEWER SERVICES FOR THE NEW BUILDING. STREET CLOSURE FOR WATER AND SEWER SERVICE CONNECTIONS SHALL BE PERFORMED IN ACCORDANCE WITH CITY OF BEACON REQUIREMENTS.
8. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO CONSTRUCTION. THE PROPOSED DRIVEWAY SHALL HAVE A STABILIZED CONSTRUCTION ENTRANCE.
9. FOUNDATION DRAINAGE TO BE DESIGNED BY BUILDING ARCHITECT AND/OR STRUCTURAL ENGINEER, ASSUMED TO REQUIRE A SUMP PUMP. THE TYPE OF PUMP AND METHODS USED TO ENSURE PROPER DRAINAGE SHALL BE ACCEPTABLE TO THE CITY OF BEACON BUILDING DEPARTMENT. BACKFLOW PREVENTION DEVICES SHALL BE PLACED ON THE FOOTING DRAINS TO PREVENT BACKFLOW INTO THE FOOTING DRAIN. SUMP PUMP DISCHARGE SHALL NOT ENTER THE SANITARY SEWER SYSTEM.
10. THE PROPOSED DRIVEWAY SIGHT DISTANCE SHALL BE IN COMPLIANCE WITH THE CITY OF BEACON'S 192-9(B) CODE AND THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION REQUIREMENTS. THE STATE UTILIZES THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) GUIDELINES FOR INTERSECTION SIGHT DISTANCES. FOR ROADS WITH A SPEED LIMIT OF 30 MPH, AASHTO DESIGN TABLES CALL FOR A SIGHT DISTANCE OF 290 FEET TO THE LEFT AND 335 FEET TO THE RIGHT. IN CASES WHERE INTERSECTION SIGHT DISTANCE IS DEFICIENT, A MINIMUM STOPPING SIGHT DISTANCE OF 200 FEET IS REQUIRED. THE MEASURED SIGHT DISTANCE IS AS FOLLOWS:

    LOT 1: ISD RIGHT ±283' TO THE 4-WAY INTERSECTION WITH LEONARD ST & GROVE ST; ISD LEFT ±607'; SSD RIGHT = ±283 FROM THE 4-WAY INTERSECTION WITH LEONARD ST & GROVE ST.; SSD LEFT = ±585

    LOT 2: ISD RIGHT ±306' TO THE 4-WAY INTERSECTION WITH LEONARD ST & GROVE ST; ISD LEFT ±607'; SSD RIGHT = ±306 FROM THE 4-WAY ITERSECTION WITH LEONARD ST & GROVE ST.; SSD LEFT = ±580

11. BEDROCK SHALL REMOVED BY MECHANICAL MEANS. NO BLASTING SHALL BE PERMITTED WITHOUT APPROVAL FROM THE BUILDING DEPARTMENT.

INFILTRATION AND INFLOW MITIGATION NOTES:

1. AT AN INSPECTION PERFORMED ON MAY 27, 2026, HUDSON LAND DESIGN OBSERVED NO ILLICIT STORMWATER OR SUMP PUMP CONNECTIONS TO THE CITY OF BEACON'S SANITARY SEWER COLLECTION SYSTEM.

ENCROACHMENT NOTE:

1. THE FILING OF THIS PLAT DOES NOT CONSTITUTE ANY ENDORSEMENT, APPROVAL OR AUTHORIZATION OF ANY KIND FOR THE CONTINUATION OR REMOVAL OF ANY EXISTING ENCROACHMENTS ON THE SUBJECT PROPERTY.

PERFORMANCE GUARANTY NOTE:

1. PRIOR TO THE ISSUANCE OF A BUILDING PERMIT FOR LOT 2, A PERFORMANCE GUARANTY FOR WORK WITHIN THE CITY RIGHT-OF-WAY SHALL BE POSTED WITH THE CITY IN AN AMOUNT AND FORM APPROVED BY THE CITY ENGINEER AND CITY ATTORNEY.

DRIVEWAY VARIANCE NOTE:

1. THE PROPOSED DRIVEWAY ON LOT 2 IS POSITIONED SUCH THAT THE THREE EXISTING SPRUCE TREES CAN BE REMAIN. AS A RESULT, THE LOCATION OF THE DRIVEWAY IS 2.5' FROM THE PROPOSED PROPERTY LINE. THEREFORE AN AREA VARIANCE OF 2.5 FEET IS SOUGHT FOR THE LOCATION OF THE DRIVEWAY WHERE 5 FEET IS REQUIRED.

OWNER'S CONSENT:

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

_____ _____
STEPHEN SPACCARELLI & CLAIRE TIPLEY DATE

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE

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GRAPHIC SCALE
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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

SUBDIVISION PLAN

108 LIBERTY STREET

108 LIBERTY STREET
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-31-266830

JOB #:	2026:013
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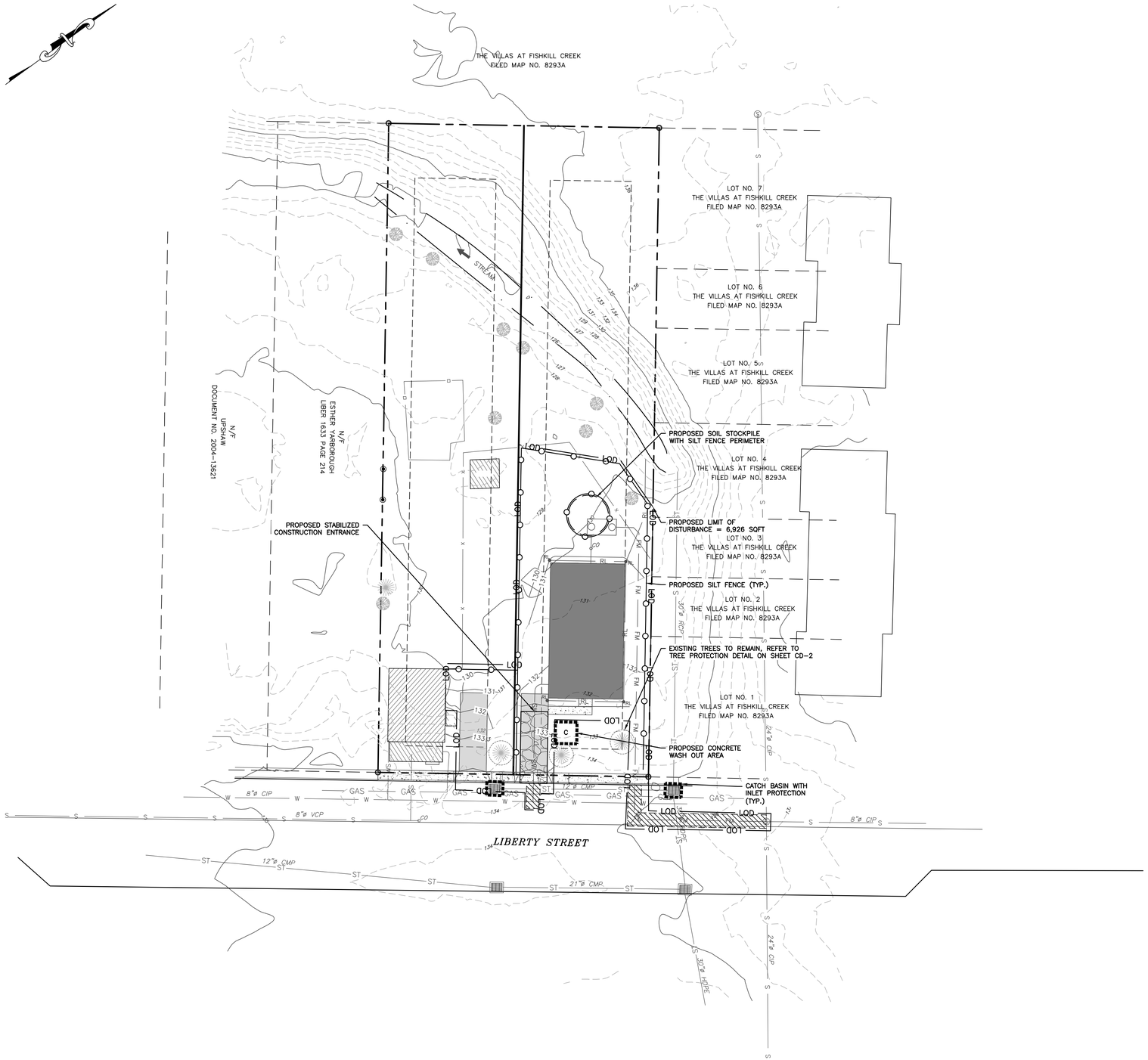

LEGEND:

- EXISTING PROPERTY LINE
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- EXISTING EASEMENT LINE
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- 100' WETLAND BUFFER
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- PROPOSED HYDRANT
- PROPOSED WATER SHUT OFF VALVE
- PROPOSED WATER VALVE
- PROPOSED SILT FENCE
- PROPOSED LIMIT OF DISTURBANCE
- PROPOSED CATCH BASIN INLET PROTECTION
- PROPOSED CONSTRUCTION ENTRANCE

EROSION AND SEDIMENT CONTROL NOTES:

1. ALL EROSION CONTROL MEASURES EMPLOYED DURING THE CONSTRUCTION PROCESS SHALL BE INSPECTED BY THE CONTRACTOR IN ACCORDANCE WITH THE MAINTENANCE SCHEDULE. ALL EROSION CONTROL STRUCTURES SHALL BE REPAIRED AND MAINTAINED AS NECESSARY BY THE CONTRACTOR.
2. ALL STORMWATER MANAGEMENT STRUCTURES (E.G. CATCH BASINS) SHALL BE REGULARLY INSPECTED FOR SEDIMENT ACCUMULATIONS. CATCH BASINS SHALL BE CLEANED WHEN SEDIMENT DEPTH REACHES A MAXIMUM OF ONE-HALF THE AVAILABLE SUMP DEPTH.
3. ALL EROSION CONTROL INSTALLATION AND MAINTENANCE MEASURES SHALL MEET THE REQUIREMENTS OF THE NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL.
4. ANY PILE OF POTENTIALLY EROSIVE MATERIAL TEMPORARILY STOCKPILED ON THE SITE DURING THE CONSTRUCTION PROCESS SHALL BE LOCATED IN AN AREA AWAY FROM STORM DRAINAGE AND SHALL BE PROPERLY PROTECTED FROM EROSION BY A SURROUNDING SILT FENCE.
5. PERMANENT SEEDED AREAS FOR EROSION CONTROL SHALL BE IN ACCORDANCE WITH DETAIL AND SPECIFICATIONS ON THIS PLAN.
6. AREAS UNDERGOING CLEARING OR GRADING AND WHERE WORK IS DELAYED OR COMPLETED AND WILL NOT BE REDISTURBED FOR A PERIOD OF 21 DAYS OR MORE SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT VEGETATIVE COVER WITHIN 14 DAYS.
7. ON-SITE DUST CONTROL SHALL BE ACCOMPLISHED BY STANDARD METHODS OF LIGHTLY WATERING ALL EXPOSED SOIL AND RAPIDLY STABILIZING THE REGRADED AREAS WITH TOPSOIL, LOAM AND/OR SEEDING.
8. THE CITY ENGINEER AND PROJECT ENGINEER SHALL BE NOTIFIED NO LESS THAN 48 HOURS PRIOR TO THE START OF ANY SITE WORK, AND BY SUCH NOTIFICATION, SHALL BE PROVIDED WITH THE NAME AND TELEPHONE NUMBER OF THE GENERAL CONTRACTOR RESPONSIBLE FOR SUCH WORK.
9. THE CITY AND/OR ITS REPRESENTATIVES 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 PROJECT ENGINEER SHALL BE CONSULTED ON ANY SPECIAL ADDITIONS OR DELETIONS OF EROSION CONTROL MEASURES WARRANTED BY CHANGING FIELD CONDITIONS.
10. 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 TO FILTER WATER FOR PUMPING TO A SUITABLE LOCATION.
11. WHEN ALL DISTURBED AREAS ARE STABLE, ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED.

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.

OWNER'S CONSENT:

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

_____ _____
STEPHEN SPACCARELLI & CLAIRE TIPLEY DATE

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE

_____ DAY OF _____, 20_____, SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS _____ DAY OF _____, 20____, BY

_____ CHAIRMAN

_____ SECRETARY

IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.

DRAWN BY: CMB				CHECKED BY: MAB			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	6/30/26	PER PLANNING BOARD COMMENTS	CMB				

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

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STATE OF NEW YORK MICHAEL A. BEDNOSKY 084466 LICENSED PROFESSIONAL ENGINEER
SEAL

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

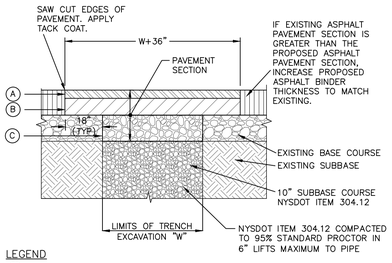
EROSION & SEDIMENT CONTROL PLAN

108 LIBERTY STREET

108 LIBERTY STREET
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-31-266830

JOB #:	2026:013
DATE:	5/26/26
SCALE:	1" = 20'
TITLE:	ESC-1
SHEET:	5 OF 7

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



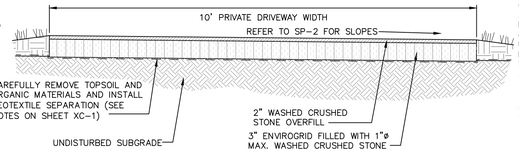
LEGEND

(A) 1.5" ASPHALT CONCRETE TOP COURSE– NYSDOT TYPE F1
(B) 3.0" ASPHALT CONCRETE BINDER COURSE– NYSDOT TYPE F9
(C) 3.0" ASPHALT BASE COURSE– NYSDOT TYPE F9

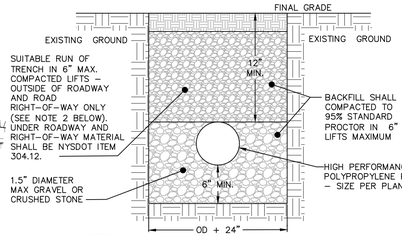
NOTES:

1. SAW CUT MIN. 18" BEYOND EXCAVATION WITH SMOOTH EDGES. 18" JOINT BETWEEN EXISTING AND NEW TOP COURSE TO BE MILLED. JOINT TO BE SEALED WITH POLYMER MODIFIED SEALER.
2. FURNISH, PLACE, AND COMPACT SUBBASE.
3. TACK COAT IN ACCORDANCE WITH NYSDOT STANDARD SPEC.
4. FURNISH AND PLACE ASPHALT CONCRETE PAVEMENT AS SPECIFIED.

PAVEMENT RESTORATION DETAIL
NOT TO SCALE



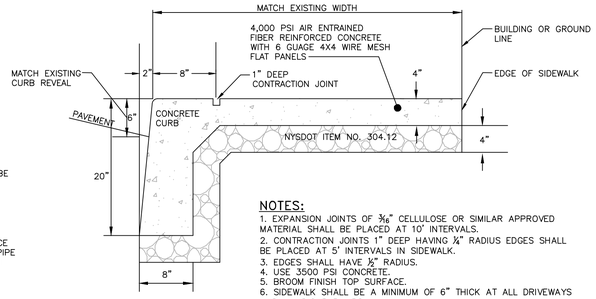
PAVED DRIVEWAY SECTION DETAIL
NOT TO SCALE



NOTES:

1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.

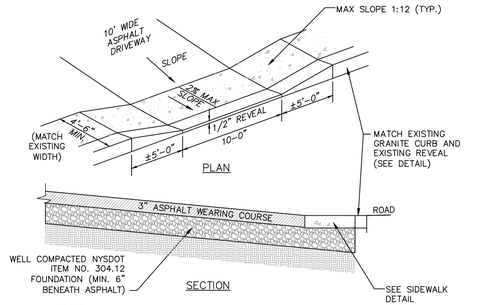
STORM LINE TRENCH DETAIL
NOT TO SCALE



NOTES:

1. EXPANSION JOINTS OF 3/8" CELLULOSE OR SIMILAR APPROVED MATERIAL SHALL BE PLACED AT 10' INTERVALS.
2. CONTRACTION JOINTS 1" DEEP HAVING 1/2" RADIUS EDGES SHALL BE PLACED AT 5' INTERVALS IN SIDEWALK.
3. EDGES SHALL HAVE 1/2" RADIUS.
4. USE 3500 PSI CONCRETE.
5. BROOM FINISH TOP SURFACE.
6. SIDEWALK SHALL BE A MINIMUM OF 6" THICK AT ALL DRIVEWAYS AND HANDICAP RAMPS.
7. MAXIMUM SLOPE OF 1 ON 12 TO BE USED WHERE SIDEWALK TERMINATES AT HANDICAP RAMPS.
8. THE SIDEWALK AND CURBING SHALL BE SEALED WITH A SEALER THAT PROTECTS AGAINST DE–ICING AGENTS.

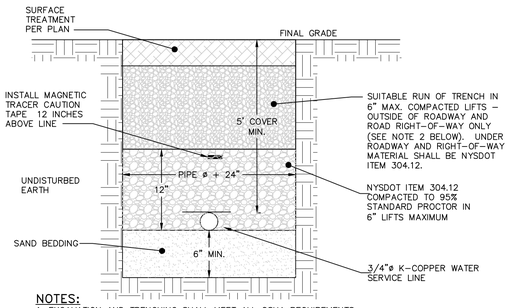
MONOLITHIC CURB AND SIDEWALK DETAIL
NOT TO SCALE



NOTE:

1. RESEED AND STABILIZE GRASS AREAS AFTER ASPHALT AND CONCRETE INSTALLATION.

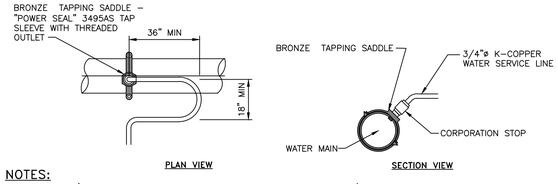
DRIVEWAY ENTRANCE DETAIL
NOT TO SCALE



NOTES:

1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.
2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, ENLOGATED 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.
4. IF WATER SERVICE AND SEWER SERVICE LINE CROSSINGS ARE NEEDED, PROVIDE 18" OF VERTICAL SEPARATION

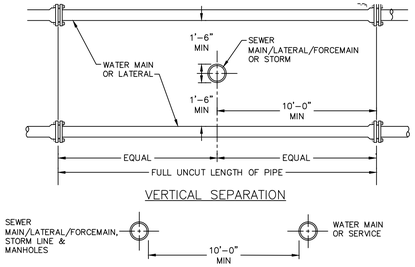
WATER SERVICE LINE TRENCH DETAIL
NOT TO SCALE



NOTES:

1. A MINIMUM 5' COVER SHALL BE PROVIDED ON THE WATER SERVICE LINE (CONDITIONED ON ACTUAL WATER MAIN DEPTH).
2. CORPORATION STOP TO BE COMPRESSION TYPE BY MUELLER.
3. WATER SERVICE LINE TO HAVE A "GOOSENECK" NEAR CORPORATION STOP.
4. CORPORATION STOP TO BE INSTALLED IN THE UPPER HALF OF THE WATER MAIN AT AN ANGLE OF APPROXIMATELY 45° FROM HORIZONTAL.
5. THE CONTRACTOR SHALL INSTALL A FULL BODIED STAINLESS STEEL TAPPING SLEEVE AT THE PROPOSED WATER SERVICE LOCATION.

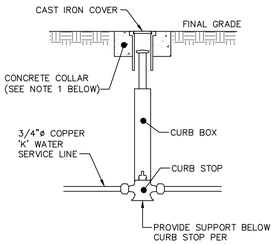
WATER SERVICE CONNECTION DETAIL
NOT TO SCALE



NOTE:

1. 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 ENCASEMENT OF WATERLINE OR OFFSETTING OF WATERLINE SHALL BE REQUIRED WHERE SEPARATION DISTANCES CANNOT BE MAINTAINED.

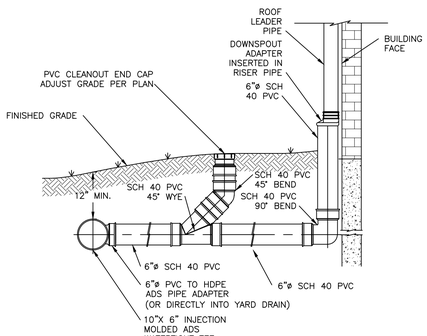
WATER LINE SEPARATION DETAIL
NOT TO SCALE



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.
2. CURB STOP TO BE COMPRESSION TYPE BY MUELLER.
3. AREA AROUND CURB BOX TO BE BACKFILLED WITH GRAVELLY MATERIAL.

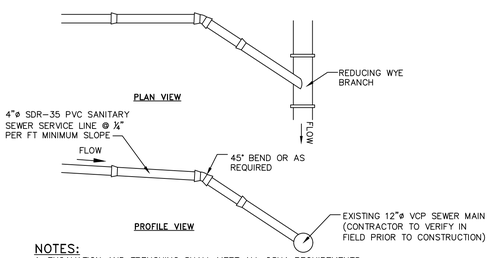
WATER SHUT–OFF VALVE DETAIL
NOT TO SCALE



NOTES:

1. ALL ROOF LEADER PIPES SHALL BE 6"ø SCH 40 PVC @ 2.0% SLOPE MIN. UNLESS SPECIFIED OTHERWISE.
2. PVC JOINT CONNECTIONS SHALL BE MADE WITH PVC CEMENT.
3. ROOF LEADER HEADER PIPES SHALL BE 10"ø HDPE PIPE.
4. SUBSTITUTIONS OF PIPE MATERIAL SHALL BE BROUGHT TO THE DESIGN ENGINEER'S ATTENTION FOR REVIEW.

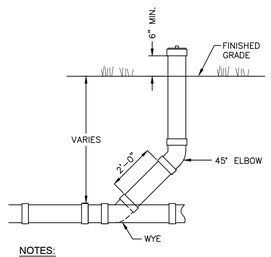
ROOF LEADER CONNECTION DETAIL
NOT TO SCALE



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.
3. TAPPING SADDLE FOR CONNECTION OF THE PROPOSED SERVICE LINE TO THE EXISTING SEWER MAIN TO BE A 4" PREDCO HUB TAP SADDLE – MODEL #HTS4/E.

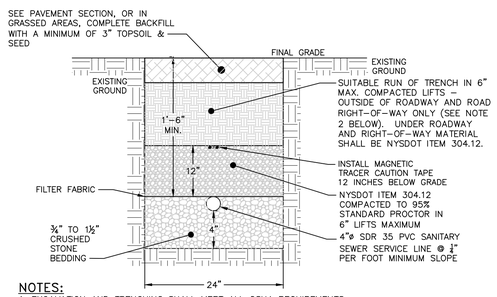
SANITARY SEWER SERVICE CONNECTION DETAIL
NOT TO SCALE



NOTES:

1. SEWER PIPE AND FITTINGS SHALL BE SDR–35.

CLEANOUT 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

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE _____ DAY OF _____, 20_____, SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS _____ DAY OF _____, 20_____, BY

_____ CHAIRMAN

_____ SECRETARY

IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.

OWNER'S CONSENT:

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

_____ _____
STEPHEN SPACCARELLI & CLAIRE TIPLEY DATE

DRAWN BY: CMB				CHECKED BY: MAB			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	6/30/26	PER PLANNING BOARD COMMENTS	CMB				

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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

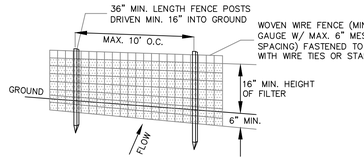
CONSTRUCTION DETAILS

108 LIBERTY STREET

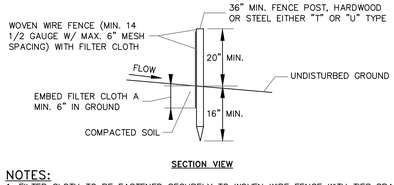
108 LIBERTY STREET
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054–31–266830

JOB #: 2026:013
DATE: 5/26/26
SCALE: AS SHOWN
TITLE: CD–1
SHEET: 6 OF 7

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



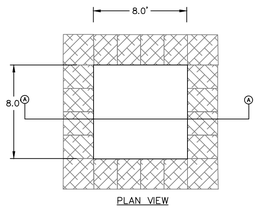
PERSPECTIVE VIEW



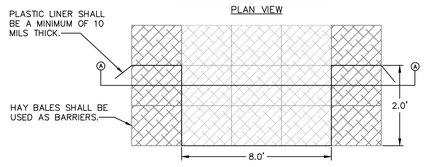
SECTION VIEW

NOTES:
1. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
2. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N OR APPROVED EQUAL.
3. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE OR APPROVED EQUAL.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

SILT FENCE DETAIL
NOT TO SCALE



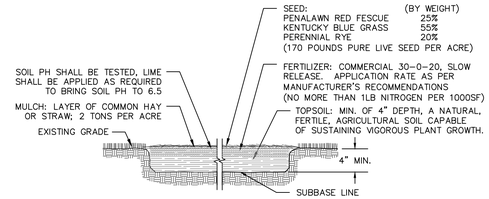
PLAN VIEW



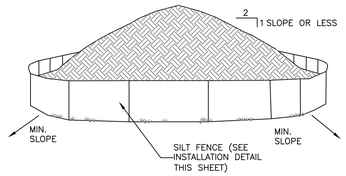
SECTION VIEW

NOTES:
1. WASHOUT STATION SHALL BE LOCATED 100' FROM ANY STORMWATER FEATURE ON SITE OR NATURAL WATERWAYS OR WETLANDS.
2. INSPECT WASHOUT STATION DAILY AND REPLACE PLASTIC LINER WHEN ANY RIPS OR TEARS ARE OBSERVED.
3. REPLACE WASHOUT STATION WHEN IT IS AT 75% OF ITS CAPACITY WITH HARDENED MATERIAL.
4. WATER ACCUMULATION IN WASHOUT AREA FROM RAINWATER SHALL BE PUMPED FROM THE STATION INTO A GRASSED AREA.

CONCRETE WASHOUT STATION DETAIL
NOT TO SCALE

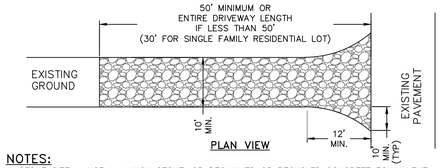


TOPSOIL SEED, FERTILIZER AND MULCH DETAIL
NOT TO SCALE



NOTES:
1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
2. EACH PILE SHALL BE SURROUNDED WITH SILT FENCING, THEN STABILIZED WITH VEGETATION OR COVERED.

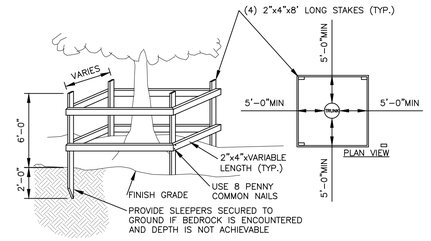
TEMPORARY SOIL STOCKPILE DETAIL
NOT TO SCALE



PLAN VIEW

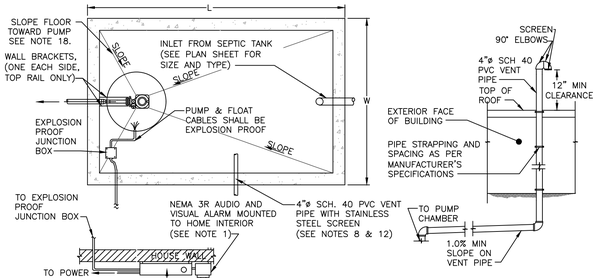
NOTES:
1. STONE SIZE - USE 1-4 INCH STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. THICKNESS - NOT LESS THAN SIX (6) INCHES.
3. WIDTH - 12 FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. 24 FOOT MINIMUM IF SINGLE ENTRANCE TO LARGE COMMERCIAL OF RESIDENTIAL SITE.
4. GEOTEXTILE - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
5. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
6. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURE USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACTED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
7. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
8. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

STABILIZED CONSTRUCTION ENTRANCE DETAIL
NOT TO SCALE



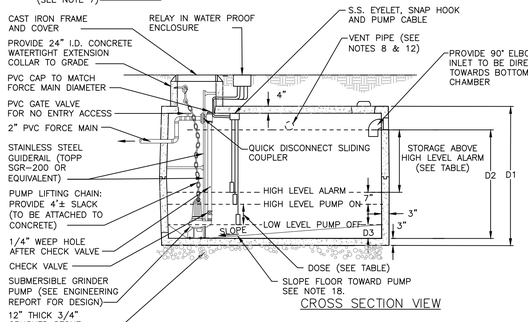
NOTES:
1. TREES TO REMAIN NOTED ON EXISTING CONDITIONS PLAN.
2. NOT ALL TREES TO REMAIN REQUIRE PROTECTION. TREE PROTECTION TO BE UTILIZED ON TREES WHERE CONSTRUCTION TRAFFIC WOULD COMPACT THE ROOT ZONE OF THE TREE.

TEMPORARY TREE PROTECTION DETAIL
NOT TO SCALE



PLAN VIEW

VENT DETAIL

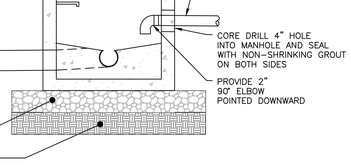


CROSS SECTION VIEW

PUMP CHAMBER DIMENSIONS							*DOSE		STORAGE (2 DAYS)			PUMP MAKE AND MODEL	FORCE MAIN SIZE (IN)	NO. OF PUMPS
RIM ELEVATION	LENGTH OF FORCE MAIN PIPE (FT.)	PIPE VOLUME (GAL)	REQ'D DOSE (GAL)	W	L	D1	D2	D3	DEPTH (IN)	VOLUME (GAL)	REQ'D (GAL)	DEPTH PROVIDED (IN)	VOLUME PROVIDED (GAL)			
129.2	162	29.7	209.3	5'-8"	10'-6"	65"	52"	8"	7"	225.6	880	30	964	PRG101 SERIES 101 GRINDER PUMP	2.0	1

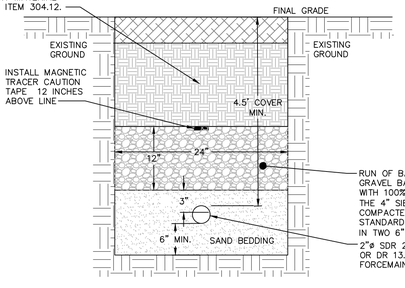
PUMP CHAMBER DETAIL
NOT TO SCALE

PUMP CHAMBER NOTES
1. THREE FLOAT SWITCHES SHALL BE INSTALLED: PUMP ON, PUMP OFF, AND HIGH ALARM. VISIBLE AND AUDIBLE ALARMS SHALL BE PROVIDED. THE ALARMS SHALL BE LOCATED INSIDE THE HOME, CLEARLY VISIBLE AND AUDIBLE.
2. ALL ELECTRICAL WORK AND MATERIAL FOR PUMP INSTALLATION SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE.
3. AN ELECTRICAL UNDERWRITER'S CERTIFICATE FOR THE PUMP CHAMBER MUST BE PROVIDED TO THE DUTCHESS COUNTY DEPARTMENT OF HEALTH PRIOR TO THE DUTCHESS COUNTY DEPARTMENT OF HEALTH CONDUCTING A FINAL INSPECTION ON THE PUMP CHAMBER.
4. THERE SHALL BE A MINIMUM OF 2.5' COVER OVER THE CONDUIT CONVEYING THE FLOAT PUMP CABLES AND CONTROL WIRING. CONDUITS FROM ALARM BOX AND CONTROL PANEL TO RELAY PANEL AT PUMP CHAMBER SHALL SHARE THE SAME TRENCH.
5. PROVIDE ADDITIONAL CONDUIT FOR CONTROL WIRING AS PER THE MANUFACTURERS RECOMMENDATIONS. MINIMUM COVER SHALL BE 2.5'.
6. AN ALUMINUM WARNING PLATE SHALL BE RIVETED OR OTHERWISE PERMANENTLY ATTACHED TO THE CHAMBER COVER. THE PLATE SHALL BE A MINIMUM OF 12"x12" AND SHALL BE ENGRAVED WITH THE FOLLOWING LANGUAGE: "WARNING - CONFINED SPACE - ENTRY PROHIBITED WITHOUT AUTHORIZATION - CALL OWNER FOR APPROVAL TO ACCESS".
7. CONTROL PANELS SHALL BE LOCATED WITHIN THE HOME.
8. 4" ø SDR PVC SCREENED VENT SHALL EXTEND TO HOME ROOF LINE (REFER TO NOTE 12).
9. A WATER TIGHTNESS TEST SHALL BE COMPLETED BY THE CONTRACTOR, WITNESSED BY THE ENGINEER, AND SHALL INCLUDE FILLING THE TANK AND MEASURING WATER LEVEL.
10. CONTRACTOR SHALL CAULK INLET AND OUTLET JOINTS AND OTHER CONDUIT PENETRATIONS.
11. INSTALL STAINLESS STEEL GUIDE RAIL FOR PUMP REMOVAL AND MAINTENANCE.
12. LOCATION OF 4" DIA. SDR PVC VENTILATION PIPE SHALL BE APPROVED BY THE OWNER AND SHALL PROVIDE POSITIVE SLOPE TO SURFACE (IE: NO DIPS OR SAGS ALLOWED). THE INVERT OF THE VENT PIPE SHALL MATCH INLET INVERT. THE VENT PIPE SHALL BE SECURELY MOUNTED TO THE EXTERIOR OF THE HOME AND SHALL VENT A MINIMUM OF 12" ABOVE ROOF LINE. VENT PIPE AND BRACKETS TO MATCH EXTERIOR HOUSE COLOR. HOMEOWNER HAS THE OPTION TO TIE VENT TO INTERIOR VENTING PIPING.
13. ALL ELECTRIC SHALL CONFORM TO THE NATIONAL ELECTRIC CODE, LATEST EDITION.
14. A PROFESSIONAL ENGINEER SHALL CERTIFY INSTALLATION AND TESTING OF PUMP CHAMBER TO DUTCHESS COUNTY DEPARTMENT OF HEALTH.
15. PRE-CAST PUMP CHAMBER SHOWN IS A 1,500 GALLON PUMP CHAMBER MODEL HD-1500, BY WOODARDS CONCRETE PRODUCTS, INC. 629 LYBOLT RD, BULLVILLE, NY (845) 361-3471.
16. PROVIDE AN ALL WEATHER JUNCTION BOX WITH AN OUTLET AND SCREWED COVER AT OR ABOVE GRADE AT THE PUMP CHAMBER TO ALLOW FOR A PLUG IN CONNECTION FOR THE PUMP.
17. SLOPE FLOOR TOWARD PUMP ON ALL SIDES USING NON-SHRINK GROUT.



NOTES:
1. CONFLICTS SHALL BE BROUGHT TO THE DESIGN ENGINEER'S ATTENTION IMMEDIATELY.
2. CONTRACTOR SHALL CONTACT THE CITY OF BEACON SEWER DEPARTMENT WITH TWO DAYS MINIMUM NOTICE PRIOR TO MAKING CONNECTION TO EXISTING SEWER MANHOLE.

SEWER FORCE MAIN INTO EXISTING SANITARY MANHOLE 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, ENLOGATED 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.

SEWER FORCEMAIN TRENCH DETAIL
NOT TO SCALE

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE _____ DAY OF _____, 20_____, SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS _____ DAY OF _____, 20_____, BY

_____ CHAIRMAN

_____ SECRETARY

IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.

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

_____ _____
STEPHEN SPACCARELLI & CLAIRE TIPLEY DATE

DRAWN BY: CMB				CHECKED BY: MAB			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	6/30/26	PER PLANNING BOARD COMMENTS	CMB				

Dig Safely. New York Call 811 before you dig

STATE OF NEW YORK MICHAEL A. BODENDORF LICENSED PROFESSIONAL ENGINEER 084466

SEAL

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

CONSTRUCTION DETAILS

108 LIBERTY STREET

108 LIBERTY STREET
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-31-266830

JOB #:	2026:013
DATE:	5/26/26
SCALE:	AS SHOWN
TITLE:	CD-2
SHEET:	7 OF 7

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

LANC & TULLY
Engineering and Surveying, D.P.C.

July 10, 2026

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

RE: 108 Liberty Street
Tax No. 6054-31-266830
City of Beacon, NY

Dear Mr. Gunn:

My office has received the following regarding the proposed subdivision at 108 Liberty Street:

- Correspondence dated June 30, 2026, from Hudson Land Design.
- Correspondence from Kingsley Tree Care, dated June 19, 2026.
- Report titled "Infiltration and Inflow (I&I) Investigation Report", dated June 30, 2026, as prepared by Hudson Land Design.
- Plan titled "Map of Survey for the Lands of Spaccarelli & Tipley", dated January 7, 2026, as prepared by Robert V. Oswald Land Surveying.
- Plan set titled "108 Liberty Street Residential Subdivision", consisting of 7 sheets, as prepared by Hudson Land Design, dated May 26, 2026.

The proposed project is the subdivision of the existing parcel with a dwelling located at 108 Liberty Street into two lots, and retaining the existing dwelling on one of the lots to be created. The project site is located in the R1-5 Zoning District. Based on our review of the above documents and plans, we would like to offer the following comments:

<u>General Comments:</u>

1. An Infiltration and Inflow (I&) study was conducted by the applicant's engineering consultant, with the findings of the report indicating that no sources of I&I were found.

<u>Subdivision Plan (Sheet 4 of 7):</u>

1. The information requested for Sheet 2 of 7 and shall be provided on this sheet.

2. Section 223-26, Paragraph B of the City Zoning Code states "*In any residence district, no designated off-street parking area or structure shall be developed in any front yard forward of the principal building, except as approved by the*

Building Inspector or Planning Board for an unusual lot configuration. Nor shall any off-street parking area or structure be developed in a residence district in any minimum side or rear yard setback adjacent to a street line or in any other side or rear yard within five feet of the lot line…" The proposed driveway for Lot 2 is shown to be within 2.5 feet of the proposed lot line between Lots 1 and 2, which is in non-compliance with the Zoning Code. The applicant should look to reduce the width of the proposed dwelling to allow for shifting of the driveway to comply with zoning requirements. Unless the Planning Board has the abilities to issue a waiver to this requirement, the applicant will need to seek a variance from the Zoning Board of Appeals.

3. As previously requested, the applicant has shown the extension of the sidewalk along the front or the property, but the letter submitted by Kingsley Tree Care is recommending that the walk not be installed, as it would increase the area of root-zone disturbance. The Planning Board should discuss as to whether or not a sidewalk should be installed along the front of the property.

4. The Kingsley Tree Care letter further recommends the water and sewer services be conducted during the winter months when the trees are dormant. This would only be acceptable for the installation of the services on site but is not acceptable as to the installation of the services within the road or road right-of-way. Work within the road shall be conducted outside of winter months to allow for proper repair of the trenches and road surface.

5. It is recommended that the proposed invert "in" elevation of the sewer force main into the sewer manhole be raised to a higher elevation to protect against the possible build up of solids against the inlet in the manhole.

Construction Details (Sheet 7 of 7):

1. The "Sewer Force Main Trench Detail" shall be revised to reflect the use of NYSDOT Item No. 304.12 from the above the sand bedding to the underside of the roadway pavement.

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.

Respectfully,
LANC & TULLY, P.C.

John Russo, P.E.

cc: Natalie Quinn, Planner
Jennifer Gray, Esq.
Bryan Murphy, Building Inspector

KARC
PLANNING CONSULTANTS, INC.

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

FR: KARC Planning Consultants, Inc.

DATE: July 13, 2026

RE: 108 Liberty Street Subdivision Application, Stephen Spaccarelli and Claire Tipley

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I have reviewed the following materials regarding the proposed subdivision at 108 Liberty Street:

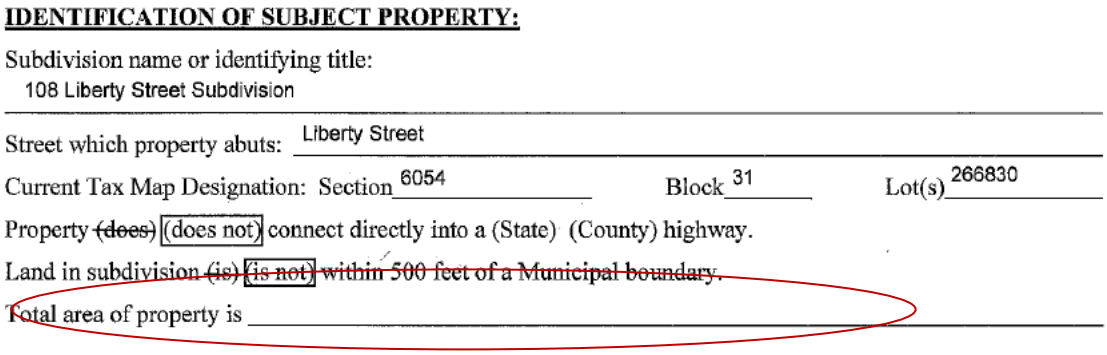
- Cover letter by Hudson Land Design, dated June 30, 2026
- Tree Assessment by Kingsley Tree Care, dated June 19, 2026
- I&I Report by Hudson Land Design, dated June 30, 2026
- Subdivision Plan Set (7 sheets) by Hudson Land Design, last revised June 30, 2026

Project Description:

The subject property is a developed residential parcel located at 108 Liberty Street in the City of Beacon, (Tax ID #6054-31-266830). The property owner is seeking to develop the property through the subdivision of the property into two (2) individual residential lots, including retention of the existing dwelling on one of the newly created lots and development of a new single-family dwelling on second lot. The property is located in the R1-5 zoning district, where single-family dwellings are permitted.

Comments & Recommendations:

1. **Incomplete Form**. The subdivision application does not identify the total property area. The applicant should submit an updated application form to the Building Department to address this comment.



IDENTIFICATION OF SUBJECT PROPERTY:

Subdivision name or identifying title:
108 Liberty Street Subdivision

Street which property abuts: Liberty Street

Current Tax Map Designation: Section 6054 Block 31 Lot(s) 266830

Property ~~(does)~~ (does not) connect directly into a (State) (County) highway.

Land in subdivision ~~(is)~~ ~~(is not)~~ ~~within 500 feet of a Municipal boundary.~~

Total area of property is _____

2. **Driveway variance.** The proposed driveway for Lot 2 is located 2.5 feet from the side lot line, where a minimum setback of 5 feet is required. A variance from the ZBA will be required prior to site plan approval.

3. **Front yard setback. L**ot 2 proposes a 28.6-foot front setback where 10 feet is required. Section 223-13(K) provides that new buildings should conform, as nearly as practicable, to the established building alignment of adjacent lots. While greater than the minimum, the Planning Board discussed at its June meeting that the increased setback is appropriate to preserve the existing Norway spruce trees and because the lot marks the end of the established building alignment, rather than being located mid-block.

4. **Preservation of Natural Features.** The applicant has submitted an arborist's assessment supporting preservation of the three mature Norway spruce trees. Tree protection notes and a driveway construction detail have been incorporated into the plan set consistent with the arborist's recommendations and the Planning Board's prior discussion. This comment has been satisfactorily addressed.

Comments 3 and 4 have been satisfactorily addressed. The remaining items consist of administrative revision to the application form and obtaining the required area variance from the Zoning Board of Appeals for the proposed driveway setback. Subject to resolution of Comments 1 and 2, the subdivision application is sufficient for approval from a planning and zoning compliance perspective.

If you have any questions or require additional information, please do not hesitate to contact me.

Natalie Quinn
Beacon Planning Consultant

Cc: Bryan Murphy, Building Inspector
Jennifer L. Gray, Esq., City Attorney
John Russo, P.E., City Engineer

Planning Board
1 Municipal Plaza
Beacon NY 12508

Sally Travis
34 Angela Court
Beacon NY 12508

RE: Opposition to the proposed subdivision at 108 Liberty Street Beacon NY 12508

July 13, 2026

Dear Planning Board Members,

I am writing to respectfully oppose the proposed subdivision of the property at 108 Liberty Street and the construction of an additional single-family home.

My concerns include:

~ Increased stormwater runoff onto adjacent properties. Adding a new home, driveway, roof, sheds, and other impervious surfaces would reduce the land's ability to absorb water and increase the risk of erosion and runoff onto neighboring properties.
The proposal appears to rely on drainage infrastructure running beneath The Villas at Fishkill Creek property, which raises important questions about capacity, maintenance, repair responsibility, and potential disruption to residents of The Villas at Fishkill Creek.

~ Adverse impacts on the seven townhouse backyards that directly border this property. The proposed development would significantly reduce privacy and diminish the peaceful enjoyment that current homeowners have reasonably expected. Because of the proposed home's location, it would allow direct views into at least three neighboring townhouses—not merely into their yards and decks, but into the homes themselves. Residents should not be placed in the position of having to keep their curtains closed in order to preserve basic privacy within their own homes.

~ Potential loss of mature trees that currently serve as a natural buffer between existing homes and the proposed development.

~ Increased noise, traffic, and activity associated with another residence, including temporary construction impacts. Traffic on this section of Liberty Street is already affected by drop-off and pick-up times, as well as school events at Forrestal Elementary School directly across the street.

~ The cumulative effect of increased density—more noise, lighting, traffic, reduced privacy, and a precedent for future lot splits—would fundamentally change the character of the neighborhood.

For these reasons, I respectfully request that the Planning Board deny the proposed subdivision or, at minimum, postpone any approval until you have had time to carefully evaluate whether this subdivision is consistent with Beacons Comprehensive Plan, zoning objectives, stormwater management requirements, and the protection of neighboring property owners.

I urge the Board to consider the long-term impacts on the surrounding community before deciding on this application.

Thank you for your time, consideration and service to our community.

Respectfully,

Sally Travis
34 Angela Court
Beacon NY 12508

City of Beacon Planning Board Agenda
07/14/2026

Title:

Continue review of applications for Subdivision Approval and Site Plan Approval, Mixed-Use Commercial and Residential, 321 Main Street, submitted by Arpa Gavigan Developments LLC.

ATTACHMENTS

321 Main PB 7.14.26 site plan app redacted2.pdf

321 Main PB 7.14.26 subdivsion app redacted2.pdf

321 Main PB 7.14.26 ARB app redacted2.pdf

321 Main PB 7.14.26 short form enviromental.pdf

321 Main PB 7.14.26 Envirmroental Map.pdf

321 Main PB 7.14.26 Narrative and replies to Comments.pdf

321 Main PB 7.14.26 historic planning comments redacted2.pdf

321 Main PB 7.14.26 Stormwater Study.pdf

321 Main PB 7.14.26 Inflow Study.pdf

321 Main PB 7.14.26 Cost Estimation.pdf

321 Main PB 7.14.26 plan set redacted2.pdf

Lanc & Tully 321 Main Street 07-10-26.pdf

KARC Review PB_321 Main St_2026.07.13.pdf

APPLICATION FOR SITE PLAN APPROVAL

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

IDENTIFICATION OF APPLICANT

Name: Arpa Govigan Developments LLC

Address: 6 cherry street
Cold spring NY 10516

Signature: Coral Govigan

Date: 6/18/26

Phone: [redacted]

(For Official Use Only)

	Date	Initials
Application & Fee Rec'd		
Initial Review		
Public Hearing		
Conditional Approval		
Final Approval		

Received:

JUN 29 2026

City of Beacon
Building/Planning/Zoning

IDENTIFICATION OF REPRESENTATIVE / DESIGN PRFESSIONAL

Name: JPO Engineering

Address: 735 Route 9D
Garrison, NY

Phone: 845 803 1935

Fax:

Email address: john@jpoengineering.com

IDENTIFICATION OF SUBJECT PROPERTY:

Property Address: 321 main St.

Tax Map Designation: Section 5954 Block 36 Lot(s) 93089

Land Area:

Zoning District(s)

DESCRIPTION OF PROPOSED DEVELOPMENT:

Proposed Use: Commerard and Residentia

Gross Non-Residential Floor Space: Existing ø Proposed 955 1624

TOTAL: 955 1624

Dwelling Units (by type): Existing ø Proposed 2

TOTAL: 955 1624

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.

INFORMATION TO BE SHOWN ON SITE LOCATION SKETCH

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

INFORMATION TO BE SHOWN ON THE SITE DEVELOPMENT PLAN

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

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

_____ _____
Chairman, City Planning Board **Date**

APPLICATION FEES

Site Plan	**Residential** $500 + $250 per dwelling unit **Commercial** $500 + $250 per 1,000 s.f.
Special Use Permit	**Residential** $500 + $250 per dwelling unit **Commercial** $500 + $250 per 1,000 s.f.
Subdivision	$ 750 for 2-4 lots + $100 per lot $1,000 for 5 or more lots + $300 per lot

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)	$ 3,000	$ 1,000	Current bills + $1,200
6-15	$ 9,000	$ 2,500	Current bills + $1,200
Over 15	$ 18,000	$ 5,000	Current bills + $6,000

NON-RESIDENTIAL SITE PLAN AND SUP APPLICATIONS

	Initial Deposit	Depleted to	Replenishment
Existing Buildings/Change of Use with no site development	$ 1,800	$ 1,000	Current bills + $600
Up to 3,000 s.f. gross floor area	$ 3,125	$ 1,000	Current bills + $1,200
3,000 to 10,000 s.f. gross floor area	$ 3,000 + $0.50 per sq.ft. over 3,000	$ 2,500	Current bills + $3,000
Over 10,000 s.f. gross floor area	$ 9,000 + $0.50 per sq.ft. over 10,000	$ 2,500	Current bills + $3,000

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

** if required by Chairman*	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: Arra Gavignan Development LLC

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

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

Applicant Address: 6 Cherry St. Cold Spring, NY

Project Address: 321 main St.

Project Tax Grid # 130200 - 5954 - 36 - 930849

Type of Application Site Plan Approval Application

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

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

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

Conal Gavigan

Signature of Owner

Title if owner is corporation

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

CITY OF BEACON
SITE PLAN SPECIFICATION FORM

Name of Application: 321 Main St.

PLEASE INDICATE WHETHER THE SITE PLAN DRAWINGS SHOW THE SUBJECT INFORMATION BY PLACING A CHECK MARK IN THE APPROPRIATE BOXES BELOW.

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

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

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

Applicant/Sponsor Name: CONN CAMGAN

Signature: Conl Gagan

Date: 06/18/26

FOR OFFICE USE ONLY
Application #

CITY OF BEACON

1 Municipal Plaza, Beacon, NY

Telephone (845) 838-5000 • http://beaconny.gov/

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
Arpa Gavigan Developments LLC	6 Cherry St Cold Spring, NY
Place where such business entity was created NYS 09/17/24	Official Registrar's or Clerk's office where the documents and papers creating entity were filed 41 State St. Suite 112 Albany, NY
Date such business entity or partnership was created	Telephone Contact Information Conal Gavigan [redacted]

IF AFFIANT IS A CORPORATION:

Name of Entity	Telephone Contact Information
Principal Place of Business of Entity	Place and Date of incorporation
Method of Incorporation	Official place where the documents and papers of incorporation were filed

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
Carol Bonilla	6 Cherry St Cold Spring NY 10516	[redacted]	Partner
Chris Orpa	" " "	[redacted]	Partner

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.
Coral Gurgun	6 cherry St cold spring NY 10516	[redacted]	Purchase 1/12/2025	Dutchess county Clerks office
CLAIRE ARPA	6 cherry st cold spring NY 10516	[redacted]	Purchase 1/12/2025	Dutchess cty Clerks 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

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.

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	Telephone Contact Information
Principal Business Address	Place and Date of Incorporation
Method of Incorporation	Official place where the documents and papers of incorporation were filed

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

Name	Residence or business address	Telephone number

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, John O'Rourke being first duly sworn, according to law, deposes and says that I am (Title) Engineer, an active and qualified member of the NYS Engineer Board, 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.

(Print) John ORourke

(Signature) _____

APPLICATION FOR SUBDIVISION APPROVAL

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

IDENTIFICATION OF APPLICANT

Name: Arpa Govigan Developments LLC

Address: 6 Cherry Street
Cold Spring, NY 10516

Signature: Coral Govigan

Date: 6/18/26

Phone: [redacted]

(For Official Use Only)

	Date	Initials
Preliminary Application Rec'd		
Application Fee:		
Public Hearing		
Preliminary Plat Approved:		
Final Plat Approved:		
Recreation Fee:		
Performance Bond:		

Received:
JUN 29 2026
City of Beacon
Building/Planning/Zoning

IDENTIFICATION OF REPRESENTATIVE / DESIGN PRFESSIONAL

Name: JPO Engineering

Address: 733 Route 90 Garrison, NY

Phone: 845 803 1935

Fax:

Email address: john@jpoengineering.com

IDENTIFICATION OF SUBJECT PROPERTY:

Subdivision name or identifying title:

Street which property abuts: Main St.

Current Tax Map Designation: Section 5954 Block 36 Lot(s) 430 849

Property (does) (does not) connect directly into a (State) (County) highway.

Land in subdivision (is) (is not) within 500 feet of a Municipal boundary.

Total area of property is 0.11 acre

ITEMS TO ACCOMPANY THIS APPLICATION

a. One electronic and five (5) **folded** copies of a subdivision plat showing the location of the subject property and the proposed development with respect to neighboring properties and developments.

b. An application fee, payable to the City of Beacon, computed per the attached fee schedule.

c. An initial escrow amount, payable to the City of Beacon, as set forth in the attached fee schedule.

APPLICATION FEES

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

ESCROW FEES

ALL SUBDIVISIONS, AND RESIDENTIAL SITE PLAN AND SUP APPLICATIONS

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

NON-RESIDENTIAL SITE PLAN AND SUP APPLICATIONS

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

ZONING

* *if required by Chairman*	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)*

* *if required by Chairman*	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: Arpa Gorigan Developments LLC

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

Clair Arpa, Carol Gorigan

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

Applicant Address: 6 Cherry St Cold Spring, NY

Project Address: Lots 321 main Street

Project Tax Grid # 130200-5954-36-930849

Type of Application Subdivision Aplication Approval

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

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

Carol Gorigan

Signature of Owner

Title if owner is corporation

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

CITY OF BEACON
PRELIMINARY SUBDIVISION PLAT
AND CONSTRUCTION PLANS SPECIFICATION FORM

Name of Application: 321 Main St.

PRELIMINARY SUBDIVISION PLAT	YES	NO
The preliminary plat shall be clearly marked "Preliminary Plat", shall be drawn to a convenient scale but not less than 1" = 100', and shall contain the following information:	✓	
Proposed subdivision name or identifying title, name, and address of property owner and subdivider (if other than owner), name and address of the surveyor and/or engineer preparing the plan, scale, approximate true North point, and date.	✓	
The approximate location and dimensions of all property lines, the total acreage of the proposed subdivision, the location of any zoning, special district or municipal boundary lines affecting the subdivision, and the names of owners of record of properties adjoining and directly across the street from proposed subdivision.	✓	
The location of all existing structures and pertinent features, including railroads, water bodies, water courses, wetlands, rock outcroppings, wooded areas, major trees, and stone walls, that may influence the design of the subdivision, plus accurate topography at a vertical contour interval of not more than two (2) feet. The topographic data shall be determined by field survey unless the Planning Board specifically waives this requirement and/or permits the substitution of topographic information obtained from other sources determined satisfactory for the particular case.	✓	
The location and status of existing streets or private roads, easements and rights-of-way (if any), proposals for the layout of new streets or private roads (including widths and approximate curve radii) and any proposed easements, rights-of-way and/or reservations.	✓	
The names of existing streets or private roads and proposed names for new streets or private roads.	✓	
The proposed arrangement of lots, including identifying numbers and approximate area and dimensions of each.	✓	
Location, size and nature of any area proposed to be reserved for park purposes.		✓
A site location sketch, at a scale of one inch equals 400 feet, showing the general situation within 1,000 feet of the applicant's property with respect to surrounding properties, streets and private roads.	✓	
Where the preliminary plat includes only a portion of an applicant's contiguous holding, the applicant shall also indicate, on a sketch at a scale of not less than one inch equals 200 feet, the probable future street or private road system, lot arrangement and location of park and other reservations for the remaining portion of the tract. Such sketch shall be for the purpose of guiding the Planning Board in reviewing the proposed preliminary plat and shall include topographic data with a vertical contour interval of not more than five feet plus any other information determined necessary by the Planning Board.		✓
Such additional information as may be required by Chapter 195 – Subdivision of Land; Chapter 223 – Zoning; or the Planning Board.	✓	

PRELIMINARY CONSTRUCTION PLANS	YES	NO
The preliminary construction plans shall be drawn at the same scale as the preliminary plat and shall include the following information:		
Location and sizes of any existing water, sewer storm drainage and other utility lines and structures within and nearby the proposed subdivision.	✓	
The proposed system for the provision of water supply and fire protection facilities, sewage disposal, stormwater drainage, and other utility services.	✓	
Proposed street or private road profiles and cross-sections showing the approximate grade of proposed streets or private roads, the relationship of existing to proposed grades, and the proposed grades, and the proposed vertical curvature along the center line of all new streets or private roads.	✓	
Location of all existing and proposed monuments and other subdivision improvements.	✓	
Such additional information as may be required by this chapter, the Zoning chapter, or the Planning Board.	✓	

CITY OF BEACON
FINAL SUBDIVISION PLAT
AND CONSTRUCTION PLANS SPECIFICATION FORM

Name of Application: 321 main St.

FINAL SUBDIVISION PLAT	YES	NO
The final subdivision plat shall be drawn clearly and legibly on transparent tracing cloth with black waterproof ink, at a scale no smaller than one inch equals 100 feet but preferably at a scale of one inch equals 50 feet. The sheet size shall not exceed 36 inches by 48 inches. If the size of proposed subdivision required a drawing larger than this, two or more sheets may be submitted, with match lines clearly indicated, and an index map shall be prepared on the same size sheet.	✓	
The final plat shall contain the following information:		
Proposed subdivision name or identifying title, name, and address of owner of record and of subdivider (if other than owner), certification and seal of the registered engineer or licensed land surveyor who prepared the plat, names of the owners of record of adjoining properties and of properties directly across the street or private road, graphic scale, approximate true North point, and date.	✓	
The location and dimensions of all boundary lines of the proposed subdivision, and all existing and proposed streets, private roads, lot lines, easements and rights-of-way, with sufficient data to readily determine the location, bearing and length of all such lines and to reproduce such lines upon the ground.	✓	
The names of all existing and proposed streets and private roads.	✓	
The locations of all water bodies and watercourses.	✓	
The location of all existing buildings, including identification of all buildings to be removed as a condition of plat approval.	✓	
The total acreage included in the entire subdivision, and the identification number and acreage of all lots and land reservations within the proposed subdivision.	✓	
Location of all existing and proposed monuments.	✓	
A site location map, at a scale of one inch equals 400 feet, showing the location of the subject property with respect to neighboring properties, streets and private roads.	✓	
Notations explaining any drainage, sight slope, street widening, park area or other reservations or easements, including any self-imposed restrictions or covenants.	✓	
Endorsement of approval by the Dutchess County Health Department.		
Plan for the provisional delivery of mail, as approved by the local postmaster.	✓	
Endorsement of the owner as follows: "Approved for filing: Carl Gryps (Owner) Date 6/29/26"		

FINAL SUBDIVISION PLAT *(continued)*	YES	NO
Form for endorsement by Planning Board Chairman as follows: "Approved by Resolution of the Planning Board of the City of Beacon, New York, on the _____ day of _____, 20_____, subject to All requirements and conditions of said Resolution. Any change, erasure, modification or revision of this plat, as approved, shall void this approval. Signed this _____ day of _____, 20_____, by _____, Chairman _____, Secretary In absence of the Chairman or Secretary, the Acting Chairman or Acting Secretary Respectively may sign in this place.		
Such additional information as may be required by Chapter 195 – Subdivision of Land; Chapter 223 – Zoning; or the Planning Board.		
Stormwater pollution prevention plan. A stormwater pollution prevention plan consistent with the requirements of Chapter 190 and with the terms of preliminary plan approval shall be required for final subdivision plat approval. The SWPPP shall meet the performance and design criteria and standards in Chapter 190, Article II. The approved final subdivision plat shall be consistent with the provisions of Chapter 190.	✓	

FINAL CONSTRUCTION PLANS	YES	NO
Final construction plans and profiles shall be prepared for all proposed streets, private roads and other required improvements. Plans shall be drawn at the same scale as the final plat and on the same size sheets, but not on the same sheets. The following information shall be shown:		
Plans and profiles showing the location and a typical cross-section of street and/or private road pavements including curbs and gutters, sidewalks, manholes and catch basins; the location of street or private road trees, lighting and signs; the location, size and invert elevations of existing and proposed sanitary sewers, stormwater drains and fire hydrants; the location and size of all water, gas or other underground utilities or structures; and the location and design of any other required improvements.		
Profiles showing existing and proposed elevations along the center line of all streets and private roads. Where a proposed street or private road intersects an existing street or private road, the elevation along the center line of the existing street or private road within 100 feet of intersection, shall be shown. All elevations must be referred to established U.S. Government of approved local benchmarks, where they exist within ½ mile of the boundary of the subdivision.		
The Planning Board may require, where steep slopes exist, cross-sections showing existing and proposed elevations of all new streets and private roads every 100 feet at five points on a line at right angles to the center line of the street or private road, said elevation points to be at the center line of the street or private road, each property line, and points 30 feet inside each property line.		
Location, size, elevation and other appropriate description of any existing facilities which will be connected to proposed facilities and utilities within the subdivision.		

FINAL CONSTRUCTION PLANS ***(continued)***		
Where the design of the subdivision requires the regarding of land, the regarding of land, the regraded contours shall be shown along with estimates of the quantity of material to be added or removed and the proposed measures to be implemented by the subdivider to rehabilitate the disturbed area or areas.		
Title of all sheets, name, address, signature and seal of licensed engineer preparing the construction plans, the date prepared, including revisions dates if any, approximate true North point, scale, and consecutive numbering as sheet _____ of _____.		
A notation of approval, on all sheets as follows "Approved by: _____ _____ Owner Date and _____ _____ Planning Board Chairman Date"		
Such additional information as may be required by Chapter 195 – Subdivision of Land; Chapter 223 – Zoning; or the Planning Board.		

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

Applicant/Sponsor Name: ARPA GAUGAN DEVELOPMENTS LLC.

Signature: Carl Gauger

Date: 6/24/26

FOR OFFICE USE ONLY
Application #

CITY OF BEACON

1 Municipal Plaza, Beacon, NY

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ENTITY DISCLOSURE FORM

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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 Arpa Gowrgon Developments LLC	Address of Entity 6 cherry St Cold Spring, NY
Place where such business entity was created NYS 09/17/24	Official Registrar's or Clerk's office where the documents and papers creating entity were filed 41 State St. Suite 112 Albany, NY
Date such business entity or partnership was created	Telephone Contact Information Conal Gavigan [redacted]

IF AFFIANT IS A CORPORATION:

Name of Entity	Telephone Contact Information
Principal Place of Business of Entity	Place and Date of incorporation
Method of Incorporation	Official place where the documents and papers of incorporation were filed

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
Cord Bonilla	6 Cherry St Cold Spring NY, 10516	[redacted]	Partner
Chris Orpa	" " "	[redacted]	Partner

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.
Carol Gurgen	6 cherry St cold spring NY 10516	[redacted]	Purchase 1/12/2025	Putnam county Clerks office
CLAIRE ARPA	6 cherry st cold spring NY 10516	[redacted]	Purch 1/12/2025	Putnam cty Clerks 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

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.

_____

_____

_____

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	Telephone Contact Information
Principal Business Address	Place and Date of Incorporation
Method of Incorporation	Official place where the documents and papers of incorporation were filed

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

Name	Residence or business address	Telephone number

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, John O'Rourke being first duly sworn, according to law, deposes and says that I am (Title) Engineer, an active and qualified member of the NYS Engineer Board, 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.

(Print) John ORourke

(Signature) _____

Docusign Envelope ID: 6C8A0E19-1065-43B9-BFC0-EAD86506C43D

ARCHITECTURAL REVIEW BOARD APPLICATION

Date: 11/24/25

Project Address: 321 Main Street, Beacon, NY

Project Architect/Engineer: Madeleine Sanchez AIA Architect

Owner/Builder: Arpa Gavigan Developments LLC

Contact Phone No.: 845-265-3073 [redacted] Email: [redacted]

Approval Requested: X Certificate of Appropriateness (sign or façade change) _____ New Single-Family House

Color/Materials:

Siding: Gray Slate Hardie Plank Lap Siding, smooth texture, 8" exposure

Roofing: Not visible (flat roof with parapet/cornice)

Windows: Color: Black Type: Andersen Series 400 wood w/vinyl clad

Trim: Iron Gray, Hardie Trim smooth texture, 3.5" wide

Garage Door: NA

Stone/Brick: NA

DocuSigned by: Claire Arpa 14B4C7CCE8BC4CF...

Signed by: Conal Gavigan 44EA0D36D9FF47D...

Signature of Owner

Applications for sign approval must also submit a sign permit application & supporting documents

FOR OFFICE USE ONLY:

The Architectural Review Board has reviewed the plans submitted for approval for the project listed above and has determined:

Plan Denied _____
(Date)

Plan Approved _____
(Date)

Subject to the following:

_____

_____

FEE: $100.00

Short Environmental Assessment Form
Part 1 - Project Information

Instructions for Completing

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

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

Part 1 – Project and Sponsor Information

Name of Action or Project:
Subdivision / Site Plan Application

Project Location (describe, and attach a location map):
321 main St Beacon NY

Brief Description of Proposed Action:
owner seeks to subdivide property then build new building on it

Name of Applicant or Sponsor:	Telephone: 631 601 5583
Arpa Gourgan Develpm LLC	E-Mail: cgourgan1@gmail.com

Address:
6 Cherry S

City/PO:	State:	Zip Code:
Cold Spring	NY	10516

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

3. a. Total acreage of the site of the proposed action? .119 acres
   b. Total acreage to be physically disturbed? .023 acres
   c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? .119 acres

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

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

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

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

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

	NO	YES
9. Does the proposed action meet or exceed the state energy code requirements?		
If the proposed action will exceed requirements, describe design features and technologies:	☐	☑

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

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

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

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

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

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

☐ Wetland ☐ Urban ☐ Suburban

	NO	YES
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered?	☑	☐
16. Is the project site located in the 100-year or 500-year flood plain?	☑	☐
17. Will the proposed action create storm water discharge, either from point or non-point sources? If Yes,	☐	☑
a. Will storm water discharges flow to adjacent properties?	☑	☐
b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)?	☐	☑
If Yes, briefly describe:		
18. Does the proposed action include construction or other activities that would result in the impoundment of water or other liquids (e.g., retention pond, waste lagoon, dam)? If Yes, explain the purpose and size of the impoundment:	☑	☐
19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility? If Yes, describe:	☑	☐
20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste? If Yes, describe:	☑	☐
21. Is the project located within, or within ½ mile of, a disadvantaged community?	☑	☐
If No, could impacts from the project affect a disadvantaged community?	☐	☐
If Yes to either question in 21, answer the following question.		
a. Identify the potential pollution impacts of the project, either direct or indirect, that may occur within the disadvantaged community (e.g., wastewater discharges, air emissions, noise, odors, solid or hazardous waste generation or management):		

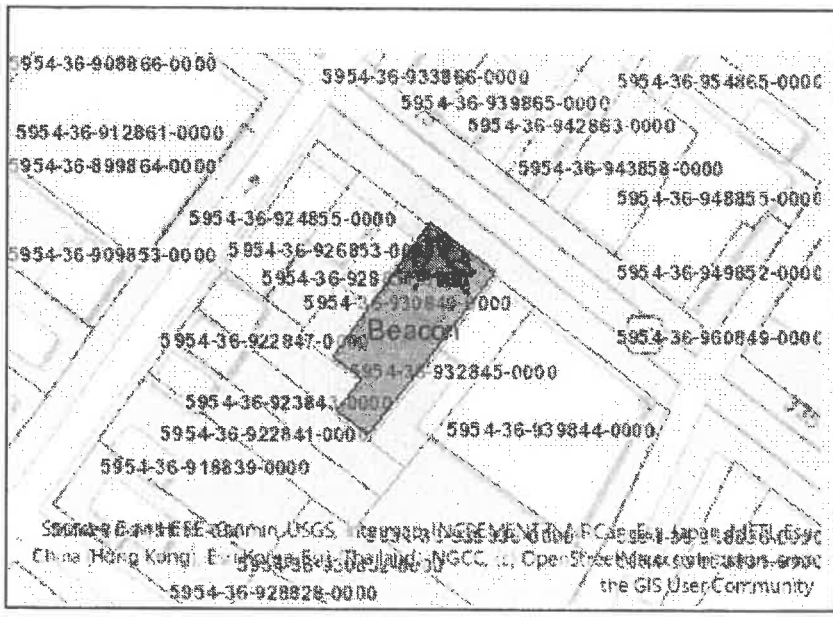
I CERTIFY THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE

Applicant/sponsor/name: John O'Rourke Date: 6/18/26

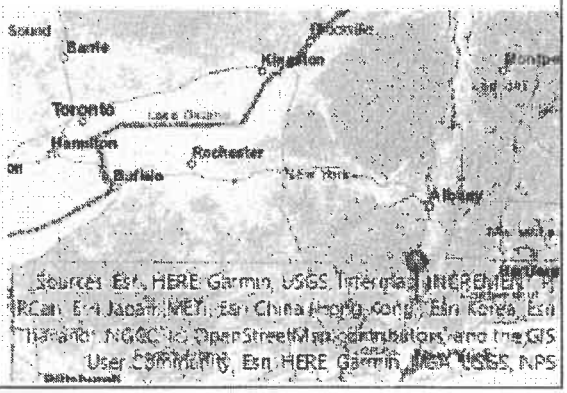
Signature: _____ Title: Engineer

EAF Mapper Summary Report

Monday, December 22, 2025 3:06 PM



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



Part 1 / Question 7 [Critical Environmental Area]	No
Part 1 / Question 12a [National or State Register of Historic Places or State Eligible Sites]	Yes
Part 1 / Question 12b [Archeological Sites]	No
Part 1 / Question 13a [Wetlands or Other Regulated Waterbodies]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
Part 1 / Question 15 [Threatened or Endangered Animal]	No
Part 1 / Question 15 [Threatened or Endangered Animal - Name]	
Part 1 / Question 16 [100 Year Flood Plain]	No
Part 1 / Question 20 [Remediation Site]	Yes

Mr. John Gunn

Beacon Planning Board Chair
street

Re- Site plans- 321 Main

City of Beacon

Beacon NY 12508

1 Municipal Plaza

Tax No. 5954-36-930849

Beacon, NY 12589

Applicant-Arpa Gavigan Dev.

June 08, 2026

Dear Chairman Gunn and Members of the Planning Board:

Narrative: The application is seeking to subdivide 321 Main Street (Parcel #5954-36-930849) from the existing 0.119- acre parcel into two parcels: Parcel A (0.048 ac) and Parcel B (0.071 ac).

Parcel B will retain the existing two-story structure. Parcel A is proposed to be developed with a 3-story mixed-use building. The proposed building will have commercial space on the 1st floor and a single apartment on the 2nd and 3rd floors. The project is located in the Central Main Street (CMS) Zoning District. No parking is proposed for the new Parcel A and instead a pedestrian easement to the rear yard with secure bicycle storage and 17% landscaping area is included; the existing Parcel B parking remains unchanged.

On behalf of the Applicant for the above referenced project, JPO Engineering, PLLC. has submitted the following revised items:

• Revised Application for Site Plan Approval, JPO Engineering, PLLC, dated June-08-2026

• Revised Application for Subdivision Approval, prepared by JPO Engineering, dated June-08-2026

• Architectural Review Board Application, prepared by Madeleine Sanchez AIA Architect, dated May-04-2026

• Compliance Memo, prepared by Madeleine Sanchez AIA Architect, dated November 17, 2025

• Infiltration and Inflow report for the existing site and building, dated March 23, 2026.

• Drainage Analysis report showing pre and post drainage from the site. for the new proposed building, dated March 31, 2026.

• Construction cost estimate for all work to incur within the City's right-of-way.

• Site Plan (11 sheets) by JPO Engineering, PLLC, dated June-08-2026

In response to Lanc & Tully's March 5, 2026 comment memorandum and KARC's March 10, 2026 comment memorandum and Comments from the Planning board

Below is a point-by-point response to the comments received.

Lanc & Tully March 5, 2026 Comment Memorandum

General Comments:

1. A project narrative should be provided for the project that fully describes all aspects of

the proposed project.

Response: *Project Narrative added to submission*

2. The applicant's consultant shall conduct an Inflow & Infiltration (I&I) Study of the existing site and building and provide a certified written report to the City of Beacon of the findings. Possible cross-connections to the City's sanitary sewer collection system include roof-leaders, sump pumps, existing site drains, etc. shall be identified. If any cross-connections are found, the report shall include these findings along with the volume of I&I being introduced into the sanitary sewer collection system, and the proposed remediation for the cross-connection(s) found.

Response: Inflow & Infiltration (I&I) Study of the existing site and building completed and included in the latest submission dated.

3. The Short Environmental Assessment Form shall be revised to accurately reflect the

information provided by the NYSDEC. Several of the questions have been answered "No", but according to EAF Mapper Summary Report at the end of the EAF form, the questions should have been marked "Yes". An accurate EAF shall be submitted for the project.

Response: Revised Short Environmental Assessment Form submitted with latest submission with corrections made per EAF Mapper Summary Report

4. The sheets should be properly numbered. At present the sheets are number 1

through 7, but there are actually 10 sheets in the plan set.

Response: Sheets re-numbered and some added and other excluded per comments

5. Construction details shall be provided for each of the utilities, sidewalk replacement, curb replacement, pavement restoration, connections to existing utilities, the stockade fence, plantings, and all other aspects of work on the site.

Response: Included in new grading and utility and Details plans

6. A grading plan shall be prepared for the project.

Response: Notes on grading included in new grading and utility plan- datums and contour elevations not noted on drawings to avoid any conflicting information, floor slab will be determined from run off slope to existing sidewalk. Rear of Building will slope 2% away from building for initial 7' then remainder is level to existing boundary elevations

7. An erosion and sediment control plan shall be prepared for the project.

Response. *New erosion and sediment control plan included in revised submission*

8. Will there be any impacts to the buildings, or utilities to the buildings, on either side of the proposed building? If so, the plans shall clearly show how this will be mitigated.

Response: *Re-location of 319 Main Street water meter transmitter and gas supply service shown in revised Existing site condition and demolition plan.*

9. A drainage analysis report shall be prepared for the project showing pre and post drainage from the site. The report shall also provide information as to how the increase in run-off from the proposed project will be handled. If possible, applicant should look at the possibility of using the rear of the site to handle stormwater runoff.

Response: Included in the new Grading and utility plan and drainage analysis report added to submission

10. A demolition plan shall be prepared that reflects all items that are to be removed as part of the project (fencing, sidewalk, etc.),

Response: Existing site plan- revised to include Demolition items.

11. A construction cost estimate shall be prepared by the engineer for all work to incur within the City's right-of-way. This would include the removal and installation of sidewalks, curbs, pavement, utility installations, etc.

Response: Included with latest submission

Sheet S-01 (Sheet 1 of 10):

1. An "Index of Drawings" should be provided on the 1st sheet.

Response: Included

2. The "Parcel Information" shall be updated to reflect the existing tax parcel, the actual acreage of the overall existing parcel, and the current address of the parcel.

Response: Included in site revised Site plan and Subdivision plan

3. The Bulk Information Chart shall provide the existing for the current parcel, as well as the proposed for both lots to be created.

Response: Included in revised site plan and subdivision plan

4. Labeling and dimensions provided on the plan should not be obscured by hatching. Hatching shall be lightened or text masked so that it is legible.

Response: labeling and hatching revised throughout plans

5. The site plan shall include a chart providing the calculations for all landscaped areas to allow for determination of the total landscaped area being provided.

Response: Included in revised Lighting and Landscape plan

6. The plan should be revised to reflect the streetlight located in front of the project, as well as the driveway curb cut that currently exists.

Response: Included in Revised Site plan

7. The plan includes a call-out for "Porous Pavers" in the sidewalk area in front of the

project but also notes the sidewalk as concrete. As the sidewalk is concrete

throughout this area, and there are no porous pavers in this area, the call-out should be removed.

Response: Removed

8. The existing utilities in Main Street shall be provided on the plan, along with the proposed connection of the proposed utilities to service the new building to the existing mains in Main Street.

Response: Included in the new Grading and Utility plan

9. The size and material of each of the proposed utilities to service the project shall be noted on the plan.

Response: Included in the new Grading and Utility plan

10. The plan shall show the location of the existing utilities serving the existing building

on the parcel.

Response: Included in the new Existing Condition and Demolition plan

11. The plan is noting 2 manholes on the parcel, with one being to the rear of the existing building and the other being to the rear of the proposed building. What do these manholes serve?

Response: Removed

12. It is recommended that a single potable water service line and fire service line shown on the plan be run as a single line outside of the building and then split on the interior of the building.

Response: Revised per comments in the new Grading and Utility plan

13. The plan shows a rainwater pipe running towards Main Street. Where will this discharge to? Roof leaders should not discharge directly on to sidewalks, in turn causing unsafe icing conditions during winter months.

Response: Revised in the new Grading and Utility plan, this is proposed overflow from rear catch basin and will connect to city stormwater drain

14. The following notes shall be provided on the plan:

I. All water & sewer connections shall comply with City Water and Sewer District requirements.

ii. No cellar, roof, or footing drains shall be discharged into the sanitary sewer system.

iii. The Applicant/Applicant's plumber shall acquire water meters and MXU units (signal sending and receiving unit) for the AMI system (Advanced Metering Infrastructure) from the City of iv.Beacon Water Department. The MXU unit shall be installed on the exterior of the building and shall be located 2 to 3 feet above the exterior ground elevation.

V The Contractor shall perform a utilities call-out prior to construction to verify all underground utility locations by contacting UFPO @1-800-962-7962.

vi. The Contractor shall contact the City of Beacon Water and Sewer Department to schedule a pre-construction meeting to ensure that the arrangements for water supply and sewage disposal are commenced in accordance with the approved plans and amendments thereto and generally accepted standards.

vii. The Applicant/Contractor shall secure all necessary permits prior to construction.

viii. A road opening permit shall be required for the installation of the proposed utilities to service the building. Any street closures require pre-approval from the City of Beacon and shall be performed in accordance with City of Beacon requirements.

x. All erosion control measures shall be installed prior to construction.

X. Bedrock shall be removed by mechanical means. No blasting shall be permitted without approval from the Building Department.

Response: All notes above added to the Grading and Utility Plan

Sheet S-03 (Sheet 3 of 10):

1. The distance and bearing for the north-west boundary line, between parcels 930849 and 928851 is not provided on the plan. The plan shall be revised to reflect the bearing and distance along this property line.

Response: Included in new Subdivision plan, was obscured by proposed building hatching in previous plan

2. The plan should reflect any easements or agreements that may exist across the subject parcel with the neighboring parcels.

Response: Existing driveway Easement and proposed Pedestrian easements added to revised Subdivision plan

3. The plan shall be updated to reflect easements that may be necessary between Parcel "A" and Parcel "B" as part of this project, such as for ingress & egress, utilities, etc. The descriptions for such easements shall be provided for review.

Response: Proposed Pedestrian and access easements added to revised Subdivision plan with brief description in notes

Sheet S-06 (Sheet 6 of 10):

1. The hatching presented on the drawing should be reflective of the existing proposed materials. At present a brick pattern hatching is being used to represent grass area and a concrete sidewalk.

Response: Revised in updated plans

2. A planting schedule table shall be provided on the plan identifying all proposed plantings, the number of plantings, and the size of the plantings.

Response: Included in revised Lighting and Landscape plan

3. The labeling of the landscaping on the plan shall be increased in scale so that they are legible.

Response: Revised in updated lighting and Landscape plan

4. The labeling of the lights on the plan shall be increased in scale so that they are legible.

Response: Revised in updated lighting and Landscape plan

5 The drawing should be coordinated with the drawing provided on Sheet S-01, as

there are currently inconsistencies between the two drawings.

Response: Revised in updated plans

KARC March 10, 2026 Comment Memorandum

1. **Bulk Information.** The site plan set should indicate required and proposed bulk information for both Parcel A and Parcel B. Currently, only proposed information, presumably for Parcel A, is shown on Sheet S-01.

Response: Included in revised Site and Subdivision plans

2. **Landscaped Area.** The bulk table references “minimum open space,” but the CMS regulations require “landscaped area,” which is defined differently. The bulk table should

be revised accordingly, and the plans should include calculations and dimensions demonstrating that the 10% landscaped area requirement is met.

Response: Included in updated Site plan

3. Application Form. The application form contains incorrect and unclear information, including the zoning district designation and omission of the land area for the existing parcel. Several figures are also unlabeled. For example, it is unclear whether 995 SF represents existing commercial floor area and 1,624 SF represents proposed commercial floor area. The application form should be corrected and supplemented with a clear project narrative.

Response: Revised application with clarifications and Project Narrative included

4. Site Plan Set. An index of drawings should be provided on the cover sheet or Sheet S-01 identifying all ten sheets in the plan set. In addition, an existing conditions plan and demolition plan should be provided. The current “existing conditions” sheet consists only of photographs and does not depict existing site features.

Response: New sheet with index of drawings added. Existing condition revised to include Demolition and current site features

5. Parking. The plans should calculate the minimum and maximum parking requirements based on the proposed program. The plans should also clearly indicate the square footage of commercial space. In addition, the project narrative should describe the existing and proposed approach to parking, including how parking associated with the existing use is accommodated and how the proposed mixed-use program is expected to utilize available parking resources.

Response: Parking allowances and Requirements table added in revised Site plan. Square footage included in the Site plan. Parking addressed in narrative- no new parking proposed for new lot and existing lot parking remains unchanged

6. Lighting Plan.

a. The lighting plan labels fixtures L1 and L2 in plan view, but details are provided for L1 and L3. Fixture labels should be consistent between the plan view, luminaire schedule, and detail sheets.

b. A detail for the proposed bollard lighting (L-3) should be provided.

c. The plans should indicate hours of lighting operation and any adaptive controls (such as dimmers, timers, or motion sensors) through notes on Sheet S-06.

d. The gooseneck light fixture detail shown on Sheet S-10 under “Proposed Light Fixture” should be relocated to Sheet S-06 and clearly labeled on the lighting plan and in the luminaire schedule.

Response: Items a-d addressed in revised Lighting and Landscape plan

7. Landscaping Plan. Landscaping elements are labeled on Sheet S-06, but no key is provided to identify what each label refers to. A planting schedule should be provided identifying plant labels, species, quantities, spacing, and planting size.

Response: Included in revised Lighting and Landscape plan

8. Refuse and Bike Storage. A detail for the “Linear Garden Bike and Bin Storage with Green Roof” is provided on Sheet S-06 but is not clearly labeled on the plan. Additionally, Sheet S-06 depicts one installation, while Sheet S-01 appears to show two installations. The plan sheets should be made consistent. The refuse storage area associated with the existing building (Parcel B) should also be identified.

Response: Revised per comments and included in revised Site plan

9. Fence Detail. A detail for the proposed 6-foot stockade fence should be included in the plan set.

Response: Included in revised Lighting and Landscape plan

10. HVAC Screening. A detail should be provided for the HVAC enclosure. It is unclear whether this corresponds to the shadowbox fence detail shown on Sheet S-06.

Response: Included in revised Lighting and Landscape plan- same shadowbox detail

11. CMS Compliance. There are several items in the design standards compliance memo dated November 17, 2025 that should be clarified or reflected on the plan set:

a. Side Setbacks. The elevations and CMS compliance memo indicate proposed side setbacks of approximately 3 inches and 6 inches from the adjoining buildings to accommodate dimensional variation in existing walls. The applicant should confirm with the Building Inspector that these clearances are sufficient to meet applicable Building Code fire separation and maintenance access requirements.

Response: Revised to include additional detail per Meeting with Building Inspector and revised compliance memo with notes.

b. Cornice Height. The memo notes that the proposed storefront cornice would be located approximately 10’-6” above grade, rather than the minimum 12-foot height requirement referenced in §223-41.18(J)(6). These are design requirements that

“shall” be met rather than optional guidelines. The applicant’s explanation may have merit; however, if the requirement cannot be met, the applicant should confirm with the Building Inspector whether relief from the Zoning Board of Appeals would be required.

Response: Elevation and building height revised to accommodate the compliant 12’ storefront cornice.

c. Side Wall Treatment. The memo indicates that the side walls will be largely blank due to their potential function as common property walls. The Planning Board should confirm that the treatment of the exposed portion of the side façade is appropriate given its visibility from the public realm.

Response: Per above and Planning board comments we have included a new side elevation in the Site Plans to show the limited extent of the side wall on view and to highlight the existing chimney on 321 existing 2 story building.

Regards,

John O’Rourke P.E.

733 Route 9D

Garrison, New York 10524

845 803 1935

john@jpoengineering.com

Madeleine Sanchez AIA Architect
534 East Mountain Road
Cold Spring, NY 10516
[redacted]
845-265-3073
[redacted]

November 17, 2025
**Revised 5/4/26 in response to Board comments at meeting on 3/10/26, and 3/10/26 comments on CMS Compliance from KARC Planning Consultants' memo.

City of Beacon Planning Board
Attn: Mercedes Perez, Planning Board Secretary
1 Municipal Plaza
Beacon, NY 12508

RE: Proposed New Building at 321 Main Street, Beacon, NY, Arpa Gavigan Developments LLC

Dear Honorable Chair and Members of the City of Beacon Planning Board:

The proposed building site is located within the City of Beacon Central Main Street District. The following shall show compliance of the proposed new building with the applicable sections of the City of Beacon Zoning Code Article IVD Central Main Street (CMS) District Design Standards: (6 pages)

E. Dimensional Regulations:

1. Front Setback maximum 10 feet:
   The proposed building would have a 10' Front Setback from the property line, to align with the primary facades of the adjoining buildings.

2. Corner Buildings: Not applicable

3. Side setbacks: minimum of zero
   The proposed setbacks of the proposed building would have 3" gap and 6" gap to abutting buildings (to allow for dimensional variation in the existing walls of abutting buildings).

**In response to a comment 11a. on KARC Planning Consultant 3/10/26 memo:
Side setbacks were confirmed at a meeting On 3/18/26 with the Building Inspector, Brian Murphy and Owner, Conal Gavigan, and myself. Mr. Murphy indicated that the 3" and 6" clearances were sufficient to meet Building Code fire separation and maintenance access requirements. The Zoning Code stipulates a side setback minimum of zero, and building to the property line is permitted provided the side walls are made of a non-combustible material and there are no windows on the side walls. Mr. Murphy also indicated that there are no requirements for maintenance access.

4. Rear setbacks: minimum 20 feet for parcels 100' deep or more
   The proposed building would have a rear setback of 43'.

5. Minimum front occupancy on Main Street: 100% for buildings with side walls
   The proposed building would have 100% front occupancy.

6. Building Height: minimum 2 stories, maximum three stories and 38 feet
   The proposed 3- story building would be 33'-2" high.
   **Due to façade revisions (see item 6), the building would be 34'-10" high.

J. Design Standards:

1. Because of the design standards in this section, the architectural review provisions of Chapter 86 shall not apply within the CMS District. In addition to the preceding sections of this article, all new buildings or substantial alterations of existing buildings shall comply with the following design requirements. These design standards are intended to promote the following purposes:

   a. Preserve and enhance the unique character and general public welfare of the City of Beacon;

      With its contextual design, the proposed building shall preserve and enhance the unique character and general public welfare of the City of Beacon, by contributing to its historic heritage and by improving the use of the existing empty property.

   b. Promote pedestrian access and activity, as well as a general sense of area security;

      The proposed mixed-use commercial and residential building shall encourage pedestrian activity by filling an existing void in the street wall. It would create an inviting entry, with lighting to promote a sense of security that is not present in the vacant space.

   c. Restore and maintain the role of streets as civic and social spaces, framed by active uses;

      The proposed building will further define the street wall and enhance the street as social space.

   d. Support a sense of design context that appropriately relates to historic buildings, general façade and window patterns, and traditional streetscapes in the area to new redevelopment efforts, while still allowing architectural flexibility.

      The proposed building directly relates to the historic buildings on Main Street in its general façade and window patterns and shall contribute to the continuity of the traditional streetscape.

2. Key terms: Standards using the verb "shall" are required; should is used when the standard is to be applied unless the Planning Board finds a strong justification for an alternative solution in an unusual and specific circumstance; and "may" means that the "standard" is an optional guideline that is encouraged but not required.

3. Proposed new buildings should be compatible with nearby historic-quality buildings along MainStreet. References to the existing context should include scale, type and texture of materials, roof and cornice form, spacing a proportion of windows and doors, signs, and street-front fixtures. Buildings in or directly adjoining the Historic District and Landmark Overlay sections of the CMS District shall reinforce historic patterns and neighboring buildings with an emphasis in continuity and compatibility, not contrast, but new construction may still be distinguishable in architectural details, most evident in window construction and interiors.

The proposed building's design is compatible with historic buildings along Main Street, as it defined by its context and historic precedents found on Main Street. This particularly unique stretch of Main Street is characterized by relatively small-scale clapboard buildings. The scale of the proposed building is in keeping with the adjacent buildings, and the proposed height falls in between the two. Its design relates to its existing historic clapboard buildings, specifically at the neighboring #321 and #323, across the street at #296 and #300, and up the street at #149. The general façade proportions, first floor entry configuration and window patterns of the proposed building were inspired by the neighboring #315. Similar cornices and storefront configurations, materials and proportions can be found along existing Main Street.

Note: The proposed building is not in or adjacent to the Historic and Landmark Overlay.

**Clapboard was selected for the siding material for the following reasons:

-Clapboard siding is compatible with several neighboring clapboard buildings on Main Street (#321, 323, 296, 300, 149 and 134 Main Street).

-Historic photos show clapboard buildings on Main Street and are part of the historic fabric of Beacon.

-Brick was considered as a material for the proposed building. However, the adjacent 319 Main Street is an older brick material. In our opinion, any new brick that would butt up against the older brick would not come close to the existing older quality and patina.

4. Buildings should have a top-floor cornice feature and first floor architectural articulation, such as a storefront with a secondary cornice or architecturally emphasized doorway, to accent the central body of the building.

The proposed building would have a top floor, pronounced cornice with decorative brackets and corbels. The proposed building will also have a secondary cornice above the length of the storefront, covered by a shallow standing seam metal roof and brackets, typical of other Main Street facades.

5. Architectural features and windows shall be continued on all sides of the building that are clearly visible from a street or public parking area, avoiding any blank walls, except in cases of existing walls or potential common property walls. Larger buildings shall incorporate significant breaks in the facades and rooflines at intervals of no more than 35 feet.

The side walls would be blank, as they are common property walls. The clapboard siding would continue along the exposed portion of the southeast façade. However, there would not be windows on this wall, as the height of abutting building has the potential of increasing.

**As per Board's request, a new side elevation had been added to the drawings to show the party wall, as it is visible from the public realm. The drawings show clapboard and corresponding trim, contiguous with the front and rear elevations.

6. Building elements that provide architectural interest, such as bay windows, and cornices, but not including balconies and porches, may encroach up to two feet above the sidewalk, if the bottom of the encroaching building elements is at least 12 feet above grade.

The primary upper cornice would protrude 1'-9" from the façade and its bottom would be 31' above grade. The secondary storefront lower cornice would protrude 1'-0" from the façade and its bottom would be 10'-6" above grade.

Note: The height of the bottom of the proposed lower cornice would not meet with the "optional guideline" height of 12'. (As the key term "may" is used in this section, this standard is an "optional guideline".) We would request special permission for the bottom of the lower cornice to be at a height of 10'-6" for the following reasons:

-The height of the proposed lower cornice was located to align with the porch roof of the adjacent bookstore, which is at 10'-10".

-There are precedents for lower cornices on Main Street that are below 12'.

-Given the proposed front setback, the proposed height of the lower cornice should not have a negative effect onto the main passage route of the sidewalk.

-If the lower cornice were raised by 1'-6" to meet the standard, it would read too high and out of balance with the relatively moderate height of the proposed overall facade.

-If the lower cornice were at 12 feet, the top of the cornice would conflict with the bottom sill of the proposed second-floor windows. (We considered the options of decreasing the 2nd floor window heights, but this would impact the glazing to façade ratio; or increasing the floor-to-floor height, resulting in a taller commercial space, and a different façade configuration on a taller building. It was concluded that either option would result in a less favorable design for the façade than the proposed.)

**Following the Planning Board's instructions, a meeting was held on 3/18/26 with the Building Inspector, Brian Murphy and Owner, Conal Gavigan, and Madeleine Sanchez, to discuss whether a zoning variance was required for the proposed lower cornice height. Mr. Murphy needed to consult with the attorney to determine whether the lower cornice would be considered an encroachment on the sidewalk, given the façade would be set back. On 4/21/26, the Building Inspector determined that the project, as proposed, will require a variance for the lower cornice height.

After a facade study, with a compliant lower cornice, showed minimal impact to the overall façade configuration, the Owners decided to comply with the height requirement and increase the height of the bottom of the lower cornice from 10'-6" to 12'-0". As a result, the height of the storefront has increased, with the additional 18" distributed as follows: added 6" to the storefront glass, added 6" to the transom units, added 6" to the signage band. The overall height of the proposed building is now 34'-10". The revised façade is shown in the updated drawings, and a variance will not be required.

7. Not Applicable.

8. Buildings shall have a front entrance facing the primary street and connected to the sidewalk. Front entrance doors for commercial buildings and retail storefronts shall be active and provide main access during business hours.

   The proposed building shall have two front entry doors facing the primary street and would connect to the sidewalk; one door to the ground floor commercial space (providing main access during business hours) and the other door to the second and third floor apartments.

9. Primary individual window proportions shall be greater in height than in width, but the Planning Board may allow for exceptions for storefront, transom and specialty windows. Mirrored, reflective, or tinted glass, all-glass walls, and exterior roll-down security gates shall not be permitted. Any shutters shall match the size of the window opening and appear functional.

   The proportion of the proposed second-floor double-hung windows would be greater in height than width at 3'-1 5/8" w x 6'-4 7/8" h. The proportion of the third-floor double-hung windows would be greater in height than width at 3'-1 5/8" w x 6'-0 7/8" h. The proportions of the storefront windows would be greater in height that in width, with three windows at 3'-6" w x 5'-6" h. **storefront windows are now 6'-0" tall (see item 6) The exception would be the proportion of five stationary transom windows of greater than width than height above the entry doors at 3'-0" w x 1'-6" h and transom windows above the storefront windows at 3'-6 11/16" w x 1'-6" h. **transom windows are now 2'-0" tall (see item 6) No roll down gates or shutters are proposed.

10. Commercial buildings shall have at least 70% glass on the first-floor facades, located between 2 feet and 10 feet above the sidewalk. Main Street of East Main Street buildings should have at least 30% glass on the upper-floor facades.

    **Façade revisions from item 6 resulted in adjustments to the ratio at the ground level, as follows:

    The proposed commercial first floor façade, located between 2 feet and 10 feet above the sidewalk would exceed the 70% glass requirement: 126 sf of window/172 sf of façade = 73% Updated to be 117 sf of window/166 sf of façade=70%

    The upper floor façade would meet the 30% glass requirement: 119sf of window/397 sf of façade=30% Updated to be 116 sf of window/385 sf façade=30%

11. Finish building materials should be wood, brick, traditional cement-based stucco, smooth cast stone, smooth-finished fiber-cement siding, or other materials deemed acceptable by the approving body. Vinyl, aluminum or sheet metal siding or sheet trim, exposed concrete blocks or concrete walls, plywood or other similar prefabricated panels, unpainted or unstained lumber, synthetic rough-cut stone, synthetic brick, synthetic stucco, exterior insulation and finishing systems (EIFS), direct-applied finish system (DAFS), and chain link, barbed wire, plastic, or vinyl fencing shall not be permitted.

The finish building materials would be a smooth finish fiber-cement siding, Hardie Plank Lap Siding with smooth texture with an 8" exposure. This was chosen over wood siding, primarily for maintenance purposes. The doors, storefront, brackets, corbels, and panels would be wood. No fencing is proposed.

12. Materials and colors should complement historic building on the block. Fluorescent, neon, metallic, or other intentionally garish colors, as well as stripes, dot, or other incompatible patterns, shall be prohibited.

The proposed neutral color palette consists of three gray tones, with black accents, and would complement other buildings on the block. The siding would be a medium tone Hardie Gray Slate, with trim the darker tone Hardie Iron Gray. The darkest grey elements, such as the door and storefront frames and top crown molding would be the corresponding matching Benjamin Moore colors of BM-2125-20 Deep Space. The medium gray elements, such as the bottom and side panels of the storefront, would be BM-2125-40 Shadow Gray. The lightest grey tone would be for the corbels and brackets, with BM-2125-5- Sweet Innocence. The light fixtures, standing seam metal roof of lower cornice and the window sashes would be black. Several historic buildings on Main Street have black windows, cornices with contrasting colors and darker toned storefront. There are several gray colored elements on Main Street facades, such as at #236 and #211. The proposed colors would blend with the existing blue and tan colors of the neighboring clapboard buildings.

12. Lighting fixtures shall be a maximum of 15 feet in height, except pole lights in rear parking lots shall be a maximum of 20 feet high. All exterior lighting shall comply with the standards in section 223-14B.
    (1) The type, location and shading of such lighting shall prevent spillover of light onto any adjacent residential or multifamily property or direct glare onto any public sidewalk or street.
    (2) Such lighting shall use full cutoff fixtures that do not emit light above the horizontal plane into the night sky, except of lighting for short-term events or holidays, flagpole lighting, decorative light sources under 600 lumens, public parks and other public specialty lighting, as determined by the Building Inspector.
    (3) Hours of lighting and fixture height, type, design, intensity and color temperature may be determined by the Planning Board in acting on a site development plan upon consideration of the following considerations:
        (a) Lighting Fixtures in pedestrian areas should be a maximum of 15 feet in height and parking lot lighting fixtures should be a maximum of 20 feet.
        (b) Pedestrian and parking areas should average approximately one footcandle. Only high security areas may require lighting in the two to five footcandle range, while over five footcandles is usually a waste of energy and a source of glare.
        (c) Color temperature should be in the range of 2,400 to 4,000 Kelvin degrees.
        (d) The color rendering index should be in the range of 80-100.
        (e) Adaptive controls, such as dimmers, timers and motion sensor shut-off lighting, should be used where appropriate.

The two proposed decorative sconces, 11" diameter Gooseneck Barn Lights, would be above the transoms of the entrance doors to the commercial and residential spaces. The fixtures would comply with the standards in section 223-14B as follows:

(1) The type and location of the proposed fixtures should avoid spillover onto the adjacent properties and direct glare onto the sidewalk. The light fixture over the commercial entry is set back 7' from the neighboring one-story entry structure. The light over the residential entrance is approximately 7'-6" from the closest edge of the storefront window of the adjacent bookstore. The lights would have a flat lens at the bottom to avoid glare onto the public sidewalk or street.

(2) The light fixture type casts light downward, so they would not emit light above the horizontal plane.

(3) (a) The centerline of the fixtures would comply with the 15' maximum height standard, as they would be mounted 9'-9" above grade and the fixtures would protrude 1'-6 ¾". **Due to revisions on the elevation, (see item 6) the centerline of the light fixtures has increased to 11'-0".
(b) The fixture would have a LED11, 850 lumen-bulb, which would result in less than 1 footcandle over the bottom surface of the first-floor entries.
(c) Color temperature would be 3000K, which is in the desired range.
(d) Color rendering index would be 90, which is in the desired range.
(e) Adaptive controls would be used as the lights would be on a motion sensor.

14. Mechanical equipment and refuse containers shall be concealed from public view by approved architectural or landscaping elements and shall be located to the rear of the site. Window or projecting air conditioners shall not be permitted on the front façade of new buildings or additions.

The mechanical equipment (3 heat pumps) and refuse containers shall be located on the ground level at the rear of the building. They would be concealed from public view, screened by an enclosure.

**Details of the proposed enclosure have been added to the engineer's drawings.

15. Not applicable.

Sincerely yours,

Madeleine Sanchez AIA Architect

321 Main Street Beacon NY, Storm Water Analysis

Introduction

The application is seeking to subdivide 321 Main Street (Parcel #5954-36-930849) from the existing 0.119- acre parcel into two parcels: Parcel A (0.048 ac) and Parcel B (0.071 ac).
Parcel B will retain the existing two-story structure. Parcel A is proposed to be developed with a 3-story mixed-use building. The proposed construction will change the type of surfaces on the existing property, changing the amount of runoff from pre-existing conditions. A detention system is proposed. The detention system will have an outlet control structure, which will be 2" Diameter opening to control the flow. Using the manning equation the flow can be calculated entering the system. The calculations below will show the resultant flow and volume will be the same as pre-existing conditions.

Present Existing Site

Area = 5,183 sf = .119 Acres
Tc (Time of Concentration,) mins
Manning's Roughness Coefficient (n)= 0.24
Sheet Flow Length (l)= 75 ft
2 year, 24-hour Rainfall, in (P)= 3.29
Slope of Land Surface, ft/ft (S) = 0.022

$$Tc = \frac{O.OO7*(n*l)_{0.8}}{(P^{0.5})*S^{0.4}}$$

$$Tc = \left(\frac{0.007*(0.24*75)^{0.8}}{(3.29^{0.5})*0.022^{0.4}} \right) * 60$$

Tc =10.76 minutes

Intensity

1 year storm	2-year storm	10-year storm	100-year storm

2.65”/hr	3.17”/hr	4.24”/hr	6.69”/hr

Runoff Coefficient from Present Site

	Area(A) (Acres)	Percent	C (Runoff Coefficient)
Landscape	.0695	58%	0.3
Pavement/concrete	.0335	28%	0.95
Roof/Buildings	.0165	14%	0.95
Total	0.119		0.58

Runoff from Existing Site

1-year storm
Q =CiA
0.58 x 2.65”/hr x 0.119 acre = 0.18 cfs
Volume = 0.18 cfs x 0.5 x (11mins x 3) x 60 sec/min = 178 cf

2-year storm
Q =CiA
0.58 x 3.17”/hr x 0.119 acre = 0.22 cfs
Volume = 0.22 cfs x 0.5 x (11mins x 3) x 60 sec/min = 218 cf

10-year storm
Q =CiA
0.58 x 4.24”/hr x 0.119 acre = 0.29 cfs
Volume = 0.29 cfs x 0.5 x (11mins x 3) x 60sec/min = 287 cf

100-year storm
Q =CiA
0.58 x 6.69”/hr x 0.119 acre = 0.46 cfs
Volume = 0.46 cfs x 0.5 x (11mins x 3) x 60 sec/min = 455cf

Proposed Site

Area = 5,183 sf = .119 Acres
Tc (Time of Concentration,) mins
Manning's Roughness Coefficient (n)= 0.24
Sheet Flow Length (l)= 30 ft
2 year, 24-hour Rainfall, in (P)= 3.29
Slope of Land Surface, ft/ft (S) = 0.016

$$Tc = \frac{0.007*(n*l)^{0.8}}{(P^{0.5})*S^{0.4}}$$

$$Tc = \left(\frac{0.007*(0.24*30)^{0.8}}{(3.29^{0.5})*0.016^{0.4}}\right) * 60$$

Tc = 5.8 minutes

Runoff Coefficient from Proposed Site

	Area(A) (Acres)	Percent	C (Runoff Coefficient)
Landscape	.0450	38%	0.3
Pavement/concrete	.0343	29%	0.95
Roof/Buildings	.0394	33%	0.95
Total	0.119		0.88

Runoff from Proposed Site

2-year storm

Q =CiA

0.88 x 2.65”/hr x 0.119 acre = 0.28 cfs

Volume = 0.28 cfs x 0.5 x (5.8 mins x 3) x 60 sec/min = 142 cf

2-year storm

Q =CiA

0.88 x 3.17”/hr x 0.119 acre = 0.33 cfs

Volume = 0.33 cfs x 0.5 x (6mins x 3) x 60 sec/min = 169 cf

10-year storm

Q =CiA

0.88 x 4.24”/hr x 0.119 acre = 0.44 cfs

Volume = 0.44 cfs x 0.5 x (6mins x 3) x 60 sec/min = 226 cf

100-year storm

Q =CiA

0.88 x 6.69”/hr x 0.119 acre = 0.7cfs

Volume = 0.7cfs x 0.5 x (6mins x 3) x 60 sec/min = 357cf

Flow Leaving Controlled Flow Structure

Diameter of Pipe: 2”

Cross Sectional Area: 0.02 ft_2

Hydraulic Radius: 0.04 ft

Roughness coefficient: 0.009

Slope: .01 ft/ft

$Q=^{g-x.04_{2/3}x}\ .02\ x\ .01°'_5$

Q= 0.04cfs

Volume of Detention System

Volume of Storage Tank: 11.5 ft x 23 ft x 1.18 ft = 312 cf

Volume of Stone Storage: 15.5 ft x 27 ft x 1.18 ft = 493 cf
(493- 312)*(0.4) = 72 c.f.

Total Volume: 312 + 72 = 384 cf

The Outflow Control Structure will reduce the amount of flow leaving the site to meet pre-existing conditions. The volume of the detention system will be able to hold the volume of a 100-year storm. The detention system is the R-tank HD model

Discharge Rates

	Existing Site Runoff Flow	Proposed Site Runoff Flow
1 Year Storm	0.18 cfs	0.28 cfs
2 Year Storm	0.22 cfs	0.33 cfs
10 Year Storm	0.29 cfs	0.44 cfs
100 Year Storm	0.46 cfs	0.7cfs

Discharge Volumes

	Existing Site Runoff Volume	Proposed Site Runoff Volume
1 Year Storm	210 cf	142 cf
2 Year Storm	257 cf	169 cf
10 Year Storm	339 cf	226 cf
100 Year Storm	538 cf	357cf

Conclusion:

The tables above show the difference in the discharge flows and volume. The proposed detention system and outflow control structure will be able to accommodate the runoff flow and contain the runoff volume to be less than the pre-existing condition.

Respectfully Submitted,

John Patrick O'Rourke. NY State P.E. 102652

INFILTRATION AND INFLOW (I&I) REPORT

March 23, 2026
Mr. Bryan Murphy
City of Beacon Building Inspector
1 Municipal Center
Beacon, NY 12508

Re: Infiltration and Inflow Investigation
321 Main Street-Mixed Use Development
Tax ID: Parcel #5954-36-930849 (0.119 acres)
City of Beacon, New York

Prepared by:
John Patrick O'Rourke P.E.
JPO ENGINEERING PLLC
733 Route 9D
Garrison, NY 10524
(845) 803-1935

On March 23, 2026, JPO Engineering conducted an infiltration and inflow (I&I) study on the parcel located at 321 Main Street in accordance with §179-6 of the City of Beacon's code. The study was performed to determine if any illicit connections/inflows to the City of Beacon's sewage system are present on the subject property. Illicit inflows are wastewater discharges from non-sanitary wastewater sources which connect into the City's sanitary sewer system. Such types of flow include discharges from stormwater systems, sump/groundwater pumping, or other prohibited sources of inflow.

Below please find a description of the subject property, a summary of our I&I study investigation and the conclusions from the study.

The site is a developed parcel which contains a two-story mixed-use existing building, a paved driveway and a paved parking area with the remainder of the lot green space. The main building on the property is (residential & commercial) building located along the property's front North Eastern portion.

The main building was found to have roof gutters that run along the building's front and rear sides. The downspouts for the gutters were followed to their point of discharge and it was found that all of the downspouts discharge onto the ground around the building (on the paved driveway and rear grass area and no illicit connections were found along the outside of the main building.



View of the main building's front side. A roof gutter is present along this side of the building which serves the lower flat roof only, along with a downspout on the corner that discharges to ground on the paved driveway east of the building.



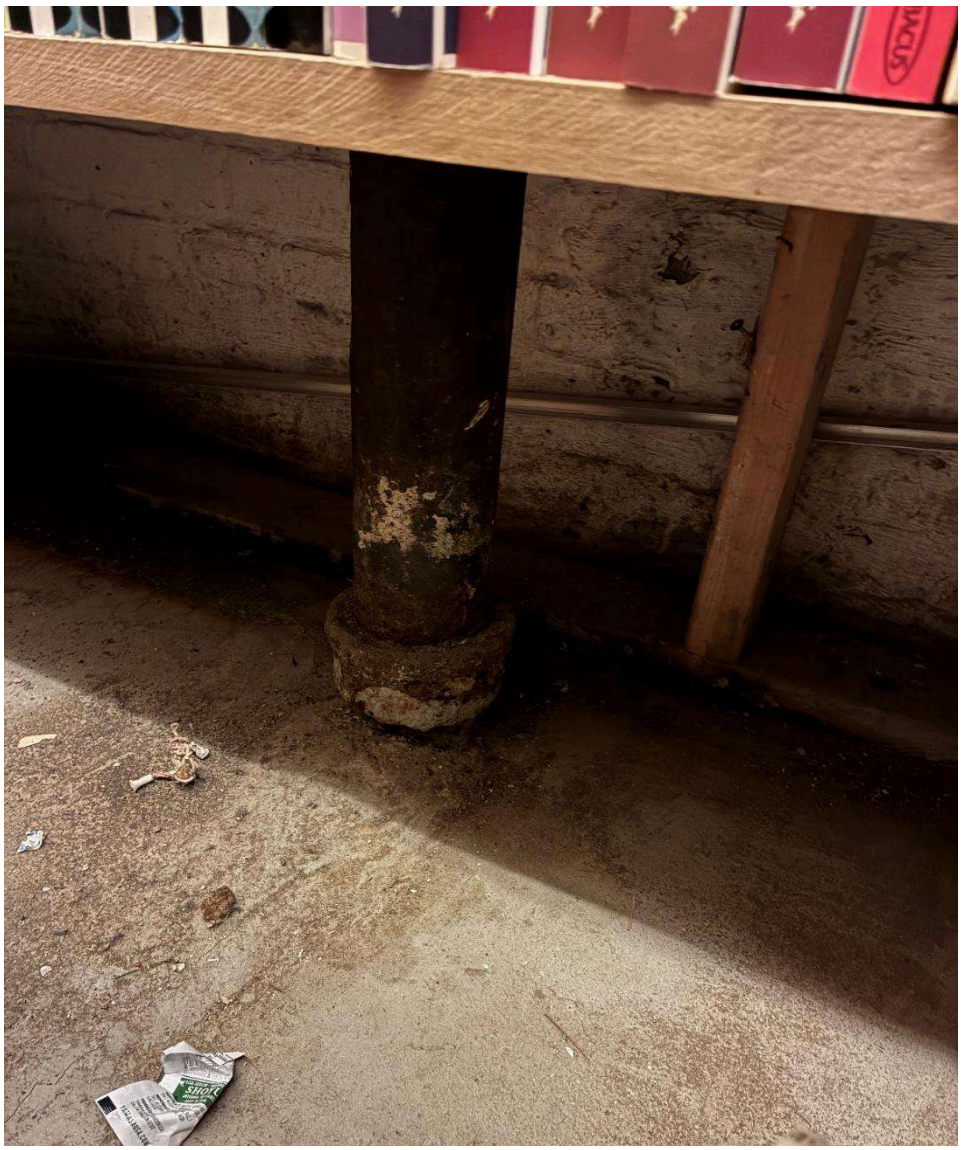
The main roof slopes back and discharges into the rear gutter, this gutter downspout discharges onto the ground 8’ back to the green area along the rear of the building.



Rear gutter discharges into grass area at rear of building

Interior:
The interior of the main building's was inspected to determine if any illicit sources are connected to the building's internal sewer lines such as from sump pumps, floor drains, or other illicit sources (discharges other than sanitary wastewater). For the inspection, the basement level of the main building was accessed, and the building's internal sewer pipes were visually inspected along their lengths to the building's sanitary discharge point (point where the sewage lines for the building converge and go towards the public sanitary system).

The building's sanitary discharge point is located towards the rear in the center of the building and goes under the concrete floor slab and into the ground. The raw sewage goes underground, goes out of the building's front side, and connects to the sanitary sewer main in the Main Street.



View of the line form the commercial space, this branch runs for 4’under the concrete and meets the main building’s sanitary discharge point

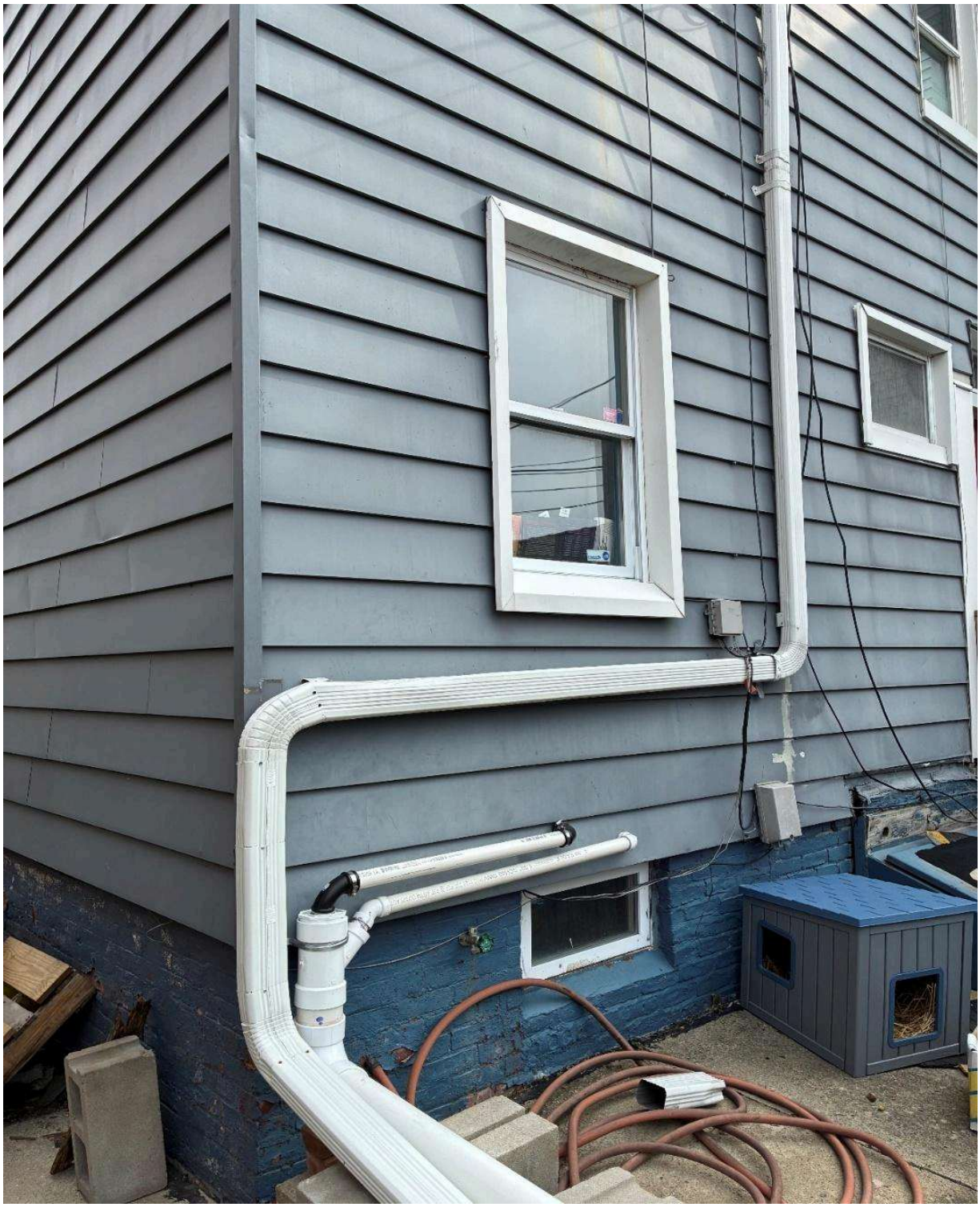


View of main building raw sewage outlet point located towards rear in the basement slab
No connections, other than from the building's water fixtures, were found along any point of the lines (no illicit connections).

A sump pit was found on the basement level towards the rear near the Bilco door exit from the basement.
The sump pit has a primary and a backup pump set at different levels and both discharge out through rear above window through 2" pvc lines, both lines join a 4" drain line which runs 50' back and discharges in the Grass/gravel area at the rear of the site



View of the sump pump located near the rear of the building



View of the basement sump pump exiting the building and meeting the 4” drain



Sump pump discharges into perforated drain line in green area at rear of lot

Through our investigation, JPO Engineering did not find any illicit connections from the building at 321 Main Street to the City of Beacon’s sanitary sewer collection system. A 15” HDPE pipe is proposed to connect the new catch basin to an existing City catch basin located in South Brett St. approximately 45 feet south of the parcel.

Should you have any questions, please feel free to call me at 845 803 1935

Roof Area	1-year Peak Rate (cfs)	1-year Peak Volume (acre-ft)	2- year Peak Rate (cfs)	2-year Peak Volume (acre-ft)	5- year Peak Rate (cfs)	5-year Peak Volume (acre-ft)	10- year Peak Rate (cfs)	10-year Peak Volume (acrefeet)
1,500 sqft	.12	.0066	.14	0.0075	.19	0.01	.282	0.014

Respectfully Submitted,

John Patrick O'Rourke. NY State P.E. 102652

JPO Engineering
733 Route 9D
Garrison, New York 10524
845 803 1935
john@jpoengineering.com

Location : 321 Main Street,
Beacon NY 12508
Date : 12/4/2026

Cost estimate: Utility, Sidewalk and Pavement Works

Removal work	**units**	**$/unit**	**quantity**	**cost**
Concrete Curb/Sidewalk (monolithic)	LF	95	20	$1,900.00
Pavement Removal (utility trenches)	LF	20	36	$720.00
Gas line to 319 from valve to building	LF	75	20	$1,500.00
Water meter transmitter	EA	250	1	$250.00
Road, sidewalk and Curbing	**units**	**$/unit**	**quantity**	**cost**
Pavement Foundation Course	SY	27	36	$972.00
Pavement Binder Course	SY	50	36	$1,800.00
Pavement Top Course	SY	15	36	$540.00
Monolithic Sidewalk/Curb	SF	50	20	$1,000.00
Utilities	**units**	**$/unit**	**quantity**	**cost**
4" Water Service Wet Tap	EA	3000	1	$3,000.00
4" DI Water Service	LF	60	50	$3,000.00
4" sewer service tap	EA	2000	1	$2,000.00
4" SDR 35 Sewer Service	LF	45	50	$2,250.00
4" Stomm Pipe Connection	EA	500	1	$500.00
4 " HDPE Storm Pipe	LF	45	50	$2,250.00
Catch Basin	EA	4500	1	$4,500.00
New Gas line to 319	LF	75	20	$1,500.00
Re-locate water meter to new proposed/approved location	EA	250	1	$250.00
Subtotal				$27,932
10% Contingency	EA			$2,793
Total all Items				**$30,725**



SUBMISSION CONTENTS

SHEET 1 - TITLE COVER SHEET BY JPO ENGINEERING, PLLC, DATED MAY 21, 2026

SHEET 2 - SITE PLAN BY JPO ENGINEERING, PLLC, DATED MAY 21, 2026

SHEET 3 - SUBDIVISION PLAN BY JPO ENGINEERING, PLLC, DATED MAY 21, 2026

SHEET 4 - PROPOSED ELEVATION BY MADELEINE SANCHEZ AIA ARCHITECT DATED APRIL 21, 2026

SHEET 5 - PROPOSED FLOOR PLANS BY MADELEINE SANCHEZ AIA ARCHITECT DATED APRIL 21, 2026

SHEET 6 - GRADING AND UTILITY PLAN BY JPO ENGINEERING, PLLC, DATED MAY 21, 2026

SHEET 7 - DETAILS BY JPO ENGINEERING, PLLC, DATED MAY 21, 2026

SHEET 8 - LIGHTING AND LANDSCAPE PLAN BY JPO ENGINEERING, PLLC, DATED MAY 21, 2026

SHEET 9 - EXISTING CONDITION AND DEMOLITION PLAN BY JPO ENGINEERING, PLLC, DATED MAY 21, 2026

SHEET 10 - EROSION AND SEDIMENT CONTROL PLAN BY JPO ENGINEERING, PLLC, DATED MAY 21, 2026

SHEET 11 - STRUCTURAL SECTION BY JPO ENGINEERING, PLLC, DATED MAY 21, 2026

SUPPLEMENTAL DOCUMENTS

EXHIBIT A- REVISED APPLICATION FOR SITE PLAN APPROVAL, JPO ENGINEERING, PLLC, DATED MAY 21, 2026

EXHIBIT B- REVISED APPLICATION FOR SUBDIVISION APPROVAL, JPO ENGINEERING, PLLC, DATED MAY 21, 2026

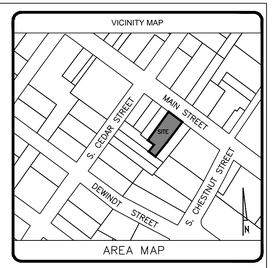
EXHIBIT C- ARCHITECTURAL REVIEW BOARD APPLICATION, PREPARED BY MADELEINE SANCHEZ AIA ARCHITECT, DATED NOVEMBER 24, 2025

EXHIBIT D- COMPLIANCE MEMO, PREPARED BY MADELEINE SANCHEZ AIA ARCHITECT, REVISED MAY 04, 2026

EXHIBIT E- INFILTRATION AND INFLOW REPORT FOR THE EXISTING SITE AND BUILDING, DATED MARCH 23, 2026.

EXHIBIT F- DRAINAGE ANALYSIS REPORT SHOWING PRE AND POST DRAINAGE FROM THE SITE. FOR THE NEW PROPOSED BUILDING, DATED MARCH 31, 2026.

EXHIBIT G- CONSTRUCTION COST ESTIMATE FOR ALL WORK TO INCUR WITHIN THE CITY'S RIGHT-OF-WAY.



JPO Engineering, PLLC
733 Route 9D, Garrison, NY 10524
(845) 803-1935

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SITE SPECIFIC NOTES:

1. THE PARCEL LIES WITHIN THE CMS (CENTRAL MAIN STREET) ZONING DISTRICT. BUSINESSES AND RESIDENTIAL USES ARE A PERMITTED USE WITHIN THIS DISTRICT.
2. ALTERATION OF THIS DOCUMENT, EXCEPT BY A NEW YORK STATE LICENSED ENGINEER OR LAND SURVEYOR WITH A 7208-N EXEMPTION OF THE NEW YORK STATE EDUCATION LAW, IS ILLEGAL.
3. BOUNDARY SURVEY INFORMATION AS PER SURVEY PREPARED BY BRENDAN JOHNSON DATED APRIL 18, 2024.

OWNER

ARPA GAVIGAN DEVELOPMENTS LLC
6 Cherry Street
Cold spring, New York 10516

SEAL & STAMP

STATE OF NEW YORK
JOHN P. O'ROURKE
102652
LICENSED PROFESSIONAL ENGINEER

MADELEINE SANCHEZ AIA ARCHITECT
534 EAST MOUNTAIN ROAD NORTH COLD SPRING NY 10516
TEL 845.265.3073

PROJECT ADDRESS:

321 MAIN STREET,
BEACON, NY.

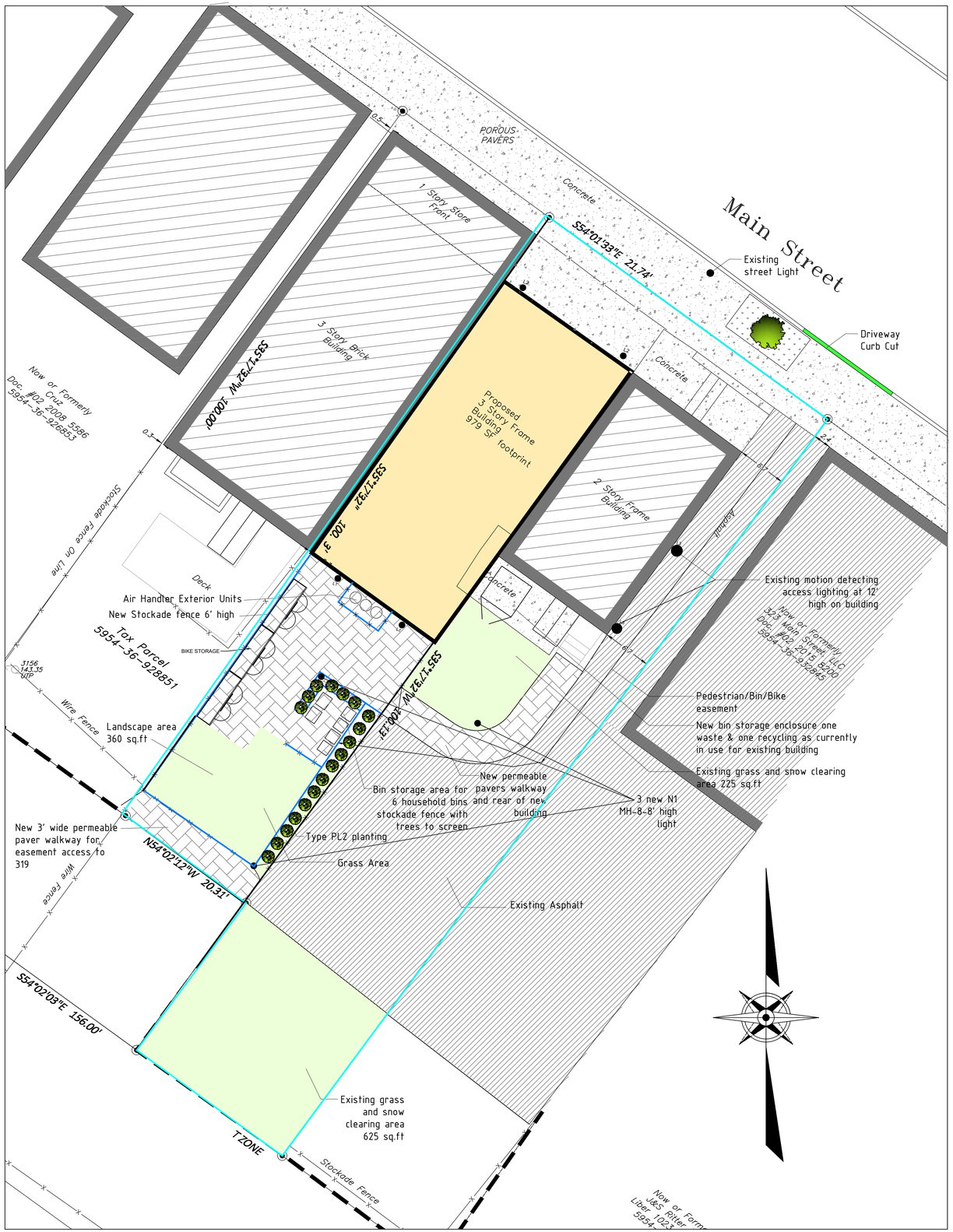
REV. DATE	DESCRIPTION	DRAWN BY
05-21-2026	PLANNING APPLICATION	JPO

COVER SHEET

JOB #:	321 MAIN
DATE:	06/12/2026
SHEET:	1 of 11
DRAWN BY:	JPO
REVIEWED BY:	JPO

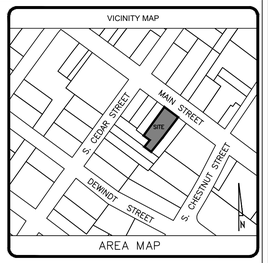
S-01

Scale



PROPOSED CONDITIONS
SCALE: 1"=10'

Use & Parking Requirements	Proposed Area / Count	Parking Requirement
Commercial 0 spaces (minimum)3 spaces per 1,000 sf GFA (maximum)	979 sf	0 parking spaces minimum 3 parking spaces maximum
Residential 0 spaces (minimum)1 space per dwelling unit (maximum)	2 dwelling units	0 parking spaces minimum 2 parking spaces maximum
Total Required Total Provided		0 parking spaces minimum 5 parking spaces maximum 0 parking spaces



PARCEL INFORMATION

TAX GRID PARCEL NUMBER(S)	130200-5954-36-930894
ZONING DISTRICT	CMS
TOTAL AREA	0.119 AC.
ADDRESS	321 MAIN STREET
SCHOOL DISTRICT	BEACON CSD
SANITARY DISPOSAL	CENTRAL SEWAGE DISPOSAL
WATER SUPPLY	CENTRAL WATER

BULK ZONING REGULATIONS TABLE

	REQUIRED SETBACKS			MIN LOT DEPTH	ALLOWABLE BUILDING HEIGHT	MINIMUM LANDSCAPED AREA	LOT AREA
	FRONT	SIDE	REAR				
REQUIRED	0-10'	0'	20'	75'	3 STORIES /38'	10% OR 5% IF OPEN TO PUBLIC	
EXISTING LOT 321 MAIN STREET 130200-5954-36-930894	3'	0'	80'	125'	2 STORIES / 24' 3"	57%	0.119-acres
NEW PROPOSED LOT-PARCEL A	10'	0'	43'	100,	3 STORIES / 34' 10"	17%	0.048-acres
REMAINING LOT-PARCEL B	3'	0'	80'	125'	2 STORIES / 24' 3"	26%	0.071-acres

REFERENCE: CITY OF BEACON ZONING -233 ATTACHMENT 1 - 223-17. SCHEDULE OF BULK REGULATIONS

JPO Engineering, PLLC
733 Route 9D, Garrison, NY 10524
(845) 803-1935

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3. BOUNDARY SURVEY INFORMATION AS PER SURVEY PREPARED BY BRENDAN JOHNSON DATED APRIL 18, 2024.

OWNER
ARPA GAVIGAN DEVELOPMENTS LLC
6 Cherry Street
Cold spring, New York 10516

SEAL & STAMP

STATE OF NEW YORK
JOHN P. O'ROURKE
102652
LICENSED PROFESSIONAL ENGINEER

MADELEINE SANCHEZ AIA
ARCHITECT
534 EAST MOUNTAIN ROAD NORTH COLD SPRING NY 10516
TEL 845.265.3073

PROJECT ADDRESS:
321 MAIN STREET,
BEACON, NY.

REV. DATE	DESCRIPTION	DRAWN BY
02-24-2026	PLANNING APPLICATION	JPO
05-21-2026	REVISED PLANNING APPLICATION	JPO

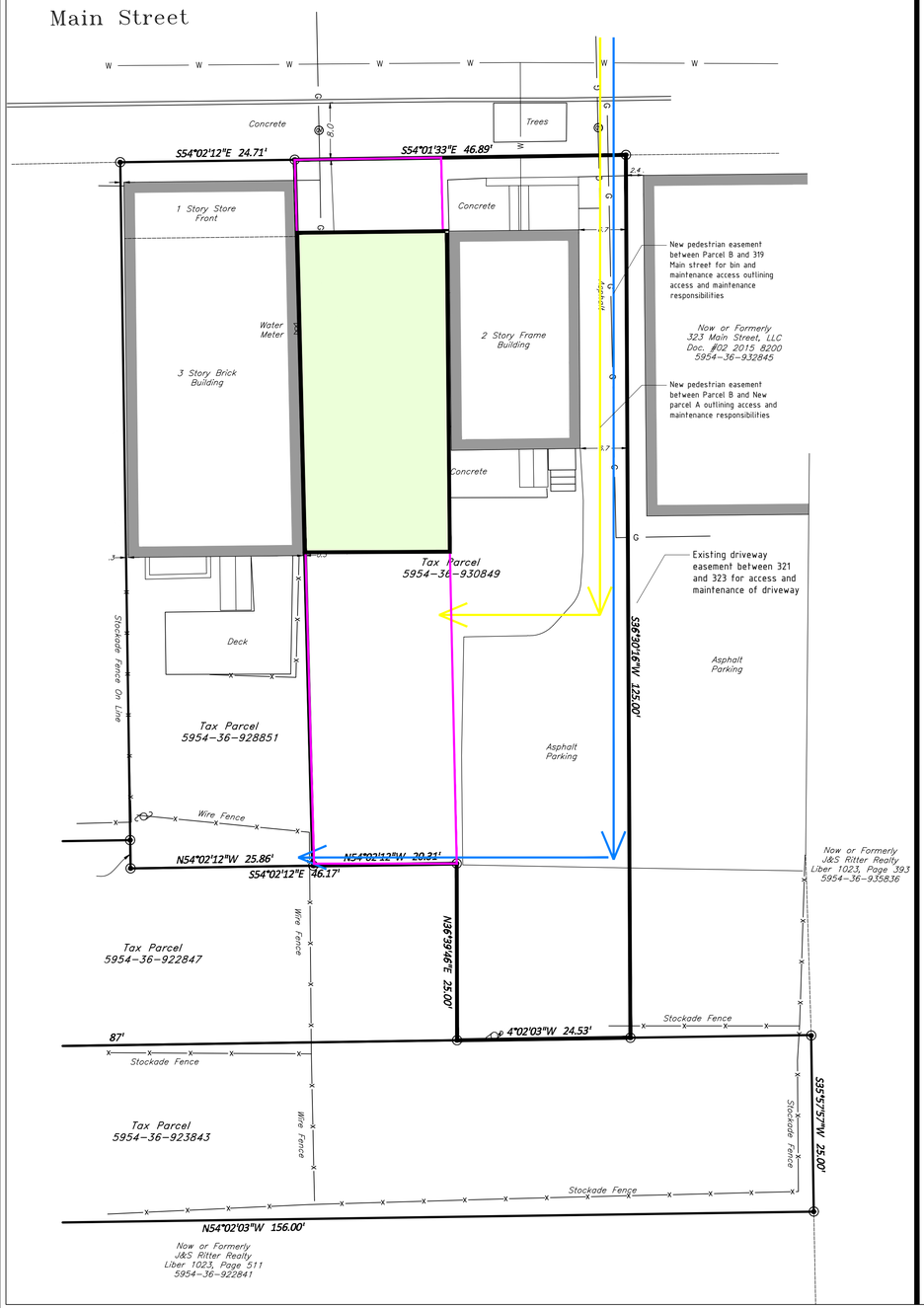
SITE PLAN

JOB #:	321 MAIN
DATE:	06/12/2026
SHEET:	2 of 11
DRAWN BY:	JPO
REVIEWED BY:	JPO

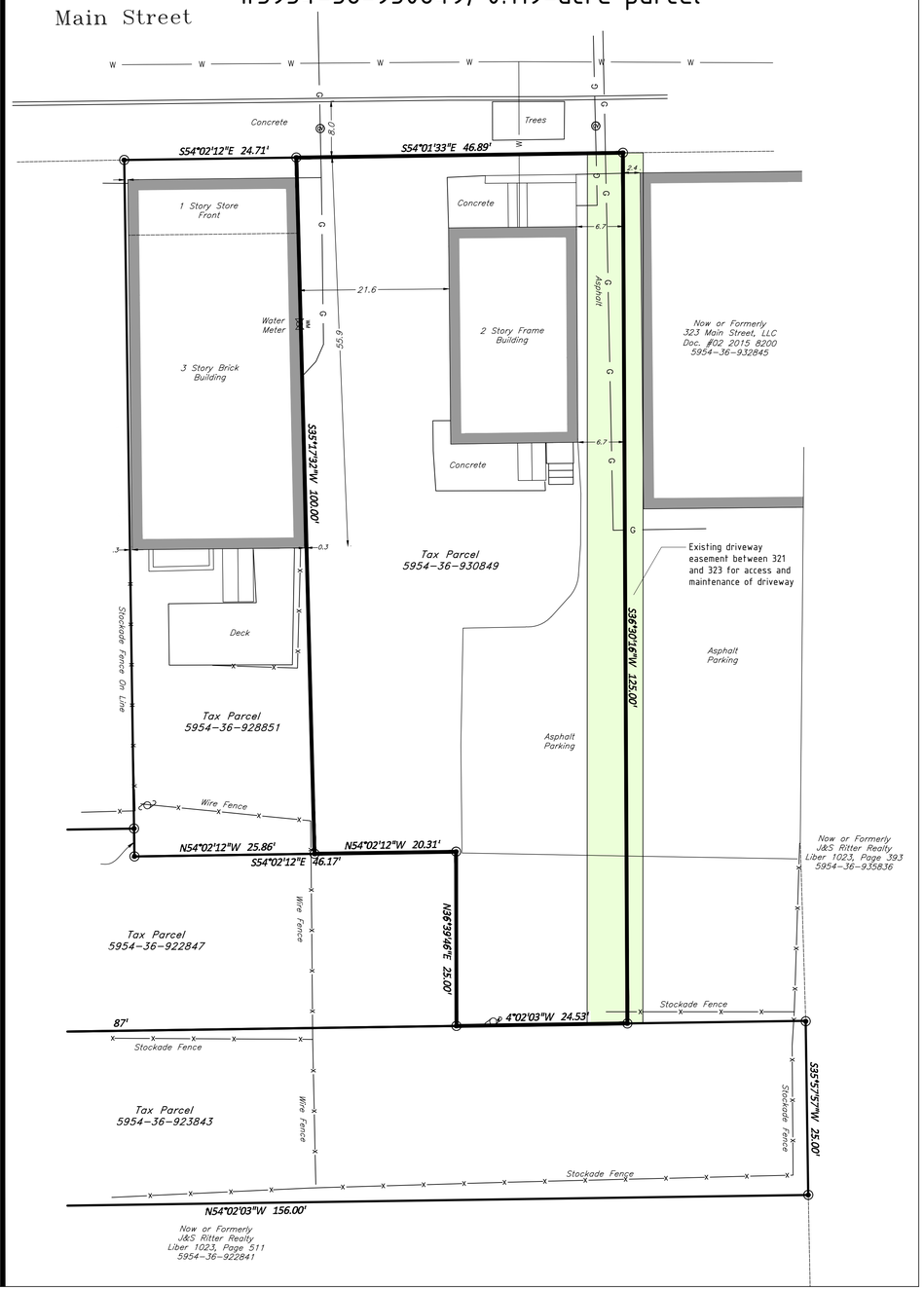
S-02

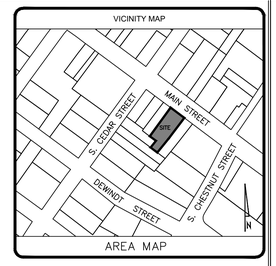
Scale

New lot Parcel A - 0.048 acre



Existing lot 321 Main Street (Parcel #5954-36-930849) 0.119-acre parcel





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3. Only boundary survey maps with the surveyor's embossed or red inked seal are genuine true and correct copies of the surveyor's original work and opinion. A copy of this document without a proper application of the surveyor's embossed or red inked seal should be assumed to be an unauthorized copy.

4. Certifications on this boundary survey map signify that the map was prepared in accordance with the current existing Code of Practice for Land Surveys adopted by the New York State Association of Professional Land Surveyors, Inc. The certification is limited to persons for whom the boundary survey map is prepared, to the title company, to the governmental agency, and to the lending institution listed on this boundary survey map.

5. The certifications herein are not transferable.

6. The location of underground improvements or encroachments are not always known and often must be estimated. If any underground improvements or encroachments exist or are shown, the improvements or encroachments are not covered by this certificate.

7. Subject to the findings of a current title search.

8. Subject to covenants, easements, restrictions, conditions and agreements of record.

9. Subject to any right, title or interest the public may have for highway use.

10. Bearings and North shown hereon are referenced to NAD 83-NY East using NYSNET RTN GPS.

TAX PARCEL NUMBER

City of Beacon, Dutchess County, New York
5954-36-922847 - 6 S. Cedar St
5954-36-92885 - 319 Main St
5954-36-930849 - 321 Main St

DEED REFERENCE

Doc. #02 2022 4589
Avalon PDF LLC
to
The Lindley Todd, LLC
November 14, 2022

Doc. #02 2014 4533
Fredys F. Geurrero
to
Hudson Todd, LLC
August 6, 2014

Doc. #02 2017 518
Piccone Equities Inc.
to
Hudson Todd, LLC
January 20, 2017

DATE OF SURVEY

Field Completion: April 11, 2024

CERTIFICATIONS

Hudson Todd, LLC
The Lindley Todd, LLC

AREA

5954-36-930849
5,196 Square Feet
0.119 Acres

5954-36-928851
2,529 Square Feet
0.058 Acres

5954-36-922847
2,880 Square Feet
0.066 Acres

5954-36-923843
3,900 Square Feet
0.090 Acres

UTILITY NOTE

Underground Utilities Shown Hereon Were Marked and Located in the field by Others and Mapped by This Office.

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OWNER

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SEAL & STAMP



MADELEINE SANCHEZ AIA
ARCHITECT
534 EAST MOUNTAIN ROAD NORTH COLD SPRING NY 10516
TEL 845.265.3073

PROJECT ADDRESS:

321 MAIN STREET,
BEACON, NY.

REV. DATE	DESCRIPTION	DRAWN BY
02-24-2026	PLANNING APPLICATION	JPO
05-21-2026	REVISED PLANNING APPLICATION	JPO

JOHNSON SURVEYING
BRENDAN JOHNSON, PLS
10 Meadow Lane
Pleasant Valley, NY 12569
Phone No. (845) 380-0528
johnsonboundaries@gmail.com

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rev.	date	description
1	2/11/26	Utility Locations





BRENDAN JOHNSON, P.L.S.
P.L.S. No. 50919

321 - MAIN
MAP OF A SURVEY
PREPARED FOR
ARPA GAVIGAN DEVELOPMENTS, LLC

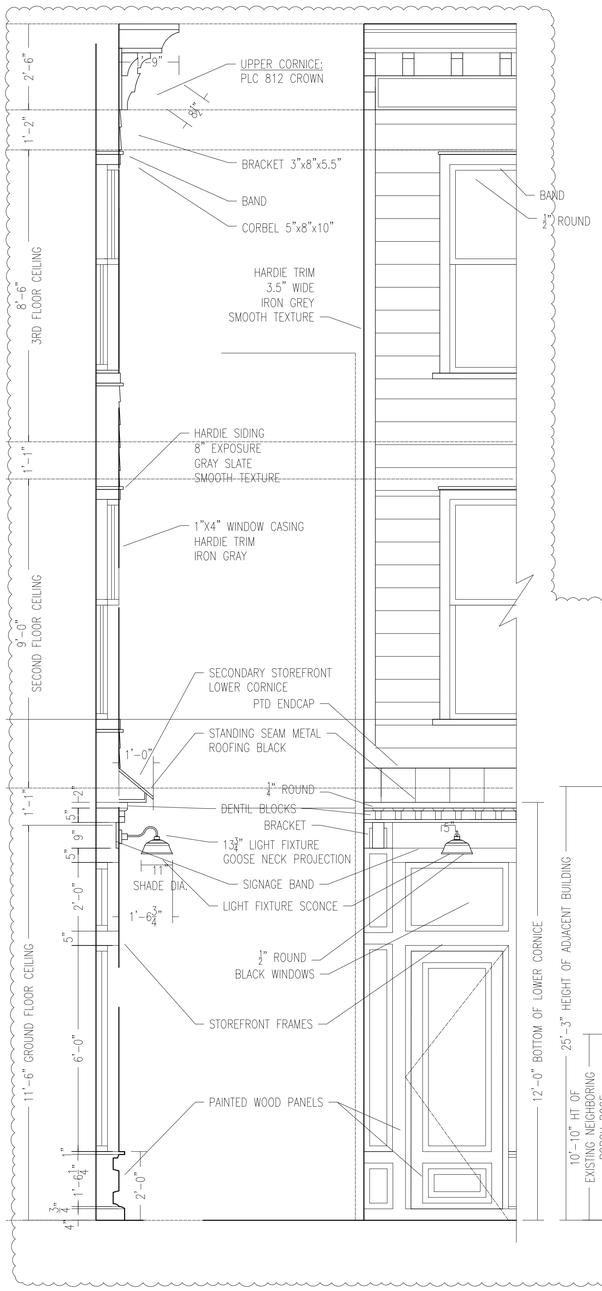
CITY OF BEACON, COUNTY OF DUTCHESS, STATE OF NEW YORK

SUBDIVISION PLAN

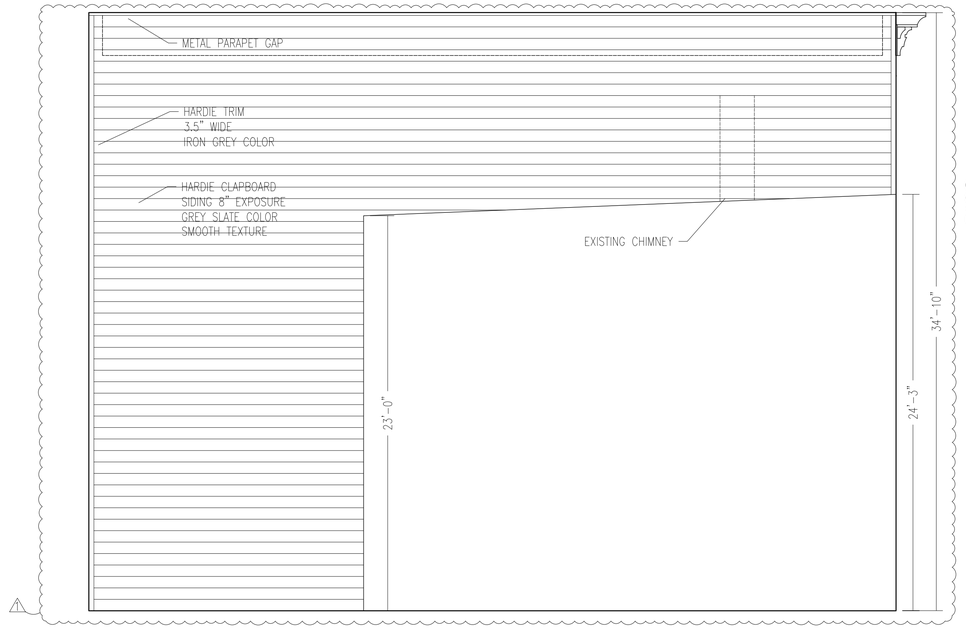
JOB #:	321 MAIN
DATE:	06/12/2026
SHEET:	3 of 11
DRAWN BY:	JPO
REVIEWED BY:	JPO

S-03

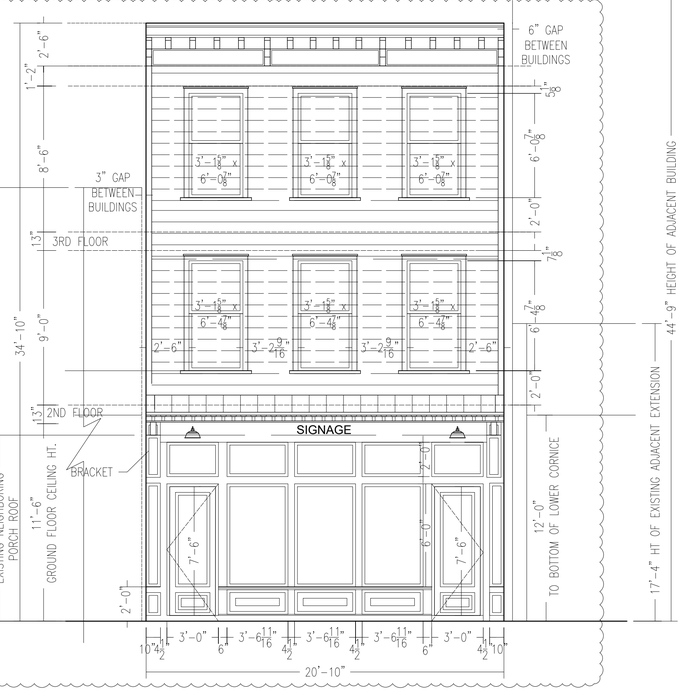
Scale



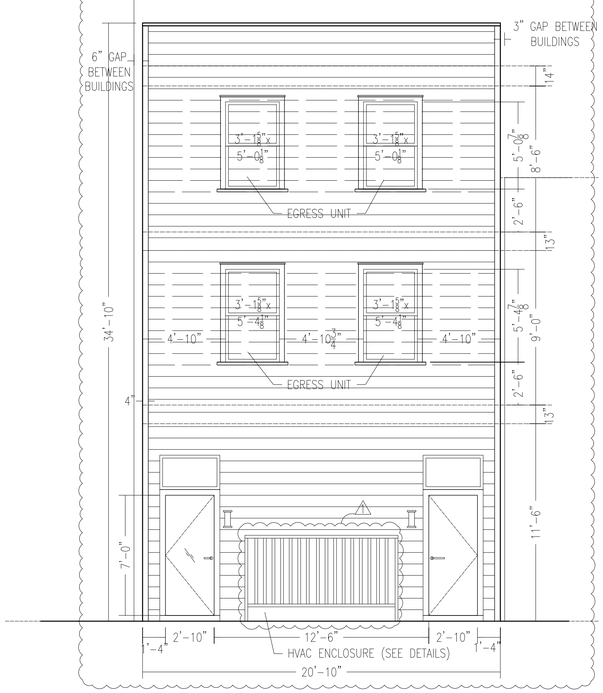
2 FACADE DETAIL SECTION / ELEVATION
SCALE: 1/2" = 1'-0"



1 PROPOSED SOUTH SIDE ELEVATION
SCALE: 1/4" = 1'-0"



3 PROPOSED FRONT FACADE
SCALE: 1/4" = 1'-0"



4 PROPOSED REAR FACADE
SCALE: 1/4" = 1'-0"

EXTERIOR FACADE DESIGN DEVELOPMENT SPECIFICATIONS

Hardie Plank Lap Siding, Smooth Texture, Gray Slate, 9.25" boards for 8" exposure
Hardie Trim, Smooth Texture, Iron Gray, 3.5" wide
Andersen Series Double Hung 400, Exterior Black
Front: 2nd Floor – (3) WDH3062 R.O. 3'-2 1/8"x6'-4 7/8"
3rd floor – (3) WDH30510 R.O. 3'-2 1/8"x6'-0 7/8"
Rear: 2nd floor – (2) WDH21052 R.O. 3'-0 1/8"x5'-0 7/8"
3rd floor – (2) WDH210410 R.O. 3'-0 1/8"x5'-4 7/8"

Ground Floor: 117sf/166sf=70% (min. required is 70%)
Second and Third Floors: 116sf/385sf=30% (min. required is 30%)

Front Shop and Apartment Entries: Simpson Outswing 3/4" Glass with Bottom Panel,7501 Thermal Sash Paint Grade Poplar, Clear Glass, Ovolo Sticking, Panel Type: 1 7/16" Innerbond, 3'-0"Wx7'-0"H, painted BM-2125-20 Deep Space
Rear Shop Entry: Andersen Commercial Outswing Door, 2'-9 11/16"Wx6'-10"H Dark Bronze
Rear Sprinkler Room Entry: Painted Steel Door, BM-2125-40 Shadow Gray

Front Entries:(2)Barnlight 11" Bomber Gooseneck Light in Matte Black,W/LED Flat Lens Product Code Integrated LED Series BLE-G-WHB11-I06-G26-106-NA-NA-NA-LED11-3000K-FL
Rear Entries: (2) Barnlight Industrial Static Wall Sconce in Matte Black, Product Code BLE-W-CGGT-106-NA-NA-106-NA-E26

Top Crown Molding: PLC 812, 1-3/16"x 8-1/2" painted BM-2125-20 Deep Space
(4) Corbels: More Than Moldings Mission Style Wood Bracket SKU: E1021556XSAL Model E, 5"Wx10"Dx18"H, Alder painted BM-2125-50 Sweet Innocence
Brackets: More Than Moldings Mission Wood Bracket SKU: E55699AL, Model B 3"Wx5.5"Dx8"H", painted BM-2125-50 Sweet Innocence
Backer Board for Brackets: BM-2125-20 Deep Space
Band: Painted BM-2125-50 Sweet Innocence
Half Round Band Borders: #8071 7/16"x 7/8" Painted BM-2125-20 Deep Space

Dentil Moldings: 2"x2" blocks, painted BM-2125-50 Sweet Innocence
Back Panel of Dentils: BM-2125-20
¼ Rounds: 5/8"x5/8" painted BM-2125-50
Roofing: Aluminum Standing Seam Black

Window Frames: Painted wood BM-2125-20 Deep Space
Signage Band: Painted wood BM-2125-40 Shadow Gray
½ rounds border on signage band: #8071 7/16"x7/8" BM-2125-20 Deep Space
Bottom and Side Panels: Painted wood BM-2125-40 Shadow Gray

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ARPA GAVIGAN
DEVELOPMENTS LLC
6 Cherry Street
Cold spring, New York 10516

SEAL & STAMP

STATE OF NEW YORK
JOHN P. O'ROURKE
102652
LICENSED PROFESSIONAL ENGINEER

MADELEINE SANCHEZ AIA
ARCHITECT
534 EAST MOUNTAIN ROAD NORTH COLD SPRING NY 10516
TEL 845.265.3073

PROJECT ADDRESS:
321 MAIN STREET,
BEACON, NY.

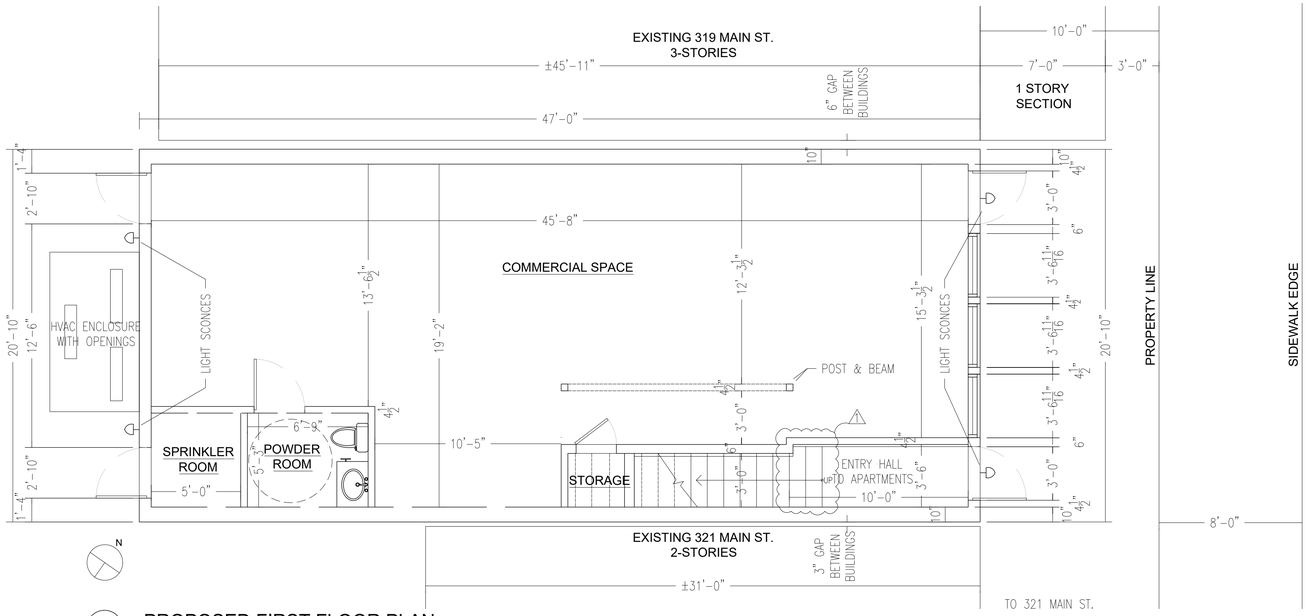
REV. DATE	DESCRIPTION	DRAWN BY
02-24-2026	PLANNING APPLICATION	MS
04-21-2026	REVISED PLANNING APPLICATION	MS

PROPOSED ELEVATION

JOB #:	321 MAIN
DATE:	06/12/2026
SHEET:	4 of 11
DRAWN BY:	MS
REVIEWED BY:	JPO

S-04

Scale



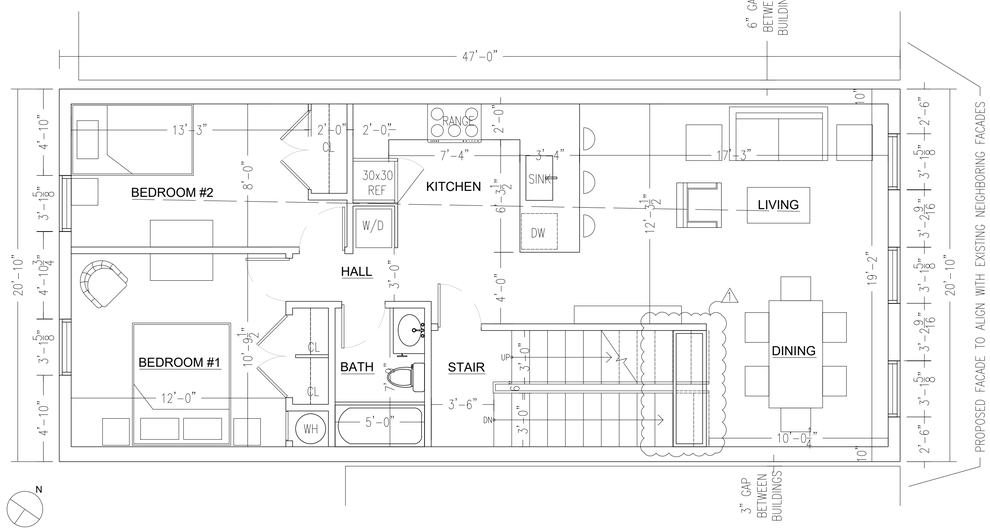
1 PROPOSED FIRST FLOOR PLAN

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

ARCHITECTURAL ZONING CONFORMANCE CHART

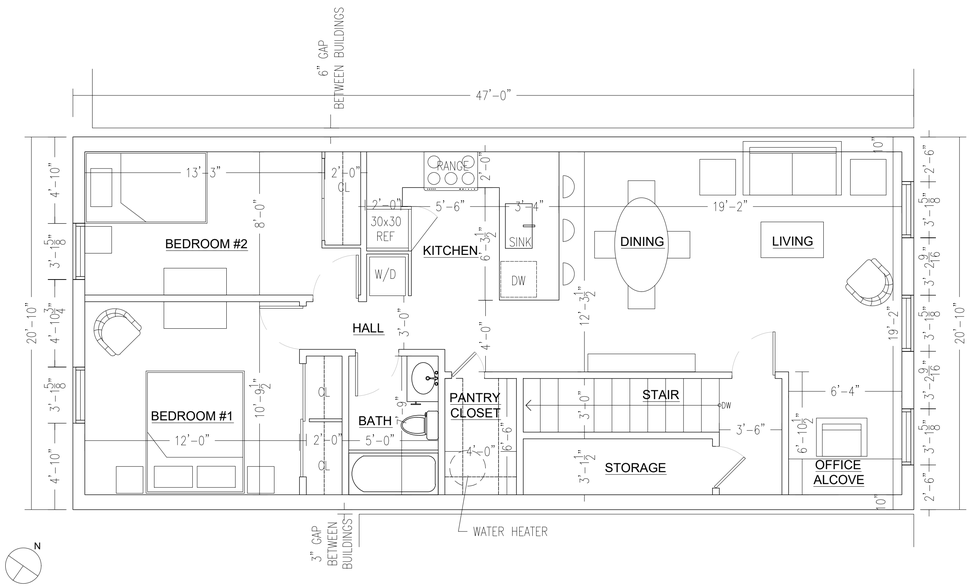
ZONING DISTRICT CMS

REQUIRED SETBACKS	PROPOSED SETBACKS
FRONT – 10'	FRONT – 10'
SIDE – 0'	SIDE – 0'
REAR – 20'	REAR – 43'
ALLOWABLE BUILDING HIEGHT	PROPOSED BUILDING HEIGHT
3 STORY, 38'-0"	3 STORY, 34'-10"



2 PROPOSED SECOND FLOOR APARTMENT PLAN

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



3 PROPOSED 3RD FLOOR APARTMENT PLAN

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

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6 Cherry Street
Cold spring, New York 10516

SEAL & STAMP

STATE OF NEW YORK · JOHN P. O'ROURKE · 102652 · LICENSED PROFESSIONAL ENGINEER

MADELEINE SANCHEZ AIA
ARCHITECT
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TEL 845.265.3073

PROJECT ADDRESS:

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BEACON, NY.

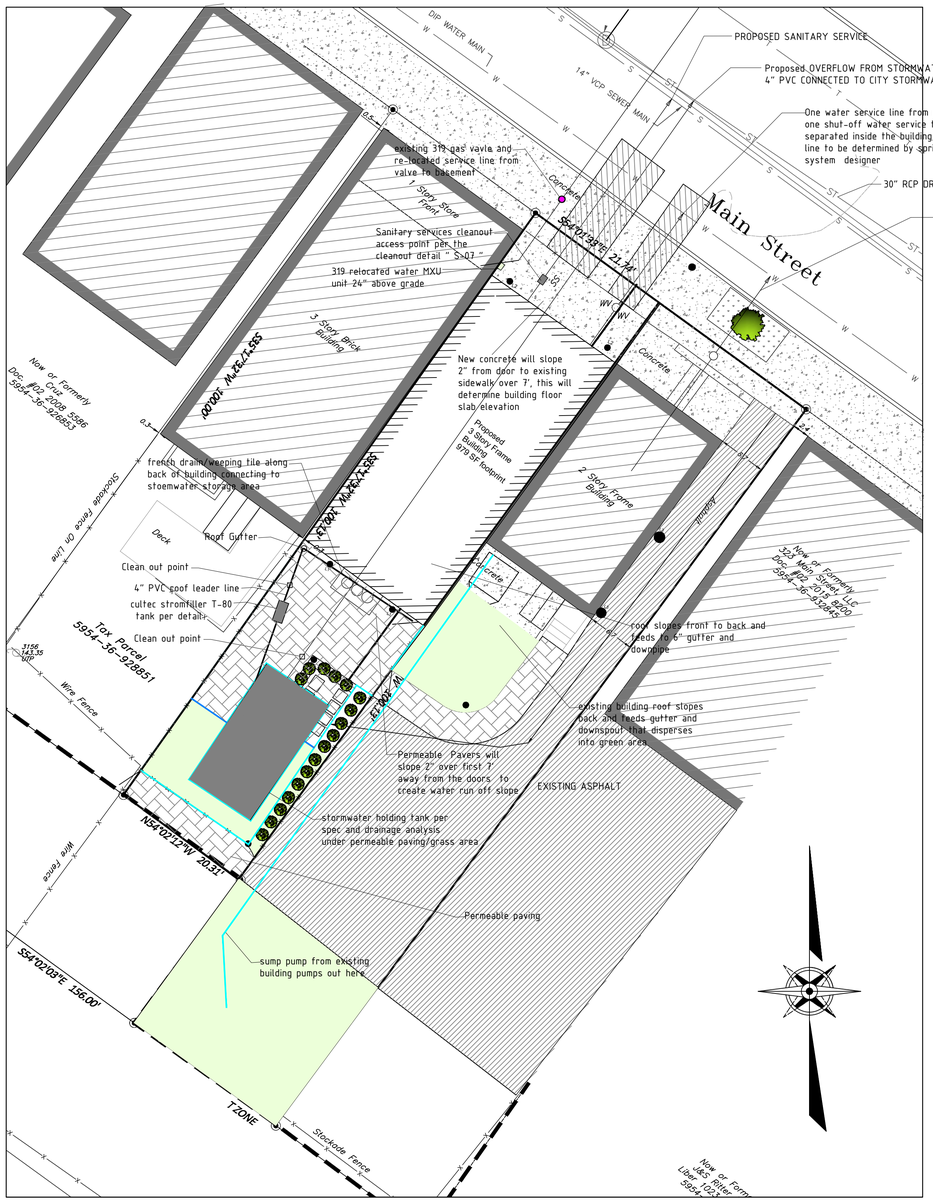
REV. DATE	DESCRIPTION	DRAWN BY
02-24-2026	PLANNING APPLICATION	MS
04-21-2026	REVISED PLANNING APPLICATION	MS

PROPOSED FLOOR PLANS

JOB #:	321 MAIN
DATE:	06/12/2026
SHEET:	5 of 11
DRAWN BY:	MS
REVIEWED BY:	JPO

S-05

Scale



LEGEND:

- EXISTING PROPERTY LINE
- ADJOINING PROPERTY LINE
- 250 EXISTING MAJOR CONTOUR
- 252 EXISTING MINOR CONTOUR
- OHW EXISTING OVER HEAD WIRE
- EXISTING UTILITY POLE
- SS EXISTING SEWER SERVICE LINE
- S EXISTING SEWER LINE
- EXISTING SEWER MANHOLE
- CO EXISTING SEWER CLEAN OUT
- W EXISTING WATER LINE
- WS EXISTING WATER SERVICE LINE
- EXISTING HYDRANT
- EXISTING WATER VALVE
- ST EXISTING STORM WATER LINE
- EXISTING CATCH BASIN
- EXISTING STORM WATER MANHOLE
- EXISTING GAS VALVE

- PROPOSED PROPERTY LINE
- PROPOSED SET BACK LINE
- 250 PROPOSED MAJOR CONTOUR
- 252 PROPOSED MINOR CONTOUR
- PROPOSED EASEMENT
- PROPOSED TREE LINE
- SS PROPOSED SEWER SERVICE LINE
- PROPOSED SEWER MANHOLE
- CO PROPOSED SEWER CLEAN OUT
- ST PROPOSED STORM WATER LINE
- RL PROPOSED ROOF LEADER LINE
- PROPOSED ROOF LEADER
- WS PROPOSED WATER SERVICE LINE
- PROPOSED WELL
- PROPOSED HYDRANT
- PROPOSED WATER SHUT OFF VALVE
- PROPOSED WATER VALVE

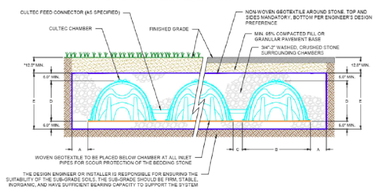
NOTES:

DEPTH OF ALL NEW TRENCHES AND SERVICES TO BE DETERMINED FROM DEPTH OF EXISTING CITY SERVICES IN THE MAIN STREET THIS DEPTH AND THE SLOPES TO BE CONFIRMED BY THE INSTALLATION CONTRACTOR AND PROJECT ENGINEER AS THE EXACT DEPTH OF CITY SERVICE NOT CONFIRMED

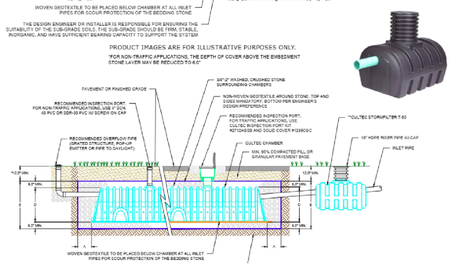
Typical Residential Drainage Details

Ref.	Bare Chamber Volume	Recharger 330XLHD
		7.46 ft³/ft 52.21 ft³/unit 391 gal
A	Stone Border	12"
B	Chamber Width	52"
C	Row Spacing	6"
D	Chamber Height	30"
E	Effective Depth	42"
	Chamber Length*	8.5'

*Chamber length includes integral end walls.



PRODUCT IMAGES ARE FOR ILLUSTRATIVE PURPOSES ONLY.
*FOR NON-TRAFFIC APPLICATIONS, THE DEPTH OF COVER ABOVE THE EMBEDMENT STONE LAYER MAY BE REDUCED TO 6.0"



SITE SPECIFIC NOTES:

1. THE CONTRACTOR SHALL PERFORM A UTILITIES CALL-OUT PRIOR TO CONSTRUCTION TO VERIFY ALL UNDERGROUND UTILITY LOCATIONS BY CONTACTING UFPO @ 1-800-962-7962. SPECIFIC ATTENTION SHALL BE PAID TO THE LOCATIONS OF THE GAS (IF APPLICABLE), WATER AND SEWER MAINS WITH RESPECT TO THE PROPOSED LOCATIONS FOR THE SERVICE LINES.
2. THE CONTRACTOR SHALL CONTACT THE CITY OF BEACON WATER AND SEWER DEPARTMENTS TO SCHEDULE A PRE-CONSTRUCTION MEETING TO INSURE THAT THE ARRANGEMENTS FOR WATER SUPPLY AND SEWAGE DISPOSAL ARE COMMENCED IN ACCORDANCE WITH THE APPROVED PLANS AND AMENDMENTS THERETO AND GENERALLY ACCEPTED STANDARDS.
3. THE SITE CONTRACTOR SHALL VERIFY THE DEPTH AND LOCATION OF UTILITY LINES WITHIN SOUTH OF THE FIRST DESIGN IN INVESTIGATIVE TEST PIT EXCAVATIONS. ANY UTILITY CONFLICTS SHALL BE BROUGHT TO THE DESIGN ENGINEER'S ATTENTION IMMEDIATELY.
4. THE PROPOSED BUILDINGS SHALL BE SERVED BY THE CITY OF BEACON MUNICIPAL WATER AND SEWER SERVICES.
5. THE WATER SERVICE LINE AND METER SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF BEACON WATER DEPARTMENT REQUIREMENTS.
6. THE WATER SERVICE LINE TO THE BUILDINGS SHALL BE PER MEP ENGINEER TO MEET SPRINKLER REQUIREMENTS.
7. THE EXISTING ¾" WATER SERVICE STUB TO THE FRONT BUILDING MAY BE USED OR ABANDONED IN PLACE.
8. A ROAD OPENING PERMIT SHALL BE REQUIRED FOR THE INSTALLATION OF THE UNDERGROUND UTILITIES. A STREET CLOSURE FOR SERVICE CONNECTIONS SHALL BE PERFORMED IN ACCORDANCE WITH CITY OF BEACON REQUIREMENTS.
9. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO CONSTRUCTION. THE PROPOSED DRIVEWAY SHALL HAVE A STABILIZED CONSTRUCTION ENTRANCE.
10. SUMP PUMPS TO BE PROVIDED FOR FOOTING DRAINS, IF NECESSARY. THE TYPE OF PUMP AND METHODS OF CONNECTION TO STORM DRAINAGE SHALL BE COORDINATED WITH THE CITY OF BEACON BUILDING DEPARTMENT.
11. THE CITY OF BEACON BUILDING DEPARTMENT SHALL BE PROVIDED ACCESS TO VERIFY THE LOCATION OF THE EXISTING ROOF LEADERS AND SUMP PUMPS AND THE AREA THEY DRAIN TO.

EXISTING SIDEWALK, CURBING AND ASPHALT PAVEMENT REPAIR NOTES:

1. THE CONTRACTOR SHALL REPAIR AND REPLACE IN-KIND EXISTING CONCRETE SIDEWALKS AND CURBING, AND ASPHALT PAVEMENT THAT ARE DAMAGED AS A RESULT OF UTILITY CONSTRUCTION.
2. THE SIDEWALKS SHALL BE SAW CUT AT AN EXISTING CONSTRUCTION JOINT OR CONTROL JOINT SO THAT THE FINISHED WORK IS CONTINUOUS, OR SMOOTH MATCHES EXISTING.
3. CUTS THROUGH EXISTING PAVEMENT SHALL BE MADE VIA SAW CUT AND REPAIRED IN ACCORDANCE WITH THE DETAILS ON C1-1.

GENERAL CONSTRUCTION NOTES:

1. ALL WATER & SEWER CONNECTIONS SHALL COMPLY WITH CITY WATER AND SEWER DISTRICT REQUIREMENTS.
2. NO CELLAR, ROOF, OR FOOTING DRAINS SHALL BE DISCHARGED INTO THE SANITARY SEWER SYSTEM.
3. THE APPLICANT/APPLICANT'S PLUMBER SHALL ACQUIRE WATER METERS AND MXU UNITS (SIGNAL SENDING AND RECEIVING UNIT) FOR THE AMI SYSTEM (ADVANCED METERING INFRASTRUCTURE) FROM THE CITY OF BEACON WATER DEPARTMENT. THE MXU UNIT SHALL BE INSTALLED ON THE EXTERIOR OF THE BUILDING AND SHALL BE LOCATED 2 TO 3 FEET ABOVE THE EXTERIOR GROUND ELEVATION.
4. THE CONTRACTOR SHALL PERFORM A UTILITIES CALL-OUT PRIOR TO CONSTRUCTION TO VERIFY ALL UNDERGROUND UTILITY LOCATIONS BY CONTACTING UFPO @1-800-962-7962.
5. THE CONTRACTOR SHALL CONTACT THE CITY OF BEACON WATER AND SEWER DEPARTMENT TO SCHEDULE A PRE-CONSTRUCTION MEETING TO ENSURE THAT THE ARRANGEMENTS FOR WATER SUPPLY AND SEWAGE DISPOSAL ARE COMMENCED IN ACCORDANCE WITH THE APPROVED PLANS AND AMENDMENTS THERETO AND GENERALLY ACCEPTED STANDARDS.
6. THE APPLICANT/CONTRACTOR SHALL SECURE ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION.
7. A ROAD OPENING PERMIT SHALL BE REQUIRED FOR THE INSTALLATION OF THE PROPOSED UTILITIES TO SERVICE THE BUILDING. ANY STREET CLOSURES REQUIRE PRE-APPROVAL FROM THE CITY OF BEACON AND SHALL BE PERFORMED IN ACCORDANCE WITH CITY OF BEACON REQUIREMENTS.
8. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO CONSTRUCTION.
9. BEDROCK SHALL BE REMOVED BY MECHANICAL MEANS. NO BLASTING SHALL BE PERMITTED WITHOUT APPROVAL FROM THE BUILDING DEPARTMENT.

INSPECTION SCHEDULE & LONG TERM MAINTENANCE OF STORMWATER STRUCTURES

CATCH BASINS AND PIPING:

ALL CATCH BASINS SHALL BE INSPECTED AFTER EACH STORM EVENT FOR SEDIMENT ACCUMULATION, AND DEBRIS, AND REMOVE AS NECESSARY. WHEN SEDIMENT ACCUMULATION WITHIN THE CATCH BASIN SUMP REACHES 1/2 OF THE SUMP DEPTH, IT SHALL BE REMOVED. ASSOCIATED PIPING SHALL BE INSPECTED ANNUALLY AND ACCUMULATED SEDIMENT SHALL BE REMOVED AS NEEDED.

JPO Engineering, PLLC
733 Route 9D, Garrison, NY 10524
(845) 803-1935

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3. BOUNDARY SURVEY INFORMATION AS PER SURVEY PREPARED BY BRENDAN JOHNSON DATED APRIL 18, 2024.

OWNER

ARPA GAVIGAN DEVELOPMENTS LLC
6 Cherry Street
Cold spring, New York 10516

SEAL & STAMP

STATE OF NEW YORK
JOHN P. O'ROURKE
102652
LICENSED PROFESSIONAL ENGINEER

MADELEINE SANCHEZ AIA ARCHITECT
534 EAST MOUNTAIN ROAD NORTH COLD SPRING NY 10516
TEL 845.265.3073

PROJECT ADDRESS:

321 MAIN STREET,
BEACON, NY.

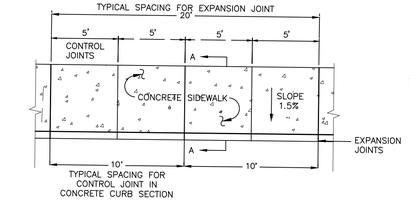
REV. DATE	DESCRIPTION	DRAWN BY
05-21-2026	PLANNING APPLICATION	JPO

GRADING & UTILITY PLAN

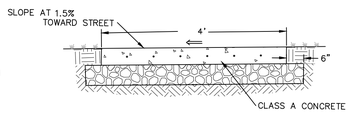
JOB #:	321 MAIN
DATE:	06/12/2026
SHEET:	6 of 11
DRAWN BY:	JPO
REVIEWED BY:	JPO

S-06

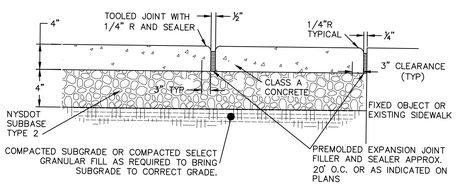
Scale



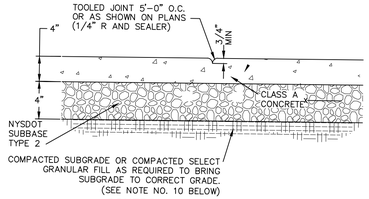
PLAN



SECTION A–A



EXPANSION JOINT

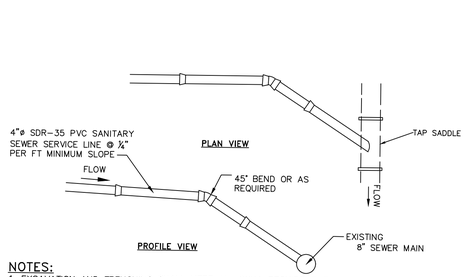


CONTROL JOINT

NOTES:

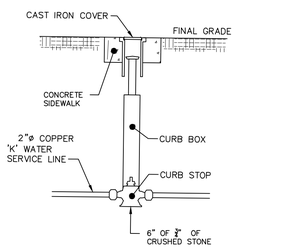
1. MATERIAL AND METHODS OF CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION (NYSDOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, DATED JANUARY 2, 2002, AND ALL ADDENDA THERETO; THE ONLY EXCEPTION BEING THAT THE WORK OF THIS CONTRACT SHALL BE MEASURED IN ENGLISH UNITS.
2. ALL CONCRETE SHALL BE 4,000 PSI CLASS A CONCRETE. CONCRETE MATERIALS, PLACEMENT, AND CONSTRUCTION SHALL CONFORM WITH SECTION 500 OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
3. REINFORCING STEEL FOR CONCRETE SHALL CONFORM WITH SECTION 556 – REINFORCING STEEL FOR CONCRETE STRUCTURES OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS AND AS SPECIFICALLY CALLED OUT IN THE DRAWINGS.
4. ALL EXPOSED SURFACE SHALL HAVE A BROOM TEXTURED FINISH.
5. EXPANSION JOINTS SHALL BE LOCATED A MAXIMUM OF 20' ON CENTER, OR AS INDICATED ON PLANS.
6. JOINTS SHALL NOT BE SAW CUT.
7. EXPOSED CONCRETE SURFACES SHALL BE TREATED WITH "SURFKOTE"/"AUROKOTE" 30-7000 INTENSIFIER BRIGHT PROTECTOR AND SIDEWALK SEALER, OR EQUAL. RATE AND METHOD OF APPLICATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
8. ALL SIDEWALK AND DRIVEWAY SLABS SHALL BEAR ON WELL COMPACTED APPROVED SUBGRADE. WHERE FILL IS REQUIRED TO RAISE THE SUBGRADE FOR BRINGING THE SURFACE ELEVATION TO A SPECIFIED GRADE, THE FILL MATERIAL PLACED SHALL BE IN CONFORMANCE WITH SECTION 203, EXCAVATION AND EMBANKMENT, OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
9. ALL SIDEWALK EDGING TO HAVE FULL DEPTH, 1/4" RADIUS EDGES, AND SCORED JOINTS TO ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
10. NEW SIDEWALK SHALL HAVE CONTRACTION AND EXPANSION JOINTS TO MATCH THE SAME PATTERN IN THE PRESENT SIDEWALK.

CONCRETE SIDEWALK DETAIL
N.T.S.



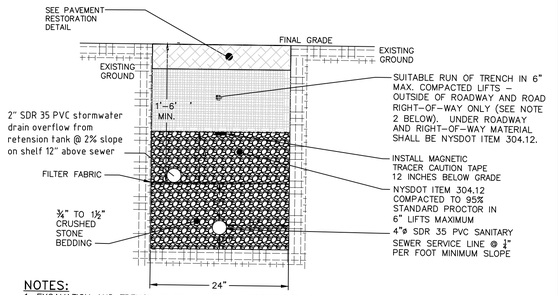
NOTES:
1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.
2. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED AND USED.
3. TAPPING SADDLE FOR CONNECTION OF THE PROPOSED SERVICE LINE TO THE EXISTING SEWER MAIN TO BE A 4" WYE TAP SADDLE AND STRAPS– MODEL FERNCO TSW–4

SANITARY SEWER SERVICE CONNECTION DETAIL
NOT TO SCALE



NOTES:
1. CURB STOP TO BE MUELLER MODEL #A–728
2. VALVE AND VALVE BOX SHALL BE INSTALLED PLUMB WITH GROUND SURFACE.
3. AREA AROUND CURB BOX TO BE BACKFILLED WITH CRUSHED STONE

WATER SHUT–OFF VALVE DETAIL
NOT TO SCALE



NOTES:
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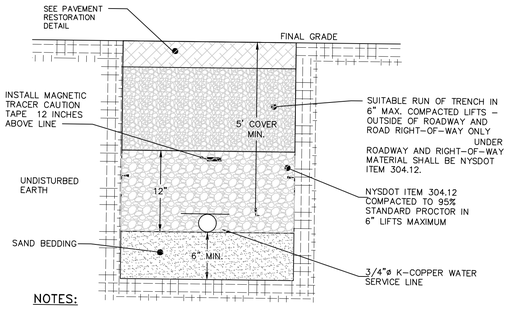
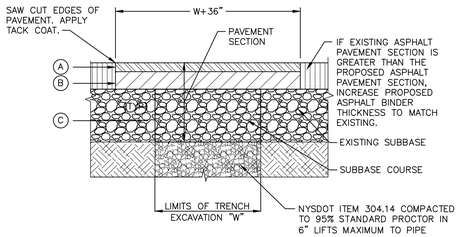
2. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED AND USED.

SANITARY SEWER SERVICE AND STORMWATER LINE TRENCH DETAIL
NOT TO SCALE



NOTES:
1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.
2. 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.

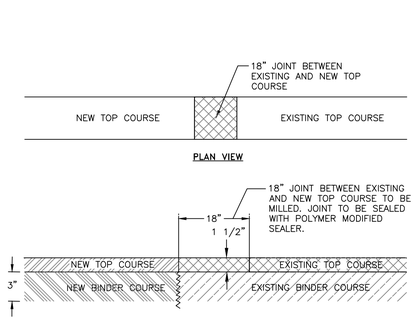
WATER SERVICE LINE TRENCH DETAIL
NOT TO SCALE



LEGEND
- (A) 1–1/2" ASPHALT CONCRETE TOP COURSE– NYSDOT TYPE 6F
- (B) 3–1/2" ASPHALT CONCRETE BINDER COURSE– NYSDOT TYPE 3
- (C) 10" GRANULAR SUBBASE COURSE– NYSDOT ITEM 304.14

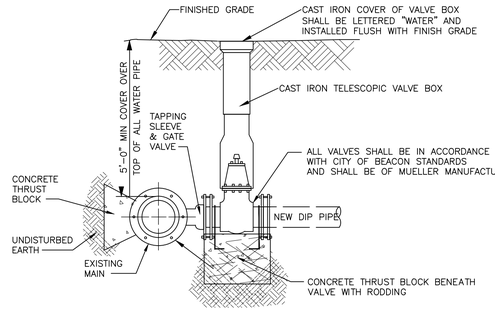
NOTES:
1. SAW CUT MIN. 18" BEYOND EXCAVATION WITH SMOOTH EDGES. 18" JOINT BETWEEN EXISTING AND NEW TOP COURSE TO BE MILLED. JOINT TO BE SEALED WITH POLYMER MODIFIED SEALER.
2. FURNISH, PLACE, AND COMPACT SUBBASE.
3. TACK COAT IN ACCORDANCE WITH NYSDOT STANDARD SPEC.
4. FURNISH AND PLACE ASPHALT CONCRETE PAVEMENT AS SPECIFIED.

STREET PAVEMENT RESTORATION DETAIL
NOT TO SCALE



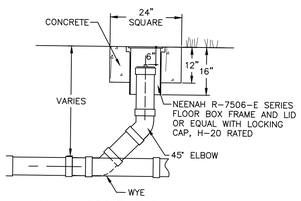
NOTES:
1. 3" BINDER COURSE AND 1½" TOP COURSE TO BE USED FOR RESTORATION OF PAVEMENT WITHIN CITY ROADS.
2. EXCAVATIONS ARE TO BE SAW CUT SMOOTH, ALL EDGES TACK COATED, AND ALL SEAMS SEALED WITH A HOT POLYMER MODIFIED CRACK SEALANT.
3. IF EXISTING ASPHALT PAVEMENT DEPTH IS GREATER THAN THE PROPOSED ASPHALT PAVEMENT SECTION, INCREASE PROPOSED ASPHALT BINDER THICKNESS TO MATCH EXISTING.

MILLED KEYWAY DETAIL
NOT TO SCALE

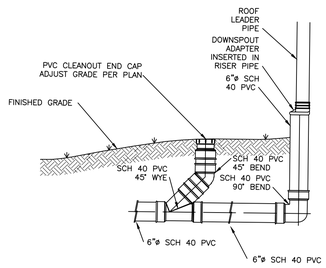


NOTES:
1. TAPPING SLEEVE SHALL BE USED IT THE SECTION OF WATER MAIN IN THE VICINITY OF THE CONNECTION CANNOT BE SHUT DOWN AND ISOLATED.
2. ALL VALVES SHALL OPEN BY TURNING LEFT (COUNTERCLOCKWISE) AND HAVE A 2–INCH SQUARE–OPERATING NUT PAINTED RED.
3. ALL VALVES SHALL BE M.J. RESILIENT WEDGE TYPE WITH "O" RING PACKING, DESIGNED FOR A WORKING PRESSURE OF 150 PSI AND BE IN FULL CONFORMANCE WITH AWWA C500.
4. TAPPING SLEEVE AND GATE VALVE SHOWN ARE MUELLER H–615, AND T–2630 RESPECTIVELY.

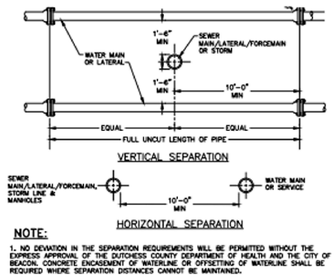
TAPPING SLEEVE DETAIL
NOT TO SCALE



CLEANOUT DETAIL
NOT TO SCALE



ROOF LEADER DETAIL



NOTE:
1. 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 ENCASEMENT OF WATERLINE OR OFFSETTING OF WATERLINE SHALL BE REQUIRED WHERE SEPARATION DISTANCES CANNOT BE MAINTAINED.

WATER LINE SEPARATION DETAIL
NOT TO SCALE

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OWNER
ARPA GAVIGAN DEVELOPMENTS LLC
6 Cherry Street
Cold spring, New York 10516

SEAL & STAMP



MADELEINE SANCHEZ AIA
ARCHITECT
534 EAST MOUNTAIN ROAD NORTH COLD SPRING NY 10516
TEL 845.265.3073

PROJECT ADDRESS:
321 MAIN STREET,
BEACON, NY.

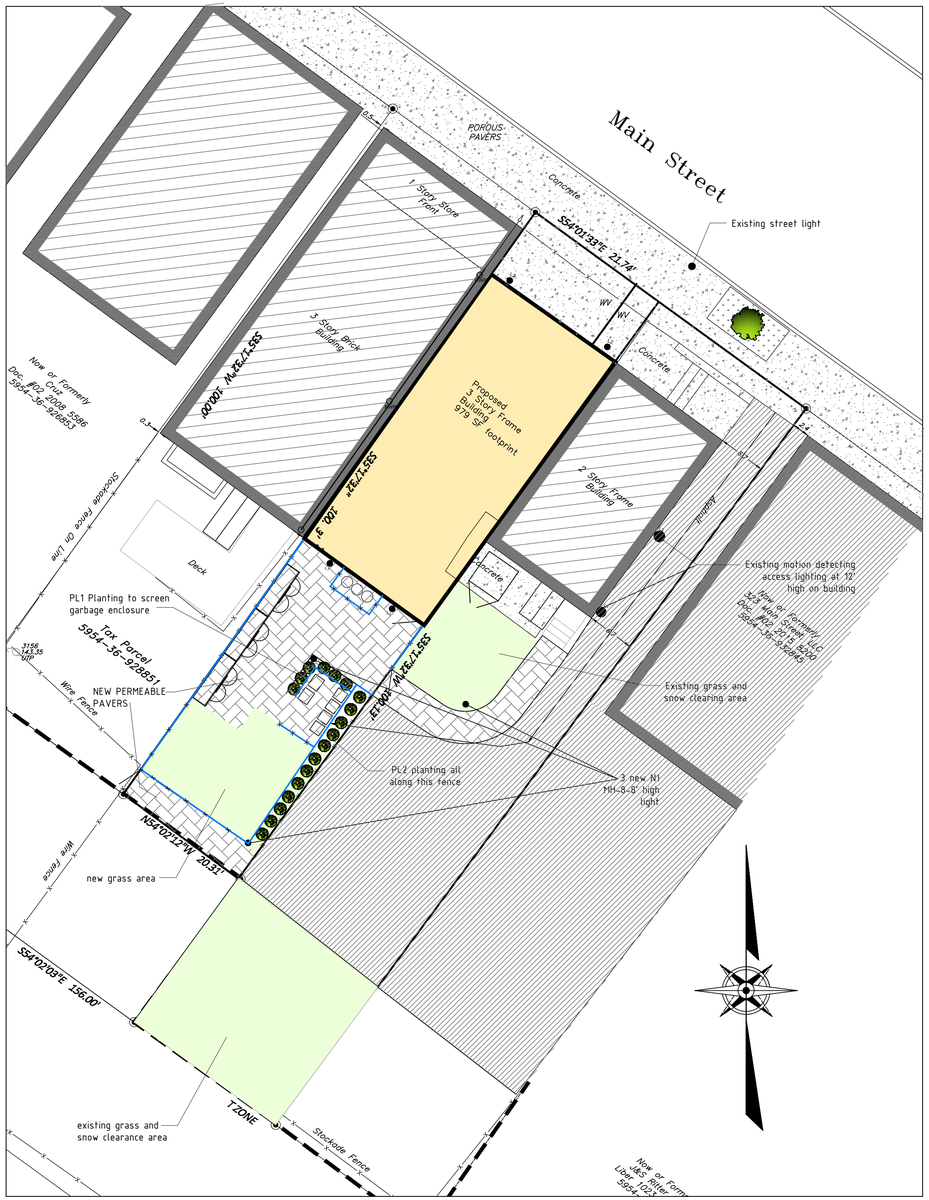
REV. DATE	DESCRIPTION	DRAWN BY
05-21-2026	PLANNING APPLICATION	JPO

DETAILS

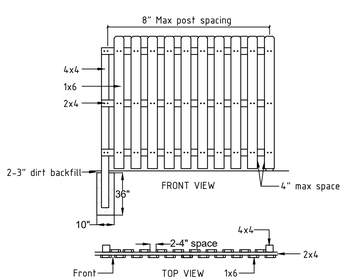
JOB #:	321 MAIN
DATE:	06/12/2026
SHEET:	7 of 11
DRAWN BY:	JPO
REVIEWED BY:	JPO

S-07

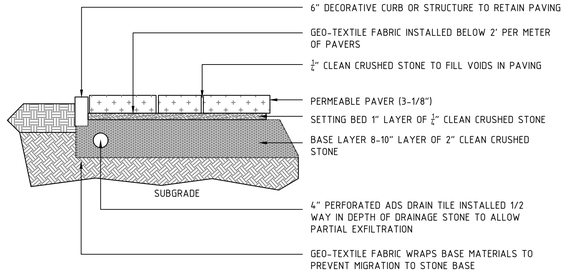
Scale



LANDSCAPE AND LIGHTING PLAN
SCALE: 1"=10'



Straight Shadowbox



CONCRETE PAVER DETAIL

Luminaire Schedule

Symbol	Qty	Lable	LLF	Arrangement	Description	Watts	MH	CCT	CRI
●	3	N1	0.950	Single	TBL-T4-16L-175-30k8-BOLLARD	10	8	3000K	80
●	2	L1	0.250	Single	WS-W190208	6	6	3000K	80
●	2	L2	0.550	Single	SPS-0629 R	6	10	3000K	80

BARN LIGHT ELECTRIC COMPANY LIGHTING | LED LIGHTING

BOMBER LED GOOSENECK LIGHT



L2 - Front Lights above both doors
Bomber Gooseneck Light 18" stem - 11" shade.
MODEL - SPS-0629 R
CRI: 80 COLOR: BLACK
MOUNTING HEIGHT = 10 FEET ABOVE FINISHED GRADE

NLS LIGHTING **CALIFORNIA BOLLARD**
BOLLARD + LANDSCAPE LIGHTING



N1: SITE AND LANDSCAPING LIGHT
NLS LIGHTING "CALIFORNIA BOLLARD" LANDSCAPE LIGHTING FIXTURE.
MODEL #TBL-T4-16L-175-30K8
CRI: 80 COLOR: BLACK OR APPROVED EQUAL.
MOUNTING HEIGHT=8 FEET ABOVE FINISHED GRADE



NOTE:
L1 ANS N1 REAR YARD LIGHTS WILL BE CONTROLLED BY MOTION SENSING AND DUSK TO DAWN CONTROLLERS WITH SET ILLUMINATED DURATIONS

L2 FRONT MAIN STREET LIGHTS WILL BE CONTROLLED BY DUSK TO DAWN SENSORS. THESE WILL STAY LIT AS PER THE STREET LIGHTS

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.

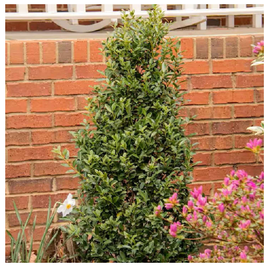
L1: EXTERIOR WALL MOUNTED HOUSE LIGHT

WAC LIGHTING "CYLINDER" WALL MOUNT 3000K WALL LIGHT
MODEL #WS-W190208
CRI: 80 COLOR: BLACK OR APPROVED EQUAL.
MOUNTING HEIGHT = 7 FEET A.F.F.

NOTES:
1. ALL FIXTURES WILL BE SET AT 0° TILT ANGLE



PL-1 - 2 Gal Pencil Holly 3' high - spacing 3'



PL2 5 Gal.Japaneese arrow point Holly4' high 6' spacing

LANDSCAPE AREA

NEW PROPOSED PARCEL A -THE TOTAL LANDSCAPE AREA IS 360 SQ.FT WHICH 17% OF THE TOTAL LOT AREA OF 2100 SQFT

PARCEL B WITH EXISTING BUILDING THE LANDSCAPE AREA REMAINING IS 850 SQFT WHICH IS 26% OF THE TOTAL LOT AREA OF 3125 SQFT

LANDSCAPE NOTES:

THE LANDSCAPE CONTRACTOR SHALL CAREFULLY COORDINATE CONSTRUCTION ACTIVITIES WITH THAT OF THE EARTHWORK CONTRACTOR AND OTHER SITE DEVELOPMENT.

THE CONTRACTOR SHALL VERIFY DRAWING DIMENSIONS WITH ACTUAL FIELD CONDITIONS AND INSPECT RELIEF AT EACH WORK AND ADJACENT SURFACES. THE CONTRACTOR SHALL VERIFY THE ACCURACY OF ALL FINISH GRADES WITHIN THE WORK AREA. THE CONTRACTOR SHALL REPORT TO THE ENGINEER AND OWNER ALL CONDITIONS WHICH PREVENT PROPER EXECUTION OF THIS WORK.

THE EXACT LOCATION OF ALL EXISTING UTILITIES, STRUCTURES AND UNDERGROUND UTILITIES, WHICH MAY NOT BE INDICATED ON THE DRAWINGS, SHALL BE DETERMINED BY THE CONTRACTOR. THE CONTRACTOR SHALL PROTECT EXISTING STRUCTURES AND UTILITY SERVICES AND IS RESPONSIBLE FOR THEIR REPLACEMENT IF DAMAGED.

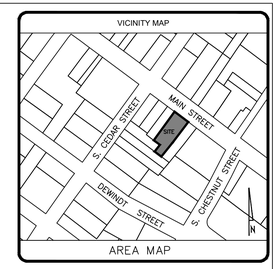
THE CONTRACTOR SHALL KEEP THE PREMISES FREE FROM RUBBISH AND ALL DEBRIS AT ALL TIMES AND SHALL ARRANGE MATERIAL STORAGE SO AS NOT TO INTERFERE WITH THE OPERATION OF THE PROJECT. ALL UNUSED MATERIALS, RUBBISH AND DEBRIS SHALL BE REMOVED FROM THE SITE.

NO TREES OR SHRUBS SHALL BE PLANTED ON EXISTING OR PROPOSED UTILITY LINES.

QUALITY ASSURANCE:
A. PLANT NAMES SHALL CONFORM TO THE LATEST EDITION OF "STANDARDIZED PLANT NAMES" AS ADOPTED BY THE AMERICAN JOINT COMMITTEE ON HORTICULTURAL NOMENCLATURE.
B. SIZE AND GRADING: PLANT SIZES AND GRADING SHALL CONFORM TO THE LATEST EDITION OF "AMERICAN STANDARD FOR NURSERY STOCK" AS SPONSORED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC (AAN), UNLESS OTHERWISE SPECIFIED.
C. NURSERY SOURCE: OBTAIN FRESHLY DUG, HEALTHY, VIGOROUS PLANTS NURSERY GROWN UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE IN THE LOCALITY OF THE PROJECT FOR A MINIMUM OF 2 YEARS. PLANTS SHALL HAVE BEEN LINED OUT IN ROWS, ANNUALLY CULTIVATED, SPRAYED, PRUNED AND FERTILIZED IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICE. ALL PLANTS SHALL HAVE BEEN TRANSPLANTED OR ROOT PRUNED AT LEAST ONCE IN THE PAST 3 YEARS. BALED AND BURLAPPED PLANTS MUST COME FROM SOIL WHICH WILL HOLD A FIRM ROOT BALL. HEELING IN PLANTS AND PLANTS FROM COLD STORAGE ARE NOT ACCEPTABLE.
D. SUBSTITUTIONS: DO NOT MAKE SUBSTITUTIONS OF TREES AND/OR SHRUB MATERIALS. IF REQUIRED LANDSCAPE MATERIAL IS NOT OBTAINABLE, SUBMIT PROOF OF NON-AVAILABILITY AND PROPOSAL FOR USE OF EQUIVALENT MATERIAL.

SEEDING & PLANTING SEASONS AND TIMING CONDITIONS:
A. UNLESS OTHERWISE DIRECTED IN WRITING, SEED LAWNS FROM MARCH 15 TO JUNE 15, AND FROM AUGUST 15 TO OCTOBER 15.
B. UNLESS OTHERWISE DIRECTED IN WRITING PLANT TREES AND SHRUBS FROM MARCH 15 TO JUNE 1, AND FROM AUGUST 15 TO OCTOBER 30.

ALL LANDSCAPING SHALL BE MAINTAINED THROUGHOUT THE LIFE OF THE SITE.



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3. BOUNDARY SURVEY INFORMATION AS PER SURVEY PREPARED BY BRENDAN JOHNSON DATED APRIL 18, 2024.

OWNER
ARPA GAVIGAN DEVELOPMENTS LLC
6 Cherry Street
Cold spring, New York 10516

SEAL & STAMP



MADELEINE SANCHEZ AIA
ARCHITECT
534 EAST MOUNTAIN ROAD NORTH COLD SPRING NY 10516
TEL 845.265.3073

PROJECT ADDRESS:
321 MAIN STREET,
BEACON, NY.

REV. DATE	DESCRIPTION	DRAWN BY
05-21-2026	PLANNING APPLICATION	JPO

LIGHTING & LANDSCAPE PLAN

JOB #:	321 MAIN
DATE:	06/12/2026
SHEET:	8 of 11
DRAWN BY:	JPO
REVIEWED BY:	JPO

S-08

Scale

SURVEY NOTES

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2. Unauthorized alteration or addition to a survey map bearing a licensed land surveyor's seal is a violation of section 7209, sub-division 2, of the New York State Education Law.

3. Only boundary survey maps with the surveyor's embossed or red inked seal are genuine true and correct copies of the surveyor's original work and opinion. A copy of this document without a proper application of the surveyor's embossed or red inked seal should be assumed to be an unauthorized copy.

4. Certifications on this boundary survey map signify that the map was prepared in accordance with the current existing Code of Practice for Land Surveys adopted by the New York State Association of Professional Land Surveyors, Inc. The certification is limited to persons for whom the boundary survey map is prepared, to the title company, to the governmental agency, and to the lending institution listed on this boundary survey map.

5. The certifications herein are not transferable.

6. The location of underground improvements or encroachments are not always known and often must be estimated. If any underground improvements or encroachments exist or are shown, the improvements or encroachments are not covered by this certificate.

7. Subject to the findings of a current title search.

8. Subject to covenants, easements, restrictions, conditions and agreements of record.

9. Subject to any right, title or interest the public may have for highway use.

10. Bearings and North shown hereon are referenced to NAD 83-NY East using NYSNET RTN GPS.

TAX PARCEL NUMBER

City of Beacon, Dutchess County, New York
5954-36-922847 - 6 S. Cedar St
5954-36-92885 - 319 Main St
5954-36-930849 - 321 Main St

DEED REFERENCE

Doc. #02 2022 4589
Avalon PDF LLC
to
The Lindley Todd, LLC
November 14, 2022

Doc. #02 2014 4533
Fredys F. Geurrero
to
Hudson Todd, LLC
August 6, 2014

Doc. #02 2017 518
Piccone Equities Inc.
to
Hudson Todd, LLC
January 20, 2017

DATE OF SURVEY

Field Completion: April 11, 2024

CERTIFICATIONS

Hudson Todd, LLC
The Lindley Todd, LLC

AREA

5954-36-930849
5,196 Square Feet
0.119 Acres

5954-36-928851
2,529 Square Feet
0.058 Acres

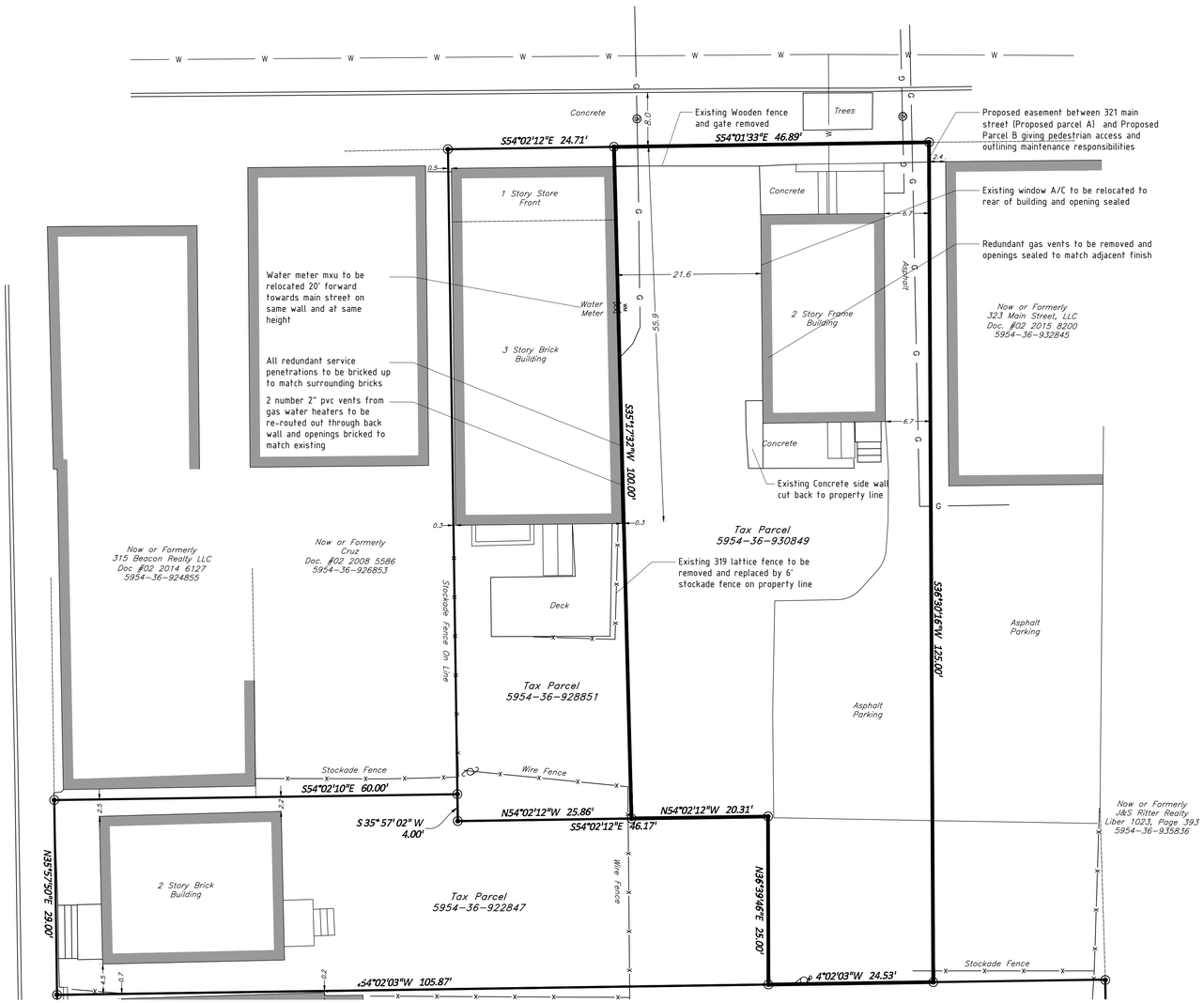
5954-36-922847
2,890 Square Feet
0.066 Acres

5954-36-923843
3,900 Square Feet
0.090 Acres

UTILITY NOTE

Underground Utilities Shown Hereon Were Marked and Located in the field by Others and Mapped by This Office.

Main Street



Existing Site: Street Views



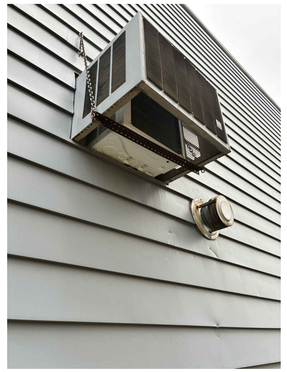

Existing Site: between 321 and 319 Main Street

Front

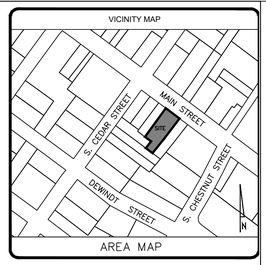


Rear









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OWNER

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SEAL & STAMP

STATE OF NEW YORK · JOHN P. O'ROURKE · 102652 · LICENSED PROFESSIONAL ENGINEER

MADELEINE SANCHEZ AIA
ARCHITECT
534 EAST MOUNTAIN ROAD NORTH COLD SPRING NY 10516
TEL 845.265.3073

PROJECT ADDRESS:

321 MAIN STREET,
BEACON, NY.

REV. DATE	DESCRIPTION	DRAWN BY
02-24-2026	PLANNING APPLICATION	JPO
05-21-2026	REVISED PLANNING APPLICATION	JPO

EXISTING CONDITION & DEMOLITION PLAN

JOB #:	321 MAIN
DATE:	06/12/2026
SHEET:	9 of 11
DRAWN BY:	JPO
REVIEWED BY:	JPO

S-09

Scale

JOHNSON SURVEYING
BRENDAN JOHNSON, PLS
10 Meadow Lane
Pleasant Valley, NY 12569
Phone No. (845) 380-0528
johnsonboundaries@gmail.com

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rev.	date	description
1	2/11/26	Utility Locations

STATE OF NEW YORK · BRENDAN S. JOHNSON · 050919 · LICENSED LAND SURVEYOR

BRENDAN JOHNSON, P.L.S.
P.L.S. No. 50919

MAIN & CEDAR

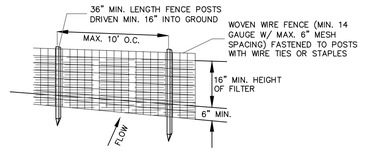
MAP OF A SURVEY
PREPARED FOR
ARPA GAVIGAN DEVELOPMENTS, LLC

CITY OF BEACON, COUNTY OF DUTCHESS, STATE OF NEW YORK

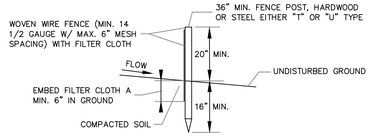


LEGEND:

- SILT FENCE
- CONSTRUCTION FENCE
- AREA OF DISTURBED SOIL



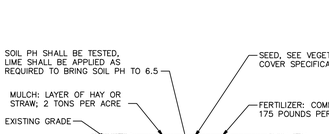
PERSPECTIVE VIEW



SECTION VIEW

NOTES:
1. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
2. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N OR APPROVED EQUAL.
3. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE OR APPROVED EQUAL.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

SILT FENCE DETAIL
NOT TO SCALE



NOTES:
1. TOPSOIL, SEED, MULCH, AND FERTILIZE DISTURBED SOIL AREAS THAT WILL BE LEFT EXPOSED FOR 14 DAYS OR MORE.
2. SEED MIXTURE FOR USE ON LAWNS IN SUNNY AREAS:

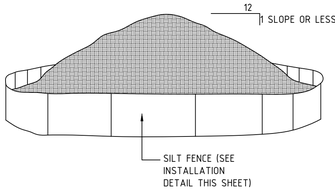
65% KENTUCKY BLUE GRASS BLEND	114 POUNDS PER ACRE
20% PERENNIAL RYEGRASS	35 POUNDS PER ACRE
15% FINE FESCUE	26 POUNDS PER ACRE
	175 POUNDS PER ACRE

3. SEED MIXTURE FOR USE IN SHADY AREAS:

80% BLEND OF SHADE TOLERANT KENTUCKY BLUEGRASS	138 POUNDS PER ACRE
20% FINE FESCUE	37 POUNDS PER ACRE
	175 POUNDS PER ACRE

4. SEED BETWEEN APRIL 1ST AND MAY 15TH OR AUGUST 15TH AND OCTOBER 15TH. SEEDING MAY OCCUR BETWEEN MAY 15TH AND AUGUST 15TH IF ADEQUATE IRRIGATION IS PROVIDED.
5. TOPSOIL SHALL HAVE AT LEAST 6% BY WEIGHT OF FINE TEXTURED STABLE ORGANIC MATERIAL, AND NO GREATER THAN 20%. TOPSOIL SHALL HAVE NOT LESS THAN 20% FINE TEXTURED MATERIAL (PASSING THE NO. 200 SIEVE) AND NOT MORE THAN 15% CLAY.

TOPSOIL, SEED AND MULCH DETAIL
NOT TO SCALE



TEMPORARY SOIL STOCKPILE DETAIL
N.T.S.

NOTES
1. EACH PILE SHALL BE SURROUNDED WITH SILT FENCING
2. LOCATION FOR STOCKPILE SHALL BE DRY AND STABLE

PRODUCT SPECIFICATIONS



NOTES:
SECTION VIEW
Washout station shall be located 100' from any stormwater feature on site or natural waterways or wetlands.
Inspect washout station daily and replace plastic liner when any rips or tears are observed.
Replace washout station when it is at 75% of its capacity with hardened material.
Water accumulation in washout area from rainwater shall be pumped from the station into a grassed area.

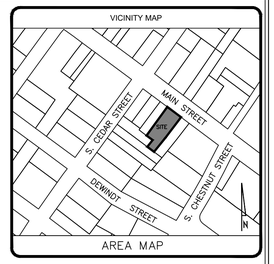
CONCRETE WASHOUT STATION DETAIL
N.T.S.

EROSION AND SEDIMENT CONTROL NOTES

1. ALL EROSION CONTROL MEASURES EMPLOYED DURING THE CONSTRUCTION PROCESS SHALL BE INSPECTED BY THE CONTRACTOR IN ACCORDANCE WITH THE MAINTENANCE SCHEDULE PROVIDED ON THIS SHEET. ALL EROSION CONTROL STRUCTURES SHALL BE REPAIRED AND MAINTAINED AS NECESSARY BY THE CONTRACTOR.
2. ALL STORMWATER MANAGEMENT STRUCTURES (E.G. SWALES, CULVERTS) SHALL BE REGULARLY INSPECTED FOR SEDIMENT ACCUMULATIONS. SEDIMENT AND TRASH SHALL BE REMOVED, AS NECESSARY.
3. ALL EROSION CONTROL INSTALLATION AND MAINTENANCE MEASURES SHALL MEET THE REQUIREMENTS OF THE NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL.
4. ANY PILE OF POTENTIALLY EROSIVE MATERIAL TEMPORARILY STOCKPILED ON THE SITE DURING THE CONSTRUCTION PROCESS SHALL BE LOCATED IN AN AREA AWAY FROM STORM DRAINAGE AND SHALL BE PROPERLY PROTECTED FROM EROSION BY A SURROUNDING SILT FENCE.
5. PERMANENT SEEDED AREAS FOR EROSION CONTROL SHALL BE IN ACCORDANCE WITH DETAIL AND SPECIFICATIONS ON THE APPROVED SITE PLAN DETAIL SHEET.
6. AREAS UNDERGOING CLEARING OR GRADING AND WHERE WORK IS DELAYED OR COMPLETED AND WILL NOT BE REVEGETATED FOR A PERIOD OF 21 DAYS OR MORE SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT VEGETATIVE COVER WITHIN 14 DAYS.
7. ON-SITE DUST CONTROL SHALL BE ACCOMPLISHED BY STANDARD METHODS OF LIGHTLY WATERING ALL EXPOSED SOIL AND RAPIDLY STABILIZING THE REGRADED AREAS WITH TOPSOIL, LOAM AND/OR SEEDING.
8. THE PROJECT ENGINEER SHALL BE NOTIFIED NO LESS THAN 48 HOURS PRIOR TO THE START OF ANY SITE WORK, AND BY SUCH NOTIFICATION, SHALL BE PROVIDED WITH THE NAME AND TELEPHONE NUMBER OF THE GENERAL CONTRACTOR RESPONSIBLE FOR SUCH WORK.
9. THE CITY MAY INSPECT EROSION AND SEDIMENT CONTROL PRACTICES ON THE SITE DURING CONSTRUCTION AND DURING NORMAL BUSINESS HOURS. IF ADDITIONAL EROSION CONTROL MEASURES ARE REQUIRED, THE CONTRACTOR SHALL BE NOTIFIED IN WRITING BY THE CITY. THE CONTRACTOR SHALL RESPOND TO ALL REQUESTS FOR ADDITIONAL EROSION CONTROL MEASURES WITHIN 24 HOURS OF THE TIME THE NOTIFICATION TO THE CONTRACTOR WAS HANDED OR SENT. THE CITY SHALL BE CONSULTED ON ANY SPECIAL ADDITIONS OR DELETIONS OF EROSION CONTROL MEASURES WARRANTED BY CHANGING FIELD CONDITIONS.
10. 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. SUMP PUMPS SHALL NOT DISCHARGE TO A SURFACE LOCATION.
11. WHEN ALL DISTURBED AREAS ARE STABLE, ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED PER THE APPROVAL OF THE ENGINEER SUPERVISING CONSTRUCTION.

INSPECTION SCHEDULE & MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURESPERMANENT 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.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 WHEN IT REACHES 1/3 THE FACE OF THE FENCE HEIGHT OR 6 INCHES, WHICHEVER IS LESS. IF MORE THAN 1/3 OF THE TOTAL SECTION OF FENCE, BASED ON LINEAR FOOTAGE, BEGINS TO DETERIORATE OR IN ANY WAY BECOMES INEFFECTIVE, REPLACE THE AFFECTED SECTION OF FENCE IMMEDIATELY.MULCHING:
INSPECT MULCHED AREAS DURING OPERATIONS TO MINIMIZE THE AMOUNT OF DISTURBED AREAS AT ANY ONE TIME DURING THE CONSTRUCTION PROJECT. APPLY TEMPORARY SOIL STABILIZATION PRACTICES SUCH AS MULCHING, SEEDING, AND SPRAYING TO INACTIVE EXPOSED SOIL AREAS. MULCH SHALL BE SPREAD AS NEEDED. REAPPLY MULCH BEFORE EXCESSIVE EROSION OCCURS. AREAS THAT CANNOT BE SEEDED SHALL BE SPRAYED WITH MULCH AS NEEDED, AND TO AVOID EXCESSIVE EROSION, MULCH SHALL BE REAPPLIED UNTIL THE AREA IS RESTABILIZED.CATCH BASINS:
CATCH BASINS SHALL BE INSPECTED AFTER EACH STORM EVENT FOR SEDIMENT ACCUMULATION AND DEBRIS, AND CLEANED AS NECESSARY. THE INSPECTOR SHALL REMOVE SEDIMENT WHEN IT REACHES 1/2 THE DEPTH OF THE SUMP. REMOVE ALL SEDIMENT ACCUMULATION WITHIN THE CATCH BASIN SUMP REACHES 1/2 OF THE SUMP DEPTH. ALL SEDIMENT SHALL BE REMOVED.

VICINITY MAP



AREA MAP

JPO Engineering, PLLC
733 Route 9D, Garrison, NY 10524
(845) 803-1935

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OWNER

ARPA GAVIGAN DEVELOPMENTS LLC
6 Cherry Street
Cold spring, New York 10516

SEAL & STAMP



MADELEINE SANCHEZ AIA
ARCHITECT
534 EAST MOUNTAIN ROAD NORTH COLD SPRING NY 10516
TEL 845.265.3073

PROJECT ADDRESS:

321 MAIN STREET,
BEACON, NY.

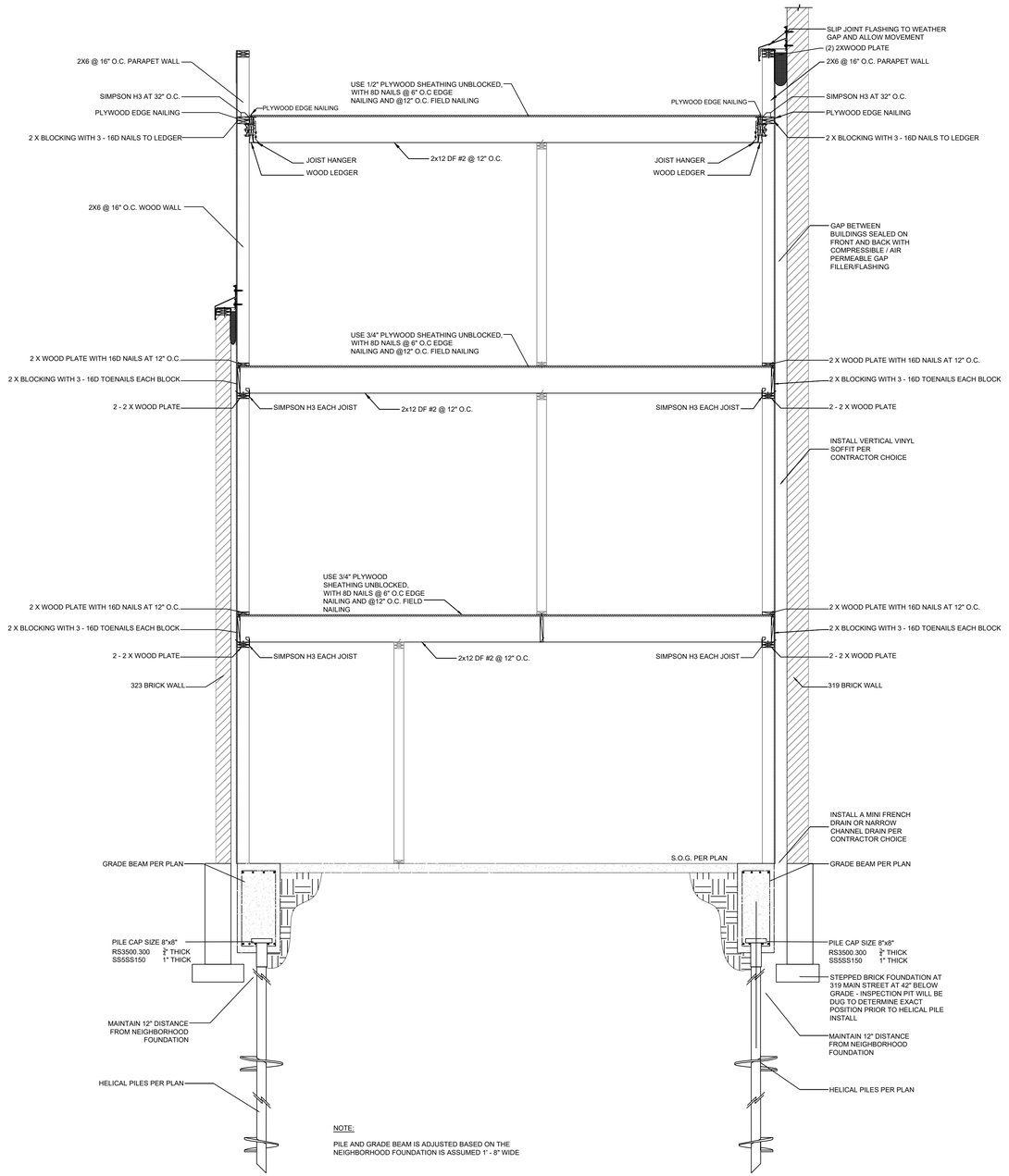
REV. DATE	DESCRIPTION	DRAWN BY
05-21-2026	PLANNING APPLICATION	JPO

EROSION & SEDIMENT CONTROL PLAN

JOB #:	321 MAIN
DATE:	06/12/2026
SHEET:	10 of 11
DRAWN BY:	JPO
REVIEWED BY:	JPO

S-10

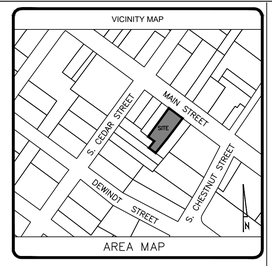
Scale



NOTE:

PILE AND GRADE BEAM IS ADJUSTED BASED ON THE NEIGHBORHOOD FOUNDATION IS ASSUMED 1' - 8" WIDE

SCALE: N.T.S



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6 Cherry Street
Cold spring, New York 10516

SEAL & STAMP

STATE OF NEW YORK
JOHN P. O'ROURKE
102652
LICENSED PROFESSIONAL ENGINEER

MADELEINE SANCHEZ AIA
ARCHITECT
534 EAST MOUNTAIN ROAD NORTH COLD SPRING NY 10516
TEL 845.265.3073

PROJECT ADDRESS:

321 MAIN STREET,
BEACON, NY.

REV. DATE	DESCRIPTION	DRAWN BY
02-24-2026	PLANNING APPLICATION	JPO
05-21-2026	REVISED PLANNING APPLICATION	JPO

STRUCTURAL SECTION

JOB #:	321 MAIN
DATE:	06/12/2026
SHEET:	11 of 11
DRAWN BY:	JPO
REVIEWED BY:	JPO

S-11

Scale

LANC & TULLY
Engineering and Surveying, D.P.C.

July 10, 2026

Mr. John Gunn
Beacon Planning Board Chair
City of Beacon
1 Municipal Plaza
Beacon, NY 12589

RE: 321 Main Street
Tax No. 5954-36-930849
City of Beacon

Dear Mr. Gunn:

My office has received the following regarding the proposed project located at 321 Main Street:

- Application for Subdivision Approval
- Application for Site Plan Approval
- Short Environmental Assessment Form dated June 8, 2026.
- Architectural Review Board Application
- Correspondence from Madeleine Sanchez, AIA, with a revision date of May 4, 2026.
- Project narrative and response letter dated June 8, 2026, as prepared by JPO Engineering.
- Infiltration and Inflow (I&I) Report dated March 23, 2026, as prepared by JPO Engineering.
- Stormwater Analysis Report as prepared by JPO Engineering.
- Public Improvements Cost Estimate, dated December 4, 2026, as prepared by JPO Engineering.
- Architectural renderings as prepared by Madeleine Sanchez, AIA, dated November 25, 2025.
- Plan set titled "321 Main Street" consisting of 11 Sheets, with the latest revision date of May 21, 2026, as prepared by JPO Engineering, PLLC.

The proposed project entails the subdivision of a 0.048± acre parcel into 2 lots, and the construction of a new building on the newly created lot. The proposed building will have commercial space on the 1st floor and a single apartment on the 2nd and 3rd floors. The project is located in the Central Main Street (CMS) Zoning District and is located on a 0.119± acre parcel.

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

SEQRA Form Comments:

1. Question No. 2 on Page1 of 3 is marked "Yes". As such, the applicant is required to list the agency from which a permit or approval is required.

2. Question No. 11 on Page 2 of 3 is marked "No". This should be marked "Yes", as the project will be connecting to the City's sanitary sewer collection system.

3. Questions 12a on Page 2 of 3 should be marked "Yes" per the EAF Mapper Summary Report.

4. In running the EAF Mapper summary Report on the NYSDEC website, it appears that the responses to questions 12b and 15 are to be marked "Yes" per the summary report. It is unclear as to why the summary report submitted was modified to state "NO" to both of the questions. The responses to these questions shall be revised accordingly and all required information provided.

5. Question 14 on page 3 of 3 was not completed. This should be marked as appropriate.

6. Questions 20 and 21 on Page 3 of 3 are both noted as "Yes" on the EAF Mapper Summary Report, but the questions have been marked as "No". These questions shall be corrected and the appropriate information provided as required.

Stormwater Analysis Report:

1. The report shall be revised to reflect the actual 1, 2, 10, and 100-year 24-hour rainfall values as determined in accordance with Section 4.9 of the 2024 NYSDEC Stormwater Management Design Manual. Based upon the NRCC and NRCS website, the 1-year rainfall is 2.61", the 2-year rainfall is 3.16" events, the 10-year rainfall is 4.7", and the 100-year rainfall is 8.34". The report shall be revised to reflect these values for intensity, and the calculations revised to reflect the use of these values.

General Comments:

1. The date of the submitted construction cost estimate should be revised, as it currently states December 4, 2026. With exception of the wrong date, the construction cost estimate for bonding purposes was found to be acceptable. Applicant will also need to establish escrow for post-approval review costs as noted in Section 223-61.1B of the City Code, for inspection of work within City road right-of-way.

2. The applicant's consultant conducted an Inflow & Infiltration (I&I) Study of the existing site and building and no sources of I&I into the City's sanitary sewer collection system were found.

3. As a post-stormwater management facility will be constructed as part of the project, a Stormwater Easement and Maintenance Agreement shall be prepared and provided to the Planning Board Attorney for review.

4. Per the applicant required parking for the project ranges between a minimum of 0 to a maximum of 5 spaces. The applicant is proposing to develop no parking for the project. The Board should determine if they find this acceptable for the project. It is also recommended that since the applicant is not proposing any parking on site, they

provide additional information as to where offsite parking may be available for the project.

5. Architect shall ensure that elevation drawings and renderings are consistent with one another.

Sheet 2 of 11 (Site Plan):

1. What is the height of the fencing that appears to be surrounding the air handlers at the rear of the building? This should be noted on the plan.

2. The plan calls out a new 6' high stockade fence, but the fence detail on Sheet 8 provides for a shadowbox fence. The plans and details shall be coordinated. The fence details shall also reflect the height of the fence.

Sheet 3 of 11 (Subdivision Plan):

1. The plan shall include a legend to clarify what is meant by the yellow and blue direction lines on the New Lot Parcel plan.
2. This plan shall show all existing and proposed ingress/egress easements, as well as existing and proposed utility easements. Easements shall be provided with metes and bounds.

3. The plan shall include the metes and bounds for the new lot to be created.

4. It appears that the proposed building (light green shaded rectangle) extends beyond the property line on the east side. This should be reviewed further.

Sheet 4 of 11 (Proposed Elevations):

1. The lines through the windows on the Front and Rear Facades should be removed.

Sheet 6 of 11 (Grading & Utility Plan):

1. The drainage details on the sheet shall be provided at a larger scale and shall be clear and legible.

2. We would recommend the applicant's consultant conduct soil testing in the location of the proposed stormwater facility to determine if an infiltration system may work for the site, which would avoid having to run a drainage line out into a Main Street.

3. Consideration should be given to running the storm overflow line to the existing stormwater manhole within Main Street. Proposed connection of this system to the City's system shall be discussed with the Highway Superintendent.

4. The size of the proposed water service line to service the building shall be provided on the plans at this time. Sizing the service line should be completed by the sprinkler designer at this time.

5. The plan shall reflect the size of the existing water main within Main Street.

6. A wet-tap will be required for the connection of the water service line to the existing water main. The plan shall show a valve at the wet-tap connection.

7. Although plan is noted at "Grading" plan, there does not appear to be any grades provided on the plan. The plan shall show all proposed grades for the site, as well as first floor elevation. The plan, at a minimum, could include spot elevations and proposed spot elevations around the site and around the building and other features to be constructed. All grading of the site, utilities, building, shall be determined at this time as part of the engineering for the project.

8. The lowest sewerable elevation (LSE) of the building shall be provided.

9. The size and material of the proposed sewer lateral for the building shall be noted on the plan.

10. Sizing of roof leader line should be reviewed, as the sizing of the line may need to be increased based upon flows for larger storm events.

Sheet 7 of 11 (Details):

1. The "Street Pavement Restoration" detail shall be revised to reflect a 1 ½" asphalt top course, a 3" asphalt binder course, and a 6" asphalt base course.

2. Plan shall include construction details for curbing and monolithic curb and sidewalk.

Sheet 8 of 11 (Lighting & Landscape Plan):

1. As previously requested, the plan shall include a chart providing the calculations for all landscaped areas to allow for determination of the total landscaped area being provided.

Sheet 9 of 11 (Existing Conditions & Demolition Plan):

1. It is recommended that this sheet be moved to the front so the plan set as Sheet 2.

2. As this is labeled as a demolition plan, the plan should indicate in red what is to be removed or demolished. This would include sidewalks, pavement, etc.

Sheet 10 of 11 (Erosion & Sediment Control Plan):

1. The detail for the Concrete Washout Station shall be provided at a larger scale and shall be legible and clear.

2. The silt fence shall be clearly shown on the plan and called out.

This completes our review at this time. Further comments may be provided based on future submissions when more detailed plans are prepared for the project. **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.

Respectfully,

LANC & TULLY, P.C.

John Russo, P.E.

cc: Natalie Quinn, Planner
Jennifer Gray, Esq.
Bryan Murphy, Building Inspector

KARC
PLANNING CONSULTANTS, INC.

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

FR: KARC Planning Consultants, Inc.

DATE: July 13, 2026

RE: 321 Main Street Site Plan & Subdivision, Arpa Gavigan Developments LLC

I have reviewed the following material regarding the proposed mixed-use building located at 321 Main Street:

- Project Narrative and Comment Response Letter by John O'Rourke P.E., dated June 8, 2026
- Application for Site Plan Approval, including disclosure forms, prepared by Arpa Gavigan Developments LLC, dated June 18, 2026
- Application for Subdivision Approval, prepared by Arpa Gavigan Developments LLC, dated June 18, 2026
- Architectural Review Board Application, prepared by Arpa Gavigan Developments LLC, dated November 24, 2025
- Short Form EAF completed by John O'Rourke, dated June 18, 2026
- Stormwater Analysis by JPO Engineering, PLLC, undated
- I&I Report by JPO Engineering, PLLC, dated March 23, 2026
- Construction cost estimate by JPO Engineering, PLLC, dated December 4, 2026
- Compliance Memo, prepared by Madeleine Sanchez AIA Architect, dated November 17, 2025, revised May 4, 2026
- Site Plan (11 sheets) by JPO Engineering, PLLC, dated June 12, 2026
- Architectural supplemental materials (10 pages) by Madeleine Sanchez AIA Architect, dated November 25, 2025.

Project Description:

The applicant is seeking to subdivide 321 Main Street (Parcel #5954-36-930849) from the existing 0.11-acre parcel into two parcels: Parcel A (0.048 ac) and Parcel B (0.071 ac). Parcel B will retain the existing two-story structure. Parcel A is proposed to be developed with a 3-story mixed-use building. The project site is located in the Central Main Street (CMS) zoning district.

Comments & Recommendations:

1. **Application Form & Project Narrative**. The application forms and project narrative contain numerous inconsistencies and omissions, including incorrect zoning information, incomplete subdivision application responses, omission of the existing parcel area, unclear building area

and unit information, and supporting documents containing inconsistent dates. These documents should be revised so that they accurately describe the existing conditions and the proposed conditions of proposed Parcels A and B.

2. **Bulk Compliance**. The zoning bulk table on Sheet S-02 has been updated; however, several inconsistencies remain that prevent verification of zoning compliance. The zoning compliance table should be reviewed and corrected for consistency with the plans.
    a. Proposed Parcels A and B should be clearly labeled on the site and subdivision plans.
    b. The listed front setbacks appear inconsistent with the proposed building locations.
    c. Side setbacks should be provided for each side yard on each parcel. The values shown do not appear to accurately reflect the existing or proposed conditions.
3. **Landscaped Area**. The bulk table indicates 17% and 26% landscaped area for Parcels A and B, respectively. The plans should identify the dimensions and square footage of each landscaped area to demonstrate compliance with the minimum landscaped area requirement.
4. **EAF Mapper.** The responses to the Short EAF appear inconsistent with both the project and the EAF Mapper output. Where the applicant's responses differ from mapped resources, supporting documentation or explanation should be provided. See Question 2, 11, 12a, 12b, and 20.
5. **Site Plan and Subdivision Plans.** The plan set contains several inconsistencies and lacks sufficient detail to support subdivision review.
    a. The cover sheet is dated June 12, 2026. However, the drawing index and revision block indicate a latest revision date of May 21, 2026. The applicant should clarify the revision history and identify the changes made between May 21 and June 12, 2026.
    b. The subdivision plans should be prepared as a Preliminary Subdivision Plat and include all information required by the City's subdivision regulations, including bearings and distances for all proposed lot lines.
    c. The proposed lot lines and easement areas appear to have been graphically overlaid onto the survey base. A revised plat should clearly depict the proposed subdivision configuration and easements as part of a professionally prepared Preliminary Subdivision Plat suitable for Planning Board review and recording.
6. **Existing Driveway Easement.** The existing easement should be fully identified on the plans, including liber/page references and recorded descriptions where applicable.
7. **Proposed Pedestrian Access Easements.** Sheet S-03 depicts proposed pedestrian access easements benefiting Parcel A and the adjoining property at 319 Main Street. The proposed easement areas should be clearly shown and dimensioned on the plans, and the revised subdivision plat should accurately depict their limits. Draft easement language should also be provided for review by the City Attorney to ensure the proposed easements adequately establish the intended access rights.

8. **Parking**. A parking requirements table has been added to Sheet S-02. As previously requested, the project narrative should describe the existing and proposed approach to parking, including how parking associated with the existing use is accommodated and how the proposed mixed-use program is expected to utilize available parking resources.
9. **Lighting Plan**. The lighting plan remains incomplete. The plans should clarify the mounting height of the proposed bollards, provide photometric information demonstrating compliance with Section 223-14(B), and reconcile the note referencing photometric diagrams, which are not included in the submission.
10. **Refuse and Bike Storage**. The detail for the "Linear Garden Bike and Bin Storage with Green Roof" was removed, but no replacement detail has been provided. A detail for the "new bin storage enclosure" on Parcel B should also be provided.
11. **Fence Detail**. A detail for the proposed 6-foot stockade fence should be provided. The referenced detail on Sheet S-08 appears to depict a shadowbox fence rather than the proposed stockade fence.

The application has progressed, however, the submission remains incomplete and internally inconsistent in several respects. The above items should be addressed prior to the Planning Board's final review of the application. Additional comments may be provided following submission of revised or supplemental submission materials.

Natalie Quinn
Beacon Planning Consultant

Cc: Bryan Murphy, Building Inspector
Jennifer L. Gray, Esq., City Attorney
John Russo, P.E., City Engineer

City of Beacon Planning Board Agenda
07/14/2026

Title:

Review of application for Amended Site Plan Approval, Edgewater Place, Residential, submitted by Scenic Beacon Developments, LLC.

ATTACHMENTS

Edgewater PB 7.14.26 Submission Cvr Ltr.pdf

Edgewater PB 7.14.26 Amended Site Plan by HLD6.30.26.pdf

Edgewater PB 7.14.26 Exhibit A -Apps for Site Plan & Special Use Permit redacted2.pdf

Edgewater PB 7.14.26 Exhibit B.1 - Subdivision Plat and Site Plan Approval Resolution 9.17.18.pdf

Edgewater PB 7.14.26 Exhibit B.2 - Amended Neg Dec 7.10.18.pdf

Edgewater PB 7.14.26 Exhibit B.3 - Amended LWRP Consistency Determination 7.10.18.pdf

Edgewater PB 7.14.26 Exhibit B.4 - Internal Property Subdivision Plat Approval Resolution 3.12.24.pdf

Edgewater PB 7.14.26 Exhibit C - City Council SUP Resolution (Resolution No. 116 of 2018) 8.6.18.pdf

Edgewater PB 7.14.26 Exhibit D - Area Variance Approval Resolution No. 2018-1 dated 1.17.18.pdf

Edgewater PB 7.14.26 Exhibit E - Parking and Traffic Ltr by Colliers Engineering & Design 6.30.26.pdf

Edgewater PB 7.14.26 Exhibit F - Short EAF redacted2.pdf

Lanc & Tully Edgewater 07-10-26.pdf

KARC Review PB_18-30 Edgewater_07.14.2026.pdf

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CUDDY +FEDER LLP

300 Westage Business Center, Suite 380
Fishkill, New York 12524
T 845 896 2229
F 845 896 3672
cuddyfeder.com

Taylor M. Palmer
tpalmer@cuddyfeder.com

June 30, 2026

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: Scenic Beacon Developments, LLC – Application for Amended Site Plan Approval
Property: Edgewater Place, Beacon, New York 12508
Tax Parcel IDs: 5955-19-590022, 5955-19-604016 & 5955-19-588001

Dear Chairman Gunn and Members of the Planning Board:

On behalf of Scenic Beacon Developments, LLC (the "Applicant"), the owner of the above-referenced Property, we respectfully submit this letter and the referenced enclosures in support of an Application for Amended Site Plan Approval (the "Application") relating to the Applicant's previously approved Edgewater project (the "Original Edgewater Project" or "Original Project").[1] The Application involves the proposed addition of two (2) dwelling units and nine (9) bedrooms, along with certain revisions to the off-street parking facilities (the "Amended Edgewater Project" or the "Amended Project").

ORIGINAL EDGEWATER PROJECT APPROVALS, BUILDING PROGRAM AND STATUS OF CONSTRUCTION:

The Original Edgewater Project building program contemplates the construction of seven (7) residential multifamily buildings comprising 246 dwelling units and 350 bedrooms (located in Buildings 1 through 7); a common residential tenant amenity building; surface, subsurface (i.e., podium), and land banked off-street parking facilities; and other improvements related to pedestrian trails and stormwater control measures, amongst others, on the Property. The Property is generally located at Edgewater Place and is classified within the RD 1.7 Zoning district.[2]

[1] *See* **Exhibit A** – City of Beacon Planning Board Application for Site Plan Approval & Planning Board Application for Special Use Permit Approval. Consistent with the Original Project, although the City Council remains the approval authority for the Special Use Permit, the Application Form for the Permit is provided to the Planning Board as agent for the City Council.

[2] Note: The involved tax parcels include the parcels including Building 2 and 3, in addition to the common parcel surrounding the Buildings.

In 2018, the Applicant secured approvals for the Original Project from this Board, the City Council, and the Zoning Board of Appeals ("ZBA"). Specifically, this Board issued an Amended Negative Declaration pursuant to the State Environmental Quality Review Act ("SEQR") and an Amended Local Waterfront Revitalization Program ("LWRP") Consistency Determination on July 10, 2018 and subsequently granted Preliminary and Final Subdivision Plat Approval and Site Plan Approval on September 17, 2018,[3] while the City Council issued Special Use Permit Approval for the multifamily dwellings on August 6, 2018,[4] and the ZBA granted variance relief related to building stories, total number of units per building, and building distances on January 17, 2018 (collectively, the "Original Approvals").[5]

Following the issuance of the Original Approvals, the Applicant worked to satisfy all conditions of approval relative to securing the Planning Board Chair's endorsement on the final site plan set and subdivision plat. These conditions included securing outside agency approvals; drafting various legal agreements related to trails, stormwater, construction, right-of-way maintenance, water service, and land banked off-street parking spaces; finalizing the site plan set and subdivision plat in response to Planning Board and City consultant comments; and posting a performance bond. After the Planning Board Chair's endorsement was secured, on August 6, 2020 the Applicant filed the final subdivision plat with the Dutchess County Clerk's office as Map No. 12669 and simultaneously recorded various associated legal agreements.

Construction of Phase 1 of the Original Edgewater Project commenced in 2022 upon the issuance of the first Building Permit. Phase 1 consisted of the demolition of the-then existing buildings; expansive site work to plant and stabilize the Property; installation of major sewer and water lines and retention basins; and the construction and occupation of four (4) of the eight (8) buildings on the Property, specifically Buildings 5, 6, and 7 and the residential tenant amenity building. This Phase is now complete.

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[3] *See* **Exhibit B.1** – Preliminary and Final Subdivision Plat Approval and Site Plan Approval Resolution; **Exhibit B.2** – Amended Negative Declaration; and **Exhibit B.3** – Amended LWRP Consistency Determination. As this board is aware, all conditions of the approval have been satisfied, and no further extensions are required for same.

[4] *See* **Exhibit C** – City Council Special Use Permit Approval Resolution (No. 116-2018). This Approval is valid through January 14, 2028. *See* City Council Resolution No. 118 of 2025, a copy of which is on file with the City.

[5] *See* **Exhibit D** – Zoning Board Variance Approval Resolution (No. 2018-01). This Approval is valid through September 11, 2027. *See* ZBA Resolution No. 2025-09, a copy of which is on file with the City.

During the Phase I construction, the City Council amended the City of Beacon Zoning Code ("Zoning Code") Section 223-25.C(3) in December 2023 to authorize this Board to internally subdivide one or more of the buildings within a project site that has already received site plan approval. Pursuant to this amendment, the Applicant then applied for and ultimately received Preliminary and Final Internal Property Subdivision Plat Approval from the Planning Board on March 12, 2024.[6] This Approval authorized the creation of seven (7) total lots, five (5) comprising individual residential buildings, one (1) comprising two (2) residential buildings due to the integrated nature of those buildings, and the final one (1) comprising the remainder of the Property, including the tenant amenity building, parking facilities, trailways, stormwater measures, etc. Thereafter, the Applicant satisfied all conditions of approval (e.g., securing outside agency approvals and drafting relevant legal agreements), obtained the Planning Board Chair's endorsement on the final subdivision plat, and filed the plat with the Dutchess County Clerk's Office as Map No. 12669A on December 26, 2024.

Phase 2 of the Original Edgewater Project is now underway. Phase 2 includes construction of the remaining four (4) buildings (Buildings 1, 2, 3 & 4), completion of the water and sewer connections, and other minor improvements.

PROPOSED MINOR AMENDMENTS TO THE ORIGINAL EDGEWATER PROJECT BUILDING PROGRAM:

The Applicant remains fully committed to compliance with the approved Site Plan and seeks only to modify those components related to the Original Edgewater Project's unit, bedroom and parking counts. Specifically, the Amended Edgewater Project proposes the following:

1. 248 total dwelling units, where a maximum 252 units are permitted pursuant to Zoning Code Section 223-17 and 223-41.10, and where 246 units were previously approved as part of the Original Project;

2. 359 total bedrooms, where the maximum number of bedrooms is not regulated under the Zoning Code, and where 350 bedrooms were previously approved, which change includes proposed unit mix adjustments; and

[6] *See* **Exhibit B.4** – Preliminary and Final Internal Property Subdivision Plat Approval Resolution. As is noted therein, this Board determined that the Application "does not create new or different adverse environmental impacts, therefore the Planning Board's Amended Negative Declaration dated July 10, 2018 fully addresses the whole action, including the proposed subdivision approval, and no further SEQRA review is required."

3. 321 surface and subsurface off-street parking spaces where a minimum 248 is required under the current Zoning Code Section 223-26, and where 329 spaces were previously approved (comprised of 284 surface and subsurface spaces and 45 land banked spaces).

The Proposed Two (2) Additional Dwelling Units Comply with the Permitted Maximum Density for the Property and the Planning Board Can Approve the Number of Units Per Building Pursuant to the Zoning Code:

The additional two (2) dwelling units are proposed to be studios situated within Buildings 2 and 3, which results in a total of 37 units per Building. The additional units will *not* result in any changes to the Original Project's approved building height, envelope, or massing.

The proposed unit count falls within the permitted maximum dwelling units on the Property per Zoning Code Section 223-17, specifically, Footnote "h". As is noted in the Board's prior Site Plan Approval Resolution and Negative Declaration, a maximum 252 dwelling units are permitted on the Property in accordance with RD-1.7's minimum lot size area per dwelling unit and the developer incentive contained within Zoning code Section 223-41.10.M.[7] The lot area per dwelling unit calculation permits 242 units on the Property, while the developers incentive for providing Below Market Rate ("BMR") Units permits and additional ten (10) dwelling units, for a total of 252 units permitted. The proposed 248 dwelling units therefore comply with the Zoning Code.

Notably, the total unit count per Building exceeds the amount permitted pursuant to Zoning Code Section 223-17, but falls *well below* the number of units contemplated by the ZBA in the previously issued variance relief.[8] Pursuant to Zoning Code Section 223-17, a maximum of 36 units is permitted per Building in the RD 1-7 Zoning District. All of the constructed and proposed Buildings will comply with this requirement, except for the proposed Buildings 2 and 3, which will each have 37 dwelling units. The Planning Board retains its discretion to approve the 37 units in each Building in accordance with Zoning Code Section 223-41.11.M.

[7] *See* Zoning Code § 223-17. Schedule of Dimensional Regulations and Footnote "h"; *see also* **Exhibit B.1** (page 3), **Exhibit B.2** (page 4) (both explaining the lot area calculations for the Property).

[8] *See* **Exhibit D** (52 units in Building 2 and 59 units in Building 3 were proposed and considered by the ZBA when issuing variance relief for an earlier iteration of the Original Project).

The Proposed Overall Bedroom Count and the Proposed Bedroom Count Per Building Are Not Regulated by the Zoning Code and the Prior Site Plans Do Not Restrict Unit Mix Arrangement:

The proposed nine (9) additional bedrooms are a result of both the addition of two (2) dwelling units, discussed above, and a proposed change in unit mix. Neither the total number of bedrooms nor the number of bedrooms per Building are regulated by the Zoning Code, and neither the Original Approvals nor the final endorsed site plan set specify the unit mix per building or the unit arrangement per Building. Instead, these components were left to the discretion of the Applicant provided the maximum bedroom and unit counts were maintained.[9]

Collectively, the Amended Project includes a total of 30 studios, 111 one-bedrooms, 103 two-bedrooms, and four (4) three-bedrooms, where the previously approved unit mix was 25 studios, 126 one-bedrooms, 86 two-bedrooms, and nine (9) three-bedrooms. The proposed unit mix changes equates to an increase of five (5) studios (five (5) bedrooms); a decrease of 15 one bedrooms (15 bedrooms); an increase of 17 two bedrooms (34 bedrooms); and a decrease of five (5) three bedrooms (15 bedrooms), for a total increase of nine (9) bedrooms that results in an overall bedroom count of 359.

The unit mix changes are proposed solely within the Phase II Buildings currently under construction. The Phase 1 Buildings (Buildings 5, 6, and 7) comprise 15 studios, 51 one-bedrooms, 38 two-bedrooms, and two (2) three-bedrooms. Under the approved unit mix, the Phase II Buildings (Buildings 1, 2, 3, and 4) would comprise 10 studios, 75 one-bedrooms, 48 two-bedrooms, and seven (7) three-bedrooms for a total of 201 bedrooms. The Amended Project instead proposes the following unit mix remain for Phase II – 15 studios, 60 one-bedrooms, 65 two-bedrooms, and two (2) three-bedrooms for a total of 211 bedrooms, nine (9) above the Original Project count.

The Proposed Off-Street Parking Count Complies with the Zoning Code's Range of Permitted Number of Spaces and is Consistent with the Applicant's Recent Experience at the Property and at Developments Throughout the City:

The Applicant proposes a total of 321 off-street parking spaces on the Property. Zoning Code 223-26.D mandates a minimum of one (1) parking space per dwelling unit and a maximum of three (3) spaces per dwelling unit in the RD 1.7 Zoning District, which equates to a range of permitted spaces between 248 and 744 for the Amended Project. The proposed parking count therefore

[9] *See* Final Site Plan Set, Sheets 1 & 6 of 16, endorsed by the Planning Board Chair on August 8, 2020.

complies with the Zoning Code.

The Original Project comprised a total 329 off-street parking spaces, where 328 spaces were required under the then-existing Zoning Code parking regulations. Of those 329 approved spaces, 238 were surface spaces, 46 subsurface, and 45 land banked. The land banked parking was located in two (2) areas: (1) "Land Banked Parking Area A" containing 12 parking spaces along the northern portion of the property, north of Building 1; and (2) "Land Banked Parking Area B" containing 33 parking spaces on the northern, central portion of the Property between Building 1 and the parking area adjacent to Building 7. In accordance with the Zoning Code and the Original Approvals, the Applicant recorded a Declaration of Land Banked Parking in the Dutchess County Clerk's Office on August 6, 2020, as Doc No. 2020-3016, which bound the Applicant to construct the land banked spaces in the future upon a finding by the Planning Board that spaces are necessary (the "Land Banked Parking Declaration").[10]

The Applicant is now proposing to construct additional surface and subsurface parking spaces at the Property. Specifically, the Applicant is proposing to construct the Original Project's 238 surface and 46 subsurface spaces, in addition to 29 new surface parking spaces and eight (8) new subsurface spaces. The eight (8) new subsurface spaces are proposed below Buildings 2 and 3, while the new surface spaces are located in three (3) areas: (1) 12 spaces in roughly the same location as "Land Banked Parking Area A"; (2) 12 spaces to the north of the parking area approved to the northeast of Building 1 and east of the Tompkins Avenue entrance; and (3) five (5) spaces on the southern portion of the Property, to the south of Buildings 3 and 4. The proposed spaces are more clearly depicted within the enclosed Site Plan titled "Amended Site Plan – Edgewater" prepared by Hudson Land Design Professional Engineering, P.C., dated June 30, 2026.

The Applicant's transportation engineer, Colliers Engineering & Design ("Colliers"), prepared the enclosed Parking and Traffic Letter dated June 30, 2026 describing the proposed parking changes and traffic implications of the additional units.[11] As is further detailed therein, the proposed parking ratio on the Property (1.29) exceeds the parking ratio that the Applicant has identified as sufficient based on the current build out of the Project and the Applicant's other developments in the City (1.25). The Letter also attests to the fact that the additional (2) units are anticipated to result in a negligible increase in traffic generation associated with the Amended Project.

[10] Note: This Declaration was drafted in accordance with the then-existing Zoning Code Section 223-26.E, which has now been re-codified as Section 223-26.C(2). Should this Application be approved, the Applicant will seek to extinguish the Land Banked Parking Declaration.

[11] *See* **Exhibit E** – Colliers Traffic and Parking Letter.

THE AMENDED EDGEWATER PROJECT'S PROCEDURES:[12]

The Amended Project requires Amended Site Plan Approval from the Planning Board and Amended Special Use Permit Approval from the City Council.[13] In accordance with Zoning Code Section 223-18.B(1), this Application is being submitted to the Planning Board as agent for the City Council, after which the Planning Board will be responsible for forwarding the Application to the City Council and issuing a report to the City Council within 45 days of receipt of this Application. The Applicant respectfully requests this Board refer the Application to the City Council and consider issuing a positive report and recommendation to the City Council at the appropriate time within the codified timeframe.

Zoning Code Section 223-25.K(2) provides the Planning Board with the discretion to determine the extent of further project review that is warranted based on character of proposed site plan changes. The Applicant respectfully submits that the *de minimis* and zoning compliant additional units and bedrooms, together with the off-street parking facility changes do not warrant an additional public hearing before this Board. To the extent the Planning Board may wish to provide an avenue for public engagement – it is worth noting that the Application will still undergo a public hearing process with the City Council in accordance with Zoning Code Section 223-18.B(1).

Consistent with the Original Project, the Amended Project requires referral to the Dutchess County Planning Board pursuant to the provisions of General Municipal Law. Accordingly, the Applicant respectfully requests the Planning Board refer the Application to the County Planning Board for its review and comment.

THE APPLICATION DOES NOT REQUIRE ANY FURTHER ENVIRONMENTAL OR COASTAL POLICY REVIEW BY THE PLANNING BOARD UNDER THE STATE ENVIRONMENTAL QUALITY REVIEW ACT ("SEQR") OR CHAPTER 220 OF THE CITY CODE IMPLEMENTING THE CITY LWRP:

As noted above, the Original Project previously underwent vigorous environmental and coastal policy review by the Planning Board, which review ultimately culminated in the issuance of a

[12] Note: A pre-submission meeting between the Applicant, Applicant's consultants, the City Building Inspector, and Planning Board Attorney, Engineer, and Planner was held on June 22, 2026.

[13] *See* **Exhibit B.1** (page 10) & **Exhibit C** (page 4) ("Any increase to the total number of units above 246 or bedrooms above 350 on the Property shall require an application to the City Council and the Planning Board to amend the Special Permit and Site Plan, respectively.") (both).

Negative Declaration under SEQR and an LWRP Consistency Determination on December 12, 2017 and, after the Applicant reduced the Original Project scope, an Amended Negative Declaration and Amended Consistency Determination on July 10, 2018.[14]

As this Board is aware, the State legislature recently adopted amendments to SEQR that created entirely new categories of projects that are fully exempt from SEQR review. The Amended Project qualifies for one of these exemptions because it includes construction of housing on property that (1) is connected to public water and sewer; (2) is located at a previously disturbed site that (i) includes active construction, (ii) is in an urban area, (iii) is not in a Federal Emergency Management Agency designated 100-year floodplain, or special flood hazard area, (iv) is in a City with less than a million residents, (v) is and has not recently been used for agricultural purposes, and (vi) is not located in a designated coastal erosion hazard area;[15] (3) does not contain any non-residential uses; (4) includes only two (2) dwelling units; and (5) does not include single-family housing.[16] The Applicant respectfully requests that the Board recognize that the Amended Project constitutes a qualified action exempt from SEQR review.[17]

The Amended Project is similarly exempt from additional coastal policy review pursuant to Chapter 220 of the City Code because it does not constitute an action subject to SEQR for the foregoing reasons.[18]

ENCLOSURES:

In support of this Application, please find four (4) copies of the following documents:

Exhibit A: Executed City of Beacon Planning Board Applications for Site Plan Approval & for Special Use Permit Approval;

[14] *See* **Exhibit B.2** & **Exhibit B.3**.
[15] *See* New York State Environmental Conservation Law ("ECL") § 8-0105(11)(i)-(vi).
[16] *See* ECL 8-0111(5)(a)(ii)(1)-(5).
[17] *See* ECL § 8-0105(11)(d). Nonetheless, a Short Environmental Assessment Form ("SEAF") has been annexed to the submission for the Board's reference in reviewing the minor site plan changes. *See* **Exhibit F** – SEAF. The SEAF includes updated water and wastewater quantities.
[18] *See* City Code § 220-4.

Exhibit B: City of Beacon Planning Board Approvals, Determinations, and Declarations for the Edgewater Project:

1. Preliminary and Final Subdivision Plat Approval and Site Plan Approval Resolution, dated September 17, 2018 and filed in the City Clerk's Office September 17, 2018;

2. Amended Negative Declaration, dated July 10, 2018 and filed in the City Clerk's Office July 12, 2018;

3. Amended Local Waterfront Revitalization Program Consistency Determination, dated July 10, 2018 and filed in the City Clerk's Office July 12, 2018;

4. Preliminary and Final Internal Property Subdivision Plat Approval Resolution dated March 12, 2024, filed in City Clerk's Office March 13, 2024;

Exhibit C: City of Beacon City Council Special Use Permit Approval Resolution for the Edgewater Project (Resolution No. 116 of 2018) dated August 6, 2018 and filed in the City Clerk's Office August 7, 2018;

Exhibit D: City of Beacon Zoning Board of Appeals Area Variance Approval Resolution for the Edgewater Project (Resolution No. 2018-1) dated January 17, 2018;

Exhibit E: Parking and Traffic Letter prepared by Colliers Engineering & Design dated June 30, 2026; and

Exhibit F: Short Environmental Assessment Form.

In further support of this Application, we respectfully submit four (4) copies of a Site Plan titled "Amended Site Plan – Edgewater" prepared by Hudson Land Design Professional Engineering, P.C., dated June 30, 2026.

Additionally, enclosed are two (2) checks payable to the City of Beacon in the amount of $2,000.00, representing the Site Plan and Special Use Permit Application filing fees, and in the amount of $3,303.50 replenishment for the escrow account for professional review costs.

CONCLUSION:

The Applicant respectfully requests that this matter be placed on the Planning Board's July 14, 2026 meeting agenda, at which time the Applicant looks forward to introducing the Amended Project and requests that the Board refer the matter to the City Council, ZBA and the Dutchess County Planning Board, recognize that the Application constitutes a qualified action under SEQR, determine the applicable procedures for the Application, and consider issuing a positive report and recommendation to the City Council.

In the meantime, should the Planning Board or City Staff have any questions, please do not hesitate to contact me. Thank you in advance for your consideration.

Very truly yours,



Taylor M. Palmer

Enclosures

cc: Bryan Murphy, City Building Inspector
Jennifer L. Gray, Esq., Planning Board Attorney
John Russo, P.E., Planning Board Engineer
Natalie Quinn, Planning Board Planner
Michael A. Bodendorf, P.E., Hudson Land Design Professional Engineering, P.C.
Richard D'Andrea, PE, PTEO, Colliers
Allison Fausner, Esq.



SCHEDULE OF REGULATIONS (RD–1.7 ZONING DISTRICT) AND LOT CONFORMANCE TABLE:

PARAMETER	REQUIREMENT	PROVIDED
LOT AREA:	5,000 SQFT MIN.	±523,155 SQFT
LOT WIDTH:	50 FEET MINIMUM	±920 FEET
LOT DEPTH:	100 FEET MINIMUM	±869 FEET
YARD SETBACKS (RESIDENTIAL USE):		
FRONT YARD:	30 FEET MINIMUM	±252 FEET
SIDE YARD:	20 FEET MINIMUM	±39 FEET
REAR YARD:	25 FEET MINIMUM	±55 FEET
MIN. DIST. B/T BUILDINGS	30 FEET MINIMUM	±25 FT AVG., 12 FT MIN.
MAX. BUILDING HEIGHT:	55 FT, 4.5 STORIES	VARIES, 5 STORIES MAX.
MAX. BUILDING COVERAGE:	25% MAX.	±12%
MAX. UNITS/BUILDING:	36 MAX.	VARIES
LOT AREA/DU	1,700 SF/DU = 242 + 10 BONUS UNITS[1]	248 INCLUDING 25 BMR UNITS

NOTES:
[1]252 TOTAL UNITS (INCLUDING 10 BONUS UNITS PER § 223.41.10.M) AFTER DEDUCTING ENVIRONMENTAL CONSTRAINTS AS DEFINED IN § 223–63 – "ANY LOT AREA COVERED BY SURFACE WATER, WITHIN A FEDERAL REGULATORY FLOODWAY, WITHIN A STATE OR FEDERALLY REGULATED WETLAND, OR WITH EXISTING PREDEVELOPMENT VERY STEEP SLOPES OF 25% OR MORE AS DEFINED IN § 223–63"
[2]SEE PREVIOUSLY APPROVED VARIANCE NOTES.

OWNER/APPLICANT INFORMATION:

SCENIC BEACON DEVELOPMENTS, LLC
28 CREEK DRIVE
BEACON, NY 12508

ZONING SUMMARY:

ZONING DISTRICT: RD 1.7
TAX MAP NO.:
5955–19–590022 = 10.40 ACRES (HOA PARCEL)
5955–19–615029 = 0.23 ACRES (BUILDING 1)
5955–19–604016 = 0.23 ACRES (BUILDING 2)
5955–19–588001 = 0.46 ACRES (BUILDING 3 & 4)
5955–19–579035 = 0.19 ACRES (BUILDING 5)
5955–19–570022 = 0.23 ACRES (BUILDING 6)
5955–19–561009 = 0.19 ACRES (BUILDING 7)
TOTAL LAND AREA = 12.009 ACRES OR 523,155 SQFT
LANDS UNDERWATER = 10.035 ACRES OR 437,113 SQFT
(UNDERWATER LANDS ARE NOT INCLUDED IN THIS APPLICATION)

LOT AREA: 12,009 ACRES (523,155 SQFT)
BUILDING FOOTPRINT: 69,960 SQUARE FEET
BUILDING AREA: 286,840 SQUARE FEET
HISTORICAL OVERLAY: NO
PARKING OVERLAY DISTRICT: NO
EXISTING USE: RESIDENTIAL
PROPOSED USE: RESIDENTIAL

PARKING COMPLIANCE TABLE

USE & PARKING REQUIREMENTS	AREA/COUNT	PROPOSED PARKING REQUIREMENT
RESIDENTIAL: 1MIN. TO 3 MAX. PER DWELLING UNIT	248 DWELLING UNITS	248 MIN. TO 744 MAX. PARKING SPACES
TOTAL REQUIRED PARKING SPACES		248 MIN. TO 744 MAX.
TOTAL PROPOSED PARKING SPACES		321 TOTAL PARKING SPACES (267) SURFACE SPACES (54) PODIUM SPACES

ORIGINAL SITE PLAN APPROVAL REFERENCE:

1. REFERENCE IS HEREBY MADE TO APPROVED SITE PLAN SET ENTITLED "EDGEWATER", CONSISTING OF 16 SHEETS, DATED JANUARY 31, 2017, LAST REVISED APRIL 20, 2019, APPROVED BY THE CITY OF BEACON PLANNING BOARD ON SEPTEMBER 11, 2018 AND SIGNED BY THE PLANNING BOARD CHAIRMAN ON AUGUST 8, 2020.
2. REFER TO ORIGINAL APPROVED SITE PLAN FOR ADDITIONAL INFORMATION.

PREVIOUSLY APPROVED VARIANCE NOTES:

1. A VARIANCE TO EXCEED THE MAXIMUM NUMBER OF STORIES FROM 4½ STORIES TO 5 STORIES HAS BEEN GRANTED BY THE ZONING BOARD OF APPEALS FOR BUILDINGS 3, 4, AND 6. VARIANCE #2018–01, DATED JANUARY 17, 2018.
2. A VARIANCE TO EXCEED THE MAXIMUM NUMBER OF UNITS IN A BUILDING WAS GRANTED BY THE ZONING BOARD OF APPEALS FOR BUILDINGS 1, 2, 3, AND 6. VARIANCE #2018–01, DATED JANUARY 17, 2018.
3. A VARIANCE TO ALLOW LESS THAN 30 FEET BETWEEN BUILDINGS HAS BEEN GRANTED BY THE ZONING BOARD OF APPEALS. VARIANCE #2018–01, DATED JANUARY 17, 2018.

AMENDED PARKING NOTES:

1. THE SITE PLAN WAS ORIGINALLY APPROVED WITH 238 SURFACES SPACES, 46 PODIUM SPACES, 33 LAND BANKED PARKING SPACES LOCATED TO THE WEST OF BUILDING 1, 46 PODIUM SPACE BENEATH BUILDINGS 2 AND 3 AND 12 LAND BANKED SPACES ON THE NORTH SIDE OF THE NORTHERLY PARKING LOT FOR A TOTAL OF 329 SPACES.
2. THE AREA WHERE THE 33 APPROVED LAND BANKED SPACES IS SOLID BEDROCK AT AN ELEVATION APPROXIMATELY 17 FEET HIGHER THAN PROPOSED GRADE. THEREFORE, OTHER AREAS ON THE SITE HAVE BEEN IDENTIFIED FOR ADDITIONAL PARKING SPACES TO BE LOCATED.
3. TWENTY NINE ADDITIONAL (29) CONSTRUCTED SURFACE PARKING SPACES ARE PROPOSED, AND EIGHT (8) ADDITIONAL PODIUM PARKING SPACES ARE PROPOSED. THIS INCLUDES TWELVE (12) SURFACE SPACES IN THE GENERAL VICINITY OF THE LAND BANKED PARKING SPACES ON THE NORTH SIDE OF THE NORTHERLY PARKING LOT, TWELVE (12) SURFACE SPACES IN THE NORTHEAST CORNER OF THE EASTERLY PARKING LOT, AND FIVE (5) GRASS PAVER SPACES IN THE SOUTHEAST CORNER OF THE EASTERLY PARKING LOT, IN ADDITION TO EIGHT (8) NEW SUBSURFACE SPACES IN BUILDING 2 AND 3. THESE SPACES WILL BE CONSTRUCTED AND NOT LAND BANKED.
4. THE TOTAL PARKING SPACES PROVIDED ARE;

267 CONSTRUCTED SURFACE SPACES
+ 54 CONSTRUCTED PODIUM SPACES
321 TOTAL CONSTRUCTED PARKING SPACES

PREVIOUSLY APPROVED LAND BANKED PARKING AREA B DETAIL
SCALE: 1"=30

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE _____ DAY OF _____, 20_____ SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS _____ DAY OF _____, 20_____ BY

_____ CHAIRMAN

_____ SECRETARY

IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.

DRAWN BY: CMB				CHECKED BY: MAB			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY

GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

Dig Safely. New York Call 811 before you dig

HUDSON LAND DESIGN

SEAL

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

AMENDED SITE PLAN
EDGEWATER
15–30 EDGEWATER PLACE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 5955–19–590022

JOB #:	2016:015
DATE:	JUNE 30, 2026
SCALE:	1" = 30'
TITLE:	SP–1
SHEET:	1 OF 1

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

APPLICATION FOR SITE PLAN APPROVAL

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

IDENTIFICATION OF APPLICANT

Name: Scenic Beacon Developments LLC

Address: 28 Creek Drive, Beacon, NY 12508

Signature:

Date: 06/29/2026

Phone: [redacted]

(For Official Use Only)

	Date	Initials
Application & Fee Rec'd		
Initial Review		
Public Hearing		
Conditional Approval		
Final Approval		

IDENTIFICATION OF REPRESENTATIVE / DESIGN PRFESSIONAL

Name: Taylor M. Palmer, Esq, Cuddy & Feder LLP
Attorney for Applicant

Address: 445 Hamilton Avenue, 14th Floor
White Plains, NY 10601

Phone: 914-761-1300

Fax: 914-761-5378

Email address: tpalmer@cuddyfeder.com

IDENTIFICATION OF SUBJECT PROPERTY:

Property Address: Edgewater Place, Beacon, NY 12508

Tax Map Designation: Section 5955-19-590022; 5955-19-588001 and 5955-19-604016 Block Lot(s)

Land Area: 12 acres / 523,155 sf

Zoning District(s) RD-1.7

DESCRIPTION OF PROPOSED DEVELOPMENT:

Proposed Use: Existing Multifamily Housing

Gross Non-Residential Floor Space: Existing 0 Proposed 0

TOTAL: 0

Dwelling Units (by type): Existing 246 Proposed 248

TOTAL: 248

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.

INFORMATION TO BE SHOWN ON SITE LOCATION SKETCH

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

INFORMATION TO BE SHOWN ON THE SITE DEVELOPMENT PLAN

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

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

_____ _____
Chairman, City Planning Board **Date**

APPLICATION FEES

Site Plan	**Residential** $500 + $250 per dwelling unit **Commercial** $500 + $250 per 1,000 s.f.
Special Use Permit	**Residential** $500 + $250 per dwelling unit **Commercial** $500 + $250 per 1,000 s.f.
Subdivision	$ 750 for 2-4 lots + $100 per lot $1,000 for 5 or more lots + $300 per lot

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)	$ 3,000	$ 1,000	Current bills + $1,200
6-15	$ 9,000	$ 2,500	Current bills + $1,200
Over 15	$ 18,000	$ 5,000	Current bills + $6,000

NON-RESIDENTIAL SITE PLAN AND SUP APPLICATIONS

	Initial Deposit	Depleted to	Replenishment
Existing Buildings/Change of Use with no site development	$ 1,800	$ 1,000	Current bills + $600
Up to 3,000 s.f. gross floor area	$ 3,125	$ 1,000	Current bills + $1,200
3,000 to 10,000 s.f. gross floor area	$ 3,000 + $0.50 per sq.ft. over 3,000	$ 2,500	Current bills + $3,000
Over 10,000 s.f. gross floor area	$ 9,000 + $0.50 per sq.ft. over 10,000	$ 2,500	Current bills + $3,000

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

** if required by Chairman*	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: Scenic Beacon Developments LLC

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

Development Beacon Edgewater, LLC; Partner Beacon Edgewater, LLC and EWLWPWRW LLC

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

18-30 Edgewater Place, Beacon, NY 12508

Applicant Address: 28 Creek Drive, Beacon, NY 12508

Project Address: Edgewater Place, Beacon, NY 12508

Project Tax Grid # 5955-19-590022; 5955-19-588001 and 5955-19-604016

Type of Application Application for Amended Site Plan & Special Use Permit Approval

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, Rodney Weber, Manging Member of Scenic Beacon Developments LLC, the undersigned owner of the above referenced property, hereby affirm that I have reviewed my records and verify that the following information is true.

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

Scenic Beacon Developments LLC
By: Rodney Weber

Signature of Owner

Managing Member

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: Scenic Beacon Developments LLC - Application for Amended Site Plan and Special Use Permit Approval

PLEASE INDICATE WHETHER THE SITE PLAN DRAWINGS SHOW THE SUBJECT INFORMATION BY PLACING A CHECK MARK IN THE APPROPRIATE BOXES BELOW.		
	YES	**NO**
The site plan shall be clearly marked "Site Plan", it shall be prepared by a legally certified individual or firm, such as a Registered Architect or Professional Engineer, and it shall contain the following information:	X	
LEGAL DATA		
Name and address of the owner of record.	X	
Name and address of the applicant (if other than the owner).	N/A	
Name and address of person, firm or organization preparing the plan.	X	
Date, north arrow, and written and graphic scale.	X	
NATURAL FEATURES		
Existing contours with intervals of two (2) feet, referred to a datum satisfactory to the Planning Board.	X	
Approximate boundaries of any areas subject to flooding or stormwater overflows.	X	
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.	N/A*	
EXISTING STRUCTURES, UTILITIES, ETC.		
Outlines of all structures and the location of all uses not requiring structures. Paved areas, sidewalks, and vehicular access between the site and public streets.	X	
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.	N/A*	
Other existing development, including fences, retaining walls, landscaping, and screening.	X	
Sufficient description or information to define precisely the boundaries of the property.	X	
The owners of all adjoining lands as shown on the latest tax records.	X	
The locations, names, and existing widths of adjacent streets and curb lines.	X	
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	N/A*	

* Indicates shown on original approved site plan. No changes are proposed as part of the amended site plan.

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

* Indicates shown on original approved site plan. No changes are proposed as part of the amended site plan.

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

Please See Attached Project Narrative

Applicant/Sponsor Name: Scenic Beacon Developments LLC By: Rodney Weber, Managing Member

Signature:

Date: 06/29/2026

FOR OFFICE USE ONLY
Application #

CITY OF BEACON
1 Municipal Plaza, Beacon, NY
Telephone (845) 838-5000 · http://beaconny.gov/

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
Scenic Beacon Developments LLC	28 Creek Drive Beacon, NY 12508
Place where such business entity was created New York	Official Registrar's or Clerk's office where the documents and papers creating entity were filed New York State Department of State
Date such business entity or partnership was created 11/25/2015	Telephone Contact Information [redacted]

IF AFFIANT IS A CORPORATION:

Name of Entity	Telephone Contact Information
Principal Place of Business of Entity	Place and Date of incorporation
Method of Incorporation	Official place where the documents and papers of incorporation were filed

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
Development Beacon Edgewater, LLC	28 Creek Drive Beacon, NY 12508	[redacted]	31.31%
Partner Beacon Edgewater LLC	28 Creek Drive Beacon, NY 12508	[redacted]	8.69%
EWLWPWRW LLC	28 Creek Drive Beacon, NY 12508	[redacted]	60%

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.
Scenic Beacon Developments LLC 5955-19-590022	28 Creek Drive Beacon, NY 12508	[redacted]	June 20, 2016 Bargain & Sale Deed	Recorded in the Dutchess Country Clerk's Office on July 1, 2016 #02-2016-4225
Scenic Beacon Developments LLC 5955-19-604016	28 Creek Drive Beacon, NY 12508	[redacted]	Feb. 7, 2025 Correction Deed	Recorded in the Dutchess County Clerk's Office February 18, 2025 as #02 2025 50585
Scenic Beacon Developments LLC 5955-19-588001	28 Creek Drive Beacon, NY 12508	[redacted]	Feb. 7,2025 Correction Deed	Recorded in the Dutchess County Clerk's Office February 18, 2025 as #02 2025 50587

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
Scenic Beacon Developments LLC	28 Creek Drive, Beacon, NY 12508

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. N/A

SECTION J. N/A

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

Name of the Corporation	Telephone Contact Information
Principal Business Address	Place and Date of Incorporation
Method of Incorporation	Official place where the documents and papers of incorporation were filed

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

Name	**Residence or business address**	**Telephone number**

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, Rodney Weber being first duly sworn, according to law, deposes and says that I am (Title) Managing Member, an active and qualified member of ~~the~~ Scenic Beacon Developments LLC, 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.

(Print) Rodney Weber

(Signature) 

APPLICATION FOR SPECIAL USE PERMIT

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

IDENTIFICATION OF APPLICANT

Name: Scenic Beacon Developments LLC

Address: 28 Creek Drive, Beacon, NY 12508

Signature: [signature]

Date: 06/29/2026

Phone: [redacted]

(For Official Use Only)

	Date	Initials
Application & Fee Rec'd		
Initial Review		
PB Public Hearing		
Sent to City Council		
City Council Workshop		
City Council Public Hearing		
City Council Approve/Disapprove		

IDENTIFICATION OF REPRESENTATIVE / DESIGN PRFESSIONAL

Name: Taylor M. Palmer, Esq.Cuddy & Feder LLP
Attorney for Applicant

Address: 445 Hamilton Avenue, 14th Floor
White Plains, NY 10601

Phone: 914-761-1300

Fax: 914-761-5378

Email address: tpalmer@cuddyfeder.com

IDENTIFICATION OF SUBJECT PROPERTY:

Property Address: Edgewater Place, Beacon, NY 12508

Tax Map Designation: Section 5955-19-590022; 5955-19-588001 and 5955-19-604016. Block _____ Lot(s) _____

Land Area: 12 acres / 523,155 sf

Zoning District(s) RD-1.7

DESCRIPTION OF PROPOSED DEVELOPMENT:

Proposed Use: Existing Multifamily Housing

Gross Non-Residential Floor Space: Existing 0 Proposed 0

TOTAL: 0

Dwelling Units (by type): Existing 246 Proposed 248

TOTAL: 248

ITEMS TO ACCOMPANY THIS APPLICATION

a. Five (5) **folded** copies and One (1) digital copy of a site location sketch showing the location of the subject property and the proposed development with respect to neighboring properties and developments.

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c. Section, block and lot numbers written on the subject property and all adjoining properties, including the names of the record owners of such adjoining properties.

INFORMATION TO BE SHOWN ON THE SITE DEVELOPMENT PLAN

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

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

_____ _____
Chairman, City Planning Board **Date**

APPLICATION FEES

Site Plan	**Residential** $500 + $250 per dwelling unit **Commercial** $500 + $250 per 1,000 s.f.
Special Use Permit	**Residential** $500 + $250 per dwelling unit **Commercial** $500 + $250 per 1,000 s.f.
Subdivision	$ 750 for 2-4 lots + $100 per lot $1,000 for 5 or more lots + $300 per lot

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)	$ 3,000	$ 1,000	Current bills + $1,200
6-15	$ 9,000	$ 2,500	Current bills + $1,200
Over 15	$ 18,000	$ 5,000	Current bills + $6,000

NON-RESIDENTIAL SITE PLAN AND SUP APPLICATIONS

	Initial Deposit	Depleted to	Replenishment
Existing Buildings/Change of Use with no site development	$ 1,800	$ 1,000	Current bills + $600
Up to 3,000 s.f. gross floor area	$ 3,125	$ 1,000	Current bills + $1,200
3,000 to 10,000 s.f. gross floor area	$ 3,000 + $0.50 per sq.ft. over 3,000	$ 2,500	Current bills + $3,000
Over 10,000 s.f. gross floor area	$ 9,000 + $0.50 per sq.ft. over 10,000	$ 2,500	Current bills + $3,000

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

** if required by Chairman*	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: Scenic Beacon Developments LLC

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

Development Beacon Edgewater, LLC; Partner Beacon Edgewater, LLC and EWLWPWRW LLC

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

18-30 Edgewater Place, Beacon, NY 12508

Applicant Address: 28 Creek Drive, Beacon, NY 12508

Project Address: Edgewater Place, Beacon, NY 12508

Project Tax Grid # 5955-19-590022; 5955-19-588001 and 5955-19-604016

Type of Application Application for Amended Site Plan & Special Use Permit Approval

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, Rodney Weber, Manging Member of Scenic Beacon Developments LLC, the undersigned owner of the above referenced property, hereby affirm that I have reviewed my records and verify that the following information is true.

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

Scenic Beacon Developments LLC
By: Rodney Weber

Signature of Owner

Managing Member

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: Scenic Beacon Developments LLC - Application for Amended Site Plan and Special Use Permit Approval

PLEASE INDICATE WHETHER THE SITE PLAN DRAWINGS SHOW THE SUBJECT INFORMATION BY PLACING A CHECK MARK IN THE APPROPRIATE BOXES BELOW.		
	YES	**NO**
The site plan shall be clearly marked "Site Plan", it shall be prepared by a legally certified individual or firm, such as a Registered Architect or Professional Engineer, and it shall contain the following information:	X	
LEGAL DATA		
Name and address of the owner of record.	X	
Name and address of the applicant (if other than the owner).	N/A	
Name and address of person, firm or organization preparing the plan.	X	
Date, north arrow, and written and graphic scale.	X	
NATURAL FEATURES		
Existing contours with intervals of two (2) feet, referred to a datum satisfactory to the Planning Board.	X	
Approximate boundaries of any areas subject to flooding or stormwater overflows.	X	
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.	N/A*	
EXISTING STRUCTURES, UTILITIES, ETC.		
Outlines of all structures and the location of all uses not requiring structures. Paved areas, sidewalks, and vehicular access between the site and public streets.	X	
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.	N/A*	
Other existing development, including fences, retaining walls, landscaping, and screening.	X	
Sufficient description or information to define precisely the boundaries of the property.	X	
The owners of all adjoining lands as shown on the latest tax records.	X	
The locations, names, and existing widths of adjacent streets and curb lines.	X	
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	N/A*	

* Indicates shown on original approved site plan. No changes are proposed as part of the amended site plan.

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

* Indicates shown on original approved site plan. No changes are proposed as part of the amended site plan.

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

Please See Attached Project Narrative

Applicant/Sponsor Name: Scenic Beacon Developments LLC By: Rodney Weber, Managing Member

Signature: _____

Date: 06/29/2026

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
Scenic Beacon Developments LLC	28 Creek Drive Beacon, NY 12508
Place where such business entity was created New York	Official Registrar's or Clerk's office where the documents and papers creating entity were filed New York State Department of State
Date such business entity or partnership was created 11/25/2015	Telephone Contact Information [redacted]

IF AFFIANT IS A CORPORATION:

Name of Entity	Telephone Contact Information
Principal Place of Business of Entity	Place and Date of incorporation

Method of Incorporation	Official place where the documents and papers of incorporation were filed

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
Development Beacon Edgewater, LLC	28 Creek Drive Beacon, NY 12508	[redacted]	31.31%
Partner Beacon Edgewater LLC	28 Creek Drive Beacon, NY 12508	[redacted]	8.69%
EWLWPWRW LLC	28 Creek Drive Beacon, NY 12508	[redacted]	60%

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.
Scenic Beacon Developments LLC 5955-19-590022	28 Creek Drive Beacon, NY 12508	[redacted]	June 20, 2016 Bargain & Sale Deed	Recorded in the Dutchess Country Clerk's Office on July 1, 2016 #02-2016-4225
Scenic Beacon Developments LLC 5955-19-604016	28 Creek Drive Beacon, NY 12508	[redacted]	February 7, 2025 Correction Deed	Recorded in the Dutchess Country Clerk's Office on February 18, 2025 #02-2025-50585
Scenic Beacon Developments LLC 5955-19-588001	28 Creek Drive Beacon, NY 12508	[redacted]	February 7, 2025 Correction Deed	Recorded in the Dutchess Country Clerk's Office on February 18, 2025 as #02-2025-50587

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
Scenic Beacon Developments LLC	28 Creek Drive, Beacon, NY 12508

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.

N/A

SECTION J.

N/A

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

Name of the Corporation	Telephone Contact Information
Principal Business Address	Place and Date of Incorporation
Method of Incorporation	Official place where the documents and papers of incorporation were filed

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

Name	Residence or business address	Telephone number

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, Rodney Weber being first duly sworn, according to law, deposes and says that I am (Title) Managing Member, an active and qualified member of ~~the~~ Scenic Beacon Developments LLC, 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.

(Print) Rodney Weber

(Signature) _____

RESOLUTION

PLANNING BOARD
BEACON, NEW YORK

PRELIMINARY & FINAL SUBDIVISION PLAT APPROVALS AND SITE PLAN APPROVAL FOR EDGEWATER PROJECT (22 EDGEWATER PLACE)

WHEREAS, the Beacon Planning Board received applications for Preliminary and Final Subdivision Plat Approvals (lot merger), Site Plan Approval and Special Use Permit Approval from Scenic Beacon Developments, LLC (the "Applicant"), to demolish two existing buildings and construct seven buildings, containing 246 apartments including 25 workforce housing units (350 bedrooms[1]), on 12.009 acres on property located and collectively known as 22 Edgewater Place and designated on the Tax Map of the City of Beacon as **Parcel IDs 5954-25-581985, 5955-19-590022, 5954-25-566983 and 5954-25-574979** (the "Property") in the RD-1.7 Zoning District, within the within the Local Waterfront Revitalization Program ("LWRP") boundary, (the "Amended Project" or "Amended Proposed Action"); and

WHEREAS, the City Council is the approval authority for the Special Use Permit to permit multifamily housing on the Property pursuant to City of Beacon Zoning Code § 223-18; and

WHEREAS, the Planning Board is the approval authority for the Subdivision and Site Plan pursuant to City of Beacon Code §§ 195-2 and 223-25; and

WHEREAS, the Amended Proposed Action also includes a request for a determination of consistency with the LWRP; and

WHEREAS, the application consists of application forms, correspondence, the Full Environmental Assessment Form ("Full EAF") and professional studies and reports submitted to the Planning Board; and

WHEREAS, the Subdivision is shown on the drawing, entitled, "Lot Consolidation Map Prepared for Weber Projects LLC," dated August 27, 2018, prepared by TEC Land Surveying; and

WHEREAS, the Site Plan is shown on the drawings, entitled "Special Use Permit Application," Sheets 1-15 last revised August 28, 2018, as prepared by Hudson Land Design; TEC Land Surveying; and Aryeh Siegel, Architect; and

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[1] The Amended Proposed Action proposes 246 units comprised of 25 studios, 126 1-bedroom units, 86 2-bedroom units, and 9 3-bedroom units.

WHEREAS, the Applicant originally submitted an application for Preliminary and Final Subdivision Plat approvals (lot merger) and Site Plan approval for the construction of seven (7) apartment buildings containing a total of 307 units (413 bedrooms) following the demolition of two existing structures and the merger of four lots into a single 12-acre parcel, along with associated infrastructure including but not limited to landscaping, stormwater management facilities, lighting, off-street parking areas, and retaining walls; and (the "Original Proposed Action"); and

WHEREAS, the Original Proposed Action was a Type I Action pursuant to the New York State Environmental Quality Review Act ("SEQRA"); and

WHEREAS, the Planning Board, as Lead Agency, opened a public hearing to consider comments regarding any environmental impacts of the Original Proposed Action on May 9, 2017 and continued the hearing to July 11, 2017, August 8, 2017, September 12, 2017, October 12, 2017, November 14, 2017 and December 12, 2017, at which time the SEQRA public hearing was closed; and

WHEREAS, after taking a "hard look" at each of the relevant areas of environmental concern through review of the Full EAF and all associated materials prepared in connection with the Original Proposed Action, the Planning Board adopted a Negative Declaration on December 12, 2017; and

WHEREAS, on December 12, 2017 the Planning Board adopted a Resolution finding the Original Proposed Action to be consistent with the relevant policies of the LWRP; and

WHEREAS, the Zoning Board of Appeals opened a duly advertised public hearing on the Applicant's variance application on March 21, 2017 and continued the public hearing to December 19, 2017, at which time all those wishing to be heard were given such opportunity on the Applicant's variance application to (1) allow three proposed buildings to have 5 stories where the maximum building height is 4.5 stories pursuant to City of Beacon Zoning Code § 223-17.C/223 Attachment 1:6; (2) allow four proposed buildings to exceed 36 units where the maximum number of dwelling units per building is 36 units pursuant to the City of Beacon Zoning Code § 223-17.C/223 Attachment 1:6; and (3) allow less than 30 feet between buildings where the minimum distance between buildings on the same lot is 30 feet pursuant to City of Beacon Zoning Code § 223-17.C/223 Attachment 1:6; and

WHEREAS, on December 19, 2017 the Zoning Board of Appeals closed the public hearing; and

WHEREAS, on January 17, 2018, the Zoning Board of Appeals granted the Applicant's variance requests, with conditions; and

WHEREAS, on May 21, 2018, the City Council adopted Law No. 9-2018 which amended the calculation of lot area per dwelling unit in the R1, RD and Fishkill Creek Development Districts; and

WHEREAS, Local Law No. 9-2018 provides that for all development proposals involving a total lot area of more than three acres within the R1, RD and Fishkill Creek Development Districts, the lot area per dwelling unit calculation shall first deduct any lot area covered by surface water, within a federal regulatory floodway, within a state or federally regulated wetland, or with existing, pre-development very steep slopes of 25 percent or more; and

WHEREAS, application of Local Law No. 9-2018 resulted in a total area of 110,284[2] square feet being deducted prior to determining the net buildable area for the Project, as shown on the Steep Slopes Analysis Map, dated June 8, 2018, as prepared by Hudson Land Design; and

WHEREAS, on June 12, 2018 the Beacon Planning Board received a revised set of plans which included revisions to the Site Plan, in part to comply with Local Law No. 9-2018; and

WHEREAS, the revisions provided in the Amended Project include but are not limited to a reduction in the total number of proposed dwelling units from 307 units (413 bedrooms) to 246 units (350 bedrooms) which is a reduction of 61 units or approximately 20%, a reduction in the number of parking spaces by approximately 15%, reduction in water usage by 15%, a reduction in school age children by 13%, a reduction in the amount of impervious surface coverage while increasing the area to remain as green space and not developed, adjustments to a retaining wall along the eastern parking lot and relocation of the pathway on the western side of the Property to avoid Very Steep Slopes, and providing approximately 140 feet of additional walkways on the west side of the Property facing the Hudson River, beyond what was originally proposed; and

WHEREAS, the Amended Project is no longer a Type I Action because it was amended to include 246 total dwelling units, which falls below the threshold for Type I Actions, and accordingly the Amended Project is an Unlisted Action pursuant to SEQRA; and

WHEREAS, based upon a review of the Updated Parts 1 and 2 of the Full EAF and all other application materials that were submitted in support of the Original Proposed Action, along with reports from City staff and consultants, information from involved and interested agencies, and information from the public, the Planning Board adopted an Amended Negative Declaration on July 10, 2018 and determined that the Amended Proposed Action will not have any significant adverse impacts upon the environment; and

WHEREAS, on July 10, 2018 the Planning Board also determined that the Amended Project is entirely consistent with the LWRP policies which apply to the Amended Project; and

---

[2] The Applicant's representatives calculated the deduction of total lot area as 110,284 square feet whereas the City Engineer calculated the deduction of total lot area as 110,533 square feet. The Special Permit Resolution by the City Council references 110,284 square feet. Both figures result in a maximum density of 252 units.

WHEREAS, on July 16, 2018, the City Council opened and closed a public hearing on the Special Use Permit application in connection with the Amended Project and approved the Special Use Permit application by Resolution 116-2018 (the "Special Permit Resolution") after finding the Amended Proposed Action complies with City of Beacon Zoning Code § 223-18; and

WHEREAS, on August 8, 2017 the Planning Board opened a duly noticed public hearing on the application for Site Plan approval concerning the Original Proposed Action, at which time all those interested were given an opportunity to be heard and the public hearing was continued to September 12, 2017, October 11, 2017, November 14, 2017, December 12, 2017 and thereafter adjourned month to month to June 12, 2018; and

WHEREAS, on August 14, 2018 the Planning Board re-opened a duly re-noticed public hearing on the application for Site Plan approval and opened a duly noticed public hearing pursuant to City of Beacon Zoning Code § 223-16.C regarding impacts to very steep slopes, at which time all those interested were given an opportunity to be heard and the public hearings were closed on September 11, 2018; and

WHEREAS, on September 11, 2018 the Planning Board opened a public hearing on the application for Subdivision approval, at which time all those interested were given an opportunity to be heard and the public hearings were closed on September 11, 2018; and

WHEREAS, the Planning Board has reviewed the proposed Site Plan in accordance with City of Beacon Zoning Code §223-16.B concerning impacts to Very Steep Slopes; and

WHEREAS, on September 7, 2017, the Planning Board's Architectural and Community Appearance Board of Review (the "ARB") reviewed the Original Proposed Action and recommended approval of the design, basing its criteria on City Code §86-6, such that no building or structure is so detrimental to the desirability, property values or development of the surrounding area as to provoke one or more harmful effects set forth in City Code §86-2, and the Amended Project does not materially change the design of the proposed seven buildings; and

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

NOW, THEREFORE, BE IT RESOLVED, that the Planning Board has reviewed the proposed Site Plan in accordance with City of Beacon Zoning Code §223-16.B concerning impacts to Very Steep Slopes and finds that the Project avoids construction on Very Steep Slopes, as defined by the City of Beacon Zoning Code, to the extent practicable and further finds that to the extent there are impacts to Very Steep Slopes:

(1) There is no other suitable alternative area within the lot available for the proposed development. Disturbing a small portion of Very Steep Slopes is necessary for

almost any type of reasonable development of the Property. A looped road with two points of ingress and egress is recommended for safety purposes and would likely be required for any type of multifamily development on the Property, which is evidenced by the prior disturbance of Very Steep Slopes for previous development on the Property. Further, moving the interior drives to avoid disturbance to Very Steep Slopes would decrease ADA accessibility. Most of the Very Steep Slopes on the Property with the exception of the Bluff on the west side appear to be man-made from previous development of the Property and construction of Bank Street.

(2) The proposed development is the minimum necessary to make reasonable use of the land. The density of the Project has been reduced from 307 units to 246 units which is six fewer units that the maximum permitted on the Property. In addition, clustering the development reduces the need for a larger footprint which would disturb additional land. Several site design elements have been proposed to further reduce disturbance to the minimum necessary to make reasonable use of the Property, including (i) reduction of parking areas and travel lanes, (ii) landbanked parking and parking under buildings, (iii) retaining wall along the parking area along Buildings 1 and 2 to minimize impacts to Very Steep Slopes along Bank Street and maintain existing vegetation, (iv) relocation of the trail along the Bluff further from the ridgeline, (v) elimination of parallel parking spaces from the access road to reduce impacts to fragmented interior Very Steep Slopes, and (vi) relocation of the retaining wall along the west side of the site entrance off Branch Street to minimize impacts to Very Steep Slopes;

(3) All feasible construction standards and precautions will be taken to assure that environmental impacts are minimized. Temporary erosion and sediment control (E&SC) measures will be implemented during construction, and permanent E&SC measures are incorporated into the project design. Weekly inspections of the temporary E&SC measures by a qualified professional will be required; and

(4) The purpose and intent of Section 223-16.B of the Zoning Code are satisfied to the maximum extent feasible. As stated above, most of the Very Steep Slopes on the Property appear to be man-made as a result of previous development of the Property, with the exception of the Bluff at the western edge of the Property. The Bluff will remain largely undisturbed as a result the Project. Thus, the purpose and intent of the Code in preventing erosion, minimizing stormwater runoff, preserving the City's underground water resources, and protecting the City's character and property values, is satisfied by the Project's avoidance of disturbance to Very Steep Slopes, particularly those that are natural and not man-made, to the maximum extent feasible.

BE IT FURTHER RESOLVED, that the Planning Board hereby grants Preliminary Subdivision Plat Approval for the Amended Project, as shown on the application materials referenced above.

BE IT FURTHER RESOLVED, that the Planning Board hereby finds that the Final Subdivision Plat will not be substantively changed from the Preliminary Subdivision Plat and hereby determines that a public hearing on the Final Plat is not required.

BE IT FURTHER RESOLVED, that the Planning Board hereby grants Final Subdivision Plat Approval, as shown on the application materials referenced above, subject to the conditions and modifications set forth herein, and also hereby grants Site Plan Approval for the Property located and collectively known as 22 Edgewater Place, as shown on the application materials enumerated above, subject to the following conditions:

A. The following conditions shall be fulfilled prior to the signing of the Final Subdivision Plat by the Chairman of the Planning Board:

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

2. The Applicant shall seek and obtain all required permits and/or approvals from the appropriate agencies for the Amended Project, including but not necessarily limited to approval from the Dutchess County Department of Health, and shall meet all conditions contained in such approvals, as required therein.

3. The comments contained in the City Engineer's letter to the Planning Board dated September 6, 2018, and all comments in any subsequent letter(s) issued, pertaining to the Subdivision Plat shall be fulfilled to the satisfaction of the City Engineer.

4. The comments contained in the City Planner's letter to the Planning Board dated September 6, 2018, and all comments in any subsequent letter(s) issued, pertaining to the Subdivision Plat shall be fulfilled to the satisfaction of the City Planner.

5. The Applicant has agreed that the trail depicted on the western side of the Property which connects to Tompkins Terrace to the North and is generally adjacent to the Bluff as depicted on the Amended Site Plan and the sidewalks south of Building 5 and along the Branch Street entry that connect to Bank Street (the "Connection Trail") are open to the public, dawn to dusk, weather dependent. A note shall be added to the plat to this effect.

6. The Applicant has further agreed that the Connection Trail may be connected, at the City's sole cost and expense, in the future to the City's proposed Greenway Trail to the west along the Metro North property (the "Greenway Trail"). The note on the plat regarding the future trail linking the future Greenway Trail to the Connection Trail shall be revised to replace the reference to a reservation of rights by the City of Beacon with a grant of easement rights to the City of Beacon and otherwise clarify the scope of the

easement to the satisfaction of the City Attorney, consistent with the Special Permit Resolution adopted by the City Council, which provides the Final Subdivision Plat shall contain language satisfactory to the City Attorney offering for dedication to the City an easement, without a legal description, for the City to locate, construct and maintain said Greenway Trail connection.

7. As per the Special Permit Resolution adopted by the City Council for this Project, regulations regarding public use of the Connection Trail were directed to be determined during Site Plan review. Accordingly, the Connection Trail is subject to the following regulations:

   i. The Connection Trail shall be open to the public from dawn to dusk, subject to weather conditions.

   ii. The Applicant has the right to close the Connection Trail due to weather conditions or other unsafe or hazardous conditions, including but not limited to construction activity on the Property.

   iii. The Connection Trail shall be used for purposes of pedestrian recreation or otherwise traveling to and from the Metro North Train Station.

   iv. The Applicant shall keep the Connection Trail in good working order for the purposes described above.

   v. The Applicant shall be solely responsible for the construction, maintenance, repair and replacement of the Connection Trail.

8. All easements shall be shown on the Final Subdivision Plat to the satisfaction of the City Engineer and City Attorney.

9. The following easement agreements, declarations of restrictive covenants or other appropriate documents shall be prepared and submitted to the City Attorney for review and shall be recorded in the Dutchess County Clerk's Office simultaneously with the Subdivision Plat, with a copy of the recorded documents submitted to the City Clerk for filing:

   i. Stormwater Easement and Maintenance Agreement

   ii. "Connection Trail" Easement Agreement or Declaration for the purpose of authorizing public access over the "Connection Trail" from Tompkins Terrace to Branch Street.

   iii. Declaration or Easement Agreement granting to the City of Beacon a 20-foot right-of-way for the construction and maintenance of a trail linking the off-site Greenway Trail to the "Connection Trail" within

the area depicted on the Final Subdivision Plat as "Limits of 'Connection Trail' Connection Area," with the exact location of the 20-foot right-of-way to be determined at a future date. The easement shall include reference to the "Limits of the 'Connection Trail' Connection Area" as shown on the Final Subdivision Plat. As per Special Permit Resolution #116-2018 adopted by the City Council for the Project, construction of the trail linkage shall be at the City of Beacon's sole cost and expense.

10. An Offer of Dedication with a description of the area to be dedicated as shown on the subdivision plat to the north of the Branch Street right-of-way shall be submitted to the City Council.

11. The proposed water lines serving the Project are being offered for dedication to the City of Beacon. An Offer of Dedication shall be submitted to the City Council along with a draft Water Line Easement Agreement. In the event the City Council does not accept dedication of the installed water lines, the Applicant shall be solely responsible for the maintenance, repair and replacement of such lines.

12. The Applicant shall post a performance bond with the City of Beacon for the public improvements which include, but are not limited to, the proposed water system, Branch Street improvements, and traffic signal timing modifications. The Applicant's engineer shall prepare a cost estimate for the work and provide to the City Engineer for review.

When the conditions above have been satisfied, four (4) sets of the above referenced plans revised as per the conditions above shall be submitted for endorsement by the Planning Board Chairman. One set of the endorsed plans will be returned to the Applicant, one set will be retained by the City Clerk, one set will be provided to the Planning Board, and one set each will be forwarded to the Building Inspector, City Engineer and City Planner.

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

1. The Applicant shall seek and obtain all required permits and/or approvals from the appropriate agencies for the Amended Project, including but not necessarily limited to approval from the Dutchess County Department of Health, and shall meet all conditions contained in such approvals, as required therein.

2. The comments contained in the City Engineer's letter to the Planning Board dated September 6, 2018, and all comments in any subsequent letter(s) issued, shall be fulfilled to the satisfaction of the City Engineer.

3. The comments contained in the City Planner's letter to the Planning Board dated September 6, 2018, and all comments in any subsequent letter(s) issued, shall be fulfilled to the satisfaction of the City Planner.

C. Prior to the issuance of a Building Permit, the following conditions shall be fulfilled:

1. The Applicant shall submit a Maintenance Agreement, License Agreement or other similar document to the City Council for review concerning the Applicant's agreement to maintain the approximately 155 foot section of the Branch Street public right-of-way which extends from the intersection of Bank Street and Branch Street westward to the point where Branch Street becomes a private right-of-way, due its use as the primary access to the Project with only one other private user (Bobbit, Parcel ID 5954-25-569966).

2. The Applicant shall establish an escrow with the City of Beacon for the inspection of the water main installation.

3. The Applicant shall establish an escrow for stormwater inspections by the City Engineer on behalf of the City of Beacon.

4. Pursuant to Section 223-41.10.A, the Applicant shall submit floor plans which provide a mix of unit types in the same proportion as all other units in the development, subject to approval by the Planning Board. The floor plans should indicate the location of each BMR unit to be provided.

5. Pursuant to Section 223-26.E of the Zoning Code, the Applicant shall be responsible for the construction of the forty-five (45) landbanked parking spaces as shown on the approved site plan referenced herein within six (6) months of the date such spaces may be deemed necessary by the Planning Board. A landbanked parking agreement shall be submitted to the City Attorney for review and approval.

D. Prior to the issuance of a Certificate of Occupancy, the following conditions shall be fulfilled:

1. The Applicant shall perform the traffic signal timing modifications, including adaptive software technology if required, for the AM Peak Hour for the Wolcott Avenue/Verplanck Avenue intersection and for the PM Peak Hour for the Wolcott Avenue/Beekman Street intersection, as set forth in the Traffic Impact Study, dated January 18, 2017, revised February 27, 2017, including any subsequent revisions thereto, as prepared by Maser Consulting, P.A, Hawthorne, N.Y., to the satisfaction of the Building Inspector, City Engineer, City Traffic Consultant and NYSDOT.

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

1. Within 6-12 months following completion and full occupancy of the Amended Project, the following intersections will be monitored by the Applicant to assess whether traffic signal warrants are satisfied at these locations:

   a. Wolcott Avenue/Tompkins Avenue

   b. Beekman Street/West Main Street

   Prior to monitoring, the Applicant shall submit a Monitoring Protocol for review and approval of the City Traffic Consultant and NYSDOT, which shall include pedestrian and bicyclist counts. If a traffic signal is warranted, the Applicant shall contribute its fair share toward the installation of a traffic signal based on the level of traffic volume the Project contributes to the intersection or other reasonable basis consistent with best practices in the industry.

2. Pursuant to NYSDEC recommendations, removal of trees greater than four (4) inches in diameter at the Project Site will take place between October 1 and April 1 during the bat hibernation period to avoid the removal of trees which may be utilized by Indiana Bats as roosting trees.

3. Any increase to the total number of units above 246 or bedrooms above 350 on the Property shall require an application to the City Council and the Planning Board to amend the Special Permit and Site Plan, respectively.

4. Based on the current and anticipated future need for park and recreational opportunities in the City of Beacon, as set forth in the analysis provided by BFJ Planning, and the demands of the future population of the Amended Project, the Planning Board hereby finds that additional recreation/parkland should be created as a condition of approval. However, the Planning Board hereby determines that recreation/parkland of adequate size and location cannot be provided on the Project Site or is otherwise impractical. Therefore, that Applicant shall pay a Recreation Fee as prescribed under Section 225-25.H of the City Code. The Planning Board hereby requires that, prior to the issuance of the first Certificate of Occupancy for each building, the Applicant shall pay a Recreation Fee for the number of units located in the subject building, as per the City's Fee Schedule in effect at the time of payment.

5. Rock removal operations shall be limited to 8 a.m. to 5 p.m., Monday through Friday. Rock removal shall not occur on any federal holidays or weekends.

6. The Building Inspector and the City Engineer shall have the right to direct the Applicant to cause the placement, cleaning and/or repair of sedimentation and erosion control devices wherever and whenever deemed necessary during construction.

7. This approval is conditioned upon compliance with all of the mitigation measures specified in the Applicant's Full EAF and related application documents, including the SEQRA Negative Declaration. The Applicant shall be responsible for the funding and/or implementation of all such identified mitigation measures. Where the terms of this resolution may be inconsistent with the Full EAF, the terms of this resolution shall be controlling.

8. The Applicant shall be responsible for the payment of all application review costs incurred by the City in its review and approval of this Amended Project. Such fees shall be paid by the Applicants within thirty (30) days of each notification by the City that such fees are due. If such fees are not paid within the thirty (30) day period, and an extension therefor has not been granted by the City, this resolution shall be rendered null and void.

9. As used herein, the term "Applicant" shall include Scenic Beacon Developments, LLC, and its heirs, successors and assigns.

10. If any of the conditions enumerated in this resolution upon which this approval is granted are found to be invalid or unenforceable, then the integrity of this resolution and the remaining conditions shall remain valid and intact.

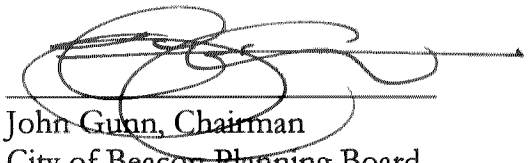
11. The approvals granted by this resolution do not supersede the authority of any other entity.

12. Conditional approval of the Final Subdivision Plat shall expire one hundred eighty (180) days from the date of the adoption of this resolution unless all items in Condition A above have been certified as completed and the Final Plat has been submitted for endorsement by the Planning Board Chairman, or unless a written request for an extension of Final Subdivision Plat Approval is granted. The Planning Board may grant ninety (90) day extensions to said time period.

13. Once the Final Subdivision Plat has been endorsed by the Planning Board Chairman, said plat must be filed in the Dutchess County Clerk's Office within sixty-two (62) days. After said filing, two (2) copies of the Final Plat certified by Dutchess County shall be submitted to the Planning Board Secretary. One (1) certified copy of the Final Plat shall be retained by the Planning Board and the other certified copy shall be transmitted to the City Clerk along with a signed copy of this resolution and proof of recording of the easement documents described above.

14. The Applicant must return for approval from the Planning Board if any changes to the endorsed plans and/or this resolution of approval are subsequently desired other than changes determined to be field changes by the Building Inspector or City Engineer.

Resolution Adopted: September 11, 2018
Beacon, New York



John Gunn, Chairman
City of Beacon Planning Board

9/17, 2018
Dated

Motion by R.Williams, seconded by P.Lambert:

Gary Barrack	Voting: Excused	Jill Reynolds	Voting: AYE
David Burke	Voting: AYE	Randall Williams	Voting: AYE
Patrick Lambert	Voting: AYE	John Gunn, Chairman	Voting: AYE
Rick Muscat	Voting: Excused		

Approved: 5-0

Received in the Office of the
City Clerk
on September 17, 2018

Agency Use Only [IfApplicable]

Project : Edgewater

Date : 7/10/18

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

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

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

Reasons Supporting This Determination:
To complete this section:

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

See attached for the reasons supporting this Amended Negative Declaration.**

**As a result of the project changes, the Proposed Action has been reclassified from a Type I Action to an Unlisted Action because the Proposed Action now includes the development of less than 250 dwelling units.

Determination of Significance - Type 1 and Unlisted Actions

SEQR Status: ☐ Type 1 ☑ Unlisted

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

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

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

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

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

There will, therefore, be no significant adverse impacts from the project as conditioned, and, therefore, this conditioned negative declaration is issued. A conditioned negative declaration may be used only for UNLISTED actions (see 6 NYCRR 617.d).

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

Name of Action: Edgewater

Name of Lead Agency: City of Beacon Planning Board

Name of Responsible Officer in Lead Agency: John Gunn

Title of Responsible Officer: Chairman

Signature of Responsible Officer in Lead Agency: Date: 7/10/2018

Signature of Preparer (if different from Responsible Officer) Date: 7/10/18

For Further Information:

Contact Person: Etha Grogan, Planning Secretary

Address: 1 Municipal Plaza, Beacon NY 12508

Telephone Number: 845-838-5002

E-mail: egrogan@cityofbeacon.org

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

Chief Executive Officer of the political subdivision in which the action will be principally located (e.g., Town / City / Village of)
Other involved agencies (if any)
Applicant (if any)
Environmental Notice Bulletin: http://www.dec.ny.gov/enb/enb.html

PRINT FULL FORM

ATTACHMENT TO
AMENDED
NEGATIVE DECLARATION
REASONS SUPPORTING DETERMINATION

APPLICATION FOR SITE PLAN, SPECIAL USE PERMIT AND SUBDIVISION APPROVAL FOR EDGEWATER

22 Edgewater Place:
Tax Grid Nos. 5954-25-581985, 5954-25-574979, 5954-25-566983, 5955-19-59002

CONCLUSIONS

On December 12, 2017, the Beacon Planning Board adopted a Negative Declaration finding that the Proposed Action would not result in any significant adverse environmental impacts.

On June 12, 2018 the Beacon Planning Board received a revised set of plans for the Project which included revisions to the site plan, in part to comply with Local Law No. 9-2018 adopted by the City Council on May 21, 2018 which amended the calculation of lot area per dwelling unit in the R1, RD and Fishkill Creek Development Districts. The revisions to the Project include but are not limited to a reduction in the total number of proposed dwelling units from 307 units (413 bedrooms) to 246 units (350 bedrooms), a reduction in the number of parking spaces, a reduction in the amount of impervious surface coverage, and approximately 140 feet of additional walkways on the west side of the Property facing the Hudson River ("Amended Project" or "Amended Proposed Action"). Additional application materials submitted with the revised plans included an updated Part 1 of the Environmental Assessment Form (EAF), dated June 11, 2018.

At the time of the Planning Board's adoption of the Negative Declaration on December 12, 2017, the Proposed Action was a Type I action pursuant to 6 NYCRR 617.4(b)(5)(iii) because the project proposes the construction of more than 250 new residential units to be connected to, public water and sewer in a city having a population of less than 150,000. The Amended Proposed Action is no longer a Type I action because it proposes a total of 246 dwelling units which falls below the threshold for Type I actions. Therefore, the Amended Proposed Action is an Unlisted action.

The Planning Board, as Lead Agency, previously held a public hearing to consider comments regarding any environmental impacts of the Proposed Action on May 9, 2017 and continued the hearing to July 11, 2017, August 8, 2017, September 12, 2017, October 12, 2017, November 14, 2017 and December 12, 2017, at which time the State Environmental Quality Review Act (SEQRA) public hearing was closed.

Based upon a review of the Updated Parts 1 and 2 of the Full EAF and all other application materials that were submitted in support of the Proposed Action and the Amended Proposed Action, along with reports from City staff and consultants, information from involved and interested agencies, and information from the public, the Planning Board, acting as Lead Agency, makes the following conclusions.

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

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

  Much of the analyses regarding impacts to land remain the same in the Amended Proposed Action as were analyzed for the Proposed Action in December 2017.

  The Project Site continues to consists of four (4) parcels which are proposed to be merged into one development parcel of approximately 12 acres. Approximately 10 acres of the Site will be disturbed for development of the Project. The Site is currently developed with two buildings and is characterized by prior soil disturbance across much of the Site. Several stockpiles of aggregate and topsoil are currently located within the central portion of the Site on either side of the remnants of an asphalt road that extends across the central portion of the Site.

  The Site is located within the RD-1.7 Zoning District. The Amended Project proposes 246 dwelling units (350 bedrooms) in seven (7) apartment buildings with associated infrastructure including utility lines, stormwater facilities, and a below-grade parking garage and on-grade parking. The number of proposed units was reduced from the 307 units (413 bedrooms) analyzed as part of the Planning Board SEQRA Negative Declaration adopted on December 12, 2017. The reduction in proposed units was required to comply with Local Law No. 9-2018 adopted by the City Council on May 21, 2018 which amended the calculation of lot area per dwelling unit in the R1, RD and Fishkill Creek Development Districts. Local Law No. 9-2018 generally requires that areas containing "Very Steep Slopes" must be deducted from the total net buildable area for the purposes of determining a property's allowable density. "Very Steep Slopes" are defined by Local Law No. 9-2018 to include slopes of 25% or more extending over a contiguous land area of at least 10,000 square feet. Based on this formula, a total area of 110,533 square feet was deducted from the lot area to determine the Property's net buildable area. This calculation resulted in a total unit count of 242 prior to adding the 10 bonus units as per the City's Affordable Work Force Housing Law, bringing the total allowable units to 252. The Amended Proposed Action proposes 246 units comprised of 25 studios, 126 1-bedroom units, 86 2-bedroom units, and 9 3-bedroom units.

Land banked parking will continue to be utilized for a portion of the proposed parking spaces to minimize land disturbance and impervious coverage. The prior plans proposed to land bank 33 parking spaces, whereas the Amended Proposed Action proposes to land bank 45 parking spaces. A total of 328 parking spaces are required pursuant to the City Zoning Code and 329 parking spaces are proposed through a mix of 238 surface parking spaces, 46 podium parking spaces and 45 land banked parking spaces.

The Project will continue to require the removal of approximately 3.2 acres of woods, which generally involves smaller trees located on the interior of the site. No wetlands or wetland buffer areas will be disturbed as a result of the Project. As described in the June 12, 2018 memorandum from Hudson Land Design, P.C. entitled, "Reduced Density Proposal – Avoidance of Newly Defined Very Steep Slopes Wherever Possible," disturbance of slopes will be avoided, minimized and stabilized using best management practices during construction and post-construction.

The revised site plan features several changes to reduce the impacts on Very Steep Slopes compared to the previous December 12, 2017 plans, including a retaining wall along the eastern parking area to maintain existing slopes near Bank Street, elimination of the parking areas behind Building 7 and along the lower access driveway, and the relocation of the western trail route to avoid slopes along the bluff overlooking the Hudson River. Due to proposed development on Very Steep Slopes, compliance with Section 223-16.B will be required for any final approvals for the Amended Project.

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

  There continue to be no unique geological features on the Property.

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

  Residential land uses are generally not associated with the discharge of contaminants into aquifers or other ground water sources. There will be no bulk storage of petroleum or chemicals on-site. The Amended Project does not include or require wastewater discharged to groundwater, and is not located within 100 feet of potable drinking water or irrigation sources.

Site disturbance will still exceed 1-acre. Therefore the full Stormwater Pollution Prevention Plan (SWPPP) that was prepared to obtain coverage under NYSDEC SPDES General Permit GP-0-15-002 will be updated to reflect the reduction in site disturbance and impervious surface coverage. The proposed stormwater practices shown on the plans and described in the SWPPP are designed in accordance with the NYSDEC Stormwater Management Design Manual, including design of an underground site stormwater conveyance system and three infiltration basins.

The Amended Project will be connected to the existing public water distribution system. The Project reviewed for the Planning Board's December 2017 Negative Declaration was expected to require 45,430 gallons of water per day at full build out based on 307 dwelling units (413 bedrooms). The Amended Project is now expected to require 38,500 gallons of water per day at full build out based on 246 dwelling units (350 bedrooms). This represents a reduction of 6,930 gallons per day. Based on a recent study completed by the City of Beacon, there is sufficient public water supply for the Amended Proposed Action.

A 6" ductile iron (DI) water main runs beneath Tompkins Terrace and an 8" DI main runs beneath Bank Street. An 8" DI spur runs into the Site beneath Branch Street from Bank Street to an existing hydrant. The Amended Project continues to propose that the Site will connect to the 8" DI pipe (DIP) on Bank Street through a 8" DIP. The 8" DIP will be brought through the Site to provide water supply to the new buildings and continue to Branch Street and connect to the 8" DIP forming a looped connection to the City water system. The Applicant continues to propose to dedicate the new 8" water main to the City, along with a 20' wide utility easement for maintenance purposes. Flow and pressure tests have confirmed adequate flow and pressure are available for the Project. New fire hydrants and periodic isolation valves are proposed within the Site. In the event the City does not accept dedication of the 8" water main and easement, the infrastructure will remain privately owned and maintained but will need to be modified to include backflow prevention devices and meters. Notably, the Amended Project does not propose to use public water for irrigation purposes. Rather, the Amended Project includes an underground cistern for harvesting roof runoff for irrigation purposes. This is consistent with the original Project that was the subject of the December 2017 Negative Declaration.

The Amended Project will be connected to the existing public sanitary sewer system. The Project reviewed for the Planning Board's December 2017 Negative Declaration was expected to require 45,430 gallons of water per day at full build out based on 307 dwelling units (413 bedrooms). The Amended Project is now expected to require 38,500 galls of water per day at full build out based on 246 dwelling units (350 bedrooms x 110 gpd/bedroom). This represents a reduction of 6,930 gallons per day. Under normal operating conditions the public sanitary sewer system is

sufficient for the Project; however the West Main Street sewer pump station may require upgrades. If it is determined that upgrades are necessary as the City's hydraulic model of the sewer system is updated, the upgrades will be implemented as necessary. The Site currently contains an existing apartment building, and a single family residence. Both structures will be demolished thereby eliminating any current inflow and infiltration (I&I) entering the City sanitary sewer system (North interceptor) from the Site.

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

For the Amended Proposed Action, the treatment of stormwater will continue to be provided for the new impervious area. The Planning Board noted in its December 2017 Negative Declaration that a Stormwater Pollution Prevention Plan (SWPPP) had been prepared in accordance with the requirements of NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity Permit No. GP-0-15-002. The final stormwater management system was proposed to consist of minimal conveyance systems which included culverts and grass-lined swales/dikes where required. It was anticipated that most, if not all perimeter diversion swales/dikes will be unnecessary and removed after installation; however, there may be a need for some as site conditions warrant. The remainder of the drainage area would remain undisturbed with natural vegetation remaining.

The Amended Project includes a reduction in impervious surface coverage. Based on this reduction, the SWPPP will be updated to include the reduction in impervious area which was contributing to each stormwater management facility (Bioretention Areas 1 &2 and Infiltration Basin 3). The reduction in impervious surface coverage will reduce overall stormwater impacts.

Further, the Amended Project continues to propose the implementation of green infrastructure practices to the greatest extent possible to reduce runoff, including avoidance of sensitive areas, minimizing grading and soil disturbance, minimizing impervious areas on internal access ways, driveways and parking areas, and use of meadow as permanent final groundcover to provide better water quality. The Amended Project continues to propose parking spaces and drive aisles that were reduced in size from 9'x20' with a 25' drive aisle to 9'x18' with a 24' drive aisle, to comply with the newly amended City Code requirements and consistency with the "Greenway Connections" and NYSDEC stormwater objectives to reduce impervious surfaces. Infiltration/bioretention practices, use of open channel

vegetated conveyance systems, and an underground cistern for roof runoff will also continue to be implemented.

As in December 2017, pretreatment practices proposed for the Amended Project include overland flow, vegetated swales, stone check dams, hydrodynamic devices, treatment practices, bioretention areas, infiltration basins and grass filter strips.

In December 2017, the proposed Bioretention areas 1 and 2 did not meet 100% Runoff Reduction Volume (RRV) due to shallow bedrock constraints. The January 2015 NYSDEC Stormwater Design Manual describes acceptable site limitations to include shall depth to bedrock. It was proposed at that time that Bioretention Area 1 will be supplemented with cisterns for roof runoff, and Bioretention Area 2 will be supplemented with a vegetated swale to maximize the Runoff Reduction Volume. As the SWPPP is updated by the Applicant to include the reduced impervious surface coverage, the City Engineer will review to confirm whether these practices remain applicable and issue his recommendations to the Planning Board. Moreover, temporary vegetation sufficient to stabilize the soil will be provided on all disturbed areas as needed to prevent soil erosion, in accordance with the SWPPP.

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

Impacts on air resulting from the Amended Proposed Action remain unchanged from the Planning Board's December 2017 Negative Declaration.

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

periods during construction of the proposed project. This is a temporary, construction-related, unavoidable impact that is not significant.

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

  Impacts on plants and animals resulting from the Amended Proposed Action remain unchanged from the Planning Board's December 2017 Negative Declaration.

  Pursuant to a March 30, 2017 letter from NYSDEC, the only state-listed species recorded within or near the Project Site is the Indiana Bat (NYS Listing: Endangered). The main impact of concern for bats is the removal of potential roost trees. The Applicant submitted a Threatened and Endangered Species Habitat Suitability Assessment Report, dated September 15, 2017, prepared by Ecological Solutions, LLC, Southbury, CT. The Report concluded "The proposed project will require the removal of approximately 3.2 acres of woods for the proposed project, which generally involves smaller trees located on the interior of the site that consist of opportunistic trees that are not prime for Indiana bat habitat." Pursuant to NYSDEC recommendations, removal of trees greater than four (4) inches in diameter at the Project Site will take place between October 1 and April 1 during the bat hibernation period to avoid the removal of trees which may be utilized by Indiana Bats as roosting trees. The Amended Proposed Action also includes shielded, cut-off light fixtures that direct light down to minimize light pollution and not interfere with potential bat foraging activities. Lastly, the Amended Proposed Action includes implementation of soil conservation and dust control best management practices, such as watering dry disturbed soil to keep dust down, and using staked, recessed silt fence and anti-tracking pads to prevent erosion and sedimentation in surface waters on the site. Also, native vegetation is proposed to enhance wildlife habitat.

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

  There continue to be no agricultural resources in the vicinity of the Site.

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

  Impacts on aesthetic resources resulting from the Amended Proposed Action remain unchanged from the Planning Board's December 2017 Negative Declaration.

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

The Local Waterfront Revitalization Program (LWRP) does not list viewsheds from the Site, or viewsheds that would be obscured by the Project. Seasonal views of the Amended Project will be experienced from the Metro North train station and from the Hudson River. The Applicant submitted an updated LWRP Consistency Statement, prepared by Aryeh Siegel, Architect, which was reviewed by the City Planner. Photo renderings of the Amended Project were also submitted by the Applicant demonstrating the possible seasonal views from these vantage points. The views remain unchanged from the December 2017 Negative Declaration. The renderings demonstrate that the tops of the buildings will be visible to some degree and the level of visibility will change with the seasonal leaf coverage. Architectural review of the proposed building roofs includes attention to the roof materials and finishes to harmonize with the existing landscape. The buildings have been designed to be set back from the property lines to allow for the maintenance of the existing wooded hillsides around the proposed development areas. The seasonal views of the Amended Project are consistent with the existing viewshed and will not result in a significant adverse environmental impact.

It is noted that the height of the proposed buildings complies with the maximum building height permitted in the RD-1.7 District. However, due to the method in which the buildings are measured under the City of Beacon Zoning Code three (3) of the seven (7) proposed buildings received a variance from the maximum number of stories permitted. Buildings 3, 4 and 6 will be 55 feet in height, consistent with the limitations in the Zoning Code, but are measured as 5 stories where a maximum of 4.5 stories is permitted.

Although there are no officially designated scenic views affected by the Amended Project, it should be noted that views of the Amended Project from publically accessible areas such as public streets, will be improved in the Amended Project as compared to the original Project reviewed for the December 2017 Negative Declaration. The reduced unit count requires 58 fewer parking spaces which resulted in additional green space, particularly at the most visible portion of the Property near the Bank Street/Tompkins Avenue intersection. Also, the parking areas behind Building 7 and along the lower driveway south of Building 4 have been eliminated.

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

Impacts on historic and archeological resources resulting from the Amended Proposed Action remain unchanged from the Planning Board's December 2017 Negative Declaration.

Pursuant to a March 30, 2017 letter from NYSDEC, the records of the statewide inventory of archaeological resources maintained by the New York State Museum and the New York State Office of Parks, Recreation and Historic Preservation (NYS OPRHP) state that the Proposed Action is located within an area considered to be sensitive with regard to archaeological resources.

A Phase 1A Archeological Investigation for the Project Site dated September 2017 was submitted for the Board's review. The Phase 1A Report provides the following conclusion:

"The project area has experienced extensive soil disturbance, initially the result of historic development followed by excavation related to the removal of the historic buildings that once occupied the site. The recent use of the property for aggregate and topsoil stockpiling have also affected the landscape. A significant portion of the property, especially along the eastern, southern and western perimeters, have slopes exceeding 12%. With the high level of disturbance and the presence of slopes greater than 12%, no further archeological investigation is recommended."

Additionally, based on its review of the Project (OPRHP Project Review #17PR06370), in a letter dated October 10, 2017, the NYS OPRHP provided the following opinion: "...[the] project will have no impact on archaeological and/or historic resources listed in or eligible for the New York State Register of Historic Places."

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

  Impacts on open space and recreation resulting from the Amended Proposed Action remain unchanged from the Planning Board's December 2017 Negative Declaration.

  The area of the Proposed Action is not designated as open space by the City of Beacon. The Proposed Action will not result in the loss of a current or future recreational resource, eliminate significant open space, or result in loss of an area now used informally by the community as an open space resource, as the Site is primarily a vacant lot, with improvements limited to an existing apartment building and a single family residence. If a park of adequate size and practical location does not address the need for additional recreation/parkland within the City, a recreation fee will be required which will be used for the future need for park and recreational opportunities in the City of Beacon.

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

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

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

A Traffic Impact Study, dated January 18, 2017, revised February 27, 2017, (the "Study") was prepared by Maser Consulting, P.A., Hawthorne, N.Y. for review by the Planning Board. The Study was prepared to identify current and future traffic operating conditions on the surrounding roadway network and to assess the potential traffic impacts of the Project. The Study was based on the prior proposal of 307 dwelling units. The Study was subject to review and comment by the Planning Board's Traffic Consultant, Creighton Manning Engineers, LLP, Albany, N.Y.

The Amended Project continues to propose access to the Site at a reconstructed driveway connection to Tompkins Avenue located between Tompkins Terrace and Bank Street. The Amended Project also continues to include an extension at the southern end of the Site to Branch Street, providing access directly to Bank Street, which connects to West Main Street to the south.

The Study established Year 2017 Existing Traffic Volumes and then projected a 2022 Design Year which took into account background traffic growth and traffic from other potential or approved developments in the area. Estimated volume from the Project during peak hours was added to the Study and the Existing, No-Build and Build Traffic Volumes were compared to roadway capacities based on procedures from the Highway Capacity Manual to determine existing and future Levels of Service (LOS) and operating conditions.

The following intersections were studied:

Wolcott Avenue (NYS Route 9D)/Tompkins Avenue/Ralph Street
Tompkins Avenue/Bank Street
Beekman Street/W.Main Street
W.Main Street/Bank Street
Wolcott Avenue (NYS Route 9D)/Verplanck Avenue
Wolcott Avenue (NYS Route 9D)/Beekman Street/West Church Street
Wolcott Avenue (NYS Route 9D)/Main Street/Municipal Place
Tompkins Avenue/Site Access
Branch Street/Bank Street

The Study concluded and the Planning Board's Traffic Consultant concurred that similar levels of service and delays will be experienced at the area intersections

under the future No-Build and Build Conditions. The majority of the intersections studied will experience a traffic volume increase of 7% or less as a result of Edgewater or the West End Lofts project recently approved by the Planning Board. The traffic projections do not take any credits for the anticipated use of Metro North and/or pedestrian trips to the train by residents of the new developments, which will likely reduce the actual peak vehicular traffic generated given the walking distance to the train station. The Applicant's traffic consultant prepared analyses for the Project as a transit-oriented development, based on the Site's proximity to the Metro-North train station. Where a mass transit credit is applied to the Project, which the Applicant's traffic consultant identified could be obtainable for the Site, the Applicant's traffic consultant concluded: "...the expected delays would be less at the study area intersections as a result of the lower vehicular traffic generation from the project."

Notwithstanding, due to anticipated delays at the Wolcott Avenue/Verplanck Avenue and Wolcott Avenue/Beekman Street intersections, traffic signal timing modifications are proposed during the AM Peak Hour for the Wolcott Avenue/Verplanck Avenue intersection and during the PM Peak Hours for the Wolcott Avenue/Beekman Street intersection, to address the project related delay increases. With these traffic signal timing modifications, the intersections will operate similar to No-Build conditions without the Project. Additionally, the intersections of Wolcott Avenue/Tompkins Avenue and Beekman Street/West Main Street are proposed to be monitored after occupancy of the Project to assess whether traffic signal warrants will be satisfied at these locations.

Related to transportation, the Amended Project also continues to propose improved pedestrian access to and from the Amended Project, upgraded pedestrian facilities along Branch Street, Bank Street and West Main Street, and pedestrian striping and signing improvements at the intersection of Bank Street and West Main Street. The Amended Project also continues to propose ample bicycle storage and a car share program for its residents.

An updated review of traffic conditions was prepared by the Applicant's consultant, Maser Consultanting, P.A. in a letter dated June 5, 2018 ("Updated Traffic Analysis"). The Updated Traffic Analysis includes the AM Peak Hour and PM Peak Hour trip generated projected for the Amended Proposed Action with 246 dwelling units instead of 307 dwelling units. As expected, the reduced density proposal results in a reduction in traffic generation. The net reduction in trip generation at the AM Peak Hour is 31 (307 units: 155 trips vs. 246 units: 124 trips) and the net reduction in trip generation at the PM Peak Hour is 35 (307 units: 188 vs. 246 units: 153). Notwithstanding the reduction in projected trip generation, the Applicant continues to propose all previously proposed traffic mitigation measures, as described above.

As with the original Study, these projections do not account for any mass transit usage by residents of the development. However, due to the Property's proximity to the Metro-North Train Station it is likely that a portion of residents will utilize mass transit thus reducing the actual trip generation.

The Planning Board's Traffic Consultant, Creighton Manning Engineers, LLP, Albany, N.Y., reviewed the Updated Traffic Analysis and in a memorandum to the Planning Board dated July 3, 2018 concurred that the Amended Project will result in fewer trips than that originally studied.

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

Impacts on energy resulting from the Amended Proposed Action remain unchanged from the Planning Board's December 2017 Negative Declaration.

It is anticipated that existing energy infrastructure will continue to serve the Amended Proposed Action and that enough surplus exists to meet potential demand. The Amended Proposed Action does not require a new, or an upgrade to any existing substation.

Several green building techniques have been incorporated into the Amended Project. The building design will allow for the ability to utilize solar energy in the future if and when it becomes feasible.

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

Impacts on noise, odor and light resulting from the Amended Proposed Action remain unchanged from the Planning Board's December 2017 Negative Declaration.

The Amended Proposed Action is not anticipated to generate any noxious odors.

Noise impacts associated with the proposed Amended Project will be limited to temporary impacts generated during construction. Temporary noise impacts associated with construction will be mitigated by limiting construction activities to the hours between 7:00 a.m. and 7:00 p.m. Soil testing was conducted onsite to investigate the depth of the soil and rock conditions. In the area of Bioretention area 1, shale bedrock was found less than 5 feet from the existing grade. In the area of Bioretention area 2, bedrock depths were found to be slightly deeper than 4 feet. If blasting becomes necessary, it will be performed in accordance with all

applicable state and local requirements. In addition, there will be no significant noise impacts post-construction.

All proposed lighting will be fully shielded and dark sky compliant. Lighting levels along the access drive will generally be low (within 0.0 – 1.0 footcandles along the majority of the access drive, with discrete areas of increased intensity under lighting fixtures (up to about 3.0 footcandles). The proposed Lighting Plan shows minimal to no light spillage over property lines. Lighting at the perimeter of the site is negligible.

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

Impacts on human health resulting from the Amended Proposed Action remain unchanged from the Planning Board's December 2017 Negative Declaration.

According to information available on the NYS DEC Site Remediation Database, the off-site contamination under the following Site Codes identified in the EAF has either completed a remediation program or does not pose a threat to development on the Edgewater Site: V00293, C314112, V00096, 314069, 546031.

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

Impacts on community plans and community character resulting from the Amended Proposed Action remain unchanged from the Planning Board's December 2017 Negative Declaration.

The Amended Project is consistent with the recommendations and goals identified in the 2007 Comprehensive Plan and 2017 Comprehensive Plan Updates regarding density of developments. The Site is the only property in the City classified in the RD-1.7 Zoning District and the number of proposed dwelling units complies with the provisions of the RD-1.7 District. The transit oriented nature of the Amended Project is consistent with the Comprehensive Plan which seeks to encourage development and allow for increased density of housing in the waterfront/train station area of the City. (2007 Comprehensive Plan, pp. 7 & 17; 2017 Comprehensive Plan Update, p. 10). The density of the Amended Project is also consistent with the surrounding neighborhood which includes the existing Tompkins Terrace and Colonial Springs residential developments.

The Amended Project will create an increased demand for community services such as emergency services and the Beacon City School District. The application was previously referred to the City of Beacon Police and Fire Departments and the general layout has not substantially changed since that time, except to create a "No Parking, Fire Zone" in front of Building 4 to address comments from the Fire Department. The Amended Project will be constructed in accordance with all applicable state and local emergency and fire safety requirements.

The December 2017 Negative Declaration adopted by the Planning Board contains a lengthy discussion of impacts to the Beacon City School District (BCSD). At that time, the Planning Board concluded that based on the information provided the Planning Board's professional planning consultant, the Applicant's professional planning consultant and the BCSD, the addition of 42 school-age children represents the most accurate application of the Rutger's ratios. The Planning Board also considered the instruction budget vs. the total budget of the BCSD in determining the impacts of the Project on the BCSD. The following chart was provided in the December 2017 Negative Declaration to show the net fiscal impacts of 42 school-age children:

	Cost/Student	*# Students*	*Add'l. Costs*	*Revenue*	*Net Impacts*
Instructional Budget	*$17,102*	*42*	*$718,284*	*$810,300*	*+ $92,016*
Total Budget	*$23,116*	*42*	*$970,872*	*$810,300*	*-$160,572*

After considering all testimony and written submissions to the Planning Board on this subject, the Planning Board determined that the addition of 42 school-age children as a result of the Project will not create a significant increased demand on the School District.

The Applicant has submitted revised analysis of the generation of school-age children resulting from the Amended Proposed Action which includes 246 dwelling units instead of 307 dwelling units. The Amended Proposed Action will produce fewer school-age children than the previously studied Proposed Action. According to the City Planner's review of the Applicant's analysis, application of the Rutgers demographic multipliers results in an estimated 36 public school-age children, compared to 42 in the former projection.

Further, based on a July 3, 2018 memorandum from the Beacon City Assessor, the estimated valuation of the Amended Proposed Action remains $34-40 million due to the overall square footage of the development remaining relatively constant despite the reduction in the number of units. Therefore, the fiscal impacts to the BCSD will similarly be less than that which was previously studied for the December 2017 Negative Declaration.

Thus, for the reasons set forth in the December 2017 Negative Declaration and updated herein, the Planning Board finds that the Amended Proposed Action will not have a significant adverse impact on community services including the BSCD.

Based upon all information before the Planning Board to-date, including the revised Full EAF, the Planning Board finds that the Amended Proposed Action will not have any significant adverse impacts upon the environment. This Amended Negative Declaration indicates that no environmental impact statement need be prepared and that the SEQRA process is complete.

Received in the Office of the
City Clerk
July 12, 2018

RESOLUTION

PLANNING BOARD
BEACON, NEW YORK

AMENDED
LOCAL WATERFRONT REVITALIZATION PROGRAM (LWRP)
CONSISTENCY DETERMINATION
EDGEWATER (22 EDGEWATER PLACE)

WHEREAS, the Beacon Planning Board received applications for Preliminary and Final Subdivision Plat Approvals (lot merger) and Site Plan Approval from Scenic Beacon Developments LLC (the "Applicant") for the construction of seven (7) apartment buildings containing a total of 307 units (413 bedrooms) following the demolition of two existing structures and the merger of four lots into a single 12-acre parcel, along with associated infrastructure including but not limited to landscaping, stormwater management facilities, lighting, off-street parking areas, and retaining walls; and (the "Project" or "Proposed Action"); and

WHEREAS, the Site is located in the Coastal Management Zone as defined by the City's Local Waterfront Revitalization Program (LWRP) and the Proposed Action includes a request for an LWRP Consistency Determination; and

WHEREAS, the subject property is located at 22 Edgewater Place and designated on the City tax maps as Parcel Nos. 5954-25-581985, 5955-19-590022, 5954-25-566983 and 5954-25-574979; and

WHEREAS, on June 12, 2018 the Beacon Planning Board received a revised set of plans for the Project which included revisions to the site plan, in part to comply with Local Law No. 9-2018 adopted by the City Council on May 21, 2018 which amended the calculation of lot area per dwelling unit in the R1, RD and Fishkill Creek Development Districts; and

WHEREAS, the revisions to the Project include but are not limited to a reduction in the total number of proposed dwelling units from 307 units (413 bedrooms) to 246 units (350 bedrooms), a reduction in the number of parking spaces, a reduction in the amount of impervious surface coverage, and approximately 140 feet of additional walkways on the west side of the Property facing the Hudson River ("Amended Project" or "Amended Proposed Action"); and

WHEREAS, the Planning Board has reviewed the Amended Project to determine whether the revisions affect its determination of consistency with the Local Waterfront

Revitalization Program ("LWRP") as set forth in its Resolution dated December 12, 2017 and its findings are set forth herein; and

WHEREAS, the subdivision is shown on the drawing, entitled, "Lot Consolidation Map Prepared for Weber Projects LLC," dated March 6, 2017, prepared by TEC Land Surveying; and

WHEREAS, the Site Plan is shown on the drawings entitled, "Site Plan Edgewater," Sheets 1-15, dated January 31, 2017, last revised June 26, 2018, prepared by Aryeh Siegal, Architect; and

WHEREAS, the application also consists of application forms, the Environmental Assessment Form (EAF) and professional studies and reports submitted to the Planning Board; and

WHEREAS, the application was referred to the Dutchess County Planning Department pursuant to New York State General Municipal Law and responses dated March 16, 2017 and June 12, 2017 were received; and

WHEREAS, on May 9, 2017, the Planning Board opened a public hearing for the purpose of soliciting comments regarding the relevant areas of environmental impact, and the SEQRA public hearing was closed on December 12, 2017; and

WHEREAS, on August 8, 2017, the Planning Board opened a public hearing on the application for Site Plan Approval, at which time all those interested were given an opportunity to be heard and the public hearing remains open; and

WHEREAS, in accordance with Section 220-6 of Chapter 220, Waterfront Consistency Review, of the City Code, all "actions to be undertaken within the City's Coastal Management Zone shall be evaluated for consistency in accordance with the.....LWRP policy standards....;" and

WHEREAS, in accordance with Section 220-5 of the Waterfront Consistency Review chapter of the City Code, it is the Lead Agency's responsibility to make the Determination of Consistency based upon the Applicant's LWRP Consistency Statement, the SEQRA documents, the application and Project documentation, and all other information that has been submitted by the Applicant, City staff, Planning Board consultants, involved and interested agencies, and the public; and

WHEREAS, the Site was rezoned to RD-1.7 after the adoption of the LWRP and therefore several references to an RD-6 zoning designation for the Site (known as the Prizzi property) are no longer applicable, however, it is noted that the LWRP identifies a potential for development of the property as townhouses;

Amended Local Waterfront Revitalization Program (LWRP) Consistency Determination - Edgewater

WHEREAS, the Planning Board adopted a Negative Declaration pursuant to SEQRA on December 12, 2017; and

WHEREAS, on July 10, 2018 after taking a "hard look" at each of the relevant areas of environmental concern through review of the Revised Environmental Assessment Form and all associated materials prepared in connection with the Amended Proposed Action the Planning Board adopted an Amended Negative Declaration pursuant to SEQRA finding that the Amended Proposed Action does not result in any significant adverse environmental impacts.

NOW, THEREFORE, BE IT RESOLVED, that there are a number of LWRP policies which do not apply to the Amended Project which policies are those that are contained in the LWRP but not listed below, and the Planning Board hereby makes the following consistency findings with respect to the LWRP policies which apply to the Amended Project:

POLICY 5

Encourage the location of development in areas where public services and facilities essential to such development are adequate, except when such development has special functional requirements or other characteristics which necessitates its location in other coastal areas.

As noted in the SEQRA Amended Negative Declaration for the Project, the Project will be connected to the existing public water distribution system and public sanitary sewer system.

POLICY 13

The construction or reconstruction of erosion protection structures shall be undertaken only if they have a reasonable probability of controlling erosion for at least thirty years as demonstrated in design and construction standards and/or assured maintenance or replacement programs.

There will be no measurable increase erosion or flooding generated by the Amended Project. In December 2017, the Planning Board noted in its LWRP Consistency Determination that the proposed stormwater practices shown on the plans and described in the SWPPP have been designed in accordance with the NYSDEC Stormwater Management Design Manual. The Planning Board further noted that a Stormwater Pollution Prevention Plan (SWPPP) had been prepared in accordance with the requirements of NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity Permit No. GP-0-15-002. The final stormwater management system was proposed to consist of minimal conveyance systems which included culverts and grass-lined swales/dikes where required. It was anticipated that most, if not all perimeter diversion swales/dikes will be unnecessary and removed after installation;

however, there may be a need for some as site conditions warrant. The remainder of the drainage area would remain undisturbed with natural vegetation remaining.

The Amended Project includes a reduction in impervious surface coverage. Based on this reduction, the SWPPP will be updated to include the reduction in impervious area which was contributing to each stormwater management facility (Bioretention Areas 1 &2 and Infiltration Basin 3). The reduction in impervious surface coverage will reduce overall stormwater impacts.

Further, the Amended Project continues to propose the implementation of green infrastructure practices to the greatest extent possible to reduce runoff, including avoidance of sensitive areas, minimizing grading and soil disturbance, minimizing impervious areas on internal access ways, driveways and parking areas, and use of meadow as permanent final groundcover to provide better water quality. The Amended Project continues to propose parking spaces and drive aisles that were reduced in size from 9'x20' with a 25' drive aisle to 9'x18' with a 24' drive aisle, to comply with the newly amended City Code requirements and consistency with the "Greenway Connections" and NYSDEC stormwater objectives to reduce impervious surfaces.

Infiltration/bioretention practices, use of open channel vegetated conveyance systems, and an underground cistern for roof runoff will also continue to be implemented.

As in December 2017, pretreatment practices proposed for the project include overland flow, vegetated swales, stone check dams, hydrodynamic devices, treatment practices, bioretention areas, infiltration basins and grass filter strips.

In December 2017, the proposed bioretention areas 1 and 2 did not meet 100% Runoff Reduction Volume due to shallow bedrock constraints. The January 2015 NYSDEC Stormwater Design Manual describes acceptable site limitations to include shall depth to bedrock. It was proposed at that time that Bioretention Area 1 will be supplemented with cisterns for roof runoff, and Bioretention Area 2 will be supplemented with a vegetated swale to maximize the Runoff Reduction Volume. As the SWPPP is updated by the Applicant to include the reduced impervious surface coverage, the City Engineer will review to confirm whether these practices remain applicable and issue his recommendations to the Planning Board. Moreover, temporary vegetation sufficient to stabilize the soil will be provided on all disturbed areas as needed to prevent soil erosion, in accordance with the SWPPP.

POLICY 14

Activities and development, including the construction or reconstruction of erosion protection structures, shall be undertaken so that there will be no measurable increase in erosion or flooding at the site of such activities or development or at other locations.

Amended Local Waterfront Revitalization Program (LWRP) Consistency Determination - Edgewater

The location of the proposed buildings has not changed from that which was reviewed for the December 2017 LWRP Consistency Determination. The proposed buildings have been sited on the flattest area of the Site and slopes and disturbed soils will be appropriately stabilized as described in the SWPPP both during and post-construction.

POLICY 25
Protect, restore and enhance natural and manmade resources which are not identified as being of state-wide significance, but which contribute to the scenic quality of the coastal area.

The explanation of Policy 25 in the LWRP states that "the scenic qualities of Beacon results from the combination of clustered buildings (many historic) and wooded hillsides against the backdrop of the Hudson Highlands. The height, bulk, scale of future buildings will be important factors in maintaining the character of the City, as will the preservation of the wooded hillsides that intersperse the developed areas."

There is no physical change to the overall layout, massing and exterior design of the proposed buildings in the Amended Project as compared to that reviewed by the Planning Board in issuing its December 2017 LWRP Consistency Determination.

The Amended Project remains consistent with Policy 25 in its condensing and clustering of the footprint of the buildings and impervious surfaces to achieve the clustered effected recommended by the LWRP. The buildings are setback from the property lines, which allows for the maintenance of the existing wooded hillsides around the proposed developed areas.

POLICY 33
Best management practices will be used to ensure the control of stormwater runoff and combined sewer overflows draining into coastal waters.

See Policy 13.

POLICY 33A
Regulate construction in steeply sloped and high erosion areas to control excessive stormwater runoff.

See Policy 13.

POLICY 37
Best management practices will be utilized to minimize the nonpoint discharge of excess nutrients, nonpoint discharge of excess nutrients, organics and eroded soils into coastal waters.

Amended Local Waterfront Revitalization Program (LWRP) Consistency Determination - Edgewater

See Policy 13.

POLICY 38
The quality and quantity of surface water and groundwater supplies will be conserved and protected particularly where such waters constitute the primary or sole source of water supply.

Residential land uses are generally not associated with the discharge of contaminants into aquifers or other ground water sources. There will be no bulk storage of petroleum or chemicals on-site. The Amended Project does not include or require wastewater discharged to groundwater, and is not located within 100 feet of potable drinking water or irrigation sources.

The Amended Project will be connected to the existing public water distribution system. The Project reviewed for the Planning Board's December 2017 LWRP Consistency Determination was expected to require 45,430 gallons of water per day at full build out based on 307 dwelling units (413 bedrooms). The Amended Project is now expected to require 38,500 gallons of water per day at full build out based on 246 dwelling units (350 bedrooms x 110 gpd/bedroom).

Notably, the Amended Project does not propose to use public water for irrigation purposes. Rather, the Amended Project includes an underground cistern for harvesting roof runoff for irrigation purposes. This is consistent with the original Project that was the subject of the December 2017 LWRP Consistency Determination.

BE IT FURTHER RESOLVED, that the Planning Board hereby determines that the Amended Project is entirely consistent with the LWRP policies which apply to the Project.

Resolution Adopted: July 10, 2018
Beacon, New York

John Gunn, Chairman
City ~~of Beacon~~ Planning Board

7/10/2018, 2018
Dated

motion by P. Lambert, seconded by R. Muscat:

Gary Barrack AYE
David Burke EXCUSED
Patrick Lambert AYE
Rick Muscat AYE
Jill Reynolds NO
Randall Williams AYE
John Gunn AYE

Received in the Office of the City Clerk
July 12, 2018

Received by office
of the City Clerk
3/13/2024

RESOLUTION

PLANNING BOARD
BEACON, NEW YORK

PRELIMINARY AND FINAL INTERNAL PROPERTY SUBDIVISION PLAT APPROVAL
FOR SCENIC BEACON DEVELOPMENTS, LLC (18-30 Edgewater Place)

Parcel ID# 5955-19-590022

WHEREAS, the Beacon Planning Board received from Scenic Beacon Developments, LLC ("Applicant") an application for Internal Property Subdivision Approval pursuant to City of Beacon Zoning Code §223-25.C(3) (the "Applicant"), for a 7-lot internal property subdivision ("Project"), on property located at 18-30 Edgewater Place in the Designed Residence Zoning District ("RD-1.7") and designated on the Tax Map of the City of Beacon as Parcel ID# **5955-19-590022** (the "Property"); and

WHEREAS, by Resolution dated September 11, 2018 the Applicant received Site Plan and Subdivision (lot merger) approvals for the construction of seven buildings containing 246 apartments including 25 workforce housing units (350 bedrooms total) (the "Approvals"); and

WHEREAS, the Approvals were preceded by the Planning Board's issuance of a consistency determination pursuant to the Local Waterfront Revitalization Program ("LWRP") on July 10, 2018, the Planning Board's adoption of an Amended Negative Declaration pursuant to the State Environmental Quality Review Act ("SEQRA") on July 10, 2018, the City Council's approval of a Special Use Permit to allow multifamily housing, and the approval of several area variances by the Zoning Board of Appeals; and

WHEREAS, pursuant to Zoning Code §223-25.C(3), the Applicant now proposes to place Buildings 1, 2, 5, 6, and 7 on individual lots, and Buildings 3 and 4 would be on a single lot because the buildings are integrated structures; and

WHEREAS, Proposed Lot 1 would consist of 453,387 square feet (10.408 acres) consisting of common and/or shared areas, facilities, and amenities, Proposed Lot 2 would consist of 10,200 square feet (0.234 acres) containing one building, Proposed Lot 3 would consist of 10,200 square feet (0.234 acres) containing one building, Proposed Lot 4 would consist of 20,195 square feet (0.464 acres) containing Buildings 3 and 4 which are integrated structures, Proposed Lot 5 would consist of 8,500 square feet (0.195 acres) containing one building, Proposed Lot 6 would consist of 10,200 square feet (0.234 acres) containing one building, and Proposed Lot 7 would consist of 8,500 square feet (0.195 acres) containing one building; and

WHEREAS, the Planning Board is the approval authority for the Internal Property Subdivision pursuant to the City of Beacon Code §195-2 and Zoning Code §223-25.C(3); and

WHEREAS, Zoning Code §223-25.C(3) authorizes the Planning Board, after completion of Site Plan review, to subdivide one or more of the lots or buildings within a project that will continue to be controlled by an approved Site Plan; and

WHEREAS, the proposed Internal Property Subdivision will not change the scope of development on the Property which will continue to be controlled by the Approved Site Plan, which was approved by the Planning Board by Resolution dated September 11, 2018; and

WHEREAS, informal comments received from the Dutchess County Department of Behavioral & Community Health ("DCDOH") note that due to the proposed subdivision the sewage collection system for the property which was previously proposed to remain private will now be required to be public (i.e. dedicated to the City of Beacon) or a transportation corporation will need to be formed by the Applicant pursuant to the provisions of the NYS Transportation Corporation Law; and

WHEREAS, the application consists of application forms, correspondence and plans submitted to the Planning Board; and

WHEREAS, the proposed Internal Property Subdivision is shown on the drawings entitled "Edgewater – Preliminary Subdivision Plat prepared for Edgewater," prepared by Brendan Johnson, PLS, Johnson Surveying, LLC, dated January 24, 2024, and "Preliminary Subdivision Plat Edgewater," prepared by Hudson Land Design Professional Engineering, P.C., dated December 27, 2023; and

WHEREAS, the development of the Property as set forth on the approved Site Plan was the subject of an environmental review conducted by the Planning Board as Lead Agency pursuant to the New York State Environmental Quality Review Act ("SEQRA") which concluded with the Planning Board's adoption of a Negative Declaration on December 12, 2017, amended July 10, 2018; and

WHEREAS, the requested Internal Property Subdivision is an additional permit/approval sought as part of the Proposed Action previously evaluated by the Planning Board under SEQRA, and does not create new or different adverse environmental impacts, therefore the Planning Board's Amended Negative Declaration dated July 10, 2018 fully addresses the whole action, including the proposed subdivision approval, and no further SEQRA review is required; and

WHEREAS, the Planning Board reviewed the application at its meetings on February 14, 2024 and March 12, 2024 and considered comments by its consulting engineer and planner; and

WHEREAS, on March 12, 2024 the Planning Board opened a duly noticed public hearing on the application for Subdivision approval concerning the Proposed Action, at which time all those interested were given an opportunity to be heard and the public hearing was closed on March 12, 2024; and

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

NOW, THEREFORE, BE IT RESOLVED, that the Planning Board hereby grants Preliminary Internal Property Subdivision Plat Approval for the Project, as shown on the application materials enumerated above.

BE IT FURTHER RESOLVED, that the Planning Board hereby finds that the Final Internal Property Subdivision Plat will not be substantively changed from the Preliminary Subdivision Plat and hereby determines that a public hearing on the Final Plat is not required.

BE IT FURTHER RESOLVED, that the Planning Board hereby grants Final Internal Property Subdivision Plat Approval to the Project, as shown on the application materials enumerated above, subject to the following conditions and modifications set forth below and any other requirements which must be met by law:

A. The following conditions shall be fulfilled prior to the signing of the Final Internal Property Subdivision Plat by the Chairperson of the Planning Board:

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

2. The Applicant shall seek and obtain all required permits and/or approvals from the appropriate agencies for the Project, including but not necessarily limited to approval from the Dutchess County Department of Behavioral & Community Health, and shall meet all conditions contained in such approvals, as required therein.

3. The comments contained in the City Engineer's letter to the Planning Board dated March 8, 2024, and all comments in any subsequent letter(s) issued, shall be fulfilled to the satisfaction of the City Engineer.

4. The Applicant shall either (i) form a Transportation Corporation for sewer works pursuant to the provisions of the NYS Transportation Law, or (ii) submit to the City an Offer of Cession and Dedication for the sewer infrastructure in a form acceptable to the City Attorney, to be recorded in the Dutchess County Clerk's Office, and satisfactory assurance delivered to the City Attorney that those documents shall be recorded in the Dutchess County Clerk's Office in appropriate order in relationship to the timing of the filing of the Internal Property Subdivision Plat, and that a copy of the

documents with proof of their recording will be promptly submitted to the Planning Board Secretary for filing with a copy to the City Attorney. In the event the City of Beacon City Council declines to accept dedication of the sewer infrastructure, the Applicant shall form a Transportation Corporation, unless otherwise required by the DCDOH.

5. All existing and proposed easements, restrictive covenants and related notes, as applicable, shall be shown on the Final Internal Property Subdivision Plat to the satisfaction of the City Engineer and City Attorney. Proposed easement agreements, declarations of restrictive covenants or other appropriate documents corresponding with the easements and notes shown on the Final Internal Property Subdivision Plat shall be prepared, as applicable, and submitted to the City Attorney for review as to form, and satisfactory assurance delivered to the City Attorney that those documents shall be recorded in the Dutchess County Clerk's Office in appropriate order in relationship to the timing of the filing of the Internal Property Subdivision Plat, and that a copy of the documents with proof of their recording will be promptly submitted to the Planning Board Secretary for filing with a copy to the City Attorney.

6. The Applicant shall post a performance guaranty with the City of Beacon for any public sanitary sewer improvements. The Applicant's engineer shall prepare a cost estimate for the work and provide to the City Engineer for review.

7. The Applicant shall establish an escrow with the City of Beacon for the City's construction inspection of any public sanitary sewer installation.

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

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

1. All conditions, set forth in the any previous Planning Board Resolution related to the Property, and not explicitly superseded herein, shall remain in full force and effect. Proposed Lots 1 through 7 shall continue to be controlled by the Site Plan approved by the Planning Board on September 11, 2018 and any approved amendment thereof. The approval granted herein does not authorize any development within any Lot other than what is shown on the Approved Site Plan.

2. Pursuant to Zoning Code §223-25.C(3), the Zoning Code's Schedule of Dimensional Regulations shall apply to the overall site area covered by the Approved Site Plan, whether or not the same is or will continue to be under one ownership.

3. The Building Inspector and the City Engineer shall have the right to direct the Applicant to cause the placement, cleaning and/or repair of sedimentation and erosion control devices wherever and whenever deemed necessary during construction.

4. The Applicant shall be responsible for the payment of all application review costs incurred by the City in its review and approval of this project. Such fees shall be paid by the Applicants within thirty (30) days of each notification by the City that such fees are due. If such fees are not paid within the thirty (30) day period, and an extension therefor has not been granted by the City, this resolution shall be rendered null and void.

5. As used herein, the term "Applicant" shall include the Applicant and the Applicant's heirs, successors and assigns, and where applicable its contractors and employees.

6. If any of the conditions enumerated in this resolution upon which this approval is granted are found to be invalid or unenforceable, then the integrity of this resolution and the remaining conditions shall remain valid and intact.

7. The approval granted by this resolution does not supersede the authority of any other entity.

8. The Applicant must return for approval from the Planning Board if any changes to the endorsed plans and/or this resolution of approval are subsequently desired other than changes determined to be field changes by the Building Inspector or City Engineer. The Planning Board, in its discretion, shall determine the appropriate procedures for consideration of the proposed revision, and whether such revision is material enough to require further environmental analysis and/or further project review, as the Board may deem appropriate.

9. Conditional approval of the Final Internal Property Subdivision Plat shall expire one hundred eighty (180) days from the date of the adoption of this Resolution unless all items in Condition A above have been certified as completed and the Final Plat has been submitted for endorsement by the Planning Board Chairperson, or unless a written request for an extension of

Final Internal Property Subdivision Plat Approval is granted. The Planning Board may grant ninety (90) day extensions to said time period.

10. Once the Final Internal Property Subdivision Plat has been endorsed by the Planning Board Chairperson, said Plat must be filed in the Dutchess County Clerk's Office within sixty-two (62) days. After said filing, two (2) copies of the Final Plat certified by Dutchess County and showing the assigned Filed Map number shall be submitted by the Applicant to the Planning Board Secretary. One (1) certified copy of the Final Plat shall be retained by the Planning Board and the other certified copy shall be transmitted to the City Clerk along with a signed copy of this Resolution and proof of recording of the easement(s) and other documents described above.

Resolution Adopted: March 12, 2024
Beacon, New York

John Gunn, Chairperson
City of Beacon Planning Board

MARCH 12th, 2024
Dated

Motion by Mr. Warner, seconded by Ms. Quiana:

Kevin Byrne	Voting AYE	Leonard Warner	Voting AYE
Karen Quiana	Voting AYE	J. Randall Williams	Voting EXCUSED
Donna Francis	Voting AYE	John Gunn, Chairperson	Voting AYE
David Jensen	Voting AYE		

Approved: 6-0
Denied:

Doc not in DMS

CITY OF BEACON
CITY COUNCIL

Resolution No. 116 of 2018

RESOLUTION GRANTING A SPECIAL USE PERMIT FOR EDGEWATER (22 EDGEWATER PLACE)

WHEREAS, Scenic Beacon Developments, LLC (the "Applicant") submitted an application for a Special Use Permit to construct multifamily housing on property located and collectively known as 22 Edgewater Place, located in the RD-1.7 Zoning District. Said premise being known and designated on the City Tax Map as Parcel IDs **5954-25-581985, 5955-19-590022, 5954-25-566983 and 5954-25-574979**; and

WHEREAS, the City Council is the approval authority for the Special Use Permit pursuant to City of Beacon Zoning Code §223-18; and

WHEREAS, the Special Use Permit application was submitted by the Applicant in conjunction with its application for Preliminary and Final Subdivision Plat approvals (lot merger) and Site Plan approval for the construction of seven (7) apartment buildings originally containing a total of 307 units (413 bedrooms) following the demolition of two existing structures and the merger of four lots into a single 12-acre parcel, along with associated infrastructure including but not limited to landscaping, stormwater management facilities, lighting, off-street parking areas, and retaining walls; and (the "Project" or "Proposed Action"); and

WHEREAS, the Subdivision is shown on the drawing, entitled, "Lot Consolidation Map Prepared for Weber Projects LLC," dated March 6, 2017, prepared by TEC Land Surveying; and

WHEREAS, the Site Plan is shown on the drawings entitled, "Site Plan Edgewater," Sheets 1-15, dated January 31, 2017, last revised June 26, 2018, prepared by Aryeh Siegal, Architect; and

WHEREAS, the original Proposed Action was a Type I action pursuant to the New York State Environmental Quality Review Act ("SEQRA"); and

WHEREAS, the Planning Board, as Lead Agency, opened a public hearing to consider comments regarding any environmental impacts of the Proposed Action on May 9, 2017 and continued the hearing to July 11, 2017, August 8, 2017, September 12, 2017, October 12, 2017, November 14, 2017 and December 12, 2017, at which time the (SEQRA)

public hearing was closed; and

WHEREAS, after taking a "hard look" at each of the relevant areas of environmental concern through review of the Environmental Assessment Form and all associated materials prepared in connection with the Proposed Action, the Planning Board adopted a Negative Declaration on December 12, 2017; and

WHEREAS, the Planning Board determined that the Proposed Project is entirely consistent with the Local Waterfront Revitalization Program ("LWRP") policies which apply to the Project; and

WHEREAS, on January 17, 2018, the Zoning Board of Appeals opened and closed a public hearing on the Applicant's variance application to (1) allow three proposed buildings to have 5 stories where the maximum building height is 4.5 stories pursuant to City Code § 223-17.C/223 Attachment 1:6; (2) allow four proposed buildings to exceed 36 units where the maximum number of dwelling units per building is 36 units pursuant to the City Code § 223-17.C/223 Attachment 1:6; and (3) allow less than 30 feet between buildings where the minimum distance between buildings on the same lot is 30 feet pursuant to City Code § 223-17.C/223 Attachment 1:6; and

WHEREAS, on January 17, 2018, the Zoning Board of Appeals granted the Applicant's variance requests, with conditions; and

WHEREAS, on May 21, 2018, the City Council adopted Law No. 9-2018 which amended the calculation of lot area per dwelling unit in the R1, RD and Fishkill Creek Development Districts;

WHEREAS, Local Law No. 9-2018 provides that for all development proposals involving a total lot area of more than three acres within the R1, RD and Fishkill Creek Development Districts, the lot area per dwelling unit calculation shall first deduct any lot area covered by surface water, within a federal regulatory floodway, within a state or federally regulated wetland, or with existing, pre-development very steep slopes of 25 percent or more; and

WHEREAS, application of Local Law No. 9-2018 resulted in a total area of 110,533 square feet being deducted prior to determining the net buildable area for the Project.

WHEREAS, on June 12, 2018 the Beacon Planning Board received a revised set of plans for the Project which included revisions to the Site Plan, in part to comply with Local Law No. 9-2018; and

WHEREAS, the revisions to the Project include but are not limited to a reduction in the total number of proposed dwelling units from 307 units (413 bedrooms) to 246 units (350 bedrooms) which is a reduction of 61 units or approximately 20%, a reduction in the number of parking spaces by approximately 15%, reduction in water usage by 15%, a reduction in school age children by 13%, a reduction in the amount of impervious surface coverage, while increasing the area to remain as green space and not developed and

providing approximately 140 feet of additional walkways on the west side of the Property facing the Hudson River, beyond what was originally proposed ("Amended Project" or "Amended Proposed Action"); and

WHEREAS, the Project will provide twenty five (25) Below Market Rate Housing as per the City Code; and

WHEREAS, the Amended Project is no longer a Type I action because it was amended to include 246 total dwelling units which falls below the threshold for Type I actions; and

WHEREAS, the Amended Project is therefore an Unlisted Action pursuant to SEQRA; and

WHEREAS, based upon a review of the Updated Parts 1 and 2 of the Full EAF and all other application materials that were submitted in support of the Proposed Action and the Amended Proposed Action, along with reports from City staff and consultants, information from involved and interested agencies, and information from the public, the Planning Board adopted an Amended Negative Declaration on July 10, 2018 and determined that the Amended Proposed Action will not have any significant adverse impacts upon the environment; and

WHEREAS, on July 10, 2018 the Planning Board also determined that the Amended Project is entirely consistent with the Local Waterfront Revitalization Program ("LWRP") policies which apply to the Amended Project; and

WHEREAS, on July 16, 2018, the City Council opened a public hearing on the Special Use Permit application in connection with the Amended Project, at which time all interested persons were given the opportunity to be heard and the public hearing was closed on July 16, 2018; and

WHEREAS, the City Council has reviewed the application for a Special Use Permit against the standards for a Special Use Permit set forth in the City of Beacon Zoning Code Sections 223-18 and finds the proposal complies with this section of the Zoning Law, as set forth below.

NOW, THEREFORE, BE IT RESOLVED, that the City Council hereby finds pursuant to Sections 223-18 of the City Zoning Code:

1. The location and size of the use, the nature and intensity of the operations involved in or conducted in connection with it, the size of the site in relation to it and the location of the site with respect to streets giving access to it are such that it will be in harmony with the appropriate and orderly development of the district in which it is located.

2. The project is within walking distance of the Beacon Train Station and will provide economic benefits of pedestrian traffic to Main Street, while not significantly increasing vehicular impacts on City streets.

3. The Project includes a balanced mix of housing types and sizes, including 25 below-market-rate units in accordance with the City's Affordable Workforce Housing Law.

4. The location, nature and height of buildings, walls and fences and the nature and extent of the landscaping on the site are such that the use will not hinder or discourage the appropriate development use of adjacent land and buildings.

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

6. The proposed Amended Project is compatible with other multifamily developments in the surrounding neighborhood, which include the existing Tompkins Terrace and Colonial Springs residential developments.

7. Parking areas will be of adequate size for the particular use and property located and suitably screened from the adjoining residential uses, and the entrance and exit drives shall be laid out so as to achieve maximum safety.

BE IT FURTHER RESOLVED, that the City Council grants a Special Use Permit to Scenic Beacon Developments, LLC to construct 246 units of multifamily housing on property located and collectively known as 22 Edgewater Place, located in the RD-1.7 Zoning District, and designated on the City Tax Map as Parcel IDs 5954-25-581985, 5955-19-590022, 5954-25-566983 and 5954-25-574979, upon the following conditions:

1. Prior to the issuance of a Building Permit, the Applicant shall obtain Subdivision and Site Plan approval from the City of Beacon Planning Board.

2. No permits shall be issued until the Applicant has paid to the City all applicable fees and professional review fees incurred in connection with review of this Application.

3. Any increase to the total number of units above 246 or bedrooms above 350 on the Property shall require an application to the City Council and the Planning Board to amend the Special Permit and Site Plan, respectively.

4. The Applicant has agreed that the trail depicted on the western side of the property which connects to Tompkins Terrace to the North and is generally adjacent to the Bluff as depicted on the Amended Site Plan and the sidewalks south of Building 5 and along the Branch Street entry that connect to Bank Street (the "Connection Trail")are open to the public, dawn to dusk, weather dependent, and that such trail may be connected, at the City's sole cost and expense, in the future to the City's proposed Greenway Trail to the west along the Metro North property (the "Greenway Trail"). Regulations regarding public

use of the Connection Trail will be determined during Site Plan review. The specific location of the connection between the Greenway Trail and the Connection Trail cannot presently be identified by the City. Therefore, the Amended Site Plan shall be designed to accommodate a pedestrian connection to the Metro-North northern parking lot immediately to the west or any proposed development on such property (City Tax Map as Parcel IDs 5954-25-549980 and 5954-33-549777), and thereby also more directly connect to Train Station and any future northern extension of the Hudson River Greenway Trail through the Metro-North parking area. The Subdivision shall contain language satisfactory to the City Attorney offering for dedication to the City an easement, without a legal description, to locate, construct and maintain said Greenway Trail connection.

5. A copy of this Resolution shall be attached to the Certificate of Occupancy.

6. As used herein, the term "Applicant" shall include its heirs, successors and assigns.

7. In accordance with Section 223-18.F(1)(b)(2) of the Zoning Law, this Special Permit approval authorizes only the particular use specified in the permit and shall expire if:

   a. A bona fide application for a Building Permit is not filed within one (1) year of the issuances of this Special Permit approval; or

   b. If all required improvements are not made within two (2) years from the date of issuance of the Building Permit; or

   c. If said use ceases for more than six (6) months for any reason.

8. In accordance with Section 223-18.F(2) of the Zoning Law, the City Council may grant one (1) or more extensions of up to six (6) months each, to (a) complete the conditions of approval for the special permit use, upon a finding that the applicant is working toward completion of such conditions with due diligence and has offered a reasonable explanation of its inability to complete such improvements and file a bona fide application for a building permit, and (b) to complete construction of the improvements, upon a finding that the Applicant is prosecuting construction with due diligence and has offered a reasonable explanation of its inability to complete the Project. The City Council may impose such conditions as it deems appropriate upon the grant of any extension. The granting of an extension of time shall not require a public hearing.

9. The Building Inspector may revoke this Special Permit approval where it is found that the use of the premises does not conform with the limitations and conditions contained in the Special Permit approval.

10. If any of the conditions enumerated in this resolution upon which this approval is granted are found to be invalid or unenforceable, then the integrity of this resolution and the remaining conditions shall remain valid and intact.

11. The approvals granted by this resolution do not supersede the authority of any other entity.

Dated: August 6, 2018

Resolution No. 116 of 2018			**Date: August 6, 2018**				
☐ **Amendments**						☐ **2/3 Required.**	
☐ **Not on roll call.**			☐ **On roll call**			☐ **3/4 Required**	
Motion	Second	Council Member	Yes	No	Abstain	Reason	Absent
		Terry Nelson	x				
		Jodi McCredo		x			
x		**George Mansfield**	x				
		Lee Kyriacou	x				
	x	**John Rembert**		x			
		Amber Grant					x
		Mayor Randy J. Casale	x				
		Motion Carried	x				

Received In the Office of the
City Clerk
August 7, 2018

5102/11/640091v1 8/3/18

2018-01

City of Beacon
Zoning Board of Appeals

RESOLUTION

WHEREAS, an application has been made to the City of Beacon Zoning Board of Appeals by **Scenic Beacon Developments**, LLC (the "Applicant") to (1) allow three proposed buildings to have 5 stories where the maximum building height is 4.5 stories pursuant to City § 223-17.C/223 Attachment 1:6; (2) allow four proposed buildings to exceed 36 units where the maximum number of dwelling units per building is 36 units pursuant to the City Code § 223-17.C/223 Attachment 1:6; and (3) allow less than 30 feet between buildings where the minimum distance between buildings on the same lot is 30 feet pursuant to City Code § 223-17.C/223 Attachment 1:6, in connection with the construction of seven apartment buildings containing a total of 307 units (413 bedrooms) on property located and collectively known as 22 Edgewater Place, located in the RD-1.7 Zoning District. Said premise being known and designated on the City Tax Map as Pace IDs **5954-25-581985, 5955-19-590022, 5954-25-566983 and 5954-25-574979**; and

WHEREAS, the Applicant is proposing to demolish two existing buildings, construct seven (7) apartment buildings containing 307 units on 12.009 acres in the RD-1.7 Zoning District (the "Proposed Project"); and

WHEREAS, the Proposed Project requires variance approvals from the Zoning Board of Appeals, Special Permit approval from the City Council and Site Plan approval from the Planning Board; and

WHEREAS, the Proposed Action is a Type I action pursuant to the New York State Environmental Quality Review Act ("SEQRA"); and

WHEREAS, the Planning Board, as Lead Agency, opened a public hearing to consider comments regarding any environmental impacts of the Proposed Action on May 9, 2017 and continued the hearing to July 11, 2017, August 8, 2017, September 12, 2017, October 12, 2017, November 14, 2017 and December 12, 2017, at which time the (SEQRA) public hearing was closed; and

WHEREAS, after taking a "hard look" at each of the relevant areas of environmental concern through review of the Environmental Assessment Form and all associated materials prepared in connection with the Proposed Action, the Planning Board adopted a Negative Declaration on December 12, 2017; and

WHEREAS, the Planning Board determined that the Proposed Project is entirely consistent with the Local Waterfront Revitalization Program ("LWRP") policies which apply to the Project; and

WHEREAS, the Zoning Board of Appeals held a duly advertised public hearing on

the application on March 21, 2017 and continued the public hearing to December 19, 2017, at which time all those wishing to be heard on the application were given such opportunity; and

WHEREAS, the Board closed the public hearing on December 19, 2017; and

WHEREAS, pursuant to New York State General City Law § 81-b(4) and Zoning Code Section 223.55(C)(2)(b), when deciding the request for an area variance:

> In making its determination, the Zoning Board of Appeals shall take into consideration the benefit to the applicant if the variance is granted, as weighed against the detriment to the health, safety and welfare of the neighborhood or community by such grant. In making such a determination, the board shall also consider:
>
> [1] Whether an undesirable change will be produced in the character of the neighborhood or a detriment to nearby properties will be created by the granting of the area variance;
>
> [2] Whether the benefit sought by the applicant can be achieved by some method, feasible for the applicant to pursue, other than an area variance;
>
> [3] Whether the requested area variance is substantial;
>
> [4] Whether the proposed variance will have an adverse effect or impact on the physical or environmental conditions in the neighborhood or district; and
>
> [5] Whether the alleged difficulty was self-created, which consideration shall be relevant to the decision of the Board of Appeals, but shall not necessarily preclude the granting of the area variance.

WHEREAS, pursuant to Zoning Code Section 223.55(C)(2)(c) "the Board of Appeals, in granting of area variances, shall grant the minimum variance that it shall deem necessary and adequate and at the same time preserve and protect the character of the neighborhood and the health, safety and welfare of the community."

WHEREAS, based upon the Record before it and after viewing the premises and neighborhood concerned and upon considering each of the factors set forth in Section 223.55(C)(2)(b)[1]-[5] of the City of Beacon Code, the Zoning Board finds with respect to each of the requested variances as follows:

1. The variances will not produce an undesirable change in the character of the neighborhood and there will not be a detriment to nearby properties created by the granting of the area variances.

A. Maximum Building Height- Number of Stories

The City's Zoning Code Section 223-17.C/223 Attachment 1:6 permits a building height to be no greater than fifty-five (55) feet or 4 ½ stories. Each of the seven proposed buildings will comply with the maximum height of 55 feet permitted by the Zoning Code Section 223-17.C. A height variance of half a story is required for three buildings designed with gabled roofs.

The Board find that no undesirable change will be produced in the character of the neighborhood and no detriment to nearby properties will be created by the granting of the area variance of half a story permitting a maximum height of 5 stories for three of the seven buildings where the maximum amount of stories permitted by the code is 4 ½ stories. Under the Zoning Code Section 223-63, the "height of building" is measured as the "vertical distance from the average established grade in front of the lot or from the average natural grade at the building line, whichever is higher, to the level of the highest point of the roof, if the roof is flat, or to the mean level between the eaves and the highest point of the roof, if the roof is of any other type." Under this definition, gabled roofs and angled roofs are measured differently. The gabled roofs are measured with an extra half story because of its design. The three buildings for which variances are required are not as tall at the peak of the angled roofs as the other four buildings that comply with the 4 ½ story height requirement. Furthermore, the roofs of the buildings are all accessible by the Beacon Fire Department apparatuses. As all seven buildings are within the permitted height of 55 feet, the granting of a half story variance for three of the seven buildings does not create a detriment to nearby properties.

B. Maximum Number of Dwelling Units Per Building

No undesirable change will be produced in the character of the neighborhood and no detriment to nearby properties will be created by the granting of an area variance permitting more than 36 dwelling units. The Zoning Code Section 223-17.C states that the maximum number of dwelling units per building shall not exceed 36. The Applicant proposes to construct a total of 307 dwelling units, to be distributed among seven buildings, as permitted on the 12-acre parcel by right. The buildings are proposed to contain the following number of units:

- Building 1- 48 units;
- Building 2- 52 units;

- Building 3- 59 units
- Building 4- 32 units (no variance required)
- Building 5- 32 units (no variance required)
- Buildings 6- 51 units; and
- Building 7- 32 units (no variance required)

Three (3) of the buildings are proposed to contain 32 residential dwelling units, this is four less units than permitted. All the buildings will look similar from the exterior, and the total number of units (307 units) proposed for the 12-acre property is permitted. Under the density regulation in 223 Attachment 1:6, the lot area required per dwelling unit is 1,700 square feet. Therefore, on a 12 acre lot, approximately 522,720 square feet, 307 dwelling units may be constructed. The proposed development will not result in any adverse impacts to the neighborhood character because by permitting the Applicant to have more dwelling units per building, the Applicant is able to preserve more open space and decrease overall lot coverage and impervious surface. Otherwise, the Applicant could construct the same number of units (307), but in more buildings which would have greater impacts.

C. Minimum Separation Between Buildings

No undesirable change will be produced in the character of the neighborhood and no detriment to nearby properties will be created by the granting of a variance to permit a minimum distance of less than 36 feet between buildings. There are a total of five openings between the proposed seven buildings on the premises. The closest minimum distance between the buildings is 12 feet. By reducing the distance between buildings the Applicant is able to cluster the buildings to preserve a maximum amount of open space. In addition, the buildings include additional fire suppression systems and will utilize fire suppression materials to ensure fire safety and further preserve the welfare of the neighborhood and ensure the safety of all residents. The Fire Department received the plans and had no objection to the reduced separation distance between buildings. Overall, the proposed project enhances the character of the neighborhood, and will not have a detrimental impact to either the neighborhood or adjacent properties.

2. The benefit sought by the Applicant cannot be achieved by some method feasible for the Applicant to pursue, other than the requested area variances.

A. Maximum Building Height- Number of Stories

The benefit sought by the Applicant cannot be achieved by some other method feasible for the Applicant to pursue. The Applicant may construct 307 dwelling units on the premises by right. The Applicant has presented two other alternatives. Such alternatives require the Applicant to construct eight buildings (providing 288 dwelling units) or nine buildings (providing 307 units). Both alternatives create higher development impacts. The Applicant wants to pursue a sustainable development to maximize open space. Under the

proposed project there is 35% impervious coverage. Both alternatives require at least 40% impervious coverage.

The premises is located in the Coastal Management Zone as defined by the City's Local Water Front Revitalization Program (LWRP). The proposed project condenses and clusters the footprint of the buildings and decreases impervious surfaces to achieve the clustered effect recommended by the LWRP. Specifically the LWRP provides that "the scenic qualities of Beacon results from the combination of clustered buildings (many historic) and wooded hillsides against the backdrop of the Hudson Highlands." On December 12, 2017, the Planning Board issued a Local Waterfront Revitalization (LWRP) Consistency Determination, which provides in part that the proposed Project is consistent with the policies in the LWRP because it condenses and clusters the footprint of the buildings and impervious surfaces to achieve the clustered effected by the LWRP. The proposed alternatives do not achieve the same effect.

B. Maximum Number of Dwelling Units Per Building

The Applicant is proposing 31 dwelling units as below-market rate units, in accordance with the City's Affordable-Workforce Housing Laws. By granting the variance and permitting more than 36 dwelling units in a building, the Applicant can create a better mix of unit types and overall diversity in unit counts to better achieve the goals of the Affordable-Workforce Housing Law.

The Applicant is permitted to build 307 units on the premises pursuant to the density requirements of the RD-1.7 Zoning District on a 12 acre parcel, subject to special use permit approval by the City Council to approve multifamily complexes. Without the variances, the Applicant will need to construct one or two extra buildings, increasing lot coverage and impervious surface. The Applicant's goal to preserve 65% green space, create diversity in buildings and unit types and provide common gathering space for residents cannot be achieved without the requested variance.

If each building contained the same number of units it would necessitate more buildings, and would therefore create a much higher-impact development. Therefore, there is no other feasible means to achieve the required number of units but for the granting of the variance to permit more than 36 dwelling units per building.

C. Minimum Separation Between Buildings

As discussed above, the relative clustering of the buildings contributes to maximizing the amount of open space provided onsite. The proposed layout allows for the preservation of the maximum amount of green space (65%) and will overall enhance the community. Thus, the benefit the Applicant seeks, to develop 307 residential dwelling units and preserve 65% open space, cannot be achieved without the requested variance.

3. The requested variances are mathematically substantial; however, this does not outweigh the other factors meriting the granting of the variance.

The requested variances are mathematically substantial. However, in considering whether a variance is substantial, the Board must examine the totality of the circumstances within the application and the overall effect of granting the requested relief. Here, the variances are not substantial in their effect. The project design provides a variety of units, both market-rate and below-market rate units, while preserving the most amount of open space. Moreover, even though the requested variances are mathematically substantial, this factor alone does not preclude the granting of the variances.

The Board reviewed the overall effect of the requested variances to permit the clustering of units on this 12 acre parcel requiring (1) a half story height variance for three buildings, (2) a variance to permit more than 36 residential dwelling units per building and (3) a variance to allow less than 30 feet between the proposed buildings. While the requested variance is mathematically substantial, the variance will result in minimal impacts to the surrounding neighborhood and environment. Therefore, the Board finds that the requested variance is not substantial.

4. The proposed variance will not have an adverse effect or impact on the physical or environmental conditions in the neighborhood or district.

The proposed variances will not have an adverse effect or impact on the physical or environmental conditions in the neighborhood or district. There will be no adverse effects of noise, vibrations, odor, traffic, or impact on public services caused by the requested variances. As part of the Coordinated SEQRA review conducted by the Planning Board as Lead Agency, the Planning Board has determined that the entire action, including the required variances, will have no potential significant adverse environmental impacts. As mentioned above, the Planning Board also granted a LWRP Consistency Determination which provides that the proposed Project is consistent with polices and guidance of the LWRP. The proposed project will preserve 65% open space and utilize green infrastructure practices to reduce runoff, minimize grading and soil disturbance, and minimize impervious surface areas. The proposed project will also incorporate soil conservation and dust control best management practices and utilize native vegetation in all proposed landscaping to enhance wildlife habitat.

5. The alleged difficulty was self-created but this factor does not preclude the granting of the area variances.

The need for the variances is self-created since it is presumed the Applicant selected the Property as the location for its proposed development knowing the zoning requirements pertaining to the maximum height of buildings permitted, the maximum number of residential dwelling units per building and the minimum distance required between buildings. However, this does not preclude the granting of the area variance.

NOW THEREFORE, BE IT RESOLVED, that, for the reasons set forth above, the application of Scenic Beacon Developments, LLC (the "Applicant") to allow Building 3, Building 4, and Building 6, as identified on the proposed Site Plan dated January 31, 2017, to have 5 stories where the maximum building height is 4.5 stories pursuant to City § 223-17.C/223 Attachment 1:6, is hereby GRANTED.

BE IT FURTHER RESOLVED, that for the reasons set forth above, the application of Scenic Beacon Developments, LLC, to allow four proposed buildings to exceed 36 units where the maximum number of dwelling units per building is 36 units pursuant to the City Code § 223-17.C/223 Attachment 1:6, is hereby GRANTED subject to the following conditions:

1. If the Applicant builds less than 252 units (7 buildings x 36 dwelling units= 252 untis), this variance is void. The Applicant will be required to comply with the Zoning Code requirements restricting the number of units per building and may not exceed 36 residential dwelling units per building.

2. The Applicant is permitted to construct a maximum number of four buildings with more than 36 residential dwelling units. The maximum number of dwelling units for any one building may not exceed 59 residential dwelling units per building.

BE IT FURTHER RESOLVED, that for the reasons set forth above, the application of Scenic Beacon Developments, LLC, to allow less than 30 feet between buildings where the minimum distance between buildings on the same lot is 30 feet pursuant to City Code § 223-17.C/223 Attachment 1:6, is hereby GRANTED subject to the following conditions:

1. The Applicant shall maintain at least 65% of the 12-acre parcel as open space, but for Planning Board approval of impervious infrastructure including, but not limited to, sidewalks, development of land banked parking, roads, and decks. The total amount of open space land preserved after Planning Board approval of said impervious infrastructure shall not be less than 60% of the 12-acre parcel.

2. Impervious surface shall not exceed 35% of the 12-acre parcel, but for Planning Board approval of impervious infrastructure, including, but not limited to, sidewalks, development of land banked parking, roads, and decks. The total impervious surface area, including any additional approved impervious surfaces, shall not to exceed 40% of the 12-acre parcel.

3. The distance between any of the proposed buildings shall not be less than 12 feet.

BE IT FURTHER RESOLVED, that all the variances granted herein are subject to the following conditions:

1. No permit or Certificate of Occupancy shall be issued until the Applicants have paid in full all application and consultant fees incurred by the City of Beacon in connection with the review of this application.

2. The Applicant shall obtain a building permit within twelve months from the date of obtaining the last land use approval.

3. The variance shall terminate unless the Proposed Project, as defined herein, has been substantially completed within five years from the date of obtaining the last land use approval or the Applicant appears before the Board for an extension.

Dated: January 17, 2018

Mr. John Dunne, Chairman

2018-01

Height Variance

Mr. Dunne called the roll							
Motion	**Second**	**Zoning Board Member**	**Aye**	**Nay**	**Abstain**	**Excused**	**Absent**
		John Dunne	X				
		Jordan Haug	X				
	X	Robert Lanier	X				
X		Judy Smith	X				
		David Jensen		X			
		Motion Carried	**4**	**1**			

Maximum Number of Dwelling Units Variance

Mr. Dunne called the roll:							
Motion	**Second**	**Zoning Board Members**	**Aye**	**Nay**	**Abstain**	**Excused**	**Absent**
		John Dunne	X				
X		Jordan Haug	X				
		Robert Lanier	X				
	X	Judy Smith	X				
		David Jensen		X			
		Motion Carried:	**4**	**1**			

Maximum Distance Between Buildings Variance

Mr. Dunne called the roll:							
Motion	**Second**	**Zoning Board Members**	**Aye**	**Nay**	**Abstain**	**Excused**	**Absent**
		John Dunne	X				
X		Jordan Haug	X				
	X	Robert Lanier	X				
		Judy Smith	X				
		David Jensen		X			
		Motion Carried:	4	1			

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

Colliers Engineering & Design

June 30, 2026

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

Edgewater Project – Parking & Traffic Letter
City of Beacon, Dutchess County, New York
Project No. 16003078A

Dear Chairman Gunn and Members of the Planning Board,

We are writing on behalf of the Applicant, Scenic Beacon Developments LLC, in connection with the Edgewater apartment development ("the Project") located at Edgewater Place in the City of Beacon, Dutchess County, New York (the "Property"). The Property is classified within the City of Beacon RD-1.7 (Designed Residence District, 1,700 square feet per dwelling unit – minimum lot size of 5,000 square feet) zoning district. As you are aware, this Project was previously approved by your Board to include a total of 246 apartment units with a mixture of studio, one (1)-bedroom, two (2)-bedroom and three (3)-bedroom units, in addition to 284 parking spaces and 45 land banked parking spaces, for a total of 329 parking spaces on the Property, where 328 parking spaces were required under the then-existing City parking regulations. ("Approved Project"). The land banked parking spaces were to remain as set aside grassed area for future parking should parking demand warrant the construction of these additional parking spaces.

The Applicant is now proposing two (2) additional studio apartment units, thus increasing the total number of apartments on the Property to 248 units and revisions to the off-street parking facilities ("Modified Project"). Based on the Applicant's recent experience at the site, along with their experience managing other similar apartment complexes in the City, the Applicant has identified a need to construct a certain potion of the land bank parking spaces at this time in slightly different areas on the Property (i.e., 37 additional spaces). With the additional spaces the total number of spaces provided on the site will be 321 parking spaces.

The City of Beacon Zoning Code (the "Zoning Code") provides specific off-street parking requirements in Section 223-26 – Off Street Parking, Loading and Vehicular Access. Since the time of the original approvals for the Project, the Zoning Code has been modified to change the parking standards. The Zoning Code now specifies both minimum and maximum parking standards. Exhibit No. 1 below summarizes the minimum and maximum parking standards, and the resulting minimum required and maximum allowable parking spaces for both the Approved Project and the Modified Project based on the current Zoning Code parking standards.

Colliers Engineering & Design

Exhibit No. 1 – City of Beacon Code Required Parking

	Size	Code Minimum Parking Standard		Code Maximum Parking Standard	
Approved Project	246 Units	1.0 Space/ Dwelling Unit	246 Spaces	3.0 Space/ Dwelling Unit	738 Spaces
Modified Project	248 Units	1.0 Space/ Dwelling Unit	248 Spaces	3.0 Space/ Dwelling Unit	744 Spaces

Notes:

1. City of Beacon Code Minimum and Maximum Parking Standards are based on Section 223-26.D of the City Code.

The 321 parking spaces proposed to be provided by the Modified Project are considered Zoning Code compliant since they fall between the 248-space minimum and 744-space maximum allowable parking spaces identified by the Zoning Code.

With the additional two (2) apartment units, for a total of 248 units, and the implementation of the land bank parking spaces, the provided parking ratio on the site will be 1.29 spaces per dwelling unit. The Applicant's recent experience at the Edgewater site as well as their experience at other locations int the City, the Applicant has identified a need for a parking ratio of 1.25 spaces per dwelling unit at the site, which the proposed parking will exceed with the implementation of the land bank parking spaces.

Furthermore, parking demand data provided by the Institute of Transportation Engineers (ITE) as contained in the ***Parking Generation Manual, 6th Edition (2023)*** was reviewed. ITE provides parking demand data for Land Use 220 – Multifamily Housing (Low-Rise) which was referenced to identify an anticipated parking demand for the modified project. The ITE data, which is attached to this letter for reference indicates that a Weekday parking demand of 304 parking spaces and a Saturday Parking demand of 290 parking spaces can be expected for the 248 unit Modified Project. This parking demand would be accommodated by the proposed 321 parking spaces.

In addition to the review of the prosed parking, it should be noted that the addition of the two (2)-studio apartments is anticipated to result in a negligible increase in traffic generation associated with the Project. In fact, ITE data indicates that the two (2) additional studio apartments would result in peak hour traffic volume increase of just one (1) vehicle during the Weekday AM and Weekday PM Peak hours.

Sincerely,

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

Richard D'Andrea, PE, PTOE
Department Manager

R:\Projects\2016\16003078A\Correspondence\OUT\260630RGD_PB Letter.docx

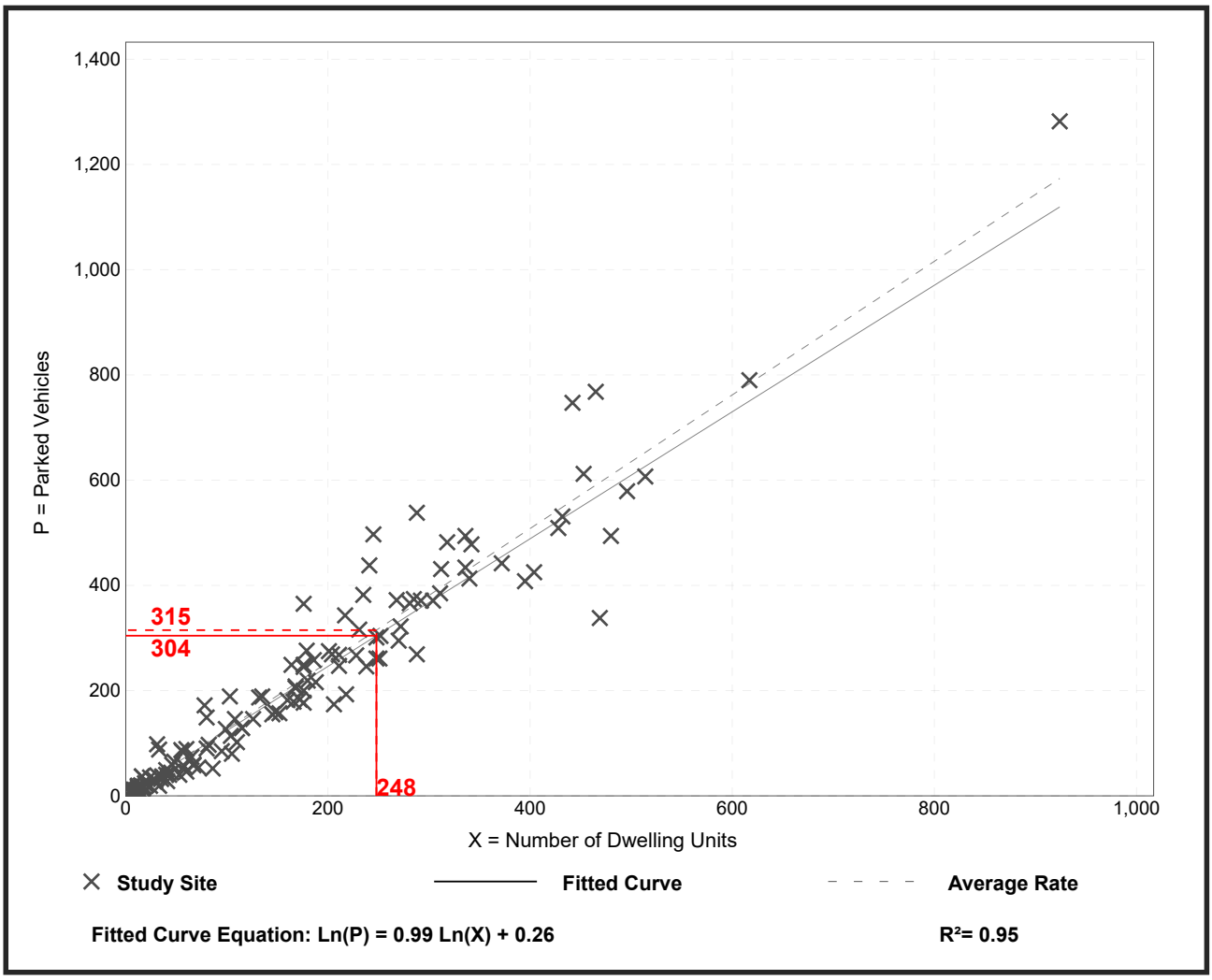
Multifamily Housing - 2+ BR (Low-Rise) - Not Close to Rail Transit
(220)

Peak Period Parking Demand vs: **Dwelling Units**
On a: **Weekday (Monday - Friday)**
Setting/Location: **General Urban/Suburban**
Number of Studies: 143
Avg. Num. of Dwelling Units: 154

Peak Period Parking Demand per Dwelling Unit

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
1.27	0.58 - 3.16	1.07 / 1.59	1.22 - 1.32	0.29 (23%)

Data Plot and Equation



Parking Generation Manual, 6th Edition ● Institute of Transportation Engineers

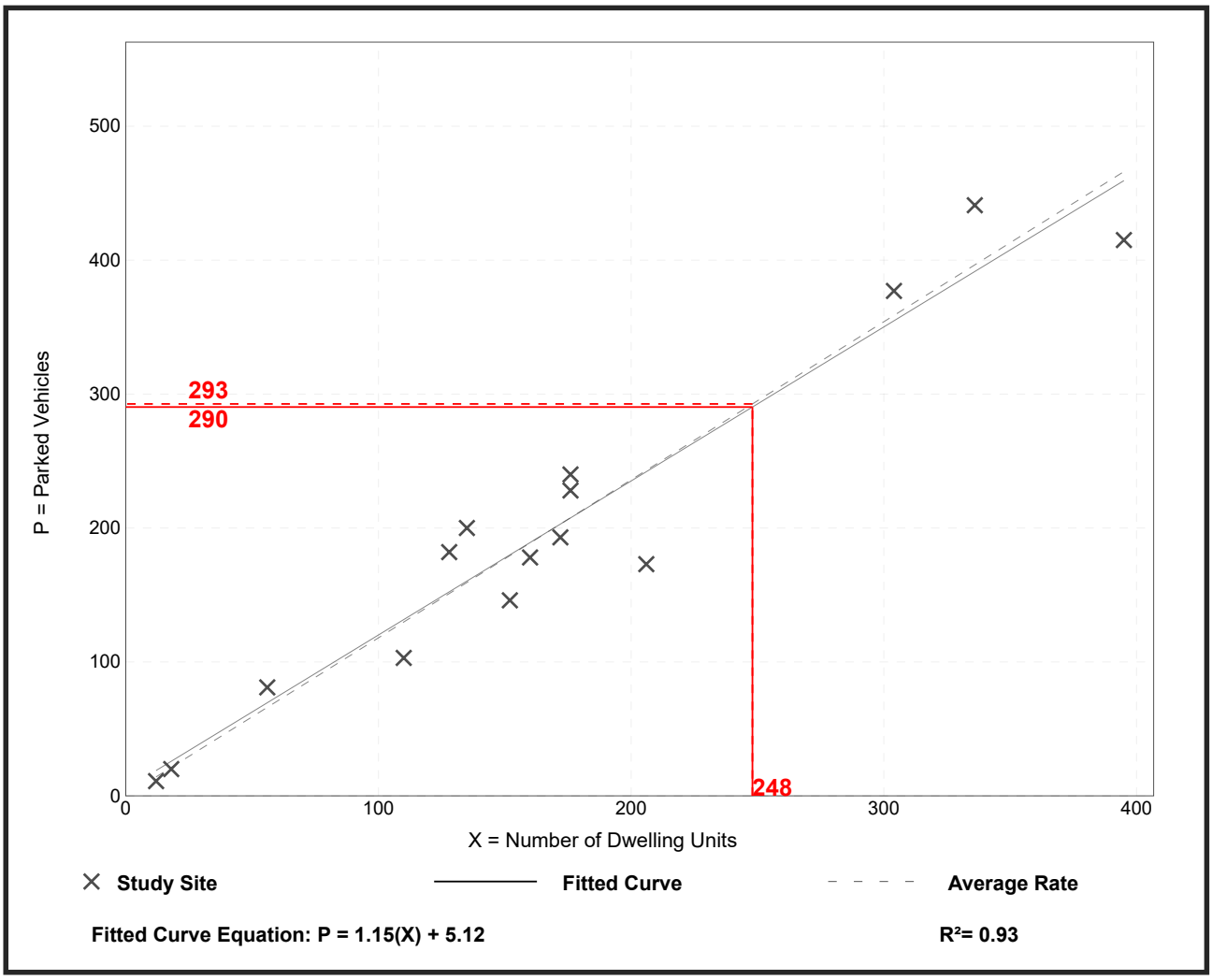
Multifamily Housing - 2+ BR (Low-Rise) - Not Close to Rail Transit
(220)

Peak Period Parking Demand vs: **Dwelling Units**
On a: **Saturday**
Setting/Location: **General Urban/Suburban**
Number of Studies: 15
Avg. Num. of Dwelling Units: 169

Peak Period Parking Demand per Dwelling Unit

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
1.18	0.84 - 1.48	1.07 / 1.44	***	0.19 (16%)

Data Plot and Equation



Parking Generation Manual, 6th Edition ● Institute of Transportation Engineers

Short Environmental Assessment Form
Part 1 - Project Information

Instructions for Completing

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

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

Part 1 – Project and Sponsor Information

Name of Action or Project:
Edgewater

Project Location (describe, and attach a location map):
15-30 Edgewater Place, Beacon, NY 12508

Brief Description of Proposed Action:
The overall Project entails the construction of seven residential apartment buildings consisting of 246 dwelling units located at 15-30 Edgewater Place in the City of Beacon. The Project received Site Plan, Special Use Permit and Subdivision approval by the City of Beacon on September 11, 2018.
The current amended Site Plan proposal calls for two additional residential studio apartments which will increase the total dwelling units from 246 to 248. Bedrock was encountered where 33 land banked parking spaces were located on the approved plan. To avoid extensive rock removal, alternate locations for 17 of the 33 land banked parking spaces have been identified in areas on the premises that will not require extensive earthwork to construct. The new location of the 17 relocated land banked parking spaces will be constructed.

Name of Applicant or Sponsor:	Telephone: [redacted]
Scenic Beacon Developments	E-Mail: [redacted]

Address:
28 Creek Drive

City/PO:	State:	Zip Code:
Beacon	New York	12508

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

3. a. Total acreage of the site of the proposed action? +/- 12.009 acres
   b. Total acreage to be physically disturbed? +/- 6.58* acres
   c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? +/- 12.009 acres

*Represents the total disturbance for the project. Approximately 3.0 acres of project site remain to be developed.

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

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

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

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

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

	NO	YES
9. Does the proposed action meet or exceed the state energy code requirements?		
If the proposed action will exceed requirements, describe design features and technologies:		
All apartments will conform with the latest building and energy codes.	☐	☑

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

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

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

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

* A Phase IA Archaeological study was conducted as part of the original approval. A findings letter of no impact was received by the State Historic Preservation Office on October 10, 2017. The no impact letter is attached.

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

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

☐ Wetland ■ Urban ■ Suburban

	NO	YES
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered? Atlantic Sturgeon, Shortnos...	☐	☑
16. Is the project site located in the 100-year or 500-year flood plain?	☑	☐
17. Will the proposed action create storm water discharge, either from point or non-point sources? If Yes,	☐	☑
a. Will storm water discharges flow to adjacent properties?	☐	☑
b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)?	☐	☑
If Yes, briefly describe: Stormwater runoff from the project site is conveyed to post-construction stormwater control practices within the site, including infiltration basins, bioretention areas, hydrodynamic separators (for water quality control) and on-site catch basins. A portion of the on-site system connects and conveys treated stormwater runoff to the City of Beacon stormwater sewer system on Branch Street. The northerly portion of the on-site system discharges treated stormwater runoff to an existing drainage ditch at the north portion of the property.		
18. Does the proposed action include construction or other activities that would result in the impoundment of water or other liquids (e.g., retention pond, waste lagoon, dam)? If Yes, explain the purpose and size of the impoundment: There are two bioretention basins and one infiltration basin for treatment of stormwater runoff. Bioretention Basin 1 has 0.57 acre-feet, Bioretrention Basin 2 has 1.49 acre-feet and Infiltration Basin 3 has 0.48 acre-feet of capacity to the highest outlets.	☐	☑
19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility? If Yes, describe:	☑	☐
20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste? If Yes, describe: Site V00293: Status- Completed (C); Site 546031: Status- Monitored (02); Site 314069: Status- No Further Action (N); Site C314112: Status- Completed (C); DEC Site V00096 Status- No Further Action (N). Refer to annexed reports from the NYSDE Remediation Database.	☐	☑
21. Is the project located within, or within ½ mile of, a disadvantaged community?	☐	☑
If No, could impacts from the project affect a disadvantaged community?	☐	☐
If Yes to either question in 21, answer the following question.		
a. Identify the potential pollution impacts of the project, either direct or indirect, that may occur within the disadvantaged community (e.g., wastewater discharges, air emissions, noise, odors, solid or hazardous waste generation or management): Potential impacts could include temporary noise pollution during construction. The area where project is located is an established residential area with adjacent multi-family residential apartment complexes and single-family houses. The project is also adjacent to the Beacon train station.		

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

Applicant/sponsor/name: Michael A. Bodendorf, P.E. Date: 6/30/2026

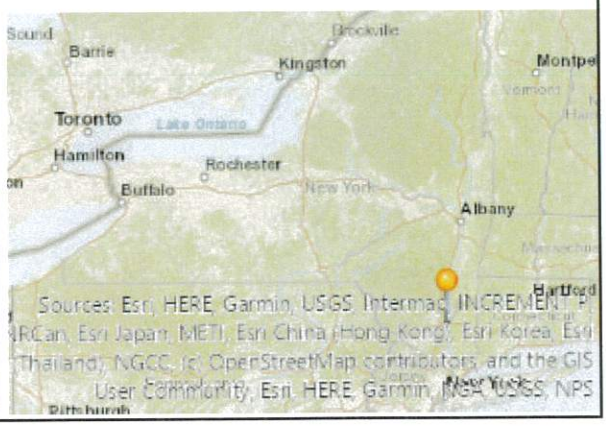
Signature: Title: Engineer for Applicant

EAF Mapper Summary Report

Tuesday, June 23, 2026 8:56 PM



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



Part 1 / Question 7 [Critical Environmental Area]	No
Part 1 / Question 12a [National or State Register of Historic Places or State Eligible Sites]	Yes
Part 1 / Question 12b [Archeological Sites]	Yes
Part 1 / Question 13a [Wetlands or Other Regulated Waterbodies]	Yes - Digital mapping information on local, New York State, and federal wetlands and waterbodies is known to be incomplete. Refer to the EAF Workbook.
Part 1 / Question 15 [Threatened or Endangered Animal]	Yes
Part 1 / Question 15 [Threatened or Endangered Animal - Name]	Atlantic Sturgeon, Shortnose Sturgeon, Indiana Bat
Part 1 / Question 16 [100 or 500 Year Floodplain]	No
Part 1 / Question 20 [Remediation Site]	Yes
Part 1 / Question 21 [Disadvantaged Community]	Yes

NEW YORK STATE OF OPPORTUNITY.

Parks, Recreation, and Historic Preservation

ANDREW M. CUOMO
Governor

ROSE HARVEY
Commissioner

October 10, 2017

Mr. Michael Bodendorf
Principal
Hudson Land Design
174 Main Street
Beacon, NY 12508

Re: DEC
Edgewater Residential Development
22 Edgewater Place, Beacon, NY 12508
17PR06370

Dear Mr. Bodendorf:

Thank you for requesting the comments of the Office of Parks, Recreation and Historic Preservation (OPRHP). We have reviewed the project in accordance with the New York State Historic Preservation Act of 1980 (Section 14.09 of the New York Parks, Recreation and Historic Preservation Law). These comments are those of the OPRHP and relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8) and its implementing regulations (6 NYCRR Part 617).

Based upon this review, it is the New York State Office of Parks, Recreation and Historic Preservation's opinion that your project will have no impact on archaeological and/or historic resources listed in or eligible for the New York State and National Registers of Historic Places.

If further correspondence is required regarding this project, please be sure to refer to the OPRHP Project Review (PR) number noted above.

Sincerely,

Michael F. Lynch, P.E., AIA

Director, Division for Historic Preservation

3.0 ESTIMATED WATER & WASTEWATER QUANTITIES

At full build-out, the project is expected to generate ~~38,500~~ 39,490 gallons of wastewater per day. Based on previous conversations with the City of Beacon Sewer Superintendent, the City's existing sewer infrastructure and sewer treatment plant have sufficient capacity to handle the anticipated increase in daily sewage load. The site currently contains an apartment building, and a single family residence. Both structures will be demolished and removed; thereby eliminating any current inflow and infiltration (I&I) entering the City sewer system from the site. The following table provides estimated water usage/wastewater generation at full buildout of the project, according to the NYSDEC Design Standards for Wastewater Treatment Works, 2014.

Water and wastewater quantities for the project are based on the following:

Flow Component	# of Units	Flow Rate per Unit - gallons per day (gpd)	Total Component Flow (gpd)
Residential	~~350 bedrooms~~* 359 bedrooms	110 per bedroom	~~38,500~~ 39,490

*The current bedroom breakdown is as follows: ~~25~~ 30 studio, ~~126~~ 111 one-bedroom, ~~86~~ 103 two-bedroom, and ~~9~~ 4 three-bedroom apartments.

Total Flow: ~~38,500~~ 39,490 gpd

The bedroom count and projected flows from each building are provided in Appendix A.

4.0 WATER SUPPLY

At full build-out, the project is expected to require ~~38,500~~ 39,490 gallons of water per day. Based on previous conversations with the City of Beacon Water and Sewer Superintendent, the anticipated increase in daily water demand is readily available for this project. There is a 6" cast iron (CI) water main that runs beneath Tompkins Terrace, and an 8" CIP main that runs beneath Bank Street. An 8" CI spur that runs into the site beneath Branch Street from Bank Street to an existing hydrant. It is proposed to connect to the 8" CIP on Bank Street with 8" ductile iron pipe (DIP). The 8" DIP will be brought through the site to provide water supply to the new buildings which will continue down to Branch Street and connect to the 8" CIP forming a looped connection to the City water system. The new 8" water main will be dedicated to the City once installed and certified. New fire hydrants and periodic isolation valves will be provided within the site. A blanket utility easement will be granted to the City for maintenance purposes. Flow and pressure tests have been conducted on existing hydrants near the site to confirm that adequate flow and pressure are available for the project.

Approximately 2,280 lf of 8" diameter class 52 ductile iron water main extension will be installed to serve the project. The water man is proposed to be dedicated to the City of Beacon. New 6" class 52 ductile iron service lines will be provided to each building and then split to

Search Details from Environmental Remediation Databases

Site Record

Document Repository

Site Name: Doral Hat Property
Site Code: V00293
Program: Voluntary Cleanup Program
Classification: C
EPA ID Number:

Administrative Information

An official website of New York State.
Here's how you know

NEW YORK STATE

NYS Department of Environmental Conservation
DER Environmental Remediation Databases

Site Type:
Estimated Size: 3.11 Acres
Distance of site to the nearest points of community interest:

- School: 1,815.03 Ft
- Daycare Facility: 457.72 Ft
- Medical Facility: 3,737.66 Ft
- Senior Care Facility: 2,799.41 Ft
- Disadvantaged Community Boundary: 0.00 Ft (Located within a DAC)
- Potential Environmental Justice Area: 0.00 Ft (Located within a PEJ)

Hazardous Waste Disposal Period

No Hazardous Waste Disposal information available.

Institutional And Engineering Controls

No Institutional And Engineering Controls Information Available

Site Owner(s) and Operator(s)

Current Owner Name: Information Not Available

Site Document Repository

No Repository Information Available

Site Description

Site Location:
The CHGE Beacon Manufactured Gas Plant (MGP) Dorel Hat property is located in a suburban area in the City of Beacon, Dutchess County, N.Y. The site is approximately 4 acres in size, and is bounded by West Main St. to the north, River St. to the east, an open field owned by the Metropolitan Transportation Authority (MTA)to the south and by Railroad Drive and the Beacon Railroad station to the west.

Site Features:
The main site features include: an approximately 32,000 square foot building surrounded by a grass covered area in the southern portion of the property and an asphalt paved parking lot in the northern half.

Current Zoning/Uses:
The site is currently used for storage and office space and is zoned commercial. The surrounding parcels are commercial and residential. The nearest residential area is comprised of townhouses located approximately 100 feet to the east on River St.

Past Uses of the Site:
The 1 Main Street site is adjacent to a former MGP located on River Street, which operated from 1871 to approximately 1946.

Operable Units (OU)
The site was divided into 2 Operable Units.
An operable unit represents a portion of a remedial program for a site that for technical or administrative reasons can be addressed separately to investigate, eliminate or mitigate a release, threat of release or exposure pathway resulting from the site contamination

Operable Unit 1 (OU1) consists of the MGP site itself, which has since been redeveloped for residential use. It appears that all contaminated soils were removed prior to redevelopment. No significant amounts of MGP contamination were found to remain at the former MGP site, and it was determined that no further action was required. A release letter for the Beacon MGP was issued under the VCA on January 31, 2002.

Operable Unit 2 (OU2) consists of the property across the street from the MGP, known as the Dorel Hat property. The majority of MGP contaminated soil on OU2 was removed during an IRM conducted in 2007.

On September 12, 2007 the Dorel Hat property was transferred to the MTA. On July 15, 2011 the MTA filed a Deed Restriction by which it is required to comply with the Department approved Site Management Plan.

Site Geology/Hydrogeology:
The site is underlain by unconsolidated sand and silt deposits to a depth of approximately 8 feet. Below these, a 4 foot thick clay layer lies above the slate bedrock. Groundwater on the site flows toward the Hudson River, to the west.

Contaminants of Concern (Including Materials Disposed)

Contaminant Name/Type
Other
Coal tar

Site Environmental Assessment

Remediation of accessible contaminated soil at this site has been completed. The primary contaminant is coal tar which contains PAHs and BTEX compounds.

The majority of coal tar contaminated soil was removed during an IRM conducted in 2007. Due to the presence of the Dorel Hat building, a force sewer Main and a gas line on the site, some of the coal tar contaminated soil was not removed and remains in the subsurface under the building and to the east of the building. The coal tar is located at a depth of approximately 5 to 10 feet below the ground surface.

Levels of sub-slab soil vapor beneath the building exceed DOH guidance values for indoor air. A sub-slab depressurization vapor mitigation system was installed to prevent sub-slab vapor from entering the building.

Groundwater on the site exceeds Groundwater Quality Standards for VOCs, SVOC's, Metals and Pesticides. The area is supplied by a public water supply.

DER Environmental Remediation Databases Privacy Policy Terms of Service

Site Health Assessment

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Here's how you know

NEW YORK STATE

NYS Department of Environmental Conservation
DER Environmental Remediation Databases

Site Record

Document Repository

Site-related documents are available for review through the DEC Info Locator

Administrative Information

Site Name: Hudson River PCB Sediments
Site Code: 546031
Program: State Superfund Program
Classification: 02
EPA ID Number: NYD980763841

Location

DEC Region: 5
Address: Hudson River, Hudson Falls-NYC Battery
City:
Zip: 12180
County: Saratoga
Latitude: 43.286475666
Longitude: -73.595363441
Site Type:
Estimated Size: 0 Acres
Distance of site to the nearest points of community interest:

- School: 129.78 Ft
- Daycare Facility: 174.02 Ft
- Medical Facility: 0.00 Ft
- Senior Care Facility: 285.15 Ft
- Disadvantaged Community Boundary: 1,615.14 Ft (Not located within a DAC)
- Potential Environmental Justice Area: 1,615.14 Ft (Not located within a PEJ)

Hazardous Waste Disposal Period

From: 1946
To: present

Institutional And Engineering Controls

No Institutional And Engineering Controls Information Available

Site Owner(s) and Operator(s)

Current Owner Name: New York State
Current Owner(s) Address:
, ZZ,

Current Owner Name: STATE OF NEW YORK
Current Owner(s) Address:
, ZZ,

Current Owner Name: New York State
Current Owner(s) Address:
, ZZ,

Owner(s) During Disposal: STATE OF NEW YORK

Current On-Site Operator: NYS Department of Transportation
Stated Operator(s) Address: State Campus - Building 5
Albany, NY, 12233

Site Document Repository

Name: US Epa
Address: 187 Wolf road
colonie, NY,

Site Description

Site Location:

This National Priorities List site includes the nearly 200-mile stretch of the Hudson River that extends from Hudson Falls in Washington County to the Battery in New York City. The river is part of the Champlain Canal between Fort Edward and Waterford. EPA is the lead agency for the investigation and cleanup of the site.

Site Features:

The site includes the main stem of the Hudson River, as well as the associated flood plains, river banks, riverene fringing wetlands, and backwater areas.

Current zoning / uses:

The river is currently used for recreation, transportation, and as a source of water for

drinking and other purposes. The river floodplain areas include all types of land uses, from passive / recreational to residential to commercial / industrial.

Historical uses:

The General Electric Company (GE) discharged PCBs into the river from two capacitor manufacturing plants located in Hudson Falls and Fort Edward starting sometime in 1946.

Previous investigations identified 40 areas or 'hot spots' in the upper Hudson that had sediments contaminated with greater than 50 ppm of PCBs. Also included in the definition of this site are five Remnant Deposits or river sediment areas that were exposed when the level of the river was lowered when the Fort Edward Dam was removed in 1973.

EPA issued a Record of Decision (ROD) for this National Priorities List site on September 25, 1984 which included: in-place containment of the Remnant Deposits; evaluation of downstream domestic water quality at Waterford, New York; and interim "No Action" as to the PCB-contaminated river sediment. The 1984 ROD indicated that both the No Action decision for the river sediments and the containment remedy for the Remnant Deposits might be reexamined by EPA in the future. The containment remedy for the Remnant Deposits was performed by GE under a 1990 Consent Decree with EPA. In addition, in 1990, NYSDEC completed the evaluation of downstream domestic water quality at Waterford, New York, which concluded that PCB concentrations were below analytical detection limits after treatment and met standards applicable to public water supplies.

In December 1989, EPA announced its decision to initiate a detailed Reassessment Remedial Investigation/Feasibility Study (RI/FS) of the September 1984 decision concerning the PCB contaminated Hudson River sediments. The Reassessment culminated with EPA's issuance of a second ROD for the site in February 2002 which included the dredging of an estimated 2.65 million cubic yards of PCB contaminated sediments from the Upper Hudson River (between Fort Edward and Troy), which was estimated in the ROD to contain about 66,300 kilograms of total PCBs (approximately 65% of the total PCB mass estimated to be present within the Upper Hudson River). The ROD also identified further evaluation of PCB contamination in the flood plains concurrent with the design phase of the project.

EPA issued a series of Orders to GE for performance of the engineering design for the project. Phase 1 dredging commenced in May 2009, and was completed in October 2009.

After completion of Phase 1, EPA reviewed the environmental monitoring and operational data to determine the changes to the project standards and to project design specifications for Phase 2.

The changes to the project for Phase 2 were provided to GE in December 2010. GE, in accordance with the Consent Decree for the site, opted to implement Phase 2 of the remedy on 12/31/10.

Construction work for Phase 2 of the remedial project started in 2011, and was completed in 2016. Dredging was completed in fall 2015; habitat reconstruction was completed in 2016. Facility decommissioning was performed in 2016.

Operable Units:

The site was divided into five operable units.

An operable unit represents a portion of a remedial program for a site that for technical or administrative reasons can be addressed separately in investigation, eliminate or mitigate release, threat of release or exposure pathway resulting from the site contamination.

Operable Unit 1 (OU1) consists of the capping of the remnant deposits.

OU 2 consists of the dredging of the Upper Hudson River.

OU 3 consists of the removal of soils on Rogers Island.

OU 4 consists of the Upper Hudson River Floodplains Investigation (EPA tracks as OU4).

OU 5 consists of the Lower Hudson River Sediments (from the Federal Dam in Troy to the Battery in New York City).

For more information on the Hudson River Fish advisory, copy and paste this link into a web browser:
https://www.health.ny.gov/environmental/outdoors/fish/hudson_river/advisory_outreach_project/

Contaminants of Concern (Including Materials Disposed)

Contaminant Name/Type
PCB aroclor 1254

Contaminant Name/Type
Polychlorinated biphenyls (PCB)
Cadmium
Lead
PCB aroclor 1242
PCB aroclor 1016

Site Environmental Assessment

Nature and extent of contamination:

Contaminants:

The primary constituent of concern is PCBs, discharged from two GE capacitor plants in Hudson Falls and Fort Edward. The upstream extent of contamination is the portion of the river immediately above the Bakers Falls Dam at the GE Hudson Falls plant site. The downstream extent of contamination is the Atlantic Ocean.

The commercial mixtures of PCBs discharged from the two GE plant sites changed over time; initially aroclor 1254, changing to aroclor 1242 and then to aroclor 1016.

Contaminant Concentrations:

PCBs have been found in excess of standards, criteria and guidance concentrations (SCGs) in sediments, surface water, biota, air, and soils at the Hudson River PCBs site. The primary sources at the plant sites have been almost completely abated through remedial work at the plant sites; as a result, the primary source of PCB to the surface water and biota of the river are the remaining contaminated sediments in the river south of the plant sites.

Prior to remediation of the Upper Hudson River from 2009 to 2016, PCB concentrations in sediment range from non-detect to greater than one percent PCB (> 10,000 parts per million). In surface water typically concentrations range from 2 nanograms per liter (ng/l or parts per trillion) to 100 ng/l, except at times of high flow when scour-driven remobilization

of contaminated sediments can cause much higher concentrations in excess of 1 microgram per liter (1 ug/l or part per billion).

Floodplains - Investigations are underway to determine the extent of floodplain impacts. To date, PCB concentrations in excess of 500 milligrams per kilogram (mg/kg or part per million) have been found in limited areas. Those areas have been addressed over the past 15 years with various interim remedies (soil covers). The nature and extent of floodplain soil contamination has not yet been established. Remedial investigations are currently underway.

Lower Hudson River - The Lower Hudson River portion of the NPL site (from the Federal Dam in Troy to the Battery in New York City) has not been fully investigated to date. Preliminary sampling of sediment started in 2023 under an order between EPA and GE. Annual fish monitoring for PCBs occurs in certain locations in the lower Hudson.

Significant threat:
PCB contamination in the Hudson River sediments continue to pose a significant threat to human health and/or the environment. Concentrations in PCBs in biota directly attributable to the waste disposal at the site have led the Department of Health to recommend that human consumption of biota be limited over a substantial portion of the Hudson River between Hudson Falls and the Battery in New York City. In the upper Hudson, the fishery is catch and release only, and the NYSDOH advisory is to eat none.

To see the fish consumption advisories, go to:

https://www.health.ny.gov/publications/2794.pdf

and

https://www.health.ny.gov/environmental/outdoors/fish/hudson_river/advisory_outreach_project/

The disposal of PCB into the Hudson River has also led to significant environmental damage as defined in 6 NYCRR Part 375.

This site has been included in the Federal National Priorities List (NPL).

An official website of New York State.
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NYS Department of Environmental Conservation
DER Environmental Remediation Databases

Search Details from Environmental Remediation Databases

Site Record

Document Repository

Site-related documents are available for review through the DEC Info Locator

Administrative Information

Site Name: CH - MGP - Beacon Street
Site Code: 314069
Program: State Superfund Program
Classification: N *
EPA ID Number: NYD980531792

Location

DEC Region: 3
Address: River Street
City: Beacon
Zip: 12508
County: Dutchess
Latitude: 41.5062354
Longitude: -73.98241136
Site Type:
Estimated Size: 0 Acres
Distance of site to the nearest points of community interest:

- School: 1,599.63 Ft
- Daycare Facility: 494.79 Ft
- Medical Facility: 3,490.44 Ft
- Senior Care Facility: 2,613.19 Ft
- Disadvantaged Community Boundary: 0.00 Ft (Located within a DAC)
- Potential Environmental Justice Area: 0.00 Ft (Located within a PEJ)

Hazardous Waste Disposal Period

No Hazardous Waste Disposal information available.

Site Owner(s) and Operator(s)

Current Owner Name: Jeffrey L. Boetign
Current Owner(s) Address: 424 RIVER STREET
BEACON, NY, 12508

Current Owner Name: CITY OF BEACON
Current Owner(s) Address: 1 MUNICIPAL PLAZA, SUITE 1
BEACON, NY, 12508

Current Owner Name: Robert Harrington
Current Owner(s) Address: 426 RIVER STREET
BEACON, NY, 12508

Current Owner Name: GARY BLUM
Current Owner(s) Address: 418 RIVER STREET
BEACON, NY, 12508

Current Owner Name: Gurmukh Singh
Current Owner(s) Address: 428 RIVER STREET
BEACON, NY, 12508

Current Owner Name: Hassan Toy
Current Owner(s) Address: 422 RIVER STREET
BEACON, NY, 12508

Current Owner Name: Jeffrey Staten
Current Owner(s) Address: 420 RIVER STREET
BEACON, NY, 12508

Current Owner Name: JOSEPH HARNEY
Current Owner(s) Address: 416 RIVER STREET
BEACON, NY, 12508

Current Owner Name: Joseph Stezel
Current Owner(s) Address: 430 RIVER STREET
BEACON, NY, 12508

Current On-Site Operator: 7-11

Stated Operator(s) Address:

, NY,

Current On-Site Operator: CENTRAL HUDSON GAS & ELECTRIC CORP.

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* Class N Sites: "DEC offers this information with the caution that the amount of information provided for Class N sites is highly variable, not necessarily based on any DEC investigation, sometimes of unknown origin, and sometimes is many years old. Due to the preliminary nature of this information, significant conclusions or decisions should not be based solely upon this summary."

For more Information:

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Site Record

Document Repository

Site-related documents are available for review through the DEC Info Locator

Administrative Information

Site Name: Long Dock Beacon
Site Code: C314112
Program: Brownfield Cleanup Program
Classification: C
EPA ID Number:

Location

DEC Region: 3
Address: 8 and 23 Long Dock Beacon Road
City: Beacon
Zip: 12508-
County: Dutchess
Latitude: 41.50436724
Longitude: -73.98681499
Site Type:
Estimated Size: 6.44 Acres
Distance of site to the nearest points of community interest:

- School: 2,104.26 Ft
- Daycare Facility: 1,122.59 Ft
- Medical Facility: 4,187.38 Ft
- Senior Care Facility: 2,816.22 Ft
- Disadvantaged Community Boundary: 0.00 Ft (Located within a DAC)
- Potential Environmental Justice Area: 0.00 Ft (Located within a PEJ)

Hazardous Waste Disposal Period

No Hazardous Waste Disposal information available.

Institutional And Engineering Controls

Control Type:
Environmental Easement

Control Elements:
Landuse Restriction
Site Management Plan
Cover System

Soil Management Plan
Monitoring Plan
IC/EC Plan
Ground Water Use Restriction

Site Owner(s) and Operator(s)

Current Owner Name: The Scenic Hudson Land Trust, Inc.
Current Owner(s) Address: One Civic Center Plaza, Suite 200
Poughkeepsie, NY, 12601

Site Document Repository

Name: The Beacon Institute
Address: 199 Main Street
Beacon, NY, 12508

Name: Howland Public Library
Address: 313 Main Street
Beacon, NY, 12508

Name: Beacon City Hall
Address: Municipal Plaza, Lower Level
Beacon, NY, 12508

Site Description

Location: The Long Dock Beacon Site is located on a peninsula adjacent to the Hudson River on Long Dock Road in the City of Beacon, Dutchess County, New York. The site is bordered by the Hudson River to the west, Red Flynn Drive to the east, land owned by Scenic Hudson to the south and the Hudson River and the Metro North Railroad station to the north.

Site Features: A rehabilitated red barn which serves as an art gallery and a parking area are located in the northeast corner of the site. The remainder of the site is a passive recreational park.

Current Zoning/Use: The site is zoned for commercial/recreational use. A portion of the site is currently a park which extends from the site to the south. The surrounding area has a combination of residential, commercial, and light industrial land uses.

Past Use of the Site: Prior uses of the site included a salvage yard, which operated on the northeastern portion of the site from approximately 1962 to 1983 and a Major Oil Storage Facility (MOSF), which operated on the southern portion of the site from approximately 1936 to 1994. In addition unregulated filling of the site may have also led to site contamination. The site is comprised of two former Voluntary Cleanup Program (VCP) sites, the Beacon Salvage site (V00444) and the Garret Storm site (V00096).

Site Geology and Hydrogeology: Shallow subsurface soils at the site generally consist of historic fill material consisting of sand, gravel, coal, ash, wood, and brick fragments. Fill is underlain by silt and clay at a depth of 5-10 feet in the northern portion of the site. A dense clay layer is generally present beneath the site at depths of 10 feet on the northern portion of the site and 15-17 feet on the southern portion of the site. Overburden soils extend several hundred feet beneath the site.

Overburden groundwater is present at depths of 0 to 5 feet beneath the ground surface. The overall direction of groundwater flow is tidally influenced (to the east at high tide, to the southwest at low tide).

Summary of Project Completion Date

Projects associated with this site are listed in the Project Completion Dates table and are grouped by Operable Unit (OU). A site can be divided into a number of operable units depending on the complexity of the site and the number of issues associated with a site. Sites are often divided into operable units based on the media to be addressed (such as groundwater or contaminated soil), geographic area, or other factors.

Project Completion Dates

Contaminants of Concern (Including Materials Disposed)

Contaminant Name/Type
Polychlorinated biphenyls (PCB)
Lead
Arsenic

Contaminant Name/Type
Benzo(a)pyrene

Site Environmental Assessment

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Site Health Assessment

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Site Record

Document Repository

Site-related documents are available for review through the DEC Info Locator

Administrative Information

Site Name: Ferry Road Waterfront Site
Site Code: V00096
Program: Voluntary Cleanup Program
Classification: N *
EPA ID Number:

Location

DEC Region: 3
Address: West End of Ferry Street
City: Beacon
Zip: 12508
County: Dutchess
Latitude: 41.504367438
Longitude: -73.986838475
Site Type:
Estimated Size: 0 Acres
Distance of site to the nearest points of community interest:

- School: 2,030.78 Ft
- Daycare Facility: 1,054.40 Ft
- Medical Facility: 4,113.89 Ft
- Senior Care Facility: 2,747.58 Ft
- Disadvantaged Community Boundary: 0.00 Ft (Located within a DAC)
- Potential Environmental Justice Area: 0.00 Ft (Located within a PEJ)

Hazardous Waste Disposal Period

No Hazardous Waste Disposal information available.

Site Owner(s) and Operator(s)

Current Owner Name: Information Not Available

Site Document Repository

No Repository Information Available

Site Description

This site is a former mulitple oil storage facility. This site along with Site #V00444 (Beacon Salvage) have been combined into Long Dock Beacon BCP Site. See site # C314112 for further information.

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LANC & TULLY
Engineering and Surveying, D.P.C.

July 10, 2026

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

RE: Edgewater
Site Plan Amendment
City of Beacon, NY

Dear Mr. Gunn:

My office has received the following regarding the proposed site plan amendments to the Edgewater project:

- Correspondence dated June 30, 2026, from Cuddy & Feder.
- Application for Special Use Permit dated June 29, 2026.
- Application for Site Plan Approval dated June 29, 2026.
- Copy of Preliminary and Final Subdivision Plat Approval and Site Plan Approval Resolution dated September 17, 2018.
- Copy of Amended Negative Declaration dated July 10, 2018.
- Copy of Amended Local Waterfront Revitalization Program Consistency Determination dated July 12, 2018.
- Copy of Preliminary and Final Internal Property subdivision Plat Approval Resolution dated March 12, 2024.
- Copy of City of Beacon City Council Special Use Permit Approval resolution dated August 6, 2018.
- Copy of City of Beacon Zoning Board of Appeals Area Variance Approval Resolution for the Edgewater Project dated January 17, 2018.
- Parking and Traffic letter prepared by Colliers Engineering & Design, dated June 30, 2026.
- Short Environmental Assessment Form.
- Plan titled "Amended Site Plan – Edgewater", dated June 30, 2026, as prepared by Hudson Land Design.

The applicant is requesting to amend the previously approved site plan to allow for the construction of two (2) additional dwelling units and nine (9) bedrooms in the 4 buildings (Buildings 1, 2, 3, and 4) to be constructed in Phase 2. The applicant is also proposing to build out the land banked parking with some modifications as to the location of the proposed parking to be constructed.

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

General Comments:

1. As the applicant is proposing to amend the approved site plan to allow for additional units and bedrooms, Sheet 6 of 16 of the original approved plan set should also be included as part of the amendment application, as this sheet included the total count of apartments and bedrooms for the project.

2. Sheet 11 of 16 of the original plan set included the proposed grading of the site. This plan shall be revised to reflect the proposed grading in the areas of the proposed alternate parking areas to be constructed as part of this amendment.

3. As the applicant is proposing extending the parking lot in the north-east corner to allow for the construction of additional parking stalls, we would recommend that additional landscaping be provided in this area to further screen the parking lot from the intersection of Tompkins Avenue and Bank Street.

4. The sizing of Infiltration Basin 3 should be reviewed, as the extension of the parking lot in the north-east corner, and that of the additional 5 parking stalls along the access road, will create additional impervious areas that will flow to this basin that was not originally accounted for in the original design.

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.

Respectfully,

LANC & TULLY, P.C.

John Russo, P.E.

cc: Natalie Quinn, Planner
Jennifer Gray, Esq.
Bryan Murphy, Building Inspector

KARC
PLANNING CONSULTANTS, INC.

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

FR: KARC Planning Consultants, Inc.

DATE: July 14, 2026

RE: 15-30 Edgewater Place (Phase 2) Site Plan Amendment, Scenic Beacon Developments, LLC

I have reviewed the following materials regarding the proposed site plan amendments to Phase 2 of the Edgewater development:

- Cover letter by Taylor M. Palmer, Cuddy + Feder LLP, dated June 30, 2026
- Application for Special Use Permit, dated June 29, 2026
- Application for Site Plan Approval, dated June 29, 2026
- Amended Site Plan (Sheet SP-1, 1 Sheet) prepared by Hudson Land Design, dated June 30, 2026
- Parking and Traffic Letter prepared by Colliers Engineering & Design, dated June 30, 2026
- Short EAF and attachments prepared by Michael Bodendorf, dated June 30, 2026
- Copy of Amended Negative Declaration, dated July 10, 2018
- Copy of Amended LWRP Consistency Determination, dated July 12, 2018
- Copy of City Council Special Use Permit Approval Resolution, dated August 6, 2018
- Copy of Subdivision and Site Plan Approval Resolution, dated September 17, 2018
- Copy of Internal Property Subdivision Approval Resolution, dated March 12, 2024
- Copy of ZBA Area variance Approval Resolution, dated January 17, 2018

Project Description:
The Applicant is proposing to amend the previously approved site plan to allow for the construction of two (2) additional dwelling units and nine (9) additional bedrooms throughout the four Phase 2 residential buildings (Buildings 1, 2, 3, and 4). This increases the total unit count from 246 to 248 units and the bedroom count from 350 to 359 bedrooms. The applicant is also proposing modifications to the previously approved land-banked parking, including construction of twenty-nine (29) land-banked parking spaces. Seventeen (17) of those spaces are proposed to be relocated from an approved land-banked parking area due to the presence of bedrock.

Comments & Recommendations:

1. **Short EAF.** The project description in the Short EAF should be revised to fully describe the proposed action, including the addition of nine (9) bedrooms, relocation of a trash enclosure, and construction of twenty-nine (29) land-banked parking spaces, seventeen (17) of which are proposed to be relocated due to bedrock.

    a. The 2018 approvals contemplated a total of forty-five (45) land-banked parking spaces to minimize initial land disturbance and impervious coverage. The current application should

clarify how many land-banked spaces will remain following this amendment and explain how the proposed revisions continue to minimize land disturbance and impervious coverage.

2. **Maximum Density.** Based upon the previously approved net buildable area calculations, the proposed increase from 246 to 248 dwelling units remains below the maximum permitted density of 252 dwelling units.

3. **Parking Compliance.** The applicant's parking analysis indicates that the proposed amendment will result in 321 parking spaces, whereas 329 spaces were previously approved. The application materials state that thirty-three (33) approved land-banked parking spaces are being eliminated, while only seventeen (17) are proposed to be relocated. The applicant should clarify the parking calculations and reconcile the apparent discrepancy between the narrative and the stated reduction in total parking.

    a. Although the proposed parking supply complies with the City's current parking regulations, the Planning Board retains discretion to determine whether the proposed parking supply is appropriate for this development. Because 106 dwelling units are currently occupied, the applicant could provide more detailed parking utilization data or other information regarding actual parking demand for this particular development, location, and unit style (luxury) to assist the Board in evaluating the proposed reduction in approved parking.

4. **Relocated trash enclosure.** A note on the site plan indicates that a trash enclosure within the parking area is to be relocated. Details regarding enclosure design, screening, and landscaping should also be provided.

5. **Plan Coordination.** Any sheets from the previously approved plan set affected by the proposed parking modifications, including landscaping and lighting, should be updated to reflect the proposed amendments.

The above comments are intended to assist the Planning Board in its initial review of the proposed amendment and to identify items requiring clarification or additional information. Additional comments may be provided upon review of revised or supplemental submission materials.

Natalie Quinn
Beacon Planning Consultant

Cc: Bryan Murphy, Building Inspector
Jennifer L. Gray, Esq., City Attorney
John Russo, P.E., City Engineer

City of Beacon Planning Board Agenda
07/14/2026

Title:

Review application for Amended Site Plan Approval, 248 Tioronda Avenue, Residential, submitted by Beacon 248 Holdings, LLC.

ATTACHMENTS

248 Tioronda PB 7.14.26 Amended SIte Plan Submission Cvr Ltr.pdf

248 Tioronda PB 7.14.26 Site Plan Application redacted2.pdf

248 Tioronda PB 7.14.26 Renderings.pdf

248 Tioronda PB 7.14.26 Floor Plans, Elevations pgs 1-10.pdf

248 Tioronda PB 7.14.26 Floor Plans, Elevations pgs 11-20.pdf

248 Tioronda PB 7.14.26 Site Plan.pdf

248 Tioronda PB 7.14.26 SWPPP.pdf

Lanc & Tully 248 Tioronda Ave 07-10-26.pdf

Chai Developers LLC
35 Main Street, Suite 311
Poughkeepsie, NY 12601

June 29, 2026

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

RE: Submission for 248 Tioronda Ave Amended Site Plan Approval

Dear Mr. Gunn,

On behalf of Beacon 248 Holdings LLC, I am submitting this package of materials for the amended site plan approval for 248 Tioronda Avenue, to be reviewed by the Planning Board at its July meeting. The plans included in this submission are based on the concept approval received from the City Council on May 18.

Please see the following items included in this submission:

- Amended Site Plan Application
- Amended Site Plan
- Updated SWPPP
- Architectural Floor Plans & Elevations
- Architectural Renderings

We look forward to discussing the submission with the Board and receiving its input as we continue to refine the project.

Thank you very much.

Respectfully,

Jay Blumenfeld
Chai Developers LLC
Beacon 248 Holdings LLC

APPLICATION FOR SITE PLAN APPROVAL

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

IDENTIFICATION OF APPLICANT

Name: Beacon 248 Holdings LLC

Address: 35 Main St, Suite 311
Poughkeepsie, NY 12601

Signature: [signature]

Date: 6/25/2026

Phone: [redacted]

(For Official Use Only)

	Date	Initials
Application & Fee Rec'd		
Initial Review		
Public Hearing		
Conditional Approval		
Final Approval		

IDENTIFICATION OF REPRESENTATIVE / DESIGN PRFESSIONAL

Name: LaBella Associates

Address: 21 Fox Street
Poughkeepsie, NY 12601

Phone: 845-454-3980

Fax: N/A

Email address: kahearn@labellapc.com

IDENTIFICATION OF SUBJECT PROPERTY:

Property Address: 248 Tioronda Ave (AKA 50-300 Arno Drive), City of Beacon, NY 12508

Tax Map Designation: Section 6054 Block 45 Lot(s) 012574

Land Area: 9.18 acres

Zoning District(s) Fishkill Creek Development (FCD)

DESCRIPTION OF PROPOSED DEVELOPMENT:

Proposed Use: Multifamily residential development

Gross Non-Residential Floor Space: Existing N/A Proposed N/A

TOTAL: N/A

Dwelling Units (by type): Existing 64 units Proposed 136

TOTAL: 200 units (64 existing in buildings 200-300, 136 in Buildings 50-100).

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.

INFORMATION TO BE SHOWN ON SITE LOCATION SKETCH

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

INFORMATION TO BE SHOWN ON THE SITE DEVELOPMENT PLAN

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

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

_____ _____
Chairman, City Planning Board Date

APPLICATION FEES

Site Plan	**Residential $500 + $250 per dwelling unit** **Commercial $500 + $250 per 1,000 s.f.**
Special Use Permit	**Residential $500 + $250 per dwelling unit** **Commercial $500 + $250 per 1,000 s.f.**
Subdivision	**$ 750 for 2-4 lots + $100 per lot** **$1,000 for 5 or more lots + $300 per lot**

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)	$ 3,000	$ 1,000	Current bills + $1,200
6-15	$ 9,000	$ 2,500	Current bills + $1,200
Over 15	$ 18,000	$ 5,000	Current bills + $6,000

NON-RESIDENTIAL SITE PLAN AND SUP APPLICATIONS

	Initial Deposit	Depleted to	Replenishment
Existing Buildings/Change of Use with no site development	$ 1,800	$ 1,000	Current bills + $600
Up to 3,000 s.f. gross floor area	$ 3,125	$ 1,000	Current bills + $1,200
3,000 to 10,000 s.f. gross floor area	$ 3,000 + $0.50 per sq.ft. over 3,000	$ 2,500	Current bills + $3,000
Over 10,000 s.f. gross floor area	$ 9,000 + $0.50 per sq.ft. over 10,000	$ 2,500	Current bills + $3,000

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

* *if required by Chairman*	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: Beacon 248 Holdings LLC

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

Bernard Kohn

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

Project parcel: 6054-45-012574

Applicant Address: 35 Main Street, Suite 311, Poughkeepsie, NY 12601

Project Address: 248 Tioronda Ave (AKA 50-300 Arno Drive), Beacon, NY 12508

Project Tax Grid # 6054-45-012574

Type of Application Amended Site Plan Application, Floodplain Development Permit Application

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

I, Bernard Kohn of Beacon 248 Holdings LLC, the undersigned owner of the above referenced property, hereby affirm that I have reviewed my records and verify that the following information is true.

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

Signature of Owner

Bernard Kohn, Partner

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: 248 Tioronda Avenue

PLEASE INDICATE WHETHER THE SITE PLAN DRAWINGS SHOW THE SUBJECT INFORMATION BY PLACING A CHECK MARK IN THE APPROPRIATE BOXES BELOW.		
	YES	**NO**
The site plan shall be clearly marked "Site Plan", it shall be prepared by a legally certified individual of firm, such as a Registered Architect or Professional Engineer, and it shall contain the following information:	X	
LEGAL DATA		
Name and address of the owner of record.	X	
Name and address of the applicant (if other than the owner).	X	
Name and address of person, firm or organization preparing the plan.	X	
Date, north arrow, and written and graphic scale.	X	
NATURAL FEATURES		
Existing contours with intervals of two (2) feet, referred to a datum satisfactory to the Planning Board.	X	
Approximate boundaries of any areas subject to flooding or stormwater overflows.	X	
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.	X	
EXISTING STRUCTURES, UTILITIES, ETC.		
Outlines of all structures and the location of all uses not requiring structures. Paved areas, sidewalks, and vehicular access between the site and public streets.	X	
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.	X	
Other existing development, including fences, retaining walls, landscaping, and screening.	X	
Sufficient description or information to define precisely the boundaries of the property.	X	
The owners of all adjoining lands as shown on the latest tax records.	X	
The locations, names, and existing widths of adjacent streets and curb lines.	X	
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	X	

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

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

Applicant/Sponsor Name: Bernard Kohn of Beacon 248 Holdings LLC

Signature:

Date: 6/25/2026

FOR OFFICE USE ONLY
Application #

CITY OF BEACON
1 Municipal Plaza, Beacon, NY
Telephone (845) 838-5000 • http://beaconny.gov/

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: Beacon 248 Holdings LLC

Address of Applicant: [redacted]

Telephone Contact Information: [redacted]

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.
Beacon 248 Holdings LLC	[redacted]	[redacted]	12/10/2018	1/18/2019 Dutchess County Clerk

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

☐ YES ☒ NO

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

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

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

N/A

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

(Print) Bernard Kohn

(Signature) _____

FOR OFFICE USE ONLY
Application #

CITY OF BEACON
1 Municipal Plaza, Beacon, NY
Telephone (845) 838-5000 • http://beaconny.gov/

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 Beacon 248 Holdings LLC	Telephone Contact Information [redacted]
Principal Place of Business of Entity [redacted]	Place and Date of incorporation Rockland County 03-29-2017
Method of Incorporation Limited Liability Corporation (LLC)	Official place where the documents and papers of incorporation were filed Rockland County

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
Bernard Kohn	[redacted]		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.
Beacon 248 Holdings LLC	[redacted]		12-10-2018	01-18-2019 at DC 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
Beacon 248 Holdings LLC	[redacted]

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. N/A

SECTION J.

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

Name of the Corporation See Section A	Telephone Contact Information
Principal Business Address	Place and Date of Incorporation
Method of Incorporation	Official place where the documents and papers of incorporation were filed

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

Name	**Residence or business address**	**Telephone number**
See Section B		

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**
N/A	

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, Bernard Kohn being first duly sworn, according to law, deposes and says that I am (Title) Partner, an active and qualified member of the Beacon 248 Holdings LLC, 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.

(Print) Bernard Kohn

(Signature) 



330

PERSPECTIVE - WEST

248 TIORONDA AVE
BUILDINGS 100A - 100B

SCHEMATIC CONCEPT DESIGN

ab architekten



PERSPECTIVE - EAST

248 TIORONDA AVE
BUILDINGS 100A - 100B

SCHEMATIC CONCEPT DESIGN

ab architekten





PERSPECTIVE - FROM WOLCOTT AVE

248 TIORONDA AVE
BUILDINGS 100A - 100B

SCHEMATIC CONCEPT DESIGN

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PERSPECTIVE - FROM KRISTY DR

248 TIORONDA AVE
BUILDINGS 100A - 100B

SCHEMATIC CONCEPT DESIGN

ab architekten

PERSPECTIVE - GREENWAY TRAIL



PERSPECTIVE - FROM KNEVELS AVE

248 TIORONDA AVE
BUILDINGS 100A - 100B

SCHEMATIC CONCEPT DESIGN



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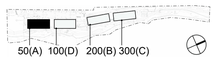
BEACON 248 HOLDINGS LLC
147 UNION ST., SUITE 101
POUGHKEEPSIE, NY 12601

OWNER

BUILDING KEY



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#	DATE	DESCRIPTION

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CITY COUNCIL PRESENTATION

248 TIORONDA AVE

CELLAR PLAN

BLDG 50

DRAWING TITLE

AB

CHECKED BY

PROJECT #

1/8" = 1'-0"

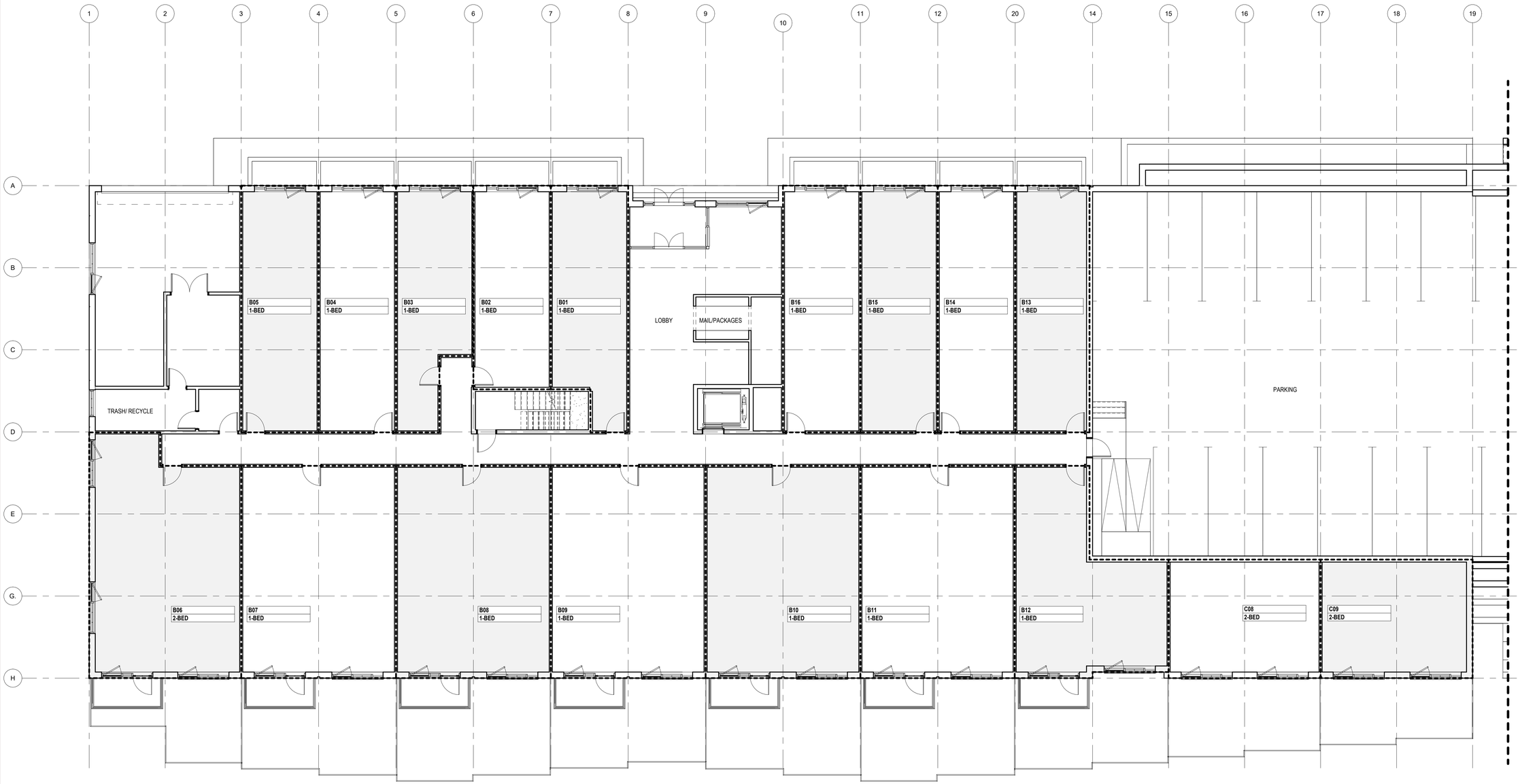
SCALE

07/08/20

DATE

A-A200.

DRAWING #



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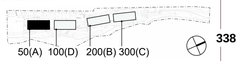
BEACON 248 HOLDINGS LLC
147 UNION ST., SUITE 101
POUGHKEEPSIE, NY 12601
OWNER

BUILDING KEY



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CITY COUNCIL PRESENTATION

248 TIORONDA AVE

BASEMENT PLAN

BLDG 50

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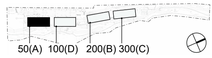
147 UNION ST., SUITE 101
POUGHKEEPSIE, NY 12601

OWNER

BUILDING KEY



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CITY COUNCIL PRESENTATION

248 TIORONDA AVE

1ST FLOOR PLAN

BLDG 50

DRAWING TITLE

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SCALE

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DATE

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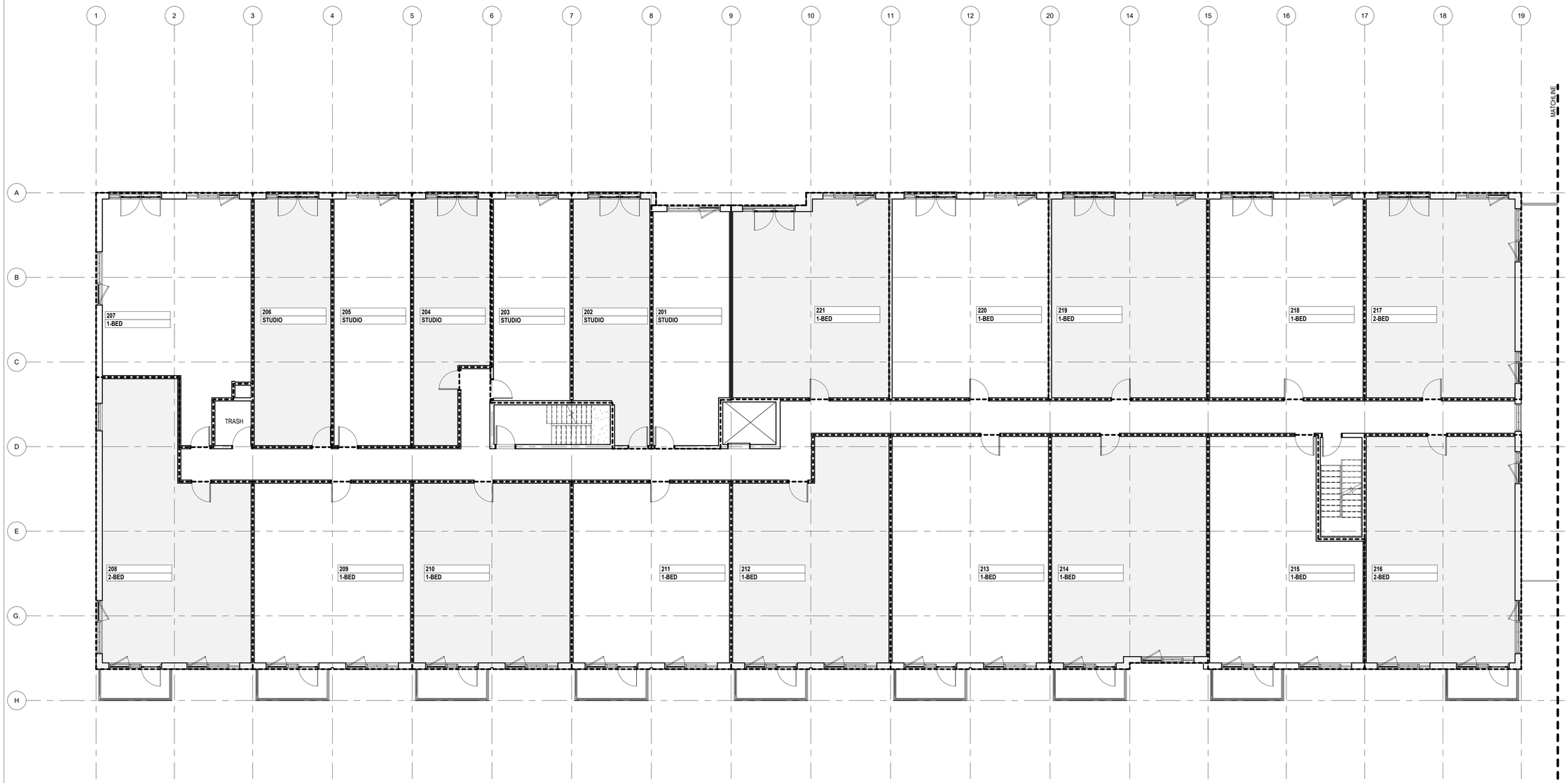
3 OF 20



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BEACON 248 HOLDINGS LLC
147 UNION ST., SUITE 101
POUGHKEEPSIE, NY 12601
OWNER

BUILDING KEY

50(A) 100(D) 200(B) 300(C)

340

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CITY COUNCIL PRESENTATION

248 TIORONDA AVE

2ND FLOOR PLAN

BLDG 50

DRAWING TITLE

AB
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PROJECT #

1/8" = 1'-0"
SCALE

07/08/20
DATE

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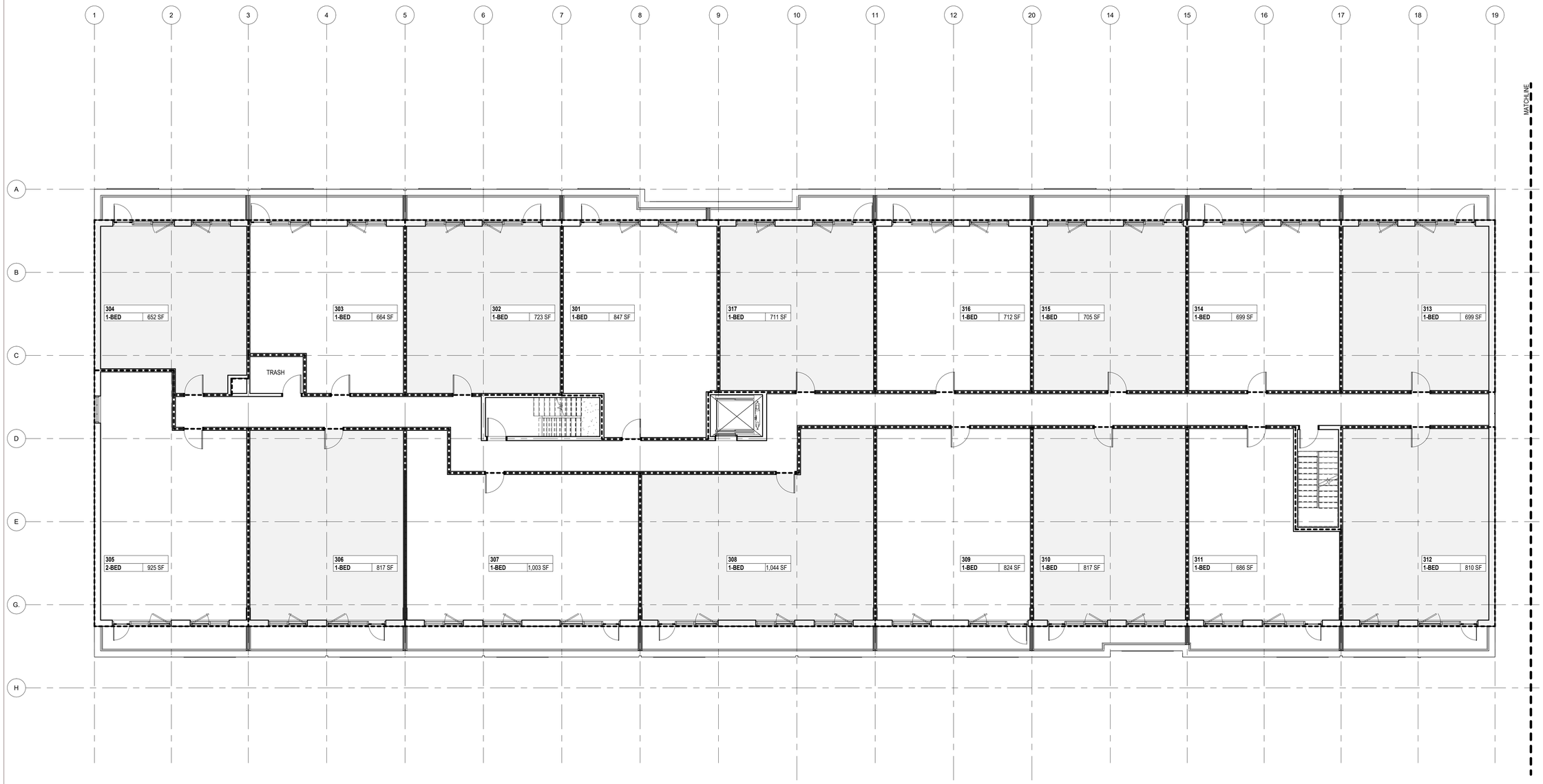
DRAWING #



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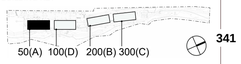
BEACON 248 HOLDINGS LLC
147 UNION ST., SUITE 101
POUGHKEEPSIE, NY 12601

OWNER

BUILDING KEY



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CITY COUNCIL PRESENTATION

248 TIORONDA AVE

3RD FLOOR PLAN

BLDG 50

DRAWING TITLE

AB

CHECKED BY

PROJECT #

1/8" = 1'-0"

SCALE

07/08/20

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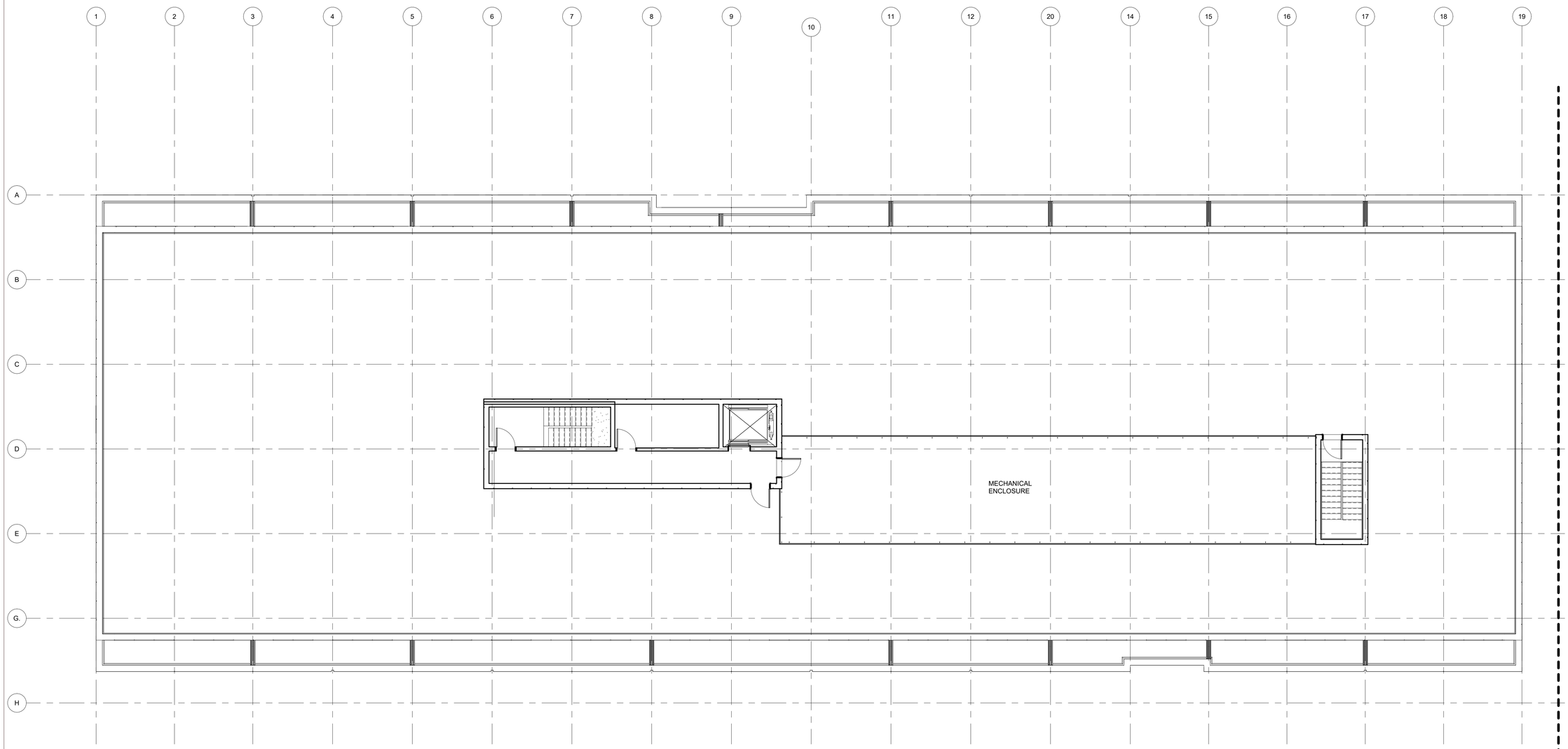
5 OF 20



NOTE: THE COMBINED GREEN ROOF AREA TO BE PROVIDED BETWEEN THE EXISTING AND PROPOSED BUILDINGS TOTALS 10,000 SF.

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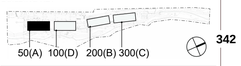
BEACON 248 HOLDINGS LLC
147 UNION ST., SUITE 101
POUGHKEEPSIE, NY 12601

OWNER

BUILDING KEY



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CITY COUNCIL PRESENTATION

248 TIORONDA AVE

ROOF PLAN

BLDG 50

DRAWING TITLE

AB

CHECKED BY

PROJECT #

1/8" = 1'-0"

SCALE

07/08/20

DATE

A-A205.

DRAWING #

6 OF 20



1 ELEVATION - WEST

1/8" = 1'-0"



2 ELEVATION - EAST

1/8" = 1'-0"

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BEACON 248 HOLDINGS LLC
147 UNION ST., SUITE 101
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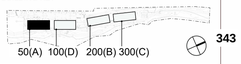
OWNER

BUILDING KEY



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CITY COUNCIL PRESENTATION

248 TIORONDA AVE

ELEVATIONS

BLDG 50

DRAWING TITLE

AB — CHECKED BY

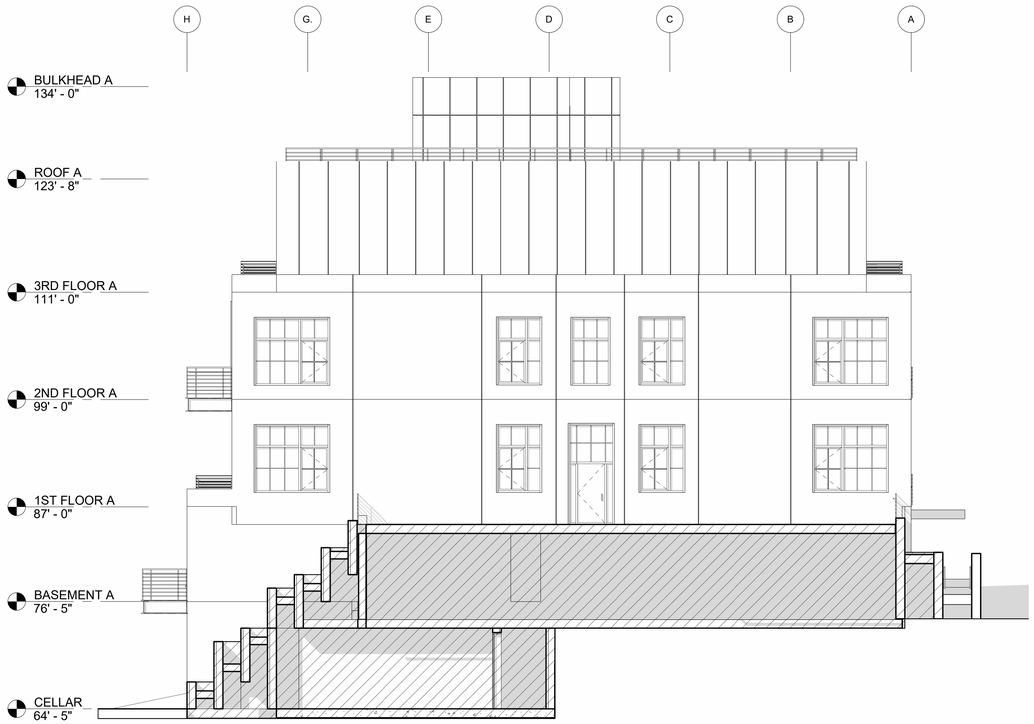
PROJECT #

1/8" = 1'-0" — SCALE

07/08/20 — DATE

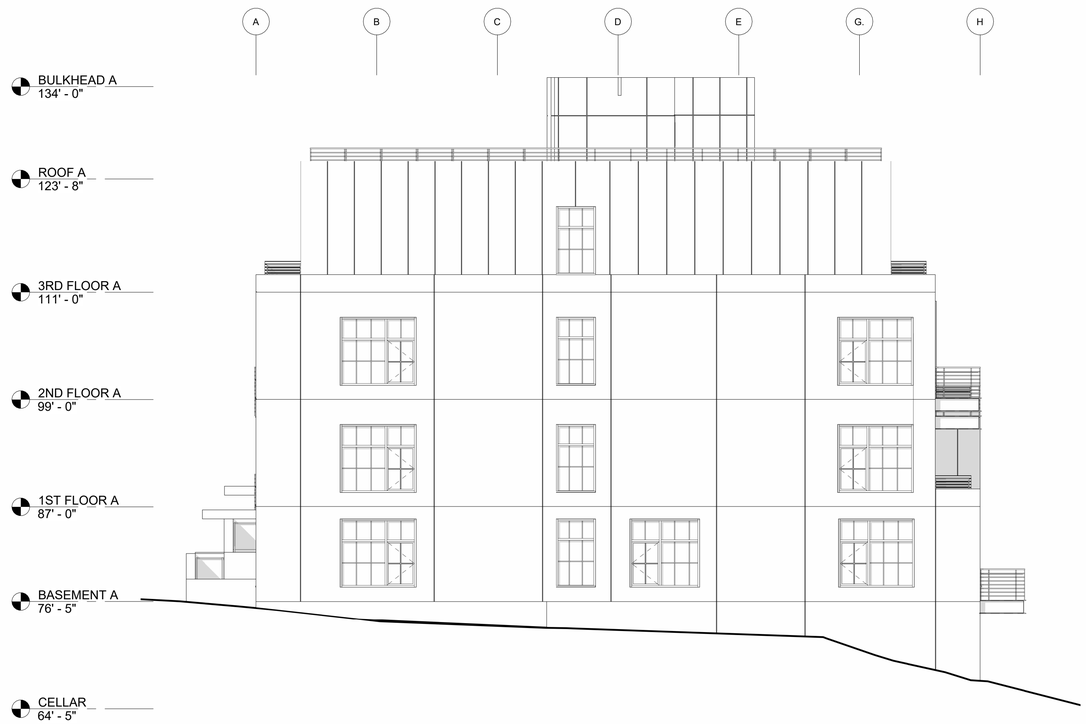
A-A401.

DRAWING #



1 ELEVATION - NORTH

1/8" = 1'-0"



2 ELEVATION - SOUTH

1/8" = 1'-0"

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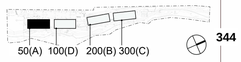
147 UNION ST., SUITE 101
POUGHKEEPSIE, NY 12601

OWNER

BUILDING KEY



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CITY COUNCIL PRESENTATION

248 TIORONDA AVE

ELEVATIONS

BLDG 50

DRAWING TITLE

AB — CHECKED BY

PROJECT #

1/8" = 1'-0" — SCALE

07/08/20 — DATE

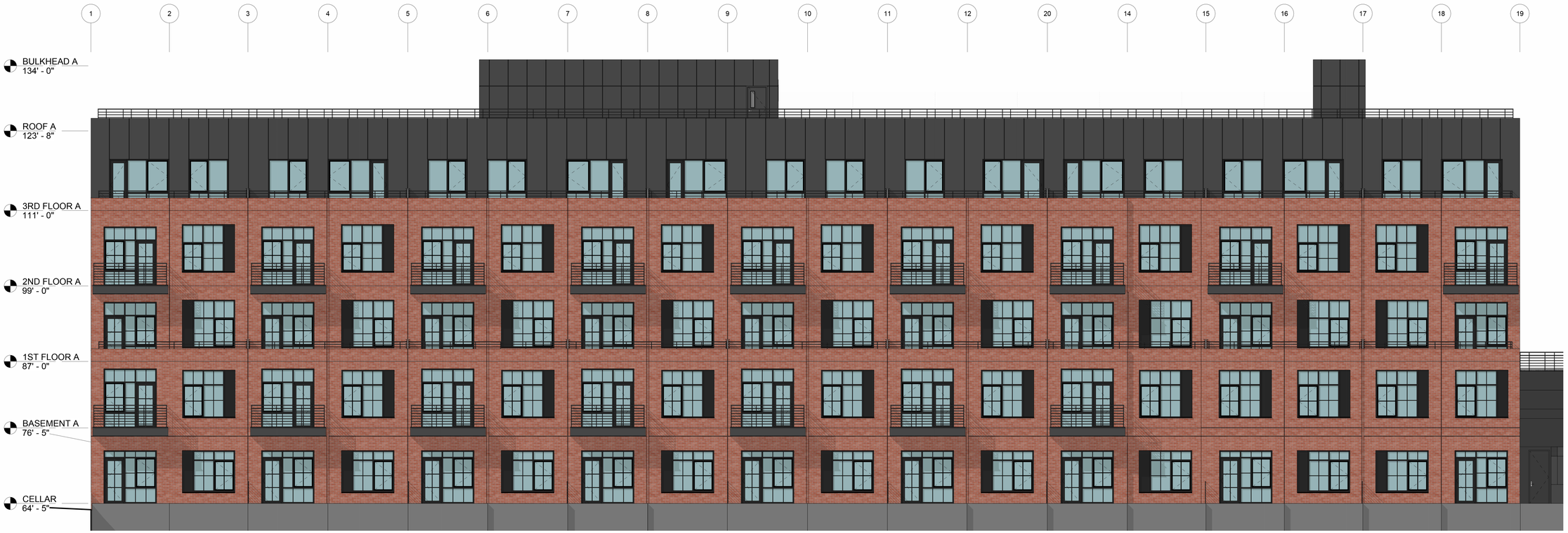
A-A402.

DRAWING #



1 ELEVATION - WEST

1/8" = 1'-0"



2 ELEVATION - EAST

1/8" = 1'-0"

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CITY COUNCIL PRESENTATION

248 TIORONDA AVE

COLORIZED ELEVATIONS

BLDG 50

DRAWING TITLE

AB
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PROJECT #

1/8" = 1'-0"
SCALE

07/08/20
DATE

A-A403.
DRAWING #

9 OF 20



1 ELEVATION - NORTH

1/8" = 1'-0"



2 ELEVATION - SOUTH

1/8" = 1'-0"

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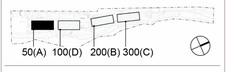
BUILDING KEY



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CITY COUNCIL PRESENTATION

248 TIORONDA AVE

COLORIZED ELEVATIONS

BLDG 50

DRAWING TITLE

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PROJECT #

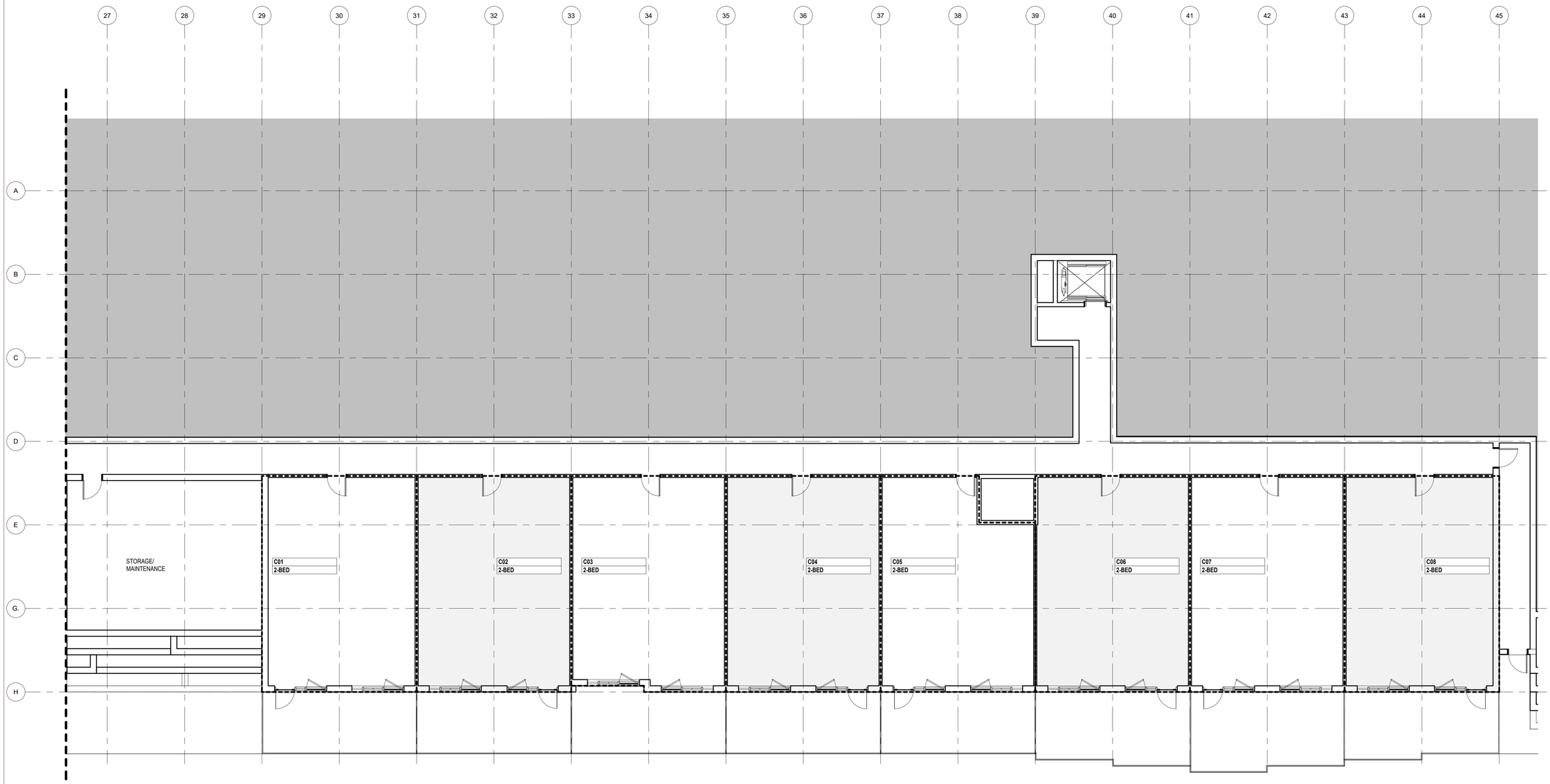
1/8" = 1'-0" — SCALE

07/08/20 — DATE

A-A404.

DRAWING #

10 OF 20



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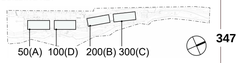

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CITY COUNCIL
PRESENTATION

248 TIORONDA AVE

CELLAR PLAN

BLDG 100

DRAWING TITLE

AB
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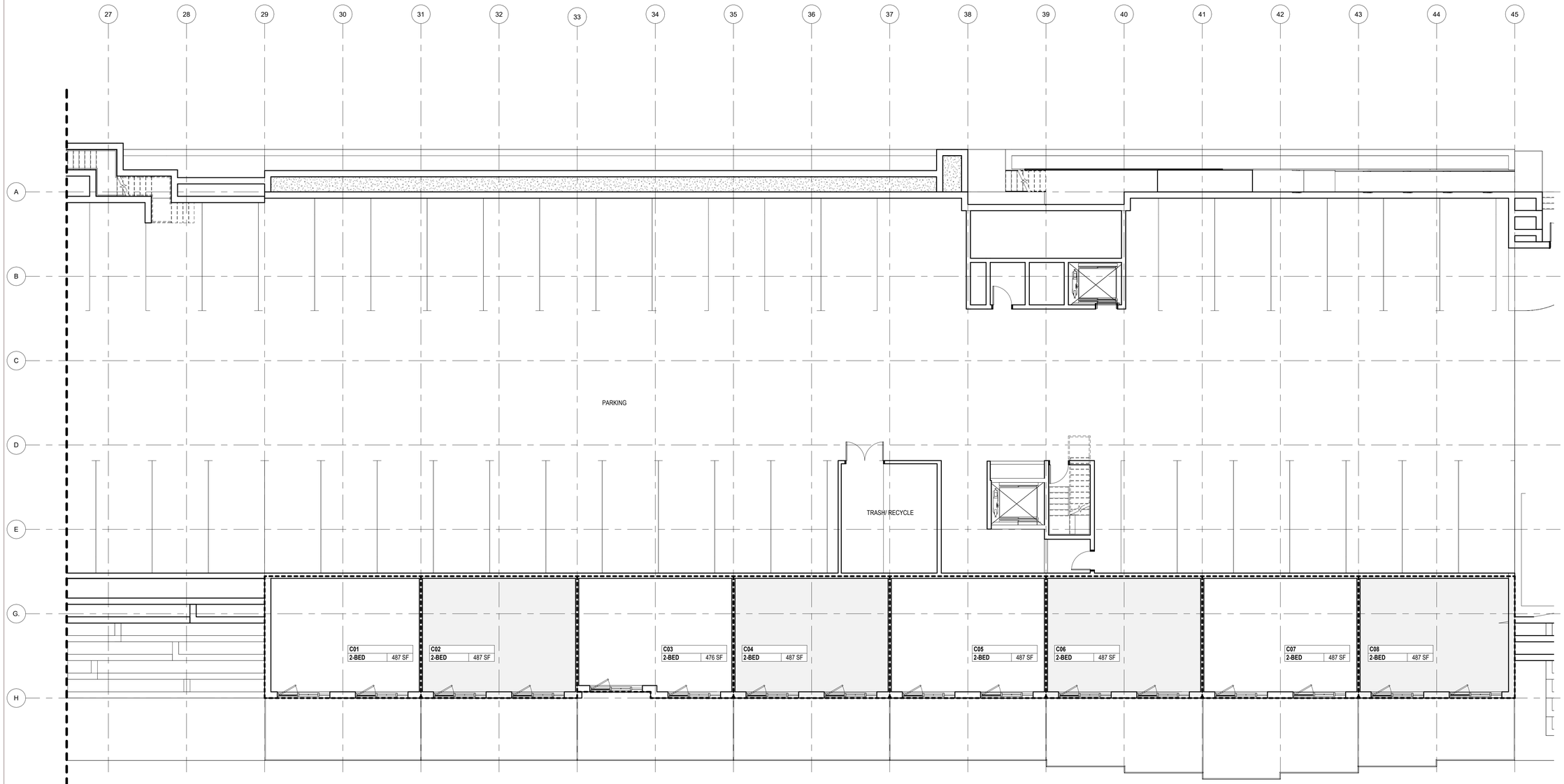
PROJECT #

1/8" = 1'-0"
SCALE

07/08/20
DATE

A-D200.
DRAWING #

11 OF 20



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248 TIORONDA AVE

BASEMENT PLAN

BLDG 100

DRAWING TITLE

AB
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PROJECT #

1/8" = 1'-0"
SCALE

07/08/20
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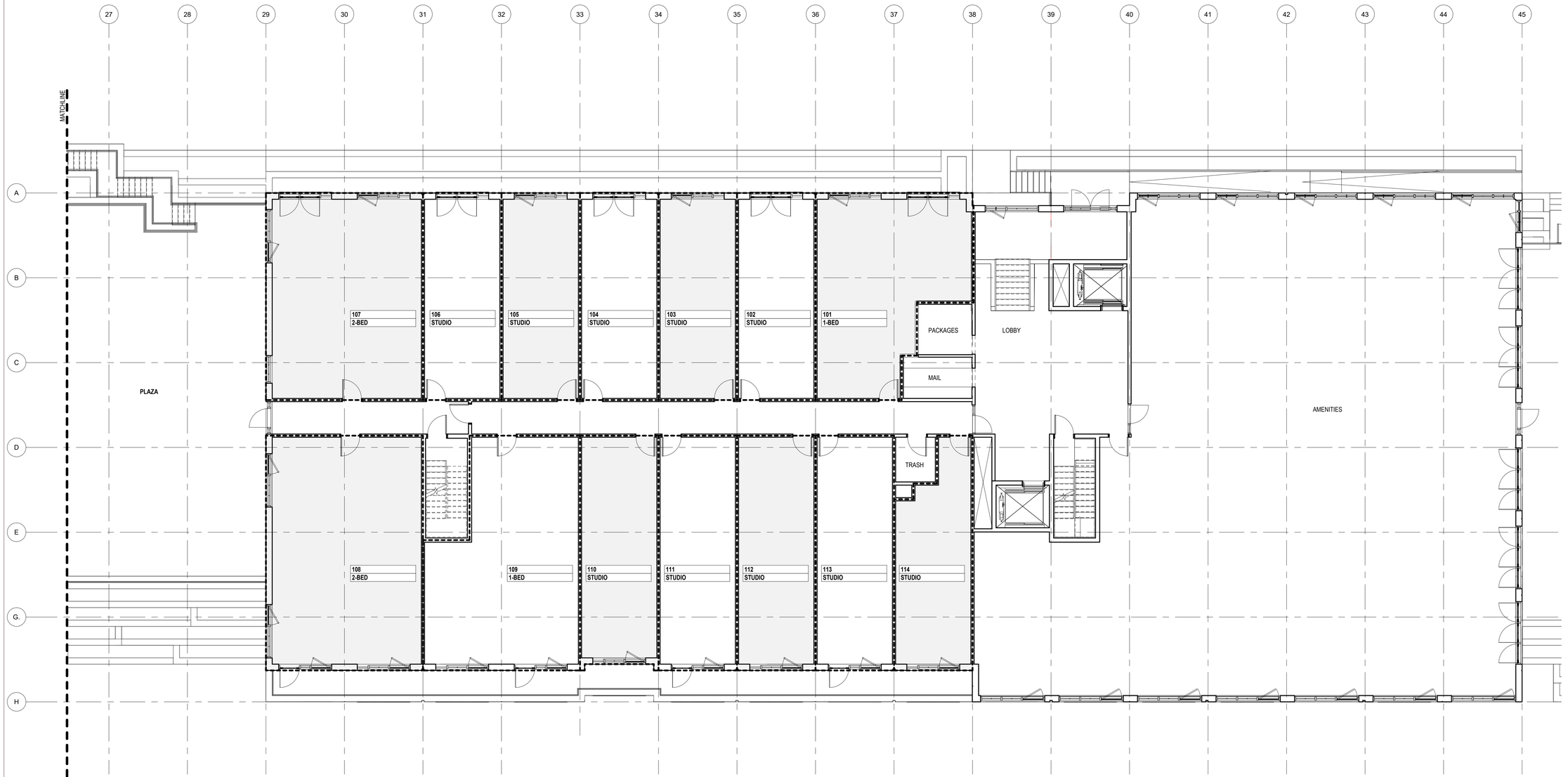
A-D201.
DRAWING #



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BUILDING KEY



349

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CITY COUNCIL PRESENTATION

248 TIORONDA AVE

1ST FLOOR PLAN

BLDG 100

DRAWING TITLE

AB

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PROJECT #

1/8" = 1'-0"

SCALE

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DATE

A-D202.

DRAWING #

13 OF 20



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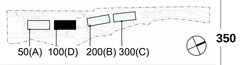

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CITY COUNCIL PRESENTATION

248 TIORONDA AVE

2ND FLOOR PLAN

BLDG 100

DRAWING TITLE

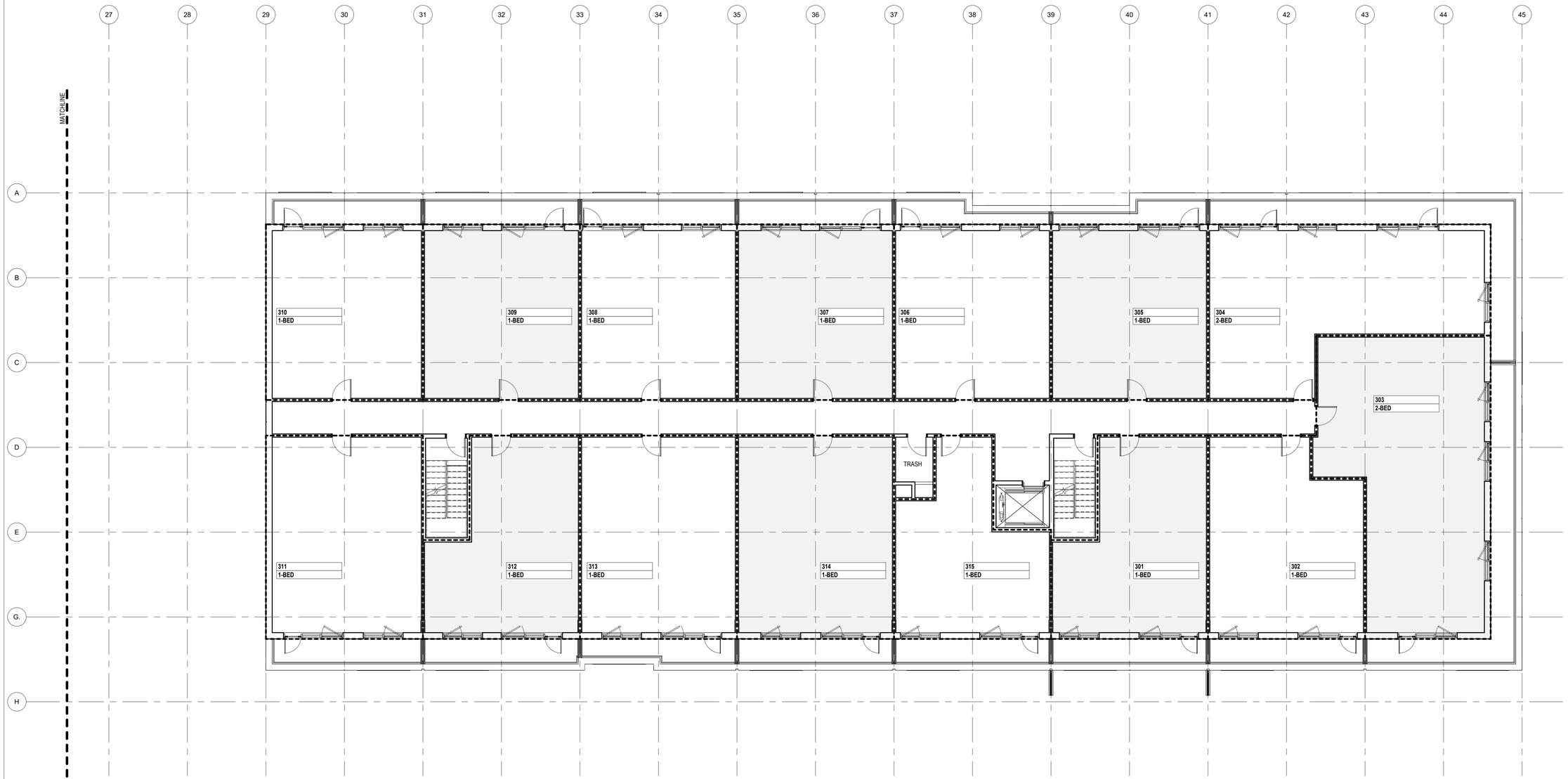
AB
CHECKED BY

PROJECT #

1/8" = 1'-0"
SCALE

07/08/20
DATE

A-D203.
DRAWING #



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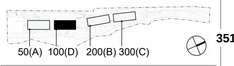
BUILDING KEY



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CITY COUNCIL PRESENTATION

248 TIORONDA AVE

3RD FLOOR PLAN

BLDG 100

DRAWING TITLE

AB

CHECKED BY

PROJECT #

1/8" = 1'-0"

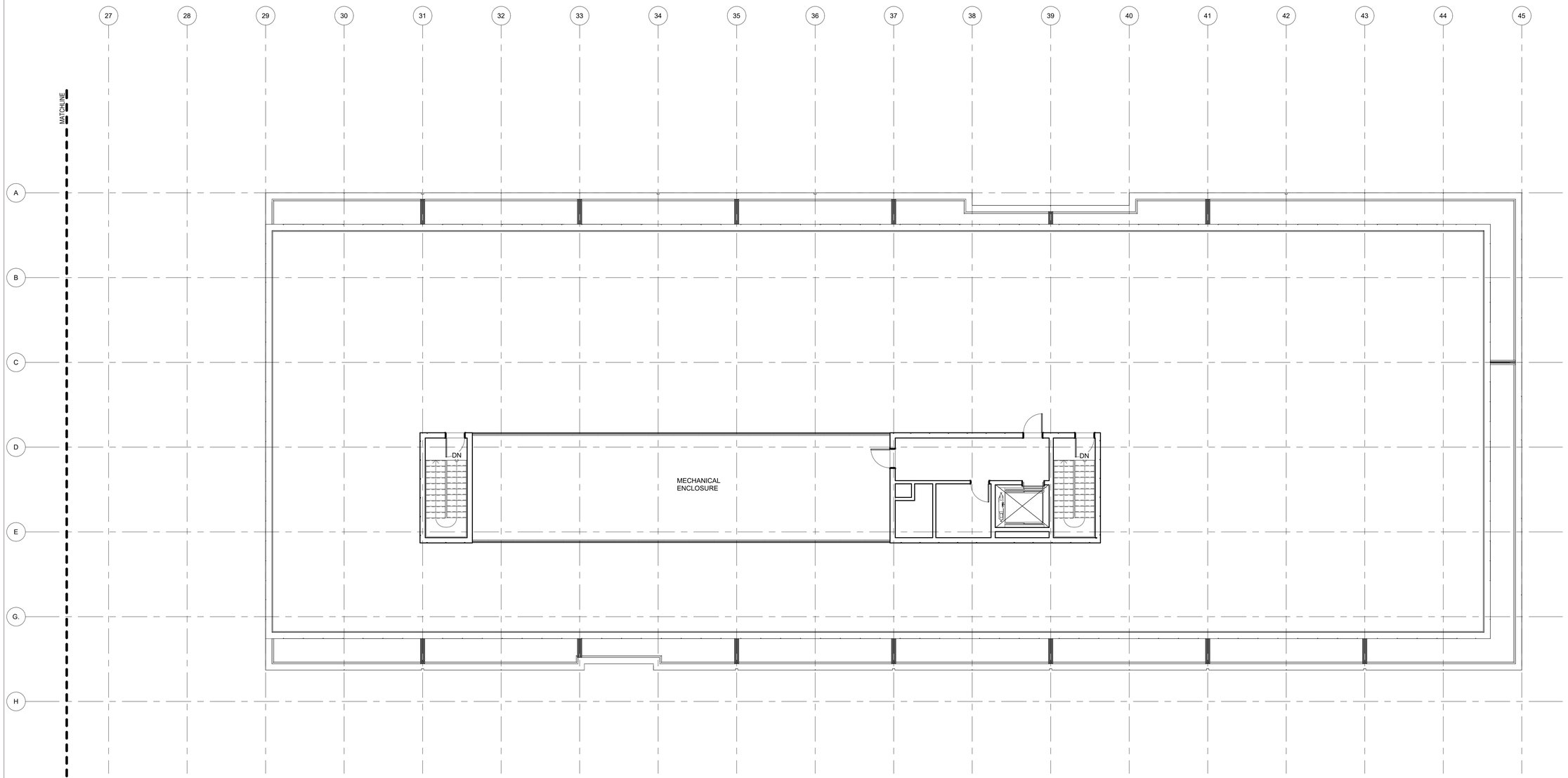
SCALE

07/08/20

DATE

A-D204.

DRAWING #



NOTE: THE COMBINED GREEN ROOF AREA TO BE PROVIDED BETWEEN THE EXISTING AND PROPOSED BUILDINGS TOTALS 10,000 SF.

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BUILDING KEY

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CITY COUNCIL PRESENTATION

248 TIORONDA AVE

ROOF PLAN

BLDG 100
DRAWING TITLE

AB
CHECKED BY
PROJECT #

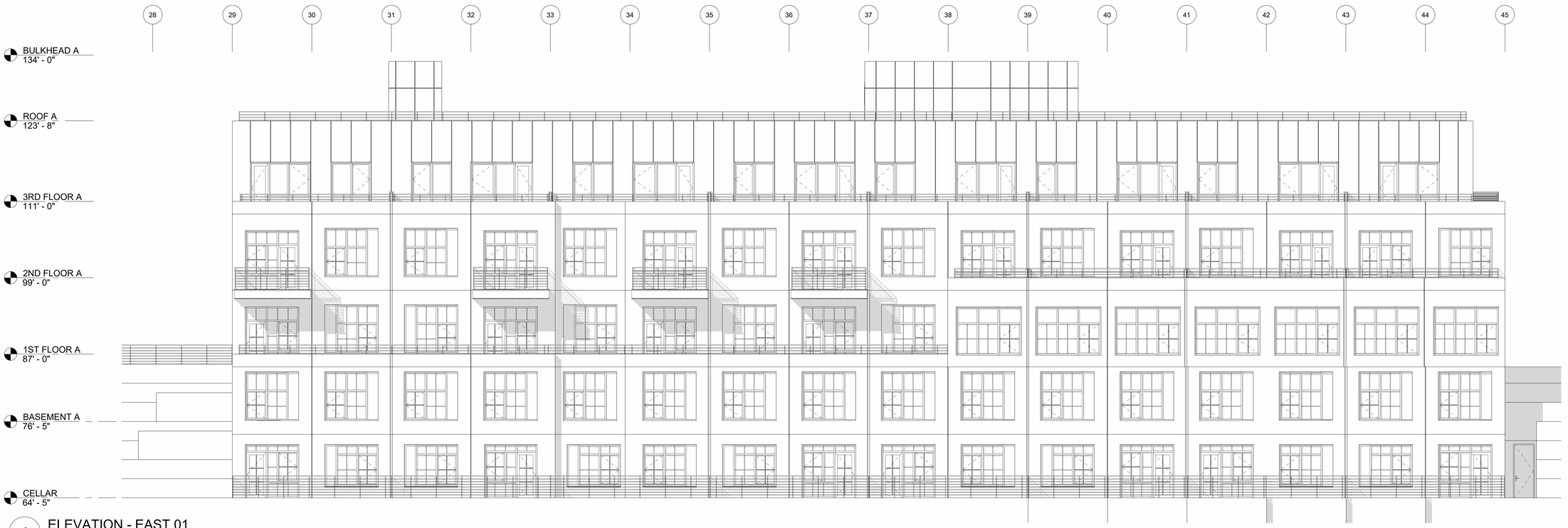
1/8" = 1'-0"
SCALE
07/08/20
DATE

A-D205.
DRAWING #



2 ELEVATION - WEST 01

1/8" = 1'-0"



1 ELEVATION - EAST 01

1/8" = 1'-0"

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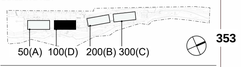
POUGHKEEPSIE, NY 12601

OWNER

BUILDING KEY



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CITY COUNCIL PRESENTATION

248 TIORONDA AVE

ELEVATIONS

BLDG 100

DRAWING TITLE

AB

CHECKED BY

PROJECT #

1/8" = 1'-0"

SCALE

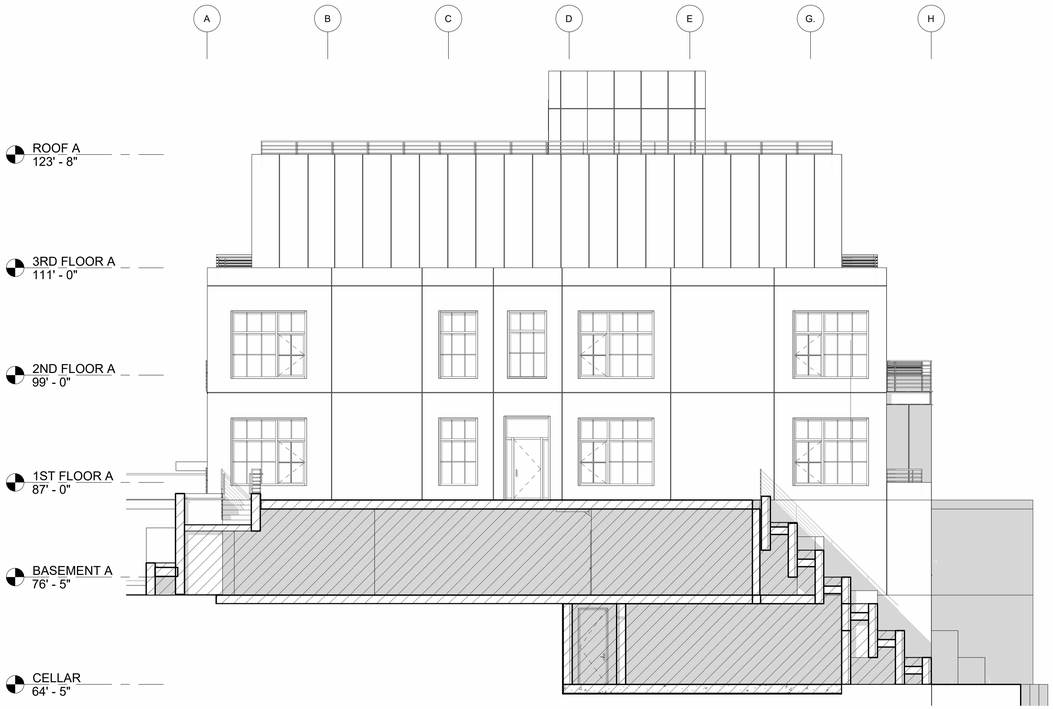
07/08/20

DATE

A-D401.

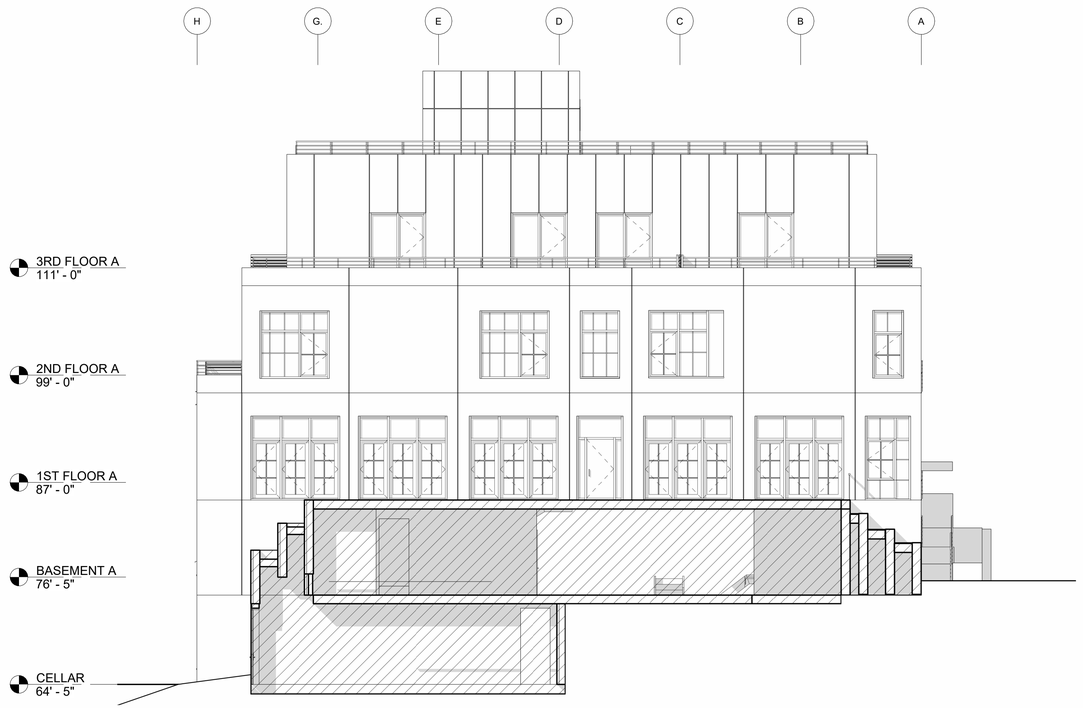
DRAWING #

17 OF 20



2 ELEVATION - SOUTH

1/8" = 1'-0"



1 ELEVATION - NORTH 01

1/8" = 1'-0"

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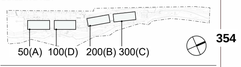

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ELEVATIONS

BLDG 100

DRAWING TITLE

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1/8" = 1'-0"

SCALE

07/08/20

DATE

A-D402.

DRAWING #

18 OF 20



1 ELEVATION - WEST

1/8" = 1'-0"



2 ELEVATION - EAST

1/8" = 1'-0"

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CITY COUNCIL PRESENTATION

248 TIORONDA AVE

COLORIZED ELEVATIONS

BLDG 100

DRAWING TITLE

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PROJECT #

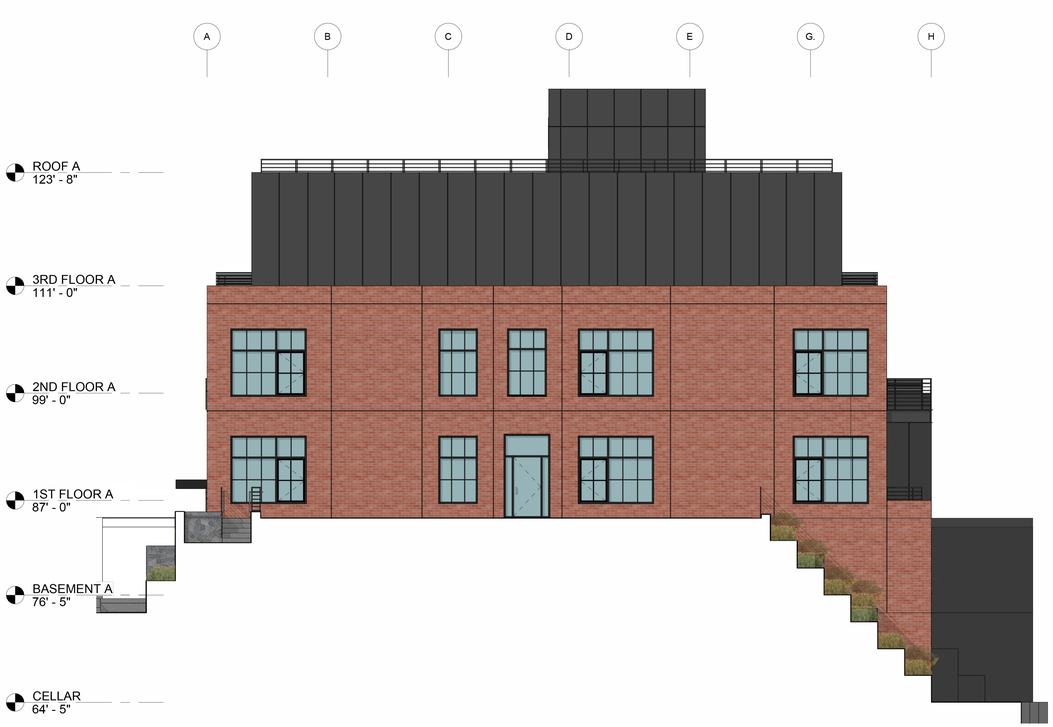
1/8" = 1'-0" — SCALE

07/08/20 — DATE

A-D403.

DRAWING #

19 OF 20



1 ELEVATION - SOUTH

1/8" = 1'-0"



2 ELEVATION - NORTH

1/8" = 1'-0"

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OWNER

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CITY COUNCIL PRESENTATION

248 TIORONDA AVE

COLORIZED ELEVATIONS

BLDG 100

DRAWING TITLE

AB

CHECKED BY

PROJECT #

1/8" = 1'-0"

SCALE

07/08/20

DATE

A-D404.

DRAWING #

20 OF 20

AMENDED SITE PLAN

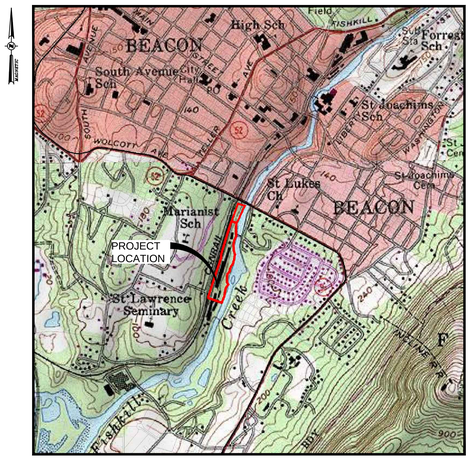
248 TIORONDA AVE, BEACON NY

PREPARED FOR

CHAI DEVELOPERS

CITY OF BEACON
DUTCHESS COUNTY, NEW YORK

JUNE 30, 2026



LOCATION MAP
SCALE: 1"=1000'
SOURCE: USGS CATSKILL, NY QUADRANGLE
(USGS REF. CODE: WEST POINT-41073-D8-TF-024)

BEST MANAGEMENT PRACTICES FOR INDIANA BATS

1. THE PROJECT WILL AVOID CUTTING TREES TO THE MAXIMUM EXTENT PRACTICABLE.
2. LARGER TREES WILL BE RETAINED.
3. TREE CLEARING LIMITS WILL BE MARKED IN THE FIELD PRIOR TO ANY CLEARING, AND CONTRACTORS WILL BE INFORMED ABOUT CLEARING LIMITS PRIOR TO THE INITIATION OF WORK.
4. TREES WILL BE REMOVED BETWEEN OCTOBER 1 AND MARCH 31 IN ORDER TO AVOID ANY INCIDENTAL TAKE TO INDIANA BATS, OR OTHER BATS THAT MAY USE TREES FOR ROOSTING.
5. ALL SITE LIGHTING ON THE SITE WILL BE FULL CUT-OFF.
6. THERE WILL BE NO USE OF HERBICIDES OR PESTICIDES IN ANY STORMWATER MANAGEMENT BASINS.

CITY OF BEACON PLANNING BOARD APPROVAL
CITY OF BEACON, NEW YORK

APPROVED BY RESOLUTION NUMBER _____ OF THE PLANNING BOARD OF BEACON, NEW YORK ON THE _____ DAY OF _____, 2015, SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION, OR REVISION OF THIS PLAT AS APPROVED SHALL VOID THIS APPROVAL. SIGNED THIS _____ DAY OF _____ 2015.

_____
CHAIRMAN

CITY OF BEACON PLANNING BOARD APPROVAL
OWNER / APPLICANT SIGNATURE

THE UNDERSIGNED APPLICANT FOR THE PROPERTY AND THE UNDERSIGNED OWNER OF THE PROPERTY SHOWN HEREON, STATE THAT THEY ARE FAMILIAR WITH THIS MAP, ITS NOTES AND ITS CONTENTS, AND HEREBY CONSENT TO ALL SAID TERMS AND CONDITIONS AS STATED HEREON.

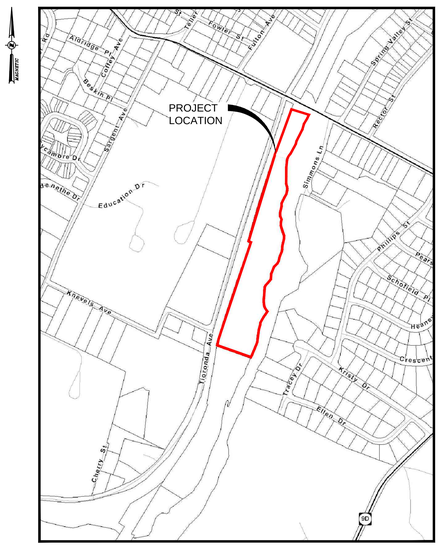
THE APPLICANT AND OWNER UNDERSTAND THEIR OBLIGATION TO THE CITY TO KEEP THIS SITE AS PER SITE PLAN APPROVAL BY THE CITY PLANNING BOARD UNTIL A NEW OR REVISED SITE PLAN IS APPROVED FOR THE SITE. THE APPLICANT AND OWNER UNDERSTAND THEIR OBLIGATION TO THE TOWN NOT TO OCCUPY THE PREMISES BEFORE A CO IS ISSUED BY THE TOWN CODE ENFORCEMENT OFFICER.

_____ APPLICANT DATE

_____ OWNER DATE

INDEX OF DRAWINGS

PAGE NO.	SHEET NO.	DATE	DESCRIPTION
1	G001	06/30/26	TITLE SHEET
2	SV1	03/12/26	MAP OF EXISTING CONDITIONS: LANDS OF BEACON 248 HOLDINGS, LLC
3	C120	06/30/26	DEMOLITION PLAN
4	C130	06/30/26	SITE PLAN
5	C140	06/30/26	GRADING PLAN
6	C150	06/30/26	EROSION & SEDIMENT CONTROL PLAN
7	C160	06/30/26	UTILITY PLAN
8	C161	06/30/26	UTILITY PROFILES
9	C162	06/30/26	UTILITY PROFILES
10	C180	06/30/26	LANDSCAPE PLAN
11	C190	06/30/26	PHOTOMETRIC LIGHTING PLAN
12	C200	06/30/26	VEHICLE MANEUVERING PLAN
13	C530	06/30/26	SITE DETAILS
14	C540	06/30/26	STORM SEWER DETAILS
15	C550	06/30/26	EROSION & SEDIMENT CONTROL DETAILS & NOTES
16	C570	06/30/26	SANITARY SEWER AND WATER DETAILS & NOTES
17	C580	06/30/26	LANDSCAPE DETAILS & NOTES



AREA PARCEL MAP
SCALE: 1"=400'

BULK TABLE

FISHKILL CREEK DEVELOPMENT DISTRICT: FCD

ZONING REQUIREMENTS:	REQUIRED	PROPOSED
MINIMUM LOT AREA	2 ACRES	9.18 ACRES
MAXIMUM # OF DWELLINGS	200 UNITS[1]	200 UNITS[1]
MAXIMUM BUILDING COVERAGE	35%	17%
MINIMUM OPEN SPACE	30%	64%
MINIMUM FRONTAGE OF OVERALL FCD SITE ON PUBLIC STREET ROW	50 FT	135'
MINIMUM BUILDING SETBACK FROM EDGE OF PAVEMENT OF PUBLIC AND PRIVATE STREETS	12 FT	160'
MINIMUM SETBACK AND BUFFER WIDTH ALONG FISHKILL CREEK	AVG 50 FT MIN 25 FT	AVG = 62 FT MIN. = 37 FT
MAXIMUM BUILDING HEIGHT	3 STORIES / 40 FEET	SEE NOTE 2
MINIMUM NUMBER OF PARKING SPACES		
RESIDENTIAL:	1 SPACE PER DWELLING UNIT =200 SPACES	227 SPACES TOTAL (WHICH INCLUDES 89 SURFACE SPACES AND 138 GARAGE SPACES)
GREENWAY/RAIL TRAIL:	0 SPACES	4 SPACES
TOTAL:	204 SPACES 7 ACCESSIBLE SPACES REQUIRED	231 SPACES 13 ACCESSIBLE SPACES PROVIDED

BULK TABLE NOTES:

1. EXISTING BUILDINGS 200 + 300 CONTAIN 64 UNITS (SEE DEVELOPMENT SCHEDULE). PER CITY COUNCIL RESOLUTION RESOLUTION NO. 117 OF 2025, "THE APPLICANT IS DIRECTED TO SUBMIT A CONCEPT PLAN FOR 2 BUILDINGS CONTAINING 136 RESIDENTIAL UNITS (WHICH INCLUDES 27 BMR UNITS)," WHICH SUMS TO 200 UNITS SITEWIDE.
2. PER CITY COUNCIL RESOLUTION NO. 117 OF 2025, BUILDINGS 50 & 100 SHALL BE "IN SUBSTANTIALLY THE SAME DESIGN AS BUILDINGS 200 AND 300." PROPOSED BUILDINGS 50 & 100 MAINTAIN THE SAME ROOF ELEVATION AS BUILDINGS 200 AND 300.

DEVELOPMENT SCHEDULE

BUILDING	UNITS	STUDIO & 1-BR	2-BR	3-BR
200 & 300	64[1]	27	30	7
50 & 100	136[2]	106	30	-
TOTAL	200[3]	133	60	7

DEVELOPMENT SCHEDULE NOTES:

1. BUILDINGS 200 & 300 CONTAIN 8 EXISTING BMR UNITS.
2. 27 OF THE UNITS WITHIN BUILDINGS 50 & 100 SHALL BE BMR UNITS MEETING THE REQUIREMENTS OF ARTICLE 16B, AFFORDABLE– WORKFORCE HOUSING, OF THE ZONING LAW.
3. FULL BUILDOUT OF 200 UNITS SHALL CONTAIN 35 BMR UNITS.

SITE ENGINEER:
LABELLA ASSOCIATES D.P.C.
21 FOX STREET, POUGHKEEPSIE, NY 12601
PHONE: (845) 454-3980

PROJECT ARCHITECT:
AB ARCHITEKTEN
62 ALLEN STREET, 2ND FLOOR
NEW YORK, NY 10002
PHONE: (212) 334-1232

SITE SURVEYOR:
LABELLA ASSOCIATES D.P.C.
21 FOX STREET, POUGHKEEPSIE, NY 12601
PHONE: (845) 454-3980

APPLICANT:
BEACON 248 HOLDINGS, LLC.
35 MAIN ST, SUITE 311
POUGHKEEPSIE, NY 12601
(201) 753-1445

OWNER INFORMATION:
BEACON 248 HOLDINGS, LLC.
35 MAIN ST, SUITE 311
POUGHKEEPSIE, NY 12601

TAX MAP INFORMATION:
CITY OF BEACON, NEW YORK
SECTION 6054, BLOCK 45, LOT 012574 (9.18 ACRE)

AREA:
TOTAL PROJECT AREA: 9.18± ACRES

ZONING DISTRICT:
FISHKILL CREEK DEVELOPMENT (FCD) ZONING DISTRICT

WATER & SEWER DISTRICT:
CITY OF BEACON

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Poughkeepsie, NY 12601
(845) 454-3980
labellapc.com

NOT FOR CONSTRUCTION
EXP: EXP:

CERTIFICATE OF AUTHORIZATION NUMBER:
PROFESSIONAL ENGINEERING: 0021272
LAND SURVEYING: 0021271
GEOLOGICAL: 0021659

It is a violation of New York Education Law Art. 145 Sec. 7209 & Art. 147 Sec. 7307, for any person, unless acting under the direction of a licensed architect, professional engineer, or land surveyor, to alter an item in any way. If an item bearing the seal of an architect, engineer, or land surveyor is altered; the altering architect, engineer, or land surveyor shall affix to the item their seal and notation "altered by" followed by their signature and date of such alteration, and a specific description of the alteration.

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Poughkeepsie, New York 12601

248 Tioronda Avenue
248 Tioronda Avenue
Beacon, New York 12508

NO:	DATE:	DESCRIPTION:
Revisions		

PROJECT NUMBER: 2260816
DRAWN BY: GMZ
REVIEWED BY: KGA
ISSUED FOR: ISSUED FOR PLANNING BOARD REVIEW
DATE: 06/30/26
DRAWING NAME:

TITLE SHEET

DRAWING NUMBER:

G001

6/30/2026 1:30:07 PM
\\cas-labs\Labs\Data\Projects\81700\81799\81750.00 Chai Builders B-248JWD\05_GIS_81750-00_TITLE.dwg

LEGEND

EXISTING CONDITIONS:

- PROPERTY LINE NO PHYSICAL BOUNDS
- ADJACENT PROPERTY LINE
- 110 — EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- ×200.3 — EXISTING SPOT GRADE
- EXISTING PROPERTY EASEMENT
- EXISTING PROTECTIVE CREEKSIDE BUFFER
- EXISTING BUILDING
- EXISTING CONCRETE RETAINING WALL
- EXISTING RIPRAP
- EXISTING BUILDING FOUNDATION
- 248 — EXISTING TEXTURE PLATE
- EXISTING CURB
- GRAVEL — EXISTING GRAVEL DRIVEWAY
- EXISTING CREEK
- OHW — EXISTING OVERHEAD WIRES
- W — EXISTING WATER LINE
- UE — EXISTING UNDERGROUND ELECTRIC LINE
- 8"SAN — EXISTING UNDERGROUND SEWER LINE
- 18"RCP — EXISTING UNDERGROUND STORM LINE

SYMBOLS:

- EXISTING SIGN (2 POSTS)
- EXISTING BOLLARD
- EXISTING FENCE POST
- EXISTING POST
- EXISTING CONIFEROUS TREE
- EXISTING DECIDUOUS TREE

SYMBOLS:

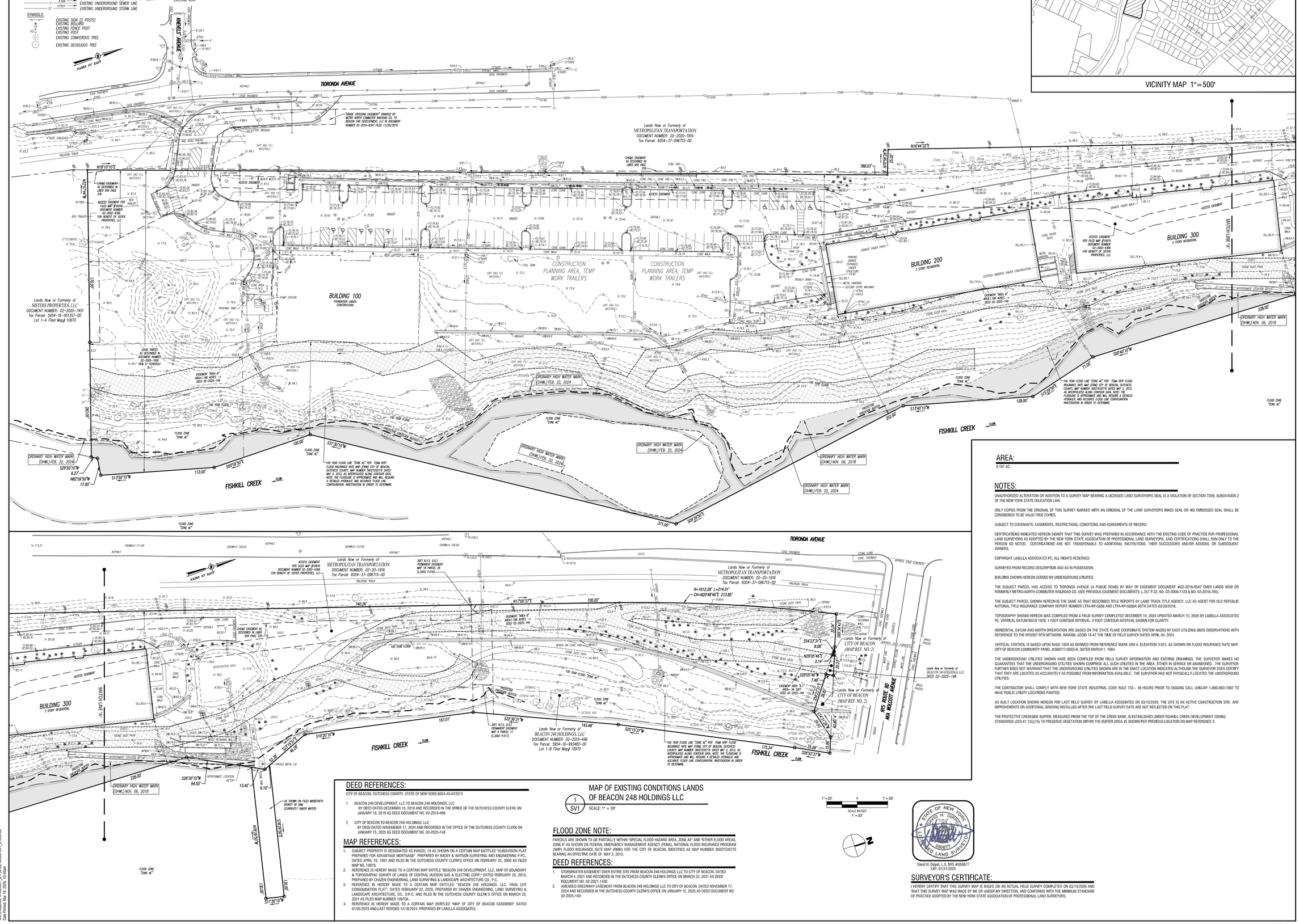
- EXISTING SHRUB
- EXISTING MONUMENT
- EXISTING IRON PIPE FOUND
- EXISTING IRON ROD FOUND
- EXISTING CAPPED IRON ROD SET
- EXISTING SPIKE SET
- EXISTING SANITARY MANHOLE
- EXISTING CLEANOUT
- EXISTING DRAINAGE MANHOLE
- EXISTING CATCH BASIN
- EXISTING YARD DRAIN
- EXISTING END SECTION
- EXISTING ROUND ELECTRIC HAND HOLE
- EXISTING ELECTRIC BOX
- EXISTING GUY WIRE
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- EXISTING BOLLARD LIGHT
- EXISTING LANDSCAPE LIGHT
- EXISTING PANEL/SWITCH BOX
- EXISTING CONDUIT TO/FROM UNDERGROUND
- EXISTING GAS STRUCTURE
- EXISTING HYDRANT
- EXISTING AUTO SPKLR. HYDRANT
- EXISTING WATER SHUT OFF VALVE
- EXISTING WATER VALVE
- EXISTING VENT

SYMBOLS:

- EXISTING HANDICAP PARKING SPACE
- EXISTING SPOT GRADE BOTTOM CURB
- EXISTING SPOT GRADE TOP CURB
- EXISTING SPOT GRADE BOTTOM WALL
- EXISTING SPOT GRADE TOP WALL
- EXISTING FINISHED FLOOR ELEVATION
- EXISTING RIM ELEVATION
- EXISTING INVERT ELEVATION



VICINITY MAP 1"=500'



AREA:

9.181 AC.

NOTES:

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY MAP BEARING A LICENSED LAND SURVEYOR'S SEAL IS A VIOLATION OF SECTION 7209, SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW.

ONLY COPIES FROM THE ORIGINAL OF THIS SURVEY MARKED WITH AN ORIGINAL OF THE LAND SURVEYOR'S INKED SEAL OR HIS EMBOSSED SEAL SHALL BE CONSIDERED TO BE VALID TRUE COPIES.

SUBJECT TO COVENANTS, EASEMENTS, RESTRICTIONS, CONDITIONS AND AGREEMENTS OF RECORD.

CERTIFICATIONS INDICATED HEREON SIGNIFY THAT THIS SURVEY WAS PREPARED IN ACCORDANCE WITH THE EXISTING CODE OF PRACTICE FOR PROFESSIONAL LAND SURVEYORS AS ADOPTED BY THE NEW YORK STATE ASSOCIATION OF PROFESSIONAL LAND SURVEYORS. SAID CERTIFICATIONS SHALL RUN ONLY TO THE PERSON SO NOTED. CERTIFICATIONS ARE NOT TRANSFERABLE TO ADDITIONAL INSTITUTIONS, THEIR SUCCESSORS AND/OR ASSIGNS, OR SUBSEQUENT OWNERS.

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SURVEYED FROM RECORD DESCRIPTION AND AS IN POSSESSION.

BUILDING SHOWN HEREON SERVED BY UNDERGROUND UTILITIES.

THE SUBJECT PARCEL HAS ACCESS TO TIORONDA AVENUE (A PUBLIC ROAD) BY WAY OF EASEMENT DOCUMENT #02-2016-8347 OVER LANDS NOW OR FORMERLY METRO-NORTH COMMUTER RAILROAD CO. (SEE PREVIOUS EASEMENT DOCUMENTS; L.257 P.32, NO. 02-2009-1123 & NO. 02-2016-795).

THE SUBJECT PARCEL SHOWN HEREON IS THE SAME AS THAT DESCRIBED TITLE REPORTS BY LAND TRACK TITLE AGENCY, LLC AS AGENT FOR OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY REPORT NUMBER LTTA-NY-5688 AND LTTA-NY-5688A BOTH DATED 03/30/2018.

TOPOGRAPHY SHOWN HEREON WAS COMPILED FROM A FIELD SURVEY COMPLETED DECEMBER 16, 2024 UPDATED MARCH 10, 2026 BY LABELLA ASSOCIATES PC. VERTICAL DATUM NGVD 1929, 1 FOOT CONTOUR INTERVAL, 2 FOOT CONTOUR INTERVAL SHOWN FOR CLARITY.

HORIZONTAL DATUM AND NORTH ORIENTATION ARE BASED ON THE STATE PLANE COORDINATE SYSTEM NAD83 NY EAST UTILIZING GNSS OBSERVATIONS WITH REFERENCE TO THE NYSDOT RTN NETWORK, NAVD88, GEOID 18 AT THE TIME OF FIELD SURVEY DATED APRIL 04, 2024 .

VERTICAL CONTROL IS BASED UPON NVGD 1929 AS DERIVED FROM REFERENCE MARK (RM 4, ELEVATION 3.92'), AS SHOWN ON FLOOD INSURANCE RATE MAP, CITY OF BEACON COMMUNITY PANEL #360217-0003-B, DATED MARCH 1, 1984.

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN COMPILED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THE SURVEYOR DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

THE CONTRACTOR SHALL COMPLY WITH NEW YORK STATE INDUSTRIAL CODE RULE 753 - 48 HOURS PRIOR TO DIGGING CALL UDIG-NY 1-800-962-7962 TO HAVE PUBLIC UTILITY LOCATIONS PAINTED.

AS BUILT LOCATION SHOWN HEREON PER LAST FIELD SURVEY BY LABELLA ASSOCIATES ON 03/10/2026. THE SITE IS AN ACTIVE CONSTRUCTION SITE. ANY IMPROVEMENTS OR ADDITIONAL GRADING INSTALLED AFTER THE LAST FIELD SURVEY DATE ARE NOT REFLECTED ON THIS PLAT.

THE PROTECTIVE CREEKSIDE BUFFER, MEASURED FROM THE TOP OF THE CREEK BANK, IS ESTABLISHED UNDER FISHKILL CREEK DEVELOPMENT ZONING STANDARDS (223-41.13)(15) TO PRESERVE VEGETATION WITHIN THE BUFFER AREA. IS SHOWN PER PREVIOUS LOCATION ON MAP REFERENCE 3.

DEED REFERENCES:

CITY OF BEACON, DUTCHESS COUNTY, STATE OF NEW YORK 6054-45-012574

1. BEACON 248 DEVELOPMENT, LLC TO BEACON 248 HOLDINGS, LLC BY DEED DATED DECEMBER 10, 2018 AND RECORDED IN THE OFFICE OF THE DUTCHESS COUNTY CLERK ON JANUARY 18, 2019 AS DEED DOCUMENT NO. 02-2019-496
2. CITY OF BEACON TO BEACON 248 HOLDINGS, LLC BY DEED DATED NOVEMBER 17, 2024 AND RECORDED IN THE OFFICE OF THE DUTCHESS COUNTY CLERK ON JANUARY 15, 2025 AS DEED DOCUMENT NO. 02-2025-148

MAP REFERENCES:

1. SUBJECT PROPERTY IS DESIGNATED AS PARCEL 18 AS SHOWN ON A CERTAIN MAP ENTITLED "SUBDIVISION PLAT PREPARED FOR ADVANTAGE MORTGAGE" PREPARED BY BADEY & WATSON SURVEYING AND ENGINEERING P.PC., DATED APRIL 16, 1991 AND FILED IN THE DUTCHESS COUNTY CLERK'S OFFICE ON FEBRUARY 22, 2000 AS FILED MAP NO. 10970.
2. REFERENCE IS HEREBY MADE TO A CERTAIN MAP ENTITLE "BEACON 248 DEVELOPMENT, LLC, MAP OF BOUNDARY & TOPOGRAPHIC SURVEY OF LANDS OF CENTRAL HUDSON GAS & ELECTRIC CORP." DATED FEBRUARY 25, 2013, PREPARED BY CHAZEN ENGINEERING, LAND SURVEYING & LANDSCAPE ARCHITECTURE CO., P.C.
3. REFERENCE IS HEREBY MADE TO A CERTAIN MAP ENTITLED "BEACON 248 HOLDINGS, LLC, FINAL LOT CONSOLIDATION PLAT", DATED FEBRUARY 22, 2020, PREPARED BY CHAZEN ENGINEERING, LAND SURVEYING & LANDSCAPE ARCHITECTURE, CO., D.P.C. AND FILED IN THE DUTCHESS COUNTY CLERK'S OFFICE ON MARCH 23, 2021 AS FILED MAP NUMBER 10970A.
4. REFERENCE IS HEREBY MADE TO A CERTAIN MAP ENTITLED "MAP OF CITY OF BEACON EASEMENT" DATED 01/05/2023 AND LAST REVISED 12/18/2024, PREPARED BY LABELLA ASSOCIATES.

1 SV1 — MAP OF EXISTING CONDITIONS LANDS OF BEACON 248 HOLDINGS LLC

SCALE: 1" = 30'

1"=30' 0 1"=30'
SCALE IN FEET
1"=30'

FLOOD ZONE NOTE:

PARCELS ARE SHOWN TO LIE PARTIALLY WITHIN "SPECIAL FLOOD HAZARD AREA, ZONE AE" AND "OTHER FLOOD AREAS, ZONE X" AS SHOWN ON FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), NATIONAL FLOOD INSURANCE PROGRAM (NFIP) FLOOD INSURANCE RATE MAP (FIRM) FOR THE CITY OF BEACON, IDENTIFIED AS MAP NUMBER 36027C0577E BEARING AN EFFECTIVE DATE OF MAY 2, 2012.

DEED REFERENCES:

1. STORMWATER EASEMENT OVER ENTIRE SITE FROM BEACON 248 HOLDINGS LLC TO CITY OF BEACON, DATED MARCH 4, 2021 AND RECORDED IN THE DUTCHESS COUNTY CLERK'S OFFICE ON MARCH 23, 2021 AS DEED DOCUMENT NO. 02-2021-1430.
2. AMENDED GREENWAY EASEMENT FROM BEACON 248 HOLDINGS LLC TO CITY OF BEACON, DATED NOVEMBER 17, 2024 AND RECORDED IN THE DUTCHESS COUNTY CLERK'S OFFICE ON JANUARY 15, 2025 AS DEED DOCUMENT NO. 02-2025-149.

STATE OF NEW YORK — DAVID H. DIPPEL — 050677 — LICENSED LAND SURVEYOR

David H. Dippel, L.S. NYS #050677
EXP: 01/31/2025

SURVEYOR'S CERTIFICATE:

I HEREBY CERTIFY THAT THIS SURVEY MAP IS BASED ON AN ACTUAL FIELD SURVEY COMPLETED ON 03/10/2026 AND THAT THIS SURVEY MAP WAS MADE BY ME OR UNDER MY DIRECTION, AND CONFORMS WITH THE MINIMUM STANDARD OF PRACTICE ADOPTED BY THE NEW YORK STATE ASSOCIATION OF PROFESSIONAL LAND SURVEYORS.

MAP NO. 6080

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Poughkeepsie, NY 12601
845-454-3980
labellapc.com

CERTIFICATE OF AUTHORIZATION NUMBER:
PROFESSIONAL ENGINEERING: 018281
LAND SURVEYING: 017976
GEOLOGICAL: 018750

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CLIENT:

CHAI DEVELOPERS
147 UNION STREET,
POUGHKEEPSIE, NEW YORK 12601

PROJECT/SITE:

TIORONDA AVENUE 248
248 TIORONDA AVENUE,
CITY OF BEACON, DUTCHESS COUNTY,
NEW YORK 12508

NO:	DATE:	DESCRIPTION:
Revisions		

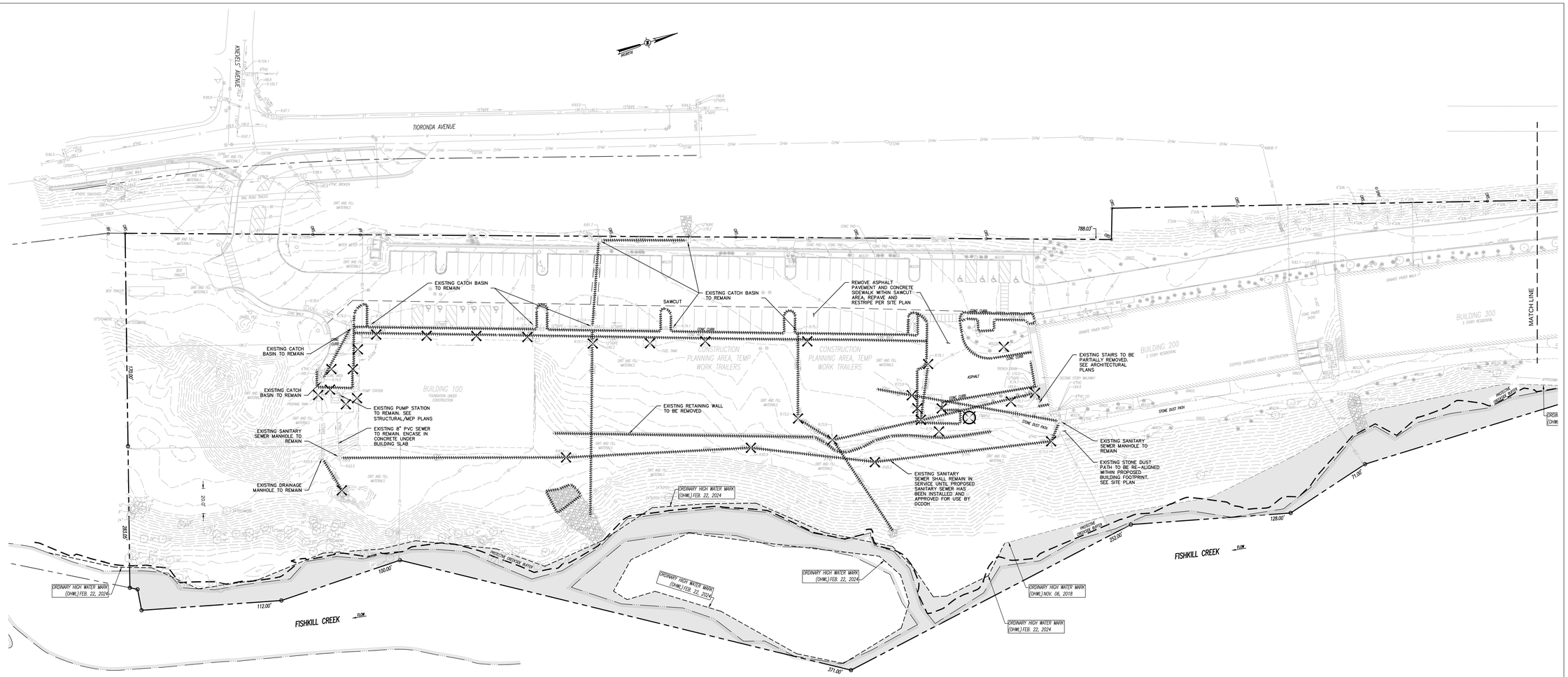
PROJECT NUMBER: 81750.00
DRAWN BY: AP
REVIEWED BY: DD
ISSUED FOR: PLANNING BOARD REVIEW
DATE: 03/12/2026
DRAWING NAME:

MAP OF EXISTING CONDITIONS LANDS OF BEACON 248 HOLDINGS LLC

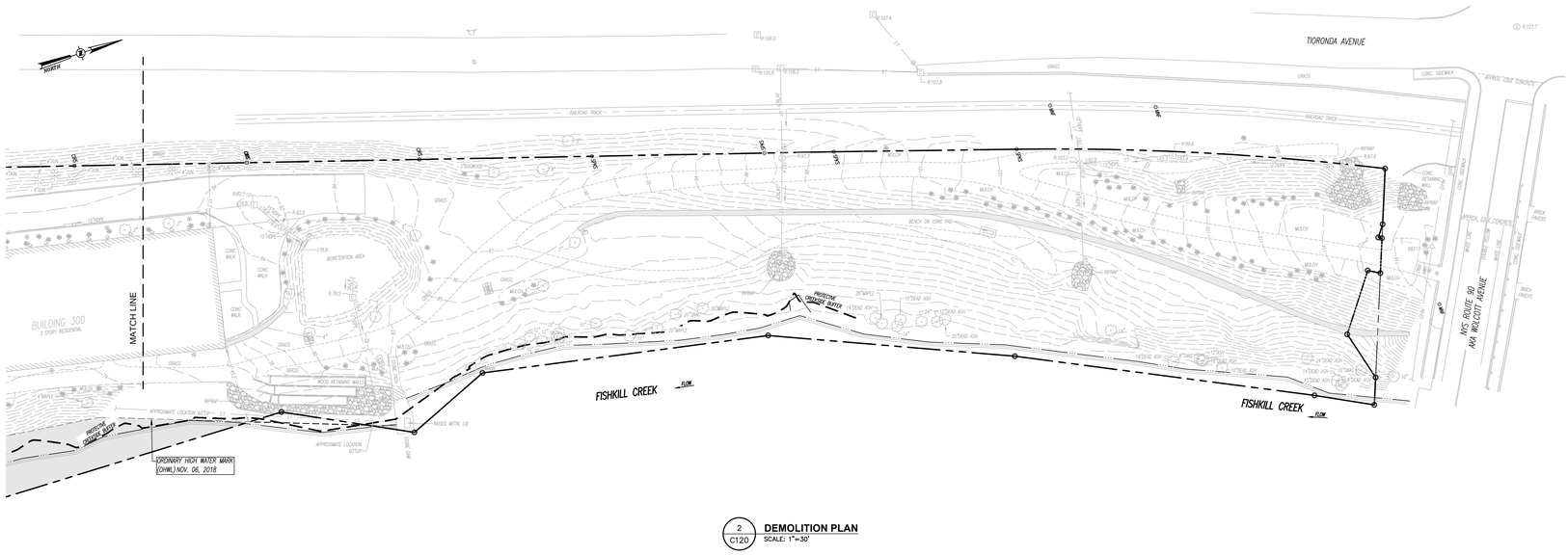
DRAWING NUMBER:

SV1
SHEET 1 OF 1

Drawing Name: R:\81750.00_Layout\Drawings\81750.00 Civil Bulletin 9-24\81750.00 Civil Bulletin 9-24 SV1.dwg
Xrefs Attached: X-5SURVEY_81750.00_RAISES-GOV_20100-50
Date Plotted: Mar 13, 2026, 10:46am



1 C120 **DEMOLITION PLAN**
SCALE: 1"=30'



2 C120 **DEMOLITION PLAN**
SCALE: 1"=30'

LEGEND:

- EXISTING FEATURE TO BE REMOVED
- EXISTING TREE TO BE REMOVED
- EXISTING SITE FEATURE TO BE REMOVED
- EXISTING PAVEMENT & SIDEWALK TO BE REMOVED
- EXISTING BUILDING TO BE REMOVED
- DEMO ASPHALT
- DEMO BUILDING
- DEMO CONCRETE
- DEMO GRAVEL SECTION
- DEMO RIP RAP SECTION
- DEMO ATHLETIC TRACK
- DEMO TREES AND SHRUBS
- WORKLIMITS
- TREE PROTECTION FENCING
- N.I.C. NOT IN CONTRACT
- EXISTING STRUCTURE TO BE REMOVED, N.I.C
- PAVEMENT SAWCUT LINE

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(845) 454-3980

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EXP: EXP:

CERTIFICATE OF AUTHORIZATION NUMBER:
PROFESSIONAL ENGINEERING: 0021272
LAND SURVEYING: 0021271
GEOLOGICAL: 0021659

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Poughkeepsie, New York 12601

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248 Tioronda Avenue
Beacon, New York 12508

NO:	DATE:	DESCRIPTION:
Revisions		

PROJECT NUMBER: 2260816
DRAWN BY: GMZ
REVIEWED BY: KGA
ISSUED FOR: ISSUED FOR PLANNING BOARD REVIEW
DATE: 06/30/26
DRAWING NAME:

DEMOLITION PLAN

DRAWING NUMBER:

C120

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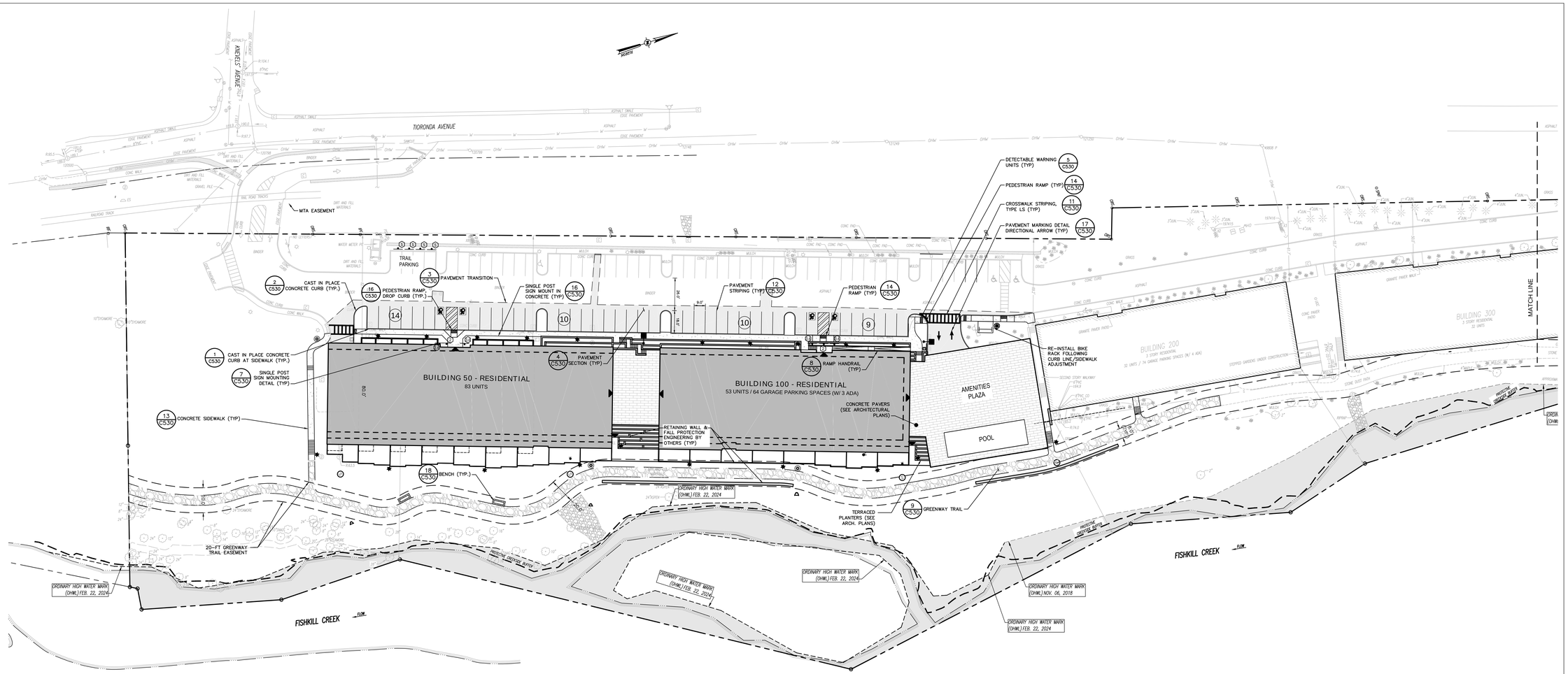
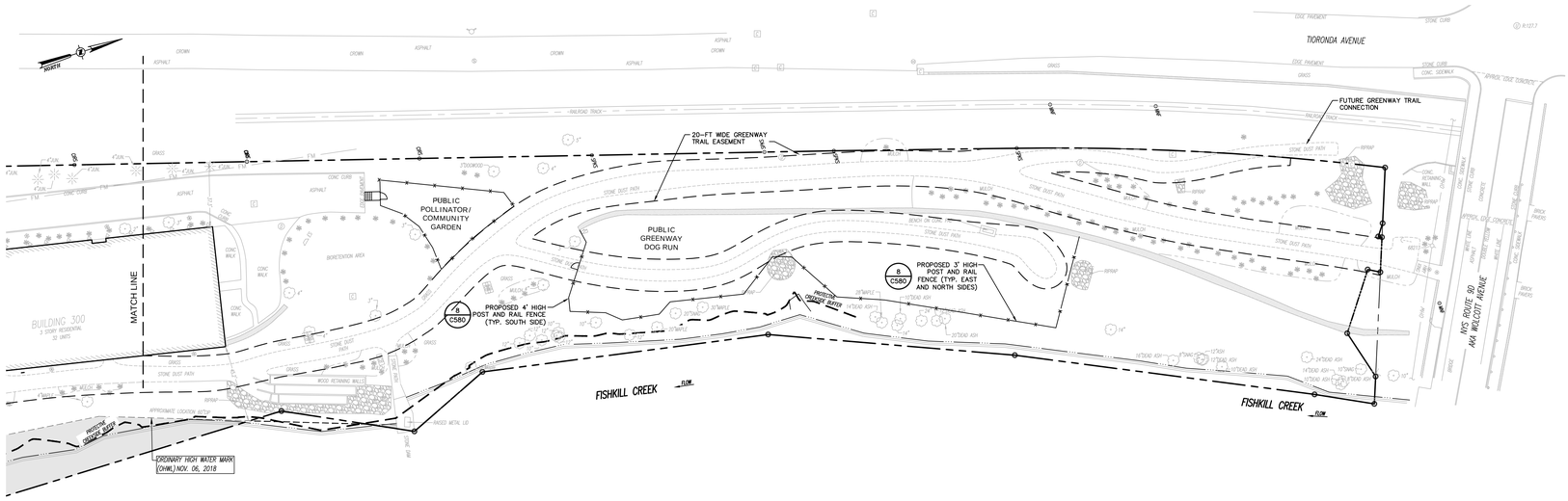


1 C130 **SITE PLAN**
SCALE: 1"=30'



2 C130 **SITE PLAN**
SCALE: 1"=30'

SITE PLAN NOTES:

LAND BANKED PARKING SHALL BE CONSTRUCTED IF REQUIRED BY THE LANDBANKED PARKING AGREEMENT, PER SECTION 223-26E OF CITY CODE..

THE BEACON GREENWAY TRAIL COMMITTEE WILL BE ASKED TO REVIEW LAYOUT OF TRAIL PRIOR TO CONSTRUCTION. ADDITIONALLY, THE COMMITTEE WILL DETERMINE THE FINAL LOCATION OF THE BENCHES ON THE GREENWAY TRAIL DURING FINAL REVIEW PRIOR TO CONSTRUCTION.

LEGEND:

- EXISTING 100-YEAR FLOOD PLAIN
- EXISTING PROPERTY LINE
- EASEMENT LINE
- PROPOSED BUILDING
- PROPOSED PAVEMENT
- 25 PROPOSED PARKING COUNT
- PROPOSED SIDE WALK
- EXISTING METRO-NORTH RAILROAD TRACKS (INACTIVE)
- PROPOSED CURB
- PROPOSED LIGHT POLE
- PROPOSED RETAINING WALL
- GREENWAY TRAIL

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(845) 454-3980

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NOT FOR CONSTRUCTION
EXP: EXP:

CERTIFICATE OF AUTHORIZATION NUMBER:
PROFESSIONAL ENGINEERING: 0021272
LAND SURVEYING: 0021271
GEOLOGICAL: 0021659

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248 Tioronda Avenue
Beacon, New York 12508

NO:	DATE:	DESCRIPTION:
Revisions		

PROJECT NUMBER: 2260816
DRAWN BY: GMZ
REVIEWED BY: KGA
ISSUED FOR: ISSUED FOR PLANNING BOARD REVIEW
DATE: 06/30/26
DRAWING NAME: SITE PLAN
DRAWING NUMBER: C130

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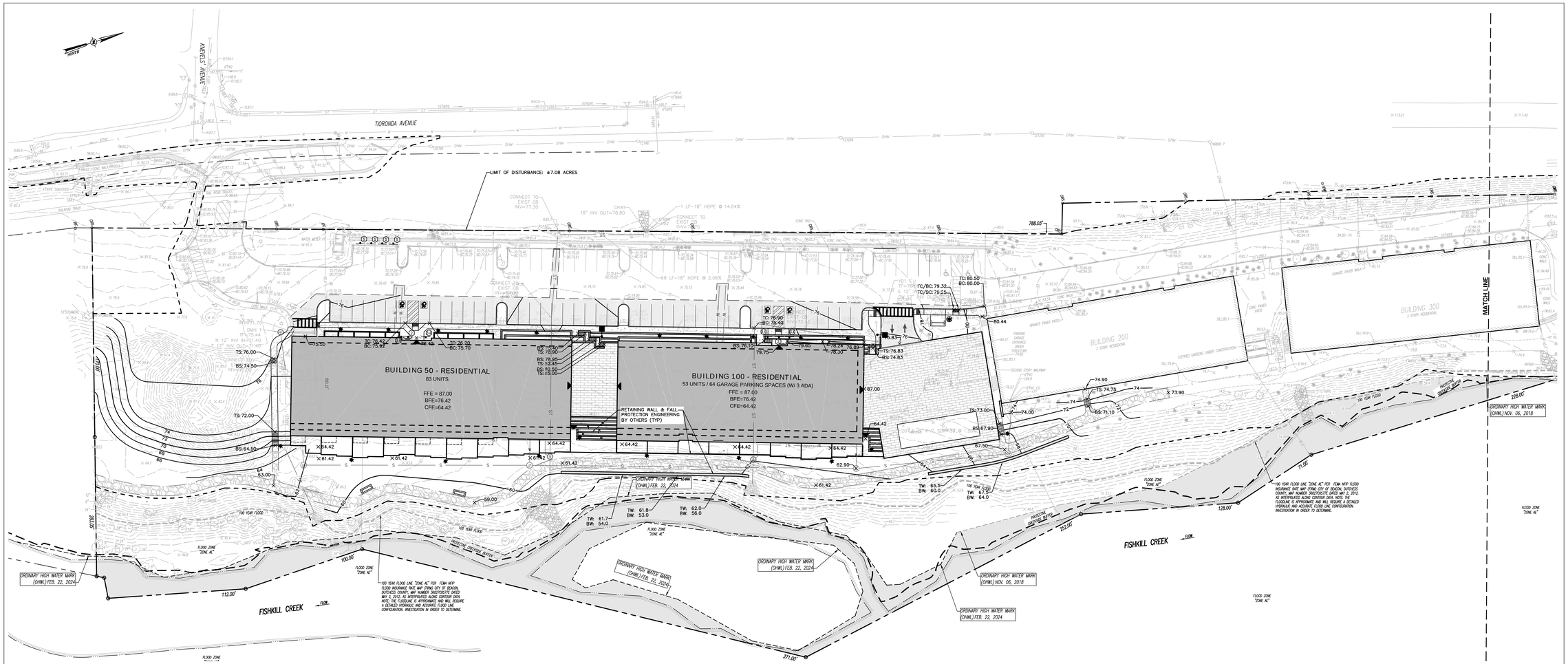
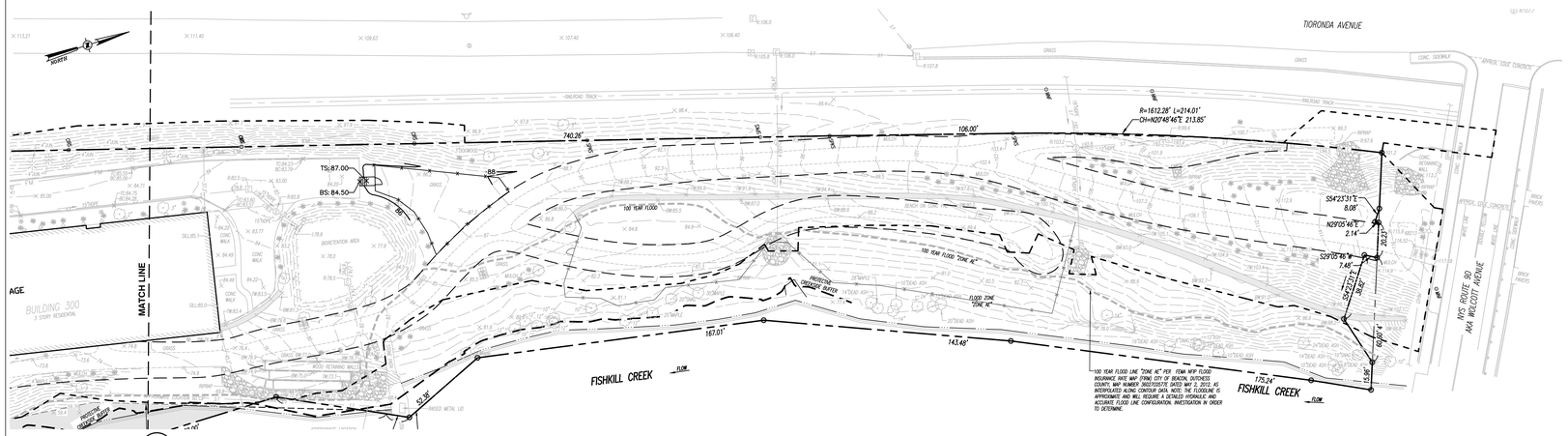


1 C140 **GRADING PLAN**
SCALE: 1"=30'



2 C140 **GRADING PLAN**
SCALE: 1"=30'

GRADING & DRAINAGE LEGEND:

- PROPOSED PROPERTY LINE
- PROPOSED BUILDING
- PROPOSED PAVEMENT
- XXX — PROPOSED 10 FT CONTOUR
- XXX — PROPOSED 2 FT CONTOUR
- XXX.X — PROPOSED SPOT GRADE
- PROPOSED TREE LINE
- PROPOSED SHRUB LINE
- PROPOSED DRAINAGE SWALE
- PROPOSED WORK LIMIT LINE
- S — PROPOSED SANITARY SEWER LINE
- FM — PROPOSED FORCE MAIN
- W — PROPOSED WATER LINE
- ST — PROPOSED STORM DRAIN LINE
- PROPOSED HYDRANT
- PROPOSED SANITARY MANHOLE
- PROPOSED CATCH BASIN
- PROPOSED DRAINAGE MANHOLE

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NOT FOR CONSTRUCTION
EXP: EXP:

CERTIFICATE OF AUTHORIZATION NUMBER:
PROFESSIONAL ENGINEERING: 0021272
LAND SURVEYING: 0021271
GEOLOGICAL: 0021659

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248 Tioronda Avenue
Beacon, New York 12508

NO:	DATE:	DESCRIPTION:
Revisions		

PROJECT NUMBER: 2260816
DRAWN BY: GMZ
REVIEWED BY: KGA
ISSUED FOR: ISSUED FOR PLANNING BOARD REVIEW
DATE: 06/30/26
DRAWING NAME: GRADING PLAN
DRAWING NUMBER: C140

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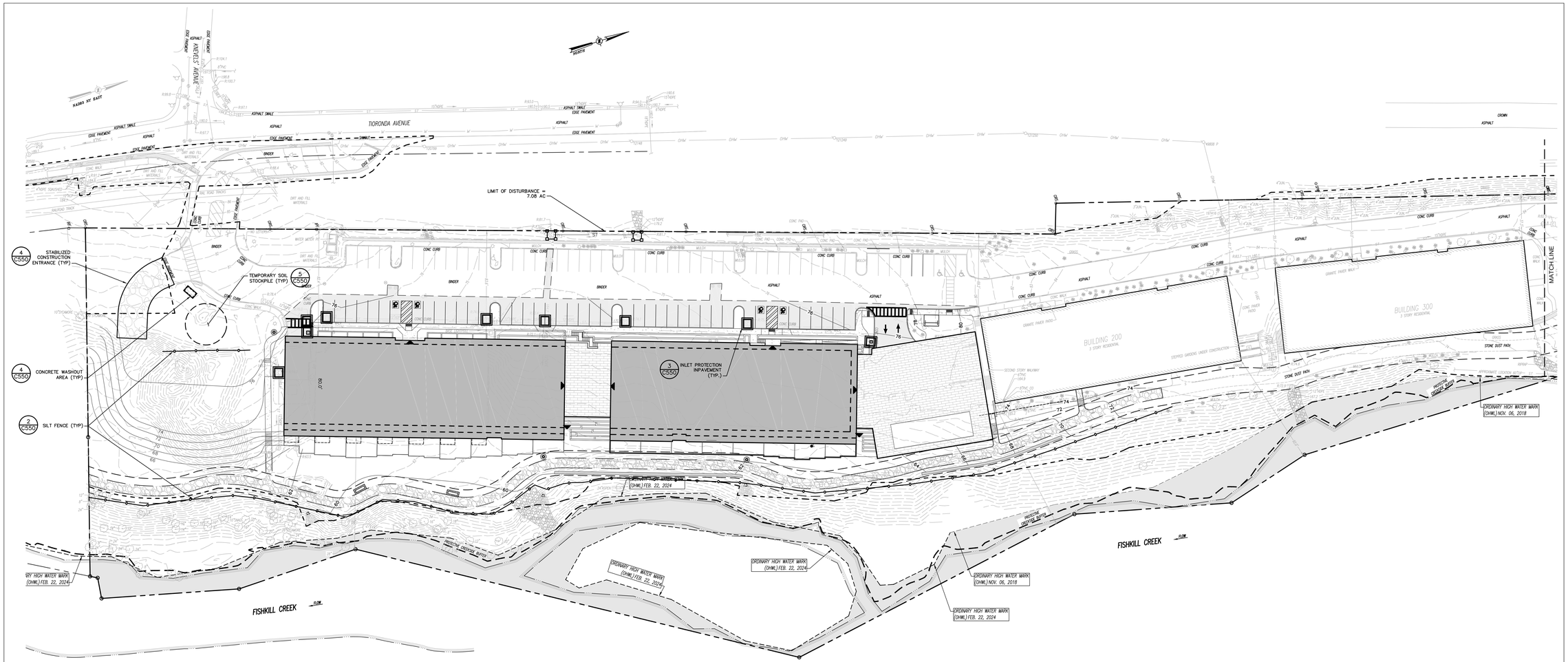
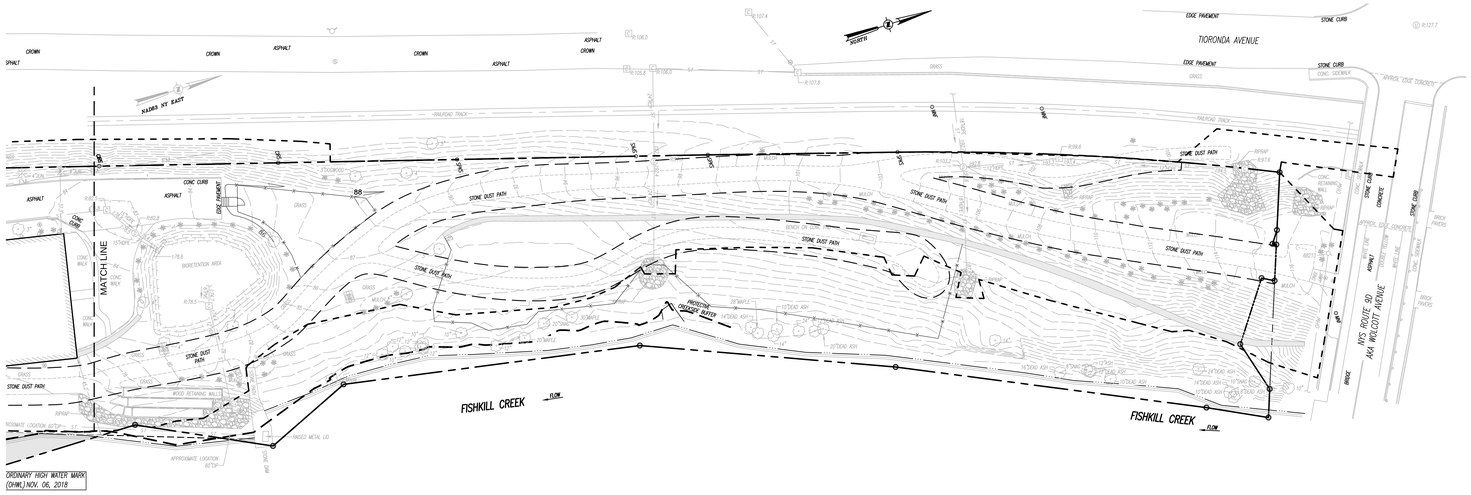


1 C150 **EROSION AND SEDIMENT CONTROL PLAN**
SCALE: 1"=30'



2 C150 **EROSION AND SEDIMENT CONTROL PLAN**
SCALE: 1"=30'

LEGEND:

- EXISTING 100-YEAR FLOOD PLAIN
- EXISTING PROPERTY LINE
- EASEMENT LINE
- PROPOSED BUILDING
- PROPOSED PAVEMENT
- 25 PROPOSED PARKING COUNT
- PROPOSED SIDE WALK
- EXISTING METRO-NORTH RAILROAD TRACKS (INACTIVE)
- PROPOSED CURB
- PROPOSED RETAINING WALL
- PROPOSED EROSION BLANKET
- PROPOSED STABILIZED CONSTRUCTION ENTRANCE
- PROPOSED OUT-OF PAVEMENT INLET PROTECTION
- PROPOSED IN-PAVEMENT INLET PROTECTION
- PROPOSED SILT FENCE
- LIMIT OF DISTURBANCE
- PROPOSED STRAW BALE DIKE
- PROPOSED TEMPORARY SOIL STOCKPILE

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EXP: EXP:

CERTIFICATE OF AUTHORIZATION NUMBER:
PROFESSIONAL ENGINEERING: 0021272
LAND SURVEYING: 0021271
GEOLOGICAL: 0021659

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Poughkeepsie, New York 12601

248 Tioronda Avenue
248 Tioronda Avenue
Beacon, New York 12508

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DRAWN BY: GMZ
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ISSUED FOR: ISSUED FOR PLANNING BOARD REVIEW
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EROSION AND SEDIMENT CONTROL PLAN

DRAWING NUMBER:

C150

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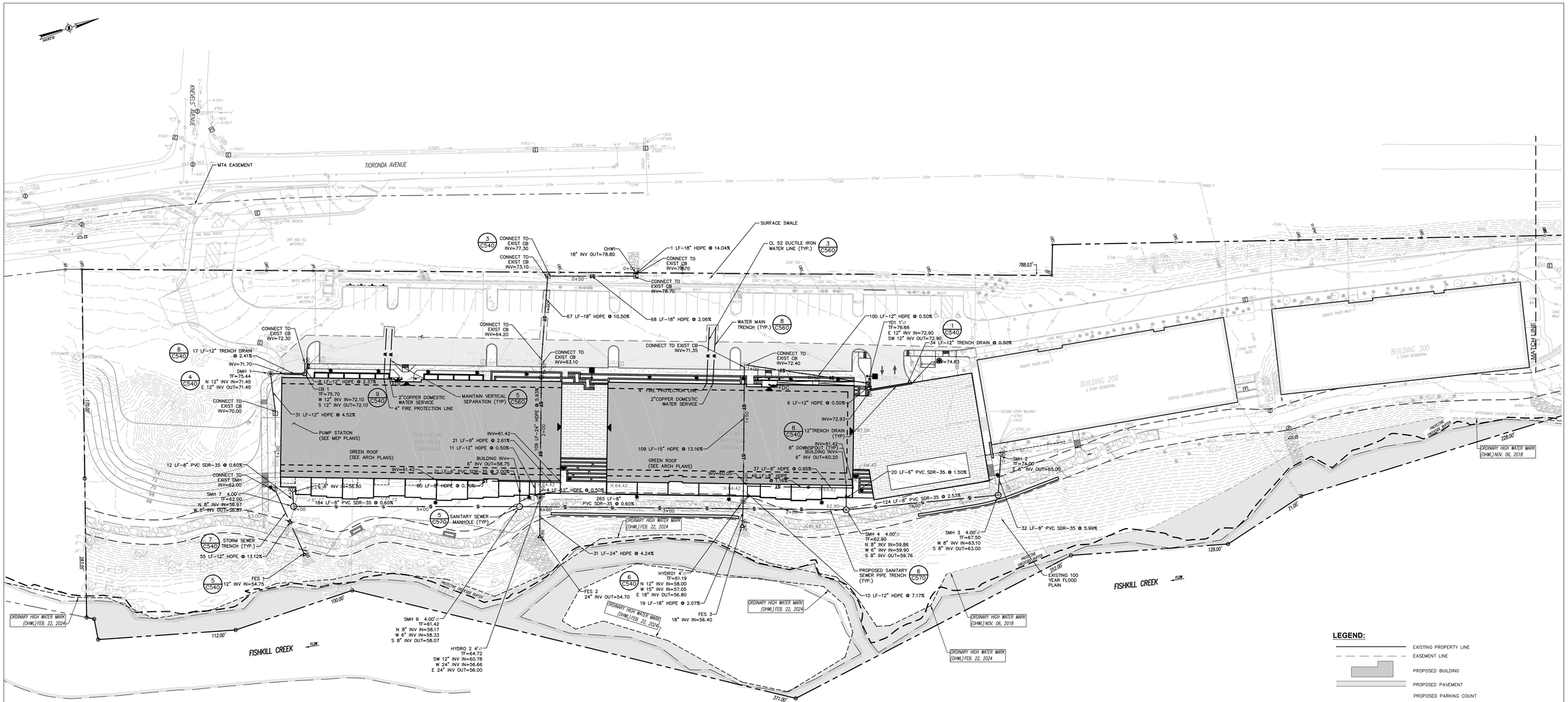
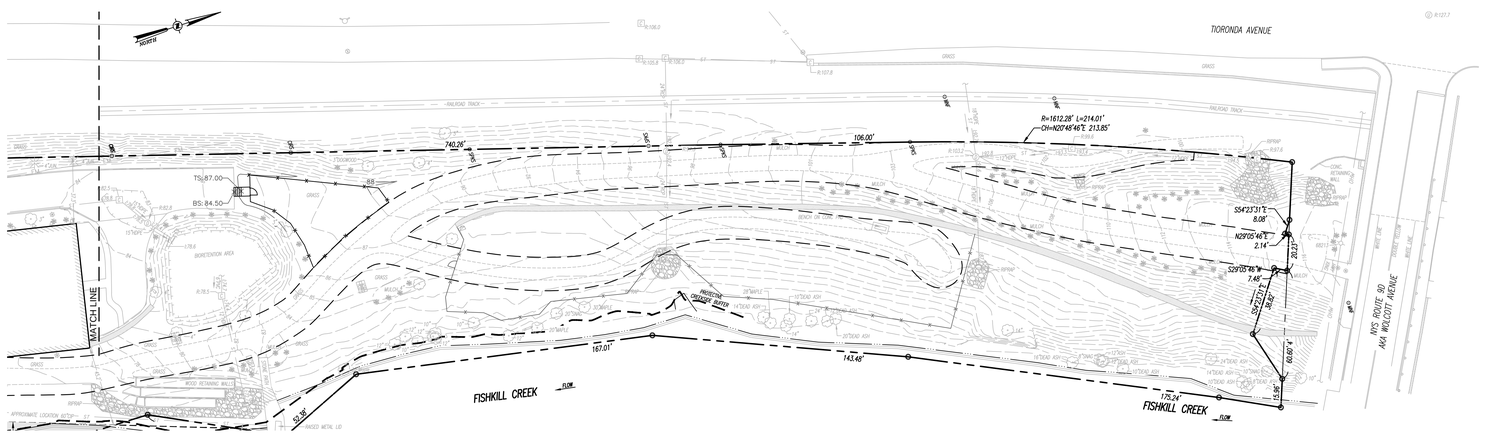


1/C160 **UTILITY PLAN**
SCALE: 1"=30'



2/C160 **UTILITY PLAN**
SCALE: 1"=30'

UTILITY PLAN NOTES:

GENERAL CONSTRUCTION:

1. ALL UNDERGROUND UTILITIES ARE SHOWN IN THEIR RELATIVE POSITION AND ARE FOR INFORMATIONAL PURPOSES ONLY. CONTRACTOR TO VERIFY THEIR ACTUAL LOCATION IN THE FIELD PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
2. ANY CONDITION ENCOUNTERED IN THE FIELD DIFFERING FROM THOSE SHOWN HEREON, SHALL BE REPORTED TO THE DESIGN ENGINEER BEFORE CONSTRUCTION IS TO PROCEED.
3. SEWER MAINS IN RELATION TO WATER MAINS: WHERE POSSIBLE, SEWERS SHALL BE LAID AT LEAST 10 (TEN) FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED WATER MAIN. VERTICAL SEPARATION SHALL BE MAINTAINED TO PROVIDE 18 (EIGHTEEN) INCHES BETWEEN TOP OF SEWER AND BOTTOM OF THE WATER MAIN AT UTILITY CROSSINGS. WHEN NOT POSSIBLE TO OBTAIN THE PROPER VERTICAL SEPARATION, SEWER PIPE SHALL BE PRESSURE RATED AND TESTED @ 150psi, TO (TEN) FEET ON EACH SIDE OF THE WATER MAIN BEING CROSSED.
4. ALL PROPOSED UTILITIES SHALL TERMINATE 5 FEET FROM ANY PROPOSED BUILDING FACE. CONTRACTOR TO COORDINATE WITH BUILDING PLANS FOR ANY CONNECTIONS.
5. ALL STORM SEWER SHALL BE SMOOTH INTERIOR HDPE UNLESS OTHERWISE SPECIFIED.
6. ALL GRAVITY SANITARY LATERALS SHALL BE SDR 21 PVC UNLESS OTHERWISE SPECIFIED.
7. ALL WATER PIPE SHALL BE CL52 DUCTILE IRON PIPE UNLESS OTHERWISE SPECIFIED.
8. CONTRACTOR TO VERIFY STATUS OF ALL UTILITY SERVICES PRIOR TO INTERRUPTION.
9. EXPLORATORY EXCAVATIONS SHALL BE PERFORMED BY THE CONTRACTOR AT ALL UTILITY CONNECTION LOCATIONS AND AS NEEDED TO VERIFY EXISTING CONDITIONS PRIOR TO PERFORMING WORK.
10. BEFORE CONSTRUCTING LINES TO CONNECT TO EXISTING UTILITIES, VERIFY EXISTING UTILITY INVERTS AND NOTIFY THE ENGINEER IF ANY VARIATION FROM THE PLAN IS REQUIRED.
11. THE CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITIES IN SERVICE FOR THE DURATION OF THE WORK.
12. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIRED PERMITS AND ASSOCIATED CONDITIONS.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR DEWATERING UTILITY TRENCHES AND EXCAVATIONS AND FOR THE MAINTENANCE OF SURFACE DRAINAGE DURING THE COURSE OF THE WORK.
14. IF ROCK REMOVAL BY BLASTING IS REQUIRED, THE CONTRACTOR SHALL OBTAIN ALL NECESSARY APPROVALS AND PERMITS REQUIRED BY THE AUTHORITY HAVING JURISDICTION.
15. WATER UTILITIES BEYOND THE METER PIT AND SEWER UTILITIES INCLUDING THE EXISTING 2"-INCH FIBERGLASS FORCE MAIN SHALL BE PRIVATELY OWNED AND OPERATED BY THE PROPERTY OWNER.

EMERGENCY STANDBY GENERATOR:

1. A STANDBY EMERGENCY GENERATOR SHALL BE PROVIDED TO ENSURE CONTINUOUS OPERATION OF THE PUMP STATION DURING POWER FAILURE . THE EMERGENCY GENERATOR SHALL HAVE ADEQUATE CAPACITY TO ACCOMMODATE THE FULL ELECTRICAL LOAD OF THE PROPOSED PUMP STATIONS (4) WITH ALL PUMPS RUNNING (STAGGERED STARTS). THE CONTRACTOR SHALL VERIFY AND CONFIRM THE SIZE OF THE EMERGENCY GENERATOR WITH THE MANUFACTURER PRIOR TO SHOP DRAWING SUBMITTAL BASED ON THE SELECTED PUMPS AND STATION EQUIPMENT.
2. THE EMERGENCY GENERATOR SHALL BE 30 KW DIESEL ENGINE GENERATOR SET MODEL RD030 AS MANUFACTURED BY GENERAC OR APPROVED EQUAL. THE UNIT SHALL BE EQUIPPED WITH THE FOLLOWING APPURTENANCES AND ACCESSORIES:
   - RUN-OFF AUTO SWITCH
   - RUNNING TIME METER
   - CRITICAL GRADE EXHAUST SILENCER
   - AUTOMATIC TRANSFER SWITCH
   - AUTOMATIC BATTERY CHARGER
   - GENERATOR ALARM STATUS PANEL
   - OIL PRESSURE GAUGE
   - HIGH TEMPERATURE AND LOW OIL PRESSURE SHUTDOWN
   - 61 GALLON SUBBASE FUEL TANK
3. THE EMERGENCY GENERATOR SHALL BE INSTALLED ON A REINFORCED CONCRETE PAD OF SUFFICIENT DIMENSIONS WITHIN THE PROPOSED FENCE ENCLOSURE. GENERATOR SHALL BE SETBACK A DISTANCE FROM FENCE TO ALLOW REQUIRED MAINTENANCE ON IT IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS.

LEGEND:

- EXISTING PROPERTY LINE
- EASEMENT LINE
- PROPOSED BUILDING
- PROPOSED PAVEMENT
- PROPOSED PARKING COUNT
- PROPOSED SIDE WALK
- PROPOSED RIPRAP
- EXISTING METRO-NORTH RAILROAD TRACKS (INACTIVE)
- PROPOSED GREENWAY TRAIL
- SIGN
- OHW — EXISTING OVERHEAD WIRES
- S — PROPOSED SANITARY SEWER LINE
- FM — PROPOSED FORCE MAIN
- W — PROPOSED WATER LINE
- ST — PROPOSED STORM DRAIN LINE
- PROPOSED FRENCH DRAIN/FOOTING DRAIN
- PROPOSED UNDERDRAIN
- DRAINAGE SWALE
- PROPOSED HYDRANT
- PROPOSED WATER VALVE
- PROPOSED SANITARY MANHOLE
- PROPOSED FLUSHING VALVE
- PROPOSED CATCH BASIN
- PROPOSED DRAINAGE MANHOLE
- DEEP TEST PIT
- ROOF DOWNSPOUT/INLINE DRAIN
- ROOF DOWNSPOUT/SPLASHBLOCK

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CERTIFICATE OF AUTHORIZATION NUMBER:
PROFESSIONAL ENGINEERING: 0021272
LAND SURVEYING: 0021271
GEOLOGICAL: 0021659

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DATE: 06/30/26
DRAWING NAME: UTILITY PLAN
DRAWING NUMBER: C160

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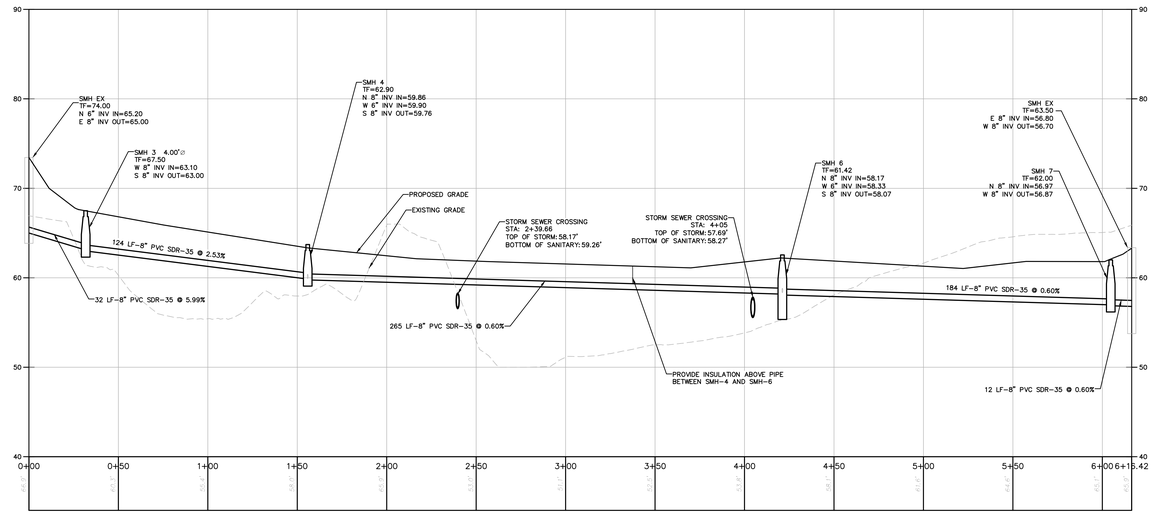

1 **SANITARY PROFILE**
SCALE: SCALE-H=1"=30'
SCALE-V=1"=6'

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DRAWING NAME:

UTILITY PROFILES

DRAWING NUMBER:

C161

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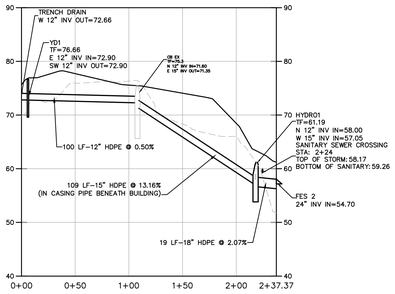
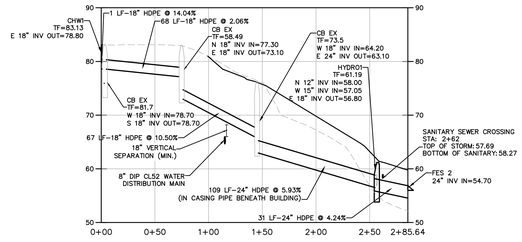
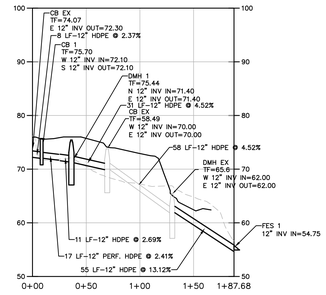


1 **STORM PROFILE 1**
SCALE: SCALE-H=1"=50'
SCALE-V=1"=10'



2 **STORM PROFILE 2**
SCALE: SCALE-H=1"=50'
SCALE-V=1"=10'



3 **STORM PROFILE 3**
SCALE: SCALE-H=1"=50'
SCALE-V=1"=10'

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DATE: 06/30/26
DRAWING NAME:

UTILITY PROFILES

DRAWING NUMBER:

C162

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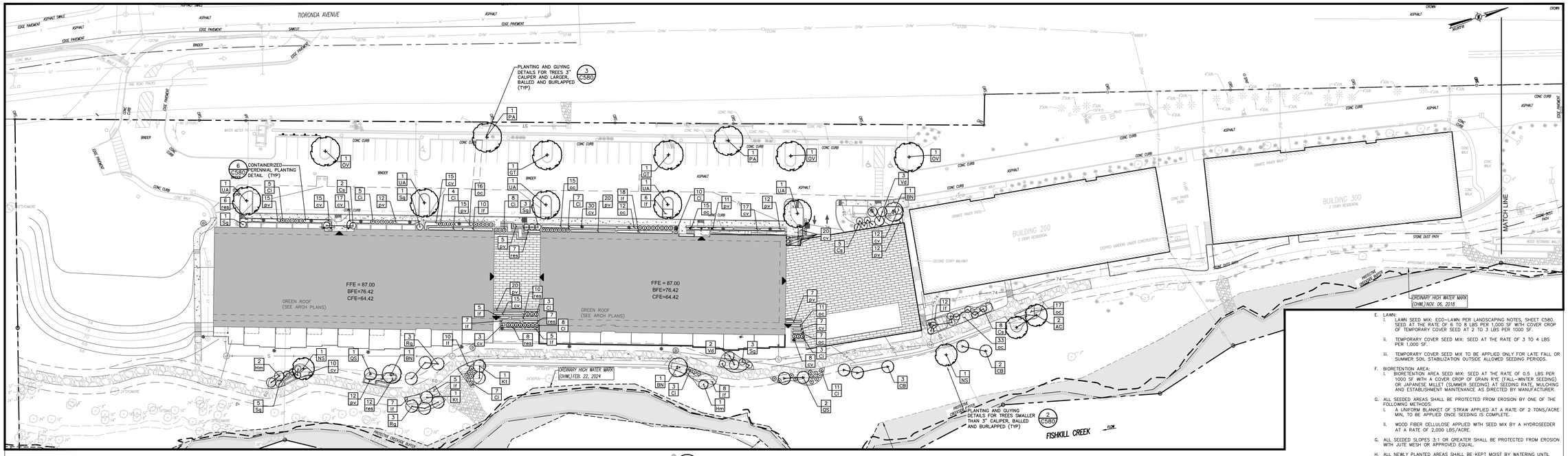
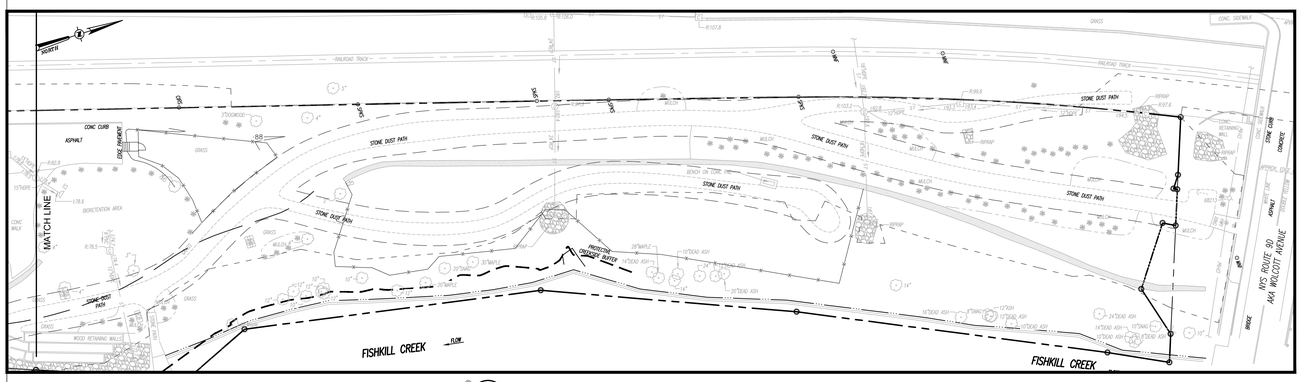


1 **LANDSCAPE PLAN**
SCALE: 1"=30'



2 **LANDSCAPE PLAN-EMERGENCY ACCESS DRIVE**
SCALE: 1"=30'

PLANT LIST

QTY	ABRV	BOTANICAL NAME	COMMON NAME	SIZE	COND	SPACING	REMARKS
TREES							
0	AR	ACER RUBRUM	RED MAPLE	3" Cal.	B&B	As Shown	
0	AA	AMELANCHIER ARBOREA	DOWNY SERVICEBERRY	4'–5' HT	B&B	As Shown	MULTISTEM CLUMP
3	AC	AMELANCHIER CANADENSIS	SERVICEBERRY	6'–8' HT	B&B	As Shown	MULTISTEM CLUMP
3	BN	Betula nigra	River Birch	8'–10' Clump	B&B	As Shown	Multi-Stemp Clump
0	CC	Crataegus crusgalli 'inermis'	Thornless Hawthorn	10–12' Clump	B&B	As Shown	Multi-Stemp Clump
0	LT	Liriodendron tulipifera	Tulpitree	3" Cal.	B&B	As Shown	
0	JV	Juniperus virginiana	Eastern Red Cedar	8'–10'	B&B	As Shown	
1	GT	CARPINUS CAROLINIANA	AMERICAN HORNBEAM	2" CAL.	B&B	As Shown	
3	OV	OSTRYA VIRGINIANA	EASTERN HOPHORNBEAM	2" CAL.	B&B	As Shown	
2	NS	Nyssa sylvatica	Sour Gum	3" Cal.	B&B	As Shown	Fall Digging Hazard
2	PA	CHIONANTHUS VIRGINICUS	FRINGETREE	8' HT	B&B	As Shown	MULTISTEM TREE; 5 BOLES MAX.
0	PO	Plantanus occidentalis	American Sycamore	2.5" Cal.	B&B	As Shown	
0	PT	Populus tremuloides	Quaking Aspen	10–12'	B&B	As Shown	Multi-Stem
0	PY	Prunus yeodensis	Yoshino Cherry	2" Cal.	B&B	As Shown	
0	QR	Quercus rubra	Northern Red Oak	3" Cal.	B&B	As Shown	Fall Digging Hazard
0	QB	Quercus bicolor	Swamp White Oak	3" Cal.	B&B	As Shown	Fall Digging Hazard
3	QS	QUERCUS ILICIFOLIA	SCRUB OAK	4'–5' HT	CONT	AS SHOWN	
0	ST	STAPHYLEA TRIFOLIA	AMERICAN BLADDERNUT	2" CAL.	B&B	AS SHOWN	SINGLE STEM TREE FORM
5	UA	Ulmus americana 'Princeton'	Princeton Elm	3" Cal.	B&B	As Shown	
SHRUBS							
74	CI	Comptonia peregrina	Sweet Fern	#3 Cont.		As Shown	
0	Cm	Cornus amomum	Silky Dogwood	24"–30"	Cont	As Shown	
0	Co	Cornus sericea	Red–Osier Dogwood	30"–36"	Cont.	As Shown	
15	Cs	CORNUS SERICEA 'FLAVAMIRA'	YELLOW–TWIGGED DOGWOOD	18"–24"	Cont	As Shown	
5	CB	CORYLUS CORNUTA	BEAKED HAZELNUT	30"–36" HT	CONT	AS SHOWN	
0	CA	CORYLUS AMERICANA	AMERICAN HAZELNUT	30"–36" HT	CONT	AS SHOWN	
3	Hm	Hamamelis virginiana	Witchhazel	3' – 4'	Cont.	As Shown	
3	Kt	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	30"–36"	Cont.	As Shown	
0	Lb	Lindera benzoin	Spicebush	36"	Cont.	As Shown	
0	Mp	Myrica pennsylvanica	NORTHERN BAYBERRY	#5	Cont.	As Shown	
6	Rg	Rhus typhina 'Laciniata'	Cutleaf Staghorn Sumac	36"	Cont.	As Shown	
0	RC	ROSA CAROLINIANA	CAROLINA ROSE	18"–24"	CONT.	As Shown	
13	Sg	SYMPHORICARPUS ALBUS	SNOWBERRY	24"–30"	CONT.	As Shown	
0	Va	Viburnum acerifolium	Mapleleaf Viburnum	24"–30"	Cont.	As Shown	
5	Vd	Viburnum dentatum	Doublefile Viburnum	30"–36"	Cont.	As Shown	
0	VL	VIBURNUM LENTAGO	NANNYBERRY VIBURNUM	5'–6' HT	CONT	As Shown	
0	VP	VIBURNUM PRUNIFOLIUM	BLACKHAW VIBURNUM	30"–36" HT	CONT	As Shown	
0	Xv	Ilex verticillata 'Winter Red'	Winter Red Winterberry	18"–24"	Cont	As Shown	
PERENNIALS/ GRASSES							
174	cv	Carex Vulpinoidea	Fox Sedge		#1 Cont.	8" O.C.	
93	If	PANICUM CLANDESTINUM	DEERTONGUE		#1 CONT	16–18" O.C.	
139	oc	Osmunda cinnamomea	Cinnamon Fern		#2 Cont.	2–3' O.C.	
141	pv	Panicum virgatum 'Shenandoah'	Shenandoah Switch Grass		#2 Cont.	2–3' O.C.	
24	res	Rudbeckia laciniata	Cutleaf Coneflower		#1 Cont	18" O.C.	
0	ss	Schizachyrium scoparium	Little Bluestem		#1 Cont	18" O.C.	

3 **OVERALL PLANT LIST**
SCALE: NTS

E. LAWN:
I. LAWN SEED MIX: ECO–LAWN PER LANDSCAPING NOTES, SHEET C580. SEED AT THE RATE OF 6 TO 8 LBS PER 1,000 SF WITH COVER CROP OF TEMPORARY COVER SEED AT 2 TO 3 LBS PER 1000 SF.

II. TEMPORARY COVER SEED MIX: SEED AT THE RATE OF 3 TO 4 LBS PER 1,000 SF.

III. TEMPORARY COVER SEED MIX TO BE APPLIED ONLY FOR LATE FALL OR SUMMER SOIL STABILIZATION OUTSIDE ALLOWED SEEDING PERIODS.

F. BIORETENTION AREA:
I. BIORETENTION AREA SEED MIX: SEED AT THE RATE OF 0.5 LBS PER 1000 SF WITH A COVER CROP OF GRAIN RYE (FALL–WINTER SEEDING) OR JAPANESE MILLET (SUMMER SEEDING) AT SEEDING RATE, MULCHING AND ESTABLISHMENT MAINTENANCE AS DIRECTED BY MANUFACTURER.

G. ALL SEEDED AREAS SHALL BE PROTECTED FROM EROSION BY ONE OF THE FOLLOWING METHODS:
I. A UNIFORM BLANKET OF STRAW APPLIED AT A RATE OF 2 TONS/ACRE MIN, TO BE APPLIED ONCE SEEDING IS COMPLETE.

II. WOOD FIBER CELLULOSE APPLIED WITH SEED MIX BY A HYDROSEEDER AT A RATE OF 2,000 LBS/ACRE.

G. ALL SEEDED SLOPES 3:1 OR GREATER SHALL BE PROTECTED FROM EROSION WITH JUTE MESH OR APPROVED EQUAL.

H. ALL NEWLY PLANTED AREAS SHALL BE KEPT MOIST BY WATERING UNTIL GRASSES AND GROUND COVERS ARE WELL ESTABLISHED. THE LANDSCAPE CONTRACTOR MUST WATER PLANT MATERIAL WHEN NECESSARY FOR 60 DAYS AFTER INSTALLATION.

I. LAWNS ARE TO BE WARRANTED UNTIL THEY BECOME ESTABLISHED, UNTIL FINAL ACCEPTANCE, AND NOT LESS THAN 60 DAYS AFTER COMPLETION OF ALL WORK. TREES, SHRUBS, GROUND COVERS, AND PERENNIALS SHALL BE WARRANTED AGAINST DEFECTS INCLUDING POOR GROWTH AND DEATH, EXCEPT WHEN RESULTING FROM OWNER NEGLECT, INCIDENTS THAT ARE BEYOND THE CONTROL OF THE LANDSCAPE INSTALLER AND DAMAGE OR ABUSE BY OTHERS, FOR AT LEAST ONE FULL YEAR AFTER PROJECT COMPLETION.

. ALL LANDSCAPING SHOWN ON THESE PLANS SHALL BE MAINTAINED IN A HEALTHY AND VIGOROUS GROWING CONDITION THROUGHOUT THE DURATION OF THE PROPOSED USE OF THE SITE. ALL VEGETATION NOT SO MAINTAINED SHALL BE REPLACED WITH NEW COMPARABLE VEGETATION AT THE BEGINNING OF THE NEXT GROWING SEASON.

SITE LEGEND:

- PROPOSED BUILDING
- PROPOSED PAVEMENT
- PROPOSED SIDEWALK
- PROPOSED CURB
- 80 — PROPOSED 10 FT CONTOUR
- 79 — PROPOSED 2 FT CONTOUR
- 79.2 x — PROPOSED SPOT GRADE
- PROPOSED PERMEABLE ASPHALT PAVEMENT
- 25 — PROPOSED PARKING COUNT
- PROPOSED TREES
- PROPOSED SHRUBS
- PROPOSED HERBACEOUS PLANTS
- MULCH BED
- RIVERSTONE BED
- 4.3 / CO — PLANT QUANTITY / PLANT NAME

SOIL RESTORATION NOTES:

SOIL SHALL BE RESTORED IN ACCORDANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN AND THE LATEST EDITION OF THE NYSDEC DEEP–RIPPING AND COMPACTION GUIDELINES.

IN AREAS WHERE SOIL DISTURBANCE HAS OCCURRED OUTSIDE OF BUILDINGS AND PAVEMENT AREAS, THE DISTURBED SUB–SOILS SHALL BE RETURNED TO ROUGH GRADE AND THE FOLLOWING SOILS RESTORATION STEPS APPLIED:

1) APPLY THREE INCHES OF COMPOST OVER SOIL. COMPOST SHALL BE AGED, FROM PLANT DERIVED MATERIALS, FREE OF VIABLE WEED SEEDS, HAVE NO VISIBLE FREE WATER OR DUST PRODUCED WHEN HANDLING, PASS THROUGH A HALF INCH SCREEN AND HAVE A PH SUITABLE TO GROW DESIRED PLANTS.

2) TILL COMPOST INTO THE SUBSOIL TO A DEPTH OF AT LEAST 12–INCHES USING A CAT–MOUNTED RIPPER, TRACTOR MOUNTED DISC, OR TILLER, MIXING AND CIRCULATING AIR AND COMPOST INTO SUB–SOILS.

3) ROCK–PICK UNTIL UPLIFTED STONE/ROCK MATERIALS OF FOUR INCHES AND LARGER SIZE ARE CLEANED OFF THE SITE.

4) APPLY TOPSOIL TO A DEPTH OF SIX INCHES.

NOTES:
1. BROADCAST DENSITY, MULCHING, AND FIRST & SECOND SEASON MAINTENANCE TO MATCH MANUFACTURER'S RECOMMENDATIONS TO ENSURE PROPER ESTABLISHMENT.
2. OWNER TO FOLLOW GROWING SEASON MAINTENANCE RECOMMENDATIONS AFTER 1 YEAR TO ACHIEVE PROPER ESTABLISHMENT. CONTRACTOR TO INSTALL A 3"–4" SPADE CUT EDGE AT ALL LAWN/MULCH INTERFACES (TYP). CONTRACTOR TO ROUGHLY STAKE OUT AREA FOR OWNER APPROVAL PRIOR TO EDGING AND MULCHING.
3. ALL AREAS DISTURBED AS A RESULT OF CONSTRUCTION ACTIVITIES AND WHICH ARE NOT OTHERWISE CALLED OUT AS HARDSCAPE OR LANDSCAPE PLANTING AREAS SHALL BE SEEDED TO ESTABLISH LAWN PER LANDSCAPING NOTES.

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Poughkeepsie, NY 12601
(845) 454-3980
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EXP: EXP:

CERTIFICATE OF AUTHORIZATION NUMBER:
PROFESSIONAL ENGINEERING: 0021272
LAND SURVEYING: 0021271
GEOLOGICAL: 0021659

It is a violation of New York Education Law Art. 145 Sec. 7209 & Art. 147 Sec. 7307, for any person, unless acting under the direction of a licensed architect, professional engineer, or land surveyor, to alter an item in any way. If an item bearing the seal of an architect, engineer, or land surveyor is altered; the altering architect, engineer, or land surveyor shall affix to the item their seal and notation "altered by" followed by their signature and date of such alteration, and a specific description of the alteration.

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Poughkeepsie, New York 12601

248 Tioronda Avenue
248 Tioronda Avenue
Beacon, New York 12508

NO:	DATE:	DESCRIPTION:
Revisions		

PROJECT NUMBER: 2260816
DRAWN BY: DC
REVIEWED BY: KGA
ISSUED FOR: ISSUED FOR PLANNING BOARD REVIEW
DATE: 06/30/26
DRAWING NAME: LANDSCAPE PLAN
DRAWING NUMBER: C180

6/30/2026 2:10:01 PM
\\cabinet\projects\Chazen Projects\81709\81709.00 LCH4 Builders S-248 IOW\191_C180_81709.00_LAND.dwg

LIGHTING STATISTICS:

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Stat Zone # 1 Entire Site to PL	+	0.2 fc	5.0 fc	0.0 fc	N/A	N/A
Stat Zone # 2 Onsite Drive and Parking areas	+	0.5 fc	5.0 fc	0.0 fc	N/A	N/A

LIGHTING LEGEND:

PROPOSED BUILDING

POST AND LUMINAIRE

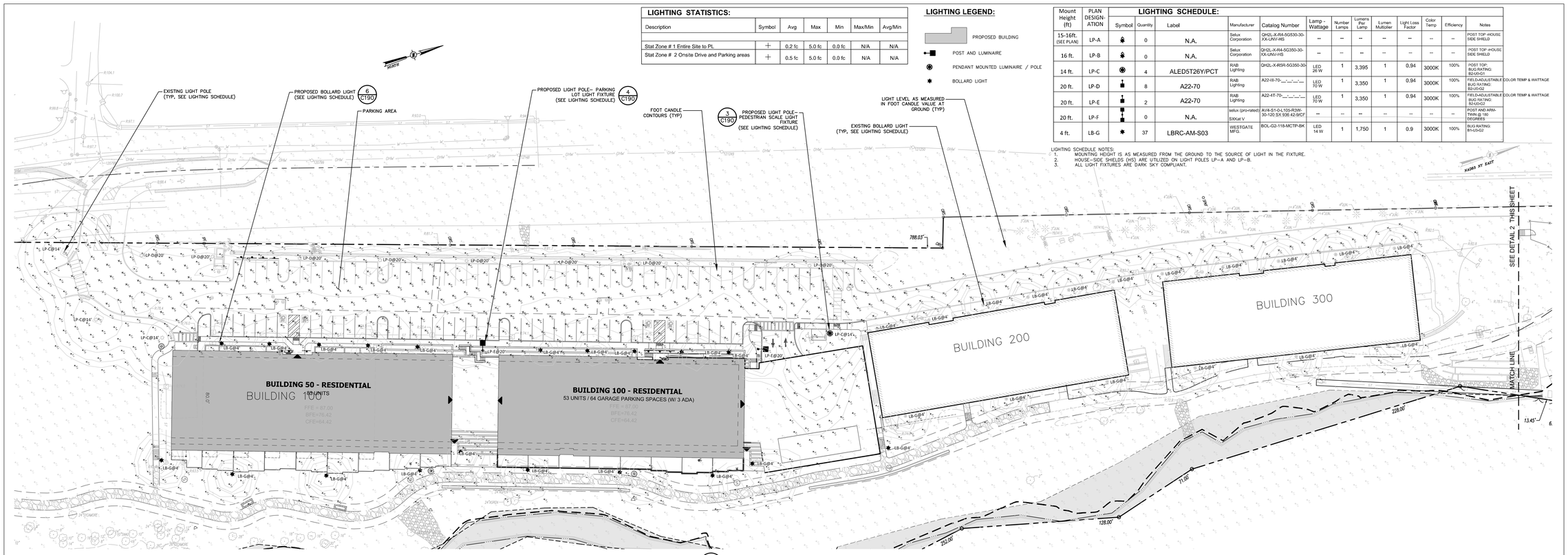
PENDANT MOUNTED LUMINAIRE / POLE

BOLLARD LIGHT

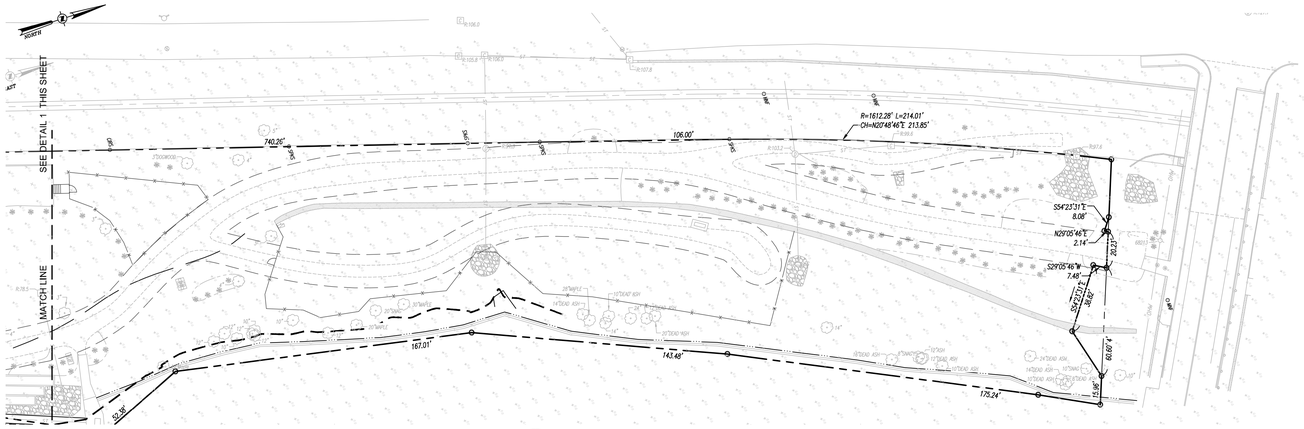
LIGHTING SCHEDULE:

Mount Height (ft)	PLAN DESIGN-ATION	Symbol	Quantity	Label	Manufacturer	Catalog Number	Lamp - Wattage	Number Lamps	Lumens Per Lamp	Lumen Multiplier	Light Loss Factor	Color Temp	Efficiency	Notes
15-16ft. (SEE PLAN)	LP-A		0	N.A.	Selux Corporation	QH2L-X-R4-5GS30-30-XX-UNV-HS	--	--	--	--	--	--	--	POST TOP-HOUSE SIDE SHIELD
16 ft.	LP-B		0	N.A.	Selux Corporation	QH2L-X-R4-5GS50-30-XX-UNV-HS	--	--	--	--	--	--	--	POST TOP-HOUSE SIDE SHIELD
14 ft.	LP-C		4	ALED5T26Y/PCT	RAB Lighting	QH2L-X-R5R-5G350-30-	LED 26 W	1	3,395	1	0.94	3000K	100%	POST TOP: BUG RATING: B2-U0-G1
20 ft.	LP-D		8	A22-70	RAB Lighting	A22-I8-70-__-__-__	LED 70 W	1	3,350	1	0.94	3000K	100%	FIELD-ADJUSTABLE COLOR TEMP & WATTAGE BUG RATING: B2-U0-G2
20 ft.	LP-E		2	A22-70	RAB Lighting	A22-4T-70-__-__-__	LED 70 W	1	3,350	1	0.94	3000K	100%	FIELD-ADJUSTABLE COLOR TEMP & WATTAGE BUG RATING: B2-U0-G2
20 ft.	LP-F		0	N.A.	selux (pro-rated) SXKat V	AV4-S1-L105-R3W-30-120 SX 936 42-9/CF	--	--	--	--	--	--	--	POST AND ARM-TWIN @ 180 DEGREES
4 ft.	LB-G		37	LBRC-AM-S03	WESTGATE MFG.	BOL-G2-118-MCTP-BK	LED 14 W	1	1,750	1	0.9	3000K	100%	BUG RATING: B1-U1-G2

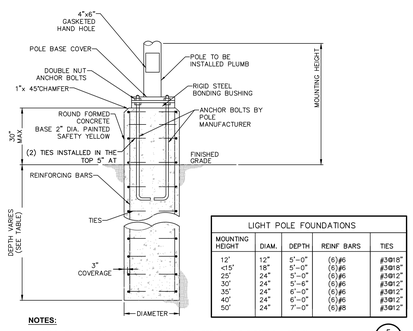
LIGHTING SCHEDULE NOTES:
1. MOUNTING HEIGHT IS AS MEASURED FROM THE GROUND TO THE SOURCE OF LIGHT IN THE FIXTURE.
2. HOUSE-SIDE SHIELDS (HS) ARE UTILIZED ON LIGHT POLES LP-A AND LP-B.
3. ALL LIGHT FIXTURES ARE DARK SKY COMPLIANT.



1 C190 **PHOTOMETRIC LIGHTING PLAN**
SCALE: 1"=30'



2 C190 **PHOTOMETRIC LIGHTING PLAN**
SCALE: 1"=30'

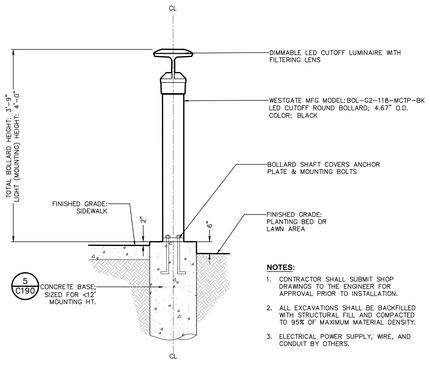


LIGHT POLE FOUNDATIONS				
MOUNTING HEIGHT	DIAM.	DEPTH	REINF BARS	TIES
12'	12"	5'-0"	(6)#6	#3@18"
≤15'	18"	5'-0"	(6)#6	#3@18"
25'	24"	5'-0"	(6)#6	#3@12"
30'	24"	5'-6"	(6)#6	#3@12"
35'	24"	6'-0"	(6)#6	#3@12"
40'	24"	6'-0"	(6)#6	#3@12"
50'	24"	7'-0"	(6)#8	#3@12"

NOTES:
1. CONDUITS AND GROUNDING SHALL BE AS REQUIRED BY THE ELECTRICAL DESIGN.
2. ALL CONCRETE SHALL BE **4,500 PSI** @ 28 DAYS.
3. ALL REINFORCING STEEL SHALL BE GRADE 60.
4. DESIGNED FOR **90 MPH** WIND WITH FIXTURE AREA OF **13 SF.**
5. FOUNDATION DIAMETER AND REINFORCING CIRCLE SHALL BE COORDINATED WITH ANCHOR BOLT LIMITS.
6. FOUNDATIONS SHALL BE AUGERED INTO UNDISTURBED NATURAL SOIL OR COMPACTED FILL PER SITE GRADING PLANS.

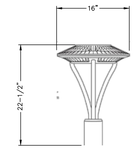
5 C190 **LOT LIGHTING CONCRETE BASE**
SCALE: N.T.S.

LIGHTING NOTES:
1. PROPOSED LIGHTING AS MANUFACTURED BY SELUX LIGHTING. PROPOSED POLE LENGTHS VARY, SEE LIGHTING CHART.
2. GRID NUMBERS SHOWN REPRESENT FOOT CANDLE VALUES AT GROUND PLANE.
3. THE LIGHTING FIXTURES, SURFACE LOCATIONS AND ASSOCIATED PHOTOMETRIC VALUES ARE IDENTIFIED BY THE CHAZEN COMPANIES, DETAILED DESIGN OF THE LIGHTING SPECIFICATIONS, FOUNDATION DESIGN, LIGHTING CONDUIT, WIRING, AND CONTROL CIRCUITRY SHALL BE BY OTHERS.
4. IF DISCREPANCIES EXIST BETWEEN THE LIGHTING SCHEDULE AND LIGHTING PLAN, THE PLAN SHALL DICTATE.
5. THE EXISTING STREET LIGHTS IN THE RIGHT-OF-WAYS HAVE NOT BEEN INCLUDED IN THIS PHOTOMETRIC ANALYSIS. THE LIGHT LEVELS SHOWN HEREON REFLECT THE PROPOSED LIGHTING ON SITE.
6. LIGHTING AND ELECTRICAL SERVICE WIRING SHALL ONLY BE INSTALLED IN THE EVENT OF BUILDOUT OF LANDBANKED PARKING. INSTALL ELECTRIC CONDUIT STUBS-UPS, COVER AND MARK LOCATIONS IN CURRENT WORK PHASE.

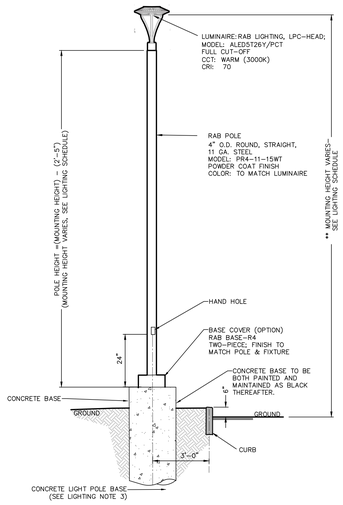


NOTES:
1. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.
2. ALL EXCAVATIONS SHALL BE BACKFILLED WITH STRUCTURAL FILL AND COMPACTED TO 95% OF MAXIMUM MATERIAL DENSITY.
3. ELECTRICAL POWER SUPPLY, WIRE, AND CONDUIT BY OTHERS.

6 C190 **BOLLARD LIGHT FIXTURE DETAIL**
SCALE: N.T.S.



SIDE VIEW



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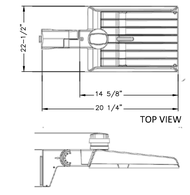
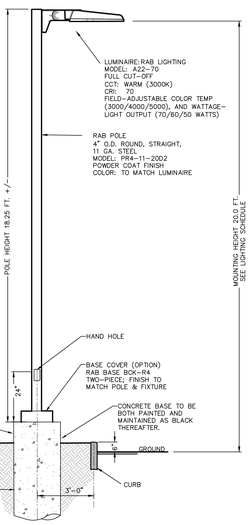
2. ALL EXCAVATIONS SHALL BE BACKFILLED WITH STRUCTURAL FILL AND COMPACTED TO 95% OF MAXIMUM MATERIAL DENSITY.
3. ELECTRICAL POWER SUPPLY, WIRE, AND CONDUIT BY OTHERS.

3 C190 **PEDESTRIAN SCALE LIGHTING FIXTURE DETAIL**
SCALE: N.T.S.



TOP VIEW



NOTES:
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2. ALL EXCAVATIONS SHALL BE BACKFILLED WITH STRUCTURAL FILL AND COMPACTED TO 95% OF MAXIMUM MATERIAL DENSITY.
3. ELECTRICAL POWER SUPPLY, WIRE, AND CONDUIT BY OTHERS.
4. WHEN LIGHT FIXTURE IS ADJACENT TO PARKING, BASE HEIGHT TO BE 30" HIGH.

4 C190 **PARKING AREA LIGHTING FIXTURE DETAIL**
SCALE: N.T.S.

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EXP: EXP:

CERTIFICATE OF AUTHORIZATION NUMBER:
PROFESSIONAL ENGINEERING: 0021272
LAND SURVEYING: 0021271
GEOLOGICAL: 0021659

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NO.	DATE:	DESCRIPTION:
Revisions		

PROJECT NUMBER: 2260816
DRAWN BY: DC
REVIEWED BY: KGA
ISSUED FOR: ISSUED FOR PLANNING BOARD REVIEW
DATE: 06/30/26
DRAWING NAME:

PHOTOMETRIC LIGHTING PLAN

DRAWING NUMBER:

C190

6/30/2026 2:12:28 PM
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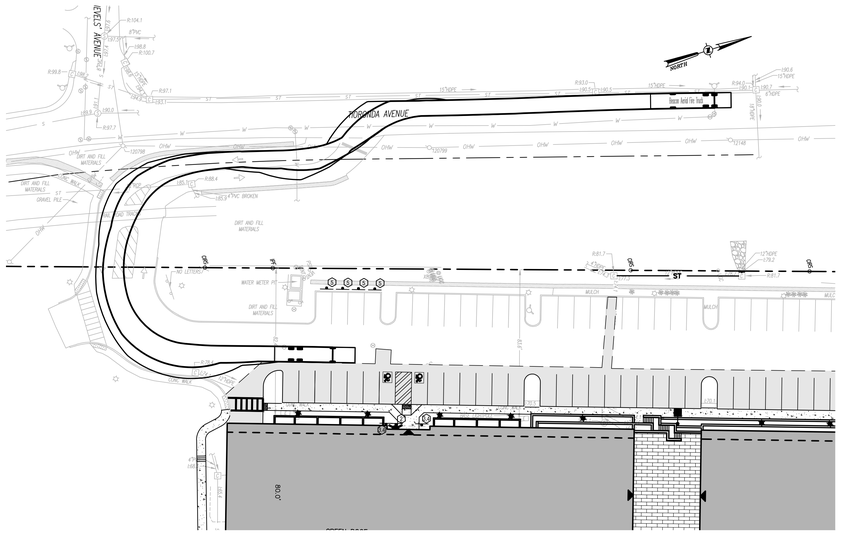
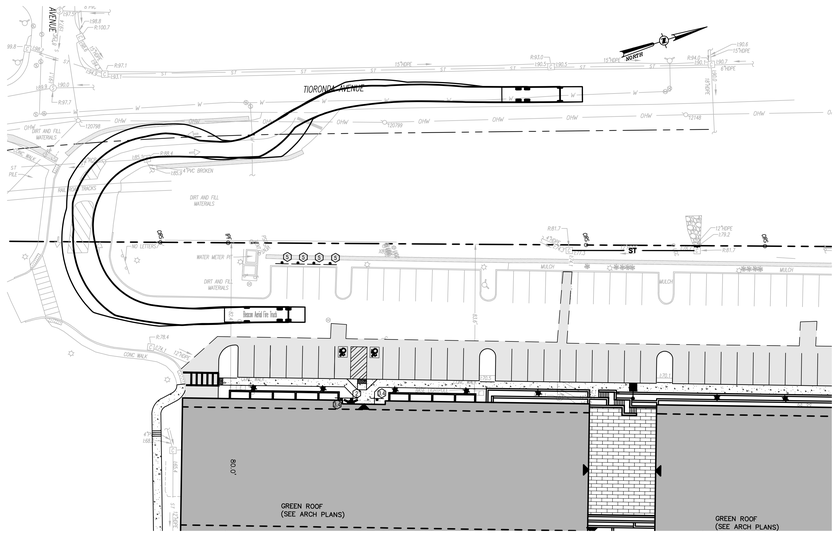
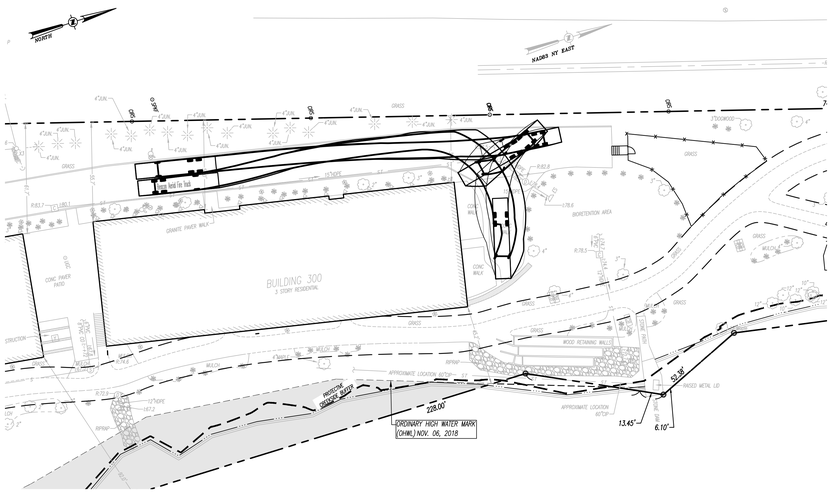


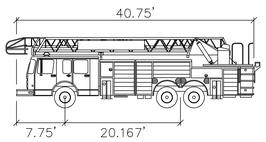
1 C200 **SITE ACCESS MANEUVERING PLAN - INGRESS**
SCALE: 1"=50'



2 C200 **SITE ACCESS MANEUVERING PLAN - EGRESS**
SCALE: 1"=30'



3 C200 **FIRETRUCK TURNAROUND AREA MANEUVERING PLAN**
SCALE: 1"=50'



BEACON FIRE TRUCK

	feet
Width	: 8.33
Track	: 8.41
Lock to Lock Time	: 6.0
Steering Angle	: 45.0

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NO:	DATE:	DESCRIPTION:
Revisions		

PROJECT NUMBER: 2260816
DRAWN BY: GMZ
REVIEWED BY: KGA
ISSUED FOR: ISSUED FOR PLANNING BOARD REVIEW
DATE: 06/30/26
DRAWING NAME:

VEHICLE MANEUVERING PLAN

DRAWING NUMBER:

C200

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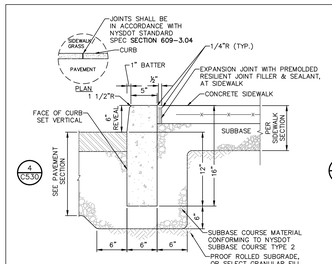
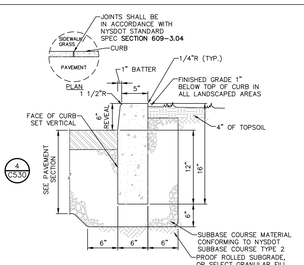


NOTES:
1. CONCRETE CURB SHALL BE INSTALLED IN ACCORDANCE WITH NYSDOT STANDARD SPECIFICATION **SECTION 609.**
2. PRECAST CONCRETE CURB MAY BE SUBSTITUTED, WHEN ALTERNATE CONSTRUCTION DETAILS ARE SUBMITTED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER. ALTERNATE CURB SHALL BE INSTALLED IN ACCORDANCE WITH NYSDOT SPEC **SECTION 609.**

① **CAST IN PLACE CONCRETE CURB AT SIDEWALK**
SCALE: NOT TO SCALE



NOTES
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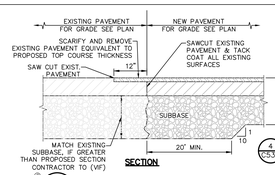
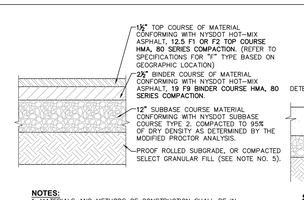
② **CAST IN PLACE CONCRETE CURB**
SCALE: NOT TO SCALE



③ **PAVEMENT TRANSITION DETAIL**
SCALE: NOT TO SCALE

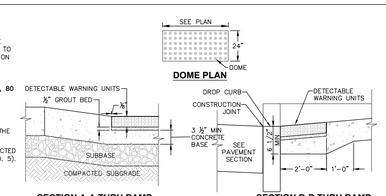


NOTES:
1. MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION (NYSDOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, DATED **"CURRENT VERSION"**, AND ALL ADDENDA THERE TO.
2. SUBBASE MATERIAL SHALL CONFORM WITH **SECTION 304** – SUBBASE COURSE OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS AND THE TYPE CALLED OUT IN THESE DRAWINGS.
3. HOT MIX ASPHALT (HMA) PAVEMENT SHALL CONFORM WITH **SECTION 400**–HOT MIX ASPHALT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS AND THE TYPE CALLED OUT IN THESE DRAWINGS. ALTHOUGH **SECTION 400** IN ITS ENTIRETY IS REFERENCED, THE HOT MIX ASPHALT (HMA) PAVEMENT(S) SPECIFIED FOR THIS CONTRACT SHALL BE AS SPECIFIED UNDER **SECTION 402**–HOT MIX ASPHALT (HMA) PAVEMENTS.
4. TACK COAT WHEN SPECIFIED OR CALLED OUT IN THESE DRAWINGS OR REQUIRED BY THE REFERENCED SPECIFICATIONS SHALL CONFORM WITH **SECTION 407**–TACK COAT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
5. WHERE IT IS NECESSARY TO PLACE FILL FOR PURPOSES OF BRINGING THE SUBGRADE ELEVATION UP TO A SPECIFIED GRADE, THE FILL MATERIAL PLACED SHALL BE IN CONFORMANCE WITH **SECTION 203**–EXCAVATION AND EMBANKMENT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
6. PAVEMENT SECTION SHOWN IS PRELIMINARY. PRIOR TO BIDDING AND COMMENCEMENT OF CONSTRUCTION, THE FINAL DESIGN OF THE PAVEMENT SECTION MUST BE PREPARED BY A NYS LICENSED PROFESSIONAL ENGINEER AND MUST BE BASED ON A CURRENT GEOTECHNICAL REPORT PREPARED FOR THIS PROJECT.

ALT. NOTE 6:

6. PAVEMENT SECTION SHOWN IS PRELIMINARY. PRIOR TO CONSTRUCTION, SHOP DRAWINGS SHOWING THE FINAL DESIGN OF THE PAVEMENT SECTION MUST BE PREPARED BY A NYS LICENSED PROFESSIONAL ENGINEER AND SUBMITTED FOR REVIEW.

④ **PAVEMENT SECTION DETAIL**
SCALE: NOT TO SCALE

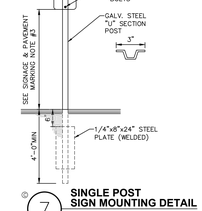


NOTES:
1. DETECTABLE WARNING UNIT SHALL BE ADA COMPLIANT, AND SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES.
2. CAST IRON 2" TERRA PAVING TYPE THREE ADA COMPLIANT WARNING PAVER.
3. COORDINATE W/ OWNER FOR COLOR.

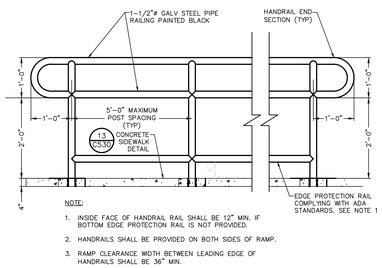
⑤ **DETECTABLE WARNING UNITS FOR RAMPS**
SCALE: NOT TO SCALE

SIGN NO.	SIGN FACE	MUTCD NUMBER	MIN SIZE	COLORS BCK GRND	COLORS LEGEND	MOUNTING
①		W11-2	24"x24"	YELLOW/ FYG	BLACK	7 C530
②	NO PARKING ANY TIME	R7-1	12"x18"	WHITE	RED	7 C530
③	RESERVED PARKING	NY R7-8D	12"x18"	WHITE/ BLUE	GREEN/ WHITE	7 C530
④	VAN ACCESSIBLE	R7-8P	12"x6"	WHITE	BLUE	7 C530
⑤	TRAIL PARKING ONLY	CUSTOM DESIGN TO BE COORD. WITH OWNER PRIOR TO CONSTRUCTION				7 C530

⑥ **SIGN SCHEDULE**
SCALE: NOT TO SCALE

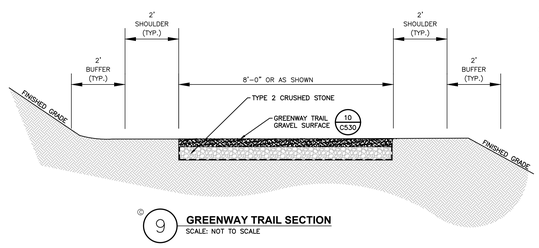


⑦ **SINGLE POST SIGN MOUNTING DETAIL**
SCALE: NOT TO SCALE

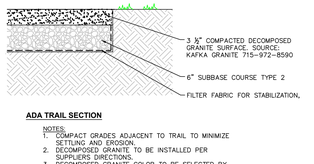


NOTE:
1. INSIDE FACE OF HANDRAIL RAIL SHALL BE 12" MIN. IF BOTTOM EDGE PROTECTION RAIL IS NOT PROVIDED.
2. HANDRAILS SHALL BE PROVIDED ON BOTH SIDES OF RAMP.
3. RAMP CLEARANCE WIDTH BETWEEN LEADING EDGE OF HANDRAILS SHALL BE 36" MIN.

⑧ **STEEL PIPE HANDRAIL DETAIL**
SCALE: NOT TO SCALE



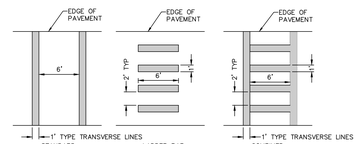
⑨ **GREENWAY TRAIL SECTION**
SCALE: NOT TO SCALE



ADA TRAIL SECTION

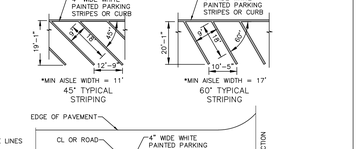
NOTES:
1. COMPACT GRADES ADJACENT TO TRAIL TO MINIMIZE SETTLING AND EROSION.
2. DECOMPOSED GRANITE TO BE INSTALLED PER SUPPLIERS DIRECTIONS.
3. DECOMPOSED GRANITE COLOR TO BE SELECTED BY LANDSCAPE ARCHITECT.
4. REFER TO DETAIL 23/C530 FOR HAND RAIL.
5. TRAIL SURFACE SHOULD BE ADA-COMPLIANT.

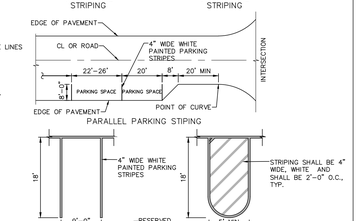
⑩ **ADA TRAIL SURFACE**
SCALE: NOT TO SCALE

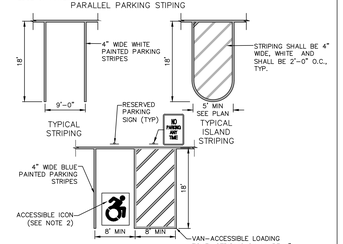


NOTES:
1. ALL CROSS WALK STRIPING SHALL BE WHITE
2. TYPE S CROSS WALK SHALL BE USED IN LOW TRAFFIC VOLUME STREET CROSSINGS.
3. TYPE L CROSS WALK SHALL BE USED IN MEDIUM TRAFFIC VOLUME STREET CROSSINGS.
4. TYPE LS CROSS WALK SHALL BE USED IN HIGH TRAFFIC VOLUME STREET CROSSINGS.

⑪ **PAVEMENT MARKING DETAIL CROSS WALK STRIPING**
SCALE: NOT TO SCALE

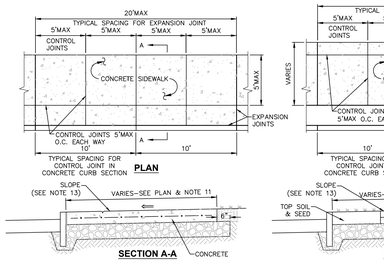


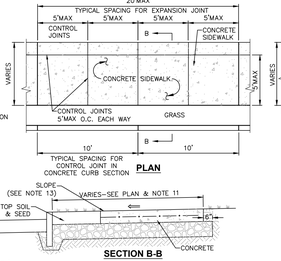


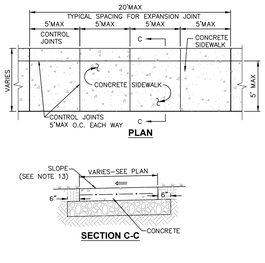


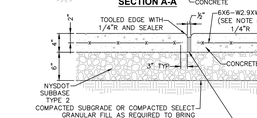
NOTES:
1. ALL DIMENSIONS SHALL BE IN ACCORDANCE WITH ADA STANDARD AND CURRENT ZONING AND SITE REGULATIONS.
2. PAINTED ACCESSIBLE LOGO TO BE IN ACCORDANCE W/ NEW YORK STATE LAW.
3. SLOPE OF PAVEMENT SURFACE IN ACCESSIBLE PARKING AREA SHALL NOT EXCEED 1.5% IN ANY DIRECTION.
4. SEE PLAN FOR ACTUAL LOCATION OF SIGNAGE

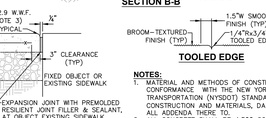
⑫ **PAVEMENT MARKING DETAIL PARKING STRIPING**
SCALE: NOT TO SCALE

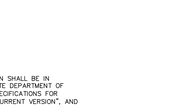




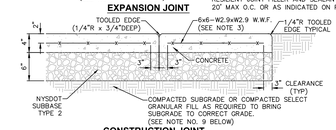




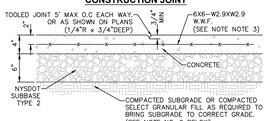




EXPANSION JOINT



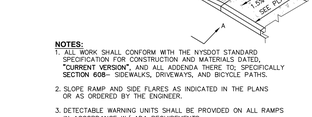
CONSTRUCTION JOINT



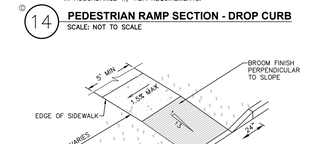
CONTROL JOINT

⑬ **CONCRETE SIDEWALK DETAIL**
SCALE: NOT TO SCALE

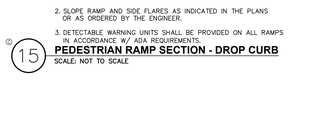
NOTES:
1. MATERIAL AND METHODS OF CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION (NYSDOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, DATED "CURRENT VERSION", AND ALL ADDENDA THERE TO.
2. ALL CONCRETE SHALL BE **4,500** CONCRETE. CONCRETE MATERIALS, PLACEMENT, AND CONSTRUCTION SHALL CONFORM WITH **SECTION 500** OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
3. REINFORCING STEEL FOR CONCRETE SHALL CONFORM WITH SECTION 556 – REINFORCING STEEL FOR CONCRETE STRUCTURES OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS AND AS SPECIFICALLY CALLED OUT IN THE DRAWINGS.
4. ALL EXPOSED SURFACES SHALL HAVE A BROOM TEXTURED FINISH & TOOLED EDGES. TOOL SHALL PROVIDE MAX 1-1/2" WIDE SMOOTH TROWEL FINISH AT JOINT.
5. EXPANSION JOINTS SHALL BE LOCATED A MAXIMUM OF 20' ON CENTER, OR AS INDICATED ON PLANS.
6. JOINTS SHALL NOT BE SAW CUT.
7. EXPOSED CONCRETE SURFACES SHALL BE TREATED WITH **"SUREBOND"/"SAFEBOND" SB-7000** INTENSIFIER BRIGHT PROTECTOR AND SIDEWALK SEALER, OR EQUAL. RATE AND METHOD OF APPLICATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
8. SUBBASE MATERIAL SHALL CONFORM WITH **SECTION 304** OF THE ABOVE REFERENCED NYSDOT STANDARD.
9. WHERE IT IS NECESSARY TO PLACE FILL FOR PURPOSE OF BRINGING THE SUBGRADE ELEVATION UP TO A SPECIFIED GRADE, THE FILL MATERIAL PLACED SHALL BE IN ACCORDANCE WITH SECTION 203-EXCAVATION AND EMBANKMENT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
10. ALL WORK SHALL CONFORM WITH **SECTION 608**–SIDEWALK, DRIVEWAYS, AND BICYCLE PATHS OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
11. ALL WORK SHALL CONFORM WITH AASHTO GEOMETRIC DESIGN OF HIGHWAYS AND STREET 2011, ICC A117.1 2009, OR LATEST EDITION.
12. SIDEWALK WIDTH SHOWN ON THE PLANS IS TO BE MEASURED FROM THE BACK OF THE CURB.
13. SIDEWALKS SHALL HAVE A CROSS SLOPE OF **1.5%** PER FT. UNLESS OTHERWISE NOTED ON PLAN.



TOOLED EDGE





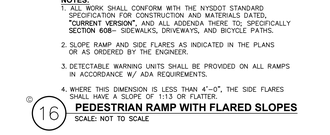


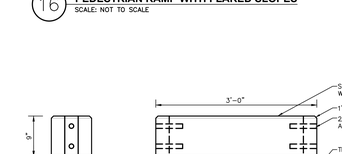
NOTES:
1. ALL WORK SHALL CONFORM WITH THE NYSDOT STANDARD SPECIFICATION FOR CONSTRUCTION AND MATERIALS DATED, **"CURRENT VERSION"**, AND ALL ADDENDA THERE TO; SPECIFICALLY **SECTION 608**– SIDEWALKS, DRIVEWAYS, AND BICYCLE PATHS.
2. SLOPE RAMP AND SIDE FLARES AS INDICATED IN THE PLANS OR AS ORDERED BY THE ENGINEER.
3. DETECTABLE WARNING UNITS SHALL BE PROVIDED ON ALL RAMPS IN ACCORDANCE W/ ADA REQUIREMENTS.

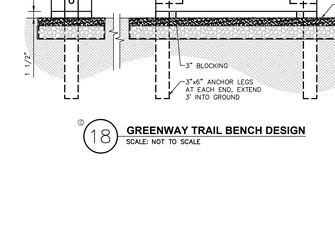
⑭ **PEDESTRIAN RAMP SECTION - DROP CURB**
SCALE: NOT TO SCALE

NOTES:
1. ALL WORK SHALL CONFORM WITH THE NYSDOT STANDARD SPECIFICATION FOR CONSTRUCTION AND MATERIALS DATED, **"CURRENT VERSION"**, AND ALL ADDENDA THERE TO; SPECIFICALLY **SECTION 608**– SIDEWALKS, DRIVEWAYS, AND BICYCLE PATHS.
2. SLOPE RAMP AND SIDE FLARES AS INDICATED IN THE PLANS OR AS ORDERED BY THE ENGINEER.
3. DETECTABLE WARNING UNITS SHALL BE PROVIDED ON ALL RAMPS IN ACCORDANCE W/ ADA REQUIREMENTS.

⑮ **PEDESTRIAN RAMP SECTION - DROP CURB**
SCALE: NOT TO SCALE







NOTES:
1. ALL WORK SHALL CONFORM WITH THE NYSDOT STANDARD SPECIFICATION FOR CONSTRUCTION AND MATERIALS DATED, **"CURRENT VERSION"**, AND ALL ADDENDA THERE TO; SPECIFICALLY **SECTION 608**– SIDEWALKS, DRIVEWAYS, AND BICYCLE PATHS.
2. SLOPE RAMP AND SIDE FLARES AS INDICATED IN THE PLANS OR AS ORDERED BY THE ENGINEER.
3. DETECTABLE WARNING UNITS SHALL BE PROVIDED ON ALL RAMPS IN ACCORDANCE W/ ADA REQUIREMENTS.
4. WHERE THIS DIMENSION IS LESS THAN 4'-0", THE SIDE FLARES SHALL HAVE A SLOPE OF 1:13 OR FLATTER.

⑯ **PEDESTRIAN RAMP WITH FLARED SLOPES**
SCALE: NOT TO SCALE

⑰ **PAVEMENT MARKING DETAIL DIRECTIONAL ARROW**
SCALE: NOT TO SCALE

⑱ **GREENWAY TRAIL BENCH DESIGN**
SCALE: NOT TO SCALE

STRIPING NOTES:
1. ALL STRIPING SHALL CONFORM TO THE LATEST EDITION OF THE NYSDOT STANDARD SPECIFICATIONS, **SECTION 640** AND THE "NATIONAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" – **2009 EDITION** AND THE "NYS SUPPLEMENT."
2. STRIPE PAVEMENT AS INDICATED ON THE PLANS AND/OR IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REQUIREMENTS.
3. STRIPING WORK WILL BE REVIEWED AND ACCEPTED BY THE AUTHORITY HAVING JURISDICTION.
4. COLOR: DRIVE LANE DIVIDERS – WHITE OR AOBE
NO PARKING ZONE MARKINGS – WHITE OR AOBE
PARKING DIVIDERS – WHITE OR AOBE
WALKING LINES – WHITE OR AOBE
ACCESSIBLE PARKING LINES & SYMBOL – BLUE

SIGNAGE NOTES:
1. ALL SIGNS SHALL CONFORM TO THE LATEST EDITION OF THE NYSDOT STANDARD SPECIFICATIONS, **SECTION 645** AND THE "NATIONAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" – **2009 EDITION** AND THE "NYS SUPPLEMENT."
2. SIGN MOUNTING HEIGHT SHALL BE A MINIMUM OF 7'. MINIMUM MOUNTING HEIGHT MAY BE ADJUSTED ONLY IN ACCORDANCE WITH PROVISIONS OUTLINED IN THE "NATIONAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" – **2009 EDITION** AND THE "NYS SUPPLEMENT."
3. SIGN POST SHALL BE IN ACCORDANCE W/ NYSDOT STANDARD SPECS **SECTION 730.**

LaBella
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21 Fox Street
Poughkeepsie, NY 12601
(845) 454-3980
labellapc.com

NOT FOR CONSTRUCTION
EXP: EXP:

CERTIFICATE OF AUTHORIZATION NUMBER:
PROFESSIONAL ENGINEERING: 0021272
LAND SURVEYING: 0021271
GEOLOGICAL: 0021659

It is a violation of New York Education Law Art. 145 Sec. 7209 & Art. 147 Sec. 7307, for any person, unless acting under the direction of a licensed architect, professional engineer, or land surveyor, to alter an item in any way. If an item bearing the seal of an architect, engineer, or land surveyor is altered; the altering architect, engineer, or land surveyor shall affix to the item their seal and notation "altered by" followed by their signature and date of such alteration, and a specific description of the alteration.

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Chai Developers
147 Union Street
Poughkeepsie, New York 12601

248 Tioronda Avenue
248 Tioronda Avenue
Beacon, New York 12508

NO.	DATE:	DESCRIPTION:
Revisions		

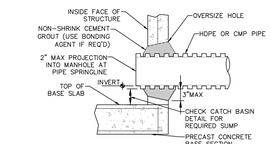
PROJECT NUMBER: 2260816
DRAWN BY: GMZ
REVIEWED BY: KGA
ISSUED FOR: ISSUED FOR PLANNING BOARD REVIEW
DATE: 06/30/26
DRAWING NAME:

SITE DETAILS

DRAWING NUMBER:

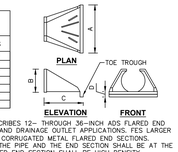
C530

6/30/2026 1:38:19 PM
\\castellabella.wpengine\Chazen Projects\8170\8170-81799\81700.00 CHAI Builders B-248 UNION ST_C530_81700.00_SITE3.dwg



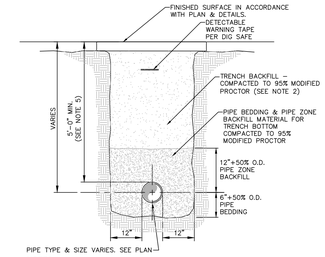
PIPE CONNECTION TO DRAINAGE STRUCTURE- CMP OR HDPE CEMENT GROUT SEAL JOINT
SCALE: NOT TO SCALE

TYPICAL HDPE END SECTION				
PIPE DIA.	END SECTION DIMENSIONS			
	A	B	C	D
12"	42"	14"	34"	6"
15"	42"	17"	34"	6"
18"	59"	21"	48"	6"
24"	59"	27"	48"	6"
30"	82"	34"	58"	6"
36"	82"	41"	58"	6"



NOTES:
1. SCOPE: THIS SPECIFICATION DESCRIBES 12" THROUGH 36" INCH ADS FLARED END SECTIONS FOR USE IN CULVERT AND DRAINAGE OUTLET APPLICATIONS. FES LARGER THAN 36" SHALL USE CIRCULAR CORRUGATED METAL FLARED END SECTIONS.
2. REQUIREMENTS: THE INVERT OF THE PIPE AND THE END SECTION SHALL BE AT THE SAME ELEVATION. THE ADS FLARED END SECTION SHALL BE HIGH DENSITY POLYETHYLENE MEETING ASTM D3350 MINIMUM CELL CLASSIFICATION 213320C; CONTACT MANUFACTURER FOR ADDITIONAL CELL CLASSIFICATION INFORMATION. WHEN PROVIDED, THE METAL THREADED FASTENING ROD SHALL BE STAINLESS STEEL.
3. INSTALLATION: INSTALLATION SHALL BE IN ACCORDANCE WITH ADS INSTALLATION INSTRUCTIONS AND WITH THOSE ISSUED BY STATE OR LOCAL AUTHORITIES. CONTACT YOUR LOCAL ADS REPRESENTATIVE OR VISIT WWW.ADS-PIPE.COM FOR THE LATEST INSTALLATION INSTRUCTIONS.
4. PROVIDE TRASH RACK ONLY WHERE SPECIFIED ON SITE PLANS.

TYPICAL END SECTION - HDPE
SCALE: NOT TO SCALE



PIPE TYPE & SIZE VARIES. SEE PLAN

NOTES:
1. PIPE BEDDING & PIPE ZONE BACKFILL SHALL BE A NATURAL RUN-OF-BANK (R.O.B.) SAND OR A MIXTURE OF CRUSHED STONE AND GRAVEL, FREE OF SOFT, NONDURABLE PARTICLES, ORGANIC MATERIALS AND ELONGATED PARTICLES, AND SHALL BE WELL GRADED FROM FINE TO COARSE PARTICLES. BEDDING GRADATIONS SHALL BE APPROVED BY THE ENGINEER AND SHALL MEET THE FOLLOWING GRADATION REQUIREMENTS:

SIEVE DESIGNATION	% PASSING
3/4"	100%
NO. 40	0–70%
NO. 200	0–10%

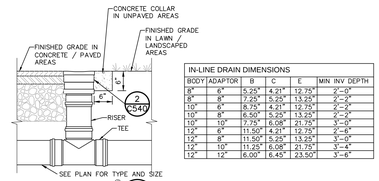
2. TRENCH BACKFILL SHALL BE A NATURAL RUN-OF-BANK (R.O.B.) OR PROCESSED GRAVEL, OR EXCAVATED MATERIAL FREE OF SOFT, NONDURABLE PARTICLES, ORGANIC MATERIALS AND ELONGATED PARTICLES, AND SHALL BE WELL GRADED FROM FINE TO COARSE PARTICLES. TRENCH BACKFILL GRADATIONS SHALL BE APPROVED BY THE ENGINEER AND SHALL MEET THE FOLLOWING GRADATION REQUIREMENTS:

SIEVE DESIGNATION	% PASSING
4"	100%
NO. 40	0–70%
NO. 200	0–10%

IN NON-TRAFFIC UNPAVED AREAS TRENCH BACKFILL CAN BE MATERIALS EXCAVATED FROM THE TRENCH AS APPROVED BY THE ENGINEER AND COMPACTED TO 90% MODIFIED PROCTOR.

3. INSTALL CONTINUOUS DETECTABLE MARKING TAPE DURING BACKFILLING OF TRENCH FOR UNDERGROUND PIPING. LOCATE TAPE 12" BELOW FINISHED GRADE, DIRECTLY OVER PIPING, EXCEPT 6" BELOW SUBGRADE UNDER PAVEMENTS & SLAB.
4. TRENCHING SHALL BE IMPLEMENTED IN ACCORDANCE WITH O.S.H.A. STANDARDS.
5. 5'-0" MIN COVER SHALL BE APPLIED TO WATER MAIN OR SANITARY SEWER FORCE MAINS ONLY.

PIPE TRENCH DETAIL (TYPICAL)
SCALE: NOT TO SCALE



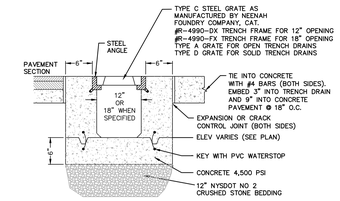
IN-LINE DRAIN DIMENSIONS					
BODY	ADAPTOR	B	C	E	MIN. INV. DEPTH
6"	6"	5.25"	4.21"	12.75"	2'-0"
8"	8"	7.25"	5.25"	13.25"	2'-0"
10"	6"	8.75"	4.21"	12.75"	2'-0"
10"	8"	6.50"	5.25"	13.25"	2'-0"
10"	10"	7.75"	6.08"	21.75"	3'-0"
12"	6"	11.50"	4.21"	12.75"	2'-0"
12"	8"	11.50"	5.25"	13.25"	3'-0"
12"	10"	11.25"	6.08"	21.75"	3'-4"
12"	12"	6.00"	6.45"	23.50"	3'-6"

IN-LINE DRAIN
SCALE: NOT TO SCALE



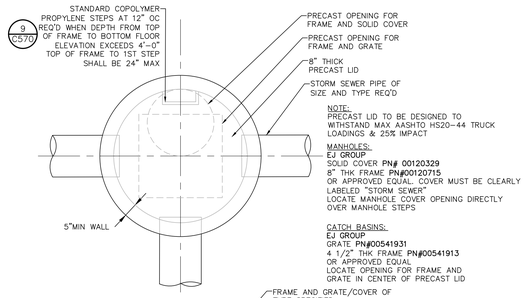
NOTE:
1. CASTINGS RATED STANDARD HS20-44 LOADING
2. MATERIAL SHALL CONFORM TO ASTM A48-CLASS 30B
3. PAINT: CASTINGS TO BE FURNISHED WITH A BLACK PAINT
4. IN-LINE DRAIN BY NYLOPLAST OR APPROVED EQUIVALENT
5. DRAIN AREA = 62.7 SQ. INCH

12" IN-LINE DRAIN & GRATE
SCALE: NOT TO SCALE



NOTES:
1. DEPTH OF TRENCH DRAINS VARY. SEE GRADING AND DRAINAGE PLAN FOR DIMENSIONS OF EACH INDIVIDUAL TRENCH DRAIN.
2. ALL GRATES SHALL BE "BICYCLE SAFETY" APPROVED.
3. PROVIDE HORIZONTAL OUTLET END PLATES AT DOWNSTREAM END OF EACH TRENCH DRAIN.

TRENCH DRAIN DETAIL
SCALE: NOT TO SCALE

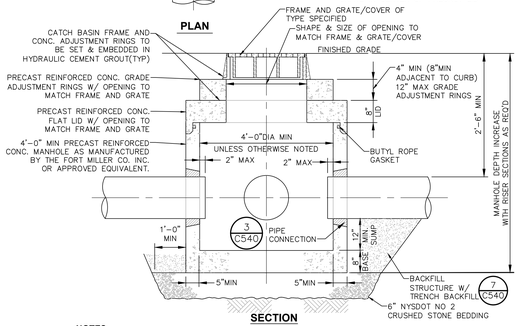


NOTE:
PRECAST LID TO BE DESIGNED TO WITHSTAND MAX AASHTO HS20-44 TRUCK LOADINGS & 25% IMPACT

MANHOLES:
EJ GROUP
SOLID COVER PN# 00120329
8" THK FRAME PN#00120715
OR APPROVED EQUAL. COVER MUST BE CLEARLY LABELED "STORM SEWER"
LOCATE MANHOLE COVER OPENING DIRECTLY OVER MANHOLE STEPS

CATCH BASINS:
EJ GROUP
GRATE PN#00541931
4 1/2" THK FRAME PN#00541913
OR APPROVED EQUAL
LOCATE OPENING FOR FRAME AND GRATE IN CENTER OF PRECAST LID

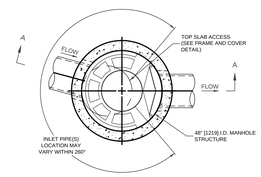
PLAN



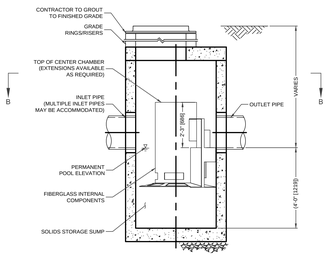
SECTION

NOTES:
1. CATCH BASIN SHALL BE PRECAST CONCRETE, DESIGNED FOR HS20-44 VEHICULAR LOADING AND 25% IMPACT.
2. FRAME AND COVER SHALL BE DESIGNED FOR HS20-44 VEHICULAR LOADING & 25% IMPACT.
3. CONCRETE CATCH BASIN LID CLEAR OPENING DIMENSION MUST MATCH FRAME AND GRATE CLEAR OPENING DIMENSION.
4. CATCH BASINS HAVING A DEPTH GREATER THAN 48" FROM FINISHED SURFACE TO THE FLOOR OF THE CONCRETE BASE SHALL BE PROVIDED WITH STEPS.
5. BACKFILL USING TRENCH BACKFILL, COMPACTED IN 6" LIFTS.
6. SUMPS FOR CATCH BASINS SHALL BE 12".
7. ECCENTRIC CONE TOP CAN BE USED FOR MANHOLES DEPTH GREATER THAN 7 FEET.
8. SEE CHART FOR REQUIRED MANHOLES / CATCH BASINS DIAMETERS.
9. ALL PRECAST CONSTRUCTION IN ACCORDANCE W/ASTM C478

PRECAST CONCRETE CATCH BASIN/MANHOLE DETAIL
SCALE: NOT TO SCALE



PLAN VIEW B-B
NOT TO SCALE



ELEVATION A-A
NOT TO SCALE

CASCADE separator™

CASCADE SEPARATOR DESIGN NOTES
THE STANDARD CS-4 CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED BELOW. SOME CONFIGURATIONS MAY BE COMBINED TO SUIT SITE REQUIREMENTS.
CONFIGURATION DESCRIPTION
GRATED INLET ONLY (NO INLET PIPE)
GRATED INLET WITH INLET PIPE OR PIPES
CURB INLET ONLY (NO INLET PIPE)
CURB INLET WITH INLET PIPE OR PIPES



FRAME AND COVER
(DIAMETER VARIES)
NOT TO SCALE

SITE SPECIFIC DATA REQUIREMENTS				
STRUCTURE ID			HYDRO 1	HYDRO 2
WATER QUALITY FLOW RATE (cfs [L/s])			0.91	0.55
UNIT TREATMENT FLOW RATE (cfs [L/s])			1.80	1.80
PEAK FLOW RATE (cfs [L/s])				
RETURN PERIOD OF PEAK FLOW (yrs)				
RIM ELEVATION				
PIPE DATA:	INVERT	MATERIAL	DIAMETER	DIAMETER
INLET PIPE 1				
INLET PIPE 2				
OUTLET PIPE				
NOTES / SPECIAL REQUIREMENTS:				

GENERAL NOTES
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.ContechES.com
3. CASCADE SEPARATOR WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
4. CASCADE SEPARATOR STRUCTURE SHALL MEET AASHTO HS20 LOAD RATING, ASSUMING EARTH COVER OF 0' - 2' [610], AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION.
5. CASTINGS SHALL MEET AASHTO M306 AND BE CAST WITH THE CONTECH LOGO.
6. CASCADE SEPARATOR STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C478 AND AASHTO LOAD FACTOR DESIGN METHOD.
7. ALTERNATE UNITS ARE SHOWN IN MILLIMETERS [mm].

INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CASCADE SEPARATOR MANHOLE STRUCTURE.
C. CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
D. CONTRACTOR TO PROVIDE, INSTALL AND GROUT INLET AND OUTLET PIPE(S). MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. ALL PIPE CENTERLINES TO MATCH PIPE OPENING CENTERLINES.
E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

CONTECH ENGINEERED SOLUTIONS LLC
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CONTECH HYDRODYNAMIC SEPARATOR CS-4
SCALE: NOT TO SCALE

LaBella Powered by partnership.
21 Fox Street
Poughkeepsie, NY 12601
(845) 454-3980
labellapc.com

NOT FOR CONSTRUCTION
EXP: EXP:

CERTIFICATE OF AUTHORIZATION NUMBER:
PROFESSIONAL ENGINEERING: 0021272
LAND SURVEYING: 0021271
GEOLOGICAL: 0021659

It is a violation of New York Education Law Art. 145 Sec. 7209 & Art. 147 Sec. 7307, for any person, unless acting under the direction of a licensed architect, professional engineer, or land surveyor, to alter an item in any way. If an item bearing the seal of an architect, engineer, or land surveyor is altered; the altering architect, engineer, or land surveyor shall affix to the item their seal and notation "altered by" followed by their signature and date of such alteration, and a specific description of the alteration.

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Chai Developers
147 Union Street
Poughkeepsie, New York 12601

248 Tioronda Avenue
248 Tioronda Avenue
Beacon, New York 12508

NO.	DATE:	DESCRIPTION:
Revisions		

PROJECT NUMBER: 2260816
DRAWN BY: GMZ
REVIEWED BY: KGA
ISSUED FOR: ISSUED FOR PLANNING BOARD REVIEW
DATE: 06/30/26
DRAWING NAME:

STORM SEWER DETAILS

DRAWING NUMBER:

C540

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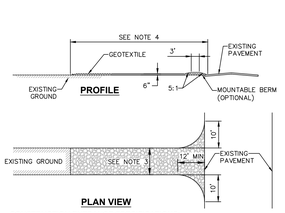
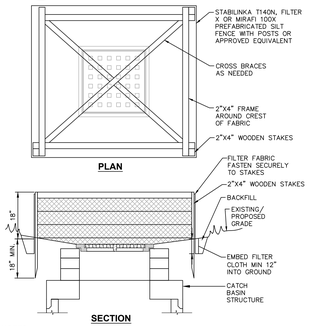


PLAN VIEW

CONSTRUCTION ENTRANCE SPECIFICATIONS:

1. STONE SIZE – USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. THICKNESS – NOT LESS THAN SIX (6) INCHES.
3. WIDTH – TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY FOUR (24) FEET IF SINGLE ENTRANCE TO SITE.
4. LENGTH – NOT LESS THAN 50' (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30' MINIMUM LENGTH WOULD APPLY).
5. GEOTEXTILE – WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. 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.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

① STABILIZED CONSTRUCTION ENTRANCE DETAIL
SCALE: NOT TO SCALE

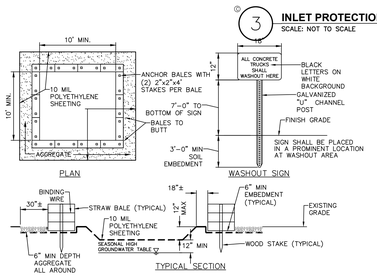


NOTES:

1. FILTER FABRIC SHALL HAVE AN EOS OF 40–85.
2. CUT FABRIC FROM CONTINUOUS ROLL TO ELIMINATE JOINTS. IF JOINTS ARE NEEDED, OVERLAP TO THE NEXT STAKE.
3. STAKE MATERIALS WILL BE STANDARD 2"x4" WOOD OR EQUIVALENT, WITH A MINIMUM LENGTH OF 3 FEET.
4. SPACE STAKES EVENLY AROUND INLET 3 FEET APART AND DRIVE MINIMUM 18" DEEP. SPANS GREATER THAN 3 FEET MAY BE BRIDGED WITH THE USE OF WIRE MESH BEHIND FABRIC FOR SUPPORT.
5. FABRIC SHALL BE EMBEDDED 1 FOOT MINIMUM BELOW GROUND AND BACKFILLED. IT SHALL BE SECURELY FASTENED TO THE STAKES AND FRAME.
6. A 2"x4" WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVERFLOW STABILITY.
7. MAXIMUM DRAINAGE AREA IS 1 ACRE.
8. INLET PROTECTION SHALL REMAIN IN–PLACE UNTIL SITE HAS BEEN STABILIZED.
9. ONCE BINDER COURSE IS PLACED INLET PROTECTION SHALL BE PROVIDED IN ACCORDANCE WITH DETAIL 6, SHEET SD3, "CATCH BASIN STONE AND BLOCK INLET PROTECTION."

OUT-OF PAVEMENT

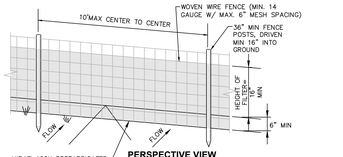
③ INLET PROTECTION DETAIL
SCALE: NOT TO SCALE



NOTES:

1. CONTAINMENT MUST BE STRUCTURALLY SOUND AND LEAK FREE AND CONTAIN ALL LIQUID WASTES.
2. CONTAINMENT DEVICES MUST BE OF SUFFICIENT QUANTITY OR VOLUME TO COMPLETELY CONTAIN THE LIQUID WASTES GENERATED.
3. WASHOUT MUST BE CLEANED OR NEW FACILITIES CONSTRUCTED AND READY TO USE ONCE WASHOUT IS 75% FULL. THIS INCLUDES REPLACEMENT OF THE 10 MIL POLYETHYLENE SHEETING.
4. WASHOUT AREA(S) SHALL BE INSTALLED IN A LOCATION EASILY ACCESSIBLE BY CONCRETE TRUCKS.
5. ONE OR MORE AREAS MAY BE INSTALLED ON THE CONSTRUCTION SITE AND MAY BE RELOCATED AS CONSTRUCTION PROGRESSES.
6. AT LEAST WEEKLY, REMOVE ACCUMULATION OF SAND AND AGGREGATE AND DISPOSE OF PROPERLY.

④ CONCRETE WASHOUT AREA DETAIL
SCALE: NOT TO SCALE

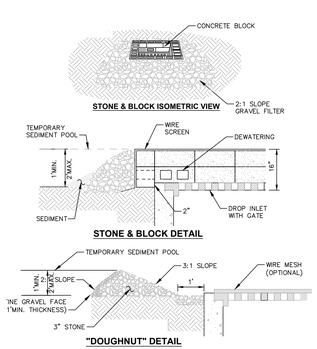


NOTES:

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL "T" OR "L" TYPE OR HARDWOOD.
2. FILTER FABRIC TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 6" MAX MESH OPENING.
3. WHEN TWO SECTIONS OF FILTER FABRIC ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY 6" AND FOLDED.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIALS REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.
5. MAXIMUM DRAINAGE AREA FOR OVERLAND FLOW TO A SILT FENCE SHALL NOT EXCEED 1/4 ACRE PER 100 FEET OF FENCE.
6. SILT FENCE SHALL BE USED WHERE EROSION COULD OCCUR IN THE FORM OF SHEET EROSION.
7. SILT FENCE SHALL NOT BE USED WHEN A CONCENTRATION OF WATER IS FLOWING TO THE BARRIER.
8. MAXIMUM ALLOWABLE SLOPE LENGTHS CONTRIBUTING RUN-OFF TO A SILT FENCE ARE:

SLOPE STEEPNESS	MAXIMUM SLOPE LENGTH(FT)
2:1	25
3:1	50
4:1	75
5:1 OR FLATTER	100

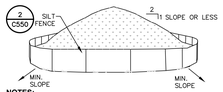
② SILT FENCE INSTALLATION DETAIL
SCALE: NOT TO SCALE



CONSTRUCTION SPECIFICATIONS:

1. LAY ONE BLOCK ON EACH SIDE OF THE STRUCTURE ON ITS SIDE FOR DEWATERING. FOUNDATION SHALL BE 2 INCHES MINIMUM BELOW REST OF INLET AND BLOCKS SHALL BE PLACED AGAINST INLET FOR SUPPORT.
2. HARDWARE CLOTH OR 1/2" WIRE MESH SHALL BE PLACED OVER BLOCK OPENINGS TO SUPPORT STONE.
3. USE CLEAN STONE OR GRAVEL 1/2–3/4 INCH IN DIAMETER PLACED 2 INCHES BELOW TOP OF THE BLOCK ON A 2:1 SLOPE OR FLATTER.
4. FOR STONE STRUCTURES ONLY, A 1 FOOT THICK LAYER OF THE FILTER STONE WILL BE PLACED AGAINST THE 3 INCH STONE AS SHOWN ON THE DRAWINGS. MAXIMUM DRAINAGE AREA 1 ACRE.
5. MAXIMUM DRAINAGE AREA IS 1 ACRE.

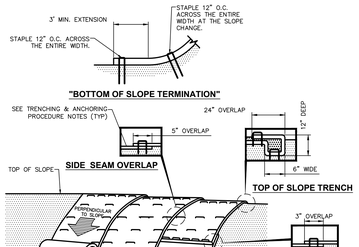
IN PAVEMENT



NOTES:

1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 1V:2H.
3. UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE SURROUNDED WITH SILT FENCING, THEN STABILIZED WITH VEGETATION OR COVERED.
4. SEE SPECIFICATIONS FOR INSTALLATION OF SILT FENCE.

⑤ TEMPORARY SOIL STOCKPILE DETAIL
SCALE: NOT TO SCALE



NOTES:

1. PREPARE THE TOPSOIL (SEEDBED) FIRST BY RAKING, SHAPING, FINE GRADING, COMPACTING, SEEDING & FERTILIZING THE SLOPES.
2. USE THE TRENCHING & ANCHORING PROCEDURES DETAILED HEREIN TO SECURE ANY EXPOSED MATERIAL ENDS. SECURE ALL PRODUCT OVERLAPS: OVERLAP IN THE DIRECTION OF WATER FLOW, PERPENDICULAR TO THE SLOPE.
3. KEEP EROSION CONTROL BLANKET IN SOLID CONTACT WITH THE TOPSOIL.
4. USE THE REQUIRED NUMBER OF STAPLES/STAKES TO SECURELY FASTEN THE EROSION CONTROL BLANKET TO THE SLOPE. IN LOOSE SOIL CONDITIONS, THE USE OF STAPLES/STAKES LENGTHS GREATER THAN 6" MAYBE NECESSARY FOR PROPER SECURING. STAPLE PATTERNS & OVERLAPS ARE DEPENDENT ON SITE CONDITIONS & MANUFACTURER'S REQUIREMENTS. CONTRACTOR SHALL CONSULT WITH MANUFACTURER FOR ACTUAL SITE SPECIFIC REQUIREMENTS.

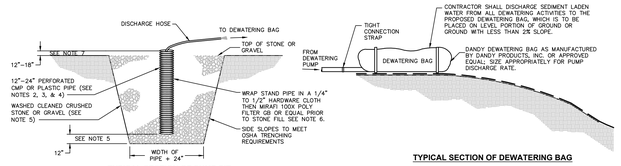
TRENCHING & ANCHORING PROCEDURE NOTES:

SIDE SEAM OVERLAP– THE EDGES OF PARALLEL BLANKETS SHALL BE STAPLED WITH A 5" OVERLAP.

TOP OF SLOPE TRENCH: BEGIN AT THE TOP OF SLOPE BY ANCHORING THE EROSION CONTROL BLANKET IN A 6"D x 6"W TRENCH WITH A 12" OVERLAP EXTENDED BEYOND THE UP–SLOPE PORTION OF THE TRENCH. ANCHOR WITH A ROW OF STAPLES/STAKES 12" O.C. IN THE BOTTOM OF THE TRENCH. BACKFILL & COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO THE COMPACTED SOIL & FOLD THE REMAINING 12" PORTION OF THE EROSION CONTROL BLANKET BACK OVER THE SEED & COMPACTED SOIL. SECURE THE EROSION CONTROL BLANKET OVER THE COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED 12" O.C. ACROSS THE ENTIRE WIDTH.

END ROLL OVERLAP– CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE SHALL BE PLACED END OVER END (SHINGLE–STYLE) WITH A 3" OVERLAP. STAPLE THRU OVERLAPPED AREAS, 12" APART ACROSS THE ENTIRE WIDTH.

⑥ EROSION CONTROL BLANKET INSTALLATION DETAIL
SCALE: NTS



NOTES:

1. SUMP PIT QUANTITY SHALL BE DETERMINED BY CONTRACTOR.
2. OVERALL SUMP PIT DIMENSIONS SHALL BE COMPATIBLE WITH ANTICIPATED SEEPAGE RATES AND PUMP SIZE TO BE USED.
3. THE STANDPIPE DIAMETER AND NUMBER OF PERFORATIONS SHALL BE COMPATIBLE WITH THE PUMP SIZE BEING USED.
4. PERFORATIONS IN THE STANDPIPE SHALL BE EITHER CIRCULAR OR SLOTS. PERFORATION SIZE SHALL NOT EXCEED 1/2" INCH DIAMETER.
5. CRUSHED STONE OF GRAVEL SHALL BE NYSDOT #2 SIZE OR EQUAL. CRUSHED STONE SHALL EXTEND A MINIMUM OF 12" BELOW THE BOTTOM OF THE STANDPIPE AND SHALL BE WASHED PRIOR TO PLACEMENT WITHIN SUMP.
6. WRAP STAND PIPE WITH HARDWARE WIRE CLOTH AND FILTER FABRIC.
7. THE STANDPIPE SHALL EXTEND A MINIMUM OF 12" ABOVE THE SURROUNDING GROUND.
8. DISCHARGE SHALL BE THROUGH A DEWATERING BAG.
9. DEWATERING TO BE EMPTIED ON–SITE AT A LOCATION APPROVED BY ENGINEER OR OFF–SITE AT NYSDEC ACCEPTABLE LOCATION.
10. SHOULD DEWATERING BE REQUIRED DURING SOIL REMEDIATION, SUCH DISCHARGE SHALL BE DIRECTED TO A PORTABLE TANK AND REMOVED FROM THE SITE IN ACCORDANCE WITH STARS 1.

⑦ DEWATERING DETAIL
SCALE: NOT TO SCALE

SPDES GENERAL PERMIT GP-0-20-001 COMPLIANCE NOTES:

HAVE BEEN SUBMITTED AS A SET. THESE ENGINEERING DRAWINGS ARE CONSIDERED AN INTEGRAL PART OF THE SWPPP. THEREFORE THE PLAN SET IS NOT CONSIDERED COMPLETE WITHOUT THE SWPPP.

THIS PROJECT HAS NOT RECEIVED WRITTEN APPROVAL FROM CITY OF BEACON MS4 ALLOWING THE DISTURBANCE OF MORE THAN FIVE (5) ACRES OF LAND AT ANY ONE TIME. CONTRACTOR SHALL NOT DISTURB MORE THAN FIVE (5) ACRES AT ANY ONE TIME.

CONSTRUCTION SEQUENCING NOTES:

1. PRIOR TO COMMENCING ANY CLEARING, GRUBBING, EARTHWORK ACTIVITIES, ETC.AT THE SITE, THE CONTRACTOR SHALL FLAG THE WORK LIMITS AND SHALL INSTALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES (I.E. SILT FENCES, TREE PROTECTION/BARRIER FENCES, STABILIZED CONSTRUCTION ENTRANCES, STORM DRAIN SEDIMENT FILTERS, DRAINAGE DITCH SEDIMENT FILTERS, ETC.) INDICATED ON THE PROJECT DRAWINGS. TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES MUST BE CONSTRUCTED, STABILIZED, AND FUNCTIONAL BEFORE SITE DISTURBANCE BEGINS WITHIN THEIR TRIBUTARY AREAS.
2. THE CONTRACTOR SHALL CLEAR AND GRUB THE AREA OF THE STORMWATER MANAGEMENT FACILITIES. THIS AREA SHALL NOT EXCEED FIVE (5) ACRES IN EXTENT WITHOUT TEMPORARY STABILIZATION.
3. PRIOR TO COMMENCING CLEARING, GRUBBING AND/OR EARTHWORK ACTIVITIES IN ANY OTHER AREA OF THE SITE, THE CONTRACTOR SHALL INSTALL INLET AND OUTLET PROTECTION MEASURES (RIPRAP OVERFLOW WEIR(S), CULVERT INLET/OUTLET PROTECTION, ETC.) AND SHALL STABILIZE THE AREAS DISTURBED DURING THE CONSTRUCTION OF THE SEDIMENT BASIN.
4. THE CONTRACTOR SHALL INSTALL TEMPORARY DIVERSION MEASURES WITH ASSOCIATED STABILIZATION MEASURES (I.E., VEGETATIVE COVER, DRAINAGE DITCH SEDIMENT FILTERS, STORM DRAIN SEDIMENT FILTERS, ETC.)TO ASSURE THAT STORMWATER RUNOFF IS CONVEYED TO THE TEMPORARY SEDIMENT BASIN.
5. TEMPORARY DIVERSION MEASURES SHALL BE LOCATED IN A MANNER THAT WILL ASSURE THAT ANY AREA TRIBUTARY TO EACH DIVERSION DOES NOT EXCEED FIVE (5) ACRES. THESE TEMPORARY DIVERSION MEASURES SHALL BE INSPECTED DAILY AND REPAIRED/STABILIZED AS NECESSARY TO MINIMIZE EROSION.
6. THE CONTRACTOR SHALL COMMENCE SITE CONSTRUCTION ACTIVITIES INCLUDING CLEARING & GRADING OF THE PROPOSED AREA OF DISTURBANCE AS REQUIRED.
7. INSTALL PROTECTIVE MEASURES AT THE LOCATIONS OF ALL GRATE INLETS, CURB INLETS, AND AT THE ENDS OF ALL EXPOSED STORM SEWER PIPES.
8. CONSTRUCT ALL UTILITIES, CURB AND GUTTER, GUTTER INLETS, AREA INLETS, AND STORM SEWER MANHOLES, AS SHOWN ON THE PLANS. INLET PROTECTION MAY BE REMOVED TEMPORARILY FOR THIS CONSTRUCTION. PLACE REQUIRED RIP–RAP AT LOCATIONS SHOWN ON THE PLANS.
9. FINALIZE PAVEMENT SUB–GRADE PREPARATION.
10. REMOVE PROTECTIVE MEASURES AROUND INLETS AND MANHOLES NO MORE THAN 24 HOURS PRIOR TO PLACING STABILIZED BASE COURSE.
11. INSTALL SUB–BASE MATERIAL AS REQUIRED FOR PAVEMENT.
12. PRIOR TO FINALIZING CONSTRUCTION OF THE STORMWATER MANAGEMENT FACILITY, ALL CATCH BASINS AND DRAINAGE LINES SHALL BE CLEANED OF ALL SILT AND SEDIMENT.
13. UPON COMPLETION OF SITE CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL FINALIZE CONSTRUCTION OF THE STORMWATER MANAGEMENT FACILITY. CONTRACTOR SHALL FINISH GRADE THE FORBAY(S), AQUATIC BENCHES, AND WET POOL(S) AND STABILIZE AS INDICATED IN THE PROJECT DRAWINGS.
14. THE CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES AND IMMEDIATELY ESTABLISH PERMANENT VEGETATION ON THE AREAS DISTURBED DURING THEIR REMOVAL.

EROSION AND SEDIMENT CONTROL MEASURES:

1. DAMAGE TO SURFACE WATERS RESULTING FROM EROSION AND SEDIMENTATION SHALL BE MINIMIZED BY STABILIZING DISTURBED AREAS AND BY REMOVING SEDIMENT FROM CONSTRUCTION SITE DISCHARGES.
2. AS MUCH AS IS PRACTICAL, EXISTING VEGETATION SHALL BE PRESERVED, FOLLOWING THE COMPLETION OF CONSTRUCTION ACTIVITIES IN ANY PORTION OF THE SITE, PERMANENT VEGETATION SHALL BE ESTABLISHED ON ALL EXPOSED SOILS
3. SITE PREPARATION ACTIVITIES SHALL BE PLANNED TO MINIMIZE THE SCOPE AND DURATION OF SOIL DISRUPTION.
4. 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.

MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES:

PERMANENT AND TEMPORARY VEGETATION:
INSPECT ALL AREAS THAT HAVE RECEIVED VEGETATION EVERY SEVEN DAYS & AFTER EVERY RAIN EVENT. 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 & AFTER EVERY RAIN EVENT. 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 & AFTER EVERY RAIN EVENT. 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.

SOIL STOCKPILE:
INSPECT SEDIMENT CONTROL BARRIERS (SILT FENCE OR HAY BALE) AND VEGETATION FOR DAMAGE EVERY SEVEN DAYS & AFTER EVERY RAIN EVENT. MAKE ALL REPAIRS IMMEDIATELY. REMOVE SEDIMENT FROM THE UP–SLOPE FACE OF THE SEDIMENT CONTROL BARRIER BEFORE IT ACCUMULATES TO A HEIGHT EQUAL TO 1/3 THE HEIGHT OF THE SEDIMENT CONTROL BARRIER. IF SEDIMENT CONTROL BARRIER TEARS, BEGINS TO DECOMPOSE, OR IN ANYWAY BECOMES INEFFECTIVE, REPLACE THE AFFECTED SECTION OF SEDIMENT CONTROL BARRIER IMMEDIATELY. REVEGETATE DISTURBED AREA TO STABILIZE SOIL STOCK PILE. 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 WORK. APPLY TEMPORARY SOIL STABILIZATION PRACTICES SUCH AS MULCHING, SODDING, AND SPRAYING (WATER). STRUCTURAL MEASURES (MULCH, SEEDING) SHALL BE INSTALLED IN DISTURBED AREAS BEFORE SIGNIFICANT PROBLEMS DEVELOP. WATER SHALL BE SPRAYED AS NEEDED. REPEAT AS NEEDED, BUT AVOID EXCESSIVE SPRAYING, WHICH COULD CREATE RUNOFF AND EROSION PROBLEMS.

EROSION CONTROL BLANKET:
INSPECT THE BLANKET EVERY SEVEN DAYS & AFTER EVERY RAIN EVENT. REPLACE WIRE STAPLES AS NEEDED REPAIR AND RESEED WHERE CRACKS ARE DAMAGED VEGETATION IS EVIDENT. WHEN DAMAGED BEYOND REPAIR OR NO LONGER FUNCTIONING, THE BLANKET SHALL BE REPLACED.

TEMPORARY SWALE:
INSPECT ALL EARTH DIKES EVERY SEVEN DAYS & AFTER EVERY RAIN EVENT. ALL AREAS DAMAGED BY EROSION SHALL BE REPAIRED IMMEDIATELY.

STORM DRAIN INLET PROTECTION:
INSPECT ALL STORM DRAIN INLET PROTECTION DEVICES EVERY SEVEN DAYS & AFTER EVERY RAIN EVENT. MAKE REPAIRS AS NEEDED, REMOVE SEDIMENT FROM THE POOL AREA AS NECESSARY.

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 CONSTRUCT NEW PITS AS NEEDED.

SNOW AND ICE CONTROL:
PARKING LOTS, ROADWAYS, AND DRIVEWAYS ADJACENT TO WATER QUALITY FILTERS SHALL NOT BE SANDED DURING SNOW EVENTS DUE TO HIGH POTENTIAL FOR CLOGGING FROM SAND IN SURFACE WATER RUNOFF. USE SALT ONLY FOR SNOW AND ICE CONTROL.

GENERAL EROSION AND SEDIMENT CONTROL NOTES:

1. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE IN STRICT COMPLIANCE WITH "NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL", NOVEMBER 2016.
2. EXCESS SOIL TO BE STOCKPILED WITHIN THE LIMITS OF SITE DISTURBANCE IF NOT USED IMMEDIATELY FOR GRADING PURPOSES. INSTALL SILT FENCE AROUND SOIL STOCKPILES.
3. APPLY SURFACE STABILIZATION AND RESTORATION MEASURES. AREAS UNDERGOING CLEARING OR GRADING AND ANY AREAS DISTURBED BY CONSTRUCTION ACTIVITIES WHERE WORK IS DELAYED, SUSPENDED, OR INCOMPLETE AND WILL NOT BE REDISTURBED FOR 21 DAYS OR MORE SHALL BE STABILIZED WITH TEMPORARY VEGETATIVE COVER WITHIN 14 DAYS AFTER CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS CEASED. (SEE SPECIFICATIONS FOR TEMPORARY VEGETATIVE COVER). AREAS UNDERGOING CLEARING OR GRADING AND ANY AREAS DISTURBED BY CONSTRUCTION ACTIVITIES WHERE WORK IS COMPLETE AND WILL NOT BE REDISTURBED SHALL BE STABILIZED AND RESTORED WITH PERMANENT VEGETATIVE COVER AS SOON AS SITE AREAS ARE AVAILABLE AND WITHIN 14 DAYS AFTER WORK IS COMPLETE. (SEE SPECIFICATIONS FOR PERMANENT VEGETATIVE COVER). SEEDING FOR PERMANENT VEGETATIVE COVER SHALL BE WITHIN THE SEASONAL LIMITATIONS. PROVIDE STABILIZATION WITH TEMPORARY VEGETATIVE COVER WITHIN 14 DAYS AFTER WORK IS COMPLETE, FOR SEEDING OUTSIDE PERMITTED SEEDING PERIODS.
4. SEEDED AREAS TO BE MULCHED WITH STRAW OR HAY MULCH IN ACCORDANCE WITH VEGETATIVE COVER SPECIFICATIONS.
5. THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL MEASURES THROUGHOUT THE COURSE OF CONSTRUCTION.
6. 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.
7. WHEN ALL DISTURBED AREAS ARE STABLE, ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED.

TOPSOIL SPECIFICATIONS:

1. EXISTING EXCESS TOPSOIL SHALL BE REMOVED AND STORED IN TOPSOIL STOCKPILES SUFFICIENTLY REMOVED FROM OTHER EXCAVATION OR DISTURBANCE TO AVOID MIXING. SILT FENCE SHALL BE INSTALLED AROUND TOPSOIL STOCKPILE AREAS.

SITE PREPARATION:

1. COMPLETE ROUGH GRADING AND FINAL GRADE, ALLOWING FOR DEPTH OF TOPSOIL TO BE ADDED.
2. SCARIFY ALL COMPACT, SLOWLY PERMEABLE, MEDIUM AND FINE TEXTURED SUBSOIL AREAS. SCARIFY AT APPROXIMATELY RIGHT ANGLES TO THE SLOPE DIRECTION IN SOIL AREAS THAT ARE STEEPER THAN 5%.
3. REMOVE REFUSE, WOODY PLANT PARTS, STONES OVER 3 INCHES IN DIAMETER, AND OTHER LITTER.

TOPSOIL MATERIALS:

1. NEW TOPSOIL SHALL BE BETTER THAN OR EQUAL TO THE QUALITY OF THE EXISTING ADJACENT TOPSOIL. IT SHALL MEET THE FOLLOWING CRITERIA:
   A. ORIGINAL LOAM TOPSOIL, MILLS DRAINED HOMOGENEOUS TEXTURE AND OF UNIFORM GRADE, WITHOUT THE ADMIXTURE OF SUBSOIL MATERIAL AND FREE OF DENSE MATERIAL, HARDPAN, CLAY, STONES, SOD OR OTHER UNDESIRABLE MATERIAL.
   B. CONTAINING NOT LESS THAN 5% NOR MORE THAN 20% ORGANIC MATTER IN THAT PORTION OF A SAMPLING PASSING A 1/4" SIEVE WHEN DETERMINED BY THE WET COMBUSTION METHOD ON A SAMPLE DRIED AT 105°C.
   C. CONTAINING A PH VALUE WITHIN THE RANGE OF 6.5 TO 7.5 ON THAT PORTION OF THE SAMPLE WHICH PASSES A 1/4" SIEVE.
   D. CONTAINING THE FOLLOWING WASHED GRADATIONS:

SIEVE DESIGNATION	% PASSING
1"	100
1/4"	97–100
NO 200	20–60

APPLICATION AND GRADING:

1. TOPSOIL SHALL BE DISTRIBUTED TO A UNIFORM DEPTH OF 4" OVER THE AREA. IT SHALL NOT BE PLACED WHEN IT IS PARTLY FROZEN, MUDDY, OR ON FROZEN SLOPES OR OVER ICE, SNOW, OR STANDING WATER.
2. TOPSOIL PLACED ON GRADED OR SLOPES STEEPER THAN 5% SHALL BE PROMPTLY FERTILIZED, SEEDED, MULCHED AND STABILIZED BY "TRACKING" WITH SUITABLE EQUIPMENT.

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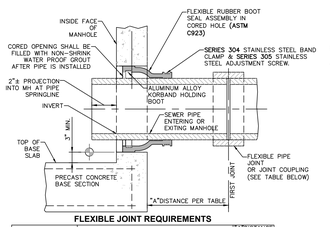
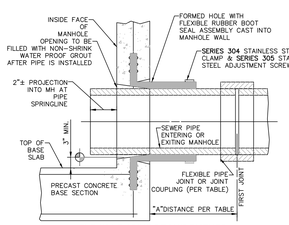


FLEXIBLE JOINT REQUIREMENTS

SEWER PIPE TYPE	FLEXIBLE JOINT TYPE IN & OUT	"A"DISTANCE (FEET)
DUCTILE IRON	STD RUBBER GASKET PIPE JOINT ONLY	10" MAX
PVC	STD RUBBER GASKET PIPE JOINT ONLY	3" MAX

NOTE:
REFERENCE MANHOLE DETAIL(S) FOR REQUIRED INVERT CHANNEL CONFIGURATION.

① **PIPE CONNECTION TO MANHOLE-PRECAST OR CORED HOLE W/ INSERTED FLEXIBLE BOOT**
SCALE: NOT TO SCALE



FLEXIBLE JOINT REQUIREMENTS

SEWER PIPE TYPE	FLEXIBLE JOINT TYPE IN & OUT	"A"DISTANCE (FEET)
DUCTILE IRON	STD RUBBER GASKET PIPE JOINT ONLY	10" MAX
PVC	STD RUBBER GASKET PIPE JOINT ONLY	3" MAX

NOTE:
REFERENCE MANHOLE DETAIL(S) FOR REQUIRED INVERT CHANNEL CONFIGURATION.

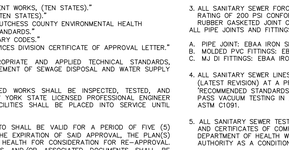
② **PIPE CONNECTION TO MANHOLE-FLEXIBLE RUBBER BOOT CAST INTO MANHOLE WALL**
SCALE: NOT TO SCALE

ACCEPTABLE MANHOLE STEPS

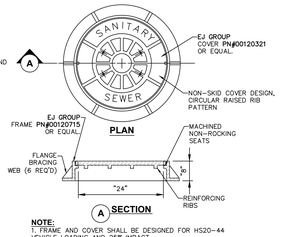
MANUFACTURER	PATTERN NUMBER	"A" STEP WIDTH	"B" LEG LENGTH	"C" RUNG CLEAR	"D" EMBED-MENT	"E" RUNG CLEAR
M.A. INDUSTRIES INC*	PS2-PF	14 3/4	9 1/4	13 3/4	3 3/8	5 7/8
M.A. INDUSTRIES INC*	PS2-PFS	14 3/4	8 1/4	13 3/4	3 3/8	4 7/8

* OR EQUIVALENT

MH STEP DESIGN AND INSTALLATION SHALL COMPLY WITH ALL OSHA REGULATIONS

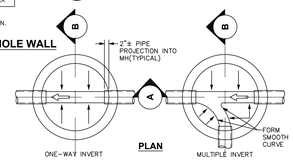


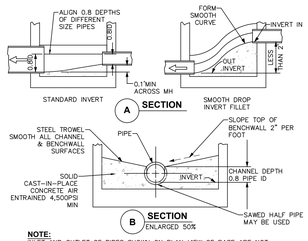
⑨ **COPOLYMER POLYPROPYLENE MH STEP**
SCALE: NOT TO SCALE



NOTE:
1. FRAME AND COVER SHALL BE DESIGNED FOR HS20-44 VEHICLE LOADING AND 25% IMPACT.

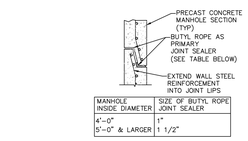
③ **HEAVY DUTY STANDARD CAST IRON MH COVER**
SCALE: NOT TO SCALE





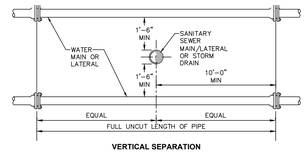
NOTE:
INLET AND OUTLET OF PIPES SHOWN ON PLAN VIEW OF BASE ARE NOT NECESSARILY TYPICAL OF ALL MANHOLES. REFER TO UTILITY PLAN FOR INLET AND OUTLET DIRECTIONS.

⑦ **INVERT, CHANNEL AND BENCHWALLS**
SCALE: NOT TO SCALE



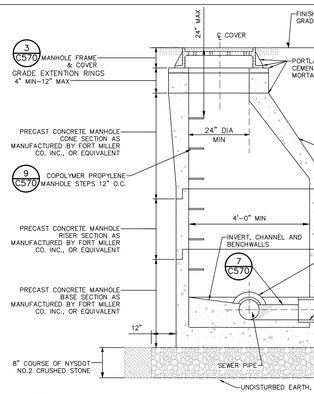
MANHOLE INSIDE DIAMETER	SIZE OF BUTYL ROPE JOINT SEALER
4'-0" & LARGER	1"
5'-0" & LARGER	1 1/2"

④ **MANHOLE JOINT**
SCALE: NOT TO SCALE



NOTES:
1. NO DEVIATION IN THE SEPARATION REQUIREMENTS WILL BE PERMITTED WITHOUT THE EXPRESS APPROVAL OF THE NYS HEALTH DEPARTMENT, OFFSETTING OF WATERLINE SHALL BE REQUIRED WHERE SEPARATION DISTANCES CANNOT BE MAINTAINED.
2. WHEN IT IS IMPOSSIBLE TO OBTAIN VERTICAL SEPARATION AS INDICATED ABOVE, BOTH THE WATER MAIN AND THE SEWER MAIN SHALL BE CONSTRUCTED OF MECHANICAL JOINT, DUCTILE IRON PIPE OR PVC WATER WORKS GRADE PRESSURE PIPE FOR 10' EACH SIDE OF CROSSING AND SHALL BE PRESSURE TESTED TO 150psi TO ASSURE WATER TIGHTNESS.

⑧ **SANITARY/STORM SEWER AND WATERMAIN SEPARATION DETAIL**
SCALE: NOT TO SCALE

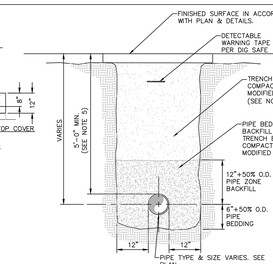


NOTES:
USE ONLY WET-CAST UNITS. DRY-CAST NOT ACCEPTABLE

CONE DIMENSIONS	
DIAM. OPENING	HEIGHT
24"	24" OR 42"
30"	34"

2. INVERT SHALL BE FILLETED.
3. REINFORCEMENT FOR MANHOLE COMPONENTS SHALL BE DESIGNED BY A LICENSED NEW YORK STATE PROFESSIONAL ENGINEER PRIOR TO CONSTRUCTION. SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW. STRUCTURE SHALL BE DESIGNED FOR HS20-44 VEHICULAR LOADING PLUS 25% IMPACT.
4. CONCRETE TO TEST **4,500 PSI** AT 28 DAYS IN CONFORMANCE WITH **A.S.T.M. C-478.**
5. BENCH SHALL BE BUILT FOR FLOW BETWEEN INLET AND OUTLET.
6. EACH MANHOLE EXTERIOR SHALL RECEIVE TWO BITUMINOUS COATS.

⑤ **PRECAST CONCRETE MANHOLE**
SCALE: NOT TO SCALE



NOTES:
1. PIPE BEDDING & PIPE ZONE BACKFILL SHALL BE A NATURAL RUN-OF-BANK (R.O.B.) SAND OR A MIXTURE OF CRUSHED STONE AND GRAVEL, FREE OF SOFT, NONDURABLE PARTICLES, ORGANIC MATERIALS AND ELONGATED PARTICLES, AND SHALL BE WELL GRADED FROM FINE TO COARSE PARTICLES. BEDDING GRADATIONS SHALL BE APPROVED BY THE ENGINEER AND SHALL MEET THE FOLLOWING GRADATION REQUIREMENTS:

SIEVE DESIGNATION	% PASSING
3/4"	100%
NO. 40	0-70%
NO. 200	0-10%

2. TRENCH BACKFILL SHALL BE A NATURAL RUN-OF-BANK (R.O.B.) OR PROCESSED GRAVEL, OR EXCAVATED MATERIAL FREE OF SOFT, NONDURABLE PARTICLES, ORGANIC MATERIALS AND ELONGATED PARTICLES, AND SHALL BE WELL GRADED FROM FINE TO COARSE PARTICLES. TRENCH BACKFILL GRADATIONS SHALL BE APPROVED BY THE ENGINEER AND SHALL MEET THE FOLLOWING GRADATION REQUIREMENTS:

SIEVE DESIGNATION	% PASSING
4"	100%
NO. 40	0-70%
NO. 200	0-10%

IN NON-TRAFFIC UNPAVED AREAS TRENCH BACKFILL CAN BE MATERIALS EXCAVATED FROM THE TRENCH AS APPROVED BY THE ENGINEER AND COMPACTED TO 90% MODIFIED PROCTOR.

3. INSTALL CONTINUOUS DETECTABLE MARKING TAPE DURING BACKFILLING OF TRENCH FOR UNDERGROUND PIPING. LOCATE TAPE 12" BELOW FINISHED GRADE, DIRECTLY OVER PIPING, EXCEPT 6" BELOW SUBGRADE UNDER PAVEMENTS & SLAB.
4. TRENCHING SHALL BE IMPLEMENTED IN ACCORDANCE WITH O.S.H.A. STANDARDS.
5. 5'-0" MIN COVER SHALL BE APPLIED TO WATER MAIN OR SANITARY SEWER FORCE MAINS ONLY.

⑥ **PIPE TRENCH DETAIL (TYPICAL)**
SCALE: NOT TO SCALE

POTABLE WATER NOTES

1. THE CONTRACTOR SHALL CONTACT THE CITY OF BEACON WATER DEPARTMENT 48 HOURS BEFORE STARTING WORK AS WELL AS 48 HOURS PRIOR TO CONNECTIONS TO THE CITY WATER SYSTEM.
2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL FIELD VERIFY EXISTING WATER CONNECTION AND ALL PROPOSED UTILITY CROSSINGS AND IF NECESSARY EXCAVATE TEST PITS TO DETERMINE DEPTH AND CONDITION OF EXISTING UTILITIES.
3. THE CONTRACTOR SHALL EXPOSE THE EXISTING WATER MAIN AT THE CONNECTION POINT FOR WATER DEPARTMENT INSPECTION. THE CONTRACTOR SHALL UTILIZE A RESTRAINED JOINT METHOD AS APPROVED BY THE WATER DEPARTMENT.
4. ALL WATER LINES SHALL BE DUCTILE IRON PIPE, CLASS 52 TYTON PUSH ON GASKETED JOINT BY U.S. PIPE OR EQUAL UNLESS OTHERWISE SPECIFIED BY OR APPROVED BY THE WATER DEPARTMENT. RESTRAINED JOINTING SHALL EMPLOY "MEGALUG" CONNECTIONS, LOCK-JOINT PIPE, OR AS ALTERNATIVELY SPECIFIED BY THE WATER DEPARTMENT AND ACCORDING TO THE RESTRAINT SCHEDULE HEREIN. ALL WATER PIPING CONSTRUCTION SHALL BE TO THE SPECIFICATIONS OF THE WATER DEPARTMENT.
5. THE WATER LINE MAY BE FLEXED WITHIN PIPE SPECIFICATIONS OR LAID DEEPER IN AREAS WHERE CROSSINGS WITH THE SANITARY LINE OCCUR, TO ACHIEVE THE REQUIRED 1.5' VERTICAL SEPARATION DISTANCE. IF THIS DISTANCE CANNOT BE REASONABLY ACHIEVED, THE CONTRACTOR SHALL CUT AND JOINT THE PIPE LINES 10' IN EACH DIRECTION. (SEE WATERLINE OFFSET DETAIL FOR FURTHER INFORMATION).
6. ALL NEW WATER MAIN INSTALLATIONS SHALL BE HYDROSTATICALLY TESTED PER AWWA STANDARD C 600(LATEST REVISION) AT A PRESSURE OF 150 PSI, OR 1.25 TIMES THE WORKING PRESSURE OF THE SYSTEM AS A MINIMUM. ALLOWABLE LEAKAGE OF THIS TEST SHALL BE AS DEFINED IN SECTION 5.2 OF SAID AWWA SPECIFICATION.
7. APPROVED AND TESTED WATER MAIN SHALL BE DISINFECTED PER AWWA SECTION C651, AS DIRECTED BY THE WATER DEPARTMENT AND ENGINEER. THE TABLET METHOD FOR DISINFECTION SHALL NOT BE ACCEPTED.
8. THE FACILITY WILL BE CONSTRUCTED WITH WATER CONSERVING PLUMBING FIXTURES.
9. THE WATERMAIN IS TO BE INSTALLED AT A CONTINUOUS GRADE WITH NO ABRUPT HIGH OR LOW POINTS.
10. RELOCATE HYDRANT, WATER VALVES, AND PIPING AS REQUIRED BY FINAL FIELD CONDITIONS AND AS APPROVED BY THE WATER DEPARTMENT. POTENTIAL CONFLICTS WITH PROPOSED DRAINAGE IMPROVEMENTS OR OTHER UTILITIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
11. ALL POTABLE WATERMAIN PIPES SHALL BE 8" DIAMETER-CLASS 52 DUCTILE IRON PIPE. ALL 4" DIAMETER WATER SERVICE LINES SHALL BE – CLASS 52 DUCTILE IRON AND ALL 2" DIAMETER WATER SERVICE LINES SHALL BE TYPE K COPPER, UNLESS OTHERWISE NOTED. SERVICE MAIN CONNECTION SIZE SHALL BE AS INDICATED ON THE PLANS.
12. REGULATORY AGENCY SHALL BE DEFINED, UNLESS OTHERWISE INDICATED, AS THE CITY OF BEACON WATER DEPARTMENT, THE DUTCHESS COUNTY DEPARTMENT OF HEALTH (DCDOH), AND CITY ENGINEER.
13. POTABLE WATER LINES IN BUILDING SHALL BE PROTECTED FROM FIRE SERVICE LINES WITH APPROPRIATE BACKFLOW PREVENTION PER DOH, NFPA, OR OTHER APPLICABLE CODE AND SHALL BE APPROVED SEPARATELY FROM THESE PLANS.

DUTCHESS COUNTY STANDARD NOTES FOR WATER SYSTEMS:

THE DESIGN, CONSTRUCTION AND INSTALLATION SHALL BE IN ACCORDANCE WITH THIS PLAN AND GENERALLY ACCEPTED STANDARDS IN EFFECT AT THE TIME OF CONSTRUCTION WHICH INCLUDE:

- "NEW YORK STATE DESIGN STANDARDS FOR INTERMEDIATE SIZED WASTEWATER TREATMENT SYSTEMS", NYSDEC
- "RECOMMENDED STANDARDS FOR SEWAGE TREATMENT WORKS, (TEN STATES)."
- "RECOMMENDED STANDARDS FOR WATER WORKS, (TEN STATES)."
- "NEW YORK STATE DEPARTMENT OF HEATH AND DUTCHESS COUNTY ENVIRONMENTAL HEALTH SERVICES DIVISION POLICIES, PROCEDURES AND STANDARDS."
- "DUTCHESS COUNTY AND NEW YORK STATE SANITARY CODES."
- "DUTCHESS COUNTY ENVIRONMENTAL HEALTH SERVICES DIVISION CERTIFICATE OF APPROVAL LETTER."

THIS PLAN IS APPROVED AS MEETING THE APPROPRIATE AND APPLIED TECHNICAL STANDARDS, GUIDELINES, POLICIES AND PROCEDURES FOR ARRANGEMENT OF SEWAGE DISPOSAL AND WATER SUPPLY FACILITIES.

UPON COMPLETION OF THE FACILITIES, THE FINISHED WORKS SHALL BE INSPECTED, TESTED, AND CERTIFIED COMPLETE TO THE DC EHSD BY THE NEW YORK STATE LICENSED PROFESSIONAL ENGINEER SUPERVISING CONSTRUCTION. NO PART OF THE FACILITIES SHALL BE PLACED INTO SERVICE UNTIL ACCEPTED BY THE DC EHSD.

APPROVAL OF ANY PLAN(S) OR AMENDMENT THERETO SHALL BE VALID FOR A PERIOD OF FIVE (5) YEARS FROM THE DATE OF APPROVAL. FOLLOWING THE EXPIRATION OF SAID APPROVAL, THE PLAN(S) SHALL BE RE-SUBMITTED TO THE COMMISSIONER OF HEALTH FOR CONSIDERATION FOR RE-APPROVAL. RE-SUBMISSION OR REVISED SUBMISSION OF PLANS AND/OR ASSOCIATED DOCUMENTS SHALL BE SUBJECT TO COMPLIANCE WITH THE TECHNICAL STANDARDS, GUIDELINES, POLICIES AND PROCEDURES IN EFFECT AT THE TIME OF THE RE-SUBMISSION.

NO CELLAR, FOOTING, FLOOR, GARAGE, COOLER OR ROOF DRAINS SHALL BE DISCHARGED INTO THE SEWAGE COLLECTION SYSTEM.

ALL BUILDINGS SHALL BE CONSTRUCTED AT AN ELEVATION HIGH ENOUGH TO ENSURE GRAVITY FLOW TO THE SEWAGE COLLECTION SYSTEM.

ALL REQUIRED EROSION & SEDIMENT CONTROL AND STORMWATER POLLUTION PREVENTION WATER QUALITY & QUANTITY CONTROL STRUCTURES, PERMANENT AND TEMPORARY, ARE SHOWN ON THE PLANS.

THE DC EHSD SHALL BE NOTIFIED SIXTY DAYS PRIOR TO ANY CHANGE IN USE; USE CHANGES MAY REQUIRE RE-APPROVAL BY THE DC EHSD.

NO BUILDINGS ARE TO BE OCCUPIED AND THE NEW WATER SYSTEM SHALL NOT BE PLACED INTO SERVICE, UNTIL A "COMPLETED WORKS APPROVAL" IS USED UNDER SECTION 5-1.22(D) OF PART 5 OF THE NEW YORK STATE SANITARY CODE (10NYCRR5)

NO BUILDINGS ARE TO BE OCCUPIED AND THE NEW WASTEWATER COLLECTION SYSTEM SHALL NOT BE PLACED INTO SERVICE UNTIL, A "CERTIFICATE OF CONSTRUCTION COMPLIANCE" IS ISSUED UNDER SECTION 19.7 OF ARTICLE 19 OF THE DUTCHESS COUNTY SANITARY CODE

ALL SERVICE LINES ARE THE RESPONSIBILITY OF THE OWNER UP TO THE PROPERTY LINE. THE WATER AND SEWER COMPANIES SHALL BE RESPONSIBLE FOR ALL VALVES AND PIPES WHICH ARE NOT ON THE OWNER'S PROPERTY.

THE UNDERSIGNED OWNERS OF THE PROPERTY HEREON STATE THAT THEY ARE FAMILIAR WITH THIS MAP, ITS CONTENTS AND ITS LEGENDS AND HEREBY CONSENT TO ALL SAID TERMS AND CONDITIONS STATES HEREON.

ADDITIONAL NOTES FOR RESIDENTIAL

WITH CENTRAL UTILITIES

1. THAT, NO BUILDINGS ARE TO BE OCCUPIED AND THE NEW WATER SYSTEM SHALL NOT BE PLACED INTO SERVICE, UNTIL A "COMPLETED WORKS APPROVAL" IS ISSUED UNDER SECTION 5-1.22(d) OF PART 5 OF THE NEW YORK STATE SANITARY CODE (10NYCRR5)
2. THAT, NO BUILDINGS ARE TO BE OCCUPIED AND THE NEW WASTEWATER COLLECTION SYSTEM SHALL NOT BE PLACED INTO SERVICE UNTIL, A "CERTIFICATE OF CONSTRUCTION COMPLIANCE" IS ISSUED UNDER SECTION 19.7 OF ARTICLE 19 OF THE DUTCHESS COUNTY SANITARY CODE.

MANHOLES AND OTHER BELOW GRADE STRUCTURES:

1. STRUCTURAL DESIGN FOR MANHOLES AND OTHER BELOW-GRADE PRECAST CONCRETE STRUCTURES:
   A. NON-TRAFFIC LOADS:
      BELOW GRADE PRECAST CONCRETE STRUCTURES SHALL BE DESIGNED TO WITHSTAND LOADS IMPOSED BY STRUCTURE WEIGHT, EARTH COVER, LATERAL PRESSURE FROM EARTH AND GROUND WATER, AND LIVE LOADS SUCH AS PEDESTRIAN TRAFFIC OR MACHINERY ON OR ABOVE THE STRUCTURE; AND
   B. TRAFFIC LOADS:
      BELOW GRADE PRECAST CONCRETE STRUCTURES SHALL BE DESIGNED TO ALSO WITHSTAND TRAFFIC LOADS CREATED BY AN HS20-44 TRUCK PLUS 25% IMPACT AS DEFINED IN THE LATEST EDITION OF THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) DESIGN STANDARDS.
2. MATERIAL WHICH SHALL BE UTILIZED IN THE CONSTRUCTION OF PRECAST CONCRETE STRUCTURES:
   CEMENT: ASTM C-150, TYPES I,II,III,V
   SAND: NYSDOT STD. SPEC. **SECTION NO. 703-0** CONCRETE SAND
   STONE: NYSDOT STD. SPEC. **SECTION NO. 703-02** COARSE AGGREGATE
   STEEL BAR REINFORCEMENT: **ASTM A615,** GRADE 60
   WIRE MESH REINFORCEMENT: **ASTM A185** PLAIN
   CONCRETE STRENGTH (28 DAY): **4,500** PSI (F'C)
   ENTRAINED AIR: 5% MIN.
3. ALL CASTINGS (FRAMES AND COVERS, FRAMES AND GRATES, ETC.) FOR USE IN CONJUNCTION WITH MANHOLES AND OTHER BELOW GRADE STRUCTURES SHALL BE MANUFACTURED FROM GRAY IRON OR DUCTILE IRON. GRAY IRON SHALL CONFORM WITH ASTM A 48, CLASS 30B AND DUCTILE IRON SHALL CONFORM WITH **ASTM A 536** AND BE OF A GRADE APPROPRIATE TO ITS INTENDED USE.
4. ALL CASTINGS (FRAMES AND COVERS, FRAMES AND GRATES, ETC.) FOR USE IN CONJUNCTION WITH MANHOLES AND OTHER BELOW GRADE STRUCTURES SHALL BE DESIGNED TO WITHSTAND AASHTO HS 20-44 HIGHWAY LOADING PLUS 25% IMPACT.
5. ALL ASTM REFERENCES SHALL BE FOR THE LATEST ACTIVE STANDARD.

DUTCHESS COUNTY STANDARD NOTES FOR WATER SYSTEMS:

THE DESIGN, CONSTRUCTION AND INSTALLATION SHALL BE IN ACCORDANCE WITH THIS PLAN AND GENERALLY ACCEPTED STANDARDS IN EFFECT AT THE TIME OF CONSTRUCTION WHICH INCLUDE:

- "NEW YORK STATE DESIGN STANDARDS FOR INTERMEDIATE SIZED WASTEWATER TREATMENT SYSTEMS", NYSDEC
- "RECOMMENDED STANDARDS FOR SEWAGE TREATMENT WORKS, (TEN STATES)."
- "RECOMMENDED STANDARDS FOR WATER WORKS, (TEN STATES)."
- "NEW YORK STATE DEPARTMENT OF HEATH AND DUTCHESS COUNTY ENVIRONMENTAL HEALTH SERVICES DIVISION POLICIES, PROCEDURES AND STANDARDS."
- "DUTCHESS COUNTY AND NEW YORK STATE SANITARY CODES."
- "DUTCHESS COUNTY ENVIRONMENTAL HEALTH SERVICES DIVISION CERTIFICATE OF APPROVAL LETTER."

THIS PLAN IS APPROVED AS MEETING THE APPROPRIATE AND APPLIED TECHNICAL STANDARDS, GUIDELINES, POLICIES AND PROCEDURES FOR ARRANGEMENT OF SEWAGE DISPOSAL AND WATER SUPPLY FACILITIES.

UPON COMPLETION OF THE FACILITIES, THE FINISHED WORKS SHALL BE INSPECTED, TESTED, AND CERTIFIED COMPLETE TO THE DC EHSD BY THE NEW YORK STATE LICENSED PROFESSIONAL ENGINEER SUPERVISING CONSTRUCTION. NO PART OF THE FACILITIES SHALL BE PLACED INTO SERVICE UNTIL ACCEPTED BY THE DC EHSD.

APPROVAL OF ANY PLAN(S) OR AMENDMENT THERETO SHALL BE VALID FOR A PERIOD OF FIVE (5) YEARS FROM THE DATE OF APPROVAL. FOLLOWING THE EXPIRATION OF SAID APPROVAL, THE PLAN(S) SHALL BE RE-SUBMITTED TO THE COMMISSIONER OF HEALTH FOR CONSIDERATION FOR RE-APPROVAL. RE-SUBMISSION OR REVISED SUBMISSION OF PLANS AND/OR ASSOCIATED DOCUMENTS SHALL BE SUBJECT TO COMPLIANCE WITH THE TECHNICAL STANDARDS, GUIDELINES, POLICIES AND PROCEDURES IN EFFECT AT THE TIME OF THE RE-SUBMISSION.

NO CELLAR, FOOTING, FLOOR, GARAGE, COOLER OR ROOF DRAINS SHALL BE DISCHARGED INTO THE SEWAGE COLLECTION SYSTEM.

ALL BUILDINGS SHALL BE CONSTRUCTED AT AN ELEVATION HIGH ENOUGH TO ENSURE GRAVITY FLOW TO THE SEWAGE COLLECTION SYSTEM.

ALL REQUIRED EROSION & SEDIMENT CONTROL AND STORMWATER POLLUTION PREVENTION WATER QUALITY & QUANTITY CONTROL STRUCTURES, PERMANENT AND TEMPORARY, ARE SHOWN ON THE PLANS.

THE DC EHSD SHALL BE NOTIFIED SIXTY DAYS PRIOR TO ANY CHANGE IN USE; USE CHANGES MAY REQUIRE RE-APPROVAL BY THE DC EHSD.

NO BUILDINGS ARE TO BE OCCUPIED AND THE NEW WATER SYSTEM SHALL NOT BE PLACED INTO SERVICE, UNTIL A "COMPLETED WORKS APPROVAL" IS USED UNDER SECTION 5-1.22(D) OF PART 5 OF THE NEW YORK STATE SANITARY CODE (10NYCRR5)

NO BUILDINGS ARE TO BE OCCUPIED AND THE NEW WASTEWATER COLLECTION SYSTEM SHALL NOT BE PLACED INTO SERVICE UNTIL, A "CERTIFICATE OF CONSTRUCTION COMPLIANCE" IS ISSUED UNDER SECTION 19.7 OF ARTICLE 19 OF THE DUTCHESS COUNTY SANITARY CODE

ALL SERVICE LINES ARE THE RESPONSIBILITY OF THE OWNER UP TO THE PROPERTY LINE. THE WATER AND SEWER COMPANIES SHALL BE RESPONSIBLE FOR ALL VALVES AND PIPES WHICH ARE NOT ON THE OWNER'S PROPERTY.

THE UNDERSIGNED OWNERS OF THE PROPERTY HEREON STATE THAT THEY ARE FAMILIAR WITH THIS MAP, ITS CONTENTS AND ITS LEGENDS AND HEREBY CONSENT TO ALL SAID TERMS AND CONDITIONS STATES HEREON.

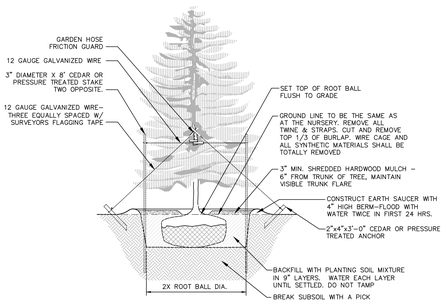
SANITARY SEWER NOTES

1. FINAL SEWER COLLECTION SYSTEM IS SUBJECT TO REVIEW, REVISION AND APPROVAL BY THE CITY OF BEACON SEWER DEPARTMENT, THE DCDOH, AND THE TOWN ENGINEER.
2. ALL PROPOSED SANITARY SEWER FORCE MAINS SHALL BE PRESSURE TESTED TO 100 PSIG OR 1.5x THE WORKING PRESSURE OF THE SYSTEM.
3. ALL SANITARY SEWER FORCE MAINS SHALL BE PVC SDR-21 PUSH-ON GASKETED PIPE WITH A PRESSURE RATING OF 200 PSI CONFORMING TO ASTM D2241. THE PVC PIPE SHALL HAVE AN INTEGRAL BELL END WITH A RUBBER GASKETED JOINT CONFORMING TO ASTM D1869 AND F477 FOR A FLEXIBLE WATER TIGHT SEAL. ALL PIPE JOINTS AND FITTINGS SHALL BE PROPERLY RESTRAINED AGAINST THRUST FORCES AS FOLLOWS:
   A. PIPE JOINT: EBAA IRON SERIES 6500 BELL RESTRAINT HARNESS FOR PVC PIPE BELL JOINT
   B. MOLDED PVC FITTINGS: EBAA IRON SERIES 7500 RESTRAINT FOR PVC PIPE AT PVC FITTING
   C. MJ DI FITTINGS: EBAA IRON SERIES 2000PV MECHANICAL JOINT RESTRAINT FOR PVC PIPE
4. ALL SANITARY SEWER LINES SHALL PASS A LOW PRESSURE AIR TEST IN ACCORDANCE WITH ASTM F1417 (LATEST REVISION) AT A PRESSURE OF 3.5 PSI, AND A DEFLECTION TEST IN ACCORDANCE WITH THE "RECOMMENDED STANDARDS FOR WASTE WATER FACILITIES". ALL NEW SANITARY SEWER MANHOLES SHALL PASS VACUUM TESTING IN ACCORDANCE WITH ASTM C1244 OR HYDROSTATIC TESTS IN ACCORDANCE WITH ASTM C1091.
5. ALL SANITARY SEWER TESTING SHALL BE PERFORMED UNDER THE SUPERVISION OF THE PROJECT ENGINEER, AND CERTIFICATES OF COMPLIANCE WITH TEST STANDARDS SHALL BE PROVIDED TO THE DUTCHESS COUNTY DEPARTMENT OF HEALTH WITH ENGINEERS CERTIFICATION OF COMPLETION AND TO THE APPROPRIATE SEWER AUTHORITY AS A CONDITION OF APPROVAL FOR OPERATION.
6. ALL SANITARY SEWER SYSTEM COMPONENTS INSIDE OF BUILDINGS SHALL BE INSTALLED BY, OR UNDER THE SUPERVISION OF, A LICENSED PLUMBER IN ACCORDANCE WITH THE CITY PLUMBING CODE.
7. ALL NEW SANITARY SEWER MANHOLE COVERS SHALL BE 30" DIAMETER HEAVY DUTY, WATERTIGHT DIAMETER CAST IRON AND SHALL READ "SANITARY SEWER".
8. RIM ELEVATION ADJUSTMENTS LESS THAN 12-INCHES SHALL BE MADE USING A CONCRETE COLLAR AND/OR PORTLAND CEMENT. RIM ELEVATION ADJUSTMENTS GREATER THAN 12" SHALL REQUIRE THE INSTALLATION OF AN ADDITIONAL RISER SECTION TO THE CONCRETE STRUCTURE WITH ADDITIONAL STEPS TO BE ADDED AS REQUIRED.
9. ALL SANITARY SEWER LATERALS OUTSIDE OF BUILDING SHALL MEET NYS AND LOCAL PLUMBING CODES.
10. ALL SANITARY SEWER FORCE MAIN JOINTS AND FITTINGS SHALL BE FUSED PER MANF. INSTRUCTIONS UNLESS OTHERWISE SHOWN HEREIN.
11. THRUST BLOCKS SHALL BE PROVIDED AT ALL BENDS IN THE FORCEMAIN.
12. BACKFLOW PREVENTION DEVICES WILL BE INTERNAL TO BUILDINGS AND SUBMITTED SEPARATELY TO THE DUTCHESS COUNTY DEPERTMANT OF ENVIRONMENTAL AND BEHAVIORAL HEALTH.

ADDITIONAL NOTES FOR COMMERCIAL PROJECTS

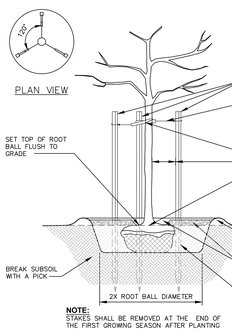
SEWAGE DISPOSAL SYSTEM IS DESIGNED FOR SANITARY SEWAGE ONLY. NO WASTES FROM RESTAURANTS, TAVERNS, DINERS, PIZZERIAS, FOOD SERVICE ESTABLISHMENTS, BAKERIES, DOCTOR'S OFFICES, DENTISTS, HAIR DRESSERS, SALONS, BEAUTY PARLORS, DRY CLEANERS, LAUNDROMATS, LAUNDRIES, PHOTO FINISHERS, METAL PLATERS, OR ANY OTHER PROCESS WASTES ARE ALLOWED.

WATER MAIN DISINFECT



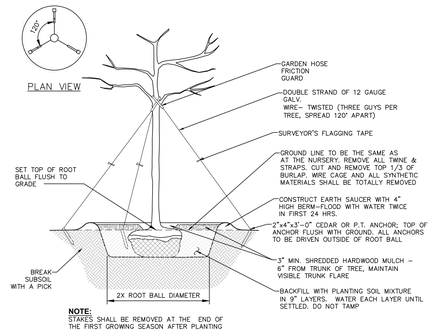
NOTES:
1. SPRAY WITH ANTIDESICCANT IN ACCORDANCE WITH MFG.'S RECOMMENDATIONS.
2. TREES LESS THAN 3" CALIPER SHALL BE STAKED.
3. TREES GREATER THAN 3" CALIPER AND UP SHALL BE GUYED AND ANCHORED.
4. STAKES SHALL BE REMOVED AT THE END OF THE FIRST GROWING SEASON AFTER PLANTING.

① **EVERGREEN PLANTING DETAIL**
SCALE: NOT TO SCALE



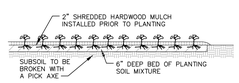
NOTE:
STAKES SHALL BE REMOVED AT THE END OF THE FIRST GROWING SEASON AFTER PLANTING

② **PLANTING AND GUYING DETAILS-FOR TREES SMALLER THAN 3" CALIPER, BALLED AND BURLAPPED**
SCALE: NOT TO SCALE



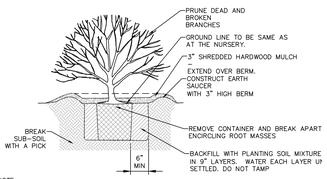
NOTE:
STAKES SHALL BE REMOVED AT THE END OF THE FIRST GROWING SEASON AFTER PLANTING

③ **PLANTING AND GUYING DETAILS-FOR TREES 3" CALIPER AND LARGER, BALLED AND BURLAPPED**
SCALE: NOT TO SCALE



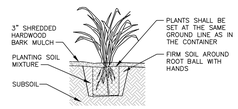
NOTE:
GROUND COVERS SHOULD BE POT OR CONTAINER GROWN.

④ **GROUND COVER/ ANNUAL PLUG PLANTING**
SCALE: NOT TO SCALE



NOTE:
SPRAY WITH ANTI DESICCANT IN ACCORDANCE WITH MFG'S RECOMMENDATIONS IF FOLIAGE IS PRESENT.

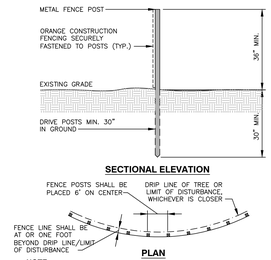
⑤ **SHRUB PLANTING DETAIL FOR CONTAINERIZED SHRUBS**
SCALE: NOT TO SCALE



SECTIONAL ELEVATION

NOTES:
1. SPADED PLANTING SOIL MIX (4"–6" DEPTH), ADD FERTILIZER WHEN MIXING. DO NOT COMPACT AFTER PLANTING.
2. WATER THOROUGHLY AFTER PLANTING.
3. PROVIDE WELL DRAINING SUBSOIL WHEN SOIL IS HEAVY OR COMPACTED.
4. PLANTS SHALL BE REMOVED FROM ALL CONTAINERS WHEN PLANTED, UNLESS OTHERWISE STATED IN THE PLANT SCHEDULE.

⑥ **CONTAINERIZED PERENNIAL PLANTING DETAIL**
SCALE: NOT TO SCALE

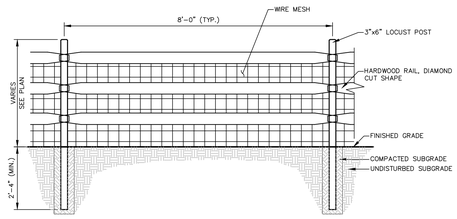


SECTIONAL ELEVATION

PLAN

NOTE:
SEE LANDSCAPING PLAN FOR ADDITIONAL TREE PROTECTION NOTES.

⑦ **TREE PROTECTION FENCING DETAIL**
SCALE: NOT TO SCALE



⑧ **SPLIT RAIL FENCE DETAIL**
SCALE: NOT TO SCALE

LANDSCAPING NOTES:

1. THE LANDSCAPE CONTRACTOR SHALL CAREFULLY COORDINATE CONSTRUCTION ACTIVITIES WITH THAT OF THE EARTHWORK CONTRACTOR AND OTHER SITE DEVELOPMENT.
2. THE CONTRACTOR SHALL VERIFY DRAWING DIMENSIONS WITH ACTUAL FIELD CONDITIONS AND INSPECT RELATED WORK AND ADJACENT SURFACES. THE CONTRACTOR SHALL VERIFY THE ACCURACY OF ALL FINISH GRADES WITHIN THE WORK AREA. THE CONTRACTOR SHALL REPORT TO THE LANDSCAPE ARCHITECT/ENGINEER AND OWNER CONDITIONS WHICH PREVENT PROPER EXECUTION OF THIS WORK.
3. THE EXACT LOCATION OF ALL EXISTING UTILITIES, STRUCTURES AND UNDERGROUND UTILITIES, WHICH MAY NOT BE INDICATED ON THE DRAWINGS, SHALL BE DETERMINED BY THE CONTRACTOR. THE CONTRACTOR SHALL PROTECT EXISTING STRUCTURES AND UTILITY SERVICES AND IS RESPONSIBLE FOR THEIR REPLACEMENT IF DAMAGED.
4. THE CONTRACTOR SHALL KEEP THE PREMISES FREE FROM RUBBISH AND ALL DEBRIS ALL TIMES AND SHALL ARRANGE MATERIAL STORAGE SO AS NOT TO INTERFERE WITH THE OPERATION OF THE PROJECT. ALL UNUSED MATERIALS, RUBBISH AND DEBRIS SHALL BE REMOVED FROM THE SITE.
5. NO TREES OR SHRUBS SHALL BE PLANTED ON EXISTING OR PROPOSED UTILITY LINES
6. QUALITY ASSURANCE:
   A. NOMENCLATURE: PLANT NAMES SHALL CONFORM TO THE LATEST EDITION OF "STANDARDIZED PLANT NAMES" AS ADOPTED BY THE AMERICAN JOINT COMMITTEE ON HORTICULTURAL NOMENCLATURE.
   B. SIZE AND GRADING: PLANT SIZES AND GRADING SHALL CONFORM TO THE LATEST EDITION OF "AMERICAN STANDARD FOR NURSERY STOCK" AS SPONSORED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC (AAN), UNLESS OTHERWISE SPECIFIED.
   C. NURSERY SOURCE: OBTAIN FRESHLY DUG, HEALTHY, VIGOROUS PLANTS NURSERY GROWN UNDER CLIMACTIC CONDITIONS SIMILAR TO THOSE IN THE LOCALITY OF PROJECT FOR A MINIMUM OF 2 YEARS. PLANTS SHALL HAVE BEEN LINED OUT ROWS, ANNUALLY CULTIVATED, SPRAYED, PRUNED AND FERTILIZED IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICE. ALL PLANTS SHALL HAVE BEEN TRANSPLANTED OR ROOT PRUNED AT LEAST ONCE IN THE PAST 3 YEARS. BALLED AND BURLAPPED PLANTS MUST COME FROM SOIL WHICH WILL HOLD A FIRM ROOT BALL. HEELED IN PLANTS AND PLANTS FROM COLD STORAGE ARE NOT ACCEPTABLE.
   D. SUBSTITUTIONS: DO NOT MAKE SUBSTITUTIONS OF TREES AND/OR SHRUB MATERIALS. IF REQUIRED LANDSCAPE MATERIAL IS NOT OBTAINABLE, SUBMIT PROOF OF NON–AVAILABILITY AND PROPOSAL FOR USE OF EQUIVALENT MATERIAL. WHEN AUTHORIZED, ADJUSTMENTS OF CONTRACT AMOUNT (IF ANY) WILL BE MADE BY CHANGE ORDER.
7. SEEDING & PLANTING SEASONS AND TIMING CONDITIONS:
   A. UNLESS OTHERWISE DIRECTED IN WRITING, SEED LAWNS FROM MARCH 15 TO JUNE 15, AND FROM AUGUST 15 TO OCTOBER 15.
   B. UNLESS OTHERWISE DIRECTED IN WRITING PLANT TREES AND SHRUBS FROM MARCH 15 TO JUNE 1, AND FROM AUGUST 15 TO OCTOBER 30.
   C. AREAS UNDERGOING CLEARING OR GRADING AND ANY AREAS DISTURBED BY CONSTRUCTION ACTIVITIES WHERE LAWNS OR PLANTINGS ARE TO BE ESTABLISHED AND WORK IS COMPLETE, SHALL BE RESTORED WITH PERMANENT VEGETATIVE COVER AS SOON AS SITE AREAS ARE AVAILABLE AND WITHIN 14 DAYS AFTER WORK IS COMPLETE; WORK SHALL BE WITHIN THE SEASONAL LIMITATIONS FOR EACH KIND OF LANDSCAPE WORK REQUIRED. PROVIDE STABILIZATION WITH TEMPORARY VEGETATIVE COVER (TOPSOIL AND TEMPORARY COVER SEED MIX) WITHIN 14 DAYS AFTER WORK IS COMPLETE, FOR SEEDING OUTSIDE PERMITTED SEEDING PERIODS.
8. PRODUCTS:
   A. TOPSOIL
      i. EXISTING EXCESS TOPSOIL SHALL BE REMOVED AND STORED IN TOPSOIL STOCKPILES SUFFICIENTLY REMOVED FROM OTHER EXCAVATION OR DISTURBANCE TO AVOID MIXING. SILT FENCE SHALL BE INSTALLED AROUND TOPSOIL STOCKPILE AREAS.
      ii. IMPORTED TOPSOIL: PROVIDE TOPSOIL CONFORMING TO THE FOLLOWING:
      a. LOAM TOPSOIL, WELL DRAINED HOMOGENEOUS TEXTURE AND OF UNIFORM GRADE, WITHOUT THE ADMIXTURE OF SUBSOIL MATERIAL AND FREE OF DELETERIOUS MATERIAL, HARDPAN, CLAY, STONES, SOD OR OTHER OBJECTIONABLE MATERIAL.
      b. CONTAINING NOT LESS THAN 5% NOR MORE THAN 20% ORGANIC MATTER IN THAT PORTION OF A SAMPLING PASSING A 1/4" SIEVE WHEN DETERMINED BY THE WET COMBUSTION METHOD ON A SAMPLE DRIED AT 105°C.
      c. CONTAINING A PH VALUE WITHIN THE RANGE OF 6.5 TO 7.5 ON THAT PORTION OF THE SAMPLE WHICH PASSES A 1/4" SIEVE.
      d. CONTAINING THE FOLLOWING WASHED GRADATIONS:

SIEVE DESIGNATION	% PASSING
1"	100
1/4"	97–100
NO 200	20–60

      iii. SITE PREPARATION:
      a. COMPLETE ROUGH GRADING AND FINAL GRADE, ALLOWING FOR DEPTH OF TOPSOIL TO BE ADDED.
      b. SCARIFY ALL COMPACT, SLOWLY PERMEABLE, MEDIUM AND FINE TEXTURED SUBSOIL AREAS. SCARIFY AT APPROXIMATELY RIGHT ANGLES TO THE SLOPE DIRECTION IN SOIL AREAS THAT ARE STEEPER THAN 5%.
      c. REMOVE REFUSE, WOODY PLANT PARTS, STONES OVER 3 INCHES IN DIAMETER AND OTHER LITTER.
      iv. TOPSOIL MATERIALS:
      a. NEW TOPSOIL SHALL BE BETTER THAN OR EQUAL TO THE QUALITY OF THE EXISTING ADJACENT TOPSOIL. IT SHALL MEET THE FOLLOWING CRITERIA:
1. ORIGINAL LOAM TOPSOIL, WELL DRAINED HOMOGENEOUS TEXTURE AND OF UNIFORM GRADE, WITHOUT THE ADMIXTURE OF SUBSOIL MATERIAL AND FREE OF DENSE MATERIAL, HARDPAN, CLAY, STONES, SOD OR OTHER OBJECTIONABLE MATERIAL.
2. CONTAINING NOT LESS THAN 5% NOR MORE THAN 20% ORGANIC MATTER IN THAT PORTION OF A SAMPLING PASSING A 1/4" SIEVE WHEN DETERMINED BY THE WET COMBUSTION METHOD ON A SAMPLE DRIED AT 105°C.
3. CONTAINING A PH VALUE WITHIN THE RANGE OF 6.5 TO 7.5 ON THAT PORTION OF SAMPLE WHICH PASSES A 1/4" SIEVE.
4. CONTAINING THE FOLLOWING WASHED GRADATIONS:

SIEVE DESIGNATION	% PASSING
1"	100
1/4"	97–100
NO 200	20–60

      v. APPLICATION AND GRADING:
      a. TOPSOIL SHALL BE DISTRIBUTED TO A UNIFORM DEPTH OF 4" OVER THE AREA. IT SHALL NOT BE PLACED WHEN IT IS PARTLY FROZEN, MUDDY, OR ON FROZEN SLOPES OR OVER ICE, SNOW, OR STANDING WATER.
      b. TOPSOIL PLACED AND GRADED ON SLOPES STEEPER THAN 5% SHALL BE PROMPTLY FERTILIZED, SEEDED, MULCHED AND STABILIZED BY "TRACKING" WITH SUITABLE EQUIPMENT.
   B. SEED MIXTURE:
      PROVIDE FRESH, CLEAN, NEW–CROP SEED MIXED IN THE PROPORTIONS SPECIFIED FOR SPECIES AND VARIETY, AND CONFORMING TO FEDERAL AND STATE STANDARDS. PROVIDE THE FOLLOWING MIXTURES:
      i. LAWN SEED MIX
      ECO–LAWN:

AMOUNT BY:		MINIMUM	%
WEIGHT	SPECIES OR VARIETY	PURITY	GERMINATION
20%	SR5250 CREEPING RED FESCUE	95%	80%
20%	SR5150 CHEWINGS FESCUE	95%	80%
20%	SHORELINE SLENDER CREEPING RED FESCUE	95%	85%
20%	QUATRO SHEEP FESCUE	95%	85%
20%	SR3210 BLUE FESCUE	95%	80%
100%			

      *STANDARD OF QUALITY: ECO–LAWN SEED MIX MANUFACTURED BY WILDFLOWER FARM COLDWATER, ON, CA OR APPROVED EQUAL
      ii TEMPORARY COVER SEED MIX

AMOUNT BY:		MINIMUM %	
WEIGHT	SPECIES OR VARIETY	PURITY	GERMINATION
100%	ANNUAL RYEGRASS	98%	90%

      iii. BIORETENTION AREA SEED MIX: NATIVE DETENTION AREA MIX, ERN–MX–183 AS MANUFACTURED BY ERNST SEEDS, MEADVILLE, PA OR APPROVED EQUAL.
   C. LIME: NATURAL LIMESTONE CONTAINING AT LEAST 85% OF TOTAL CARBONATES, GROUND TO SUCH FINENESS THAT AT LEAST 90% PASSES A 10–MESH SIEVE AND AT LEAST 50% PASSES A 100–MESH SIEVE.
   D. FERTILIZER:
      i. FOR STARTER FERTILIZING: COMMERCIAL STARTER FERTILIZER, GRANULAR, NONBURNING PRODUCT CONTAINING 5% NITROGEN, 10% AVAILABLE PHOSPHORUS, AND 5% WATER SOLUABLE POTASH (5–10–5).
      ii. FOR FINAL FERTILIZING: IF APPLIED IN SPRING SEASON, SHALL BE A SLOW RELEASE COMMERCIAL FERTILIZER, GRANULAR, WITH 3–1–2 NPK. IF APPLIED IN FALL SEASON, SHALL BE AS SPECIFIED IN (8.D.I) ABOVE.
   E. TREES, SHRUBS, GROUND COVERS, PERENNIALS, ANNUALS:
      i. PLANTING SOIL MIXTURE: SHALL BE PREMIXED IN BULK, AND CONTAIN THE FOLLOWING BY VOLUME:
         30 PARTS TOPSOIL
         10 PARTS PEAT
         1 PART BONE MEAL
      ii. PEAT: BROWN TO BLACK IN COLOR, WEED AND SEED FREE, DRIED SPHAGNUM PEAT, CONTAINING NOT MORE THAN 9% MINERAL ON A DRY BASIS AND CONFORMING TO NYSDOT 713–15.
      iii. BONE MEAL: FINELY GROUND, RAW, MINIMUM 4% NITROGEN AND 20% PHOSPHORIC ACID. IT SHALL BE DELIVERED IN SEALED BAGS SHOWING THE MANUFACTURER'S GUARANTEED ANALYSIS.
   F. STAKES: 8 FEET LONG, 3 INCH DIA. CEDAR OR P.T. WOOD STAKES.
   G. HOSE: NEW, 2–PLY GARDEN HOSE NOT LESS THAN 1/2 INCH IN DIAMETER.
   H. WEED CONTROL FABRIC: SOIL CHECK AS MANUFACTURED BY BRIGHTON BYPRODUCTS CO. INC, NEW BRIGHTON, PA; MIRASCAPE OR MIRAFI GEOSYNTHETIC PRODUCTS, NORCROSS, PA, OR APPROVED EQUIVALENT.
   I. MULCH:
      i. LAWN AREAS
      OAT OR WHEAT STRAW, FREE OF WEEDS. AN ALTERNATIVE IS WOOD FIBER CELLULOSE IF HYDROSEEDING IS USED.
      ii. PLANT BED AREAS
      GROUND OR SHREDDED HARDWOOD BARK, UNCOLORED. NO PIECES OVER 2 INCHES GREATEST DIMENSION. FREE FROM SAWDUST.

EXECUTION:
A. LANDSCAPE WORK SHALL BE UNDERTAKEN AS SOON AS SITE AREAS ARE AVAILABLE.
B. TOPSOIL SHALL BE SPREAD NO LESS THAN 4" OVER SUB–GRADE MATERIAL. SOIL AMENDMENTS SHALL BE THOROUGHLY MIXED INTO THE TOP 4" OF TOPSOIL, FOLLOWING THE SPECIFICATIONS STATED BELOW.
C. PERFORM FINE GRADING TO FINISHED ELEVATION ONLY IMMEDIATELY PRIOR TO PLANTING. PLANTING AREAS SHALL BE GRADED TO A SMOOTH, EVEN SURFACE, FREE OF DEPRESSIONS OR RIDGES WITH A UNIFORM LOOSE, FINE TEXTURE.
D. FERTILIZING:
   i. THE SOIL SHALL BE TESTED FOR PH AND LIME ADDED AS NECESSARY. ALL AMENDMENTS SHALL BE CHECKED AND APPROVED BY LANDSCAPE ARCHITECT BEFORE AMENDMENTS ARE MADE.
   ii. APPLY FERTILIZER AT RATE OF 4 LBS/1000 SF FOR LAWN AREAS.
E. LAWN:
   i. LAWN SEED MIX: SEED AT THE RATE OF 6 TO 8 LBS PER 1,000 SF.
   ii. TEMPORARY COVER SEED MIX: SEED AT THE RATE OF 3 TO 4 LBS PER 1,000 SF.
   iii. TEMPORARY COVER SEED MIX TO BE APPLIED ONLY FOR LATE FALL OR SUMMER SOIL STABILIZATION OUTSIDE ALLOWED SEEDING PERIODS.

LaBella
Powered by partnership.
21 Fox Street
Poughkeepsie, NY 12601
(845) 454-3980
labellapc.com

NOT FOR CONSTRUCTION
EXP: EXP:

CERTIFICATE OF AUTHORIZATION NUMBER:
PROFESSIONAL ENGINEERING: 0021272
LAND SURVEYING: 0021271
GEOLOGICAL: 0021659

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Chai Developers
147 Union Street
Poughkeepsie, New York 12601

248 Tioronda Avenue
248 Tioronda Avenue
Beacon, New York 12508

NO:	DATE:	DESCRIPTION:
Revisions		

PROJECT NUMBER: 2260816
DRAWN BY: GMZ
REVIEWED BY: KGA
ISSUED FOR: ISSUED FOR PLANNING BOARD REVIEW
DATE: 06/30/26
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LANDSCAPING DETAILS AND NOTES

DRAWING NUMBER:

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Amended Stormwater Pollution Prevention Plan
for
248 Tioronda Ave

248 Tioronda Ave
City of Beacon
Dutchess County, New York

Issued: December 2019
Last Revised: June 2026

Prepared for:
CHAI Builders
120 Route 59, Suite 201
Suffern, NY 10901

Prepared by:
LaBella Associates
21 Fox Street
Poughkeepsie, NY 12601
(845) 454-3980
www.labellapc.com

LaBella Project No. CZ81750.00

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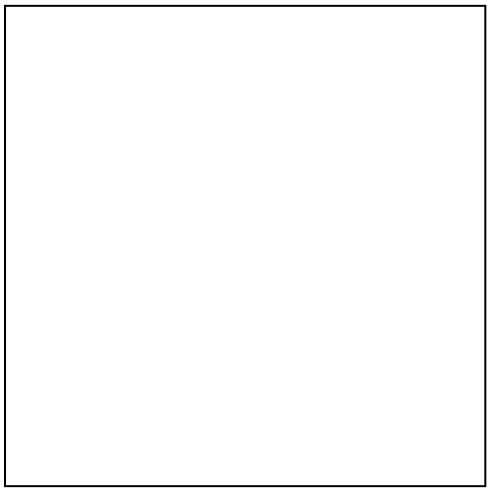
PREPARER OF THE SWPPP

"I hereby certify that the Stormwater Pollution Prevention Plan (SWPPP) for this project has been prepared in accordance with the terms and conditions of the GP-0-20-001. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of this permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings."

Name and Title[1]: Kyle Ahearn, PE – Senior Civil Engineer

Date: Issued: December 2019
Amended: June 2026



[1] This is a signature of a New York State licensed Professional Engineer employed by LaBella Associates that is duly authorized to sign and seal Stormwater Pollution Prevention Plans (SWPPPs), NOIs, and NOTs prepared under their direct supervision. Refer to Appendix H for the LaBella Certifying Professionals Letter.

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1.0 EXECUTIVE SUMMARY

This Stormwater Pollution Prevention Plan (SWPPP) has been prepared for major activities associated with construction of 248 Tioronda Ave in the City of Beacon. This SWPPP includes the elements necessary to comply with the national baseline general permit for construction activities enacted by the U.S. Environmental Protection Agency (EPA) under the National Pollutant Discharge Elimination System (NPDES) program and all local governing agency requirements. This SWPPP must be implemented at the start of construction.

This SWPPP has been developed in accordance with the "New York State Department of Environmental Conservation (NYSDEC) State Pollution Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity" General Permit Number GP-0-20-001, effective January 29, 2015 through January 28, 2020. The SWPPP and accompanying plans identify and detail stormwater management, pollution prevention, and erosion and sediment control measures necessary during and following completion of construction.

This SWPPP and the accompanying plans entitled "248 Tioronda Ave" have been submitted as a set. These engineering drawings are considered an integral part of this SWPPP. Therefore, this SWPPP is not considered complete without them. References made herein to "the plans" or to a specific "sheet" refer to these drawings.

This report considers the impacts associated with the intended development with the purpose of:

1. Maintaining existing drainage patterns as much as possible while continuing the conveyance of upland watershed runoff;
2. Controlling increases in the rate of stormwater runoff resulting from the proposed development so as not to adversely alter downstream conditions; and
3. Mitigating potential stormwater quality impacts and preventing soil erosion and sedimentation resulting from stormwater runoff generated both during and after construction.

The analysis and design completed and documented in this report is intended to be part of the application made for a multifamily residential redevelopment project completed on behalf of the Owner/Operator.

1.1 Project Description

CHAI Builders is proposing a **Error! Reference source not found.** with increase in impervious surface. A location map of the site has been provided in Appendix G, as Figure 1.

This type of project is included in Table 2 of Appendix B of GP-0-20-001; and the project site is not located in one of the watersheds listed in Appendix C of GP-0-20-001. Therefore, this SWPPP includes post-construction stormwater management practices, as well as erosion and sediment controls.

This project is located within the City of Beacon regulated, traditional land use control Municipal Separate Stormwater Sewer System (MS4). Therefore, an MS4 SWPPP Acceptance Form is required to accompany NOIs submitted to the NYSDEC.

Runoff from the project site will discharge to the Fishkill Creek, which is not included in the list of Section 303(d) water bodies included in Appendix E of GP-0-20-001.

Project construction activities will consist primarily of site grading, paving, building construction, and the installation of storm drainage necessary to support the proposed **Error! Reference source not found.**. Construction phase pollutant sources anticipated at the site are disturbed (exposed) soil, vehicle fuels and lubricants, chemicals associated with building construction, and building materials. Without adequate control there is the potential for each type of pollutant to be transported by stormwater.

1.2 Stormwater Pollution Controls

The stormwater pollution controls outlined herein have been designed and evaluated in accordance with the following standards and guidelines:

- New York State Stormwater Management Design Manual, dated January 2015 (Design Manual).
- New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016 (SSESC).

Stormwater quality will be enhanced through the implementation of temporary and permanent erosion and sediment control measures, the proposed stormwater management facilities, and other construction-phase pollution controls outlined herein.

The proposed stormwater collection system consisting of pipes, open drainage ways, and on-site stormwater management facilities will adequately collect, treat, and convey the stormwater runoff.

An existing bioretention pond & hydrodynamic separator and proposed green roof & hydrodynamic separators will be used to manage and treat stormwater runoff generated by the proposed **Error! Reference source not found.**.

Pre- and post-development surface runoff rates have been evaluated for the 1-, 10-, and 100-year 24-hour storm events. Comparison of pre- and post-development watershed conditions demonstrates that the peak rate of runoff from the project site will not be increased.

The post-construction stormwater management practice(s) will be privately owned by the Applicant Deed restrictions will be in place, which require operation and maintenance of the practice(s) in accordance with the operation and maintenance plan.

1.3 Conclusion

This project is subject to the requirements of the City of Beacon regulated MS4, and this SWPPP has been prepared in conformance with the current Design Manual and SSESC. As such, GP-0-20-001 coverage will be effective five (5) business days from the date the NYSDEC receives the electronically submitted eNOI and signed "MS4 SWPPP Acceptance" form, or ten (10) business days from the date the NYSDEC receives the complete paper NOI and signed "MS4 SWPPP Acceptance" form.

2.0 SWPPP IMPLEMENTATION RESPONSIBILITIES

A summary of the responsibilities and obligations of all parties involved with compliance with the NYSDEC SPDES General Permit GP-0-20-001 conditions is outlined in the subsequent sections. For a complete listing of the definitions, responsibilities, and obligations, refer to the SPDES General Permit GP-0-20-001 presented in Appendix A.

2.1 Definitions

1. "General SPDES Permit" means a SPDES permit issued pursuant to 6 NYCRR Part 750-1.21 authorizing a category of discharges.

2. "Owner" or "Operator" means the person, persons, or legal entity which owns or leases the property on which the *construction activity* is occurring; and/or an entity that has operational control over the construction plans and specifications, including the ability to make modifications to the plans and specifications. There may be occasions during the course of a project in which there are multiple Owners/Operators, all of which will need to file and maintain the appropriate SWPPP documents and plans, including without limitation, the Notice of Intent (NOI) and Notice of Termination (NOT).

3. "Owner's/Operator's Engineer" means the person or entity retained by an Owner/Operator to design and oversee the implementation of the SWPPP.

4. "Contractor" means the person or entity identified as such in the construction contract with the Owner/Operator. The term "Contractor" shall also include the Contractor's authorized representative, as well as any and all subcontractors retained by the Contractor.

5. "Qualified Inspector" means a person that is knowledgeable in the principles and practices of erosion and sediment control, such as licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), Registered Landscape Architect, or other Department endorsed individual(s).

   It can also mean someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided that person has training in the principles and practices of erosion and sediment control. Training in the principles and practices of erosion and sediment control means that an individual working under the direct supervision of the licensed Professional Engineer or Registered Landscape Architect has received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity. After receiving the initial training, the individual working under the direct supervision of the licensed Professional Engineer or Registered Landscape Architect shall receive four (4) hours of training every three (3) years.

   It can also mean a person that meets the *Qualified Professional* qualifications in addition to the *Qualified Inspector* qualifications.

   Note: Inspections of any post-construction stormwater management practices that include structural components, such as a dam for an impoundment, shall be performed by a licensed Professional Engineer.

6. "Qualified Professional" means a person that is knowledgeable in the principles and practices of stormwater management and treatment, such as a licensed Professional Engineer, Registered Landscape Architect, or other Department endorsed individual(s). Individuals preparing SWPPPs that require the post-construction stormwater management practice component must have an understanding of the principles of hydrology, water quality management practice design, water quantity control design, and, in many cases, the principles of hydraulics. All components of the SWPPP that involve the practice of engineering, as defined by the NYS Education Law (see Article 145), shall be prepared by, or under the direct supervision of, a professional engineer licensed to practice in the State of New York.

7. "Trained Contractor" means an employee from a contracting (construction) company, identified in Part III.A.6., that has received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity. After receiving the initial training, the *Trained Contractor* shall receive four (4) hours of training every three (3) years.

   It can also mean an employee from a contracting (construction) company, identified in Part III.A.6.,that meets the *Qualified Inspector* qualifications (e.g. licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), Registered Landscape Architect, or someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided they have received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity.

   The "Trained Contractor(s)" will be responsible for the day to day implementation of the SWPPP.

2.2 Owner's/Operator's Responsibilities

1. Ensure that control measures are selected, designed, installed, implemented and maintained to minimize the discharge of pollutants and prevent a violation of the water quality standards, meeting the non-numeric effluent limitations in Part I.B.1.(a)-(f) of the SPDES General Permit and in accordance with the New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016.

2. Ensure that practices are selected, designed, installed, and maintained to meet the performance criteria in the Design Manual. Practices must be designed to meet the applicable sizing criteria in Part I.C.2.a., b., c. or d. of GP-0-20-001.

3. Retain the services of a "Qualified Inspector" or "Qualified Professional" as defined under Section 2.1, to provide the services outlined in Section 2.5 "Qualified Inspector's/Qualified Professional's Responsibilities."

4. Retain the services of a "Qualified Professional," as defined under Section 2.1, to provide the services outlined in Section 2.3 "Owner's/Operator's Engineers Responsibilities."

5. Have an authorized corporate officer sign the completed NOI. A copy of the completed NOI is included in Appendix B.

6. Submit the electronic version of the NOI (eNOI) along with the MS4 SWPPP acceptance form using the NYSDEC's website (http://www.dec.ny.gov/chemical/43133.html) or submit the signed NOI along with the MS4 SWPPP acceptance form to the following:

   NOTICE OF INTENT
   NYS DEC, Bureau of Water Permits
   625 Broadway, 4th Floor
   Albany, New York 12233-3505

   City of Beacon
   1 Municipal Plaza
   Beacon, NY 12508

7. Pay the required initial and annual fees upon receipt of invoices from NYSDEC. These invoices are generally issued in the fall of each year. The initial fee is calculated as $110.00 per acre disturbed plus $675.00 per acre of net increase in impervious cover, and the annual fee is $110.00.

8. Prior to the commencement of construction activity, identify the contractor(s) and subcontractor(s) that will be responsible for implementing the erosion and sediment control measures and stormwater management practices described in this SWPPP. Have each of these contractors and subcontractors identify at least one "Trained Contractor", as defined under Section 2.1 that will be responsible for the implementation of the SWPPP. Ensure that the Contractor has at least one "Trained Contractor" on site on a daily basis when soil disturbance activities are being performed.

9. Schedule a pre-construction meeting which shall include the City of Beacon representative, Owner's/Operator's Engineer, Contractor, and their sub-contractors to discuss responsibilities as they relate to the implementation of this SWPPP.

10. Retain the services of an independent certified materials testing and inspection firm operating under the direction of a licensed Professional Engineer to perform regular tests, inspections, and certifications of the construction materials used in the construction of all post-construction stormwater management practices.

11. Retain the services of a NYS licensed land surveyor to perform an as-built topographic survey of the completed post-construction stormwater management facilities.

12. Require the Contractor to fully implement the SWPPP prepared for the site by the Owner/Operator's Engineer to ensure that the provisions of the SWPPP are implemented from the commencement of construction activity until all areas of disturbance have achieved final stabilization and the Notice of Termination (NOT) has been submitted to the NYSDEC.

13. Forward a copy of the NOI Acknowledgement Letter received from the regulatory agency to the Owner's/Operator's Engineer for project records, and to the Contractor for display at the construction site.

14. Maintain a copy of the General Permit (GP-0-20-001), NOI, NOI Acknowledgement Letter, SWPPP, MS4 SWPPP Acceptance Form, inspection reports, Spill Prevention, Countermeasures, Cleanup ("SPCC") Plan, and all documentation in accordance with Part I.F.8.a.-d of GP-0-20-001 necessary to demonstrate eligibility with the permit at the construction site, until all disturbed areas have achieved final stabilization and the NOT has been submitted to the NYSDEC. Place documents in a secure location that must be accessible during normal business hours to an individual performing a compliance inspection.

15. Prior to submitting a Notice of Termination, ensure for post-construction stormwater management practice(s) that are privately owned, the Owner/Operator has a deed restriction in place that requires operation and maintenance of the practice(s) in accordance with the operation and maintenance plan.

16. Submit a Notice of Termination (NOT) form (see Appendix B) within 48 hours of receipt of the Owner's/Operator's Engineer's certification of final site stabilization to the following:

    NOTICE OF TERMINATION
    NYS DEC, Bureau of Water Permits

625 Broadway, 4th Floor
Albany, New York 12233-3505

City of Beacon
1 Municipal Plaza
Beacon, NY 12508

17. Request and receive all SWPPP records from the Owner's/Operator's Engineer and archive those records for a minimum of five (5) years after the NOT is filed.

18. Implement the Post-Construction Inspections and Maintenance procedures outlined in Appendix F.

19. The NOI, SWPPP, and inspection reports required by GP-0-20-001 are public documents that the Owner/Operator must make available for review and copying by any person within five (5) business days of the Owner/Operator receiving a written request by any such person to review the NOI, SWPPP, or inspection reports. Copying of documents will be done at the requester's expense.

20. The Owner/Operator must keep the SWPPP current at all times. At a minimum, the Owner/Operator shall amend the SWPPP:
    a) Whenever the current provisions prove to be ineffective in minimizing pollutants in stormwater discharges from the project site;
    b) Whenever there is a change in design, construction, or operation at the construction site that has or could have an effect on the discharge of pollutants; and
    c) To address issues or deficiencies identified during an inspection by the "Qualified Inspector," the Department, or other Regulatory Authority.

2.3 Owner's/Operator's Engineer's Responsibilities

1. Prepare the SWPPP using good engineering practices, best management practices, and in compliance with all federal, state, and local regulatory requirements.

2. Prepare the Notice of Intent (NOI) form (see Appendix B), sign the "SWPPP Preparer Certification" section of the NOI, and forward to Owner/Operator for signature.

3. Provide copies of the SWPPP to the City of Beacon once all signatures and attachments are complete.

4. Enter Contractor's information in Section 2.5 "SWPPP Participants" once a Contractor is selected by the Owner/Operator.

5. Update the SWPPP each time there is a significant modification to the pollution prevention measures or a change of the principal Contractor working on the project who may disturb site soil.

2.4 Contractor's Responsibilities

1. Sign the SWPPP Contractor's Certification Form contained within Appendix C and forward to the Owner's/Operator's Engineer for inclusion in the Site Log Book.

2. Identify at least one Trained Contractor that will be responsible for implementation of this SWPPP. Ensure that at least one Trained Contractor is on site on a daily basis when soil disturbance activities are being performed. The Trained Contractor shall inspect the erosion and sediment control practices and pollution prevention measures being implemented within the active work area daily to ensure that they are being maintained in effective operating conditions at all times. If deficiencies are identified, the contractor shall begin implementing corrective actions within one business day and shall complete the corrective actions in a reasonable time frame.

3. Provide the names and addresses of all subcontractors working on the project site. Require all subcontractors who will be involved with construction activities that will result in soil disturbance to identify at least one Trained Contractor that will be on site on a daily basis when soil disturbance activities are being performed; and to sign a copy of the Subcontractor's Certification Form contained within Appendix C, then forward to the Owner's/Operator's Engineer for inclusion into the Site Log Book. This information must be retained as part of the Site Log Book.

4. Maintain a Spill Prevention and Response Plan in accordance with requirements outlined in Section 5.4 of this SWPPP. This plan shall be provided to the Owner's/Operator's Engineer for inclusion in the Site Log Book, prior to mobilization on-site.

5. Participate in a pre-construction meeting which shall include the City of Beacon representative, Owner/Operator, Owner's/Operator's Engineer, and all subcontractors to discuss responsibilities as they relate to the implementation of this SWPPP.

6. If Contractor plans on utilizing adjacent properties for material, waste, borrow, or equipment storage areas, or if Contractor plans to engage in industrial activity other than construction (such as operating asphalt and/or concrete plants) at the site, Contractor shall submit appropriate documentation to the Owner's/Operator's Engineer so that the SWPPP can be modified accordingly.

7. Implement site stabilization, erosion and sediment control measures, and other requirements of the SWPPP.

8. In accordance with the requirements in the most current version of the NYS Standards and Specifications for Erosion and Sediment Control, conduct inspections of erosion and sediment control measures installed at the site to ensure that they remain in effective operating condition at all times. Prepare and retain written documentation of inspections as well as of all repairs/maintenance activities performed. This information must be retained as part of the Site Log Book.

9. Begin implementing corrective actions within one (1) business day of receipt of notification by the Qualified Inspector/Qualified Professional that deficiencies exist with the erosion and sediment control measures employed at the site. Corrective actions shall be completed within a reasonable time frame.

10. Maintain a record of the date(s) and location(s) that soil restoration is performed in accordance with the accompanying plans and NYSDEC Division of Water's publication "Deep-Ripping and Decompaction," dated April 2008. A copy of this is publication is provided in Appendix E. The record that is to be maintained shall be a copy of the overall site grading plan delineating the area(s) and date(s) that the soil was restored.

11. Upon completion of all construction at the site, the contractor responsible for overall SWPPP Compliance shall sign the certification on their Contractor Certification Form indicating that: a.) all temporary erosion and sediment control measures have been removed from the site, b.) the on-site soils disturbed by construction activity have been restored in accordance with the SWPPP and the NYSDEC Division of Water's publication "Deep-Ripping and Decompaction," and c.) all permanent stormwater management practices required by the SWPPP have been installed in accordance with the contract documents.

2.5 Qualified Inspector's/Qualified Professional's Responsibilities

1. Participate in a pre-construction meeting with the City of Beacon representative, Owner/Operator, Contractor, and their subcontractors to discuss responsibilities as they relate to the implementation of this SWPPP.

2. Conduct an initial assessment of the site prior to the commencement of construction and certify in an inspection report that the appropriate erosion and sediment control measures described within this SWPPP have been adequately installed and implemented to ensure overall preparedness of the site.

3. Provide on-site inspections to determine compliance with the SWPPP. Site inspections shall occur at an interval of at least once every seven calendar days or, if at times, this project involves the disturbance of greater than five acres of soil at any one time, site inspections shall occur at an interval of at least twice every seven calendar days, with the inspections separated by a minimum of at least two full calendar days. A written inspection report shall be provided to the Owner/Operator and general contractor within one business day of the completion of the inspection, with any deficiencies identified. A sample inspection form is provided in Appendix D.

4. Prepare an inspection report subsequent to each and every inspection that shall include/address the items listed in Part IV.C.4.a-k of GP-0-20-001. Sign all inspection reports and maintain on site with the SWPPP.

5. Notify the owner/operator and appropriate contractor or subcontractor of any corrective actions that need to be taken.

6. Prepare a construction Site Log Book to be used as a record of all inspection reports generated throughout the duration of construction. Ensure that the construction Site Log Book is maintained and kept up-to-date throughout the duration of construction.

7. Review the Contractor's SWPPP records on a periodic basis to ensure compliance with the requirements for daily reports, soil restoration, inspections, and maintenance logs.

8. Based on the as-built survey and material testing certifications performed by others, perform evaluations of the completed stormwater management practices to determine whether they were constructed in accordance with this SWPPP.

9. Conduct a final site assessment and prepare a certification letter to the Owner/Operator indicating that, upon review of the material testing and inspection reports prepared by the firm retained by the Owner/Operator, review of the completed topographic survey, and evaluation of the completed stormwater management facilities, the stormwater management facilities have been constructed substantially in accordance with the contract documents and should function as designed.

10. Prepare the Notice of Termination (NOT). Sign the NOT Certifications VI (Final Stabilization) and VII (Post-construction Stormwater Management Practices), and forward the NOT to the Owner/Operator for signature on Certification VIII (Owner/Operator Certification).

11. Transfer the SWPPP documents, along with all NOI's, permit certificates, NOT's, construction Site Log Book, and written records required by the General Permit to the Owner/Operator for archiving.

2.6 SWPPP Participants

1. Owner's/Operator's Engineer:

Kyle Ahearn, PE – Senior Civil Engineer
LaBella Associates
21 Fox Street
Poughkeepsie, NY 12601
Phone: (845) 454-3980

2. Owner/Operator:

CHAI Builders
120 Route 59, Suite 201
Suffern, NY 10901
Phone: 917-6964402

3. Contractor:

Name and Title: Pete Coon

Company Name: AW Coon and Sons, Inc

Mailing Address: 412 NY-199

Red Hook, NY 12571

Phone: (845) 758-8727

3.0 SITE CHARACTERISTICS

3.1 Land Use and Topography

The project parcel is in the Fishkill Creek Development (FCD) zone. It was previously the site of a Tuck Tape manufacturing facility. The facility was shuttered in the 1990's and has remained vacant since that time. In the late 2000's, the crumbling warehouse buildings were razed. There has also been an environmental cleanup at the site, which was monitored and approved by the NYSDEC.

Site elevations range from approximately 40 feet above mean sea level (MSL) to 120 feet MSL. The project site is quite narrow, approximately 1900 feet in length from north to south and 100-300 feet in width from west to east. The western portion of the site runs along an MTA railroad easement along Tioronda Avenue and is moderately sloped, with typical slopes of approximately 20-30%. The eastern portion of the site runs along the Fishkill Creek and is extremely sloped, with slopes in the range of 20-80%. The central portion of the site is relatively flat, with average slopes of 10-15%.

3.2 Soils and Groundwater

The United States Department of Agriculture (USDA) Soil Conservation Service (SCS) Soil Survey for Dutchess County was reviewed and provided surficial soil conditions for the study area.

The soils within the overall watershed are of the Udorthents classification. They fall into hydrologic soil groups A and D. According to the Soil Survey of Dutchess County, Udorthents typically range from being very deep to shallow, somewhat excessively drained to moderately well drained. They are found in disturbed areas and typically associated with areas that were subject to previous earthwork operations.

In an effort to ascertain a better understanding of the hydrologic nature of the on-site soils, LaBella (formerly Chazen) observed deep tests at 11 locations at the site. We brought an excavator on site to investigate soil conditions and determine limiting factors such as groundwater, bedrock, and existing utilities. See Appendix K for the soil testing results. Our findings were consistent with the Soil Survey of Dutchess County. Layers consisted of fill material from the previous use on site, and a variety of clayey material.

Soil data as provided by the SCS is presented in Table 1.

Table 1: USDA Soil Data

Map Symbol & Description	Hydrologic Soil Group	Permeability (inches/hour)	Erosion Factor K	Depth to Water Table (feet)	Depth to Bedrock (inches)
Ud - Udorthents	A/D	0.06-20	0.37	>3.0	>60

Upon review of the soil data presented in Table 1, the project site does not contain soils with a soil slope phase of E or F.

The Soil Conservation Service defines the hydrologic soil groups as follows:

- Type A Soils: Soils having a high infiltration rate and low runoff potential when thoroughly wet. These soils consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a moderate rate of water transmission.

The soils map for the study area is presented in Appendix G, as Figure 2.

3.3 Watershed Designation

The project site is not located in a restricted watershed identified in Appendix C of GP-0-20-001.

3.4 Receiving Water Bodies

The nearest natural classified water body into which runoff from the project site will discharge is the Fishkill Creek.

The Fishkill Creek is classified by NYSDEC as a Class C water course, and is not included in the Section 303(d) list of impaired waters found in Appendix E of GP-0-20-001.

3.5 Aquifer Designation

The project site is not located over a US EPA designated Sole Source aquifer; nor is it located over a Primary or Principal aquifer listed in the NYSDEC Technical and Operational Guidance Series (TOGS) 2.1.3 (1980).

3.6 Wetlands

A search on the NYSDEC Environmental Resource Mapper on June 5, 2019, and a review of GIS data, determined that no state-regulated wetlands are located on or in the vicinity of the project site.

The Fishkill Creek is a federally-regulated stream. The Ordinary High Water Line shown on the project plans was marked on July 10, 2019 by LaBella (formerly Chazen) and was located on July 25, 2019 by LaBella (formerly Chazen).

3.7 Flood Plains

According to the National Flood Insurance Program Flood Insurance Rate Map (FIRM), City of Beacon, New York, Community Panel Number 36027C0576E, the project site lies within Flood Zone X, areas determined to be outside 500-year floodplain.

3.8 Listed, Endangered, or Threatened Species

A search was performed on the NYSDEC Environmental Resource Mapper on June 5, 2019, and determined that the project site does contain threatened or endangered species, or critical habitat. An endangered, threatened, and rare species assessment, as prepared by LaBella (formerly Chazen), indicates that the hardwood/floodplain forest habitat on site could potentially support two threatened or endangered species, the Indiana Bat and the Bald Eagle. The proposed

project will impact 0.6 acre of the upland hardwood forest habitat. The remaining 2.9 acres of upland riparian forest/floodplain wetlands on the site will be left undisturbed.

The NYSDEC New York Natural Heritage Program Letter dated July 24, 2013 indicated the presence of non-breeding bald eagle. By email dated August 8, 2013 from the NYSDEC, the Department indicated that the non-breeding occurrence is associated with wintering eagles and known roosting location, and that this roosting location is at the mouth of Fishkill Creek at the Hudson River at Denning's Point. This location is approximately 0.77 miles from the project site. According to the NYSDEC, there is no record of a breeding nest site within one mile of the project, but this should be reassessed annually until the project is constructed. The National Bald Eagle Management Guidelines would also recommend that the project minimize disruptive activities and development in the flight paths between nests, roost sites and important foraging areas; locate water dependent facilities away from foraging areas, avoid boating near foraging areas, and protect and preserve potential roost and nest sites by retaining, to the extent practicable, mature trees and old growth stands within 0.5 miles of the water. In this case, the project does not propose any marina or boating activities. The project will retain much of the wooded vegetation along Fishkill Creek. The activities proposed on the site are less disruptive than previous on-site activities associated with the Metro-North railroad. The project site will be reviewed annually for any nests until construction is completed. The US Fish and Wildlife Service did not have any concerns regarding possible use of the site by Bald Eagle. While the NYSDEC indicated that the closest occurrence of Indiana bat is more than 2.5 miles away, the USFWS requested that the project limit tree clearing to October 1 to March 31, minimize removal of large trees, use cut-off lighting, and not use pesticides or herbicides in any stormwater basins.

The stormwater discharges from the project site will not adversely impact listed, endangered or threatened species so long as the stormwater management practices have been constructed in accordance with this SWPPP.

An Environmental Resource Map has been provided in Appendix G, as Figure 4.

3.9 Historic Places

A search on the New York State Cultural Resource Information System (CRIS) database, performed on June 5, 2019, revealed that the property is not located within an archeologically sensitive area, and is not located on or immediately adjacent to a property listed or determined to be eligible for listing on the National or State Registers of Historic Places. Additionally, the construction activity does not include the construction of a new building within 50 feet 20-feet for 1-5 acres disturbance; 50-feet for 5-20 acres disturbance; 100-feet for 20+ acres of disturbance of any structure more than 50 years old. A printout of the historic places screening map is presented in Appendix G, as Figure 3.

3.10 Rainfall Data

Rainfall data utilized in the modeling and analysis was obtained from the Cornell University online Extreme Precipitation in New York & New England website (http://precip.eas.cornell.edu/). Rainfall data specific to the portion of Dutchess County under consideration, for various 24-hour storm events, is presented in the following Table:

Table 2: Rainfall Data

Storm Event Return Period	24-Hour Rainfall (inches)
1-year	2.80
10-year	5.20
100-year	7.81

These values were used to evaluate the pre- and post-development stormwater runoff characteristics.

4.0 CONSTRUCTION SEQUENCE

This project has not received written approval from City of Beacon allowing the disturbance of more than five acres of land at any one time. Therefore, if the Contractor's construction sequence requires the disturbance of more than five acres at any one time, written approval must be obtained from NYSDEC prior to disturbing more than five acres at once.

Should the waiver request be denied, the contractor shall limit the area of disturbance to less than five acres of disturbance at any given time. The Contractor shall prepare and submit to the Owner's/Operator's Engineer a sequencing plan that identifies the progression of construction through the site. This sequencing plan must be retained as part of the Site Log Book.

The "Erosion and Sediment Control Plan" and the "Erosion and Sediment Control Plan Prior to Construction" in the accompanying drawings and waiver request identifies the major construction activities that are the subject of this SWPPP. The order (or sequence) in which the major activities are expected to begin is presented on the accompanying drawings, though each activity will not necessarily be completed before the next begins. In addition, these activities could occur in a different order if necessary to maintain adequate erosion and sediment control. If this is the case, the contractor shall notify the Owner's/Operator's Engineer overseeing the implementation of the SWPPP.

The Contractor will be responsible for implementing the erosion and sediment control measures identified on the plans. The Contractor may designate these tasks to certain subcontractors as they see fit, but the ultimate responsibility for implementing these controls and ensuring their proper function remains with the Contractor.

Refer to the accompanying plans for details and specifications regarding the construction sequencing schedule.

5.0 CONSTRUCTION-PHASE POLLUTION CONTROL

The SWPPP and accompanying plans identify the temporary and permanent erosion and sediment control measures that have been incorporated into the design of this project. These measures will be implemented during construction, to minimize soil erosion and control sediment transport off-site, and after construction, to control the quality and quantity of stormwater runoff from the developed site.

Erosion control measures, designed to minimize soil loss, and sediment control measures, intended to retain eroded soil and prevent it from reaching water bodies or adjoining properties, have been developed in accordance with the following documents:

- NYSDEC SPDES General Permit for Stormwater Discharges From Construction Activity, Permit No. GP-0-20-001 (effective January 29, 2015 through January 28, 2020)
- New York State Standards and Specifications for Erosion and Sediment Control, NYSDEC (November 2016)

The SWPPP and accompanying plans outline the construction scheduling for implementing the erosion and sediment control measures. These documents include limitations on the duration of soil exposure, criteria and specifications for placement and installation of the erosion and sediment control measures, a maintenance schedule, and specifications for the implementation of erosion and sediment control practices and procedures.

Temporary and permanent erosion and sediment control measures that shall be applied during construction generally include:

1. Minimizing soil erosion and sedimentation by stabilization of disturbed areas and by removing sediment from construction site discharges.
2. Preservation of existing vegetation to the greatest extent practical. Following the completion of construction activities in any portion of the site, permanent vegetation shall be established on all exposed soils.
3. Site preparation activities to minimize the area and duration of soil disruption.
4. Establishment of permanent traffic corridors to ensure that “routes of convenience” are avoided.

5.1 Temporary Erosion and Sediment Control Measures

The temporary erosion and sediment control measures described in the following sections are included as part of the construction documents.

5.1.1 Stabilized Construction Access

Prior to construction, stabilized construction access(es) will be installed, per accompanying plans, to reduce the tracking of sediment onto public roadways.

Construction traffic must enter and exit the site at the stabilized construction access(es). The intent is to trap dust and mud that would otherwise be carried off-site by construction traffic.

The access(es) shall be maintained in a condition, which will control tracking of sediment onto public rights-of-way or streets. When necessary, additional aggregate will be placed atop the filter fabric to assure the minimum thickness is maintained. All sediment and/or soil spilled, dropped, or washed onto public rights-of-way must be removed immediately. Periodic inspection and needed maintenance shall be provided after each substantial rainfall event.

5.1.2 Dust Control

Water trucks shall be used as needed during construction to reduce dust generated on-site. Dust control must be provided by the Contractor(s) to a degree that is acceptable to the Owner, and in compliance with the applicable local and state dust control requirements.

5.1.3 Temporary Soil Stockpile

Materials, such as topsoil, will be temporarily stockpiled (if necessary) on the site during the construction process. Stockpiles shall be located in an area away from storm drainage, water bodies and/or courses, and will be properly protected from erosion by a surrounding silt fence barrier.

5.1.4 Silt Fencing

Prior to the initiation of and during construction activities, a geotextile filter fabric (or silt fence) will be established downgradient of all disturbed areas. These barriers may extend into non-impact areas to provide adequate protection of adjacent lands.

Clearing and grubbing will be performed only as necessary for the installation of the sediment control barrier. To facilitate effectiveness of the silt fencing, daily inspections and inspections immediately after significant storm events will be performed by the Contractor(s). Maintenance of the fence will be performed as needed.

5.1.5 Temporary Seeding

For areas undergoing clearing, grading, and disturbance as part of construction activities, where work has temporarily ceased, temporary soil stabilization measures must be initiated by the end of the next business day and completed within fourteen (14) days from the date the soil disturbance activity has temporarily ceased.

5.1.6 Stone and Block Drop Inlet Protection

Concrete blocks surrounded by wire mesh and crushed stone will be placed around both existing catch basins, and proposed catch basins once they have been installed, to prevent sediment from entering the catch basins and storm sewer system. During construction, crushed stone shall be replaced as necessary to ensure proper function.

5.1.7 Erosion Control Blanket

Erosion control blankets shall be installed in accordance with manufacturer's requirements on all slopes exceeding 3:1. Erosion control blankets provide temporary erosion protection, rapid vegetative establishment, and long-term erosion resistance to shear stresses generated by high runoff flow velocities associated with steep slopes.

5.1.8 Stone Check Dams

Stone check dams will be installed within drainage ditches to reduce the velocity of stormwater runoff, promote settling of sediment, and reduce sediment transport off-site.

Sediment accumulated behind the stone check dam will be removed as needed to maintain flow through the stone check dam and prevent large flows from carrying sediment over or around the dam. Stones shall be replaced as needed to maintain the design cross section of the structures.

5.1.9 Temporary Diversion Swales

Temporary diversion swales shall be used to divert off-site runoff around the construction site and divert runoff from stabilized areas around disturbed areas.

5.1.10 Dewatering Operations

Dewatering will be used to intercept sediment-laden stormwater or pumped groundwater and allow it to settle out of the pumped discharge prior to being discharged from the site. Water from dewatering operations shall be treated to eliminate the discharge of sediment and other pollutants. Water resulting from dewatering operations shall be directed to temporary sediment traps or dewatering devices. Temporary sediment traps and dewatering bags will be provided, installed, and maintained at downgradient locations to control sediment deposits to downstream surfaces.

5.2 Permanent Erosion and Sediment Control Measures

The permanent erosion and sediment control measures described in the following sections are included as part of the construction documents.

5.2.1 Establishment of Permanent Vegetation

Disturbed areas that will be vegetated must be seeded in accordance with the contract documents. The type of seed, mulch, and maintenance measures as described in the contract documents shall also be followed.

Permanent soil stabilization measures must be initiated by the end of the next business day and completed within fourteen (14) days from the date the soil disturbance activity has permanently ceased.

Final site stabilization is achieved when all soil-disturbing activities at the site have been completed and a uniform, perennial vegetative cover with a density of 80 percent has been established or equivalent stabilization measures (such as the use of mulches or geotextiles) have been employed on all unpaved areas and areas not covered by permanent structures.

5.2.2 Rock Outlet Protection

Rock outlet protection shall be installed at the locations as indicated and detailed on the accompanying plans. The installation of rock outlet protection will reduce the velocity and energy of water, such that the flow will not erode downstream surfaces.

5.2.3 Permanent Turf Reinforcement

Permanent turf reinforcement mats (TRMs) provide long-term erosion protection and vegetation establishment assistance while permanently reinforcing vegetation. TRMs shall be installed on slopes/channels where specified. TRM's provide two key advantages. First, their unique fiber shape and 3-D pattern create a thick matrix of voids that trap seed, soil, and water in place for quicker, thicker vegetation growth. Secondly, they provide additional reinforcement that doubles the vegetation's natural erosion protection abilities by remaining a permanent part of the application and anchoring mature plants to the soil for superior, long-term erosion resistance.

5.3 Other Pollutant Controls

Other necessary pollutant controls are listed below:

5.3.1 Solid and Liquid Waste Disposal

No solid or liquid waste materials, including building materials, shall be discharged from the site with stormwater. All solid waste, including disposable materials incidental to any construction activities, must be collected and placed in containers. The containers shall be emptied periodically by a licensed 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 of 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.

5.3.2 Sanitary Facilities

Temporary sanitary facilities will be provided by the Contractor throughout the construction phase. They must be utilized by all construction personnel and will be serviced by a licensed commercial Contractor. These facilities must comply with state and local sanitary or septic system regulations.

5.3.3 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; such water can be retained in temporary ponds/sediment traps until it infiltrates and/or evaporates.

5.4 Construction Housekeeping Practices

During the construction phase, the Contractor(s) will implement the following measures:

5.4.1 Material Stockpiles

Material resulting from clearing and grubbing operations that will be stockpiled on-site, must be adequately protected with downgradient erosion and sediment controls.

5.4.2 Equipment Cleaning and Maintenance

The Contractor(s) will designate areas for equipment cleaning, maintenance, and repair. The Contractor(s) and subcontractor(s) will utilize those areas. The areas will be protected by a temporary perimeter berm.

5.4.3 Detergents

The use of detergents for large-scale washing is prohibited (i.e., vehicles, buildings, pavement surfaces, etc.)

5.4.4 Spill Prevention and Response

A Spill Prevention and Response Plan shall be developed for the site by the Contractor(s). The plan shall detail the steps required 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 Safety Data Sheets (SDS) 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.

5.4.5 Concrete Wash Areas

Concrete trucks will be allowed to wash out or discharge surplus concrete or drum wash water on the site, but only in specifically designated diked and impervious washout areas, which have been prepared to prevent contact between the concrete wash and stormwater. Waste generated from concrete wash water shall not be allowed to flow into drainage ways, inlets, receiving waters, or highway right of ways, or any location other than the designated concrete wash areas. Proper signage designating the "Concrete Wash Areas" shall be placed near the facility. Concrete wash areas shall be located at minimum 100 linear feet from drainage ways, inlets, and surface waters.

The hardened residue from the concrete wash areas will be disposed of in the same manner as other non-hazardous construction waste materials. Maintenance of the wash area is to include removal of hardened concrete. Facility shall have sufficient volume to contain all the concrete waste resulting from washout and a minimum freeboard of 12 inches. Facility shall not be filled beyond 95% capacity and shall be cleaned out once 75% full unless a new facility is constructed. The Contractor will be responsible for seeing that these procedures are followed.

Sawcut Portland Cement Concrete (PCC) slurry shall not be allowed to enter drainage ways, inlets, and/or surface waters. Sawcut residue should not be left on the surface of pavement or be allowed to flow over and off pavement.

The Project may require the use of multiple concrete wash areas. All concrete wash areas will be located in an area where the likelihood of the area contributing to stormwater discharges is negligible. If required, additional BMPs must be implemented to prevent concrete wastes from contributing to stormwater discharges.

5.4.6 Material Storage

Construction materials shall be stored in a dedicated staging area. The staging area shall be located in an area that prevents negative impacts of construction materials on 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 of at an approved solid waste or chemical disposal facility.

6.0 STORMWATER MANAGEMENT PLANNING

Chapter 3 of the Design Manual outlines a six-step planning process for site planning and selection of stormwater management practices that must be implemented for both new development and redevelopment projects. This process is intended to develop a design that maintains pre-construction hydrologic conditions through the application of environmentally sound development principles, as well as treatment and control of runoff discharges from the site. The following sections outline the step-by-step process and how it has been applied to this project.

The goals of this Stormwater Management Plan are to analyze the peak rate of runoff under pre- and post-development conditions, to maintain the pre-development rate of runoff in order to minimize impacts to adjacent or downstream properties, and to minimize the impact to the quality of runoff exiting the site.

The Design Manual provides both water quality and water quantity objectives to be met by projects requiring a "Full SWPPP". These objectives will be met by applying stormwater control practices to limit peak runoff rates and improve the quality of runoff leaving the developed site.

6.1 STEP 1 – Site Planning

During the Site Planning process, the project site is evaluated for implementation of the green infrastructure planning measures identified in Table 3.1 of the Design Manual, in order to preserve natural resources and reduce impervious cover. Table A of Appendix K provides a description of each green infrastructure planning measure, along with a project specific evaluation.

6.2 STEP 2 - Determine Water Quality Treatment Volume (WQv)

Stormwater runoff from impervious surfaces is recognized as a significant contributor of pollution that can adversely affect the quality of receiving water bodies. Therefore, treatment of stormwater runoff is important since most runoff related water quality contaminants are transported from land, particularly the impervious surfaces, during the initial stages of storm events.

6.2.1 NYSDEC Requirements for New Development

The Design Manual requires that water quality treatment be provided for the initial flush of runoff from every storm. The NYSDEC refers to the amount of runoff to be treated as the "Water Quality Volume" (WQv). Section 4.2 of the Design Manual defines the Water Quality Volume as follows:

$$WQv = \frac{[(P)(R_v)(A)]}{12}$$

Where: P = 90% Rainfall Event Number
R_v = 0.05 + 0.009 (I), minimum R_v = 0.2
I = Impervious Cover (Percent)
A = Contributing Area in Acres

This definition ensures that, all other things being equal, the Water Quality Volume will increase along with the impervious cover percentage. This project will implement existing bioretention areas and hydrodynamic separator and proposed green roof and hydrodynamic separators to meet the water quality volume associated with new development.

6.2.2 NYSDEC Requirements for Redevelopment Projects

Chapter 9 of the Design Manual outlines alternative WQv treatment objectives for redevelopment projects.

According to Section 9.2.1.B.II., redevelopment activities can achieve the water quality treatment objective if 75% of the water quality volume associated with the disturbed, impervious area is captured and treated by alternate stormwater management practices. In this case, 100% of any new impervious area must be treated. This project will implement hydrodynamic separators to meet the water quality objective associated with redevelopment.

The Water Quality Volume equation has been applied to the drainage area tributary to each of the stormwater quality practices proposed for this project. The practices have been sized to accommodate the Water Quality Volume, as per the performance criteria presented in Chapter 6 and/or Chapter 9 of the Design Manual. Water quality volume calculations for each of the proposed practices are presented in Table B of Appendix K.

6.3 STEP 3 – Apply Runoff Reduction Techniques and Standard SMPs with RRv Capacity to Reduce Total WQv

Land use change and development in the watershed increases the volume of runoff. As such, reductions in the amount of runoff from new development, accomplished through the implementation of a stormwater management plan for the site, will play an important role in the success or failure of the watershed-wide stormwater management plan. Runoff reduction techniques can be applied to manage, reduce, and treat stormwater, while maintaining and restoring natural hydrology through infiltration, evapo-transpiration, and the capture and reuse of stormwater. Volume reduction techniques by themselves typically are not sufficient to provide adequate attenuation of stormwater runoff, but they can decrease the size of the peak runoff rate reduction facilities.

6.3.1 NYSDEC Requirements for New Development

The Design Manual states that runoff reduction shall be achieved through infiltration, groundwater recharge, reuse, recycle, and/or evaporation/evapotranspiration of 100-percent of the post-development water quality volume to replicate pre-development hydrology. Runoff control techniques provide treatment in a distributed manner before runoff reaches the collection system, by maintaining pre-construction infiltration, peak runoff flow, discharge volume, as well as minimizing concentrated flow. This can be accomplished by applying a combination of Runoff Reduction Techniques, standard Stormwater Management Practices (SMPs) with RRv capacity, and good operation and maintenance.

6.3.2 NYSDEC Requirements for Redevelopment Projects

Section 3.2 of the Design Manual indicates, "Although encouraged, meeting the RRv criteria is not required for redevelopment activities that meet the criteria in Chapter 9 of this manual." This project involves the reconstruction of existing impervious area on a site that has adequate space for controlling stormwater runoff from the reconstructed area.

Although not required, bioretention ponds are proposed for this project and will provide both WQv and RRv at the site.

6.3.3 Methodology

In order to reduce the required WQv, a site-specific evaluation must be performed to determine the most practical means of reducing runoff volume. The Design Manual strongly encourages implementation of a combination of RR techniques and standard SMPs with RRv capacity. The following Table demonstrates a summary of the RRv practices being applied, and both the water quality and runoff reduction volumes they provide. The RR Technique(s) have been designed in accordance with Chapter 5 of the Design Manual. The standard SMP(s) with RRv capacity have been designed in accordance with Chapter 6 of the Design Manual. Refer to the contract drawings for practice dimensions, material specifications, and installation details. Practice specific calculations are presented in Table E of Appendix K.

Table 3: Summary of RR Techniques and Standard SMPs with RRv Capacity

RR Technique or Standard SMP with RRv Capacity	NYSDEC Design Variant	Pretreatment Volume Required (% of WQv)	Pretreatment Volume Provided (% of WQV)	WQv Required (CF)	WQv Provided (CF)	RRv Capacity	RRv Provided (CF)
Existing Bioretention (with underdrain) New Development	F-5	25	100	2,522	2,591	40%	1,036
Green Roof (Ext.)	RR-10	N/A	N/A	1,108	1,108	100%	1,108
						Total WQv Provided (CF)	**3,699**
						Total RRv Provided (CF)	**2,144**

6.3.4 Application of Standard Stormwater Management Practices (SMPs) with RRv Capacity

The standard SMPs with RRv capacity, described in the following section, have been incorporated into the stormwater management plan for this project. Design calculations for each measure have been included in Table E of Appendix K.

6.3.4.1 Bioretention (F-5)

Bioretention filters are shallow landscaped depressions commonly located in parking lot islands or within small pockets in residential areas that receive stormwater runoff. Stormwater flows into the bioretention area, ponds on the surface, and is gradually infiltrated into the soil bed. Pollutants are removed by a number of processes, such as adsorption, filtration, volatilization, ion exchange, and decomposition. Filtered runoff can either be allowed to infiltrate into the surrounding soil, functioning as an infiltration basin or rainwater garden or collected by an under drain system and discharged to the storm sewer system or directly to receiving waters, functioning like a surface sand filter. Runoff from larger storms is generally diverted past the bioretention area to the stormwater collection and conveyance system.

The Bioretention filters (F-5) were designed according to the criteria set forth in Section 6.4 “Stormwater Filtering Systems” of the Design Manual.

6.3.5 RRv Performance Summary

According to Section 3.6 of the Design Manual, "If the RRv calculated in this step is greater than or equal to the WQv calculated in Step 2, the designer has met the RRv requirement and may proceed to Step 6." A summary of the RRv provided is presented in the following table:

Table 4: Summary of RRv Provided

100% RRv = New Development WQv Required (CF)	RRv Provided (CF)	% RRv Provided
3,363	2,144	63%

As indicated in the above table, the RRv provided is not greater than or equal to the full RRv required for the project site. A good faith effort has been made to reduce runoff to the greatest extent practical. However, the project site has been developed previously and has urban fill throughout, limiting the ability to provide infiltration practices that meet the requirements of the Design Manual, which prevents reduction of the total WQv. As such, Table D of Appendix K provides a project specific evaluation for each RR technique and standard SMP with RRv capacity, demonstrating why these practices are infeasible.

6.4 STEP 4 – Determine the Minimum RRv Required

Projects that cannot achieve 100% of the runoff reduction requirement due to site limitations, shall provide a minimum runoff reduction volume as calculated by the following equation:

$$RRv_{min} = \frac{[(P)(R_V*)(Aic)(S)]}{12}$$

Where:

RRv_{min} = Runoff Reduction Volume (in acre-feet)
P = 90% Rainfall Event Number
Aic = Total area of new impervious cover (acres)
Rv* = 0.05+0.009(I), where I is 100% impervious
S = Hydrologic Soil Group (HSG) Specific Reduction Factor where:
HSG A = 0.55 HSG C = 0.30
HSG B = 0.40 HSG D = 0.20

Based upon the soil survey data, the majority of the site consists of soils having a hydrologic soil type A. As such, a specific reduction factor of 0.55 has been applied. Calculation of the required minimum RRv is presented in Table C of Appendix K.

Table 5: Minimum RRv Summary

Minimum RRv Required (CF)	RRv Provided (CF)	% of Minimum RRv Provided
908	2,144	>100%

Note: %Min RRv Provided=RRv Provided ÷ Min RRv Required

As indicated in the above table, the RRv provided is greater than the minimum RRv required for the project site. Therefore, the runoff reduction volume criteria has been met for the project and the design can proceed to Step 5.

6.5 STEP 5 – Apply Standard Stormwater Management Practices to Address Remaining Water Quality Volume

If the entire Water Quality Volume is not reduced through implementation of RR techniques and standard SMPs with RRv capacity, then the design must achieve the remaining WQv through the standard SMPs listed in Table 3.3 of the Design Manual.

Table 6: Summary of WQv Provided

Step 2 WQv Required (CF)	Step 3 WQv Reduction by RR Techniques & Standard SMPs w/ RRv Capacity (CF)	Step 5 Reduced WQv to be Treated by Standard SMPs (CF) on Alternative SMP's for Redevelopment
11,821	3,699	8,122

WQv associated with redevelopment based upon the results listed in Tables 5, 100% of the required RRv and WQv have not been met through implementation of RR techniques and standard SMPs with RRv capacity. As such, the stormwater quality control systems (without RRv capacity) described in the following sections, have been incorporated into the stormwater management plan for this project, to meet the WQv objective.

6.5.1 Hydrodynamic Separators

Hydrodynamic separators accelerate the separation of floating and settling pollutants from stormwater through the use of a vortex. These pre-fabricated devices come in the form of an underground manhole or vault. The devices have no moving parts and are typically fabricated from concrete and marine grade aluminum.

During operation, stormwater runoff enters the unit tangentially to promote a gentle swirling motion in a treatment chamber. As stormwater circles within the chamber, settable solids fall into a sump and are retained. Buoyant debris, oil, and grease rise to the surface and are separated from the water as it flows under a baffle wall. Finally, treated water exits the treatment chamber through a flow control orifice located behind the baffle wall.

During low-flow conditions all runoff is diverted into the treatment chamber by a flow partition. At higher flow rates, a portion of the runoff spills over the flow partition and is diverted around the treatment chamber to prevent re-suspension and washout of previously trapped pollutants. Water that spills over the partition flows into a head equalization chamber above the treatment chamber outlet. As the head equalization chamber fills, the head differential driving flow through the treatment chamber collapses. The result is that flow rates in the treatment chamber remain relatively constant even as total flow rates increase substantially. This configuration further reduces the potential for re-suspension or washout.

According to Chapter 9 of the Design Manual, hydrodynamic separators of the type proposed for this project have been approved for use as a pretreatment system in new and redevelopment projects or as a primary treatment system on redevelopment projects.

STEP 6 - Table 7: Summary of WQ Practices

SWM Practice ID	NYSDEC Design Variant	Required WQv (CF)	WQv Provided (CF)
Hydrodynamic Separator 1	ALT	5,244	5,244
Hydrodynamic Separator 2	ALT	3,984	3,984
Existing Hydrodynamic Separator 5	ALT	3,159	3,159
Total Treatment from Hydrodynamic Separators			**12,387**

6.6 Apply Volume and Peak Rate Control

This report presents the pre-development and post-development features and conditions associated with the rate of surface water runoff within the study area. For both cases, the drainage patterns, drainage structures, soil types, and ground cover types are considered in this study.

6.6.1 NYSDEC Requirements for New Development

Chapter 4 of the Design Manual requires that projects meet three separate stormwater quantity criteria:

1. The Channel Protection (CPv) requirement is designed to protect stream channels from erosion. This is accomplished by providing 24 hours of extended detention for the 1-year, 24-hour storm event. The Manual defines the CPv detention time as the center of mass detention time through each stormwater management practice.

2. The Overbank Flood Control (Qp) requirement is designed to prevent an increase in the frequency and magnitude of flow events that exceed the bank-full capacity of a channel, and therefore must spill over into the floodplain. This is accomplished by providing detention storage to ensure that, at each design point, the post-development 10-year 24-hour peak discharge rate does not exceed the corresponding pre-development rate.

3. The Extreme Flood Control (Qf) requirement is designed to prevent the increased risk of flood damage from large storm events, to maintain the boundaries of the pre-development 100-year floodplain, and to protect the physical integrity of stormwater management practices. This is accomplished by providing detention storage to ensure that, at each design point, the post-development 100-year 24-hour peak discharge rate does not exceed the corresponding pre-development rate.

Downstream analysis has been prepared for the project. Therefore, as described in Chapter 4 of the Design Manual, the stormwater quantity criteria described above do not apply to this project. However, a hydrologic and hydraulic analysis of the post-development project site has been performed in order to evaluate the performance of the proposed stormwater collection system.

6.6.2 Methodology

In order to demonstrate that the NYSDEC detention requirements are being met, the Design Manual requires that a hydrologic and hydraulic analysis of the pre- and post-development conditions be performed using the Natural Resources Conservation Service Technical Release 20 (TR-20) and Technical Release 55 (TR-55) methodologies. HydroCAD, developed by HydroCAD Software Solutions

LLC of Tamworth, New Hampshire, is a Computer-Aided-Design (CAD) program for analyzing the hydrologic and hydraulic characteristics of a given watershed and associated stormwater management facilities. HydroCAD uses the TR-20 algorithms and TR-55 methods to create and route runoff hydrographs.

HydroCAD has the capability of computing hydrographs (which represent discharge rates characteristic of specified watershed conditions, precipitation, and geologic factors) combining hydrographs and routing flows though pipes, streams and ponds. HydroCAD can also calculate the center of mass detention time for various hydraulic features. Documentation for HydroCAD can be found on their website: http://www.hydrocad.net/.

For this analysis, the watershed and drainage system was broken down into a network consisting of two types of components as described below:

1. Subcatchment: A relatively homogeneous area of land, which produces a volume and rate of runoff unique to that area.
2. Pond: Natural or man-made impoundment, which temporarily stores stormwater runoff and empties in a manner determined by its geometry and the hydraulic structure located at its outlets.

Subcatchments and ponds are represented by hexagons and squares, respectively, on the watershed routing diagrams provided with the computations included in Appendix I and Appendix J.

The analysis of hydrologic and hydraulic conditions and proposed stormwater management facilities, servicing the study area, was performed by dividing the tributary watershed into relatively homogeneous subcatchments. The separation of the watershed into subcatchments was dictated by watershed conditions, methods of collection, conveyance, and points of discharge. Watershed characteristics for each subcatchment were then assessed from United States Geological Service (USGS) 7.5-minute topographic maps, aerial photographs, a topographical survey, soil surveys, site investigations, and land use maps.

Proposed stormwater management facilities were designed and evaluated in accordance with the Design Manual and local regulatory requirements. The hydrologic and hydraulic analysis considered the SCS, Type III 24-hour storm events identified in Table 8.

Table 8: Design Events

Facility	24-hour Storm Event
Storm Sewer	10-year
Detention Basin (pond)	1-year
	10-year
	100-year
Flood Conditions	100-year

6.6.3 Description of Design Points

The study area consists of an overall watershed that encompasses approximately 11.9 acres and contains the 5.93 acre project site. The overall watershed was broken down into smaller watersheds, or subcatchments, to allow for analysis of runoff conditions at several locations throughout the study area. Each of these locations was defined as a Design Point (DP) in order to compare the effects resulting

from stormwater management facilities proposed as part of the project. Descriptions of each of the selected design points are provided below.

- Design Point 1: Off-site discharge to the Fishkill Creek downstream. Runoff enters the Fishkill Creek on the West side of the Creek and flows down to the Design Point.

6.6.4 Pre-development Watershed Conditions

The pre-development project site is covered predominantly by a combination of grass/woods and impervious surfaces. Analysis of pre-development conditions considered existing drainage patterns, soil types, ground cover, and topography. The Pre-Development Watershed Delineation Map has been provided in Appendix G, as Figure 4.

The results of the computer modeling used to analyze the overall watershed under pre-development conditions are presented in Appendix I. A summary of the pre-development watershed runoff rates at each design point is presented in Table 9.

6.6.5 Post-development Watershed Conditions

The post-development project site is covered predominantly by grass and impervious surfaces. The analysis of post-development conditions considered existing drainage patterns, soil types, ground cover to remain, planned site development, site grading and, stormwater management facilities proposed as part of site improvements. The Post-Development Watershed Delineation Map has been provided in Appendix G, as Figure 5.

The results of the computer modeling used to analyze the overall watershed under post-development conditions are presented in Appendix J. A summary of the post-development watershed runoff rates at each design point is presented in Table 9.

There are numerous locations and methods for providing controls of off-site discharge of stormwater from the project site. Each has been designed to provide the above quantity controls by attenuating stormwater runoff and releasing runoff to off-site locations at a rate equal to or less than that which existed prior to development of the site. Each device is detailed on the accompanying plans.

6.6.6 Performance Summary

A comparison of the pre- and post-development watershed conditions was performed for the design point and storm events evaluated herein. For the design point and design storms, this comparison demonstrates that the peak rate of runoff will not be increased. Therefore, the project will not have a significant adverse impact on the adjacent or downstream properties or receiving water courses.

The results of the computer modeling used to analyze the pre- and post-development watersheds are presented in Appendix I and Appendix J, respectively. The following Table summarizes the results of this analysis.

6.6.7 Downstream Analysis

The hydrologic evaluation and subsequent stormwater management design for this project evaluates the impact of site runoff on the peak flows of the Fishkill Creek. The design intent is to manage the peak rate of run-off during post-development conditions from the site in a manner that does not increase the peak flow rate or flood elevations of the Fishkill Creek. The point of interest for this project is where the Fishkill Creek crosses the eastern property line.

Information from the Flood Insurance Study (FIS) prepared for the Fishkill Creek was used to generate runoff hydrographs for the off-site, upstream watershed and the site watershed. The hydrographs were then reviewed to compare the timing of the off-site peak rate of runoff with the timing of the site watershed. A study location in the FIS was within or adjacent to the project site. Please see the FIS attached in Appendix L.

The FIS used various hydrologic analyses to establish the peak discharge frequency relationships for floods at locations along the creek. These methods included statistical analysis of stream gaging stations using several methods based on the available data, methods to regional frequency studies prepared by ACOE and methodologies developed by the Soil Conservation Service.

Subcatchment ES1 is made up of approximately 122,300-acres (+/-) of off-site and on-site drainage area, which encompasses the Fishkill Creek watershed northeast of the proposed site. This watershed drainage area generally consists of woods with light underbrush, meadows, residential, and impervious surfaces. Runoff from this subcatchment travels overland and is ultimately conveyed to the Fishkill Creek.

The computer model used to evaluate this project uses SCS methods TR-55 and TR-20 and generates hydrographs to compare the timing and flow rates from watersheds. Information from the FIS was incorporated into the model to provide a reasonable analysis of the site and upstream watershed runoff characteristics.

The results of the computer modeling used to analyze the pre- and post-development watersheds are presented in Appendix I and Appendix J, respectively. Table 5 summarizes the results of this analysis:

Table 9: Summary of Pre- and Post-Development Peak Discharge Rates

	Pre- vs. Post-Development Discharge Rate (cfs)					
Design Point (DP)	1-year 24-hour storm event		10-year 24-hour storm event		100-year 24-hour storm event	
	Pre	Post	Pre	Post	Pre	Post
1	1,349.72	1,349.72	6,047.51	6,047.51	12,834.86	12,834.86

As the table above shows, the proposed redevelopment project will not increase the post development peak discharge rates within the Fishkill Creek, during the 10-year or 100-year storm event by 5% or more (the threshold required to be demonstrated for a Downstream Analysis in accordance with NYSDEC Stormwater Manual Design Manual requirements for projects seeking exemption from quantity control). In fact, the table indicates that the proposed redevelopment project will not increase the post development peak discharge rates at all. The hydraulic modeling indicates this is a result of the peak discharge from upstream areas being at a delay as compared to onsite conditions. Additionally, based on the hydrologic study, it is not anticipated that downstream structures will be adversely impacted by the redevelopment.

7.0 INSPECTIONS, MAINTENANCE, AND REPORTING

7.1 Inspection and Maintenance Requirements

7.1.1 Pre-Construction Inspection and Certification

Prior to the commencement of construction, the Qualified Inspector/Qualified Professional shall conduct an assessment of the site and certify that the appropriate erosion and sediment control measures have been adequately installed and implemented. The Contractor shall contact the Qualified Inspector/Qualified Professional once the erosion and sediment control measures have been installed.

7.1.2 Construction Phase Inspections and Maintenance

A Qualified Inspector/Qualified Professional, as defined in Appendix A of the General Permit GP-0-20-001, shall conduct regular site inspections between the time this SWPPP is implemented and final site stabilization. Site inspections shall occur at an interval of at least once every seven (7) calendar days.

The purpose of site inspections is to assess performance of pollutant controls. Based on these inspections, the Qualified Inspector/Qualified Professional will decide whether it is necessary to modify this SWPPP, add or relocate sediment barriers, or whatever else may be needed in order to prevent pollutants from leaving the site via stormwater runoff. The general contractor has the duty to cause pollutant control measures to be repaired, modified, maintained, supplemented, or whatever else is necessary in order to achieve effective pollutant control.

Examples of particular items to evaluate during site inspections are listed below. This list is not intended to be comprehensive. During each inspection the inspector must evaluate overall pollutant control system performance as well as particular details of individual system components. Additional factors should be considered as appropriate to the circumstances.

1. Locations where vehicles enter and exit the site must be inspected for evidence of off-site sediment tracking. A stabilized construction entrance will be constructed where vehicles enter and exit. This entrance will be maintained or supplemented as necessary to prevent sediment from leaving the site on vehicles.
2. Sediment barriers must be inspected and, if necessary, they must be enlarged or cleaned in order to provide additional capacity. All material from behind sediment barriers will be stockpiled on the up slope side. Additional sediment barriers must be constructed as needed.
3. Inspections will evaluate disturbed areas and areas used for storing materials that are exposed to rainfall for evidence of, or the potential for, pollutants entering the drainage system. If necessary, the materials must be covered or original covers must be repaired or supplemented. Also, protective berms must be constructed, if needed, in order to contain runoff from material storage areas.
4. Grassed areas will be inspected to confirm that a healthy stand of grass is maintained. The site has achieved final stabilization once all areas are covered with building foundation or pavement, or have a stand of grass with at least 80 percent density. The density of 80 percent or greater must be maintained to be considered as stabilized. Areas must be watered, fertilized, and reseeded as needed to achieve this goal.
5. All discharge points must be inspected to determine whether erosion control measures are effective in preventing significant impacts to receiving waters.

The inspection reports must be completed entirely and additional remarks should be included if needed to fully describe a situation. An important aspect of the inspection report is the description of additional measures that need to be taken to enhance plan effectiveness. The inspection report must identify whether the site was in compliance with the SWPPP at the time of inspection and specifically identify all incidents of non-compliance.

Within one (1) business day of the completion of an inspection, the *Qualified Inspector/Qualified Professional* shall notify the Owner/Operator and appropriate contractor or subcontractor of any corrective actions that need to be taken. The contractor or subcontractor shall begin implementing the corrective actions within one (1) business day of the notification and shall complete the corrective actions in a reasonable time frame.

In addition to the inspections performed by the *Qualified Inspector/Qualified Professional*, the Contractor shall perform routine inspections that include a visual check of all erosion and sediment control measures. All inspections and maintenance shall be performed in accordance with the inspection and maintenance schedule provided on the accompanying plans. Sediment removed from erosion and sediment control measures will be exported from the site, stockpiled for later use, or used immediately for general non-structural fill.

It is the responsibility of the general contractor to assure the adequacy of site pollutant discharge controls. Actual physical site conditions or contractor practices could make it necessary to install more structural controls than are shown on the accompanying plans. (For example, localized concentrations of runoff could make it necessary to install additional sediment barriers, sediment traps, etc.) Assessing the need for additional controls and implementing them or adjusting existing controls will be a continuing aspect of this SWPPP until the site achieves final stabilization.

7.1.3 Temporary Suspension of Construction Activities

For construction sites where soil disturbance activities have been temporarily suspended (e.g. Winter shutdown) and temporary stabilization measures have been applied to all disturbed areas, the frequency of Qualified Inspector/Qualified Professional inspections can be reduced to once every 30 calendar days. Prior to reducing the frequency of inspections, the Owner/Operator shall notify the NYSDEC Region 3 stormwater contact person and the City of Beacon in writing.

7.1.4 Partial Project Completion

For construction sites where soil disturbance activities have been shut down with partial project completion, all areas disturbed as of the project shutdown date have achieved final stabilization, and all post-construction stormwater management practices required for the completed portion of the project have been constructed in conformance with the SWPPP and are operational, the inspections by the Qualified Inspector/Qualified Professional can stop. Prior to the shutdown, the Owner/Operator shall notify the NYSDEC Region 3 stormwater contact person and the City of Beacon in writing.

If soil disturbance activities have not resumed within two years from the date of shutdown, a Notice of Termination (NOT) shall be properly completed and submitted to the NYSDEC.

7.1.5 Post-Construction Inspections and Maintenance

Inspections and maintenance of final stabilization measures and post-construction stormwater management practices shall be performed in accordance with Appendix F, once all disturbed areas are stabilized and all stormwater management systems are in place and operable.

7.2 Reporting Requirements

7.2.1 Inspection and Maintenance Reports

Inspection/maintenance reports shall be prepared prior to and during construction in accordance with the schedule outlined herein and in the SPDES General Permit GP-0-20-001 Part IV.C. The reports shall be prepared to identify and document the maintenance of the erosion and sediment control measures. A sample inspection form is provided in Appendix D.

Specifically, each inspection shall record the following information:

1. Date and time of inspection.

2. Name and title of person(s) performing inspection.

3. A description of the weather and soil conditions (e.g. dry, wet, saturated) at the time of the inspection.

4. A description of the condition of the runoff at all points of discharge from the construction site. This shall include identification of any discharges of sediment from the construction site. Include discharges from conveyance systems (i.e. pipes, culverts, ditches, etc.) and overland flow.

5. A description of the condition of all natural surface waterbodies located within, or immediately adjacent to, the property boundaries of the construction site which receive runoff from disturbed areas. This shall include identification of any discharges of sediment to the surface water body.

6. Identification of all erosion and sediment control practices and pollution prevention measures that need repair or maintenance.

7. Identification of all erosion and sediment control practices and pollution prevention measures that were not installed properly or are not functioning as designed and need to be reinstalled or replaced.

8. Description and sketch of areas with active soil disturbance activity, areas that have been disturbed but are inactive at the time of the inspection, and areas that have been stabilized (temporary and/or final) since the last inspection.

9. Indication of the current phase of construction of all post-construction stormwater management practices and identification of all construction that is not in conformance with the SWPPP and technical standards.

10. Corrective action(s) that must be taken to install, repair, replace or maintain erosion and sediment control practices and pollution prevention measures; and to correct deficiencies identified with the construction of the post-construction stormwater management practice(s).

11. Identification and status of all corrective actions that were required by previous inspection.

12. Color photographs, with date stamp, that clearly show the condition of all practices that have been identified as needing corrective actions. The *Qualified Inspector/Qualified Professional* shall attach paper color copies of the digital photographs to the inspection report being maintained onsite within seven (7) calendar days of the date of the inspection. The *Qualified Inspector/Qualified Professional* shall also take digital photographs, with date stamp, that

clearly show the condition of the practice(s) after the corrective action has been completed. The *Qualified Inspector/Qualified Professional* shall attach the paper color copies of the digital photographs to the inspection report that documents the completion of the corrective action work within seven (7) calendar days of that inspection.

All inspection reports shall be signed by the *Qualified Inspector/Qualified Professional*. Pursuant to Part II.C.2 of GP-0-20-001, the inspection reports shall be maintained on site with the SWPPP.

7.2.2 Site Log Book

The Owner/Operator shall retain a copy of the SWPPP required by GP-0-20-001 at the construction site from the date of initiation of construction activities to the date of final stabilization.

During construction, the Owner's/Operator's Engineer shall maintain a record of all SWPPP inspection reports at the site in the Site Log Book. The Site Log Book shall be maintained on-site and made available to the permitting authority, if necessary.

7.2.3 Post Construction Records and Archiving

Following construction, the Owner/Operator shall retain copies of the SWPPP, the complete construction Site Log Book, and records of all data used to complete the NOI to be covered by this permit, for a period of at least five years from the date that the site is finally stabilized. This period may be extended by the NYSDEC, at its sole discretion, at any time upon written notification.

Records shall be maintained of all post construction inspections and maintenance work performed in accordance with the requirements outlined in Appendix F.

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Appendix A:
NYSDEC SPDES General Permit GP-0-20-001

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NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SPDES GENERAL PERMIT
FOR STORMWATER DISCHARGES

From

CONSTRUCTION ACTIVITY

Permit No. GP- 0-20-001

Issued Pursuant to Article 17, Titles 7, 8 and Article 70

of the Environmental Conservation Law

Effective Date: January 29, 2020 Expiration Date: January 28, 2025

John J. Ferguson

Chief Permit Administrator

1-23-20

Authorized Signature Date

Address: NYS DEC
Division of Environmental Permits
625 Broadway, 4th Floor
Albany, N.Y. 12233-1750

PREFACE

Pursuant to Section 402 of the Clean Water Act ("CWA"), stormwater *discharges* from certain *construction activities* are unlawful unless they are authorized by a *National Pollutant Discharge Elimination System ("NPDES")* permit or by a state permit program. New York administers the approved State Pollutant Discharge Elimination System (SPDES) program with permits issued in accordance with the New York State Environmental Conservation Law (ECL) Article 17, Titles 7, 8 and Article 70.

An *owner or operator* of a *construction activity* that is eligible for coverage under this permit must obtain coverage prior to the *commencement of construction activity*. Activities that fit the definition of "*construction activity*", as defined under 40 CFR 122.26(b)(14)(x), (15)(i), and (15)(ii), constitute construction of a *point source* and therefore, pursuant to ECL section 17-0505 and 17-0701, the *owner or operator* must have coverage under a SPDES permit prior to *commencing construction activity*. The *owner or operator* cannot wait until there is an actual *discharge* from the *construction site* to obtain permit coverage.

***Note: The italicized words/phrases within this permit are defined in Appendix A.**

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SPDES GENERAL PERMIT FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES

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Part 1. PERMIT COVERAGE AND LIMITATIONS

A. Permit Application

This permit authorizes stormwater *discharges* to *surface waters of the State* from the following *construction activities* identified within 40 CFR Parts 122.26(b)(14)(x), 122.26(b)(15)(i) and 122.26(b)(15)(ii), provided all of the eligibility provisions of this permit are met:

1. *Construction activities* involving soil disturbances of one (1) or more acres; including disturbances of less than one acre that are part of a *larger common plan of development or sale* that will ultimately disturb one or more acres of land; excluding *routine maintenance activity* that is performed to maintain the original line and grade, hydraulic capacity or original purpose of a facility;

2. *Construction activities* involving soil disturbances of less than one (1) acre where the Department has determined that a *SPDES* permit is required for stormwater *discharges* based on the potential for contribution to a violation of a *water quality standard* or for significant contribution of *pollutants* to *surface waters of the State.*

3. *Construction activities* located in the watershed(s) identified in Appendix D that involve soil disturbances between five thousand (5,000) square feet and one (1) acre of land.

B. Effluent Limitations Applicable to Discharges from Construction Activities

*Discharge*s authorized by this permit must achieve, at a minimum, the effluent limitations in Part I.B.1. (a) – (f) of this permit. These limitations represent the degree of effluent reduction attainable by the application of best practicable technology currently available.

1. Erosion and Sediment Control Requirements - The *owner or operator* must select, design, install, implement and maintain control measures to *minimize* the *discharge* of *pollutants* and prevent a violation of the *water quality standards*. The selection, design, installation, implementation, and maintenance of these control measures must meet the non-numeric effluent limitations in Part I.B.1.(a) – (f) of this permit and be in accordance with the New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016, using sound engineering judgment. Where control measures are not designed in conformance with the design criteria included in the technical standard, the *owner or operator* must include in the *Stormwater Pollution Prevention Plan* (“SWPPP”) the reason(s) for the

deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the technical standard.

a. **Erosion and Sediment Controls.** Design, install and maintain effective erosion and sediment controls to *minimize* the *discharge* of *pollutants* and prevent a violation of the *water quality standards*. At a minimum, such controls must be designed, installed and maintained to:

   (i) *Minimize* soil erosion through application of runoff control and soil stabilization control measure to *minimize pollutant discharge*s;

   (ii) Control stormwater *discharge*s, including both peak flowrates and total stormwater volume, to *minimize* channel and *streambank* erosion and scour in the immediate vicinity of the *discharge* points;

   (iii) *Minimize* the amount of soil exposed during *construction activity*;

   (iv) *Minimize* the disturbance of *steep slopes*;

   (v) *Minimize* sediment *discharge*s from the site;

   (vi) Provide and maintain *natural buffer*s around surface waters, direct stormwater to vegetated areas and maximize stormwater infiltration to reduce *pollutant discharge*s, unless *infeasible*;

   (vii) *Minimize* soil compaction. Minimizing soil compaction is not required where the intended function of a specific area of the site dictates that it be compacted;

   (viii) Unless *infeasible*, preserve a sufficient amount of topsoil to complete soil restoration and establish a uniform, dense vegetative cover; and

   (ix) *Minimize* dust. On areas of exposed soil, *minimize* dust through the appropriate application of water or other dust suppression techniques to control the generation of pollutants that could be discharged from the site.

b. **Soil Stabilization**. In areas where soil disturbance activity has temporarily or permanently ceased, the application of soil stabilization measures must be initiated by the end of the next business day and completed within fourteen (14) days from the date the current soil disturbance activity ceased. For construction sites that *directly discharge* to one of the 303(d) segments

listed in Appendix E or is located in one of the watersheds listed in Appendix C, the application of soil stabilization measures must be initiated by the end of the next business day and completed within seven (7) days from the date the current soil disturbance activity ceased. See Appendix A for definition of *Temporarily Ceased*.

c. **Dewatering**. *Discharge*s from *dewatering* activities, including *discharge*s from *dewatering* of trenches and excavations, must be managed by appropriate control measures.

d. **Pollution Prevention Measures**. Design, install, implement, and maintain effective pollution prevention measures to *minimize* the *discharge* of *pollutants* and prevent a violation of the *water quality standards*. At a minimum, such measures must be designed, installed, implemented and maintained to:

(i) *Minimize* the *discharge* of *pollutants* from equipment and vehicle washing, wheel wash water, and other wash waters. This applies to washing operations that use clean water only. Soaps, detergents and solvents cannot be used;

(ii) *Minimize* the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, hazardous and toxic waste, and other materials present on the site to precipitation and to stormwater. Minimization of exposure is not required in cases where the exposure to precipitation and to stormwater will not result in a *discharge* of *pollutants*, or where exposure of a specific material or product poses little risk of stormwater contamination (such as final products and materials intended for outdoor use) ; and

(iii) Prevent the *discharge* of *pollutants* from spills and leaks and implement chemical spill and leak prevention and response procedures.

e. **Prohibited *Discharge*s.** The following *discharge*s are prohibited:

(i) Wastewater from washout of concrete;

(ii) Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;

(iii) Fuels, oils, or other *pollutants* used in vehicle and equipment operation and maintenance;

(iv) Soaps or solvents used in vehicle and equipment washing; and

(v) Toxic or hazardous substances from a spill or other release.

f. Surface Outlets. When discharging from basins and impoundments, the outlets shall be designed, constructed and maintained in such a manner that sediment does not leave the basin or impoundment and that erosion at or below the outlet does not occur.

C. Post-construction Stormwater Management Practice Requirements

1. The *owner or operator* of a *construction activity* that requires post-construction stormwater management practices pursuant to Part III.C. of this permit must select, design, install, and maintain the practices to meet the *performance criteria* in the New York State Stormwater Management Design Manual ("Design Manual"), dated January 2015, using sound engineering judgment. Where post-construction stormwater management practices ("SMPs") are not designed in conformance with the *performance criteria* in the Design Manual, the *owner or operator* must include in the SWPPP the reason(s) for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the technical standard.

2. The *owner or operator* of a *construction activity* that requires post-construction stormwater management practices pursuant to Part III.C. of this permit must design the practices to meet the applicable *sizing criteria* in Part I.C.2.a., b., c. or d. of this permit.

a. Sizing Criteria for New Development

(i) Runoff Reduction Volume ("RRv"): Reduce the total Water Quality Volume ("WQv") by application of RR techniques and standard SMPs with RRv capacity. The total WQv shall be calculated in accordance with the criteria in Section 4.2 of the Design Manual.

(ii) Minimum RRv and Treatment of Remaining Total WQv: Construction activities that cannot meet the criteria in Part I.C.2.a.(i) of this permit due to site limitations shall direct runoff from all newly constructed impervious areas to a RR technique or standard SMP with RRv capacity unless infeasible. The specific site limitations that prevent the reduction of 100% of the WQv shall be documented in the SWPPP.

For each impervious area that is not directed to a RR technique or standard SMP with RRv capacity, the SWPPP must include documentation which demonstrates that all options were considered and for each option explains why it is considered infeasible.

In no case shall the runoff reduction achieved from the newly constructed impervious areas be less than the Minimum RRv as calculated using the criteria in Section 4.3 of the Design Manual. The remaining portion of the total WQv that cannot be reduced shall be treated by application of standard SMPs.

(iii) Channel Protection Volume ("Cpv"): Provide 24 hour extended detention of the post-developed 1-year, 24-hour storm event; remaining after runoff reduction. The Cpv requirement does not apply when:
(1) Reduction of the entire Cpv is achieved by application of runoff reduction techniques or infiltration systems, or
(2) The site discharges directly to tidal waters, or fifth order or larger streams.

(iv) *Overbank* Flood Control Criteria ("Qp"): Requires storage to attenuate the post-development 10-year, 24-hour peak discharge rate (Qp) to predevelopment rates. The Qp requirement does not apply when:
(1) the site discharges directly to tidal waters or fifth order or larger streams, or
(2) A downstream analysis reveals that *overbank* control is not required.

(v) Extreme Flood Control Criteria ("Qf"): Requires storage to attenuate the post-development 100-year, 24-hour peak discharge rate (Qf) to predevelopment rates. The Qf requirement does not apply when:
(1) the site discharges directly to tidal waters or fifth order or larger streams, or
(2) A downstream analysis reveals that *overbank* control is not required.

b. *Sizing Criteria* for *New Development* in Enhanced Phosphorus Removal Watershed

(i) Runoff Reduction Volume (RRv): Reduce the total Water Quality Volume (WQv) by application of RR techniques and standard SMPs with RRv capacity. The total WQv is the runoff volume from the 1-year, 24 hour design storm over the post-developed watershed and shall be

calculated in accordance with the criteria in Section 10.3 of the Design Manual.

(ii) Minimum RRv and Treatment of Remaining Total WQv: *Construction activities* that cannot meet the criteria in Part I.C.2.b.(i) of this permit due to *site limitations* shall direct runoff from all newly constructed *impervious areas* to a RR technique or standard SMP with RRv capacity unless *infeasible*. The specific *site limitations* that prevent the reduction of 100% of the WQv shall be documented in the SWPPP. For each *impervious area* that is not directed to a RR technique or standard SMP with RRv capacity, the SWPPP must include documentation which demonstrates that all options were considered and for each option explains why it is considered *infeasible.*

In no case shall the runoff reduction achieved from the newly constructed *impervious areas* be less than the Minimum RRv as calculated using the criteria in Section 10.3 of the Design Manual. The remaining portion of the total WQv that cannot be reduced shall be treated by application of standard SMPs.

(iii) Channel Protection Volume (Cpv): Provide 24 hour extended detention of the post-developed 1-year, 24-hour storm event; remaining after runoff reduction. The Cpv requirement does not apply when:
(1) Reduction of the entire Cpv is achieved by application of runoff reduction techniques or infiltration systems, or
(2) The site *discharge*s directly to tidal waters, or fifth order or larger streams.

(iv) *Overbank* Flood Control Criteria (Qp): Requires storage to attenuate the post-development 10-year, 24-hour peak *discharge* rate (Qp) to predevelopment rates. The Qp requirement does not apply when:
(1) the site *discharge*s directly to tidal waters or fifth order or larger streams, or
(2) A downstream analysis reveals that *overbank* control is not required.

(v) Extreme Flood Control Criteria (Qf): Requires storage to attenuate the post-development 100-year, 24-hour peak *discharge* rate (Qf) to predevelopment rates. The Qf requirement does not apply when:
(1) the site *discharge*s directly to tidal waters or fifth order or larger streams, or
(2) A downstream analysis reveals that *overbank* control is not required.

c. Sizing Criteria for Redevelopment Activity

(i) Water Quality Volume (WQv): The WQv treatment objective for *redevelopment activity* shall be addressed by one of the following options. *Redevelopment activities* located in an Enhanced Phosphorus Removal Watershed (see Part III.B.3. and Appendix C of this permit) shall calculate the WQv in accordance with Section 10.3 of the Design Manual. All other *redevelopment activities* shall calculate the WQv in accordance with Section 4.2 of the Design Manual.

(1) Reduce the existing *impervious cover* by a minimum of 25% of the total disturbed, *impervious area*. The Soil Restoration criteria in Section 5.1.6 of the Design Manual must be applied to all newly created pervious areas, or

(2) Capture and treat a minimum of 25% of the WQv from the disturbed, *impervious area* by the application of standard SMPs; or reduce 25% of the WQv from the disturbed, *impervious area* by the application of RR techniques or standard SMPs with RRv capacity., or

(3) Capture and treat a minimum of 75% of the WQv from the disturbed, *impervious area* as well as any additional runoff from tributary areas by application of the alternative practices discussed in Sections 9.3 and 9.4 of the Design Manual., or

(4) Application of a combination of 1, 2 and 3 above that provide a weighted average of at least two of the above methods. Application of this method shall be in accordance with the criteria in Section 9.2.1(B) (IV) of the Design Manual.

If there is an existing post-construction stormwater management practice located on the site that captures and treats runoff from the *impervious area* that is being disturbed, the WQv treatment option selected must, at a minimum, provide treatment equal to the treatment that was being provided by the existing practice(s) if that treatment is greater than the treatment required by options 1 – 4 above.

(ii) Channel Protection Volume (Cpv): Not required if there are no changes to hydrology that increase the *discharge* rate from the project site.

(iii) *Overbank* Flood Control Criteria (Qp): Not required if there are no changes to hydrology that increase the *discharge* rate from the project site.

(iv) Extreme Flood Control Criteria (Qf): Not required if there are no changes to hydrology that increase the *discharge* rate from the project site

d. Sizing Criteria for Combination of Redevelopment Activity and New Development

Construction projects that include both New Development and Redevelopment Activity shall provide post-construction stormwater management controls that meet the sizing criteria calculated as an aggregate of the Sizing Criteria in Part I.C.2.a. or b. of this permit for the New Development portion of the project and Part I.C.2.c of this permit for Redevelopment Activity portion of the project.

D. Maintaining Water Quality

The Department expects that compliance with the conditions of this permit will control *discharge*s necessary to meet applicable *water quality standards*. It shall be a violation of the *ECL* for any discharge to either cause or contribute to a violation of *water quality standards* as contained in Parts 700 through 705 of Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York, such as:

1. There shall be no increase in turbidity that will cause a substantial visible contrast to natural conditions;

2. There shall be no increase in suspended, colloidal or settleable solids that will cause deposition or impair the waters for their best usages; and

3. There shall be no residue from oil and floating substances, nor visible oil film, nor globules of grease.

If there is evidence indicating that the stormwater *discharge*s authorized by this permit are causing, have the reasonable potential to cause, or are contributing to a violation of the *water quality standards*; the *owner or operator* must take appropriate corrective action in accordance with Part IV.C.5. of this general permit and document in accordance with Part IV.C.4. of this general permit. To address the *water quality standard* violation the *owner or operator* may need to provide additional information, include and implement appropriate controls in the SWPPP to correct the problem, or obtain an individual SPDES permit.

If there is evidence indicating that despite compliance with the terms and conditions of this general permit it is demonstrated that the stormwater *discharge*s authorized by this permit are causing or contributing to a violation of *water quality standards*, or if the Department determines that a modification of the permit is necessary to prevent a violation of *water quality standards*, the authorized *discharge*s will no longer be eligible for coverage under this permit. The Department may require the *owner or operator* to obtain an individual SPDES permit to continue discharging.

E. Eligibility Under This General Permit

1. This permit may authorize all *discharges* of stormwater from *construction activity* to *surface waters of the State* and *groundwaters* except for ineligible *discharges* identified under subparagraph F. of this Part.

2. Except for non-stormwater *discharges* explicitly listed in the next paragraph, this permit only authorizes stormwater *discharge*s; including stormwater runoff, snowmelt runoff, and surface runoff and drainage, from *construction activities*.

3. Notwithstanding paragraphs E.1 and E.2 above, the following non-stormwater discharges are authorized by this permit: those listed in 6 NYCRR 750-1.2(a)(29)(vi), with the following exception: "Discharges from firefighting activities are authorized only when the firefighting activities are emergencies/unplanned"; waters to which other components have not been added that are used to control dust in accordance with the SWPPP; and uncontaminated *discharge*s from *construction site* de-watering operations. All non-stormwater discharges must be identified in the SWPPP. Under all circumstances, the *owner or operator* must still comply with *water quality standards* in Part I.D of this permit.

4. The *owner or operator* must maintain permit eligibility to *discharge* under this permit. Any *discharges* that are not compliant with the eligibility conditions of this permit are not authorized by the permit and the *owner or operator* must either apply for a separate permit to cover those ineligible *discharges* or take steps necessary to make the *discharge* eligible for coverage.

F. Activities Which Are Ineligible for Coverage Under This General Permit

All of the following are **not** authorized by this permit:

1. *Discharge*s after *construction activities* have been completed and the site has undergone *final stabilization*;

2. *Discharge*s that are mixed with sources of non-stormwater other than those expressly authorized under subsection E.3. of this Part and identified in the SWPPP required by this permit;

3. *Discharges* that are required to obtain an individual SPDES permit or another SPDES general permit pursuant to Part VII.K. of this permit;

4. *Construction activities* or *discharges* from *construction activities* that may adversely affect an *endangered or threatened species* unless the *owner or*

operator has obtained a permit issued pursuant to 6 NYCRR Part 182 for the project or the Department has issued a letter of non-jurisdiction for the project. All documentation necessary to demonstrate eligibility shall be maintained on site in accordance with Part II.D.2 of this permit;

5. *Discharges* which either cause or contribute to a violation of *water quality standards* adopted pursuant to the *ECL* and its accompanying regulations;

6. *Construction activities* for residential, commercial and institutional projects:

   a. Where the *discharge*s from the *construction activities* are tributary to waters of the state classified as AA or AA-s; and

   b. Which are undertaken on land with no existing *impervious cover*; and

   c. Which disturb one (1) or more acres of land designated on the current United States Department of Agriculture ("USDA") Soil Survey as Soil Slope Phase "D", (provided the map unit name is inclusive of slopes greater than 25%), or Soil Slope Phase "E" or "F" (regardless of the map unit name), or a combination of the three designations.

7. *Construction activities* for linear transportation projects and linear utility projects:

   a. Where the *discharge*s from the *construction activities* are tributary to waters of the state classified as AA or AA-s; and

   b. Which are undertaken on land with no existing *impervious cover*; and

   c. Which disturb two (2) or more acres of land designated on the current USDA Soil Survey as Soil Slope Phase "D" (provided the map unit name is inclusive of slopes greater than 25%), or Soil Slope Phase "E" or "F" (regardless of the map unit name), or a combination of the three designations.

8. *Construction activities* that have the potential to affect an *historic property*, unless there is documentation that such impacts have been resolved. The following documentation necessary to demonstrate eligibility with this requirement shall be maintained on site in accordance with Part II.D.2 of this permit and made available to the Department in accordance with Part VII.F of this permit:

   a. Documentation that the *construction activity* is not within an archeologically sensitive area indicated on the sensitivity map, and that the *construction activity* is not located on or immediately adjacent to a property listed or determined to be eligible for listing on the National or State Registers of Historic Places, and that there is no new permanent building on the *construction site* within the following distances from a building, structure, or object that is more than 50 years old, or if there is such a new permanent building on the *construction site* within those parameters that NYS Office of Parks, Recreation and Historic Preservation (OPRHP), a Historic Preservation Commission of a Certified Local Government, or a qualified preservation professional has determined that the building, structure, or object more than 50 years old is not historically/archeologically significant.

      - 1-5 acres of disturbance - 20 feet
      - 5-20 acres of disturbance - 50 feet
      - 20+ acres of disturbance - 100 feet, or

   b. DEC consultation form sent to OPRHP, and copied to the NYS DEC Agency Historic Preservation Officer (APO), and
      (i) the State Environmental Quality Review (SEQR) Environmental Assessment Form (EAF) with a negative declaration or the Findings Statement, with documentation of OPRHP's agreement with the resolution; or
      (ii) documentation from OPRHP that the *construction activity* will result in No Impact; or
      (iii) documentation from OPRHP providing a determination of No Adverse Impact; or
      (iv) a Letter of Resolution signed by the owner/operator, OPRHP and the DEC APO which allows for this *construction activity* to be eligible for coverage under the general permit in terms of the State Historic Preservation Act (SHPA); or

   c. Documentation of satisfactory compliance with Section 106 of the National Historic Preservation Act for a coterminous project area:

      (i) No Affect
      (ii) No Adverse Affect
      (iii) Executed Memorandum of Agreement, or

   d. Documentation that:

      (i) SHPA Section 14.09 has been completed by NYS DEC or another state agency.

9. *Discharges* from *construction activities* that are subject to an existing SPDES individual or general permit where a SPDES permit for *construction activity* has been terminated or denied; or where the *owner or operator* has failed to renew an expired individual permit.

Part II. PERMIT COVERAGE

A. How to Obtain Coverage

1. An *owner or operator* of a *construction activity* that is not subject to the requirements of a regulated, traditional land use control MS4 must first prepare a SWPPP in accordance with all applicable requirements of this permit and then submit a completed Notice of Intent (NOI) to the Department to be authorized to discharge under this permit.

2. An *owner or operator* of a *construction activity* that is subject to the requirements of a *regulated, traditional land use control MS4* must first prepare a SWPPP in accordance with all applicable requirements of this permit and then have the SWPPP reviewed and accepted by the *regulated, traditional land use control MS4* prior to submitting the NOI to the Department. The *owner or operator* shall have the "MS4 SWPPP Acceptance" form signed in accordance with Part VII.H., and then submit that form along with a completed NOI to the Department.

3. The requirement for an *owner or operator* to have its SWPPP reviewed and accepted by the *regulated, traditional land use control MS4* prior to submitting the NOI to the Department does not apply to an *owner or operator* that is obtaining permit coverage in accordance with the requirements in Part II.F. (Change of *Owner or Operator*) or where the *owner or operator* of the *construction activity* is the *regulated, traditional land use control MS4* . This exemption does not apply to *construction activities* subject to the New York City Administrative Code.

B. Notice of Intent (NOI) Submittal

1. Prior to December 21, 2020, an owner or operator shall use either the electronic (eNOI) or paper version of the NOI that the Department prepared. Both versions of the NOI are located on the Department's website (http://www.dec.ny.gov/). The paper version of the NOI shall be signed in accordance with Part VII.H. of this permit and submitted to the following address:

   NOTICE OF INTENT
   NYS DEC, Bureau of Water Permits
   625 Broadway, 4th Floor
   Albany, New York 12233-3505

2. Beginning December 21, 2020 and in accordance with EPA's 2015 NPDES Electronic Reporting Rule (40 CFR Part 127), the *owner or operator* must submit the NOI electronically using the *Department's* online NOI.

3. The *owner or operator* shall have the SWPPP preparer sign the "SWPPP Preparer Certification" statement on the NOI prior to submitting the form to the Department.

4. As of the date the NOI is submitted to the Department, the *owner or operator* shall make the NOI and SWPPP available for review and copying in accordance with the requirements in Part VII.F. of this permit.

C. Permit Authorization

1. An *owner or operator* shall not *commence construction activity* until their authorization to *discharge* under this permit goes into effect.

2. Authorization to *discharge* under this permit will be effective when the *owner or operator* has satisfied <u>all</u> of the following criteria:

   a. project review pursuant to the State Environmental Quality Review Act ("SEQRA") have been satisfied, when SEQRA is applicable. See the Department's website (http://www.dec.ny.gov/) for more information,

   b. where required, all necessary Department permits subject to the *Uniform Procedures Act ("UPA")* (see 6 NYCRR Part 621), or the equivalent from another New York State agency, have been obtained, unless otherwise notified by the Department pursuant to 6 NYCRR 621.3(a)(4). *Owners or operators* of *construction activities* that are required to obtain *UPA* permits

must submit a preliminary SWPPP to the appropriate DEC Permit Administrator at the Regional Office listed in Appendix F at the time all other necessary *UPA* permit applications are submitted. The preliminary SWPPP must include sufficient information to demonstrate that the *construction activity* qualifies for authorization under this permit,

   c. the final SWPPP has been prepared, and

   d. a complete NOI has been submitted to the Department in accordance with the requirements of this permit.

3. An *owner or operator* that has satisfied the requirements of Part II.C.2 above will be authorized to *discharge* stormwater from their *construction activity* in accordance with the following schedule:

   a. For *construction activities* that are <u>not</u> subject to the requirements of a *regulated, traditional land use control MS4*:

      (i) Five (5) business days from the date the Department receives a complete electronic version of the NOI (eNOI) for *construction activities* with a SWPPP that has been prepared in conformance with the design criteria in the technical standard referenced in Part III.B.1 and the *performance criteria* in the technical standard referenced in Parts III.B., 2 or 3, for *construction activities* that require post-construction stormwater management practices pursuant to Part III.C.; or

      (ii) Sixty (60) business days from the date the Department receives a complete NOI (electronic or paper version) for *construction activities* with a SWPPP that has <u>not</u> been prepared in conformance with the design criteria in technical standard referenced in Part III.B.1. or, for *construction activities* that require post-construction stormwater management practices pursuant to Part III.C., the *performance criteria* in the technical standard referenced in Parts III.B., 2 or 3, or;

      (iii) Ten (10) business days from the date the Department receives a complete paper version of the NOI for *construction activities* with a SWPPP that has been prepared in conformance with the design criteria in the technical standard referenced in Part III.B.1 and the *performance criteria* in the technical standard referenced in Parts III.B., 2 or 3, for *construction activities* that require post-construction stormwater management practices pursuant to Part III.C.

b. For *construction activities* that are subject to the requirements of a *regulated, traditional land use control MS4*:

(i) Five (5) business days from the date the Department receives both a complete electronic version of the NOI (eNOI) and signed "*MS4* SWPPP Acceptance" form, or

(ii) Ten (10) business days from the date the Department receives both a complete paper version of the NOI and signed "MS4 SWPPP Acceptance" form.

4. Coverage under this permit authorizes stormwater *discharges* from only those areas of disturbance that are identified in the NOI. If an *owner or operator* wishes to have stormwater *discharges* from future or additional areas of disturbance authorized, they must submit a new NOI that addresses that phase of the development, unless otherwise notified by the Department. The *owner or operator* shall not *commence construction activity* on the future or additional areas until their authorization to *discharge* under this permit goes into effect in accordance with Part II.C. of this permit.

D. General Requirements For Owners or Operators With Permit Coverage

1. The *owner or operator* shall ensure that the provisions of the SWPPP are implemented from the *commencement of construction activity* until all areas of disturbance have achieved *final stabilization* and the Notice of Termination ("NOT") has been submitted to the Department in accordance with Part V. of this permit. This includes any changes made to the SWPPP pursuant to Part III.A.4. of this permit.

2. The *owner or operator* shall maintain a copy of the General Permit (GP-0-20-001), NOI, *NOI Acknowledgment Letter*, SWPPP, MS4 SWPPP Acceptance form, inspection reports, responsible contractor's or subcontractor's certification statement (see Part III.A.6.), and all documentation necessary to demonstrate eligibility with this permit at the *construction site* until all disturbed areas have achieved *final stabilization* and the NOT has been submitted to the Department. The documents must be maintained in a secure location, such as a job trailer, on-site construction office, or mailbox with lock. The secure location must be accessible during normal business hours to an individual performing a compliance inspection.

3. The *owner or operator* of a *construction activity* shall not disturb greater than five (5) acres of soil at any one time without prior written authorization from the Department or, in areas under the jurisdiction of a *regulated, traditional land*

use control MS4, the *regulated, traditional land use control MS4* (provided the *regulated, traditional land use control MS4* is not the *owner or operator* of the *construction activity*). At a minimum, the *owner or operator* must comply with the following requirements in order to be authorized to disturb greater than five (5) acres of soil at any one time:

a. The *owner or operator* shall have a *qualified inspector* conduct **at least** two (2) site inspections in accordance with Part IV.C. of this permit every seven (7) calendar days, for as long as greater than five (5) acres of soil remain disturbed. The two (2) inspections shall be separated by a minimum of two (2) full calendar days.

b. In areas where soil disturbance activity has temporarily or permanently ceased, the application of soil stabilization measures must be initiated by the end of the next business day and completed within seven (7) days from the date the current soil disturbance activity ceased. The soil stabilization measures selected shall be in conformance with the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016.

c. The *owner or operator* shall prepare a phasing plan that defines maximum disturbed area per phase and shows required cuts and fills.

d. The *owner or operator* shall install any additional site-specific practices needed to protect water quality.

e. The *owner or operator* shall include the requirements above in their SWPPP.

4. In accordance with statute, regulations, and the terms and conditions of this permit, the Department may suspend or revoke an *owner's or operator's* coverage under this permit at any time if the Department determines that the SWPPP does not meet the permit requirements or consistent with Part VII.K..

5. Upon a finding of significant non-compliance with the practices described in the SWPPP or violation of this permit, the Department may order an immediate stop to all activity at the site until the non-compliance is remedied. The stop work order shall be in writing, describe the non-compliance in detail, and be sent to the *owner or operator*.

6. For *construction activities* that are subject to the requirements of a *regulated, traditional land use control MS4*, the *owner or operator* shall notify the

regulated, traditional land use control MS4 in writing of any planned amendments or modifications to the post-construction stormwater management practice component of the SWPPP required by Part III.A. 4. and 5. of this permit. Unless otherwise notified by the *regulated, traditional land use control MS4*, the *owner or operator* shall have the SWPPP amendments or modifications reviewed and accepted by the *regulated, traditional land use control MS4* prior to commencing construction of the post-construction stormwater management practice.

E. Permit Coverage for Discharges Authorized Under GP-0-15-002

1. Upon renewal of SPDES General Permit for Stormwater Discharges from *Construction Activity* (Permit No. GP-0-15-002), an *owner or operator* of *a construction activity* with coverage under GP-0-15-002, as of the effective date of GP- 0-20-001, shall be authorized to *discharge* in accordance with GP- 0-20-001, unless otherwise notified by the Department.

   An *owner or operator* may continue to implement the technical/design components of the post-construction stormwater management controls provided that such design was done in conformance with the technical standards in place at the time of initial project authorization. However, they must comply with the other, non-design provisions of GP-0-20-001.

F. Change of Owner or Operator

1. When property ownership changes or when there is a change in operational control over the construction plans and specifications, the original *owner or operator* must notify the new *owner or operator*, in writing, of the requirement to obtain permit coverage by submitting a NOI with the Department. For *construction activities* subject to the requirements of a *regulated, traditional land use control MS4,* the original *owner or operator* must also notify the MS4, in writing, of the change in ownership at least 30 calendar days prior to the change in ownership.

2. Once the new *owner or operator* obtains permit coverage, the original *owner or operator* shall then submit a completed NOT with the name and permit identification number of the new *owner or operator* to the Department at the address in Part II.B.1. of this permit. If the original *owner or operator* maintains ownership of a portion of the *construction activity* and will disturb soil, they must maintain their coverage under the permit.

3. Permit coverage for the new *owner or operator* will be effective as of the date the Department receives a complete NOI, provided the original *owner or*

operator was not subject to a sixty (60) business day authorization period that has not expired as of the date the Department receives the NOI from the new *owner or operator*.

Part III. STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

A. General SWPPP Requirements

1. A SWPPP shall be prepared and implemented by the *owner or operator* of each *construction activity* covered by this permit. The SWPPP must document the selection, design, installation, implementation and maintenance of the control measures and practices that will be used to meet the effluent limitations in Part I.B. of this permit and where applicable, the post-construction stormwater management practice requirements in Part I.C. of this permit. The SWPPP shall be prepared prior to the submittal of the NOI. The NOI shall be submitted to the Department prior to the *commencement of construction activity*. A copy of the completed, final NOI shall be included in the SWPPP.

2. The SWPPP shall describe the erosion and sediment control practices and where required, post-construction stormwater management practices that will be used and/or constructed to reduce the *pollutants* in stormwater *discharges* and to assure compliance with the terms and conditions of this permit. In addition, the SWPPP shall identify potential sources of pollution which may reasonably be expected to affect the quality of stormwater *discharges*.

3. All SWPPPs that require the post-construction stormwater management practice component shall be prepared by a *qualified professional* that is knowledgeable in the principles and practices of stormwater management and treatment.

4. The *owner or operator* must keep the SWPPP current so that it at all times accurately documents the erosion and sediment controls practices that are being used or will be used during construction, and all post-construction stormwater management practices that will be constructed on the site. At a minimum, the *owner or operator* shall amend the SWPPP, including construction drawings:

   a. whenever the current provisions prove to be ineffective in minimizing *pollutants* in stormwater *discharges* from the site;

b. whenever there is a change in design, construction, or operation at the *construction site* that has or could have an effect on the *discharge* of *pollutants*;

c. to address issues or deficiencies identified during an inspection by the *qualified inspector,* the Department or other regulatory authority; and

d. to document the final construction conditions.

5. The Department may notify the *owner or operator* at any time that the SWPPP does not meet one or more of the minimum requirements of this permit. The notification shall be in writing and identify the provisions of the SWPPP that require modification. Within fourteen (14) calendar days of such notification, or as otherwise indicated by the Department, the *owner or operator* shall make the required changes to the SWPPP and submit written notification to the Department that the changes have been made. If the *owner or operator* does not respond to the Department's comments in the specified time frame, the Department may suspend the *owner's or operator's* coverage under this permit or require the *owner or operator* to obtain coverage under an individual SPDES permit in accordance with Part II.D.4. of this permit.

6. Prior to the *commencement of construction activity*, the *owner or operator* must identify the contractor(s) and subcontractor(s) that will be responsible for installing, constructing, repairing, replacing, inspecting and maintaining the erosion and sediment control practices included in the SWPPP; and the contractor(s) and subcontractor(s) that will be responsible for constructing the post-construction stormwater management practices included in the SWPPP. The *owner or operator* shall have each of the contractors and subcontractors identify at least one person from their company that will be responsible for implementation of the SWPPP. This person shall be known as the *trained contractor.* The *owner or operator* shall ensure that at least one *trained contractor* is on site on a daily basis when soil disturbance activities are being performed.

   The *owner or operator* shall have each of the contractors and subcontractors identified above sign a copy of the following certification statement below before they commence any *construction activity*:

   "I hereby certify under penalty of law that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the *qualified inspector* during a site inspection. I also understand that the *owner or operator* must comply with

   the terms and conditions of the most current version of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for stormwater *discharge*s from *construction activities* and that it is unlawful for any person to cause or contribute to a violation of *water quality standards*. Furthermore, I am aware that there are significant penalties for submitting false information, that I do not believe to be true, including the possibility of fine and imprisonment for knowing violations"

   In addition to providing the certification statement above, the certification page must also identify the specific elements of the SWPPP that each contractor and subcontractor will be responsible for and include the name and title of the person providing the signature; the name and title of the *trained contractor* responsible for SWPPP implementation; the name, address and telephone number of the contracting firm; the address (or other identifying description) of the site; and the date the certification statement is signed. The *owner or operator* shall attach the certification statement(s) to the copy of the SWPPP that is maintained at the *construction site*. If new or additional contractors are hired to implement measures identified in the SWPPP after construction has commenced, they must also sign the certification statement and provide the information listed above.

7. For projects where the Department requests a copy of the SWPPP or inspection reports, the *owner or operator* shall submit the documents in both electronic (PDF only) and paper format within five (5) business days, unless otherwise notified by the Department.

B. Required SWPPP Contents

1. Erosion and sediment control component - All SWPPPs prepared pursuant to this permit shall include erosion and sediment control practices designed in conformance with the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016. Where erosion and sediment control practices are not designed in conformance with the design criteria included in the technical standard, the *owner or operator* must demonstrate *equivalence* to the technical standard. At a minimum, the erosion and sediment control component of the SWPPP shall include the following:

   a. Background information about the scope of the project, including the location, type and size of project

b. A site map/construction drawing(s) for the project, including a general location map. At a minimum, the site map shall show the total site area; all improvements; areas of disturbance; areas that will not be disturbed; existing vegetation; on-site and adjacent off-site surface water(s); floodplain/floodway boundaries; wetlands and drainage patterns that could be affected by the *construction activity*; existing and final contours ; locations of different soil types with boundaries; material, waste, borrow or equipment storage areas located on adjacent properties; and location(s) of the stormwater *discharge*(s);

c. A description of the soil(s) present at the site, including an identification of the Hydrologic Soil Group (HSG);

d. A construction phasing plan and sequence of operations describing the intended order of *construction activities*, including clearing and grubbing, excavation and grading, utility and infrastructure installation and any other activity at the site that results in soil disturbance;

e. A description of the minimum erosion and sediment control practices to be installed or implemented for each *construction activity* that will result in soil disturbance. Include a schedule that identifies the timing of initial placement or implementation of each erosion and sediment control practice and the minimum time frames that each practice should remain in place or be implemented;

f. A temporary and permanent soil stabilization plan that meets the requirements of this general permit and the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016, for each stage of the project, including initial land clearing and grubbing to project completion and achievement of *final stabilization*;

g. A site map/construction drawing(s) showing the specific location(s), size(s), and length(s) of each erosion and sediment control practice;

h. The dimensions, material specifications, installation details, and operation and maintenance requirements for all erosion and sediment control practices. Include the location and sizing of any temporary sediment basins and structural practices that will be used to divert flows from exposed soils;

i. A maintenance inspection schedule for the contractor(s) identified in Part III.A.6. of this permit, to ensure continuous and effective operation of the erosion and sediment control practices. The maintenance inspection

schedule shall be in accordance with the requirements in the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016;

j. A description of the pollution prevention measures that will be used to control litter, construction chemicals and construction debris from becoming a *pollutant* source in the stormwater *discharges*;

k. A description and location of any stormwater *discharges* associated with industrial activity other than construction at the site, including, but not limited to, stormwater *discharges* from asphalt plants and concrete plants located on the *construction site*; and

l. Identification of any elements of the design that are not in conformance with the design criteria in the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016. Include the reason for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the technical standard.

2. Post-construction stormwater management practice component – The *owner or operator* of any construction project identified in Table 2 of Appendix B as needing post-construction stormwater management practices shall prepare a SWPPP that includes practices designed in conformance with the applicable *sizing criteria* in Part I.C.2.a., c. or d. of this permit and the *performance criteria* in the technical standard, New York State Stormwater Management Design Manual dated January 2015

   Where post-construction stormwater management practices are not designed in conformance with the *performance criteria* in the technical standard, the *owner or operator* must include in the SWPPP the reason(s) for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the technical standard.

   The post-construction stormwater management practice component of the SWPPP shall include the following:

   a. Identification of all post-construction stormwater management practices to be constructed as part of the project. Include the dimensions, material specifications and installation details for each post-construction stormwater management practice;

b. A site map/construction drawing(s) showing the specific location and size of each post-construction stormwater management practice;

c. A Stormwater Modeling and Analysis Report that includes:
   (i) Map(s) showing pre-development conditions, including watershed/subcatchments boundaries, flow paths/routing, and design points;

   (ii) Map(s) showing post-development conditions, including watershed/subcatchments boundaries, flow paths/routing, design points and post-construction stormwater management practices;

   (iii) Results of stormwater modeling (i.e. hydrology and hydraulic analysis) for the required storm events. Include supporting calculations (model runs), methodology, and a summary table that compares pre and post-development runoff rates and volumes for the different storm events;

   (iv) Summary table, with supporting calculations, which demonstrates that each post-construction stormwater management practice has been designed in conformance with the *sizing criteria* included in the Design Manual;

   (v) Identification of any *sizing criteria* that is not required based on the requirements included in Part I.C. of this permit; and

   (vi) Identification of any elements of the design that are not in conformance with the *performance criteria* in the Design Manual. Include the reason(s) for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the Design Manual;

d. Soil testing results and locations (test pits, borings);

e. Infiltration test results, when required; and

f. An operations and maintenance plan that includes inspection and maintenance schedules and actions to ensure continuous and effective operation of each post-construction stormwater management practice. The plan shall identify the entity that will be responsible for the long term operation and maintenance of each practice.

3. Enhanced Phosphorus Removal Standards - All construction projects identified in Table 2 of Appendix B that are located in the watersheds identified in Appendix C shall prepare a SWPPP that includes post-construction stormwater management practices designed in conformance with the applicable *sizing criteria* in Part I.C.2. b., c. or d. of this permit and the *performance criteria,* Enhanced Phosphorus Removal Standards included in the Design Manual. At a minimum, the post-construction stormwater management practice component of the SWPPP shall include items 2.a - 2.f. above.

C. Required SWPPP Components by Project Type

Unless otherwise notified by the Department, *owners or operators* of *construction activities* identified in Table 1 of Appendix B are required to prepare a SWPPP that only includes erosion and sediment control practices designed in conformance with Part III.B.1 of this permit. *Owners or operators* of the *construction activities* identified in Table 2 of Appendix B shall prepare a SWPPP that also includes post-construction stormwater management practices designed in conformance with Part III.B.2 or 3 of this permit.

Part IV. INSPECTION AND MAINTENANCE REQUIREMENTS

A. General Construction Site Inspection and Maintenance Requirements

1. The *owner or operator* must ensure that all erosion and sediment control practices (including pollution prevention measures) and all post-construction stormwater management practices identified in the SWPPP are inspected and maintained in accordance with Part IV.B. and C. of this permit.

2. The terms of this permit shall not be construed to prohibit the State of New York from exercising any authority pursuant to the ECL, common law or federal law, or prohibit New York State from taking any measures, whether civil or criminal, to prevent violations of the laws of the State of New York or protect the public health and safety and/or the environment.

B. Contractor Maintenance Inspection Requirements

1. The *owner or operator* of each *construction activity* identified in Tables 1 and 2 of Appendix B shall have a *trained contractor* inspect the erosion and sediment control practices and pollution prevention measures being implemented within the active work area daily to ensure that they are being maintained in effective operating condition at all times. If deficiencies are identified, the contractor shall

begin implementing corrective actions within one business day and shall complete the corrective actions in a reasonable time frame.

2. For construction sites where soil disturbance activities have been temporarily suspended (e.g. winter shutdown) and *temporary stabilization* measures have been applied to all disturbed areas, the *trained contractor* can stop conducting the maintenance inspections. The *trained contractor* shall begin conducting the maintenance inspections in accordance with Part IV.B.1. of this permit as soon as soil disturbance activities resume.

3. For construction sites where soil disturbance activities have been shut down with partial project completion, the *trained contractor* can stop conducting the maintenance inspections if all areas disturbed as of the project shutdown date have achieved *final stabilization* and all post-construction stormwater management practices required for the completed portion of the project have been constructed in conformance with the SWPPP and are operational.

C. Qualified Inspector Inspection Requirements

The *owner or operator* shall have a *qualified inspector* conduct site inspections in conformance with the following requirements:

[Note: The *trained contractor* identified in Part III.A.6. and IV.B. of this permit **cannot** conduct the *qualified inspector* site inspections unless they meet the *qualified inspector* qualifications included in Appendix A. In order to perform these inspections, the *trained contractor* would have to be a:

- licensed Professional Engineer,
- Certified Professional in Erosion and Sediment Control (CPESC),
- New York State Erosion and Sediment Control Certificate Program holder
- Registered Landscape Architect, or
- someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided they have received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity].

1. A *qualified inspector* shall conduct site inspections for all *construction activities* identified in Tables 1 and 2 of Appendix B, with the exception of:

   a. the construction of a single family residential subdivision with 25% or less *impervious cover* at total site build-out that involves a soil disturbance of one (1) or more acres of land but less than five (5) acres and is not located

in one of the watersheds listed in Appendix C and not directly discharging to one of the 303(d) segments listed in Appendix E;

   b. the construction of a single family home that involves a soil disturbance of one (1) or more acres of land but less than five (5) acres and is not located in one of the watersheds listed in Appendix C and not directly discharging to one of the 303(d) segments listed in Appendix E;

   c. construction on agricultural property that involves a soil disturbance of one (1) or more acres of land but less than five (5) acres; and

   d. *construction activities* located in the watersheds identified in Appendix D that involve soil disturbances between five thousand (5,000) square feet and one (1) acre of land.

2. Unless otherwise notified by the Department, the *qualified inspector* shall conduct site inspections in accordance with the following timetable:

   a. For construction sites where soil disturbance activities are on-going, the *qualified inspector* shall conduct a site inspection at least once every seven (7) calendar days.

   b. For construction sites where soil disturbance activities are on-going and the *owner or operator* has received authorization in accordance with Part II.D.3 to disturb greater than five (5) acres of soil at any one time, the *qualified inspector* shall conduct at least two (2) site inspections every seven (7) calendar days. The two (2) inspections shall be separated by a minimum of two (2) full calendar days.

   c. For construction sites where soil disturbance activities have been temporarily suspended (e.g. winter shutdown) and *temporary stabilization* measures have been applied to all disturbed areas, the *qualified inspector* shall conduct a site inspection at least once every thirty (30) calendar days. The *owner or operator* shall notify the DOW Water (SPDES) Program contact at the Regional Office (see contact information in Appendix F) or, in areas under the jurisdiction of a *regulated, traditional land use control MS4,* the *regulated, traditional land use control MS4* (provided the *regulated, traditional land use control MS4* is not the *owner or operator* of the *construction activity*) in writing prior to reducing the frequency of inspections.

d. For construction sites where soil disturbance activities have been shut down with partial project completion, the *qualified inspector* can stop conducting inspections if all areas disturbed as of the project shutdown date have achieved *final stabilization* and all post-construction stormwater management practices required for the completed portion of the project have been constructed in conformance with the SWPPP and are operational. The *owner or operator* shall notify the DOW Water (SPDES) Program contact at the Regional Office (see contact information in Appendix F) or, in areas under the jurisdiction of a *regulated, traditional land use control MS4,* the *regulated, traditional land use control MS4* (provided the *regulated, traditional land use control MS4* is not the *owner or operator* of the *construction activity*) in writing prior to the shutdown. If soil disturbance activities are not resumed within 2 years from the date of shutdown, the *owner or operator* shall have the *qualified inspector* perform a final inspection and certify that all disturbed areas have achieved *final stabilization,* and all temporary, structural erosion and sediment control measures have been removed*;* and that all post-construction stormwater management practices have been constructed in conformance with the SWPPP by signing the "*Final Stabilization*" and "Post-Construction Stormwater Management Practice" certification statements on the NOT. The *owner or operator* shall then submit the completed NOT form to the address in Part II.B.1 of this permit.

e. For construction sites that directly *discharge* to one of the 303(d) segments listed in Appendix E or is located in one of the watersheds listed in Appendix C, the *qualified inspector* shall conduct at least two (2) site inspections every seven (7) calendar days. The two (2) inspections shall be separated by a minimum of two (2) full calendar days.

3. At a minimum, the *qualified inspector* shall inspect all erosion and sediment control practices and pollution prevention measures to ensure integrity and effectiveness, all post-construction stormwater management practices under construction to ensure that they are constructed in conformance with the SWPPP, all areas of disturbance that have not achieved *final stabilization,* all points of *discharge* to natural surface waterbodies located within, or immediately adjacent to, the property boundaries of the *construction site*, and all points of *discharge* from the *construction site*.

4. The *qualified inspector* shall prepare an inspection report subsequent to each and every inspection. At a minimum, the inspection report shall include and/or address the following:

a. Date and time of inspection;

b. Name and title of person(s) performing inspection;

c. A description of the weather and soil conditions (e.g. dry, wet, saturated) at the time of the inspection;

d. A description of the condition of the runoff at all points of *discharge* from the *construction site*. This shall include identification of any *discharges* of sediment from the *construction site*. Include *discharges* from conveyance systems (i.e. pipes, culverts, ditches, etc.) and overland flow;

e. A description of the condition of all natural surface waterbodies located within, or immediately adjacent to, the property boundaries of the *construction site* which receive runoff from disturbed areas. This shall include identification of any *discharges* of sediment to the surface waterbody;

f. Identification of all erosion and sediment control practices and pollution prevention measures that need repair or maintenance;

g. Identification of all erosion and sediment control practices and pollution prevention measures that were not installed properly or are not functioning as designed and need to be reinstalled or replaced;

h. Description and sketch of areas with active soil disturbance activity, areas that have been disturbed but are inactive at the time of the inspection, and areas that have been stabilized (temporary and/or final) since the last inspection;

i. Current phase of construction of all post-construction stormwater management practices and identification of all construction that is not in conformance with the SWPPP and technical standards;

j. Corrective action(s) that must be taken to install, repair, replace or maintain erosion and sediment control practices and pollution prevention measures; and to correct deficiencies identified with the construction of the post-construction stormwater management practice(s);

k. Identification and status of all corrective actions that were required by previous inspection; and

l. Digital photographs, with date stamp, that clearly show the condition of all practices that have been identified as needing corrective actions. The *qualified inspector* shall attach paper color copies of the digital photographs to the inspection report being maintained onsite within seven (7) calendar days of the date of the inspection. The *qualified inspector* shall also take digital photographs, with date stamp, that clearly show the condition of the practice(s) after the corrective action has been completed. The *qualified inspector* shall attach paper color copies of the digital photographs to the inspection report that documents the completion of the corrective action work within seven (7) calendar days of that inspection.

5. Within one business day of the completion of an inspection, the *qualified inspector* shall notify the *owner or operator* and appropriate contractor or subcontractor identified in Part III.A.6. of this permit of any corrective actions that need to be taken. The contractor or subcontractor shall begin implementing the corrective actions within one business day of this notification and shall complete the corrective actions in a reasonable time frame.

6. All inspection reports shall be signed by the *qualified inspector.* Pursuant to Part II.D.2. of this permit, the inspection reports shall be maintained on site with the SWPPP.

Part V. TERMINATION OF PERMIT COVERAGE

A. Termination of Permit Coverage

1. An *owner or operator* that is eligible to terminate coverage under this permit must submit a completed NOT form to the address in Part II.B.1 of this permit. The NOT form shall be one which is associated with this permit, signed in accordance with Part VII.H of this permit.

2. An *owner or operator* may terminate coverage when one or more the following conditions have been met:

   a. Total project completion - All *construction activity* identified in the SWPPP has been completed; and all areas of disturbance have achieved *final stabilization*; and all temporary, structural erosion and sediment control measures have been removed; and all post-construction stormwater management practices have been constructed in conformance with the SWPPP and are operational;

   b. Planned shutdown with partial project completion - All soil disturbance activities have ceased; and all areas disturbed as of the project shutdown date have achieved *final stabilization*; and all temporary, structural erosion and sediment control measures have been removed; and all post-construction stormwater management practices required for the completed portion of the project have been constructed in conformance with the SWPPP and are operational;

   c. A new *owner or operator* has obtained coverage under this permit in accordance with Part II.F. of this permit.

   d. The *owner or operator* obtains coverage under an alternative SPDES general permit or an individual SPDES permit.

3. For *construction activities* meeting subdivision 2a. or 2b. of this Part, the *owner or operator* shall have the *qualified inspector* perform a final site inspection prior to submitting the NOT. The *qualified inspector* shall, by signing the "*Final Stabilization*" and "Post-Construction Stormwater Management Practice certification statements on the NOT, certify that all the requirements in Part V.A.2.a. or b. of this permit have been achieved.

4. For *construction activities* that are subject to the requirements of a *regulated, traditional land use control MS4* and meet subdivision 2a. or 2b. of this Part, the *owner or operator* shall have the *regulated, traditional land use control MS4* sign the "MS4 Acceptance" statement on the NOT in accordance with the requirements in Part VII.H. of this permit. The *regulated, traditional land use control MS4* official, by signing this statement, has determined that it is acceptable for the *owner or operator* to submit the NOT in accordance with the requirements of this Part. The *regulated, traditional land use control MS4* can make this determination by performing a final site inspection themselves or by accepting the *qualified inspector*'s final site inspection certification(s) required in Part V.A.3. of this permit.

5. For *construction activities* that require post-construction stormwater management practices and meet subdivision 2a. of this Part, the *owner or operator* must, prior to submitting the NOT, ensure one of the following:

   a. the post-construction stormwater management practice(s) and any right-of-way(s) needed to maintain such practice(s) have been deeded to the municipality in which the practice(s) is located,

b. an executed maintenance agreement is in place with the municipality that will maintain the post-construction stormwater management practice(s),

c. for post-construction stormwater management practices that are privately owned, the *owner or operator* has a mechanism in place that requires operation and maintenance of the practice(s) in accordance with the operation and maintenance plan, such as a deed covenant in the *owner or operator's* deed of record,

d. for post-construction stormwater management practices that are owned by a public or private institution (e.g. school, university, hospital), government agency or authority, or public utility; the *owner or operator* has policy and procedures in place that ensures operation and maintenance of the practices in accordance with the operation and maintenance plan.

Part VI. REPORTING AND RETENTION RECORDS

A. Record Retention

The *owner or operator* shall retain a copy of the NOI, NOI Acknowledgment Letter, SWPPP, MS4 SWPPP Acceptance form and any inspection reports that were prepared in conjunction with this permit for a period of at least five (5) years from the date that the Department receives a complete NOT submitted in accordance with Part V. of this general permit.

B. Addresses

With the exception of the NOI, NOT, and MS4 SWPPP Acceptance form (which must be submitted to the address referenced in Part II.B.1 of this permit), all written correspondence requested by the Department, including individual permit applications, shall be sent to the address of the appropriate DOW Water (SPDES) Program contact at the Regional Office listed in Appendix F.

Part VII. STANDARD PERMIT CONDITIONS

A. Duty to Comply

The *owner or operator* must comply with all conditions of this permit. All contractors and subcontractors associated with the project must comply with the terms of the SWPPP. Any non-compliance with this permit constitutes a violation of the Clean Water

Act (CWA) and the ECL and is grounds for an enforcement action against the *owner or operator* and/or the contractor/subcontractor; permit revocation, suspension or modification; or denial of a permit renewal application. Upon a finding of significant non-compliance with this permit or the applicable SWPPP, the Department may order an immediate stop to all *construction activity* at the site until the non-compliance is remedied. The stop work order shall be in writing, shall describe the non-compliance in detail, and shall be sent to the *owner or operator*.

If any human remains or archaeological remains are encountered during excavation, the *owner or operator* must immediately cease, or cause to cease, all *construction activity* in the area of the remains and notify the appropriate Regional Water Engineer (RWE). *Construction activity* shall not resume until written permission to do so has been received from the RWE.

B. Continuation of the Expired General Permit

This permit expires five (5) years from the effective date. If a new general permit is not issued prior to the expiration of this general permit, an *owner or operator* with coverage under this permit may continue to operate and *discharge* in accordance with the terms and conditions of this general permit, if it is extended pursuant to the State Administrative Procedure Act and 6 NYCRR Part 621, until a new general permit is issued.

C. Enforcement

Failure of the *owner or operator,* its contractors, subcontractors, agents and/or assigns to strictly adhere to any of the permit requirements contained herein shall constitute a violation of this permit. There are substantial criminal, civil, and administrative penalties associated with violating the provisions of this permit. Fines of up to $37,500 per day for each violation and imprisonment for up to fifteen (15) years may be assessed depending upon the nature and degree of the offense.

D. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for an *owner or operator* in an enforcement action that it would have been necessary to halt or reduce the *construction activity* in order to maintain compliance with the conditions of this permit.

E. Duty to Mitigate

The *owner or operator* and its contractors and subcontractors shall take all reasonable steps to *minimize* or prevent any *discharge* in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

F. Duty to Provide Information

The *owner or operator* shall furnish to the Department, within a reasonable specified time period of a written request, all documentation necessary to demonstrate eligibility and any information to determine compliance with this permit or to determine whether cause exists for modifying or revoking this permit, or suspending or denying coverage under this permit, in accordance with the terms and conditions of this permit. The NOI, SWPPP and inspection reports required by this permit are public documents that the *owner or operator* must make available for review and copying by any person within five (5) business days of the *owner or operator* receiving a written request by any such person to review these documents. Copying of documents will be done at the requester's expense.

G. Other Information

When the *owner or operator* becomes aware that they failed to submit any relevant facts, or submitted incorrect information in the NOI or in any of the documents required by this permit , or have made substantive revisions to the SWPPP (e.g. the scope of the project changes significantly, the type of post-construction stormwater management practice(s) changes, there is a reduction in the sizing of the post-construction stormwater management practice, or there is an increase in the disturbance area or *impervious area*), which were not reflected in the original NOI submitted to the Department, they shall promptly submit such facts or information to the Department using the contact information in Part II.A. of this permit. Failure of the *owner or operator* to correct or supplement any relevant facts within five (5) business days of becoming aware of the deficiency shall constitute a violation of this permit.

H. Signatory Requirements

1. All NOIs and NOTs shall be signed as follows:

    a. For a corporation these forms shall be signed by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:

(i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or

(ii) the manager of one or more manufacturing, production or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

b. For a partnership or sole proprietorship these forms shall be signed by a general partner or the proprietor, respectively; or

c. For a municipality, State, Federal, or other public agency these forms shall be signed by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:

(i) the chief executive officer of the agency, or

(ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

2. The SWPPP and other information requested by the Department shall be signed by a person described in Part VII.H.1. of this permit or by a duly authorized representative of that person. A person is a duly authorized representative only if:

    a. The authorization is made in writing by a person described in Part VII.H.1. of this permit;

    b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field,

superintendent, position of *equivalent* responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position) and,

c. The written authorization shall include the name, title and signature of the authorized representative and be attached to the SWPPP.

3. All inspection reports shall be signed by the *qualified inspector* that performs the inspection.

4. The MS4 SWPPP Acceptance form shall be signed by the principal executive officer or ranking elected official from the *regulated, traditional land use control MS4,* or by a duly authorized representative of that person.

   It shall constitute a permit violation if an incorrect and/or improper signatory authorizes any required forms, SWPPP and/or inspection reports.

I. Property Rights

The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations. *Owners or operators* must obtain any applicable conveyances, easements, licenses and/or access to real property prior to *commencing construction activity*.

J. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

K. Requirement to Obtain Coverage Under an Alternative Permit

1. The Department may require any owner or operator authorized by this permit to apply for and/or obtain either an individual SPDES permit or another SPDES general permit. When the Department requires any discharger authorized by a general permit to apply for an individual SPDES permit, it shall notify the discharger in writing that a permit application is required. This notice shall

include a brief statement of the reasons for this decision, an application form, a statement setting a time frame for the owner or operator to file the application for an individual SPDES permit, and a deadline, not sooner than 180 days from owner or operator receipt of the notification letter, whereby the authorization to discharge under this general permit shall be terminated. Applications must be submitted to the appropriate Permit Administrator at the Regional Office. The Department may grant additional time upon demonstration, to the satisfaction of the Department, that additional time to apply for an alternative authorization is necessary or where the Department has not provided a permit determination in accordance with Part 621 of this Title.

2. When an individual SPDES permit is issued to a discharger authorized to *discharge* under a general SPDES permit for the same *discharge*(s), the general permit authorization for outfalls authorized under the individual SPDES permit is automatically terminated on the effective date of the individual permit unless termination is earlier in accordance with 6 NYCRR Part 750.

L. Proper Operation and Maintenance

The *owner or operator* shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the *owner or operator* to achieve compliance with the conditions of this permit and with the requirements of the SWPPP.

M. Inspection and Entry

The *owner or operator* shall allow an authorized representative of the Department, EPA, applicable county health department, or, in the case of a *construction site* which *discharges* through an *MS4*, an authorized representative of the *MS4* receiving the discharge, upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the owner's or operator's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit;

2. Have access to and copy at reasonable times, any records that must be kept under the conditions of this permit; and

3. Inspect at reasonable times any facilities or equipment (including monitoring and control equipment), practices or operations regulated or required by this permit.

4. Sample or monitor at reasonable times, for purposes of assuring permit compliance or as otherwise authorized by the Act or ECL, any substances or parameters at any location.

N. Permit Actions

This permit may, at any time, be modified, suspended, revoked, or renewed by the Department in accordance with 6 NYCRR Part 621. The filing of a request by the *owner or operator* for a permit modification, revocation and reissuance, termination, a notification of planned changes or anticipated noncompliance does not limit, diminish and/or stay compliance with any terms of this permit.

O. Definitions

Definitions of key terms are included in Appendix A of this permit.

P. Re-Opener Clause

1. If there is evidence indicating potential or realized impacts on water quality due to any stormwater discharge associated with construction activity covered by this permit, the owner or operator of such discharge may be required to obtain an individual permit or alternative general permit in accordance with Part VII.K. of this permit or the permit may be modified to include different limitations and/or requirements.

2. Any Department initiated permit modification, suspension or revocation will be conducted in accordance with 6 NYCRR Part 621, 6 NYCRR 750-1.18, and 6 NYCRR 750-1.20.

Q. Penalties for Falsification of Forms and Reports

In accordance with 6NYCRR Part 750-2.4 and 750-2.5, any person who knowingly makes any false material statement, representation, or certification in any application, record, report or other document filed or required to be maintained under this permit, including reports of compliance or noncompliance shall, upon conviction, be punished in accordance with ECL §71-1933 and or Articles 175 and 210 of the New York State Penal Law.

R. Other Permits

Nothing in this permit relieves the *owner or operator* from a requirement to obtain any other permits required by law.

APPENDIX A – Acronyms and Definitions

Acronyms

APO – Agency Preservation Officer
BMP – Best Management Practice
CPESC – Certified Professional in Erosion and Sediment Control
Cpv – Channel Protection Volume
CWA – Clean Water Act (or the Federal Water Pollution Control Act, 33 U.S.C. §1251 et seq)
DOW – Division of Water
EAF – Environmental Assessment Form
ECL - Environmental Conservation Law
EPA – U. S. Environmental Protection Agency
HSG – Hydrologic Soil Group
MS4 – Municipal Separate Storm Sewer System
NOI – Notice of Intent
NOT – Notice of Termination
NPDES – National Pollutant Discharge Elimination System
OPRHP – Office of Parks, Recreation and Historic Places
Qf – Extreme Flood
Qp – Overbank Flood
RRv – Runoff Reduction Volume
RWE – Regional Water Engineer
SEQR – State Environmental Quality Review
SEQRA - State Environmental Quality Review Act
SHPA – State Historic Preservation Act
SPDES – State Pollutant Discharge Elimination System
SWPPP – Stormwater Pollution Prevention Plan
TMDL – Total Maximum Daily Load
UPA – Uniform Procedures Act
USDA – United States Department of Agriculture
WQv – Water Quality Volume

Definitions

All definitions in this section are solely for the purposes of this permit.

Agricultural Building – a structure designed and constructed to house farm implements, hay, grain, poultry, livestock or other horticultural products; excluding any structure designed, constructed or used, in whole or in part, for human habitation, as a place of employment where agricultural products are processed, treated or packaged, or as a place used by the public.

Agricultural Property –means the land for construction of a barn, *agricultural building*, silo, stockyard, pen or other structural practices identified in Table II in the "Agricultural Management Practices Catalog for Nonpoint Source Pollution in New York State" prepared by the Department in cooperation with agencies of New York Nonpoint Source Coordinating Committee (dated June 2007).

Alter Hydrology from Pre to Post-Development Conditions - means the post-development peak flow rate(s) has increased by more than 5% of the pre-developed condition for the design storm of interest (e.g. 10 yr and 100 yr).

Combined Sewer - means a sewer that is designed to collect and convey both "sewage" and "stormwater".

Commence (Commencement of) Construction Activities - means the initial disturbance of soils associated with clearing, grading or excavation activities; or other construction related activities that disturb or expose soils such as demolition, stockpiling of fill material, and the initial installation of erosion and sediment control practices required in the SWPPP. See definition for "*Construction Activity(ies)*" also.

Construction Activity(ies) - means any clearing, grading, excavation, filling, demolition or stockpiling activities that result in soil disturbance. Clearing activities can include, but are not limited to, logging equipment operation, the cutting and skidding of trees, stump removal and/or brush root removal. Construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of a facility.

Construction Site – means the land area where *construction activity(ies)* will occur. See definition for "*Commence (Commencement of) Construction Activities"* and "*Larger Common Plan of Development or Sale" also.*

Dewatering – means the act of draining rainwater and/or groundwater from building foundations, vaults or excavations/trenches.

Direct Discharge (to a specific surface waterbody) - means that runoff flows from a *construction site* by overland flow and the first point of discharge is the specific surface waterbody, or runoff flows from a *construction site* to a separate storm sewer system

and the first point of discharge from the separate storm sewer system is the specific surface waterbody.

Discharge(s) - means any addition of any pollutant to waters of the State through an outlet or *point source*.

Embankment –means an earthen or rock slope that supports a road/highway.

Endangered or Threatened Species – see 6 NYCRR Part 182 of the Department's rules and regulations for definition of terms and requirements.

Environmental Conservation Law (ECL) - means chapter 43-B of the Consolidated Laws of the State of New York, entitled the Environmental Conservation Law.

Equivalent (Equivalence) – means that the practice or measure meets all the performance, longevity, maintenance, and safety objectives of the technical standard and will provide an equal or greater degree of water quality protection.

Final Stabilization - means that all soil disturbance activities have ceased and a uniform, perennial vegetative cover with a density of eighty (80) percent over the entire pervious surface has been established; or other equivalent stabilization measures, such as permanent landscape mulches, rock rip-rap or washed/crushed stone have been applied on all disturbed areas that are not covered by permanent structures, concrete or pavement.

General SPDES permit - means a SPDES permit issued pursuant to 6 NYCRR Part 750-1.21 and Section 70-0117 of the ECL authorizing a category of discharges.

Groundwater(s) - means waters in the saturated zone. The saturated zone is a subsurface zone in which all the interstices are filled with water under pressure greater than that of the atmosphere. Although the zone may contain gas-filled interstices or interstices filled with fluids other than water, it is still considered saturated.

Historic Property – means any building, structure, site, object or district that is listed on the State or National Registers of Historic Places or is determined to be eligible for listing on the State or National Registers of Historic Places.

Impervious Area (Cover) - means all impermeable surfaces that cannot effectively infiltrate rainfall. This includes paved, concrete and gravel surfaces (i.e. parking lots, driveways, roads, runways and sidewalks); building rooftops and miscellaneous impermeable structures such as patios, pools, and sheds.

Infeasible – means not technologically possible, or not economically practicable and achievable in light of best industry practices.

Larger Common Plan of Development or Sale - means a contiguous area where multiple separate and distinct *construction activities* are occurring, or will occur, under one plan. The term "plan" in "larger common plan of development or sale" is broadly defined as any announcement or piece of documentation (including a sign, public notice or hearing, marketing plan, advertisement, drawing, permit application, State Environmental Quality Review Act (SEQRA) environmental assessment form or other documents, zoning request, computer design, etc.) or physical demarcation (including boundary signs, lot stakes, surveyor markings, etc.) indicating that *construction activities* may occur on a specific plot.

For discrete construction projects that are located within a larger common plan of development or sale that are at least 1/4 mile apart, each project can be treated as a separate plan of development or sale provided any interconnecting road, pipeline or utility project that is part of the same "common plan" is not concurrently being disturbed.

Minimize – means reduce and/or eliminate to the extent achievable using control measures (including best management practices) that are technologically available and economically practicable and achievable in light of best industry practices.

Municipal Separate Storm Sewer (MS4) - a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

(i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to surface waters of the State*;*
(ii) Designed or used for collecting or conveying stormwater;
(iii) Which is not a *combined sewer*; and
(iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

National Pollutant Discharge Elimination System (NPDES) - means the national system for the issuance of wastewater and stormwater permits under the Federal Water Pollution Control Act (Clean Water Act).

Natural Buffer –means an undisturbed area with natural cover running along a surface water (e.g. wetland, stream, river, lake, etc.).

New Development – means any land disturbance that does not meet the definition of Redevelopment Activity included in this appendix.

New York State Erosion and Sediment Control Certificate Program – a certificate program that establishes and maintains a process to identify and recognize individuals who are capable of developing, designing, inspecting and maintaining erosion and sediment control plans on projects that disturb soils in New York State. The certificate program is administered by the New York State Conservation District Employees Association.

NOI Acknowledgment Letter - means the letter that the Department sends to an owner or operator to acknowledge the Department's receipt and acceptance of a complete Notice of Intent. This letter documents the owner's or operator's authorization to discharge in accordance with the general permit for stormwater discharges from *construction activity.*

Nonpoint Source - means any source of water pollution or pollutants which is not a discrete conveyance or *point source* permitted pursuant to Title 7 or 8 of Article 17 of the Environmental Conservation Law (see ECL Section 17-1403).

Overbank –means flow events that exceed the capacity of the stream channel and spill out into the adjacent floodplain.

Owner or Operator - means the person, persons or legal entity which owns or leases the property on which the *construction activity* is occurring; an entity that has operational control over the construction plans and specifications, including the ability to make modifications to the plans and specifications; and/or an entity that has day-to-day operational control of those activities at a project that are necessary to ensure compliance with the permit conditions.

Performance Criteria – means the design criteria listed under the "Required Elements" sections in Chapters 5, 6 and 10 of the technical standard, New York State Stormwater Management Design Manual, dated January 2015. It does not include the Sizing Criteria (i.e. WQv, RRv, Cpv, Qp and Qf) in Part I.C.2. of the permit.

Point Source - means any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, vessel or other floating craft, or landfill leachate collection system from which *pollutants* are or may be discharged.

Pollutant - means dredged spoil, filter backwash, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand and industrial, municipal, agricultural waste and ballast discharged into water; which may cause or might reasonably be expected to cause pollution of the waters of the state in contravention of the standards or guidance values adopted as provided in 6 NYCRR Parts 700 et seq .

Qualified Inspector - means a person that is knowledgeable in the principles and practices of erosion and sediment control, such as a licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), Registered Landscape Architect, New York State Erosion and Sediment Control Certificate Program holder or other Department endorsed individual(s).

It can also mean someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided that person has training in the principles and practices of erosion and sediment control. Training in the principles and practices of erosion and sediment control means that the individual working under the direct supervision of the licensed Professional Engineer or Registered Landscape Architect has received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity. After receiving the initial training, the individual working under the direct supervision of the licensed Professional Engineer or Registered Landscape Architect shall receive four (4) hours of training every three (3) years.

It can also mean a person that meets the *Qualified Professional* qualifications in addition to the *Qualified Inspector* qualifications.

Note: Inspections of any post-construction stormwater management practices that include structural components, such as a dam for an impoundment, shall be performed by a licensed Professional Engineer.

Qualified Professional - means a person that is knowledgeable in the principles and practices of stormwater management and treatment, such as a licensed Professional Engineer, Registered Landscape Architect or other Department endorsed individual(s). Individuals preparing SWPPPs that require the post-construction stormwater management practice component must have an understanding of the principles of hydrology, water quality management practice design, water quantity control design, and, in many cases, the principles of hydraulics. All components of the SWPPP that involve the practice of engineering, as defined by the NYS Education Law (see Article 145), shall be prepared by, or under the direct supervision of, a professional engineer licensed to practice in the State of New York.

Redevelopment Activity(ies) – means the disturbance and reconstruction of existing impervious area, including impervious areas that were removed from a project site within five (5) years of preliminary project plan submission to the local government (i.e. site plan, subdivision, etc.).

Regulated, Traditional Land Use Control MS4 - means a city, town or village with land use control authority that is authorized to discharge under New York State DEC's

SPDES General Permit For Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s) or the City of New York's Individual SPDES Permit for their Municipal Separate Storm Sewer Systems (NY-0287890).

Routine Maintenance Activity - means *construction activity* that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of a facility, including, but not limited to:

- Re-grading of gravel roads or parking lots,
- Cleaning and shaping of existing roadside ditches and culverts that maintains the approximate original line and grade, and hydraulic capacity of the ditch,
- Cleaning and shaping of existing roadside ditches that does not maintain the approximate original grade, hydraulic capacity and purpose of the ditch if the changes to the line and grade, hydraulic capacity or purpose of the ditch are installed to improve water quality and quantity controls (e.g. installing grass lined ditch),
- Placement of aggregate shoulder backing that stabilizes the transition between the road shoulder and the ditch or *embankment*,
- Full depth milling and filling of existing asphalt pavements, replacement of concrete pavement slabs, and similar work that does not expose soil or disturb the bottom six (6) inches of subbase material,
- Long-term use of equipment storage areas at or near highway maintenance facilities,
- Removal of sediment from the edge of the highway to restore a previously existing sheet-flow drainage connection from the highway surface to the highway ditch or *embankment*,
- Existing use of Canal Corp owned upland disposal sites for the canal, and
- Replacement of curbs, gutters, sidewalks and guide rail posts.

Site limitations – means site conditions that prevent the use of an infiltration technique and or infiltration of the total WQv. Typical site limitations include: seasonal high groundwater, shallow depth to bedrock, and soils with an infiltration rate less than 0.5 inches/hour. The existence of site limitations shall be confirmed and documented using actual field testing (i.e. test pits, soil borings, and infiltration test) or using information from the most current United States Department of Agriculture (USDA) Soil Survey for the County where the project is located.

Sizing Criteria – means the criteria included in Part I.C.2 of the permit that are used to size post-construction stormwater management control practices. The criteria include; Water Quality Volume (WQv), Runoff Reduction Volume (RRv), Channel Protection Volume (Cpv), *Overbank* Flood (Qp), and Extreme Flood (Qf).

State Pollutant Discharge Elimination System (SPDES) - means the system established pursuant to Article 17 of the ECL and 6 NYCRR Part 750 for issuance of permits authorizing discharges to the waters of the state.

Steep Slope – means land area designated on the current United States Department of Agriculture ("USDA") Soil Survey as Soil Slope Phase "D", (provided the map unit name is inclusive of slopes greater than 25%) , or Soil Slope Phase E or F, (regardless of the map unit name), or a combination of the three designations.

Streambank – as used in this permit, means the terrain alongside the bed of a creek or stream. The bank consists of the sides of the channel, between which the flow is confined.

Stormwater Pollution Prevention Plan (SWPPP) – means a project specific report, including construction drawings, that among other things: describes the construction activity(ies), identifies the potential sources of pollution at the *construction site*; describes and shows the stormwater controls that will be used to control the pollutants (i.e. erosion and sediment controls; for many projects, includes post-construction stormwater management controls); and identifies procedures the *owner or operator* will implement to comply with the terms and conditions of the permit. See Part III of the permit for a complete description of the information that must be included in the SWPPP.

Surface Waters of the State - shall be construed to include lakes, bays, sounds, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Atlantic ocean within the territorial seas of the state of New York and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, public or private (except those private waters that do not combine or effect a junction with natural surface waters), which are wholly or partially within or bordering the state or within its jurisdiction. Waters of the state are further defined in 6 NYCRR Parts 800 to 941.

Temporarily Ceased – means that an existing disturbed area will not be disturbed again within 14 calendar days of the previous soil disturbance.

Temporary Stabilization - means that exposed soil has been covered with material(s) as set forth in the technical standard, New York Standards and Specifications for Erosion and Sediment Control, to prevent the exposed soil from eroding. The materials can include, but are not limited to, mulch, seed and mulch, and erosion control mats (e.g. jute twisted yarn, excelsior wood fiber mats).

Total Maximum Daily Loads (TMDLs) - A TMDL is the sum of the allowable loads of a single pollutant from all contributing point and *nonpoint source*s. It is a calculation of the maximum amount of a pollutant that a waterbody can receive on a daily basis and still meet *water quality standard*s, and an allocation of that amount to the pollutant's sources. A TMDL stipulates wasteload allocations (WLAs) for *point source* discharges, load allocations (LAs) for *nonpoint source*s, and a margin of safety (MOS).

Trained Contractor - means an employee from the contracting (construction) company, identified in Part III.A.6., that has received four (4) hours of Department endorsed

training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity. After receiving the initial training, the *trained contractor* shall receive four (4) hours of training every three (3) years.

It can also mean an employee from the contracting (construction) company, identified in Part III.A.6., that meets the *qualified inspector* qualifications (e.g. licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), Registered Landscape Architect, New York State Erosion and Sediment Control Certificate Program holder, or someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided they have received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity).

The *trained contractor* is responsible for the day to day implementation of the SWPPP.

Uniform Procedures Act (UPA) Permit - means a permit required under 6 NYCRR Part 621 of the Environmental Conservation Law (ECL), Article 70.

Water Quality Standard - means such measures of purity or quality for any waters in relation to their reasonable and necessary use as promulgated in 6 NYCRR Part 700 et seq.

APPENDIX B – Required SWPPP Components by Project Type

Table 1
Construction Activities that Require the Preparation of a SWPPP That Only Includes Erosion and Sediment Controls

The following construction activities that involve soil disturbances of one (1) or more acres of land, but less than five (5) acres: • Single family home not located in one of the watersheds listed in Appendix C or not *directly discharging* to one of the 303(d) segments listed in Appendix E • Single family residential subdivisions with 25% or less impervious cover at total site build-out and not located in one of the watersheds listed in Appendix C and not directly discharging to one of the 303(d) segments listed in Appendix E • Construction of a barn or other *agricultural building*, silo, stock yard or pen.
The following construction activities that involve soil disturbances between five thousand (5000) square feet and one (1) acre of land: All construction activities located in the watersheds identified in Appendix D that involve soil disturbances between five thousand (5,000) square feet and one (1) acre of land.
The following construction activities that involve soil disturbances of one (1) or more acres of land: • Installation of underground, linear utilities; such as gas lines, fiber-optic cable, cable TV, electric, telephone, sewer mains, and water mains • Environmental enhancement projects, such as wetland mitigation projects, stormwater retrofits and stream restoration projects • Pond construction • Linear bike paths running through areas with vegetative cover, including bike paths surfaced with an impervious cover • Cross-country ski trails and walking/hiking trails • Sidewalk, bike path or walking path projects, surfaced with an impervious cover, that are not part of residential, commercial or institutional development; • Sidewalk, bike path or walking path projects, surfaced with an impervious cover, that include incidental shoulder or curb work along an existing highway to support construction of the sidewalk, bike path or walking path. • Slope stabilization projects • Slope flattening that changes the grade of the site, but does not significantly change the runoff characteristics

Table 1 (Continued) CONSTRUCTION ACTIVITIES THAT REQUIRE THE PREPARATION OF A SWPPP THAT ONLY INCLUDES EROSION AND SEDIMENT CONTROLS

The following construction activities that involve soil disturbances of one (1) or more acres of land:

- Spoil areas that will be covered with vegetation
- Vegetated open space projects (i.e. recreational parks, lawns, meadows, fields, downhill ski trails) excluding projects that *alter hydrology from pre to post development* conditions,
- Athletic fields (natural grass) that do not include the construction or reconstruction of *impervious area* and do not *alter hydrology from pre to post development* conditions
- Demolition project where vegetation will be established, and no redevelopment is planned
- Overhead electric transmission line project that does not include the construction of permanent access roads or parking areas surfaced with *impervious cover*
- Structural practices as identified in Table II in the "Agricultural Management Practices Catalog for Nonpoint Source Pollution in New York State", excluding projects that involve soil disturbances of greater than five acres and construction activities that include the construction or reconstruction of impervious area
- Temporary access roads, median crossovers, detour roads, lanes, or other temporary impervious areas that will be restored to pre-construction conditions once the construction activity is complete

Table 2
CONSTRUCTION ACTIVITIES THAT REQUIRE THE PREPARATION OF A SWPPP THAT INCLUDES POST-CONSTRUCTION STORMWATER MANAGEMENT PRACTICES

The following construction activities that involve soil disturbances of one (1) or more acres of land:

- Single family home located in one of the watersheds listed in Appendix C or *directly discharging* to one of the 303(d) segments listed in Appendix E
- Single family home that disturbs five (5) or more acres of land
- Single family residential subdivisions located in one of the watersheds listed in Appendix C or *directly discharging* to one of the 303(d) segments listed in Appendix E
- Single family residential subdivisions that involve soil disturbances of between one (1) and five (5) acres of land with greater than 25% impervious cover at total site build-out
- Single family residential subdivisions that involve soil disturbances of five (5) or more acres of land, and single family residential subdivisions that involve soil disturbances of less than five (5) acres that are part of a larger common plan of development or sale that will ultimately disturb five or more acres of land
- Multi-family residential developments; includes duplexes, townhomes, condominiums, senior housing complexes, apartment complexes, and mobile home parks
- Airports
- Amusement parks
- Breweries, cideries, and wineries, including establishments constructed on agricultural land
- Campgrounds
- Cemeteries that include the construction or reconstruction of impervious area (>5% of disturbed area) or *alter the hydrology from pre to post development* conditions
- Commercial developments
- Churches and other places of worship
- Construction of a barn or other *agricultural building* (e.g. silo) and structural practices as identified in Table II in the "Agricultural Management Practices Catalog for Nonpoint Source Pollution in New York State" that include the construction or reconstruction of *impervious area*, excluding projects that involve soil disturbances of less than five acres.
- Golf courses
- Institutional development; includes hospitals, prisons, schools and colleges
- Industrial facilities; includes industrial parks
- Landfills
- Municipal facilities; includes highway garages, transfer stations, office buildings, POTW's, water treatment plants, and water storage tanks
- Office complexes
- Playgrounds that include the construction or reconstruction of impervious area
- Sports complexes
- Racetracks; includes racetracks with earthen (dirt) surface
- Road construction or reconstruction, including roads constructed as part of the construction activities listed in Table 1

Table 2 (Continued)

CONSTRUCTION ACTIVITIES THAT REQUIRE THE PREPARATION OF A SWPPP THAT INCLUDES POST-CONSTRUCTION STORMWATER MANAGEMENT PRACTICES

The following construction activities that involve soil disturbances of one (1) or more acres of land:

- Parking lot construction or reconstruction, including parking lots constructed as part of the construction activities listed in Table 1
- Athletic fields (natural grass) that include the construction or reconstruction of impervious area (>5% of disturbed area) or *alter the hydrology from pre to post development* conditions
- Athletic fields with artificial turf
- Permanent access roads, parking areas, substations, compressor stations and well drilling pads, surfaced with *impervious cover,* and constructed as part of an over-head electric transmission line project, wind-power project, cell tower project, oil or gas well drilling project, sewer or water main project or other linear utility project
- Sidewalk, bike path or walking path projects, surfaced with an impervious cover, that are part of a residential, commercial or institutional development
- Sidewalk, bike path or walking path projects, surfaced with an impervious cover, that are part of a highway construction or reconstruction project
- All other construction activities that include the construction or reconstruction of *impervious area* or *alter the hydrology from pre to post development* conditions, and are not listed in Table 1

APPENDIX C – Watersheds Requiring Enhanced Phosphorus Removal

Watersheds where *owners or operators* of construction activities identified in Table 2 of Appendix B must prepare a SWPPP that includes post-construction stormwater management practices designed in conformance with the Enhanced Phosphorus Removal Standards included in the technical standard, New York State Stormwater Management Design Manual ("Design Manual").

- Entire New York City Watershed located east of the Hudson River - Figure 1
- Onondaga Lake Watershed - Figure 2
- Greenwood Lake Watershed -Figure 3
- Oscawana Lake Watershed – Figure 4
- Kinderhook Lake Watershed – Figure 5

Figure 1 - New York City Watershed East of the Hudson

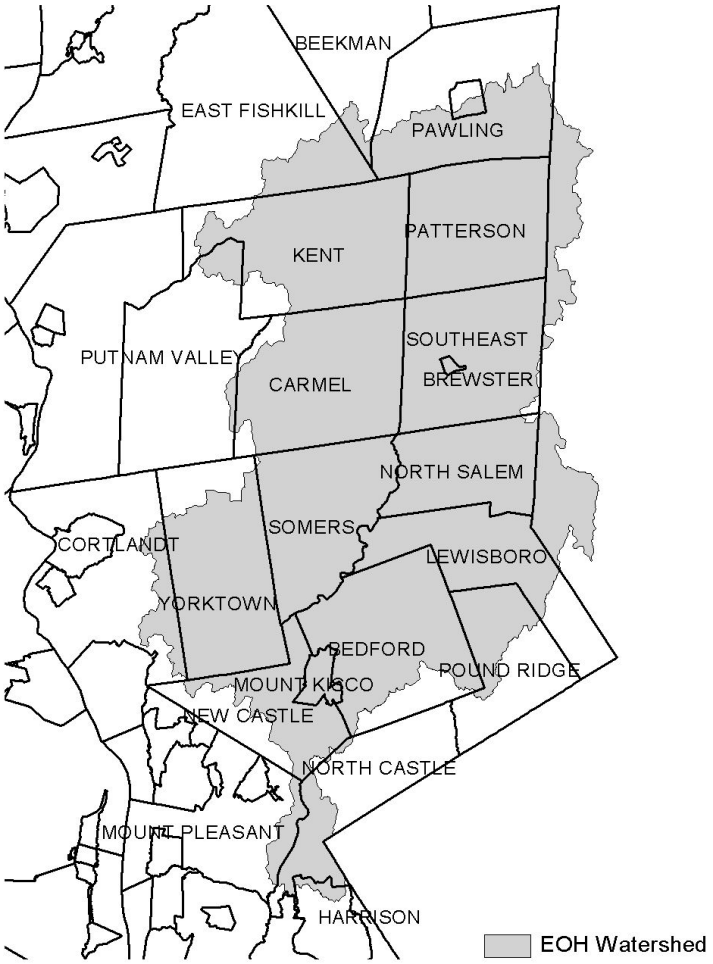


Figure 2 - Onondaga Lake Watershed



Figure 3 - Greenwood Lake Watershed

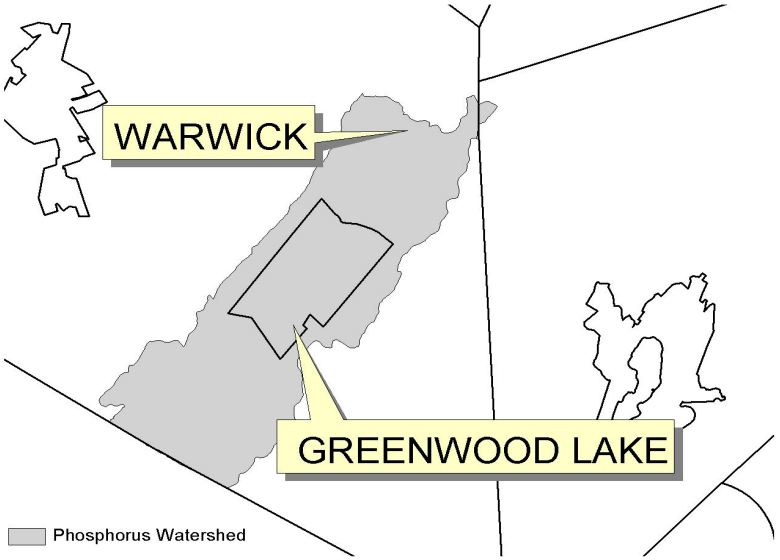


Figure 4 - Oscawana Lake Watershed

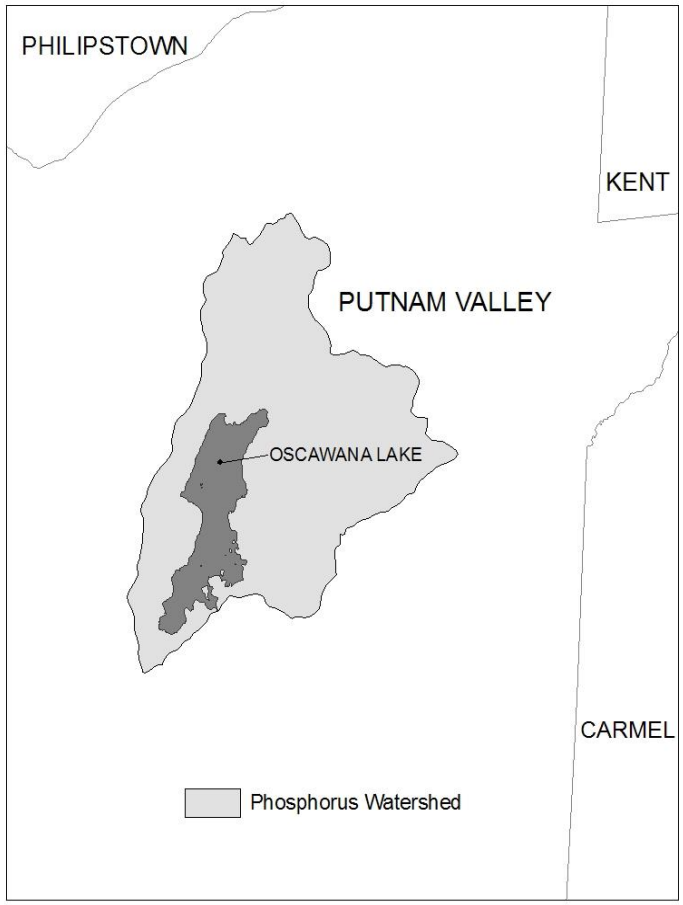
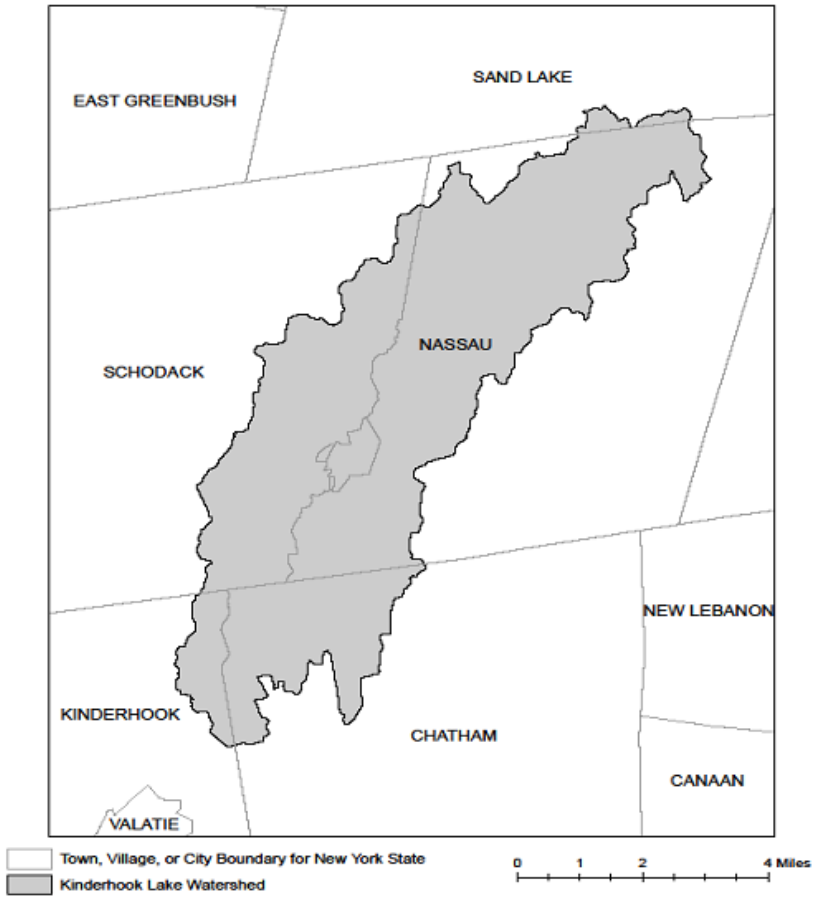


Figure 5 - Kinderhook Lake Watershed



APPENDIX D – Watersheds with Lower Disturbance Threshold

Watersheds where *owners or operators* of construction activities that involve soil disturbances between five thousand (5000) square feet and one (1) acre of land must obtain coverage under this permit.

Entire New York City Watershed that is located east of the Hudson River - See Figure 1 in Appendix C

APPENDIX E – 303(d) Segments Impaired by Construction Related Pollutant(s)

List of 303(d) segments impaired by pollutants related to *construction activity* (e.g. silt, sediment or nutrients). The list was developed using "The Final New York State 2016 Section 303(d) List of Impaired Waters Requiring a TMDL/Other Strategy" dated November 2016. *Owners or operators* of single family home and single family residential subdivisions with 25% or less total impervious cover at total site build-out that involve soil disturbances of one or more acres of land, but less than 5 acres, and *directly discharge* to one of the listed segments below shall prepare a SWPPP that includes post-construction stormwater management practices designed in conformance with the New York State Stormwater Management Design Manual ("Design Manual"), dated January 2015.

COUNTY	WATERBODY	POLLUTANT
Albany	Ann Lee (Shakers) Pond, Stump Pond	Nutrients
Albany	Basic Creek Reservoir	Nutrients
Allegany	Amity Lake, Saunders Pond	Nutrients
Bronx	Long Island Sound, Bronx	Nutrients
Bronx	Van Cortlandt Lake	Nutrients
Broome	Fly Pond, Deer Lake, Sky Lake	Nutrients
Broome	Minor Tribs to Lower Susquehanna (north)	Nutrients
Broome	Whitney Point Lake/Reservoir	Nutrients
Cattaraugus	Allegheny River/Reservoir	Nutrients
Cattaraugus	Beaver (Alma) Lake	Nutrients
Cattaraugus	Case Lake	Nutrients
Cattaraugus	Linlyco/Club Pond	Nutrients
Cayuga	Duck Lake	Nutrients
Cayuga	Little Sodus Bay	Nutrients
Chautauqua	Bear Lake	Nutrients
Chautauqua	Chadakoin River and tribs	Nutrients
Chautauqua	Chautauqua Lake, North	Nutrients
Chautauqua	Chautauqua Lake, South	Nutrients
Chautauqua	Findley Lake	Nutrients
Chautauqua	Hulburt/Clymer Pond	Nutrients
Clinton	Great Chazy River, Lower, Main Stem	Silt/Sediment
Clinton	Lake Champlain, Main Lake, Middle	Nutrients
Clinton	Lake Champlain, Main Lake, North	Nutrients
Columbia	Kinderhook Lake	Nutrients
Columbia	Robinson Pond	Nutrients
Cortland	Dean Pond	Nutrients

Dutchess	Fall Kill and tribs	Nutrients
Dutchess	Hillside Lake	Nutrients
Dutchess	Wappingers Lake	Nutrients
Dutchess	Wappingers Lake	Silt/Sediment
Erie	Beeman Creek and tribs	Nutrients
Erie	Ellicott Creek, Lower, and tribs	Silt/Sediment
Erie	Ellicott Creek, Lower, and tribs	Nutrients
Erie	Green Lake	Nutrients
Erie	Little Sister Creek, Lower, and tribs	Nutrients
Erie	Murder Creek, Lower, and tribs	Nutrients
Erie	Rush Creek and tribs	Nutrients
Erie	Scajaquada Creek, Lower, and tribs	Nutrients
Erie	Scajaquada Creek, Middle, and tribs	Nutrients
Erie	Scajaquada Creek, Upper, and tribs	Nutrients
Erie	South Branch Smoke Cr, Lower, and tribs	Silt/Sediment
Erie	South Branch Smoke Cr, Lower, and tribs	Nutrients
Essex	Lake Champlain, Main Lake, South	Nutrients
Essex	Lake Champlain, South Lake	Nutrients
Essex	Willsboro Bay	Nutrients
Genesee	Bigelow Creek and tribs	Nutrients
Genesee	Black Creek, Middle, and minor tribs	Nutrients
Genesee	Black Creek, Upper, and minor tribs	Nutrients
Genesee	Bowen Brook and tribs	Nutrients
Genesee	LeRoy Reservoir	Nutrients
Genesee	Oak Orchard Cr, Upper, and tribs	Nutrients
Genesee	Tonawanda Creek, Middle, Main Stem	Nutrients
Greene	Schoharie Reservoir	Silt/Sediment
Greene	Sleepy Hollow Lake	Silt/Sediment
Herkimer	Steele Creek tribs	Silt/Sediment
Herkimer	Steele Creek tribs	Nutrients
Jefferson	Moon Lake	Nutrients
Kings	Hendrix Creek	Nutrients
Kings	Prospect Park Lake	Nutrients
Lewis	Mill Creek/South Branch, and tribs	Nutrients
Livingston	Christie Creek and tribs	Nutrients
Livingston	Conesus Lake	Nutrients
Livingston	Mill Creek and minor tribs	Silt/Sediment
Monroe	Black Creek, Lower, and minor tribs	Nutrients
Monroe	Buck Pond	Nutrients
Monroe	Cranberry Pond	Nutrients

Monroe	Lake Ontario Shoreline, Western	Nutrients
Monroe	Long Pond	Nutrients
Monroe	Mill Creek and tribs	Nutrients
Monroe	Mill Creek/Blue Pond Outlet and tribs	Nutrients
Monroe	Minor Tribs to Irondequoit Bay	Nutrients
Monroe	Rochester Embayment - East	Nutrients
Monroe	Rochester Embayment - West	Nutrients
Monroe	Shipbuilders Creek and tribs	Nutrients
Monroe	Thomas Creek/White Brook and tribs	Nutrients
Nassau	Beaver Lake	Nutrients
Nassau	Camaans Pond	Nutrients
Nassau	East Meadow Brook, Upper, and tribs	Silt/Sediment
Nassau	East Rockaway Channel	Nutrients
Nassau	Grant Park Pond	Nutrients
Nassau	Hempstead Bay	Nutrients
Nassau	Hempstead Lake	Nutrients
Nassau	Hewlett Bay	Nutrients
Nassau	Hog Island Channel	Nutrients
Nassau	Long Island Sound, Nassau County Waters	Nutrients
Nassau	Massapequa Creek and tribs	Nutrients
Nassau	Milburn/Parsonage Creeks, Upp, and tribs	Nutrients
Nassau	Reynolds Channel, west	Nutrients
Nassau	Tidal Tribs to Hempstead Bay	Nutrients
Nassau	Tribs (fresh) to East Bay	Nutrients
Nassau	Tribs (fresh) to East Bay	Silt/Sediment
Nassau	Tribs to Smith/Halls Ponds	Nutrients
Nassau	Woodmere Channel	Nutrients
New York	Harlem Meer	Nutrients
New York	The Lake in Central Park	Nutrients
Niagara	Bergholtz Creek and tribs	Nutrients
Niagara	Hyde Park Lake	Nutrients
Niagara	Lake Ontario Shoreline, Western	Nutrients
Niagara	Lake Ontario Shoreline, Western	Nutrients
Oneida	Ballou, Nail Creeks and tribs	Nutrients
Onondaga	Harbor Brook, Lower, and tribs	Nutrients
Onondaga	Ley Creek and tribs	Nutrients
Onondaga	Minor Tribs to Onondaga Lake	Nutrients
Onondaga	Ninemile Creek, Lower, and tribs	Nutrients
Onondaga	Onondaga Creek, Lower, and tribs	Nutrients
Onondaga	Onondaga Creek, Middle, and tribs	Nutrients

Onondaga	Onondaga Lake, northern end	Nutrients
Onondaga	Onondaga Lake, southern end	Nutrients
Ontario	Great Brook and minor tribs	Silt/Sediment
Ontario	Great Brook and minor tribs	Nutrients
Ontario	Hemlock Lake Outlet and minor tribs	Nutrients
Ontario	Honeoye Lake	Nutrients
Orange	Greenwood Lake	Nutrients
Orange	Monhagen Brook and tribs	Nutrients
Orange	Orange Lake	Nutrients
Orleans	Lake Ontario Shoreline, Western	Nutrients
Orleans	Lake Ontario Shoreline, Western	Nutrients
Oswego	Lake Neatahwanta	Nutrients
Oswego	Pleasant Lake	Nutrients
Putnam	Bog Brook Reservoir	Nutrients
Putnam	Boyd Corners Reservoir	Nutrients
Putnam	Croton Falls Reservoir	Nutrients
Putnam	Diverting Reservoir	Nutrients
Putnam	East Branch Reservoir	Nutrients
Putnam	Lake Carmel	Nutrients
Putnam	Middle Branch Reservoir	Nutrients
Putnam	Oscawana Lake	Nutrients
Putnam	Palmer Lake	Nutrients
Putnam	West Branch Reservoir	Nutrients
Queens	Bergen Basin	Nutrients
Queens	Flushing Creek/Bay	Nutrients
Queens	Jamaica Bay, Eastern, and tribs (Queens)	Nutrients
Queens	Kissena Lake	Nutrients
Queens	Meadow Lake	Nutrients
Queens	Willow Lake	Nutrients
Rensselaer	Nassau Lake	Nutrients
Rensselaer	Snyders Lake	Nutrients
Richmond	Grasmere Lake/Bradys Pond	Nutrients
Rockland	Congers Lake, Swartout Lake	Nutrients
Rockland	Rockland Lake	Nutrients
Saratoga	Ballston Lake	Nutrients
Saratoga	Dwaas Kill and tribs	Silt/Sediment
Saratoga	Dwaas Kill and tribs	Nutrients
Saratoga	Lake Lonely	Nutrients
Saratoga	Round Lake	Nutrients
Saratoga	Tribs to Lake Lonely	Nutrients

303(d) Segments Impaired by Construction Related Pollutant(s)

Schenectady	Collins Lake	Nutrients
Schenectady	Duane Lake	Nutrients
Schenectady	Mariaville Lake	Nutrients
Schoharie	Engleville Pond	Nutrients
Schoharie	Summit Lake	Nutrients
Seneca	Reeder Creek and tribs	Nutrients
St.Lawrence	Black Lake Outlet/Black Lake	Nutrients
St.Lawrence	Fish Creek and minor tribs	Nutrients
Steuben	Smith Pond	Nutrients
Suffolk	Agawam Lake	Nutrients
Suffolk	Big/Little Fresh Ponds	Nutrients
Suffolk	Canaan Lake	Silt/Sediment
Suffolk	Canaan Lake	Nutrients
Suffolk	Flanders Bay, West/Lower Sawmill Creek	Nutrients
Suffolk	Fresh Pond	Nutrients
Suffolk	Great South Bay, East	Nutrients
Suffolk	Great South Bay, Middle	Nutrients
Suffolk	Great South Bay, West	Nutrients
Suffolk	Lake Ronkonkoma	Nutrients
Suffolk	Long Island Sound, Suffolk County, West	Nutrients
Suffolk	Mattituck (Marratooka) Pond	Nutrients
Suffolk	Meetinghouse/Terrys Creeks and tribs	Nutrients
Suffolk	Mill and Seven Ponds	Nutrients
Suffolk	Millers Pond	Nutrients
Suffolk	Moriches Bay, East	Nutrients
Suffolk	Moriches Bay, West	Nutrients
Suffolk	Peconic River, Lower, and tidal tribs	Nutrients
Suffolk	Quantuck Bay	Nutrients
Suffolk	Shinnecock Bay and Inlet	Nutrients
Suffolk	Tidal tribs to West Moriches Bay	Nutrients
Sullivan	Bodine, Montgomery Lakes	Nutrients
Sullivan	Davies Lake	Nutrients
Sullivan	Evens Lake	Nutrients
Sullivan	Pleasure Lake	Nutrients
Tompkins	Cayuga Lake, Southern End	Nutrients
Tompkins	Cayuga Lake, Southern End	Silt/Sediment
Tompkins	Owasco Inlet, Upper, and tribs	Nutrients
Ulster	Ashokan Reservoir	Silt/Sediment
Ulster	Esopus Creek, Upper, and minor tribs	Silt/Sediment
Warren	Hague Brook and tribs	Silt/Sediment

303(d) Segments Impaired by Construction Related Pollutant(s)

Warren	Huddle/Finkle Brooks and tribs	Silt/Sediment
Warren	Indian Brook and tribs	Silt/Sediment
Warren	Lake George	Silt/Sediment
Warren	Tribs to L.George, Village of L George	Silt/Sediment
Washington	Cossayuna Lake	Nutrients
Washington	Lake Champlain, South Bay	Nutrients
Washington	Tribs to L.George, East Shore	Silt/Sediment
Washington	Wood Cr/Champlain Canal and minor tribs	Nutrients
Wayne	Port Bay	Nutrients
Westchester	Amawalk Reservoir	Nutrients
Westchester	Blind Brook, Upper, and tribs	Silt/Sediment
Westchester	Cross River Reservoir	Nutrients
Westchester	Lake Katonah	Nutrients
Westchester	Lake Lincolndale	Nutrients
Westchester	Lake Meahagh	Nutrients
Westchester	Lake Mohegan	Nutrients
Westchester	Lake Shenorock	Nutrients
Westchester	Long Island Sound, Westchester (East)	Nutrients
Westchester	Mamaroneck River, Lower	Silt/Sediment
Westchester	Mamaroneck River, Upper, and minor tribs	Silt/Sediment
Westchester	Muscoot/Upper New Croton Reservoir	Nutrients
Westchester	New Croton Reservoir	Nutrients
Westchester	Peach Lake	Nutrients
Westchester	Reservoir No.1 (Lake Isle)	Nutrients
Westchester	Saw Mill River, Lower, and tribs	Nutrients
Westchester	Saw Mill River, Middle, and tribs	Nutrients
Westchester	Sheldrake River and tribs	Silt/Sediment
Westchester	Sheldrake River and tribs	Nutrients
Westchester	Silver Lake	Nutrients
Westchester	Teatown Lake	Nutrients
Westchester	Titicus Reservoir	Nutrients
Westchester	Truesdale Lake	Nutrients
Westchester	Wallace Pond	Nutrients
Wyoming	Java Lake	Nutrients
Wyoming	Silver Lake	Nutrients

APPENDIX F – List of NYS DEC Regional Offices

Region	Covering the following counties:	DIVISION OF ENVIRONMENTAL PERMITS (DEP) Permit Administrators	DIVISION OF WATER (DOW) Water (SPDES) Program
1	Nassau and Suffolk	50 Circle Road Stony Brook, NY 11790 Tel. (631) 444-0365	50 Circle Road Stony Brook, NY 11790-3409 Tel. (631) 444-0405
2	Bronx, Kings, New York, Queens and Richmond	1 Hunters Point Plaza, 47-40 21st St. Long Island City, NY 11101-5407 Tel. (718) 482-4997	1 Hunters Point Plaza, 47-40 21st St. Long Island City, NY 11101-5407 Tel. (718) 482-4933
3	Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster and Westchester	21 South Putt Corners Road New Paltz, NY 12561-1696 Tel. (845) 256-3059	100 Hillside Avenue, Suite 1w White Plains, NY 10603 Tel. (914) 428 - 2505
4	Albany, Columbia, Delaware, Greene, Montgomery, Otsego, Rensselaer, Schenectady and Schoharie	1150 North Westcott Road Schenectady, NY 12306-2014 Tel. (518) 357-2069	1130 North Westcott Road Schenectady, NY 12306-2014 Tel. (518) 357-2045
5	Clinton, Essex, Franklin, Fulton, Hamilton, Saratoga, Warren and Washington	1115 State Route 86, Po Box 296 Ray Brook, NY 12977-0296 Tel. (518) 897-1234	232 Golf Course Road Warrensburg, NY 12885-1172 Tel. (518) 623-1200
6	HERKIMER, JEFFERSON, LEWIS, ONEIDA AND ST. LAWRENCE	STATE OFFICE BUILDING 317 WASHINGTON STREET WATERTOWN, NY 13601-3787 TEL. (315) 785-2245	STATE OFFICE BUILDING 207 GENESEE STREET UTICA, NY 13501-2885 TEL. (315) 793-2554
7	BROOME, CAYUGA, CHENANGO, CORTLAND, MADISON, ONONDAGA, OSWEGO, TIOGA AND TOMPKINS	615 ERIE BLVD. WEST SYRACUSE, NY 13204-2400 TEL. (315) 426-7438	615 ERIE BLVD. WEST SYRACUSE, NY 13204-2400 TEL. (315) 426-7500
8	CHEMUNG, GENESEE, LIVINGSTON, MONROE, ONTARIO, ORLEANS, SCHUYLER, SENECA, STEUBEN, WAYNE AND YATES	6274 EAST AVON-LIMA ROADAVON, NY 14414-9519 TEL. (585) 226-2466	6274 EAST AVON-LIMA RD. AVON, NY 14414-9519 TEL. (585) 226-2466
9	ALLEGANY, CATTARAUGUS, CHAUTAUQUA, ERIE, NIAGARA AND WYOMING	270 MICHIGAN AVENUE BUFFALO, NY 14203-2999 TEL. (716) 851-7165	270 MICHIGAN AVENUE BUFFALO, NY 14203-2999 TEL. (716) 851-7070

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Appendix B:
NYSDEC Forms

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NOI for coverage under Stormwater General Permit for Construction Activity

version 1.29

(Submission #: HP6-TD89-CR09C, version 2)

Details

Submitted	3/3/2021 (0 days ago) by Long Nguyen
Alternate ID	248 Tioronda
Submission ID	HP6-TD89-CR09C
Submission Reason	New
Status	Submitted
Active Steps	Under Review

Form Input

Owner/Operator Information

Owner/Operator Name (Company/Private Owner/Municipality/Agency/Institution, etc.)
Beacon 248 Holdings LLC

Owner/Operator Contact Person Last Name (NOT CONSULTANT)
Kohn

Owner/Operator Contact Person First Name
Berry

Owner/Operator Mailing Address
147 Union Street, Suite 101

City
Poughkeepsie

State
NY

Zip
12601

Phone
917-696-4402

Email
berry@chaibuilders.com

Federal Tax ID
82-0995024

Project Location

Project/Site Name
248 Tioronda

Street Address (Not P.O. Box)
248 Tioronda Ave

Side of Street
East

City/Town/Village (THAT ISSUES BUILDING PERMIT)
Beeacon

State
NY

Zip
12508-4022

County
DUTCHESS

DEC Region
3

Name of Nearest Cross Street
Knevels Ave

Distance to Nearest Cross Street (Feet)
100

Project In Relation to Cross Street
North

Tax Map Numbers Section-Block-Parcel
5954-10-993482

Tax Map Numbers
6054-45-012574

1. Coordinates

Provide the Geographic Coordinates for the project site. The two methods are:
- Navigate to the project location on the map (below) and click to place a marker and obtain the XY coordinates.
- The "Find Me" button will provide the lat/long for the person filling out this form. Then pan the map to the correct location and click the map to place a marker and obtain the XY coordinates.

Navigate to your location and click on the map to get the X,Y coordinates
586100,4594101

Project Details

2. What is the nature of this project?
Redevelopment with increase in impervious area

3. Select the predominant land use for both pre and post development conditions.

Pre-Development Existing Landuse
Other: Vacant Parcel

Post-Development Future Land Use
Other: Mixed Use

3a. If Single Family Subdivision was selected in question 3, enter the number of subdivision lots.
NONE PROVIDED

4. In accordance with the larger common plan of development or sale, enter the total project site acreage, the acreage to be disturbed and the future impervious area (acreage)within the disturbed area.

*** ROUND TO THE NEAREST TENTH OF AN ACRE. ***

Total Site Area (acres)
9.2

Total Area to be Disturbed (acres)
5.0

Existing Impervious Area to be Disturbed (acres)
2.5

Future Impervious Area Within Disturbed Area (acres)
4.7

5. Do you plan to disturb more than 5 acres of soil at any one time?
No

---

6. Indicate the percentage (%) of each Hydrologic Soil Group(HSG) at the site.

A (%)
100

B (%)
0

C (%)
0

D (%)
0

7. Is this a phased project?
No

8. Enter the planned start and end dates of the disturbance activities.

Start Date
02/22/2021

End Date
02/22/2022

9. Identify the nearest surface waterbody(ies) to which construction site runoff will discharge.
Fishkill Creek

9a. Type of waterbody identified in question 9?
Stream/Creek Off Site

Other Waterbody Type Off Site Description
NONE PROVIDED

9b. If "wetland" was selected in 9A, how was the wetland identified?
Regulatory Map

10. Has the surface waterbody(ies in question 9 been identified as a 303(d) segment in Appendix E of GP-0-20-001?
No

11. Is this project located in one of the Watersheds identified in Appendix C of GP-0-20-001?
No

12. Is the project located in one of the watershed areas associated with AA and AA-S classified waters?
No

If No, skip question 13.

13. Does this construction activity disturb land with no existing impervious cover and where the Soil Slope Phase is identified as an E or F on the USDA Soil Survey?
NONE PROVIDED

If Yes, what is the acreage to be disturbed?
NONE PROVIDED

14. Will the project disturb soils within a State regulated wetland or the protected 100 foot adjacent area?
No

15. Does the site runoff enter a separate storm sewer system (including roadside drains, swales, ditches, culverts, etc)?
No

16. What is the name of the municipality/entity that owns the separate storm sewer system?
N/A

17. Does any runoff from the site enter a sewer classified as a Combined Sewer?
No

18. Will future use of this site be an agricultural property as defined by the NYS Agriculture and Markets Law?
No

19. Is this property owned by a state authority, state agency, federal government or local government?
No

20. Is this a remediation project being done under a Department approved work plan? (i.e. CERCLA, RCRA, Voluntary Cleanup Agreement, etc.)
No

Required SWPPP Components

21. Has the required Erosion and Sediment Control component of the SWPPP been developed in conformance with the current NYS Standards and Specifications for Erosion and Sediment Control (aka Blue Book)?
Yes

22. Does this construction activity require the development of a SWPPP that includes the post-construction stormwater management practice component (i.e. Runoff Reduction, Water Quality and Quantity Control practices/techniques)?
Yes

If you answered No in question 22, skip question 23 and the Post-construction Criteria and Post-construction SMP Identification sections.

23. Has the post-construction stormwater management practice component of the SWPPP been developed in conformance with the current NYS Stormwater Management Design Manual?
Yes

24. The Stormwater Pollution Prevention Plan (SWPPP) was prepared by:
Professional Engineer (P.E.)

SWPPP Preparer
Christopher P. Lapine

Contact Name (Last, Space, First)
Lapine, Christopher

Mailing Address
21 Fox Street

City
Poughkeepsie

State
NY

Zip
12601-4724

Phone
845-454-3980

Email
clapinee@chazencompanies.com

Download SWPPP Preparer Certification Form
Please take the following steps to prepare and upload your preparer certification form:

1) Click on the link below to download a blank certification form
2) The certified SWPPP preparer should sign this form
3) Scan the signed form
4) Upload the scanned document
Download SWPPP Preparer Certification Form

Please upload the SWPPP Preparer Certification

> SWPPP Preparer Certification Form (GP-0-20-001).pdf - 02/26/2021 11:03 AM
> **Comment**
> NONE PROVIDED

Erosion & Sediment Control Criteria

25. Has a construction sequence schedule for the planned management practices been prepared?
Yes

26. Select all of the erosion and sediment control practices that will be employed on the project site:

Temporary Structural
Dust Control
Silt Fence
Stabilized Construction Entrance
Storm Drain Inlet Protection
Straw/Hay Bale Dike

Biotechnical
None

Vegetative Measures
Brush Matting
Mulching
Seeding
Topsoiling

Permanent Structural
Diversion
Land Grading
Rock Outlet Protection

Other
NONE PROVIDED

Post-Construction Criteria

*** IMPORTANT: Completion of Questions 27-39 is not required if response to Question 22 is No.**

27. Identify all site planning practices that were used to prepare the final site plan/layout for the project.
Reduction of Clearing and Grading
Sidewalk Reduction
Parking Reduction

27a. Indicate which of the following soil restoration criteria was used to address the requirements in Section 5.1.6("Soil Restoration") of the Design Manual (2010 version).
All disturbed areas will be restored in accordance with the Soil Restoration requirements in Table 5.3 of the Design Manual (see page 5-22).

28. Provide the total Water Quality Volume (WQv) required for this project (based on final site plan/layout). (Acre-feet)
0.318

29. Post-construction SMP Identification
Use the Post-construction SMP Identification section to identify the RR techniques (Area Reduction), RR techniques(Volume Reduction) and Standard SMPs with RRv Capacity that were used to reduce the Total WQv Required (#28).

Identify the SMPs to be used by providing the total impervious area that contributes runoff to each technique/practice selected. For the Area Reduction Techniques, provide the total

contributing area (includes pervious area) and, if applicable, the total impervious area that contributes runoff to the technique/practice.

Note: Redevelopment projects shall use the Post-Construction SMP Identification section to identify the SMPs used to treat and/or reduce the WQv required. If runoff reduction techniques will not be used to reduce the required WQv, skip to question 33a after identifying the SMPs.

30. Indicate the Total RRv provided by the RR techniques (Area/Volume Reduction) and Standard SMPs with RRv capacity identified in question 29. (acre-feet)
0.055

31. Is the Total RRv provided (#30) greater than or equal to the total WQv required (#28)?
No

If Yes, go to question 36. If No, go to question 32.

32. Provide the Minimum RRv required based on HSG. [Minimum RRv Required = (P) (0.95) (Ai) / 12, Ai=(s) (Aic)] (acre-feet)
0.052

32a. Is the Total RRv provided (#30) greater than or equal to the Minimum RRv Required (#32)?
Yes

If Yes, go to question 33.
Note: Use the space provided in question #39 to summarize the specific site limitations and justification for not reducing 100% of WQv required (#28). A detailed evaluation of the specific site limitations and justification for not reducing 100% of the WQv required (#28) must also be included in the SWPPP.

If No, sizing criteria has not been met; therefore, NOI can not be processed. SWPPP preparer must modify design to meet sizing criteria.

33. SMPs
Use the Post-construction SMP Identification section to identify the Standard SMPs and, if applicable, the Alternative SMPs to be used to treat the remaining total WQv (=Total WQv Required in #28 - Total RRv Provided in #30).

Also, provide the total impervious area that contributes runoff to each practice selected.

NOTE: Use the Post-construction SMP Identification section to identify the SMPs used on Redevelopment projects.

33a. Indicate the Total WQv provided (i.e. WQv treated) by the SMPs identified in question #33 and Standard SMPs with RRv Capacity identified in question #29. (acre-feet)
0.298

Note: For the standard SMPs with RRv capacity, the WQv provided by each practice = the WQv calculated using the contributing drainage area to the practice - provided by the practice. (See Table 3.5 in Design Manual)

34. Provide the sum of the Total RRv provided (#30) and the WQv provided (#33a).
0.353

35. Is the sum of the RRv provided (#30) and the WQv provided (#33a) greater than or equal to the total WQv required (#28)?
Yes

If Yes, go to question 36.

If No, sizing criteria has not been met; therefore, NOI can not be processed. SWPPP preparer must modify design to meet sizing criteria.

36. Provide the total Channel Protection Storage Volume (CPv required and provided or select waiver (#36a), if applicable.

CPv Required (acre-feet)
NONE PROVIDED

CPv Provided (acre-feet)
NONE PROVIDED

36a. The need to provide channel protection has been waived because:
Site discharges directly to tidal waters or a fifth order or larger stream.

37. Provide the Overbank Flood (Qp) and Extreme Flood (Qf) control criteria or select waiver (#37a), if applicable.

Overbank Flood Control Criteria (Qp)

Pre-Development (CFS)
0

Post-Development (CFS)
0

Total Extreme Flood Control Criteria (Qf)

Pre-Development (CFS)
0

Post-Development (CFS)
0

37a. The need to meet the Qp and Qf criteria has been waived because:
Downstream analysis reveals that the Qp and Qf controls are not required.

38. Has a long term Operation and Maintenance Plan for the post-construction stormwater management practice(s) been developed?
Yes

If Yes, Identify the entity responsible for the long term Operation and Maintenance
Berry Kohn

39. Use this space to summarize the specific site limitations and justification for not reducing 100% of WQv required (#28). (See question #32a) This space can also be used for other pertinent project information.
Regarding 36a, down stream analysis shows no flood control devices are needed.

Post-Construction SMP Identification

Runoff Reduction (RR) Techniques, Standard Stormwater Management Practices (SMPs) and Alternative SMPs
Identify the Post-construction SMPs to be used by providing the total impervious area that contributes runoff to each technique/practice selected. For the Area Reduction Techniques, provide the total contributing area (includes pervious area) and, if applicable, the total impervious area that contributes runoff to the technique/practice.

RR Techniques (Area Reduction)

Round to the nearest tenth

Total Contributing Acres for Conservation of Natural Area (RR-1)
NONE PROVIDED

Total Contributing Impervious Acres for Conservation of Natural Area (RR-1)
NONE PROVIDED

Total Contributing Acres for Sheetflow to Riparian Buffers/Filter Strips (RR-2)
NONE PROVIDED

Total Contributing Impervious Acres for Sheetflow to Riparian Buffers/Filter Strips (RR-2)
NONE PROVIDED

Total Contributing Acres for Tree Planting/Tree Pit (RR-3)
NONE PROVIDED

Total Contributing Impervious Acres for Tree Planting/Tree Pit (RR-3)
NONE PROVIDED

Total Contributing Acres for Disconnection of Rooftop Runoff (RR-4)
NONE PROVIDED

RR Techniques (Volume Reduction)

Total Contributing Impervious Acres for Disconnection of Rooftop Runoff (RR-4)
NONE PROVIDED

Total Contributing Impervious Acres for Vegetated Swale (RR-5)
NONE PROVIDED

Total Contributing Impervious Acres for Rain Garden (RR-6)
NONE PROVIDED

Total Contributing Impervious Acres for Stormwater Planter (RR-7)
NONE PROVIDED

Total Contributing Impervious Acres for Rain Barrel/Cistern (RR-8)
NONE PROVIDED

Total Contributing Impervious Acres for Porous Pavement (RR-9)
NONE PROVIDED

Total Contributing Impervious Acres for Green Roof (RR-10)
NONE PROVIDED

Standard SMPs with RRv Capacity

Total Contributing Impervious Acres for Infiltration Trench (I-1)
NONE PROVIDED

Total Contributing Impervious Acres for Infiltration Basin (I-2)
NONE PROVIDED

Total Contributing Impervious Acres for Dry Well (I-3)
NONE PROVIDED

Total Contributing Impervious Acres for Underground Infiltration System (I-4)
NONE PROVIDED

Total Contributing Impervious Acres for Bioretention (F-5)
1.1

Total Contributing Impervious Acres for Dry Swale (O-1)
NONE PROVIDED

Standard SMPs

Total Contributing Impervious Acres for Micropool Extended Detention (P-1)
NONE PROVIDED

Total Contributing Impervious Acres for Wet Pond (P-2)
NONE PROVIDED

Total Contributing Impervious Acres for Wet Extended Detention (P-3)
NONE PROVIDED

Total Contributing Impervious Acres for Multiple Pond System (P-4)
NONE PROVIDED

Total Contributing Impervious Acres for Pocket Pond (P-5)
NONE PROVIDED

Total Contributing Impervious Acres for Surface Sand Filter (F-1)
NONE PROVIDED

Total Contributing Impervious Acres for Underground Sand Filter (F-2)
NONE PROVIDED

Total Contributing Impervious Acres for Perimeter Sand Filter (F-3)
NONE PROVIDED

Total Contributing Impervious Acres for Organic Filter (F-4)
NONE PROVIDED

Total Contributing Impervious Acres for Shallow Wetland (W-1)
NONE PROVIDED

Total Contributing Impervious Acres for Extended Detention Wetland (W-2)
NONE PROVIDED

Total Contributing Impervious Acres for Pond/Wetland System (W-3)
NONE PROVIDED

Total Contributing Impervious Acres for Pocket Wetland (W-4)
NONE PROVIDED

Total Contributing Impervious Acres for Wet Swale (O-2)
NONE PROVIDED

Alternative SMPs (DO NOT INCLUDE PRACTICES BEING USED FOR PRETREATMENT ONLY)

Total Contributing Impervious Area for Hydrodynamic
1.9

Total Contributing Impervious Area for Wet Vault
NONE PROVIDED

Total Contributing Impervious Area for Media Filter
NONE PROVIDED

"Other" Alternative SMP?
NONE PROVIDED

Total Contributing Impervious Area for "Other"
NONE PROVIDED

Provide the name and manufaturer of the alternative SMPs (i.e. proprietary practice(s)) being used for WQv treatment.

Note: Redevelopment projects which do not use RR techniques, shall use questions 28, 29, 33 and 33a to provide SMPs used, total WQv required and total WQv provided for the project.

Manufacturer of Alternative SMP
Contech

Name of Alternative SMP
CDS

Other Permits

40. Identify other DEC permits, existing and new, that are required for this project/facility.
None

If SPDES Multi-Sector GP, then give permit ID
NONE PROVIDED

If Other, then identify
NONE PROVIDED

41. Does this project require a US Army Corps of Engineers Wetland Permit?
No

If "Yes," then indicate Size of Impact, in acres, to the nearest tenth
NONE PROVIDED

42. If this NOI is being submitted for the purpose of continuing or transferring coverage under a general permit for stormwater runoff from construction activities, please indicate the former SPDES number assigned.
NONE PROVIDED

MS4 SWPPP Acceptance

43. Is this project subject to the requirements of a regulated, traditional land use control MS4?
Yes - Please attach the MS4 Acceptance form below

If No, skip question 44

44. Has the "MS4 SWPPP Acceptance" form been signed by the principal executive officer or ranking elected official and submitted along with this NOI?
NONE PROVIDED

MS4 SWPPP Acceptance Form Download
Download form from the link below. Complete, sign, and upload.
MS4 SWPPP Acceptance Form

MS4 Acceptance Form Upload

> 3_App B_MS4 SWPPP Acceptance_GP-0-15-002 Signed Owner.pdf - 02/26/2021 11:43 AM
> **Comment**
> NONE PROVIDED

Owner/Operator Certification

Owner/Operator Certification Form Download
Download the certification form by clicking the link below. Complete, sign, scan, and upload the form.

Owner/Operator Certification Form (PDF, 45KB)

Upload Owner/Operator Certification Form

3_App B__NOI_81750-00_GP-0-15-002 Signed Owner.pdf - 03/03/2021 06:09 PM

Comment

NONE PROVIDED

Attachments

Date	Attachment Name	Context	User
3/3/2021 6:09 PM	3_App B__NOI_81750-00_GP-0-15-002 Signed Owner.pdf	Attachment	Long Nguyen
2/26/2021 11:43 AM	3_App B_MS4 SWPPP Acceptance_GP-0-15-002 Signed Owner.pdf	Attachment	Long Nguyen
2/26/2021 11:03 AM	SWPPP Preparer Certification Form (GP-0-20-001).pdf	Attachment	Long Nguyen

Status History

	User	Processing Status
3/3/2021 6:08:02 PM	Long Nguyen	Draft
3/3/2021 6:13:33 PM	Long Nguyen	Submitting
3/3/2021 6:13:47 PM	Long Nguyen	Submitted

Processing Steps

Step Name	Assigned To/Completed By	Date Completed
Form Submitted	Long Nguyen	3/3/2021 6:13:47 PM
Under Review	DAVID GASPER	

Revisions

Revision	Revision Date	Revision By
Revision 1	2/26/2021 10:20 AM	Long Nguyen

Revision	Revision Date	Revision By
Revision 2	3/3/2021 6:08 PM	Long Nguyen

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NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Division of Water, Bureau of Water Permits
625 Broadway, Albany, New York 12233-3505
P: (518) 402-8111 F: (518) 402-9029
www.dec.ny.gov

3/11/2021

Beacon 248 Holdings LLC
Berry Kohn
147 Union Street, Suite 101
Poughkeepsie, NY 12601

RE: ACKNOWLEDGMENT of NOTICE OF INTENT for Coverage Under SPDES General Permit for Storm Water Discharges from CONSTRUCTION ACTIVITY – General Permit No. GP-0-20-001

Dear Prospective Permittee:

This is to acknowledge that the New York State Department of Environmental Conservation (Department) has received a complete Notice of Intent (NOI) for coverage under General Permit No. GP-0-20-001 for the construction activities located at:

248 Tioronda
248 Tioronda Ave
Beeacon, NY 12508-4022 County: **DUTCHESS**

Pursuant to Environmental Conservation Law (ECL) Article 17, Titles 7 and 8, and ECL Article 70, discharges in accordance with GP-0-20-001 from the above construction site will be authorized **5** business days from **3/3/2021,** which is the date we received your final NOI, unless notified differently by the Department.

The permit identification number for this site is: **NYR11H777**. Be sure to include this permit identification number on any forms or correspondence you send us. When coverage under the permit is no longer needed, you must submit a Notice of Termination to the Department.

This authorization is conditioned upon the following:

1. The information submitted in the NOI received by the Department on **3/3/2021** is accurate and complete.

2. You have developed a Stormwater Pollution Prevention Plan (SWPPP) that complies with GP-0-20 -001 which must be implemented as the first element of construction at the above-noted construction site.

3. Activities related to the above construction site comply with all other requirements of GP-0-20-001.

4. Payment of the annual $110 regulatory fee, which is billed separately by the Department in the late fall. The regulatory fee covers a period of one calendar year. In addition, since September 1, 2004, construction stormwater permittees have been assessed an initial authorization fee which is now $110 per acre of land disturbed and $675 per acre of future impervious area. The initial authorization fee covers the duration of the authorized disturbance.

5. Your SWPPP has been reviewed by the regulated, traditional land use control MS4 where your project is located and has been determined to be in substantive conformance with the requirements in the SPDES General Permit for Stormwater Discharges from MS4s.

6. When applicable, project review pursuant to the State Environmental Quality Review Act (SEQRA) has been satisfied.

7. You have obtained all necessary Department permits subject to the Uniform Procedures Act (UPA). You should check with your Regional Permit Administrator for further information.

***Note: Construction activities cannot commence until project review pursuant to SEQRA has been satisfied, when SEQRA is applicable; and, where required, all necessary Department permits subject to the UPA have been obtained.**

Please be advised that the Department may request a copy of your SWPPP for review.

Should you have any questions regarding any aspect of the requirements specified in GP-0-20-001, please contact Dave Gasper at (518) 402-8114.

Sincerely,

David Gasper

David Gasper
Environmental Engineer

cc: RWE - **3**
SWPPP Preparer
Christopher P. Lapine
Lapine, Christopher
21 Fox Street
Poughkeepsie, NY 12601-4724

New York State Department of Environmental Conservation
Division of Water
625 Broadway, 4th Floor
Albany, New York 12233-3505
(NOTE: Submit completed form to address above)

NOTICE OF TERMINATION for Storm Water Discharges Authorized under the SPDES General Permit for Construction Activity

Please indicate your permit identification number: NYR ___ ___ ___ ___ ___ ___

I. Owner or Operator Information

1. Owner/Operator Name: Chai Builders

2. Street Address: 120 Route 59, Suite 201

3. City/State/Zip: Suffern, NY, 10901-4908

4. Contact Person: Berry Kohn | 4a.Telephone: 917-696-4402

4b. Contact Person E-Mail: berry@chaibuilders.com

II. Project Site Information

5. Project/Site Name: Chai Builders

6. Street Address: 248 Tioronda Ave

7. City/Zip: Beacon, 12508-4022

8. County: Dutchess

III. Reason for Termination

9a. □ All disturbed areas have achieved final stabilization in accordance with the general permit and SWPPP. ***Date final stabilization completed** (month/year): _____

9b. □ Permit coverage has been transferred to new owner/operator. Indicate new owner/operator's permit identification number: NYR ___ ___ ___ ___ ___ ___
(Note: Permit coverage can not be terminated by owner identified in I.1. above until new owner/operator obtains coverage under the general permit)

9c. □ Other (Explain on Page 2)

IV. Final Site Information:

10a. Did this construction activity require the development of a SWPPP that includes post-construction stormwater management practices? □ yes □ no (If no, go to question 10f.)

10b. Have all post-construction stormwater management practices included in the final SWPPP been constructed? □ yes □ no (If no, explain on Page 2)

10c. Identify the entity responsible for long-term operation and maintenance of practice(s)?

_____

NOTICE OF TERMINATION for Storm Water Discharges Authorized under the SPDES General Permit for Construction Activity - continued

10d. Has the entity responsible for long-term operation and maintenance been given a copy of the operation and maintenance plan required by the general permit? □ yes □ no

10e. Indicate the method used to ensure long-term operation and maintenance of the post-construction stormwater management practice(s):

□ Post-construction stormwater management practice(s) and any right-of-way(s) needed to maintain practice(s) have been deeded to the municipality.

□ Executed maintenance agreement is in place with the municipality that will maintain the post-construction stormwater management practice(s).

□ For post-construction stormwater management practices that are privately owned, a mechanism is in place that requires operation and maintenance of the practice(s) in accordance with the operation and maintenance plan, such as a deed covenant in the owner or operator's deed of record.

□ For post-construction stormwater management practices that are owned by a public or private institution (e.g. school, university or hospital), government agency or authority, or public utility; policy and procedures are in place that ensures operation and maintenance of the practice(s) in accordance with the operation and maintenance plan.

10f. Provide the total area of impervious surface (i.e. roof, pavement, concrete, gravel, etc.) constructed within the disturbance area? _____ (acres)

11. Is this project subject to the requirements of a regulated, traditional land use control MS4? □ yes □ no

(If Yes, complete section VI - "MS4 Acceptance" statement

V. Additional Information/Explanation:

(Use this section to answer questions 9c. and 10b., if applicable)

VI. MS4 Acceptance - MS4 Official (principal executive officer or ranking elected official) or Duly Authorized Representative (Note: Not required when 9b. is checked -transfer of coverage)

I have determined that it is acceptable for the owner or operator of the construction project identified in question 5 to submit the Notice of Termination at this time.

Printed Name:

Title/Position:

Signature:	Date:

NOTICE OF TERMINATION for Storm Water Discharges Authorized under the SPDES General Permit for Construction Activity - continued

VII. Qualified Inspector Certification - Final Stabilization:

I hereby certify that all disturbed areas have achieved final stabilization as defined in the current version of the general permit, and that all temporary, structural erosion and sediment control measures have been removed. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

Printed Name:	
Title/Position:	
Signature:	Date:

VIII. Qualified Inspector Certification - Post-construction Stormwater Management Practice(s):

I hereby certify that all post-construction stormwater management practices have been constructed in conformance with the SWPPP. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

Printed Name:	
Title/Position:	
Signature:	Date:

IX. Owner or Operator Certification

I hereby certify that this document was prepared by me or under my direction or supervision. My determination, based upon my inquiry of the person(s) who managed the construction activity, or those persons directly responsible for gathering the information, is that the information provided in this document is true, accurate and complete. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

Printed Name:	
Title/Position:	
Signature:	Date:

(NYS DEC Notice of Termination - January 2015)

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Appendix C:
Contractor’s Certification Form
Subcontractor’s Certification Form

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Stormwater Pollution Prevention Plan
Contractor Certification Statement
(Responsible for overall SWPPP Compliance)

248 Tioronda Ave.,
248 Tioronda Ave., City of Beacon, Dutchess County, New York

This is to certify that the following contracting firm will be responsible for installing, constructing, repairing, inspecting and/or maintaining the erosion and sediment control practices and post-construction stormwater management control practices required by the SWPPP.

Contracting Firm Information

Name: _____

Address: _____

Telephone & Fax: _____

Trained Contractor(s) [1] Responsible for SWPPP Implementation (Provide name, title, and date of last training)

_____

_____

Prior to commencement of construction activity, the following certification shall be issued:

I hereby certify under penalty of law that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the *qualified inspector* during a site inspection. I also understand that the *owner or operator* must comply with the terms and conditions of the most current version of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for stormwater *discharges* from *construction activities* and that it is unlawful for any person to cause or contribute to a violation of *water quality standards*. Furthermore, I am aware that there are significant penalties for submitting false information, that I do not believe to be true, including the possibility of fine and imprisonment for knowing violations.

Printed Name: _____

Title/Position: _____

Signature: _____ Date: _____

Upon completion of construction activities, the following certification shall be issued, prior to issuance of the NOT:

I hereby certify that that all permanent stormwater management practices required by the SWPPP have been installed in accordance with the contract documents. I further certify that all temporary erosion and sediment control measures have been removed from the site, and that the on-site soils disturbed by construction activity have been restored in accordance with the SWPPP and the NYSDEC Division of Water's publication "Deep-Ripping and Decompaction".

Printed Name: _____

Title/Position: _____

Signature: _____ Date: _____

[1] "Trained Contractor" means an employee from a contracting (construction) company that has received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity. After receiving the initial training, the "trained contractor" shall receive four (4) hours of training every three (3) years. It can also mean an employee from the contracting (construction) company that meets the "qualified inspector" qualifications (e.g. licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), Registered Landscape Architect, or someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided they have received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity). The "Trained Contractor" will be responsible for the day to day implementation of the SWPPP.

[2] Signatory Requirements:

a. For a corporation, this form shall be signed by (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principle business function, or any other person who performs similar policy or decision-making functions for the corporation; or (ii) the manager of one or more manufacturing, production or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

b. For a partnership or sole proprietorship, this form shall be signed by a general partner or the proprietor, respectively.

c. For a municipality, State, Federal, or other public agency, this form shall be signed by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g. Regional Administrators of EPA).

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Stormwater Pollution Prevention Plan
Subcontractor Certification Statement
(whose work involves soil disturbance)

248 Tioronda Ave.,

248 Tioronda Ave., City of Beacon, Dutchess County, New York

Each Subcontractor whose work will involve soil disturbance of any kind is required to complete and sign this Certification Statement before commencing any construction activity at the site. This completed Certification Statement(s) shall be maintained at the construction site in the Site Log Book.

Subcontracting Firm Information

Name: _____

Address: _____

_____

Telephone & Fax: _____

Trained Contractor(s)[2] Responsible for SWPPP Implementation (Provide name, title, and date of last training)

_____

_____

Prior to commencement of construction activities, the following certification shall be issued:

I hereby certify under penalty of law that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the *qualified inspector* during a site inspection. I also understand that the *owner or operator* must comply with the terms and conditions of the most current version of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for stormwater *discharges* from *construction activities* and that it is unlawful for any person to cause or contribute to a violation of *water quality standards*. Furthermore, I am aware that there are significant penalties for submitting false information, that I do not believe to be true, including the possibility of fine and imprisonment for knowing violations.

Printed Name: _____

Title/Position: _____

Signature: _____ Date: _____

[2] "Trained Contractor" means an employee from a contracting (construction) company that has received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity. After receiving the initial training, the "trained contractor" shall receive four (4) hours of training every three (3) years. It can also mean an employee from the contracting (construction) company that meets the "qualified inspector" qualifications (e.g. licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), Registered Landscape Architect, or someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided they have received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity). The "Trained Contractor" will be responsible for the day to day implementation of the SWPPP.

[2] Signatory Requirements:

a. For a corporation, this form shall be signed by (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principle business function, or any other person who performs similar policy or decision-making functions for the corporation; or (ii) the manager of one or more manufacturing, production or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
b. For a partnership or sole proprietorship, this form shall be signed by a general partner or the proprietor, respectively.
c. For a municipality, State, Federal, or other public agency, this form shall be signed by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g. Regional Administrators of EPA).

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Appendix D:
SWPPP Inspection Report
(Sample Form)

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Stormwater Pollution Prevention Plan
Inspection Report

248 Tioronda Ave.

248 Tioronda Ave.

Beacon, Dutchess, NY

A Qualified Inspector[1] shall prepare an inspection report subsequent to each and every inspection, as required in Part IV.C of the SPDES General Permit GP-0-15-002. All sections of this report are to be completed.

1. Inspection Information

Inspection number: _____

Date and Time of Inspection: _____

Weather Conditions: Snowing

Soil Conditions (e.g. dry, wet, saturated): Snow Covered

2. Inspector Information

Qualified Inspector[1]

Printed Name: _____ Date: _____

Signature: _____

Qualified Professional[1]

Printed Name _____ Date: _____

Signature: _____

3. On the included site plan, provide a sketch of areas that are disturbed at the time of the inspection and areas that have been stabilized (temporary and/or final) since the last inspection. Provide additional descriptions below if necessary.

[1] A Qualified Inspector means a person that is knowledgeable in the principles and practices of erosion and sediment control, such as licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), Registered Landscape Architect, or other Department endorsed individual(s). It can also mean someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided that person has training in the principles and practices of erosion and sediment control. Training in the principles and practices of erosion and sediment control means that the individual working under the direct supervision of the licensed Professional Engineer or Registered Landscape Architect has received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity. After receiving the initial training, the individual working under the direct supervision of the licensed Professional Engineer or Registered Landscape Architect shall receive four (4) hours of training every three (3) years. It can also mean a person that meets the Qualified Professional qualifications in addition to the Qualified Inspector qualifications. Note: Inspections of any post-construction stormwater management practices that include structural components, such as a dam for an impoundment, shall be performed by a licensed Professional Engineer.

4. In the following table, provide a description of the condition of the runoff at all points of discharge from the construction site, including conveyance systems (pipes, culverts, ditches, etc.) and overland flow. Identify any discharges of sediment from the construction site. Use additional sheets if necessary.

Description of Discharge Point	Condition of Runoff	Sediment Discharge Noted
		☐ yes / no ☐ Estimated Quantity:
		☐ yes / no ☐ Estimated Quantity:
		☐ yes / no ☐ Estimated Quantity:
		☐ yes / no ☐ Estimated Quantity:

5. For all discharge points where sediment discharge has been noted in the above table, provide detailed corrective actions that are required. Use additional sheets if necessary.

6. In the following table, provide checkmarks in the appropriate columns to indicate the condition of all erosion and sediment control practices at the site.

Erosion & Sediment Control Practice	Not Applicable	Functioning as Designed	Needs Repair or Maintenance	Not Installed Properly	Date Deficiency First Reported (If Applicable)	Deficiency Corrected? Y/N (If Applicable)
Stabilized construction entrance						
Temporary parking areas						
Construction vehicle wash areas						
Silt fence						
Temporary swales and berms						
Stone check dams						
Slope protection measures						
Dewatering operations						
Sediment traps						
Inlet protection measures						
Soil stockpiles						
Dust control measures						
Pavement sweeping						
Other:						
Other:						

7. For all erosion and sediment control practices identified in the above table as "needs repair or maintenance" or "not installed properly", provide detailed corrective actions that are required. Use additional sheets if necessary.

8. In the following table, indicate the current phase of construction of all post-construction stormwater management practices and identify all construction that is not in conformance with the SWPPP and technical standards.

SWM Practice	Current Phase of Construction	Items not in conformance with the SWPPP

9. For all post-construction stormwater management practices which are identified in the above table as including "items not in conformance with the SWPPP", provide detailed corrective action(s) that are required to correct the deficiencies. Use additional sheets if necessary.

Photo Log

Date – Item in need of repair or maintenance:	*Date – Corrected Action:*
Date – Item in need of repair or maintenance:	*Date – Corrected Action:*

Photo Log

Date – Item in need of repair or maintenance:	*Date – Corrected Action:*
Date – Item in need of repair or maintenance:	*Date – Corrected Action:*

Appendix E:
NYSDEC “Deep-Ripping and Decompaction,” April 2008

New York State
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Water

Deep-Ripping and Decompaction

April 2008

Document Prepared by:

John E. Lacey,
Land Resource Consultant and Environmental Compliance Monitor
(Formerly with the Division of Agricultural Protection and Development Services,
NYS Dept. of Agriculture & Markets)

New York State
Department of Environmental Conservation

Alternative Stormwater Management
Deep-Ripping and Decompaction

Description

The two-phase practice of 1) “Deep Ripping;” and 2) “Decompaction” (deep subsoiling), of the soil material as a step in the cleanup and restoration/landscaping of a construction site, helps mitigate the physically induced impacts of soil compression; i.e.: soil compaction or the substantial increase in the bulk density of the soil material.

Deep Ripping and Decompaction are key factors which help in restoring soil pore space and permeability for water infiltration. Conversely, the physical actions of cut-and-fill work, land grading, the ongoing movement of construction equipment and the transport of building materials throughout a site alter the architecture and structure of the soil, resulting in: the mixing of layers (horizons) of soil materials, compression of those materials and diminished soil porosity which, if left unchecked, severely impairs the soil’s water holding capacity and vertical drainage (rainfall infiltration), from the surface downward.

In a humid climate region, compaction damage on a site is virtually guaranteed over the duration of a project. Soil in very moist to wet condition when compacted, will have severely reduced permeability. Figure 1 displays the early stage of the deep-ripping phase (Note that all topsoil was stripped prior to construction access, and it remains stockpiled until the next phase – decompaction – is complete). A heavy-duty tractor is pulling a three-shank ripper on the first of several series of incrementally deepening passes through the construction access corridor's densely compressed subsoil material. Figure 2 illustrates the approximate volumetric composition of a loam surface soil when conditions are good for plant growth, with adequate natural pore space for fluctuating moisture conditions.



Fig. 1. A typical deep ripping phase of this practice, during the first in a series of progressively deeper “rips” through severely compressed subsoil.

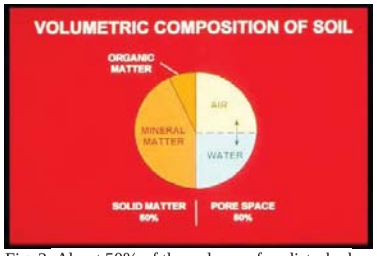

Fig. 2. About 50% of the volume of undisturbed loam surface soil is pore space, when soil is in good condition for plant growth. Brady, 2002.

Recommended Application of Practice



Fig. 3. Construction site with significant compaction of the deep basal till subsoil extends 24 inches below this exposed cut-and-fill work surface.

The objective of Deep Ripping and Decompaction is to effectively fracture (vertically and laterallly) through the thickness of the physically compressed subsoil material (see Figure 3), restoring soil porosity and permeability and aiding infiltration to help reduce runoff. Together with topsoil stripping, the “two-phase” practice of Deep Ripping and Decompaction first became established as a “best management practice” through ongoing success on commercial farmlands affected by heavy utility construction right-of-way projects (transmission pipelines and large power lines).

Soil permeability, soil drainage and cropland productivity were restored. For broader construction application, the two-phase practice of Deep Ripping and Decompaction is best adapted to areas impacted with significant soil compaction, on contiguous open portions of large construction sites and inside long, open construction corridors used as temporary access over the duration of construction. Each mitigation area should have minimal above-and-below-ground obstructions for the easy avoidance and maneuvering of a large tractor and ripping/decompacting implements. Conversely, the complete two-phase practice is not recommended in congested or obstructed areas due to the limitations on tractor and implement movement.

Benefits

Aggressive “deep ripping” through the compressed thickness of exposed subsoil before the replacement/respreading of the topsoil layer, followed by “decompaction,” i.e.: “sub-soiling,” through the restored topsoil layer down into the subsoil, offers the following benefits:

- Increases the project (larger size) area’s direct surface infiltration of rainfall by providing the open site’s mitigated soil condition and lowers the demand on concentrated runoff control structures
- Enhances direct groundwater recharge through greater dispersion across and through a broader surface than afforded by some runoff-control structural measures
- Decreases runoff volume generated and provides hydrologic source control
- May be planned for application in feasible open locations either alone or in

conjunction with plans for structural practices (e.g., subsurface drain line or infiltration basin) serving the same or contiguous areas

- Promotes successful long-term revegetation by restoring soil permeability, drainage and water holding capacity for healthy (rather than restricted) root-system development of trees, shrubs and deep rooted ground cover, minimizing plant drowning during wet periods and burnout during dry periods.

Feasibility/Limitations

The effectiveness of Deep Ripping and Decompaction is governed mostly by site factors such as: the original (undisturbed) soil's hydrologic characteristics; the general slope; local weather/timing (soil moisture) for implementation; the space-related freedom of equipment/implement maneuverability (noted above in **Recommended Application of Practice**), and by the proper selection and operation of tractor and implements (explained below in **Design Guidance**). The more notable site-related factors include:

Soil
In the undisturbed condition, each identified soil type comprising a site is grouped into one of four categories of soil hydrology, Hydrologic Soil Group A, B, C or D, determined primarily by a range of characteristics including soil texture, drainage capability when thoroughly wet, and depth to water table. The natural rates of infiltration and transmission of soil-water through the undisturbed soil layers for Group A is "high" with a low runoff potential while soils in Group B are moderate in infiltration and the transmission of soil-water with a moderate runoff potential, depending somewhat on slope. Soils in Group C have slow rates of infiltration and transmission of soil-water and a moderately high runoff potential influenced by soil texture and slope; while soils in Group D have exceptionally slow rates of infiltration and transmission of soil-water, and high runoff potential.

In Figure 4, the profile displays the undisturbed horizons of a soil in Hydrologic Soil Group C and the naturally slow rate of infiltration through the subsoil. The slow rate of infiltration begins immediately below the topsoil horizon (30 cm), due to the limited amount of macro pores, e.g.: natural subsoil fractures, worm holes and root channels. Infiltration after the construction-induced mixing and compression of such subsoil material is virtually absent; but can be restored back to this natural level with the two-phase practice of deep ripping and decompaction, followed by the permanent establishment of an appropriate, deep taproot

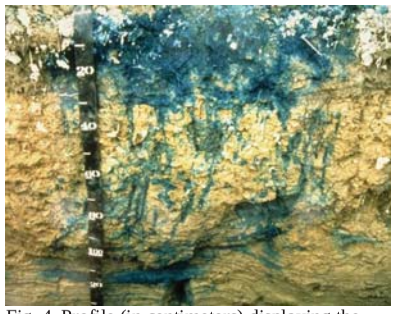

Fig. 4. Profile (in centimeters) displaying the infiltration test result of the natural undisturbed horizons of a soil in Hydrologic Soil Group C.

lawn/ground cover to help maintain the restored subsoil structure. Infiltration after construction-induced mixing and compression of such subsoil material can be notably rehabilitated with the Deep Ripping and Decompaction practice, which prepares the site for the appropriate long-term lawn/ground cover mix including deep taproot plants such as clover, fescue or trefoil, etc. needed for all rehabilitated soils.

Generally, soils in Hydrologic Soil Groups A and B, which respectively may include deep, well-drained, sandy-gravelly materials or deep, moderately well-drained basal till materials, are among the easier ones to restore permeability and infiltration, by deep ripping and decompaction. Among the many different soils in Hydrologic Soil Group C are those unique glacial tills having a natural fragipan zone, beginning about 12 to 18 inches (30 – 45cm), below surface. Although soils in Hydrologic Soil Group C do require a somewhat more carefully applied level of the Deep Ripping and Decompaction practice, it can greatly benefit such affected areas by reducing the runoff and fostering infiltration to a level equal to that of pre-disturbance.

Soils in Hydrologic Soil Group D typically have a permanent high water table close to the surface, influenced by a clay or other highly impervious layer of material. In many locations with clay subsoil material, the bulk density is so naturally high that heavy trafficking has little or no added impact on infiltration; and structural runoff control practices rather than Deep Ripping and Decompaction should be considered.

The information about Hydrologic Soil Groups is merely a general guideline. Site-specific data such as limited depths of cut-and-fill grading with minimal removal or translocation of the inherent subsoil materials (as analyzed in the county soil survey) or, conversely, the excavation and translocation of deeper, unconsolidated substratum or consolidated bedrock materials (unlike the analyzed subsoil horizons' materials referred to in the county soil survey) should always be taken into account.

Sites made up with significant quantities of large rocks, or having a very shallow depth to bedrock, are not conducive to deep ripping and decompation (subsoiling); and other measures may be more practical.

Slope
The two-phase application of 1) deep ripping and 2) decompaction (deep subsoiling), is most practical on flat, gentle and moderate slopes. In some situations, such as but not limited to temporary construction access corridors, inclusion areas that are moderately steep along a project's otherwise gentle or moderate slope may also be deep ripped and decompacted. For limited instances of moderate steepness on other projects, however, the post-construction land use and the relative alignment of the potential ripping and decompaction work in relation to the lay of the slope should be reviewed for safety and practicality. In broad construction areas predominated by moderately steep or steep slopes, the practice is generally not used.

Local Weather/Timing/Soil Moisture
Effective fracturing of compressed subsoil material from the exposed work surface, laterally and vertically down through the affected zone is achieved only when the soil material is moderately dry to moderately moist. Neither one of the two-phases, deep ripping nor decompaction (deep

subsoiling), can be effectively conducted when the soil material (subsoil or replaced topsoil) is in either a “plastic” or “liquid” state of soil consistency. Pulling the respective implements legs through the soil when it is overly moist only results in the “slicing and smearing” of the material or added “squeezing and compression” instead of the necessary fracturing. Ample drying time is needed for a “rippable” soil condition not merely in the material close to the surface, but throughout the material located down to the bottom of the physically compressed zone of the subsoil.

The “poor man’s Atterberg field test” for soil plasticity is a simple “hand-roll” method used for quick, on-site determination of whether or not the moisture level of the affected soil material is low enough for: effective deep ripping of subsoil; respreading of topsoil in a friable state; and final decompaction (deep subsoiling). Using a sample of soil material obtained from the planned bottom depth of ripping, e.g.: 20 - 24 inches below exposed subsoil surface, the sample is hand rolled between the palms down to a 1/8-inch diameter thread. (Use the same test for stored topsoil material before respreading on the site.) If the respective soil sample crumbles apart in segments no greater than 3/8 of an inch long, by the time it is rolled down to 1/8 inch diameter, it is low enough in moisture for deep ripping (or topsoil replacement), and decompaction. Conversely, as shown in Figure 5, if the rolled sample stretches out in increments greater than 3/8 of an inch long before crumbling, it is in a “plastic” state of soil consistency and is too wet for subsoil ripping (as well as topsoil replacement) and final decompaction.



Fig. 5. Augered from a depth of 19 inches below the surface of the replaced topsoil, this subsoil sample was hand rolled to a 1/8-inch diameter. The test shows the soil at this site stretches out too far without crumbling; it indicates the material is in a plastic state of consistence, too wet for final decompaction (deep subsoiling) at this time.

Design Guidance

Beyond the above-noted site factors, a vital requirement for the effective Deep Ripping and Decompaction (deep subsoiling), is implementing the practice in its distinct, two-phase process:

1) Deep rip the affected thickness of exposed subsoil material (see Figure 10 and 11), aggressively fracturing it before the protected topsoil is reapplied on the site (see Figure 12); and

2) Decompact (deep subsoil), simultaneously through the restored topsoil layer and the upper half of the affected subsoil (Figure 13). The second phase, “decompaction,” mitigates the partial recompaction which occurs during the heavy process of topsoil spreading/grading. Prior to deep ripping and decompacting the site, all construction activity, including construction equipment and material storage, site cleanup and trafficking (Figure 14), should be finished; and the site closed off to further disturbance. Likewise, once the practice is underway and the area’s soil permeability and

rainfall infiltration are being restored, a policy limiting all further traffic to permanent travel lanes is maintained.

The other critical elements, outlined below, are: using the proper implements (deep, heavy-duty rippers and subsoilers), and ample pulling-power equipment (tractors); and conducting the practice at the appropriate speed, depth and pattern(s) of movement.

Note that an appropriate plan for the separate practice of establishing a healthy perennial ground cover, with deep rooting to help maintain the restored soil structure, should be developed in advance. This may require the assistance of an agronomist or landscape horticulturist.

Implements

Avoid the use of all undersize implements. The small-to-medium, light-duty tool will, at best, only “scarify” the uppermost surface portion of the mass of compacted subsoil material. The term “chisel plow” is commonly but incorrectly applied to a broad range of implements. While a few may be adapted for the moderate subsoiling of non-impacted soils, the majority are less durable and used for only lighter land-fitting (see Figure 6).



Fig. 6. A light duty chisel implement, not adequate for either the deep ripping or decompaction (deep subsoiling) phase.



Fig. 7. One of several variations of an agricultural ripper. This unit has long, rugged shanks mounted on a steel V-frame for deep, aggressive fracturing through Phase 1.

Use a “heavy duty” agricultural-grade, deep ripper (see Figures 7,9,10 and 11) for the first phase: the lateral and vertical fracturing of the mass of exposed and compressed subsoil, down and through, to the bottom of impact, prior to the replacement of the topsoil layer. (Any oversize rocks which are uplifted to the subsoil surface during the deep ripping phase are picked and removed.) Like the heavy-duty class of implement for the first phase, the decompaction (deep subsoiling) of Phase 2 is conducted with the heavy-duty version of the deep subsoiler. More preferable is the angled-leg variety of deep subsoiler (shown in Figures 8 and 13). It minimizes the inversion of the subsoil and topsoil layers while laterally and vertically fracturing the upper half of the previously ripped subsoil layer and all of the topsoil layer by delivering a momentary, wave-like “lifting and shattering” action up through the soil layers as it is pulled.

Pulling-Power of Equipment
Use the following rule of thumb for tractor horsepower (hp) whenever deep ripping and decompacting a significantly impacted site: For both types of implement, have at least 40 hp of tractor pull available for each mounted shank/ leg.

Using the examples of a 3-shank and a 5-shank implement, the respective tractors should have 120 and 200 hp available for fracturing down to the final depth of 20-to-24 inches per phase. Final depth for the deep ripping in Phase 1 is achieved incrementally by a progressive series of passes (see Depth and Patterns of Movement, below); while for Phase 2, the full operating depth of the deep subsoiler is applied from the beginning.

The operating speed for pulling both types of implement should not exceed 2 to 3 mph. At this slow and managed rate of operating speed, maximum functional performance is sustained by the tractor and the implement performing the soil fracturing. Referring to Figure 8, the implement is the 6-leg version of the deep angled-leg subsoiler. Its two outside legs are "chained up" so that only four legs will be engaged (at the maximum depth), requiring no less than 160 hp, (rather than 240 hp) of pull. The 4-wheel drive, articulated-frame tractor in Figure 8 is 174 hp. It will be decompacting this unobstructed, former construction access area simultaneously through 11 inches of replaced topsoil and the upper 12 inches of the previously deep-ripped subsoil. In constricted areas of Phase 1) Deep Ripping, a medium-size tractor with adequate hp, such as the one in Figure 9 pulling a 3-shank deep ripper, may be more maneuverable.


Fig. 8. A deep, angled-leg subsoiler, ideal for Phase 2 decompaction of after the topsoil layer is graded on top of the ripped subsoil.


Fig. 9. This medium tractor is pulling a 3-shank deep ripper. The severely compacted construction access corridor is narrow, and the 120 hp tractor is more maneuverable for Phase 1 deep ripping (subsoil fracturing), here.

Some industrial-grade variations of ripping implements are attached to power graders and bulldozers. Although highly durable, they are generally not recommended. Typically, the shanks or "teeth" of these rippers are too short and stout; and they are mounted too far apart to achieve the well-distributed type of lateral and vertical fracturing of the soil materials necessary to restore soil permeability and infiltration. In addition, the power graders and bulldozers, as pullers, are far less maneuverable for turns and patterns than the tractor.

Depth and Patterns of Movement
As previously noted both Phase 1 Deep Ripping through significantly compressed, exposed subsoil and Phase 2 Decompaction (deep subsoiling) through the replaced topsoil and upper subsoil need to be performed at maximum capable depth of each implement. With an implement's guide wheels attached, some have a "normal" maximum operating depth of 18 inches, while others may go deeper. In many situations, however, the tractor/implement operator must first remove the guide wheels and other non essential elements from the implement. This adapts the ripper or the deep subsoiler for skillful pulling with its frame only a few inches above surface, while the shanks or legs, fracture the soil material 20-to-24 inches deep.

There may be construction sites where the depth of the exposed subsoil's compression is moderate, e.g.: 12 inches, rather than deep. This can be verified by using a ¾ inch cone penetrometer and a shovel to test the subsoil for its level of compaction, incrementally, every three inches of increasing depth. Once the full thickness of the subsoil's compacted zone is finally "pieced" and there is a significant drop in the psi measurements of the soil penetrometer, the depth/thickness of compaction is determined. This is repeated at several representative locations of the construction site. If the thickness of the site's subsoil compaction is verified as, for example, ten inches, then the Phase 1 Deep Ripping can be correspondingly reduced to the implement's minimum operable depth of 12 inches. However, the Phase 2 simultaneous Decompation (subsoiling) of an 11 inch thick layer of replaced topsoil and the upper subsoil should run at the subsoiling implements full operating depth.


Fig. 10. An early pass with a 3-shank deep ripper penetrating only 8 inches into this worksite's severely compressed subsoil.


Fig. 11. A repeat run of the 3-shank ripper along the same patterned pass area as Fig. 9; here, incrementally reaching 18 of the needed 22 inches of subsoil fracture.

Typically, three separate series (patterns) are used for both the Phase 1 Deep Ripping and the Phase 2 Decompaction on significantly compacted sites. For Phase 1, each series begins with a moderate depth of rip and, by repeat-pass, continues until full depth is reached. Phase 2 applies the full depth of Decompation (subsoiling), from the beginning.

Every separate series (pattern) consists of parallel, forward-and-return runs, with each progressive

pass of the implement's legs or shanks evenly staggered between those from the previous pass. This compensates for the shank or leg-spacing on the implement, e.g., with 24-to-30 inches between each shank or leg. The staggered return pass ensures lateral and vertical fracturing actuated every 12 to 15 inches across the densely compressed soil mass.

Large, Unobstructed Areas
For larger easy areas, use the standard patterns of movement:

- The first series (pattern) of passes is applied lengthwise, parallel with the longest spread of the site; gradually progressing across the site's width, with each successive pass.

- The second series runs obliquely, crossing the first series at an angle of about 45 degrees.

- The third series runs at right angle (or 90 degrees), to the first series to complete the fracturing and shattering on severely compacted sites, and avoid leaving large unbroken blocks of compressed soil material. (In certain instances, the third series may be optional, depending on how thoroughly the first two series loosen the material and eliminate large chunks/blocks of material as verified by tests with a ¾-inch cone penetrometer.)



Fig. 12. Moderately dry topsoil is being replaced on the affected site now that Phase 1 deep ripping of the compressed subsoil is complete.



Fig. 13. The same deep, angled-leg subsoiler shown in Fig. 7 is engaged at maximum depth for Phase 2, decompaction (deep soiling), of the replaced topsoil and the upper subsoil materials.

Corridors
In long corridors of limited width and less maneuverability than larger sites, e.g.: along compacted areas used as temporary construction access, a modified series of pattern passes are used.

- First, apply the same initial lengthwise, parallel series of passes described above.

- A second series of passes makes a broad "S" shaped pattern of rips, continually and gradually alternating the "S" curves between opposite edges inside the compacted corridor.

- The third and final series again uses the broad, alternating S pattern, but it is "flip-flopped" to continually cross the previous S pattern along the corridor's centerline. This final series of the S pattern curves back along the edge areas skipped by the second series.

Maintenance and Cost

Once the two-phase practice of Deep Ripping and Decompation is completed, two items are essential for maintaining a site's soil porosity and permeability for infiltration. They are: planting and maintaining the appropriate ground cover with deep roots to maintain the soil structure (see Figure 15); and keeping the site free of traffic or other weight loads.

Note that site-specific choice of an appropriate vegetative ground-cover seed mix, including the proper seeding ratio of one or more perennial species with a deep taproot system and the proper amount of lime and soil nutrients (fertilizer mix) adapted to the soil-needs, are basic to the final practice of landscaping, i.e: surface tillage, seeding/planting/fertilizing and culti-packing or mulching is applied. The "maintenance" of an effectively deep-ripped and decompacted area is generally limited to the successful perennial (long-term) landscape ground cover; as long as no weight-bearing force of soil compaction is applied.



Fig. 14. The severely compacted soil of a temporary construction yard used daily by heavy equipment for four months; shown before deep ripping, topsoil replacement, and decompaction.



Fig. 15. The same site as Fig. 14 after deep ripping of the exposed subsoil, topsoil replacement, decompaction through the topsoil and upper subsoil and final surface tillage and revegetation to maintain soil permeability and infiltration.

The Deep Ripping and Decompaction practice is, by necessity, more extensive than periodic subsoiling of farmland.The cost of deep ripping and decompacting (deep subsoiling), will vary according to the depth and severity of soil-material compression and the relative amount of tractor and implement time that is required. In some instances, depending on open maneuverability, two-to-three acres of compacted project area may be deep-ripped in one day. In other situations of more severe compaction and - or less maneuverability, as little as one acre may be fully ripped in a day. Generally, if the Phase 1) Deep Ripping is fully effective, the Phase 2) Decompaction should be completed in 2/3 to 3/4 of the time required for Phase 1.

Using the example of two acres of Phase 1) Deep Ripping in one day, at $1800 per day, the net cost is $900 per acre. If the Phase 2) Decompacting or deep subsoiling takes 3/4 the time as Phase 1, it costs $675 per acre for a combined total of $1575 per acre to complete the practice (these figures do not include the cost of the separate practice of topsoil stripping and replacement). Due to the many variables, it must be recognized that cost will be determined by the specific conditions or constraints of the site and the availability of proper equipment.

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- Soil penetrometer information. Access by internet searches of: *Diagnosing Soil Compaction using a Penetrometer (soil compaction tester), PSU Extension;* as well as *Dickey-john Soil Compaction Tester.* http://www.dickey-johnproducts.com/pdf/SoilCompactionTest.pdf and http://cropsoil.psu.edu/Extension/Facts/uc178pdf Last visited Sept. 07

Appendix F:
Post-Construction Inspections and Maintenance

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POST CONSTRUCTION INSPECTIONS AND MAINTENANCE

1. SITE COVER

a. Inspections

Site cover and associated structures and embankments should be inspected periodically for the first few months following construction and then on a biannual basis. Site inspections should also be performed following all major (i.e., intense storms, thunder storms, cloud burst, etc.) storm events. Items to check for include (but are not limited to):

i. Differential settlement of embankments, cracking or erosion.

ii. Lack of vigor and density of grass turf.

iii. Accumulation of sediments or litter on lawn areas, paved areas, or within catch basin sumps.

iv. Accumulation of pollutants, including oils or grease, in catch basin sumps.

v. Damage or fatigue of storm sewer structures or associated components.

b. Mowing and Sweeping

Vegetated areas and landscaping should be maintained to promote vigorous and dense growth. Lawn areas should be mowed at least three times a year (more frequent mowing may be desired for aesthetic reasons). Resultant yard waste shall be collected and disposed of off-site.

Paved areas should be swept at least twice a year. Additional sweeping may be appropriate in the early spring for removal of deicing materials

c. Debris and Litter Removal

Accumulation of litter and debris should be removed during each mowing or sweep operation.

d. Structural Repair or Replacement

Components of the system which require repair or replacement should be addressed immediately following identification.

e. Catch Basins

The frequency for cleanout of catch basin sumps will depend on the efficiency of mowing, sweeping, and debris and litter removal. Sumps should be cleaned when accumulation of sediments are within six inches of the catch basin outlet pipe.

Disposal of material from catch basins sumps, drainage manholes, and trench drains shall be in accordance with local, state, and federal guidelines.

f. Rip-rap Dissipation structures

Rip-rap used to dissipate energy from pipe outfalls shall be cleaned or replaced when it becomes overburdened with silt or sediment.

g. Winter Maintenance

To prevent impacts to storm water management facilities, the following winter maintenance limitations, restrictions, or requirements are recommended:

i. Remove snow and ice from inlet structures, basin inlet and outlet structures and away from culvert end sections.

ii. Snow removed from paved areas should not be piled at inlets/outlets of the storm water management basin.

iii. Use of deicing materials should be limited to sand and "environmentally friendly" chemical products. Use of salt mixtures should be kept to a minimum.

iv. Sand used for deicing should be clean, course material free of fines, silt, and clay.

v. Materials used for deicing should be removed during the early spring by sweeping and/ or vacuuming.

2. BIORETENTION FILTERS

a. Inspection Schedule

Bioretention filters should be inspected periodically for the first few months after construction and then on a monthly basis. Bioretention filters should be inspected after all major storm events.

b. Inspection of Uphill Drainage Area

Inspect areas that are uphill from the Bioretention filter.

i. Bare soil and/or erosion of the ground should be seeded and mulches to establish vegetation. Areas of erosion should be filled with soil, compacted, and seeded and strawed to establish vegetation.

ii. If a small channel(s) is forming, try to redirect water flowing to this area by creating a small berm or adding topsoil to areas that are heavily compacted.

iii. Piles of grass clippings, mulch, dirt, salt or other materials should be removed.

iv. Open containers of oil, grease, paint, or other substances should be covered and properly disposed of.

c. Inspection of Inlets

Stand in the Bioretention filter itself and inspect each location where water flows in.

i. Inlets should have a clear pathway for water to flow into the filter. Grit and debris or grass/weeds should be removed at curb inlets or openings.

ii. Clumps of growing grass or weeds and the associated soil or grit should be removed.

iii. Grass clippings, leaves, sticks, and other debris collecting at inlets should be removed.

iv. For pipes and ditches, sediment and debris partially blocking the pipe or ditch opening into the Bioretention filter should be removed.

v. All materials removed should be properly disposed in such a way that it may not re-enter the Bioretention filter.

vi. Small areas of erosion should be smoothed out and rock or stone applied to prevent further erosion. Reseeding and applying erosion-control matting can be used to prevent further erosion.

d. Inspection of Ponding Area

Examine the entire Bioretention surface and side slopes:

i. In areas where the mulch layer has decomposed or is less than 1-inch thick, new mulch should be added to a total depth of 2 to 3 inches. The mulch should be a shredded hardwood mulch that is less likely to float away during rainstorms. Avoid adding too much mulch so that inlets are obstructed, or certain areas become higher than the rest of the Bioretention surface.

ii. Excess sediment, grit, trash, or other debris that has accumulated on the bottom should be removed and disposed of in such a way that it cannot re-enter the Bioretention filter. If removing the material creates a hole or low area, fill in with a soil mix that matches the original mix and cover with mulch to create a flat surface.

iii. Eroded areas in the bottom or on the side slopes should be filled with clean topsoil or sand and covered with mulch. If the problem reoccurs, stone can be used to fill in the areas. If the erosion is on a side slope, fill in with clay that can be compacted and seed and mulch the area.

iv. The bottom of the Bioretention filter should be flat. The surface should be raked or mulch added to low spots to create a more level surface.

e. Inspection of Vegetation

Examine all Bioretention filter vegetation:

i. Weeds and dead and/or diseased plants should be removed and the mulch surrounding these replaced. Plants should be added to fill in areas that are not well vegetated.

ii. If bioretention filter utilized a vegetated seed mix, then grass areas shall be mowed to ensure that grass height does not exceed 6-inches.

iii. Undesirable trees and shrubs should be removed. Resultant yard wastes shall be collected and disposed of off-site

f. Inspection of Outlets

Examine the outlets that release water out of the Bioretention filter:

i. Stone should be added in areas of erosion at the outlet to reduce the impact from the water flowing out of the outlet pipe or weir during storms.

ii. Outlet obstructions should be removed and disposed of where it cannot re-enter the Bioretention filter.

g. Debris, Trash and Litter Control

Removal of debris and litter shall be accomplished during mowing operations. Inlet structures should be cleared of all debris and litter.

h. Structural Repairs and Replacement

Components of the bioretention filter, which require repair or replacement, should be addressed immediately following identification. This includes treating and or replacing diseased trees and shrub, fertilizing as necessary, replacing tree stakes and wires, replacing mulch where bare spots appear, replacing clogged underdrains, filter beds, and pea gravel diaphragm.

i. Erosion and Sediment Control

Sources of sedimentation, specifically eroded areas in upland drainage areas, should be stabilized immediately upon identification. Stabilization should be with vegetative practices or other erosion control practices when vegetative measures do not prove effective.

Soil slumpage, erosion of the embankments or around inlets/outlets, and cracking should be stabilized and repaired immediately upon identification.

j. Sediment Removal

Sediments that accumulate in the bioretention filter should be removed annually to prevent clogging of inlet or outlet structures. Disposal of material removed from bioretention filter shall be in accordance with local, state, and federal guidelines.

3. HYDRODYNAMIC DEVICE

The hydrodynamic device is a confined space environment and only properly trained personnel possessing the necessary safety equipment should enter the unit to perform maintenance or inspection.

a. Inspection Schedule

The hydrodynamic device shall be inspected every four months.

b. Inspection Items

The unit's internal components should be inspected for any signs of damage or any loosening of the bolts used to fasten the various components to the manhole structure and to each other.

Refer to attached Operations and Maintenance Guidelines, for the Hydrodynamic Device, for the manufacturer's detailed inspection and maintenance requirements.

c. Debris, Trash and Litter Control

The screen shall be power washed for the inspection. The floatables shall be removed and the sump cleaned when it has reached 50% capacity. The unit may require cleaning in the event of a spill of a toxic or foreign substance. At a minimum, the hydrodynamic device shall be pumped out at least once a year if the sump does not reach its 50% capacity.

d. Sediment removal

Disposal of material from the hydrodynamic device shall be in accordance with local, state, and federal guidelines.

CONTECH®
ENGINEERED SOLUTIONS

CDS Guide
Operation, Design, Performance and Maintenance



CDS®

Using patented continuous deflective separation technology, the CDS system screens, separates and traps debris, sediment, and oil and grease from stormwater runoff. The indirect screening capability of the system allows for 100% removal of floatables and neutrally buoyant material without blinding. Flow and screening controls physically separate captured solids, and minimize the re-suspension and release of previously trapped pollutants. Inline units can treat up to 6 cfs, and internally bypass flows in excess of 50 cfs (1416 L/s). Available precast or cast-in-place, offline units can treat flows from 1 to 300 cfs (28.3 to 8495 L/s). The pollutant removal capacity of the CDS system has been proven in lab and field testing.

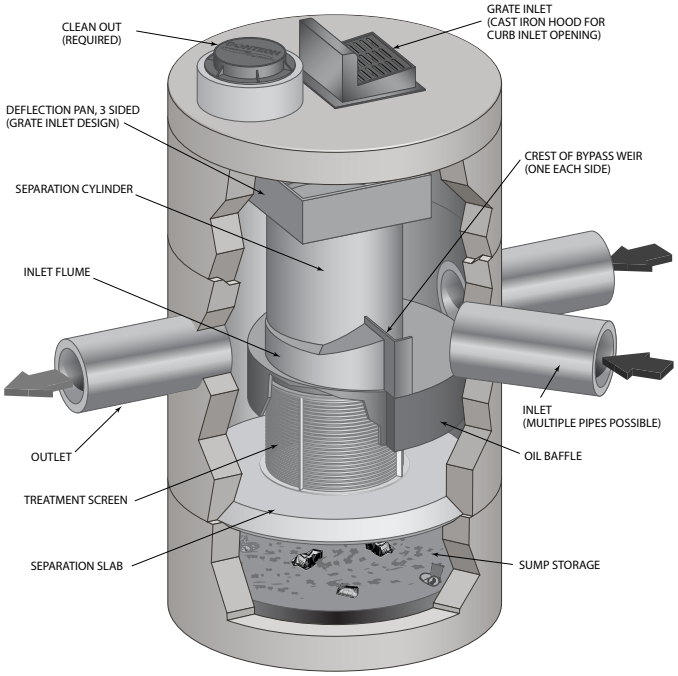
Operation Overview

Stormwater enters the diversion chamber where the diversion weir guides the flow into the unit's separation chamber and pollutants are removed from the flow. All flows up to the system's treatment design capacity enter the separation chamber and are treated.

Swirl concentration and screen deflection force floatables and solids to the center of the separation chamber where 100% of floatables and neutrally buoyant debris larger than the screen apertures are trapped.

Stormwater then moves through the separation screen, under the oil baffle and exits the system. The separation screen remains clog free due to continuous deflection.

During the flow events exceeding the treatment design capacity, the diversion weir bypasses excessive flows around the separation chamber, so captured pollutants are retained in the separation cylinder.



Design Basics

There are three primary methods of sizing a CDS system. The Water Quality Flow Rate Method determines which model size provides the desired removal efficiency at a given flow rate for a defined particle size. The Rational Rainfall Method™ or the and Probabilistic Method is used when a specific removal efficiency of the net annual sediment load is required.

Typically in the Unites States, CDS systems are designed to achieve an 80% annual solids load reduction based on lab generated performance curves for a gradation with an average particle size (d50) of 125 microns (μm). For some regulatory environments, CDS systems can also be designed to achieve an 80% annual solids load reduction based on an average particle size (d50) of 75 microns (μm) or 50 microns (μm).

Water Quality Flow Rate Method

In some cases, regulations require that a specific treatment rate, often referred to as the water quality design flow (WQQ), be treated. This WQQ represents the peak flow rate from either an event with a specific recurrence interval, e.g. the six-month storm, or a water quality depth, e.g. 1/2-inch (13 mm) of rainfall.

The CDS is designed to treat all flows up to the WQQ. At influent rates higher than the WQQ, the diversion weir will direct most flow exceeding the WQQ around the separation chamber. This allows removal efficiency to remain relatively constant in the separation chamber and eliminates the risk of washout during bypass flows regardless of influent flow rates.

Treatment flow rates are defined as the rate at which the CDS will remove a specific gradation of sediment at a specific removal efficiency. Therefore the treatment flow rate is variable, based on the gradation and removal efficiency specified by the design engineer.

Rational Rainfall Method™

Differences in local climate, topography and scale make every site hydraulically unique. It is important to take these factors into consideration when estimating the long-term performance of any stormwater treatment system. The Rational Rainfall Method combines site-specific information with laboratory generated performance data, and local historical precipitation records to estimate removal efficiencies as accurately as possible.

Short duration rain gauge records from across the United States and Canada were analyzed to determine the percent of the total annual rainfall that fell at a range of intensities. US stations' depths were totaled every 15 minutes, or hourly, and recorded in 0.01-inch increments. Depths were recorded hourly with 1-mm resolution at Canadian stations. One trend was consistent at all sites; the vast majority of precipitation fell at low intensities and high intensity storms contributed relatively little to the total annual depth.

These intensities, along with the total drainage area and runoff coefficient for each specific site, are translated into flow rates using the Rational Rainfall Method. Since most sites are relatively small and highly impervious, the Rational Rainfall Method is appropriate. Based on the runoff flow rates calculated for each intensity, operating rates within a proposed CDS system are

determined. Performance efficiency curve determined from full scale laboratory tests on defined sediment PSDs is applied to calculate solids removal efficiency. The relative removal efficiency at each operating rate is added to produce a net annual pollutant removal efficiency estimate.

Probabilistic Rational Method

The Probabilistic Rational Method is a sizing program Contech developed to estimate a net annual sediment load reduction for a particular CDS model based on site size, site runoff coefficient, regional rainfall intensity distribution, and anticipated pollutant characteristics.

The Probabilistic Method is an extension of the Rational Method used to estimate peak discharge rates generated by storm events of varying statistical return frequencies (e.g. 2-year storm event). Under the Rational Method, an adjustment factor is used to adjust the runoff coefficient estimated for the 10-year event, correlating a known hydrologic parameter with the target storm event. The rainfall intensities vary depending on the return frequency of the storm event under consideration. In general, these two frequency dependent parameters (rainfall intensity and runoff coefficient) increase as the return frequency increases while the drainage area remains constant.

These intensities, along with the total drainage area and runoff coefficient for each specific site, are translated into flow rates using the Rational Method. Since most sites are relatively small and highly impervious, the Rational Method is appropriate. Based on the runoff flow rates calculated for each intensity, operating rates within a proposed CDS are determined. Performance efficiency curve on defined sediment PSDs is applied to calculate solids removal efficiency. The relative removal efficiency at each operating rate is added to produce a net annual pollutant removal efficiency estimate.

Treatment Flow Rate

The inlet throat area is sized to ensure that the WQQ passes through the separation chamber at a water surface elevation equal to the crest of the diversion weir. The diversion weir bypasses excessive flows around the separation chamber, thus preventing re-suspension or re-entrainment of previously captured particles.

Hydraulic Capacity

The hydraulic capacity of a CDS system is determined by the length and height of the diversion weir and by the maximum allowable head in the system. Typical configurations allow hydraulic capacities of up to ten times the treatment flow rate. The crest of the diversion weir may be lowered and the inlet throat may be widened to increase the capacity of the system at a given water surface elevation. The unit is designed to meet project specific hydraulic requirements.

Performance

Full-Scale Laboratory Test Results

A full-scale CDS system (Model CDS2020-5B) was tested at the facility of University of Florida, Gainesville, FL. This CDS unit was evaluated under controlled laboratory conditions of influent flow rate and addition of sediment.

Two different gradations of silica sand material (UF Sediment & OK-110) were used in the CDS performance evaluation. The particle size distributions (PSDs) of the test materials were analyzed using standard method "Gradation ASTM D-422 "Standard Test Method for Particle-Size Analysis of Soils" by a certified laboratory.

UF Sediment is a mixture of three different products produced by the U.S. Silica Company: "Sil-Co-Sil 106", "#1 DRY" and "20/40 Oil Frac". Particle size distribution analysis shows that the UF Sediment has a very fine gradation (d50 = 20 to 30 μm) covering a wide size range (Coefficient of Uniformity, C averaged at 10.6). In comparison with the hypothetical TSS gradation specified in the NJDEP (New Jersey Department of Environmental Protection) and NJCAT (New Jersey Corporation for Advanced Technology) protocol for lab testing, the UF Sediment covers a similar range of particle size but with a finer d50 (d50 for NJDEP is approximately 50 μm) (NJDEP, 2003).

The OK-110 silica sand is a commercial product of U.S. Silica Sand. The particle size distribution analysis of this material, also included in Figure 1, shows that 99.9% of the OK-110 sand is finer than 250 microns, with a mean particle size (d50) of 106 microns. The PSDs for the test material are shown in Figure 1.

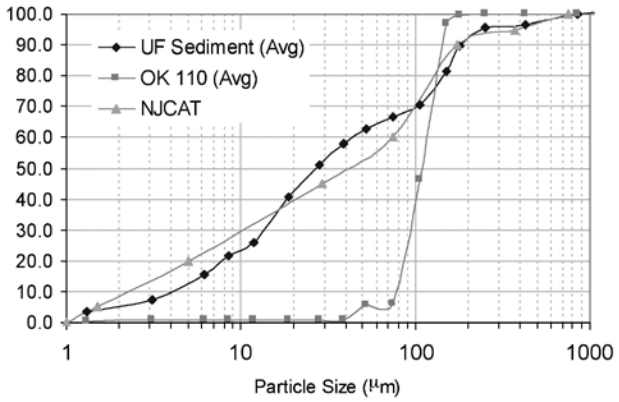


Figure 1. Particle size distributions

Tests were conducted to quantify the performance of a specific CDS unit (1.1 cfs (31.3-L/s) design capacity) at various flow rates, ranging from 1% up to 125% of the treatment design capacity of the unit, using the 2400 micron screen. All tests were conducted with controlled influent concentrations of approximately 200 mg/L. Effluent samples were taken at equal time intervals across the entire duration of each test run. These samples were then processed with a Dekaport Cone sample splitter to obtain representative sub-samples for Suspended Sediment Concentration (SSC) testing using ASTM D3977-97 "Standard Test Methods for Determining Sediment Concentration in Water Samples", and particle size distribution analysis.

Results and Modeling

Based on the data from the University of Florida, a performance model was developed for the CDS system. A regression analysis was used to develop a fitting curve representative of the scattered data points at various design flow rates. This model, which demonstrated good agreement with the laboratory data, can then be used to predict CDS system performance with respect

to SSC removal for any particle size gradation, assuming the particles are inorganic sandy-silt. Figure 2 shows CDS predictive performance for two typical particle size gradations (NJCAT gradation and OK-110 sand) as a function of operating rate.

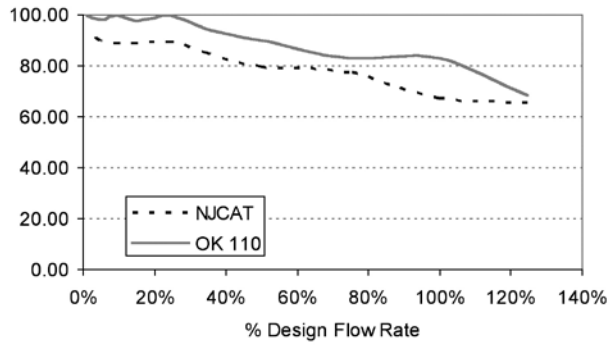


Figure 2. CDS stormwater treatment predictive performance for various particle gradations as a function of operating rate.

Many regulatory jurisdictions set a performance standard for hydrodynamic devices by stating that the devices shall be capable of achieving an 80% removal efficiency for particles having a mean particle size (d50) of 125 microns (e.g. Washington State Department of Ecology — WASDOE - 2008). The model can be used to calculate the expected performance of such a PSD (shown in Figure 3). The model indicates (Figure 4) that the CDS system with 2400 micron screen achieves approximately 80% removal at the design (100%) flow rate, for this particle size distribution (d50 = 125 μm).

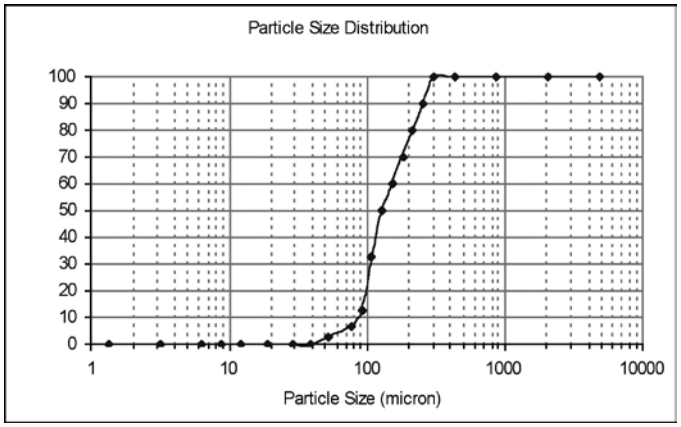


Figure 3. WASDOE PSD

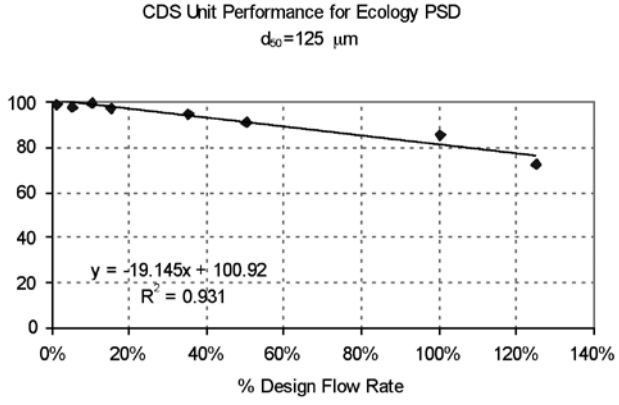


Figure 4. Modeled performance for WASDOE PSD.

Maintenance

The CDS system should be inspected at regular intervals and maintained when necessary to ensure optimum performance. The rate at which the system collects pollutants will depend more heavily on site activities than the size of the unit. For example, unstable soils or heavy winter sanding will cause the grit chamber to fill more quickly but regular sweeping of paved surfaces will slow accumulation.

Inspection

Inspection is the key to effective maintenance and is easily performed. Pollutant transport and deposition may vary from year to year and regular inspections will help ensure that the system is cleaned out at the appropriate time. At a minimum, inspections should be performed twice per year (e.g. spring and fall) however more frequent inspections may be necessary in climates where winter sanding operations may lead to rapid accumulations, or in equipment washdown areas. Installations should also be inspected more frequently where excessive amounts of trash are expected.

The visual inspection should ascertain that the system components are in working order and that there are no blockages or obstructions in the inlet and separation screen. The inspection should also quantify the accumulation of hydrocarbons, trash, and sediment in the system. Measuring pollutant accumulation can be done with a calibrated dipstick, tape measure or other measuring instrument. If absorbent material is used for enhanced removal of hydrocarbons, the level of discoloration of the sorbent material should also be identified



during inspection. It is useful and often required as part of an operating permit to keep a record of each inspection. A simple form for doing so is provided.

Access to the CDS unit is typically achieved through two manhole access covers. One opening allows for inspection and cleanout of the separation chamber (cylinder and screen) and isolated sump. The other allows for inspection and cleanout of sediment captured and retained outside the screen. For deep units, a single manhole access point would allows both sump cleanout and access outside the screen.

The CDS system should be cleaned when the level of sediment has reached 75% of capacity in the isolated sump or when an appreciable level of hydrocarbons and trash has accumulated. If absorbent material is used, it should be replaced when significant discoloration has occurred. Performance will not be impacted until 100% of the sump capacity is exceeded however it is recommended that the system be cleaned prior to that for easier removal of sediment. The level of sediment is easily determined by measuring from finished grade down to the top of the sediment pile. To avoid underestimating the level of sediment in the chamber, the measuring device must be lowered to the top of the sediment pile carefully. Particles at the top of the pile typically offer less resistance to the end of the rod than consolidated particles toward the bottom of the pile. Once this measurement is recorded, it should be compared to the as-built drawing for the unit to determine weather the height of the sediment pile off the bottom of the sump floor exceeds 75% of the total height of isolated sump.

Cleaning

Cleaning of a CDS systems should be done during dry weather conditions when no flow is entering the system. The use of a vacuum truck is generally the most effective and convenient method of removing pollutants from the system. Simply remove the manhole covers and insert the vacuum hose into the sump. The system should be completely drained down and the sump fully evacuated of sediment. The area outside the screen should also be cleaned out if pollutant build-up exists in this area.

In installations where the risk of petroleum spills is small, liquid contaminants may not accumulate as quickly as sediment. However, the system should be cleaned out immediately in the event of an oil or gasoline spill. Motor oil and other hydrocarbons that accumulate on a more routine basis should be removed when an appreciable layer has been captured. To remove these pollutants, it may be preferable to use absorbent pads since they are usually less expensive to dispose than the oil/water emulsion that may be created by vacuuming the oily layer. Trash and debris can be netted out to separate it from the other pollutants. The screen should be cleaned to ensure it is free of trash and debris.

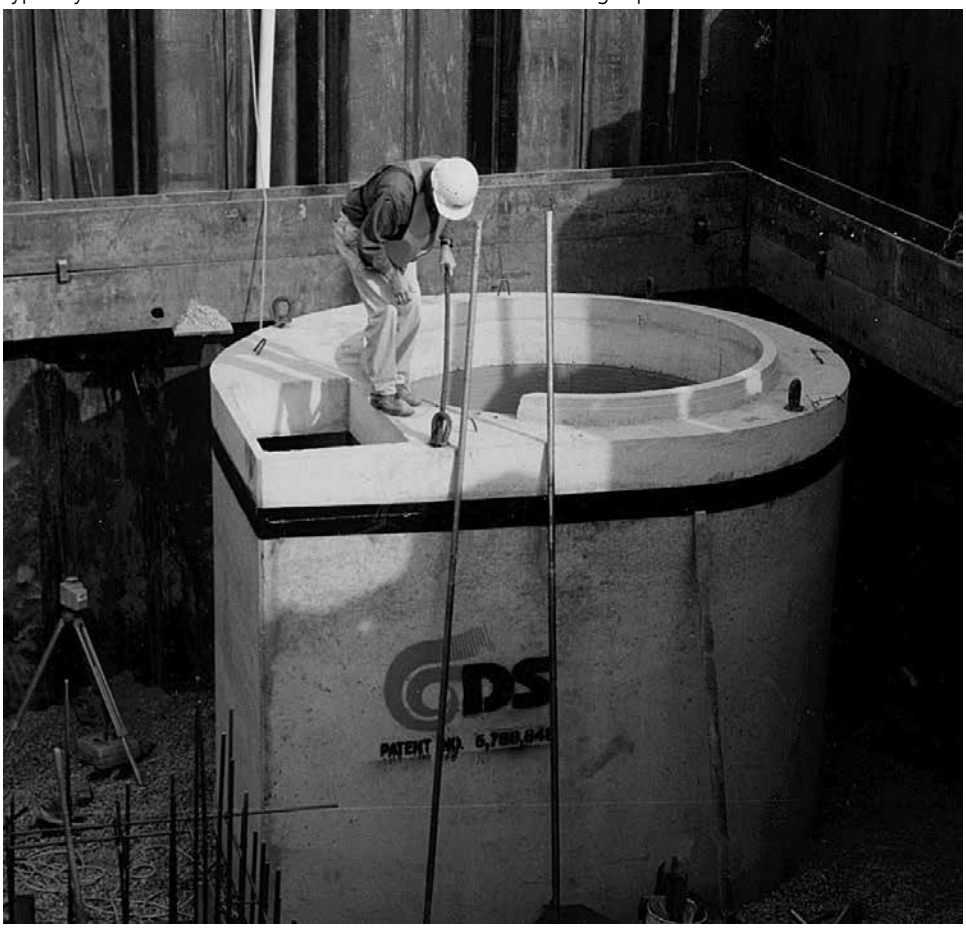
Manhole covers should be securely seated following cleaning activities to prevent leakage of runoff into the system from above and also to ensure that proper safety precautions have been followed. Confined space entry procedures need to be followed if physical access is required. Disposal of all material removed from the CDS system should be done in accordance with local regulations. In many jurisdictions, disposal of the sediments may be handled in the same manner as the disposal of sediments removed from catch basins or deep sump manholes. Check your local regulations for specific requirements on disposal.



CDS Model	Diameter		Distance from Water Surface to Top of Sediment Pile		Sediment Storage Capacity	
	ft	m	ft	m	y^3	m^3
CDS1515	3	0.9	3.0	0.9	0.5	0.4
CDS2015	4	1.2	3.0	0.9	0.9	0.7
CDS2015	5	1.5	3.0	0.9	1.3	1.0
CDS2020	5	1.5	3.5	1.1	1.3	1.0
CDS2025	5	1.5	4.0	1.2	1.3	1.0
CDS3020	6	1.8	4.0	1.2	2.1	1.6
CDS3025	6	1.8	4.0	1.2	2.1	1.6
CDS3030	6	1.8	4.6	1.4	2.1	1.6
CDS3035	6	1.8	5.0	1.5	2.1	1.6
CDS4030	8	2.4	4.6	1.4	5.6	4.3
CDS4040	8	2.4	5.7	1.7	5.6	4.3
CDS4045	8	2.4	6.2	1.9	5.6	4.3
CDS5640	10	3.0	6.3	1.9	8.7	6.7
CDS5653	10	3.0	7.7	2.3	8.7	6.7
CDS5668	10	3.0	9.3	2.8	8.7	6.7
CDS5678	10	3.0	10.3	3.1	8.7	6.7

Table 1: CDS Maintenance Indicators and Sediment Storage Capacities

Note: To avoid underestimating the volume of sediment in the chamber, carefully lower the measuring device to the top of the sediment pile. Finer silty particles at the top of the pile may be more difficult to feel with a measuring stick. These finer particles typically offer less resistance to the end of the rod than larger particles toward the bottom of the pile.



CDS Inspection & Maintenance Log

CDS Model: _____ Location: _____

Date	Water depth to sediment[1]	Floatable Layer Thickness[2]	Describe Maintenance Performed	Maintenance Personnel	Comments

1. The water depth to sediment is determined by taking two measurements with a stadia rod: one measurement from the manhole opening to the top of the sediment pile and the other from the manhole opening to the water surface. If the difference between these measurements is less than the values listed in table 1 the system should be cleaned out. **Note: to avoid underestimating the volume of sediment in the chamber, the measuring device must be carefully lowered to the top of the sediment pile**.

2. For optimum performance, the system should be cleaned out when the floating hydrocarbon layer accumulates to an appreciable thickness. In the event of an oil spill, the system should be cleaned immediately.

SUPPORT

- Drawings and specifications are available at www.ContechES.com.
- Site-specific design support is available from our engineers.

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cds_manual 3/17 PDF

RECYCLED PAPER

CDS® Models and Capacities

	CDS MODEL	Treatment Flow Rates[1]			Estimated Maximum Peak Conveyance Flow[3] (cfs)/(L/s)	Minimum Sump Storage Capacity[4] (yd^3)/(m^3)	Minimum Oil Storage Capacity[4] (gal)/(L)
		75 microns (cfs)/(L/s)	125 microns[2] (cfs)/(L/s)	Trash & Debris (cfs)/(L/s)			
PRECAST	CDS2015-4	0.5 (14.2)	0.7 (19.8)	1.0 (28.3)	10 (283)	0.9 (0.7)	61 (232)
	CDS2015-5	0.5 (14.2)	0.7(19.8)	1.0 (28.3)	10 (283)	1.5 (1.1)	83 (313)
	CDS2020-5	0.7 (19.8)	1.1 (31.2)	1.5 (42.5)	14 (396)	1.5 (1.1)	99 (376)
	CDS2025-5	1.1 (31.2)	1.6 (45.3)	2.2 (62.3)	14 (396)	1.5 (1.1)	116 (439)
	CDS3020-6	1.4 (39.6)	2.0 (56.6)	2.8 (79.3)	20 (566)	2.1 (1.6)	184 (696)
	CDS3025-6	1.7 (48.1)	2.5 (70.8)	3.5 (99.2)	20 (566)	2.1 (1.6)	210 (795)
	CDS3030-6	2.0 (56.6)	3.0 (85.0)	4.2 (118.9)	20 (566)	2.1 (1.6)	236 (895)
	CDS3035-6	2.6 (73.6)	3.8 (106.2)	5.3 (150.0)	20 (566)	2.1 (1.6)	263 (994)
	CDS4030-8	3.1 (87.7)	4.5 (127.4)	6.3 (178.3)	30 (850)	5.6 (4.3)	426 (1612)
	CDS4040-8	4.1 (116.1)	6.0 (169.9)	8.4 (237.8)	30 (850)	5.6 (4.3)	520 (1970)
	CDS4045-8	5.1 (144.4)	7.5 (212.4)	10.5 (297.2)	30 (850)	5.6 (4.3)	568 (2149)
	CDS5640-10	6.1 (172.7)	9.0 (254.9)	12.6 (356.7)	50 (1416)	8.7 (6.7)	758 (2869)
	CDS5653-10	9.5 (268.9)	14.0 (396.5)	19.6 (554.8)	50 (1416)	8.7 (6.7)	965 (3652)
	CDS5668-10	12.9 (365.1)	19.0 (538.1)	26.6 (752.9)	50 (1416)	8.7 (6.7)	1172 (4435)
	CDS5678-10	17.0 (481.2)	25.0 (708.0)	35.0 (990.7)	50 (1416)	8.7 (6.7)	1309 (4956)
	CDS9280-12	27.2 (770.2)	40.0 (1132.7)	56.0 (1585.7)	Offline	16.8 (12.8)	N/A
	CDS9290-12	35.4 (1002.4)	52.0 (1472.5)	72 (2038.8)		16.8 (12.8)	
	CDS92100-12	42.8 (1212.0)	63.0 (1783.9)	88 (2491.9)		16.8 (12.8)	
CAST-IN-PLACE	CDS150134-22	100.7 (2851.5)	148.0 (4190.9)	270 (7645.6)		56.3 (43.0)	
	CDS200164-26	183.6 (5199.0)	270.0 (7645.6)	378.0 (10703.8)		78.7 (60.2)	
	CDS240160-32	204 (5776.6)	300.0 (8495.1)	420.0 (11893.0)		119.1 (91.1)	
	Additional Cast-in-Place models available upon request.						

1. Alternative PSD/D_{50} sizing is available upon request.
2. 125 micron flows are based on the CDS Washington State Department of Ecology approval for 80% removal of a particle size distribution (PSD) having a mean particle size (D_{50}) of 125 microns.
3. Estimated maximum peak conveyance flow is calculated using conservative values and may be exceeded on sites with lower inflow velocities and sufficient head over the weir.
4. Sump and oil capacities can be customized to meet site needs.

Appendix G:
Figures

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FIG 1



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Glens Falls Office:
100 Glen Street, Glens Falls, NY 12801
Phone: (518) 812-0513

Beacon 248 Development LLC
Proposed Residential Development

Orthophoto Map

104 Rochelle Avenue
City of Beacon
Dutchess County, New York

Drawn:	CLC
Date:	01/23/2011
Scale:	1:3,600
Project:	81056.00
Figure:	X

Map Document: (R:\8\81000-81999\81056_00_Beacon\GIS\maps\81056_00_Orthophoto_8x11.mxd)
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FIG 2



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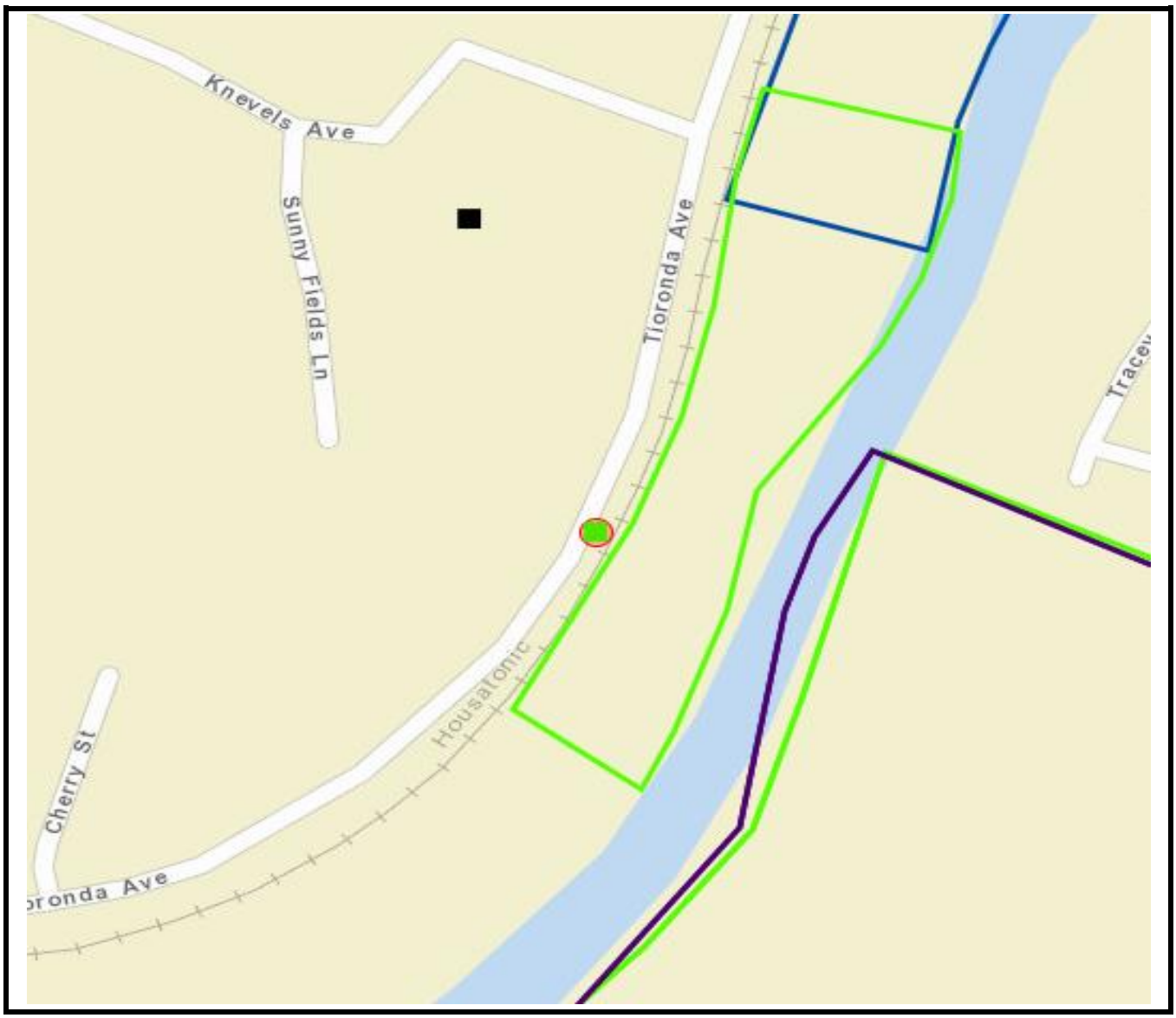
Proposed Fishkill Creek Development (FCD) Site Plan

Soils Map

Tioronda Avenue, City of Beacon - Dutchess County, NY

Drawn:	RLB
Date:	09/06/2018
Scale:	1 in = 300 feet
Project:	81750.00
Figure:	4

FIG 3



LEGEND

Consultation Projects (View)

Survey Archaeology Areas (View)

Survey Building Areas (View)

LPC Historic Districts

Archeologically Sensitive Areas

National Register Building Sites (View)

USN Building Districts (View)

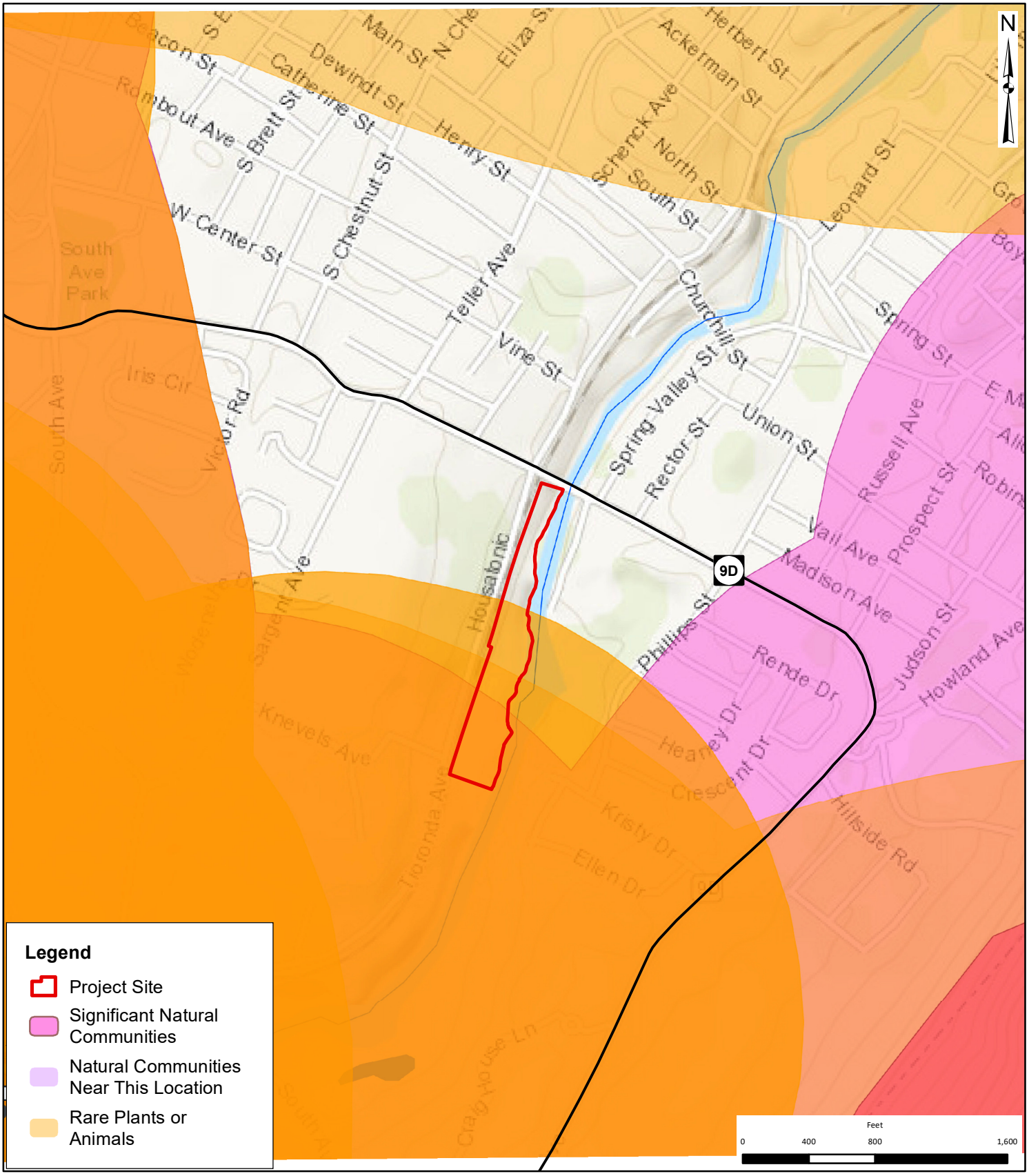
LPC Landmarks

USN Building Points (View)

- Eligible
- Listed
- Not Eligible
- Not Eligible - Demolished
- Undetermined

Cemeteries

FIG 4



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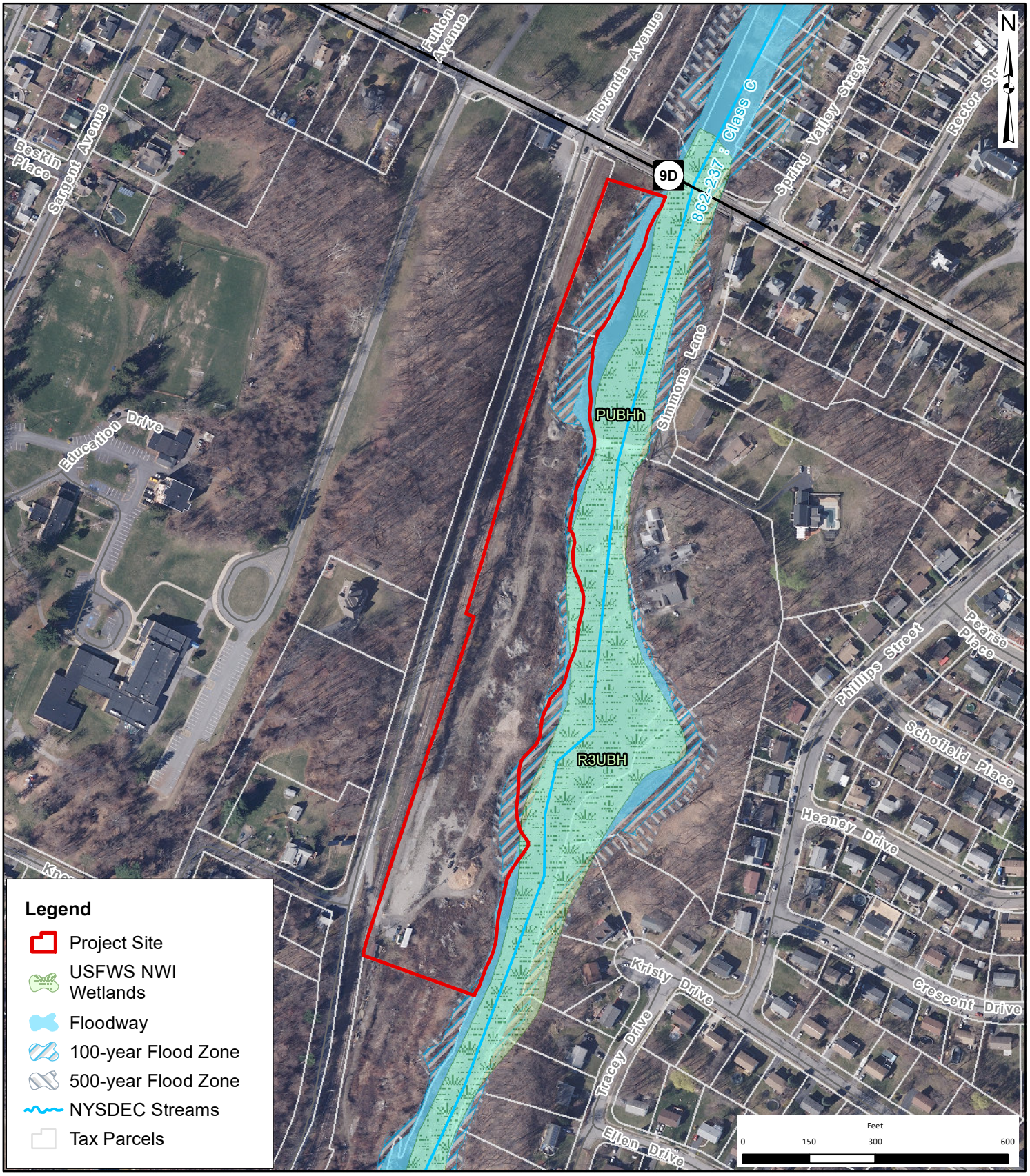
Proposed Fishkill Creek Development (FCD) Site Plan

NYSDEC Environmental Resource Map

Tioronda Avenue, City of Beacon - Dutchess County, NY

Drawn:	RLB
Date:	09/07/2018
Scale:	1 in = 800 feet
Project:	81750.00
Figure:	7

FIG 5



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Capital District Office:
547 River Street, Troy, NY 12180
Phone: (518) 273-0055

North Country Office:
375 Bay Road, Queensbury, NY 12804
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Proposed Fishkill Creek Development (FCD) Site Plan

Wetland, Streams and Floodplain Map

Tioronda Avenue, City of Beacon - Dutchess County, NY

Drawn:	RLB
Date:	09/06/2018
Scale:	1 in = 300 feet
Project:	81750.00
Figure:	6

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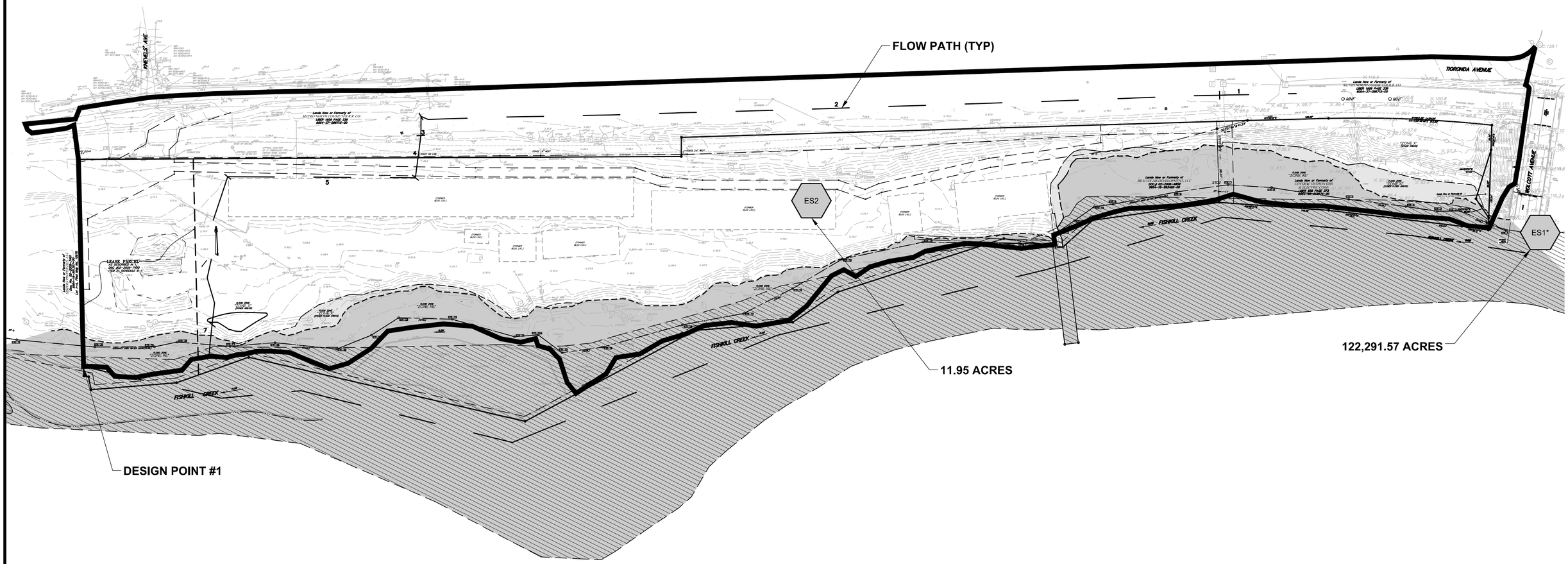
TIME OF CONCENTRATION

SUB CATCHMENT ES1
Subcatchment ES1 encompasses 191.10 square miles upstream from Design Point 1. The time of concentration has been approximated from area and flow rate found in Federal Emergency Management Agency Flood Insurance Study Numbers 36027CV002A and 36027CV001A

SUB CATCHMENT ES2 - 9.78 ACRES			
TIME OF CONCENTRATION - 44.3 MINUTES			
NUMBER	LENGTH (FT)	TYPE OF FLOW	SLOPE (%)
1	100	SHEET	1
2	1045	SHALLOW CONCENTRATED	1
3	25	CHANNEL (PIPE)	5.6
4	56	SHALLOW CONCENTRATED	7.9
5	245	CHANNEL (GUTTER)	1
6	200	SHALLOW CONCENTRATED	9.4

STORM WATER LEGEND

- WATERSHED BOUNDARY
- TIME OF CONCENTRATION / FLOW PATH
- # – SUBCATCHMENT #



1 / FIG 6 **PRE-DEVELOPMENT DRAINAGE MAP**
SCALE: 1"=60'

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0 1 2 3
ORIGINAL SCALE IN INCHES

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Planners
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Phone: (845) 454-3980

Capital District Office:
547 River Street
Troy, New York 12180
Phone: (518) 273-0055

North Country Office:
375 Bay Road
Queensbury, New York 12804
Phone: (518) 812-0513

rev.	date	description
3	2/26/24	NO REVISIONS THIS SHEET PER AMENDED SWPPP
2	08/31/21	REVISED PER CITY SUBMISSION
1	12/20/19	REVISED PER TOWN COMMENTS

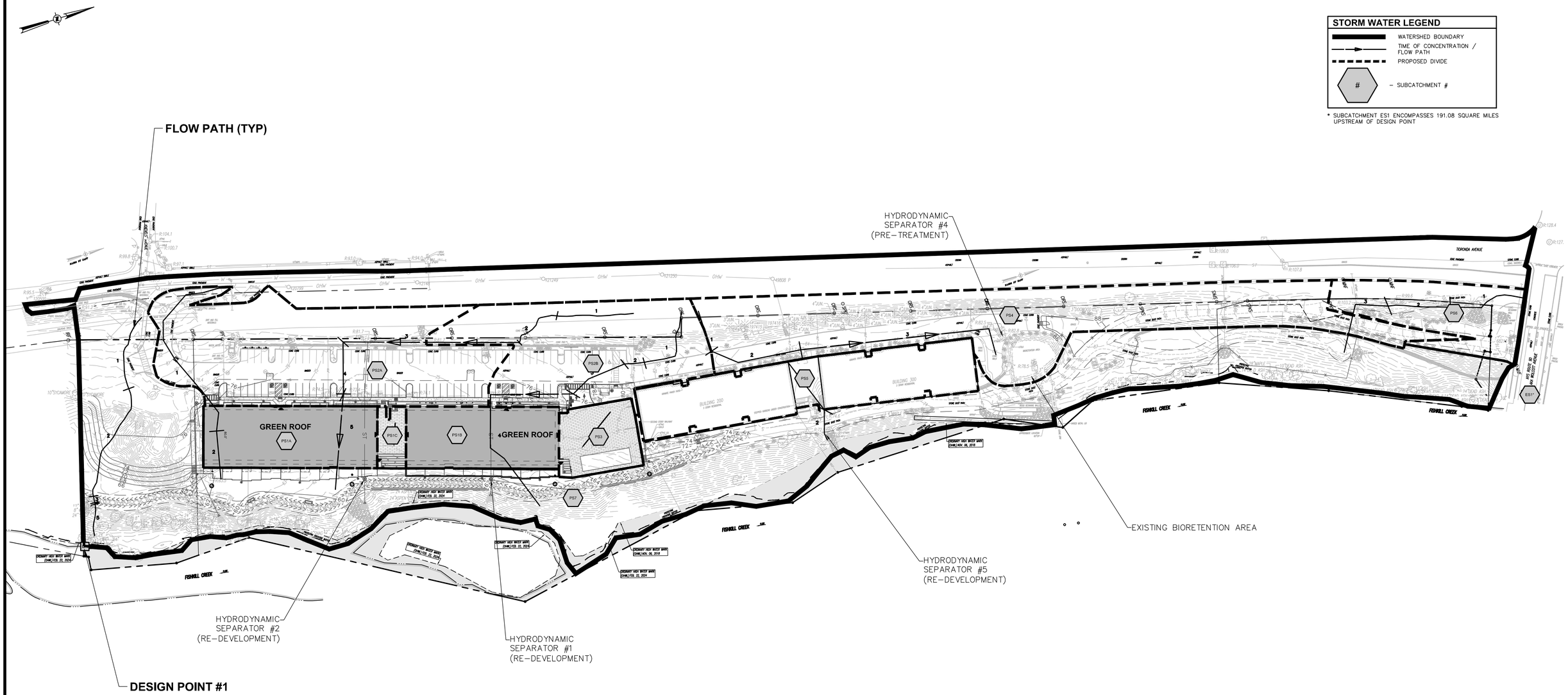
TIORONDA AVENUE & 465 WOLCOTT AVENUE
CHAI BUILDERS

PRE-DEVELOPMENT DRAINAGE MAP

CITY OF BEACON, DUTCHESS COUNTY, NEW YORK

designed	checked
CJL	LAB
date	scale
01/16/19	AS NOTED
project no.	
81750.00	
sheet no.	
FIG 6	

Drawing Name: \\cosh.lob\u\Legacy\Chazen\Projects\81700-81799\81750.00 CHAI Builders B-248\DWG\11_STMF-FIG4-FIG5_81750_PRE-POST-WATERSHED-MAPS.dwg
Xref's Attached: XBASE-ENG_81750-00; XSTORM_81750-00; XTB_81750-00_24x36; XLAYOUT_81750-00; XGRADING_81750-00; XUTIL_81750-00
Date Printed: Feb 26, 2024, 10:39pm



1 FIG 7 **POST-DEVELOPMENT DRAINAGE MAP**
SCALE: 1"=60'

0 1 2 3
ORIGINAL SCALE IN INCHES

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Troy, New York 12180
Phone: (518) 273-0055

North Country Office:
375 Bay Road
Queensbury, New York 12804
Phone: (518) 812-0513

rev.	date	description
4	06/30/26	REVISED PER AMENDED SWPPP
3	2/24/24	REVISED PER AMENDED SWPPP
2	08/31/21	REVISED PER CITY SUBMISSION
1	12/20/19	REVISED PER TOWN COMMENTS

TIORONDA AVENUE & 465 WOLCOTT AVENUE
CHAI BUILDERS

POST-DEVELOPMENT DRAINAGE MAP

CITY OF BEACON, DUTCHESS COUNTY, NEW YORK

designed	checked
CJL	LAB
date	scale
01/16/19	AS NOTED
project no.	
81750.00	
sheet no.	
FIG 7	

Drawing Name: \\cosh.lab\u\Legacy\Chazen\Projects\81700-81799\81750.00 CHAI Builders B-248\DWG\11_STMF-FIG4-FIG5_81750_PRE-POST-WATERSHED-MAPS.dwg
Xref's Attached: XBASE-ENG_81750-00; XSTORM_81750-00; XTB_81750-00_24x36; XLAYOUT_81750-00; XGRADING_81750-00; XUTIL_81750-00
Date Printed: Jun 30, 2026, 12:45pm

Appendix H:
Chazen Certifying Professionals Letter

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Capital District Office (518) 273-0055
North Country Office (518) 812-0513

April 7, 2016

To Whom it May Concern:

In accordance with the NYSDEC SPDES General Permit GP-0-15-002, part VII.H.2, the New York State licensed Professional Engineers employed by The Chazen Companies and listed on the attachment to this letter are duly authorized to sign and seal Stormwater Pollution Prevention Plans (SWPPPs), NOIs, and NOTs prepared under their direct supervision.

Sincerely,

Mark Kastner, P.E.
President

LaBella
Powered by partnership.

January 26, 2024

RE: LaBella Certifying Professionals for NYSDEC SPDES GP-0-20-001

To Whom it May Concern:

In accordance with the NYSDEC SPDES General Permit GP-0-20-001, Part VII.H.2, Kyle Ahearn, PE, a New York State Qualified Professional employed by LaBella Associates, is duly authorized to sign and seal Stormwater Pollution Prevention Plans (SWPPPs), Notice of Intents (NOIs) and Notice of Terminations (NOTs).

Respectfully submitted,

LaBella Associates

Timothy Webber
Vice President, Civil Division Director

Kyle Ahearn, PE
Senior Civil Engineer

300 State Street, Suite 201 | Rochester, NY 14614 | p (585) 454-6110 | f (585) 454-3066
www.labellapc.com

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Appendix I:
Pre-Development Stormwater Modeling

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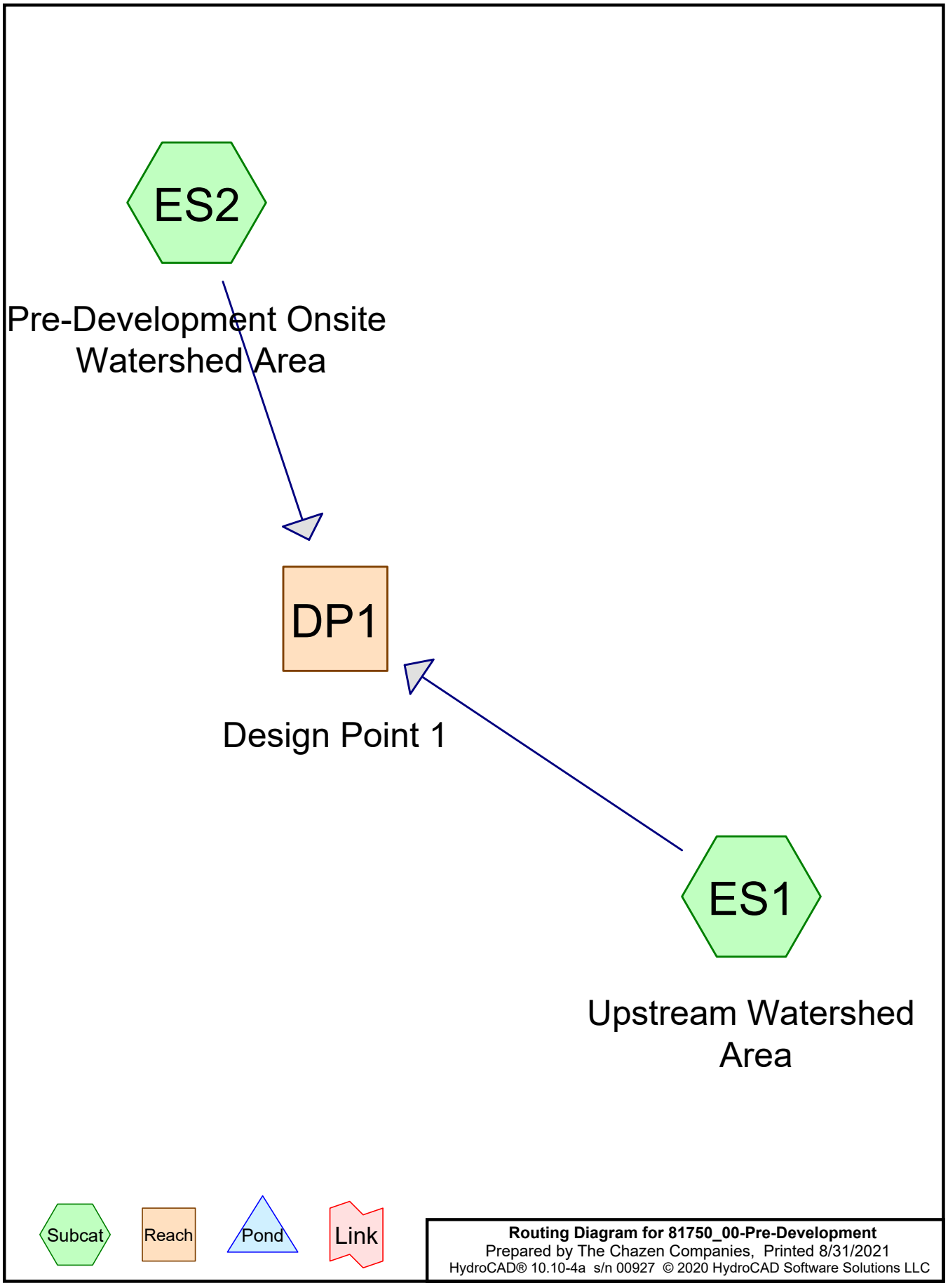

ES2
Pre-Development Onsite Watershed Area
DP1
Design Point 1
ES1
Upstream Watershed Area
Subcat
Reach
Pond
Link
Routing Diagram for 81750_00-Pre-Development
Prepared by The Chazen Companies, Printed 8/31/2021
HydroCAD® 10.10-4a s/n 00927 © 2020 HydroCAD Software Solutions LLC

Rainfall Events Listing

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	1-Year	Type III 24-hr		Default	24.00	1	2.80	2
2	10-Year	Type III 24-hr		Default	24.00	1	5.20	2
3	100-Year	Type III 24-hr		Default	24.00	1	7.81	2

Summary for Subcatchment ES1: Upstream Watershed Area

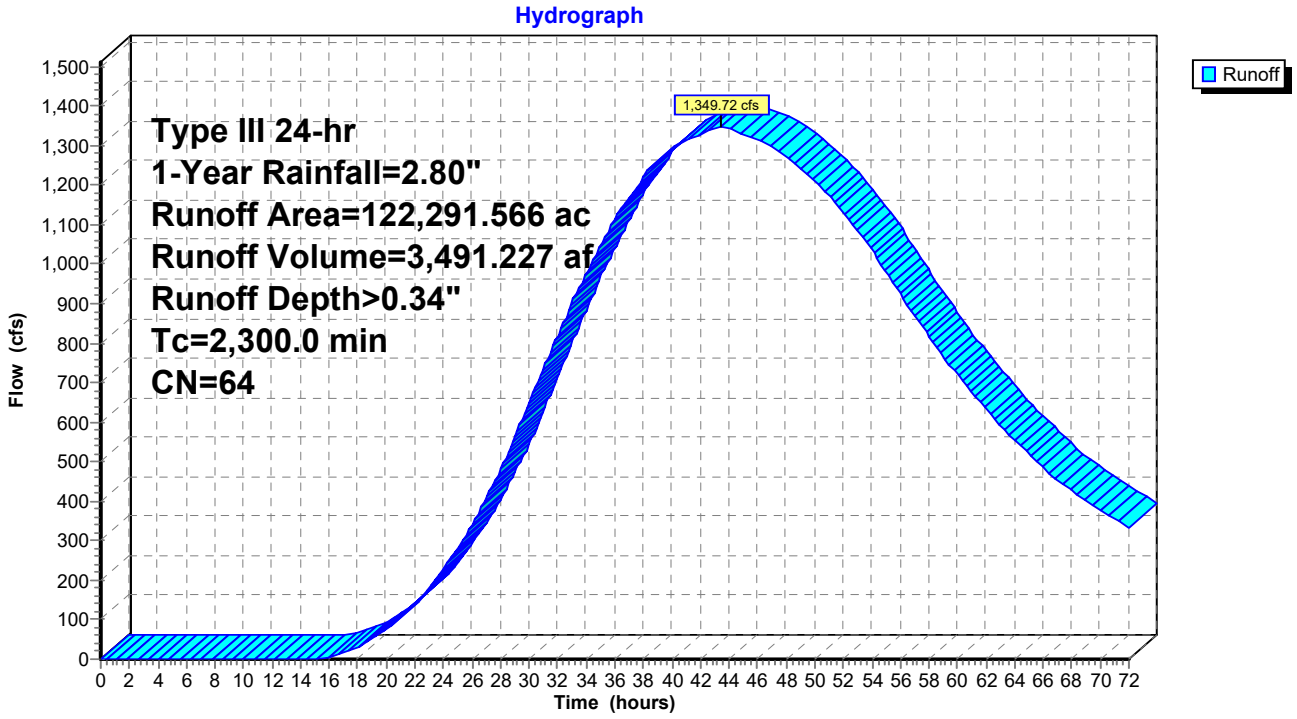
Runoff = 1,349.72 cfs @ 43.44 hrs, Volume= 3,491.227 af, Depth> 0.34"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Type III 24-hr 1-Year Rainfall=2.80"

Area (ac)	CN	Description
*122,291.566	64	
122,291.566		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2,300.0					**Direct Entry, Time of Concentration**

Subcatchment ES1: Upstream Watershed Area



Summary for Subcatchment ES2: Pre-Development Onsite Watershed Area

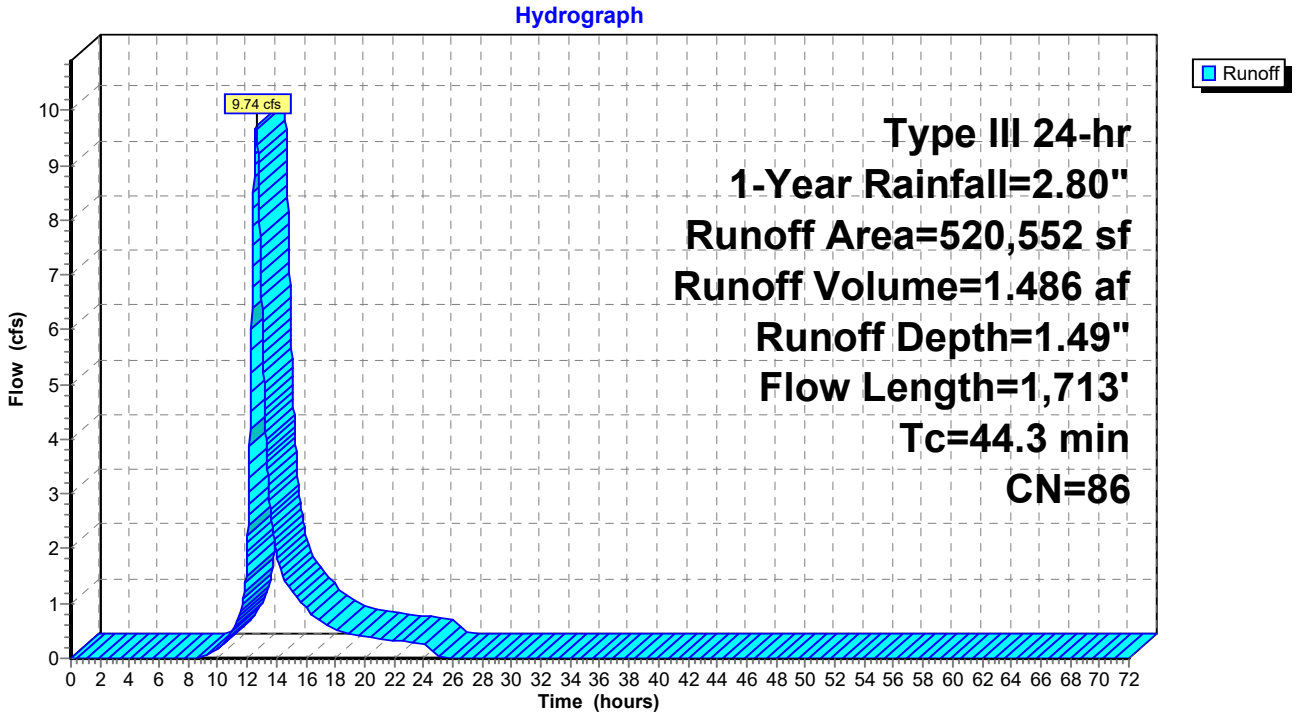
Runoff = 9.74 cfs @ 12.62 hrs, Volume= 1.486 af, Depth= 1.49"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Type III 24-hr 1-Year Rainfall=2.80"

Area (sf)	CN	Description
172,059	98	Unconnected pavement, HSG D
234,058	80	>75% Grass cover, Good, HSG D
114,435	79	Woods/grass comb., Good, HSG D
520,552	86	Weighted Average
348,493		66.95% Pervious Area
172,059		33.05% Impervious Area
172,059		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.0	100	0.0100	0.09		**Sheet Flow, 100' Sheet Grass @ .01** Grass: Dense n= 0.240 P2= 3.50"
24.9	1,045	0.0100	0.70		**Shallow Concentrated Flow, 1,045' Shallow Grass @ .01** Short Grass Pasture Kv= 7.0 fps
0.0	25	0.0560	10.73	8.43	**Pipe Channel, 25' 12" CIP @ .056** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013 Cast iron, coated
0.2	56	0.0790	5.71		**Shallow Concentrated Flow, 56' Shallow Paved @ .079** Paved Kv= 20.3 fps
0.5	245	0.0100	8.74	43.71	**Channel Flow, 245' Channel Gutter Flow @ .01** Area= 5.0 sf Perim= 5.0' r= 1.00' n= 0.017 Concrete, unfinished
0.5	200	0.0940	6.22		**Shallow Concentrated Flow, 200' Shallow Paved @ .094** Paved Kv= 20.3 fps
0.2	42	0.4380	3.31		**Shallow Concentrated Flow, 42' Shallow Woods @ .438** Woodland Kv= 5.0 fps
44.3	1,713	Total			

Subcatchment ES2: Pre-Development Onsite Watershed Area

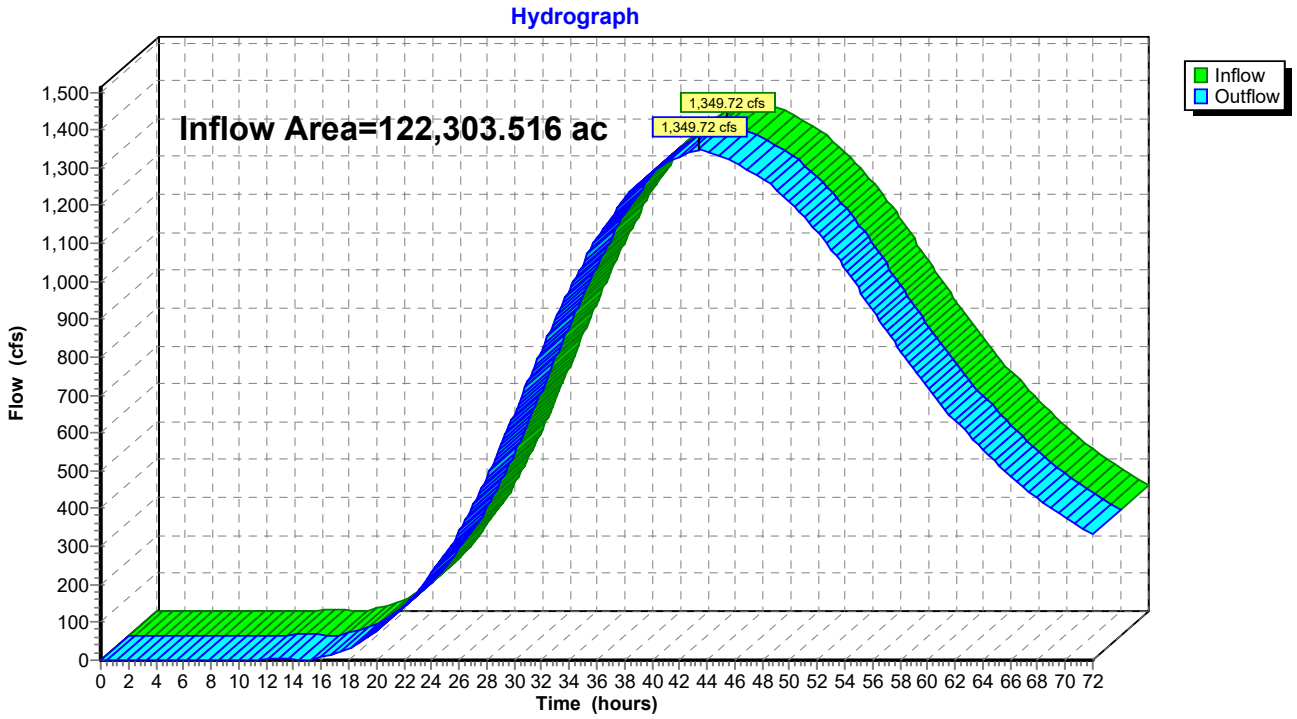


Summary for Reach DP1: Design Point 1

Inflow Area =122,303.516 ac, 0.00% Impervious, Inflow Depth > 0.34" for 1-Year event
Inflow = 1,349.72 cfs @ 43.44 hrs, Volume= 3,492.714 af
Outflow = 1,349.72 cfs @ 43.44 hrs, Volume= 3,492.714 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs

Reach DP1: Design Point 1



Summary for Subcatchment ES1: Upstream Watershed Area

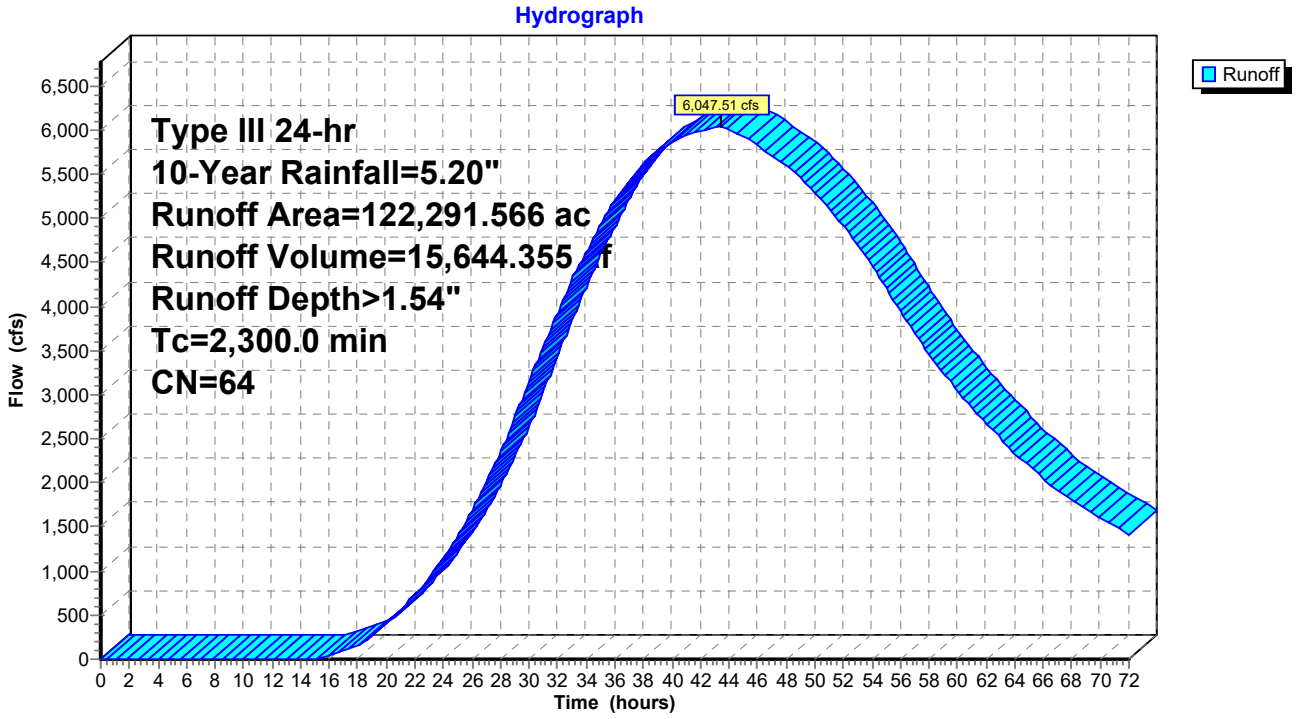
Runoff = 6,047.51 cfs @ 43.44 hrs, Volume= 15,644.355 af, Depth> 1.54"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Type III 24-hr 10-Year Rainfall=5.20"

Area (ac)	CN	Description
*122,291.566	64	
122,291.566		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2,300.0					**Direct Entry, Time of Concentration**

Subcatchment ES1: Upstream Watershed Area



Summary for Subcatchment ES2: Pre-Development Onsite Watershed Area

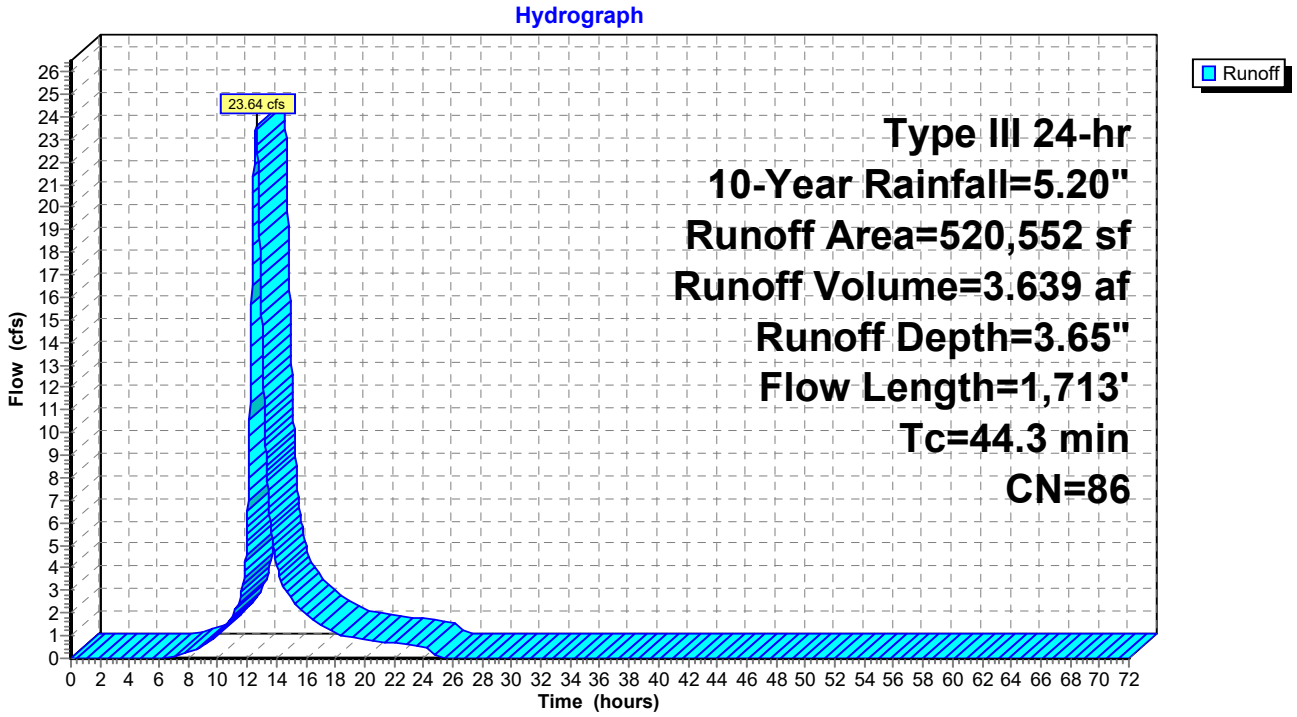
Runoff = 23.64 cfs @ 12.59 hrs, Volume= 3.639 af, Depth= 3.65"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Type III 24-hr 10-Year Rainfall=5.20"

Area (sf)	CN	Description
172,059	98	Unconnected pavement, HSG D
234,058	80	>75% Grass cover, Good, HSG D
114,435	79	Woods/grass comb., Good, HSG D
520,552	86	Weighted Average
348,493		66.95% Pervious Area
172,059		33.05% Impervious Area
172,059		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.0	100	0.0100	0.09		**Sheet Flow, 100' Sheet Grass @ .01** Grass: Dense n= 0.240 P2= 3.50"
24.9	1,045	0.0100	0.70		**Shallow Concentrated Flow, 1,045' Shallow Grass @ .01** Short Grass Pasture Kv= 7.0 fps
0.0	25	0.0560	10.73	8.43	**Pipe Channel, 25' 12" CIP @ .056** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013 Cast iron, coated
0.2	56	0.0790	5.71		**Shallow Concentrated Flow, 56' Shallow Paved @ .079** Paved Kv= 20.3 fps
0.5	245	0.0100	8.74	43.71	**Channel Flow, 245' Channel Gutter Flow @ .01** Area= 5.0 sf Perim= 5.0' r= 1.00' n= 0.017 Concrete, unfinished
0.5	200	0.0940	6.22		**Shallow Concentrated Flow, 200' Shallow Paved @ .094** Paved Kv= 20.3 fps
0.2	42	0.4380	3.31		**Shallow Concentrated Flow, 42' Shallow Woods @ .438** Woodland Kv= 5.0 fps
44.3	1,713	Total			

Subcatchment ES2: Pre-Development Onsite Watershed Area

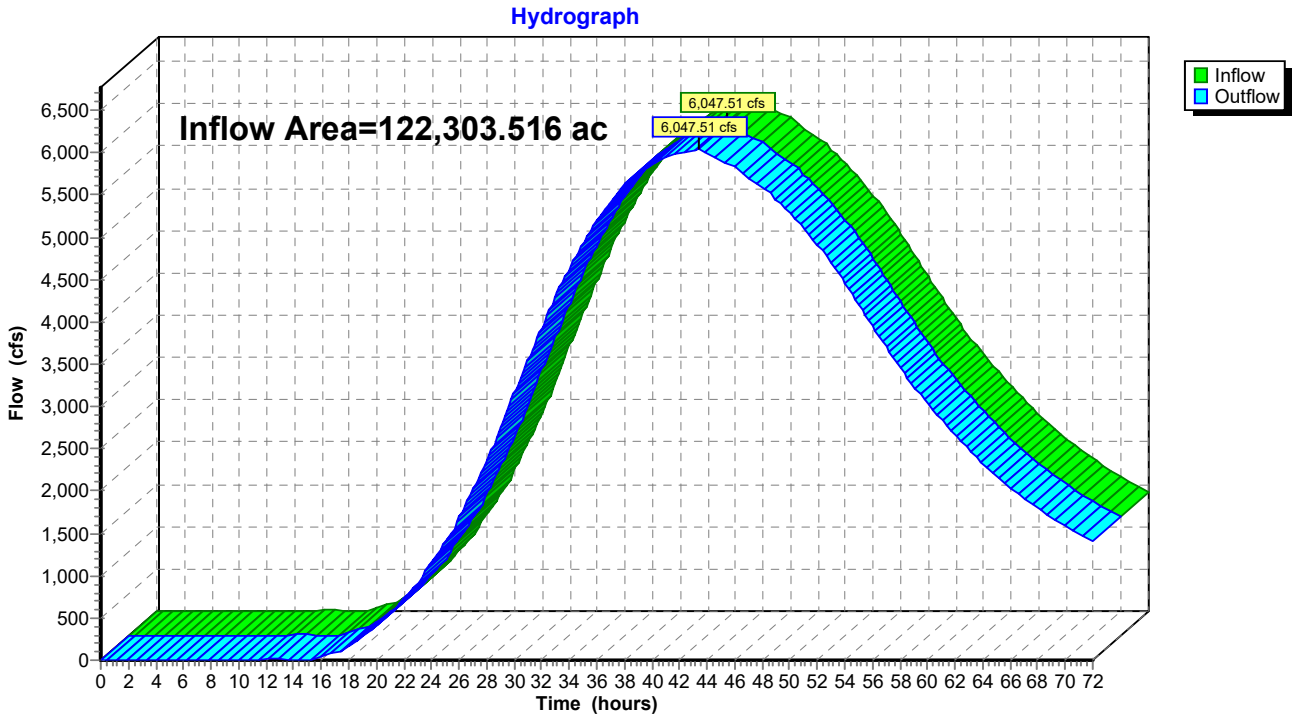


Summary for Reach DP1: Design Point 1

Inflow Area =122,303.516 ac, 0.00% Impervious, Inflow Depth > 1.54" for 10-Year event
Inflow = 6,047.51 cfs @ 43.44 hrs, Volume= 15,647.994 af
Outflow = 6,047.51 cfs @ 43.44 hrs, Volume= 15,647.994 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs

Reach DP1: Design Point 1



Summary for Subcatchment ES1: Upstream Watershed Area

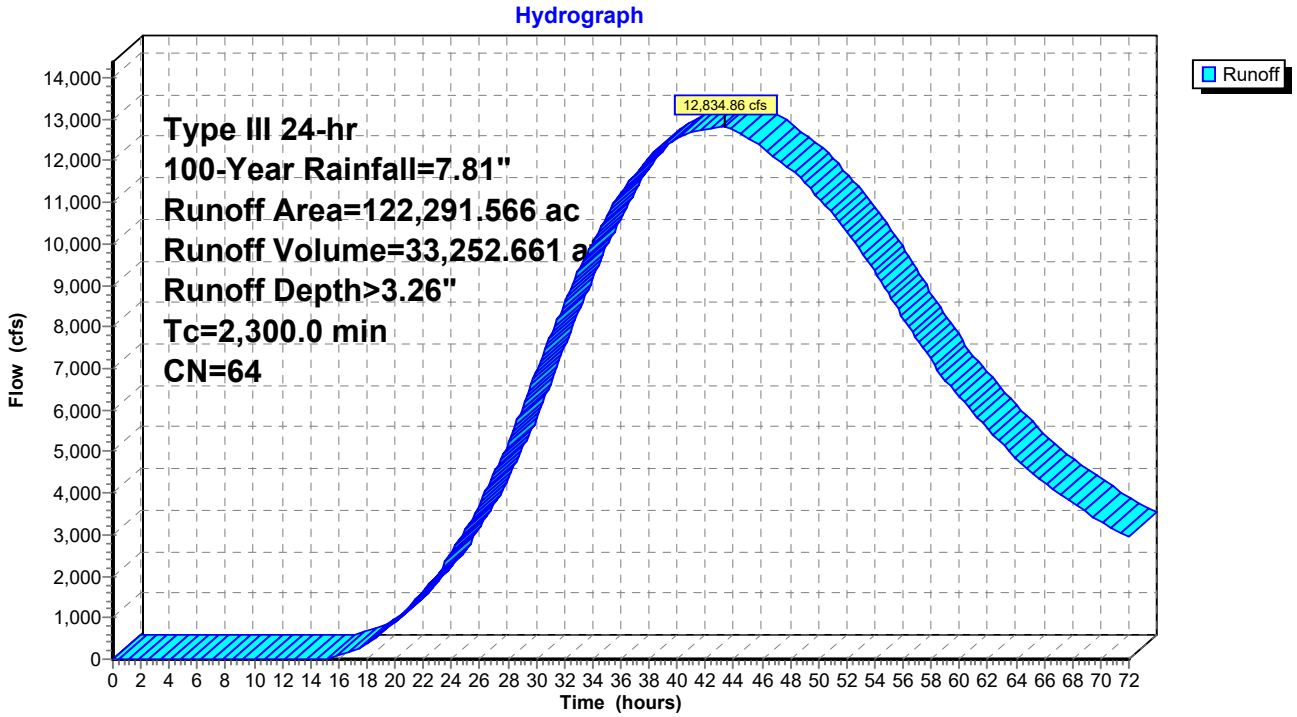
Runoff = 12,834.86 cfs @ 43.44 hrs, Volume= 33,252.661 af, Depth> 3.26"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Type III 24-hr 100-Year Rainfall=7.81"

Area (ac)	CN	Description
*122,291.566	64	
122,291.566		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2,300.0					**Direct Entry, Time of Concentration**

Subcatchment ES1: Upstream Watershed Area



Summary for Subcatchment ES2: Pre-Development Onsite Watershed Area

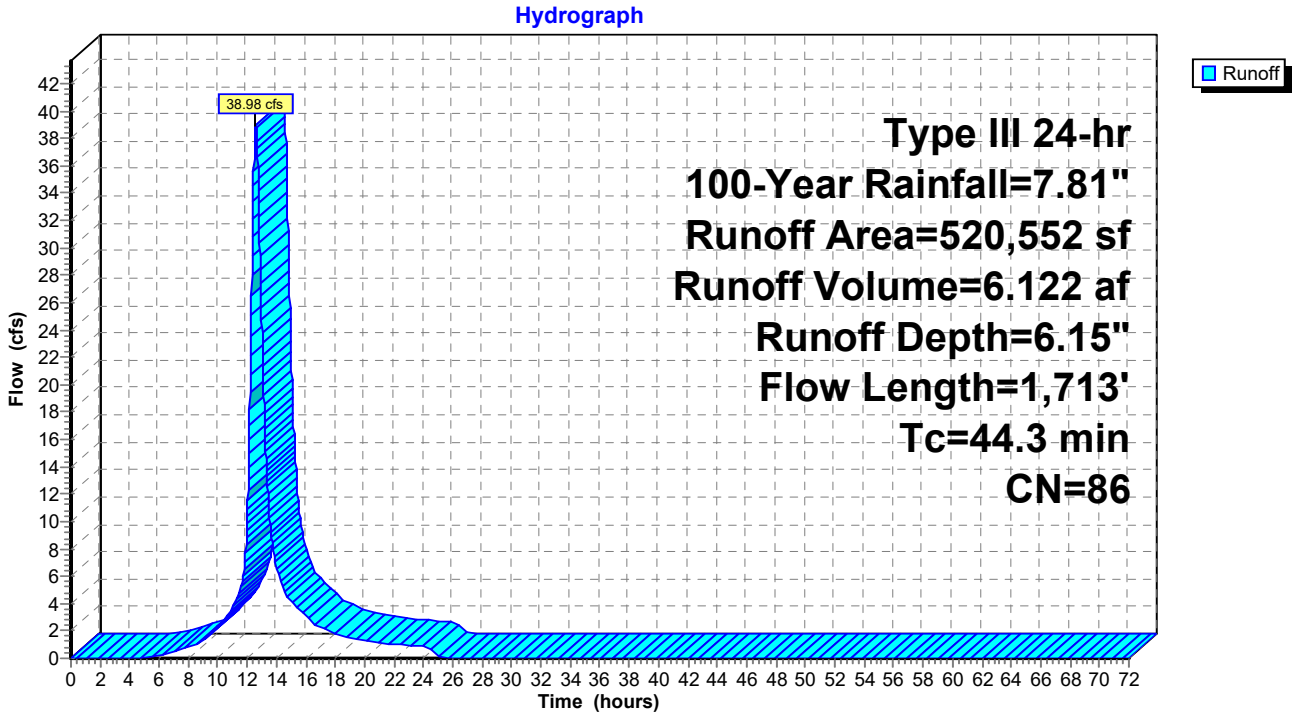
Runoff = 38.98 cfs @ 12.57 hrs, Volume= 6.122 af, Depth= 6.15"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Type III 24-hr 100-Year Rainfall=7.81"

Area (sf)	CN	Description
172,059	98	Unconnected pavement, HSG D
234,058	80	>75% Grass cover, Good, HSG D
114,435	79	Woods/grass comb., Good, HSG D
520,552	86	Weighted Average
348,493		66.95% Pervious Area
172,059		33.05% Impervious Area
172,059		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.0	100	0.0100	0.09		**Sheet Flow, 100' Sheet Grass @ .01** Grass: Dense n= 0.240 P2= 3.50"
24.9	1,045	0.0100	0.70		**Shallow Concentrated Flow, 1,045' Shallow Grass @ .01** Short Grass Pasture Kv= 7.0 fps
0.0	25	0.0560	10.73	8.43	**Pipe Channel, 25' 12" CIP @ .056** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013 Cast iron, coated
0.2	56	0.0790	5.71		**Shallow Concentrated Flow, 56' Shallow Paved @ .079** Paved Kv= 20.3 fps
0.5	245	0.0100	8.74	43.71	**Channel Flow, 245' Channel Gutter Flow @ .01** Area= 5.0 sf Perim= 5.0' r= 1.00' n= 0.017 Concrete, unfinished
0.5	200	0.0940	6.22		**Shallow Concentrated Flow, 200' Shallow Paved @ .094** Paved Kv= 20.3 fps
0.2	42	0.4380	3.31		**Shallow Concentrated Flow, 42' Shallow Woods @ .438** Woodland Kv= 5.0 fps
44.3	1,713	Total			

Subcatchment ES2: Pre-Development Onsite Watershed Area

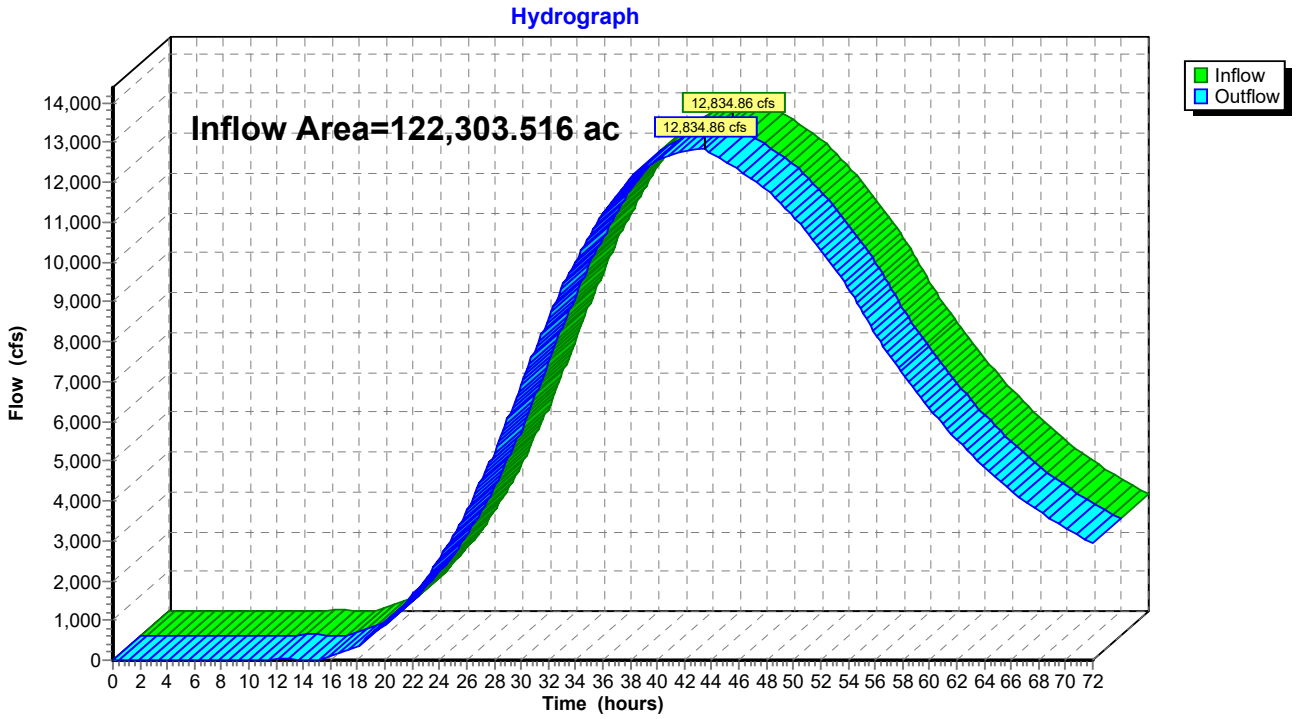


Summary for Reach DP1: Design Point 1

Inflow Area =122,303.516 ac, 0.00% Impervious, Inflow Depth > 3.26" for 100-Year event
Inflow = 12,834.86 cfs @ 43.44 hrs, Volume= 33,258.783 af
Outflow = 12,834.86 cfs @ 43.44 hrs, Volume= 33,258.783 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs

Reach DP1: Design Point 1



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Project Reports
1 Routing Diagram
2 Rainfall Events Listing

1-Year Event
3 Subcat ES1: Upstream Watershed Area
4 Subcat ES2: Pre-Development Onsite Watershed Area
6 Reach DP1: Design Point 1

10-Year Event
7 Subcat ES1: Upstream Watershed Area
8 Subcat ES2: Pre-Development Onsite Watershed Area
10 Reach DP1: Design Point 1

100-Year Event
11 Subcat ES1: Upstream Watershed Area
12 Subcat ES2: Pre-Development Onsite Watershed Area
14 Reach DP1: Design Point 1

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Appendix J:
Post-Development Stormwater Modeling

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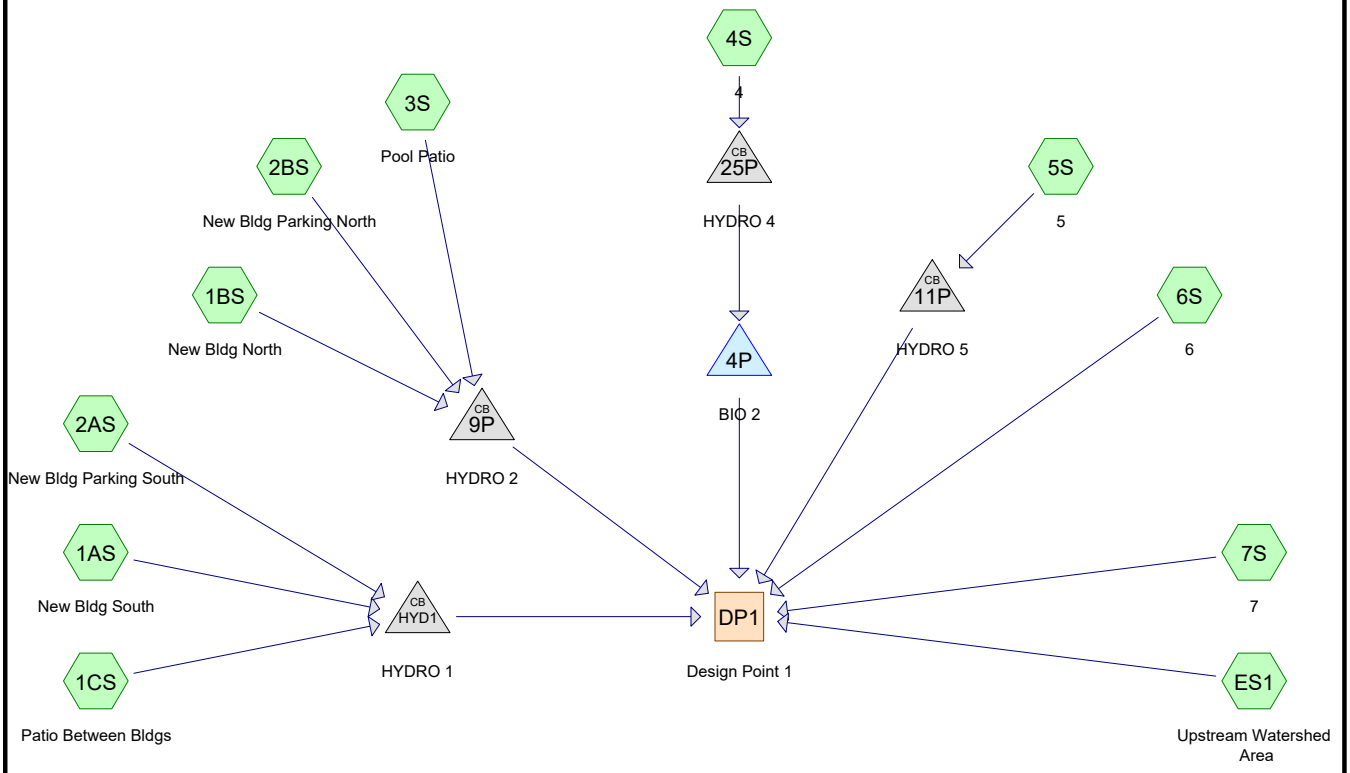


Subcat Reach Pond Link

Routing Diagram for 81750_00-Post-Development
Prepared by Labella Associates, Printed 6/30/2026
HydroCAD® 10.20-6a s/n 09581 © 2024 HydroCAD Software Solutions LLC

Summary for Subcatchment 1AS: New Bldg South

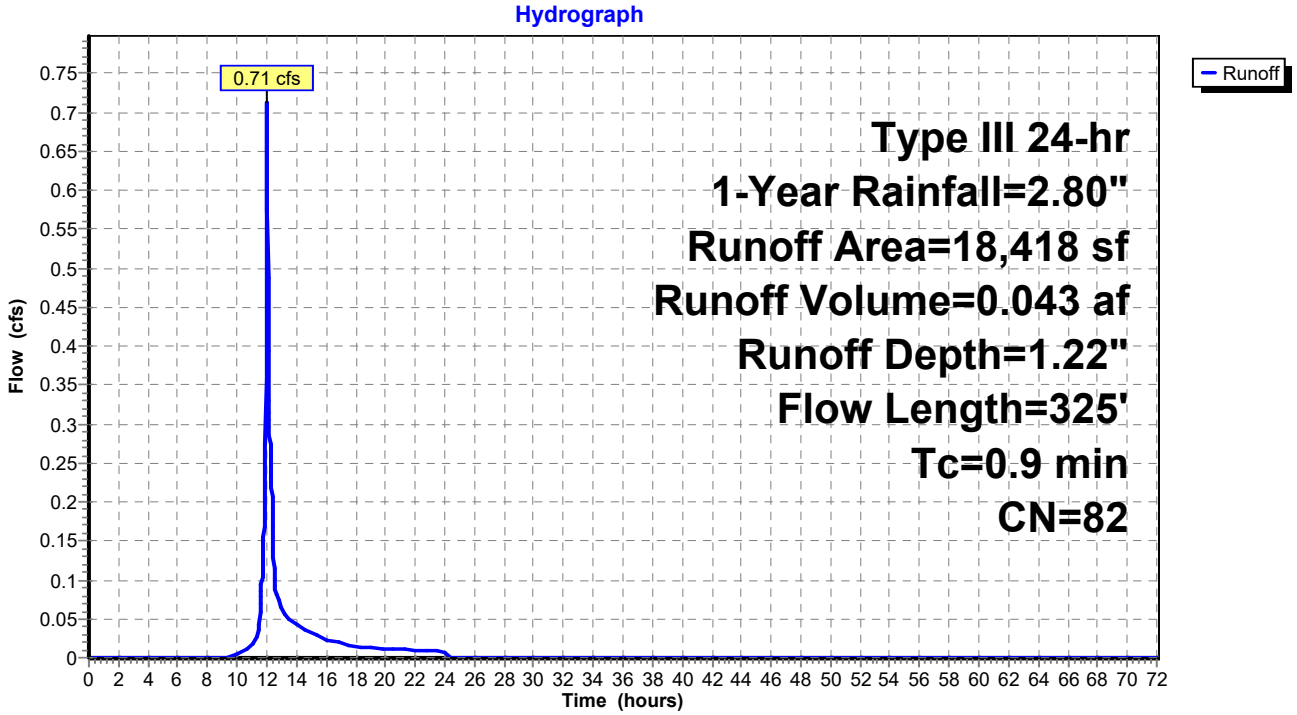
Runoff = 0.71 cfs @ 12.02 hrs, Volume= 0.043 af, Depth= 1.22"
Routed to Pond HYD1 : HYDRO 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Type III 24-hr 1-Year Rainfall=2.80"

	Area (sf)	CN	Description
	13,418	98	Paved parking, HSG D
*	5,000	39	Green Roof
	18,418	82	Weighted Average
	5,000		27.15% Pervious Area
	13,418		72.85% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.8	262	0.0734	5.50		**Shallow Concentrated Flow, 262 LF SCF @ 7.34% PAVED** Paved Kv= 20.3 fps
0.1	63	0.1500	17.57	13.80	**Pipe Channel, 63 LF @ 15%** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013 Corrugated PE, smooth interior
0.9	325	Total			

Subcatchment 1AS: New Bldg South



Summary for Subcatchment 1BS: New Bldg North

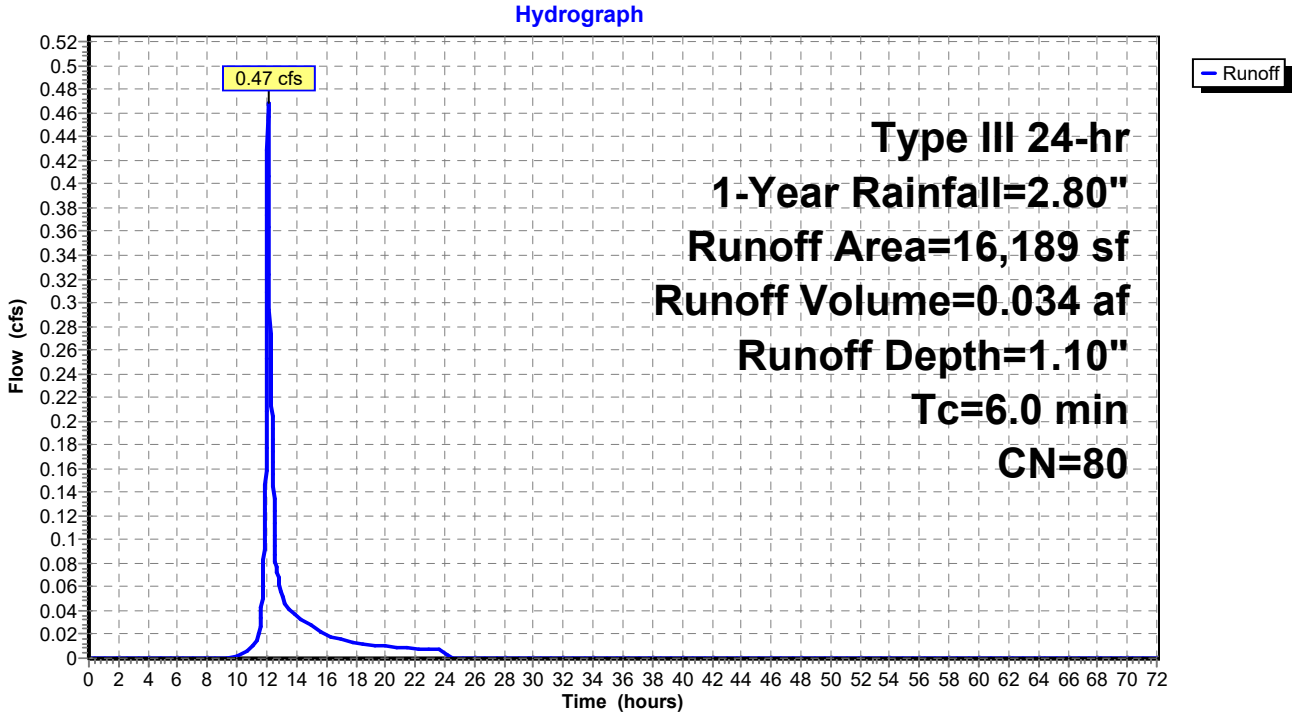
Runoff = 0.47 cfs @ 12.09 hrs, Volume= 0.034 af, Depth= 1.10"
Routed to Pond 9P : HYDRO 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Type III 24-hr 1-Year Rainfall=2.80"

	Area (sf)	CN	Description
	11,189	98	Paved parking, HSG D
*	5,000	39	Green Roof
	16,189	80	Weighted Average
	5,000		30.89% Pervious Area
	11,189		69.11% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 1BS: New Bldg North



Summary for Subcatchment 1CS: Patio Between Bldgs

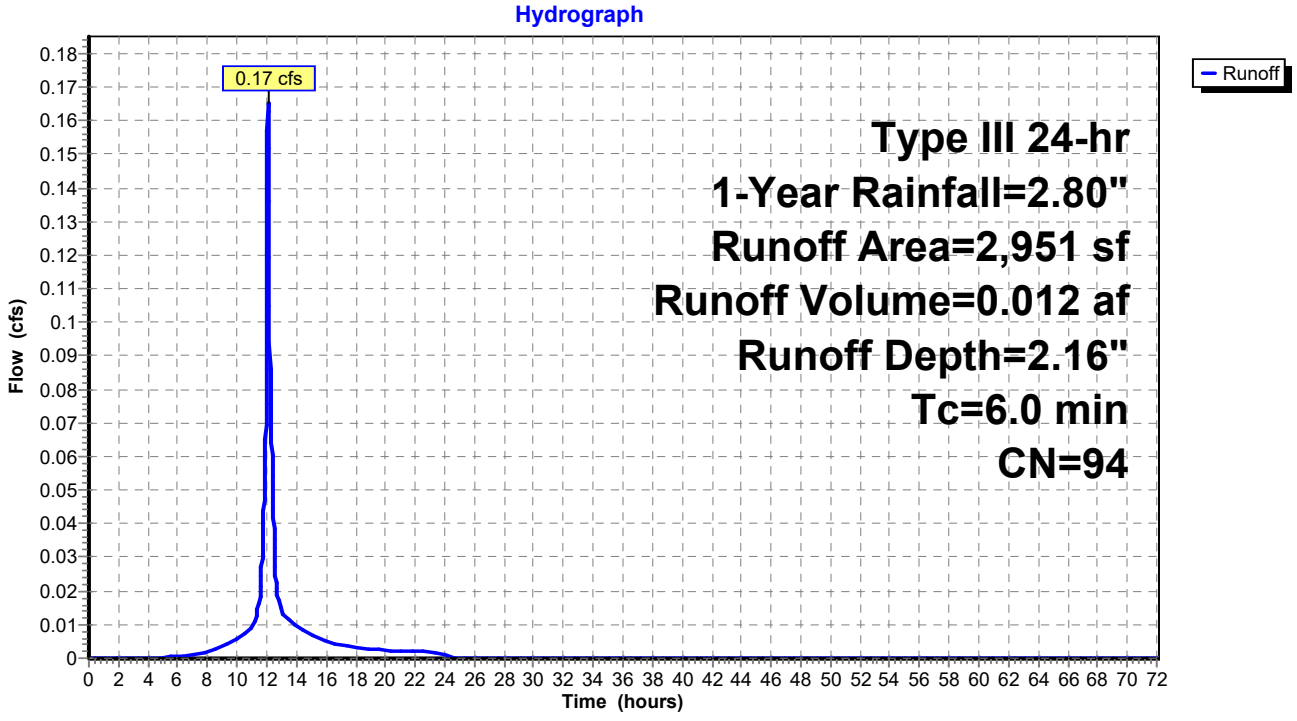
Runoff = 0.17 cfs @ 12.09 hrs, Volume= 0.012 af, Depth= 2.16"
Routed to Pond HYD1 : HYDRO 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Type III 24-hr 1-Year Rainfall=2.80"

Area (sf)	CN	Description
2,347	98	Roofs, HSG C
604	79	50-75% Grass cover, Fair, HSG C
2,951	94	Weighted Average
604		20.47% Pervious Area
2,347		79.53% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 1CS: Patio Between Bldgs



Summary for Subcatchment 2AS: New Bldg Parking South

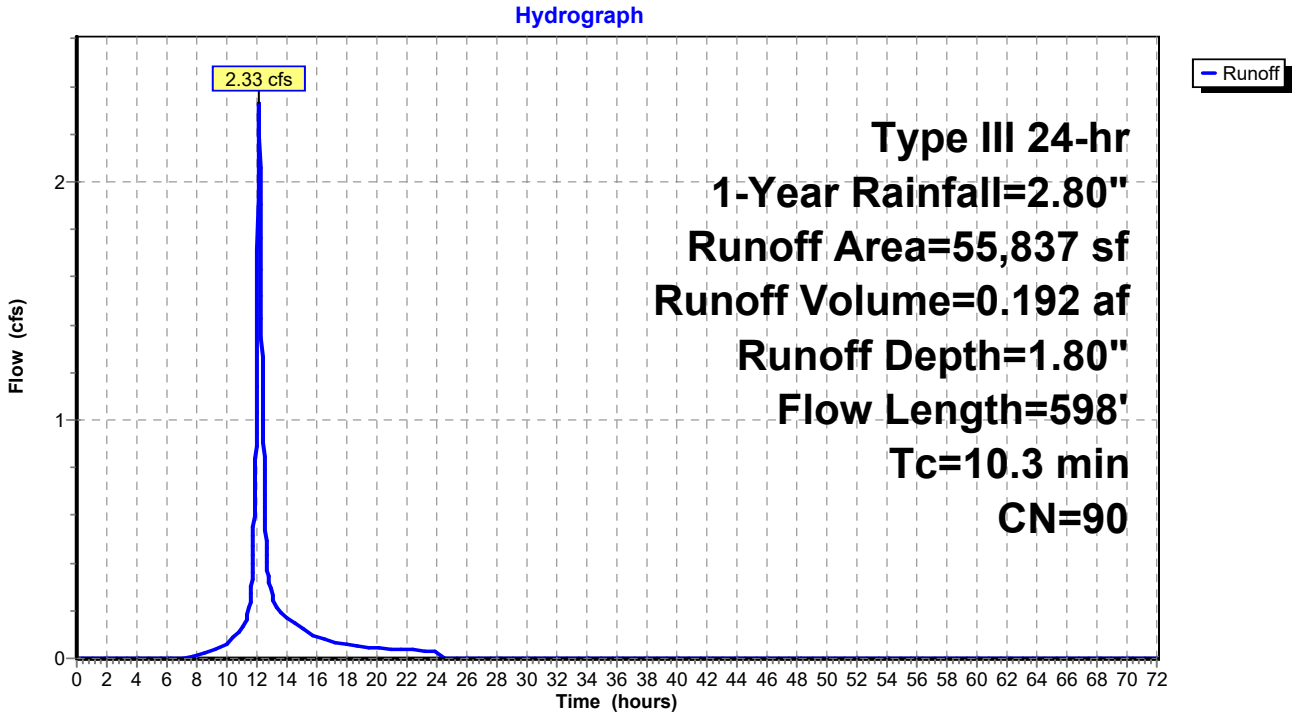
Runoff = 2.33 cfs @ 12.14 hrs, Volume= 0.192 af, Depth= 1.80"
Routed to Pond HYD1 : HYDRO 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Type III 24-hr 1-Year Rainfall=2.80"

Area (sf)	CN	Description
24,754	80	>75% Grass cover, Good, HSG D
29,905	98	Paved parking, HSG D
1,178	79	Woods/grass comb., Good, HSG D
55,837	90	Weighted Average
25,932		46.44% Pervious Area
29,905		53.56% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.1	100	0.0450	0.23		**Sheet Flow, 100 LF SF @ 4.5% GRASS** Grass: Short n= 0.150 P2= 3.19"
0.4	68	0.1500	2.71		**Shallow Concentrated Flow, 69 LF SCF @ 15% GRASS** Short Grass Pasture Kv= 7.0 fps
2.6	235	0.0100	1.50		**Shallow Concentrated Flow, 235 LF SCF @ 1%** Grassed Waterway Kv= 15.0 fps
0.1	68	0.0595	8.44	2.95	**Pipe Channel, 68 LF @ 6%** 8.0" Round Area= 0.3 sf Perim= 2.1' r= 0.17' n= 0.013 Corrugated PE, smooth interior
0.1	127	0.1250	16.04	12.60	**Pipe Channel, 127 LF @ 12.5%** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013 Corrugated PE, smooth interior
10.3	598	Total			

Subcatchment 2AS: New Bldg Parking South



Summary for Subcatchment 2BS: New Bldg Parking North

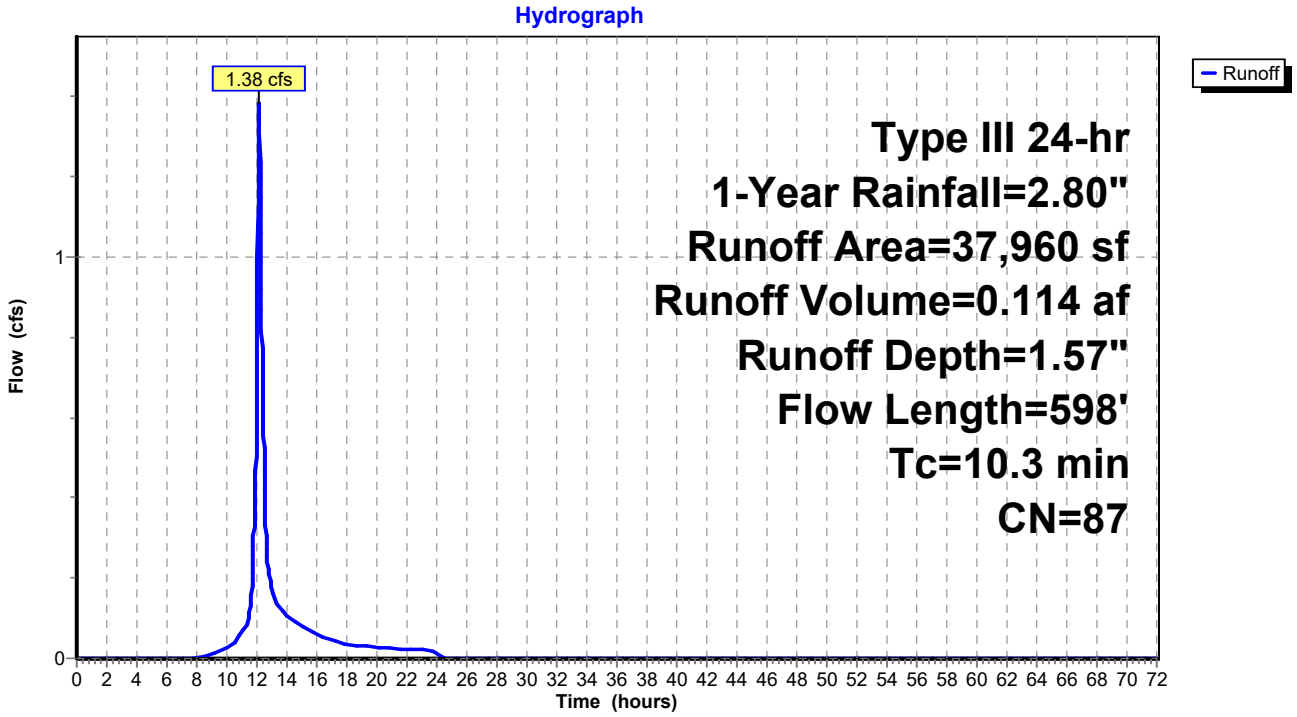
Runoff = 1.38 cfs @ 12.14 hrs, Volume= 0.114 af, Depth= 1.57"
Routed to Pond 9P : HYDRO 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Type III 24-hr 1-Year Rainfall=2.80"

Area (sf)	CN	Description
16,991	80	>75% Grass cover, Good, HSG D
14,298	98	Paved parking, HSG D
6,671	79	Woods, Fair, HSG D
37,960	87	Weighted Average
23,662		62.33% Pervious Area
14,298		37.67% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.1	100	0.0450	0.23		**Sheet Flow, 100 LF SF @ 4.5% GRASS** Grass: Short n= 0.150 P2= 3.19"
0.4	68	0.1500	2.71		**Shallow Concentrated Flow, 69 LF SCF @ 15% GRASS** Short Grass Pasture Kv= 7.0 fps
2.6	235	0.0100	1.50		**Shallow Concentrated Flow, 235 LF SCF @ 1%** Grassed Waterway Kv= 15.0 fps
0.1	68	0.0595	8.44	2.95	**Pipe Channel, 68 LF @ 6%** 8.0" Round Area= 0.3 sf Perim= 2.1' r= 0.17' n= 0.013 Corrugated PE, smooth interior
0.1	127	0.1250	16.04	12.60	**Pipe Channel, 127 LF @ 12.5%** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013 Corrugated PE, smooth interior
10.3	598	Total			

Subcatchment 2BS: New Bldg Parking North



Summary for Subcatchment 3S: Pool Patio

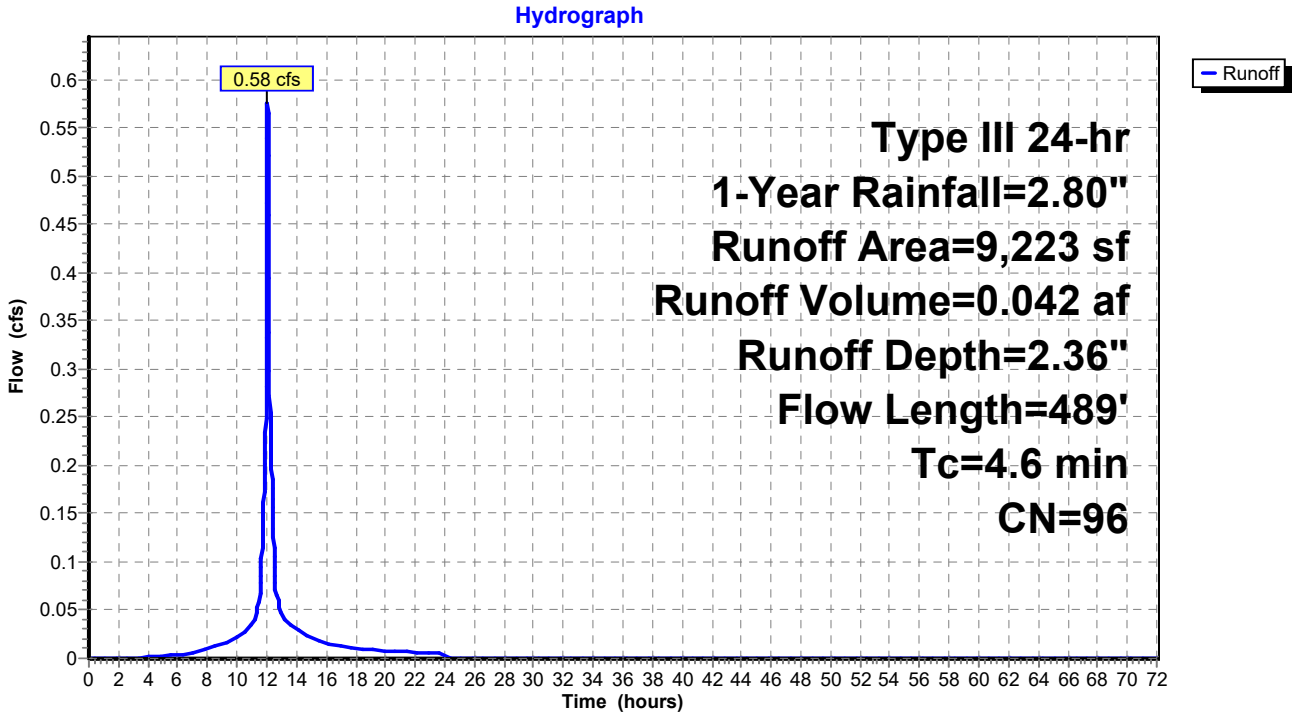
Runoff = 0.58 cfs @ 12.07 hrs, Volume= 0.042 af, Depth= 2.36"
Routed to Pond 9P : HYDRO 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Type III 24-hr 1-Year Rainfall=2.80"

Area (sf)	CN	Description
8,932	98	Paved parking, HSG A
291	39	>75% Grass cover, Good, HSG A
9,223	96	Weighted Average
291		3.16% Pervious Area
8,932		96.84% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	100	0.2050	0.43		**Sheet Flow, 100 LF SF @ 21% GRASS** Grass: Short n= 0.150 P2= 3.19"
0.1	27	0.0740	4.08		**Shallow Concentrated Flow, 27 LF SCF @ 7.4%** Grassed Waterway Kv= 15.0 fps
0.3	79	0.0412	4.12		**Shallow Concentrated Flow, 79 LF SF @ 4.12% PAVED** Paved Kv= 20.3 fps
0.3	283	0.0960	16.31	20.01	**Pipe Channel, 283 LF @ 9.6%** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.013 Corrugated PE, smooth interior
4.6	489	Total			

Subcatchment 3S: Pool Patio



Summary for Subcatchment 4S: 4

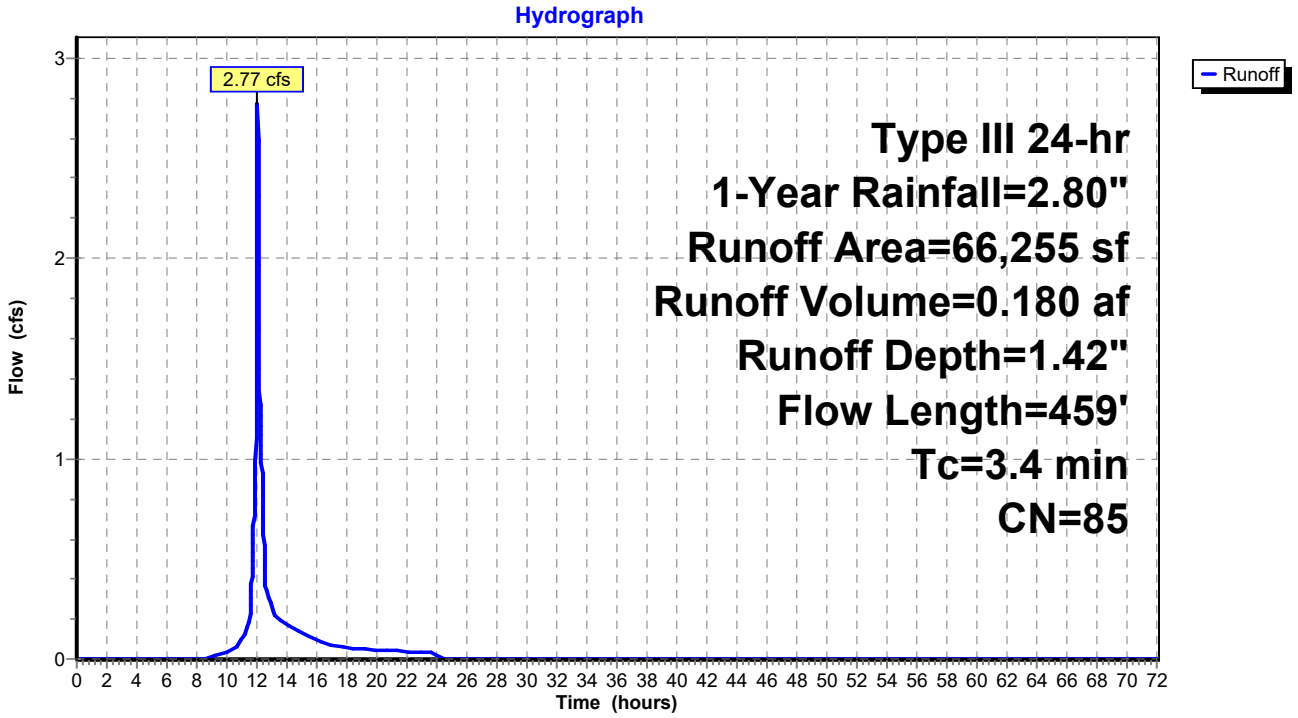
Runoff = 2.77 cfs @ 12.05 hrs, Volume= 0.180 af, Depth= 1.42"
Routed to Pond 25P : HYDRO 4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Type III 24-hr 1-Year Rainfall=2.80"

Area (sf)	CN	Description
20,343	98	Paved parking, HSG D
37,592	80	>75% Grass cover, Good, HSG D
8,320	79	Woods/grass comb., Good, HSG D
66,255	85	Weighted Average
45,912		69.30% Pervious Area
20,343		30.70% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.1	55	0.2800	0.43		**Sheet Flow, 55 LF SF @ 28% GRASS** Grass: Short n= 0.150 P2= 3.19"
0.7	121	0.0190	2.80		**Shallow Concentrated Flow, 121 LF SCF @ 2% PAVED** Paved Kv= 20.3 fps
0.6	283	0.0270	7.45	5.85	**Pipe Channel, 283 LF @ 2.7%** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013 Corrugated PE, smooth interior
3.4	459	Total			

Subcatchment 4S: 4



Summary for Subcatchment 5S: 5

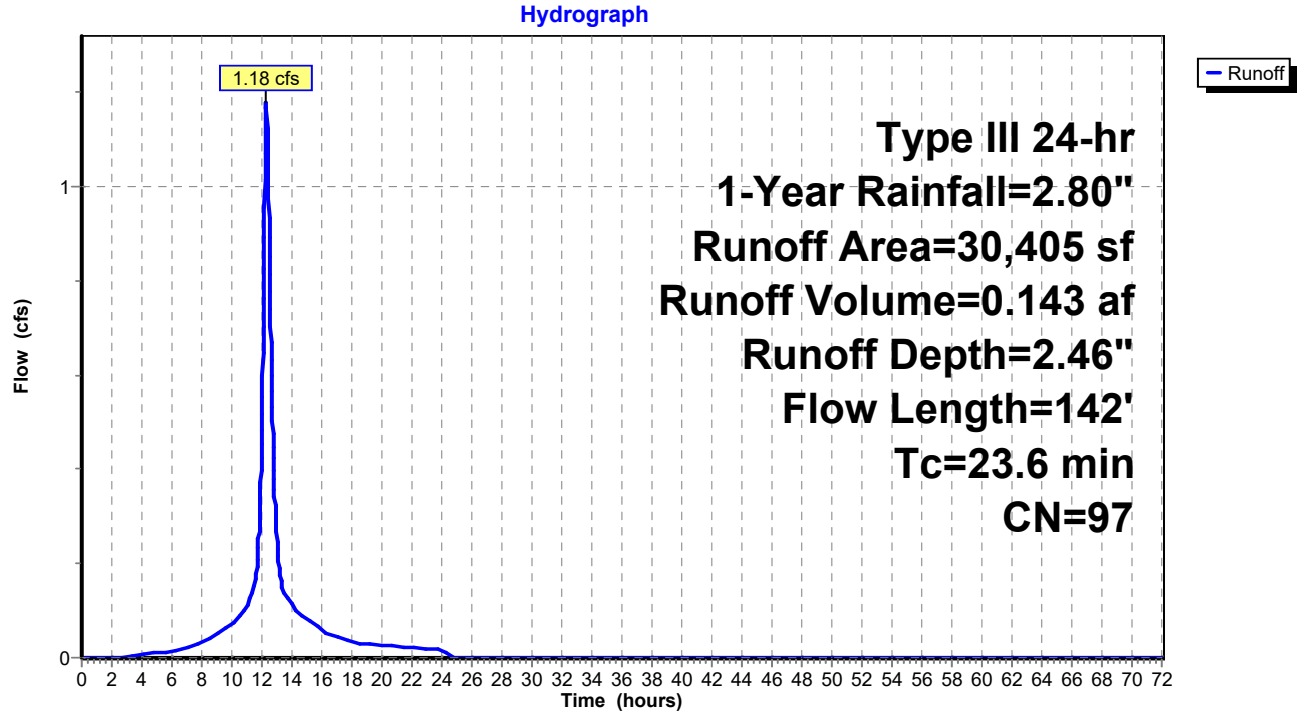
Runoff = 1.18 cfs @ 12.31 hrs, Volume= 0.143 af, Depth= 2.46"
Routed to Pond 11P : HYDRO 5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Type III 24-hr 1-Year Rainfall=2.80"

Area (sf)	CN	Description
28,401	98	Roofs, HSG D
2,004	80	>75% Grass cover, Good, HSG D
30,405	97	Weighted Average
2,004		6.59% Pervious Area
28,401		93.41% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
23.5	79	0.0100	0.06		**Sheet Flow, 79 LF SF @ 1%** Woods: Light underbrush n= 0.400 P2= 3.19"
0.1	63	0.2470	17.21	6.01	**Pipe Channel, 62.5 LF @ 25%** 8.0" Round Area= 0.3 sf Perim= 2.1' r= 0.17' n= 0.013 Corrugated PE, smooth interior
23.6	142	Total			

Subcatchment 5S: 5



Summary for Subcatchment 6S: 6

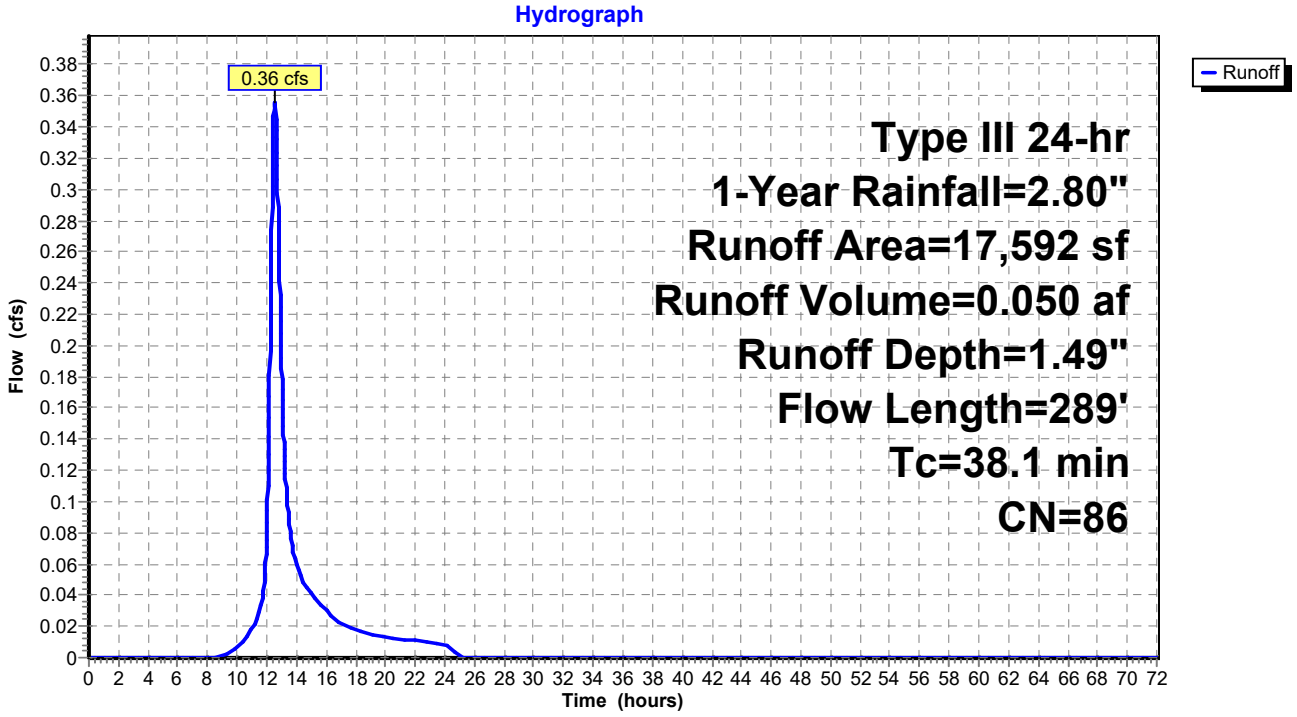
Runoff = 0.36 cfs @ 12.53 hrs, Volume= 0.050 af, Depth= 1.49"
Routed to Reach DP1 : Design Point 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Type III 24-hr 1-Year Rainfall=2.80"

Area (sf)	CN	Description
11,755	80	>75% Grass cover, Good, HSG D
5,837	98	Paved parking, HSG D
17,592	86	Weighted Average
11,755		66.82% Pervious Area
5,837		33.18% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
37.4	100	0.0050	0.04		**Sheet Flow, 100 LF SF @ 0.5%** Woods: Light underbrush n= 0.400 P2= 3.19"
0.6	82	0.0221	2.23		**Shallow Concentrated Flow, 82 LF SCF @ 2.2% GRASS** Grassed Waterway Kv= 15.0 fps
0.1	107	0.0977	14.18	11.14	**Pipe Channel, 107 LF @ 9.8%** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013 Corrugated PE, smooth interior
38.1	289	Total			

Subcatchment 6S: 6



Summary for Subcatchment 7S: 7

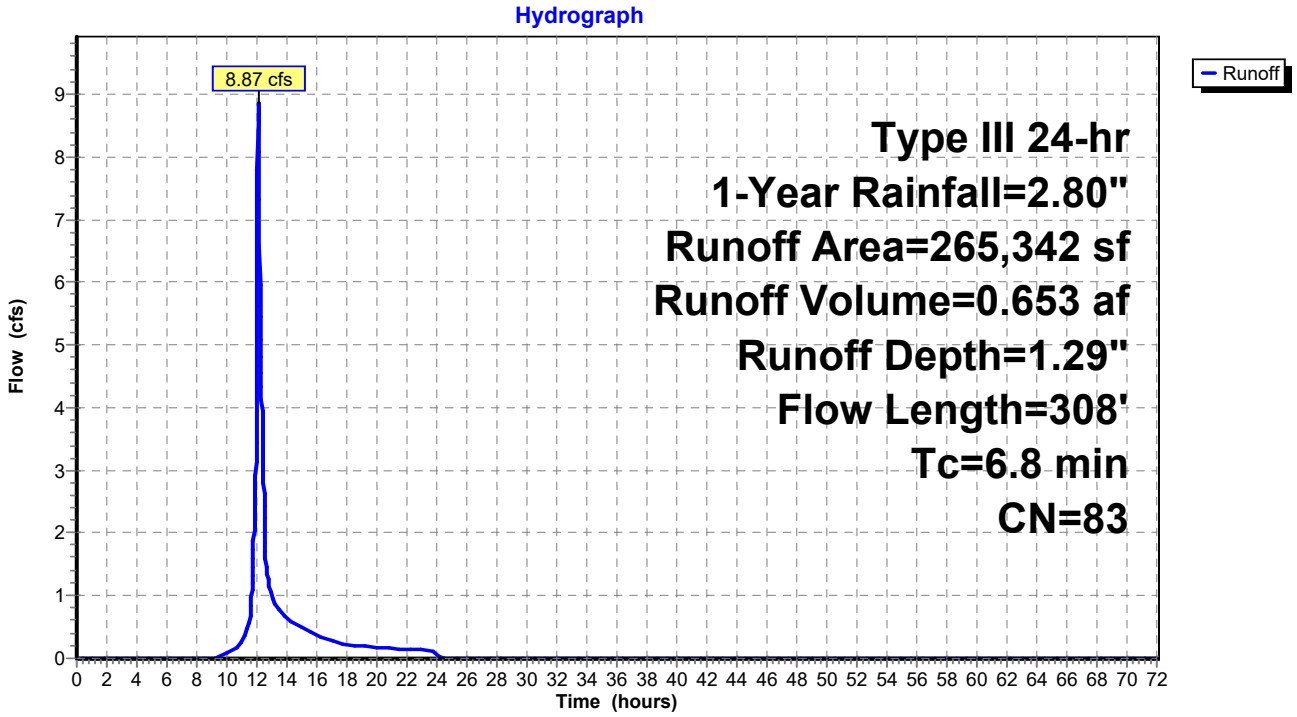
Runoff = 8.87 cfs @ 12.10 hrs, Volume= 0.653 af, Depth= 1.29"
Routed to Reach DP1 : Design Point 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Type III 24-hr 1-Year Rainfall=2.80"

Area (sf)	CN	Description
63,131	79	Woods, Fair, HSG D
42,621	98	Paved parking, HSG D
145,907	80	>75% Grass cover, Good, HSG D
13,683	96	Gravel surface, HSG D
265,342	83	Weighted Average
222,721		83.94% Pervious Area
42,621		16.06% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.4	100	0.0875	0.31		**Sheet Flow, 100 LF SF @ 8.75% GRASS** Grass: Short n= 0.150 P2= 3.19"
1.1	155	0.1032	2.25		**Shallow Concentrated Flow, 155 LF SCF @ 10% GRASS** Short Grass Pasture Kv= 7.0 fps
0.2	9	0.0278	0.97		**Sheet Flow, 9 LF SF @ 2.8% PAVEMENT** Smooth surfaces n= 0.011 P2= 3.19"
0.0	2	0.0278	1.17		**Shallow Concentrated Flow, 2 LF SCF @ 2.8% GRASS** Short Grass Pasture Kv= 7.0 fps
0.1	42	0.3869	9.33		**Shallow Concentrated Flow, 42 LF SCF @ 39% GRASS** Grassed Waterway Kv= 15.0 fps
6.8	308	Total			

Subcatchment 7S: 7



Summary for Subcatchment ES1: Upstream Watershed Area

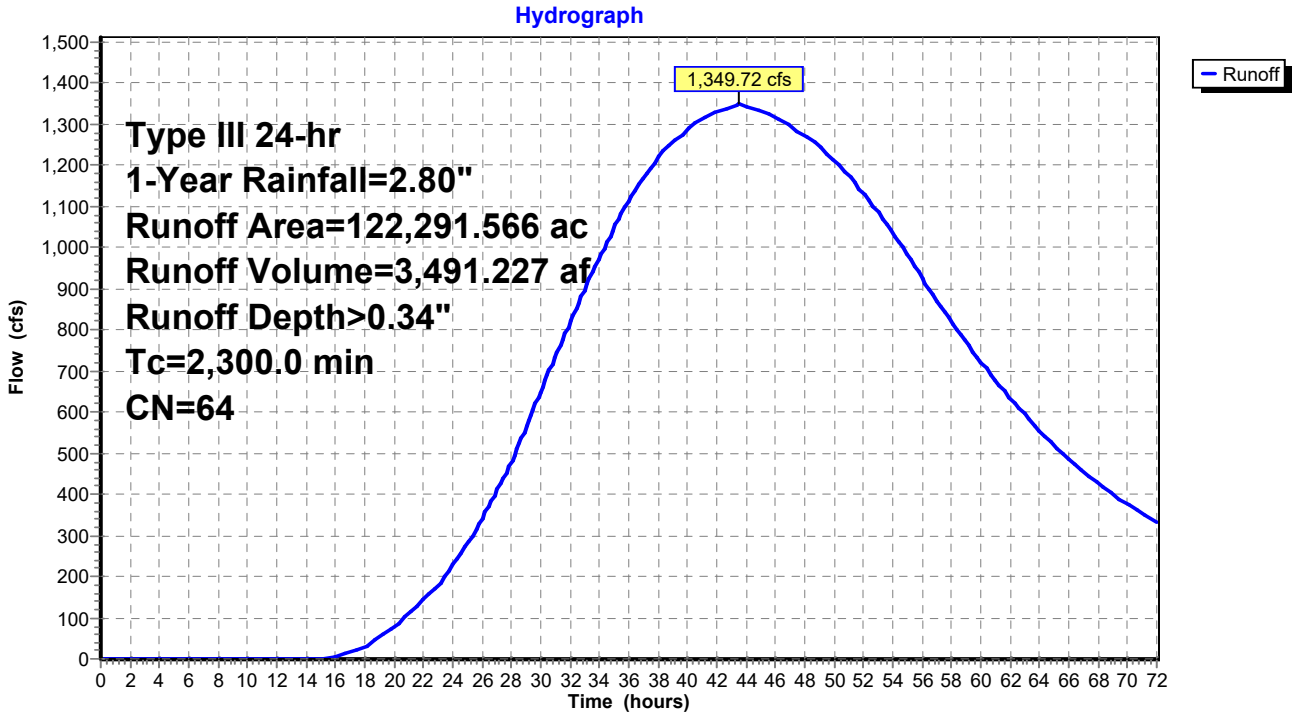
Runoff = 1,349.72 cfs @ 43.44 hrs, Volume= 3,491.227 af, Depth> 0.34"
Routed to Reach DP1 : Design Point 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Type III 24-hr 1-Year Rainfall=2.80"

Area (ac)	CN	Description
*122,291.566	64	
122,291.566		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2,300.0					**Direct Entry, Time of Concentration**

Subcatchment ES1: Upstream Watershed Area

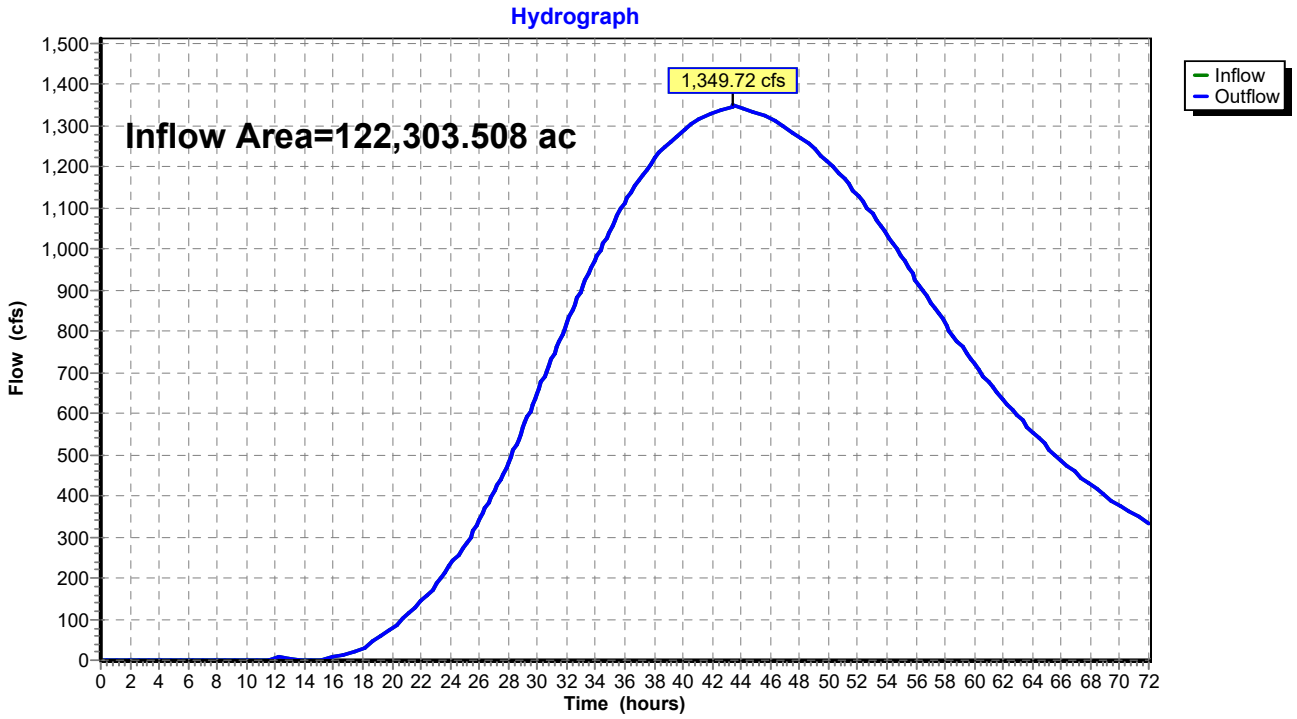


Summary for Reach DP1: Design Point 1

Inflow Area =122,303.508 ac, 0.00% Impervious, Inflow Depth > 0.34" for 1-Year event
Inflow = 1,349.72 cfs @ 43.44 hrs, Volume= 3,492.645 af
Outflow = 1,349.72 cfs @ 43.44 hrs, Volume= 3,492.645 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs

Reach DP1: Design Point 1



Summary for Pond 4P: BIO 2

Inflow Area = 1.521 ac, 30.70% Impervious, Inflow Depth = 1.42" for 1-Year event
Inflow = 2.77 cfs @ 12.05 hrs, Volume= 0.180 af
Outflow = 2.37 cfs @ 12.10 hrs, Volume= 0.180 af, Atten= 14%, Lag= 2.6 min
Discarded = 0.02 cfs @ 12.10 hrs, Volume= 0.047 af
Primary = 2.35 cfs @ 12.10 hrs, Volume= 0.133 af
Routed to Reach DP1 : Design Point 1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Peak Elev= 78.70' @ 12.10 hrs Surf.Area= 2,622 sf Storage= 1,723 cf

Plug-Flow detention time= 229.5 min calculated for 0.180 af (100% of inflow)
Center-of-Mass det. time= 229.8 min (1,059.6 - 829.8)

Volume	Invert	Avail.Storage	Storage Description
#1	78.00'	5,521 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

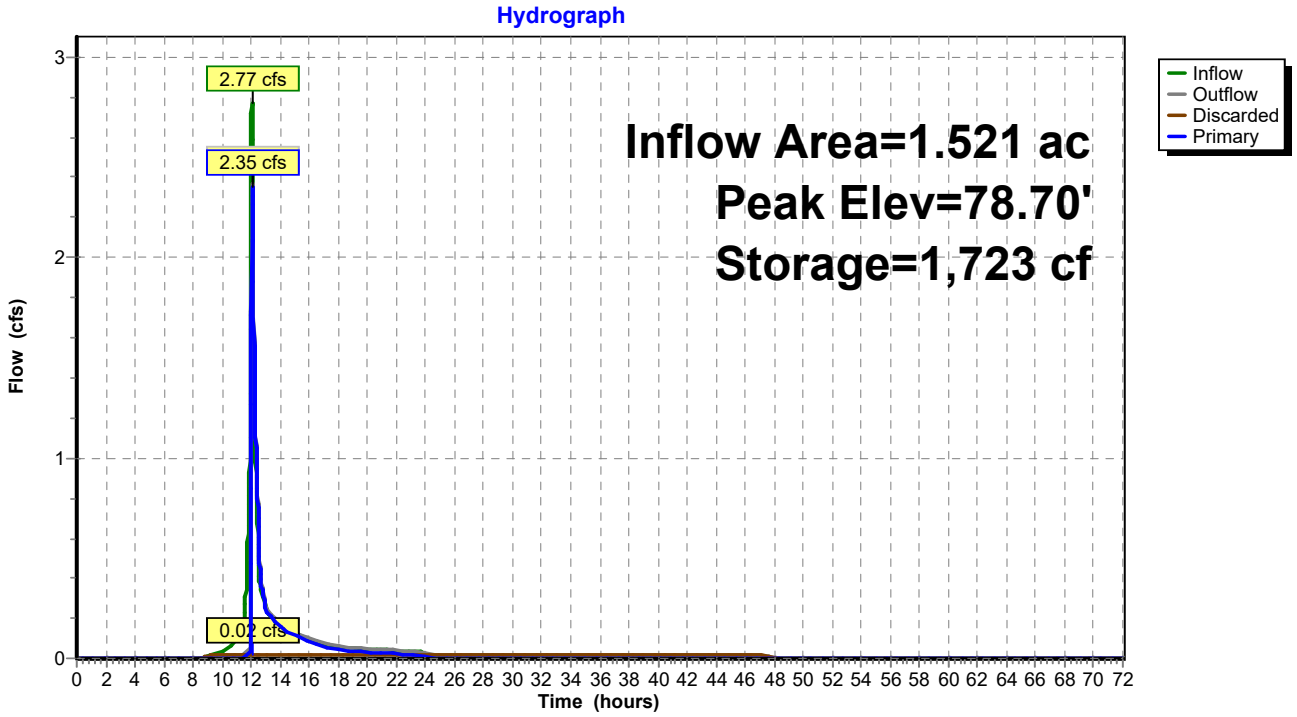
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
78.00	2,296	0	0
80.00	3,225	5,521	5,521

Device	Routing	Invert	Outlet Devices
#1	Discarded	78.00'	**0.250 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 66.00'
#2	Primary	74.40'	**12.0" Round Culvert** L= 41.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 74.40' / 74.00' S= 0.0098 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Device 2	78.50'	**24.0" x 24.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.02 cfs @ 12.10 hrs HW=78.70' (Free Discharge)
└**1=Exfiltration** (Controls 0.02 cfs)

Primary OutFlow Max=2.35 cfs @ 12.10 hrs HW=78.70' TW=0.00' (Dynamic Tailwater)
└**2=Culvert** (Passes 2.35 cfs of 5.82 cfs potential flow)
└**3=Orifice/Grate** (Weir Controls 2.35 cfs @ 1.46 fps)

Pond 4P: BIO 2


Hydrograph
Inflow Area=1.521 ac
Peak Elev=78.70'
Storage=1,723 cf
2.77 cfs
2.35 cfs
0.02 cfs
Inflow
Outflow
Discarded
Primary
Flow (cfs)
Time (hours)
0 1 2 3
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72

Summary for Pond 9P: HYDRO 2

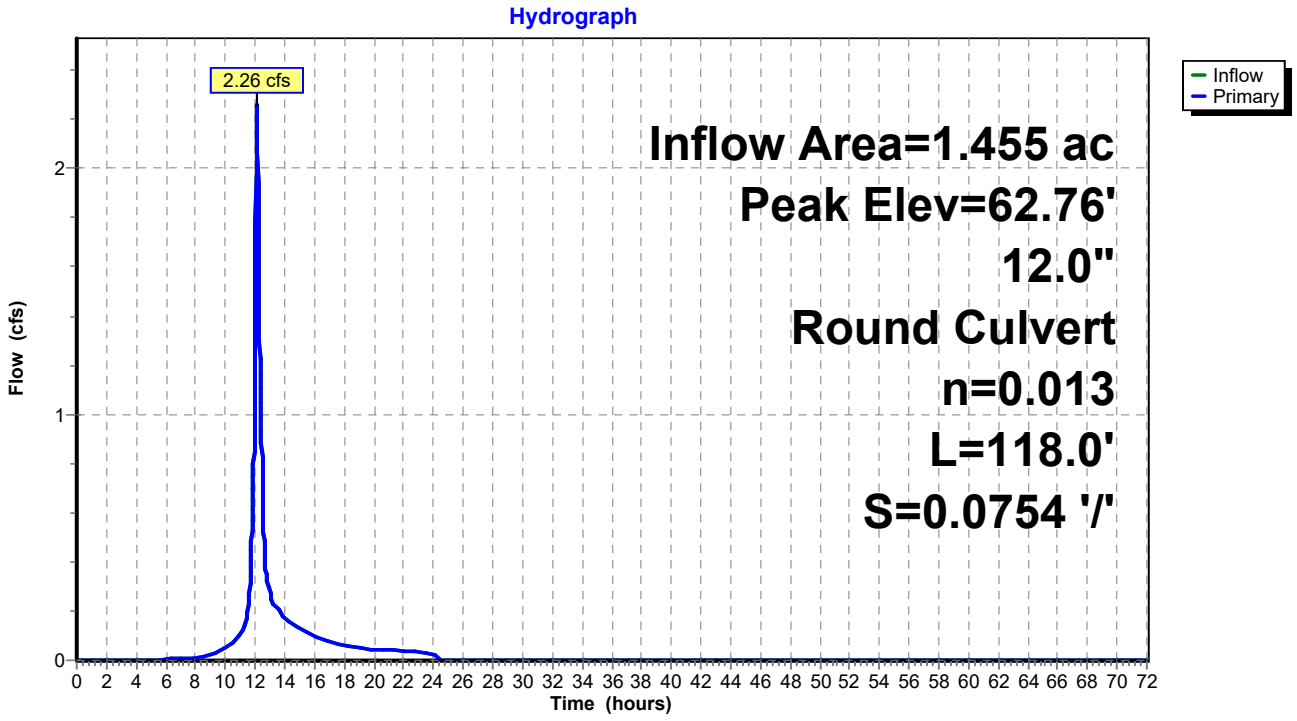
Inflow Area = 1.455 ac, 54.31% Impervious, Inflow Depth = 1.56" for 1-Year event
Inflow = 2.26 cfs @ 12.11 hrs, Volume= 0.189 af
Outflow = 2.26 cfs @ 12.11 hrs, Volume= 0.189 af, Atten= 0%, Lag= 0.0 min
Primary = 2.26 cfs @ 12.11 hrs, Volume= 0.189 af
Routed to Reach DP1 : Design Point 1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Peak Elev= 62.76' @ 12.11 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	61.90'	**12.0" Round Culvert** L= 118.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 61.90' / 53.00' S= 0.0754 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=2.25 cfs @ 12.11 hrs HW=62.75' TW=0.00' (Dynamic Tailwater)
1=Culvert (Inlet Controls 2.25 cfs @ 3.15 fps)

Pond 9P: HYDRO 2



Summary for Pond 11P: HYDRO 5

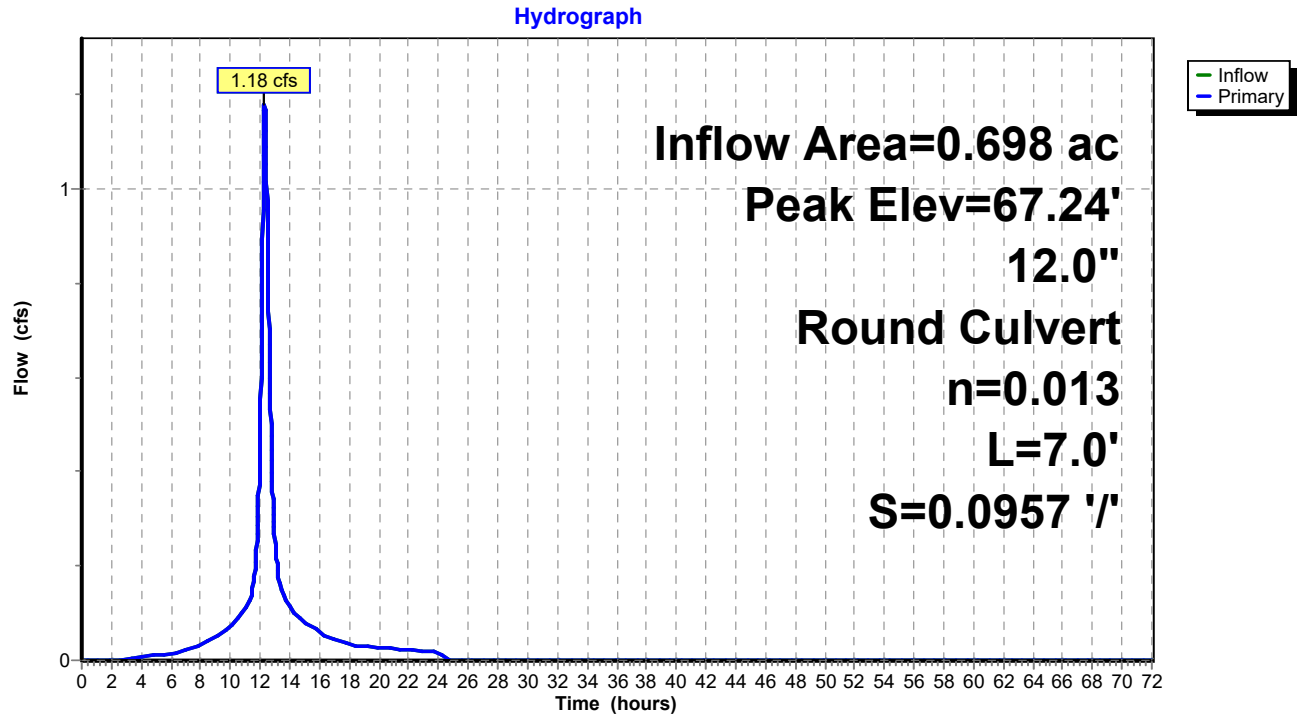
Inflow Area = 0.698 ac, 93.41% Impervious, Inflow Depth = 2.46" for 1-Year event
Inflow = 1.18 cfs @ 12.31 hrs, Volume= 0.143 af
Outflow = 1.18 cfs @ 12.31 hrs, Volume= 0.143 af, Atten= 0%, Lag= 0.0 min
Primary = 1.18 cfs @ 12.31 hrs, Volume= 0.143 af
Routed to Reach DP1 : Design Point 1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Peak Elev= 67.24' @ 12.31 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	66.67'	**12.0" Round Culvert** L= 7.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 66.67' / 66.00' S= 0.0957 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=1.18 cfs @ 12.31 hrs HW=67.24' TW=0.00' (Dynamic Tailwater)
1=Culvert (Inlet Controls 1.18 cfs @ 2.56 fps)

Pond 11P: HYDRO 5



Summary for Pond 25P: HYDRO 4

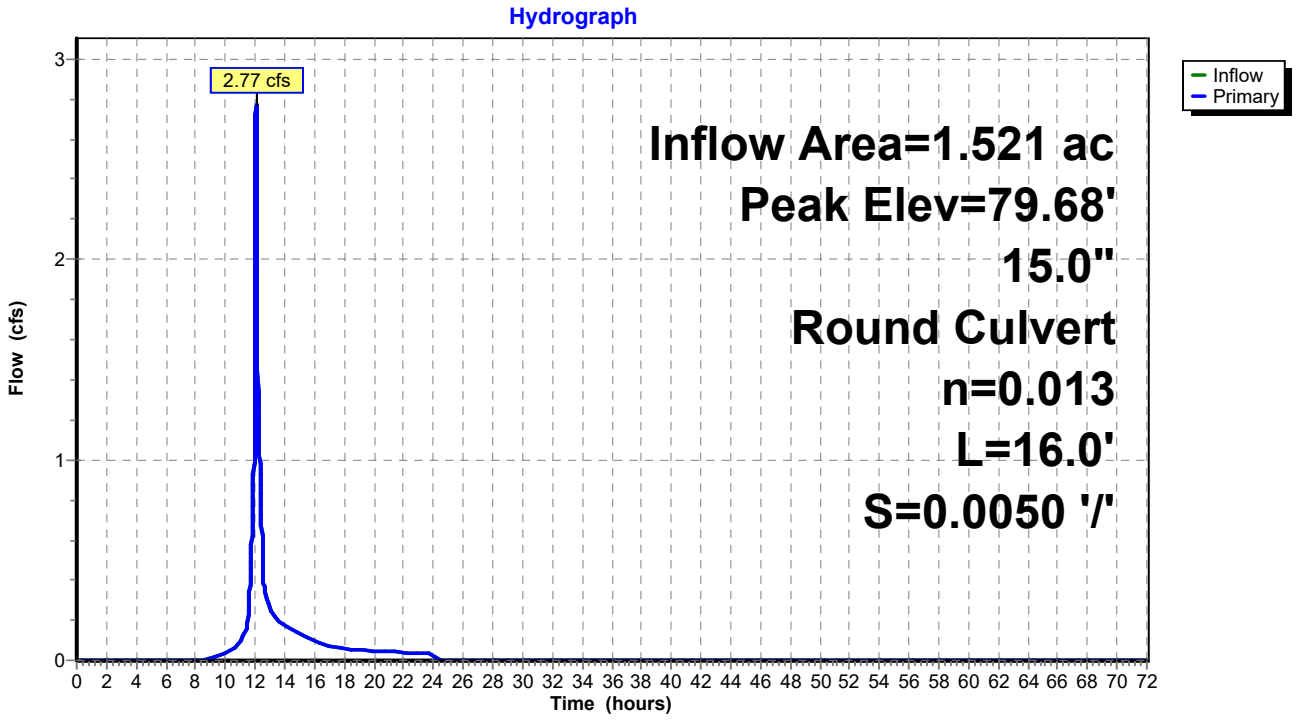
Inflow Area = 1.521 ac, 30.70% Impervious, Inflow Depth = 1.42" for 1-Year event
Inflow = 2.77 cfs @ 12.05 hrs, Volume= 0.180 af
Outflow = 2.77 cfs @ 12.05 hrs, Volume= 0.180 af, Atten= 0%, Lag= 0.0 min
Primary = 2.77 cfs @ 12.05 hrs, Volume= 0.180 af
Routed to Pond 4P : BIO 2

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Peak Elev= 79.68' @ 12.05 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	78.65'	**15.0" Round Culvert** L= 16.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 78.65' / 78.57' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=2.75 cfs @ 12.05 hrs HW=79.68' TW=78.68' (Dynamic Tailwater)
1=Culvert (Barrel Controls 2.75 cfs @ 3.46 fps)

Pond 25P: HYDRO 4



Summary for Pond HYD1: HYDRO 1

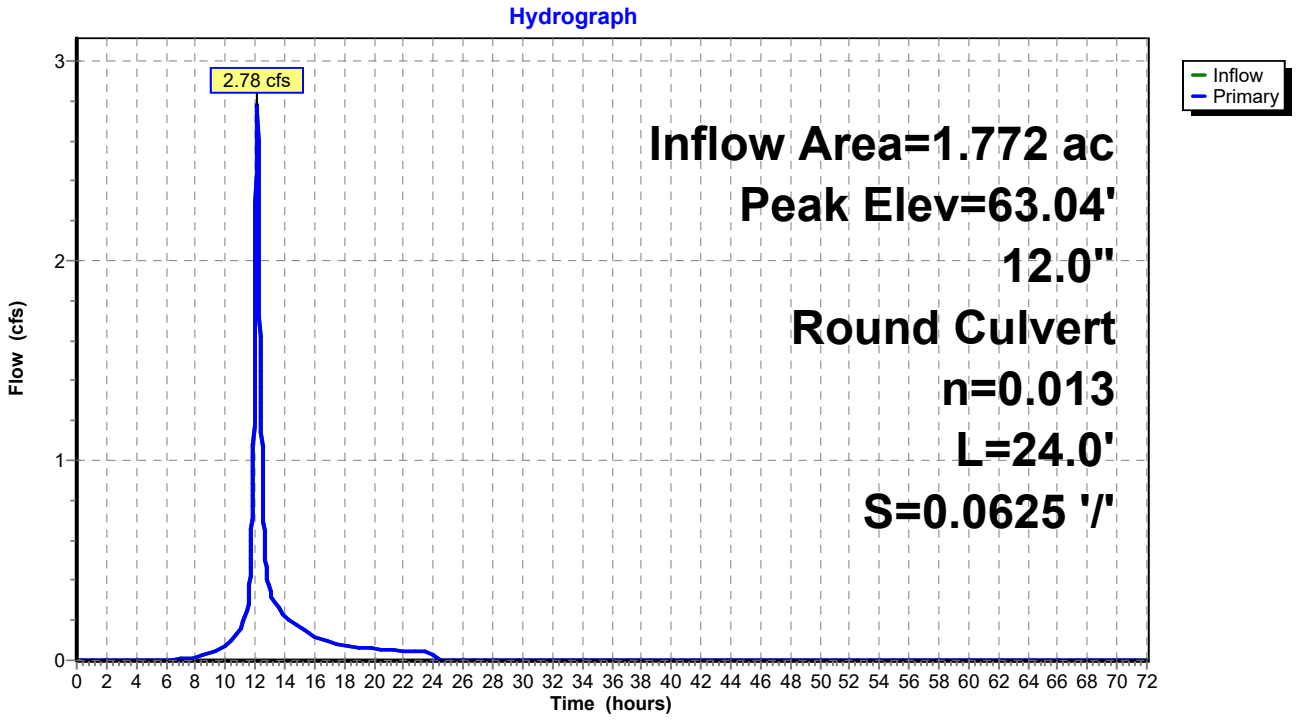
Inflow Area = 1.772 ac, 59.15% Impervious, Inflow Depth = 1.68" for 1-Year event
Inflow = 2.78 cfs @ 12.14 hrs, Volume= 0.248 af
Outflow = 2.78 cfs @ 12.14 hrs, Volume= 0.248 af, Atten= 0%, Lag= 0.0 min
Primary = 2.78 cfs @ 12.14 hrs, Volume= 0.248 af
Routed to Reach DP1 : Design Point 1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Peak Elev= 63.04' @ 12.14 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	62.00'	**12.0" Round Culvert** L= 24.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 62.00' / 60.50' S= 0.0625 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=2.78 cfs @ 12.14 hrs HW=63.04' TW=0.00' (Dynamic Tailwater)
1=Culvert (Inlet Controls 2.78 cfs @ 3.53 fps)

Pond HYD1: HYDRO 1



Summary for Subcatchment 1AS: New Bldg South

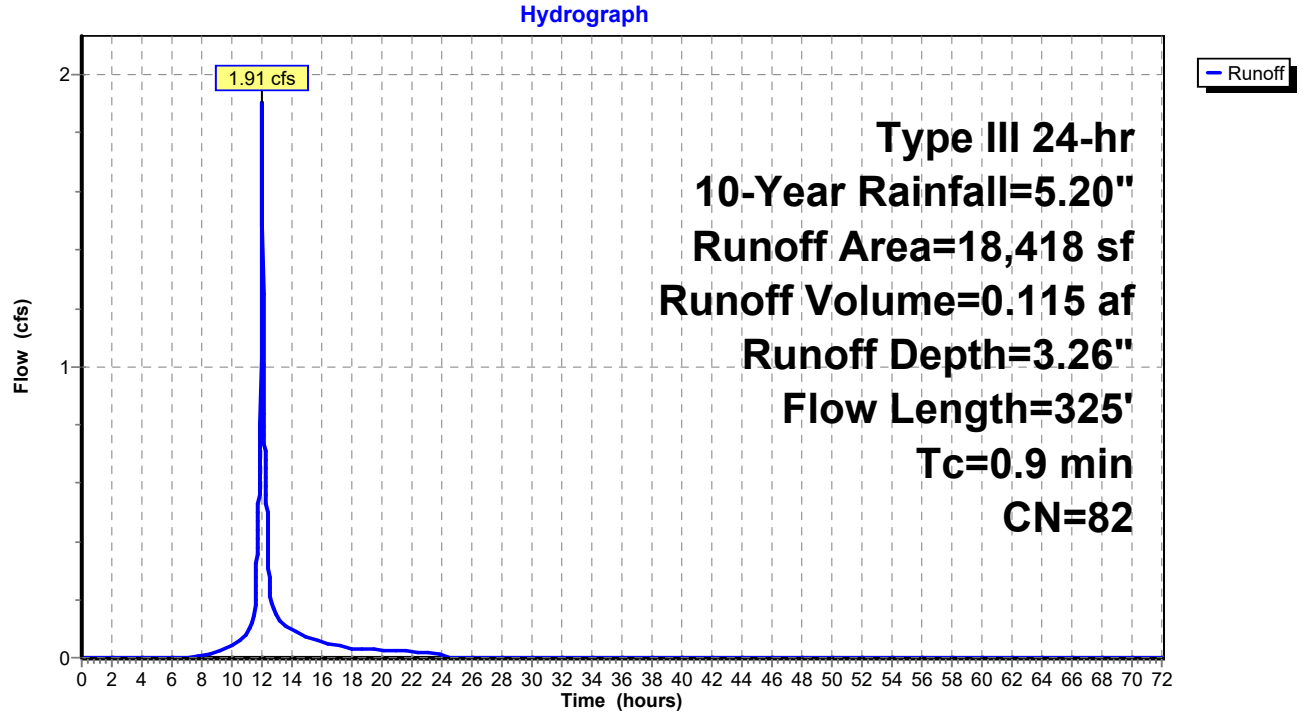
Runoff = 1.91 cfs @ 12.02 hrs, Volume= 0.115 af, Depth= 3.26"
Routed to Pond HYD1 : HYDRO 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Type III 24-hr 10-Year Rainfall=5.20"

	Area (sf)	CN	Description
	13,418	98	Paved parking, HSG D
*	5,000	39	Green Roof
	18,418	82	Weighted Average
	5,000		27.15% Pervious Area
	13,418		72.85% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.8	262	0.0734	5.50		**Shallow Concentrated Flow, 262 LF SCF @ 7.34% PAVED** Paved Kv= 20.3 fps
0.1	63	0.1500	17.57	13.80	**Pipe Channel, 63 LF @ 15%** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013 Corrugated PE, smooth interior
0.9	325	Total			

Subcatchment 1AS: New Bldg South



Summary for Subcatchment 1BS: New Bldg North

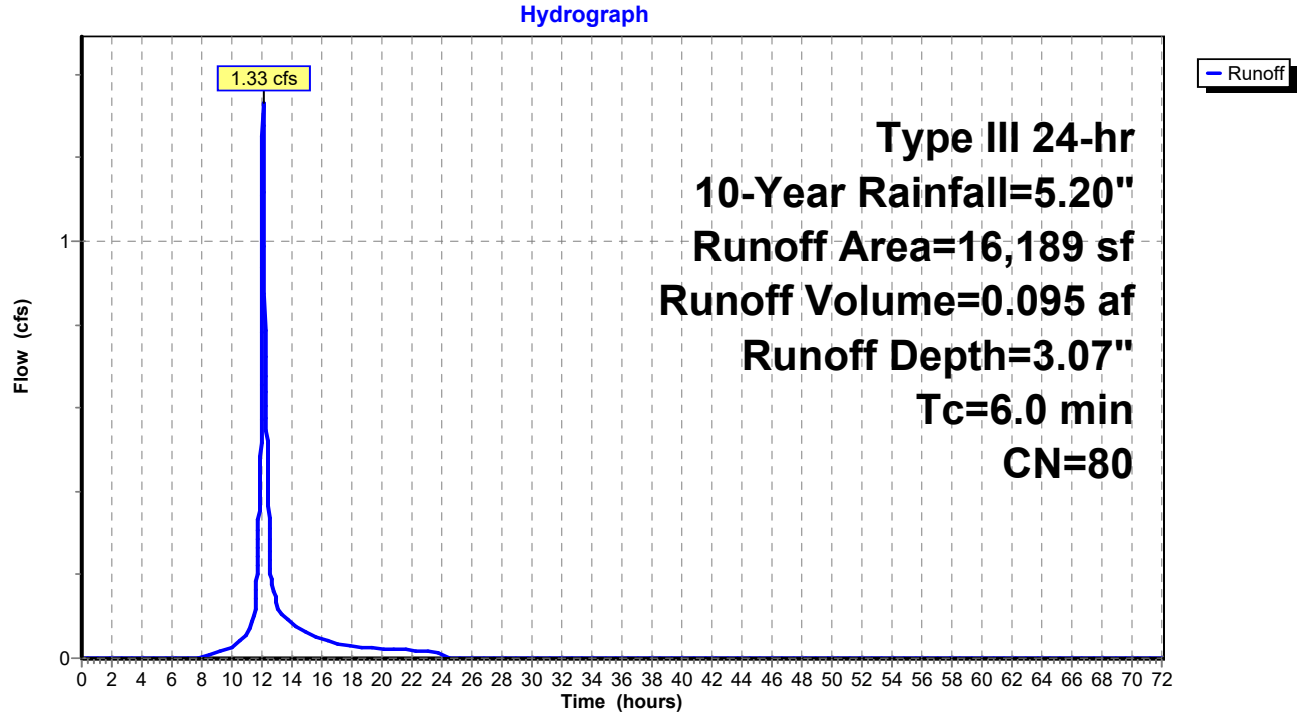
Runoff = 1.33 cfs @ 12.09 hrs, Volume= 0.095 af, Depth= 3.07"
Routed to Pond 9P : HYDRO 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Type III 24-hr 10-Year Rainfall=5.20"

	Area (sf)	CN	Description
	11,189	98	Paved parking, HSG D
*	5,000	39	Green Roof
	16,189	80	Weighted Average
	5,000		30.89% Pervious Area
	11,189		69.11% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 1BS: New Bldg North



Summary for Subcatchment 1CS: Patio Between Bldgs

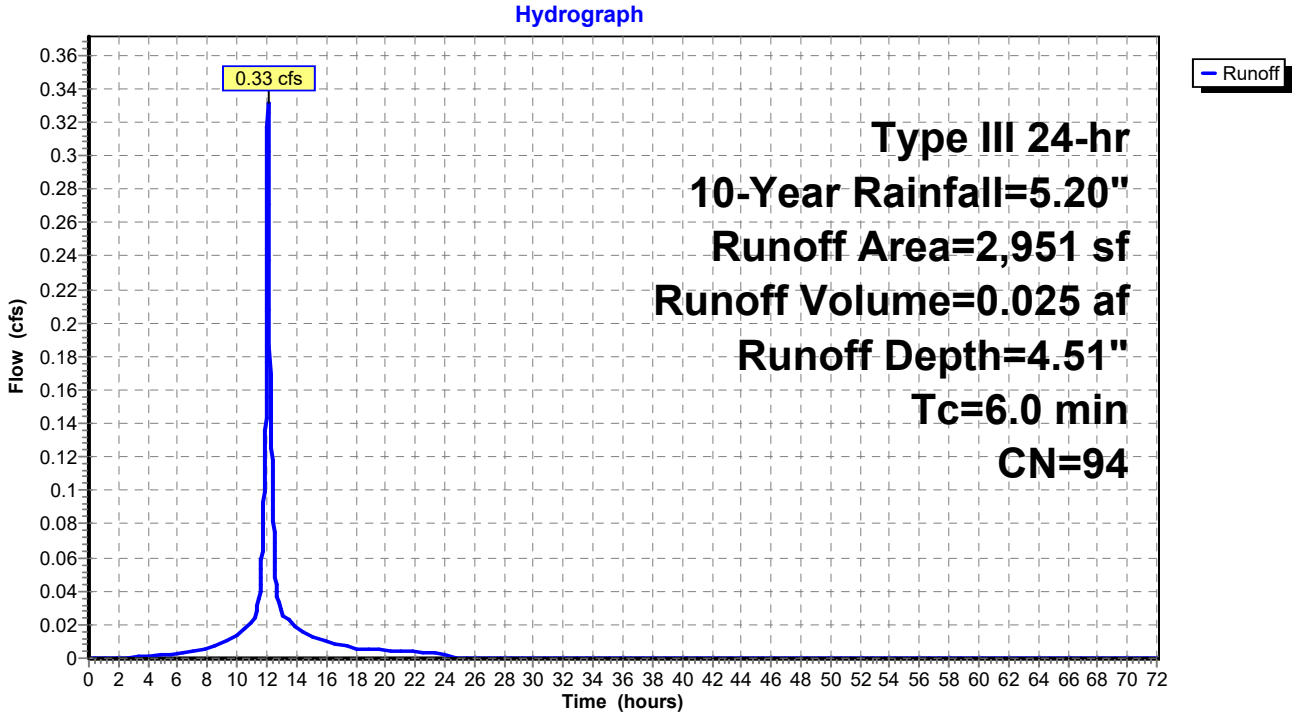
Runoff = 0.33 cfs @ 12.08 hrs, Volume= 0.025 af, Depth= 4.51"
Routed to Pond HYD1 : HYDRO 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Type III 24-hr 10-Year Rainfall=5.20"

Area (sf)	CN	Description
2,347	98	Roofs, HSG C
604	79	50-75% Grass cover, Fair, HSG C
2,951	94	Weighted Average
604		20.47% Pervious Area
2,347		79.53% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 1CS: Patio Between Bldgs



Summary for Subcatchment 2AS: New Bldg Parking South

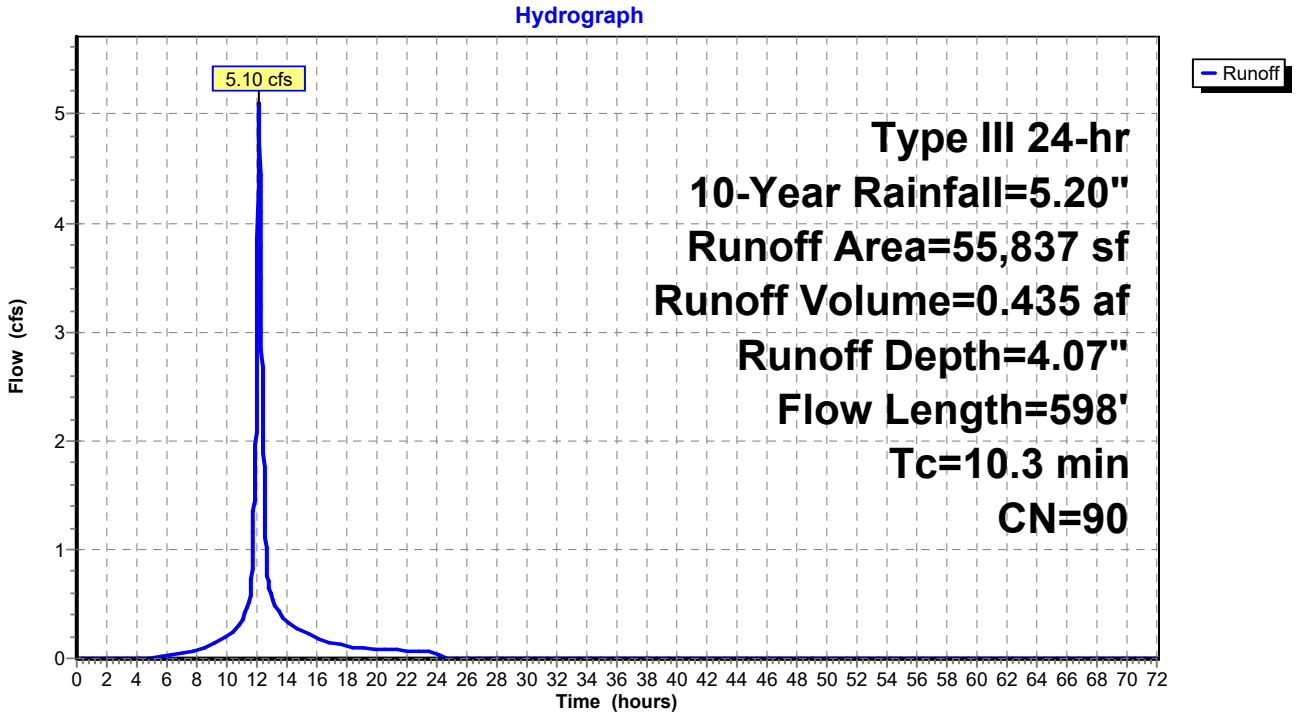
Runoff = 5.10 cfs @ 12.14 hrs, Volume= 0.435 af, Depth= 4.07"
Routed to Pond HYD1 : HYDRO 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Type III 24-hr 10-Year Rainfall=5.20"

Area (sf)	CN	Description
24,754	80	>75% Grass cover, Good, HSG D
29,905	98	Paved parking, HSG D
1,178	79	Woods/grass comb., Good, HSG D
55,837	90	Weighted Average
25,932		46.44% Pervious Area
29,905		53.56% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.1	100	0.0450	0.23		**Sheet Flow, 100 LF SF @ 4.5% GRASS** Grass: Short n= 0.150 P2= 3.19"
0.4	68	0.1500	2.71		**Shallow Concentrated Flow, 69 LF SCF @ 15% GRASS** Short Grass Pasture Kv= 7.0 fps
2.6	235	0.0100	1.50		**Shallow Concentrated Flow, 235 LF SCF @ 1%** Grassed Waterway Kv= 15.0 fps
0.1	68	0.0595	8.44	2.95	**Pipe Channel, 68 LF @ 6%** 8.0" Round Area= 0.3 sf Perim= 2.1' r= 0.17' n= 0.013 Corrugated PE, smooth interior
0.1	127	0.1250	16.04	12.60	**Pipe Channel, 127 LF @ 12.5%** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013 Corrugated PE, smooth interior
10.3	598	Total			

Subcatchment 2AS: New Bldg Parking South



Summary for Subcatchment 2BS: New Bldg Parking North

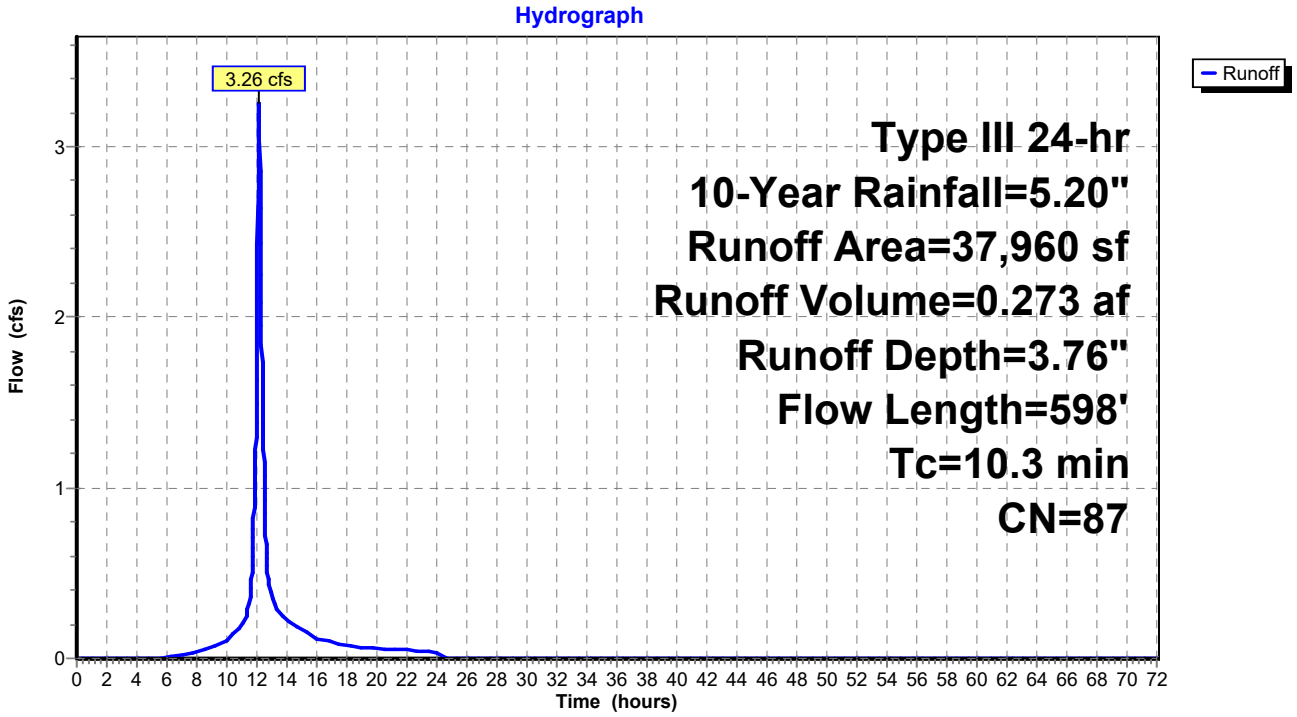
Runoff = 3.26 cfs @ 12.14 hrs, Volume= 0.273 af, Depth= 3.76"
Routed to Pond 9P : HYDRO 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Type III 24-hr 10-Year Rainfall=5.20"

Area (sf)	CN	Description
16,991	80	>75% Grass cover, Good, HSG D
14,298	98	Paved parking, HSG D
6,671	79	Woods, Fair, HSG D
37,960	87	Weighted Average
23,662		62.33% Pervious Area
14,298		37.67% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.1	100	0.0450	0.23		**Sheet Flow, 100 LF SF @ 4.5% GRASS** Grass: Short n= 0.150 P2= 3.19"
0.4	68	0.1500	2.71		**Shallow Concentrated Flow, 69 LF SCF @ 15% GRASS** Short Grass Pasture Kv= 7.0 fps
2.6	235	0.0100	1.50		**Shallow Concentrated Flow, 235 LF SCF @ 1%** Grassed Waterway Kv= 15.0 fps
0.1	68	0.0595	8.44	2.95	**Pipe Channel, 68 LF @ 6%** 8.0" Round Area= 0.3 sf Perim= 2.1' r= 0.17' n= 0.013 Corrugated PE, smooth interior
0.1	127	0.1250	16.04	12.60	**Pipe Channel, 127 LF @ 12.5%** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013 Corrugated PE, smooth interior
10.3	598	Total			

Subcatchment 2BS: New Bldg Parking North



Summary for Subcatchment 3S: Pool Patio

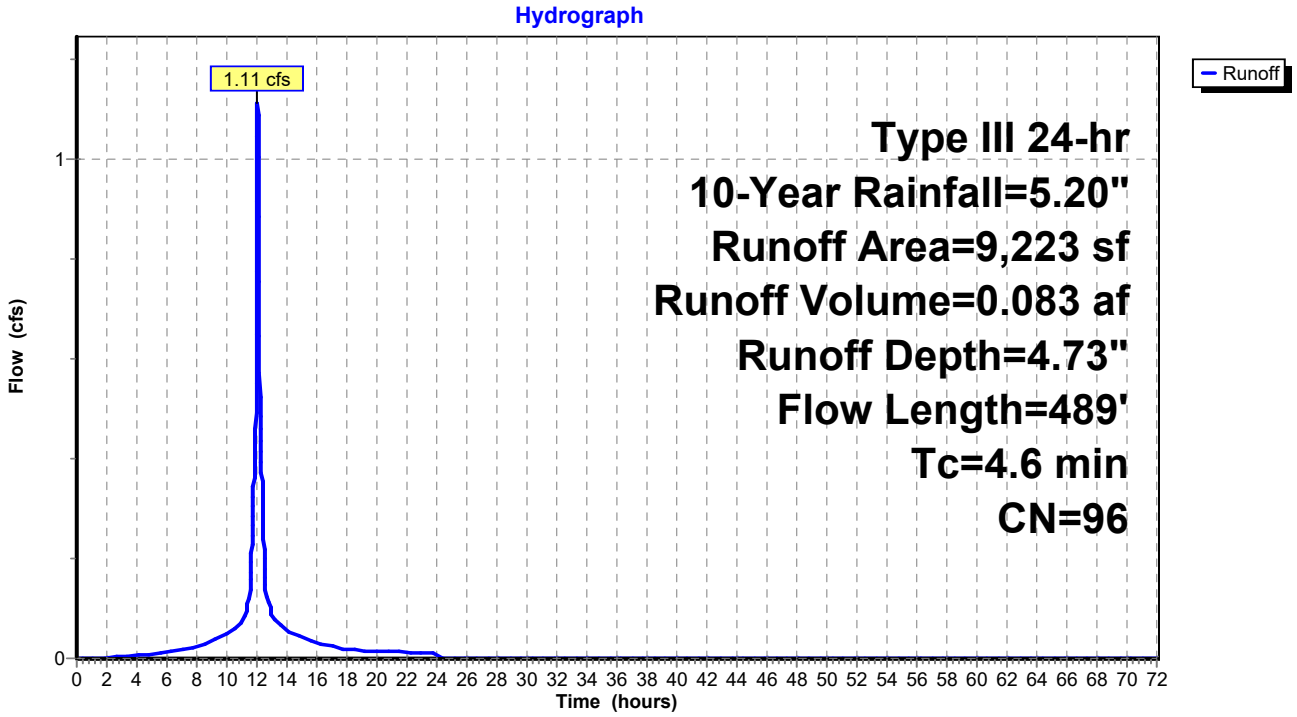
Runoff = 1.11 cfs @ 12.07 hrs, Volume= 0.083 af, Depth= 4.73"
Routed to Pond 9P : HYDRO 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Type III 24-hr 10-Year Rainfall=5.20"

Area (sf)	CN	Description
8,932	98	Paved parking, HSG A
291	39	>75% Grass cover, Good, HSG A
9,223	96	Weighted Average
291		3.16% Pervious Area
8,932		96.84% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	100	0.2050	0.43		**Sheet Flow, 100 LF SF @ 21% GRASS** Grass: Short n= 0.150 P2= 3.19"
0.1	27	0.0740	4.08		**Shallow Concentrated Flow, 27 LF SCF @ 7.4%** Grassed Waterway Kv= 15.0 fps
0.3	79	0.0412	4.12		**Shallow Concentrated Flow, 79 LF SF @ 4.12% PAVED** Paved Kv= 20.3 fps
0.3	283	0.0960	16.31	20.01	**Pipe Channel, 283 LF @ 9.6%** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.013 Corrugated PE, smooth interior
4.6	489	Total			

Subcatchment 3S: Pool Patio



Summary for Subcatchment 4S: 4

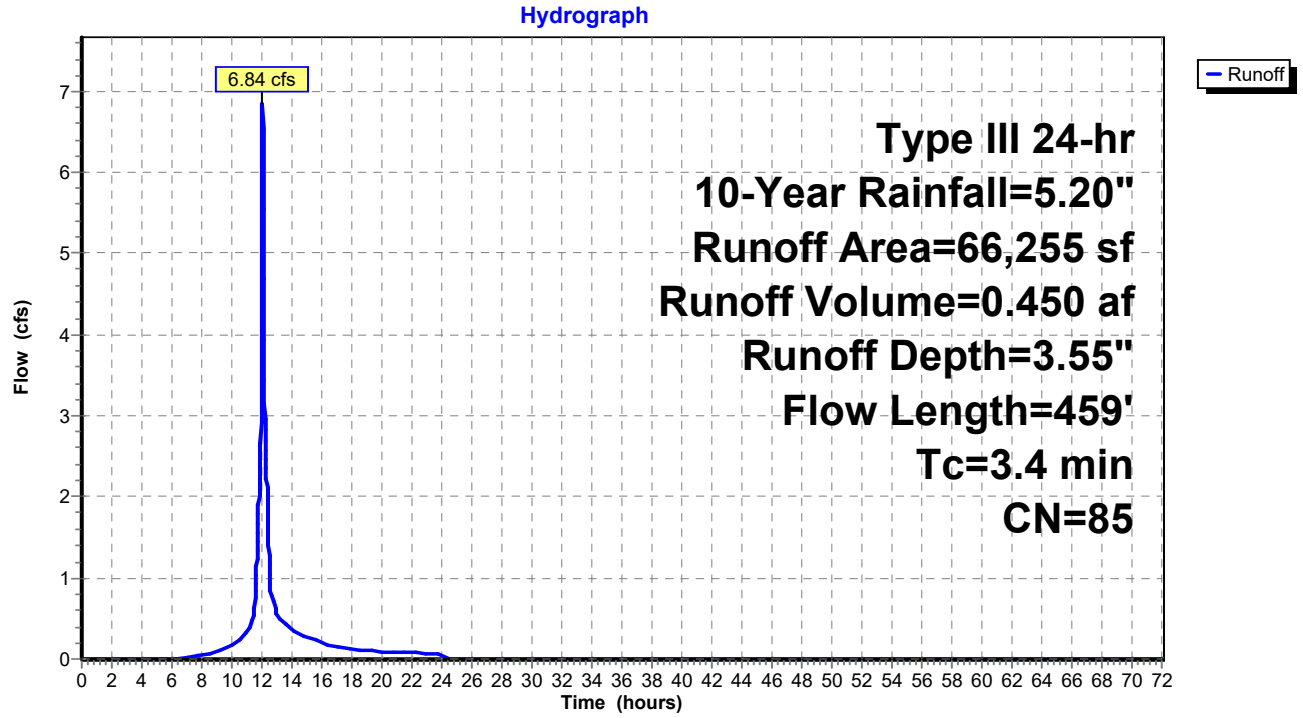
Runoff = 6.84 cfs @ 12.05 hrs, Volume= 0.450 af, Depth= 3.55"
Routed to Pond 25P : HYDRO 4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Type III 24-hr 10-Year Rainfall=5.20"

Area (sf)	CN	Description
20,343	98	Paved parking, HSG D
37,592	80	>75% Grass cover, Good, HSG D
8,320	79	Woods/grass comb., Good, HSG D
66,255	85	Weighted Average
45,912		69.30% Pervious Area
20,343		30.70% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.1	55	0.2800	0.43		**Sheet Flow, 55 LF SF @ 28% GRASS** Grass: Short n= 0.150 P2= 3.19"
0.7	121	0.0190	2.80		**Shallow Concentrated Flow, 121 LF SCF @ 2% PAVED** Paved Kv= 20.3 fps
0.6	283	0.0270	7.45	5.85	**Pipe Channel, 283 LF @ 2.7%** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013 Corrugated PE, smooth interior
3.4	459	Total			

Subcatchment 4S: 4



Summary for Subcatchment 5S: 5

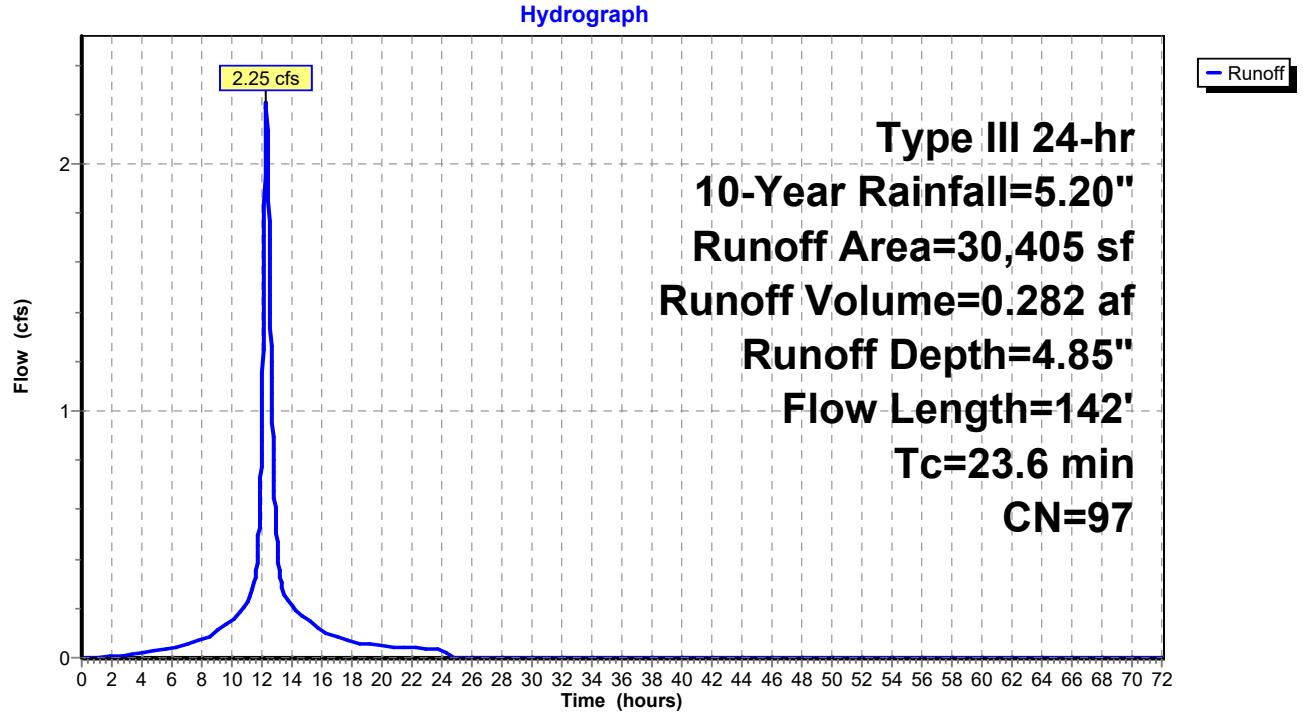
Runoff = 2.25 cfs @ 12.31 hrs, Volume= 0.282 af, Depth= 4.85"
Routed to Pond 11P : HYDRO 5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Type III 24-hr 10-Year Rainfall=5.20"

Area (sf)	CN	Description
28,401	98	Roofs, HSG D
2,004	80	>75% Grass cover, Good, HSG D
30,405	97	Weighted Average
2,004		6.59% Pervious Area
28,401		93.41% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
23.5	79	0.0100	0.06		**Sheet Flow, 79 LF SF @ 1%** Woods: Light underbrush n= 0.400 P2= 3.19"
0.1	63	0.2470	17.21	6.01	**Pipe Channel, 62.5 LF @ 25%** 8.0" Round Area= 0.3 sf Perim= 2.1' r= 0.17' n= 0.013 Corrugated PE, smooth interior
23.6	142	Total			

Subcatchment 5S: 5



Summary for Subcatchment 6S: 6

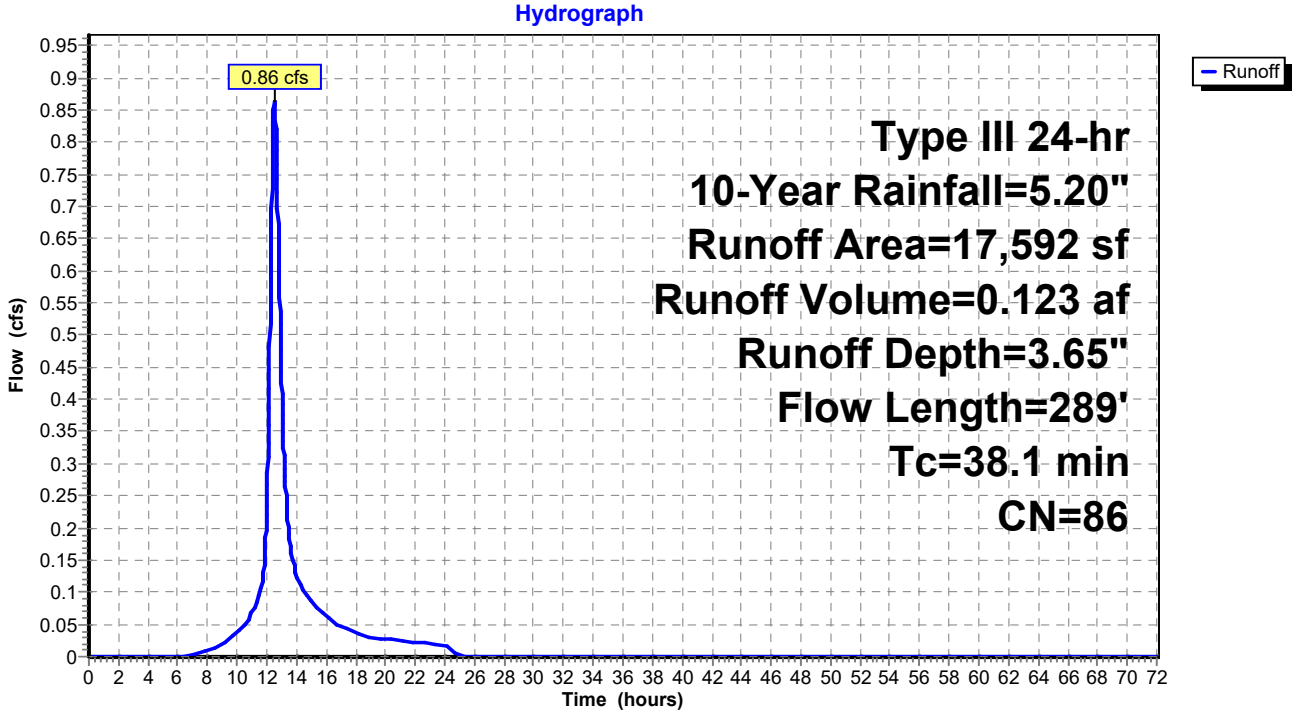
Runoff = 0.86 cfs @ 12.51 hrs, Volume= 0.123 af, Depth= 3.65"
Routed to Reach DP1 : Design Point 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Type III 24-hr 10-Year Rainfall=5.20"

Area (sf)	CN	Description
11,755	80	>75% Grass cover, Good, HSG D
5,837	98	Paved parking, HSG D
17,592	86	Weighted Average
11,755		66.82% Pervious Area
5,837		33.18% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
37.4	100	0.0050	0.04		**Sheet Flow, 100 LF SF @ 0.5%** Woods: Light underbrush n= 0.400 P2= 3.19"
0.6	82	0.0221	2.23		**Shallow Concentrated Flow, 82 LF SCF @ 2.2% GRASS** Grassed Waterway Kv= 15.0 fps
0.1	107	0.0977	14.18	11.14	**Pipe Channel, 107 LF @ 9.8%** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013 Corrugated PE, smooth interior
38.1	289	Total			

Subcatchment 6S: 6



Summary for Subcatchment 7S: 7

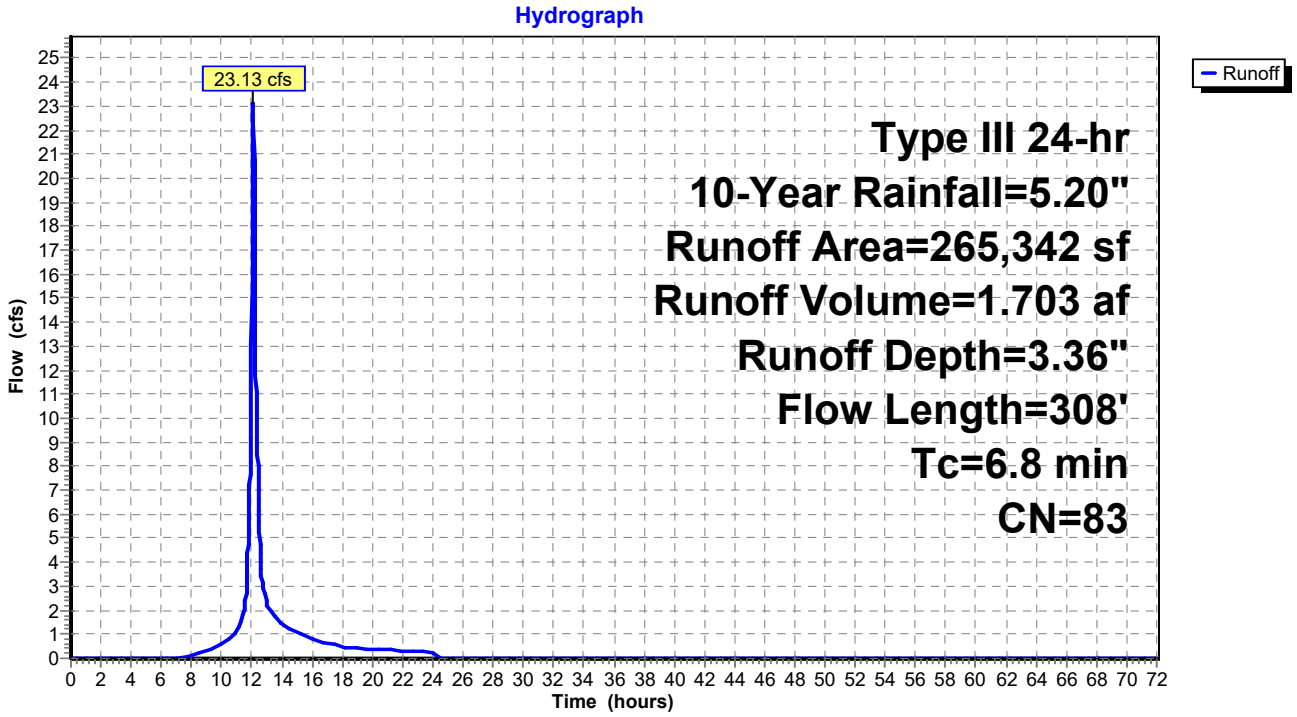
Runoff = 23.13 cfs @ 12.10 hrs, Volume= 1.703 af, Depth= 3.36"
Routed to Reach DP1 : Design Point 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Type III 24-hr 10-Year Rainfall=5.20"

Area (sf)	CN	Description
63,131	79	Woods, Fair, HSG D
42,621	98	Paved parking, HSG D
145,907	80	>75% Grass cover, Good, HSG D
13,683	96	Gravel surface, HSG D
265,342	83	Weighted Average
222,721		83.94% Pervious Area
42,621		16.06% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.4	100	0.0875	0.31		**Sheet Flow, 100 LF SF @ 8.75% GRASS** Grass: Short n= 0.150 P2= 3.19"
1.1	155	0.1032	2.25		**Shallow Concentrated Flow, 155 LF SCF @ 10% GRASS** Short Grass Pasture Kv= 7.0 fps
0.2	9	0.0278	0.97		**Sheet Flow, 9 LF SF @ 2.8% PAVEMENT** Smooth surfaces n= 0.011 P2= 3.19"
0.0	2	0.0278	1.17		**Shallow Concentrated Flow, 2 LF SCF @ 2.8% GRASS** Short Grass Pasture Kv= 7.0 fps
0.1	42	0.3869	9.33		**Shallow Concentrated Flow, 42 LF SCF @ 39% GRASS** Grassed Waterway Kv= 15.0 fps
6.8	308	Total			

Subcatchment 7S: 7



Summary for Subcatchment ES1: Upstream Watershed Area

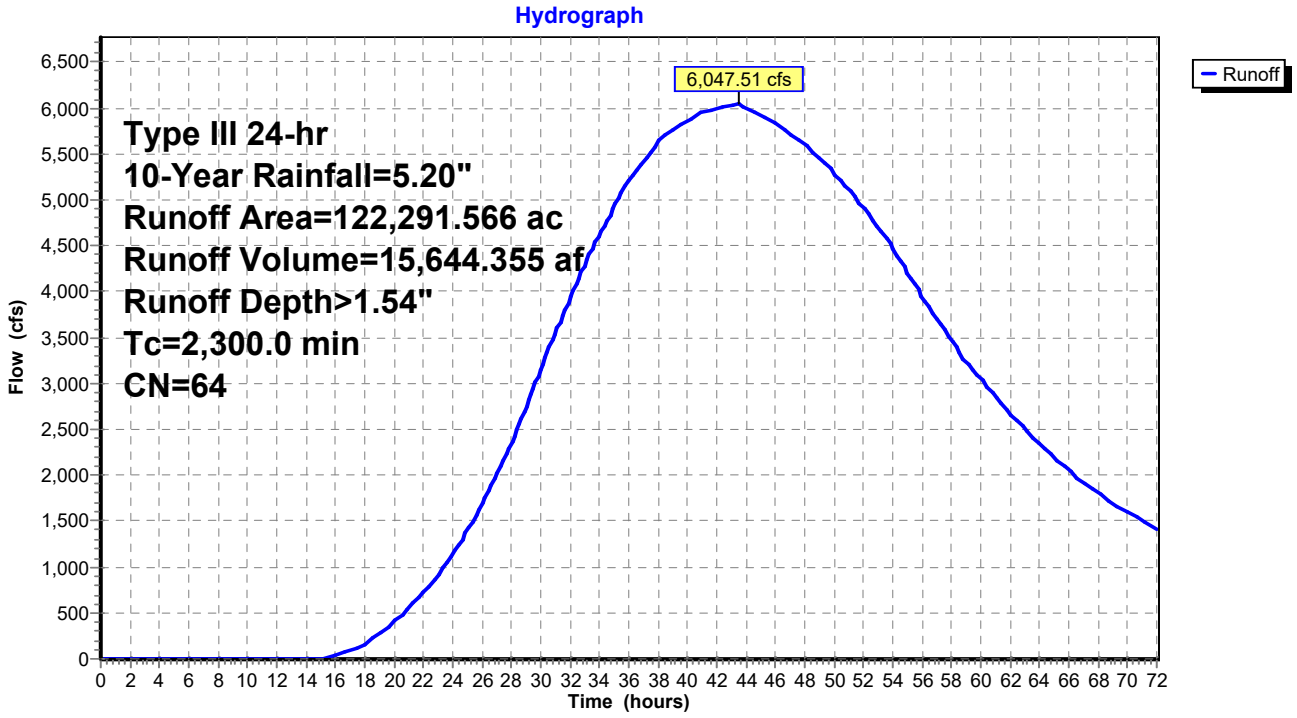
Runoff = 6,047.51 cfs @ 43.44 hrs, Volume= 15,644.355 af, Depth> 1.54"
Routed to Reach DP1 : Design Point 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Type III 24-hr 10-Year Rainfall=5.20"

Area (ac)	CN	Description
*122,291.566	64	
122,291.566		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2,300.0					**Direct Entry, Time of Concentration**

Subcatchment ES1: Upstream Watershed Area

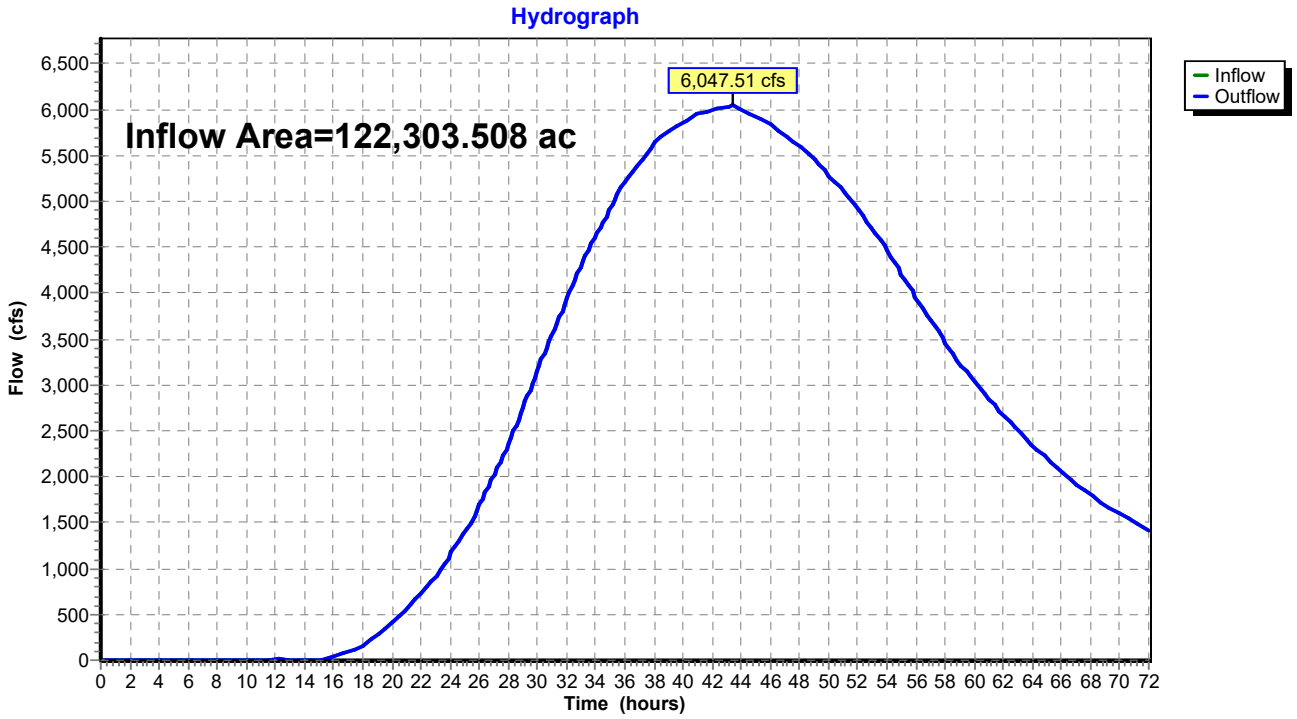


Summary for Reach DP1: Design Point 1

Inflow Area =122,303.508 ac, 0.00% Impervious, Inflow Depth > 1.54" for 10-Year event
Inflow = 6,047.51 cfs @ 43.44 hrs, Volume= 15,647.889 af
Outflow = 6,047.51 cfs @ 43.44 hrs, Volume= 15,647.889 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs

Reach DP1: Design Point 1



Summary for Pond 4P: BIO 2

Inflow Area = 1.521 ac, 30.70% Impervious, Inflow Depth = 3.55" for 10-Year event
Inflow = 6.84 cfs @ 12.05 hrs, Volume= 0.450 af
Outflow = 5.99 cfs @ 12.09 hrs, Volume= 0.450 af, Atten= 12%, Lag= 2.2 min
Discarded = 0.02 cfs @ 12.09 hrs, Volume= 0.050 af
Primary = 5.97 cfs @ 12.09 hrs, Volume= 0.400 af
Routed to Reach DP1 : Design Point 1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Peak Elev= 78.90' @ 12.09 hrs Surf.Area= 2,712 sf Storage= 2,244 cf

Plug-Flow detention time= 101.6 min calculated for 0.450 af (100% of inflow)
Center-of-Mass det. time= 102.0 min (905.6 - 803.6)

Volume	Invert	Avail.Storage	Storage Description
#1	78.00'	5,521 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

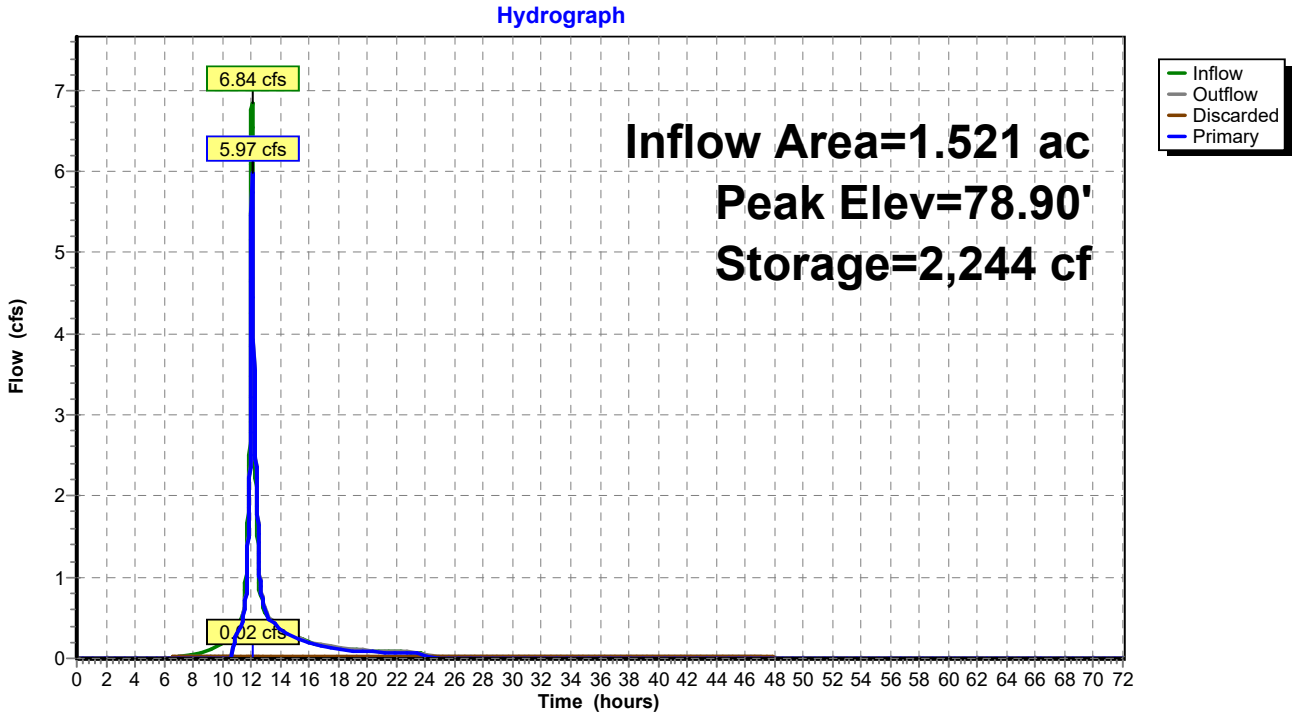
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
78.00	2,296	0	0
80.00	3,225	5,521	5,521

Device	Routing	Invert	Outlet Devices
#1	Discarded	78.00'	**0.250 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 66.00'
#2	Primary	74.40'	**12.0" Round Culvert** L= 41.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 74.40' / 74.00' S= 0.0098 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Device 2	78.50'	**24.0" x 24.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.02 cfs @ 12.09 hrs HW=78.89' (Free Discharge)
└**1=Exfiltration** (Controls 0.02 cfs)

Primary OutFlow Max=5.97 cfs @ 12.09 hrs HW=78.89' TW=0.00' (Dynamic Tailwater)
└**2=Culvert** (Inlet Controls 5.97 cfs @ 7.60 fps)
└**3=Orifice/Grate** (Passes 5.97 cfs of 6.48 cfs potential flow)

Pond 4P: BIO 2


Hydrograph
Inflow Area=1.521 ac
Peak Elev=78.90'
Storage=2,244 cf
6.84 cfs
5.97 cfs
0.02 cfs
Inflow
Outflow
Discarded
Primary
Flow (cfs)
Time (hours)
0 1 2 3 4 5 6 7
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72

Summary for Pond 9P: HYDRO 2

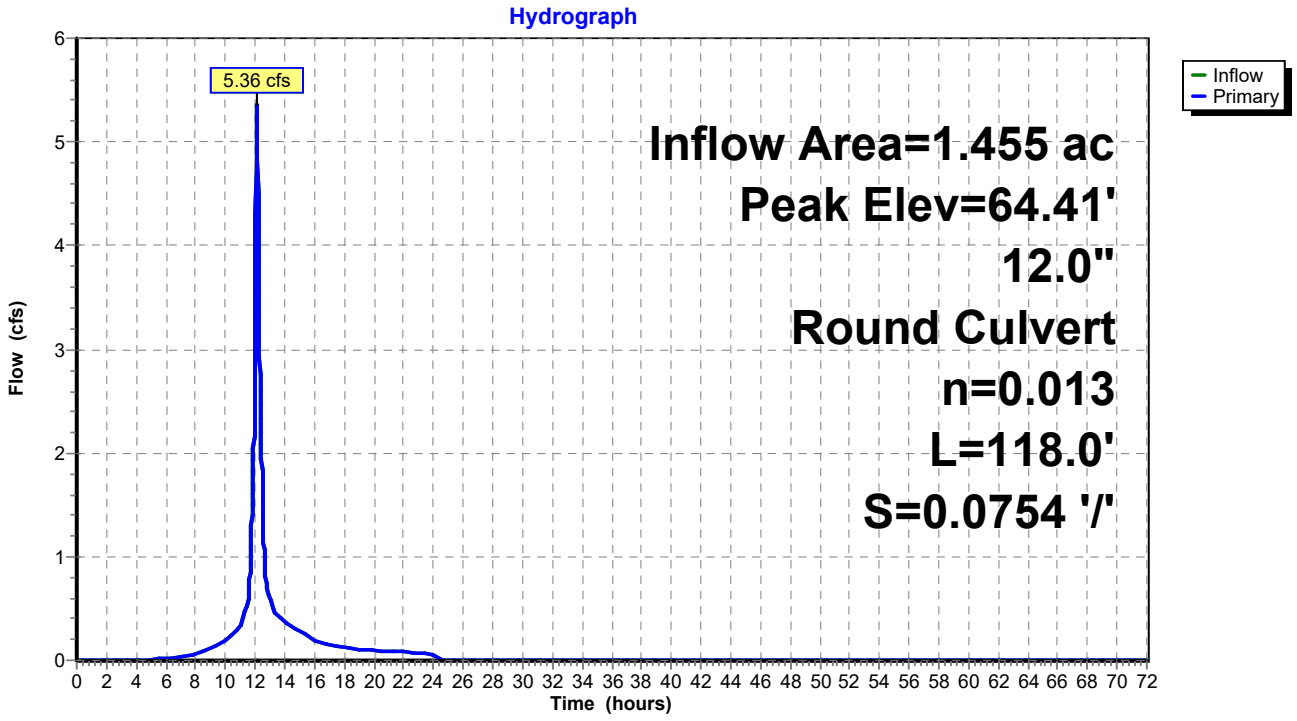
Inflow Area = 1.455 ac, 54.31% Impervious, Inflow Depth = 3.72" for 10-Year event
Inflow = 5.36 cfs @ 12.11 hrs, Volume= 0.451 af
Outflow = 5.36 cfs @ 12.11 hrs, Volume= 0.451 af, Atten= 0%, Lag= 0.0 min
Primary = 5.36 cfs @ 12.11 hrs, Volume= 0.451 af
Routed to Reach DP1 : Design Point 1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Peak Elev= 64.41' @ 12.11 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	61.90'	**12.0" Round Culvert** L= 118.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 61.90' / 53.00' S= 0.0754 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=5.33 cfs @ 12.11 hrs HW=64.39' TW=0.00' (Dynamic Tailwater)
1=Culvert (Inlet Controls 5.33 cfs @ 6.79 fps)

Pond 9P: HYDRO 2



Summary for Pond 11P: HYDRO 5

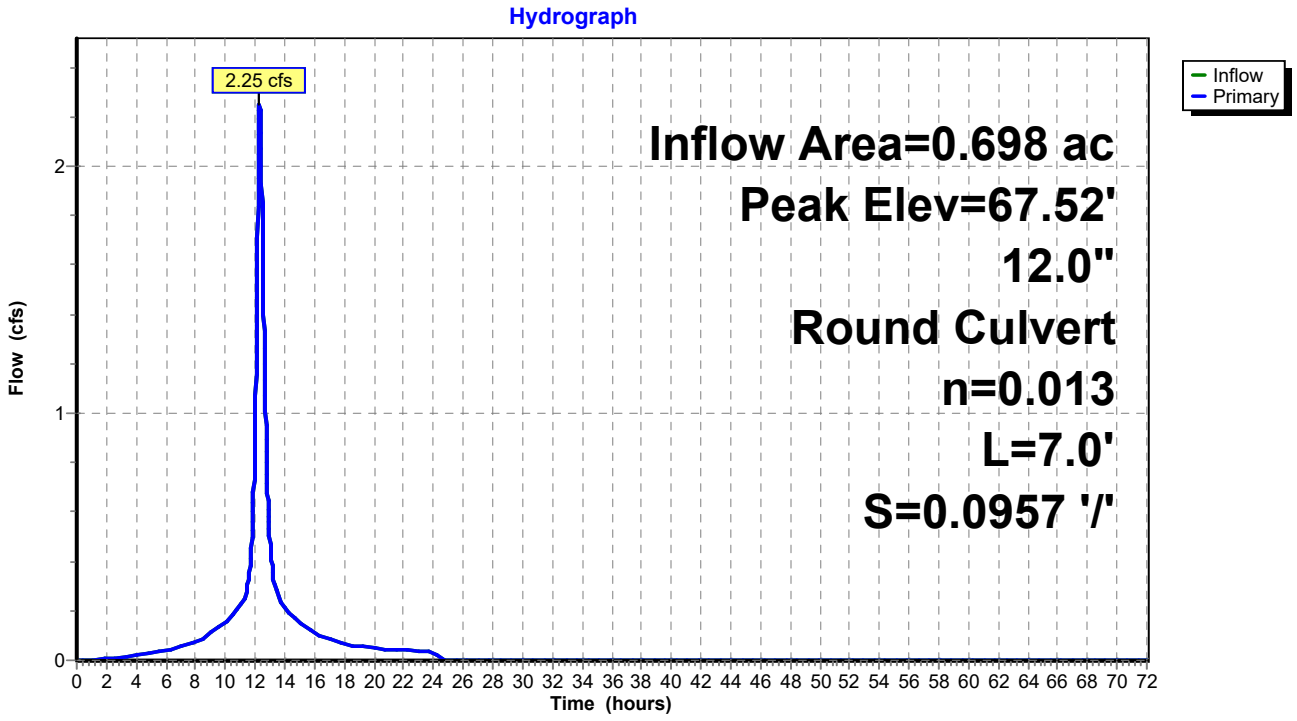
Inflow Area = 0.698 ac, 93.41% Impervious, Inflow Depth = 4.85" for 10-Year event
Inflow = 2.25 cfs @ 12.31 hrs, Volume= 0.282 af
Outflow = 2.25 cfs @ 12.31 hrs, Volume= 0.282 af, Atten= 0%, Lag= 0.0 min
Primary = 2.25 cfs @ 12.31 hrs, Volume= 0.282 af
Routed to Reach DP1 : Design Point 1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Peak Elev= 67.52' @ 12.30 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	66.67'	**12.0" Round Culvert** L= 7.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 66.67' / 66.00' S= 0.0957 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=2.25 cfs @ 12.31 hrs HW=67.52' TW=0.00' (Dynamic Tailwater)
1=Culvert (Inlet Controls 2.25 cfs @ 3.15 fps)

Pond 11P: HYDRO 5



Summary for Pond 25P: HYDRO 4

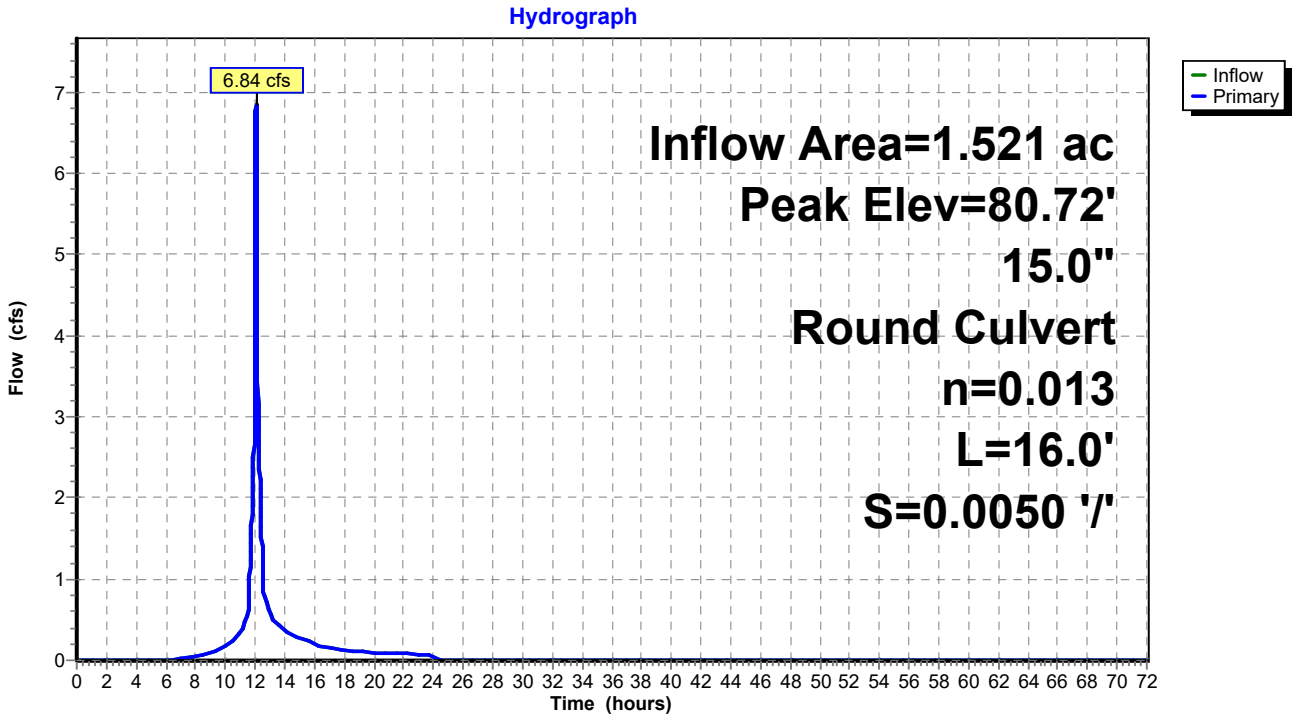
Inflow Area = 1.521 ac, 30.70% Impervious, Inflow Depth = 3.55" for 10-Year event
Inflow = 6.84 cfs @ 12.05 hrs, Volume= 0.450 af
Outflow = 6.84 cfs @ 12.05 hrs, Volume= 0.450 af, Atten= 0%, Lag= 0.0 min
Primary = 6.84 cfs @ 12.05 hrs, Volume= 0.450 af
Routed to Pond 4P : BIO 2

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Peak Elev= 80.72' @ 12.05 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	78.65'	**15.0" Round Culvert** L= 16.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 78.65' / 78.57' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=6.77 cfs @ 12.05 hrs HW=80.71' TW=78.87' (Dynamic Tailwater)
1=Culvert (Barrel Controls 6.77 cfs @ 5.52 fps)

Pond 25P: HYDRO 4



Summary for Pond HYD1: HYDRO 1

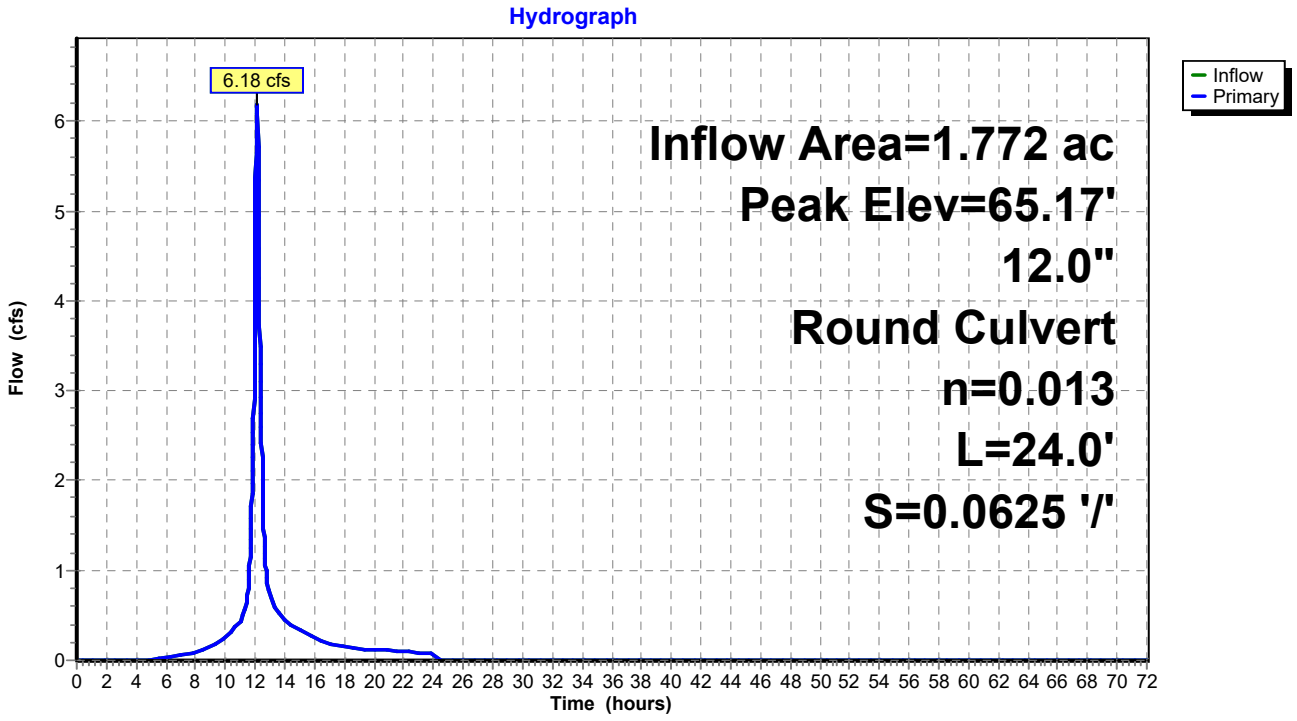
Inflow Area = 1.772 ac, 59.15% Impervious, Inflow Depth = 3.89" for 10-Year event
Inflow = 6.18 cfs @ 12.13 hrs, Volume= 0.575 af
Outflow = 6.18 cfs @ 12.13 hrs, Volume= 0.575 af, Atten= 0%, Lag= 0.0 min
Primary = 6.18 cfs @ 12.13 hrs, Volume= 0.575 af
Routed to Reach DP1 : Design Point 1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Peak Elev= 65.17' @ 12.13 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	62.00'	**12.0" Round Culvert** L= 24.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 62.00' / 60.50' S= 0.0625 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=6.16 cfs @ 12.13 hrs HW=65.15' TW=0.00' (Dynamic Tailwater)
1=Culvert (Inlet Controls 6.16 cfs @ 7.84 fps)

Pond HYD1: HYDRO 1



Summary for Subcatchment 1AS: New Bldg South

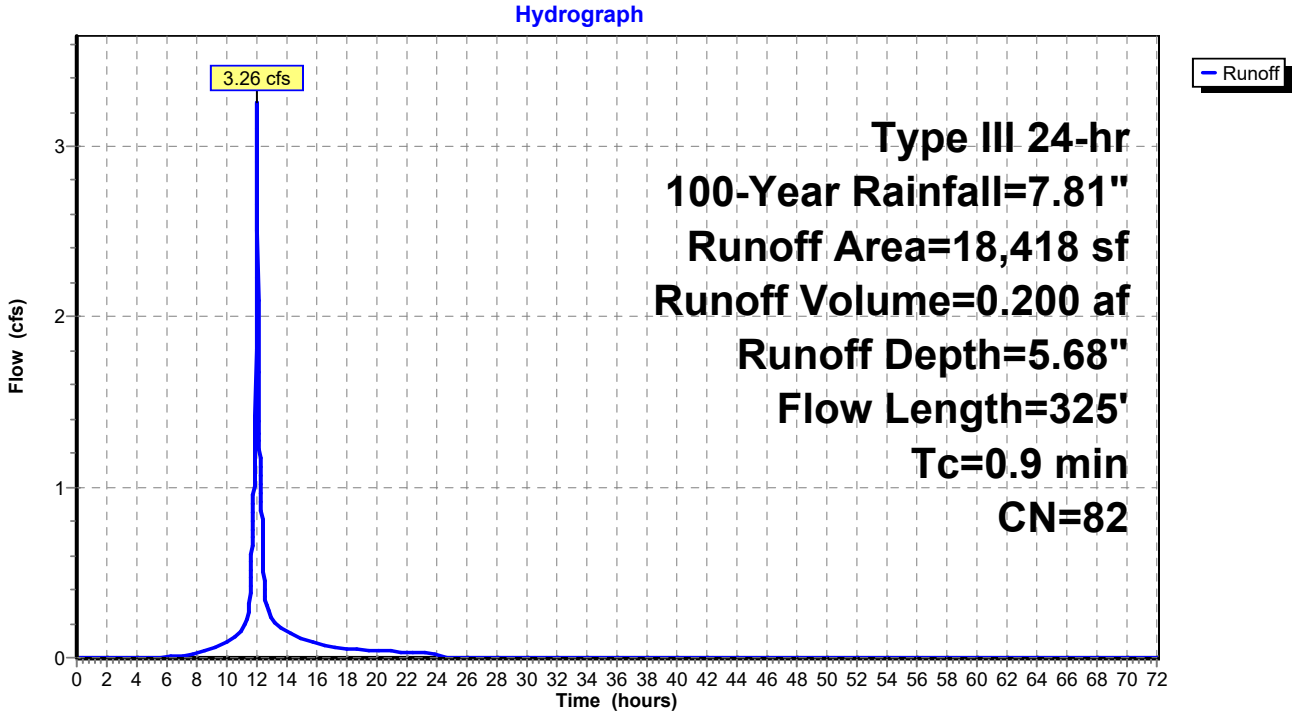
Runoff = 3.26 cfs @ 12.02 hrs, Volume= 0.200 af, Depth= 5.68"
Routed to Pond HYD1 : HYDRO 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Type III 24-hr 100-Year Rainfall=7.81"

	Area (sf)	CN	Description
	13,418	98	Paved parking, HSG D
*	5,000	39	Green Roof
	18,418	82	Weighted Average
	5,000		27.15% Pervious Area
	13,418		72.85% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.8	262	0.0734	5.50		**Shallow Concentrated Flow, 262 LF SCF @ 7.34% PAVED** Paved Kv= 20.3 fps
0.1	63	0.1500	17.57	13.80	**Pipe Channel, 63 LF @ 15%** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013 Corrugated PE, smooth interior
0.9	325	Total			

Subcatchment 1AS: New Bldg South



Summary for Subcatchment 1BS: New Bldg North

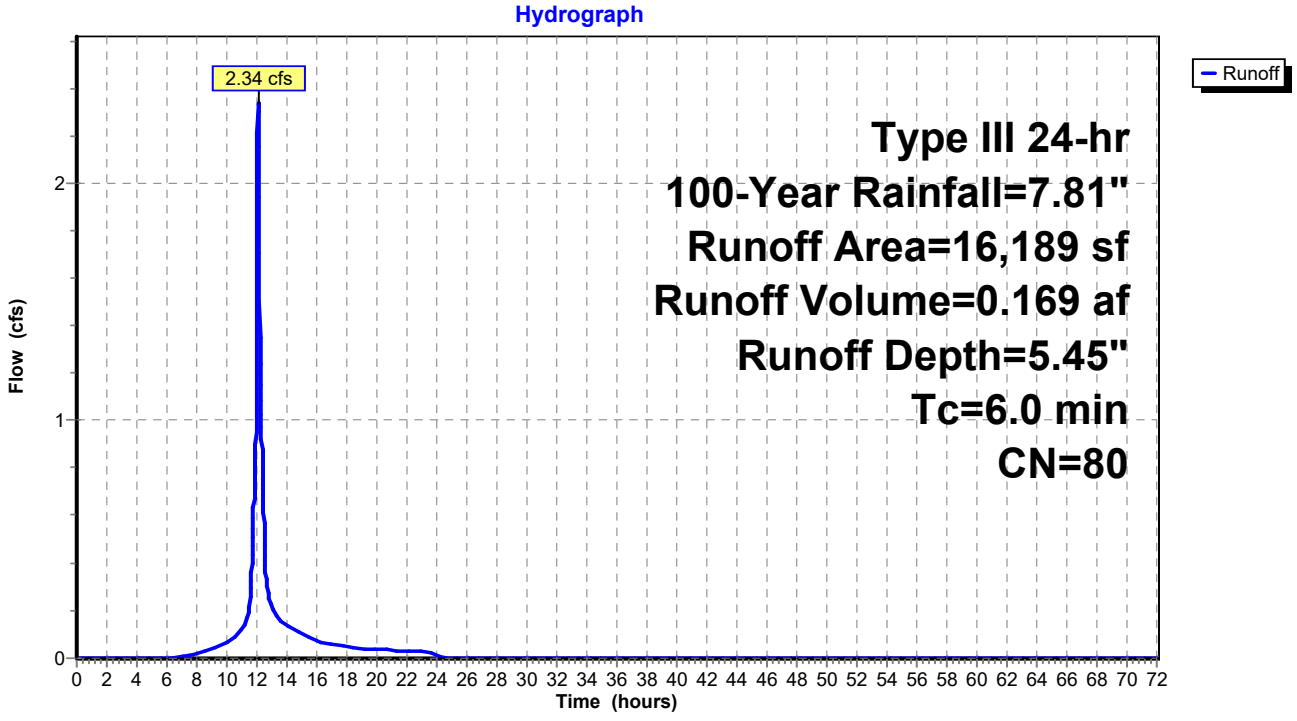
Runoff = 2.34 cfs @ 12.09 hrs, Volume= 0.169 af, Depth= 5.45"
Routed to Pond 9P : HYDRO 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Type III 24-hr 100-Year Rainfall=7.81"

	Area (sf)	CN	Description
	11,189	98	Paved parking, HSG D
*	5,000	39	Green Roof
	16,189	80	Weighted Average
	5,000		30.89% Pervious Area
	11,189		69.11% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 1BS: New Bldg North



Summary for Subcatchment 1CS: Patio Between Bldgs

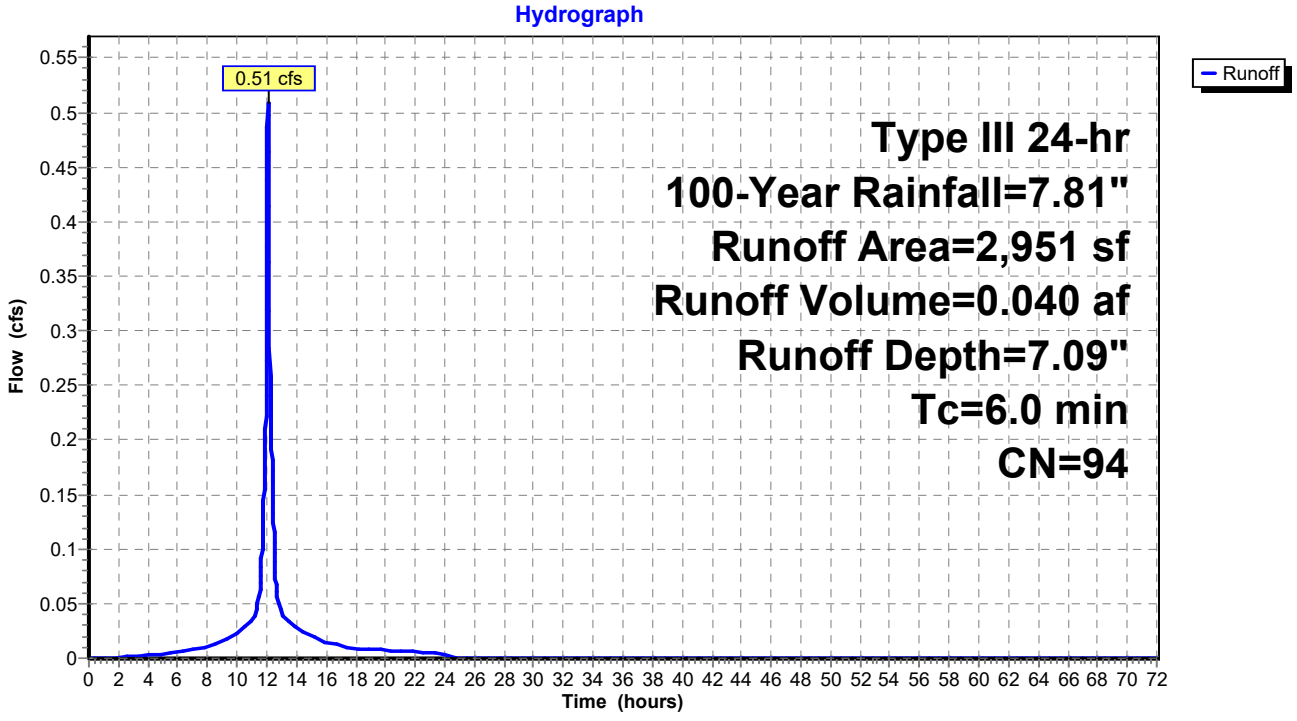
Runoff = 0.51 cfs @ 12.08 hrs, Volume= 0.040 af, Depth= 7.09"
Routed to Pond HYD1 : HYDRO 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Type III 24-hr 100-Year Rainfall=7.81"

Area (sf)	CN	Description
2,347	98	Roofs, HSG C
604	79	50-75% Grass cover, Fair, HSG C
2,951	94	Weighted Average
604		20.47% Pervious Area
2,347		79.53% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 1CS: Patio Between Bldgs



Summary for Subcatchment 2AS: New Bldg Parking South

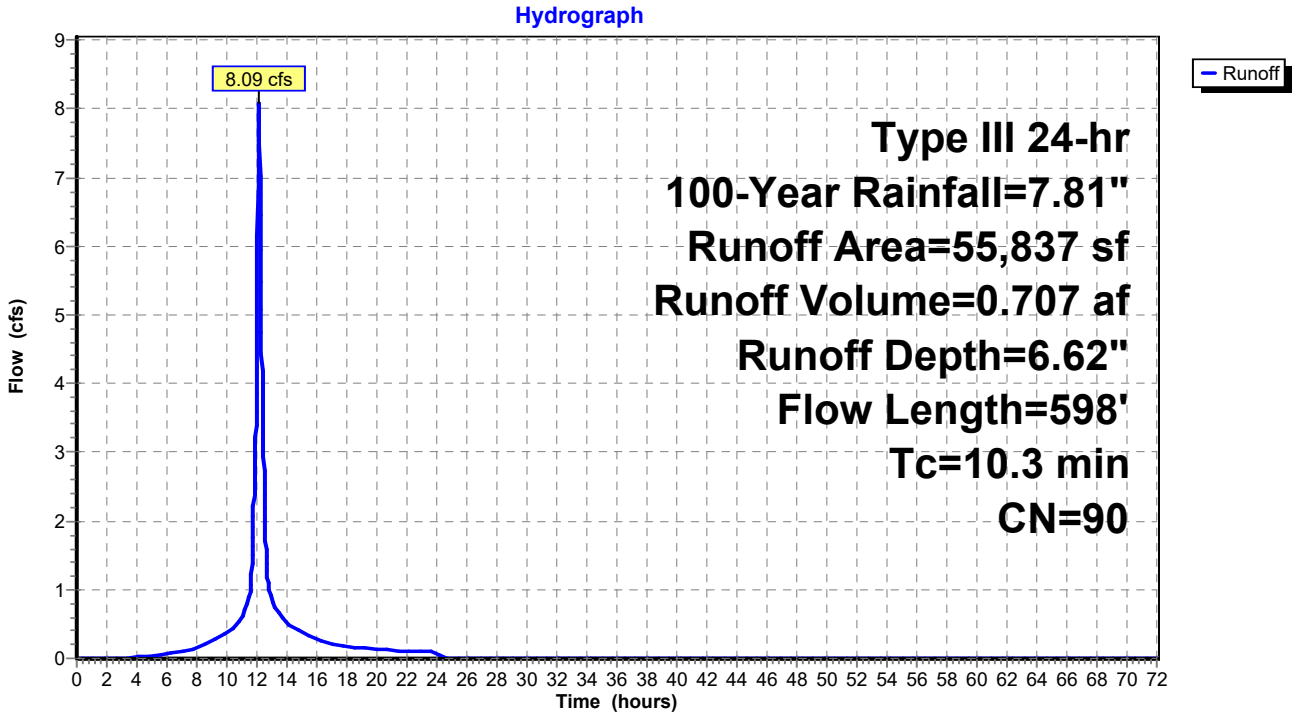
Runoff = 8.09 cfs @ 12.14 hrs, Volume= 0.707 af, Depth= 6.62"
Routed to Pond HYD1 : HYDRO 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Type III 24-hr 100-Year Rainfall=7.81"

Area (sf)	CN	Description
24,754	80	>75% Grass cover, Good, HSG D
29,905	98	Paved parking, HSG D
1,178	79	Woods/grass comb., Good, HSG D
55,837	90	Weighted Average
25,932		46.44% Pervious Area
29,905		53.56% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.1	100	0.0450	0.23		**Sheet Flow, 100 LF SF @ 4.5% GRASS** Grass: Short n= 0.150 P2= 3.19"
0.4	68	0.1500	2.71		**Shallow Concentrated Flow, 69 LF SCF @ 15% GRASS** Short Grass Pasture Kv= 7.0 fps
2.6	235	0.0100	1.50		**Shallow Concentrated Flow, 235 LF SCF @ 1%** Grassed Waterway Kv= 15.0 fps
0.1	68	0.0595	8.44	2.95	**Pipe Channel, 68 LF @ 6%** 8.0" Round Area= 0.3 sf Perim= 2.1' r= 0.17' n= 0.013 Corrugated PE, smooth interior
0.1	127	0.1250	16.04	12.60	**Pipe Channel, 127 LF @ 12.5%** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013 Corrugated PE, smooth interior
10.3	598	Total			

Subcatchment 2AS: New Bldg Parking South



Summary for Subcatchment 2BS: New Bldg Parking North

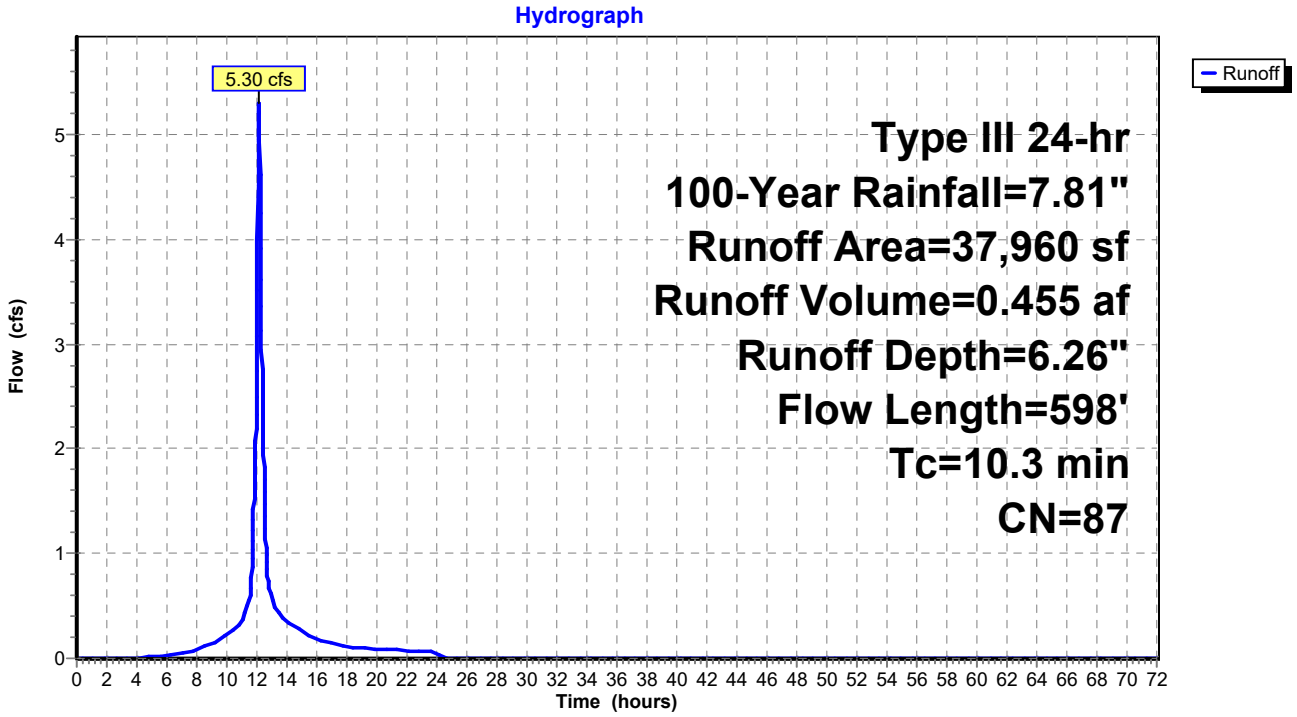
Runoff = 5.30 cfs @ 12.14 hrs, Volume= 0.455 af, Depth= 6.26"
Routed to Pond 9P : HYDRO 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Type III 24-hr 100-Year Rainfall=7.81"

Area (sf)	CN	Description
16,991	80	>75% Grass cover, Good, HSG D
14,298	98	Paved parking, HSG D
6,671	79	Woods, Fair, HSG D
37,960	87	Weighted Average
23,662		62.33% Pervious Area
14,298		37.67% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.1	100	0.0450	0.23		**Sheet Flow, 100 LF SF @ 4.5% GRASS** Grass: Short n= 0.150 P2= 3.19"
0.4	68	0.1500	2.71		**Shallow Concentrated Flow, 69 LF SCF @ 15% GRASS** Short Grass Pasture Kv= 7.0 fps
2.6	235	0.0100	1.50		**Shallow Concentrated Flow, 235 LF SCF @ 1%** Grassed Waterway Kv= 15.0 fps
0.1	68	0.0595	8.44	2.95	**Pipe Channel, 68 LF @ 6%** 8.0" Round Area= 0.3 sf Perim= 2.1' r= 0.17' n= 0.013 Corrugated PE, smooth interior
0.1	127	0.1250	16.04	12.60	**Pipe Channel, 127 LF @ 12.5%** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013 Corrugated PE, smooth interior
10.3	598	Total			

Subcatchment 2BS: New Bldg Parking North



Summary for Subcatchment 3S: Pool Patio

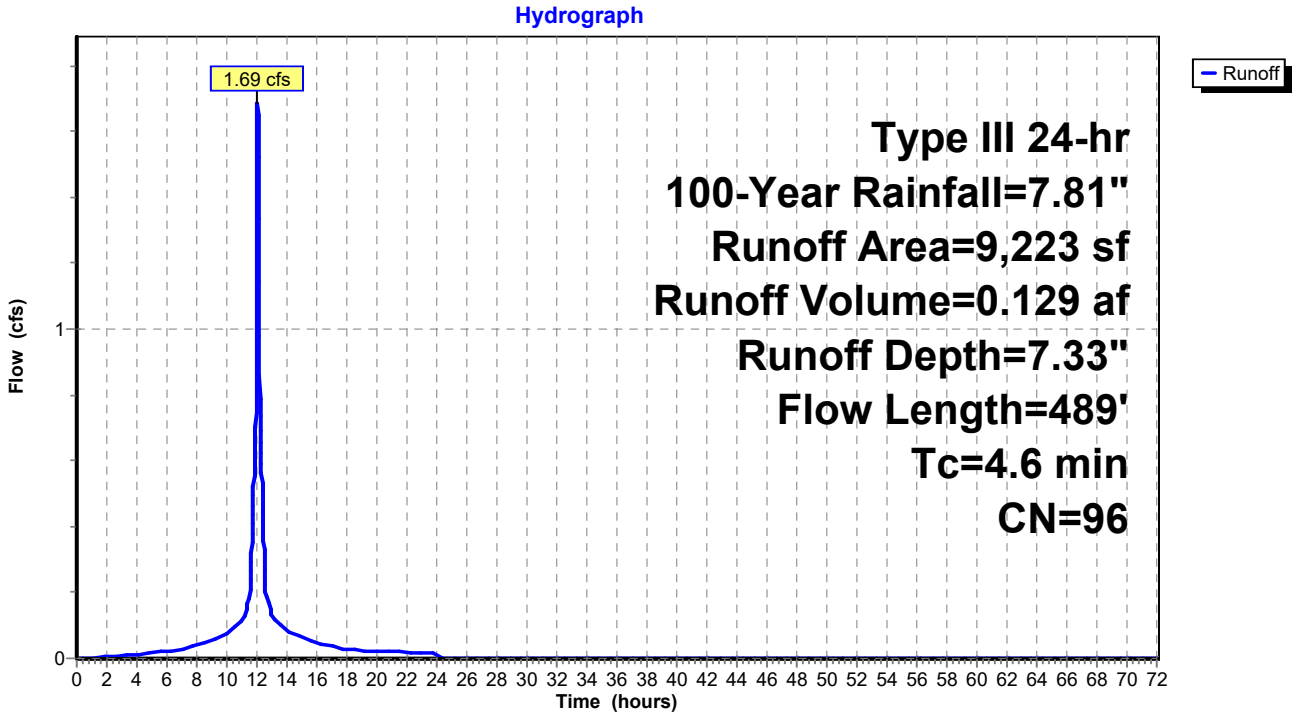
Runoff = 1.69 cfs @ 12.06 hrs, Volume= 0.129 af, Depth= 7.33"
Routed to Pond 9P : HYDRO 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Type III 24-hr 100-Year Rainfall=7.81"

Area (sf)	CN	Description
8,932	98	Paved parking, HSG A
291	39	>75% Grass cover, Good, HSG A
9,223	96	Weighted Average
291		3.16% Pervious Area
8,932		96.84% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	100	0.2050	0.43		**Sheet Flow, 100 LF SF @ 21% GRASS** Grass: Short n= 0.150 P2= 3.19"
0.1	27	0.0740	4.08		**Shallow Concentrated Flow, 27 LF SCF @ 7.4%** Grassed Waterway Kv= 15.0 fps
0.3	79	0.0412	4.12		**Shallow Concentrated Flow, 79 LF SF @ 4.12% PAVED** Paved Kv= 20.3 fps
0.3	283	0.0960	16.31	20.01	**Pipe Channel, 283 LF @ 9.6%** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.013 Corrugated PE, smooth interior
4.6	489	Total			

Subcatchment 3S: Pool Patio



Summary for Subcatchment 4S: 4

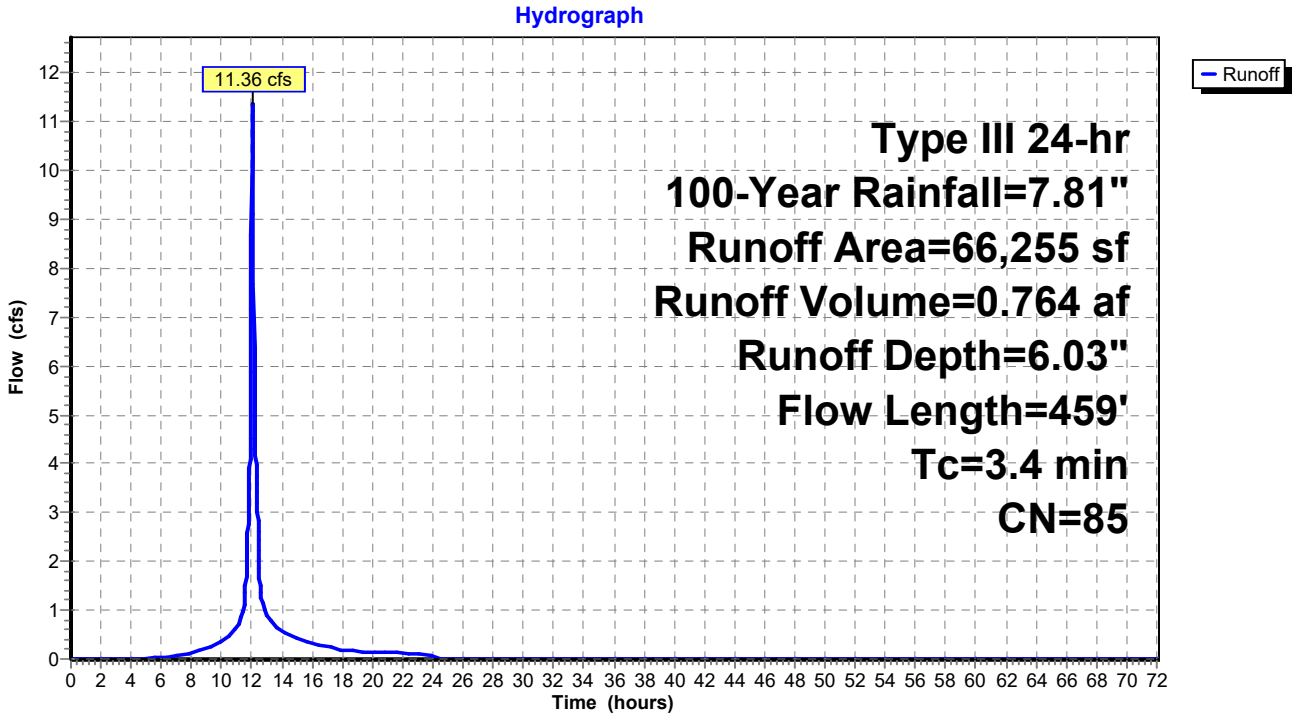
Runoff = 11.36 cfs @ 12.05 hrs, Volume= 0.764 af, Depth= 6.03"
Routed to Pond 25P : HYDRO 4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Type III 24-hr 100-Year Rainfall=7.81"

Area (sf)	CN	Description
20,343	98	Paved parking, HSG D
37,592	80	>75% Grass cover, Good, HSG D
8,320	79	Woods/grass comb., Good, HSG D
66,255	85	Weighted Average
45,912		69.30% Pervious Area
20,343		30.70% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.1	55	0.2800	0.43		**Sheet Flow, 55 LF SF @ 28% GRASS** Grass: Short n= 0.150 P2= 3.19"
0.7	121	0.0190	2.80		**Shallow Concentrated Flow, 121 LF SCF @ 2% PAVED** Paved Kv= 20.3 fps
0.6	283	0.0270	7.45	5.85	**Pipe Channel, 283 LF @ 2.7%** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013 Corrugated PE, smooth interior
3.4	459	Total			

Subcatchment 4S: 4



Summary for Subcatchment 5S: 5

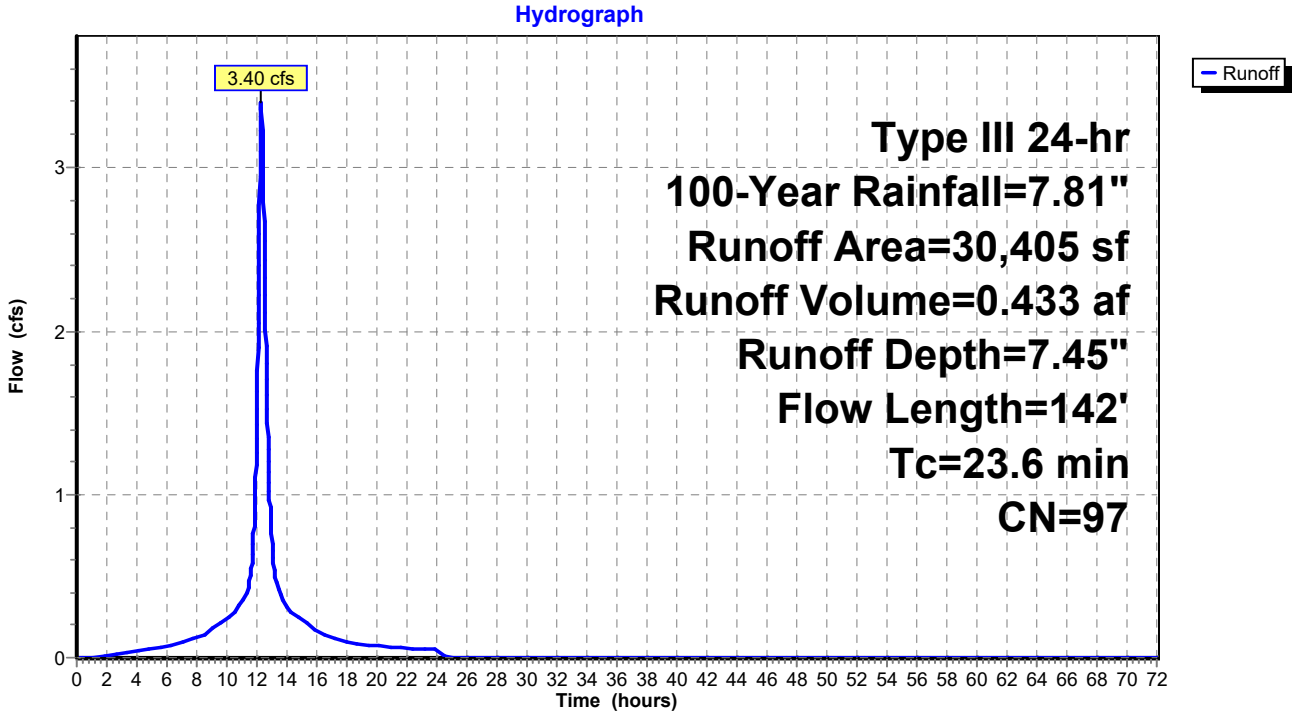
Runoff = 3.40 cfs @ 12.30 hrs, Volume= 0.433 af, Depth= 7.45"
Routed to Pond 11P : HYDRO 5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Type III 24-hr 100-Year Rainfall=7.81"

Area (sf)	CN	Description
28,401	98	Roofs, HSG D
2,004	80	>75% Grass cover, Good, HSG D
30,405	97	Weighted Average
2,004		6.59% Pervious Area
28,401		93.41% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
23.5	79	0.0100	0.06		**Sheet Flow, 79 LF SF @ 1%** Woods: Light underbrush n= 0.400 P2= 3.19"
0.1	63	0.2470	17.21	6.01	**Pipe Channel, 62.5 LF @ 25%** 8.0" Round Area= 0.3 sf Perim= 2.1' r= 0.17' n= 0.013 Corrugated PE, smooth interior
23.6	142	Total			

Subcatchment 5S: 5



Summary for Subcatchment 6S: 6

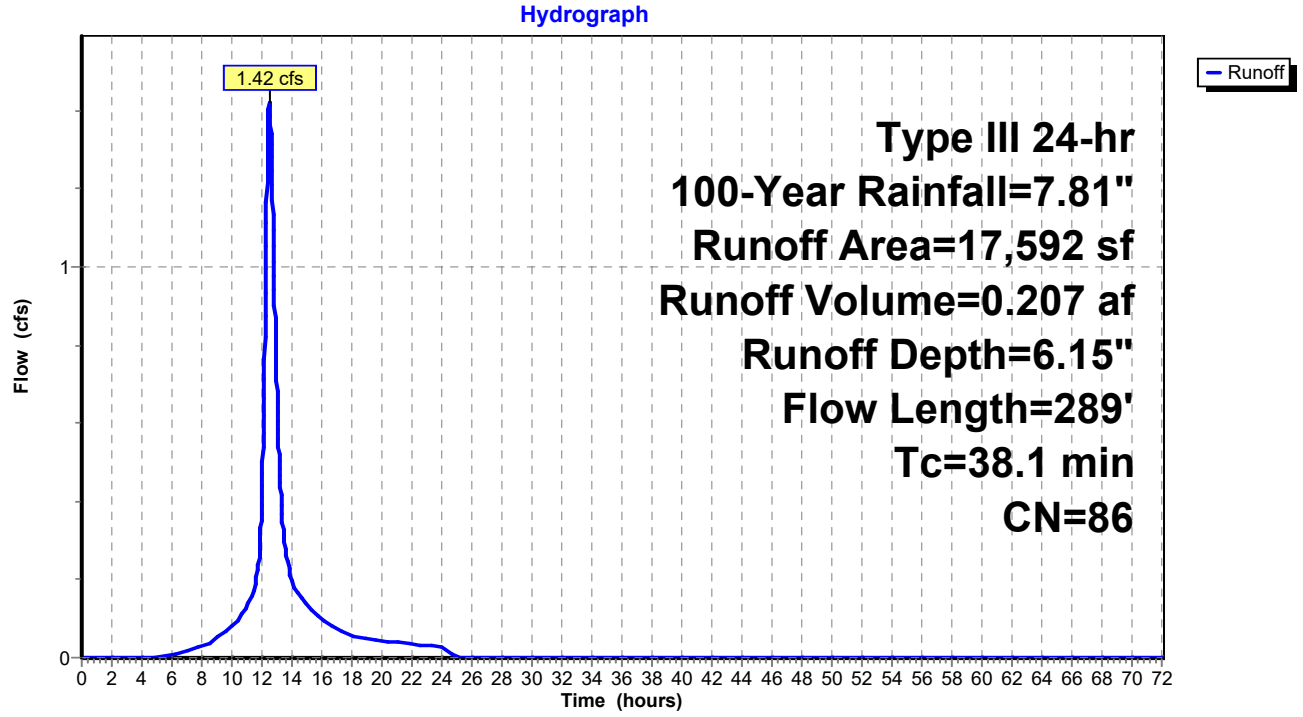
Runoff = 1.42 cfs @ 12.50 hrs, Volume= 0.207 af, Depth= 6.15"
Routed to Reach DP1 : Design Point 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Type III 24-hr 100-Year Rainfall=7.81"

Area (sf)	CN	Description
11,755	80	>75% Grass cover, Good, HSG D
5,837	98	Paved parking, HSG D
17,592	86	Weighted Average
11,755		66.82% Pervious Area
5,837		33.18% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
37.4	100	0.0050	0.04		**Sheet Flow, 100 LF SF @ 0.5%** Woods: Light underbrush n= 0.400 P2= 3.19"
0.6	82	0.0221	2.23		**Shallow Concentrated Flow, 82 LF SCF @ 2.2% GRASS** Grassed Waterway Kv= 15.0 fps
0.1	107	0.0977	14.18	11.14	**Pipe Channel, 107 LF @ 9.8%** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013 Corrugated PE, smooth interior
38.1	289	Total			

Subcatchment 6S: 6



Summary for Subcatchment 7S: 7

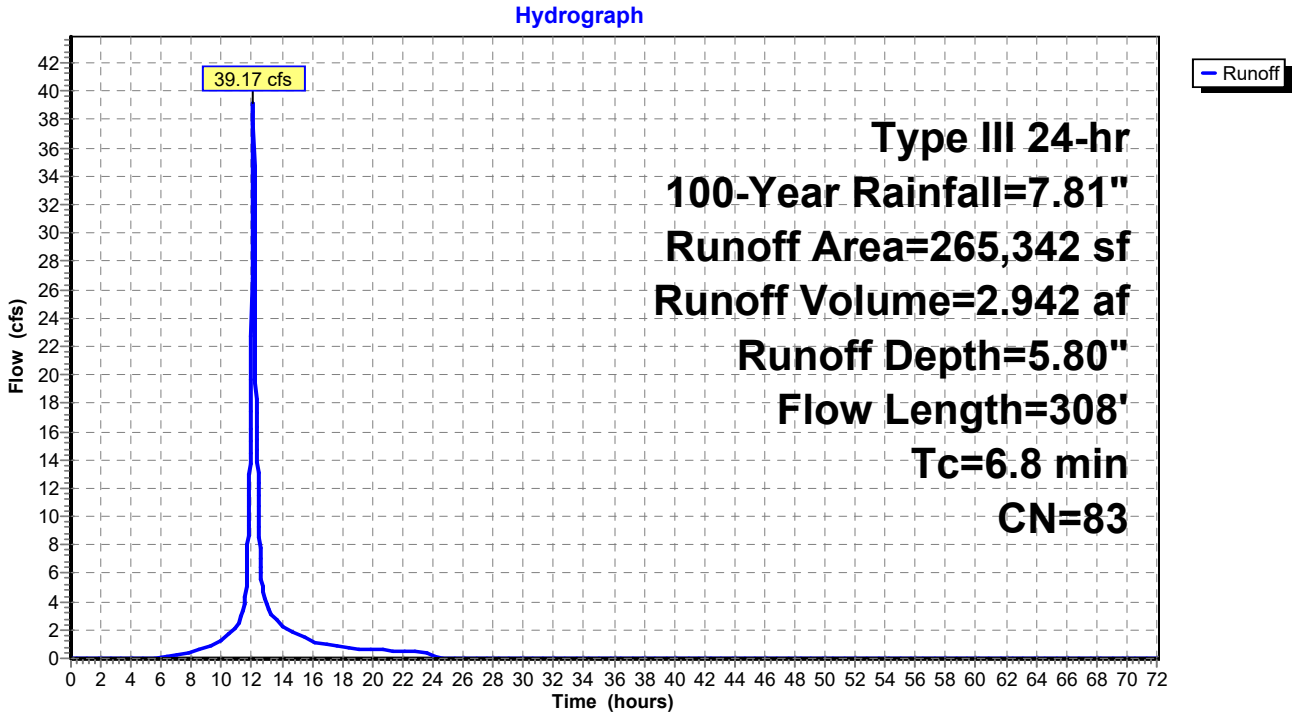
Runoff = 39.17 cfs @ 12.10 hrs, Volume= 2.942 af, Depth= 5.80"
Routed to Reach DP1 : Design Point 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Type III 24-hr 100-Year Rainfall=7.81"

Area (sf)	CN	Description
63,131	79	Woods, Fair, HSG D
42,621	98	Paved parking, HSG D
145,907	80	>75% Grass cover, Good, HSG D
13,683	96	Gravel surface, HSG D
265,342	83	Weighted Average
222,721		83.94% Pervious Area
42,621		16.06% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.4	100	0.0875	0.31		**Sheet Flow, 100 LF SF @ 8.75% GRASS** Grass: Short n= 0.150 P2= 3.19"
1.1	155	0.1032	2.25		**Shallow Concentrated Flow, 155 LF SCF @ 10% GRASS** Short Grass Pasture Kv= 7.0 fps
0.2	9	0.0278	0.97		**Sheet Flow, 9 LF SF @ 2.8% PAVEMENT** Smooth surfaces n= 0.011 P2= 3.19"
0.0	2	0.0278	1.17		**Shallow Concentrated Flow, 2 LF SCF @ 2.8% GRASS** Short Grass Pasture Kv= 7.0 fps
0.1	42	0.3869	9.33		**Shallow Concentrated Flow, 42 LF SCF @ 39% GRASS** Grassed Waterway Kv= 15.0 fps
6.8	308	Total			

Subcatchment 7S: 7



Summary for Subcatchment ES1: Upstream Watershed Area

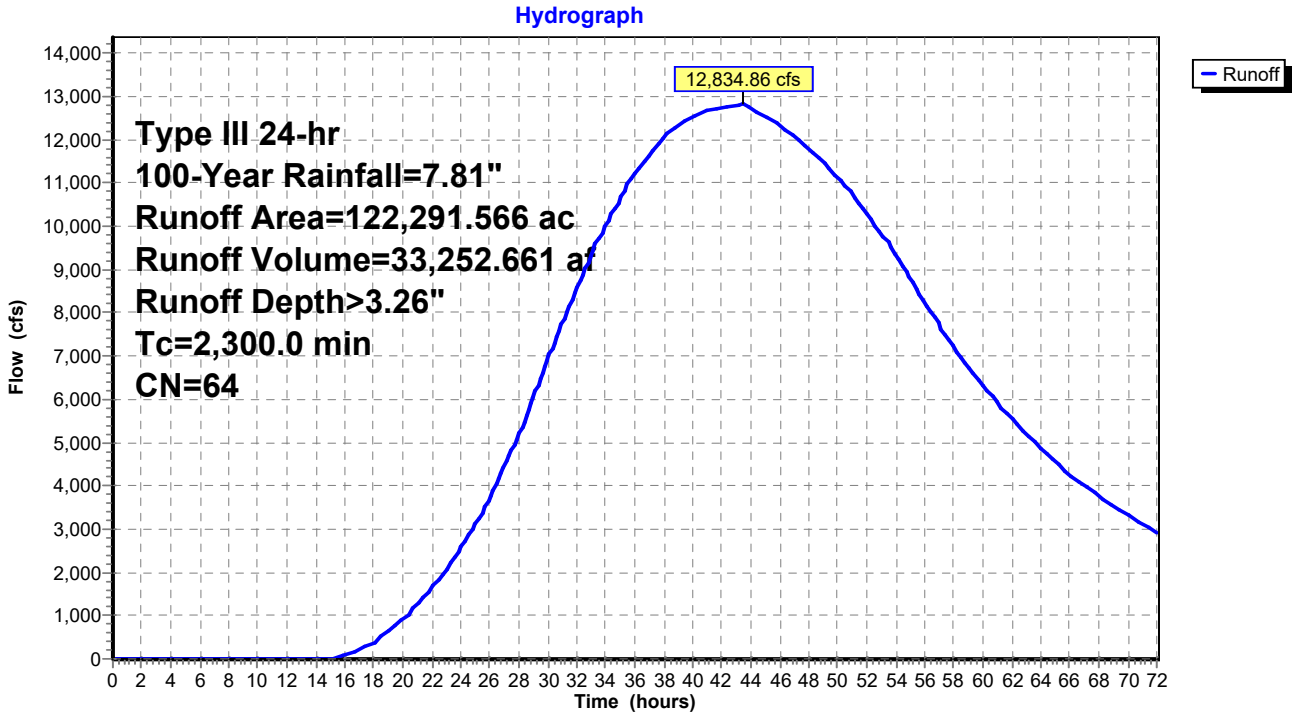
Runoff = 12,834.86 cfs @ 43.44 hrs, Volume= 33,252.661 af, Depth> 3.26"
Routed to Reach DP1 : Design Point 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Type III 24-hr 100-Year Rainfall=7.81"

Area (ac)	CN	Description
*122,291.566	64	
122,291.566		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2,300.0					**Direct Entry, Time of Concentration**

Subcatchment ES1: Upstream Watershed Area

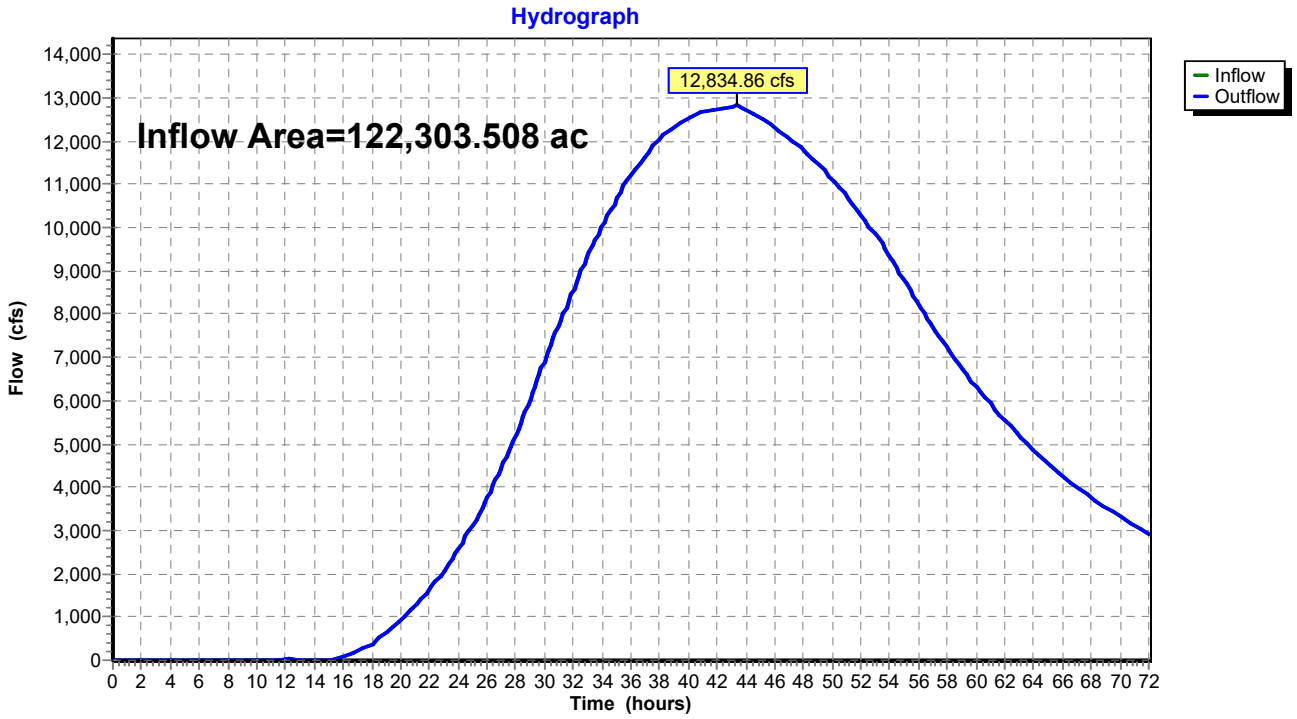


Summary for Reach DP1: Design Point 1

Inflow Area =122,303.508 ac, 0.00% Impervious, Inflow Depth > 3.26" for 100-Year event
Inflow = 12,834.86 cfs @ 43.44 hrs, Volume= 33,258.656 af
Outflow = 12,834.86 cfs @ 43.44 hrs, Volume= 33,258.656 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs

Reach DP1: Design Point 1



Summary for Pond 4P: BIO 2

Inflow Area = 1.521 ac, 30.70% Impervious, Inflow Depth = 6.03" for 100-Year event
Inflow = 11.36 cfs @ 12.05 hrs, Volume= 0.764 af
Outflow = 6.43 cfs @ 12.14 hrs, Volume= 0.764 af, Atten= 43%, Lag= 5.5 min
Discarded = 0.02 cfs @ 12.14 hrs, Volume= 0.053 af
Primary = 6.41 cfs @ 12.14 hrs, Volume= 0.712 af
Routed to Reach DP1 : Design Point 1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Peak Elev= 79.51' @ 12.14 hrs Surf.Area= 2,996 sf Storage= 3,988 cf

Plug-Flow detention time= 65.7 min calculated for 0.764 af (100% of inflow)
Center-of-Mass det. time= 66.1 min (855.0 - 788.9)

Volume	Invert	Avail.Storage	Storage Description
#1	78.00'	5,521 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

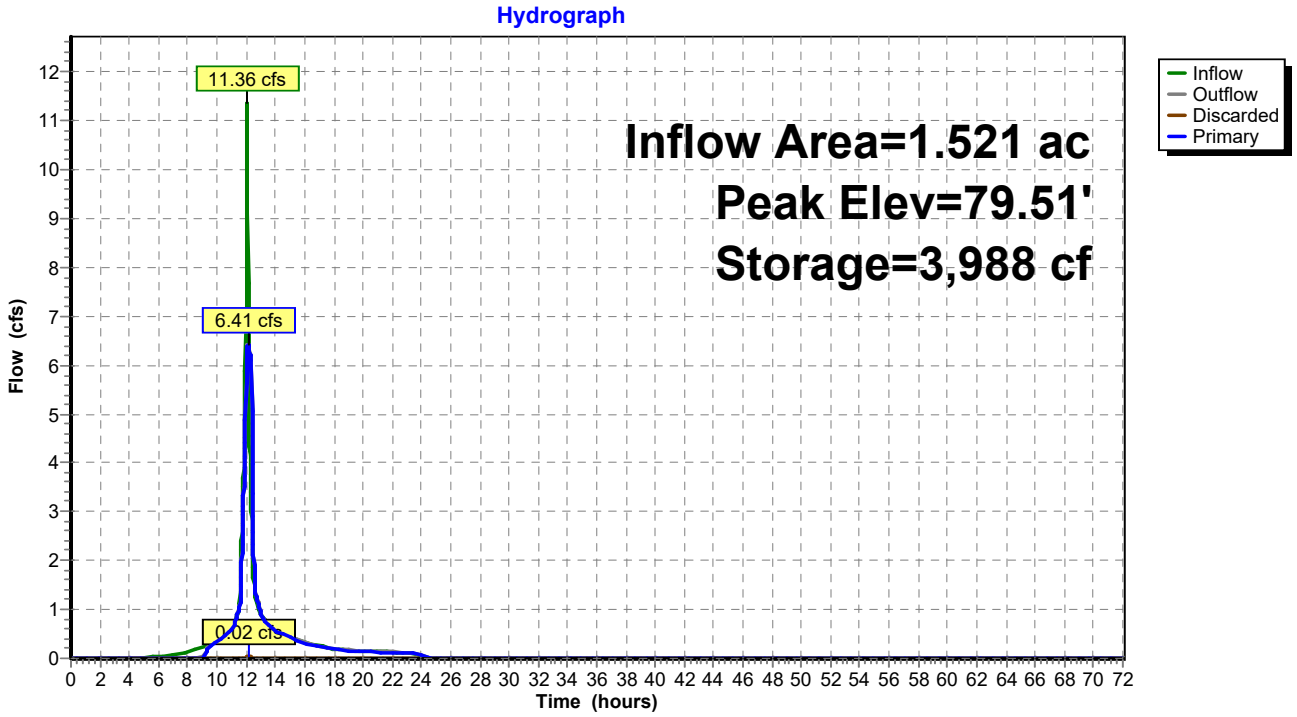
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
78.00	2,296	0	0
80.00	3,225	5,521	5,521

Device	Routing	Invert	Outlet Devices
#1	Discarded	78.00'	**0.250 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 66.00'
#2	Primary	74.40'	**12.0" Round Culvert** L= 41.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 74.40' / 74.00' S= 0.0098 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Device 2	78.50'	**24.0" x 24.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.02 cfs @ 12.14 hrs HW=79.51' (Free Discharge)
└**1=Exfiltration** (Controls 0.02 cfs)

Primary OutFlow Max=6.41 cfs @ 12.14 hrs HW=79.51' TW=0.00' (Dynamic Tailwater)
└**2=Culvert** (Inlet Controls 6.41 cfs @ 8.16 fps)
└**3=Orifice/Grate** (Passes 6.41 cfs of 19.32 cfs potential flow)

Pond 4P: BIO 2


Hydrograph
Inflow Area=1.521 ac
Peak Elev=79.51'
Storage=3,988 cf
11.36 cfs
6.41 cfs
0.02 cfs
Inflow
Outflow
Discarded
Primary
Flow (cfs)
Time (hours)
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72
0 1 2 3 4 5 6 7 8 9 10 11 12

Summary for Pond 9P: HYDRO 2

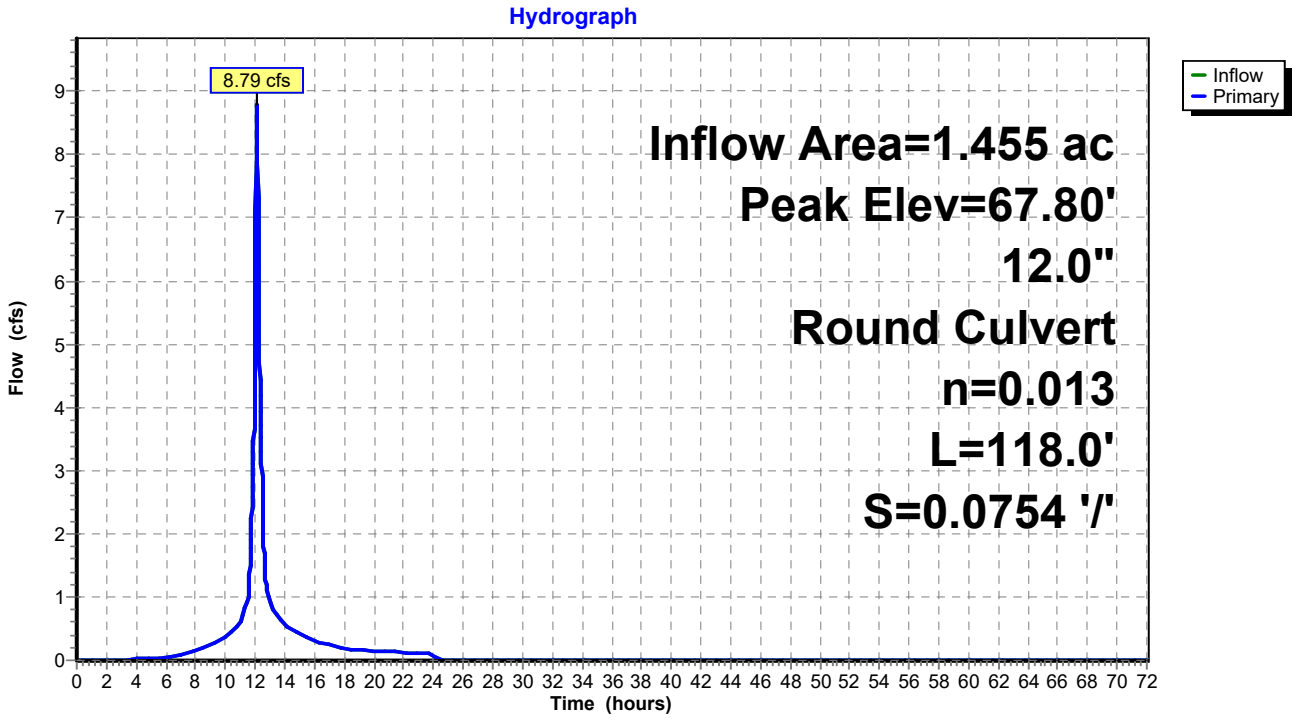
Inflow Area = 1.455 ac, 54.31% Impervious, Inflow Depth = 6.21" for 100-Year event
Inflow = 8.79 cfs @ 12.11 hrs, Volume= 0.753 af
Outflow = 8.79 cfs @ 12.11 hrs, Volume= 0.753 af, Atten= 0%, Lag= 0.0 min
Primary = 8.79 cfs @ 12.11 hrs, Volume= 0.753 af
Routed to Reach DP1 : Design Point 1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Peak Elev= 67.80' @ 12.11 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	61.90'	**12.0" Round Culvert** L= 118.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 61.90' / 53.00' S= 0.0754 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=8.75 cfs @ 12.11 hrs HW=67.75' TW=0.00' (Dynamic Tailwater)
1=Culvert (Inlet Controls 8.75 cfs @ 11.14 fps)

Pond 9P: HYDRO 2



Summary for Pond 11P: HYDRO 5

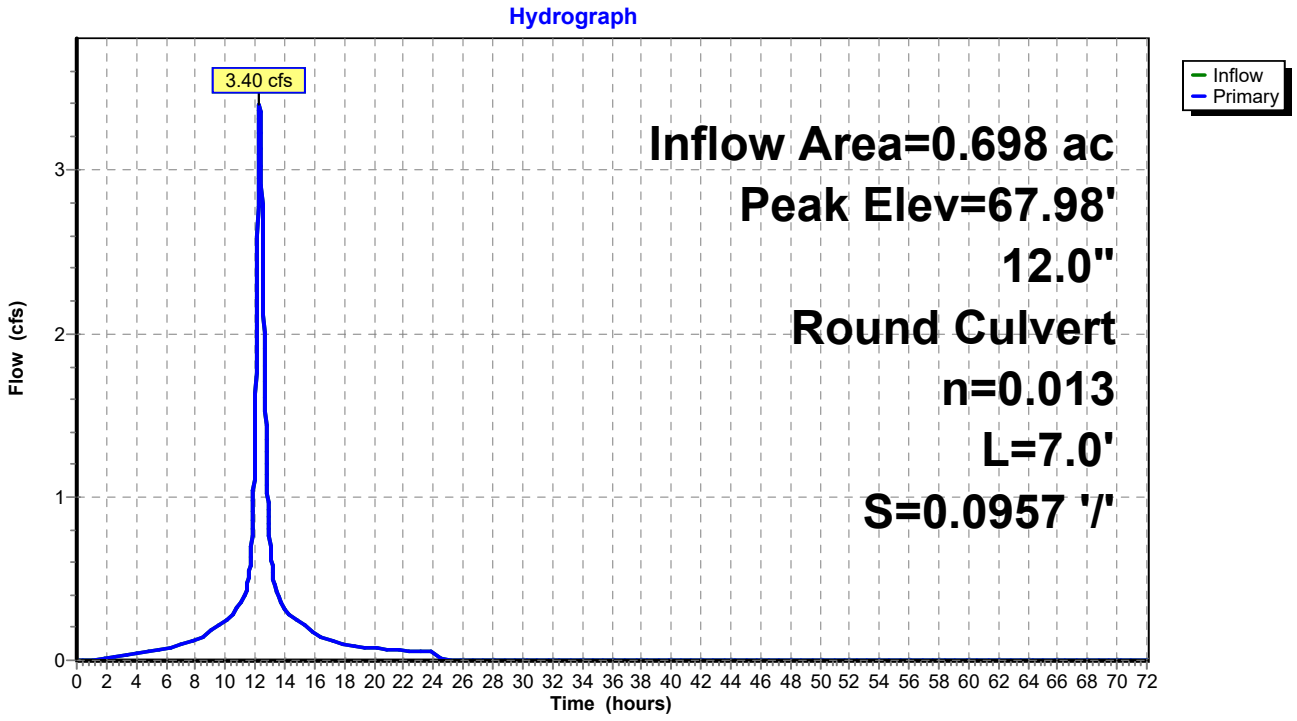
Inflow Area = 0.698 ac, 93.41% Impervious, Inflow Depth = 7.45" for 100-Year event
Inflow = 3.40 cfs @ 12.30 hrs, Volume= 0.433 af
Outflow = 3.40 cfs @ 12.30 hrs, Volume= 0.433 af, Atten= 0%, Lag= 0.0 min
Primary = 3.40 cfs @ 12.30 hrs, Volume= 0.433 af
Routed to Reach DP1 : Design Point 1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Peak Elev= 67.98' @ 12.30 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	66.67'	**12.0" Round Culvert** L= 7.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 66.67' / 66.00' S= 0.0957 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=3.40 cfs @ 12.30 hrs HW=67.98' TW=0.00' (Dynamic Tailwater)
1=Culvert (Inlet Controls 3.40 cfs @ 4.33 fps)

Pond 11P: HYDRO 5



Summary for Pond 25P: HYDRO 4

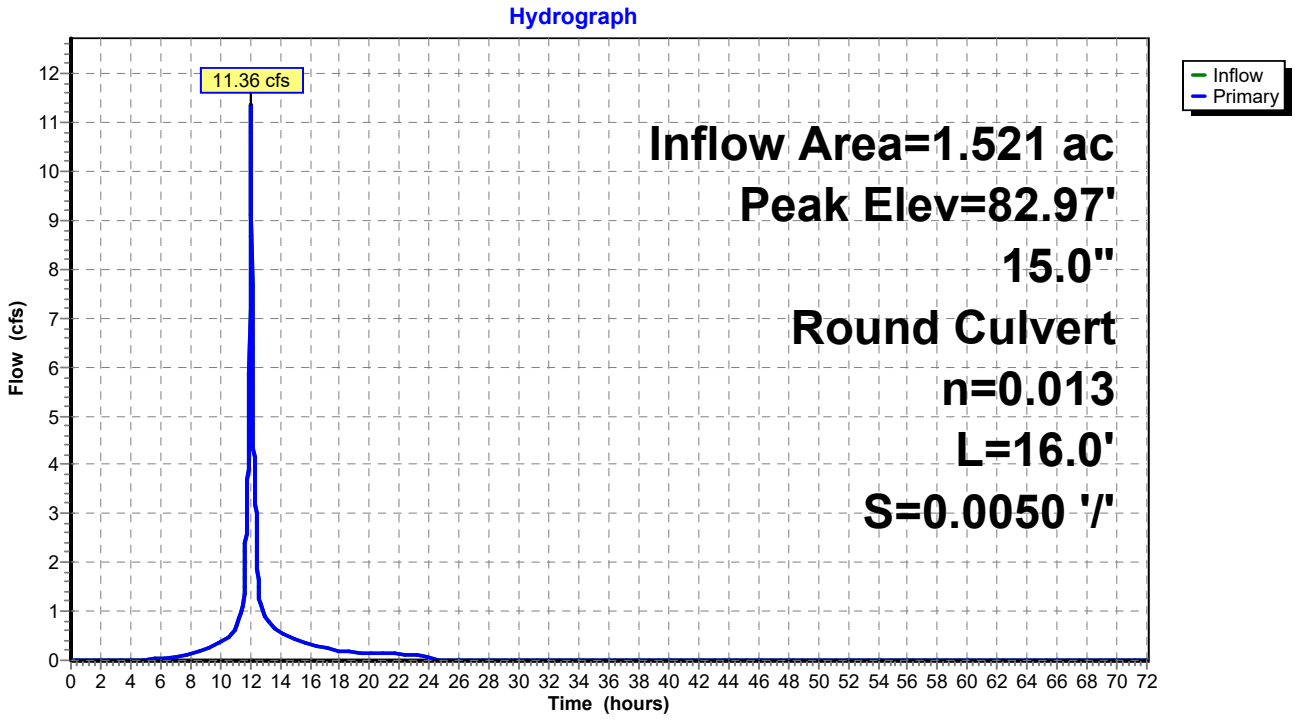
Inflow Area = 1.521 ac, 30.70% Impervious, Inflow Depth = 6.03" for 100-Year event
Inflow = 11.36 cfs @ 12.05 hrs, Volume= 0.764 af
Outflow = 11.36 cfs @ 12.05 hrs, Volume= 0.764 af, Atten= 0%, Lag= 0.0 min
Primary = 11.36 cfs @ 12.05 hrs, Volume= 0.764 af
Routed to Pond 4P : BIO 2

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Peak Elev= 82.97' @ 12.05 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	78.65'	**15.0" Round Culvert** L= 16.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 78.65' / 78.57' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=11.23 cfs @ 12.05 hrs HW=82.89' TW=79.19' (Dynamic Tailwater)
1=Culvert (Inlet Controls 11.23 cfs @ 9.15 fps)

Pond 25P: HYDRO 4



Summary for Pond HYD1: HYDRO 1

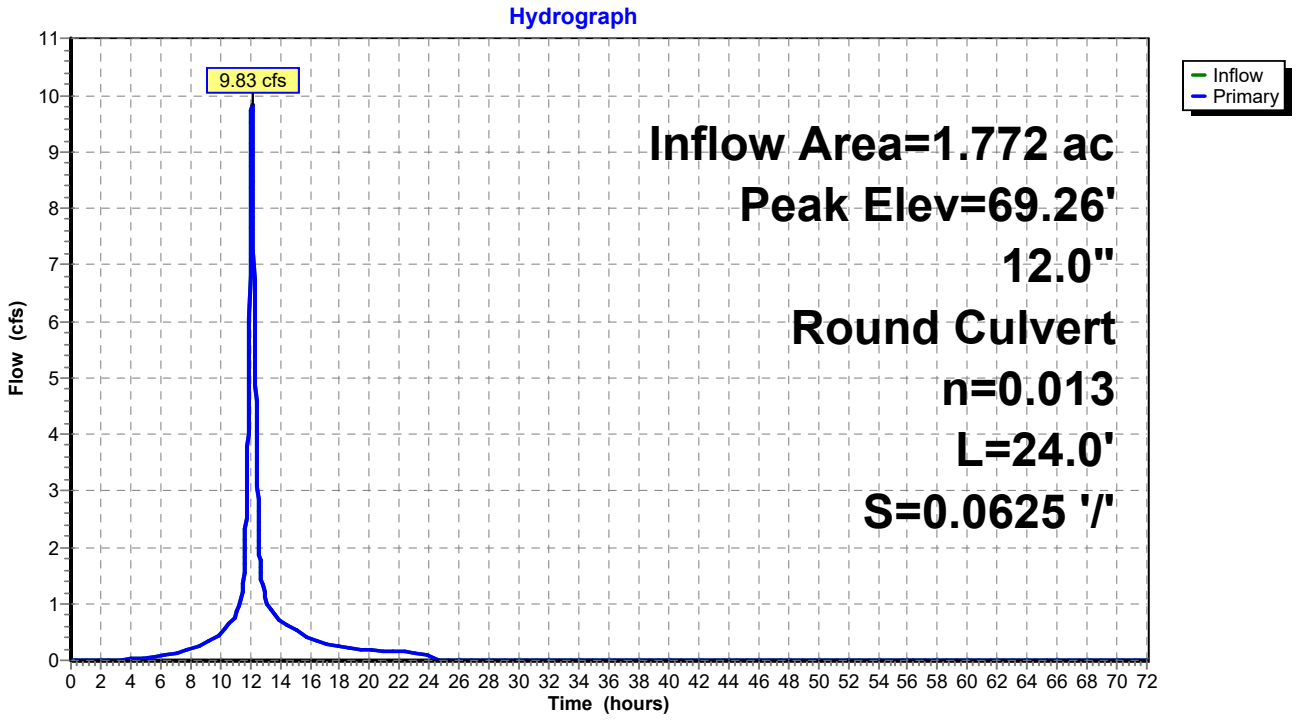
Inflow Area = 1.772 ac, 59.15% Impervious, Inflow Depth = 6.41" for 100-Year event
Inflow = 9.83 cfs @ 12.13 hrs, Volume= 0.947 af
Outflow = 9.83 cfs @ 12.13 hrs, Volume= 0.947 af, Atten= 0%, Lag= 0.0 min
Primary = 9.83 cfs @ 12.13 hrs, Volume= 0.947 af
Routed to Reach DP1 : Design Point 1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Peak Elev= 69.26' @ 12.13 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	62.00'	**12.0" Round Culvert** L= 24.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 62.00' / 60.50' S= 0.0625 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=9.82 cfs @ 12.13 hrs HW=69.24' TW=0.00' (Dynamic Tailwater)
1=Culvert (Inlet Controls 9.82 cfs @ 12.50 fps)

Pond HYD1: HYDRO 1



Summary for Subcatchment 1AS: New Bldg South

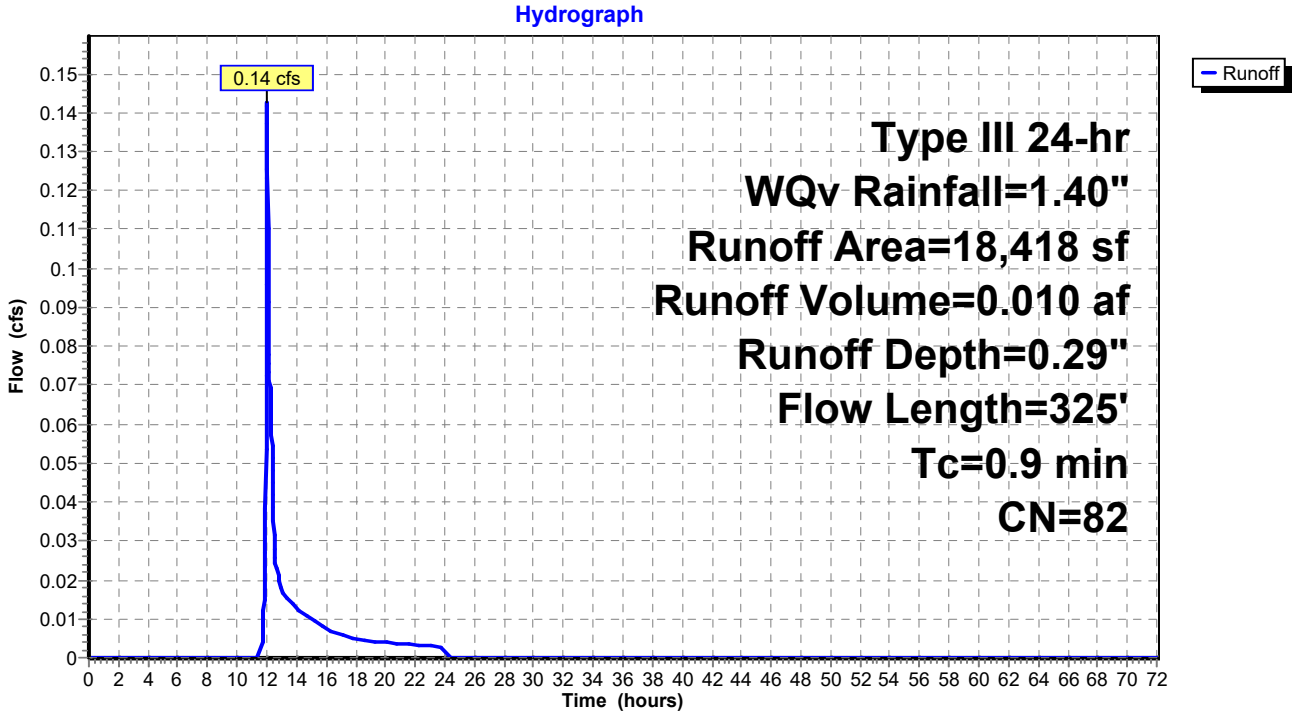
Runoff = 0.14 cfs @ 12.03 hrs, Volume= 0.010 af, Depth= 0.29"
Routed to Pond HYD1 : HYDRO 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Type III 24-hr WQv Rainfall=1.40"

	Area (sf)	CN	Description
	13,418	98	Paved parking, HSG D
*	5,000	39	Green Roof
	18,418	82	Weighted Average
	5,000		27.15% Pervious Area
	13,418		72.85% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.8	262	0.0734	5.50		**Shallow Concentrated Flow, 262 LF SCF @ 7.34% PAVED** Paved Kv= 20.3 fps
0.1	63	0.1500	17.57	13.80	**Pipe Channel, 63 LF @ 15%** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013 Corrugated PE, smooth interior
0.9	325	Total			

Subcatchment 1AS: New Bldg South



Summary for Subcatchment 1BS: New Bldg North

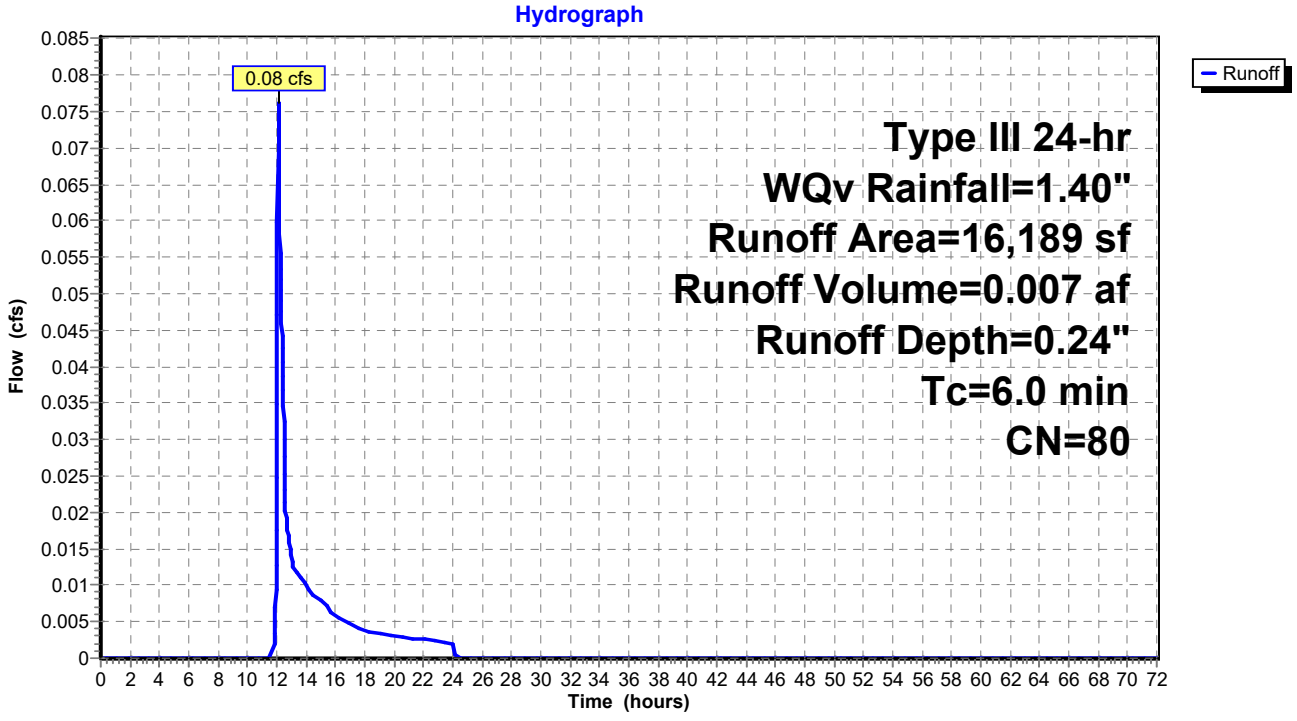
Runoff = 0.08 cfs @ 12.11 hrs, Volume= 0.007 af, Depth= 0.24"
Routed to Pond 9P : HYDRO 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Type III 24-hr WQv Rainfall=1.40"

	Area (sf)	CN	Description
	11,189	98	Paved parking, HSG D
*	5,000	39	Green Roof
	16,189	80	Weighted Average
	5,000		30.89% Pervious Area
	11,189		69.11% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 1BS: New Bldg North



Summary for Subcatchment 1CS: Patio Between Bldgs

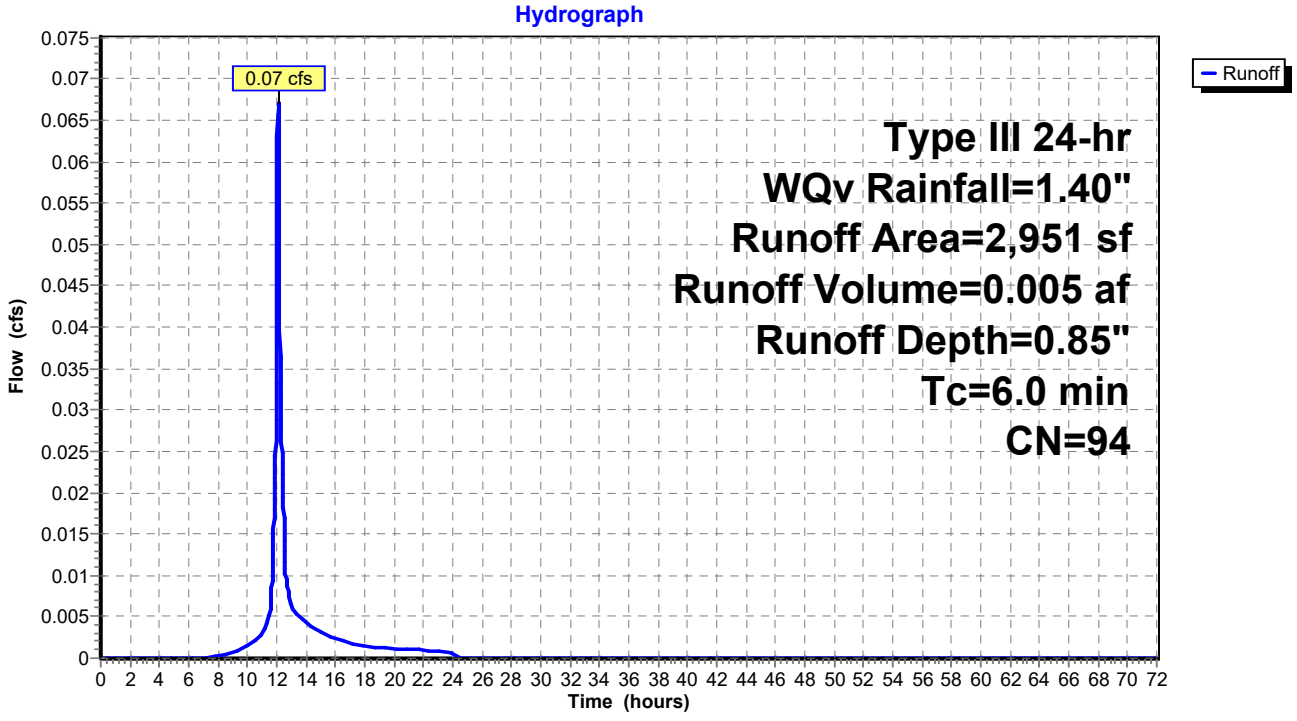
Runoff = 0.07 cfs @ 12.09 hrs, Volume= 0.005 af, Depth= 0.85"
Routed to Pond HYD1 : HYDRO 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Type III 24-hr WQv Rainfall=1.40"

Area (sf)	CN	Description
2,347	98	Roofs, HSG C
604	79	50-75% Grass cover, Fair, HSG C
2,951	94	Weighted Average
604		20.47% Pervious Area
2,347		79.53% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 1CS: Patio Between Bldgs



Summary for Subcatchment 2AS: New Bldg Parking South

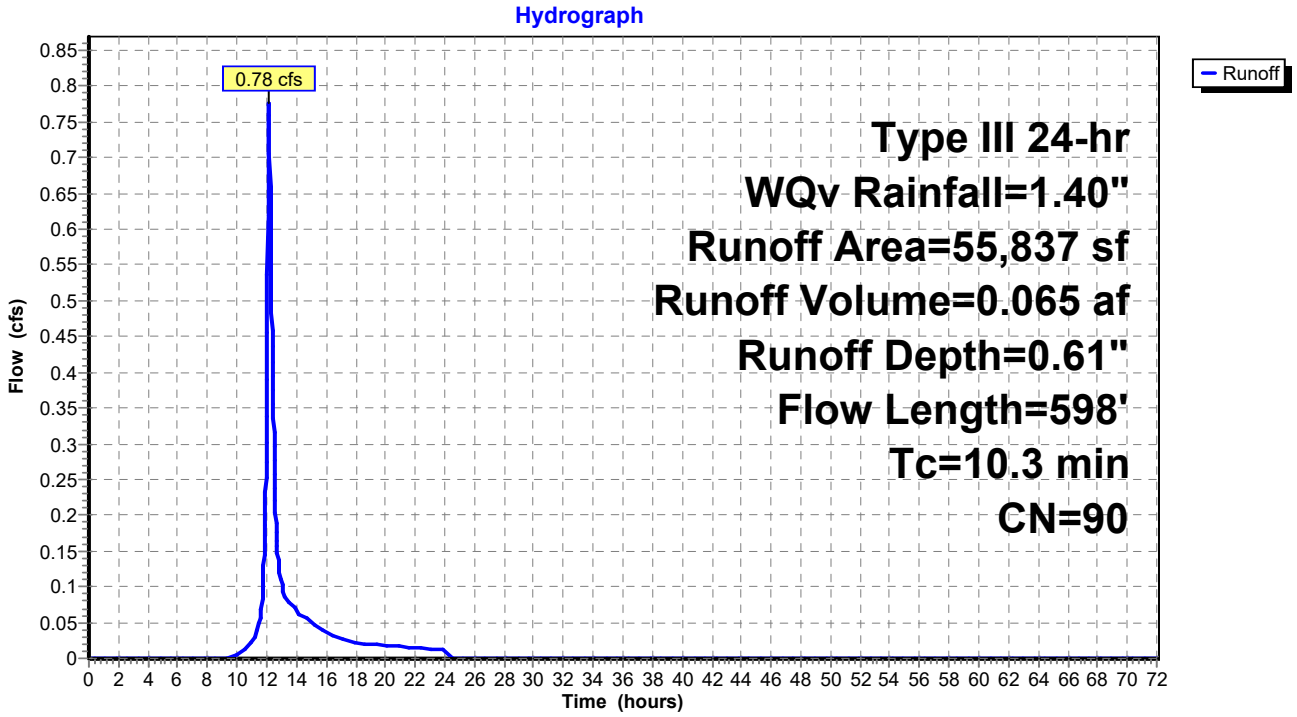
Runoff = 0.78 cfs @ 12.15 hrs, Volume= 0.065 af, Depth= 0.61"
Routed to Pond HYD1 : HYDRO 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Type III 24-hr WQv Rainfall=1.40"

Area (sf)	CN	Description
24,754	80	>75% Grass cover, Good, HSG D
29,905	98	Paved parking, HSG D
1,178	79	Woods/grass comb., Good, HSG D
55,837	90	Weighted Average
25,932		46.44% Pervious Area
29,905		53.56% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.1	100	0.0450	0.23		**Sheet Flow, 100 LF SF @ 4.5% GRASS** Grass: Short n= 0.150 P2= 3.19"
0.4	68	0.1500	2.71		**Shallow Concentrated Flow, 69 LF SCF @ 15% GRASS** Short Grass Pasture Kv= 7.0 fps
2.6	235	0.0100	1.50		**Shallow Concentrated Flow, 235 LF SCF @ 1%** Grassed Waterway Kv= 15.0 fps
0.1	68	0.0595	8.44	2.95	**Pipe Channel, 68 LF @ 6%** 8.0" Round Area= 0.3 sf Perim= 2.1' r= 0.17' n= 0.013 Corrugated PE, smooth interior
0.1	127	0.1250	16.04	12.60	**Pipe Channel, 127 LF @ 12.5%** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013 Corrugated PE, smooth interior
10.3	598	Total			

Subcatchment 2AS: New Bldg Parking South



Summary for Subcatchment 2BS: New Bldg Parking North

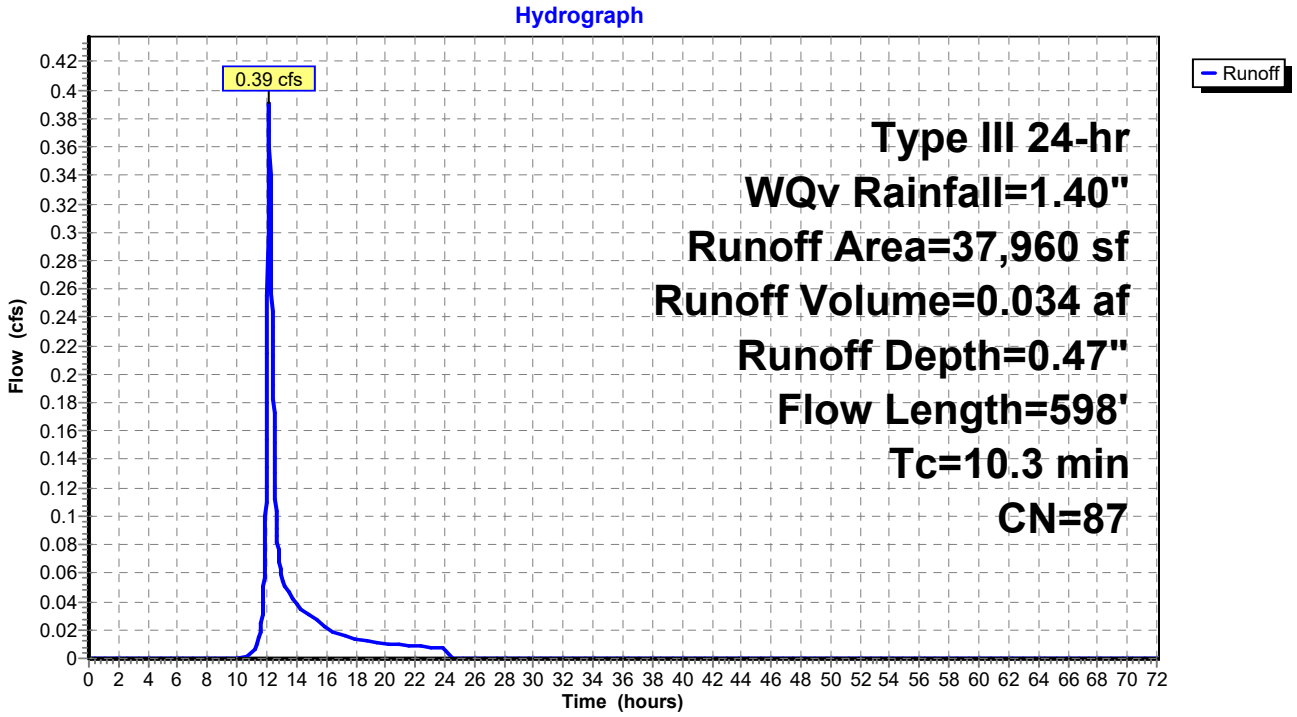
Runoff = 0.39 cfs @ 12.15 hrs, Volume= 0.034 af, Depth= 0.47"
Routed to Pond 9P : HYDRO 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Type III 24-hr WQv Rainfall=1.40"

Area (sf)	CN	Description
16,991	80	>75% Grass cover, Good, HSG D
14,298	98	Paved parking, HSG D
6,671	79	Woods, Fair, HSG D
37,960	87	Weighted Average
23,662		62.33% Pervious Area
14,298		37.67% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.1	100	0.0450	0.23		**Sheet Flow, 100 LF SF @ 4.5% GRASS** Grass: Short n= 0.150 P2= 3.19"
0.4	68	0.1500	2.71		**Shallow Concentrated Flow, 69 LF SCF @ 15% GRASS** Short Grass Pasture Kv= 7.0 fps
2.6	235	0.0100	1.50		**Shallow Concentrated Flow, 235 LF SCF @ 1%** Grassed Waterway Kv= 15.0 fps
0.1	68	0.0595	8.44	2.95	**Pipe Channel, 68 LF @ 6%** 8.0" Round Area= 0.3 sf Perim= 2.1' r= 0.17' n= 0.013 Corrugated PE, smooth interior
0.1	127	0.1250	16.04	12.60	**Pipe Channel, 127 LF @ 12.5%** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013 Corrugated PE, smooth interior
10.3	598	Total			

Subcatchment 2BS: New Bldg Parking North



Summary for Subcatchment 3S: Pool Patio

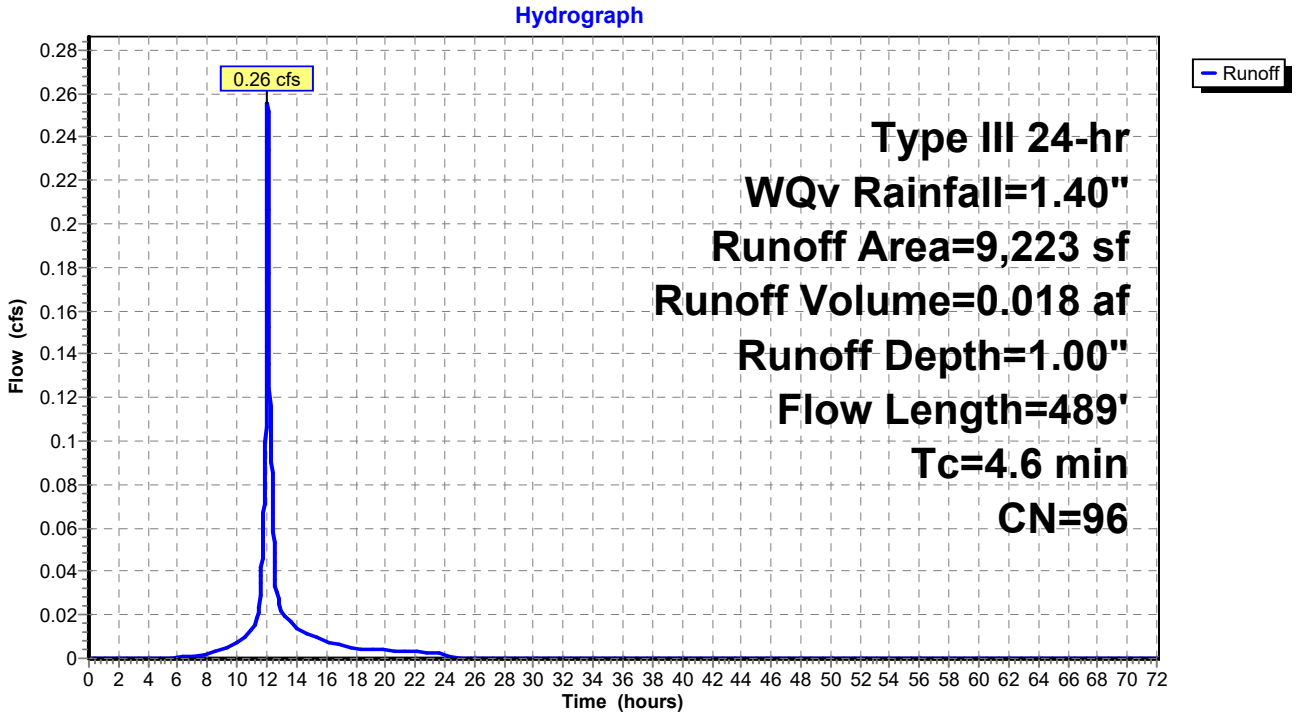
Runoff = 0.26 cfs @ 12.07 hrs, Volume= 0.018 af, Depth= 1.00"
Routed to Pond 9P : HYDRO 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Type III 24-hr WQv Rainfall=1.40"

Area (sf)	CN	Description
8,932	98	Paved parking, HSG A
291	39	>75% Grass cover, Good, HSG A
9,223	96	Weighted Average
291		3.16% Pervious Area
8,932		96.84% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	100	0.2050	0.43		**Sheet Flow, 100 LF SF @ 21% GRASS** Grass: Short n= 0.150 P2= 3.19"
0.1	27	0.0740	4.08		**Shallow Concentrated Flow, 27 LF SCF @ 7.4%** Grassed Waterway Kv= 15.0 fps
0.3	79	0.0412	4.12		**Shallow Concentrated Flow, 79 LF SF @ 4.12% PAVED** Paved Kv= 20.3 fps
0.3	283	0.0960	16.31	20.01	**Pipe Channel, 283 LF @ 9.6%** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.013 Corrugated PE, smooth interior
4.6	489	Total			

Subcatchment 3S: Pool Patio



Summary for Subcatchment 4S: 4

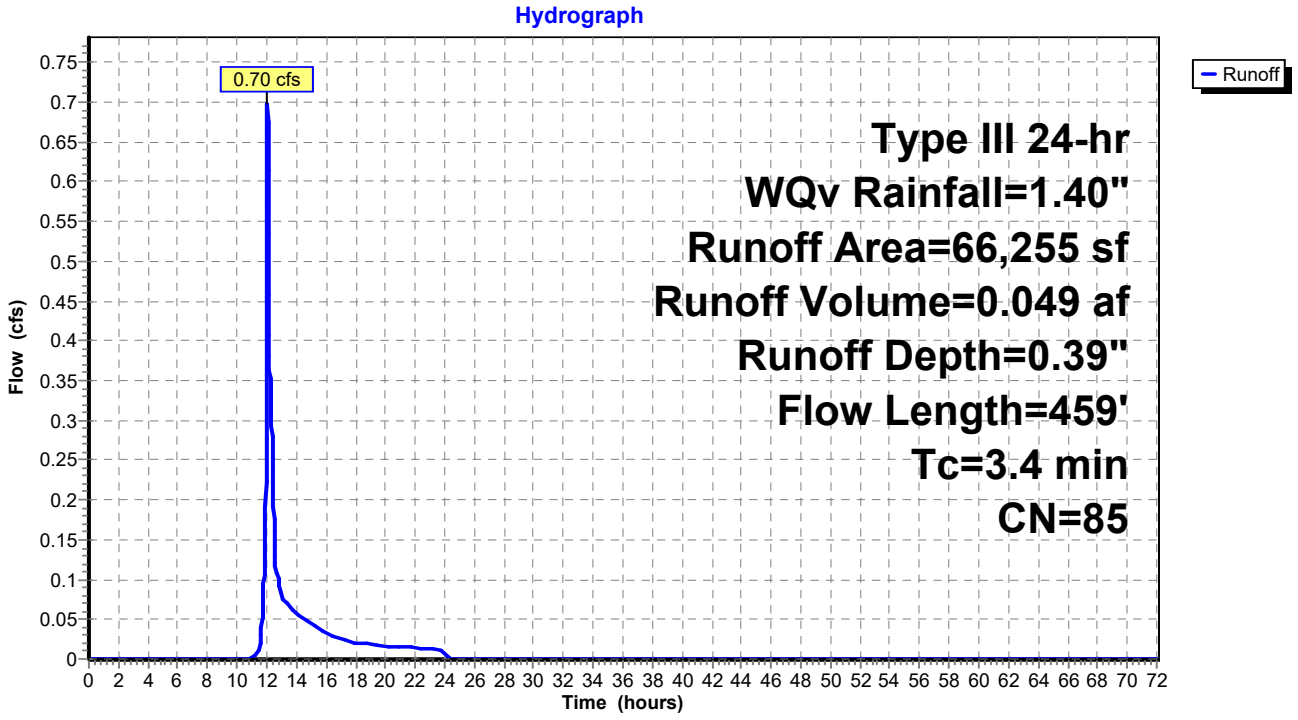
Runoff = 0.70 cfs @ 12.06 hrs, Volume= 0.049 af, Depth= 0.39"
Routed to Pond 25P : HYDRO 4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Type III 24-hr WQv Rainfall=1.40"

Area (sf)	CN	Description
20,343	98	Paved parking, HSG D
37,592	80	>75% Grass cover, Good, HSG D
8,320	79	Woods/grass comb., Good, HSG D
66,255	85	Weighted Average
45,912		69.30% Pervious Area
20,343		30.70% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.1	55	0.2800	0.43		**Sheet Flow, 55 LF SF @ 28% GRASS** Grass: Short n= 0.150 P2= 3.19"
0.7	121	0.0190	2.80		**Shallow Concentrated Flow, 121 LF SCF @ 2% PAVED** Paved Kv= 20.3 fps
0.6	283	0.0270	7.45	5.85	**Pipe Channel, 283 LF @ 2.7%** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013 Corrugated PE, smooth interior
3.4	459	Total			

Subcatchment 4S: 4



Summary for Subcatchment 5S: 5

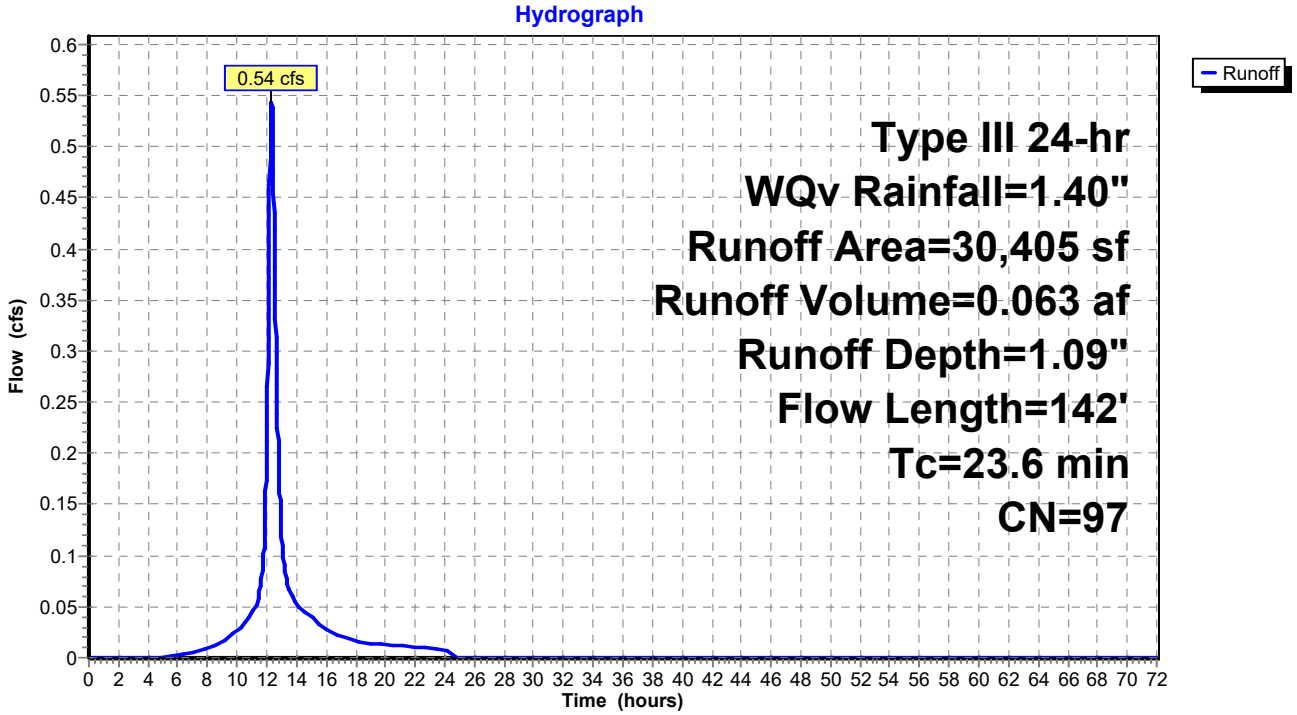
Runoff = 0.54 cfs @ 12.31 hrs, Volume= 0.063 af, Depth= 1.09"
Routed to Pond 11P : HYDRO 5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Type III 24-hr WQv Rainfall=1.40"

Area (sf)	CN	Description
28,401	98	Roofs, HSG D
2,004	80	>75% Grass cover, Good, HSG D
30,405	97	Weighted Average
2,004		6.59% Pervious Area
28,401		93.41% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
23.5	79	0.0100	0.06		**Sheet Flow, 79 LF SF @ 1%** Woods: Light underbrush n= 0.400 P2= 3.19"
0.1	63	0.2470	17.21	6.01	**Pipe Channel, 62.5 LF @ 25%** 8.0" Round Area= 0.3 sf Perim= 2.1' r= 0.17' n= 0.013 Corrugated PE, smooth interior
23.6	142	Total			

Subcatchment 5S: 5



Summary for Subcatchment 6S: 6

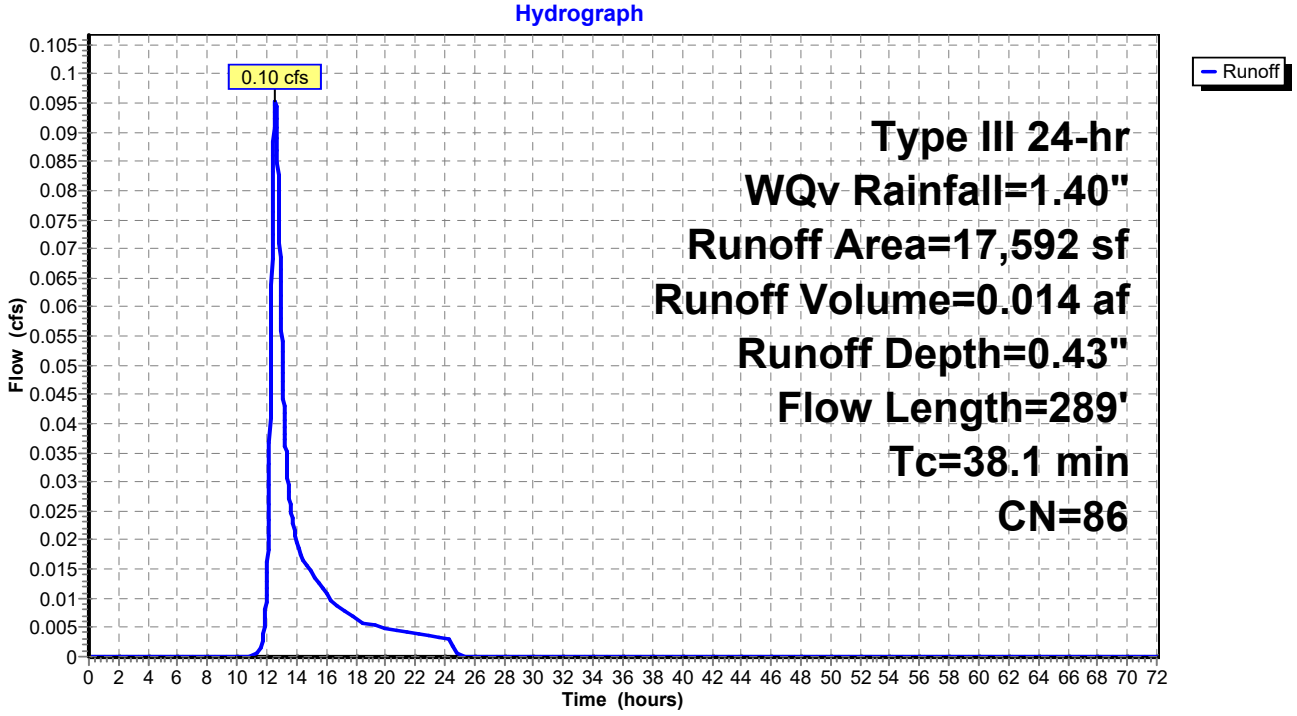
Runoff = 0.10 cfs @ 12.58 hrs, Volume= 0.014 af, Depth= 0.43"
Routed to Reach DP1 : Design Point 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Type III 24-hr WQv Rainfall=1.40"

Area (sf)	CN	Description
11,755	80	>75% Grass cover, Good, HSG D
5,837	98	Paved parking, HSG D
17,592	86	Weighted Average
11,755		66.82% Pervious Area
5,837		33.18% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
37.4	100	0.0050	0.04		**Sheet Flow, 100 LF SF @ 0.5%** Woods: Light underbrush n= 0.400 P2= 3.19"
0.6	82	0.0221	2.23		**Shallow Concentrated Flow, 82 LF SCF @ 2.2% GRASS** Grassed Waterway Kv= 15.0 fps
0.1	107	0.0977	14.18	11.14	**Pipe Channel, 107 LF @ 9.8%** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013 Corrugated PE, smooth interior
38.1	289	Total			

Subcatchment 6S: 6



Summary for Subcatchment 7S: 7

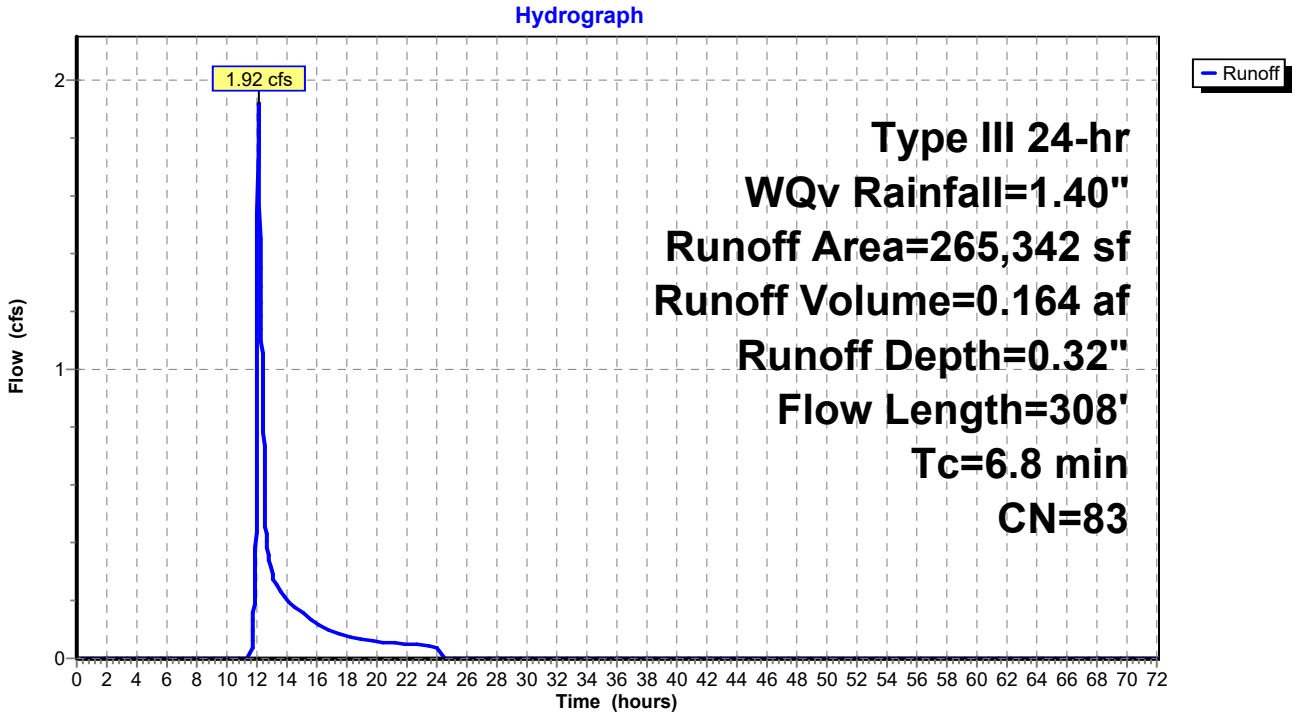
Runoff = 1.92 cfs @ 12.11 hrs, Volume= 0.164 af, Depth= 0.32"
Routed to Reach DP1 : Design Point 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Type III 24-hr WQv Rainfall=1.40"

Area (sf)	CN	Description
63,131	79	Woods, Fair, HSG D
42,621	98	Paved parking, HSG D
145,907	80	>75% Grass cover, Good, HSG D
13,683	96	Gravel surface, HSG D
265,342	83	Weighted Average
222,721		83.94% Pervious Area
42,621		16.06% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.4	100	0.0875	0.31		**Sheet Flow, 100 LF SF @ 8.75% GRASS** Grass: Short n= 0.150 P2= 3.19"
1.1	155	0.1032	2.25		**Shallow Concentrated Flow, 155 LF SCF @ 10% GRASS** Short Grass Pasture Kv= 7.0 fps
0.2	9	0.0278	0.97		**Sheet Flow, 9 LF SF @ 2.8% PAVEMENT** Smooth surfaces n= 0.011 P2= 3.19"
0.0	2	0.0278	1.17		**Shallow Concentrated Flow, 2 LF SCF @ 2.8% GRASS** Short Grass Pasture Kv= 7.0 fps
0.1	42	0.3869	9.33		**Shallow Concentrated Flow, 42 LF SCF @ 39% GRASS** Grassed Waterway Kv= 15.0 fps
6.8	308	Total			

Subcatchment 7S: 7



Summary for Subcatchment ES1: Upstream Watershed Area

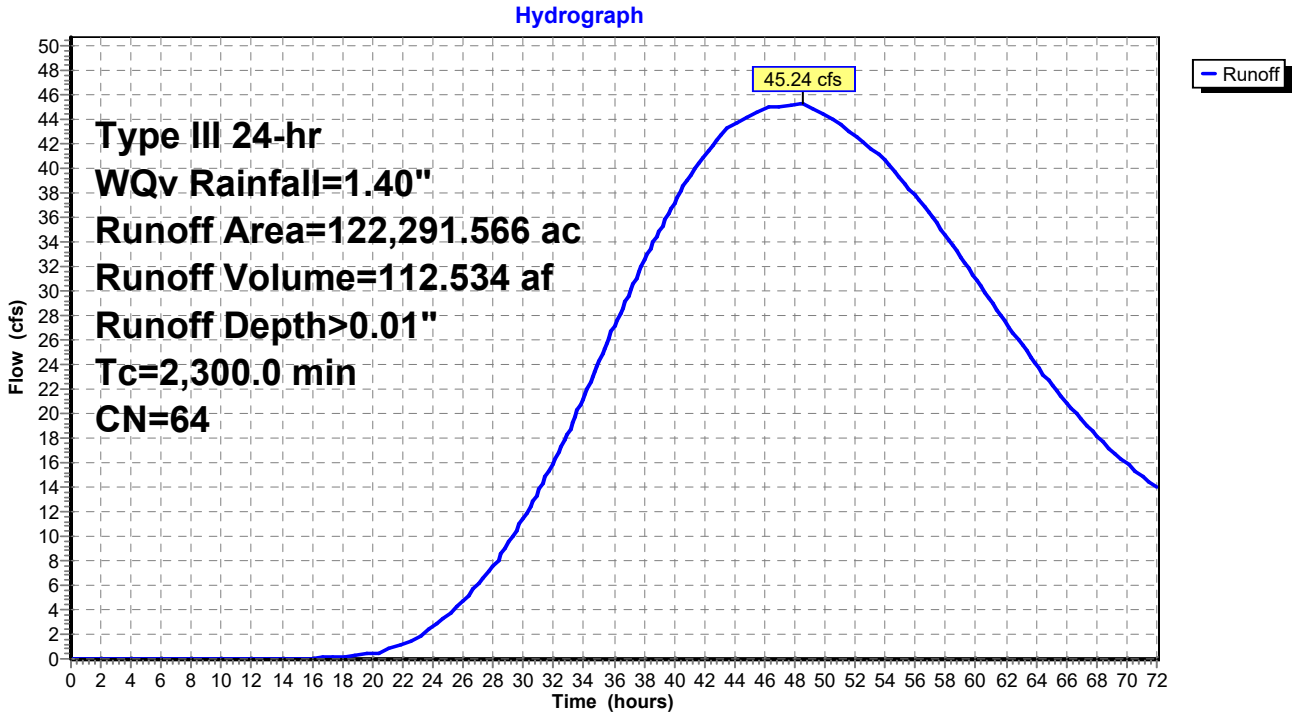
Runoff = 45.24 cfs @ 48.54 hrs, Volume= 112.534 af, Depth> 0.01"
Routed to Reach DP1 : Design Point 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Type III 24-hr WQv Rainfall=1.40"

Area (ac)	CN	Description
*122,291.566	64	
122,291.566		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2,300.0					**Direct Entry, Time of Concentration**

Subcatchment ES1: Upstream Watershed Area

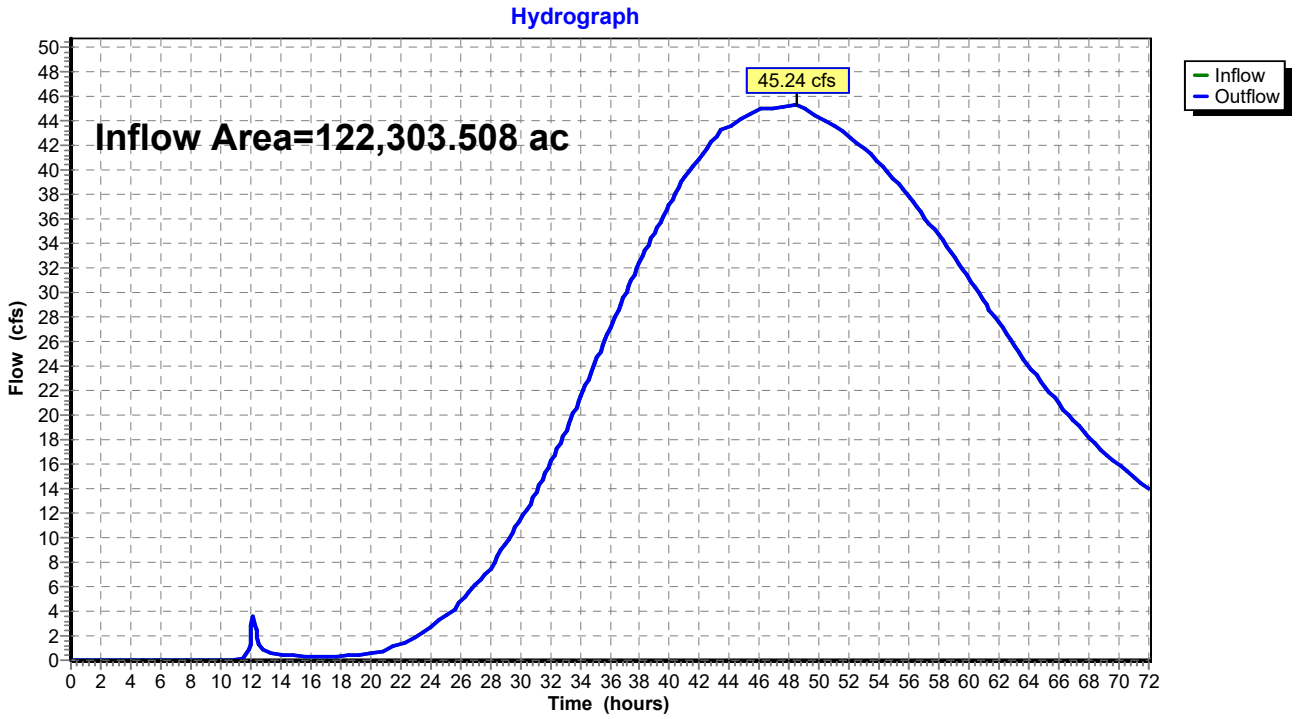


Summary for Reach DP1: Design Point 1

Inflow Area =122,303.508 ac, 0.00% Impervious, Inflow Depth > 0.01" for WQv event
Inflow = 45.24 cfs @ 48.54 hrs, Volume= 112.921 af
Outflow = 45.24 cfs @ 48.54 hrs, Volume= 112.921 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs

Reach DP1: Design Point 1



Summary for Pond 4P: BIO 2

Inflow Area = 1.521 ac, 30.70% Impervious, Inflow Depth = 0.39" for WQv event
Inflow = 0.70 cfs @ 12.06 hrs, Volume= 0.049 af
Outflow = 0.05 cfs @ 14.81 hrs, Volume= 0.049 af, Atten= 93%, Lag= 164.8 min
Discarded = 0.02 cfs @ 14.81 hrs, Volume= 0.043 af
Primary = 0.03 cfs @ 14.81 hrs, Volume= 0.006 af
Routed to Reach DP1 : Design Point 1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Peak Elev= 78.51' @ 14.81 hrs Surf.Area= 2,533 sf Storage= 1,235 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 765.5 min (1,634.4 - 868.9)

Volume	Invert	Avail.Storage	Storage Description
#1	78.00'	5,521 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

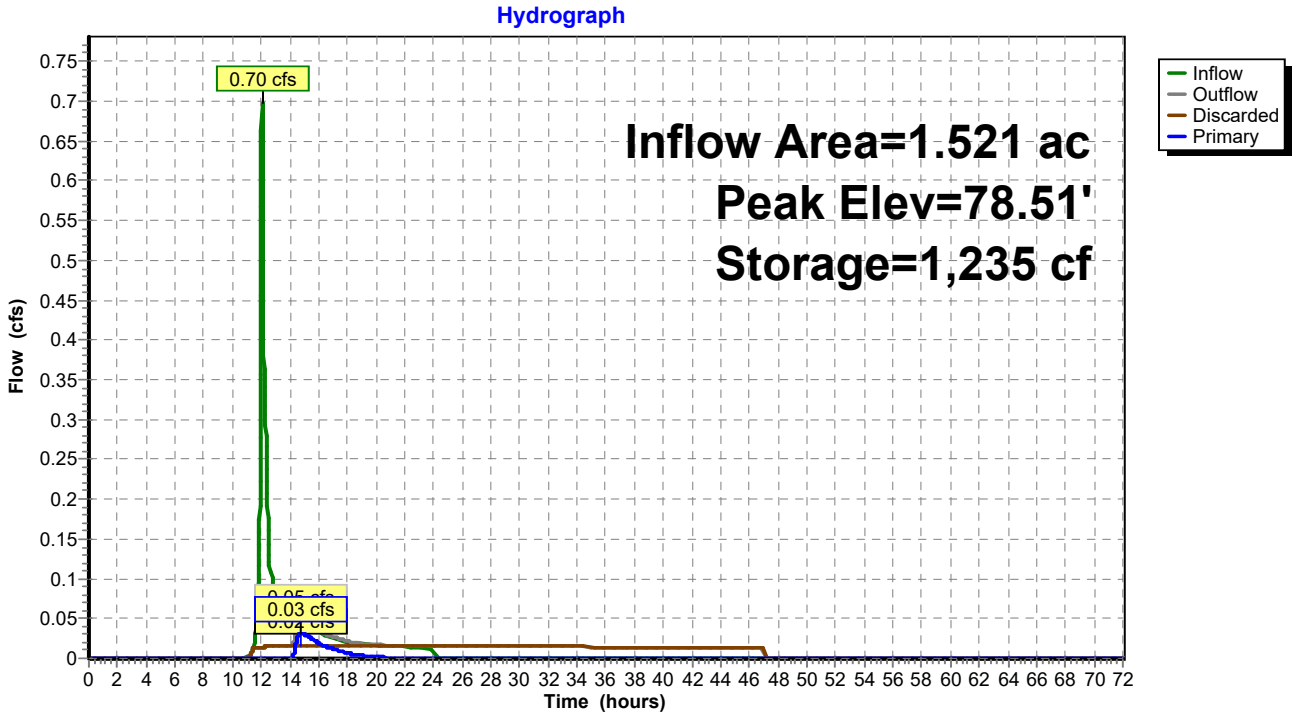
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
78.00	2,296	0	0
80.00	3,225	5,521	5,521

Device	Routing	Invert	Outlet Devices
#1	Discarded	78.00'	**0.250 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 66.00'
#2	Primary	74.40'	**12.0" Round Culvert** L= 41.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 74.40' / 74.00' S= 0.0098 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Device 2	78.50'	**24.0" x 24.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.02 cfs @ 14.81 hrs HW=78.51' (Free Discharge)
└**1=Exfiltration** (Controls 0.02 cfs)

Primary OutFlow Max=0.03 cfs @ 14.81 hrs HW=78.51' TW=0.00' (Dynamic Tailwater)
└**2=Culvert** (Passes 0.03 cfs of 5.67 cfs potential flow)
└**3=Orifice/Grate** (Weir Controls 0.03 cfs @ 0.35 fps)

Pond 4P: BIO 2


Hydrograph
Inflow Area=1.521 ac
Peak Elev=78.51'
Storage=1,235 cf
0.70 cfs
0.03 cfs
Inflow
Outflow
Discarded
Primary
Flow (cfs)
Time (hours)

Summary for Pond 9P: HYDRO 2

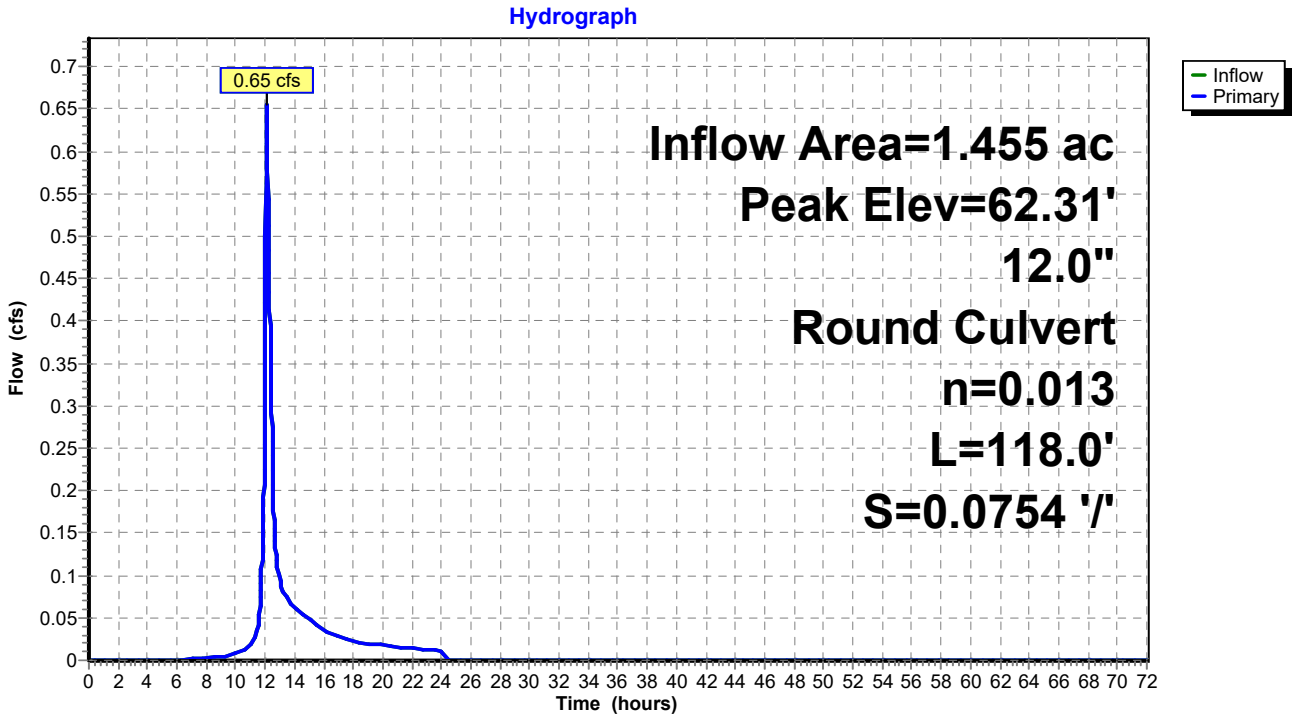
Inflow Area = 1.455 ac, 54.31% Impervious, Inflow Depth = 0.49" for WQv event
Inflow = 0.65 cfs @ 12.11 hrs, Volume= 0.059 af
Outflow = 0.65 cfs @ 12.11 hrs, Volume= 0.059 af, Atten= 0%, Lag= 0.0 min
Primary = 0.65 cfs @ 12.11 hrs, Volume= 0.059 af
Routed to Reach DP1 : Design Point 1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Peak Elev= 62.31' @ 12.11 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	61.90'	**12.0" Round Culvert** L= 118.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 61.90' / 53.00' S= 0.0754 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.65 cfs @ 12.11 hrs HW=62.31' TW=0.00' (Dynamic Tailwater)
1=Culvert (Inlet Controls 0.65 cfs @ 2.17 fps)

Pond 9P: HYDRO 2



Summary for Pond 11P: HYDRO 5

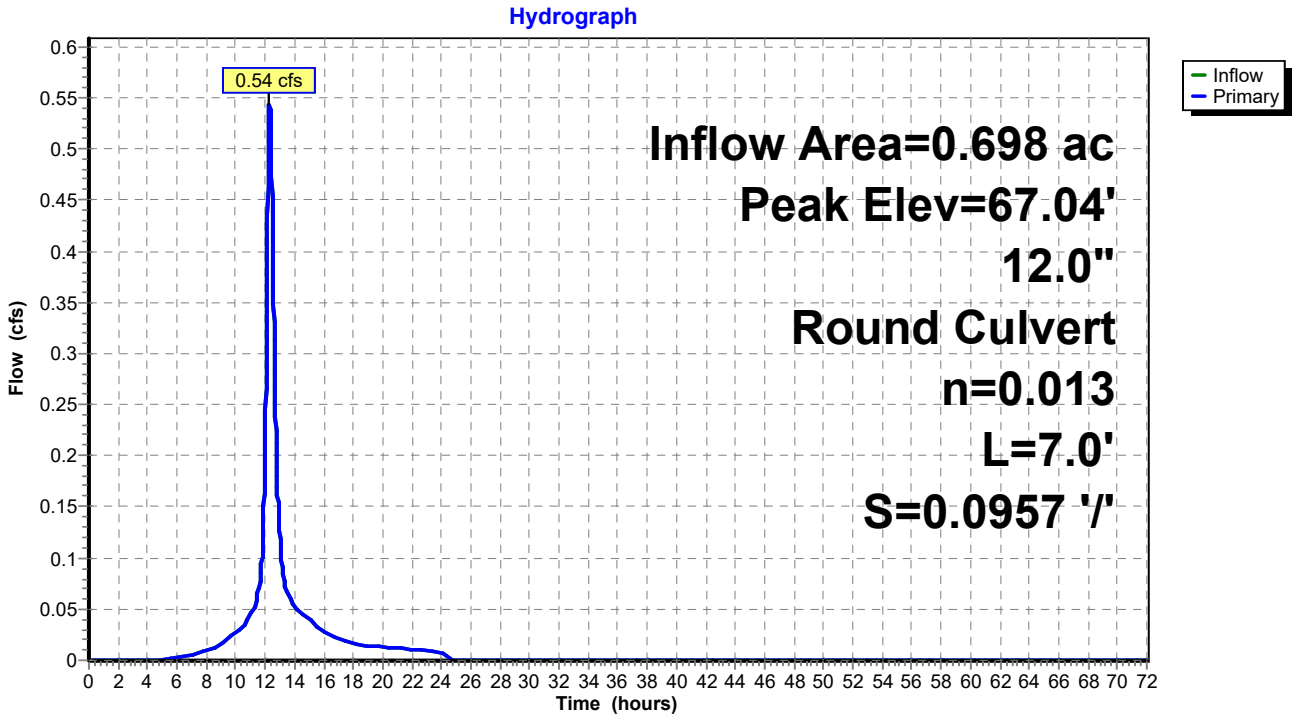
Inflow Area = 0.698 ac, 93.41% Impervious, Inflow Depth = 1.09" for WQv event
Inflow = 0.54 cfs @ 12.31 hrs, Volume= 0.063 af
Outflow = 0.54 cfs @ 12.31 hrs, Volume= 0.063 af, Atten= 0%, Lag= 0.0 min
Primary = 0.54 cfs @ 12.31 hrs, Volume= 0.063 af
Routed to Reach DP1 : Design Point 1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Peak Elev= 67.04' @ 12.31 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	66.67'	**12.0" Round Culvert** L= 7.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 66.67' / 66.00' S= 0.0957 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.54 cfs @ 12.31 hrs HW=67.04' TW=0.00' (Dynamic Tailwater)
1=Culvert (Inlet Controls 0.54 cfs @ 2.07 fps)

Pond 11P: HYDRO 5



Summary for Pond 25P: HYDRO 4

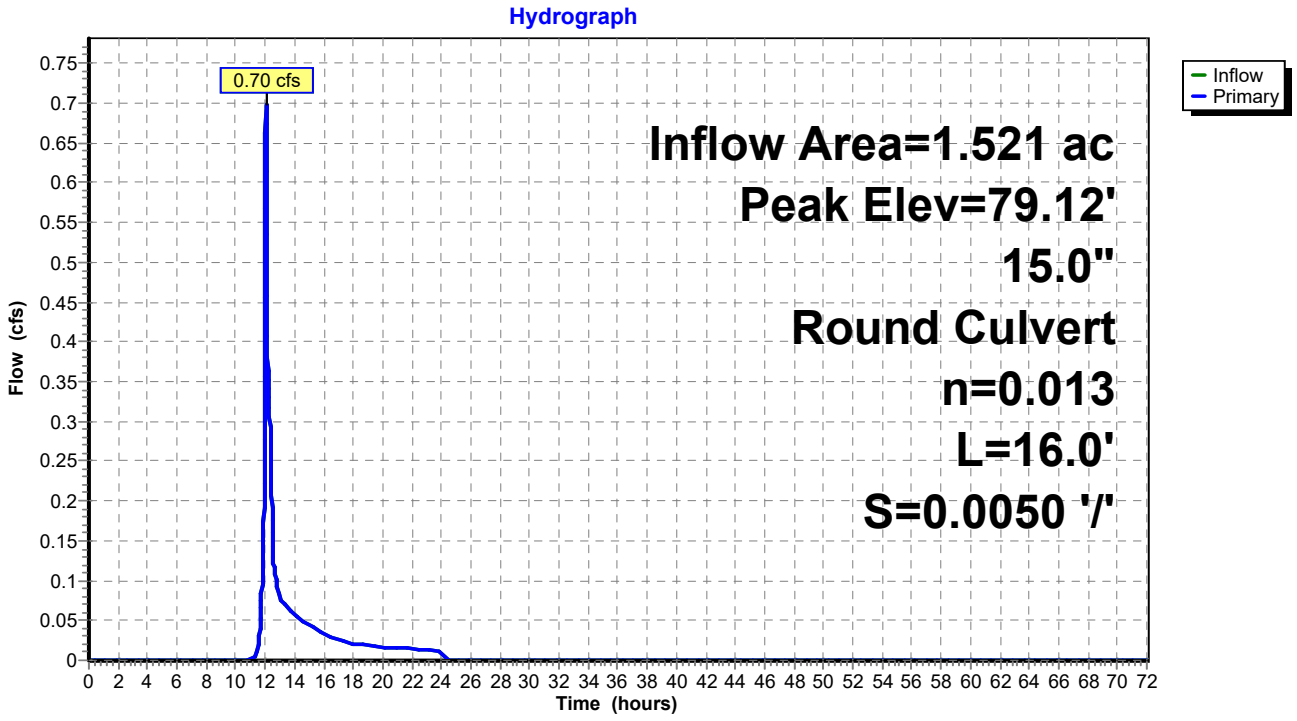
Inflow Area = 1.521 ac, 30.70% Impervious, Inflow Depth = 0.39" for WQv event
Inflow = 0.70 cfs @ 12.06 hrs, Volume= 0.049 af
Outflow = 0.70 cfs @ 12.06 hrs, Volume= 0.049 af, Atten= 0%, Lag= 0.0 min
Primary = 0.70 cfs @ 12.06 hrs, Volume= 0.049 af
Routed to Pond 4P : BIO 2

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Peak Elev= 79.12' @ 12.06 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	78.65'	**15.0" Round Culvert** L= 16.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 78.65' / 78.57' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=0.70 cfs @ 12.06 hrs HW=79.12' TW=78.13' (Dynamic Tailwater)
1=Culvert (Barrel Controls 0.70 cfs @ 2.43 fps)

Pond 25P: HYDRO 4



Summary for Pond HYD1: HYDRO 1

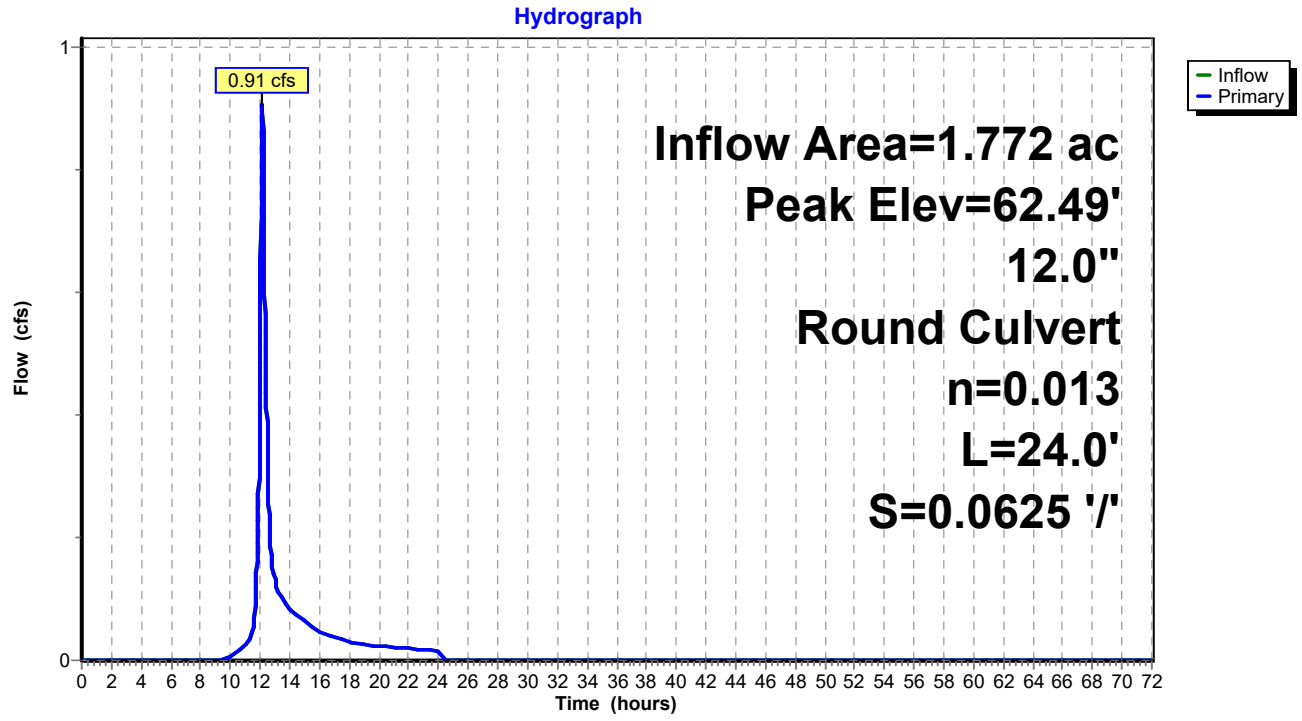
Inflow Area = 1.772 ac, 59.15% Impervious, Inflow Depth = 0.54" for WQv event
Inflow = 0.91 cfs @ 12.14 hrs, Volume= 0.080 af
Outflow = 0.91 cfs @ 12.14 hrs, Volume= 0.080 af, Atten= 0%, Lag= 0.0 min
Primary = 0.91 cfs @ 12.14 hrs, Volume= 0.080 af
Routed to Reach DP1 : Design Point 1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
Peak Elev= 62.49' @ 12.14 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	62.00'	**12.0" Round Culvert** L= 24.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 62.00' / 60.50' S= 0.0625 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.90 cfs @ 12.14 hrs HW=62.49' TW=0.00' (Dynamic Tailwater)
1=Culvert (Inlet Controls 0.90 cfs @ 2.38 fps)

Pond HYD1: HYDRO 1



Appendix K:
Project Evaluation and Design Calculations

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Appendix K - Table A
Step 1 - Evaluation of Green Infrastructure Planning Measures

Group	Practice	Description	Applicable	Project Specific Evaluation
Preservation of Natural Resources	**Preservation of Undisturbed Areas**	Delineate and place into permanent conservation undisturbed forests, native vegetated areas, riparian corridors, wetlands, and natural terrain.	**No**	The proposed site layout has been designed to limit land disturbance to the greatest extent practical. Approximately 102 +/- acres of the 155.9 acre project site will remain undisturbed, in its natural state. The project does not propose permanent conservation of this area at this time.
	Preservation of Buffers	Define, delineate and preserve naturally vegetated buffers along perennial streams, rivers, shorelines and wetlands.	**N/A**	There are no perennial streams, rivers, shorelines, or wetlands on or adjacent to the project site. As such, this green planning measure does not apply.
	Reduction of Clearing and Grading	Limit clearing and grading to the minimum amount needed for roads, driveways, foundations, utilities and stormwater management facilities.	**Yes**	Clearing and grading will be limited to the area of disturbance and will be minimized to the greatest extent practical. As a Redevelopment Project, the majority of the land in question had been previously cleared or graded for construction of the existing buildings, roadways, etc. Site clearing and grading required for redevelopment will be minor in nature. Approximately 102 +/- acres of the 155.9 acre project site will remain undisturbed, in its natural state.
	Locating Development in Less Sensitive Areas	Avoid sensitive resource areas such as floodplains, steep slopes, erodible soils, wetlands, mature forests and critical habitats by locating development to fit the terrain in areas that will create the least impact.	**Yes**	The site layout has been designed to avoid sensitive resource areas to the greatest extent practical. Furthermore, there are no floodplains, highly erodible soils, wetlands, mature forests and critical habitats located on the project site.
	Open Space Design	Use clustering, conservation design or open space design to reduce impervious cover, preserve more open space and protect water resources.	**Yes**	The site layout has been designed to maximize open space. Impervious surfaces have been minimized to the greatest extent practical and approximately 65% of the project sitewill be maintained as vegetated open space.
	Soil Restoration	Restore the original properties and porosity of the soil by deep till and amendment with compost to reduce the generation of runoff and enhance the runoff reduction performance of practices such as downspout disconnections, grass channels, filter strips, and tree clusters.	**Yes**	Full soil restoration is proposed for all areas of disturbance that will not become hardscape. All areas will be stabilized with seed & mulch, and landscaped areas will be provided.
Reduction of Impervious Cover	**Roadway Reduction**	Minimize roadway widths and lengths to reduce site impervious area	**N/A**	No new roadways are proposed as part of this project.
	Sidewalk Reduction	Minimize sidewalk lengths and widths to reduce site impervious area	**Yes**	Sidewalk widths and lengths have been minimized to the greatest extent practical while alsoensuring comfortable and safe pedestrian access throughout the site.
	Driveway Reduction	Minimize driveway lengths and widths to reduce site impervious area	**Yes**	Driveway widths and lengths have been minimized to the greatest extent practical while maintaining access for emergency vehicles throughout the site.
	Cul-de-sac Reduction	Minimize the number of cul-de-sacs and incorporate landscaped areas to reduce their impervious cover.	**N/A**	No cul-de-sacs are proposed as part of this project.
	Building Footprint Reduction	Reduce the impervious footprint of residences and commercial buildings by using alternate or taller buildings while maintaining the same floor to area ratio.	**No**	All new building area has been allocated to efficiently implement the intended use, be architecturally appropriate for the surrounding neighborhood, and meet proposed zoning requirements consistent with other areas in the Town.
	Parking Reduction	Reduce imperviousness on parking lots by eliminating unneeded spaces, providing compact car spaces and efficient parking lanes, minimizing stall dimensions, using porous pavement surfaces in overflow parking areas, and using multi-storied parking decks where appropriate.	**Yes**	Porous pavement has been proposed at the project site.

Appendix K - Table B
Step 2 - Determine Water Quality Treatment Volume (WQv)

Determine Pre- and Post-Development Impervious Cover Areas				
Watershed Pre-Development Impervious Area:	172,059	sf =	3.95	ac
Watershed Post-Development Impervious Area:	186,956	sf =	4.29	ac
Total Area Within Work Limits:	308,405	sf =	7.08	ac
Existing Disturbed Impervious Area:	107,395	sf =	2.47	ac
New Development Impervious Area:	14,897	sf =	**0.34**	**ac**
Redevelopment Impervious % (based on proposed treatment practice)	75	%		
Redevelopment Impervious Area:	80,546	sf =	**1.85**	**ac**

Determine the Initial Water Quality Volume (WQv)				
WQv(acre-feet) = [(P)(Rv)(A)] /12				
Rv = 0.05+0.009(I)				
I = Impervious Cover (%)				
P=	1.40	*inch*		
I=	31%			
Rv=	0.329			
Initial WQv=	**11,821**	cf =	**0.271**	**ac-ft**

Determine Individual Practice Water Quality Volume (WQv)							
Subcatchment Area	**Development Type**	**Total Area** *(Acres)*	**Impervious Area*** *(Acres)*	**Percent Impervious** *%*	**Rv**	**WQv** *(ft^3)*	**Description**
50	New Development	0.115	0.115	100%	0.95	554	Green Roof (Ext)
100	New Development	0.115	0.115	100%	0.95	554	Green Roof (Ext)
1A,1C,2A	Redevelopment	1.772	1.048	59%	0.58	5,244	Hydrodynamic Separator
1B,2B,3	Redevelopment	1.455	0.790	54%	0.54	3,984	Hydrodynamic Separator
4	New Development	1.521	0.467	31%	0.33	2,522	Bioretention
5	Redevelopment	0.698	0.652	93%	0.89	3,159	Hydrodynamic Separator
Total		10.36	3.72	36%	0.37	**16,018**	

** As per Section 9.3.2 of Chapter 9: Redevelopment of the NYSDEC Stormwater Design Manual, the plan proposes use of either standard practices to treat 25% or alternative practices to treat 75% of the WQv from existing disturbed, impervious area as well as any additional runoff from tributary areas that are not within the disturbed, impervious area.*

Appendix K - Table C

Step 3 - Determine Minimum Required Runoff Reduction Volume (RRv)

Section 4.3 of the NYSDEC Stormwater Management Design Manual describes the Runoff Reduction Volume equation as:

RRv = (P x Rv* x Ai) / 12

where: RRv = Runoff Reduction Volume (acre-feet)
P = 90% Rainfall Event Number (inches) (interpolated from Design Manual Fig 4.1)
Rv = 0.05 + 0.009 (I), where I is 100% impervious = 0.95 constant
Ai = (S x Aic) = Impervious cover targeted for runoff reduction
Aic = Total area of new impervious cover (acres)
S = Hydrologic Soil Group (HSG) Specific Reduction Factor
where:

HSG A=	0.55	HSG C=	0.30
HSG B=	0.40	HSG D=	0.20

The following table presents the RRv calculations for each of the proposed stormwater management practices (SMPs).

Enter the Soils Data for the site

Soil Group	Acres	S
A	5.93	0.55
B	0.00	0.40
C	0.00	0.30
D	0.00	0.20
Total Area	5.93	acres

Calculate the Minimum RRv

S =	**0.55**	
Impervious =	0.34	acre
Precipitation =	1.40	in
Rv	0.95	
Minimum RRv	**908**	**ft^3**
	0.021	ac-ft

Appendix K - Table D
Step 3 - Evaluation of Green Infrastructure Techniques

Design Variant	Practice	Description	Applicable	Project Specific Evaluation/Justification
RR-1	**Conservation of Natural Areas**	Retain the pre-development hydrologic and water quality characteristics of undisturbed natural areas, stream and wetland buffers by restoring and/or permanently conserving these areas on a site.	**No**	The project site does not contain any significant natural resources. The majority of the site has been previously disturbed. Approximately 102 +/- Acres will remain undisturbed, in its natural state. The project does not propose permanent conservation of these areas at this time.
RR-2	**Sheet flow to Riparian Buffers or Filter Strips**	Undisturbed natural areas such as forested conservation areas and stream buffers or vegetated filter strips and riparian buffers can be used to treat and control stormwater runoff from some areas of a development project.	**No**	No impervious areas flow to Design Point 1. Due to Design Point 2 being located within Raymond Avenue and an existing piped stormwater conyenace system, this technique is not feasible.
RR-3	**Tree Planting / Tree Box**	Plant or conserve trees to reduce stormwater runoff, increase nutrient uptake, and provide bank stabilization. Trees can be used for applications such as landscaping, stormwater management practice areas, and conservation areas.	**No**	The project proposes the preservation of existing mature trees, as well as the planting of numerous trees throughout the site, in order to reduce stormwater runoff, increase nutrient uptake, and provide bank stabilization. However, credit for these trees will not be taken toward an area reduction in the RRv calculations.
RR-4	**Disconnection of Rooftop Runoff**	Direct runoff from residential rooftop areas and upland overland runoff flow to designated pervious areas to reduce runoff volumes and rates.	**No**	Disconnected rooftop downspouts are proposed at a number of locations. However, no areas contain a long enough flow path before reconnecting with impervious areas to qualify for the rooftop disconnection credit.
RR-5	**Vegetated Swale**	The natural drainage paths, or properly designed vegetated channels, can be used instead of constructing underground storm sewers or concrete open channels to increase time of concentration, reduce the peak discharge, and provide infiltration.	**No**	The site has been designed to place greater emphasis on sheet flow instead of channeled flow. Stormwater practices have been designed to provide management and treatment at the source. A vegetated swale is proposed along the western edge of the project site to divert clean runoff from impervious area. However, credit for this practice will not be taken in the RRv calculations.
RR-6	**Rain Garden**	Manage and treat small volumes of stormwater runoff using a conditioned planting soil bed and planting materials to filter runoff stored within a shallow depression.	**No**	Due to the limited tributary area to rain gardens (less than or equal to 1,000SF), a rain garden is not practical at this site.
RR-7	**Stormwater Planter**	Small landscaped stormwater treatment devices that can be designed as infiltration or filtering practices. Stormwater planters use soil infiltration and biogeochemical processes to decrease stormwater quantity and improve water quality.	**No**	Stormwater planters are proposed on the site but credit for them has not been applied.
RR-8	**Rain Barrels/ Cisterns**	Capture and store stormwater runoff to be used for irrigation systems or filtered and reused for non-contact activities.	**No**	Rain Barrels/Cisterns are not proposed on-site due to the need for active management/maintenance and initial capital cost. In addition, the cold climate of the project area would require additional protection measures from freezing.
RR-9	**Porous Pavement**	Pervious types of pavements that provide an alternative to conventional paved surfaces, designed to infiltrate rainfall through the surface, thereby reducing stormwater runoff from a site and providing some pollutant uptake in the underlying soils.	**No**	Porous pavement is not proposed at this site.
RR-10	**Green Roof**	Capture runoff by a layer of vegetation and soil installed on top of a conventional flat or sloped roof. The rooftop vegetation allows evaporation and evapotranspiration processes to reduce volume and discharge rate of runoff entering conveyance system.	**Yes**	Green roofs are proposed on Buildings 50 and 100 as impervious redution practices.
	Stream Daylighting	Stream Daylight previously-culverted/piped streams to restore natural habitats, better attenuate runoff by increasing the storage size, promoting infiltration, and help reduce pollutant loads.	**No**	No stream daylighting opportunities are present on this site.

Appendix K - Table E							
Summary Table: Runoff Reduction Volume and Treated volumes							
	Runoff Reduction Techiques/Standard SMPs		**Total Contributing Area**	**Total Contributing Impervious Area**	**WQv Reduced (RRv)**	**WQv Treated**	
			(acres)	**(acres)**	**cf**	**cf**	
Area/Volume Reduction	Conservation of Natural Areas	RR-1	0.00	0.00			
	Sheetflow to Riparian Buffers/Filter Strips	RR-2	0.00	0.00			
	Tree Planting/Tree Pit	RR-3	0.00	0.00			
	Disconnection of Rooftop Runoff	RR-4		0.00			
	Vegetated Swale	RR-5	0.00	0.00	0		
	Rain Garden	RR-6	0.00	0.00	0		
	Stormwater Planter	RR-7	0.00	0.00	0	0	
	Rain Barrel/Cistern	RR-8	0.00	0.00	0		
	Porous Pavement	RR-9	0.00	0.00	0		
	Green Roof (Intensive & Extensive)	RR-10	1.77	1.05	1,108		
Standard SMPs w/RRv Capacity	Infiltration Trench	I-1	0.00	0.00	0	0	
	Infiltration Basin	I-2	0.00	0.00	0	0	
	Dry Well	I-3	0.00	0.00	0	0	
	Underground Infiltration System	I-4	0.00	0.00	0	0	
	Bioretention	F-5	1.52	0.47	1,036	1,555	
	Dry Swale	O-1			0	0	
Standard SMPs	Micropool Extended Detention (P-1)	P-1	0.00	0.00		0	
	Wet Pond (P-2)	P-2	0.00	0.00		0	
	Wet Extended Detention (P-3)	P-3	0.00	0.00		0	
	Multiple Pond System (P-4)	P-4	0.00	0.00		0	
	Pocket Pond (P-5)	P-5	0.00	0.00		0	
	Surface Sand Filter (F-1)	F-1	0.00	0.00		0	
	Underground Sand Filter (F-2)	F-2	0.00	0.00		0	
	Perimeter Sand Filter (F-3)	F-3	0.00	0.00		0	
	Organic Filter (F-4)	F-4	0.00	0.00		0	
	Shallow Wetland (W-1)	W-1	0.00	0.00		0	
	Extended Detention Wetland (W-2)	W-2	0.00	0.00		0	
	Pond/Wetland System (W-3)	W-3	0.00	0.00		0	
	Pocket Wetland (W-4)	W-4	0.00	0.00		0	
	Wet Swale (O-2)	O-2	0.00	0.00		0	
Alternative Practices	Hydrodynamic Separator		3.92	2.49		12,387	
	Filterra Bioretention System		0.00	0.00		0	
	Wet Vault		0.00	0.00		0	
	Media Filter		0.00	0.00		0	
	Underground Infiltration System		0.00	0.00		0	
Totals by Area Reduction →			1.77	0.51	0		
Totals by Volume Reduction →			1.77	1.05	1,108		
Totals by Standard SMP w/RRV →			1.52	0.47	1,036	1,555	
Totals by Standard SMP →			0.00	0.00		0	
Totals by Alternative Practices →			3.92	2.49		12,387	
Totals (Area + Volume + all SMPs) →			8.99	4.52	**2,145**	**13,941**	16,086

Appendix A - Table F
Practice Specific Sizing Calculation Worksheet

BIORETENTION NO. 2 (BIO-2)

Practice Proposed?	Yes

Enter Site Data For Drainage Area to be Treated by Practice

Catchment Number	Total Area *(Acres)*	Impervious Area *(Acres)*	Percent Impervious *%*	Rv	WQv *(ft^3)*	Precipitation *(in)*	Description
4	1.52	0.47	31%	0.33	2,522	1.40	Bioretention
Enter Impervious Area Reduced by Disconnection of Rooftops Within this Catchment:		0.00	31%	0.33	2,522	<<WQv after adjusting for Disconnected Rooftops	
Reduced by Tree Planting:	0.00	0.00	31%	0.33	2,522	<<WQv after adjusting for Tree Planting	
Enter the portion of the WQv that is not reduced for all practices routed to this practic					0	ft^3	

Determine Required Water Quality Volume

WQv = (P/12) * Rv * A

where: WQv = Water Quality Volume (acre-feet)
P = 1-year 24-hour design storm (inches)
Rv = 0.05 + 0.009 (I); min Rv = 0.2
I = Impervious Cover (%) within the drainage area contributing to the SWM practice
A = Drainage area (square feet) contributing to the SWM practice

WQv = 2,522 CF **Value taken from Appendix K - Table B*

Calculate Required Filter Bed Area

Af=(WQv)*(df)/[(k)*(hf+df)*(tf)]

where: Af = Surface area of filter bed (SF)
WQv = Required Water Quality Volume (CF)
df = Filter bed depth (ft)
k = Coefficient of permeability of filter media (ft/day)
hf = Average height of water above filter bed (ft)
tf = Design filter bed drain time (days)

SMP ID	WQv (cubic feet)	df (feet)	k (ft/day)	hf (feet)	tf (days)	Minimum Af (sq-ft)	Provided Af (sq-ft)
BIO-1	2,522	2.5	0.5	0.25	2.0	2,293	2,296

Calculate Provided Water Quality Volume

ed Within Practice = Total volumes of soil media, mulch, and ponding

WQv = $V_{SM} + V_M + V_{POND}$

V_{SM} = Af * df * P_{SM} = 1,148 cf.

V_M = Af * dm * P_M = 230 cf.

V_{POND} = (Af * hf * 2) + (2 * S * hf^2 * Pf) = 1,213 cf.

where:

P_{SM} = Porosity of soil media - 0.20	0.20	
P_M = Porosity of mulch - 0.40	0.40	
S = Bioretention Side Slopes	3.00	:1
Pf = Bioretention Perimeter	174	LF

WQv = 2,591 CF

Calculate Provided Runoff Reduction Volume

Using Underdrains? Yes

RRv = **1,036** CF

RRv Applied = 1,036 CF *This is 40% of the storage provided or WQv, whichever is less.*

Appendix K - Table G
Practice Specific Sizing Calculation Worksheet

GREEN ROOF NO. 1 (GR1)

Practice Proposed?	Yes

Enter Site Data For Drainage Area to be Treated by Practice

Catchment Number	Total Area *(Acres)*	Impervious Area *(Acres)*	Percent Impervious *%*	Rv	WQv *(ft^3)*	Precipitation *(in)*	Description
1A	0.11	0.11	100%	0.95	554	1.40	Green Roof (Ext)
1B	0.11	0.11	100%	0.95	554	1.40	Green Roof (Ext)

Enter Parameters for Proposed Green Roof

Green Roof Surface Area	AGR	**10000**	ft^2	
Depth of Soil Media	DSM	**0.30**	ft	0.25-0.5
Depth of Drainage Layer	DDL	**0.08**	ft	
Depth of Ponding Above Surface	DP	**0.02**	ft	
Porosity of Soil Media	nSM	**40%**		
Porosity of Drainage Layer	nDL	**25%**		

Calculate Storage Volume and Runoff Reduction Volume

Volume Provided in Soil Media	VSM	**1,200**	ft^3
Volume Provided in Drainage Layer	VDL	**200**	ft^3
Volume in Ponding Layer		**200**	ft^3
Storage Volume Provided in Green Roof		**1,600**	ft^3
Runoff Reduction Volume	RRv	**1,108**	ft^3

Appendix K - Table H
Practice Specific Sizing Calculation Worksheet

CHANNEL PROTECTION VOLUME

Stream Channel Protection is designed to protect stream channels from erosion. This goal is accomplished by providing 24-hour extended detention of the one-year, 24-hour storm event, remained from runoff reduction (August 2015 NYS Stormwater Design Manual). The release time is reduced to 12 hours for trout streams.

CPv = [(Vs/Vr) x Q x A] / 12 in/ft - RRv provided

CPv = Channel Protection Volume (cubic feet)
Q = One-Year Runoff (inches)
A = Drainage Area (acres)
qo/qi = Ratio of outflow to inflow, see Figure 8.5 of Stormwater Design Manual
Vs/Vr = $0.683 - 1.43(qo/qi) + 1.64(qo/qi)^2 - 0.804(qo/qi)^3$

Channel Protection Volume For The Development Conveyed to Treatment Practice

Area	Total Area (A), acres	Runoff (Q), inches	qo/qi	Vs/Vr	RRv Prov. (cf)	CPv (cf)	Method Treatment
Dry Pond	2.16	1.40	0.025	0.6483	1,036	6,080	Bioretention

Orifice Sizing

Area	Avg Release Rate (cfs)	Water Elev. (ft)	Orifice Invert (ft)	Avg Head (ft)	Orifice Area (in^2)	Orifice Dia. (in)*	CPv Provided (cf)
TOTAL	0.1407	71.5	68.1	1.7	3.2281	2.03	6,177

* - In accordance with Section 4.4 of the Stormwater Design Manual, the CPv control device should be designed to reduce the potential to clog with debris. A minimum 3" orifice with a trash rack or 1" orifice protected by a perforated standpipe is recommended in the event the calculated ED orifice is less than 3"/1", respectively.

Appendix K:
Soil Testing Results

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1
FIG 6

SOIL TESTING RESULTS

SCALE: 1"=60'

Deep Test Results 07/11/2013		
Test Number	Depth	Soil Type
DT-1	0-4.5'	Fill, Gravelly Loam w/ Brick, Concrete, Boulders
	4.5'-7'	Sandy Clay Loam
DT-2	0-2.5"	Fill: Gravelly Loam w/ Construction Debris
	2.5'	2" Metal Pipe Found, Ended DT
DT-3	0-1.5'	Gravelly Loam
	1.5-2.5'	Clay Fill w/ Construction Debris
	2.5-3'	Old Asphalt
	3-3.5'	Construction Debris
	3.5-7'	Clay
DT-4	0-1'	Gravelly Loam Fill
	1-7'	Sandy Loam, Water @ 7'
DT-5	0-5'	Gravelly Silty Loam Fill, Rock @ 5'
DT-6	0-5'-3"	Gravelly Loam Fill w/ Bricks & Construction Debris
	5'-3"	Rock
DT-7	0-5'	Gravely Loam Fill
	5-7'	Clay, Shale @ 7'
DT-8	0-3.5'	Intermittent Clay Loam and Gravelly Loam w/ Bricks & Construction Debris
	3.5-6.5'	Same w/o Bricks, No Rock, No Water
DT-9	0-4.5'	Gravelly Loam Fill - No Debris
	4.5-6.5'	Virgin Clay
	6.5'	Shale
DT-10	-	Search for forcemain, 2" fiberglass elbow found
	-	Remaining forcemain not found
DT-11	-	Search for water main
	-	4" DIP @ 3, no 8" DIP found

LEGEND:

DEEP TEST

0 1 2 3
ORIGINAL SCALE IN INCHES

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Office Locations:

Dutchess County Office:
21 Fox Street
Poughkeepsie, New York 12601
Phone: (845) 454-3980

Capital District Office:
547 River Street
Troy, New York 12180
Phone: (518) 273-0055

North Country Office:
375 Bay Road
Queensbury, New York 12804
Phone: (518) 812-0513

rev.	date	description

TIORONDA AVENUE & 465 WOLCOTT AVENUE
BEACON 248 DEVELOPMENT, LLC

SOIL TESTING RESULTS

CITY OF BEACON, DUTCHESS COUNTY, NEW YORK

designed	checked
date 8/21/13	scale AS NOTED
project no. 81056.00	
sheet no. FIG 6 1 OF 1	

Drawing Name: \\Acad100\x\81000-81099\81056 - Tioronda Ave - 100 Units\ENG\DWG\SOIL_TEST_RESULTS_81056.dwg
Xrefs Attached: XBASE-ENG_81056-00; XTB_81056-00_24x36 - Soil
Date Printed: Aug 27, 2013, 11:26am

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Appendix L:
Flood Insurance Study, Volume 1 of 4

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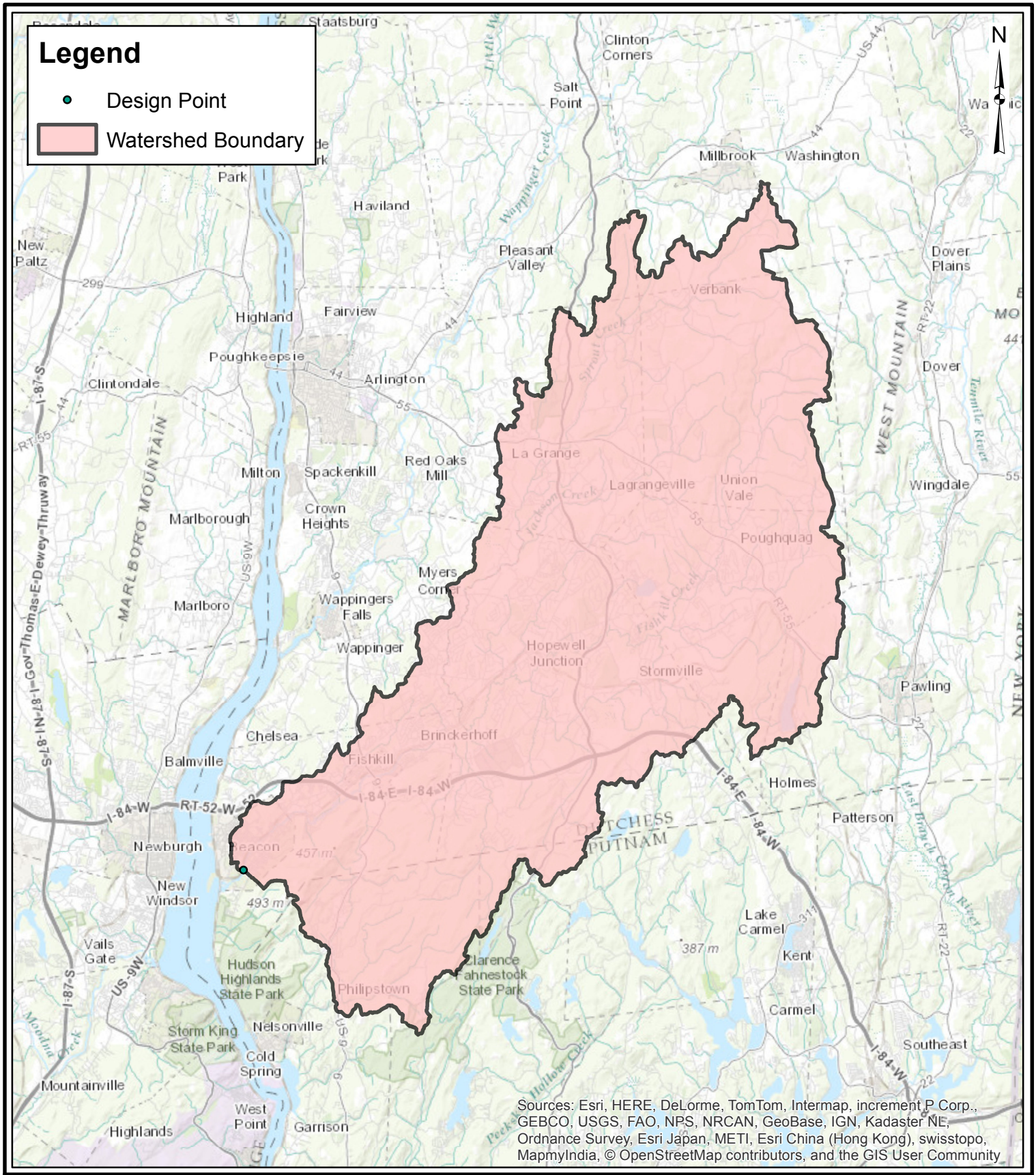

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21 Fox Street, Poughkeepsie, NY 12601
Phone: (845) 454-3980

Capital District Office:
547 River Street, Troy, NY 12180
Phone: (518) 273-0055

North Country Office:
375 Bay Road, Queensbury, NY 12804
Phone: (518) 812-0513

Beacon 248 Development

Fishkill Creek at Beacon 248 Development Watershed Map

City of Beacon, Dutchess County, New York

Drawn:	KGA
Date:	10/14/14
Scale:	1 " = 20,000 '
Project:	81056.00
Figure:	FIG 7

Map Document: (R:\0\standards\Gis\ChazenGIS\8X11P_MinimalChazenAddress.mxt)
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FLOOD INSURANCE STUDY



VOLUME 1 OF 4



DUTCHESS COUNTY, NEW YORK
(ALL JURISDICTIONS)

COMMUNITY NAME	COMMUNITY NUMBER	COMMUNITY NAME	COMMUNITY NUMBER
AMENIA, TOWN OF	361332	PAWLING, VILLAGE OF	361517
BEACON, CITY OF	360217	PINE PLAINS, TOWN OF	361141
BEEKMAN, TOWN OF	361333	PLEASANT VALLEY, TOWN OF	360221
CLINTON, TOWN OF	361334	POUGHKEEPSIE, CITY OF	360222
DOVER, TOWN OF	361335	POUGHKEEPSIE, TOWN OF	361142
EAST FISHKILL, TOWN OF	361336	RED HOOK, TOWN OF	361143
FISHKILL, TOWN OF	361337	RED HOOK, VILLAGE OF	361614
FISHKILL, VILLAGE OF	360218	RHINEBECK, TOWN OF	361144
HYDE PARK, TOWN OF	361338	RHINEBECK, VILLAGE OF	361999
LAGRANGE, TOWN OF	361011	STANFORD, TOWN OF	361145
MILAN, TOWN OF	361339	TIVOLI, VILLAGE OF	361507
MILLBROOK, VILLAGE OF	360219	UNION VALE, TOWN OF	361146
MILLERTON, VILLAGE OF	360220	WAPPINGER, TOWN OF	361387
NORTHEAST, TOWN OF	361340	WAPPINGERS FALLS, VILLAGE OF	360223
PAWLING, TOWN OF	361341	WASHINGTON, TOWN OF	361147

EFFECTIVE:
May 2, 2012

Federal Emergency Management Agency

FLOOD INSURANCE STUDY NUMBER
36027CV001A

NOTICE TO
FLOOD INSURANCE STUDY USERS

Communities participating in the National Flood Insurance Program have established repositories of flood hazard data for floodplain management and flood insurance purposes. This Flood Insurance Study (FIS) may not contain all data available within the repository. It is advisable to contact the community repository for any additional data.

Part or all of this FIS may be revised and republished at any time. In addition, part of this FIS may be revised by the Letter of Map Revision process, which does not involve republication or redistribution of the FIS. It is, therefore, the responsibility of the user to consult with community officials and to check the community repository to obtain the most current FIS components.

Selected Flood Insurance Rate Map panels for this community contain information that was previously shown separately on the corresponding Flood Boundary and Floodway Map panels (e.g., floodways and cross sections). In addition, former flood hazard zone designations have been changed as follows.

Old Zone(s)	New Zone
A1 through A30	AE
V1 through V30	VE
B	X
C	X

Initial Countywide FIS Effective Date: May 2, 2012

Revised Countywide FIS Date:

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Branch 1 Sprout Creek #1	Panels 09P-10P
Branch 1 Wappinger Creek Reach 1	Panels 11P-15P
Branch 10 Wappinger Creek Reach 1	Panels 16P-17P
Branch 11 Wappinger Creek Reach 1	Panels 18P-19P
Branch 1A Hudson River	Panel 20P
Branch 2 Sprout Creek #1	Panels 21P-23P
Branch 2 Wappinger Creek Reach 1	Panels 24P-29P
Branch 2A Wappinger Creek Reach 1	Panel 30P
Branch 2B Wappinger Creek Reach 1	Panels 31P-32P
Branch 3 Wappinger Creek Reach 1	Panels 33P-35P
Branch 4 Wappinger Creek Reach 1	Panels 36P-37P

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Branch 5 Wappinger Creek Reach 1	Panels 38P-41P
Branch 6 Wappinger Creek Reach 1	Panel 42P
Branch 7 Wappinger Creek Reach 1	Panels 43P-46P
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Branch 9 Wappinger Creek Reach 1	Panels 48P-50P
Casper Kill Creek	Panels 51P-58P
Clove Brook	Panels 59P-63P
Clove Creek	Panels 64P-66P
Clove Mountain Creek	Panels 67P-70P
Crum Elbow Creek	Panels 71P-86P
East Branch Croton River	Panels 87P-90P
East Branch Wappinger Creek Reach 1	Panels 91P-93P
Eighmy Ville Creek	Panel 94P
Fall Kill	Panels 95P-98P
Fall Kill Creek	Panels 99P-100P
Fishkill Creek	Panels 101P-128P
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Great Spring Creek	Panels 131P-133P
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Rhinebeck Kill	Panels 170P-172P
Saw Kill	Panels 173P-180P
Seeley Creek	Panels 181P-182P
Sprout Creek #1	Panels 183P-189P
Sprout Creek #2	Panels 190P-194P
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Tributary 1 to Fishkill Creek	Panels 218P-220P
Tributary 2 to Fishkill Creek	Panel 221P
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Wappinger Creek Reach 2	Panels 253P-254P
Wassaic Creek	Panels 255P-256P
Webatuck Creek Reach 1	Panels 257P-262P
Webatuck Creek Reach 2	Panels 263P-264P
Webatuck Creek Reach 3	Panels 265P-271P
Wells Brook	Panels 272P-273P
Whaley Lake Stream	Panels 274P-280P
Whortlekill Creek Reach 1	Panels 281P-283P
Whortlekill Creek Reach 2	Panels 284P-286P
Willow Brook	Panels 287P-291P

EXHIBITS

Exhibit 2 - Flood Insurance Rate Map Index
Flood Insurance Rate Map

FLOOD INSURANCE STUDY
DUTCHESS COUNTY, NEW YORK (ALL JURISDICTIONS)

1.0 INTRODUCTION

1.1 Purpose of Study

This countywide Flood Insurance Study (FIS) investigates the existence and severity of flood hazards in, or revises and updates previous FISs/Flood Insurance Rate Maps (FIRMs) for the geographic area of Dutchess County, New York, including: the Cities of Beacon and Poughkeepsie; the Towns of Amenia, Beekman, Clinton, Dover, East Fishkill, Fishkill, Hyde Park, LaGrange, Milan, Northeast, Pawling, Pine Plains, Pleasant Valley, Poughkeepsie, Red Hook, Rhinebeck, Stanford, Union Vale, Wappinger, and Washington; and the Villages of Fishkill, Millbrook, Millerton, Pawling, Red Hook, Rhinebeck, Tivoli, and Wappingers Falls (hereinafter referred to collectively as Dutchess County).

This FIS aids in the administration of the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973. This FIS has developed flood risk data for various areas of the county that will be used to establish actuarial flood insurance rates. This information will also be used by Dutchess County to update existing floodplain regulations as part of the Regular Phase of the National Flood Insurance Program (NFIP), and will also be used by local and regional planners to further promote sound land use and floodplain development. Minimum floodplain management requirements for participation in the NFIP are set forth in the Code of Federal Regulations at 44 CFR§ 60.3.

In some States or communities, floodplain management criteria or regulations may exist that are more restrictive or comprehensive than the minimum Federal requirements. In such cases, the more restrictive criteria take precedence and the State (or other jurisdictional agency) will be able to explain them.

1.2 Authority and Acknowledgments

The sources of authority for this FIS are the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973.

This FIS was prepared to include all jurisdictions within Dutchess County into a countywide format. Information on the authority and acknowledgments for each jurisdiction included in this countywide FIS, as compiled from their previously printed FIS reports, is shown below.

Amenia, Town of: the hydrologic and hydraulic analyses from the FIS report dated November 15, 1989, were performed by Edwards and Kelcey Engineers, Inc., for the Federal Emergency Management Agency (FEMA), under Contract No. EMW-85-

C-1887. That work was completed in November 1987.

Beacon, City of: the hydrologic and hydraulic analyses from the FIS report dated September 1, 1983, were prepared by Kozma Associates for FEMA, under Contract No. EMW-C-0777. That work was completed in August 1982.

Beekman, Town of: the hydrologic and hydraulic analyses from the FIS report dated March 5, 1984, were prepared by Kozma Associates for FEMA, under Contract No. EMW-C-0733. That work was completed in February 1983.

Clinton, Town of: the hydrologic and hydraulic analyses from the FIS report dated January 5, 1984, were prepared by Kozma Associates for FEMA, under Contract No. EMW-C-0733. That work was completed in December 1982.

Dover, Town of: the hydrologic and hydraulic analyses from the FIS report dated July 4, 1988, were prepared by Kozma Associates for FEMA, under Contract No. EMW-C-0733. That work was completed in December 1982.

East Fishkill, Town of: the hydrologic and hydraulic analyses from the FIS report dated December 15, 1983, were prepared by Kozma Associates for FEMA, under Contract No. EMW-C-0733. That work was completed in December 1982.

Fishkill, Town of: the hydrologic and hydraulic analyses from the FIS report dated December 1, 1983, were prepared by Kozma Associates for FEMA, under Contract No. EMW-C-0733. That work was completed in October 1982.

Fishkill, Village of: the hydrologic and hydraulic analyses from the FIS report dated September 15, 1983, were prepared by Kozma Associates for FEMA, under Contract No. EMW-C-0733. That work was completed in October 1982.

Hyde Park, Town of: the hydrologic and hydraulic analyses from the FIS report dated December 15, 1983, were prepared by Kozma Associates for FEMA, under

Contract No. EMW-C-0733. That work was completed in November 1982.

LaGrange, Town of: the hydrologic and hydraulic analyses for the original FIS, dated September 28, 1979, were performed by Harris-Toups Associates for the Federal Insurance Administration (FIA) under Contract No. H-3962. That work, which was completed in September 1977, covered all significant flooding sources in the Town of LaGrange. The hydrologic and hydraulic analyses for the November 5, 1986, FIS for Branch 3 Wappinger Creek were performed by Dewberry and Davis. The topographic data were obtained from Barger, Campbell, Gray and Rarling, Engineers and Surveyors.

For the FIS report dated September 8, 1999, updated hydrologic and hydraulic analyses for Wappinger Creek were prepared by Leonard Jackson Associates for FEMA, under Contract No. 93-C-4145. That work was completed in March 1997. Planimetric base map files for this revision were derived by digitizing U.S. Geological Survey 7.5-Minute Series Topographic Maps. These files were compiled at a scale of 1:24,000.

Millerton, Village of: the hydrologic and hydraulic analyses from the FIS report dated July 3, 1984, were prepared by Kozma Associates for FEMA, under Contract No. EMW-C-0733. That work was completed in February 1983.

Northeast, Town of: the hydrologic and hydraulic analyses from the FIS report dated March 5, 1984, were prepared by Kozma Associates for FEMA, under Contract No. EMW-C-0733. That work was completed in February 1983.

Pawling, Town of: the hydrologic and hydraulic analyses from the FIS report dated July 3, 1984, were prepared by Kozma Associates for FEMA, under Contract No. EMW-C-0733. That work was completed in March 1983.

Pawling, Village of: the hydrologic and hydraulic analyses from the FIS report dated February 1, 1984, were prepared

by Kozma Associates for FEMA, under Contract No. EMW-C-0733. That work was completed in March 1983.

Pleasant Valley, Town of: the hydrologic and hydraulic analyses from the FIS report dated July 1979 were performed by Harris-Toups Associates for the FIA under Contract No. H-3962. That work, which was completed in October 1977, covered all significant flooding sources in the Town of Pleasant Valley.

Poughkeepsie, City of: the hydrologic and hydraulic analyses from the FIS report dated July 5, 1983, were prepared by Kozma Associates for FEMA, under Contract No. EMW-C-0733. That work was completed in July 1982.

Poughkeepsie, Town of: the hydrologic and hydraulic analyses from the original FIS report dated May 1978 and FIRM dated November 15, 1978 (hereinafter referred to as the 1978 FIS) were prepared for the FIA by Harris-Toups Associates, under Contract No. H-3962. That work was completed in August 1977.

For the August 2, 1990, revision, the hydrologic and hydraulic analyses were prepared by Edwards and Kelcey Engineers, Inc., for FEMA, under Contract No. EMW-85-C-1887. That work was completed in January 1988.

For the FIS report dated September 8, 1999, revised hydrologic and hydraulic analyses were prepared by Leonard Jackson Associates for FEMA, under Contract No. 93-C-4145. That work was completed in March 1997.

Red Hook, Town of: the hydrologic and hydraulic analyses from the FIS report dated April 16, 1984, were prepared by Kozma Associates for FEMA, under Contract No. EMW-C-0733. That work was completed in March 1983.

Rhinebeck, Town of: the hydrologic and hydraulic analyses from the FIS report dated March 5, 1984, were prepared by Kozma Associates for FEMA, under Contract No. EMW-C-0733. That work was completed in December 1982.

Rhinebeck, Village of:	the hydrologic and hydraulic analyses from the FIS report dated August 1, 1984, were prepared by Kozma Associates for FEMA, under Contract No. EMW-C-0733. That work was completed in December 1982.
Stanford, Town of:	the hydrologic and hydraulic analyses from the FIS report dated December 17, 1991, were prepared by Kozma Associates Consulting Engineers, P.C. (the study contractor), for FEMA, under Contract No. EMW-86-C-2244. That work was completed in December 1989.
Tivoli, Village of:	the hydrologic and hydraulic analyses from the FIS report dated February 1, 1984, were prepared by Kozma Associates for FEMA, under Contract No. EMW-C-0733. That work was completed in February 1983.
Union Vale, Town of:	the hydrologic and hydraulic analyses from the FIS report dated September 2, 1988, were prepared by McCoy-Jackson Associates for FEMA, under Contract No. EMW-84-C-1603. That work was completed in February 1987.
Wappinger, Town of:	the hydrologic and hydraulic analyses from the original FIS report dated December 1978 and FIRM dated June 15, 1979 (hereinafter referred to as the 1979 FIS), were performed by Harris-Toups Associates for the FIA, under Contract No. H-3962. That work was completed in July 1977. The hydrologic and hydraulic analyses from the FIS report dated September 22, 1999, were prepared by Leonard Jackson Associates for FEMA, under Contract No. 93-C-4145. That work was completed in March 1997.
Wappingers Falls, Village of:	the hydrologic and hydraulic analyses from the original FIS report dated March 1978 and FIRM dated September 1, 1978 (hereinafter referred to as the 1978 FIS), were performed by Harris-Toups Associates for the FIA, under Contract No. H-3962. That work was completed in June 1977.

Wappingers Falls, Vill. (cont.)	The hydrologic and hydraulic analyses from the FIS report dated September 22, 1999, were prepared by Leonard Jackson Associates for FEMA, under Contract No. 93-C-4145. That work was completed in March 1997.

There are no previous FISs or FIRMs for the Village of Red Hook, and no previous FISs for the Towns of Milan, Pine Plains, and Washington, and for the Village of Millbrook; therefore, the previous authority and acknowledgment information for these communities is not included in this FIS.

For this countywide FIS, dated September 29, 2011 revised hydrologic and hydraulic analyses for Fishkill Creek, Maritje Kill and the Tenmile River were prepared by Dewberry for the New York State Department of Environmental Conservation (NYS DEC) under its Cooperating Technical Partner agreement with FEMA. This work was completed in June 2008. Additionally, floodplain boundaries for all unrevised flooding sources previously studied using detailed methodology were updated using topographic data provided to NYS DEC by Dutchess County. This work for also completed by Dewberry in June 2008. Flood hazard areas previously assessed using approximate methods were re-analyzed throughout the county and results were then mapped using the Dutchess County topographic data. This work was completed in May 2008.

Base map information for this FIRM was developed from digital orthoimagery provided by the New York State Office of Cyber Security & Critical infrastructure Coordination. This imagery was derived for 1- and 2- foot resolution natural color orthoimagery from photography dated April 2006.

The coordinate system used for the production of this FIRM is Universal Transverse Mercator (UTM), North American Datum of 1983 (NAD 83), GRS80 spheroid. Corner coordinates shown on the FIRM are in latitude and longitude referenced to the UTM projection, NAD 83. Differences in the datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent counties may result in slight positional differences in map features at the county boundaries. These differences do not affect the accuracy of information shown on the FIRM.

1.3 Coordination

Consultation Coordination Officer's (CCO) meetings may be held for each jurisdiction in this countywide FIS. An initial CCO meeting is held typically with representatives of FEMA, the community, and the study contractor to explain the nature and purpose of a FIS, and to identify the streams to be studied by detailed methods. A final CCO meeting is held typically with representatives of FEMA, the community, and the study contractor to review the results of the study.

The dates of the initial and final CCO meetings held for jurisdictions within Dutchess County are shown in Table 1, "Initial and Final CCO Meetings."

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TABLE 1 – INITIAL AND FINAL CCO MEETINGS

Community	Initial CCO Date	Final CCO Date
Town of Amenia	September 18, 1984	October 20, 1988
City of Beacon	March 1978	April 4, 1983
Town of Beekman	March 1978	October 11, 1983
Town of Clinton	*	August 8, 1983
Town of Dover	March 1978	October 6, 1983
Town of East Fishkill	March 1978	August 11, 1983
Town of Fishkill	March 1978	June 6, 1983
Village of Fishkill	March 1978	May 9, 1983
Town of Hyde Park	March 1978	June 27, 1983
Town of Lagrange	November 1976	November 16, 1977
Town of Milan	*	*
Village of Millbrook	*	*
Village of Millerton	March 1978	October 12, 1983
Town of Northeast	March 1978	October 13, 1983
Town of Pawling	March 1978	November 16, 1983
Village of Pawling	March 1978	October 3, 1983
Town of Pine Plains	*	*
Town of Pleasant Valley	November 1976	December 8, 1977
City of Poughkeepsie	March 1978	January 20, 1983
Town of Poughkeepsie	September 19, 1984	March 1, 1989
Town of Red Hook	March 1978	December 13, 1983
Village of Red Hook	*	*
Town of Rhinebeck	March 1978	September 16, 1983
Village of Rhinebeck	March 1978	March 13, 1984
Town of Stanford	October 11, 1990	February 1, 1991
Village of Tivoli	March 1978	September 12, 1983
Town of Union Vale	March 1984	October 15, 1987
Town of Wappinger	October 1976	March 31, 1998[1]
Village of Wappingers Falls	October 1976	March 31, 1998[1]
Town of Washington	*	*

[1]Notified by letter
*Data not available

Three initial CCO meetings for this revision were held. The first was held for communities within the Fishkill Creek watershed in February 2002, which was attended by representatives of communities within the watershed as well as NYS DEC and FEMA staff. The second was held for communities within the Wappinger Creek watershed in March 2003, which was attended by representatives

of communities within the watershed as well as NYS DEC and FEMA staff. At the third meeting, in August 2006, the remaining communities in the county were invited to discuss flood hazards within their jurisdiction in the context of the planned flood map update. The final CCO meeting was held October 6 and 7, 2008.

2.0 AREA STUDIED

2.1 Scope of Study

This FIS covers the geographic area of Dutchess County, New York.

The areas studied by detailed methods were selected with priority given to all known flood hazard areas and areas of projected development and proposed construction. All or portions of the flooding sources listed in Table 2, "Flooding Sources Studied by Detailed Methods," were studied by detailed methods. Limits of detailed study are indicated on the Flood Profiles (Exhibit 1) and on the FIRM (Exhibit 2). The areas studied were selected with priority given to all known flood hazard areas and areas of projected development and proposed construction.

TABLE 2 - FLOODING SOURCES STUDIED BY DETAILED METHODS

Amenia Stream
Branch 1 Great Spring Creek
Branch 1 Sprout Creek #1
Branch 1 Wappinger Creek Reach 1
Branch 10 Wappinger Creek Reach 1
Branch 11 Wappinger Creek Reach 1
Branch 1A Hudson River
Branch 2 Sprout Creek #1
Branch 2 Wappinger Creek Reach 1
Branch 2A Wappinger Creek Reach 1
Branch 2B Wappinger Creek Reach 1
Branch 3 Wappinger Creek Reach 1
Branch 4 Wappinger Creek Reach 1
Branch 5 Wappinger Creek Reach 1
Branch 6 Wappinger Creek Reach 1
Branch 7 Wappinger Creek Reach 1
Branch 8 Wappinger Creek Reach 1
Branch 9 Wappinger Creek Reach 1
Casper Kill Creek
Clove Brook
Clove Creek
Clove Mountain Creek
Crum Elbow Creek
East Branch Croton River
East Branch Wappinger Creek Reach 1
Eighmy Ville Creek
Fall Kill
Fall Kill Creek
Fishkill Creek
Frog Hollow Brook
Great Spring Creek
Hudson River
Indian Lake
Jackson Creek Reach 1
Jackson Creek Reach 2
Kelsey Brook
Landsman Kill
Little Wappinger Creek Reach 1
Long Pond
Maritje Kill
Rhinebeck Kill
Saw Kill
Seeley Creek
Silver Lake
Sprout Creek #1
Sprout Creek #2
Stony Creek
Swamp River Reach 1
Swamp River Reach 2
Sweezy Creek
Sylvan Lake
Sylvan Lake Outlet
Tenmile River
Tributary 1 to Fishkill Creek
Tributary 2 to Fishkill Creek
Tributary to Amenia Stream
Tributary to East Branch Croton River
Walsh Creek

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TABLE 2 - FLOODING SOURCES STUDIED BY DETAILED METHODS - continued

Wappinger Creek Reach 1	Webatuck Creek Reach 2	Whortlekill Creek Reach 1
Wappinger Creek Reach 2	Webatuck Creek Reach 3	Whortlekill Creek Reach 2
Wassaic Creek	Wells Brook	Willow Brook
Webatuck Creek Reach 1	Whaley Lake Stream	

Riverine flooding sources throughout the county have been studied by detailed methods at different times and prior to this countywide FIS, dated September 29, 2011 often on a community-by-community basis. Table 3, "Model Dates for Riverine Flooding Sources," below represents the hydraulic modeling dates for the detailed study flooding sources in the county.

TABLE 3 – MODEL DATES FOR RIVERINE FLOODING

STREAM NAME	COMMUNITY	MOST RECENT MODEL DATE
Amenia Stream	Town of Amenia	November 1987
Branch 1 Great Spring	Town of Pleasant Valley	October 1977
Branch 1 Sprout Creek #1	Town of LaGrange	September 1977
Branch 1 Wappinger Creek Reach 1	Town of Wappinger	March 1997
	Village of Wappingers Falls	March 1997
Branch 10 Wappinger Creek Reach 1	Town of Pleasant Valley	October 1977
Branch 11 Wappinger Creek Reach 1	Town of Pleasant Valley	October 1977
Branch 1A Hudson River	Town of Wappinger	July 1977
Branch 2 Sprout Creek #2	Town of LaGrange	September 1977
Branch 2 Wappinger Creek Reach 1	Town of Wappinger	July 1977
Branch 2A Wappinger Creek Reach 1	Town of Wappinger	July 1977
Branch 2B Wappinger Creek Reach 1	Town of Wappinger	July 1977
Branch 3 Wappinger Creek Reach 1	Town of Poughkeepsie	August 1977
Branch 4 Wappinger Creek Reach 1	Town of Poughkeepsie	January 1988
Branch 5 Wappinger Creek Reach 1	Town of LaGrange	September 1977
Branch 6 Wappinger Creek Reach 1	Town of Poughkeepsie	August 1977
Branch 7 Wappinger Creek Reach 1	Town of LaGrange	September 1977

TABLE 3 – MODEL DATES FOR RIVERINE FLOODING-continued

STREAM NAME	COMMUNITY	MOST RECENT MODEL DATE
Branch 8 Wappinger Creek Reach 1	Town of Poughkeepsie	August 1977
Branch 9 Wappinger Creek Reach 1	Town of Pleasant Valley	October 1977
Casper Kill Creek	Town of Poughkeepsie	January 1988
	City of Poughkeepsie	July 1982
Clove Creek	Town of Fishkill	October 1982
Clove Mountain Creek	Town of Union Vale	February 1987
Crum Elbow Creek	Town of Hyde Park	November 1982
	Town of Rhinebeck	December 1982
	Town of Clinton	December 1982
East Branch Croton River	Town of Pawling	March 1983
	Village of Pawling	March 1983
East Branch Wappinger Creek Reach 1	Town of Clinton	December 1982
	Town of Pleasant Valley	October 1977
Eighmy Ville Creek	Town of Rhinebeck	December 1982
Fall Kill	Town of Hyde Park	November 1982
Fall Kill Creek	Town of Poughkeepsie	January 1988
	City of Poughkeepsie	July 1982
Fishkill Creek	City of Beacon	July 2008
	Town of Beekman	July 2008
	Town of Fishkill	July 2008
	Village of Fishkill	July 2008
	Town of East Fishkill	July 2008
	Town of Union Vale	July 2008
Frog Hollow Creek	Town of Beekman	February 1983
Great Spring Creek	Town of Pleasant Valley	October 1977
Jackson Creek Reach 1	Town of LaGrange	September 1977
Jackson Creek Reach 2	Town of LaGrange	February 1987
Kelsey Brook	Village of Millerton	February 1983
	Town of Northeast	February 1983
Landsman Kill	Town of Rhinebeck	December 1982
	Village of Rhinebeck	December 1982
Little Wappinger Creek Reach 1	Town of Clinton	December 1982
	Town of Pleasant Valley	October 1977
Maritje Kill	Town of Hyde Park	July 2008
Rhinebeck Kill	Town of Red Hook	March 1983
	Town of Rhinebeck	December 1982
	Village of Rhinebeck	December 1982
Saw Kill	Town of Red Hook	March 1983
	Village of Red Hook	March 1983

TABLE 3 – MODEL DATES FOR RIVERINE FLOODING-continued

STREAM NAME	COMMUNITY	MOST RECENT MODEL DATE
Seeley Creek	Town of Union Vale	February 1987
Sprout Creek #1	Town of East Fishkill	December 1982
	Town of Fishkill	October 1982
	Town of LaGrange	September 1977
	Town of Wappinger	July 1977
Sprout Creek #2	Town of Union Vale	February 1987
	Town of Washington	February 1987
Stony Creek	Town of Red Hook	March 1983
	Village of Tivoli	February 1983
Swamp River Reach 1	Town of Dover	December 1982
Swamp River Reach 2	Town of Pawling	March 1983
	Village of Pawling	March 1983
Sweezy Creek	Town of Union Vale	February 1987
Sylvan Lake Outlet	Town of Beekman	February 1983
	Town of East Fishkill	December 1982
Tenmile River	Town of Amenia	July 2008
	Town of Beekman	July 2008
Tributary 1 to Fishkill Creek	Town of Fishkill	October 1982
	Village of Fishkill	October 1982
Tributary 2 to Fishkill Creek	Town of Beekman	February 1983
Tributary to Amenia Stream	Town of Amenia	November 1987
Tributary to East Branch Croton River	Town of Pawling	March 1983
Walsh Creek	Town of Union Vale	February 1983
Wappinger Creek Reach 1	Town of Clinton	December 1982
	Town of LaGrange	March 1997
	Town of Pleasant Valley	October 1997
	Town of Poughkeepsie	March 1997
	Town of Wappinger	March 1997
	Village of Wappinger Falls	March 1997
Wappinger Creek Reach 2	Town of Stanford	December 1989
	Town of Pine Plains	December 1989
Wassaic Creek	Town of Northeast	February 1983
Webatuck Creek Reach 1	Town of Amenia	November 1987
Webatuck Creek Reach 2	Town of Amenia	November 1987
	Village of Millerton	February 1983
	Town of Northeast	February 1983
Webatuck Creek Reach 2	Village of Millerton	February 1983
	Town of Northeast	February 1983
Wells Brook	Town of Dover	December 1982
Whortlekill Creek Reach 1	Town of East Fishkill	December 1982
Whortlekill Creek Reach 2	Town of LaGrange	September 1977
Willow Brook	Town of Stanford	December 1989

As part of the countywide FIS dated September 29, 2011, updated analysis were included for the flooding sources in Table 4, "Scope of Revision."

TABLE 4 - SCOPE OF REVISION

Stream	Limits of Revised or New Detailed Study
Fishkill Creek	From confluence with Hudson River to approximately 2,945 feet upstream of Clubhouse Lane
Maritje Kill	From confluence with Hudson River to approximately 4,255 feet upstream of Crum Elbow Road
Tenmile River	From county boundary to approximately 5,453 feet upstream of Mill Street

Table 5, "Stream Name Changes," lists streams that have names in this countywide FIS dated September 29, 2011 other than those used in previously printed FISs for the communities in which they are located.

TABLE 5 – STREAM NAME CHANGES

Community	Old Name	New Name
Town of Wappinger Village of Wappinger	Branch 1 Wappinger Creek	Branch 1 Wappinger Creek Reach 1
Town of Wappinger	Branch 2 Wappinger Creek	Branch 2 Wappinger Creek Reach 1
Town of Wappinger	Branch 2A Wappinger Creek	Branch 2A Wappinger Creek Reach 1
Town of Wappinger	Branch 2B Wappinger Creek	Branch 2B Wappinger Creek Reach 1
Town of LaGrange	Branch 3 Sprout Creek	Branch 1 Sprout Creek #1
Town of LaGrange	Branch 4 Sprout Creek	Branch 2 Sprout Creek #1
Town of Poughkeepsie	Branch 3 Wappinger Creek	Branch 3 Wappinger Creek Reach 1
Town of Poughkeepsie	Branch 4 Wappinger Creek	Branch 4 Wappinger Creek Reach 1
Town of LaGrange	Branch 3 Wappinger Creek	Branch 5 Wappinger Creek Reach 1

TABLE 5 – STREAM NAME CHANGES-continued

Community	Old Name	New Name
Town of LaGrange	Branch 3 Wappinger Creek	Branch 5 Wappinger Creek Reach 1
Town of Poughkeepsie	Branch 5 Wappinger Creek	Branch 6 Wappinger Creek Reach 1
Town of LaGrange	Branch 4 Wappinger Creek	Branch 7 Wappinger Creek Reach 1
Town of Poughkeepsie	Branch 6 Wappinger Creek	Branch 8 Wappinger Creek Reach 1
Town of Pleasant Valley	Branch 2 Wappinger Creek	Branch 9 Wappinger Creek Reach 1
Town of Pleasant Valley	Branch 3 Wappinger Creek	Branch 10 Wappinger Creek Reach 1
Town of Pleasant Valley	Branch 4 Wappinger Creek	Branch 11 Wappinger Creek Reach 1
Town of Clinton	East Branch Wappinger Creek	East Branch Wappinger Creek Reach 1
Town of LaGrange	Jackson Creek	Jackson Creek Reach 1
Town of Union Vale	Jackson Creek	Jackson Creek Reach 2
Town of Clinton Town of Pleasant Valley	Little Wappinger Creek	Little Wappinger Creek Reach 1
Town of East Fishkill Town of LaGrange	Sprout Creek	Sprout Creek #1
Town of Union Vale	Sprout Creek	Sprout Creek #2
Town of Dover	Swamp River	Swamp River Reach 1
Town of Dover Town of Pawling	Swamp River	Swamp River Reach 2
Town of Fishkill	Tributary to Fishkill Creek	Tributary 1 to Fishkill Creek
Town of Beekman	Tributary to Fishkill Creek	Tributary 2 to Fishkill Creek

TABLE 5 – STREAM NAME CHANGES-continued

Community	Old Name	New Name
Town of Clinton Town of LaGrange Town of Pleasant Valley Town of Poughkeepsie Town of Wappinger Village of Wappinger	Wappinger Creek	Wappinger Creek Reach 1
Town of Stanford	Wappinger Creek	Wappinger Creek Reach 2
Town of Amenia	Webatuck Creek	Webatuck Creek Reach 1
Town of Amenia Town of Northeast Village of Millerton	Webatuck Creek	Webatuck Creek Reach 2
Town of Northeast	Webatuck Creek	Webatuck Creek Reach 3
Town of East Fishkill	Whortle Kill Creek	Whortle Kill Creek Reach 1
Town of LaGrange	Whortle Kill Creek	Whortle Kill Creek Reach 2

All or portions of numerous flooding sources in the county were studied by approximate methods. Approximate analyses were used to study those areas having a low development potential or minimal flood hazards, or where resources were unavailable to conduct more refined and detailed analyses. For this revision, dated September 29, 2011 all areas of approximate flood hazard analyses were updated using the topography provided by Dutchess County and the flood frequency estimation techniques developed by the U.S. Geological Survey (USGS).

This FIS incorporates the determinations of the following LOMRs issued by FEMA. Case 03-02-029P on January 1, 2004, for Swamp River-River Valley Estates, and Case 07-02-0707P on October 15, 2007 for Furnia Site-NYS Route 22 both in the Town of Dover.

2.2 Community Description

Dutchess County is located in the southeastern portion of the State of New York. It is bordered on the north by Columbia County; on the east by Litchfield County, Connecticut; on the south by Putnam County; and to the west by Ulster and Orange Counties.

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The climate of the area is characterized as humid continental. Summer and winter temperatures range from 74.7 degrees Fahrenheit (°F) to 26.2°F, respectively. The average annual precipitation is 38 inches, with a recorded annual snowfall of 42.2 inches. The precipitation is fairly evenly distributed throughout the year (U.S. Department of Commerce, 1972)

According to the 2000 U.S. Census Bureau, the population for Dutchess County was 280,150 and the land area was 801.6 square miles.

For ease of use, information on various flooding sources in Dutchess County was organized based on its 11-digit Hydrologic Unit Code (HUC). The USGS has developed the 8-digit HUC system as a hierarchial classification system of hydrologic drainage basins in the United States. NYS DEC, in conjunction with the USGS, and the Natural Resources Conservation Service (NRCS) of the United States Department of Agriculture, developed 11- digit HUCs for classification at the subwatershed level.
The HUC hierarchy corresponds to codes with 2, 4, 6, 8 and 11 digits. In decreasing area (increasing number of digits in the HUC) order each is made up by several of the contiguous watersheds of lower hierarchy. The first two digits of the HUC are the code for the Regional Boundary (e.g. 02, for the Mid-Atlantic Region). The next two digits of the HUC are the code for the Subregional boundary (e.g. 0202, Upper Hudson). The next two digits are the code for the Accounting Unit (e.g. 020200, the Upper Hudson basin). The next two digits of the HUC are the Cataloging Unit (e.g. 02020004, Mohawk). The last three digits of the HUC are the code for the NRCS Watershed Boundary (e.g. 02020004390, Stony Clove).

HUC 2020008060 Wappingers Creek to Castle Point is located in the center of Dutchess County. In the town of Clinton, Wappinger Creek meanders through a flat, wide floodplain for approximately 2 miles as it flows through the southeastern portion of the community. Wappinger Creek and its tributaries drain approximately one quarter of Dutchess County, forming the Wappinger Creek drainage basin with a watershed area of approximately 210 square miles.

East Branch Wappinger Creek enters Pleasant Valley from the Town of Washington, crossing the eastern town line north of the hamlet of Washington Hollow, flowing northward. East Branch Wappinger Creek then flows north through the Town of Clinton to its confluence with Wappinger Creek near Hibernia. The drainage area of East Branch Wappinger Creek is approximately 33 square miles, with a length of 11 miles and an average width of 3 miles. The floodplain of East Branch Wappinger Creek is undeveloped, but has encroaching residential developments.

Little Wappinger Creek originates in the Town of Milan. It flows south through Clinton and continues southeasterly into Pleasant Valley, crossing Salt Point Turnpike before joining the main channel of Wappinger Creek Reach 1. The creek has a drainage area of 32 square miles at its confluence with Wappinger Creek at

Salt Point. The stream has an average gradient of 16 feet per mile and meanders through relatively flat terrain with wide floodplains (Dutchess County Department of Planning, 1978; Hazen and Sawyer, 1980).

Great Spring Creek is a tributary to Wappinger Creek Reach 1 originating in Clinton and crossing into the Town of Pleasant Valley in the area northeast of Ward and Marshall Roads.

Branch 1 Great Spring Creek originates in the area west of Smith Road in Pleasant Valley and flows southward into a lake.

HUC 1100005480 Ten Mile River is situated in the western portion of Dutchess County. The Tenmile River flows through the Town of Dover and is a tributary of the Housatonic River in Connecticut. Its drainage basin ranges from 5 to 8 miles wide over a length of approximately 32 miles. It drains approximately 210 square miles, from Columbia County in the north to the Town of Pawling in the south.

Wells Brook originates in the southern portion of the Town of Washington and flows east to its confluence with the Tenmile River near Dover Plains. Wells Brook has a drainage area of approximately 6 square miles at its confluence.

In the Village of Millerton, Webatuck Creek, which is a tributary of the Tenmile River, flows south through the village. Its watershed drains approximately 81 square miles, with a length of 20 miles and an average width of 4 miles.

Kelsey Brook originates in Connecticut and flows west to its confluence with Webatuck Creek in Millerton. The watershed of Kelsey Brook is approximately 4 square miles at its confluence.

HUC 2020008070 Castle Point to Fishkill is located in the southwestern portion of the county. In the Town of East Fishkill, Fishkill Creek, a tributary of the Hudson River, flows southwest through the town. It has a drainage area of approximately 194 square miles and a total length of 28 miles.

Sprout Creek flows south to its confluence with Fishkill Creek near Lomala. It has a drainage area of 56 square miles at its confluence, with a length of 18 miles.

Whortlekill Creek also flows south to its confluence with Fishkill Creek. It has a drainage area of approximately 8 square miles.

In the Town of Union Vale, Clove Brook flows in a southern direction for a distance approximately 4.0 miles to its confluence with Pray Pond. Clove Brook has an average slope of 140 feet per mile and a drainage area of approximately 6.7 square miles.

Clove Mountain Creek flows in a western direction for a distance of approximately 1.8 miles to its confluence with Pray Pond. Clove Mountain Creek

has an average slope of 190 feet per mile and a drainage area of approximately 2.1 square miles.

HUC 2030101080 Upper Croton River includes the East Branch Croton River, which flows south through the southern portion of the Town of Pawling. Its watershed drains approximately 1.5 square miles at the corporate limits with the Village of Pawling and increases to 16.5 square miles where it crosses the Dutchess Creek/Putnam County boundary. Tributary to East Branch Croton River originates in the Pawling Mountains in the western portion of the Town of Pawling. It flows southeast to its confluence in the Town of Patterson, Putnam County, NY. The watershed of the tributary drains approximately 35 squares miles at the Dutchess County/Putnam County boundary.

HUC 2020006200 Jansen Kill to Rhinecliff contains the Town of Red Hook, the Village of Red Hook, and the Village of Tivoli.

Landsman Kill flows southwest through the Town of Rhinebeck from its origin in the Town of Milan to its confluence with the Hudson River at Vanderburgh Cove. Its drainage area encompasses approximately 23 square miles with a length of 9 miles and average width of 2.5 miles.

Stony Creek, which flows south through the Village of Tivoli, and has a drainage area of approximately 22 square miles. The eastern half of Tivoli is in the Stony Creek drainage basin, while the western half drains directly into the Hudson River (Hazen and Sawyer, 1980).

HUC 2020008010 Rhinecliff to Wappingers Creek includes the Towns of Rhinebeck, Hyde Park and Poughkeepsie, the Village of Rhinebeck, and the City of Poughkeepsie.

In the Town of Hyde Park, Fall Kill is a tributary of the Hudson River which flows south through the town. Fall Kill has a drainage area of 13.2 square miles at Creek Street and a length of approximately 6.5 miles.

Rhinebeck Kill, a tributary of Landsman Kill, flows south from its origin in the Town of Red Hook to its confluence in the vicinity of Mill Road in the Town of Rhinebeck. Its watershed covers approximately 9 square miles, with a length of 6 miles and average width of 1.5 miles.

Crum Elbow Creek, which flows along the western border of the Town of Clinton, has a drainage area of approximately 19 square miles with a watershed which is approximately 1.5 miles wide and 12 miles long.

Maritje Kill is a tributary of the Hudson River which originates in central Hyde Park and flows southwest through the town to its confluence with the Hudson River.

2.3 Principal Flood Problems

In the Fishkill Creek basin, the flood of record occurred in April 2007. A storm that developed in Texas moved eastward, off the coast of Virginia, before turning northward. The storm reached the New York City area on April 15th and produced discharges on Fishkill Creek that surpassed the previous peak of October 2005. USGS New York estimated the peak discharge at gage 01372800, Fishkill Creek at Hopewell Junction, NY to be 3,910 cubic feet per second (cfs). The previous peak from the October 2005 event was 2,830 cfs. Other major events in the basin include September 1938, August 1955, and October 1955. In addition to coastal storms, rain events on melting snow, can also contribute to heavy runoff volumes.

In the Tenmile River basin, the three greatest floods occurred in September 1938, August 1955, and October 1955. The highest discharge recorded on the Tenmile River at USGS gage 01200000 (Gaylordsville, Connecticut) was 17,400 cfs. This peak discharge was a result of Hurricane Diane (FEMA, 1988). Other major floods include the ones that occurred in 1984 and April 2007, with discharges recorded at 10,400 cfs and 9,650 cfs, respectively.

In the City of Beacon, there have been a number of major storms resulting in high river stages along the Hudson River, including those of February 1875, October 1903, March 1913, November 1950, October 1955, and September 1960 (W. G. Hoyt, 1955; USACE, 1975).

In the Town of Beekman, seasonal residential homes have been subject to flooding from Sylvan Lake Outlet. The most highly flood-prone areas along Frog Hollow Brook extend from the Hamlet of Greenhaven to the confluence with Fishkill Creek. Along Whaley Lake Stream, the downstream areas between its confluence and the Hamlet of Poughquag are subject to inundation (Hazen and Sawyer, 1980).

In the Town of Clinton, the Wappinger Creek basin has been subject to significant flooding in the past. In much of New York State, major floods are usually caused by spring rain in combination with snowmelt. In Dutchess County, floods are usually the result of severe coastal storms and hurricanes. During the past 50 years, the three most severe floods occurred in September 1938, August 1955, and April 2007.

After a 3-day deluge which dropped nearly eight inches of rain in May 1984 Dutchess County was declared a disaster area by Governor Mario Cuomo (Poughkeepsie Journal, 1984). More recently, a Federal Disaster declaration was made in April 2007 after a severe flooding event.

In the Town of East Fishkill, areas adjacent to Sprout Creek, Whortlekill Creek, and Sylvan Lake Outlet are also subject to inundation. This includes residential areas near Sprout Creek in Lomala. Industrial and residential developments near the low-lying floodplain of Whortlekill Creek in the vicinity of Hopewell Junction can be inundated. Areas which are currently being developed along Sylvan Lake Outlet are also subject to flooding.

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In the Village of Millerton, highly flood-prone areas exist along Webatuck Creek throughout its entire length. The steep overbanks of Webatuck Creek produce very rapid runoff and place a heavy burden on low-lying channel areas.

In the Town of Pawling, near the corporate limits with the Town of Dover, a number of industrial and commercial establishments have suffered flood damage from rising waters of the Swamp River.
In the Village of Pawling, both the East Branch Croton River and the Swamp River have wide and relatively poorly drained floodplains. These flat areas, which are subject to frequent inundation, contain primarily residential developments that have suffered flood damage in the past after heavy rainfalls.

In the Town of Pleasant Valley, peak flows have been recorded for Wappinger Creek since 1934, with the highest volume of flow occurring in August 1955. There have been complaints that local silt deposits in Wappinger Creek have created additional flooding hazards for adjoining properties. This condition is alleged to exist north of the U.S. Route 44 bridge crossing.

At Wappinger Creek, near Wappinger Falls gage (01372500), the record extends from 1929 to 2007. The 3 highest recorded flows at the gage were August 1955, September 1938 and April 2007. The 1955 flood had a return period of 80 years and a discharge of 18,600 cfs; the 1938 flood had a discharge of approximately 7,810 cfs; and the 2007 flood had a discharge of 7,640 cfs (U.S. Department of the Interior, 2008). These discharge-frequency estimates for Wappinger Creek and Little Wappinger Creek were based on records kept by the USGS at the gaging stations shown in Table 6, "Stream Gages."

TABLE 6 – STREAM GAGES

STREAM GAGE AND LOCATION	DRAINAGE AREA (sq. miles)	PERIOD OF RECORD
WAPPINGER CREEK		
Near Wappinger Falls, in Town of LaGrange, approximately 700 feet downstream of Red Oak Mill Dam and approximately 4.5 miles northeast of the Village of Wappingers Falls	181.0	1929-2008
Near Clinton Corners, in Town of Clinton, approximately 1,900 feet downstream of confluence of East Wappinger Creek and approximately 1 mile south of Clinton	92.4	1956-1990
LITTLE WAPPINGER CREEK		
In Town of Pleasant Valley, on the right bank at Salt Point, and approximately 0.6 mile upstream of confluence with Wappinger Creek	32.9	1956-1990

At the southeastern corner of the Town of Rhinebeck, Crum Elbow Creek flows through a low-lying area that has been flooded in the past. Residential development in this area along State Route 9G is most susceptible to flooding.

The principal flooding areas along Landsman Kill are located in low-lying areas adjacent to the Village of Rhinebeck. To the west of the village is a low swampy area that is frequently inundated and remains undeveloped. East of the village along State Route 308, development is subject to inundation from Landsman Kill.

Flooding from Rhinebeck Kill occurs along U.S. Route 9 in the northern portion of the Town of Rhinebeck near Weys Corners. Residential development along Old Post Road is also subject to inundation.

Stony Creek was identified by community representatives of the Village of Tivoli as having caused flood damage. Stony Creek creates a highly flood-prone area as it passes through the village.

Flooding can occur in the Town of Union Vale during all seasons, but generally the most notable floods have occurred between the months of February and April when snowmelt adds to heavy spring rains to produce increased runoff. Summer and fall floods also occur due to hurricane activity.

2.4 Flood Protection Measures

Sylvan Lake is located along the western corporate limits of the Town of Beekman. The dam at the lake does not afford any flood protection to the town.

In the Town of East Fishkill, Fishkill Creek, Sprout Creek, and Whortlekill Creek each have two dams located in East Fishkill.

There are two dams on Fishkill Creek within the Town of Fishkill and numerous dams located along the creek within the City of Beacon; however, these dams are not used as flood control structures.

Wappinger Creek is dammed at 3 locations between its confluence with the Hudson River and the upstream corporate limits of the Town of Poughkeepsie. Wappinger Falls Dam is the extreme downstream dam. Little Falls Dam is approximately 0.7 mile upstream of U.S. Route 9, and Red Oaks Mill Dam is just upstream of State Route 376.

The US Army Corps of Engineers, New York District, in 1961 and again in 1968 (USACE, 1961; USACE, 1968) studied the feasibility of constructing a large impounding structure across Wappinger Creek at a point north of the hamlet of Pleasant Valley which would have provided sufficient storage to achieve lower river stages in Wappinger Creek below the proposed dam site during times of severe floods. This scheme met with strong local opposition from officials and residents in Pleasant Valley since it would require inundation of a substantial part of Pleasant Valley. As a consequence, this proposal was shelved.

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The Town of LaGrange, during this same 60s period,asked the USACE for local protection works along Wappinger Creek consisting of channel clearing, dredging, and straightening. Specifically, two local protection works within the town were considered by the USACE:

Overlook Road: The USACE considered that a local protection project consisting of levees would only substantially benefit the drive-in theatre at this location and felt that it would not be in the public interest to expend public funds for this purpose.
A protective dike in the general area was approved in 1974 by Dutchess County as a result of more frequently reported flooding at Milano Drive, allegedly caused by the building of the County bridge at DeGarmo Road.
Red Oaks Mill-Romca Road: The USACE considered a 1,500-foot wall and dike at this location but found that the costs of this project could not be justified by benefits accrued from the prevention of flood damages of a magnitude such as those that occurred in 1955.

In the Village of Wappingers Falls, the lake created by Wappinger Dam has no substantial impounding capacity, and is not effective in reducing large flood volume inflows. In 1976, the village passed a resolution which adopted the FIS requirements for floodplain management and designated as flood zones the special flood hazard areas delineated under the emergency program.

In the City of Poughkeepsie, the bank of the Hudson River has a non-continuous line of bulkheads that do not provide significant protection against flooding.

The Town of Wappinger initiated a drainage study designed to identify culvert locations which have inadequate drainage capacity. Streams included in this study include parts of Branches 1, 2, 2A, and 2B Wappinger Creek Reach 1. The report makes recommendations for either enlarging inadequate structures or alternately providing sufficient upstream detention pond storage to upgrade the conveyance capacity of the structure to the 4-percent annual chance (25-year) storm level (Rudolph Laper, 1975).

The National Oceanic and Atmospheric Administration (NOAA) maintains year-round surveillance of weather conditions at the Poughkeepsie Airport. Constant surveillance of stream flow gages at Red Oaks Mill and Clinton Corners has provided additional flood warning information. Flood warnings are transmitted by the National Warning System to civil defense facilities located in the sheriff's office and the emergency operating center. This information is then relayed from Civil Defense headquarters to responsible agencies as outlined in the County Natural Disaster Plan. Additional warning is provided by the Mid-Hudson Area Flood Group.

In the Town of Dover, along Tenmile River (right descending bank) there is a floodwall in the Powell Mobile Home Park area constructed by C.T. Male Associates that does not provide protection against flooding.

Non-structural measures of flood protection are being utilized to aid in the prevention of future flood damage. These measures are in the form of land-use regulations which control building within areas that have a high risk of flooding.

3.0 ENGINEERING METHODS

For the flooding sources studied in detail in the county, standard hydrologic and hydraulic study methods were used to determine the flood hazard data required for this FIS. Flood events of a magnitude which are expected to be equaled or exceeded once on the average during any 10-, 50-, 100-, or 500-year period (recurrence interval) have been selected as having special significance for floodplain management and for flood insurance rates. These events, commonly termed the 10-, 50-, 100-, and 500-year floods, have a 10-, 2-, 1-, and 0.2-percent chance, respectively, of being equaled or exceeded during any year. Although the recurrence interval represents the long term average period between floods of a specific magnitude, rare floods could occur at short intervals or even within the same year. The risk of experiencing a rare flood increases when periods greater than 1 year are considered. For example, the risk of having a flood which equals or exceeds the 100-year flood (1-percent chance of annual exceedence) in any 50-year period is approximately 40 percent (4 in 10), and, for any 90-year period, the risk increases to approximately 60 percent (6 in 10). The analyses reported herein reflect flooding potentials based on conditions existing in the county at the time of completion of this FIS. Maps and flood elevations will be amended periodically to reflect future changes.

3.1 Hydrologic Analyses

Hydrologic analyses were carried out to establish peak discharge-frequency relationships for each riverine flooding source studied by detailed methods affecting the county.

For each community within Dutchess County that had a previously printed FIS report, the unrevised hydrologic analyses described in those reports have been compiled and are summarized below.

Precountywide Analyses

On ungaged streams having tributary drainage areas between 20 and 1,750 square miles, an analysis was made using the methodology outlined in "Regional Frequency Study, Upper Delaware and Hudson River Basins, New York District" published by the Hydrologic Engineering Center, USACE (USACE, 1974). Log-Pearson Type III frequency analyses were made on the basis of regional data developed for mean annual flows, standard deviations and skews, all of which have been mapped for the study region. According to FIA practice, adjustment for expected probability was not made.
The equations derived from this study are:

$$\log Q_m = C_m - 0.05 \log A$$

$$S = C_s - 0.05 \log A$$

$$\log [Q(p)] = \log Q_m + K(p,g)S$$

Where Q_m = geometric mean of annual flood peaks

C_m = a map coefficient for mean log of annual peaks

A = area in square miles

S = standard deviation of the logs of annual flood peaks

C_s = a map coefficient for standard deviation of logs of annual peaks (S)

log [Q (p)] = log of the discharges for a given exceedence frequency (p)

K (p,g) = log of standard deviation for a given exceedence frequency (p) and skew coefficient (g)

g = skew coefficient for annual flood peaks

When the drainage area tributary to a point of interest is relatively small, between one and three square miles, a detailed investigation of stream flows from the drainage area was made according to the methodology given by SCS-TP-149, U.S. Soil Conservation Service (SCS) in their publication, "A Method for Estimation Volume and Rate Runoff in Small Watersheds" (Soil Conservation Service, 1973).

Input parameters included the following:

a. Soil type distribution within the drainage area obtained from county soil maps (Soil Conservation Service, 1955).

b. Existing land use patterns obtained from Dutchess County land use and generalized zoning maps.

c. County and local road and street maps.

d. Twenty-four hour rainfall obtained from U.S. Weather Bureau Technical Paper 40 (U.S. Weather Bureau, Rainfall Frequency Areas of the United States).

e. Average watershed land slope obtained from analysis of USGS topographic quadrangle sheets.

For ungaged streams with drainage areas falling in the range of 3 to 20 square miles, the flood discharges for varying return periods were obtained on a regional

basis for the drainage area covering Wappinger, Wappingers Falls, Poughkeepsie, LaGrange, and Pleasant Valley, New York. This became a regional analysis for the southwestern portion of Dutchess County. First, a regression analysis was made to determine the appropriate discharge-area relationship using input data from all small drainage areas studied within the five communities by the method outlined above. Next, the discharge-frequency relationships for large drainage areas (up to 1,000 square miles) were established on a regional basis by selecting a single representative value for the parameters of mean annual flow, standard deviation, and skew for Dutchess County. The values used were mean log coefficient, C_m = 1.45; standard deviation coefficient, C_s = 0.34; skew coefficient, g = 0.6. Finally, the interpolated discharge-frequency curves for the drainage areas between 3 and 20 square miles were smoothly fitted between the previously determined curves for large and small drainage areas.

Neither of these statistical computational methods are applicable to basins smaller than one square mile because of the lack of gage data available to incorporate into the regression analyses. The Rational Method of analysis was therefore used to compute peak discharges for upstream portions of streams with drainage basins smaller than one square mile.

HUC 2020006200 Jansen Kill to Rhinecliff

The calculated peak discharge as calculated by the regression equation for the USGS gaging station (No. 01372200) at Clinton Corners was used to adjust the peak discharge calculated by the regression equation at the ungaged site in accordance with the equation:

$$Qw = Qs[(Kg-1)(2As-Ag)/Ag + 1]$$

where Qw is the weighted discharge at the ungaged site, Qs is the discharge calculated by the regression equation for the ungaged site, As and Ag are the drainage areas at the site and the gage respectively, whereas Kg is the ratio of the weighted peak discharge to the peak discharge calculated by the regression equation at the gage.

For Stony Creek, the values of K were calculated to be 266, 458, 569, and 793, and the values of x were 0.61, 0.62, 0.63, and 0.69 for the 10-, 2-, 1-, and 0.2-percent annual chance flood discharges, respectively.

For Saw Kill, the values of K were determined to be 293, 464, 598, and 864, whereas values for x were found to be 0.58, 0.61, 0.61, and 0.66 for the 10-, 2-, 1-, and 0.2-percent annual chance flood discharges, respectively.

HUC 1100005480 TenMile River:
In the Town of Amenia, the hydrologic analyses for Wassaic Creek, Amenia Stream, and Tributary to Amenia Stream followed a procedure presented in Water Resources Investigations 79-93, Techniques for Estimating the Magnitude and Frequency of Floods on Rural Unregulated Streams in New York State Excluding

Long Island (U.S. Department of the Interior, 1979). This procedure relates drainage area and storage percent to a series of regression equations for the southeastern region. Discharges were computed for specific recurrence intervals by substituting the applicable values into the corresponding regression equations.

Discharges for Webatuck Creek Reach 1 were determined from the two separate log-Pearson Type III distributions for gaged streams published in the FISs for the Towns of Dover and Northeast (FEMA, August 1984; FEMA, September 1984). The discharges were transferred from the Amenia-Dover corporate limits to USGS stream gage No. 1199400, located on Webatuck Creek, applying the data from the Dover study to the transfer equation. Peak discharges at locations upstream of the gage were determined by using the transfer coefficients from the FIS for the Town of Northeast (FEMA, September 1984).

The above analyses conform with the techniques described in the USGS Bulletin 17B and Water Resources Investigations 79-83 (U.S. Department of the Interior, 1979; U.S. Department of the Interior, 1981).

The peak discharges were determined by the following transfer equation:

$$Q_2/Q_1 = (DA_2/DA_1)^x$$

where Q_1 is the peak discharge at a known location, DA_1 is the drainage area at a known location, Q_2 is the peak discharge at desired location, DA_2 is the drainage area at desired location, and x is the transfer coefficient.

The recurrence intervals and corresponding transfer coefficients used in the transfer equation are presented in the following tabulation:

Information Source	Recurrence Interval (years)	Transfer Coefficient
Flood Insurance Study for the Town of Dover	10	1.03
	50	1.25
	100	1.29
	500	1.48

Information Source	Recurrence Interval (years)	Transfer Coefficient
Flood Insurance Study for the Town of Northeast	10	0.67
	50	0.67
	100	0.67
	500	0.67

For Webatuck Creek Reach 2, the gage (No. 01199400, 14 years of record, at the time of the analysis) is located near South Amenia, New York, and has a drainage area of 81 square miles, and the transfer coefficient, "x" was calculated to be 0.67 for the 10-, 2-, 1-, and 0.2-percent annual chance floods.

HUC 2030101080 Upper Croton River:

For the East Branch Croton River, the values of K were determined to be 305, 534, 665, and 982, and the values for x were found to be 0.40, 0.39, 0.39, and 0.43 for the 10-, 2-, 1-, and 0.2-percent annual chance floods, respectively. For Tributary to East Branch Croton River, the values of K were determined to be 304, 529, 656, and 969, and the values of x were found to be 0.37, 0.35, 0.35, and 0.38. The values of K for the Swamp River were 290, 513, 624, and 911, and 0.41, 0.40, 0.41, and 0.44 for x. For Whaley Lake Stream, the values of K were 275, 462, 567, and 811, and the values of x were 0.44, 0.45, 0.46, and 0.50.

HUC 202000810 Rhinecliff to Wappingers Creek:

Discharges for Crum Elbow Creek were determined using a log-Pearson Type III analysis of data from a discontinued USGS gage (Water Resources Council, 1977). This gage (No. 01372040) is located at Hyde Park, New York. The transfer coefficients were determined to be 0.73, 0.74, 0.74, 0.77, and 0.76 for the 10-, 2-, 1-, and 0.2-percent annual chance recurrence interval floods.

Peak discharges at other locations were determined by the following transfer equation:

$$Q_2/Q_1 = (DA_2/DA_1)^x$$

where Q_1 and DA_1 are the discharge and drainage area at a gaged location; Q_2 and DA_2 are the discharge and drainage area at an ungaged location; and "x" is the transfer coefficient which was calculated to be 0.82, 0.89, 0.91, and 0.96 for the 10-, 2-, 1-, and 0.2-percent annual chance floods.

For Fall Kill, the values of K were determined to be 179, 283, 372, and 534, whereas for x they were found to be 0.060, 0.63, 0.61, and 0.65 for the 10-, 2-, 1-, and 0.2-percent annual chance flood discharges, respectively.

Casper Kill Creek, log-Pearson Type III analyses of two discontinued USGS gaging stations were used to determine peak discharges for the selected recurrence intervals. One of the USGS gages (No. 01372800) is located near Hopewell Junction, New York, and has a drainage area of 57.3 square miles; the other (No. 01373500) is located at Beacon, with a drainage area of 190 square miles.

For Landsman Kill, the values of K were determined to be 259, 415, 491, and 682, and the values for x were found to be 0.47, 0.49, 0.51, and 0.57 for the 10-, 2-, 1-, and 0.2-percent annual chance floods, respectively. For Rhinebeck Kill, the values of K were determined to be 319, 552, 687, and 1,013, and the values of x were

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found to be 0.36, 0.34, 0.35, and 0.37 for the 10-, 2-, 1-, and 0.2-percent annual chance floods, respectively.

HUC 2020008060 Wappingers Creek to Castle Point:

For the Town of LaGrange, on gaged streams that were studied for the 1979 FIS, the flood flow frequency at that particular gaging station was determined by a log-Pearson Type III analysis without correcting for expected probability. Adjustments for inadequate number of years of record, regional skew, historical records, high and low outliers, as applicable, were made according to procedures outlined in the Water Resources Council Bulletin No. 17 (Water Resources Council, 1976).

East Branch Wappinger Creek - data from a discontinued USGS gage (No. 01372100, drainage area 33.6 square miles) located at Clinton Corners, New York was used (Water Resources Council, 1977). For Little Wappinger Creek, information was used from discontinued USGS gage No. 01372300 located at Salt Point, New York. The transfer coefficient used for Little Wappinger Creek was 0.79 for floods of each of the recurrence intervals. For Wappinger Creek, data from USGS gage No. 01372200 at Clinton Corners, with a drainage area of 92.4 square miles was used. Peak discharges determined at this gaging station were used for the portion of Wappinger Creek within Clinton due to the close proximity of the gaging station. The values of K for Wells Brook were determined to be 294, 539, 650, and 935, and the values for x were found to be 0.40, 0.35, 0.37, and 0.41 for the 10-, 2-, 1-, and 0.2-percent annual chance floods, respectively. The values of K for Kelsey Brook were determined to be 317, 564, 692, and 1,009, and the values for x were found to be 0.31, 0.29, 0.29, and 0.32 for the 10-, 2-, 1-, and 0.2-percent annual chance floods, respectively. The analyses followed procedures outlined by the Water Resources Council and were published by the USGS (Water Resources Council, 1977; U.S. Department of the Interior, 1979).

Wappinger Creek Reach 1 – Discharge-frequency estimates developed for the Town of Pleasant Valley FIS were based on gage records recorded by the USGS at the following gaging stations:

Stream Gage	Location	Drainage Area (Square Miles)	Period of Record
Wappinger Creek Reach 1 near Wappingers Falls, NY	In Town of LaGrange, on left bank, 700 feet downstream of the Red Oak Mill dam and 4.5 miles northeast of The Village of Wappingers Falls, NY	181	1929-1979

Stream Gage	Location	Drainage Area (Square Miles)	Period of Record
Wappinger Creek Reach 1 near Clinton Corners, NY	In Town of Clinton, on left bank, 1,900 feet downstream of confluence of East Wappinger Creek and 1 mile south of Clinton, NY	92.4	1956-1979
Little Wappinger Creek Reach 1 at Salt Point, NY	In Town of Pleasant Valley on right bank at Salt Point, NY, and 0.6 mile from confluence with Wappinger Creek	32.9	1956-1979

While additional gage record is available at all these gages, the discharges compiled from the effective FIS and used for the hydraulic analyses reflect the period presented above.

Branch 1 Wappinger Creek Reach 1 - discharge-frequency estimates for this stream were made at its confluence with Wappinger Creek, based on the method developed for intermediate sized stream drainage areas in Dutchess County. Discharge-frequency estimates were also made at the confluence with a subbranch located adjacent to Old Hopewell Road according to the method described for small drainage areas.

Branch 2 Wappinger Creek Reach 1 - discharge-frequency estimates for were made at its confluence with Wappinger Creek and at a point upstream of the confluence of Branch 2B Wappinger Creek Reach 1 based on the method developed for intermediate sized stream drainage areas in Dutchess County. Discharge-frequency estimates were also made at a point upstream of the confluence of Branch 2A Wappinger Creek Reach 1 according to the method developed for small drainage areas.

Branch 2A Wappinger Creek Reach 1 - discharge-frequency estimates were made at its confluence with Branch 2 using the method developed for small drainage areas.

Branch 2B Wappinger Creek Reach 1 - discharge-frequency estimates for were made at its confluence with Branch 2 Wappinger Creek Reach 1 according to the analysis developed for intermediate-sized stream drainage areas in Dutchess County.

Branch 3 Wappinger Creek Reach 1 - flood frequency-discharge values were determined at its confluence with Wappinger Creek according to the method developed for small drainage areas.

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Branch 4 Wappinger Creek Reach 1 - flood frequency-discharge values were determined for the August 2, 1990, FIS using a procedure developed by the Federal Highway Administration (U.S. Department of Transportation, 1977). This procedure relates basin characteristics such as drainage area, storage area, and precipitation to a series of regression equations for a given region. Discharges were computed for specific recurrence intervals by substituting the appropriate values into the corresponding regression equations.

Branch 5 Wappinger Creek Reach 1 – discharge-frequency estimates were made at the downstream limit of the detailed study adjacent to the CONRAIL tracks (drainage area = 1.62 sq. mi.) according to the method described for small drainage areas.

Branch 6 Wappinger Creek Reach 1 - flood frequency-discharge values for were made at its confluence with Wappinger Creek according to the method developed for small drainage areas.

Branch 7 Wappinger Creek Reach 1 – discharge-frequency estimates were made at the confluence with Wappinger Creek (drainage area = 3.20 sq. mi.) and also at the confluence with a subranch upstream of Overlook Road (drainage area = 2.08 sq. mi.). At the downstream location, the discharge-frequency estimate was made according to the method described above for intermediate-sized drainage areas. At the second location, the estimates were made according to the method described above for small drainage areas.

Branch 8 Reach 1 Wappinger Creek - flood frequency-discharge values for were determined at its confluence with Wappinger Creek according to the analysis developed for intermediate-sized drainage areas. Because of large swampy areas upstream of the study limit, the original discharge-frequency estimate used in the computer model was not consistent with data obtained from a flooding event that occurred in July 1975. The discharge-frequency estimates were revised by application of data from a regional publication which uses a surface storage index using lake and swamp areas as one of the parameters (U.S. Department of the Interior, 1974).

Branch 9 Wappinger Creek Reach 1 – the discharge-frequency estimates for this branch was made at the confluence with the main channel (Drainage Area = 11.1 sq. mi.) based on the regression analysis developed for intermediate sized ungaged drainage areas in Dutchess County.

Branch 10 Wappinger Creek Reach 1 – the discharge-frequency estimates for this branch were made at its confluence with the main channel (Drainage Area = 1.7 sq. mi.) according to the method described for small ungaged drainage areas.

Branch 11 Wappinger Creek Reach 1 – the discharge-frequency estimates for this branch were made at its confluence with the main channel (Drainage Area = 1.6 sq. mi.) according to the method described for small ungaged drainage areas.

Great Spring Creek – discharge-frequency estimates for this stream were made at the confluence with Wappinger Creek and at the mouth of Branch 1 Great Spring Creek. Great Spring had a USGS gage located on it from 1960 to 1965 at a point near its confluence with Wappinger Creek. The gage was discontinued in December 1965. The maximum discharge readings, however, were always affected by high water in Wappinger Creek and are not considered reliable. No statistical analysis of concurrent gage records between this gage and the nearby gage on Little Wappinger Creek at Salt Point is therefore possible. However, since the two basins are adjacent and have similar characteristics, a comparison was made with the Salt Point gaging station's frequency-discharge estimates using an area relationship to the 0.75 power. The discharge-frequency estimates for this creek were made on this basis for both locations. The maximum recorded discharge of 260 cfs in the 5-year gaging period would have a return period of less than 10 years according to the adopted discharge-frequency relationships.

Branch 1 Great Spring Creek – discharge-frequency estimates were made at the confluence of this stream with the main channel (Drainage Area = 1.8 sq. mi.) according to the method described for small ungaged drainage areas.

Wappinger Creek Reach 1 – the hydrologic analysis for Wappinger Creek Reach 1 was prepared using a drainage area transposition equation. This equation relates gaged site data and drainage areas to compute discharges at other locations.

Little Wappinger Creek Reach 1 – the discharge-frequency estimates were based on the gaging records for the creek at Salt Point (Drainage Area = 32.4 sq. mi.). A log-Pearson Type III analysis was performed using the regional skew obtained from the Regional Frequency Study, Upper Delaware and Hudson River Basins instead of the station skew in conformance with Bulletin No. 17. The flow at the gaging station was transferred to the confluence with Wappinger Creek using an area relationship to the 0.75 power.

East Branch Wappinger Creek Reach 1 – the discharge-frequency estimates were made at the town line with Clinton (Discharge Area = 34 sq. mi.) based on the "Regional Frequency Study" (USACE, 1974). A log-Pearson Type III analysis of the USGS gaging records could not be made due to the limited years of record. The USGS gage on this stream was in operation from 1956 to 1963. The maximum flood of record, 1,340 cfs recorded in 1961, would have a return period of somewhat less than 10 years according to the adopted discharge-frequency relationships.

Wappinger Creek Reach 2 - the peak discharge of the selected recurrence interval was determined using the procedures and regression equations outlined in USGS Water Resources Investigations 79-83 for ungaged sites on gaged streams (U.S. Department of the Interior, 1979; Water Resources Council, 1977). For the southern region of New York, the following equation was used:

$$Q = K(DA)^{x}(S)^{y}(P-20)^{z}$$

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where Q is the stream discharge; DA is the drainage area; S is the main-channel slope; P is the mean annual precipitation; and K, x, y, and z are functions of the frequency. A value of 0.138 was used for K, 1.06 for x, 0.447 for y, and 1.57 for z, for the 1-percent annual chance discharge.

Sprout Creek No. 1 - discharge-frequency estimates for the ungaged Sprout Creek No. 1 were made at the downstream corporate limits and upstream of the confluence with Jackson Creek Reach 1 using the "Regional Frequency Study" (USACE, 1974). The following parameters were used: mean log coefficient, Cm equal to 1.35; a standard deviation coefficient, Cs equal to 0.33; and a skew coefficient, g equal to 0.65.

HUC 202000870 Castle Point to Fishkill:

The resulting values were connected by smooth curves, represented by the following equation:

$$Q = K(DA)^z$$

The values of K for Whortlekill Creek were determined to be 521, 734, 871, and 1,296, and the values of x were found to be 0.25, 0.27, 0.29, and 0.31 for the 10-, 2-, 1-, and 0.2-percent annual chance floods, respectively. For Sylvan Lake Outlet, the values of K were calculated to be 310, 540, 670, and 990, and the values of x were 0.36, 0.34, 0.34, and 0.36.

For Clove Brook, extrapolation resulted in the values of 132, 215, 246, and 359 for K and 0.84, 0.86, 0.87, and 0.88 for x.

For Tributary 1 to Fishkill Creek, the values of K were determined to be 309, 532, 668, and 974, and the values for x were found to be 0.36, 0.35, 0.35, and 0.38 for the 10-, 2-, 1-, and 0.2-percent annual chance floods, respectively.

Tributary 2 to Fishkill Creek, log-Pearson Type III analyses of two discontinued USGS gaging stations were used to determine peak discharges for the selected recurrence intervals. One of the USGS gages (No. 01372800) is located near Hopewell Junction, New York, and has a drainage area of 57.3 square miles; the other (No. 01373500) is located at Beacon, with a drainage area of 186 square miles.

For the Town of LaGrange, on gaged streams that were studied for the 1979 FIS, the flood flow frequency at that particular gaging station was determined by a log-Pearson Type III analysis without correcting for expected probability. Adjustments for inadequate number of years of record, regional skew, historical records, high and low outliers, as applicable, were made according to procedures outlined in the Water Resources Council Bulletin No. 17 (Water Resources Council, 1976). Sprout Creek # 1 – Discharge-frequency estimates for this ungaged stream were based on the "Regional Frequency Study" (USACE, 1974) for ungaged areas

described above. The following parameters were used: mean log coefficient, C_m = 1.35, a standard deviation coefficient, C_s = 0.33, and a skew coefficient, g = 0.65.

Jackson Creek Reach 1 – discharge-frequency estimates for this stream were determined according to the method described above for the intermediate-sized stream drainage areas.

Branch 1 Sprout Creek #1 – discharge-frequency estimates along this stream were made according to the methods described above for intermediate and small-sized drainage areas depending on the drainage area at the point in question.

Branch 2 Sprout Creek #1 – discharge-frequency estimates were made at the confluence with Sprout Creek (drainage area = 3.69 sq. mi.) according to the method described above for intermediate-sized drainage areas.

Whortle Kill Creek Reach 2 – discharge-frequency estimates for this creek were made at the town line with East Fishkill (drainage area = 2.38 sq. mi.) according to the method described above for small drainage areas.

Branch 1A Hudson River - discharge-frequency estimates were made at its confluence with the Hudson River according to the method described above for small drainage areas.

The streams within the Town of Union Vale are small, rural, ungaged basins: Clove Brook, Clove Mountain Creek, Fishkill Creek, Jackson Creek Reach 2, Selly Creek, Sprout Creek, Walsh Creek, and Willow Brook. For the streams studied by detailed methods, two regional analysis methods were used to compute peak discharges. a USGS analysis, Techniques for Estimating Magnitude and Frequency of Floods on Rural Unregulated Streams in New York State, utilized gage data throughout New York State to formulate regression equations for use on ungaged streams (U.S. Department of the Interior, 1979). A USACE analysis, Regional Frequency Study, Upper Delaware and Hudson River Basins, New York District, utilized gage data throughout the upper Delaware and Hudson River basins to formulate regression equations for use on ungaged streams (USACE, 1974). The two methods produced similar peak discharges, and the results were averaged together.

The Hudson River is tidal in nature in the study area; therefore, discharge-frequency relationships are not meaningful for determining flood stages. Instead, a stage-frequency relationship was established based on information available from the USACE (USACE, 1975). An analysis of stage-frequency relationships at Albany, Catskill, and Spuyten Duyvil indicated that the simplest method of straight-lining would not represent true conditions at intermediate locations. The rising and falling of mean tides have been found to correlate with the width of the river. Hence, the expectation of a similar effect on high river stages led to the establishment of maximum and minimum slopes of water-surface profiles between Spuyten Duyvil and Catskill (U.S. Department of Housing and Urban

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Development, 1978). Stage-frequency relationships for the Hudson River at Beacon were then extracted from these water-surface profiles.

Countywide Analyses

Techniques provided in *Magnitude and Frequency of Floods in New York,* USGS SIR 2006-5112 (USGS 2006) formed the basis of the revised hydrologic analyses conducted for this countywide study. Details on techniques used for each of the 3 revised streams are presented below.

HUC 1100005480 Tenmile River:

The 10%, 2%, 1%, and 0.2% annual chance peak discharges were developed for the Tenmile River at twelve locations along the studied reach. Log-Pearson Type III statistical analysis was conducted for the lone gage location and the resulting discharges were weighted with the ones that were computed using New York State regression equations as presented in SIR 2006-5112 (USGS 2006).

At ungaged locations, discharges were computed based on the regression equations and if the gage had drainage area within the 50% to 150% of that of a gage, the regression discharges were weighted with log-Pearson Type III discharges. The log-Pearson Type III method consists of fitting the logarithms of annual peak flows to a log-Pearson Type III distribution. The equation provided below forms the basis for the log-Pearson Type III analysis.

$\text{Log } Q = X + KS$

Where, X is the mean of logarithms of annual peak flows, S is standard deviation of logarithms of annual peak flows and K is a factor that is a function of the skew coefficient.

Following are the equations used for computing the regression estimate:

$Q\ 10 = 3.4\ (A)^{0.810}\ (ST+0.5)^{-0.218}\ (RUNF)^{0.600}\ (EL12+1)^{0.133}\ (SR)^{0.268}$

$Q\ 50 = 39.0\ (A)^{0.819}\ (ST+0.5)^{-0.188}\ (RUNF)^{0.528}\ (EL12+1)^{0.157}\ (SR)^{0.305}$

$Q\ 100 = 46.0\ (A)^{0.823}\ (ST+0.5)^{-0.177}\ (RUNF)^{0.505}\ (EL12+1)^{0.166}\ (SR)^{0.318}$

$Q\ 500 = 62.7\ (A)^{0.834}\ (ST+0.5)^{-0.155}\ (RUNF)^{0.466}\ (EL12+1)^{0.183}\ (SR)^{0.345}$

Where,

A is drainage area, in square miles.

SR is slope ratio, which is defined as the ratio of main-channel slope to basin slope within the drainage basin.

EL12 is percentage of drainage basin at or greater than 1,200 feet above sea level.

ST is basin storage, which is the percentage of total drainage area shown as lakes, ponds, and swamps (wetlands).

RUNF is Mean annual runoff, in inches.

The equation used for computing the weighted-average discharges at the gage is:

$$Q_{T(w)} = \frac{Q_{T(g)}\,(N) + Q_{T(r)}\,(E)}{N+E}$$

Where,

QT(w) is weighted peak discharge at the gaged site, in cfs, for T-year recurrence interval

QT(g) is the peak discharge at the gage, in cfs, calculated by Log-Pearson Type III frequency analysis of the station's peak discharge record, for the T-year recurrence interval

N is the number of years of annual peak-discharge record used to calculate QT(g) at the gaging station

QT(r) is the regional regression estimate of the peak discharge at the gaged site, in cfs, for the T-year recurrence interval

E is the average equivalent years of record associated with the regression equation (Table 2 in SIR 2006-5112) that was used to calculate QT(r)

Following are the equations used for computing discharges at the locations influenced by the gage.

$$Q_{T(U)w} = \frac{2\Delta A}{A_g}\,Q_{T(U)r} + (1 - \frac{2\Delta A}{A_g})Q_{T(U)g}$$

$$Q_{T(U)g} = \left(\frac{Au}{A_g}\right) b\ Q_{T(w)}$$

Where,

$Q_{T(U)w}$ is the weighted estimate of discharge QT for recurrence interval T at the ungaged site

ΔA is the absolute value of difference between the drainage areas of the streamflow-gaging station, (Ag) and the ungaged site, (Au)

$Q_{T(U)r}$ is the peak flow estimate for recurrence interval T at the ungaged site, derived from applicable regional equations

$Q_{T(U)g}$ is the peak flow estimate for recurrence interval T at the ungaged site, derived from the weighted estimate of peak discharge at the streamflow-gaging station QT(U)w

b is the exponent from the appropriate drainage area-only equation for Hydrologic Region, Region 2 in the case of Tenmile River.

HUC 2020008010 Maritje Kill:

The 10%, 2%, 1%, and 0.2% annual chance peak discharges were developed for the Maritje Kill River at 8 locations along the studied reach. Since there are no flows gages located on the stream, the discharges were computed based on flood frequency regression equations presented in SIR 2006-5112. The drainage-area only equations were used rather than the full parameter equation based on the observation that in this hydrologic region, for basins with smaller amounts of storage, the full parameter regression equations may underestimate discharges. The equations used for calculating the discharges follow:

$Q\ 10 = 197\ (A)^{0.695}$

$Q\ 50 = 378\ (A)^{0.666}$

$Q\ 100 = 480\ (A)^{0.656}$

$Q\ 500 = 782\ (A)^{0.638}$

Where,

A is drainage area, in square miles.

HUC 2020008070 Fishkill Creek:

The 10%, 2%, 1%, and 0.2% annual chance peak discharges were developed for Fishkill Creek at thirty locations along the studied reach. Log-Pearson Type III statistical analysis was conducted for the two gage locations and the resulting discharges were weighted with the ones that were computed using the regression equations. Before conducting the Log-Pearson Type III analysis, in order to optimize the available gage data and leverage the presence of 2 gages with substantial historical records, MOVE 2, a record extension technique was used to fill gaps in the historical gage data record.

At ungaged locations, discharges were computed based on the full parameter regression equations as presented in USGS SIR 2006-5112. For ungaged locations along Fishkill Creek where the drainage area is between 50% and 150% of the drainage area at the gaged location, the regression equation results were weighted with the Log-Pearson Type III calculated discharge transferred to the ungaged location.

The log-Pearson Type III method consists of fitting the logarithms of annual peak flows to a log-Pearson Type III distribution. The equation provided below forms the basis for the log-Pearson Type III analysis.

$\text{Log } Q = X + KS$

Where, X is the mean of logarithms of annual peak flows, S is standard deviation of logarithms of annual peak flows and K is a factor that is a function of the skew coefficient.

The full parameter equations used for computing the regression estimate (USGS 2006):

$Q\ 10 = 3.4\ (A)^{0.810}\ (ST+0.5)^{-0.218}\ (RUNF)^{0.600}\ (EL12+1)^{0.133}\ (SR)^{0.268}$

$Q\ 50 = 39.0\ (A)^{0.819}\ (ST+0.5)^{-0.188}\ (RUNF)^{0.528}\ (EL12+1)^{0.157}\ (SR)^{0.305}$

$Q\ 100 = 46.0\ (A)^{0.823}\ (ST+0.5)^{-0.177}\ (RUNF)^{0.505}\ (EL12+1)^{0.166}\ (SR)^{0.318}$

$Q\ 500 = 62.7\ (A)^{0.834}\ (ST+0.5)^{-0.155}\ (RUNF)^{0.466}\ (EL12+1)^{0.183}\ (SR)^{0.345}$

Where,

A is drainage area, in square miles.

SR is slope ratio, which is defined as the ratio of main-channel slope to basin slope within the drainage basin.

EL12 is percentage of drainage basin at or greater than 1,200 feet above sea level.

ST is basin storage, which is the percentage of total drainage area shown as lakes, ponds, and swamps (wetlands).

RUNF is Mean annual runoff, in inches.

The equation used for computing the weighted-average discharges at the gage is:

$$Q_{T(w)} = \frac{Q_{T(g)}\ (N) + Q_{T(r)}\ (E)}{N + E}$$

Where,
QT(w) is weighted peak discharge at the gaged site, in cfs, for T-year recurrence interval

QT(g) is the peak discharge at the gage, in cfs, calculated by Log-Pearson Type III frequency analysis of the station's peak discharge record, for the T-year recurrence interval

N is the number of years of annual peak-discharge record used to calculate QT(g) at the gaging station

QT(r) is the regional regression estimate of the peak discharge at the gaged site, in cfs, for the T-year recurrence interval

E is the average equivalent years of record associated with the regression equation (Table 2 in SIR 2006-5112) that was used to calculate QT(r)

Following are the equations used for computing discharges at the locations influenced by the gage.

$$Q_{T(U)w} = \frac{2\Delta A}{A_g} Q_{T(U)r} + (1 - \frac{2\Delta A}{A_g}) Q_{T(U)g}$$

$$Q_{T(U)g} = \left(\frac{Au}{A_g}\right) b Q_{T(w)}$$

Where,

$Q_{T(U)w}$ is the weighted estimate of discharge QT for recurrence interval T at the ungaged site

ΔA is the absolute value of difference between the drainage areas of the streamflow-gaging station, (Ag) and the ungaged site, (Au)

$Q_{T(U)r}$ is the peak flow estimate for recurrence interval T at the ungaged site, derived from applicable regional equations

$Q_{T(U)g}$ is the peak flow estimate for recurrence interval T at the ungaged site, derived from the weighted estimate of peak discharge at the streamflow-gaging station QT(U)w

b is the exponent from the appropriate drainage area-only equation for Hydrologic Region.

A summary of the drainage area-peak discharge relationships for all the streams studied by detailed methods is shown in Table 7, "Summary of Discharges."

TABLE 7 – SUMMARY OF DISCHARGES

FLOODING SOURCE AND LOCATION	DRAINAGE AREA (sq. miles)	PEAK DISCHARGES (cfs) 10-PERCENT	2-PERCENT	1-PERCENT	0.2-PERCENT
AMENIA STREAM					
Immediately upstream of confluence with Wassaic Creek	11.2	601	975	1,166	*
Immediately downstream of Lake Road	7.7	525	866	1,041	*
Immediately upstream of confluence of Tributary to Amenia Stream	3.3	206	333	396	*
BRANCH 1 GREAT SPRING CREEK					
Mouth of Great Spring Creek	1.8	360	520	660	960
BRANCH 1A HUDSON RIVER					
At confluence with Hudson River	1.7	393	565	700	975
BRANCH 1 SPROUT CREEK #1					
Mouth at Sprout Creek	4.07	650	940	1,180	1,800
BRANCH 2 SPROUT CREEK #1					
Mouth at Sprout Creek	3.69	610	900	1,120	1,720
BRANCH 1 WAPPINGER CREEK REACH 1					
At confluence with Wappinger Creek Reach 1	8.2	850	1,280	1,650	2,520
At Cross Section H	3.2	580	800	1,000	1,500
BRANCH 2 WAPPINGER CREEK REACH 1					
At confluence with Wappinger Creek Reach 1	11.8	990	1,520	1,930	3,000
At confluence of Branch 2B Wappinger Creek Reach 1	3.8	620	910	1,140	1,740
At confluence of Branch 2A Wappinger Creek Reach 1	1.5	440	610	780	1,200

*Data not available

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TABLE 7 – SUMMARY OF DISCHARGES - continued

FLOODING SOURCE AND LOCATION	DRAINAGE AREA (sq. miles)	PEAK DISCHARGES (cfs) 10-PERCENT	2-PERCENT	1-PERCENT	0.2-PERCENT
BRANCH 2A WAPPINGER CREEK REACH 1					
At confluence with Branch 2 Wappinger Creek Reach 1	1.1	300	420	550	900
BRANCH 2B WAPPINGER CREEK REACH 1					
At confluence with Branch 2 Wappinger Creek Reach 1	7.9	840	1,260	1,600	2,490
BRANCH 3 WAPPINGER CREEK REACH 1					
At confluence with Wappinger Creek Reach 1	1.23	600	800	900	1,350
BRANCH 4 WAPPINGER CREEK REACH 1					
At confluence with Wappinger Creek Reach 1	0.80	85	138	159	*
BRANCH 5 WAPPINGER CREEK REACH 1					
Cross section A	1.62	450	650	875	1,300
BRANCH 6 WAPPINGER CREEK REACH 1					
At confluence with Wappinger Creek Reach 1	0.83	460	600	710	970
BRANCH 7 WAPPINGER CREEK REACH 1					
Mouth at Wappinger Creek	3.20	580	840	1,060	1,600
Cross section L	2.08	510	800	1,000	1,550
BRANCH 8 WAPPINGER CREEK REACH 1					
At confluence with Wappinger Creek Reach 1	5.30	391	646	788	1,140

*Data not available

TABLE 7 – SUMMARY OF DISCHARGES - continued

FLOODING SOURCE AND LOCATION	DRAINAGE AREA (sq. miles)	PEAK DISCHARGES (cfs) 10-PERCENT	2-PERCENT	1-PERCENT	0.2-PERCENT
BRANCH 9 WAPPINGER CREEK REACH 1					
Mouth of Wappinger Creek Reach 1	11.1	980	1,420	1,820	3,000
BRANCH 10 WAPPINGER CREEK REACH 1					
Mouth of Wappinger Creek Reach 1	1.7	300	430	545	810
BRANCH 11 WAPPINGER CREEK REACH 1					
Mouth of Wappinger Creek Reach 1	1.6	357	514	657	950
CASPER KILL CREEK					
At confluence with the Hudson River	12.22	1,000	1,530	1,950	3,070
Approximately 1,600 feet downstream of Hagen Drive	7.88	840	1,260	1,600	2,450
At downstream face of State Route 55	2.70	549	784	990	*
CLOVE BROOK					
At confluence with Pray Pond	6.7	430	800	1,010	1,690
Upstream of confluence of Sweezy Creek	4.9	340	630	790	1,320
Upstream of Tributary 1	3.8	280	530	660	1,110
Upstream of Tributary 2	3.2	240	450	570	960
CLOVE CREEK					
At its confluence with Fishkill Creek	20.0	1,630	2,830	3,330	5,010
At the upstream corporate limits	15.7	1,300	2,240	2,640	3,940
CLOVE MOUNTAIN CREEK					
At confluence with Jackson Creek Reach 2	2.1	240	340	430	690
Upstream of confluence of Walsh Creek	1.1	190	280	320	390

*Data not available

TABLE 7 – SUMMARY OF DISCHARGES - continued

FLOODING SOURCE AND LOCATION	DRAINAGE AREA (sq. miles)	PEAK DISCHARGES (cfs) 10-PERCENT	2-PERCENT	1-PERCENT	0.2-PERCENT
CLOVE MOUNTAIN CREEK (continued)					
Approximately 100 feet downstream of lower West Clove Mountain Road culvert	0.98	180	260	300	390
Approximately 2,100 feet downstream of upper West Clove Mountain Road culvert	0.83	160	230	260	340
Upstream of confluence of Tributary	0.53	130	170	200	260
Approximately 1,000 feet upstream of upper West Clove Mountain Road culvert	0.40	110	140	160	210
Approximately 2,000 feet upstream of upper West Clove Mountain Road culvert	0.27	80	100	120	160
CRUM ELBOW CREEK					
At confluence with Hudson River	18.9	500	840	1,020	1,440
At South Cross Road	15.4	460	780	950	1,340
At Mills Cross Road	10.7	300	500	620	870
At Browns Pond Road	6.0	230	390	480	680
At Sipe Barracks Road	1.4	80	130	150	220
EAST BRANCH CROTON RIVER					
At the downstream Town of Pawling corporate limits	16.5	940	1,600	2,010	3,240
At the CONRAIL crossing	11.8	820	1,400	1,760	2,810
At the upstream corporate limits of Town of Pawling	1.5	350	620	770	1,150
At State Route 22	0.9	320	550	690	1,020

TABLE 7 – SUMMARY OF DISCHARGES - continued

FLOODING SOURCE AND LOCATION	DRAINAGE AREA (sq. miles)	PEAK DISCHARGES (cfs) 10-PERCENT	2-PERCENT	1-PERCENT	0.2-PERCENT
EAST BRANCH WAPPINGER CREEK REACH 1					
Downstream Town of Pleasant Valley corporate limit	34	1,514	2,914	3,741	6,400
EIGHMY VILLE CREEK					
At White Schoolhouse Road	6.9	640	1,060	1,320	2,050
FALL KILL					
At Creek Road	13.2	790	1,330	1,660	2,660
Just upstream of Roosevelt Road	10.0	680	1,140	1,440	2,250
FALL KILL CREEK					
At downstream Town of Poughkeepsie corporate limits	17.40	1,150	1,820	2,300	*
FISHKILL CREEK					
Downstream of Pray Pond	6.9	544	937	1,140	1,730
Upstream of Tributary 1	7.0	548	943	1,150	1,740
Downstream of Tributary 1	8.6	709	1,210	1,480	2,230
Upstream of Tributary 3	11.1	740	1,260	1,540	2,310
At downstream corporate limits of Town of Union Vale	12.9	808	1,380	1,680	2,550
Downstream of Furnace Pond	12.9	818	1,400	1,710	2,590
Upstream of confluence of Whaley Lake Stream	17.8	1,190	2,030	2,460	3,710
Downstream of confluence of Whaley Lake Stream	35.6	1,976	3,375	4,109	6,218
Upstream of confluence of Frog Hollow Brook	38.5	2,013	3,430	4,172	6,291
Downstream of confluence of Frog Hollow Brook	43.4	2,181	3,713	4,520	6,805
At downstream corporate limits of Town of Beekman	47.9	2,212	3,768	4,586	6,905

*Data not available

TABLE 7 – SUMMARY OF DISCHARGES - continued

FLOODING SOURCE AND LOCATION	DRAINAGE AREA (sq. miles)	PEAK DISCHARGES (cfs) 10-PERCENT	2-PERCENT	1-PERCENT	0.2-PERCENT
FISHKILL CREEK (continued)					
Upstream of confluence of Sylvan Lake Outlet	50.1	2,212	3,768	4,586	6,905
Downstream of confluence of Sylvan Lake Outlet	53.6	2,214	3,768	4,580	6,880
Downstream of Dam 1	55.2	2,223	3,786	4,601	6,912
USGS gage No. 01372800	57.2	2,258	3,849	4,679	7,029
Downstream of Fishkill CreekCreek_t12	74.4	2,812	4,708	5,698	8,509
Upstream of confluence of Whortle Kill Creek	75.4	2,812	4,708	5,698	8,509
Downstream of confluence of Whortle Kill Creek	81.9	3,098	5,140	6,213	9,245
Downstream of confluence of unnamed tributary	86.3	3,220	5,330	6,430	9,580
Downstream of confluence of Sprout Creek	144.4	5,109	8,645	10,493	15,880
At downstream corporate limits of Town of East Fishkill Creek	156.2	5,419	9,220	11,216	17,041
Downstream of confluence of Clove Creek	180.9	5,859	10,101	12,359	18,939
At a point approximately 1,090 feet upstream of unnamed tributary at Glenham	184.7	5,915	10,223	12,519	19,219
At upstream corporate limits of City of Beacon	187.1	5,956	10,310	12,633	19,416
USGS gage No. 01373500	188.2	5,976	10,353	12,688	19,512
At the confluence with Hudson River	192.8	6,116	10,545	12,907	19,786
LITTLE WAPPINGER CREEK REACH 1					
Mouth of Wappinger Creek	35	1,120	1,980	2,465	3,960
At corporate limits of Town of Pleasant Valley	32.3	1,510	1,860	2,320	3,720
At Hollow Road	27.4	910	1,620	2,020	3,230
At Nine Partners Road	22.6	840	1,490	1,860	2,980

TABLE 7 – SUMMARY OF DISCHARGES - continued

FLOODING SOURCE AND LOCATION	DRAINAGE AREA (sq. miles)	PEAK DISCHARGES (cfs) 10-PERCENT	2-PERCENT	1-PERCENT	0.2-PERCENT
MARITJE KILL					
Upstream of Crum Elbow Drive	1.24	229	436	553	897
Upstream of Hidden Brook Drive	2.05	323	605	766	1,232
Downstream of State Route 9G (Violet Avenue)	2.17	336	628	796	1,278
Downstream of Unnamed Dam 1	2.52	282	371	421	860
Downstream of New Bold	2.86	316	431	497	978
Downstream of St. Andrews Road	3.40	369	523	612	1,157
Downstream of U. S. Route 9	3.78	403	583	687	1,273
Downstream of bridge at confluence with Hudson	4.08	431	631	748	1,367
SAW KILL					
At confluence with Hudson River	26.4	1,970	3,460	4,460	7,460
At Linden Avenue	21.1	1,730	3,020	3,890	6,440
At County Route 199	16.1	1,480	2,560	3,300	5,400
SEELEY CREEK					
At confluence with Clove Brook	0.69	210	280	330	420
SPROUT CREEK #1					
At its confluence with Fishkill Creek	55.3	1,550	2,790	3,480	5,720
At the upstream corporate limits	54.8	1,550	2,790	3,480	5,720
At the confluence of Jackson Creek Reach 1	35.8	1,070	1,980	2,500	4,200
Downstream Town of LaGrange corporate limits	35.56	1,072	1,982	2,498	4,198
Cross section J	28.72	912	1,698	2,148	3,639
At State Route 55	23.93	790	1,486	1,888	3,221

TABLE 7 – SUMMARY OF DISCHARGES - continued

FLOODING SOURCE AND LOCATION	DRAINAGE AREA (sq. miles)	PEAK DISCHARGES (cfs) 10-PERCENT	2-PERCENT	1-PERCENT	0.2-PERCENT
SPROUT CREEK #2					
At downstream Town of Union Vale corporate limits	11.6	580	1,060	1,340	2,210
Upstream of confluence of Tributary 1	10.3	530	970	1,230	2,020
Upstream of confluence of Willow Brook	6.8	380	700	890	1,490
Upstream of confluence of Tributary 2	6.0	340	640	810	1,350
Downstream of Verbank Village Road culvert	5.6	330	600	770	1,290
STONY CREEK					
At the downstream Village of Tivoli corporate limits	22.0	1,750	3,060	3,970	6,580
At the upstream Village of Tivoli corporate limits	17.8	1,540	2,690	3,480	5,700
SWAMP RIVER REACH 1					
At a point approximately 0.2 mile upstream of its confluence with Tenmile River	48.0	*	*	5,077	*
SWAMP RIVER REACH 2					
At the downstream Town of Pawling corporate limits	13.5	850	1,440	1,810	2,870
At Swamp Road	7.5	670	1,140	1,420	2,220
At the upstream corporate limits of Town of Pawling	2.5	430	740	910	1,370
SYLVAN LAKE OUTLET					
At confluence with Fishkill Creek	3.4	480	820	1,020	1,540
At Sylvan Drive	1.0	310	540	670	990
SWEEZY CREEK					
At confluence with Clove Brook	1.1	250	340	390	500
Approximately 1,000 feet upstream of confluence with Clove Brook	0.91	220	300	340	440

*Data not available

TABLE 7 – SUMMARY OF DISCHARGES - continued

FLOODING SOURCE AND LOCATION	DRAINAGE AREA (sq. miles)	PEAK DISCHARGES (cfs) 10-PERCENT	2-PERCENT	1-PERCENT	0.2-PERCENT
SWEEZY CREEK (continued)					
Approximately 100 feet downstream of County Route 9 culvert	0.73	180	250	290	370
TENMILE RIVER					
At the upstream Town of Dover corporate limit	133.25	4,532	7,038	8,328	11,978
Upstream of an Unknown Tributary	133.32	4,537	7,048	8,340	11,997
Upstream of an Unknown Tributary	143.02	4569	7106	8413	12109
Upstream from the confluence of Swamp River	143.49	4797	7503	8897	12835
Downstream from the confluence of Swamp River	190.01	6878	12443	15558	15040
At South Dover Bridge	194.82	6999	12652	15815	25443
Downstream of removed weir	195.43	7014	12679	15847	25493
At USGS Gage Number 1200000	203.62	7217	13030	16280	26170
At the county boundary	209.77	7368	13291	16601	26672
TRIBUTARY TO AMENIA STREAM					
Immediately upstream of confluence with Amenia Stream	2.5	179	292	349	*
TRIBUTARY TO EAST BRANCH CROTON RIVER					
At county boundary	3.5	480	820	1020	1550
At the conrail crossing	1.3	340	580	720	1070
TRIBUTARY 1 TO FISHKILL CREEK					
At confluence with Fishkill Creek	3.4	480	820	1020	1550
At a point approximately 2.75 miles upstream of confluence with Fishkill Creek	1.1	320	550	690	1010

*Data not available

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TABLE 7 – SUMMARY OF DISCHARGES - continued

FLOODING SOURCE AND LOCATION	DRAINAGE AREA (sq. miles)	PEAK DISCHARGES (cfs) 10-PERCENT	2-PERCENT	1-PERCENT	0.2-PERCENT
TRIBUTARY 2 TO FISHKILL CREEK					
At the Town of Beekman upstream corporate limits	15.9	750	1200	14400	2550
WAPPINGER CREEK REACH 1					
At confluence with the Hudson River	210	7,825	14,980	19,228	32,866
Approximately 1,600 feet downstream of U.S. Route 9	197	7,459	14,279	18,328	31,328
At USGS gaging station	181	7,000	13,400	17,200	29,400
Approximately 2,900 feet downstream of Titus Road	169	6,650	12,728	16,337	27,925
Downstream Town of Pleasant Valley corporate limit	167	6,770	13,450	17,530	31,100
At mouth of Branch 9 Wappinger Creek Reach 1	161	6,430	12,640	16,420	28,860
Mouth of Great Spring Creek	146	5,590	10,630	13,630	23,310
Hurley Road bridge	134	4,950	9,000	11,360	18,700
Mouth of Little Wappinger Creek	99	3,790	7,020	8,890	14,830
USGS gaging station near Clinton Corners, New York	92.4	3,970	7,100	8,790	13,400
WAPPINGER CREEK REACH 2					
At Salt Point Turnpike	50.2	*	*	3,490	*
Approximately 1,500 feet upstream from Salt Point Turnpike	40.3	*	*	2,780	*
Approximately 500 feet upstream from Depot Lane	35.1	*	*	2,220	*

*Data not available

TABLE 7 – SUMMARY OF DISCHARGES - continued

FLOODING SOURCE AND LOCATION	DRAINAGE AREA (sq. miles)	PEAK DISCHARGES (cfs) 10-PERCENT	2-PERCENT	1-PERCENT	0.2-PERCENT
WALSH CREEK					
At confluence with Clove Mountain Creek	1.00	240	330	380	480
Approximately 2,280 feet upstream of confluence with Clove Mountain Creek	0.85	210	290	340	420
Approximately 1,700 feet downstream of Bloomer Road culvert	0.68	180	250	290	360
Upstream of confluence of Tributary	0.47	140	190	220	280
Approximately 400 feet upstream of Bloomer Road	0.42	130	170	200	260
WASSAIC CREEK					
At Wassaic State School boundary	37.3	2,018	3,340	4,040	*
WEBATUCK CREEK REACH 1					
At a point approximately 670 feet upstream of confluence with the Tenmile River	80.0	2,808	4,139	4,912	*
Immediately upstream of County Route 3	74.8	2,667	3,931	4,666	*
WEBATUCK CREEK REACH 2					
At a point approximately 2.0 miles downstream of County Route 2	57.6	2,238	3,298	3,915	*
WEBATUCK CREEK REACH 3					
At the downstream Town of Northeast corporate limits	31.9	1,460	2,340	2,840	4,050
At Indian Lake Road	25.0	1,240	1,990	2,410	3,440
Downstream of the confluence of Kelsey Brook	16.2	920	1,480	1,790	2,560
Upstream of the confluence of Kelsey Brook	12.4	770	1,240	1,500	2,140
At a point approximately 8 miles upstream of the downstream Town of Northeast corporate limits	8.1	580	930	1,120	1,610

*Data not available

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TABLE 7 – SUMMARY OF DISCHARGES - continued

FLOODING SOURCE AND LOCATION	DRAINAGE AREA (sq. miles)	PEAK DISCHARGES (cfs) 10-PERCENT	2-PERCENT	1-PERCENT	0.2-PERCENT
WELLS BROOK					
At confluence with the Tenmile River	6.1	610	1,010	1,270	1,960
At a point approximately 0.8 mile upstream of its confluence with the Tenmile River	2.6	430	750	930	1,380
WHALEY LAKE STREAM					
At confluence with Fishkill Creek	17.8	990	1,670	2,120	3,430
At the confluence of Gardner Hollow Stream at State Route 55	14.1	870	1,470	1,850	2,950
At State Route 55	8.1	680	1,140	1,420	2,210
At Whaley Lake	4.1	520	870	1,090	1,650
WHORTLEKILL CREEK REACH 1					
At confluence with Fishkill Creek	7.6	870	1,270	1,560	2,430
At Creamery Road	5.0	760	1,090	1,330	2,030
At Taconic State Parkway	2.4	650	930	1,120	1,700
WHORTLEKILL CREEK REACH 2					
Downstream Town of LaGrange corporate limits	2.38	298	420	471	583
Upstream of confluence with tributary	1.35	194	274	307	380
WILLOW BROOK					
At confluence with Sprout Creek	3.2	200	380	490	850
Approximately 500 feet downstream of Tompkins Road culvert	2.6	170	320	410	720
Upstream of confluence of Tributary	2.3	150	290	380	660
Approximately 1,200 feet downstream of Waterbury Hill Road	1.9	140	260	340	580
Upstream of Waterbury Hill Road	1.4	100	200	260	470

The stillwater elevations have been determined for the 10-, 2-, 1-, and 0.2-percent annual chance floods for the flooding sources studied by detailed methods and are summarized in Table 8, "Summary of Stillwater Elevations."

TABLE 8 - SUMMARY OF STILLWATER ELEVATIONS

FLOODING SOURCE AND LOCATION	ELEVATION (feet NAVD*) 10-PERCENT	2-PERCENT	1-PERCENT	0.2-PERCENT
HUDSON RIVER				
Entire shoreline within the Village of Tivoli	6.1	7.7	8.5	10.5
Entire shoreline affecting Rhinebeck	6.1	7.5	8.3	10.5
At Red Hook, New York	6.1	7.7	8.5	10.5
HUDSON RIVER (continued)				
Entire shoreline within City of Poughkeepsie	5.9	7.1	8.0	9.7
At Hyde Park, New York	5.8	7.2	7.9	9.7
At the Town of Wappinger	5.7	7.0	7.6	9.3
Entire shoreline within the City of Beacon	5.5	6.6	7.2	8.7
Entire shoreline affecting Town of Fishkill	5.5	6.6	7.2	8.7
INDIAN LAKE				
Entire shoreline affecting Northeast	628.3	628.3	628.3	628.37
LONG POND				
Entire shoreline within the county	344.5	344.7	344.8	345.17
SILVER LAKE				
Entire shoreline within the county	375.4	375.5	375.5	375.66
SYLVAN LAKE				
Entire shoreline within Beekman	323.8	324.2	324.4	324.8

*North American Vertical Datum of 1988

3.2 Hydraulic Analyses

Analyses of the hydraulic characteristics of flooding from the source studied were carried out to provide estimates of the elevations of floods of the selected recurrence intervals. Users should be aware that flood elevations shown on the FIRM represent rounded whole-foot elevations and may not exactly reflect the elevations shown on the Flood Profiles or in the Floodway Data tables in the FIS report. For construction

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and/or floodplain management purposes, users are encouraged to use the flood elevation data presented in this FIS in conjunction with the data shown on the FIRM.

Cross sections for the flooding sources studied by detailed methods were obtained from field surveys. All bridges, dams, and culverts were field surveyed to obtain elevation data and structural geometry.

Locations of selected cross sections used in the hydraulic analyses are shown on the Flood Profiles (Exhibit 1). For stream segments for which a floodway was computed (Section 4.2), selected cross section locations are also shown on the FIRM (Exhibit 2). Flood profiles were drawn showing computed water-surface elevations for floods of the selected recurrence intervals.

Each incorporated community within Dutchess County, has a previously printed FIS report. The hydraulic analyses described in those reports have been compiled and are summarized below.

Pre-Countywide Analyses

Cross sections for the backwater analyses of Amenia Stream, Tributary to Amenia Stream, Wassaic Creek, Webatuck Creek Reach 1 were obtained from aerial photographs at a scale of 1:7,200 (Quinn and Associates, Inc.).

Water-surface elevations of floods of the selected recurrence intervals for Amenia Stream, Branch 1 Great Spring Creek, Branch 1 Wappinger Creek Reach 1, Branch 3 Wappinger Creek Reach 1, Branch 4 Wappinger Creek Reach 1, Branch 5 Wappinger Creek Reach 1, Branch 6 Wappinger Creek Reach 1, Branch 7 Wappinger Creek Reach 1, Branch 8 Wappinger Creek Reach 1, Branch 9 Wappinger Creek Reach 1, Branch 10 Wappinger Creek Reach 1, Branch 11 Wappinger Creek Reach 1, Casper Kill Creek, Clove Brook, Clove Mountain Creek, Crum Elbow Creek, East Branch Croton River, East Branch Wappinger Creek Reach 1, Eighmy Ville Creek, Fall Kill Creek, Fall Kill, Frog Hollow Brook, Great Spring Creek, Jackson Creek Reach 1, Jackson Creek Reach 2, Kelsey Brook, Landsman Kill, Little Wappinger Creek Reach 1, Rhinebeck Kill, Seeley Creek, Sprout Creek No. 1, Sprout Creek No. 2, Stony Creek, Swamp River, Sweeney Creek, Sylvan Lake Outlet, Tributary 1 to Fishkill Creek, Tributary 2 to Fishkill Creek, Tributary to Amenia Stream, Tributary to East Branch Croton River, Walsh Creek, Wappinger Creek Reach 1, Wappinger Creek Reach 2, Wassaic Creek, Webatuck Creek Reach 1, Wells Brook, Whaley Lake Stream, Whortle Kill Creek Reach 1, and Willow Brook were computed using the USACE HEC-2 step-backwater computer program (USACE, 1984). Flood profiles were drawn showing computed water-surface elevations for floods of the selected recurrence intervals.

Starting water-surface elevations for Amenia Stream, Branch 1 Great Spring Creek, Branch 3 Wappinger Creek Reach 1, Branch 4 Wappinger Creek Reach 1, Branch 6 Wappinger Creek Reach 1, Branch 8 Wappinger Creek Reach 1, Branch 9 Wappinger Creek Reach 1, Branch 10 Wappinger Creek Reach 1, Branch 11 Wappinger Creek Reach 1, Casper Kill Creek, East Branch Croton River, East

Branch Wappinger Creek Reach 1, Fall Kill Creek, Fall Kill, Frog Hollow Brook, Great Spring Creek, Jackson Creek Reach 1, Kelsey Brook, Little Wappinger Creek Reach 1, Sprout Creek No. 1, Swamp River, Sylvan Lake Outlet, Tenmile River, Tributary to Amenia Stream, Wassaic Creek, Webatuck Creek Reach 1, Wells Brook, Whaley Lake Stream, and Whortle Kill Creek Reach 1 were calculated using the slope/area method.

Countywide Analyses

In Dutchess County, revised analyses were performed for the Tenmile River, Fishkill Creek and Maritje Kill.

For all revised detailed streams, field survey was obtained for both natural stream cross sections as well as hydraulic obstructions such as bridges, culverts, dams, and weirs. This information was combined with topographic data provided by Dutchess County in the form of bare earth mass points and break lines to create a bare earth surface for the stream corridor. This information was preprocessed using the HEC GeoRAS interface for ArcGIS 9.2. The interface prepared the geometry file for HEC-RAS and was eventually used to visualize results from the simulations.

Water-surface elevations of flood profiles of the selected recurrence intervals for all revised detailed streams were computed using the USACE HEC-RAS computer program, Version 3.1.3 (USACE, 2005).

Where data was available, for Fishkill Creek and the Tenmile River, flood stage for the April 2007 event was used to calibrate the revised hydraulic analyses. Flood profiles were drawn showing computed water-surface elevations for floods of the selected recurrence intervals.

Starting water-surface elevations for all 4 frequencies studied for Fishkill Creek and Maritje Kill were based on Mean Higher High Water (MHHW) elevation for the Hudson River. MHHW was determined from tidal gages on the Hudson River. For the Tenmile River, starting water-surface elevations were determined using slope-area method.

The hydraulic analyses for this FIS were based on unobstructed flow. The flood elevations shown on the profiles are thus considered valid only if channel conveyance areas and hydraulic structures remain unobstructed, operate properly, and do not fail.

Roughness factors (Manning's "n") used in the hydraulic computations were chosen by engineering judgment and were based on field observations of the streams and floodplain areas. Roughness factors for all streams studied by detailed methods are shown in Table 9, "Manning's "n" Values."

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TABLE 9 - MANNING'S "n" VALUES

Stream	Channel "n"	Overbank "n"
Amenia Stream	0.029-0.050	0.030-0.100
Branch 1 Great Spring Creek	0.03-0.04	0.08-0.20
Branch 1 Sprout Creek #1	0.015-0.035	0.015-0.100
Branch 1 Wappinger Creek Reach 1	0.025-0.04	0.04-0.100
Branch 10 Wappinger Creek Reach 1	0.03-0.04	0.08-0.20
Branch 11 Wappinger Creek Reach 1	0.03-0.04	0.08-0.20
Branch 1A Hudson River	0.025-0.04	0.04-0.100
Branch 2 Sprout Creek #1	0.015-0.035	0.015-0.100
Branch 2 Wappinger Creek Reach 1	0.025-0.04	0.04-0.100
Branch 2A Wappinger Creek Reach 1	0.025-0.04	0.04-0.100
Branch 2B Wappinger Creek Reach 1	0.025-0.04	0.04-0.100
Branch 3 Wappinger Creek Reach 1	0.030-0.040	0.080-0.120
Branch 4 Wappinger Creek Reach 1	0.015-0.050	0.060-0.080
Branch 5 Wappinger Creek Reach 1	0.015-0.035	0.015-0.100
Branch 6 Wappinger Creek Reach 1	0.030-0.040	0.080-0.120
Branch 7 Wappinger Creek Reach 1	0.015-0.035	0.015-0.100
Branch 8 Wappinger Creek Reach 1	0.030-0.040	0.080-0.120
Branch 9 Wappinger Creek Reach 1	0.03-0.04	0.08-0.20
Casper Kill Creek	0.024-0.060	0.030-0.120
Clove Brook	0.025-0.050	0.070-0.500
Clove Creek	0.030-0.045	0.050-0.200
Clove Mountain Creek	0.015-0.040	0.060-0.120
Crum Elbow Creek	0.030-0.045	0.045-0.200
East Branch Croton River	0.025-0.030	0.030-0.060
East Branch Wappinger Creek Reach 1	0.03-0.04	0.055-0.20
Eighmy Ville Creek	0.035-0.040	0.055-0.075
Fall Kill	0.030-0.045	0.045-0.090
Fall Kill Creek	0.024-0.040	0.040-0.120
Fishkill Creek	0.025-0.12	0.035-0.12
Frog Hollow Brook	0.030-0.050	0.040-0.065
Great Spring Creek	0.03-0.04	0.08-0.20
Jackson Creek Reach 1	0.015-0.035	0.015-0.100
Jackson Creek Reach 2	0.020-0.045	0.050-0.500
Kelsey Brook	0.035-0.040	0.060-0.080
Landsman Kill	0.030-0.040	0.055-0.070
Little Wappinger Creek Reach 1	0.03-0.04	0.050-0.100
Maritje Kill	0.035-0.12	0.035-1.00
Rhinebeck Kill	0.030-0.045	0.055-0.080
Saw Kill	0.030-0.040	0.045-0.090

TABLE 9 - MANNING'S "n" VALUES - continued

Stream	Channel "n"	Overbank "n"
Seeley Creek	0.030-0.050	0.050-0.080
Sprout Creek #1	0.015-0.060	0.015-0.100
Sprout Creek #2	0.024-0.045	0.045-0.120
Stony Creek	0.030-0.040	0.055-0.090
Swamp River Reach 2	0.030-0.035	0.060-0.100
Sweezy Creek	0.025-0.050	0.060-0.120
Sylvan Lake Outlet	0.03	0.055-0.200
Tenmile River	0.03-0.11	0.02-0.2
Tributary 1 to Fishkill Creek	0.030-0.040	0.050-0.065
Tributary 2 to Fishkill Creek	0.030-0.035	0.050-0.065
Tributary to Amenia Stream	0.029-0.050	0.050-0.100
Tributary to East Branch Croton River	0.030-0.055	0.055-0.065
Walsh Creek	0.04	0.080-0.120
Wappinger Creek Reach 1	0.015-0.040	0.015-0.100
Wappinger Creek Reach 2	0.040-0.050	0.050-0.100
Wassaic Creek	0.04	0.060-0.090
Webatuck Creek Reach 1	0.015-0.060	0.015-0.090
Webatuck Creek Reach 2	0.015-0.060	0.015-0.090
Webatuck Creek Reach 3	0.030-0.040	0.050-0.200
Wells Brook	0.030-0.040	0.060-0.070
Whaley Lake Stream	0.030-0.040	0.050-0.100
Whortlekill Creek Reach 1	0.015-0.035	0.015-0.100
Whortlekill Creek Reach 2	0.030-0.040	0.050-0.200
Willow Brook	0.015-0.045	0.050-1.000

Qualifying bench marks within a given jurisdiction that are cataloged by the National Geodetic Survey (NGS) and entered into the National Spatial Reference System (NSRS) as First or Second Order Vertical and have a vertical stability classification of A, B, or C are shown and labeled on the FIRM with their 6-character NSRS Permanent Identifier.

Bench marks cataloged by the NGS and entered into the NSRS vary widely in vertical stability classification. NSRS vertical stability classifications are as follows:

- Stability A: Monuments of the most reliable nature, expected to hold position/elevation well (e.g., mounted in bedrock)
- Stability B: Monuments which generally hold their position/elevation well (e.g., concrete bridge abutment)

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- Stability C: Monuments which may be affected by surface ground movements (e.g., concrete monument below frost line)

- Stability D: Mark of questionable or unknown vertical stability (e.g., concrete monument above frost line, or steel witness post)

In addition to NSRS bench marks, the FIRM may also show vertical control monuments established by a local jurisdiction; these monuments will be shown on the FIRM with the appropriate designations. Local monuments will only be placed on the FIRM if the community has requested that they be included, and if the monuments meet the aforementioned NSRS inclusion criteria.

To obtain current elevation, description, and/or location information for bench marks shown on the FIRM for this jurisdiction, please contact the Information Services Branch of the NGS at (301) 713-3242, or visit their Web site at www.ngs.noaa.gov.

It is important to note that temporary vertical monuments are often established during the preparation of a flood hazard analysis for the purpose of establishing local vertical control. Although these monuments are not shown on the FIRM, they may be found in the Technical Support Data Notebook associated with this FIS and FIRM. Interested individuals may contact FEMA to access this data.

3.3 Vertical Datum

All FISs and FIRMs are referenced to a specific vertical datum. The vertical datum provides a starting point against which flood, ground, and structure elevations can be referenced and compared. Until recently, the standard vertical datum in use for newly created or revised FISs and FIRMs was the National Geodetic Vertical Datum of 1929 (NGVD 29). With the finalization of the North American Vertical Datum of 1988 (NAVD 88), many FIS reports and FIRMs are being prepared using NAVD 88 as the referenced vertical datum.

All flood elevations shown in this FIS report and on the FIRM are referenced to NAVD 88. Structure and ground elevations in the community must, therefore, be referenced to NAVD 88. It is important to note that adjacent communities may be referenced to NGVD 29. This may result in differences in base flood elevations across the corporate limits between the communities.

Prior versions of the FIS report and FIRM were referenced to NGVD 29. When a datum conversion is effected for an FIS report and FIRM, the Flood Profiles, base flood elevations (BFEs) and ERMs reflect the new datum values. To compare structure and ground elevations to 1-percent annual chance flood elevations shown in the FIS and on the FIRM, the subject structure and ground elevations must be referenced to the new datum values.

As noted above, the elevations shown in the FIS report and on the FIRM for Dutchess County are referenced to NAVD 88. Ground, structure, and flood

elevations may be compared and/or referenced to NGVD 29 by applying a standard conversion factor. The conversion factor to NGVD 29 is +0.8. The conversion between the datums may be expressed as an equation:

NGVD 29 = NAVD 88 + 0.8 foot

The BFEs shown on the FIRM represent whole-foot rounded values. For example, a BFE of 102.4 will appear as 102 on the FIRM and 102.6 will appear as 103. Therefore, users that wish to convert the elevations in this FIS to NGVD 29 should apply the stated conversion factor(s) to elevations shown on the Flood Profiles and supporting data tables in the FIS report, which are shown at a minimum to the nearest 0.1 foot.

For more information on NAVD 88, see Converting the National Flood Insurance Program to the North American Vertical Datum of 1988, FEMA Publication FIA-20/June 1992, or contact the Spatial Reference System Division, National Geodetic Survey, NOAA, Silver Spring Metro Center, 1315 East-West Highway, Silver Spring, Maryland 20910 (Internet address http://www.ngs.noaa.gov).

4.0 FLOODPLAIN MANAGEMENT APPLICATIONS

The NFIP encourages State and local governments to adopt sound floodplain management programs. To assist in this endeavor, each FIS provides 1-percent annual chance floodplain data, which may include a combination of the following: 10-, 2-, 1-, and 0.2-percent annual chance flood elevations; delineations of the 1- and 0.2-percent annual chance floodplains; and 1-percent annual chance floodway. This information is presented on the FIRM and in many components of the FIS, including Flood Profiles, Floodway Data tables, and Summary of Stillwater Elevation tables. Users should reference the data presented in the FIS as well as additional information that may be available at the local community map repository before making flood elevation and/or floodplain boundary determinations.

4.1 Floodplain Boundaries

To provide a national standard without regional discrimination, the 1-percent annual chance flood has been adopted by FEMA as the base flood for floodplain management purposes. The 0.2-percent annual chance flood is employed to indicate additional areas of flood risk in the county. For the streams studied in detail, the 1- and 0.2-percent annual chance floodplain boundaries have been delineated using the flood elevations determined at each cross section. Between cross sections, the boundaries were interpolated using bare earth digital elevation data provided by Dutchess County. The topographic data was composed of bare earth mass points and 3-D breaklines. The point elevation data is comprised mostly of LiDAR with some spot heights generated from aerial photography flown within the same year in support of digital orthophotography acquisition. The 3-D breaklines were produced from 1"=1000' high precision color aerial photography collected in 2001 using photogrammetric methods. Water surface elevation triangular irregular networks (TINs) were created from the model cross sections and

intersected with the bare earth ground TIN to produce the floodplain corridor. The resulting floodplains were smoothed and incorporated in the DFIRM.

Similarly, using datum-converted effective flood profiles for non-revised, detailed streams, all flood boundaries were made current with the topography supplied by the county to FEMA.

The 1- and 0.2-percent annual chance floodplain boundaries are shown on the FIRM (Exhibit 2). On this map, the 1-percent annual chance floodplain boundary corresponds to the boundary of the areas of special flood hazards (Zones A and AE and AO), and the 0.2-percent annual chance floodplain boundary corresponds to the boundary of areas of moderate flood hazards. In cases where the 1- and 0.2-percent annual chance floodplain boundaries are close together, only the 1-percent annual chance floodplain boundary has been shown. Small areas within the floodplain boundaries may lie above the flood elevations but cannot be shown due to limitations of the map scale and/or lack of detailed topographic data.

For the streams studied by approximate methods, only the 1-percent annual chance floodplain boundary is shown on the FIRM (Exhibit 2). These boundaries were also delineated using the topographic data provided by Dutchess County.

4.2 Floodways

Encroachment on floodplains, such as structures and fill, reduces flood-carrying capacity, increases flood heights and velocities, and increases flood hazards in areas beyond the encroachment itself. One aspect of floodplain management involves balancing the economic gain from floodplain development against the resulting increase in flood hazard. For purposes of the NFIP, a floodway is used as a tool to assist local communities in this aspect of floodplain management. Under this concept, the area of the 1-percent annual chance floodplain is divided into a floodway and a floodway fringe. The floodway is the channel of a stream, plus any adjacent floodplain areas, that must be kept free of encroachment so that the 1-percent annual chance flood can be carried without substantial increases in flood heights. Minimum federal standards limit such increases to 1.0 foot, provided that hazardous velocities are not produced. The floodways in this FIS are presented to local agencies as minimum standards that can be adopted directly or that can be used as a basis for additional floodway studies.

The floodways presented in this FIS were computed for certain stream segments on the basis of equal conveyance reduction from each side of the floodplain. Floodway widths were computed at cross sections. Between cross sections, the floodway boundaries were interpolated. The results of the floodway computations are tabulated for selected cross sections (Table 10). The computed floodways are shown on the FIRM (Exhibit 2). In cases where the floodway and 1-percent annual chance floodplain boundaries are either close together or collinear, only the floodway boundary is shown.

There is no floodway data table information available for Eighmy Ville Creek and the Hudson River.

Encroachment into areas subject to inundation by floodwaters having hazardous velocities aggravates the risk of flood damage, and heightens potential flood hazards by further increasing velocities. A listing of stream velocities at selected cross sections is provided in Table 10, "Floodway Data." In order to reduce the risk of property damage in areas where the stream velocities are high, the community may wish to restrict development in areas outside the floodway.

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FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Amenia Stream								
A	792[1]	100	384	3.0	455.5	455.5	456.1	0.6
B	11,121[1]	214	643	1.8	472.3	472.3	472.8	0.5
C	16,351[1]	180	455	2.6	494.8	494.8	495.0	0.2
D	23,430[1]	100	429	2.4	541.3	541.3	541.6	0.3
E	28,682[1]	630	815	0.5	548.4	548.4	548.7	0.3
Branch 1 Great Spring Creek								
A	600[2]	64	241	2.7	212.8	211.1[3]	212.0	0.9
B	1,050[2]	176	632	1.0	212.8	211.8[3]	212.8	1.0
C	1,142[2]	77	314	2.1	212.8	212.6[3]	213.4	0.8
D	2,020[2]	207	571	1.2	213.2	213.2	214.1	0.9
E	2,081[2]	531	2,830	0.2	217.2	217.2	218.0	0.8
F	2,960[2]	137	484	1.4	217.3	217.3	218.1	0.8
G	4,070[2]	29	96	6.9	230.0	230.0	230.5	0.5
H	4,207[2]	84	551	1.2	235.8	235.8	236.7	0.9
I	4,615[2]	257	1,066	0.6	236.0	236.0	236.9	0.9
J	4,765[2]	110	481	1.4	238.5	238.5	239.3	0.8
K	5,300[2]	88	177	3.7	249.3	249.3	249.3	0.0
L	5,875[2]	217	254	2.6	279.0	279.0	279.0	0.0

[1]Feet above confluence with Wassaic Creek
[2]Feet above Great Spring Creek
[3]Elevation computed without consideration of backwater effects from Great Spring Creek

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

DUTCHESS COUNTY, NY (ALL JURISDICTIONS)

FLOODWAY DATA

AMENIA STREAM – BRANCH 1 GREAT SPRING CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Branch 1 Sprout Creek #1								
A	100[1]	110	369	3.2	303.0	301.6[2]	302.5	0.9
B	2,140[1]	155	534	2.2	305.1	305.1	305.8	0.7
C	4,700[1]	203	995	1.2	308.8	308.8	309.7	0.9
D	6,200[1]	520	2,527	0.5	309.2	309.2	310.1	0.9
E	7,080[1]	362	1,552	0.8	309.3	309.3	310.2	0.9
F	7,218[1]	262	1,343	0.9	314.3	314.3	315.2	0.9
G	7,368[1]	158	1,035	1.1	314.4	314.4	315.3	0.9
H	7,420[1]	158	2,378	0.5	314.4	314.4	315.3	0.9

[1]Feet above confluence with Sprout Creek #1
[2]Elevation computed without consideration of backwater effects from Sprout Creek #1

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

DUTCHESS COUNTY, NY (ALL JURISDICTIONS)

FLOODWAY DATA

BRANCH 1 SPROUT CREEK #1

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Branch 1 Wappinger Creek Reach 1								
A	126	30	208	7.8	8.1	5.7[2]	6.3	0.6
B	500	42	220	7.4	8.1	7.2[2]	7.5	0.3
C	1,800	48	203	8.0	60.5	60.5	60.9	0.4
D	3,645	40	147	11.0	111.5	111.5	111.5	0.0
E	3,878	21	119	13.6	121.3	121.3	121.6	0.3
F	4,067	267	1,535	1.1	125.7	125.7	126.6	0.9
G	5,300	70	580	2.8	125.9	125.9	126.7	0.8
H	6,453	92	433	2.3	126.3	126.3	127.1	0.8
I	9,000	149	405	2.5	133.7	133.7	134.7	1.0
J	9,710	310	722	1.4	136.3	136.3	137.1	0.8
K	9,895	510	2,155	0.5	136.4	136.4	137.3	0.9
L	10,215	66	205	4.9	140.9	140.9	140.9	0.0
M	10,709	35	240	4.2	145.3	145.3	145.5	0.2
N	11,015	103	355	2.8	148.7	148.7	148.9	0.2
O	11,198	269	1,314	0.8	149.1	149.1	149.4	0.3
P	11,445	627	2,564	0.4	149.3	149.3	149.6	0.3
Q	11,920	554	2,603	0.4	149.3	149.3	149.6	0.3

[1]Feet above confluence with Wappinger Creek Reach 1
[2]Elevation computed without consideration of backwater effects from Wappinger Creek Reach 1

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

DUTCHESS COUNTY, NY (ALL JURISDICTIONS)

FLOODWAY DATA

BRANCH 1 WAPPINGER CREEK REACH 1

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Branch 10 Wappinger Creek Reach 1								
A	50	19	67	8.1	214.0	203.4[2]	203.9	0.5
B	1,160	31	75	7.3	218.0	218.0	218.0	0.0
C	1,323	47	89	6.1	221.5	221.5	221.5	0.0
D	1,925	25	97	5.6	227.3	227.3	227.4	0.1
E	2,112	27	312	1.7	235.3	235.3	236.3	1.0
F	2,535	364	3,013	0.2	235.4	235.4	236.4	1.0
G	2,716	343	2,919	0.2	235.4	235.4	236.4	1.0
Branch 11 Wappinger Creek Reach 1								
A	187	100	799	0.8	238.1	238.1	239.1	1.0
B	640	88	192	3.4	238.5	238.5	239.0	0.5
C	875	19	63	10.4	239.4	239.4	239.4	0.0
D	1,430	26	102	6.5	241.6	241.6	242.3	0.7
E	1,650	21	73	9.0	243.0	243.0	243.0	0.0
F	2,525	19	75	8.8	248.6	248.6	249.2	0.6
G	2,700	27	128	5.1	249.6	249.6	250.1	0.5
H	3,280	23	87	7.5	253.4	253.4	253.9	0.5

[1]Feet above confluence with Wappinger Creek Reach 1
[2]Elevation computed without consideration of backwater effects from Wappinger Creek Reach 1

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

DUTCHESS COUNTY, NY (ALL JURISDICTIONS)

FLOODWAY DATA

BRANCH 10 WAPPINGER CREEK REACH 1 - BRANCH 11 WAPPINGER CREEK REACH 1

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Branch 1A Hudson River								
A	125[1]	75	283	2.5	11.6	11.6	11.6	0.0
B	451[1]	106	312	2.2	11.6	11.6	11.8	0.2
C	612[1]	50	206	3.4	17.2	17.2	17.9	0.7
D	865[1]	70	130	5.4	20.2	20.2	21.0	0.8
E	2,010[1]	65	224	3.1	35.8	35.8	36.7	0.9
F	2,600[1]	74	154	4.5	41.5	41.5	41.5	0.0
G	3,677[1]	225	414	1.7	45.1	45.1	47.7	0.6
Branch 2 Sprout Creek #1								
A	200[2]	170	340	3.3	325.0	325.0	325.0	0.0
B	555[2]	127	634	1.8	327.8	327.8	328.8	1.0
C	690[2]	249	471	2.4	328.3	328.3	329.1	0.8
D	2,230[2]	36	165	6.8	337.5	337.5	337.5	0.0
E	3,168[2]	43	270	4.2	348.2	348.2	348.2	0.0
F	3,950[2]	153	292	3.8	353.7	353.7	353.7	0.0
G	4,600[2]	23	102	11.0	361.9	361.9	362.0	0.1
H	6,125[2]	126	364	3.1	369.2	369.2	369.8	0.6
I	6,302[2]	435	2,171	0.5	378.0	378.0	378.0	0.0
J	7,150[2]	253	947	1.2	378.1	378.1	378.0	0.0
K	7,400[2]	544	440	2.5	379.0	379.0	379.0	0.0
L	7,670[2]	321	404	2.8	383.8	383.8	383.8	0.0

[1]Feet above confluence with Hudson River
[2]Feet above Sprout Creek #1

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)

FLOODWAY DATA

BRANCH 1A HUDSON RIVER – BRANCH 2 SPROUT CREEK #1

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Branch 2 Wappinger Creek Reach 1								
A	236	35	269	7.2	107.9	104.3[2]	104.5	0.2
B	1,800	84	335	5.8	111.7	108.2[2]	109.1	0.9
C	2,136	67	516	3.7	112.8	112.8	112.8	0.0
D	2,300	76	394	4.9	112.8	112.8	112.8	0.0
E	2,526	477	5,004	0.2	129.5	129.5	129.5	0.0
F	2,840	37	273	4.2	129.5	129.5	129.5	0.0
G	4,100	31	107	10.7	146.6	146.6	146.8	0.2
H	6,058	300	1,113	1.0	149.5	149.5	150.5	1.0
I	6,845	109	435	2.6	150.1	150.1	150.8	0.7
J	8,000	145	609	1.9	152.6	152.6	153.3	0.7
K	9,500	357	1,299	0.9	153.1	153.1	154.0	0.9
L	11,500	70	285	4.0	155.0	155.0	155.0	0.0
M	13,000	78	329	3.5	156.7	156.7	157.7	1.0
N	13,610	201	304	2.6	159.3	159.3	159.5	0.2
O	14,048	203	613	1.3	160.3	160.3	160.7	0.4
P	15,250	22	74	10.5	171.7	171.7	172.0	0.3
Q	15,635	150	1,053	0.7	181.0	181.0	181.2	0.2
R	15,787	120	952	0.8	183.1	183.1	183.1	0.0
S	16,942	20	72	10.8	192.8	192.8	193.1	0.3
T	17,875	43	141	5.5	212.1	212.1	212.1	0.0
U	18,880	19	71	11.0	218.1	218.1	218.2	0.1
V	19,090	245	301	2.6	223.6	223.6	223.6	0.0
W	19,470	340	1,262	0.6	224.2	224.2	224.2	0.0

[1]Feet above confluence with Wappinger Creek Reach 1
[2]Elevation computed without consideration of backwater effects from Wappinger Creek Reach 1

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)

FLOODWAY DATA

BRANCH 2 WAPPINGER CREEK REACH 1

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Branch 2A Wappinger Creek Reach 1								
A	583	75	188	2.9	161.3	161.3	161.9	0.6
B	1,520	64	127	4.3	164.5	164.5	164.5	0.0
C	1,675	211	295	1.9	165.2	165.2	165.2	0.0
D	2,030	55	155	3.5	165.8	165.8	165.8	0.0
E	2,341	107	521	1.1	170.2	170.2	170.5	0.3
F	3,340	65	128	4.3	176.5	176.5	176.5	0.0
Branch 2B Wappinger Creek Reach 1								
A	175	100	521	3.1	130.6	130.6	131.4	0.8
B	775	74	304	5.3	131.5	131.5	132.5	1.0
C	1,090	139	703	2.3	132.8	132.8	133.8	1.0
D	2,600	147	517	3.1	135.4	135.4	135.8	0.4
E	3,129	75	361	4.4	137.6	137.6	138.0	0.4
F	4,190	41	147	10.9	142.0	142.0	142.0	0.0
G	5,046	37	167	9.6	164.9	164.9	165.2	0.3
H	5,250	75	653	2.5	169.5	169.5	169.6	0.1
I	5,418	70	555	2.9	176.2	176.2	176.3	0.1
J	6,600	68	230	7.0	179.2	179.2	179.2	0.0
K	7,998	96	513	3.1	183.9	183.9	184.3	0.4

[1]Feet above confluence with Branch 2 Wappinger Creek

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)

FLOODWAY DATA

BRANCH 2A WAPPINGER CREEK REACH 1 - BRANCH 2B WAPPINGER CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Branch 3 Wappinger Creek Reach 1								
A	300	18	76	11.8	123.0	123.0	123.4	0.4
B	597	67	293	3.1	142.6	142.6	143.4	0.8
C	1,499	100	228	3.9	157.0	157.0	157.0	0.0
D	1,501	208	409	2.2	158.0	158.0	158.1	0.1
E	1,730	75	252	3.6	159.2	159.2	159.5	0.3
F	2,030	157	593	1.5	161.8	161.8	162.5	0.7
G	3,700	78	247	3.6	165.7	165.7	166.7	1.0
Branch 4 Wappinger Creek Reach 1								
A	930	43	112	1.4	122.5	122.5	122.5	0.0
B	3,846	30	147	1.1	158.3	158.3	159.0	0.7
Branch 5 Wappinger Creek Reach 1								
A	10,708	40	116	7.5	215.2	215.2	215.6	0.4
B	11,097	45	166	5.6	218.8	218.8	219.3	0.5
C	11,667	31	91	9.6	224.2	224.2	224.3	0.1
D	12,375	93	183	4.8	240.7	240.7	241.3	0.6
E	12,736	26	178	4.9	264.3	264.3	264.3	0.0
F	13,300	41	109	8.0	290.0	290.0	290.0	0.0
G	13,900	109	183	4.8	301.8	301.8	301.8	0.0
H	14,610	70	256	3.4	304.8	304.8	304.9	0.1
I	15,220	40	115	7.6	318.6	318.6	318.9	0.3
J	15,400	236	6,381	0.1	327.3	327.3	327.8	0.5
K	16,660	69	169	6.6	332.0	332.0	332.2	0.2
L	17,490	24	83	10.5	343.9	343.9	344.7u	0.0

[1]Feet above confluence with Wappinger Creek Reach 1

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)

FLOODWAY DATA

BRANCH 3 WAPPINGER CREEK REACH 1 – BRANCH 4 WAPPINGER CREEK REACH 1 – BRANCH 5 WAPPINGER CREEK REACH 1

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Branch 6 Wappinger Creek Reach 1								
A	300	120	300	2.4	166.7	160.1[2]	160.7	0.6
B	905	120	293	2.4	166.9	161.2[2]	161.4	0.2
C	1,036	84	330	2.2	167.0	162.2[2]	162.4	0.2
D	1,450	180	220	3.2	167.0	163.8[2]	163.8	0.0
E	3,400	89	360	2.0	167.0	167.0	167.7	0.7
Branch 7 Wappinger Creek Reach 1								
A	100	94	198	5.3	168.0	164.7[2]	164.8	0.1
B	950	141	238	4.5	174.4	174.4	174.4	0.0
C	2,000	45	147	7.2	186.2	186.2	186.6	0.4
D	2,300	64	240	4.4	189.1	189.1	190.0	0.9
E	2,700	120	338	3.1	194.9	194.9	195.0	0.1
F	3,220	34	109	9.8	204.2	204.2	204.2	0.0
G	4,475	37	130	8.2	245.5	245.5	245.5	0.0
H	4,655	135	1,301	0.8	257.4	257.4	258.4	1.0
I	4,900	79	350	3.0	257.4	257.4	258.4	1.0
J	5,800	21	90	11.8	284.2	284.2	284.2	0.0
K	6,730	56	138	7.7	314.9	314.9	314.9	0.0
L	7,020	150	984	1.1	325.5	325.5	326.5	1.0
M	7,890	85	165	6.1	349.8	349.8	349.8	0.0
N	8,090	168	1,221	0.8	360.9	360.9	360.9	0.0
O	8,395	100	667	1.5	361.0	361.0	361.0	0.0

[1]Feet above confluence with Wappinger Creek Reach 1
[2]Elevation computed without consideration of backwater effects from Wappinger Creek Reach 1

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)

FLOODWAY DATA

BRANCH 6 WAPPINGER CREEK REACH 1 -
BRANCH 7 WAPPINGER CREEK REACH 1

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Branch 8 Wappinger Creek Reach 1								
A	192	28	175	4.5	190.1	190.1	191.1	1.0
B	705	62	332	2.4	192.0	192.0	192.8	0.8
C	1,273	99	442	18.0	196.7	196.7	192.7	1.0
D	1,400	410	4,821	0.2	196.9	196.9	197.9	1.0
E	1,700	610	7,704	0.1	196.9	196.9	197.9	1.0
F	1,815	556	4,450	0.2	196.9	196.9	197.9	1.0
Branch 9 Wappinger Creek Reach 1								
A	100	37	222	8.2	207.2	199.4[2]	200.0	0.6
B	370	32	176	10.3	207.2	202.8[2]	203.1	0.3
C	1,240	37	209	8.7	207.2	206.3[2]	206.9	0.6
D	1,365	126	1,137	1.6	223.0	223.0	224.0	1.0
E	1,940	84	823	2.2	223.1	223.1	224.1	1.0
F	2,378	50	330	5.5	223.3	223.3	224.2	0.9
G	2,850	33	237	7.7	229.3	229.3	230.3	1.0
H	2,985	130	1,346	1.4	245.9	245.9	246.8	0.9
I	3,510	135	1,155	1.6	245.9	245.9	246.8	0.9
J	4,096	40	1,001	1.8	246.1	246.1	246.9	0.8
K	4,695	122	978	1.9	252.1	252.1	253.1	1.0

[1]Feet above confluence with Wappinger Creek Reach 1
[2]Elevation computed without consideration of backwater effects from Wappinger Creek Reach 1

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)

FLOODWAY DATA

BRANCH 8 WAPPINGER CREEK REACH 1 -
BRANCH 9 WAPPINGER CREEK REACH 1

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Casper Kill Creek								
A	184	44	349	5.6	7.9	7.1[2]	8.0	0.9
B	655	38	167	11.7	11.6	11.6	11.8	0.2
C	748	130	1,185	1.6	19.2	19.2	19.4	0.2
D	970	21	168	11.6	20.0	20.0	20.6	0.6
E	1,416	43	390	5.0	21.1	21.1	22.0	0.9
F	1,800	26	228	8.5	22.3	22.3	23.1	0.8
G	2,780	909	22,931	0.1	36.2	36.2	37.1	0.9
H	4,350	1,070	25,184	0.1	36.2	36.2	37.1	0.9
I	5,280	138	1,441	1.4	36.2	36.2	37.1	0.9
J	6,120	411	4,740	0.4	36.4	36.4	37.3	0.9
K	6,250	911	9,300	0.2	36.4	36.4	37.3	0.9
L	7,900	344	2,438	0.8	36.5	36.5	37.4	0.9
M	9,230	37	185	10.5	37.7	37.7	38.3	0.6
N	10,354	329	1,749	1.1	41.4	41.4	41.4	0.0
O	11,960	112	773	2.5	54.1	54.1	54.9	0.8
P	13,520	45	173	11.3	70.9	70.9	70.9	0.0
Q	13,990	297	1,578	1.2	83.3	83.3	83.5	0.2
R	14,925	159	1,150	1.7	88.4	88.4	89.3	0.8
S	17,620	223	1,486	1.3	89.2	89.2	90.0	0.8
T	18,668	84	605	3.2	89.6	89.6	90.3	0.7
U	19,660	40	294	6.6	90.3	90.3	91.2	0.9
V	20,370	102	806	2.4	93.3	93.3	94.0	0.7
W	21,425	60	355	4.5	93.8	93.8	94.4	0.6
X	22,420	252	600	2.7	96.9	96.9	97.3	0.4
Y	23,171	172	851	1.9	101.4	101.4	101.6	0.2
Z	24,654	481	3,107	0.5	105.5	105.5	106.1	0.6

[1]Feet above confluence with the Hudson River
[2]Elevation computed without consideration of backwater effects from the Hudson River

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)

FLOODWAY DATA

CASPER KILL CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Casper Kill Creek (continued)								
AA	25,900	376	1,891	0.8	105.8	105.8	106.4	0.6
AB	26,450	81	239	6.7	106.2	106.2	106.7	0.5
AC	28,375	308	1,080	1.5	111.7	111.7	111.8	0.1
AD	30,000	101	375	4.3	112.9	112.9	113.5	0.6
AE	32,390	230	1,794	0.9	115.0	115.0	115.7	0.7
AF	33,044	445	3,735	0.4	121.9	121.9	121.9	0.0
AG	34,100	358	1,950	0.8	122.0	122.0	122.0	0.0
AH	35,850	231	924	1.7	122.5	122.5	122.6	0.1
AI	37,580	41	167	9.6	125.3	125.3	125.4	0.1
AJ	39,200	39	270	5.9	129.3	129.3	129.6	0.3
AK	39,550	184	960	1.2	130.7	130.7	131.2	0.5
AL	39,870	47	267	4.3	130.8	130.8	131.3	0.5
AM	40,320	23	156	7.4	133.1	133.1	133.6	0.5
AN	40,870	43	329	3.5	134.4	134.4	134.9	0.5
AO	41,830	62	327	3.5	135.1	135.1	135.6	0.5
AP	42,250	128	802	1.4	136.8	136.8	136.8	0.0
AQ	43,360	29	105	11.0	137.7	137.7	137.7	0.0
AR	45,780	520	2,681	0.4	152.2	152.2	153.0	0.8
AS	47,450	280	2,679	0.4	156.3	156.3	156.5	0.2

[1]Feet above confluence with the Hudson River

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)

FLOODWAY DATA

CASPER KILL CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Clove Brook								
A	500[1]	459	779	1.3	496.5	496.5	497.2	0.7
B	1,148[1]	300	761	1.3	498.1	498.1	498.9	0.8
C	2,600[1]	385	388	2.6	499.8	499.8	500.6	0.8
D	3,500[1]	152	370	2.1	504.6	504.6	505.3	0.7
E	4,400[1]	180	467	1.7	507.5	507.5	508.4	0.9
F	5,400[1]	226	381	2.1	511.0	511.0	511.8	0.8
G	6,400[1]	186	517	1.5	514.9	514.9	515.8	0.9
H	7,600[1]	129	312	2.1	520.2	520.2	521.2	1.0
I	8,800[1]	180	237	2.8	525.7	525.7	526.5	0.8
J	9,600[1]	160	208	2.7	532.4	532.4	533.4	1.0
K	10,300[1]	106	198	2.9	538.7	538.7	539.7	1.0
Clove Creek								
A	1,700[2]	90	520	5.8	211.2	208.7[3]	209.7	1.0
B	3,140[2]	90	743	4.0	214.5	214.5	215.2	0.7
C	5,730[2]	90	709	4.2	217.3	217.3	218.2	0.9
D	8,440[2]	90	617	4.8	225.1	225.1	225.9	0.8
E	11,700[2]	75	378	7.9	232.6	232.6	233.2	0.6
F	13,490[2]	100	699	4.3	238.1	238.1	238.9	0.8
G	15,240[2]	75	527	5.7	244.9	244.9	245.3	0.4
H	17,180[2]	325	1,197	2.5	247.5	247.5	248.1	0.6

[1]Feet above confluence with Pray Pond
[2]Feet above confluence with Fishkill Creek
[3]Elevation computed without consideration of backwater effects from Fishkill Creek

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)

FLOODWAY DATA

CLOVE BROOK – CLOVE CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Clove Mountain Creek								
A	170[1]	23	59	7.3	502.2	502.2	502.2	0.0
B	1,230[1]	19	62	5.2	519.2	519.2	519.9	0.7
C	2,250[1]	13	37	8.1	554.7	554.7	554.7	0.0
D	5,400[1]	46	205	1.3	665.1	665.1	665.7	0.6
E	6,015[1]	52	157	1.3	667.8	667.8	668.6	0.8
F	7,000[1]	31	67	2.4	678.2	678.2	679.2	1.0
G	7,900[1]	21	46	3.5	689.6	689.6	690.5	0.9
H	8,800[1]	11	24	5.0	702.9	702.9	703.6	0.7
Crum Elbow Creek								
A	800[2]	35	104	9.8	10.4	10.4	10.4	0.0
B	3,235[2]	55	370	2.8	108.7	108.7	108.7	0.0
C	3,745[2]	115	770	1.3	112.6	112.6	112.6	0.0
D	5,310[2]	195	324	3.1	133.1	133.1	133.1	0.0
E	7,380[2]	45	115	8.9	154.3	154.3	154.3	0.0
F	9,140[2]	50	167	6.1	177.0	177.0	177.0	0.0
G	11,430[2]	44	177	5.8	201.9	201.9	202.4	0.5
H	12,650[2]	60	246	4.1	213.8	213.8	213.9	0.1
I	15,150[2]	131	231	4.4	221.5	221.5	221.8	0.3
J	17,890[2]	264	755	1.3	230.7	230.7	230.7	0.0
K	21,180[2]	55	288	3.5	235.1	235.1	235.1	0.0
L	24,420[2]	40	286	3.6	238.0	238.0	238.2	0.2
M	25,850[2]	55	336	3.0	238.3	238.3	238.9	0.6
N	27,790[2]	70	350	2.9	239.8	239.8	240.4	0.6

[1]Feet above confluence with Jackson Creek Reach 2
[2]Feet above confluence with Hudson River

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)

FLOODWAY DATA

CLOVE MOUNTAIN CREEK – CRUM ELBOW CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Crum Elbow Creek (continued)								
O	30,780	50	146	7.0	244.4	244.4	244.6	0.2
P	31,650	57	349	2.9	246.3	246.3	247.0	0.7
Q	33,730	70	215	4.0	248.8	248.8	249.3	0.5
R	37,330	90	376	2.3	253.7	253.7	254.6	0.9
S	39,720	100	449	1.9	256.2	256.2	256.9	0.7
T	41,990	100	399	2.1	258.1	258.1	259.1	1.0
U	45,640	80	250	3.4	268.3	268.3	268.4	0.1
V	47,170	40	225	2.8	272.6	272.6	273.0	0.4
W	49,450	30	137	4.5	275.0	275.0	275.6	0.6
X	51,470	40	179	3.5	278.6	278.6	279.1	0.5
Y	53,720	40	153	4.1	280.2	280.2	280.8	0.6
Z	54,560	35	150	4.1	281.8	281.8	282.5	0.7
AA	56,510	45	180	3.5	288.4	288.4	288.7	0.3
AB	58,220	97	286	2.2	289.7	289.7	290.5	0.8
AC	60,080	64	195	3.2	292.3	292.3	293.0	0.7
AD	63,040	27	110	2.9	297.8	297.8	298.5	0.7
AE	64,960	40	137	2.3	300.1	300.1	300.8	0.7
AF	67,060	20	71	4.5	312.0	312.0	312.7	0.7
AG	69,840	19	42	7.7	321.7	321.7	322.5	0.8
AH	71,550	17	48	6.7	344.7	344.7	345.3	0.6
AI	73,740	21	57	5.6	386.5	386.5	387.1	0.6
AJ	75,640	25	50	6.4	411.5	411.5	411.6	0.1

[1]Feet above confluence with Hudson River

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)

FLOODWAY DATA

CRUM ELBOW CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
East Branch Croton River								
A	400[1]	318	1,369	1.4	433.7	433.7	434.7	1.0
B	1,420[1]	255	1,278	1.5	434.9	434.9	435.4	0.5
C	3,730[1]	225	1,003	1.1	436.5	436.5	436.7	0.2
D	6,250[1]	230	1,156	1.0	436.7	436.7	437.0	0.3
E	9,220[1]	210	804	1.1	437.1	437.1	437.6	0.5
F	12,000[1]	120	550	1.7	440.4	440.4	440.6	0.2
G	13,640[1]	150	796	0.9	442.7	442.7	442.9	0.2
H	15,040[1]	160	813	0.9	442.8	442.8	443.0	0.2
I	17,060[1]	90	253	2.9	449.0	449.0	449.1	0.1
East Branch Wappinger Creek Reach 1								
A	310[2]	75	612	6.1	252.8	251.1[3]	252.1	1.0
B	620[2]	55	295	12.7	253.4	253.4	254.2	0.8
C	1,600[2]	70	900	4.2	262.7	262.7	263.7	1.0
D	3,390[2]	358	2,727	1.4	263.4	263.4	264.4	1.0
E	4,400[2]	186	1,075	3.5	263.7	263.7	264.7	1.0
F	5,994[2]	156	1,228	3.0	266.2	266.2	267.0	0.8
G	6,220[2]	76	739	5.1	282.0	282.0	283.0	1.0
H	7,300[2]	167	1,064	3.5	283.1	283.1	284.0	0.9

[1]Feet above limit of detailed study (limit of detailed study is approximately 580 feet downstream of railroad)
[2]Feet above confluence with Wappinger Creek Reach 1
[3]Elevation computed without consideration of backwater effects from Wappinger Creek Reach 1

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)

FLOODWAY DATA

EAST BRANCH CROTON RIVER -
EAST BRANCH WAPPINGER CREEK REACH 1

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Fall Kill								
A	5,770[1]	80	361	4.6	216.9	216.9	217.1	0.2
B	8,830[1]	180	876	1.9	220.2	220.2	220.4	0.2
C	11,860[1]	120	702	2.4	222.9	222.9	223.4	0.5
D	13,970[1]	100	660	2.5	223.8	223.8	224.5	0.7
E	15,670[1]	140	1,020	1.6	224.6	224.6	225.4	0.8
F	19,570[1]	100	653	2.2	227.5	227.5	227.8	0.3
G	21,110[1]	130	598	2.4	228.3	228.3	228.8	0.5
H	23,350[1]	120	319	4.5	232.2	232.2	232.5	0.3
Fall Kill Creek								
A	14,250[2]	90	1,012	2.3	181.2	181.2	182.2	1.0
B	14,945[2]	237	2,346	1.0	181.4	181.4	182.4	1.0
C	16,200[2]	613	6,205	0.4	181.5	181.5	182.5	1.0
D	16,974[2]	390	3,712	0.6	181.7	181.7	182.6	0.9
E	17,800[2]	138	1,466	1.6	182.7	182.7	183.4	0.7
F	19,230[2]	116	1,024	2.2	182.8	182.8	183.6	0.8

[1]Feet above limit of detailed study (Limit of Detailed Study is approximately 4,477 feet downstream of East Dorsey Lane)
[2]Feet above confluence with Hudson River

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)

FLOODWAY DATA

FALL KILL – FALL KILL CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Fishkill Creek								
A	90	308	5,004	6.7	7.2	4.1[2]	4.1	0.0
B	1,991	137	809	14.5	7.2	5.4[2]	5.4	0.0
C	2,239	118	1,431	9.0	8.3	8.3	8.6	0.3
D	2,693	141	1,902	6.8	16.5	16.5	16.5	0.0
E	3,330	194	2,319	5.6	34.3	34.3	34.3	0.0
F	4,967	117	1,017	12.7	41.5	41.5	41.9	0.4
G	5,298	97	1,177	11.0	50.6	50.6	50.9	0.3
H	6,286	150	1,029	12.6	54.3	54.3	54.3	0.0
I	6,745	177	2,153	6.0	85.0	85.0	85.7	0.7
J	7,897	111	1,422	9.1	86.4	86.4	87.1	0.7
K	9,011	150	2,114	6.1	95.1	95.1	95.1	0.0
L	11,741	135	1,397	9.2	129.0	129.0	129.2	0.2
M	12,272	92	829	15.6	132.2	132.2	132.4	0.2
N	12,895	87	954	13.5	137.1	137.1	137.6	0.5
O	13,641	185	2,616	4.9	143.2	143.2	143.6	0.4
P	15,345	178	1,896	6.7	146.1	146.1	146.1	0.0
Q	16,827	91	2,509	5.1	180.6	180.6	181.3	0.7
R	18,193	117	1,753	7.2	182.7	182.7	183.3	0.6
S	19,548	325	2,549	5.0	203.9	203.9	203.9	0.0
T	20,366	185	2,108	6.0	205.6	205.6	205.6	0.0
U	21,438	155	1,800	7.0	206.9	206.9	207.2	0.3
V	24,410	1,089	11,553	1.1	209.4	209.4	209.9	0.5
W	31,280	327	3,568	3.5	210.2	210.2	210.7	0.5
X	34,591	994	9,500	1.3	211.0	211.0	211.7	0.7
Y	37,852	363	3,269	3.8	214.5	214.5	214.6	0.1
Z	40,867	570	4,396	2.8	216.3	216.3	216.5	0.2
AA	44,662	364	3,260	3.4	218.9	218.9	219.4	0.6
AB	46,887	266	2,319	4.8	220.1	220.1	221.1	1.0

[1]Feet above confluence with Hudson River
[2]Elevation computed without consideration of backwater effects from Hudson River

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)

FLOODWAY DATA

FISHKILL CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Fishkill Creek (continued)								
AC	48,578	329	3,598	3.1	222.1	222.1	222.9	0.8
AD	52,858	1,047	10,449	1.1	223.6	223.6	224.4	0.8
AE	60,038	1,800	12,464	0.5	224.0	224.0	225.0	1.0
AF	61,914	758	4,401	1.5	225.0	225.0	225.6	0.6
AG	65,432	1,108	6,948	0.9	225.5	225.5	226.2	0.7
AH	71,375	1,314	4,856	1.3	229.5	229.5	230.1	0.6
AI	73,334	397	2,735	2.4	233.7	233.7	233.7	0.0
AJ	78,830	129	866	6.6	236.3	236.3	236.5	0.2
AK	79,650	169	1,170	4.0	239.1	239.1	239.8	0.7
AL	81,649	460	2,602	1.8	242.2	242.2	242.5	0.3
AM	83,196	401	2,347	2.0	244.0	244.0	244.1	0.1
AN	85,284	187	1,145	4.1	247.2	247.2	247.5	0.3
AO	88,987	380	2,169	2.2	251.4	251.4	251.9	0.5
AP	90,818	282	1,631	2.9	253.5	253.5	253.9	0.4
AQ	91,906	138	1,067	4.4	254.9	254.9	255.2	0.3
AR	94,711	347	2,453	1.9	258.4	258.4	258.5	0.1
AS	96,194	59	341	13.5	269.4	269.4	269.4	0.0
AT	96,386	158	1,068	4.3	285.8	285.8	285.9	0.1
AU	99,404	810	3,996	1.2	287.2	287.2	287.5	0.3
AV	102,199	369	2,116	2.2	292.4	292.4	292.4	0.0
AW	103,380	619	2,507	1.8	292.9	292.9	293.2	0.4
AX	107,496	614	2,816	1.6	298.3	298.3	298.4	0.1
AY	110,224	385	1,815	2.5	302.4	302.4	302.4	0.0
AZ	113,199	358	2,131	2.2	306.0	306.0	306.3	0.3
BA	113,853	282	1,800	2.6	307.4	307.4	308.2	0.8
BB	116,445	776	5,495	0.8	309.6	309.6	310.1	0.5
BC	118,977	336	736	6.2	311.1	311.1	311.2	0.1
BD	119,792	558	3,118	1.5	313.7	313.7	314.5	0.8

[1]Feet above confluence with Hudson River

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)

FLOODWAY DATA

FISHKILL CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Fishkill Creek (continued)								
BE	123,962	1,481	5,824	1.2	316.4	316.4	317.2	0.8
BF	125,972	1,342	26,059	3.5	320.9	320.9	320.9	0.0
BG	127,552	1,608	21,670	3.2	325.8	325.8	325.8	0.0
BH	129,346	178	794	5.3	331.5	331.5	331.5	0.0
BI	131,227	230	1,154	3.6	336.3	336.3	337.1	0.8
BJ	134,564	400	1,827	2.3	347.5	347.5	347.8	0.3
BK	136,939	346	1,211	2.0	351.9	351.9	352.0	0.1
BL	140,196	417	848	3.8	361.3	361.3	361.3	0.0
BM	141,008	225	866	2.8	364.8	364.8	364.9	0.1
BN	144,168	301	1,104	2.2	374.8	374.8	374.8	0.0
BO	144,945	321	718	3.4	377.3	377.3	377.4	0.1
BP	146,099	457	919	2.1	380.9	380.9	380.9	0.0
BQ	147,377	180	586	3.3	386.4	386.4	386.5	0.1
BR	148,895	42	251	7.8	395.7	395.7	395.7	0.0
BS	149,724	90	392	4.4	404.5	404.5	404.7	0.2
BT	149,876	106	1,501	1.1	424.7	424.7	424.7	0.0
BU	152,670	61	175	9.6	445.7	445.7	445.7	0.0
BV	153,301	124	460	3.7	450.0	450.0	450.2	0.2
BW	153,925	198	763	2.2	454.0	454.0	454.0	0.0
BX	154,598	80	250	6.7	455.6	455.6	455.7	0.1
BY	155,352	203	1,274	1.3	467.0	467.0	467.0	0.0
BZ	160,302	542	1,751	0.8	468.2	468.2	468.4	0.2
CA	163,849	548	1,291	1.2	471.5	471.5	471.9	0.4
CB	165,540	335	871	1.8	472.9	472.9	473.6	0.7
CC	167,435	304	857	1.8	476.1	476.1	476.6	0.5
CD	168,614	266	950	1.6	478.4	478.4	478.5	0.1
CE	171,843	131	639	2.9	486.6	486.6	486.7	0.1
CF	173,181	345	1,255	1.2	487.3	487.3	487.6	0.3

[1]Feet above confluence with Hudson River

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)

FLOODWAY DATA

FISHKILL CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Fishkill Creek (continued)								
CG	175,637[1]	289	894	1.3	491.3	491.3	491.8	0.5
CH	177,389[1]	384	971	1.2	496.1	496.1	496.2	0.1
Frog Hollow Brook								
A	830[2]	35	138	7.0	314.3	314.3	315.3	1.0
B	2,250[2]	35	145	6.6	321.3	321.3	321.8	0.5
C	6,310[2]	28	101	9.5	370.7	370.7	371.3	0.6
D	7,960[2]	42	121	7.9	394.9	394.9	395.8	0.9
E	12,070[2]	55	188	5.1	428.2	428.2	429.2	1.0

[1]Feet above confluence with Hudson River
[2]Feet above confluence with Fishkill Creek

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)

FLOODWAY DATA

FISHKILL CREEK - FROG HOLLOW BROOK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Great Spring Creek								
A	500	74	212	6.6	210.8	202.4[2]	202.5	0.1
B	650	292	2,134	0.7	210.8	209.1[2]	209.2	0.1
C	2,058	48	204	6.9	210.8	209.2[2]	209.2	0.0
D	2,650	154	714	2.0	211.7	211.7	212.0	0.3
E	3,240	217	1,168	1.2	212.0	212.0	212.5	0.5
F	4,285	68	406	3.5	212.3	212.3	212.8	0.5
G	4,360	183	865	1.6	212.5	212.5	213.1	0.6
H	4,740	299	1,354	1.0	212.7	212.7	213.4	0.7
I	5,480	431	1,843	0.5	212.8	212.8	213.6	0.8
J	6,740	44	129	7.1	214.0	214.0	214.5	0.5
K	7,350	87	480	1.9	217.4	217.4	218.2	0.8
L	7,454	108	569	1.6	217.5	217.5	218.3	0.8
M	7,790	419	1,898	0.5	217.8	217.8	218.6	0.8
N	7,895	325	1,509	0.6	217.8	217.8	218.6	0.8
O	8,800	76	237	3.9	219.7	219.7	219.7	0.0
P	11,095	120	210	4.4	230.8	230.8	231.1	0.3
Q	11,265	50	242	3.8	231.8	231.8	232.4	0.6
R	13,040	200	1,468	0.6	244.3	244.3	244.8	0.5
S	13,160	103	609	1.5	244.3	244.3	244.8	0.5

[1]Feet above confluence with Wappinger Creek Reach 1
[2]Elevation computed without consideration of backwater effects from Wappinger Creek

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)

FLOODWAY DATA

GREAT SPRING CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Jackson Creek Reach 1								
A	4,530	420	1,126	1.7	295.3	295.3	296.2	0.9
B	6,470	396	1,473	1.3	298.2	298.2	298.2	0.0
C	8,875	269	794	2.5	306.1	306.1	307.1	1.0
D	9,867	301	1,874	1.0	314.0	314.0	315.0	1.0
E	11,155	241	1,135	1.7	314.8	314.8	315.7	0.9
F	11,920	179	713	2.8	318.3	318.3	318.5	0.2
G	12,780	280	1,053	1.9	320.5	320.5	320.7	0.2
H	13,720	340	676	2.9	324.5	324.5	324.5	0.0
I	15,670	575	1,424	1.4	331.2	331.2	331.2	0.0
J	19,060	514	3,221	0.6	344.2	344.2	344.3	0.1
K	21,300	128	458	3.8	355.3	355.3	356.0	0.7
L	22,370	66	298	5.8	364.0	364.0	364.9	0.9
M	24,090	36	187	9.0	380.8	380.8	381.3	0.5
N	25,475	262	514	3.3	405.6	405.6	405.8	0.2
O	25,785	36	193	8.7	413.4	413.4	413.5	0.1
P	26,360	63	447	3.8	429.9	429.9	430.8	0.9

[1]Feet above mouth

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)

FLOODWAY DATA

JACKSON CREEK REACH 1

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Jackson Creek Reach 2								
A	200	24	92	9.9	423.1	423.1	423.6	0.5
B	1,250	70	196	4.6	435.7	435.7	436.1	0.4
C	2,230	40	159	5.7	443.7	443.7	444.1	0.4
D	3,180	140	350	2.6	455.2	455.2	456.2	1.0
E	3,900	245	329	2.8	461.0	461.0	461.8	0.8
F	4,600	90	255	3.3	466.4	466.4	467.3	0.9
G	5,350	37	142	5.4	471.9	471.9	472.4	0.5
H	6,400	31	96	8.0	481.0	481.0	481.0	0.0
I	7,600	36	83	9.2	496.1	496.1	496.1	0.0
J	8,824	135	131	3.4	510.3	510.3	510.5	0.2
K	9,800	25	63	7.0	522.1	522.1	522.9	0.8
L	11,100	64	87	5.1	538.2	538.2	539.2	1.0
M	11,900	24	75	5.9	546.5	546.5	546.5	0.0
N	12,950	37	92	4.0	558.2	558.2	559.2	1.0
O	14,200	21	52	7.2	573.2	573.2	573.6	0.4
P	15,150	19	41	7.5	588.2	588.2	588.5	0.3
Q	16,075	28	45	6.9	604.0	604.0	604.0	0.0
R	16,950	29	39	6.6	617.6	617.6	617.7	0.1
S	17,530	23	43	6.0	632.8	632.8	632.8	0.0
T	17,740	17	36	7.3	637.1	637.1	637.3	0.2

[1]Feet above Limit of Detailed Study (Limit of Detailed Study is approximately 3,264 feet downstream of State Route 55)

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)

FLOODWAY DATA

JACKSON CREEK REACH 2

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Kelsey Brook								
A	150[1]	140	731	1.3	681.5	681.5	682.3	0.8
B	900[1]	34	177	5.4	695.0	695.0	695.6	0.6
C	1,220[1]	80	350	2.7	704.7	704.7	704.7	0.0
D	1,990[1]	96	345	2.8	705.7	705.7	706.0	0.3
E	2,780[1]	84	379	2.5	706.9	706.9	707.8	0.9
F	5,420[1]	18	129	7.4	724.3	724.3	725.2	0.9
Landsman Kill								
A	1,910[2]	160	686	2.2	127.1	127.1	128.1	1.0
B	2,890[2]	110	598	2.6	129.0	129.0	129.4	0.4
C	3,900[2]	90	268	5.7	131.2	131.2	131.5	0.3
D	4,290[2]	20	115	13.3	141.1	141.1	141.7	0.6
E	5,040[2]	25	125	12.2	165.1	165.1	165.4	0.3
F	6,050[2]	100	643	2.4	184.3	184.3	184.3	0.0
G	8,960[2]	70	279	5.5	189.4	189.4	189.6	0.2
H	10,660[2]	130	578	2.6	193.0	193.0	193.4	0.4
I	11,840[2]	120	656	2.3	198.8	198.8	198.8	0.0
J	14,040[2]	50	285	5.4	202.4	202.4	203.2	0.8
K	15,890[2]	26	130	11.8	218.6	218.6	219.6	1.0
L	17,060[2]	50	233	6.6	238.8	238.8	239.8	1.0
M	19,530[2]	50	349	4.4	256.9	256.9	256.9	0.0
N	22,330[2]	100	250	6.1	292.4	292.4	292.5	0.1
O	24,550[2]	100	657	2.3	301.0	301.0	301.4	0.4
P	26,170[2]	70	351	4.4	303.3	303.3	303.6	0.3

[1]Feet above confluence with Webatuck Creek Reach 3
[2]Feet above confluence of Rhinebeck Kill

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)

FLOODWAY DATA

KELSEY BROOK – LANDSMAN KILL

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Little Wappinger Creek Reach 1								
A	175	101	800	3.1	230.5	230.5	230.8	0.3
B	1,680	93	434	5.7	231.3	231.3	231.8	0.5
C	2,690	87	418	5.9	233.8	233.8	234.0	0.2
D	4,040	73	260	9.5	238.1	238.1	238.1	0.0
E	4,335	65	1,519	1.6	242.9	242.9	243.0	0.1
F	5,200	126	861	2.9	250.7	250.7	250.8	0.1
G	6,600	133	820	3.0	251.2	251.2	251.4	0.2
H	7,830	74	348	6.7	251.6	251.6	252.0	0.4
I	9,910	145	861	2.7	256.3	256.3	257.0	0.7
J	12,670	70	515	4.5	260.0	260.0	260.5	0.5
K	15,850	110	528	4.9	265.1	265.1	265.9	0.8
L	18,670	100	514	4.5	273.6	273.6	274.2	0.6
M	19,790	90	454	5.1	276.9	276.9	277.7	0.8
N	23,910	90	279	6.1	289.7	289.7	290.2	0.5
O	26,450	120	510	4.0	304.0	304.0	304.0	0.0
P	28,360	90	409	4.9	308.2	308.2	308.3	0.1
Q	32,210	90	476	4.2	320.7	320.7	321.1	0.4
R	35,130	100	458	4.4	327.8	327.8	328.1	0.3
S	37,390	100	615	3.3	330.7	330.7	331.4	0.7
T	39,850	130	373	5.4	336.7	336.7	336.7	0.0

[1]Feet above confluence with Wappinger Creek Reach 1

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)

FLOODWAY DATA

LITTLE WAPPINGER CREEK REACH 1

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Maritje Kill								
A	670	78	798	0.9	10.0	10.0	10.0	0.0
B	1,582	47	121	6.2	53.7	53.7	53.7	0.0
C	2,273	32	144	4.8	72.4	72.4	72.4	0.0
D	3,156	110	219	3.1	93.0	93.0	93.1	0.1
E	4,344	36	110	6.2	112.9	112.9	113.2	0.3
F	5,649	45	139	4.4	150.5	150.5	150.5	0.0
G	6,433	63	104	6.0	177.0	177.0	177.0	0.0
H	6,872	61	228	2.7	187.9	187.9	188.0	0.1
I	7,705	37	157	3.9	189.7	189.7	189.8	0.1
J	9,309	107	442	1.1	193.3	193.3	193.7	0.4
K	10,952	53	161	3.1	199.2	199.2	199.4	0.2
L	12,865	155	596	0.7	220.5	220.5	220.5	0.0
M	14,951	157	184	2.3	221.2	221.2	221.2	0.0
N	16,450	205	1,539	0.5	231.4	231.4	231.4	0.0
O	16,876	144	1,324	0.6	231.4	231.4	231.4	0.0
P	19,906	296	2,524	0.3	231.4	231.4	231.5	0.1
Q	21,812	64	103	5.4	236.2	236.2	236.4	0.2
R	23,613	80	304	1.8	250.0	250.0	250.7	0.7

[1]Feet above confluence with Hudson River

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)

FLOODWAY DATA

MARITJE KILL

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Rhinebeck Kill								
A	1,430	163	1,095	1.3	126.1	126.1	127.1	1.0
B	2,500	191	637	2.2	126.7	126.7	127.5	0.8
C	4,510	76	365	3.9	128.5	128.5	129.2	0.7
D	7,570	94	818	1.7	136.6	136.6	137.0	0.4
E	10,320	117	929	1.5	139.0	139.0	139.1	0.1
F	11,330	88	515	2.8	139.3	139.3	139.5	0.2
G	12,880	111	694	2.0	140.3	140.3	140.8	0.5
H	13,615	30	199	7.1	140.6	140.6	141.0	0.4
I	14,900	106	886	1.3	145.0	145.0	145.1	0.1
J	17,060	98	723	1.6	145.6	145.6	145.9	0.3
K	18,850	85	559	2.1	146.3	146.3	146.6	0.3
L	21,010	53	336	3.5	147.9	147.9	148.3	0.4
M	22,830	28	176	6.6	149.2	149.2	149.7	0.5
N	25,180	120	731	1.1	156.1	156.1	156.1	0.0
O	26,340	65	349	2.4	156.4	156.4	156.4	0.0
P	28,480	50	151	5.6	159.8	159.8	160.6	0.8
Q	29,250	40	178	4.7	163.9	163.9	164.5	0.6

[1]Feet above confluence with Landsman Kill

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)

FLOODWAY DATA

RHINEBECK KILL

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Saw Kill								
A	130[1]	55	366	11.4	9.1	9.1	10.1	1.0
B	3,240[1]	50	319	13.1	113.6	113.6	114.6	1.0
C	4,230[1]	45	354	11.8	145.7	145.7	146.7	1.0
D	9,670[1]	90	612	6.8	167.0	167.0	168.0	1.0
E	12,940[1]	85	765	5.5	171.6	171.6	172.0	0.4
F	14,670[1]	350	2,803	1.5	173.0	173.0	173.6	0.6
G	19,150[1]	180	979	4.3	177.0	177.0	177.7	0.7
H	21,540[1]	410	3,607	1.0	182.8	182.8	183.1	0.3
I	24,050[1]	85	569	6.3	183.6	183.6	184.1	0.5
J	26,630[1]	155	1,161	3.1	202.9	202.9	202.9	0.0
K	28,820[1]	90	562	6.4	205.1	205.1	205.2	0.1
L	31,800[1]	100	809	4.5	213.0	213.0	213.5	0.5
M	33,360[1]	110	829	4.3	214.5	214.5	215.2	0.7
N	37,160[1]	140	754	4.8	220.3	220.3	220.9	0.6
O	38,140[1]	240	1,520	2.4	221.3	221.3	222.1	0.8
Seeley Creek								
A	250[2]	17	42	7.8	548.6	548.6	548.9	0.3
B	750[2]	17	41	8.0	562.8	562.8	562.8	0.0
C	1,360[2]	14	37	9.0	584.4	584.4	584.4	0.0

[1]Feet above confluence with Hudson River
[2]Feet above confluence with Clove Brook

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

DUTCHESS COUNTY, NY (ALL JURISDICTIONS)

FLOODWAY DATA

SAW KILL – SEELEY CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Sprout Creek #1								
A	1,230	175	1,240	2.8	224.3	223.7[2]	224.5	0.9
B	2,530	350	2,076	1.7	225.4	225.4	226.4	1.0
C	4,100	386	2,044	1.7	226.6	226.6	227.4	0.8
D	6,100	758	3,599	1.0	227.4	227.4	228.3	0.9
E	10,050	590	2,269	1.5	232.1	232.1	233.1	1.0
F	12,330	295	1,743	2.0	234.6	234.6	235.2	0.6
G	14,940	335	1,538	2.3	236.1	236.1	236.7	0.6
H	16,600	360	1,591	2.2	239.1	239.1	239.6	0.5
I	18,840	220	965	3.6	242.0	242.0	242.5	0.5
J	19,640	250	1,240	2.8	243.2	243.2	244.1	0.9
K	22,750	220	1,178	3.0	247.2	247.2	248.0	0.8
L	24,000	200	763	4.6	249.8	249.8	250.5	0.7
M	25,400	77	662	5.3	253.1	253.1	253.3	0.2
N	27,460	100	789	4.4	255.6	255.6	256.3	0.7
O	28,400	474	3,421	1.0	257.9	257.9	258.8	0.9
P	29,780	685	2,589	1.3	258.3	258.3	259.1	0.8
Q	31,830	546	1,129	3.1	262.8	262.8	262.8	0.0
R	33,077	96	611	5.7	265.7	265.7	266.3	0.6
S	34,480	102	841	4.1	267.2	267.2	268.0	0.8
T	34,565	300	1,526	2.3	267.5	267.5	269.2	0.9
U	36,000	720	4,191	0.8	268.2	268.2	269.2	1.0
V	37,080	182	672	5.2	270.6	270.6	270.6	0.0
W	38,390	370	1,645	2.1	272.1	272.1	272.8	0.7
X	39,000	292	1,079	3.2	273.1	273.1	273.9	0.8
Y	40,020	540	2,277	1.5	276.7	276.7	276.7	0.0
Z	41,384	168	803	4.3	278.3	278.3	278.3	0.0
AA	42,600	162	688	6.9	279.6	279.6	279.8	0.2
AB	43,900	317	1,579	2.2	282.4	282.4	282.7	0.3

[1]Feet above confluence with Fishkill Creek
[2]Elevation computed without consideration of backwater effects from Fishkill Creek

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

DUTCHESS COUNTY, NY (ALL JURISDICTIONS)

FLOODWAY DATA

SPROUT CREEK #1

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Sprout Creek #1 (continued)								
AC	45,000	552	2,470	1.4	283.3	283.3	284.1	0.8
AD	46,270	530	2,480	1.4	285.6	285.6	286.3	0.7
AE	47,400	428	1,688	2.1	286.1	286.1	286.7	0.6
AF	48,400	263	1,070	2.3	287.3	287.3	288.1	0.8
AG	49,660	287	1,420	1.8	288.8	288.8	289.7	0.9
AH	50,042	583	2,675	1.0	289.0	289.0	290.0	1.0
AI	51,200	232	1,059	2.4	289.9	289.9	290.6	0.7
AJ	51,710	414	2,135	1.2	290.6	290.6	291.6	1.0
AK	52,330	662	2,853	0.9	290.9	290.9	291.9	1.0
AL	53,100	165	474	5.3	292.0	292.0	292.0	0.0
AM	56,210	531	2,184	1.1	296.8	296.8	297.3	0.5
AN	56,341	61	369	6.8	296.9	296.9	297.3	0.4
AO	56,790	105	1,432	1.7	298.1	298.1	298.6	0.5
AP	59,030	345	3,577	0.7	299.7	299.7	300.6	0.9
AQ	63,280	180	1,722	1.5	304.2	304.2	305.0	0.8
AR	64,100	28	944	2.6	305.9	305.9	306.7	0.8
AS	65,140	220	1,887	1.1	309.6	309.6	310.3	0.7
AT	65,266	124	713	3.0	312.2	312.2	313.0	0.8
AU	68,165	251	702	3.1	315.9	315.9	316.6	0.7
AV	68,527	58	373	5.8	318.1	318.1	318.1	0.0
AW	71,000	244	1,591	1.4	322.1	322.1	322.9	0.8
AX	71,890	87	278	7.7	324.0	324.0	324.0	0.0
AY	72,030	334	1,587	1.2	327.2	327.2	327.2	0.0
AX	73,780	436	1,405	1.3	327.5	327.5	327.9	0.4
BA	73,889	731	3,527	0.5	329.0	329.0	330.0	1.0
BB	74,020	471	2,079	0.9	329.1	329.1	330.1	1.0
BC	74,970	200	692	2.7	329.7	329.7	330.6	0.9
BD	78,390	387	1,393	1.4	336.0	336.0	336.6	0.6

[1]Feet above confluence with Fishkill Creek

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

DUTCHESS COUNTY, NY (ALL JURISDICTIONS)

FLOODWAY DATA

SPROUT CREEK #1

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Sprout Creek #2								
A	250'	*	142	9.4	433.3	433.3	433.6	0.3
B	1,250'	*	106	11.6	461.0	461.0	461.0	0.0
C	2,200'	46	286	4.3	508.6	508.6	509.4	0.8
D	2,800'	87	403	3.1	509.8	509.8	510.8	1.0
E	3,700'	28	150	8.2	515.6	515.6	516.3	0.7
F	4,800'	28	155	8.0	530.5	530.5	530.9	0.4
G	5,685'	125	305	4.0	541.0	541.0	541.7	0.7
H	6,750'	56	160	5.6	546.4	546.4	547.4	1.0
I	7,750'	85	321	2.8	552.2	552.2	553.2	1.0
J	8,750'	71	235	3.4	557.4	557.4	558.3	0.9
K	9,617'	150	256	3.2	563.4	563.4	564.3	0.9
L	9,800'	89	193	4.6	564.7	564.7	565.7	1.0
Stony Creek								
A	1,580'	110	642	5.8	83.8	83.8	84.7	0.9
B	3,200'	40	262	14.2	101.9	101.9	102.5	0.6
C	4,270'	65	356	10.5	112.4	112.4	112.5	0.1
D	6,180'	60	660	5.7	131.3	131.3	131.3	0.0

[1]Feet above Limit of Detailed Study (Limit of Detailed Study is approximately 1,820 feet downstream of Verbank Village Road)
[2]Feet above Limit of Detailed Study (Limit of Detailed Study is approximately 3,108 feet downstream of Mill Street)
*Floodway coincident with channel banks

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

DUTCHESS COUNTY, NY (ALL JURISDICTIONS)

FLOODWAY DATA

SPROUT CREEK #2 – STONY CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Swamp River Reach 1								
A	979[1]	250	2,350	3.1	366.8	366.8	367.6	0.8
B	3,445[1]	254	1,380	8.0	367.7	367.7	368.7	1.0
C	4,325[1]	275	1,267	9.1	369.5	369.5	370.5	1.0
D	5,603[1]	244	1,262	5.9	372.4	372.4	372.9	0.5
Swamp River Reach 2								
A	1,860[2]	167	1,188	1.5	423.9	423.9	424.4	0.5
B	3,630[2]	298	2,153	0.8	424.1	424.1	424.6	0.5
C	5,400[2]	178	1,282	1.3	424.5	424.5	425.1	0.6
D	7,200[2]	250	1,802	1.0	425.1	425.1	425.8	0.7
E	9,120[2]	257	1,777	1.0	425.5	425.5	426.2	0.7
F	11,120[2]	212	1,194	1.4	425.9	425.9	426.6	0.7
G	13,030[2]	202	950	1.5	426.7	426.7	427.5	0.8
H	15,870[2]	176	921	1.6	427.9	427.9	428.7	0.8
I	17,690[2]	177	967	1.1	429.9	429.9	430.1	0.2
J	19,330[2]	216	956	1.1	430.3	430.3	430.6	0.3
K	21,030[2]	64	331	3.3	431.6	431.6	432.4	0.8
L	22,090[2]	140	733	1.5	434.4	434.4	434.7	0.3
M	24,280[2]	158	1,065	1.0	436.8	436.8	437.3	0.5
N	26,150[2]	139	576	1.9	437.9	437.9	438.7	0.8
O	29,780[2]	70	300	3.6	453.3	453.3	454.2	0.9

[1]Feet above confluence with Tenmile River
[2]Feet above Limit of Detailed Dtudy (Limit of Detailed Study is approximately 910 feet downstream of Kitchen Road)

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)

FLOODWAY DATA

SWAMP RIVER REACH 1 – SWAMP RIVER REACH 2

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Sweezy Creek								
A	230[1]	78	195	2.0	499.4	499.4	500.2	0.8
B	930[1]	58	94	3.6	507.8	507.7	508.4	0.7
C	1,680[1]	56	76	4.5	520.5	520.5	521.0	0.5
D	2,430[1]	36	60	5.6	536.3	536.3	537.1	0.8
E	3,030[1]	13	37	7.9	556.5	556.5	557.2	0.7
F	3,330[1]	15	36	8.1	572.0	572.0	572.0	0.0
G	3,630[1]	14	36	8.1	582.6	582.6	582.6	0.0
Sylvan Lake Outlet								
A	730[2]	54	168	5.1	292.8	290.9[3]	291.8	0.9
B	2,260[2]	100	273	3.1	295.5	295.5	296.0	0.5
C	3,890[2]	100	230	3.7	302.9	302.9	303.3	0.4
D	6,130[2]	40	145	5.9	309.2	309.2	310.0	0.8
E	7,580[2]	129	355	2.4	313.1	313.1	313.6	0.5
F	9,126[2]	76	322	2.6	319.8	319.8	320.7	0.9
G	10,546[2]	78	285	3.0	321.5	321.5	322.0	0.5
H	11,366[2]	20	84	10.1	323.8	323.8	324.6	0.8

[1]Feet above confluence with Clove Brook
[2]Feet above confluence with Fishkill Creek
[3]Elevation computed without consideration of backwater effects from Fish Kill Creek

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)

FLOODWAY DATA

SWEEZY CREEK – SYLVAN LAKE OUTLET

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
TenMile River								
A	847	132	1,044	15.8	292.6	292.6	292.6	0.0
B	2,622	187	1,615	10.3	305.3	305.3	305.3	0.0
C	4,810	224	2,074	7.9	310.8	310.8	310.9	0.1
D	6,750	264	2,341	7.0	317.8	317.8	317.8	0.0
E	8,807	275	2,475	6.4	321.1	321.1	321.6	0.5
F	10,984	128	1,796	8.8	328.8	328.8	328.9	0.1
G	12,607	126	1,696	9.3	330.4	330.4	330.8	0.4
H	14,497	306	2,482	6.4	333.3	333.3	334.0	0.7
I	16,388	205	1,965	8.1	336.5	336.5	336.8	0.3
J	17,562	211	2,113	7.5	338.1	338.1	338.8	0.7
K	18,938	112	1,759	9.0	342.9	342.9	342.9	0.0
L	21,865	259	2,213	7.1	345.4	345.4	346.3	0.9
M	24,776	432	5,735	2.7	350.6	350.6	351.5	0.9
N	26,980	520	5,410	2.9	351.2	351.2	352.1	0.9
O	29,085	541	3,501	4.4	351.9	351.9	352.9	1.0
P	31,727	508	3,801	4.1	353.4	353.4	354.3	0.9
Q	34,396	1,023	8,613	1.8	355.6	355.6	356.6	1.0
R	37,350	988	8,416	1.8	356.8	356.8	357.8	1.0
S	39,308	818	4,599	3.4	357.7	357.7	358.6	0.9
T	40,983	216	1,710	9.1	358.9	358.9	359.9	1.0
U	42,913	610	4,251	2.1	364.3	364.3	364.9	0.6
V	46,173	481	2,492	3.4	366.1	366.1	366.9	0.8
W	48,129	370	2,489	3.4	368.5	368.5	369.2	0.7
X	50,248	358	1,833	4.5	371.9	371.9	372.6	0.7
Y	54,121	171	1,121	7.4	277.0	277.0	277.1	0.1
Z	55,285	214	970	8.6	378.9	378.9	378.9	0.0
AA	57,269	310	1,742	4.8	386.3	386.3	386.3	0.0
AB	59,603	239	1,327	6.3	387.2	387.2	388.1	0.9

[1]Feet above county boundary

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

DUTCHESS COUNTY, NY (ALL JURISDICTIONS)

FLOODWAY DATA

TENMILE RIVER

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Tributary to Amenia Stream								
A	1,836[1]	286	186	1.9	548.8	548.8	549.1	0.3
Tributary 1 to Fishkill Creek								
A	1,470[2]	16	93	9.2	209.8	205.6[4]	206.4	0.8
B	3,820[2]	85	551	1.6	213.9	213.9	213.9	0.0
C	7,180[2]	60	302	2.8	217.2	217.2	217.4	0.2
D	10,560[2]	80	690	1.2	223.5	223.5	223.6	0.1
E	14,460[2]	60	384	2.2	224.1	224.1	224.4	0.3
Tributary 2 to Fishkill Creek								
A	1,170[2]	200	297	5.1	388.4	388.4	388.4	0.0
B	3,990[2]	85	237	6.4	433.6	433.6	433.6	0.0
Tributary to East Branch Croton River								
A	395[3]	35	132	6.6	615.3	615.3	615.8	0.5
B	1,765[3]	55	134	6.5	655.2	655.2	655.6	0.4
C	3,825[3]	45	112	7.7	687.7	687.7	688.6	0.9
D	5,175[3]	35	200	4.3	703.3	703.3	704.3	1.0
E	7,725[3]	85	406	2.1	717.8	717.8	718.0	0.2

[1]Feet above confluence with Amenia Stream
[2]Feet above confluence with Fishkill Creek
[3]Feet above county boundary
[4]Elevation computed without consideration of backwater effects from Fishkill Creek

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

DUTCHESS COUNTY, NY (ALL JURISDICTIONS)

FLOODWAY DATA

TRIBUTARY TO AMENIA STREAM – TRIBUTARY 1 TO FISHKILL CREEK - TRIBUTARY 2 TO FISHKILL CREEK – TRIBUTARY TO EAST BRANCH CROTON RIVER

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Walsh Creek								
A	300[1]	20	35	10.7	523.7	523.7	523.7	0.0
B	1,200[1]	62	98	3.9	541.7	541.7	542.7	1.0
C	2,292[1]	30	136	2.5	568.5	568.5	569.4	0.9
D	2,700[1]	18	37	9.1	576.6	576.6	576.8	0.2
E	3,200[1]	12	39	8.7	591.5	591.5	592.1	0.6
F	4,100[1]	12	40	8.5	615.2	615.2	615.6	0.4
G	5,100[1]	12	27	10.7	639.1	639.1	639.4	0.3
H	6,000[1]	12	29	7.5	664.9	664.9	664.9	0.0
I	6,540[1]	12	24	8.4	684.1	684.1	684.4	0.3
Wappinger Creek Reach 1								
A	61[2]	250	1,293	14.9	7.9	6.2[3]	6.2	0.0
B	2,591[2]	402	4,633	4.2	7.9	6.3[3]	6.3	0.0
C	5,256[2]	587	7,294	2.6	7.9	7.3[3]	7.7	0.4
D	7,061[2]	350	4,092	4.7	8.1	8.1	8.4	0.3
E	8,941[2]	204	2,365	8.1	9.1	9.1	9.3	0.2
F	9,561[2]	236	1,631	7.7	9.4	9.4	9.6	0.2
G	11,442[2]	94	1,167	16.5	70.6	70.6	70.9	0.3
H	13,602[2]	634	7,094	2.6	90.1	90.1	90.9	0.8
I	14,902[2]	1,090	10,419	1.8	90.3	90.3	91.0	0.7
J	16,991[2]	369	2,641	6.9	90.4	90.4	91.1	0.7
K	20,208[2]	607	5,506	3.3	103.1	103.1	103.6	0.5
L	21,328[2]	688	6,524	2.8	104.4	104.4	105.1	0.7
M	22,968[2]	641	7,061	2.6	107.6	107.6	107.8	0.2

[1]Feet above confluence with Clove Mountain Creek
[2]Feet above confluence with the Hudson River

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)

FLOODWAY DATA

WALSH CREEK – WAPPINGER CREEK REACH 1

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Wappinger Creek Reach 1 (continued)								
N	25,068	489	3,364	5.4	108.8	108.8	109.7	0.9
O	27,098	197	2,180	8.4	111.6	111.6	112.4	0.8
P	28,474	388	4,049	4.5	117.4	117.4	117.8	0.4
Q	30,474	575	7,818	2.3	118.9	118.9	119.5	0.6
R	32,774	390	6,740	2.7	119.4	119.4	120.0	0.6
S	35,037	146	2,354	7.8	120.5	120.5	121.4	0.9
T	36,632	135	1,801	9.5	121.8	121.8	122.7	0.9
U	38,912	186	2,567	6.7	128.7	128.7	129.0	0.3
V	40,618	172	2,539	6.8	139.2	139.2	139.2	0.0
W	42,358	705	9,819	1.8	143.7	143.7	143.7	0.0
X	44,848	526	6,184	2.8	144.5	144.5	144.5	0.0
Y	47,488	304	2,861	6.0	145.7	145.7	146.3	0.6
Z	49,768	311	3,957	4.3	147.2	147.2	148.0	0.8
AA	51,548	204	2,478	6.9	147.7	147.7	148.5	0.8
AB	54,008	327	3,277	5.2	149.2	149.2	149.9	0.7
AC	56,028	111	1,000	17.2	152.1	152.1	152.1	0.0
AD	58,439	560	7,267	2.4	161.2	161.2	161.4	0.2
AE	60,569	700	7,501	2.3	162.0	162.0	162.1	0.1
AF	63,149	614	3,475	4.9	165.4	165.4	165.9	0.5
AG	65,161	712	4,891	3.5	167.0	167.0	167.7	0.7
AH	66,901	685	3,849	4.5	168.6	168.6	169.5	0.9
AI	69,681	392	3,439	5.0	172.3	172.3	173.0	0.7
AJ	72,501	122	1,537	11.2	175.2	175.2	175.8	0.6
AK	74,391	191	1,371	12.5	183.2	183.2	183.3	0.1
AL	76,181	193	3,535	4.6	190.5	190.5	190.9	0.4

[1]Feet above confluence with Hudson River

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)

FLOODWAY DATA

WAPPINGER CREEK REACH 1

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Wappinger Creek Reach 1 (continued)								
AM	78,892	355	5,697	3.1	195.0	195.0	195.3	0.3
AN	80,846	144	2,213	7.9	195.3	195.3	195.6	0.3
AO	82,641	152	2,488	7.0	197.0	197.0	197.8	0.8
AP	84,647	552	8,281	2.1	198.9	198.9	199.8	0.9
AQ	85,492	940	13,400	1.3	199.1	199.1	200.0	0.9
AR	86,442	249	3,051	5.7	200.0	200.0	200.7	0.7
AS	88,132	135	1,803	9.7	201.7	201.7	202.1	0.4
AT	88,554	150	2,085	8.4	204.5	204.5	204.6	0.1
AU	89,610	104	1,385	12.7	205.9	205.9	205.9	0.0
AV	91,775	440	5,289	3.1	209.8	209.8	210.5	0.7
AW	94,574	180	2,013	6.8	211.3	211.3	212.1	0.8
AX	96,210	279	3,948	3.5	213.2	213.2	214.1	0.9
AY	97,425	792	9,015	1.5	213.7	213.7	214.6	0.9
AZ	99,959	338	3,023	4.5	213.7	213.7	215.4	0.9
BA	101,332	264	2,567	5.3	214.5	214.5	217.2	0.9
BB	103,444	303	3,370	4.0	219.0	219.0	219.8	0.8
BC	105,345	485	5,847	2.3	221.2	221.2	222.1	0.9
BD	106,454	500	10,939	1.2	221.5	221.5	222.4	0.9
BE	109,094	184	2,145	6.4	224.6	224.6	224.6	0.0
BF	111,417	675	5,319	2.1	228.8	228.8	228.9	0.1
BG	113,265	978	8,348	1.4	230.4	230.4	230.7	0.3
BH	113,740	203	1,713	5.2	231.2	231.2	232.1	0.9

[1]Feet above confluence with Hudson River

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)

FLOODWAY DATA

WAPPINGER CREEK REACH 1

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Wappinger Creek Reach 1 (continued)								
BI	115,377[1]	120	1,290	6.9	232.8	232.8	233.5	0.7
BJ	117,330[1]	165	1,081	8.2	235.1	235.1	235.7	0.6
BK	118,967[1]	216	1,472	6.0	239.4	239.4	239.6	0.2
BL	120,921[1]	381	2,645	3.4	242.0	242.0	242.4	0.4
BM	121,322[1]	400	2,885	3.0	242.4	242.4	242.8	0.4
BN	122,032[1]	450	2,612	3.4	243.0	243.0	243.4	0.4
BO	123,982[1]	220	1,270	6.9	245.1	245.1	245.6	0.5
BP	125,082[1]	250	2,074	4.2	248.2	248.2	248.9	0.7
BQ	126,082[1]	190	1,838	4.8	250.4	250.4	251.0	0.6
BR	127,732[1]	240	2,405	3.7	252.8	252.8	253.4	0.6
Wappinger Creek Reach 2								
A	0[2]	380	2,418	1.4	282.4	282.4	283.4	1.0
B	1,150[2]	190	1,060	3.3	283.9	283.9	284.8	0.9
C	3,150[2]	124	471	5.9	288.3	288.3	289.2	0.9
D	4,830[2]	69	368	7.6	294.1	294.1	294.7	0.6
E	6,980[2]	83	326	8.5	312.0	312.0	312.6	0.6
F	8,160[2]	50	352	7.9	321.9	321.9	322.5	0.6
G	10,310[2]	81	479	4.6	331.5	331.5	332.3	0.8

[1]Feet above confluence with Hudson River
[2]Feet above County Route 17 (Salt Point Turnpike)

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)

FLOODWAY DATA

WAPPINGER CREEK REACH 1 – WAPPINGER CREEK REACH 2

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Wassaic Creek								
A	3,590	617	2,131	1.9	420.6	420.6	421.5	0.9
B	7,990	97	643	6.3	432.4	432.4	433.1	0.7
Webatuck Creek Reach 1								
A	2,432	211	1,638	3.0	423.9	423.9	424.6	0.7
B	5,708	729	4,797	1.0	425.5	425.5	426.3	0.8
C	8,675	360	2,199	2.2	431.9	431.9	432.0	0.1
D	12,380	460	3,583	1.4	439.5	439.5	439.9	0.4
E	19,180	148	1,230	3.8	442.0	442.0	442.2	0.2
F	25,850	778	3,872	1.2	443.6	443.6	444.2	0.6
G	32,257	233	1,019	4.6	446.4	446.4	446.9	0.5
Webatuck Creek Reach 2								
A	45,035	64	518	7.6	460.7	460.7	461.7	1.0
B	48,749	170	965	4.1	469.2	469.2	469.6	0.4
C	53,768	340	1,278	3.1	480.5	480.5	481.3	0.8

[1]Feet above confluence with Tenmile River

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)

FLOODWAY DATA

WASSAIC CREEK – WEBATUCK CREEK REACH 1 – WEBATUCK CREEK REACH 2

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Webatuck Creek Reach 3								
A	950	75	450	5.9	548.4	548.4	549.4	1.0
B	3,230	50	379	6.9	558.7	558.7	559.5	0.8
C	5,510	70	474	5.5	563.9	563.9	564.7	0.8
D	7,720	120	790	3.3	567.8	567.8	568.5	0.7
E	9,830	130	667	3.9	570.1	570.1	570.7	0.6
F	11,140	130	526	5.0	572.8	572.8	573.3	0.5
G	12,380	130	507	4.1	574.8	574.8	575.4	0.6
H	14,020	240	863	2.4	578.7	578.7	579.4	0.7
I	17,030	220	874	2.4	583.1	583.1	583.4	0.3
J	19,760	140	716	2.9	589.6	589.6	589.9	0.3
K	22,620	65	287	7.3	601.6	601.6	602.2	0.6
L	25,530	30	179	11.7	632.8	632.8	633.1	0.3
M	27,740	18	148	14.2	665.0	665.0	665.0	0.0
N	28,355	150	1,014	2.1	670.4	670.4	671.3	0.9
O	28,695	90	444	4.7	670.6	670.6	671.5	0.9
P	29,595	130	491	4.3	676.1	676.1	676.1	0.0
Q	30,975	50	156	8.4	683.7	683.7	683.7	0.0
R	33,395	110	425	3.1	699.8	699.8	699.8	0.0
S	35,110	265	1,942	0.7	710.9	710.9	710.9	0.0
T	36,250	60	198	6.6	711.4	711.4	711.8	0.4
U	38,340	21	107	12.3	725.2	725.2	725.7	0.5
V	41,020	65	251	5.2	743.8	743.8	744.4	0.6
W	42,500	50	358	3.7	754.0	754.0	754.9	0.9

[1]Feet above Limit of Detailed Study (Limit of Detailed Study is approximately 6,720 feet downstream of Reagen Road)

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)

FLOODWAY DATA

WEBATUCK CREEK REACH 3

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Wells Brook								
A	725[1]	115	270	4.1	373.4	373.4	374.3	0.9
B	1,980[1]	28	168	6.6	379.4	379.4	379.6	0.2
C	4,280[1]	69	270	4.1	390.5	390.5	390.6	0.1
Whaley Lake Stream								
A	920[2]	35	169	11.7	352.6	352.6	352.8	0.2
B	1,685[2]	41	266	7.5	356.3	356.3	357.2	0.9
C	3,730[2]	100	282	7.1	375.4	375.4	375.4	0.0
D	5,160[2]	80	426	4.7	381.2	381.2	381.6	0.4
E	9,000[2]	80	363	5.5	404.8	404.8	405.8	1.0
F	12,480[2]	58	212	9.4	433.2	433.2	433.2	0.0
G	14,700[2]	50	209	9.5	448.1	448.1	448.4	0.3
H	17,120[2]	50	193	8.5	491.5	491.5	492.0	0.5
I	18,990[2]	31	176	7.2	517.1	517.1	518.0	0.9
J	22,500[2]	115	174	7.2	600.6	600.6	600.6	0.0
K	24,820[2]	75	186	6.8	676.7	676.7	676.7	0.0
L	27,620[2]	140	704	1.8	691.4	691.4	691.4	0.0
M	29,530[2]	70	420	3.0	692.4	692.4	693.2	0.8
N	31,220[2]	24	141	9.0	696.0	696.0	696.6	0.6

[1]Feet above confluence with Tenmile River
[2]Feet above confluence with Fishkill Creek

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

DUTCHESS COUNTY, NY (ALL JURISDICTIONS)

FLOODWAY DATA

WELLS BROOK-WHALEY LAKE STREAM

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Whortlekill Creek Reach 1								
A	1,070[1]	86	440	3.3	232.6	231.6[3]	232.5	0.9
B	2,480[1]	270	2,120	0.7	238.1	238.1	238.1	0.0
C	4,790[1]	108	685	2.1	241.3	241.3	241.4	0.1
D	5,760[1]	126	414	3.5	242.4	242.4	243.0	0.6
E	8,060[1]	139	1,367	1.1	253.7	253.7	253.7	0.0
F	9,870[1]	144	1,273	1.1	253.8	253.8	253.8	0.0
G	12,580[1]	132	613	2.4	254.1	254.1	254.4	0.3
H	14,270[1]	183	955	1.5	259.3	259.3	259.4	0.1
I	15,570[1]	55	181	8.0	264.8	264.8	265.2	0.4
J	17,390[1]	89	333	3.7	279.5	279.5	279.6	0.1
K	19,280[1]	108	511	2.4	285.7	285.7	286.6	0.9
L	21,180[1]	103	574	2.1	291.3	291.3	292.2	0.9
M	24,320[1]	76	200	6.2	298.1	298.1	298.7	0.6
N	26,820[1]	58	203	6.1	312.7	312.7	313.5	0.8
O	28,260[1]	83	250	4.9	323.6	323.6	324.0	0.4
Whortlekill Creek Reach 2								
A	0[2]	30	141	3.3	334.9	334.9	335.9	1.0
B	500[2]	31	72	4.2	338.6	338.6	338.9	0.3
C	1,000[2]	40	86	3.6	344.2	344.2	344.9	0.7
D	1,500[2]	31	77	4.0	350.1	350.1	350.4	0.3
E	2,050[2]	20	38	8.0	359.5	359.5	359.5	0.0
F	2,600[2]	20	38	8.0	368.1	368.1	368.2	0.1
G	3,000[2]	20	38	8.0	377.6	377.6	377.6	0.0
H	3,850[2]	46	93	3.3	395.3	395.3	396.3	1.0
I	4,290[2]	17	37	8.4	409.9	409.9	410.0	0.1

[1]Feet above confluence with Fishkill Creek
[2]Feet above limit of detailed study (limit of detailed study is approximately 328 feet downstream of Arthursburg Road)
[3]Elevatiuon computed without consideration of backwater effects from Fishkill Creek

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

DUTCHESS COUNTY, NY (ALL JURISDICTIONS)

FLOODWAY DATA

WHORTLEKILL CREEK REACH 1 - WHORTLEKILL CREEK REACH 2

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Willow Brook								
A	500	39	149	3.3	545.6	545.6	546.5	0.9
B	1,500	22	87	5.7	552.1	552.1	552.9	0.8
C	2,470	19	76	6.5	560.9	560.9	561.7	0.8
D	3,480	50	168	2.4	572.8	572.8	573.4	0.6
E	3,937	120	251	1.6	579.1	579.1	579.8	0.7
F	4,800	52	112	3.4	586.4	586.4	587.4	1.0
G	5,750	43	96	4.0	599.6	599.6	600.5	0.9
H	6,360	114	873	0.4	610.9	610.9	611.8	0.9
I	6,730	20	73	5.2	612.8	612.8	612.8	0.0
J	7,077	110	151	2.2	618.3	618.3	619.2	0.9
K	7,390	31	55	6.2	622.4	622.4	622.5	0.1
L	7,990	39	71	4.8	632.0	632.0	632.5	0.5
M	8,740	11	43	6.0	645.1	645.1	646.0	0.9
N	9,590	19	51	5.1	660.7	660.7	661.5	0.8
O	9,820	12	38	6.8	668.9	668.9	669.5	0.6
P	10,185	150	993	0.3	681.6	681.6	681.7	0.1
Q	10,540	23	39	6.7	684.2	684.2	684.2	0.0
R	10,890	33	177	1.1	689.0	689.0	689.8	0.8

[1]Feet above confluence with Sprout Creek #2

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

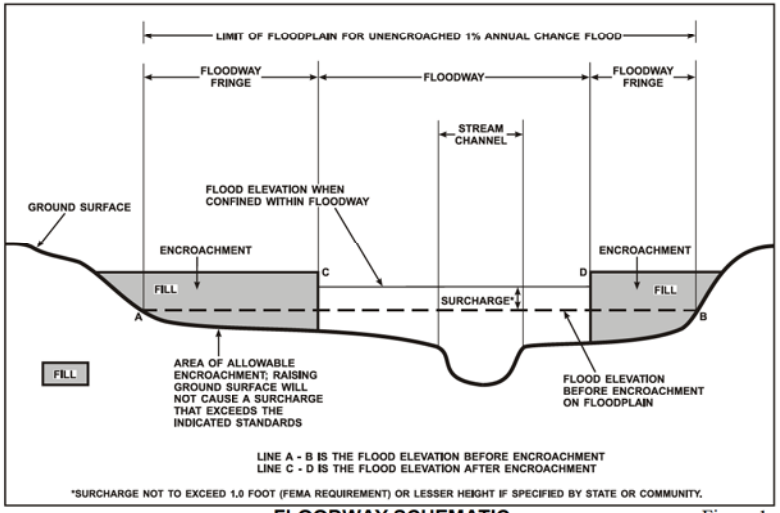
DUTCHESS COUNTY, NY (ALL JURISDICTIONS)

FLOODWAY DATA

WILLOW BROOK

Near the mouths of streams studied in detail, floodway computations are made without regard to flood elevations on the receiving water body. Therefore, "Without Floodway" elevations presented in Table 10 for certain downstream cross sections of Branch 1 Great Spring Creek, Branch 1 Sprout Creek # 1, Branch 1 Wappinger Creek Reach 1, Branch 2 Wappinger Creek Reach 1, Branch 6 Wappinger Creek Reach 1, Branch 7 Wappinger Creek Reach 1, Branch 9 Wappinger Creek Reach 1, Branch 10 Wappinger Creek Reach 1, Casper Kill Creek, Clove Creek, East Branch Wappinger Creek Reach 1, Fishkill Creek, Great Spring Creek, Sprout Creek # 1, Sylvan Lake Outlet, Tributary 1 to Fishkill Creek, Wappinger Creek Reach 1, Wells Brook, and Whortle Kill Reach 1 are lower than the regulatory flood elevations in that area, which must take into account the 1-percent annual chance flooding due to backwater from other sources.

The area between the floodway and 1-percent annual chance floodplain boundaries is termed the floodway fringe. The floodway fringe encompasses the portion of the floodplain that could be completely obstructed without increasing the water-surface elevation of the 1-percent annual chance flood by more than 1.0 foot at any point. Typical relationships between the floodway and the floodway fringe and their significance to floodplain development are shown in Figure 1.



FLOODWAY SCHEMATIC Figure 1

5.0 INSURANCE APPLICATIONS

For flood insurance rating purposes, flood insurance zone designations are assigned to a community based on the results of the engineering analyses. The zones are as follows:

Zone A

Zone A is the flood insurance rate zone that corresponds to the 1-percent annual chance floodplains that are determined in the FIS by approximate methods. Because detailed hydraulic analyses are not performed for such areas, no base flood elevations or depths are shown within this zone.

Zone AE

Zone AE is the flood insurance rate zone that corresponds to the 1-percent annual chance floodplains that are determined in the FIS by detailed methods. In most instances, whole-foot base flood elevations derived from the detailed hydraulic analyses are shown at selected intervals within this zone.

Zone AH

Zone AH is the flood insurance rate zone that corresponds to the areas of 1-percent annual chance shallow flooding (usually areas of ponding) where average depths are between 1 and 3 feet. Whole-foot base flood elevations derived from the detailed hydraulic analyses are shown at selected intervals within this zone.

Zone AO

Zone AO is the flood insurance rate zone that corresponds to the areas of 1-percent annual chance shallow flooding (usually sheet flow on sloping terrain) where average depths are between 1 and 3 feet. Average whole-foot depths derived from the detailed hydraulic analyses are shown within this zone.

Zone AR

Area of special flood hazard formerly protected from the 1-percent annual chance flood event by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1-percent annual chance or greater flood event.

Zone A99

Zone A99 is the flood insurance rate zone that corresponds to areas of the 1-percent annual chance floodplain that will be protected by a Federal flood protection system where construction has reached specified statutory milestones. No base flood elevations or depths are shown within this zone.

Zone V

Zone V is the flood insurance rate zone that corresponds to the 1-percent annual chance coastal floodplains that have additional hazards associated with storm waves. Because approximate hydraulic analyses are performed for such areas, no base flood elevations are shown within this zone.

Zone VE

Zone VE is the flood insurance rate zone that corresponds to the 1-percent annual chance coastal floodplains that have additional hazards associated with storm waves. Whole-foot base flood elevations derived from the detailed hydraulic analyses are shown at selected intervals within this zone.

Zone X

Zone X is the flood insurance rate zone that corresponds to areas outside the 0.2-percent annual chance floodplain, areas within the 0.2-percent annual chance floodplain, and to areas of 1-percent annual chance flooding where average depths are less than 1 foot, areas of 1-percent annual chance flooding where the contributing drainage area is less than 1 square mile, and areas protected from the 1-percent annual chance flood by levees. No base flood elevations or depths are shown within this zone.

Zone D

Zone D is the flood insurance rate zone that corresponds to unstudied areas where flood hazards are undetermined, but possible.

6.0 FLOOD INSURANCE RATE MAP

The FIRM is designed for flood insurance and floodplain management applications.

For flood insurance applications, the map designates flood insurance rate zones as described in Section 5.0 and, in the 1-percent annual chance floodplains that were studied by detailed methods, shows selected whole-foot base flood elevations or average depths. Insurance agents use the zones and base flood elevations in conjunction with information on structures and their contents to assign premium rates for flood insurance policies.

For floodplain management applications, the map shows by tints, screens, and symbols, the 1- and 0.2-percent annual chance floodplains. Floodways and the locations of selected cross sections used in the hydraulic analyses and floodway computations are shown where applicable.

The current FIRM presents flooding information for the entire geographic area of Dutchess County. Previously, separate Flood Hazard Boundary Maps and/or FIRMs were prepared for each incorporated community with identified flood hazard areas within the county. Historical map dates relating to the pre-countywide FIRMs for each community are presented in Table 11, "Community Map History."

COMMUNITY NAME	INITIAL IDENTIFICATION	FLOOD HAZARD BOUNDARY MAP REVISIONS DATE	FIRM EFFECTIVE DATE	FIRM REVISIONS DATE
Amenia, Town of	October 18, 1974	May 21, 1976 January 21, 1977	September 24, 1984	November 15, 1989
Beacon, City of	July 26, 1974	January 30, 1976	March 1, 1984	
Beekman, Town of	October 18, 1974	August 13, 1976 April 15, 1977	September 5, 1984	
Clinton, Town of	December 20, 1974	August 20, 1976 July 1, 1977	July 5, 1984	
Dover, Town of	December 6, 1974	None	August 15, 1984	July 4, 1988
East Fishkill, Town of	November 1, 1974	July 9, 1976	June 15, 1984	
Fishkill, Town of	December 20, 1974	None	June 1, 1984	
Fishkill, Village of	June 21, 1974	June 18, 1976	March 15, 1984	
Hyde Park, Town of	December 20, 1974	October 22, 1976	June 15, 1984	
Lagrange, Town of	November 1, 1974	April 16, 1976	September 28, 1979	November 5, 1986 September 8, 1999
Milan, Town of	October 18, 1974	May 28, 1976	August 10, 1979	
Millbrook, Village of	May 31, 1974	April 30, 1976	February 27, 1984	

TABLE 11

FEDERAL EMERGENCY MANAGEMENT AGENCY

DUTCHESS COUNTY, NY (ALL JURISDICTIONS)

COMMUNITY MAP HISTORY

COMMUNITY NAME	INITIAL IDENTIFICATION	FLOOD HAZARD BOUNDARY MAP REVISIONS DATE	FIRM EFFECTIVE DATE	FIRM REVISIONS DATE
Millerton, Village of	June 21, 1974	June 25, 1976	January 3, 1985	
Northeast, Town of	October 18, 1974	January 9, 1976	September 5, 1984	
Pawling, Town of	October 25, 1974	August 6, 1976	January 3, 1985	
Pawling, Village of	February 7, 1975	None	August 1, 1984	
Pine Plains, Town of	December 20, 1974	December 19, 1975	October 5, 1984	
Pleasant Valley, Town of	July 26, 1974	November 21, 1975	January 16, 1980	
Poughkeepsie, City of	June 28, 1974	July 9, 1976	January 5, 1984	
Poughkeepsie, Town of	November 29, 1974	None	November 15, 1978	August 2, 1990 September 8, 1999
Red Hook, Town of	October 18, 1974	August 6, 1976	October 16, 1984	
Rhinebeck, Town of	October 18, 1974	February 13, 1976	September 5, 1984	
Rhinebeck, Village of	January 5, 1984	None	February 1, 1985	
Stanford, Town of	October 18, 1974	July 9, 1976	January 21, 1983	December 17, 1991
Tivoli, Village of	December 20, 1974	None	August 1, 1984	

TABLE 11

FEDERAL EMERGENCY MANAGEMENT AGENCY

DUTCHESS COUNTY, NY (ALL JURISDICTIONS)

COMMUNITY MAP HISTORY

COMMUNITY NAME	INITIAL IDENTIFICATION	FLOOD HAZARD BOUNDARY MAP REVISIONS DATE	FIRM EFFECTIVE DATE	FIRM REVISIONS DATE
Union Vale, Town of	November 15, 1974	None	September 2, 1988	
Wappinger, Town of	November 29, 1974	None	June 15, 1979	September 22, 1999
Wappinger Falls, Village of	November 21, 1975	None	September 1, 1978	September 22, 1999
Washington, Town of	November 1, 1974	July 9, 1976 April 22, 1977	August 17, 1979	

TABLE 11

FEDERAL EMERGENCY MANAGEMENT AGENCY

DUTCHESS COUNTY, NY (ALL JURISDICTIONS)

COMMUNITY MAP HISTORY

7.0 OTHER STUDIES

Information pertaining to revised and unrevised flood hazards for each jurisdiction within Dutchess County has been compiled into this FIS. Therefore, this FIS supersedes all previously printed FIS Reports, FHBMs, FBFMs, and FIRMs for all of the incorporated areas within Dutchess County.

This is a multi-volume FIS. Each volume may be revised separately, in which case it supersedes the previously printed volume. Users should refer to the Table of Contents in Volume 1 for the current effective date of each volume; volumes bearing these dates contain the most up-to-date flood hazard data.

8.0 LOCATION OF DATA

Information concerning the pertinent data used in preparation of this FIS can be obtained by contacting FEMA, Federal Insurance and Mitigation Division, 26 Federal Plaza, Room 1337, New York, New York 10278.

9.0 BIBLIOGRAPHY AND REFERENCES

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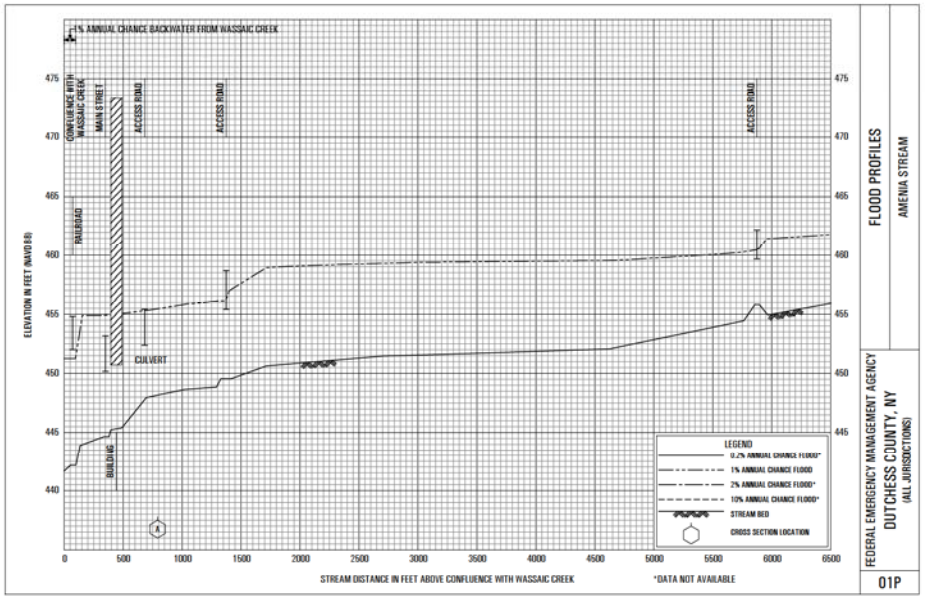
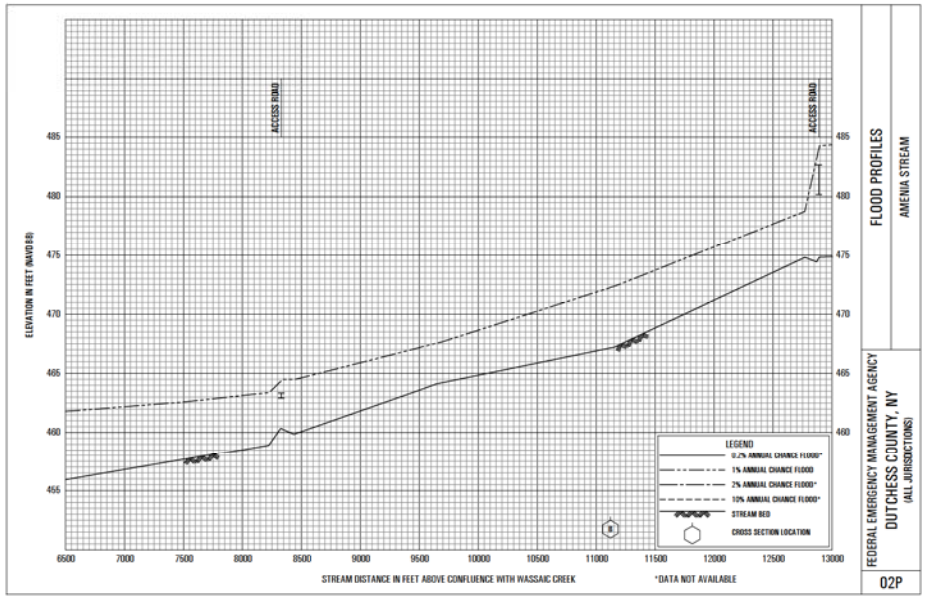
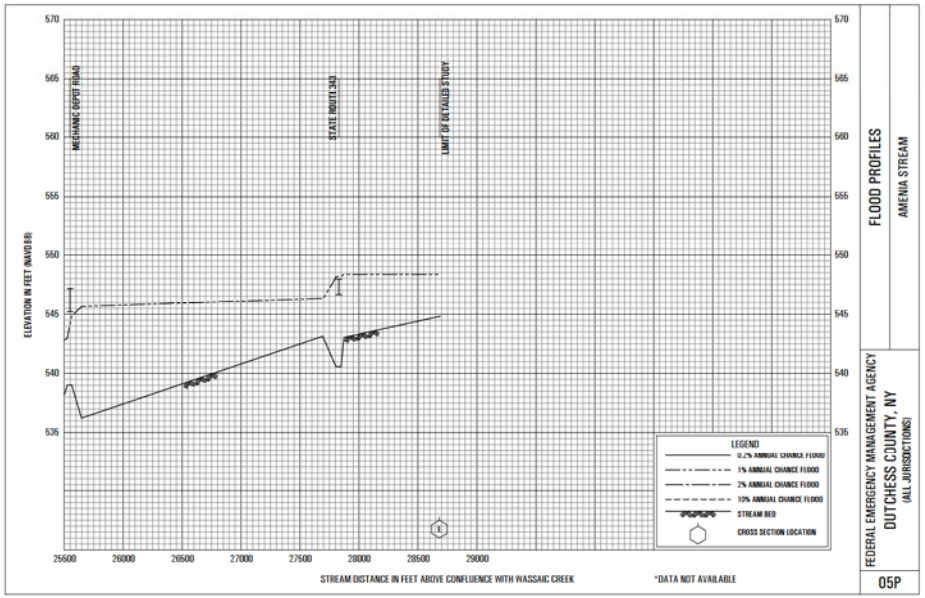
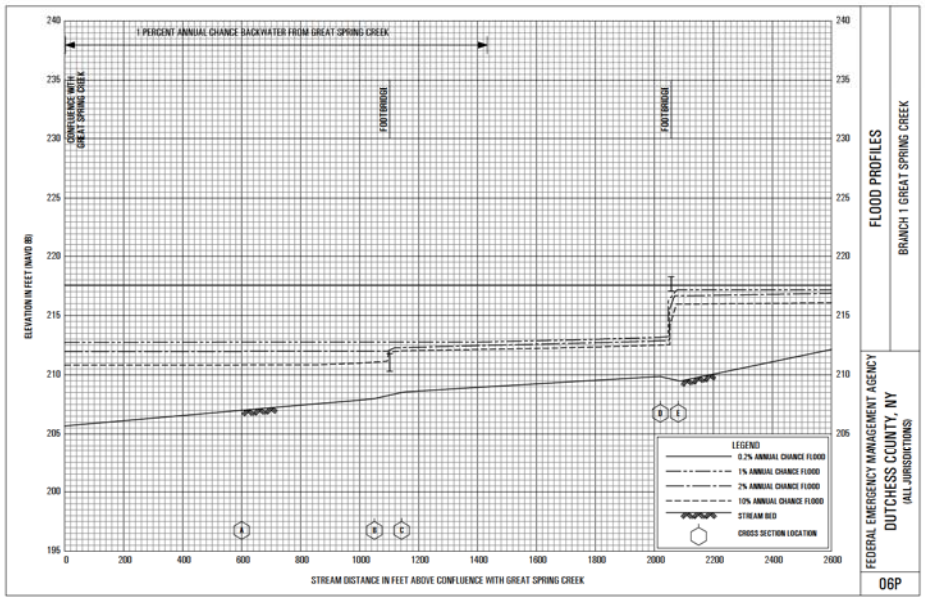

1% ANNUAL CHANCE BACKWATER FROM WASSAIC CREEK
CONFLUENCE WITH WASSAIC CREEK
MAIN STREET
ACCESS ROAD
ACCESS ROAD
ACCESS ROAD
RAILROAD
CULVERT
BUILDING
ELEVATION IN FEET (NAVD88)
STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH WASSAIC CREEK
*DATA NOT AVAILABLE
LEGEND
0.2% ANNUAL CHANCE FLOOD*
1% ANNUAL CHANCE FLOOD
2% ANNUAL CHANCE FLOOD*
10% ANNUAL CHANCE FLOOD*
STREAM BED
CROSS SECTION LOCATION
FLOOD PROFILES
AMENIA STREAM
FEDERAL EMERGENCY MANAGEMENT AGENCY
DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)
01P


ACCESS ROAD
ACCESS ROAD
ELEVATION IN FEET (NAVD88)
STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH WASSAIC CREEK
*DATA NOT AVAILABLE
LEGEND
0.2% ANNUAL CHANCE FLOOD*
1% ANNUAL CHANCE FLOOD
2% ANNUAL CHANCE FLOOD*
10% ANNUAL CHANCE FLOOD*
STREAM BED
CROSS SECTION LOCATION
FLOOD PROFILES
AMENIA STREAM
FEDERAL EMERGENCY MANAGEMENT AGENCY
DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)
02P

04P
FEDERAL EMERGENCY MANAGEMENT AGENCY
DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)
FLOOD PROFILES
AMENIA STREAM
ELEVATION IN FEET (NAVD 88)
STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH WASSAIC CREEK
*DATA NOT AVAILABLE
LEGEND
0.2% ANNUAL CHANCE (500YR)
1% ANNUAL CHANCE (100YR)
2% ANNUAL CHANCE (50YR)
10% ANNUAL CHANCE (10YR)
STREAM BED
CROSS SECTION LOCATION
CONFLUENCE OF TRIBUTARY TO AMENIA STREAM
CHURCH STREET
EAST BROADWAY STREET
STATE ROUTES 22 AND 343
LAKE AMENIA ROAD

03P
FEDERAL EMERGENCY MANAGEMENT AGENCY
DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)
FLOOD PROFILES
AMENIA STREAM
ELEVATION IN FEET (NAVD 88)
STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH WASSAIC CREEK
*DATA NOT AVAILABLE
LEGEND
0.2% ANNUAL CHANCE (500YR)
1% ANNUAL CHANCE (100YR)
2% ANNUAL CHANCE (50YR)
10% ANNUAL CHANCE (10YR)
STREAM BED
CROSS SECTION LOCATION
RAILROAD
STATE ROUTES 22 AND 343


MECHANIC DEPOT ROAD
STATE ROUTE 343
LIMIT OF DETAILED STUDY
ELEVATION IN FEET (NAVD88)
570
565
560
555
550
545
540
535
25500
26000
26500
27000
27500
28000
28500
29000
LEGEND
0.2% ANNUAL CHANCE FLOOD
1% ANNUAL CHANCE FLOOD
2% ANNUAL CHANCE FLOOD
10% ANNUAL CHANCE FLOOD
STREAM BED
CROSS SECTION LOCATION
STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH WASSAIC CREEK
*DATA NOT AVAILABLE
FLOOD PROFILES
AMENIA STREAM
FEDERAL EMERGENCY MANAGEMENT AGENCY
DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)
05P


1 PERCENT ANNUAL CHANCE BACKWATER FROM GREAT SPRING CREEK
CONFLUENCE WITH GREAT SPRING CREEK
FOOTBRIDGE
FOOTBRIDGE
ELEVATION IN FEET (NAVD 88)
240
235
230
225
220
215
210
205
200
195
0
200
400
600
800
1000
1200
1400
1600
1800
2000
2200
2400
2600
LEGEND
0.2% ANNUAL CHANCE FLOOD
1% ANNUAL CHANCE FLOOD
2% ANNUAL CHANCE FLOOD
10% ANNUAL CHANCE FLOOD
STREAM BED
CROSS SECTION LOCATION
STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH GREAT SPRING CREEK
FLOOD PROFILES
BRANCH 1 GREAT SPRING CREEK
FEDERAL EMERGENCY MANAGEMENT AGENCY
DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)
06P

FEDERAL EMERGENCY MANAGEMENT AGENCY
DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)
08P
FLOOD PROFILES
BRANCH 1 GREAT SPRING CREEK
LEGEND
0.2% ANNUAL CHANCE FLOOD
1% ANNUAL CHANCE FLOOD
2% ANNUAL CHANCE FLOOD
10% ANNUAL CHANCE FLOOD
STREAM BED
CROSS SECTION LOCATION
LIMIT OF DETAILED STUDY
STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH GREAT SPRING CREEK
ELEVATION IN FEET (NAVD 88)

FEDERAL EMERGENCY MANAGEMENT AGENCY
DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)
07P
FLOOD PROFILES
BRANCH 1 GREAT SPRING CREEK
LEGEND
0.2% ANNUAL CHANCE FLOOD
1% ANNUAL CHANCE FLOOD
2% ANNUAL CHANCE FLOOD
10% ANNUAL CHANCE FLOOD
STREAM BED
CROSS SECTION LOCATION
WISTERN ROAD
STATE HIGHWAY 115
SALT POINT TURNPIKE
STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH GREAT SPRING CREEK
ELEVATION IN FEET (NAVD 88)

10P
FEDERAL EMERGENCY MANAGEMENT AGENCY
DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)
FLOOD PROFILES
BRANCH 1 SPROUT CREEK # 1
LEGEND
0.2% ANNUAL CHANCE (500)
1% ANNUAL CHANCE (100)
2% ANNUAL CHANCE (50)
10% ANNUAL CHANCE (10)
STREAM BED
CROSS SECTION LOCATION
CULVERT
STATE ROUTE 55
FREEDOM PLAINS ROAD
OR. FINK ROAD
LIMIT OF DETAILED STUDY
STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH SPROUT CREEK #1
ELEVATION IN FEET (NAVD 88)

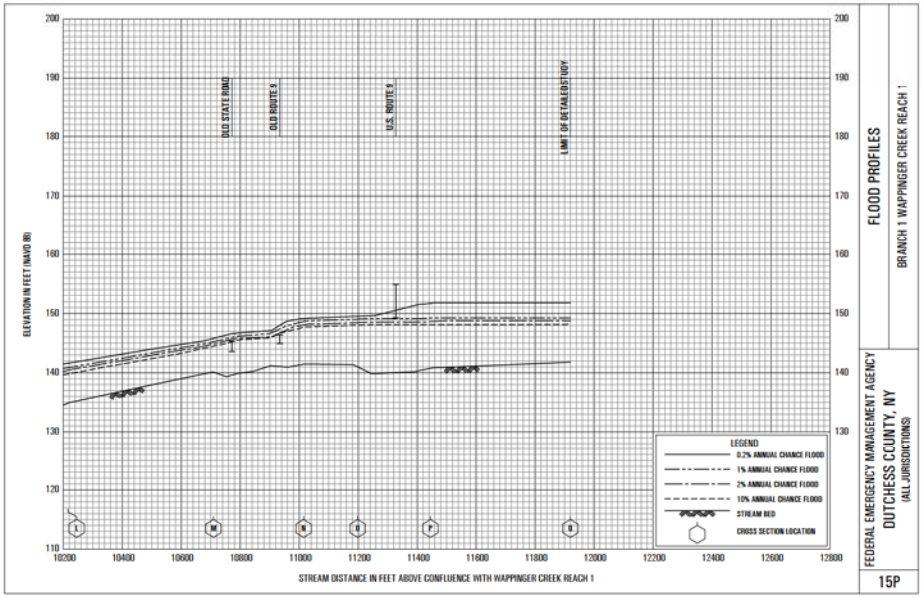
09P
FEDERAL EMERGENCY MANAGEMENT AGENCY
DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)
FLOOD PROFILES
BRANCH 1 SPROUT CREEK # 1
LEGEND
0.2% ANNUAL CHANCE (500)
1% ANNUAL CHANCE (100)
2% ANNUAL CHANCE (50)
10% ANNUAL CHANCE (10)
STREAM BED
CROSS SECTION LOCATION
TODD HILL ROAD
CONFLUENCE WITH SPROUT CREEK #1
STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH SPROUT CREEK #1
ELEVATION IN FEET (NAVD 88)

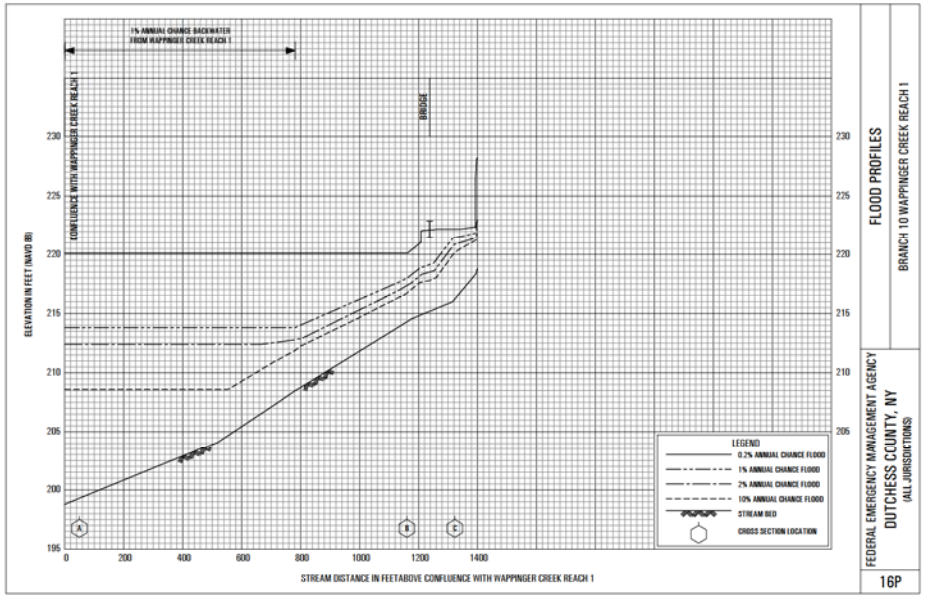
12P
FEDERAL EMERGENCY MANAGEMENT AGENCY
DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)
FLOOD PROFILES
BRANCH 1 WAPPINGER CREEK REACH 1
LEGEND
0.2% ANNUAL CHANCE FLOOD
1% ANNUAL CHANCE FLOOD
2% ANNUAL CHANCE FLOOD
10% ANNUAL CHANCE FLOOD
STREAM BED
CROSS SECTION LOCATION
PRIVATE DRIVE
STATE ROUTE 9D
ELEVATION IN FEET (NAVD 88)
STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH WAPPINGER CREEK REACH 1

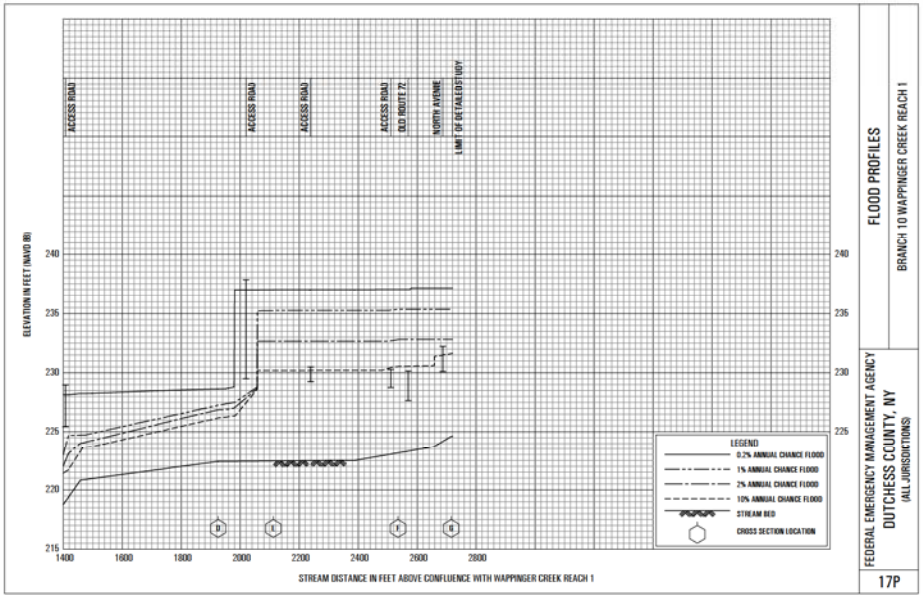
11P
FEDERAL EMERGENCY MANAGEMENT AGENCY
DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)
FLOOD PROFILES
BRANCH 1 WAPPINGER CREEK REACH 1
LEGEND
0.2% ANNUAL CHANCE FLOOD
1% ANNUAL CHANCE FLOOD
2% ANNUAL CHANCE FLOOD
10% ANNUAL CHANCE FLOOD
STREAM BED
CROSS SECTION LOCATION
FOOTBRIDGE
CONFLUENCE WITH WAPPINGER CREEK REACH 1
CREEK ROAD
ELEVATION IN FEET (NAVD 88)
STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH WAPPINGER CREEK REACH 1

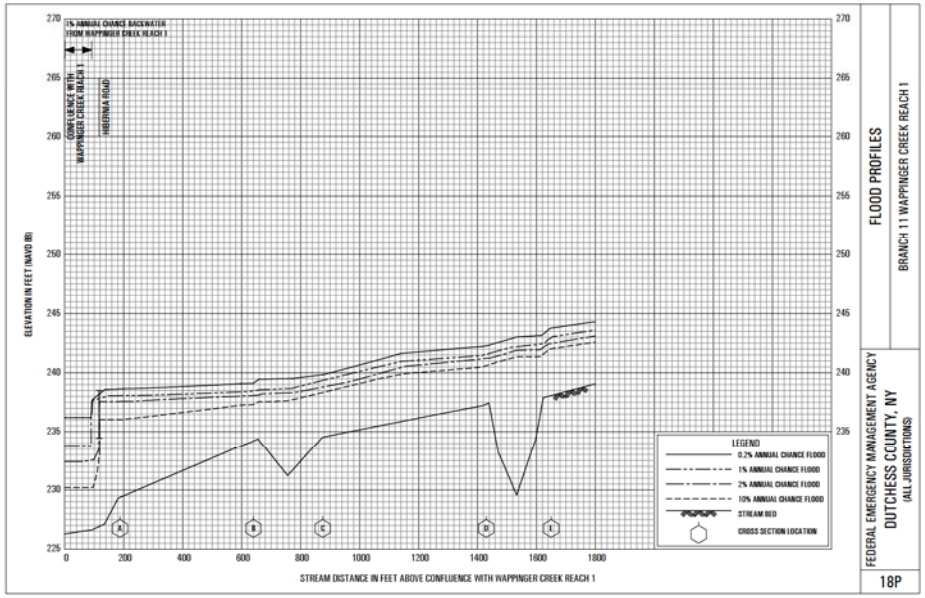
14P
FEDERAL EMERGENCY MANAGEMENT AGENCY
DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)
FLOOD PROFILES
BRANCH 1 WAPPINGER CREEK REACH 1
ELEVATION IN FEET (NAVD 88)
STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH WAPPINGER CREEK REACH 1
LEGEND
0.2% ANNUAL CHANCE FLOOD
1% ANNUAL CHANCE FLOOD
2% ANNUAL CHANCE FLOOD
10% ANNUAL CHANCE FLOOD
STREAM BED
CROSS SECTION LOCATION

13P
FEDERAL EMERGENCY MANAGEMENT AGENCY
DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)
FLOOD PROFILES
BRANCH 1 WAPPINGER CREEK REACH 1
ELEVATION IN FEET (NAVD 88)
STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH WAPPINGER CREEK REACH 1
CONFLUENCE OF TRIBUTARY 1 BRANCH 1 WAPPINGER CREEK
CONFLUENCE OF TRIBUTARY 2 BRANCH 1 WAPPINGER CREEK
LEGEND
0.2% ANNUAL CHANCE FLOOD
1% ANNUAL CHANCE FLOOD
2% ANNUAL CHANCE FLOOD
10% ANNUAL CHANCE FLOOD
STREAM BED
CROSS SECTION LOCATION


ELEVATION IN FEET (NAVD 88)
STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH WAPPINGER CREEK REACH 1
OLD STATE RDAD
OLD ROUTE 9
U.S. ROUTE 9
LIMIT OF DETAILED STUDY
LEGEND
0.2% ANNUAL CHANCE FLOOD
1% ANNUAL CHANCE FLOOD
2% ANNUAL CHANCE FLOOD
10% ANNUAL CHANCE FLOOD
STREAM BED
CROSS SECTION LOCATION
FLOOD PROFILES
BRANCH 1 WAPPINGER CREEK REACH 1
FEDERAL EMERGENCY MANAGEMENT AGENCY
DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)
15P


ELEVATION IN FEET (NAVD 88)
STREAM DISTANCE IN FEETABOVE CONFLUENCE WITH WAPPINGER CREEK REACH 1
1% ANNUAL CHANCE BACKWATER FROM WAPPINGER CREEK REACH 1
CONFLUENCE WITH WAPPINGER CREEK REACH 1
BRIDGE
LEGEND
0.2% ANNUAL CHANCE FLOOD
1% ANNUAL CHANCE FLOOD
2% ANNUAL CHANCE FLOOD
10% ANNUAL CHANCE FLOOD
STREAM BED
CROSS SECTION LOCATION
FLOOD PROFILES
BRANCH 10 WAPPINGER CREEK REACH 1
FEDERAL EMERGENCY MANAGEMENT AGENCY
DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)
16P


ACCESS ROAD
ACCESS ROAD
ACCESS ROAD
ACCESS ROAD
OLD ROUTE 7C
NORTH AVENUE
LIMIT OF DETAILED STUDY
ELEVATION IN FEET (NAVD 88)
STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH WAPPINGER CREEK REACH 1
LEGEND
0.2% ANNUAL CHANCE FLOOD
1% ANNUAL CHANCE FLOOD
2% ANNUAL CHANCE FLOOD
10% ANNUAL CHANCE FLOOD
STREAM BED
CROSS SECTION LOCATION
FLOOD PROFILES
BRANCH 10 WAPPINGER CREEK REACH 1
FEDERAL EMERGENCY MANAGEMENT AGENCY
DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)
17P


1% ANNUAL CHANCE BACKWATER FROM WAPPINGER CREEK REACH 1
CONFLUENCE WITH WAPPINGER CREEK REACH 1
VIRGINIA ROAD
ELEVATION IN FEET (NAVD 88)
STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH WAPPINGER CREEK REACH 1
LEGEND
0.2% ANNUAL CHANCE FLOOD
1% ANNUAL CHANCE FLOOD
2% ANNUAL CHANCE FLOOD
10% ANNUAL CHANCE FLOOD
STREAM BED
CROSS SECTION LOCATION
FLOOD PROFILES
BRANCH 11 WAPPINGER CREEK REACH 1
FEDERAL EMERGENCY MANAGEMENT AGENCY
DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)
18P

FEDERAL EMERGENCY MANAGEMENT AGENCY
DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)
20P
FLOOD PROFILES
BRANCH 1A HUDSON RIVER
ELEVATION IN FEET (NAVD 88)
STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH HUDSON RIVER
LEGEND
0.2% ANNUAL CHANCE FLOOD
1% ANNUAL CHANCE FLOOD
2% ANNUAL CHANCE FLOOD
10% ANNUAL CHANCE FLOOD
STREAM BED
CROSS SECTION LOCATION
CONFLUENCE WITH HUDSON RIVER
RIVER ROAD NORTH
DAM
EASTER ROAD
CHELSEA ROAD
LIMIT OF DETAILED STUDY

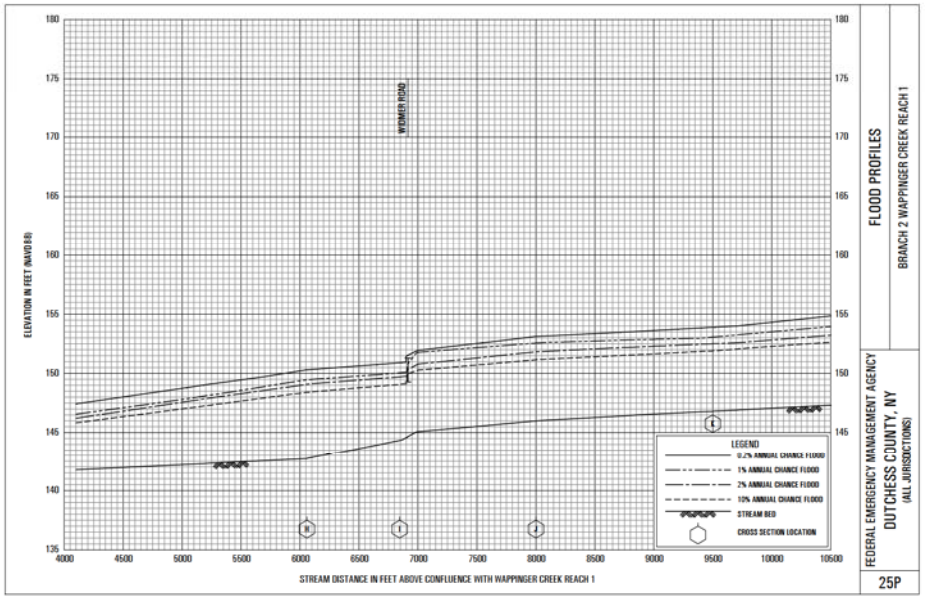
FEDERAL EMERGENCY MANAGEMENT AGENCY
DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)
19P
FLOOD PROFILES
BRANCH 11 WAPPINGER CREEK REACH 1
ELEVATION IN FEET (NAVD 88)
STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH WAPPINGER CREEK REACH 1
LEGEND
0.2% ANNUAL CHANCE FLOOD
1% ANNUAL CHANCE FLOOD
2% ANNUAL CHANCE FLOOD
10% ANNUAL CHANCE FLOOD
STREAM BED
CROSS SECTION LOCATION
LIMIT OF DETAILED STUDY

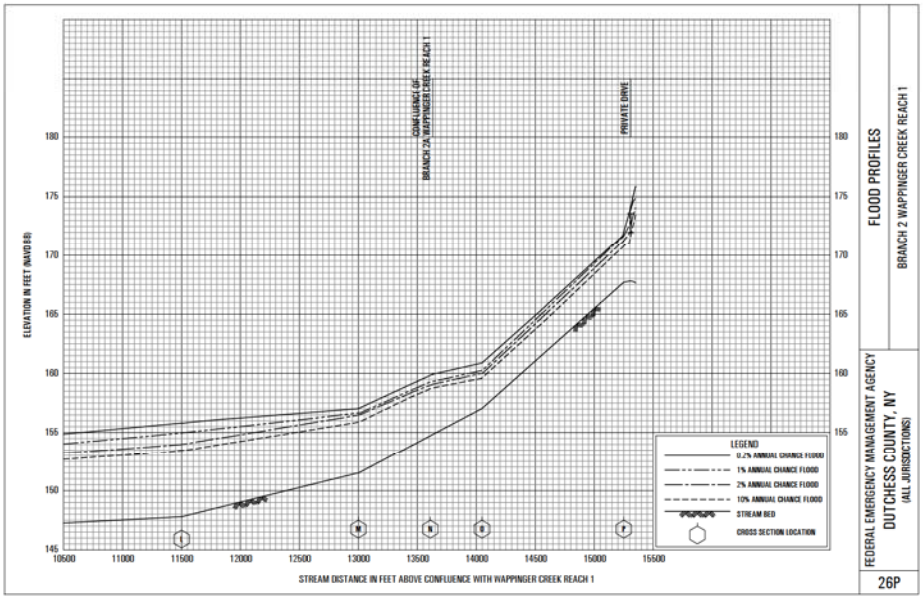
22P
FEDERAL EMERGENCY MANAGEMENT AGENCY
DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)
FLOOD PROFILES
BRANCH 2 SPROUT CREEK #1
ELEVATION IN FEET (NAVD 88)
STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH SPROUT CREEK #1
LEGEND
0.2% ANNUAL CHANCE FLOOD
1% ANNUAL CHANCE FLOOD
2% ANNUAL CHANCE FLOOD
10% ANNUAL CHANCE FLOOD
STREAM BED
CROSS SECTION LOCATION
STATE ROUTE 55

21P
FEDERAL EMERGENCY MANAGEMENT AGENCY
DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)
FLOOD PROFILES
BRANCH 2 SPROUT CREEK #1
ELEVATION IN FEET (NAVD 88)
STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH SPROUT CREEK #1
LEGEND
0.2% ANNUAL CHANCE FLOOD
1% ANNUAL CHANCE FLOOD
2% ANNUAL CHANCE FLOOD
10% ANNUAL CHANCE FLOOD
STREAM BED
CROSS SECTION LOCATION
CONFLUENCE WITH SPROUT CREEK #1
VIELE ROAD
DRIVEWAY

24P
FEDERAL EMERGENCY MANAGEMENT AGENCY
DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)
FLOOD PROFILES
BRANCH 2 WAPPINGER CREEK REACH 1
LEGEND
0.2% ANNUAL CHANCE FLOOD
1% ANNUAL CHANCE FLOOD
2% ANNUAL CHANCE FLOOD
10% ANNUAL CHANCE FLOOD
STREAM BED
CROSS SECTION LOCATION
CONFLUENCE WITH WAPPINGER CREEK REACH 1
JACKSON ROAD
DRIVEWAY
DAM
NEW MACKENSACK ROAD
FOOTBRIDGE
CONFLUENCE OF BRANCH 2B WAPPINGER CREEK REACH 1
DAM
DRIVEWAY
STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH WAPPINGER CREEK REACH 1
ELEVATION IN FEET (NAVD 88)

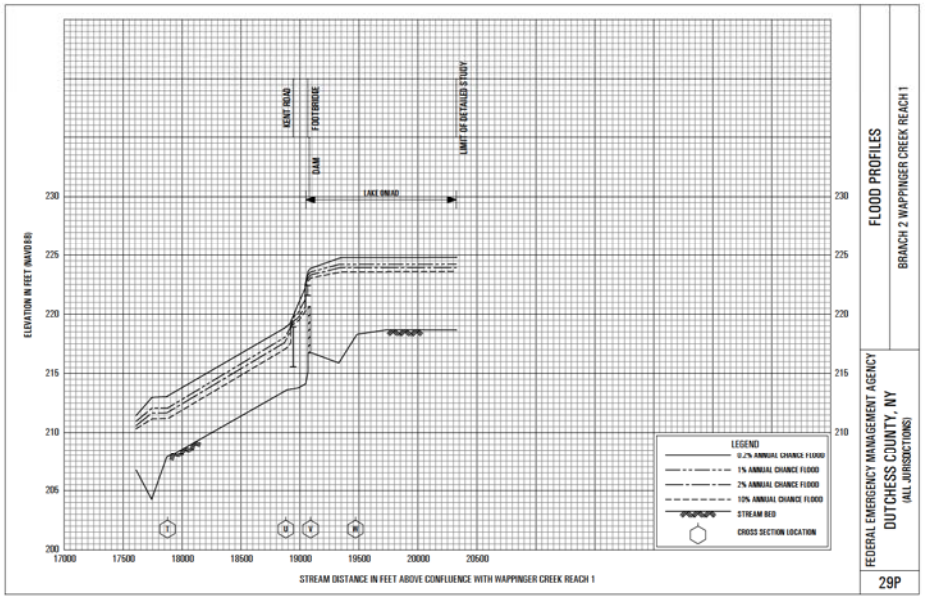
23P
FEDERAL EMERGENCY MANAGEMENT AGENCY
DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)
FLOOD PROFILES
BRANCH 2 SPROUT CREEK #1
LEGEND
0.2% ANNUAL CHANCE FLOOD
1% ANNUAL CHANCE FLOOD
2% ANNUAL CHANCE FLOOD
10% ANNUAL CHANCE FLOOD
STREAM BED
CROSS SECTION LOCATION
LIMIT OF DETAILED STUDY
STATE ROUTE 82
ABANDONED RAILROAD BRIDGE
STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH SPROUT CREEK #1
ELEVATION IN FEET (NAVD 88)


WYOMER ROAD
ELEVATION IN FEET (NAVD88)
STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH WAPPINGER CREEK REACH 1
LEGEND
0.2% ANNUAL CHANCE FLOOD
1% ANNUAL CHANCE FLOOD
2% ANNUAL CHANCE FLOOD
10% ANNUAL CHANCE FLOOD
STREAM BED
CROSS SECTION LOCATION
FLOOD PROFILES
BRANCH 2 WAPPINGER CREEK REACH 1
FEDERAL EMERGENCY MANAGEMENT AGENCY
DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)
25P


CONFLUENCE OF BRANCH 2A WAPPINGER CREEK REACH 1
PRIVATE DRIVE
ELEVATION IN FEET (NAVD88)
STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH WAPPINGER CREEK REACH 1
LEGEND
0.2% ANNUAL CHANCE FLOOD
1% ANNUAL CHANCE FLOOD
2% ANNUAL CHANCE FLOOD
10% ANNUAL CHANCE FLOOD
STREAM BED
CROSS SECTION LOCATION
FLOOD PROFILES
BRANCH 2 WAPPINGER CREEK REACH 1
FEDERAL EMERGENCY MANAGEMENT AGENCY
DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)
26P

28P
FEDERAL EMERGENCY MANAGEMENT AGENCY
DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)
FLOOD PROFILES
BRANCH 2 WAPPINGER CREEK REACH 1
LEGEND
0.2% ANNUAL CHANCE FLOOD
1% ANNUAL CHANCE FLOOD
2% ANNUAL CHANCE FLOOD
10% ANNUAL CHANCE FLOOD
STREAM BED
CROSS SECTION LOCATION
ELEVATION IN FEET (NAVD 88)
STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH WAPPINGER CREEK REACH 1

27P
FEDERAL EMERGENCY MANAGEMENT AGENCY
DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)
FLOOD PROFILES
BRANCH 2 WAPPINGER CREEK REACH 1
MYERS CORNERS ROAD
DAM
DAM
LEGEND
0.2% ANNUAL CHANCE FLOOD
1% ANNUAL CHANCE FLOOD
2% ANNUAL CHANCE FLOOD
10% ANNUAL CHANCE FLOOD
STREAM BED
CROSS SECTION LOCATION
ELEVATION IN FEET (NAVD 88)
STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH WAPPINGER CREEK REACH 1



FLOOD PROFILES

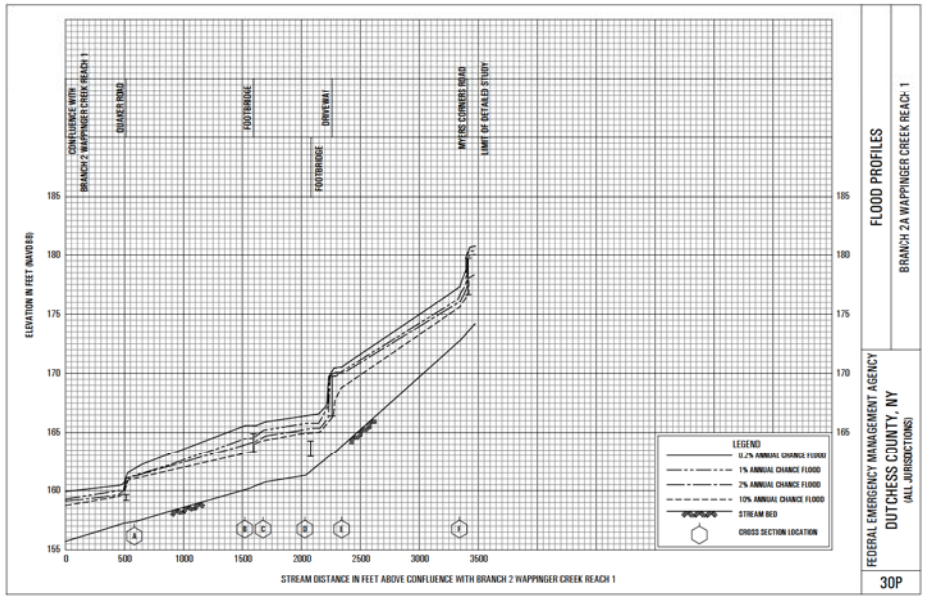
BRANCH 2 WAPPINGER CREEK REACH 1

FEDERAL EMERGENCY MANAGEMENT AGENCY

DUTCHESS COUNTY, NY

(ALL JURISDICTIONS)

29P



FLOOD PROFILES

BRANCH 2A WAPPINGER CREEK REACH- 1

FEDERAL EMERGENCY MANAGEMENT AGENCY

DUTCHESS COUNTY, NY

(ALL JURISDICTIONS)

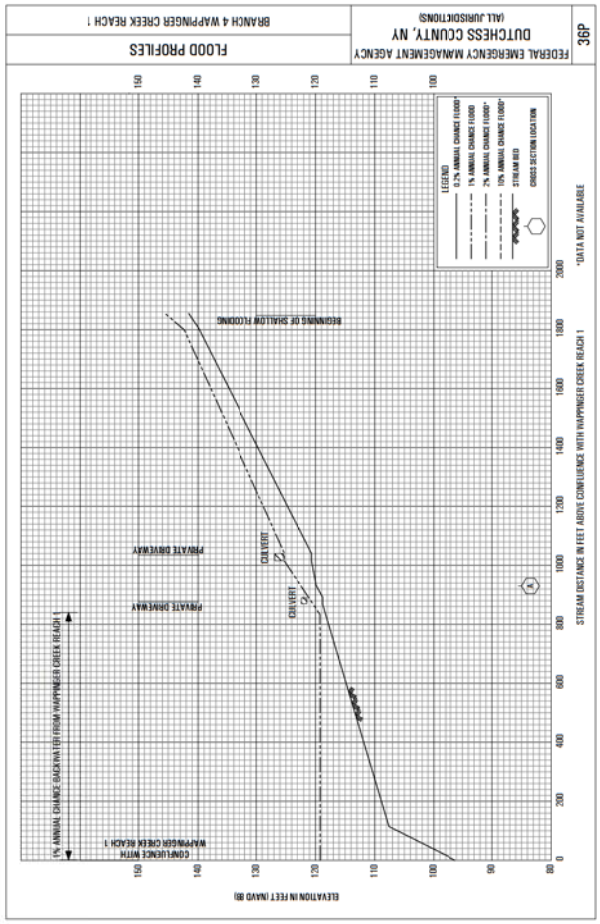
30P

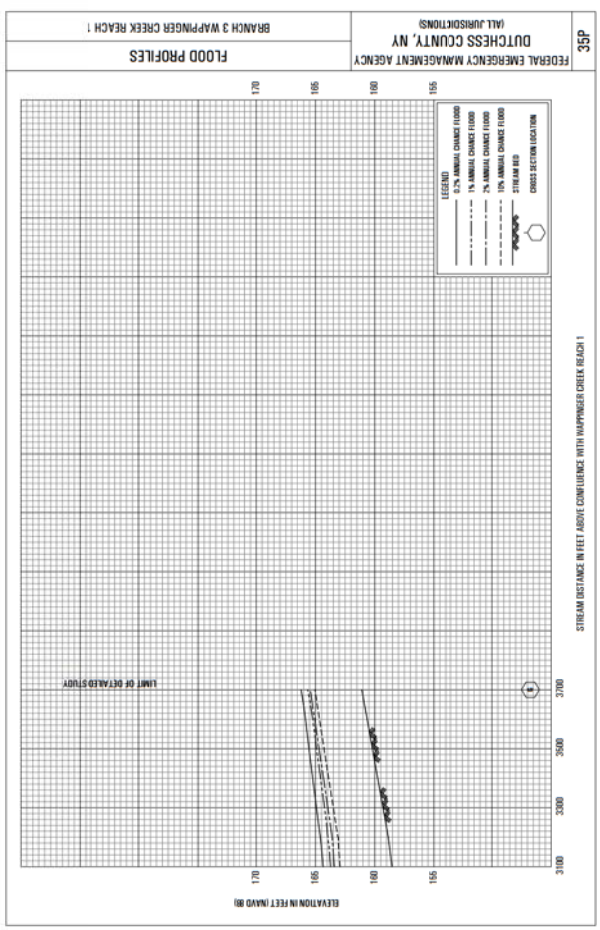
FEDERAL EMERGENCY MANAGEMENT AGENCY
DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)
32P
FLOOD PROFILES
BRANCH 2B WAPPINGER CREEK REACH 1
ELEVATION IN FEET (NAVD 88)
STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH BRANCH 2 WAPPINGER CREEK REACH 1
LEGEND
0.2% ANNUAL CHANCE (1000)
1% ANNUAL CHANCE (100)
2% ANNUAL CHANCE (50)
10% ANNUAL CHANCE (10)
STREAM BED
CROSS SECTION LOCATION
STATE ROUTE 4 7B
LIMIT OF DETAILED STUDY
FOOTBRIDGE
DRIVEWAY BRIDGE
DAM

FEDERAL EMERGENCY MANAGEMENT AGENCY
DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)
31P
FLOOD PROFILES
BRANCH 2B WAPPINGER CREEK REACH 1
ELEVATION IN FEET (NAVD 88)
STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH BRANCH 2 WAPPINGER CREEK REACH 1
LEGEND
0.2% ANNUAL CHANCE (1000)
1% ANNUAL CHANCE (100)
2% ANNUAL CHANCE (50)
10% ANNUAL CHANCE (10)
STREAM BED
CROSS SECTION LOCATION
STATE ROUTE 376
FOOTBRIDGE
DAM
CONFLUENCE WITH BRANCH 2 WAPPINGER CREEK REACH 1

34P
FEDERAL EMERGENCY MANAGEMENT AGENCY
DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)
FLOOD PROFILES
BRANCH 3 WAPPINGER CREEK REACH 1
LEGEND
0.2% ANNUAL CHANCE FLOOD
1% ANNUAL CHANCE FLOOD
2% ANNUAL CHANCE FLOOD
10% ANNUAL CHANCE FLOOD
STREAM BED
CROSS SECTION LOCATION
YASSAR ROAD
HILLS TERRACE
DAM
FOOT BRIDGE
CULVERT
STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH WAPPINGER CREEK REACH 1
ELEVATION IN FEET (NAVD 88)

33P
FEDERAL EMERGENCY MANAGEMENT AGENCY
DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)
FLOOD PROFILES
BRANCH 3 WAPPINGER CREEK REACH 1
LEGEND
0.2% ANNUAL CHANCE FLOOD
1% ANNUAL CHANCE FLOOD
2% ANNUAL CHANCE FLOOD
10% ANNUAL CHANCE FLOOD
STREAM BED
CROSS SECTION LOCATION
CONFLUENCE WITH WAPPINGER CREEK REACH 1
STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH WAPPINGER CREEK REACH 1
ELEVATION IN FEET (NAVD 88)


FLOOD PROFILES
BRANCH 4 WAPPINGER CREEK REACH 1
FEDERAL EMERGENCY MANAGEMENT AGENCY
DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)
36P
ELEVATION IN FEET (NAVD 88)
STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH WAPPINGER CREEK REACH 1
*DATA NOT AVAILABLE
LEGEND
0.2% ANNUAL CHANCE FLOOD*
1% ANNUAL CHANCE FLOOD
2% ANNUAL CHANCE FLOOD*
10% ANNUAL CHANCE FLOOD*
STREAM BED
CROSS SECTION LOCATION
BEGINNING OF SHALLOW FLOODING
PRIVATE DRIVEWAY
PRIVATE DRIVEWAY
CULVERT
CULVERT
1% ANNUAL CHANCE BACKWATER FROM WAPPINGER CREEK REACH 1
CONFLUENCE WITH WAPPINGER CREEK REACH 1


FLOOD PROFILES
BRANCH 3 WAPPINGER CREEK REACH 1
FEDERAL EMERGENCY MANAGEMENT AGENCY
DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)
35P
ELEVATION IN FEET (NAVD 88)
STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH WAPPINGER CREEK REACH 1
LEGEND
0.2% ANNUAL CHANCE FLOOD
1% ANNUAL CHANCE FLOOD
2% ANNUAL CHANCE FLOOD
10% ANNUAL CHANCE FLOOD
STREAM BED
CROSS SECTION LOCATION
LIMIT OF DETAILED STUDY

FEDERAL EMERGENCY MANAGEMENT AGENCY
DUTCHESS COUNTY, NY
(ALL JURISDICTIONS)
37P
FLOOD PROFILES
BRANCH 4 WAPPINGER CREEK REACH 1
ELEVATION IN FEET (NAVD 88)
BEGINNING OF SHALLOW FLOODING
LIMIT OF DETAILED STUDY
LEGEND
0.2% ANNUAL CHANCE FLOOD*
1% ANNUAL CHANCE FLOOD
2% ANNUAL CHANCE FLOOD*
10% ANNUAL CHANCE FLOOD*
STREAM BED
CROSS SECTION LOCATION
STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH WAPPINGER CREEK REACH 1
*DATA NOT AVAILABLE

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LANC & TULLY
Engineering and Surveying, D.P.C.

July 10, 2026

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

RE: 248 Tioronda Ave.
Tax No. 6054-45-012574
City of Beacon

Dear Mr. Gunn:

My office has received the following regarding the proposed revised concept plans for the 248 Tioronda Avenue project:

- Correspondence dated June 29, 2026, from CHAI Developers.
- Amended Site Plan Application dated June 25, 2026.
- Site plan set titled "Amended Site Plan – 248 Tioronda Ave", dated June 30th, 2026, as prepared by LaBella Associates.
- Several project renderings from different vantage points, as prepared by ab architekten.
- Architectural Floor Plans and Elevations titled "248 Tioronda Ave" for Buildings 50 and 100, dated July 8, 2020, as prepared by ab architekten.
- Site plan set titled "Amended Site Plan – 248 Tioronda Ave", dated June 30th, 2026, as prepared by LaBella Associates.

The applicant has sought and received a waiver from the Beacon City Council waving the requirement to provide for the required commercial space as previously approved. The applicant is now proposing to construct Building 50 containing 83 residential units and Building 100 containing 53 residential units and 64 in substantially the same design as Building 200 and 300 already constructed on the site.

Based upon our review of the submitted documents, we offer the following comments:

General Comments:

1. The Full Environmental Assessment Form Part 1, with the latest revision date of April 27, 2026, as last submitted to the Planning Board stated:

   "*The Applicant is now seeking approval for the requested revised concept plan to modify Building 100 as follows:*
   - *Building 100A – 71,833 SF residential building with 78 dwelling units;*
   - *Building 100B – 66,853 SF residential building with 58 dwelling units;*
   - *27 BMR units are included in the total of 136 dwelling units"*

The City Council issued a waiver waving the requirements for commercial space and allowing for 136 residential units in the current buildings proposed, with 27 of the units being BMR units. **The architectural floor plans submitted as part of this application show a total of 94 residential units in Building 50 and 61 residential units in Building 100, for a total of 155 residential units.** Since the applicant was approved by City Council for 136 units in the proposed buildings, why are 155 units provided in the buildings?

2. The submitted architectural plans submitted are dated July 8, 2020. Is this date in error? If so, the correct date shall be provided on the plans.

3. Elevations views provided in the architectural drawings shall be labeled out as to materials, colors and dimensioned.

4. The architectural floor plans for building 50 shall be revised to reflect the location of the sewage pump station located within the building. It should also reflect the location of the generator for the pump station if located within the building.

5. An updated Engineer's Report shall be provided for the sewer and water on the site. The report shall also detail the required modifications, if any, to the existing sewage pump station on the site.

6. The application was previously reviewed and approved by DCDOH for the sewer pump station that serves the site. Applicant shall seek amended approval from the DCDOH for any revisions that may be required for the previously issued approval. The Planning Board shall be provided a copy of all submissions made to the DCDOH, along with a copy of all correspondences received from the DCDOH.

Sheet C130:

1. In the area of the "Public Greenway Dog Run", it notes the fencing to be 4-foot high on the south side, and only 3-foot high along the east and north side of the park area. We would recommend that the fencing for the dog park area remain at a minimum of 4-feet to prevent dogs from jumping and escaping the fenced area since they may be loose while in the park area.

Sheet C140:

1. Plan shall reflect fall protection above the proposed retaining walls. Details of the proposed fall protection shall be provided on the plans.

2. The plan shall be revised to remove those utility runs that are being removed as delineated and called out on the Demolition Plan (Sheet C120).

Sheet C150:

1. It is recommended that a double row of silt fence be provided along the creek side of the project until the construction has been completed and all disturbed areas stabilized.

Sheet C200:

1. The applicant's engineer shall verify sizing and turning capabilities of the current and proposed fire vehicles either currently in service or ordered. Sheet shall be revised accordingly.

SWPPP Comments:

1. Pages 1 and 2 of the SWPPP report contain a message that states **"Error! Reference not found."** Applicant's engineer shall revise the report as needed for clarity.

2. Given that this revision of the SWPPP involves the addition of 2 buildings, the applicant's engineer shall revise the eNOI to indicate a new proposed end date.

3. The eNOI shall be revised to reflect the proposed green roofs for the two additional buildings to the list of proposed treatment practices.

4. Section 6.6.2 (Page 26) of the SWPPP report indicates that the 2015 NYSDEC Stormwater Design Manual requires "that hydrologic and hydraulic analysis of the Pre- and Post-development conditions be performed using NRCS TR-20 and TR-55 methodologies". Per page 3-4 of the TR-55, the minimum Tc must be 0.10 hours (6 minutes). Applicant's engineer shall revise the models to ensure that this requirement is met.

5. The individual areas noted in the table B titled, "Determine individual practice Water Quality volume (WQv)" in appendix K of the SWPPP report do not add up to the totals at the bottom of the table. Applicant's engineer shall revise the table for clarity.

6. The impervious areas (Ai) used to calculate the minimum RRv in Table C in appendix K of the SWPPP report does not equal to the total summation of the impervious areas within the sub-catchment areas designated as new development in table tale B. 100% of the WQv resulting from new development must be treated, and the minimum RRv required must be calculated based on the total new impervious areas. Applicant's engineer shall revise the calculation to account for all new impervious area, or revise the tables for clarity.

7. The Tc paths depicted on the post-development plan extend past the sub-catchment boundaries. Applicant's engineer shall revise the Tc paths in the post-development plans to be contained entirely within their respective sub-catchments as stipulated in chapter 5 of the TR-55.

8. Applicant's engineer shall provide Tc tables for the proposed sub-catchments on the post-development plan in the same manner done on the pre-development plan.

This completes our review at this time. Further comments may be provided based on future submissions prepared for the project. **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.

Respectfully,

LANC & TULLY, P.C.

John Russo, P.E.

cc: Jennifer Gray, Esq.
Bryan Murphy, Building Inspector

City of Beacon Planning Board Agenda
07/14/2026

Title:

Continue review of application for Amended Site Plan Approval, 364 Main Street, Mixed-Use Commercial and Residential, submitted by 364 Main BCN LLC.

ATTACHMENTS

364 Main PB 7.14.26 Supplemental Submission Cvr Ltr.pdf

364 Main PB 7.14.26 Exhibit A - ADG Spreadsheet - Summary of Changes.pdf

364 Main PB 7.14.26 Exhibit B - Response Memo by ADG Architects 6.30.26.pdf

364 Main PB 7.14.26 Site Plan Set by ADG Architects rev 6.30.26 (1).pdf

Lanc & Tully 364 Main Street 07-10-26.pdf

CUDDY +FEDER LLP

300 Westage Business Center, Suite 380
Fishkill, New York 12524
T 845 896 2229
F 845 896 3672
cuddyfeder.com

Taylor M. Palmer
tpalmer@cuddyfeder.com

June 30, 2026

BY HAND DELIVERY AND E-MAIL
Hon. John Gunn, Chairman
and Members of the Planning Board
City of Beacon
One Municipal Plaza
Beacon, New York 12508

Re: 364 Main BCN LLC – Additional Supplemental Submission
Application for Site Plan Amendments Involving Field Changes
Property: 364 Main Street, Beacon, New York 12508 (ID: 6054-29-006819)

Dear Chairman Gunn and Planning Board Members:

On behalf of 364 Main BCN LLC (the "Applicant"), the owner of the above-referenced Property, we respectfully submit this letter and the referenced enclosures in furtherance of the Applicant's pending Application for Amended Site Plan Approval (the "Application") related to certain amendments to the 2022 Site Plan Approval that was previously granted by this Board.

At the June 9, 2026 meeting, the Planning Board Chair requested the Applicant prepare a spreadsheet detailing the site plan revisions comprising the Application. The Applicant's architect, ADG Architect, has compiled this information with the assistance of the Applicant's team. *See* **Exhibit A** – ADG Architects Spreadsheet on Summary of Changes. The Applicant's architect has also prepared a point-by-point responses to the comments contained in the City Engineer's Comment Memo dated June 3, 2026. *See* **Exhibit B** – ADG Architects Response to Comments Memo dated June 30, 2026, providing responses to the City Engineer's Comment Memo dated June 3, 2026. To assist the Board in its review of the spreadsheet enclosed herein, we respectfully submit the Site Plans Set prepared by ADG Architects, dated April 28, 2026, last revised June 30, 2026 containing Sheets A-001 through A-009.

We look forward to appearing before the Planning Board at its July 2026 meeting date, at which time we respectfully request that this Board consider setting the Public Hearing on the Application. Should the Planning Board or City Staff have any questions in the meantime, please do not hesitate to contact us. Thank you in advance for your consideration in this matter.

Very truly yours,

Taylor M. Palmer
Enclosures
cc: Bryan Murphy, City Building Inspector; Jennifer L. Gray, Esq., Keane & Beane, Planning Board Attorney; John Russo, P.E., Lanc & Tully, P.C., Planning Board Engineer

4928-2409-2089.v1

ADG ARCHITECTS
25 WALLKILL AVE ▪ MONTGOMERY ▪ NY 12549 | 845.294.2724 | CONTACT@ADGARCHITECT.COM
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26109 Baxter 364 Main St - Summary of Changes

Source of Change	No.	Item / Architectural Feature	Original PB Approved Design	What it was Changed To (As-Built / Current State)	Reason for Change	Mitigation Strategy / Proposed Solution
On Approved Architectural CDs (Building Permit Set)	1	Brick Façade Articulation (Corbelling)	Renderings showed corbelling to create the appearance of large, recessed brick panels. Actual elevations drawings approved by the PB did not show the same detailing as the renderings	The 'field' of brick between the pilasters was installed in a flat plane.	Corbelling was not shown or detailed on the Construction Documents (CDs) prepared by the previous architect. The contractor built the flat plane as detailed in the city-approved CDs.	Since the masonry shell is built, structural corbelling is no longer feasible without removing the brick. To eliminate the perceived "flatness," we propose installing projected, bracketed painted AZEK window headers and adding up-lighting at the pilaster bases to emphasize structural rhythm and add deep shadow lines.
	2	Side-Wall Vents (East Elevation)	Vents were not explicitly highlighted or detailed on PB renderings.	6" x 6" vents were installed in the side of the building.	Vents are required for individual apartment dryers, range hoods, and bathroom fans. There is no viable structural or mechanical alternative to venting these units. Mechanical construction documents showed these penetrating the sidewalls	Maintain as constructed. The vents were installed per the approved city-approved CDs. The newly proposed projected window headers are intended to draw the eye and distract from the visibility of these necessary vents.

Source of Change	No.	Item / Architectural Feature	Original PB Approved Design	What it was Changed To (As-Built / Current State)	Reason for Change	Mitigation Strategy / Proposed Solution
	3	Exposed Covered Parking Structure (Rear)	PB elevations called for painted Azek covered structural columns; steel beam not addressed in detail.	Steel beam is fully covered by the brick facade; columns are left exposed and painted black.	The CDs lacked proper waterproofing, insulation and flashing details for the beam. Continuing the brick past the beam permanently resolved the flashing issues. This was updated in the revised structural drawings dated 11.07.24 that were provided to the City.	Maintain as constructed. The black exposed columns do not appear to detract from the building's character, and the brick wrap on the beam was a necessary fix to address potential future issues.
	4	Window Sill Detailing	PB elevations do not specific a window sill size.	A standard 4" cast stone sill was installed.	CDs called out a 6" cast stone sill in text, but the architectural details showed a 2-3/8" cast stone sill. To balance the conflicting details within the previous architect's CDs and maintain the design intent while working within standard full-brick construction parameters.	Maintain as constructed. The 4" sill is more appropriate than what was detailed in the CDs, and is a highly functional middle-ground that properly sheds water, meets the intent of the design, and aligns with the full-brick facade upgrade.
	5	Fire-Rated Windows (Stairwells & Rooftop Lobby)	Fire-rated windows were included in these locations.	Windows were removed and replaced with solid walls/brick.	Unforeseen technical difficulties related to the specialized fire-rated windows and the necessary interior detailing.	Maintain field change as constructed. This was reviewed and accepted as a field change by City building officials during construction.
	6	Juliet Balconies & Associated Doors	Juliet balconies with double doors on East and West elevations.	Replaced with standard operable double windows.	Balconies provided no usable outdoor space and introduced long-term safety and maintenance concerns (door leaks/drafts) without resident benefit. Contractor/developer noted that these create continued maintenace issues on other building that they own.	Maintain field change as constructed. Operable windows were installed at the same width and head height as the double doors, ensuring the building's scale and fenestration rhythm remained consistent.

Source of Change	No.	Item / Architectural Feature	Original PB Approved Design	What it was Changed To (As-Built / Current State)	Reason for Change	Mitigation Strategy / Proposed Solution
Approved Field Change with Building Official	7	Stair & Elevator Bulkhead Cladding	Thin brick cladding.	Fiber cement board siding (Hardie Plank) was installed.	Substituted as a material adjustment and coordinated directly with the building department during the construction phase.	Despite field approval, we propose removing the fiber cement siding and installing thin brick cladding to restore material continuity with the primary façade.
	8	Site Grading, Front Patio, & ADA Ramps	Front patio layout with specific ramp and stair configuration.	Significant modifications made to the front entry patio, ramp, and stairs.	Severe grade discrepancies between the building's existing finished floor height and the Main Street sidewalk that were not accurately represented on the approved PB drawings or the city-approved CDs.	Create two code-compliant ADA accessible ramps and monument stairs. Installation of ADA wheelchair handrails at the curb location on the east side ADA ramp.
	9	French Drain (Rear Parking Lot)	Paved parking surface.	A French drain was installed on the west side of the parking lot. (no outlet)	Added as a method to convey surface water runoff in a small area to ground below; agreed upon onsite with the City Building Inspector and Engineer.	Remove the French drain and revert to a paved area as originally designed
	10	"Shadow Boxes" (East Side, First Floor)	Assumed to be brick infill detailing by the PB.	Detail not found on PB drawings or CDs.	Clarified onsite with the Building Inspector that this was a reference to brick infill locations that became obsolete once the previous structure was removed.	No physical mitigation required. This is listed simply to clarify for the record that no detail was skipped; the existing structural removal rendered it obsolete.
	11	Dumpster enclosure	Masonry with 20 ga metal gates	Wood Fence enclosure.	Wood fence enclosure selected to match surrounding wooden fence. Apprved by BI	Keep as installed

Source of Change	No.	Item / Architectural Feature	Original PB Approved Design	What it was Changed To (As-Built / Current State)	Reason for Change	Mitigation Strategy / Proposed Solution
	12	Landscaping	Low plantings with grass beds	Planting areas in river rockbeds with grass areas	Specified ground cover, low lying plants would have been lost in grassed lawn area.	Adjusted based on further discussions with City officials- Maintain as constructed. • Removed rocks from area adjacent to the mosque fence on Eliza Street per City Engineer. This is complete. • Removed pavers and associated improvements at the front bike rack area and replace with seeded lawn per City Engineer.
	13	Eliza St Entrance	Adjustments to Eliza Street Entrance were not shown on the approved planning board documents	• Moved existing curb cut on South side of entrance to align with entrance curb • South side curb cut remained • Saw cut new asphalt to Concrete sidewalk line from end of curb to end curb at parking lot entrance • Removed existing concrete at existing drop curb at parking lot entrance	Per site visit, City engineer request.	Performed as requested by engineer. Completed.
	14	Site Plan Revisions	Steps and gates shown	• Removed the rear concrete steps and gates adjacent to the mosque that were shown on the original site plan drawings	Per site visit, City engineer request.	• Remove the rear concrete steps adjacent to the mosque. • Reflect the extension of the planting bed to the curb at the Main Street driveway entrance.
	15	Full Brick Masonry Upgrade	Thin-brick veneer was specified and approved.	A full-depth brick masonry system was installed.	To address concerns with thin-brick maintenance and durability, and ensure material authenticity, structural integrity, and long-term durability of the façade, full brick was installed	Maintain as constructed. This represents a substantial, higher-quality material upgrade from the originally approved PB plans.

Source of Change	No.	Item / Architectural Feature	Original PB Approved Design	What it was Changed To (As-Built / Current State)	Reason for Change	Mitigation Strategy / Proposed Solution
Applicant/Contractor Change	**16**	Storefront Articulation (Base Panel)	Stick-built custom wood windows with pressure-treated decorative wood trim along the base.	Aluminum storefront windows with an 18-inch high flat insulated metal panel along the bottom.	Aluminum storefront was selected to ensure durability in a high-traffic retail environment and to eliminate the long-term maintenance/rot concerns of wood at street grade.	Install painted PVC trim over the lower insulated aluminum storefront panels to match the design shown in the CDs. This will match the design intent of the wood panels shown on the city-approved CDs, while maintaining commercial-grade durability.
	17	Trim Profile at Commercial 'Eyebrow' Roof	A 'Crown' profile trim was shown at the commercial storefront 'eyebrow' roof.	Standard flat trim was installed.	The specific trim profile shown on the approved drawings does not exist as a manufactured product, or even a built-up trim profile. Flat trim was substituted in the field.	We propose removing the flat trim and installing a 4” Ogee Crown profile trim to restore the original architectural expression and shadow lines.
	18	Window Head Detailing	PB renderings showed straight brick head; PB elevations showed arched heads. City-approved CDs called out an arched Azek profile.	A straight full-brick soldier course window head detail was installed.	The contractor opted for a straight soldier course brick head, feeling that it was compatible with the building's overall character and the full-brick masonry upgrade.	We propose to install projected, bracketed painted AZEK window headers spanning the tripartite window groupings to introduce three-dimensional architectural relief.
	19	Residential Entrance (Main Street)	A projected entrance canopy was specified.	The canopy was removed, and a recessed entryway was provided.	It was felt that the projected canopy was going to be a maintenance issue, and the recessed entryway would achieve the same technical solution, creating a permanent, integrated arrival point that protects residents from the weather.	To address architectural detailing associated with a primary entrance point, we are now proposing a new projected entrance structure with a distinct cornice line and flanking pilasters to give the residential entry proper architectural weight and prominence.
	20	Roof Top Patio Layout & HVAC	A specific rooftop deck layout for tenant outdoor space.	Layout adjusted, with portions of the patio closest to Main Street relocated towards the rear.	To accommodate the necessary placement of two rows of HVAC condensers and centralized rooftop utility enclosures (doghouses).	A proposed adjusted layout has been provided. The new design appropriately screens the HVAC layout while creating two independent, and the usable rooftop areas connected by both means of egress.

Source of Change	No.	Item / Architectural Feature	Original PB Approved Design	What it was Changed To (As-Built / Current State)	Reason for Change	Mitigation Strategy / Proposed Solution
	21	Building Mounted 911 Signage	Undefined	The existing '911' signage was installed as simple block numbers	The contractor installed the 911 signage for code compliance	Remove the existing signage and install new, 911 signage as detailed on proposed drawing A-007.

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RESPONSE LETTER

Project:	26109 Baxter 364 Main	**References:**	1. Lanc & Tully Review Letter (dated 06-03-26)
Date:	June 30, 2026	**Respondent:**	As noted below

Comment No.	Topic	Reviewer Comment	Respondent	Response
Lanc & Tully Review Letter (dated 06-03-26)				
1	Architectural	During the construction of the project a number of architectural features were changed, with some of the more noticeable differences being the detailing around the windows, the replacement of Juliet balconies and doors with windows, and the storefront windows with metal panels along their bottoms. The Planning Board should discuss the changes made by the applicant and what aspects of each of the architectural changes may need to be revised to reflect the actual building approved. Sheet A-005 of the plans reflects the as-built conditions and the architectural changes that occurred during the construction of the project. Sheets A-006, A-007, A-008 and A-009 reflect proposed architectural improvements proposed by the applicant in an effort to rectify the unauthorized architectural changes. The Planning Board should review the proposed changes/improvements and provide their comments and guidance to the applicant regarding the proposed improvements.	ADG	Noted. Some of the architectural modifications referenced were reviewed in the field with City building officials during construction and reflect adjustments made for constructability, performance, and long-term maintenance considerations. Other perceived changes were documented on the approved construction documents and built accordingly. Finally, some changes were made at the discretion of the contractor/owner. To address these, the Applicant is proposing targeted refinements, as shown on Sheets A-005 through A-009, to better align the as-built conditions with the intent of the originally approved design. In particular, the Applicant proposes to remove the fiber cement siding installed at the stair and elevator bulkheads and replace it with thin brick cladding to restore material continuity with the primary façade. The submitted drawings document

Comment No.	Topic	Reviewer Comment	Respondent	Response
				both the as-built conditions and the proposed architectural improvements for transparency and clarity. The Applicant welcomes Planning Board review and guidance regarding the proposed refinements.
2	Plaza / elevation / landscaping	During construction, it was found that the first-floor elevation was approximately 2 feet higher than originally anticipated. Based upon this elevation change the applicant has modified the plaza area to allow for ADA access, while also providing a raised plaza/patio area at the front of the building. As the CMS District has requirements for landscaping, the applicant should provide a comparison of the original landscaping area proposed on site in comparison to what is currently proposed/constructed. Applicant's consultant has stated that a landscape plan will be provided in the next submission demonstrating that the quantity of proposed landscaping and previous area has Increased overall.	ADG	The plaza and entry sequence were adjusted during construction, and are continuing to be adjusted, to respond to actual site conditions and to ensure safe, code-compliant accessibility access between the building and Main Street. The revised design incorporates accessible ramps, reconfigured stairs, and a raised plaza/patio condition that aligns with the as-built relationship between the building and sidewalk elevations while maintaining functional and safe pedestrian circulation. A landscape architect has been retained and a new landscape plan will be provided with a future submission, comparing the originally approved layout with the current configuration. However, overall landscaping and pervious area has been maintained or increased in accordance with CMS District requirements.
3	French Drain	The revised plans indicate the installation of a "French drain" west side of the parking lot behind the building. The plan should clearly show where runoff is being conveyed by this drainage system. the applicant has noted that they will remove this improvement and revert back to a paved area as originally designed. We have not stated that the improvement would need to be removed at this time, rather have requested additional information as to where the French drain that was installed is actually draining to.	ADG	The French drain referenced was installed in response to discussions with the building official at the time due to site conditions encountered during construction. The Applicant decided to remove this drain and install the asphalt as per the original drawings.

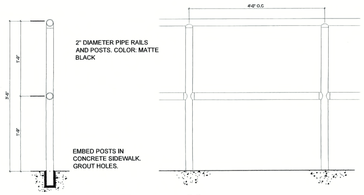
Bulk Zoning Regulations Table - Parking Lot

	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

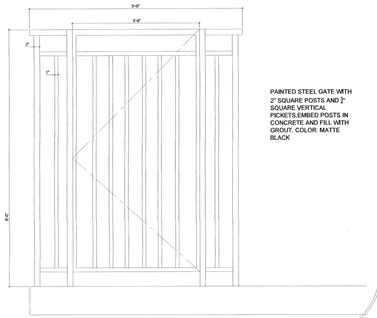
	Required Setbacks			Proposed Setbacks			Main Street Frontage Required	Main Street Frontage Required	Minimum Lot Depth	Proposed Lot Depth	Allowable Building Height	Proposed Building Height	Minimum Landscaped Area	Proposed Landscaped Area	Lot Area	Proposed Floor Area
	Front	Side	Rear	Front	Side	Rear										
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
7	02/22/22	REVISED PER PLANNING BOARD COMMENTS	AJS
8	03/29/22	REVISED PER PLANNING BOARD COMMENTS	AJS
9	06/30/22	FOR FINAL CONSULTANT REVIEW	AJS
10	09/01/22	PLANNING BOARD CHAIRMAN SIGNATURE	AJS



Fence Detail

Scale: NTS



Gate Detail

Scale: NTS

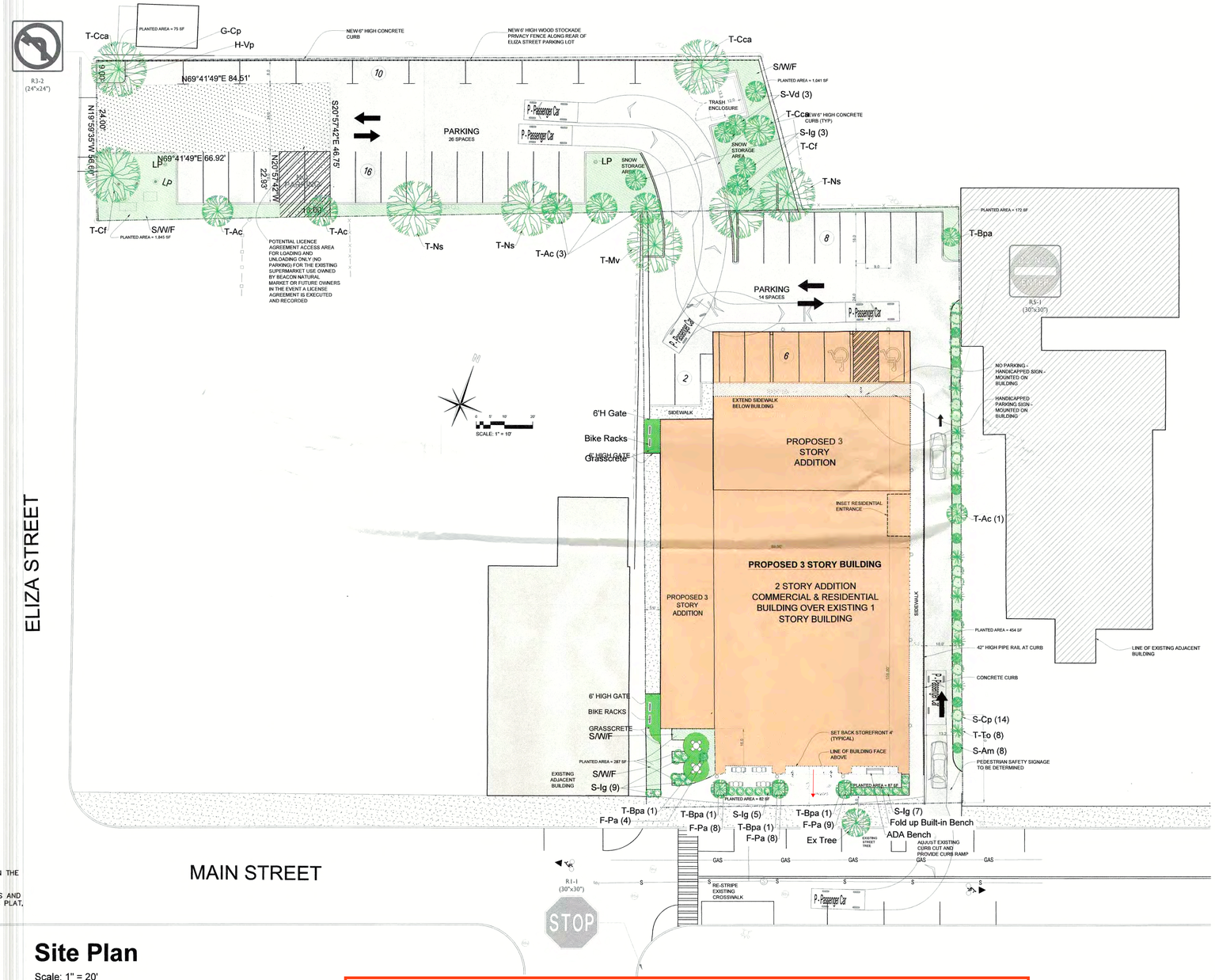
APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE 12th DAY OF April, 2022, SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS 15th DAY OF September, 20____, BY

CHAIRMAN

SECRETARY

IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.



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) & 6054-29-000836 (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
Residential		
(1) space per unit (CMS)	(20) Apartments	20 parking spaces
Commercial		
(2) spaces per 1,000 SF for Retail	8,892 sf	18 parking spaces
Total Required		**38 parking spaces**
Total Provided		**42 parking spaces**

Notes:

1. Commercial hours are 7am – 12am, Monday through Sunday, inclusive.
2. No signage is proposed as part of this application. Retail tenants will apply separately to the Planning Board for their own signage
3. The landscaped area is approximately 11%. The overall measured landscaped area is 4,043 square feet. The overall site area is 36,954 square feet. 4,043/36,954 = 0.1094. The measured landscaped area includes all planted areas on the site shaded in green. 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.
4. The project will comply with the 10% below-market-rate requirements in Article IVB, Affordable-Workforce Housing.
5. Refuse pick-up will be limited to off-peak hours.
6. Delivery vehicles shall be limited to a maximum size of a Single Unit 30' box truck. To the maximum extend practicable, trucks for deliveries and moving purposes shall be coordinated to avoid conflicts with on-site parking operations.
7. All landscaping shown on the Site Plan shall be maintained in a vigorous growing condition for the duration of the use and shall be trimmed so as to not interfere with pedestrian use of the sidewalk. All plant not so maintained shall be replaced with new plants of comparable size and quality at the beginning of the next immediately following growing season in compliance with the Site Plan, at the sole cost and expense of the property owner.

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Sheet 4 of 14	Building Plans
Sheet 5 of 14	Building Elevations & Renderings
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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
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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

A-001 APPROVED SITE PLAN - FOR REFERENCE

DRAWING NAME AND NUMBER FOR 04-28-26 SUBMISSION ONLY

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

REGISTERED ARCHITECT ARYEH JOSEPH SIEGEL 024882 STATE OF NEW YORK

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



Elevation: South

Scale: $\frac{1}{8}$" = 1'-0"



Elevation: East

Scale: $\frac{1}{8}$" = 1'-0"



Elevation: North

Scale: $\frac{1}{8}$" = 1'-0"



Elevation: West

Scale: $\frac{1}{8}$" = 1'-0"

NOTE THAT THE RENDERINGS ARE ARTISTIC INTERPRETATIONS OF THE PROPOSED BUILDING DESIGN TO AID IN REVIEWING THE PROPOSED DESIGN OF THE BUILDINGS ONLY, AND ARE NOT INTENDED AS DETAILED REPRESENTATIONS OF THE FINAL DESIGN OR OF SITE CONDITIONS. CHANGES TO WINDOW & DOOR PLACEMENT MAY OCCUR IN THE FINAL CONSTRUCTION DOCUMENTS TO SUIT TENANT LAYOUTS AND BUILDING CODE REQUIREMENTS. THE ELEVATION DRAWINGS SHOWN ON THIS SHEET INDICATE THE APPROVED DESIGN, AND IN THE CASE OF ANY DISCREPANCY BETWEEN DESIGN ELEMENTS DEPICTED ON THE ELEVATIONS AND RENDERINGS, THE ELEVATIONS SHALL GOVERN.

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE 19th DAY OF April 2022, SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS 13th DAY OF September, 2022, BY

CHAIRMAN

SECRETARY

IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.

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
7	02/22/22	REVISED PER PLANNING BOARD COMMENTS	AJS
8	03/29/22	REVISED PER PLANNING BOARD COMMENTS	AJS
9	06/30/22	FOR FINAL CONSULTANT REVIEW	AJS
10	09/01/22	PLANNING BOARD CHAIRMAN SIGNATURE	AJS



View: From Main Street

Not to Scale



View: From Main Street

Not to Scale



View: From Main Street

Not to Scale



View: Main Street

Not to Scale

A-002 APPROVED ELEVATIONS - FOR REFERENCE

DRAWING NAME AND NUMBER FOR 04-28-26 SUBMISSION ONLY

Site Plan Application

Sheet 5 of 14 - Building Elevations

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

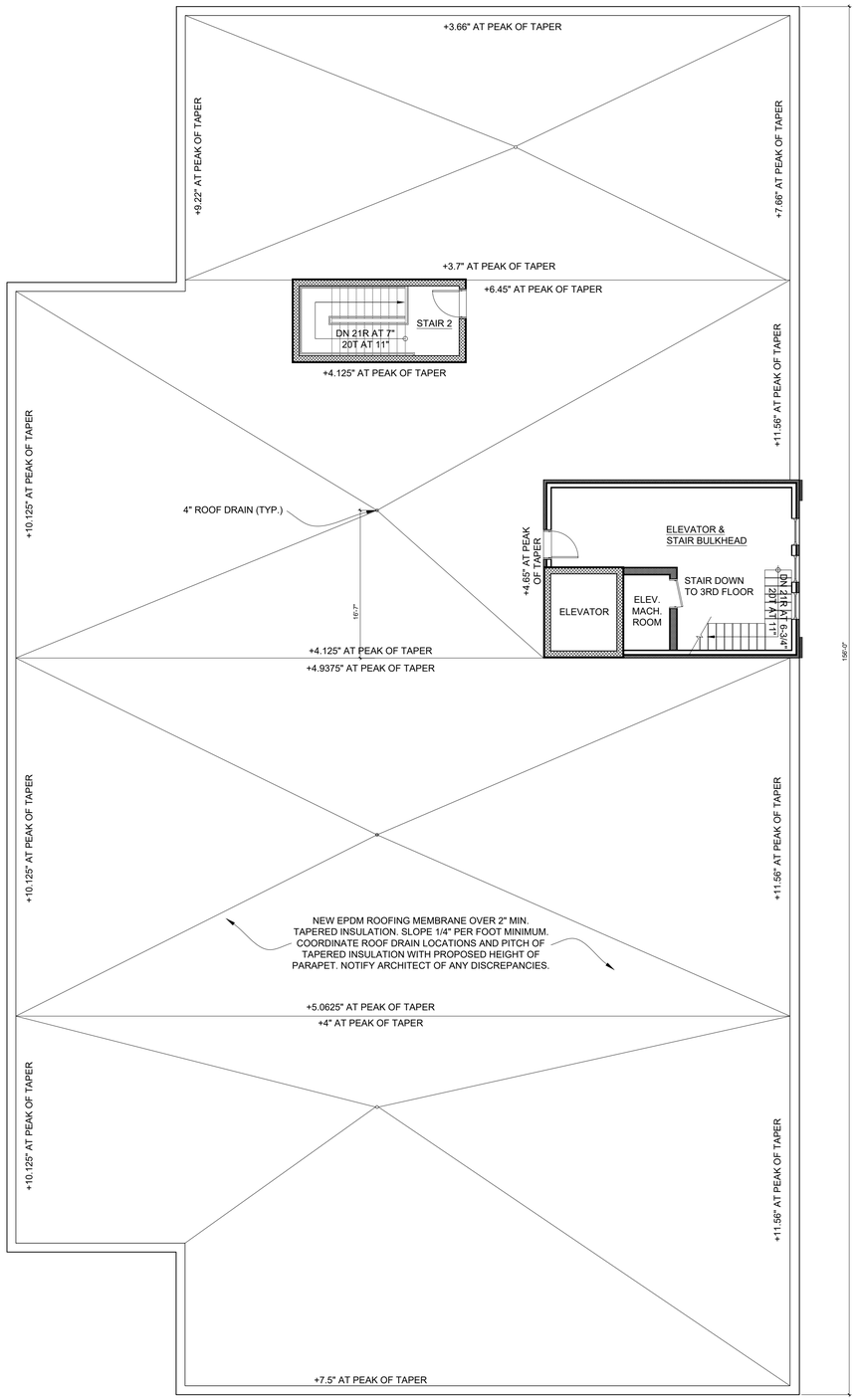
Architect:
Aryeh Siegel, Architect
84 Mason Circle
Beacon, New York 12508

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

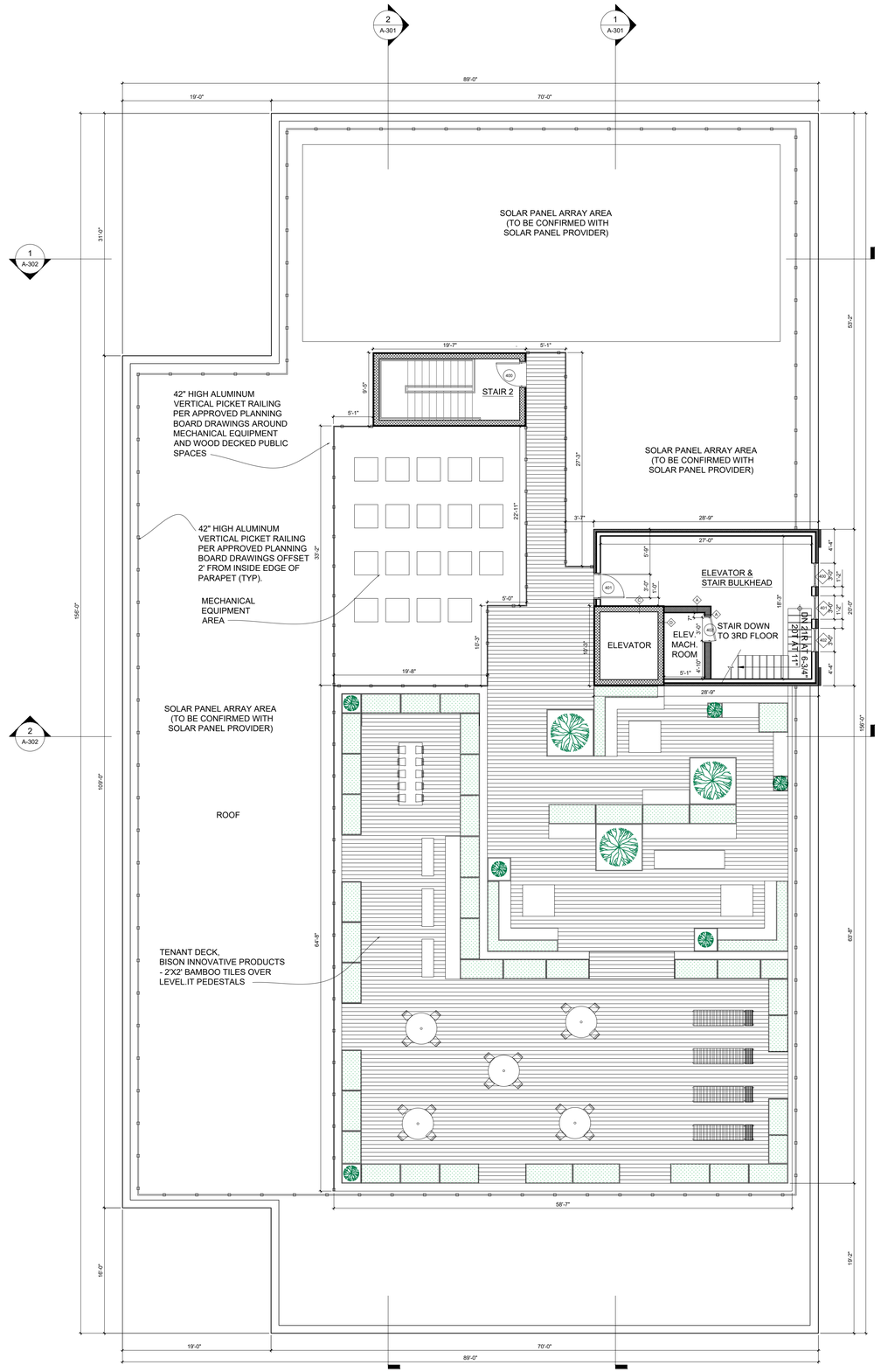
Landscape Designer:
Landscape Restorations
7 Creek Drive
Beacon, New York 12508

REGISTERED ARCHITECT STEVEN JOSEPH SIEGEL 024892 STATE OF NEW YORK

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



1 Roof Drainage Plan
1/8" = 1'-0"



1 Roof Plan
1/8" = 1'-0"

A-003 APPROVED ROOF PLAN - FOR REFERENCE

DRAWING NAME AND NUMBER FOR 04-28-26 SUBMISSION ONLY

364 Main St

New Construction & Renovation

364 Main Street
Beacon, NY 12508

Number	Date	Revision
3	September 20, 2022	Building Permit Review Set
2	June 10, 2022	Building Permit Review Set
1	May 9, 2022	Progress Print

ARYEH SIEGEL
ARCHITECT

84 Mason Circle
Beacon, New York 12508
Phone: (845) 838-2490
Website: www.ajsarch.com

Roof and Roof Drainage Plan

Date: May 18, 2022

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

Drawing Number: A-104

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

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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



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)
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Parking Overlay District:	Partial, not the portion of the lot in the T District.
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Proposed Use:	Mixed-Use: Retail / Residential

Parking & Loading

Use & Parking Requirements	Proposed Area	Current Parking Requirement
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Commercial		
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Total Provided		**42 parking spaces**

Notes:

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REVISIONS:			
NO.	DATE	DESCRIPTION	BY
1	07/27/21	REVISED PER PLANNING BOARD COMMENTS	AJS
2	08/27/21	REVISED PER PLANNING BOARD COMMENTS	AJS
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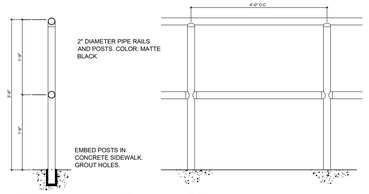
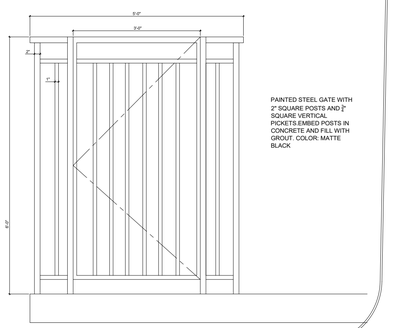
8	03/29/22	REVISED PER PLANNING BOARD COMMENTS	AJS
9	06/30/22	FOR FINAL CONSULTANT REVIEW	AJS



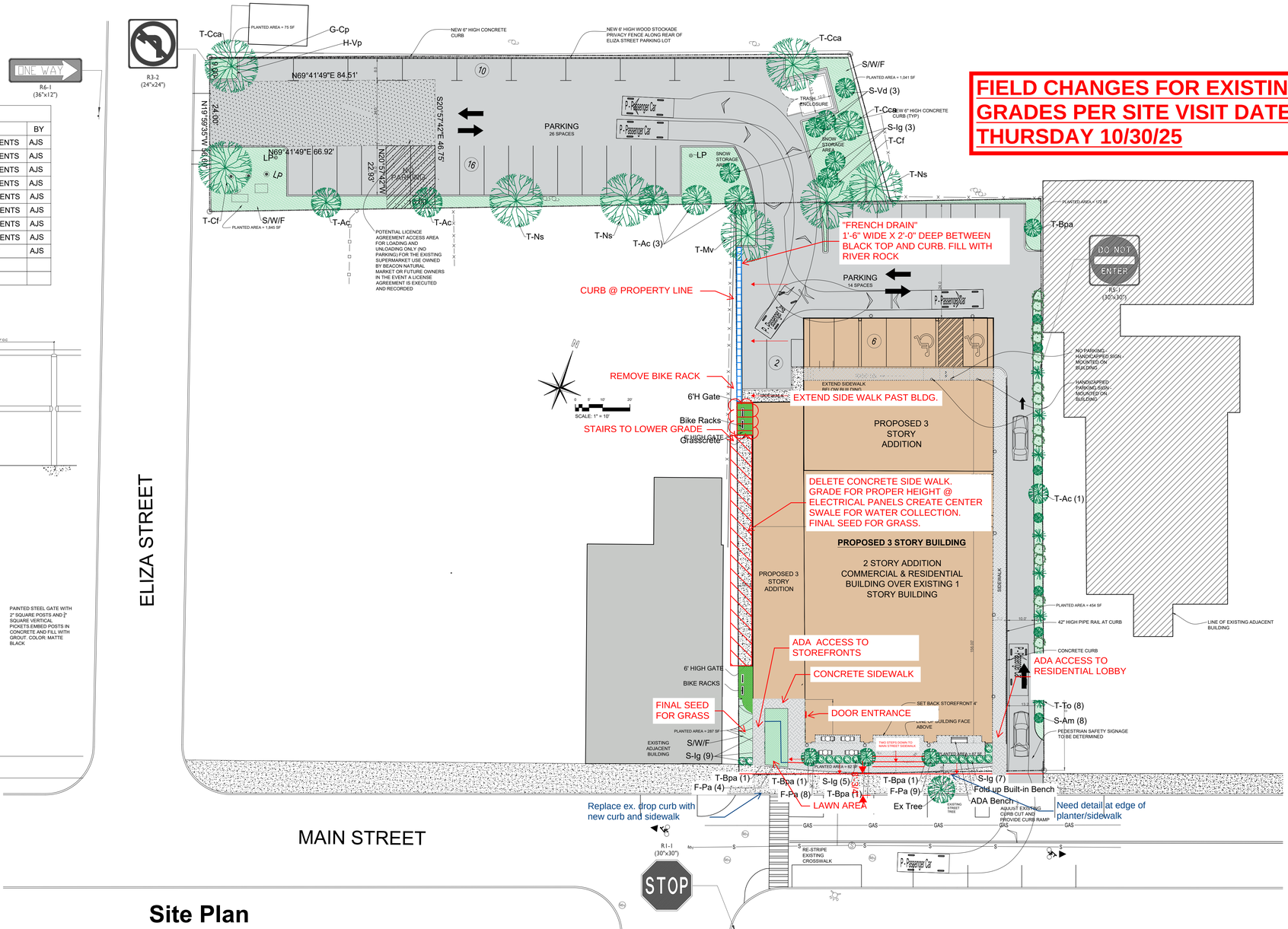
Fence Detail

Scale: NTS



Gate Detail

Scale: NTS



Site Plan

Scale: 1" = 20'

FIELD CHANGES FOR EXISTING GRADES PER SITE VISIT DATED THURSDAY 10/30/25

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Sheet 14 of 14 - ESC.2	Erosion & Sediment Control Details

A004- APPROVED SITE PLAN FIELD SKETCH REVISION - FOR REFERENCE

Site Plan Application

Sheet 1 of 14 - Site Plan

DRAWINGS NAME AND NUMBER FOR 04-28-26 SUBMISSION ONLY

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

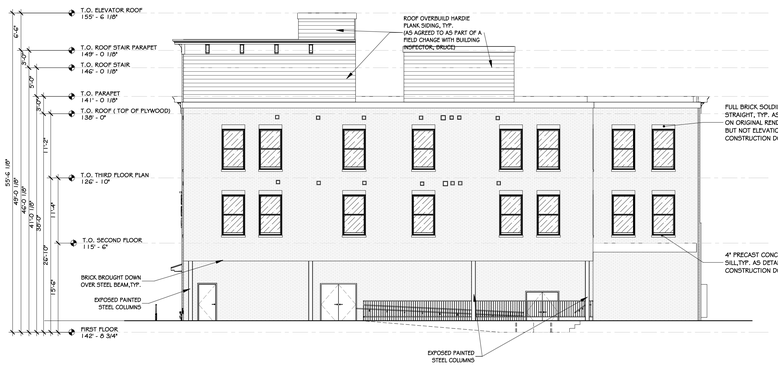
364 Main Street
Beacon, New York
Scale: 1" = 20'
October 4, 2021



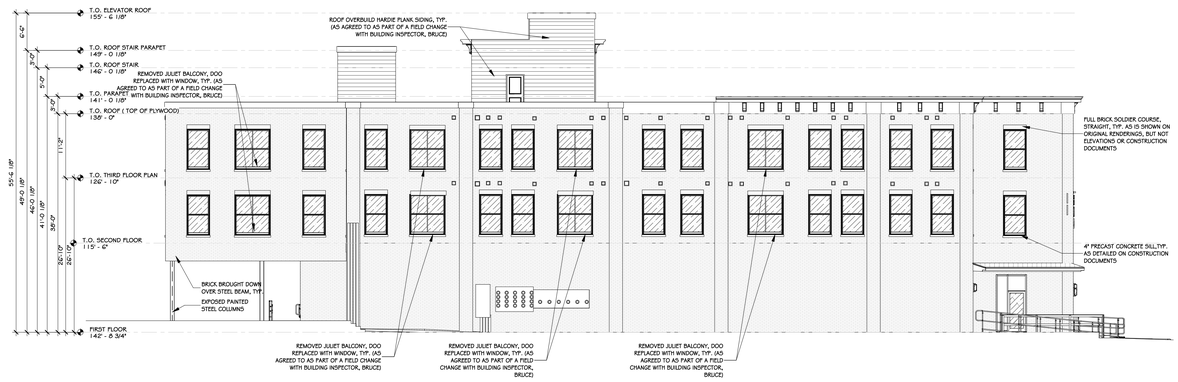
AS-BUILT PHOTOS- 04-20-26



AS-BUILT RENDERING SHOWING PROPOSED PATIO/ENTRY NOT YET CONSTRUCTED



1 AS-BUILT NORTH ELEVATION.
3/32" = 1'-0"



2 AS-BUILT WEST ELEVATION.
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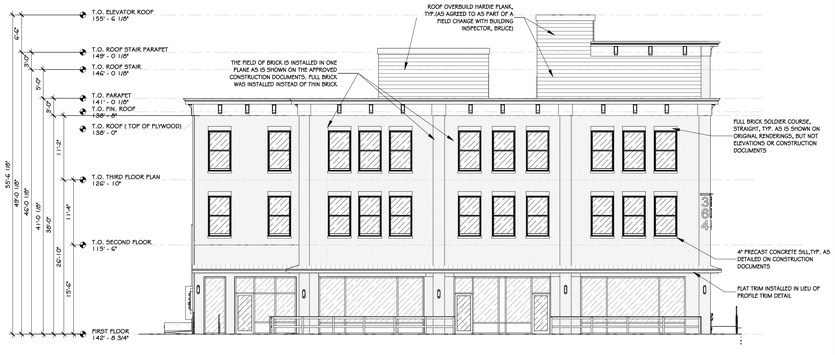

3 AS-BUILT SOUTH ELEVATION.
3/32" = 1'-0"



4 AS-BUILT EAST ELEVATION.
3/32" = 1'-0"

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CONSTRUCTION NOTES

1. NO CONSTRUCTION NOTES YET

REVISIONS:

NUM.	DATE	DESCRIPTION
1	06-30-26	UPDATED FOR JULY PLANNING BOARD MEETING

PLANNING BOARD SUBMISSION

PROJECT NORTH

KEY PLAN — WORK AREA

ADG ARCHITECTS
25 WALLKILL AVE • MONTGOMERY • NY 12549
O. 845.294.2724 | F. 888.305.6442
WWW.ADGARCHITECT.COM
CONTACT@ADGARCHITECT.COM
ARCHITECTURE • PLANNING • INTERIORS

Project: 364 MAIN ST.
364 MAIN STREET BEACON, NY 12508

Drawing: AS-BUILT ELEVATIONS AND IMAGES

REGISTERED ARCHITECT JASON T. ANDERSON 033127 STATE OF NEW YORK
06/30/2026
Exp. 02/28/2029

Project:	26109	Date:	04/28/26
Drawn:	IDEA	Scale:	AS NOTED

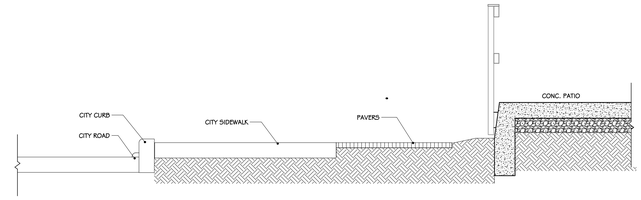
Drawing Number: A-005

It is a violation of the law for any person, unless acting under the direction of a licensed architect, to alter an item in any way. If an item bearing the seal of an architect is altered, the altering architect shall affix to his item the seal and the notation "altered by" followed by his signature and the date of such alteration, and a specific description of the alteration.



1 AS-BUILT SITE PLAN
1/16" = 1'-0"

2 3D AS-BUILT SITE



3 SECTION 'AA'
1/2" = 1'-0"

CONSTRUCTION NOTES

REVISIONS:

NUM.	DATE	DESCRIPTION
1	06-30-26	UPDATED FOR JULY PLANNING BOARD MEETING

PLANNING BOARD SUBMISSION

PROJECT

N O R T H

KEY PLAN

WORK AREA

ADG ARCHITECTS

25 WALLKILL AVE • MONTGOMERY • NY 12549
O. 845.294.2724 | F. 888.305.6442

WWW.ADGARCHITECT.COM
CONTACT@ADGARCHITECT.COM

ARCHITECTURE • PLANNING • INTERIORS

Project: 364 MAIN ST.
364 MAIN STREET BEACON, NY 12508

Drawing: AS-BUILT SITE PLAN

REGISTERED ARCHITECT JASON T. ANDERSON 033127 STATE OF NEW YORK
06/30/2026
Exp. 02/28/2029

Project:	26109	Date:	04/28/26
Drawn:	IDEA	Scale:	AS NOTED

Drawing Number: A-005.1

It is a violation of the law for any person, unless acting under the direction of a licensed architect, to alter an item in any way. If an item bearing the seal of an architect is altered, the altering architect shall affix to his item the seal and the notation "altered by" followed by his signature and the date of such alteration, and a specific description of the alteration.

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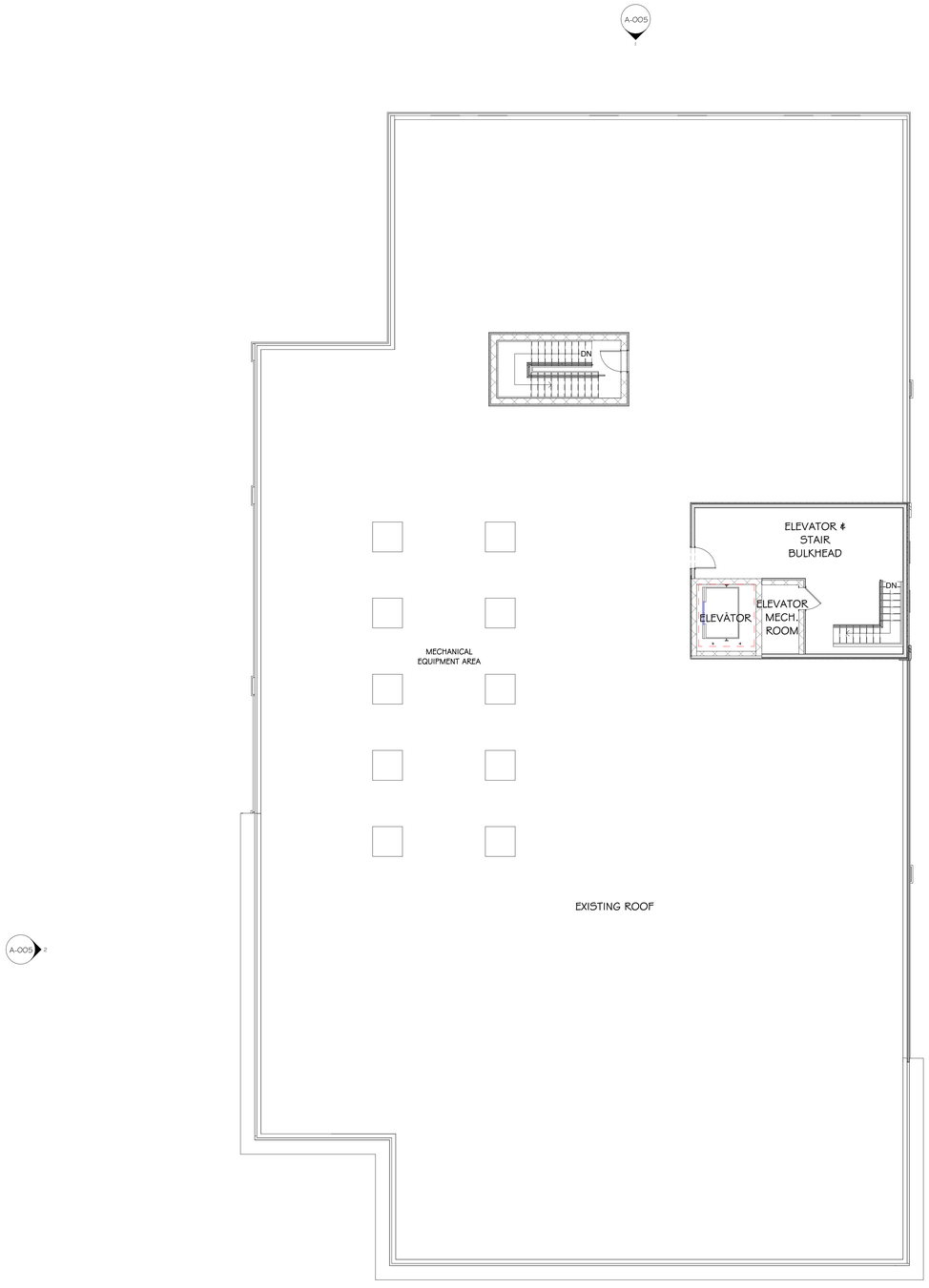

1 AS-BUILT ROOF PLAN
1/8" = 1'-0"

0' 4' 8' 16' 32'

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CONSTRUCTION NOTES

WALL LEGEND:

- NEW WALL
- EXISTING WALL
- DEMOLISH WALL
- FIRE RATED WALL

DOOR LEGEND:

- (B1DOOR) PERSONNEL DOOR TAG @ BASEMENT FL LEVEL
- (1DOOR) PERSONNEL DOOR TAG @ FIRST FL LEVEL
- (2DOOR) PERSONNEL DOOR TAG @ SECOND FL LEVEL
- (SDOOR) STOREFRONT TAG @ FIRST FL LEVEL
- (RDOOR) DEMOUNTABLE GLASS TAG @ FIRST FL LEVEL

REVISIONS:

NUM.	DATE	DESCRIPTION
1	06-30-26	UPDATED FOR JULY PLANNING BOARD MEETING

PLANNING BOARD SUBMISSION

PROJECT

PROJECT

N O R T H

KEY PLAN

WORK AREA

ADG ARCHITECTS
25 WALLKILL AVE • MONTGOMERY • NY 12549
O. 845.294.2724 | F. 888.305.6442
WWW.ADGARCHITECT.COM
CONTACT@ADGARCHITECT.COM
ARCHITECTURE • PLANNING • INTERIORS

Project: 364 MAIN ST.
364 MAIN STREET BEACON, NY 12508

Drawing: AS-BUILT ROOF PLAN

REGISTERED ARCHITECT JASON T. ANDERSON 033127 STATE OF NEW YORK
06/30/2026
Exp. 02/28/2029

Project: 26109 | Date: 04/28/26
Drawn: IDEA | Scale: AS NOTED
Drawing Number: A-005.2

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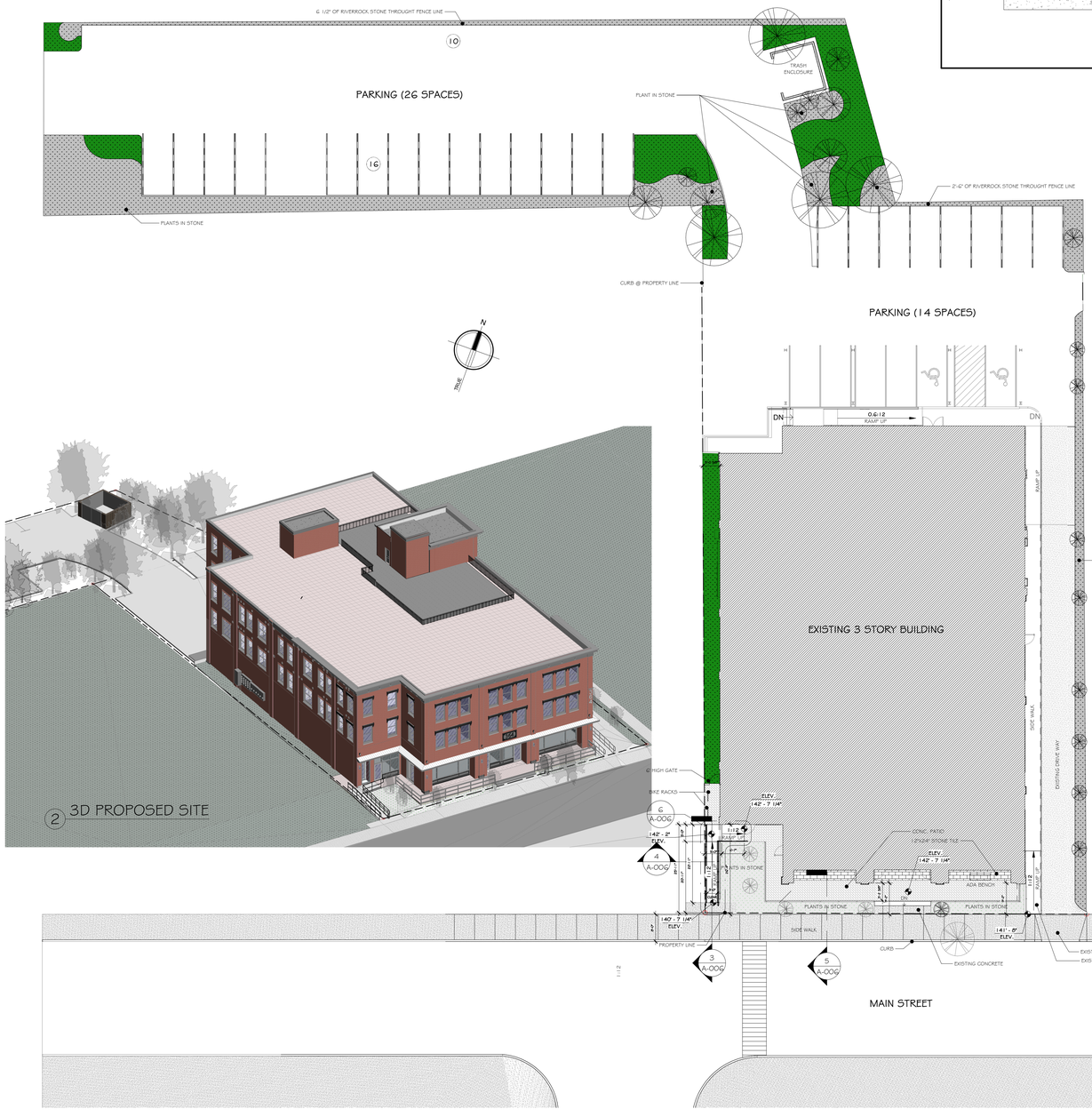
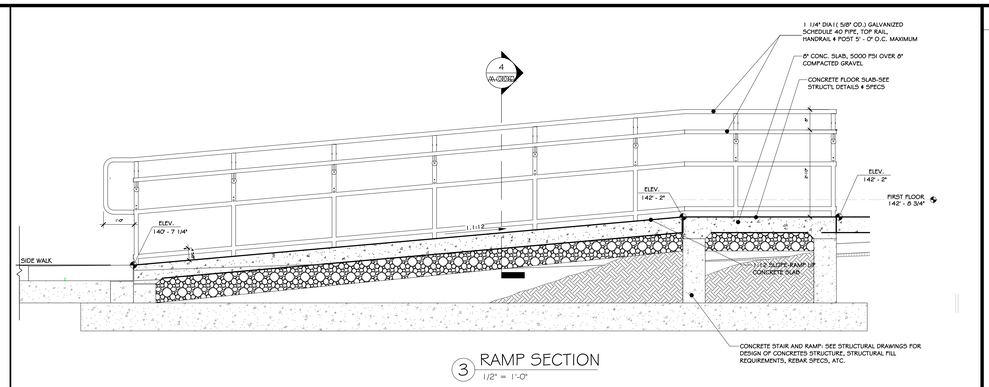
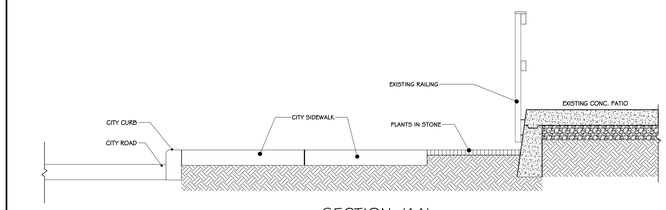


2 3D PROPOSED SITE

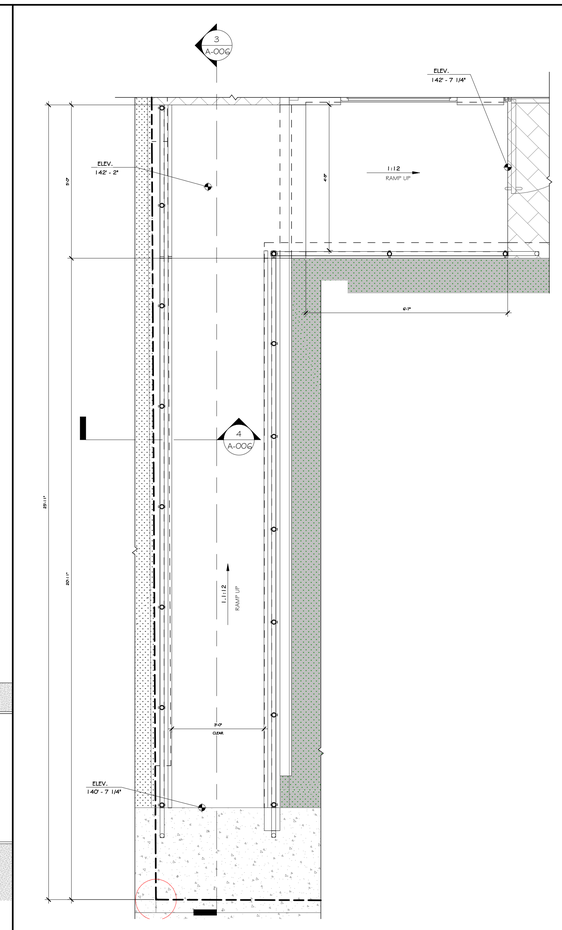
1 PROPOSED MAIN ST. PATIO/ACCESS PLAN
1/16" = 1'-0"



3 RAMP SECTION
1/2" = 1'-0"

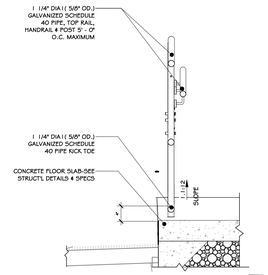


5 SECTION 'AA'
1/2" = 1'-0"



6 ENLARGED RAMP PLAN
1/2" = 1'-0"

CONSTRUCTION NOTES



4 HANDRAIL DETAILS
3/4" = 1'-0"

REVISIONS:

NUM.	DATE	DESCRIPTION
1	06-30-26	UPDATED FOR JULY PLANNING BOARD MEETING

PLANNING BOARD SUBMISSION

PROJECT

NORTH

KEY PLAN

WORK AREA

ADG ARCHITECTS

25 WALLKILL AVE • MONTGOMERY • NY 12549
O. 845.294.2724 | F. 888.305.6442

WWW.ADGARCHITECT.COM
CONTACT@ADGARCHITECT.COM

ARCHITECTURE • PLANNING • INTERIORS

Project: 364 MAIN ST.
364 MAIN STREET BEACON, NY 12508

Drawing: PROPOSED PATIO/ACCESS PLAN

JASON T. ANDERSON REGISTERED ARCHITECT 033127 STATE OF NEW YORK
06/30/2026
Exp. 02/28/2029

Project:	26109	Date:	04/28/26
Drawn:	IDEA	Scale:	AS NOTED

Drawing Number: A-006

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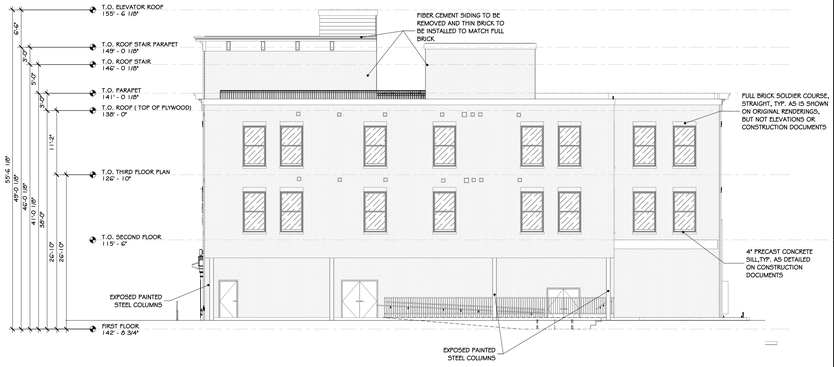
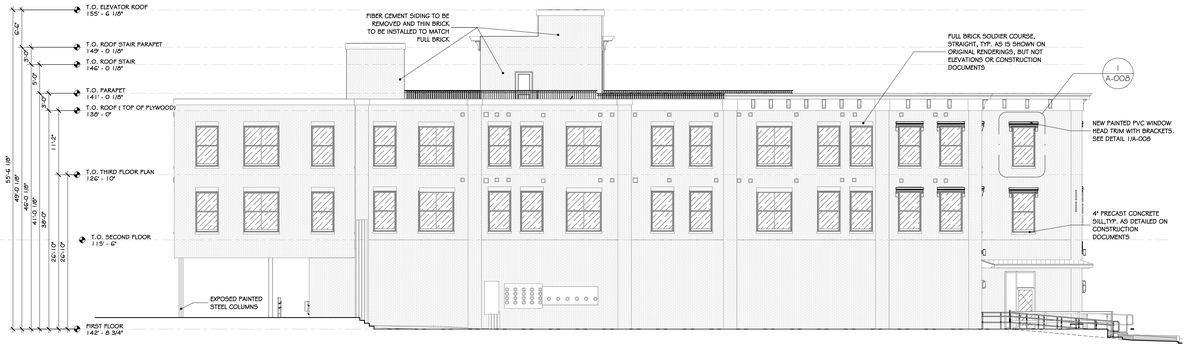
PROPOSED RENDERING



1 PROPOSED NORTH ELEVATION
3/32" = 1'-0"



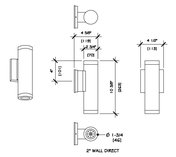
2 PROPOSED WEST ELEVATION
3/32" = 1'-0"



3 PROPOSED SOUTH ELEVATION
3/32" = 1'-0"



4 PROPOSED EAST ELEVATION
3/32" = 1'-0"



SIZE	MOUNTING	WATTAGE	OPTIC	CRI/COLOR TEM	FINISH
2×2	WU - WALL INDIRECT (UPLIGHT) ONLY	20 W	20 D	90 CRI , 2700K	MATTE BLACK

5 LIGHT SCONCE DETAIL
1" = 1'-0"

LIGHTING SCHEDULE

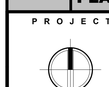
SYMBOL	LABEL	QUANTITY	ARRANGEMENT	DESCRIPTION	MANUF.	MOUNTING HEIGHT (NO DATA W/ IN CEILING
	WU-1	7		2'0 x 1'0 3/8" WALL SCONCE	RAB.	

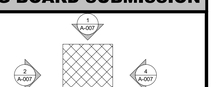
REVISIONS:

NUM.	DATE	DESCRIPTION
1	06-30-26	UPDATED FOR JULY PLANNING BOARD MEETING

PLANNING BOARD SUBMISSION

PROJECT





KEY PLAN

WORK AREA

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O. 845.294.2724 | F. 888.305.6442
WWW.ADGARCHITECT.COM
CONTACT@ADGARCHITECT.COM
ARCHITECTURE • PLANNING • INTERIORS

Project: 364 MAIN ST.
364 MAIN STREET BEACON, NY 12508

Drawing: PROPOSED ELEVATIONS AND RENDERING



06/30/2026

Exp. 02/28/2029

Project: 26109	Date: 04/28/26
Drawn: IDEA	Scale: AS NOTED
Drawing Number: A-007	

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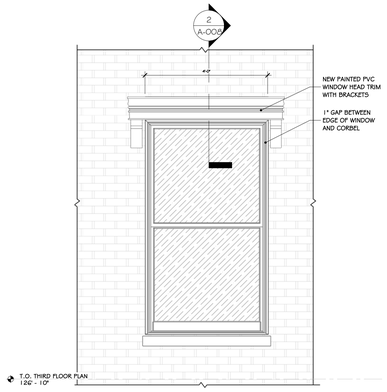
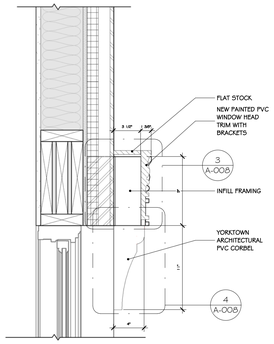
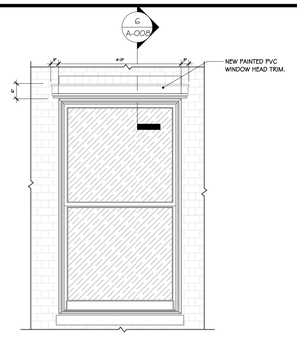


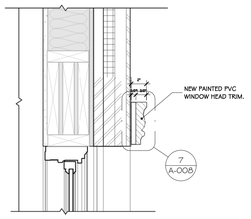
1 WINDOW ELEVATION CALLOUT- 1
1/2" = 1'-0"



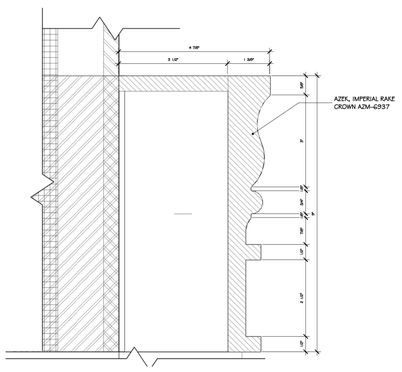
2 WINDOW HEAD TRIM SECTION DETAIL- 1
1 1/2" = 1'-0"



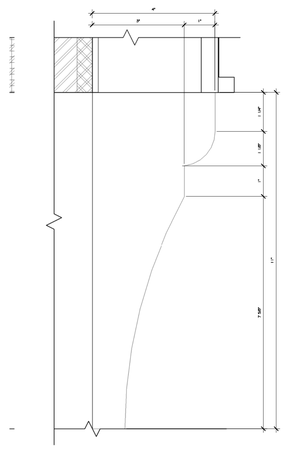
5 WINDOW ELEVATION CALLOUT -2
1/2" = 1'-0"



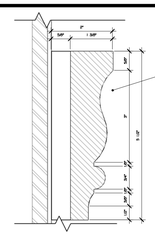
6 WINDOW HEAD TRIM SECTION DETAIL-2
1 1/2" = 1'-0"



3 WINDOW HEAD TRIM DETAIL- 1
6" = 1'-0"



4 CORBEL BRACKET DETAIL
6" = 1'-0"



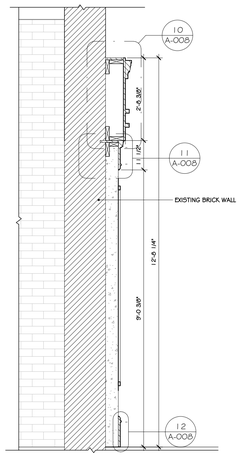
7 WINDOW HEAD TRIM DETAIL-2 CALLOUT
6" = 1'-0"



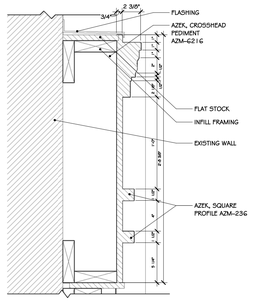




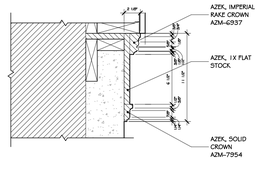
8 ENTRY ELEVATION
1/2" = 1'-0"



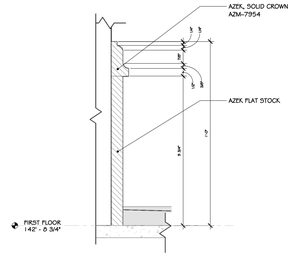
9 ENTRY SECTION
1/2" = 1'-0"



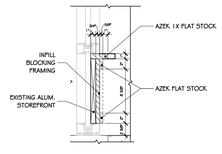
10 ENTRY HEAD TRIM
1 1/2" = 1'-0"



11 COLUMN CROWN DETAIL
1 1/2" = 1'-0"



12 COLUMN BASE DETAIL
3" = 1'-0"



13 STOREFRONT BASE DETAIL
1" = 1'-0"

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REVISIONS:

NUM.	DATE	DESCRIPTION
1	06-30-26	UPDATED FOR JULY PLANNING BOARD MEETING

PLANNING BOARD SUBMISSION

PROJECT NORTH

KEY PLAN — WORK AREA

ADG ARCHITECTS
25 WALLKILL AVE • MONTGOMERY • NY 12549
O. 845.294.2724 | F. 888.305.6442
WWW.ADGARCHITECT.COM
CONTACT@ADGARCHITECT.COM
ARCHITECTURE • PLANNING • INTERIORS

Project: 364 MAIN ST.
364 MAIN STREET BEACON, NY 12508

Drawing: HEAD TRIM DETAILS AND RENDERING

REGISTERED ARCHITECT JASON T. ANDERSON 033127 STATE OF NEW YORK
06/30/2026
Exp. 02/28/2029

Project:	26109	Date:	05/26/26
Drawn:	IDEA	Scale:	AS NOTED

Drawing Number: A-008

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1 PROPOSED ROOF PLAN
1/8" = 1'-0"

0' 4' 8' 16' 32'

CONSTRUCTION NOTES

REVISIONS:

NUM.	DATE	DESCRIPTION
1	06-30-26	UPDATED FOR JULY PLANNING BOARD MEETING

PLANNING BOARD SUBMISSION

PROJECT

NORTH

KEY PLAN

WORK AREA

ADG ARCHITECTS

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ARCHITECTURE • PLANNING • INTERIORS

Project: 364 MAIN ST.
364 MAIN STREET BEACON, NY 12508

Drawing: PROPOSED ROOF PLAN

REGISTERED ARCHITECT JASON T. ANDERSON 033127 STATE OF NEW YORK
06/30/2026
Exp. 02/28/2029

Project: 26109	Date: 04/28/26
Drawn: IDEA	Scale: AS NOTED

Drawing Number: A-009

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LANC & TULLY
Engineering and Surveying, D.P.C.

July 10, 2026

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 June 20, 2026, from Taylor Palmer, Esq. of Cuddy & Feder, LLP.
- Response correspondence from ADG Architects, dated June 30, 2026.
- Matrix table summarizing all changes that have occurred on the project, as prepared by ADG Architects.
- 11 sheet plan set titled "364 Main Street", consisting of plans that reflect the previously approved site plan and building elevations, as well as plans and elevations reflecting the proposed changes from that of the approved.

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 original project consisted of the merging of 2 parcels into a single parcel, and the development of a mixed-use commercial and multi-family residential development, with commercial space (8,892 sf) and a residential common area (1,607 sf) on the 1st floor, and 20 residential apartments to be located on the 2nd and 3rd, floors totaling 25,120 square feet, with a total bedroom count of 31.

The applicant is now appearing before the Planning Board due to architectural changes that occurred during the construction of the building without approval, as well as changes that have occurred to the project site in the plaza/patio area along Main Street. Based on our review of the above documents and plans, we would like to offer the following comments:

General Comments:

1. As requested by the Planning Board, the applicant's consultant has provided a table summarizing the changes that have occurred, why the change occurred, and the mitigation/proposed solution to rectify the unapproved changes. The Board will need to review these changes and determine if the proposed mitigation is acceptable, or if not, what the Board would like to see.

2. During construction, it was found that the first-floor elevation was approximately 2 feet higher than originally anticipated. Based upon this elevation change the applicant has modified the plaza area to allow for ADA access, while also providing a raised plaza/patio area at the front of the building. As the CMS District has requirements for landscaping, the applicant should provide a comparison of the original landscaping area proposed on site in comparison to what is currently proposed/constructed. ***Applicant's consultant has stated that a landscape architect has been retained and a new landscape plan will be provided with a future submission, comparing the originally approved layout with the current configuration.***

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: Jennifer Gray, Esq.
Bryan Murphy, Building Inspector

City of Beacon Planning Board Agenda
07/14/2026

Title:

Mirbeau of Beacon, LLC request to discuss the lighting design along Mirbeau Lane, from Grandview to the cottage locations.

ATTACHMENTS

Mirbeau PB 7.14.26 lighting discussion.pdf

June 18, 2026

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

Re: Mirbeau Beacon Special Use Permit/ Site Plan Application
Mirbeau Lane Lighting

Chairman Gunn,

We would like to be placed on the July 14th Planning Board Agenda to discuss the lighting design along Mirbeau Lane from Grandview to the Cottage locations.

The plans to be discussed are Hudson Land Design27&28 of 28 dated 2/27/24 (Rev.1) which are included in the approved plan set. We will project the plans on the meeting room monitor.

Thank you.

Regards,

Ed

Edward A. Kellogg
Mirbeau of Beacon, LLC

Cc: Mike Bodendorf-Hudson Land Design



LIGHTING SCHEDULE:

Luminaire Schedule

Symbol	Qty	Label	Arrangement	Description	LLF	Luminaire Lumens	Luminaire Watts	Total Watts	BUG Rating	Mounting Height
⊕	11	P2-S	Single	PROS-Y2-2030	1.000	1792	25.1	276.1	B1-U0-G1	10'
⊕	11	P3-S	Single	PROS-Y3-2030	1.000	1829	25.1	276.1	B1-U0-G1	10'
⊕	10	P4-S	Single	PROS-Y4-2030	1.000	1793	25.1	251	B1-U0-G1	10'
⊕	7	P5-S	Single	PROS-Y5-2030	1.000	1735	25.1	175.7	B1-U0-G1	10'
⊕	12	P2-M	Single	PROV2-36L-295-3K7-2	1.000	3597	34.1	409.2	B1-U0-G1	16'
⊕	12	P3-M	Single	PROV2-36L-295-3K7-3	1.000	3471	34.1	409.2	B1-U0-G1	16'
⊕	7	P4-M	Single	PROV2-36L-295-3K7-4W	1.000	3501	34.1	238.7	B1-U0-G1	16'
⊕	9	P5-M	Single	PROV2-36L-295-3K7-SQ	1.000	3818	34.1	306.9	B2-U0-G1	16'
◈	5	B2	Single	PROB-Y2-3030	1.000	2975	43.2	216	B1-U0-G1	2.5'
◈	37	B3	Single	PROB-Y3-3030	1.000	3030	43.7	1616.9	B1-U0-G1	2.5'
◈	16	B5	Single	PROB-Y5-3030	1.000	2892	43.2	691.2	B2-U0-G1	2.5'

KEY TO LIGHT FIXTURES:

P2-S, P2-M, P3-S, P3-M, P4-S, P4-M, P5-S & P5-M

⊕

POLE MOUNTED LIGHTS: "PROVIDENCE" BY ARCHITECTURAL AREA LIGHTING WITH LED LAMP TYPE WITH COLOR TEMPERATURE OF 3000K. LAMP IS FITTED IN CAP OF FIXTURE WITH POLE HEIGHTS TO SET FACE DOWNWARD AT A 10' OR 16' HEIGHT ABOVE GRADE PER PLAN. OPTICAL DISTRIBUTION PATTERNS TYPE 2, 3, 4 ND 5 AS NOTED ON PLAN. LED FIXTURE PERFORMANCE IS FULL CUT-OFF. ALL LAMPS SHALL HAVE A CRI OF 80 OR GREATER.

B2, B3 & B5

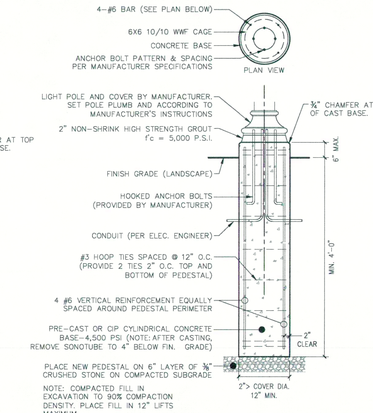
◈

BOLLARD LIGHTS: "PROVIDENCE" BOLLARD BY ARCHITECTURAL AREA LIGHTING WITH LED LAMP TYPE WITH COLOR TEMPERATURE OF 3000K. HEIGHT TO BASE OF LAMP HEAD IS 42" ABOVE GRADE. OPTICAL DISTRIBUTION PATTERNS ARE TYPE 2, 3 OR 5 AS NOTED ON PLAN AND SHOWN ON CUT SHEET. ALL LAMPS SHALL HAVE A CRI OF 80 OR GREATER.

NOTE: ALL BOLLARD LIGHTS TO BE EQUIPPED WITH DIMMER CONTROLS TO ALLOW FOR REDUCING LIGHT OUTPUT TO 50% OF FULL LIGHT LEVELS SHOWN ON THE PHOTOMETRIC PLAN.

See sheet LP-3 for Fixture Specification Order Sheets.

2 CONC. LIGHT BOLLARD BASE-ROUND
SCALE: 1/2" = 1'-0"



1 CONC. LIGHT POLE BASE-ROUND
SCALE: 1/2" = 1'-0"

POST TOP FIXTURE IMAGERY:



APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE 16 DAY OF MAY 20 24 SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS 9th DAY OF July 20 24 BY

CHAIRMAN

SECRETARY

IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.

GRAPHIC SCALE
40 20 0 40
SCALE IN FEET

Dig Safely. New York Call 811 before you dig

DRAWN BY: HT/CH/DW				CHECKED BY: HT			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	2/27/24	AMENDED SITE PLAN	HT				
2	3/26/24	PER PB COMMENTS					
3	6/10/24	FOR CHAIRMAN'S SIGNATURE	CH				

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Mirbeau INN & SPA

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174 MAIN ST., BEACON, NEW YORK 12508
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845-440-6926
F: 845-440-6637

SITE LIGHTING PLAN - NORTH

MIRBEAU BEACON

11 MIRBEAU LANE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-13-001258

JOB #:	2021:051
DATE:	3/29/2022
SCALE:	1" = 40'
TITLE:	LP-2
SHEET:	27 OF 29

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

LIGHT FIXTURE SPEC SHEETS:

"B" - BOLLARD FIXTURE:

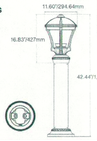
Providence® LED™ – Bollard PROB **(B2, B3, B5)** | TYPE



FEATURES

- Reliable uniform illumination
- Types II, III, IV and V distributions
- 3000K, 4000K, 5000K CCT
- 0-10V dimmable
- 20kV/10kA surge suppression
- Thermal Protection
- 13 standard powder coat finishes
- Die-Cast housing
- Full Cutoff optical system

SPECIFICATIONS



BOTTOM VIEW

- Diameter: 11.60" / 294.64 mm
- Height: 42.44" / 1,078 mm
- Weight: 27 lbs / 12kg
- IP Rating: 66

3000K and warmer CCTs only

ORDERING INFORMATION

1	2	3	4	5	6
PROB	Y2, Y3, Y5	3030	BLT		
Model	Distribution	Lumen Package	Color	Options	Mounting

1. MODEL

PROB	*Providence Bollard LED*

2. DISTRIBUTION

Y2	*Type 2*
Y3	*Type 3*
Y4	*Type 4*
Y5	*Type 5*

3. LUMEN PACKAGE

3050	*5000K CCT, 42 watts*
3040	*4000K CCT, 43 watts*
3030	*3000K CCT, 43 watts*
2050	*5000K CCT, 29 watts*
2040	*4000K CCT, 25 watts*
2030	*3000K CCT, 29 watts*

4. COLOR

BLS	Black Gloss Smooth
BLT	Black Matte Textured
DBS	Dark Bronze Gloss Smooth
DBT	Dark Bronze Matte Textured
GTT	Graphite Matte Textured
LGS	Light Grey Gloss Smooth
LGT	Light Grey Matte Textured
PSS	Platinum Silver Gloss Smooth
VGT	Verde Green Matte Textured
WHS	White Gloss Smooth
WHT	White Matte Textured
CC *	Custom Color

* Consult factory for custom color, matte and corrosive finish

5. OPTIONS

FSI	*Fusing*
DSC	*Dark Sky Cap*
PFC	*Brass Painted Finial*
BPS	*Brass Painted Struts*
LDL	*Lightly Diffused Lens*

6. MOUNTING

FL	*Fluted Shaft 5" DIA.*
RD	*Round Shaft 6" DIA.*
PM	*Pier Mount*

MANUFACTURER TO PROVIDE 80 CRI.

LUMINAIRE PERFORMANCE

Light Engine	Lensing	Distribution	Ordering Code	5000K CCT Delivered Lumens	5000K CCT Efficacy (Lm/W)	5000K CCT BUG Rating B	U	G	4000K CCT Delivered Lumens	4000K CCT Efficacy (Lm/W)	4000K CCT BUG Rating B	U	G	3000K CCT Delivered Lumens	3000K CCT Efficacy (Lm/W)	3000K CCT BUG Rating B	U	G	Average System Watts
				3050					3040					3030					
3000 Series	Clear Lens (Standard)	TYPE 2	Y2	3238	75	1	0	1	3247	76	1	0	1	2975	69	1	0	1	43
		TYPE 3	Y3	3081	75	1	0	1	3070	76	1	0	1	3038	70	1	1	1	
		TYPE 4	Y4	2053	75	1	0	1	3062	76	1	0	1	2960	69	1	0	1	
		TYPE 5	Y5	3148	73	2	0	1	3157	73	2	0	1	2830	67	2	0	1	
	Lightly Diffused Lens	TYPE 2	Y2...LDL	2386	56	1	1	1	2342	54	1	1	1	2092	49	1	1	1	
		TYPE 3	Y3...LDL	2385	57	1	1	1	2341	56	1	1	1	2091	50	1	1	1	
		TYPE 4	Y4...LDL	2296	53	1	2	1	2252	52	1	2	1	2013	47	1	2	1	
		TYPE 5	Y5...LDL	2334	52	1	1	1	2193	51	1	1	1	1959	46	1	1	1	

architectural area lighting
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16556 East Gale Ave | City of Industry | CA 91745
P 626.968.5666 | F 626.369.2695 | www.aal.net

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JOB
TYPE
NOTES

1 | 1

"M" - MEDIUM POST TOP FIXTURE:

architectural area lighting **(P2-16, P3-16, P4W-16, P5Q-16)**

DATE: 5-1-22 | LOCATION: BEACON, NY
TYPE: 2,3,4,5Q | PROJECT: MIRBEAU SPA AT HOWLAND ESTATE
CATALOG #:

PROV2 ON 4" FLUTED ALUM. POLES W/ LENS HEIGHT OF 16' ABOVE GRADE.

PROV2
ARCHITECTURAL AREA/SITE

PROVIDENCE®



Providence Medium

RELATED PRODUCTS
PROL2 PROL2-LK PROS PROB

FEATURES

- Reliable, uniform, glare free illumination
- Types 1, 2, 3, 4W, 5Q, and 5W distributions
- Ambient, 3000K, 4000K, 5000K CCT
- 0-10V dimming ready
- Integral Surge protection: 10k in parallel, 20k in series
- Upgrade Kits

DELIVERED LUMENS

The table below shows the delivered lumens for the various lumen outputs and beam distributions. Use this chart in connection with the lumen factor (LF) capability to deliver any output required.

LED #	Drive Current	Lumen Package	Lens	Distribution	3000K 70CRI Lumen	3000K 70CRI Bug Rating B	U	G	3000K 70CRI Efficacy (Lm/W)	4000K 70CRI Lumen	4000K 70CRI Bug Rating B	U	G	4000K 70CRI Efficacy (Lm/W)	5000K 70CRI Lumen	5000K 70CRI Bug Rating B	U	G	5000K 70CRI Efficacy (Lm/W)
36	295	450mA Microcosm Equivalent	None	1	3807	1	0	1	114	3960	1	0	1	118	4123	1	0	1	123
				2	3596	1	0	1	105.4	3740	1	0	1	109.7	3899	1	0	1	114.3
				3	3471	1	0	1	101.8	3611	1	0	1	105.9	3764	1	0	1	110.4
				4W	3501	1	0	1	102.7	3642	1	0	1	106.8	3796	1	0	1	111.3
				1-HS	2355	0	0	1	69.1	2450	0	0	1	71.8	2554	0	0	1	74.9
				2-HS	2049	0	0	1	60.1	2132	0	0	1	62.5	2222	0	0	1	65.2
				3-HS	1981	0	0	1	58.1	2061	0	0	1	60.4	2149	0	0	1	63.0
				4W-HS	2044	0	0	1	59.9	2126	0	0	1	62.3	2216	0	0	1	65.0
				5Q	3818	2	0	1	112.0	3971	2	0	1	116.5	4140	2	0	1	121.4
				5W	3529	2	0	1	103.5	3670	2	0	1	107.6	3825	2	0	1	112.2
			Clear	1-CL	3242	1	0	1	95.0	3373	1	0	1	98.8	3516	1	0	1	103.0
				2-CL	3062	1	0	1	89.7	3186	1	0	1	93.3	3321	1	0	1	97.3
				3-CL	2957	1	0	1	86.6	3075	1	0	1	90.1	3206	1	0	1	93.9
				4W-CL	2982	1	0	1	87.4	3102	1	0	1	90.9	3233	1	0	1	94.7
				1-CL-HS	2006	0	0	1	58.8	2087	0	0	1	61.1	2175	0	0	1	63.7
				2-CL-HS	1746	0	0	1	51.1	1816	0	0	1	53.2	1893	0	0	1	55.5
				3-CL-HS	1688	0	0	1	49.4	1755	0	0	1	51.4	1830	0	0	1	53.6
				4W-CL-HS	1740	0	0	1	51.0	1810	0	0	1	53.0	1887	0	0	1	55.3
				5Q-CL	3252	2	0	1	95.3	3382	2	0	1	99.1	3526	2	0	1	103.3
				5W-CL	3005	2	0	1	88.1	3126	2	0	1	91.6	3259	2	0	1	95.5
			Diffused	1-DL	2243	1	0	1	65.8	2334	1	0	1	68.4	2433	1	0	1	71.3
				5W-DL	2280	1	0	1	66.9	2372	1	0	1	69.6	2473	1	0	1	72.5

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HUBBELL Lighting

architectural area lighting

DATE: 5-1-22 | LOCATION: BEACON, NY
TYPE: 2,3,4,5Q | PROJECT: MIRBEAU SPA AT HOWLAND ESTATE
CATALOG #:

PROV2
ARCHITECTURAL AREA/SITE

ORDERING GUIDE

Example: PROV2-35L-325-3K7-4W-BL-SLA1-DF-HS-ADS-UNV

CATALOG #

HOUSING

PROV2

Housing	LED Quantity	Lumen output	CCT/CRI	Distribution	Finish
PROV2 Providence Medium 20"	06L 36 LED	295 450mA Microcosm Equivalent 325 525mA, 6500 Lumens 510 510mA, 6500 Lumens 525 700mA Microcosm Equivalent 615 615mA, 7500 Lumens	AM8 * Amber 595nm Peak 3K7 3000K, 70 CRI 4K7 4000K, 70 CRI 5K7 5000K, 70 CRI Contact factory for options listed below: 27K8 2700K, 80 CRI (10 or 90 CRI for standard color temperatures	1 Type I 2 Type II 3 Type III 4W Type IV Wide 5Q Type V Square 5W Type V Wide	BLS Black Gloss Smooth BLT Black Matte Textured DBS Dark Bronze Gloss Smooth DBT Dark Bronze Matte Textured GTT Graphite Matte Textured LGS Light Grey Gloss Smooth LGT Light Grey Matte Textured PSS Platinum Silver Gloss Smooth VGT Verde Green Matte Textured WHS White Gloss Smooth WHT White Matte Textured Color Option CC * Custom Color

MANUFACTURER TO PROVIDE 80 CRI.

Mounting	Optional Lens	Options	Mounting Options	Voltage
Pole Mount STND...MNT * Standard Mount PT2S 2 3/8" tenon PT3 3" tenon PT4 4" tenon Arm Mount SLA1 4" pole or tenon SLABU-4 4" pole or tenon SLABU-5 4" pole or tenon TRASU-4 4" pole or tenon TRABU-4 4" pole or tenon TRASU-5 5" pole or tenon TRABU-5 5" pole or tenon TRASB-5 5" pole or tenon TRASD-5 5" pole or tenon Wall Mount WMAS Wall Mount WMAB Wall Mount Pier Mount PMB Pier Mount 1 PMD Pier Mount 2 PMS Pier Mount 3	CL Clear Lens DL * Diffused Lens	HS * * House Side Shield PFIN Brass Colored Finial SPK Cast Spikes BPS Brass Colored Struts SF Single Fuse (120, 277) DF Double Fuse (208, 240)	ADS Adapter 5" OD Pole PCA-C Photocontrol Adapter Contemporary EPA-C Egress Adapter Contemporary	UNV 120-277V

BRASS SPIKES & BRASS FINIALS.

DIMENSIONS



Notes:
1 Tunle Friendly
2 Diffused Lens is available only with T3 and T5W distribution
3 House side Shield is available only with T1, T2, T3 and T4W distributions
4 Consult factory for custom color, matte and corrosive finish options
5 Contact Factory for additional glare shield options
6 Slide over 4" OD Pole

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HUBBELL Lighting

"S" - SMALL POST TOP FIXTURE:

architectural area lighting **(P3-10, P4-10, P5-10)**

DATE: 5-1-22 | LOCATION: BEACON, NY
TYPE: 3,4,5Q | PROJECT: MIRBEAU SPA AT HOWLAND ESTATE
CATALOG #:

PROS ON 4" FLUTED ALUM. POLES W/ LENS HEIGHT OF 10' ABOVE GRADE.

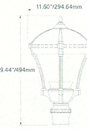
PROS
ARCHITECTURAL AREA/SITE

PROVIDENCE®

FEATURES

- Reliable, uniform, glare free illumination
- Types II, III, IV and V distributions
- 3000K, 4000K, 5000K CCT
- 0-10V dimming ready
- Integral surge suppression
- 15 standard powder coat finishes
- Upgrade Kits

DIMENSIONS





Providence Small

RELATED PRODUCTS
PROL2 PROV2

ORDERING GUIDE

Example: PROS-Y3-3030-BLS-BPS-WMA590

CATALOG #

HOUSING

PROS

Housing	Distribution	Lumen Package	Finish	Options	Mounting
PROS Providence Small LED	Y2 Type II Y3 Type III Y4 Type IV Y5 Type V	2030 4000K CCT 25 watts 2040 4000K CCT 25 watts 2050 5000K CCT 25 watts 3030 3000K CCT 43 watts 3040 4000K CCT 43 watts 3050 5000K CCT 43 watts	BLS Black Gloss Smooth BLT Black Matte Textured DBS Dark Bronze Gloss Smooth DBT Dark Bronze Matte Textured GTT Graphite Matte Textured LGS Light Grey Gloss Smooth LGT Light Grey Matte Textured PSS Platinum Silver Gloss Smooth VGT Verde Green Matte Textured WHS White Gloss Smooth WHT White Matte Textured Color Options CC Custom Color *	FSI Fusing PFIN Brass Painted Finial SPK Brass Painted Spike BPS Brass Painted Struts LDL Lightly diffused lens AD4 Adapter used only with standard AAL arms and post top; mount fixtures to slip over a 4"OD/arm O.D. pole	Standard Mount Size over a 3"/75mm pole or may choose one Wall Mount WMA590 Mount down WMA59U Mount up Pole Mount/Side Mounts TRA590 Mount down TRA59U Mount up

MANUFACTURER TO PROVIDE 80 CRI.

DELIVERED LUMENS

The table below shows the delivered lumens for the various lumen outputs and beam distributions. Use this chart in connection with the lumen factor (LF) capability to deliver any output required.

System Watts	Lumen Package	Lens	Distribution	3000K 70CRI Lumen	3000K 70CRI Bug Rating B	U	G	3000K 70CRI Efficacy (Lm/W)	4000K 70CRI Lumen	4000K 70CRI Bug Rating B	U	G	4000K 70CRI Efficacy (Lm/W)	5000K 70CRI Lumen	5000K 70CRI Bug Rating B	U	G	5000K 70CRI Efficacy (Lm/W)
25	2000	Clear Lens (Standard)	Type 2	1792	1	0	1	72	1957	1	0	1	78	1951	1	0	1	78
			Type 3	1830	1	0	1	73	1970	1	0	1	79	1958	1	0	1	78
			Type 4W	1793	0	0	1	72	1967	0	0	1	78	1960	0	0	1	78
			Type 5	1735	1	0	1	69	1894	1	0	1	76	1889	1	0	1	76
		Lightly Diffused Lens	Type 2	1216	1	1	1	49	1361	1	1	1	54	1387	1	1	1	55
			Type 3	1216	1	1	1	49	1361	1	1	1	54	1386	1	1	1	55
			Type 4W	1298	1	1	1	52	1417	1	1	1	57	1419	1	1	1	57
			Type 5	1139	1	1	1	46	1275	1	1	1	51	1259	1	1	1	52

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HUBBELL Lighting

POST TOP FIXTURES POLE:

DB1 – Decorative Pole TYPE POST TOP FIXTURES (P1, P2, P3, P4 and P5)

4" ROUND (RD) & FLUTED (FL) DECORATIVE BASE

Note: Adjust pole heights on site to set lenses at heights per plan (10' & 16')

1. BASE | 2. POLE | 3. OAH | 4. COLOR | 5. OPTIONS/ACCESSORIES



DB1

TYPE

DIMENSIONS

MAXIMUM ALLOWABLE EPA (MPH)

1. BASE	2. POLE	3. OAH	SHAFT	WT	85	90	100	110	120	130	140	150
DB1	4RD-12S	12' (3.7m)	4" RD x .125"	44	19.4	17.1	13.5	10.8	8.9	7.4	6.3	5.5
DB1	4RD-12S	12' (3.7m)	4" RD x .125"	48	15.3	13.4	10.5	8.3	6.7	5.6	4.7	4.0
DB1	4RD-12S	12' (3.7m)	4" RD x .125"	51	13.3	10.7	8.2	6.3	5.0	4.1	3.4	2.9
DB1	4RD-12S	12' (3.7m)	4" RD x .125"	55	10.0	8.6	6.4	4.8	3.6	2.9	2.4	2.0
DB1	4RD-20S	20' (6.1m)	4" RD x .226"	55	23.8	21.0	16.7	13.5	11.1	9.3	8.0	6.9
DB1	4RD-20S	20' (6.1m)	4" RD x .226"	61	19.2	16.9	13.3	10.6	8.6	7.2	6.1	5.3
DB1	4RD-20S	20' (6.1m)	4" RD x .226"	67	15.9	13.9	10.8	8.4	6.8	5.6	4.7	4.0
DB1	4RD-20S	20' (6.1m)	4" RD x .226"	74	12.4	12.3	9.4	7.3	5.7	4.7	4.0	3.3
DB1	4FL-18S	18' (5.5m)	4" FL x .188"	51	22.1	19.5	15.4	12.4	10.2	8.5	7.1	6.1
DB1	4FL-18S	18' (5.5m)	4" FL x .188"	56	17.6	15.4	12.1	9.6	7.7	6.4	5.3	4.4
DB1	4FL-18S	18' (5.5m)	4" FL x .188"	61	14.3	12.5	9.6	7.5	5.9	4.8	3.9	3.2
DB1	4FL-18S	18' (5.5m)	4" FL x .188"	67	11.7	10.1	7.6	5.8	4.4	3.5	2.7	2.2

Note: Overall height is measured to top of pole.

2. COLOR

BLS	Black Gloss Smooth
BLT	Black Matte Textured
DBS	Dark Bronze Gloss Smooth
DBT	Dark Bronze Matte Textured
GTT	Graphite Matte Textured
LGS	Light Grey Gloss Smooth
LGT	Light Grey Matte Textured
PSS	Platinum Silver Smooth
VGT	Verde Green Textured
WHS	White Gloss Smooth
WHT	White Matte Textured
Color Option	
CC *	Custom Color

* Consult factory for custom color, matte and corrosive finish options

3. OPTIONS / ACCESSORIES

FH (Flag holder. Specify location on pole)
FS1 (Single weatherproof fuse holder. Fuse by others.)
FS2 (Double weatherproof fuse holder. Fuse by others.)
LR (Ladder rest. Slips over a 4" O.D. pole.)
PCA-T (Rotatable photocell housing. The housing slips over a 4" 100mm od. pole. A fixture is supplied with the 4" 100mm O.D. tenon. Includes a stainless steel twist lock receptacle, and a clear acrylic lens with integral lens and stainless steel feet. Add as "-T" (3" min tenon) to overall height of the pole. Fixture assembly/Pre-wired on the back side and line side for easy installation. Photocell by others.)
PCR (Lowers the twist lock photocell receptacle with the attached post top. Secure to the top of the pole with three stainless steel set screws. Photocell by others.)
PLT (Plant Hanger. For 4" O.D. poles. Specify location on pole)
RDC (Installs a mounting receptacle housing, integral lay wire leads to the pole including a duplex NEMA approved clear weather proof cover. Does not include a receptacle or internal wiring.)

SPECIFICATIONS

Base shall be cast aluminum #356 alloy, free of any porosity, foreign materials, or cosmetic fillers. Base casting shall be heat treated to a T-6 condition, and of uniform wall thickness, with no warping or mold shifting.

WARNINGS

Caution must be exercised in the selection of a design wind speed when the pole is to be installed in a special wind region (as indicated by the wind map) or in an area where wind speed is unpredictable.

AAL recommends consulting a local engineer when the pole is to be installed in an area that may be subject to extreme weather and exposure.

Poles installed on structures such as buildings and bridges may be subjected to vibration, oscillations, and other fatigue effects which are not covered by the AAL warranty.

The use of banners or other appendages can severely affect the loading of a pole. No banner or other appendage should be attached to an AAL pole unless approved by AAL.

If the products are to be used on an existing foundation or on other structures, the customer assumes all responsibility for the structural integrity of the existing foundation, anchorage or structures and all the consequences arising therefrom

CAUTION

Poles should never be erected without the luminaire installed.

Anchor bolts shall be not dip galvanized steel. Six galvanized hex nuts and flat washers, and a bolt circle template shall be provided. Anchor bolt for poles are 3/4" x 24" x 3".

CERTIFICATION

Certified UL 1598 in accordance with Article 410 of ANSI/NFPA 70, National Electrical Code.

architectural area lighting
ARCHITECTURAL AREA LIGHTING
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JOB
TYPE
NOTES

1 | 1

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE 14 DAY OF MAY 20 24 SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS 1st DAY OF July 20 24, BY

CHAIRMAN

SECRETARY

IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.

See Sheet LP-2 for Lighting Schedule/Computations and Light Pole Base Detail.

GRAPHIC SCALE
40 20 0 40
SCALE IN FEET

Dig Safely. New York Call 811 before you dig

DRAWN BY: HT/CH/DW				CHECKED BY: HT			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	2/27/24	AMENDED SITE PLAN	HT				
2	3/26/24	PER PB COMMENTS					
3	6/10/24	FOR CHAIRMAN'S SIGNATURE	CH				

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LRC GROUP
85 Civic Center Plaza, Suite 204
Poughkeepsie NY 12601
Tel: 845.243.2880
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13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845-440-6926
F: 845-440-6637

SITE LIGHTING PLAN – SOUTHEAST

MIRBEAU BEACON

11 MIRBEAU LANE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-13-001258

JOB #:	2021:051
DATE:	3/29/2022
SCALE:	1" = 40'
TITLE:	LP-3
SHEET:	28 OF 29

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

City of Beacon Planning Board Agenda
07/14/2026

Title:

Certificate of Appropriateness: 213 Main Street, Sign

ATTACHMENTS

213 Main PB 7.14.26 ARB app redacted2.pdf

ARCHITECTURAL REVIEW BOARD APPLICATION

Date: June 16 2026

Project Address: 213 Main st, Beacon, NY 12508

Project Architect/Engineer: Hardy 11 Corp

Owner/Builder: Saigon Pho VN LLC

Contact Phone No. [redacted] Email: [redacted]

Approval Requested: ✓ Certificate of Appropriateness (sign or façade change) _____ New Single-Family House

Color/Materials:

Received:
JUN 17 2026 MP
City of Beacon
Building/Planning/Zoning

Siding: _____

Roofing: _____

Windows: Color: _____ Type: _____

Trim: _____

Garage Door: _____

Stone/Brick: _____

_____
Signature of Owner

Applications for sign approval must also submit a sign permit application & supporting documents

FOR OFFICE USE ONLY:

The Architectural Review Board has reviewed the plans submitted for approval for the project listed above and has determined:

Plan Denied _____
(Date)

Plan Approved _____
(Date)

Subject to the following:

_____

_____

FEE: $100.00

BUILDING DEPARTMENT

City of Beacon

Approved: _____ 20____

Disapproved: _____ 20____

_____

Building Inspector

Application for Sign Permit

Date: June 16 2026

Address of Sign: 213 Main Str, Beacon, NY 12508

Property Owner

Name: Saigon Pho Vn LLC **Phone:** [redacted]

Address: 213 Main str, Beacon, NY 12508

Business Owner

Name of Business Owner: Saigon Pho Restaurant LLC **Phone:** [redacted]

Name of Business: 213 Main str, Beacon, NY 12508

Sign Company

Name: _____ **Phone:** _____

Address: _____

Type of Sign:

_____ **Ground ($35)** ✓ **Wall ($25)** _____ **Temporary Sign ($10)**

Sign Content: Saigon Pho Restaurant

Height of Sign (if Applicable): _____ **Sign Dimensions:** H 15 x W 23

Type of Materials to be Used: Plastic

Means of Anchoring: Wall

APPLICATION IS HEREBY MADE to the Building Department for the issuance of a Sign Permit pursuant to the City of Beacon Code of Ordinances. The applicant agrees to comply with all applicable laws, ordinances, and regulations.

_____

(Signature of Property Owner)

City of Beacon
Building Department

APPLICATION PROCESSING RESTRICTION LAW
Affidavit of Property Owner

Property Owner: Phat Nguyen Saigon Pho VN LLC
(Applicant)

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

Phat Nguyen

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

213 Main St, Beacon, NY 12508

Applicant Address: 2 Carmella Rd, highland NY 12528
Project Address: 213 Main St, Beacon, NY 12508
Project Tax Grid #:
Type of Application:

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

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

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

Signature of Owner

Owner
Title if owner is corporation

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

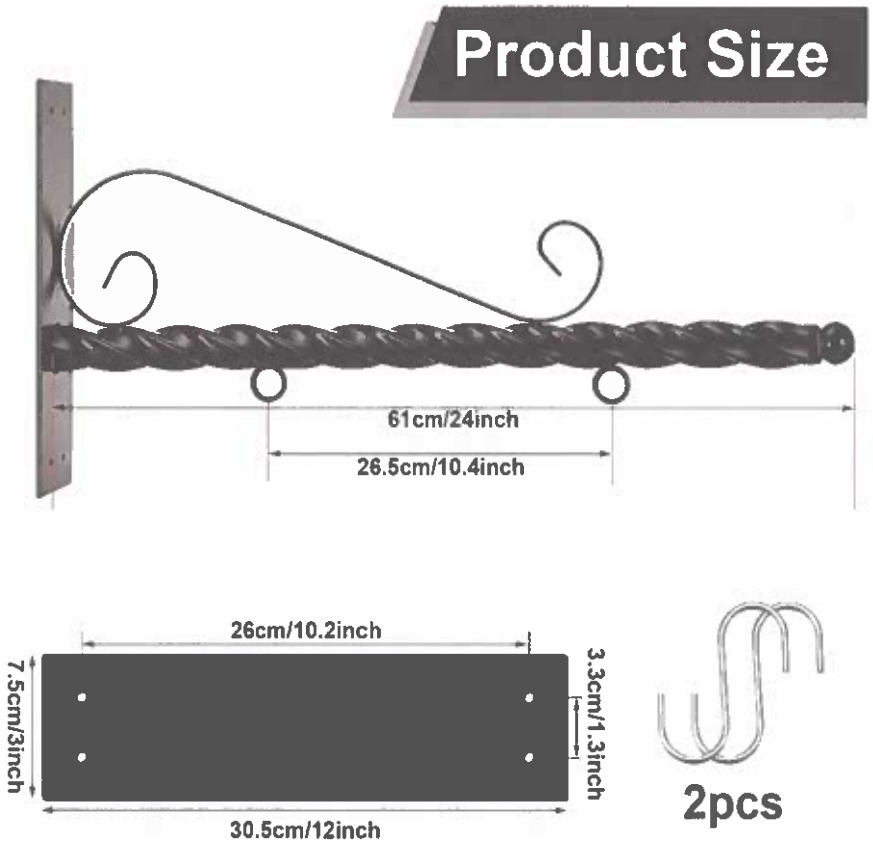
22:53

Search or ask a question

Slatwall Sign 11"w x 18"h x 1/2"d Clear Acrylic Slat Wall Picture...
$72.45
Sponsored

Otoolling
Visit the Store
4.5 ★★★★☆ (9)

24" Modern Clean Simple Design Hanging Sign Bracket Mounting Arms Sign Hanger for Home Office Classroom



Set a deal alert for Prime Day | How difficult is installatio

Number of Items: 1

23½"

15½"
1' 3½"

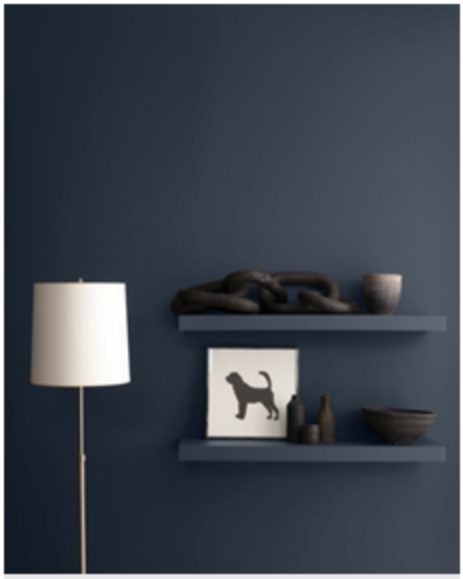
780


BJ's Restaurant
Current



PAINT COLOR # 1
BENJAMIN MOORE
HALE NAVY
HC-154

Link to supplier



Hale Navy HC-154
benjaminmoore.com


SAIGON PHO
RESTAURANT



City of Beacon Planning Board Agenda
07/14/2026

Title:

New Single-Family House: Rombout Avenue (Tax Grid #5954-35-854793)

ATTACHMENTS

Rombout Ave 854793 PB 7.14.26 ARB app and plans.pdf

ARCHITECTURAL REVIEW BOARD APPLICATION

Date: 29 June 2026

Project Address: Rombout Ave (No street number assigned, located between 160 Rombout Ave. and 43 S. Cedar)

Project Architect/Engineer: Studio vAA, 18 Clinton St. Wappingers Falls, NY 12590

Owner/Builder: Anthony Williamson/Giovanna Fichera - Builder: Anthony Hardisty/Hardy II Corp

Contact Phone No.: 914-475-0076 Email: studiovaa@gmail.com

Approval Requested: _____ Certificate of Appropriateness (sign or façade change) X New Single-Family House

Color/Materials:

Siding: Acre shiplap siding by Modern-Mill

Roofing: Versiguard EPDM membrane

Windows: Color: Black Type: Signature Series Aluminum Clad Wood Windows by Weathershield

Trim: Fly-ash trim boards, painted Jet Black Benjamin Moore -2119-10

Garage Door: Clopay Avante style - anodized black with gray tinted glass

Stone/Brick: Black Brick accent - Piave Raw by Glen-Gery

Signature of Owner

Applications for sign approval must also submit a sign permit application & supporting documents

FOR OFFICE USE ONLY:

The Architectural Review Board has reviewed the plans submitted for approval for the project listed above and has determined:

Plan Denied _____
(Date)

Plan Approved _____
(Date)

Subject to the following:

FEE: $100.00

Williamson/Fichera Proposed Exterior Products

Siding

ACRE™ BY MODERN-MILL
SHIPLAP SIDING



ACRE Shiplap Siding is a sustainable, durable alternative with the genuine look and feel of real wood. ACRE is lightweight, strong, water-resistant and guaranteed not to rot or splinter.

ACRE is easy to cut, fasten without pre-drilling, rout, thermoform and accepts paint or stain without primer.

Best of all, ACRE is made without harming a single tree, in a zero-waste environment in the U.S.A. ACRE helps protect your home and our world.

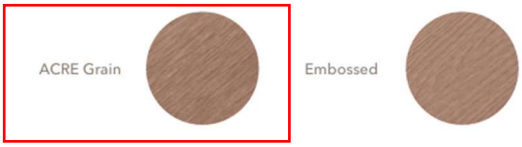


SHIPLAP SIDING PROFILE DETAILS

Nominal Size	Actual Thickness (A)	Actual Width (B)	Reveal (C)	Tongue (D)	Gap (E)	Lengths
1"x6"	3/4"	5-7/16"	4-1/2"	1-3/16"	1/4"	12', 16', 20'
1"x8"	3/4"	7-3/16"	6-1/4"	1-3/16"	1/4"	12', 16', 20'
1"x10"	3/4"	9-3/16"	8-1/4"	1-3/16"	1/4"	12', 16', 20'

– Locking tongue and groove application for a flat and straight install

AESTHETIC



Windows and Patio Doors

WEATHER SHIELD. WINDOWS & DOORS

WINDOWS DOORS COLLECTIONS SOLUTIONS INSPIRATION RESOURCES WHY WS



SIGNATURE SERIES DOUBLE HUNG

Our Signature Series double hung windows boast innovative design and increased comfort in every state-of-the-art element. With two operating sash, these windows can be raised from the bottom and lowered from the top to maximize ventilation, in addition to tilting in for cleaning.



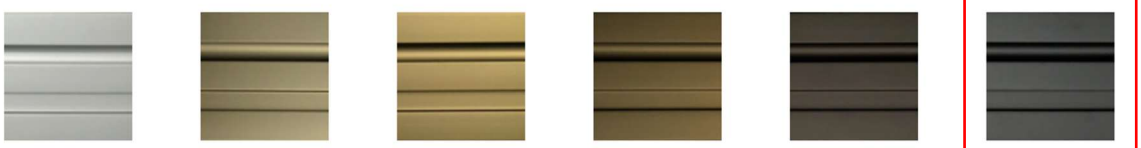
SIGNATURE SERIES CASEMENT

With a unique design that features a side-hinge and a hand crank to open, our casement windows offer the perfect blend of aesthetic appeal and ease of use. Crafted using our Tricore™ Frame Technology, casement windows provide exceptional energy efficiency and come in finish options to perfect the look of your home.

EXTERIOR OPTIONS

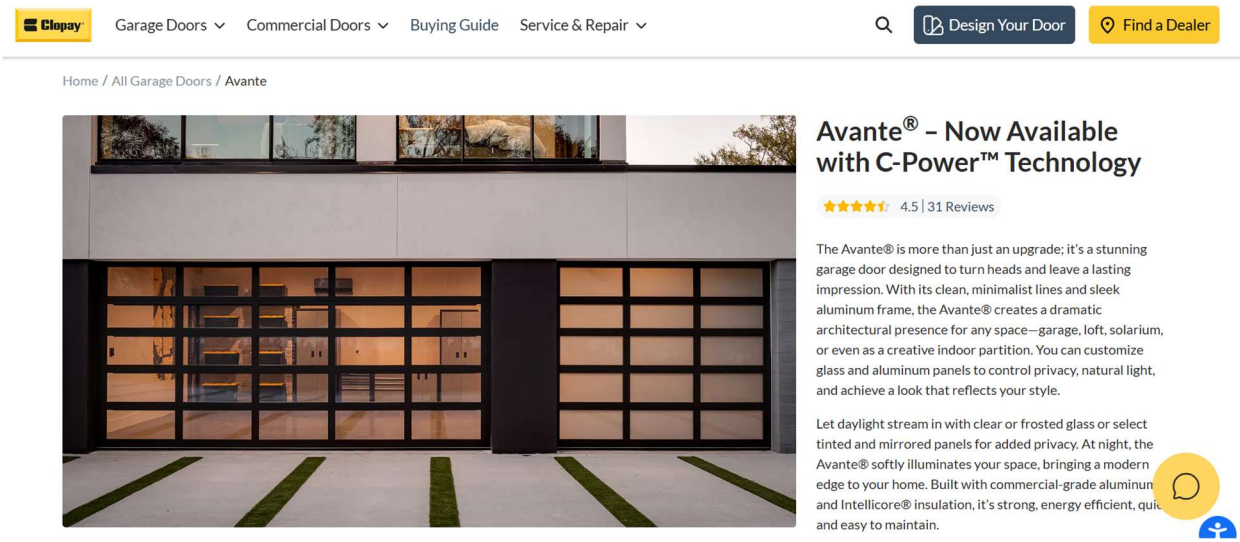
To help you get the exact look you desire, we offer an ever expanding palette of durable and distinctive exterior color options rated to the highest industry standards for color retention. Finishes and colors shown may not be actual representations. Please visit authorized Weather Shield dealer for color samples.

ANODIZED ALUMINUM FINISHES



CLEAR CHAMPAGNE LIGHT BRONZE MEDIUM BRONZE DARK BRONZE BLACK

Garage Door





NEW – C-Power Technology –Clear/White Opaque*



NEW – C-Power Technology – Gray Clear/Gray Opaque*



Gray Tinted Glass



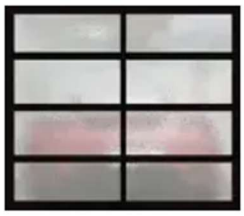
Bronze Tinted Glass



Clear Glass



Mirrored Glass



Obscure Glass



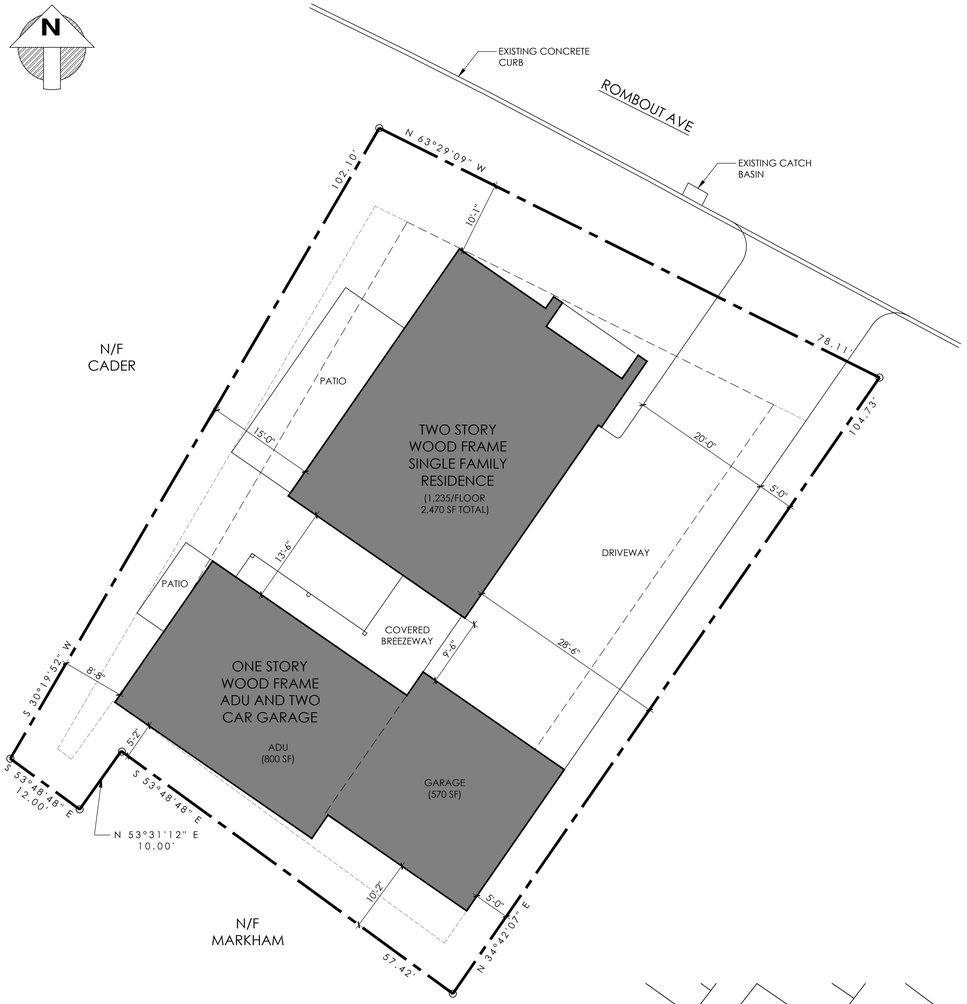
White Laminate Glass

Brick Accent – Glen-Gery



Piave Raw

Save Product Compare Brick



1 C01 SCHEMATIC SITE PLAN

SCALE: 1" = 10'-0"

SITE PLAN BASED ON SURVEY PROVIDED BY:
BADEY AND WATSON,
SURVEYING AND ENGINEERING D.P.C.
3063 ROUTE 9
COLD SPRING, NY 10516
DATE JUNE 2, 2026



LOCATION MAP

CITY OF BEACON 223-17 SCHEDULE OF DIMENSIONAL REGULATIONS ZONE R 1-5												
	MIN. LOT AREA SIZE AREA				MIN. YARDS (FEET)			MIN. DISTANCE BETWEEN BUILDINGS ON THE SAME LOT	MAX. HEIGHT MAIN BUILDING (STORIES/FEET)	MAX. % BUILDING COVERAGE	MAX. NUMBER OF UNITS PER BUILDING	MIN. OPEN SPACE
	AREA (SQUARE FEET)	PER UNIT (SQUARE FEET)	WIDTH (FEET)	DEPTH (FEET)	FRONT (FEET)	SIDE (FEET)	REAR (FEET)					
REQUIRED	5,000	2,500	50	100	10	10	20	-	2.5/35	40%	2	-
EXISTING/PROPOSED	7,393.25	3,696.625	70.25	92.41	10	15/28.5	42.833'	N/A	2/25.166	38.9%	1	N/A



A - 178 ROMBOUT AVE.



B - 43 S. CEDAR ST.



C - 160 ROMBOUT AVE.



D - 181 ROMBOUT AVE



E - 177 ROMBOUT AVE.



F - 1 JAMES ST

WILLIAMSON/FICHERA RESIDENCE

ROMBOUT AVE
BEACON, NY 12508

REGISTERED ARCHITECT BRYAN PATRICK COSGRIFF 037162 STATE OF NEW YORK

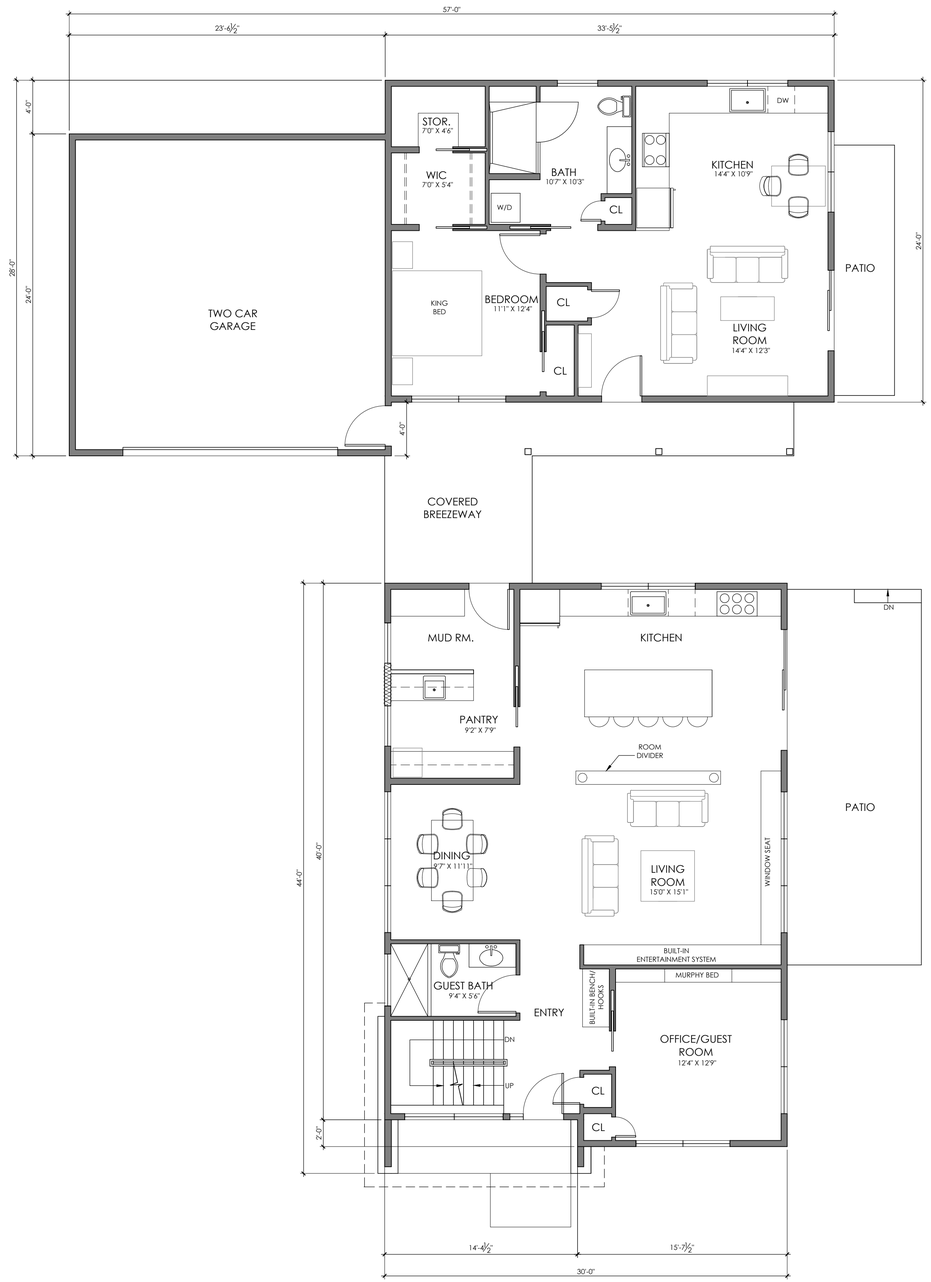
studio vAA
18 CLINTON STREET
WAPPINGERS FALL, NY 12590
T 914 475 0076
studiovaa@gmail.com

#	REVISION	DATE
1	ARCHITECTURAL REVIEW	06.28.26

SHEET TITLE:
SITE PLAN
NEIGHBORING HOUSES

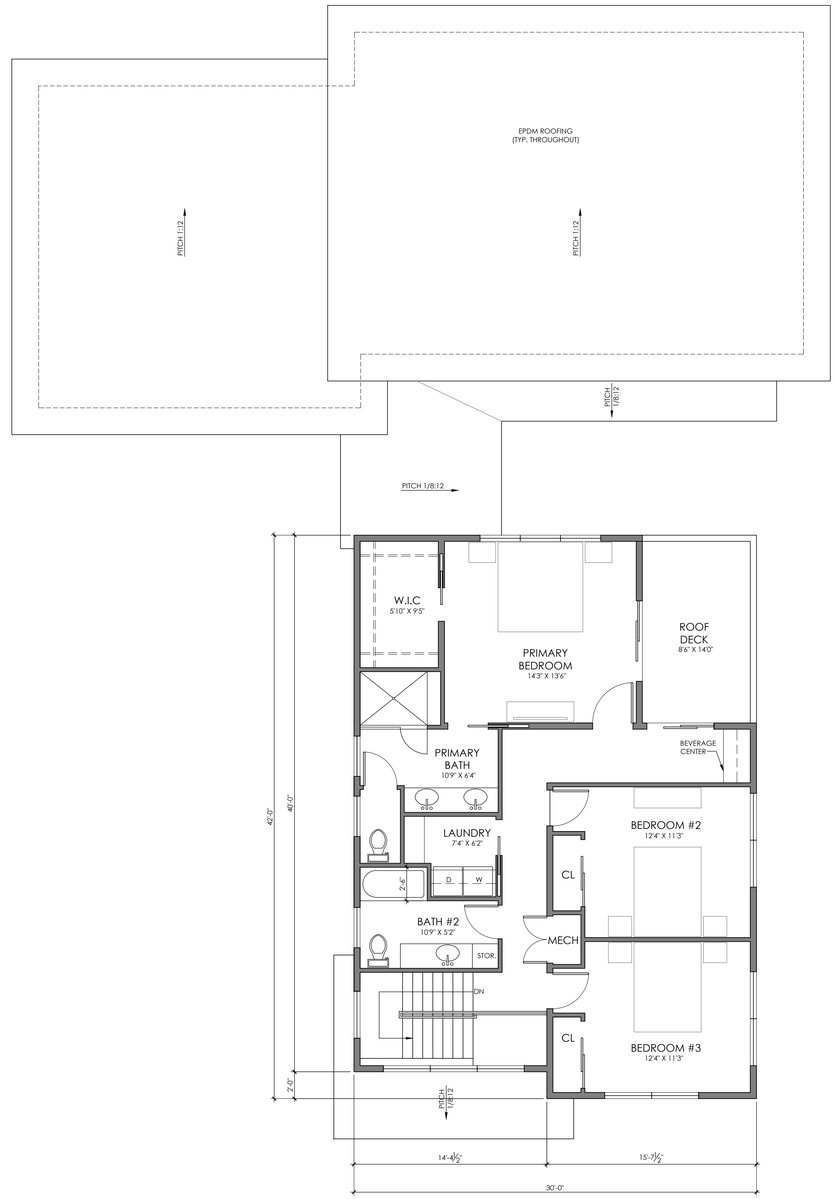
SCALE: AS NOTED
DATE: 28 JUNE 2026
PROJECT NUMBER: 2501
SHEET NUMBER: DD01

© 2026 STUDIO VAA



1 A01 **FIRST FLOOR PLAN**

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



2 A01 **SECOND FLOOR PLAN**

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

WILLIAMSON/FICHERA RESIDENCE

ROMBOUT AVE
BEACON, NY 12508

REGISTERED ARCHITECT
BRIAN PATRICK CORRIGAN
037162
STATE OF NEW YORK

studio vAA
18 CLINTON STREET
WAPPINGERS FALL, NY 12590
T: 914 475 0076
studiovaa@gmail.com

#	REVISION	DATE
1	ARCHTIECTURAL REVIEW	6.28.26

SHEET TITLE:
FLOOR PLANS

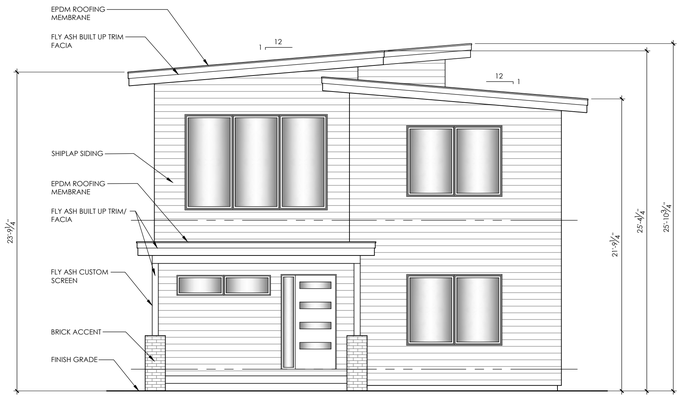
SCALE: AS NOTED
DATE: 28 JUNE 2026
PROJECT NUMBER: 2501
SHEET NUMBER: DD02

© 2026 STUDIO VAA

WILLIAMSON/FICHERA RESIDENCE

ROMBOUT AVE
BEACON, NY 12508

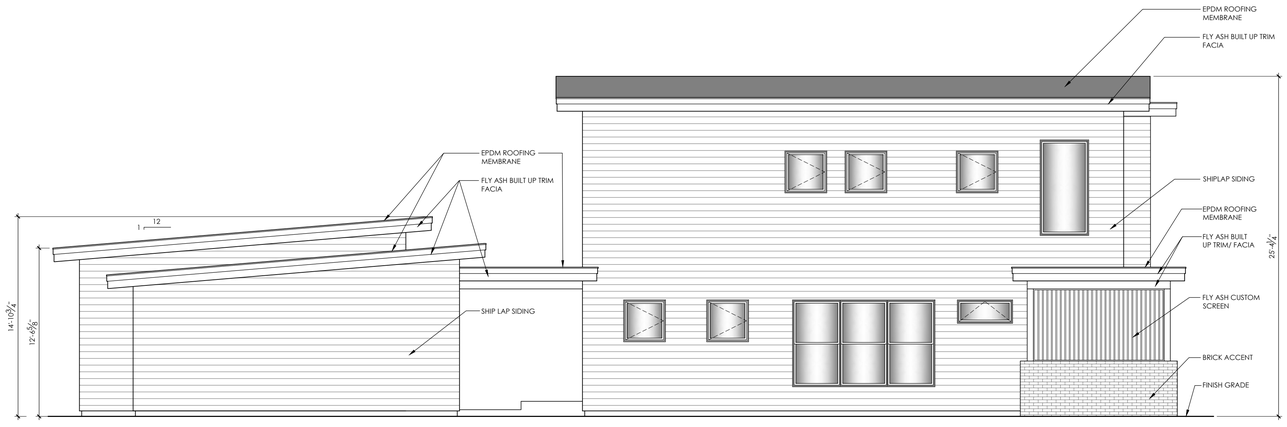
EXTERIOR FINISHES	
SIDING	PRODUCT: COMPOSITE SHIPLAP MANUF: MODERN-MILL COLOR: ACRE
EPDM ROOFING	PRODUCT: VERSIGUARD MEMBRANE MANUF: VERSICO COLOR: BLACK
TRIM/SOFFITS	PRODUCT: FLY-ASH COMPOSITE MANUF: BORAL FINISH: PAINTED COLOR: BENJAMIN MOORE SPACE BLACK 2119-10
WOOD WINDOW AND PATIO DOOR UNITS	PRODUCT: SIGNATURE SERIES ALUMINUM CLAD WOOD MANUF: WEATHERSHIELD FINISH: FACTORY COLOR: BLACK
BRICK ACCENT	PRODUCT: PIAVE RAW MANUF: GLEN-GERY FINISH: FACTORY COLOR: BLACK
GARAGE DOOR	PRODUCT: AVENTE MANUF: CLOPAY FINISH: FACTORY COLOR: ANODIZED BLACK/GRAY TINTED GLASS



1 / A01 NORTH ELEVATION

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





2 / A01 EAST ELEVATION

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



REGISTERED ARCHITECT
BRIAN PATRICK CORRIGAN
037162
STATE OF NEW YORK

studio vAA
18 CLINTON STREET
WAPPINGERS FALL, NY 12590
T 914 475 0076
studiovaa@gmail.com

#	REVISION	DATE
1	ARCHTIECTURAL REVIEW	6.28.26

SHEET TITLE:
EXTERIOR ELEVATIONS
& RENDERINGS
EXTERIOR FINISHES

SCALE: AS NOTED

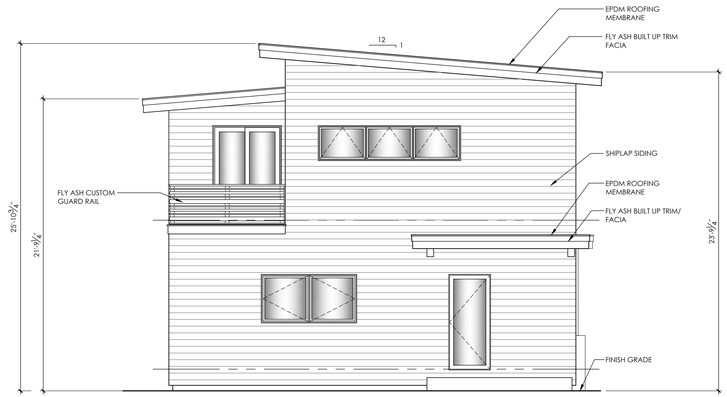
DATE: 28 JUNE 2026

PROJECT NUMBER: 2501

SHEET NUMBER: DD03

© 2026 STUDIO VAA

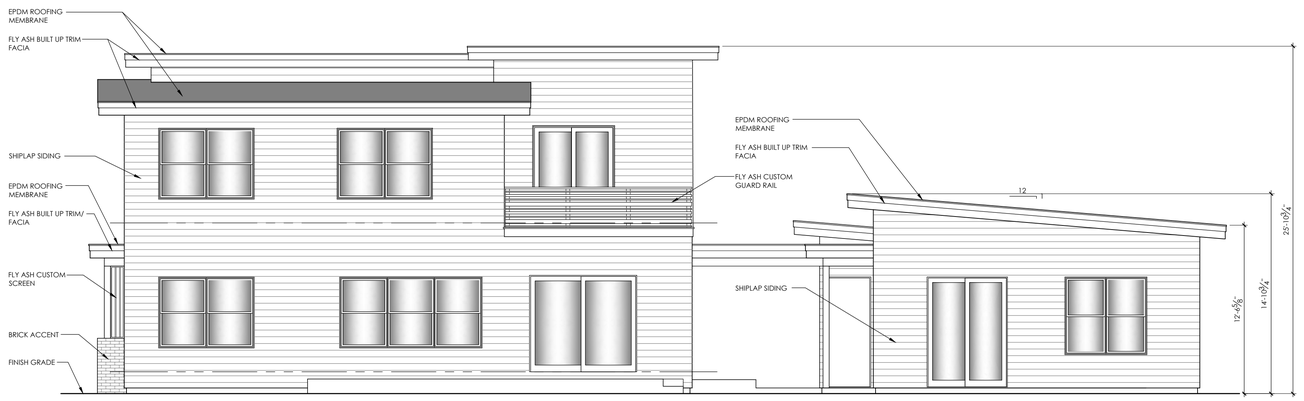
EXTERIOR FINISHES	
SIDING	PRODUCT: COMPOSITE SHIPLAP MANUF: MODERN-MILL COLOR: ACRE
EPDM ROOFING	PRODUCT: VERSIGUARD MEMBRANE MANUF: VERSICO COLOR: BLACK
TRIM/SOFFITS	PRODUCT: FLY-ASH COMPOSITE MANUF: BORAL FINISH: PAINTED COLOR: BENJAMIN MOORE SPACE BLACK 2119-10
WOOD WINDOW AND PATIO DOOR UNITS	PRODUCT: SIGNATURE SERIES ALUMINUM CLAD WOOD MANUF: WEATHERSHIELD FINISH: FACTORY COLOR: BLACK
BRICK ACCENT	PRODUCT: PIAVE RAW MANUF: GLEN-GERY FINISH: FACTORY COLOR: BLACK
GARAGE DOOR	PRODUCT: AVENTE MANUF: CLOPAY FINISH: FACTORY COLOR: ANODIZED BLACK/GRAY TINTED GLASS



1 A01 SOUTH ELEVATION

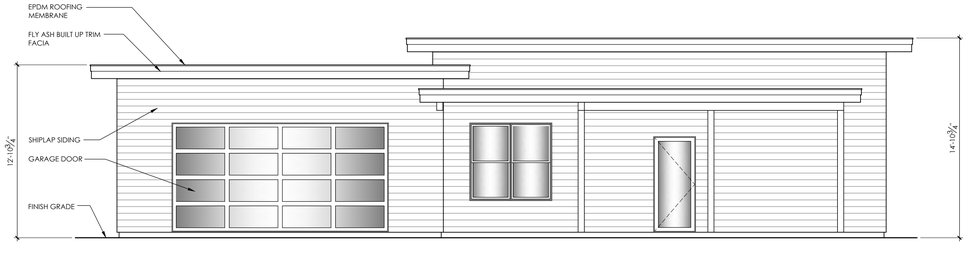
SCALE: 3/16" = 1'-0"





2 A01 WEST ELEVATION

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



3 A01 GARAGE/ADU NORTH ELEVATION

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



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WILLIAMSON/FICHERA RESIDENCE

ROMBOUT AVE
BEACON, NY 12508

REGISTERED ARCHITECT
BRYAN PATRICK CORRIGAN
037162
STATE OF NEW YORK

studio vAA
18 CLINTON STREET
WAPPINGERS FALL, NY 12590
T 914 475 0076
studiovaa@gmail.com

#	REVISION	DATE
1	ARCHTIECTURAL REVIEW	6.28.26

SHEET TITLE:
EXTERIOR ELEVATIONS
& RENDERINGS
EXTERIOR FINISHES

SCALE: AS NOTED

DATE: 28 JUNE 2026

PROJECT NUMBER: 2501

SHEET NUMBER: DD04

City of Beacon Planning Board Agenda
07/14/2026

Title:

Certificate of Appropriateness: 53 Russell Avenue, Facade

ATTACHMENTS

53 Russell PB 7.14.26 ARB app redacted2.pdf

53 Russell PB 7.14.26 ARB plans.pdf

ARCHITECTURAL REVIEW BOARD APPLICATION

Date: **June 30, 2026**

Project Address: 53 Russel Ave

Project Architect/Engineer: Moss Architects

Owner/Builder: **Andrew Reinhardt**

Contact Phone No.: [redacted] Email: [redacted]

Approval Requested: X Certificate of Appropriateness (sign or façade change) _____ New Single-Family House

Color/Materials:

Siding: Board and Batten & EFIS

Roofing: Metal Roofing standing seam- silver

Windows: Color: Black Type: Alum Clad Wood

Trim: Stained Pine

Garage Door: NA

Stone/Brick: NA

Signature of Owner

Applications for sign approval must also submit a sign permit application & supporting documents

FOR OFFICE USE ONLY:

The Architectural Review Board has reviewed the plans submitted for approval for the project listed above and has determined:

Plan Denied _____
(Date)

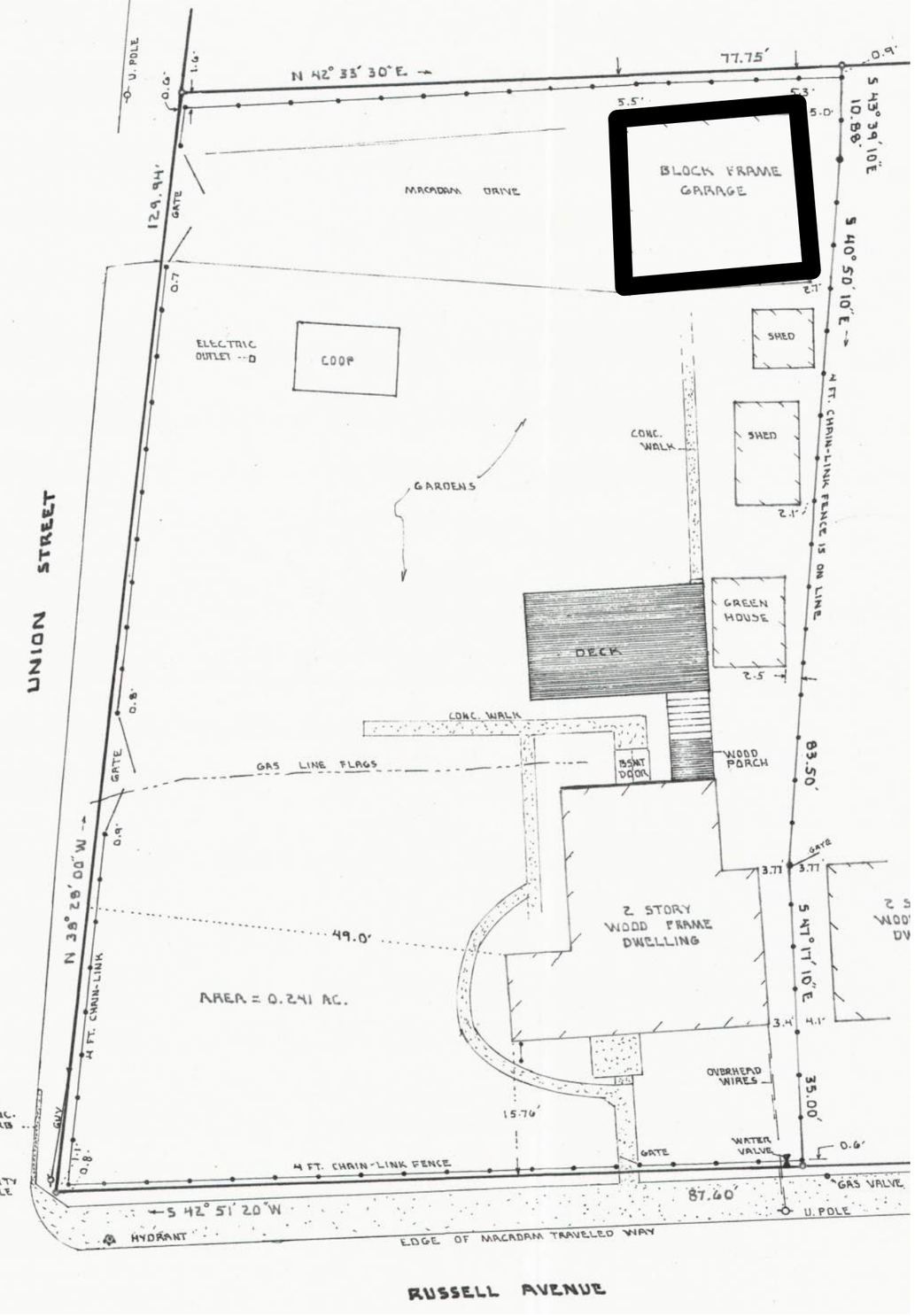
Plan Approved _____
(Date)

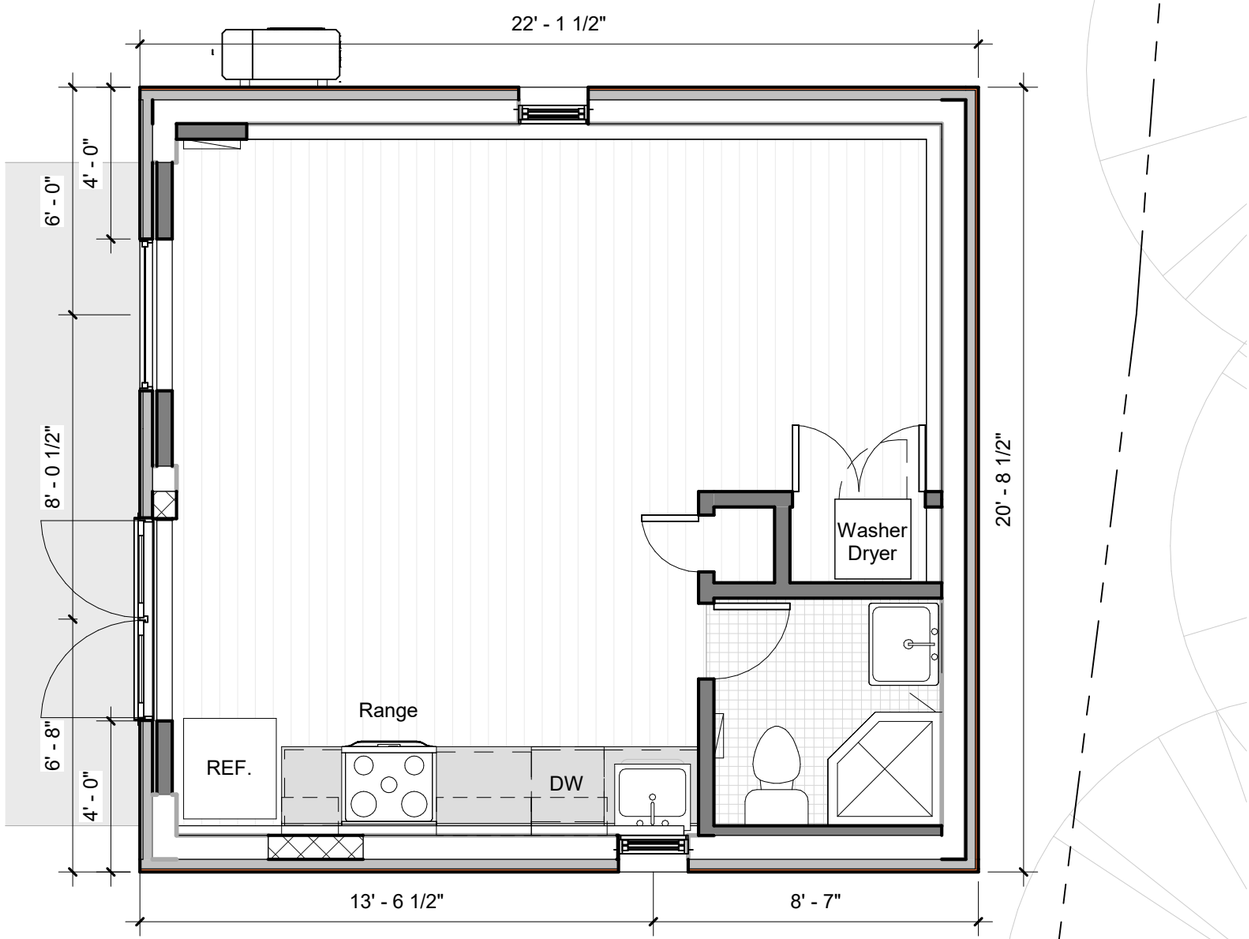
Subject to the following:

_____

_____

FEE: $100.00





c 2024 Moss Architects

MOSS ARCHITECTS
T: 845 972-4600
INFO@MOSS-ARC.COM
moss-arc.com

53 RUSSELL AVE

BEACON, NEW YORK

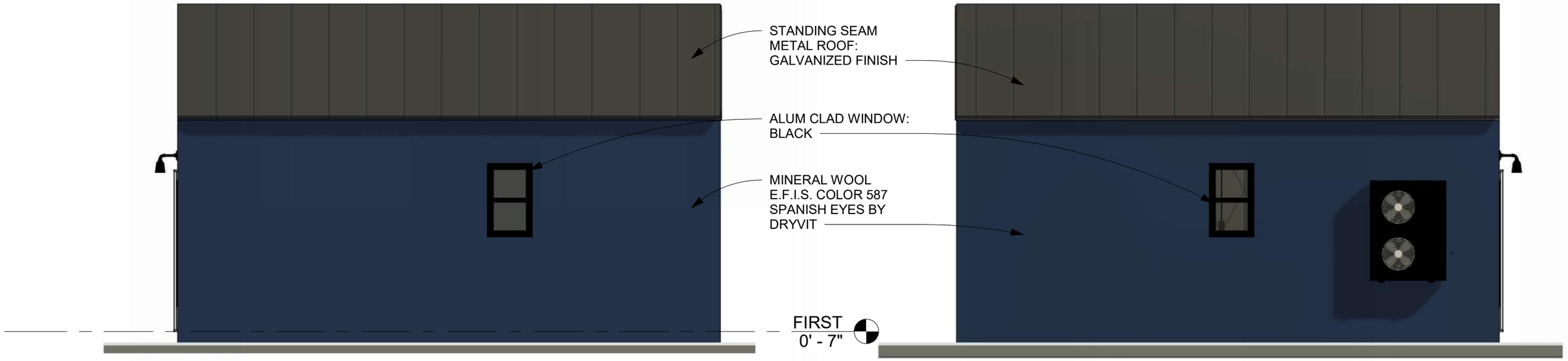
DATE:	1.25.25
SCALE:	1/4" = 1'-0"
DWG BY:	Author
CHK BY:	Checker

DRAWING TITLE

SURVEY/ FLOOR PLAN

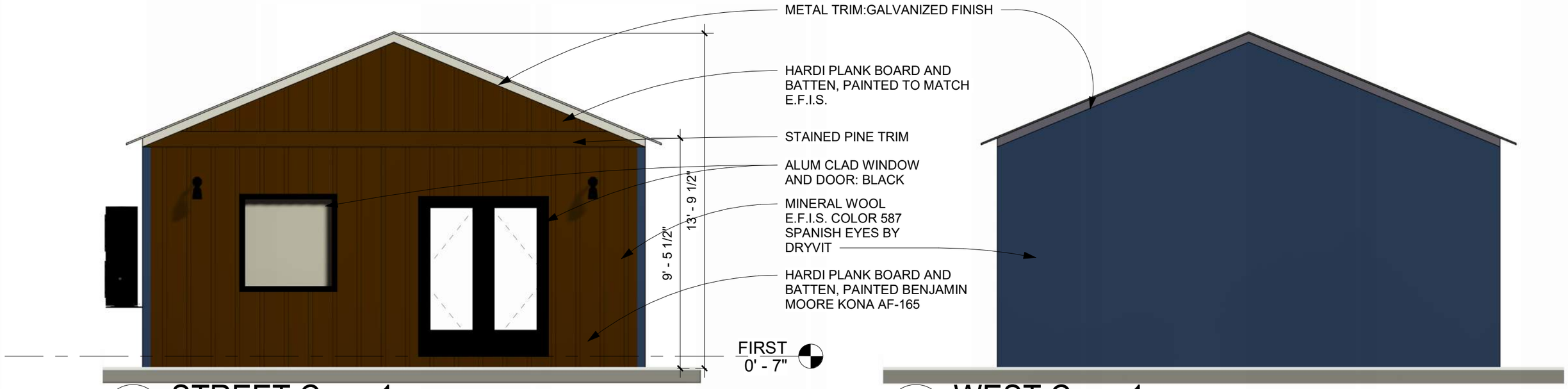
DRAWING NO.

A-798



1 NORTH Copy 1
1/4" = 1'-0"

2 SOUTH Copy 1
1/4" = 1'-0"



3 STREET Copy 1
1/4" = 1'-0"

4 WEST Copy 1
1/4" = 1'-0"

c 2024 Moss Architects

MOSS ARCHITECTS
T: 845 972-4600
INFO@MOSS-ARC.COM
moss-arc.com

53 RUSSELL AVE

BEACON, NEW YORK

DATE:	1.25.25
SCALE:	1/4" = 1'-0"
DWG BY:	Author
CHK BY:	Checker

DRAWING TITLE

ELEVATIONS

DRAWING NO.

A-2799



82 UNION ST



EXISTING GARAGE



53 RUSSEL MAIN HOUSE



PROPOSED ADU

c 2024 Moss Architects

MOSS ARCHITECTS
T: 845 972-4600
INFO@MOSS-ARC.COM
moss-arc.com

53 RUSSELL AVE

BEACON, NEW YORK

DATE: 1.25.25
SCALE: 12" = 1'-0"
DWG BY: Author
CHK BY: Checker

DRAWING TITLE

PHOTOES/ RENDERING

DRAWING NO.

A-800

City of Beacon Planning Board Agenda
07/14/2026

Title:

Certificate of Appropriateness: 425 Main Street, Facade

ATTACHMENTS

425 Main PB 7.14.26 ARB app.pdf

425 Main PB 7.14.26 ARB Submission.pdf

ARCHITECTURAL REVIEW BOARD APPLICATION

Date: June 30, 2026

Project Address: 425 Main Street

Project Architect/Engineer: Aryeh Siegel Architect

Owner/Builder: Simon Fox Properties

Approval Requested: ☑ Certificate of Appropriateness ☐ New Single Family House

Color/Materials:

Siding: Existing Brick

Roofing: N/A

Windows: Color: Match Existing Type: Match Existing

Trim: Match Existing

Garage Door: Replace existing overhead door with bi-fold glazed swinging door

Stone/Brick: Match Existing

Signature of Owner

FOR OFFICE USE ONLY:

The Architectural Review Board has reviewed the plans submitted for approval for the project listed above and has determined:

Plan Denied _____
(Date)

Plan Approved _____
(Date)

Subject to the following:

_____

_____

FEE: $100.00





EXISTING CONDITIONS PHOTOS



ALUMINUM BALUSTER RAILINGS
W/ VERTICAL PICKETS.
COLOR: BLACK



12" DOME SCONCE WITH 16"
GOOSENECK MOUNT.
BARN LIGHT ELECTRIC CO.
COLOR: MATTE BLACK



ALUMINUM STANDING SEAM SHED AWNING.
ATAS - '1" FIELD-LOK'
CLASSIC W/ SMITH SCROLLS
COLOR: BLACK



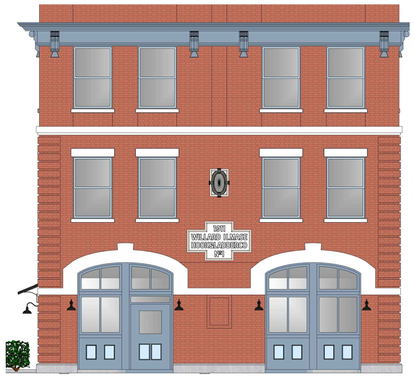
NEW RESIDENTIAL ENTRANCE WITH 4" CONCRETE LANDING.

WOOD DOOR WITH INSULATED GLASS 1/2 LITE & (2) LOWER PANELS. MOLDING PROFILE TO MATCH EXISTING OPENINGS. PROVIDE (1) COAT OF PRIMER AND (2) FINISH COATS. BENJAMIN MOORE - AURA. CUSTOM COLOR TO MATCH EXISTING.

STONE LINTEL TO MATCH EXISTING.

ALUMINUM STANDING SEAM SHED AWNING OVER ENTRY DOOR.
ATAS - 1" FIELD LOCK. COLOR: BLACK

NEW DOME LIGHTS W/ GOOSENECK MOUNT.
BARN LIGHT ELECTRIC CO.
COLOR: MATTE BLACK



REPAIR ANY AREAS OF DETERIORATED WOOD TRIM & DOOR PANELS BY PATCHING, SPLICING AND REINFORCING AS REQUIRED TO MATCH THE MATERIAL, DESIGN AND SCALE OF THE EXISTING WOODWORK.

REMOVE ANY DAMAGED OR DETERIORATED PAINT TO THE NEXT SOUND LAYER. PROVIDE (1) COAT OF PRIMER AND (2) FINISH COATS. BENJAMIN MOORE - AURA. CUSTOM COLOR TO MATCH EXISTING.



STEEL BALCONIES:
6X6 TUBE STEEL COLUMNS.
(2) 2X6 C-CHANNEL STEEL BEAM & 2X6 GALVANIZED STEEL JOISTS AT 16" ON CENTER. THROUGH BOLT EXTERIOR FACING CHANNEL W/ 1/2" DIAMETER GALVANIZED BOLTS.

PROVIDE (1) COAT OF PRIMER AND (2) FINISH COATS FOR ALL STEEL.
BENJAMIN MOORE - AURA.
COLOR: BLACK (HC-190).

5/4" X 6" WOOD DECKING W/TH SEMI-TRANSPARENT MINWAX STAIN. COLOR: PHANTOM GRAY (MW1089)

42" ALUMINUM RAILINGS W/ VERTICAL PICKETS. COLOR: BLACK

FULL LITE, INSULATED GLASS DOORS. COLOR: BLACK

2 Originally Approved
1/8" = 1'-0"







1 Proposed Revisions
1/8" = 1'-0"

425 Main Street
Amended Architectural Review Board Application

Owner:
Simon Fox Properties
245 Westchester Avenue
Port Chester, NY 10573

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

425 Main Street
Beacon, NY
Scale: As Noted
June 30, 2026