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FEBRUARY 20, 2024 MEETING
Part 1 of 2

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TOWN OF LEWISBORO
Westchester County, New York

Planning Board
79 Bouton Road
South Salem, New York 10590

Tel: (914) 763-5592
Fax: (914) 875-9148
Email: planning@lewisborogov.com

AGENDA

Tuesday, February 20, 2024 **The Commons / Courtroom at 79 Bouton Road**

Meeting will start at 7:30 p.m. and end at or before 11:00 p.m.

I. CONTINUATION OF PUBLIC HEARINGS

Cal #06-17PB, Cal #43-23WP, Cal #18-23SW
Wolf Conservation Center, Buck Run, South Salem, NY 10590; Sheet 21, Block 10803, Lots 3, 65, 67, 81, 82, 83, 86 & 88 (Wolf Conservation Center, owner of record) - Application for a Site Development Plan Approval, Special Use Permit Approval, Wetland Activity Permit Approval and Stormwater Permit Approval for a private nature preserve.

Cal #03-23PB, Cal #05-23SW
19 Mark Mead Road LLC parking, 19 Mark Mead Road, Cross River, NY 10518; Sheet 20, Block 10800 Lot 1 (19 Mark Mead Road LLC, owner of record) – Application for construction of 12 parking spaces for Bacio restaurant employees and four residential spaces.

II. EXTENSION OF TIME REQUESTS

Cal #03-13PB, Cal #03-16WP, Cal #19-21SW
"**Silvermine Preserve," Silvermine Drive & Lockwood Road, South Salem, NY, 10590 Sheet 48, Block 10057, Lot 15 and Sheet 51, Block 10057, Lot 104 (Ridgeview Designer Builders, Inc. & Daniel Higgins, owners of record) –** Request for two 90-day extensions of time to the Resolution granting Final Subdivision Plat Approval, Wetland Activity and Stormwater Permits, dated August 16, 2022 for the construction of a 13 single-family houses; the current expiration date is February 14, 2024.

Cal #08-14PB, Cal# 95-14WP, Cal# 20-14SW
Goldens Bridge Village Center, NYS Route 22, Goldens Bridge, NY 10526; Sheet 4, Block 11126, Lot 07 (Stephen Cipes, owner of record) – The Planning Board Resolution for Site Development Plan Approval, Wetland Activity Permit Approval and Town Stormwater Permit granted on January 21, 2020 for modifications to the existing shopping center; the current expiration date was January 22, 2024

III. SITE DEVELOPMENT PLAN REVIEW

Cal #18-22PB
Bichon LLC, 876 Route 35, Cross River, NY 10518; Sheet 20, Block 10801, Lot 2 (Bichon LLC – owner of record) – Application for a change of use from residential to commercial (professional office).

IV. WETLAND PERMIT REVIEW

Cal #22-23WP, Cal #02-23WV
Merchan and Valencia Residence, 1324 Route 35, South Salem, NY 10590; Sheet 39, Block 10543, Lot 22 (Lina Merchan and Fabio Valencia, owners of record) - Application for remediation of wetlands.

Cal #29-23WP, Cal #09-23SW
Bernabo Residence, 96 Post Office Road, Waccabuc, NY 10597; Sheet 25, Block 10812, Lot 3 (Alex Bernabo, owner of record) – Application for a new well, septic and house.

Cal #32-23WP, Cal #10-23SW
Gecaj Residence, 926 Route 35, South Salem, NY 10590; Sheet 20, Block 10801, Lot 156 (Xhafer Gecaj, owner of record) – Application for a new well, septic and house.

Cal #01-24WP
Wilson Residence, 55 Benedict Road, South Salem, NY 10590; Sheet 33, Block 11155, Lot 87 (Susan and Christopher Wilson, owners of record) – Application for an addition and rain garden**.**

V. DISCUSSION

Cal #12-22PB, Cal #36-22WP
Villas at Vista, 920 Oakridge Common, South Salem, NY 10590; Sheet 49D, Block 9829, Lot 10 (Smith Ridge Associates, owner of record) - Application for construction of 14 additional housing units.

Cal #05-22PB
The Boro Café, 873 Route 35, Cross River, NY 10518, Sheet 20, Block 10800, Lots 2 & 8 (Swertfager Realty, LLC & Gecaj Associates Holding, LLC; owners of record) - Application for a liquor license.

Discussion of the Lewisboro Comprehensive Plan 2024 Timeline

- Nelson Pope Voorhis (NPV) to conduct office hours for residents' specific concerns – date TBD
- Town Board to conduct public hearing(s) regarding Comprehensive Plan and zoning amendments to the Town Code; drafts can be found at: https://www.lewisborogov.com/cmpsc

VI. CORRESPONDENCE

Referral from North Salem, NY Planning Board - Application for a two-lot subdivision at 234 Hawley Road, North Salem, NY.

VII. MINUTES OF December 19, 2023.

VIII. NEXT MEETING DATE: March 19, 2024.

IX. ADJOURN MEETING.

Environmental Protection

Rohit T. Aggarwala
Commissioner

Paul V. Rush, P.E.
Deputy Commissioner
prush@dep.nyc.gov

465 Columbus Ave.
Valhalla, New York
10595

Tel. (845) 340-7800
Fax (845) 334-7175

January 5, 2023

Mr. Matthew J. Gironda, P.E.
Bibbo Associates, L.L.P
Millpond Offices
293 Route 100, Suite 203
Somers, New York 10589

Via email: mgironda@bibboassociates.com

Re: Wolf Conservation Center – SWPPP
7 Buck Run, South Salem: (T) Lewisboro
Tax Map ID #s 21-10803-3,65,67,81,82,83,84,86&88
Cross River Reservoir Drainage Basin
Log # 2021-CR-0285-SP.1

The New York City Department of Environmental Protection (DEP) determined that the above referenced application was *complete* on November 15, 2023. Please note that the following comments must be satisfactorily addressed prior to approval.

A. <u>Hydrology</u>

1. Verify that the area modelled in HydroCAD for the grass cover in C soils is correct. The area seems large per the post development drainage area.

2. What is the purpose of the underdrain behind the proposed boulder retaining wall that outlets to ES3. Provide its sizing calculations. Also, it appears that the flow from ES3 is cascading through the Swale 4 to an area very close to the location of the existing septic to be built. Confirm that this method of channeling flow will not interrupt the proper functioning of the septic system.

B. <u>Stormwater Management /Runoff Reduction Practices</u>

1. The infiltration basin outlet control configuration shows an outlet pipe to a level spreader, but this is not found on the plans. Also, the emergency spillway location should be identified on the plans relative to the existing single-story house and its driveway. Confirm that runoff from the spillway is not in the direct line of drainage to these structures and can safely convey the major storms.

2. Per the Design Manual, the infiltration basin should be equipped with a backup underdrain with a gate valve and cleanout ports capable of completely dewatering the practice within 24 hours in the event of a failure or emergency. The underdrain should discharge to a stabilized outfall per the NYS Stormwater Design Manual. (NYSDM). The note on Dwg# D-2 indicates that a pump will be used to drain the infiltration

basin to the 18” primary outlet which is not consistent with the 12” outlet device used in the HydroCAD and plans. It also states that there is an outlet to a level spreader which cannot be identified on the plans. Provide the reasoning as to why an underdrain is not used instead.

3. It appears that majority of the higher storms (10 and 100-yr) are infiltrated based on the model provided. Maximize the efficiency of the diversion structure in higher storms to primarily use the infiltration systems for treatment only. Please provide documentation that different pipe configurations were considered to maximize the diversion of larger storms. Although the proposed infiltration areas have higher infiltration rates based on the soil testing, per the NRCS hydrologic soil group C soils located in the area of the proposed infiltration Cultec units for 1.2P and 1.3P, consider using a more conservative infiltration rate (perhaps 10 in/hour) in the design to account for any anticipated slowdown and clogging in the area over time.

4. Per the NYSDM, infiltration practices must be designed as “offline” practices if the runoff is delivered by a storm drainpipe or along the main conveyance system and provide for bypass of larger storms (10 & 100 -year storms). There does not appear to be any measures to attenuate the larger storms as required in the NYSDM. The infiltration systems are showing the bypassed flows being directed to outlet devices. Provide documentation in the report on how the larger (10- & 100-year storms) will be attenuated.

5. Provide justification in the report for the deviation from NYSDM in utilizing the infiltration basin 1.1P for treatment and attenuation. Also, the diverted amount of runoff in the 100-year storm from the infiltration Cultec chambers 1.2P and 1.3P flows directly to the design point without passing through any attenuation practice – this must be justified adequately.

6. Provide the Chamber Wizard from HydroCAD for the two underground infiltration systems proposed (1.2P and 1.3P) to demonstrate the storage available.

7. Label all the relevant elevations on the Cultec chamber detail provided on the plan. Provide elevations (finished grade elevations and existing grade elevations) or calculations on the plans to depict whether the top quarter of the infiltrations systems are located in fill or not.

8. A long system of drainage structures, pipes and conveyance measures such as swales are involved in this project. Although it is noted that the swales are sized to safely convey the 10 year storm, the pipe sizing calculations are not included. Please provide. Also, it recommended to size all these measures to safely pass

20% more than the 10-yr design storm to the desired point of convergence.

9. Add the diversion manhole 1.3 detail on the plans.

10. Provide in a tabular format all the relevant elevations for all three diversion structures.

11. Include sizing of the three proposed pretreatment chambers in a tabular format on the plans. Call out the treatment rate, the minimum and the maximum flow allowed for the device along with its bypass capacity. Verify that it is sized for the flow it receives as higher storms are mostly flowing through it to the infiltration practice. Confirm that each system have the capacity to pretreat the incoming flow as the design Manual only calls for 100% pretreatment of the WQV. In addition, demonstrate that the exit velocities from the pretreatment practices are non-erosive for the 2-year storm.

12. Provide supporting documentation from HydroCAD that the Channel Protection Volume (CPv) is detained for 24 hours in the three proposed infiltration systems and that the full WQv can be dewatered within 48 hours after each storm event. The report mentions that the detention of CPv is not required for drainage areas treated with infiltration practices which is not in compliance with the NYSDM.

13. Provide the rock outlet protection sizing calculations for the different end structures proposed.

14. The third column in the swale sizing table is written for the tributary area whereas the volume provided is for the volume. Include the velocity as part of the table. Clarify if check dams will be included where the site area is greater than 2%.

C. <u>Erosion And Sediment Control</u>

1. The cut and fill Exhibits Elevation Table seems to have some discrepancies. The minimum elevation for cuts shows a higher number compared to the maximum elevation. Please correct and explain.

2. The construction sequence #10, 19 & 23 calls for drop inlet protection at catch basins. Since two type of inlet protection is provided on the plans specify when and where each type will be used. Also, it is recommended to use stone and block drop inlet protection over the fabric drop inlet protection during the initial grading phase of the project. If there is a preference for the fabric drop inlet protection, please provide justification.

3. Verify whether the two infiltration Cultec systems will also be installed in sequence #10 as it is not clear from the description. The contractor should be fully made aware by adding in the sequence that both infiltration systems must be plugged off during the entire construction period until the site is adequately stabilized. Clarify whether the pretreatment units and bypass structures will be in use during construction, or if they will be plugged along with the infiltration systems.

4. Indicate in the sequence when the third infiltration system would be built and mention when the last retaining wall near CB # 26 will be constructed. Also, indicate when the tree planting and wetland mitigation be performed. These items are not mentioned in the sequence.

5. No sediment traps or sediment basins are proposed during the construction. Clarify whether the infiltration basin will be utilized as a temporary sediment basin. If yes, provide the sizing calculations and temporary outlet structure details and also describe the partial excavation and the means for cleaning and converting it to a final infiltration basin. Also, explain in the report on how the stormwater runoff will be managed during construction. Consider providing either multiple smaller localized sediment traps or a full sediment basin during construction.

6. Please verify that all silt fences shown are parallel to the contours; if not, it will not function as intended.

7. Provide a call out for the staging area.

8. Sequence should mention when the rock outlet protection for the end structures will be installed.

9. Per the Blue Book, the height of the silt fence filter fabric should be a minimum of 18-inches above grade. The silt fence detail on drawing, D-1 shows 16-inches. Please review the Blue Book construction requirements for silt fencing and ensure that the detail shown meets all requirements.

10. DEC discourages the use of geotextile because it has the potential to negatively impact the stream if the geotextile becomes dislodged and breaks into pieces. If the applicant proceeds with using geotextile, DEP prefers the use of 100% non-synthetic biodegradable.

11. It is recommended to provide a tabular format of the various post development inspection and maintenance requirements/needs as part of the Schedule A.

The review of your application will not commence until the DEP receives the necessary information. Please be advised that failure to submit information to the DEP or to follow DEP procedures is grounds to deny approval, pursuant to Section18-23(b) (3).

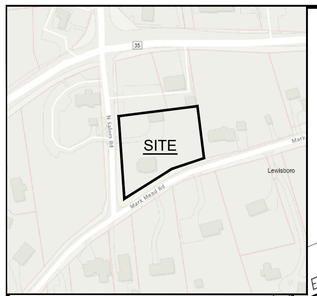
If you have any questions, please contact the undersigned at (914) 749-5357.

Sincerely,

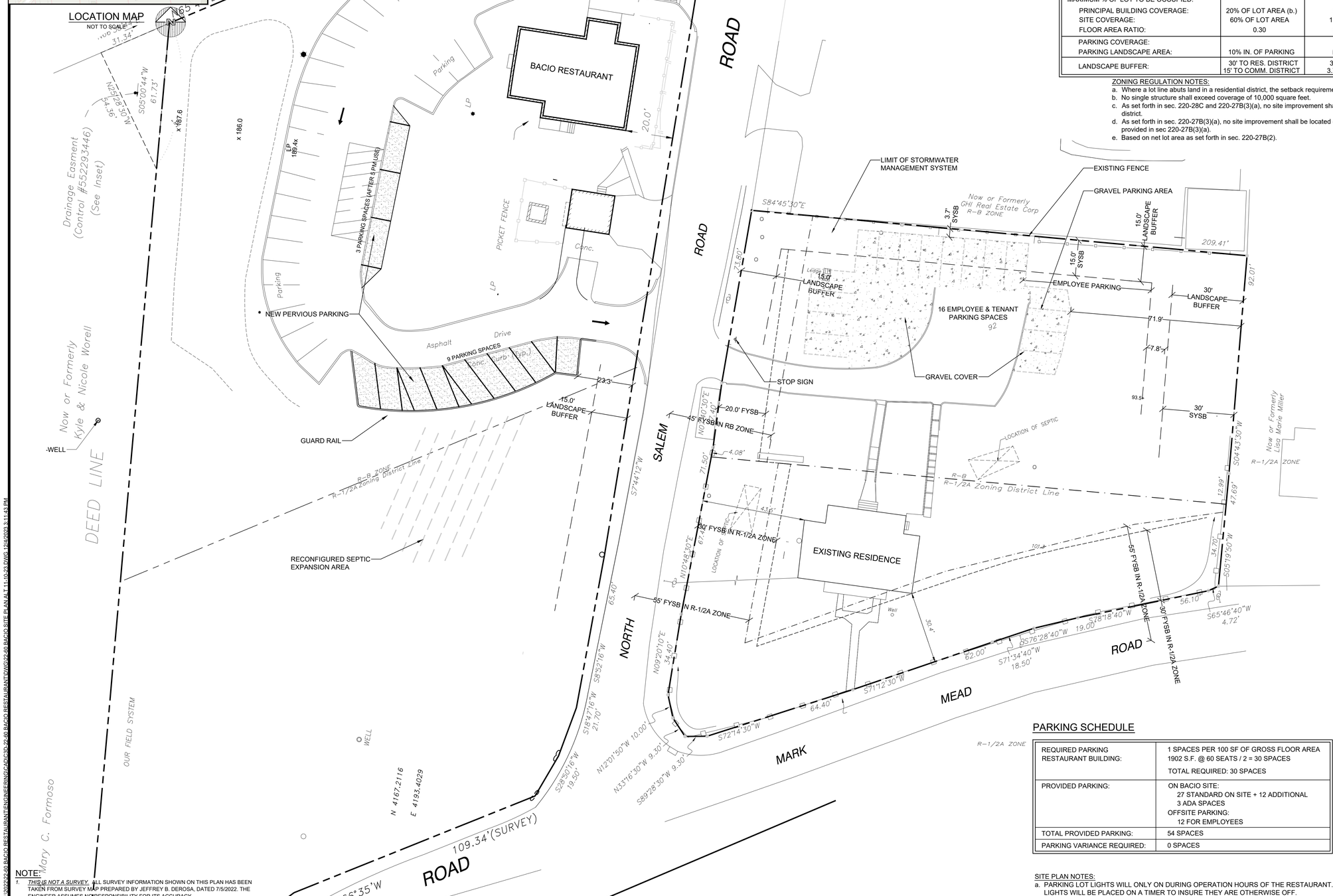
Mariyam Zachariah

Mariyam Zachariah
Associate Project Manager II
EOH Project Review Group
Regulatory & Engineering Programs

Cc: Town of Lewisboro Planning - planning@lewisborogov.com
Jan K. Johannessen, Town Planner, johannessen@kelses.com



LOCATION MAP
NOT TO SCALE



SITE DATA:

OWNER / DEVELOPER:	19 MARK MEAD ROAD, LLC.
STREET ADDRESS	12 N SALEM ROAD CROSS RIVER, NY, 10518
PROJECT LOCATION:	12 N SALEM ROAD / 19 MARK MEAD ROAD TOWN OF LEWISBORO
EXISTING TOWN ZONING:	RB, RETAIL BUSINESS / 1/2A RESIDENTIAL
PROPOSED USE:	OFFSITE PARKING
TOWN TAX MAP DATA:	SBL 53.6-1-23 & 42.18-1-LOT 6
SITE AREA :	0.906 ACRES (39,465 SF)
WATERSHED:	CROSS RIVER

ZONING SCHEDULE:

ZONING DISTRICT:	RB, RETAIL BUSINESS			
DIMENSIONAL REGULATIONS:	REQUIRED	EXISTING RESIDENCE	RESTAURANT	VARIANCE REQUIRED
MINIMUM SIZE OF LOT:				
MINIMUM LOT AREA:	1/2 ACRE	0.906 ACRE	1.939 ACRE	NONE
FRONTAGE:	100 FT.	460 FT.	814 FT.	NONE
MINIMUM YARD DIMENSIONS:				
FRONT YARD FROM STREET CENTER LINE	45 FT. (55' R-1/2A ZONE)	55.4 FT.	38.81 FT.	NONE
FRONT YARD FROM LOT LINE	20 FT. (30' R-1/2A ZONE)	30.4 FT.	20.00 FT.	NONE
SIDE YARD SETBACK:	30 FT. (a.)	127.17 FT.	144.51 FT.	NONE
REAR YARD SETBACK:	30 FT. (a.)	120.69 FT.	N/A	NONE
MAXIMUM HEIGHT:				
PRINCIPAL BUILDING - STORIES:	2 1/2	2 1/2	1 1/2	NONE
PRINCIPAL BUILDING - FEET:	30 FEET	23 FEET +/-	20 FEET +/-	NONE
MAXIMUM % OF LOT TO BE OCCUPIED:				
PRINCIPAL BUILDING COVERAGE:	20% OF LOT AREA (b.)	3.6 %	3.2 %	NONE
SITE COVERAGE:	60% OF LOT AREA	15.8 %	16.8 %	NONE
FLOOR AREA RATIO:	0.30	0.07	0.03	NONE
PARKING COVERAGE: PARKING LANDSCAPE AREA:	10% IN. OF PARKING	N/A	2,280 SF ADD'L EXISTING TO REMAIN	NONE
LANDSCAPE BUFFER:	30' TO RES. DISTRICT 15' TO COMM. DISTRICT	30 FT 3.7 FT	30 FT 3.6 FT	NONE 11.4 FT

ZONING REGULATION NOTES:
a. Where a lot line abuts land in a residential district, the setback requirements for that residence district shall govern.
b. No single structure shall exceed coverage of 10,000 square feet.
c. As set forth in sec. 220-28C and 220-27B(3)(a), no site improvement shall be located closer than 100 feet to a residence district.
d. As set forth in sec. 220-27B(3)(a), no site improvement shall be located closer than 200 feet to a residence district, except as provided in sec 220-27B(3)(a).
e. Based on net lot area as set forth in sec. 220-27B(2).

PARKING SCHEDULE

REQUIRED PARKING RESTAURANT BUILDING:	1 SPACES PER 100 SF OF GROSS FLOOR AREA 1902 S.F. @ 60 SEATS / 2 = 30 SPACES TOTAL REQUIRED: 30 SPACES
PROVIDED PARKING:	ON BACIO SITE: 27 STANDARD ON SITE + 12 ADDITIONAL 3 ADA SPACES OFFSITE PARKING: 12 FOR EMPLOYEES
TOTAL PROVIDED PARKING:	54 SPACES
PARKING VARIANCE REQUIRED:	0 SPACES

SITE PLAN NOTES:
a. PARKING LOT LIGHTS WILL ONLY ON DURING OPERATION HOURS OF THE RESTAURANT. LIGHTS WILL BE PLACED ON A TIMER TO INSURE THEY ARE OTHERWISE OFF.

NOTE:
1. *THIS IS NOT A SURVEY.* ALL SURVEY INFORMATION SHOWN ON THIS PLAN HAS BEEN TAKEN FROM SURVEY MAP PREPARED BY JEFFREY B. DEROSA, DATED 7/5/2022. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR ITS ACCURACY.

NOTE: UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209 (2) OF THE NEW YORK STATE EDUCATION LAW

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PROJECT # 22-60

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Engineer:
STATE OF NEW YORK · JOSEPH CARLO RIINA · 075143 · LICENSED PROFESSIONAL ENGINEER
JOSEPH C. RIINA, P.E.
NYS Lic. No. 64431

Revisions:

No.	Date	Comments:
1.	4/27/23	Review Meeting
2.	8/29/23	Plan Update
3.	9/27/23	Town Comments
4.	10/10/23	Lighting Plan
5.	11/20/23	Town Comments
6.	1/10/24	ALT Plan
7.	2/06/24	Updated Layout

SCALE: 1" = 20'
DRAWN BY: JCR
DATE: 3/10/23

Site Plan

SITE PLAN
PREPARED FOR
BACIO RESTAURANT / 19 MARK MEAD ROAD, LLC
19 MARK MEAD ROAD
Lewisboro Westchester County, NY

Sheet 1 of 10

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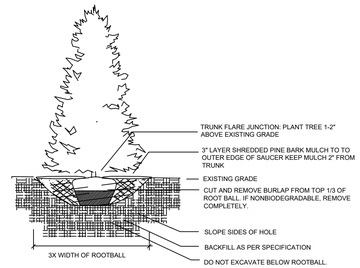
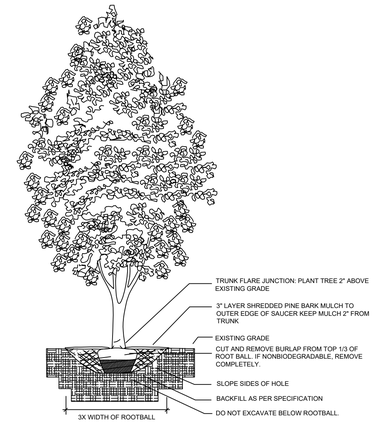
PLANT SCHEDULE

CATEGORY	SYM.	NO.	BOTANICAL NAME	COMMON NAME	SIZE	COND
DECIDUOS TREES	AS	1	ACER SACCHARUM 'GREEN MOUNTAIN'	GREEN MOUNTAIN SUGAR MAPLE	2"-2.5" CAL.	B&B
EVERGREEN TREES	AC	5	ABIES CONCOLOR	WHITE FIR	7'-8' HT.	B&B
EVERGREEN TREES	TP	5	THUJA PLICATUM 'GREEN GIANT'	GREEN GIANT ARBORVITAE	7'-8' HT.	B&B
SHRUB	IG	7	ILEX GLABRA 'DENSA'	DENSA INKBERRY	4' HT.	CONT.
EVERGREEN TREES	PG	1	PICEA GLAUCA 'MOENCH'	WHITE SPRUCE	8'-10' HT.	B&B



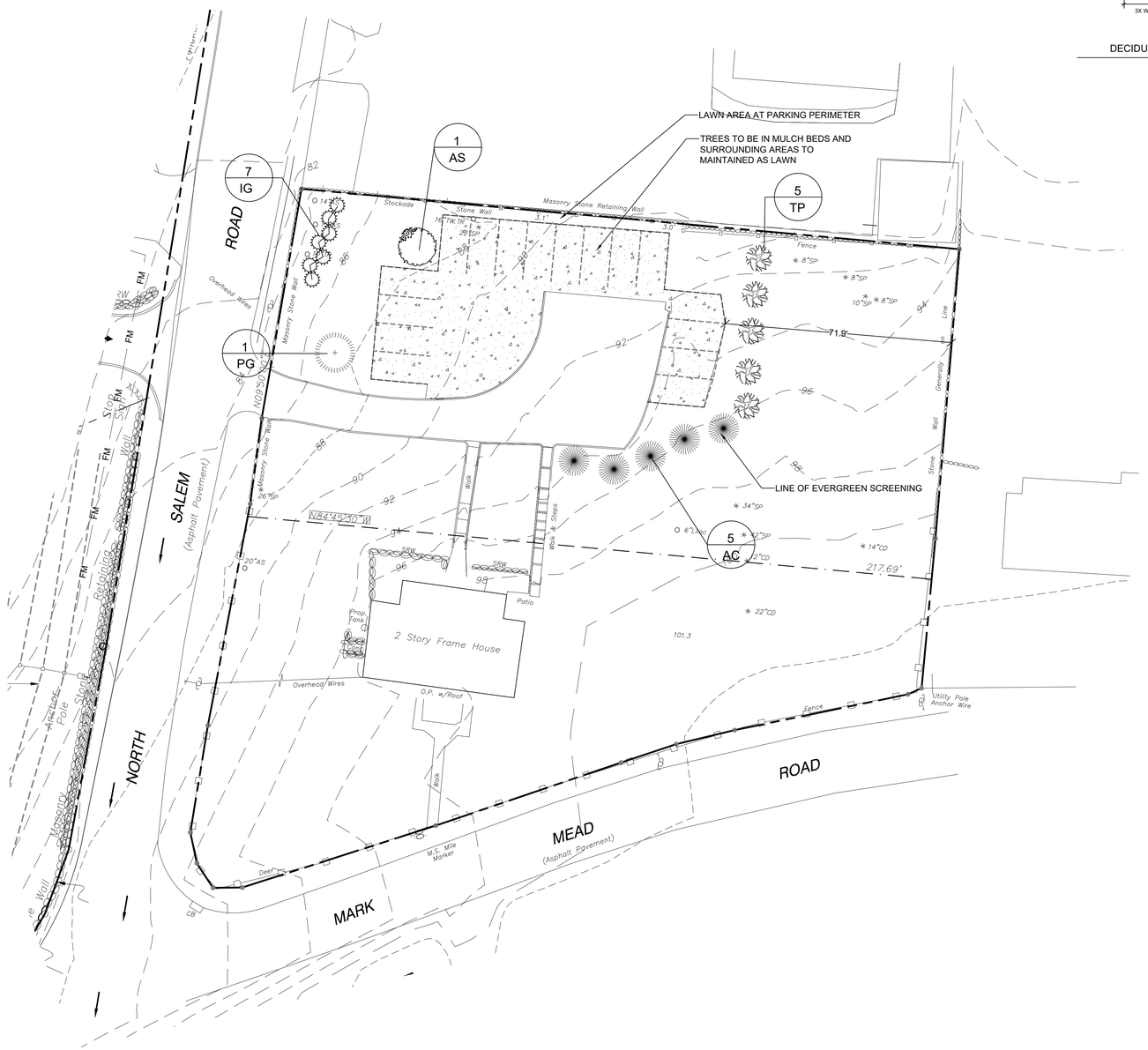
EVERGREEN TREE PLANTING

N.T.S.



DECIDUOUS TREE PLANTING

N.T.S.



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Engineer:
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Revisions:

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6.	11/20/23	A.R.B. Plan
7.	2/06/24	Updated Layout

SCALE: 1" = 20'
DRAWN BY: JCR
DATE: 3/10/23

Landscape Plan

SITE PLAN
PREPARED FOR
BACIO RESTAURANT / 19 MARK MEAD ROAD, LLC
19 MARK MEAD ROAD
Lewisboro Westchester County, NY

Sheet 5 of 10

Ciorsdan Conran

From: Linda Jeanne <crossriverhamlet@gmail.com>
Sent: Saturday, January 13, 2024 3:26 PM
To: Ciorsdan Conran
Subject: Bacio's Restaurant Plans

I fully support Bacio's Restaurant plan as outlined in **Cal #03-23PB, Cal #05-23SW.**

As a 30+ year resident of Cross River, I have always found Baccio's Restaurant to be a good neighbor. Their restaurant has a stellar reputation and enhances the economic viability of the Cross River hamlet, consistent with the goals of the draft Comprehensive Master Plan.

I urge the Planning Board to approve their proposed plans.

Linda Press Wolfe
87 Locust Ridge
Cross River, NY. 10518
914.763.6278

Linda Jeanne
crossriverhamlet@gmail.com
Cross River, NY

HTW | HOCHERMAN TORTORELLA & WEKSTEIN LLP

Attorneys at Law
Geraldine N. Tortorella (NY, CT)
Adam L. Wekstein (NY)
Noelle C. Wolfson (NY, CT)

Henry M. Hocherman, Retired

January 22, 2024

Via Electronic Mail (Planning@lewisborogov.com) and First Class Mail

Hon. Janet Andersen, Chairwoman
and Members of the Planning Board
Town of Lewisboro
79 Bouton Road
South Salem, New York 10590

Re: Conditional Final Subdivision Approval and Wetland Permit for the Silvermine Preserve Subdivision
Silvermine Drive and Lockwood Road, Town of Lewisboro
Tax Identification Nos.: Sheet 48, Block 10057, Lot 15 and
Sheet 51, Block 10057, Lot 104
Third Request for Extension

Dear Chairwoman Andersen and Members of the Planning Board:

At its July 18, 2023 meeting, the Board granted two ninety-day extensions of time with respect to Planning Board Resolution Cal #3-13PB which granted Final Subdivision Plat, Wetland Permit and Stormwater Permit Approvals for the Silvermine Preserve Subdivision (the "Approval"), to and including February 14, 2024. Construction of the road and drainage facilities was commenced several months ago and substantial progress has been made. I am advised that erosion controls have been set and are inspected periodically and maintained. The disturbance limits have been cleared and grubbed, the road has been fully graded and work on the subgrade continues. In addition, stormwater basins 1, 2 and 3 have been rough graded. Notwithstanding this progress, more construction is required to achieve substantial completion.

We have been working on drafts of the legal instruments, which are undergoing internal review with our project team and client. I anticipate submitting them to the Board, Planning Consultant and Planning Board Attorney in the near future.

In light of our client's plan to install the infrastructure before filing the Subdivision Plat, we are writing to request two additional ninety-day extensions of the Approval, to and including August 12, 2024. This is our third request for two ninety-day extensions.

Kindly schedule this request for extensions for consideration and, hopefully, action at the Board's February 20, 2024 meeting and let us know if an appearance is requested or required.

Respectfully yours,

Hocherman Tortorella & Wekstein, LLP

By: Geraldine N. Tortorella

ONE NORTH BROADWAY, SUITE 400 | WHITE PLAINS, NEW YORK 10601
PHONE: (914) 421-1800 | FAX: (914) 421-1856 | WWW.HTWLEGAL.COM

GNT:hc
cc: *(via electronic mail)*
Jan Johannessen, AICP
Joseph Cermele, P.E.
Judson Siebert, Esq.
Timothy Allen, P.E.
Alan Pilch, P.E.
Mr. Eric Moss
Ms. Sue Haft

S:\# MATTERS\Moss 0056\Lewisboro (Silvermine) 002\Letters\Planning Board Third Ext Rqst Final App 1-22-2024.docx

Ciorsdan Conran

From: nancytuccillo@aol.com
Sent: Friday, January 19, 2024 8:42 AM
To: Ciorsdan Conran
Subject: Request for extension of building permit

Hi Ciorsdan,

We would like to request an extension of the existing permit for the development of the north lot at the North County shopping center in Goldens Bridge.

We have done extensive engineering on the site in the north lot and are working with an architect to develop plans to present to the building department currently.

Kindly let us know if this request meets with your approval or if you might need any further information.

With best regards,

Nancy Tuccillo
Property Manager
914-769-3141

KSCJ CONSULTING

John Kellard, P.E.
David Sessions, RLA, AICP
Joseph M. Cermele, P.E., CFM
Jan K. Johannessen, AICP

MEMORANDUM

TO: Chairperson Janet Andersen and
Members of Lewisboro Planning Board

CC: Ciorsdan Conran
Judson Siebert, Esq.
Kevin Kelly, Building Inspector

FROM: Jan K. Johannessen, AICP JKJ
Joseph M. Cermele, P.E., CFM JMC
Town Consulting Professionals

DATE: February 16, 2024

RE: Bichon, LLC
876 Route 35
Sheet 20, Block 10801, Lot 2

PROJECT DESCRIPTION

The subject property consists of ±1.03 acres of land and is located at 876 Route 35 within the RB Zoning District. The subject property contains a former residence, driveway off Route 35, expansive asphalt and gravel parking areas, septic system and well. The property is located to the east of the Shell Gas Station, west of Cameron's deli, and north (to the rear) of an existing auto repair station. The site had been used for the unlawful storage of vehicles, which have since been removed. The applicant is proposing to convert the use of the building to office, with two (2) tenants, one of which is proposed to include the storage of three (3) flatbed trucks. Wetlands are located on and immediately adjacent to the property and the regulated buffer encompasses the majority of the parcel, including the developed portion of the site. The last approved use of the site was for a single-family residence and, therefore, the application involves a change of use from single-family residential to office/storage.

SEQRA

The proposed action has been preliminarily identified as a Type II Action and is therefore categorically exempt from the State Environmental Quality Review Act (SEQRA).

REQUIRED APPROVALS/REFERRALS

1. Site Development Plan Approval and a Wetland Activity Permit is required from the Planning Board; a public hearing is required to be held on the Wetland Permit.

2. An Article 24 Freshwater Wetland Permit may be required from the New York State Department of Environmental Conservation (NYSDEC).

3. The application must be referred to the Westchester County Planning Board in accordance with Section 239-m of the General Municipal Law. The Planning Board Administrator will coordinate this referral.

4. The subject property is located within the NYC East of Hudson Watershed and if land disturbance exceeds 5,000 s.f., coverage under the NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-20-001) will be required.

COMMENTS

1. Prior to commencing review of the site plan, we recommend that the application be referred to the Building Inspector for zoning review. Following a zoning determination, we will evaluate the proposed site plan.

DOCUMENTS REVIEWED:

- Letter, prepared by Patrick M. Croke Architect, dated February 1, 2024
- Letter, prepared by Michael Sirignano, Esq., dated January 31, 2024
- Floor Plan

JKJ/dc

Patrick M. Croke
Architect

1 February 2024

Town of Lewisboro Planning Board
79 Bouton Road
South Salem, New York 10590

RE: Bichon LLC, 876 Route 35, Cross River, NY 10518

Dear Chair Andersen and members of the Lewisboro Planning Board,

The following is an annotated response to the memo from Jan Johannessen, dated 2/24/23. The numbered items correspond to the memo items and our response is in the indented line below each item.

COMMENTS

1. This office defers review of the plan for zoning compliance to the Building Inspector. It is recommended that the application be referred to the Building Inspector for review.

    Nothing required.

2. The applicant shall submit a business plan, which shall provide a detailed description of the proposed use and its operation. The business plan shall include a title and date for reference purposes.

    The applicant has submitted a business plan dated 1/31/24, which provides a detailed description of the proposed use and its operation

3. Is the storage of containers an accessory use to the office? Are they related? The building Inspector should determine if the outdoor storage of containers is permitted use within the underlying zone.

    Nothing required. The containers have been removed.

4. Based upon aerial imagery, it appears that the parking/storage area has grown over time, including during periods when the Town's wetland ordinance was in effect. The applicant should provide any information it has on the development history of the property, including permits obtained (or not) for this work.

    Prior to the applicant's acquisition of the property in 2022 the abutting operators of the former gas station to the South encroached on the property, vehicles were stored there until applicant demanded that all such vehicles be removed from the property.

5. Gravel/asphalt extends to, over, or in close proximity to the front and side property lines, leaving little to no landscape buffer. The minimum landscape buffer setback shall be illustrated on the plan. It is recommended that the buffers be reestablished.

914 - 234 - 6093
www.pmcarchitect.com
20 Woodsbridge Road
Katonah, New York 10536

Applicant looks to the Planning Board for guidance.

6. The limits of the storage area should be clearly defined by a permanent physical barrier to prevent future encroachment/expansion. Consider fencing, curbing, large stone boulders, or a combination thereof.

Applicant looks to the Planning Board for guidance.

7. The applicant shall prepare and submit a landscaping plan demonstrating compliance with Section 220-15 and 220-55E of the Zoning Code. The plan shall illustrate the location of all proposed plants and shall include a corresponding plant schedule identifying the specie type, size, and quantity of all proposed plant material. Cross-section installation details shall be provided for proposed trees and shrubs, as applicable.

Landscaping is shown on the current plan.

Please do not hesitate to contact me with any questions you may have.

Sincerely,

Patrick M. Croke
LEED AP, BD+C

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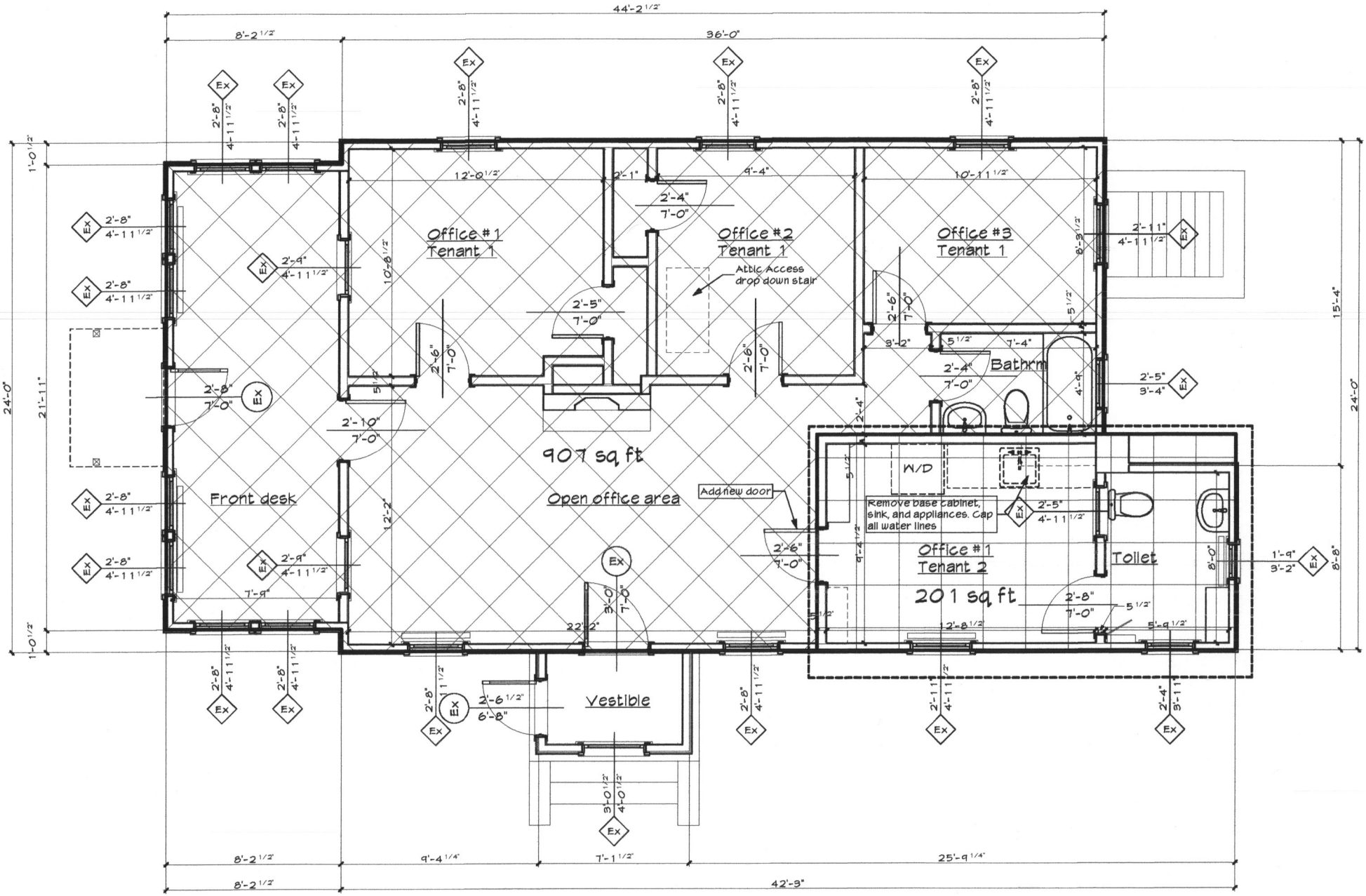
www.pmcarchitect.com
20 Woodsbridge Road
Katonah, New York 10536


44'-2 1/2"
8'-2 1/2"
36'-0"
Office #1
Tenant 1
Office #2
Tenant 1
Office #3
Tenant 1
Attic Access
drop down stair
Bathrm
907 sq ft
Open office area
Front desk
Add new door
Remove base cabinet, sink, and appliances. Cap all water lines
W/D
Office #1
Tenant 2
201 sq ft
Toilet
Vestible
24'-0"
21'-11"
15'-4"
8'-8"
42'-9"
25'-9 1/4"
9'-4 1/4"
7'-1 1/2"

Michael Fuller Sirignano
Attorney and Counselor at Law

Old Post Road Professional Building
892 Route 35, P.O. Box 784
Cross River, New York 10518

Tel: (914) 763-5500
Fax: (914) 763-9589
Email: lawoffice@sirignano.us

January 31, 2024

Ms. Janet Andersen
Planning Board Chair
Town of Lewisboro
79 Bouton Road
South Salem, NY 10590

Re: Bishon LLC Business Plan for 876 Route 35, Cross River, NY 10518

Dear Ms. Andersen and Members of the Planning Board:

This site plan application, as modified following comments from the Board and its consultants, seeks approval for two (2) separate offices within the former residence. The majority of the 1,108 sq. ft. floor area will be rented as professional or business offices and contains 907 sq. ft. consisting of three (3) private offices, an open office and reception area. A second office containing 201sq. ft. is located in the northeast corner of the building and will be used by the Owner's family in connection with their towing company. A floor plan is enclosed herein.

The hours of operation for the leased office space will be dependent on the operational needs of the particular tenant. However, the most likely hours will be between 7:00 am and 7:00 pm weekdays and Saturdays. The hours of operation for the owner's tow company office will be the same.

Our proposed site plan designates a previously paved gravel area for off-street parking of the Owner's three (3) flatbed trucks. Such off-street parking is an accessory use customarily incidental to the Owner's permitted principal business office use (see §220-24C(2)[c]). More specifically, "off street parking and loading" are permitted accessory uses" in this RB District (see §220-24C(2)[a]).

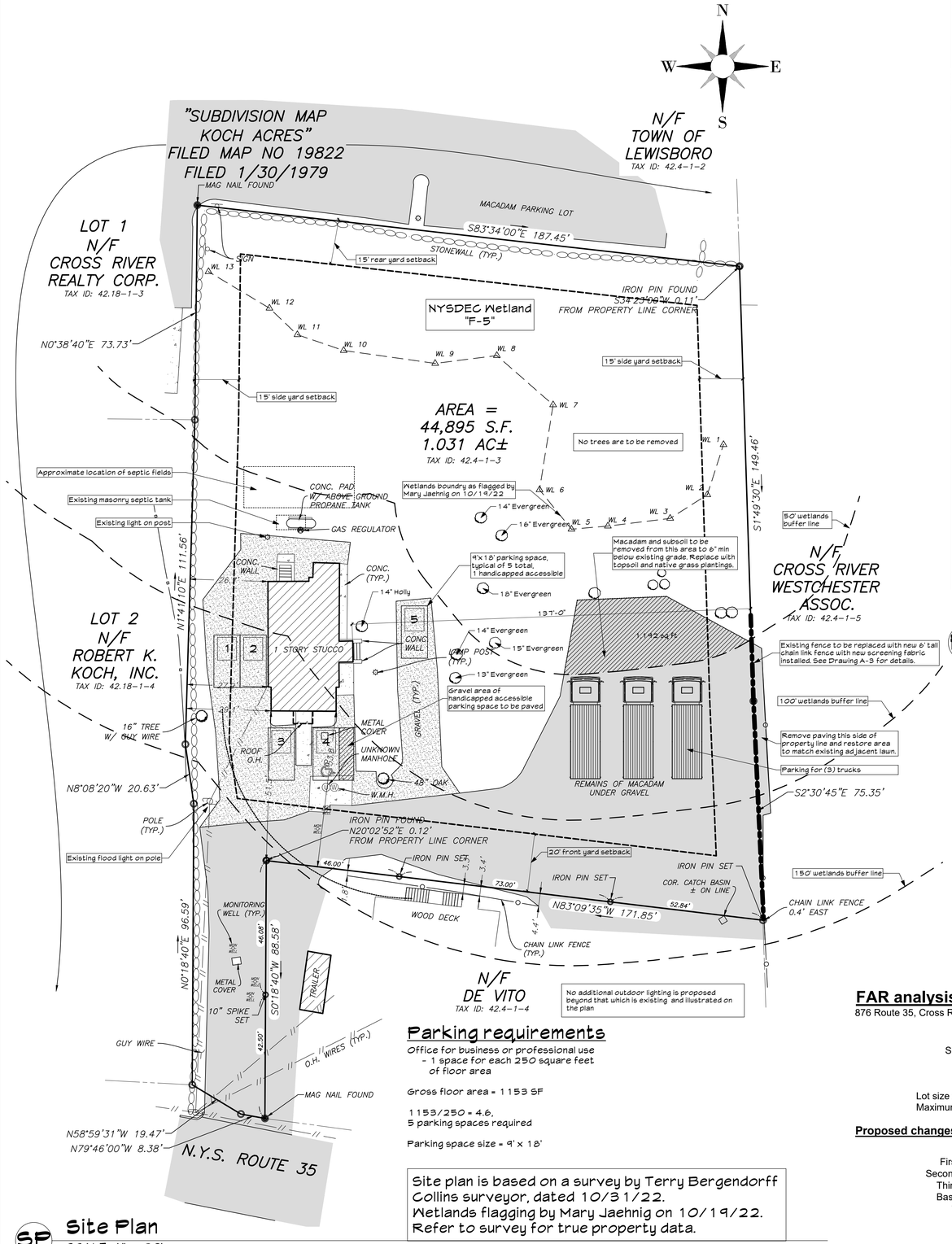
:

Very truly yours,

Michael Fuller Sirignano

Michael Fuller Sirignano

cc: Kevin Kelly, Building Inspector
Jan Johannessen, Planning Board Consultant
Jud Seibert, Planning Board Attorney



Site Plan

SCALE: 1" = 20'

Parking requirements

Office for business or professional use
- 1 space for each 250 square feet of floor area

Gross floor area = 1 153 SF

1 153/250 = 4.6,
5 parking spaces required

Parking space size = 9' x 18'

Site plan is based on a survey by Terry Bergendorff Collins surveyor, dated 10/31/22.
Wetlands flagging by Mary Jaehnig on 10/19/22.
Refer to survey for true property data.

Google Earth photo

NOT TO SCALE

Zoning analysis

Change of use
876 Route 35, Cross River, New York

Section:	42.4
Block:	1
Lot:	3
Zone:	RB
Lot size (acres):	1.031
Lot size (square feet):	44,910

Regulation	Minimum	Maximum	Actual (Existing)	Proposed	Remarks
Min. lot size (acres)	0.5		1.031	1.031	
Min. lot frontage	100'		24.8	24.8	
Front yard (Feet) from street center line	45'		153.8	153.8	
Front yard (Feet) from front lot line	20'		48.1	48.1	
Side one (Feet)	15'		26.7	26.7	
Side two (Feet)	15'		137	137	
Rear yard (Feet)	15'		116.8	116.8	
Max. height, stories		2 1/2	1	1	
Max. height, feet		30'	20' +/-	20' +/-	
Building coverage		20%	2.63%	2.63%	Percentage
		8,982	1,181	1,181	Square feet
Site Coverage		60%	30.08%	27.42%	Percentage
		0	13,508	12,316	Square feet
Floor Area Ratio		0.30	0.03	0.03	Square feet

FAR analysis

876 Route 35, Cross River, New York

Section: 42.4		
Block: 1		
Lot: 3		
Zone: RB		
Lot size (acre): 1.031	44,910	SF
Maximum FAR 0.30	13,473	SF

Proposed changes in floor area

	Existing	*Proposed*	*Increase*
First floor	1,153	1,153	0
Second floor	0	0	0
Third floor	0	0	0
Basement	0	0	0
Totals	**1,153**	**1,153**	**0**
FAR	**0.026**	**0.026**	

Building coverage summary

876 Route 35, Cross River, New York

Section: 42.4		
Block: 1		
Lot: 3		
Zone: RB		
Lot size (acre): 1.031	44,910	SF
Max. Principle bldg: 20%	8,982	SF
Max Site Coverage 60%	26,946	SF

As per Terry Bergendorff Collins Land Surveyor dated Sept.28,2022

	Existing		Proposed		
Structure	**Foot print**	**% of lot**	**Change (SF)**	**Foot print**	**% of lot**
Residence	1,153	2.57%	0	1,153	2.57%
Rood overhange	28	0.06%	0	28	0.06%
Total building coverage	**1,181**	**2.63%**	**0**	**1,181**	**2.63%**
Building coverage (from above)	1,181	2.63%	0	1,181	2.63%
Driveway Macadam areas)	11,813	26.30%	(1,192)	10,621	23.65%
Basement stair	55	0.12%	0	55	0.12%
Concrete walks, steps and plat	423	0.94%	0	423	0.94%
Concrete pad - propane tank	36	0.08%	0	36	0.08%
Total impervious surfaces	**13,508**	**30.08%**	**(1,192)**	**12,316**	**27.42%**

Patrick M. Croke Architect

20 Woodsbridge Road
Katonah, New York 10536
T: 914.234.6093
F: 914.234.0548
info@pmcarchitect.com

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NOTE: DO NOT SCALE DRAWINGS

G:\-Project Files\22035 - Koloski\2 - Drawings\22035 - Koloski - CD - V29 - 25'12"1.pln

This project is designed to conform to the 2020 Building Code of NYS

No:	Description:	Date:	
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6	Submission to Planning Board	11/27/23	☒
5	Planning Board revisions as per meeting with Jan Johannessen	11/16/23	☐
4	Planning Board review for business use	09/05/23	☐
3	Additional info for Planning Board review	03/27/23	☐
2	Added trees, septic and additional info	02/03/23	☐
1	Building Department and Planning Board submission	11/30/22	☐

Revisions:

Project Name:

Offices and parking (Business use)
876 Route 35
Cross River, NY

Drawing Title:

Site plan, aerial photo and general notes

Date: 11/27/23
Revised as noted above

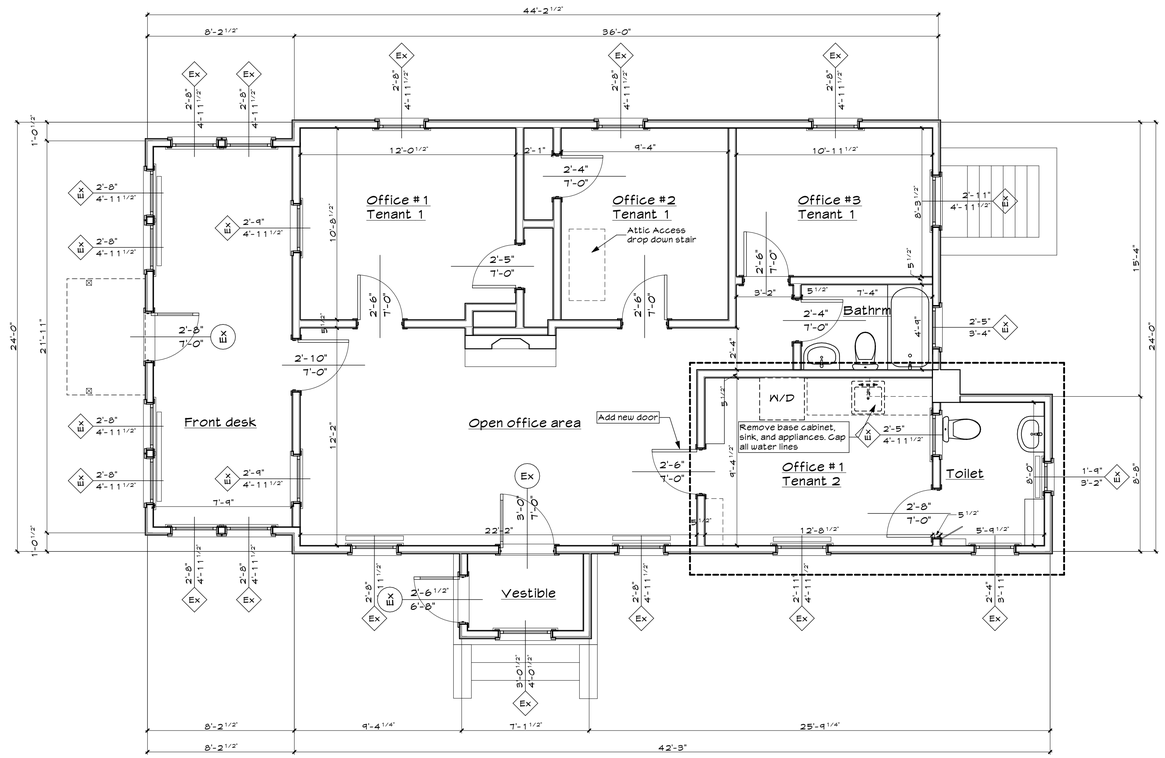
Project #: 22035

Scale: As noted

REGISTERED ARCHITECT PATRICK MICHAEL CROKE 17551 STATE OF NEW YORK

Drawing Number:

A-1



2 First Floor - Renovation

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

Patrick M. Croke Architect

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NOTE: DO NOT SCALE DRAWINGS

G:\-Project Files\22035 - McDonald - Drawings\22035 - McDonald - CD - V29 - 25'11"24.pln

This project is designed to conform to the 2020 Building Code of NYS

No:	Description:	Date:	
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6	Submission to Planning Board	11/27/23	☒
5	Planning Board revisions as per meeting with Jan Johannessen	11/16/23	☐
4	Planning Board review for business use	09/05/23	☐
3	Additional info for Planning Board review	03/27/23	☐
2	Added trees, septic and additional info	02/03/23	☐
1	Building Department and Planning Board submission	11/30/22	☐

Revisions:

Project Name:

Offices and parking (Business use)

876 Route 35
Cross River, NY

Drawing Title:

Building floor plan and photos

Date: 11/27/23
Revised as noted above

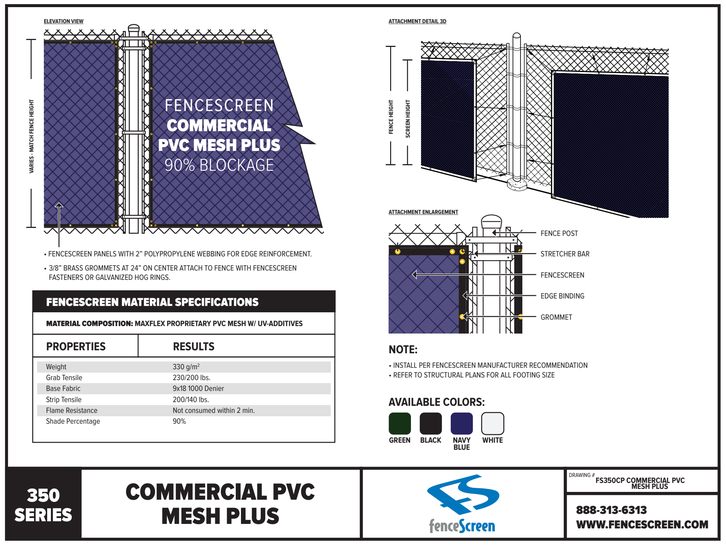
Project #: 22035

Scale: As noted

REGISTERED ARCHITECT PATRICK MICHAEL CROKE 17551 STATE OF NEW YORK

Drawing Number:

A-2



1 Fence screening - 350 series material spec

NOT TO SCALE

Patrick M. Croke Architect

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info@pmcarchitect.com

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NOTE: DO NOT SCALE DRAWINGS

O:\-Project Files\22035 - Katonah\2 - Drawings\22035 - Katonah - CD - v29 - 25\12\24.pln

This project is designed to conform to the 2020 Building Code of NYS

No:	Description:	Date:	
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6	Submission to Planning Board	11/27/23	☒
5	Planning Board revisions as per meeting with Jan Johannessen	11/16/23	☐
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3	Additional info for Planning Board review	03/27/23	☐
2	Added trees, septic and additional info	02/03/23	☐
1	Building Department and Planning Board submission	11/30/22	☐

Revisions:

Project Name:

Offices and parking (Business use)
876 Route 35
Cross River, NY

Drawing Title:

Fence photos and details

Date: 11/27/23
Revised as noted above

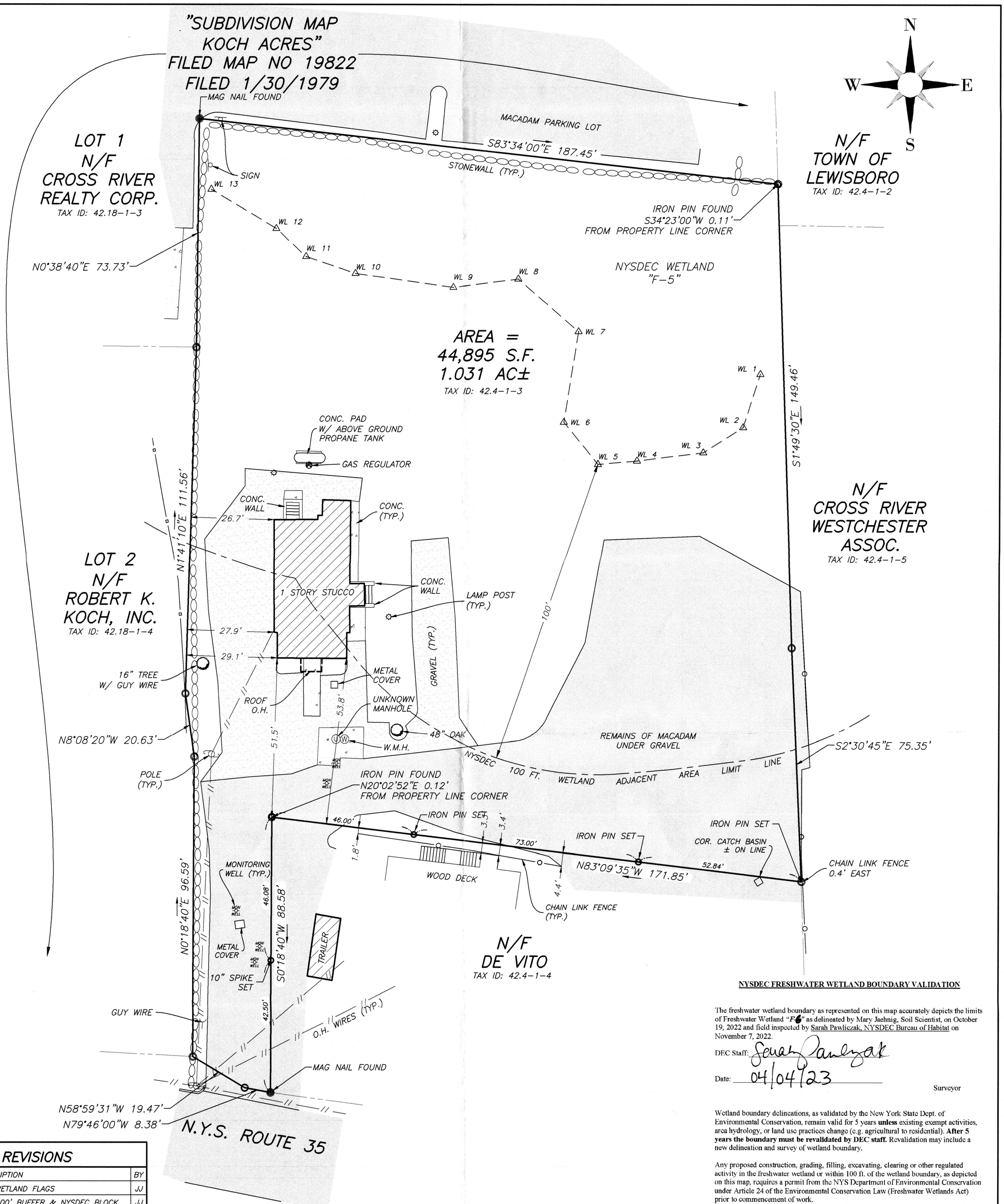
Project #: 22035

Scale: As noted

REGISTERED ARCHITECT PATRICK MICHAEL CROKE 17551 STATE OF NEW YORK

Drawing Number:

A-3



REVISIONS

DATE	DESCRIPTION	BY
10/31/22	ADD WETLAND FLAGS	JJ
3/6/23	ADD 100' BUFFER & NYSDEC BLOCK	JJ

NYSDEC FRESHWATER WETLAND BOUNDARY VALIDATION

The freshwater wetland boundary as represented on this map accurately depicts the limits of Freshwater Wetland "F-6" as delineated by Mary Jaehnig, Soil Scientist, on October 19, 2022 and field inspected by Sarah Pawliczak, NYSDEC Bureau of Habitat on November 7, 2022.

DEC Staff: Sarah Pawliczak

Date: 04/04/23

Surveyor

Wetland boundary delineations, as validated by the New York State Dept. of Environmental Conservation, remain valid for 5 years **unless** existing exempt activities, area hydrology, or land use practices change (e.g. agricultural to residential). **After 5 years the boundary must be revalidated by DEC staff.** Revalidation may include a new delineation and survey of wetland boundary.

Any proposed construction, grading, filling, excavating, clearing or other regulated activity in the freshwater wetland or within 100 ft. of the wetland boundary, as depicted on this map, requires a permit from the NYS Department of Environmental Conservation under Article 24 of the Environmental Conservation Law (Freshwater Wetlands Act) prior to commencement of work.

NOTE:
WETLANDS FLAGS SHOWN HEREON ARE PER FIELD DELINEATION BY MARY JAEHNIG ON 10/19/2022 AND SURVEY LOCATION COMPLETED 10/31/2022.

CERTIFICATIONS INDICATED HEREON SIGNIFY THIS SURVEY WAS PREPARED IN ACCORDANCE WITH THE EXISTING CODE OF PRACTICE FOR LAND SURVEYS ADOPTED BY THE NEW YORK STATE ASSOCIATION OF PROFESSIONAL LAND SURVEYORS, INC. CERTIFICATIONS SHALL RUN ONLY TO THE PERSON FOR WHOM THIS SURVEY WAS PREPARED AND ON HIS BEHALF TO THE TITLE CO. AND LENDING INSTITUTION LISTED HEREON. CERTIFICATIONS ARE NOT TRANSFERABLE TO ADDITIONAL INSTITUTIONS OR SUBSEQUENT OWNERS.

TERRY BERGENDORFF COLLINS
52 STARR RIDGE ROAD
BREWSTER, NEW YORK 10509
P:845.279.4261 F:845.279.6838
WWW.TERRYBERGENDORFFCOLLINS.COM

SURVEYOR'S SEAL

STATE OF NEW YORK · TERRY BERGENDORFF COLLINS · 49691 · LICENSED LAND SURVEYOR

N.Y.S. LICENSE NO. 49691

SURVEY OF PROPERTY
PREPARED FOR
PAUL ROTONDI
SITUATE IN
TOWN OF LEWISBORO WESTCHESTER CO., N.Y.
SCALE: 1" = 20' SEPTEMBER 28, 2022

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FIELD PARTY: DM/GN DRAWN BY: DM CHECKED BY: TBC

JOB NO. LEWISBORO 42.4-1-3

G:\DRAWINGS\LETTERS\~WESTCHESTER COUNTY\LEWISBORO\42.4-1-3 (ROTONDI 2022)\SURVEY 3.6.23.DWG 3/28/2023 11:35:45 AM 1:1

Ciorsdan Conran

From:	Linda Jeanne <crossriverhamlet@gmail.com>
Sent:	Tuesday, February 28, 2023 11:14 AM
To:	Ciorsdan Conran; planning@lewisborogov.com
Subject:	Objection to change of use application in Cross River
Attachments:	OTRJF2-2022-09-26-3-58-02.pdf

To the Lewisboro Town Planning Board Chair and Members,

The following application is on the Planning Board agenda:

Cal #18-22PB
Bichon LLC, 876 Route 35, Cross River, NY 10518; Sheet 20, Block 10801, Lot 2 (Bichon LLC – owner of record) – Application for a change of use from residential to commercial (professional office and outdoor storage of containers).

While I have no objection to the property's use for "professional office" I do object to "outdoor storage of containers."

The property owner is already in violation of **Town of Lewisboro and/or the 2020 NYS Uniform Code** - see attached. Approximately eleven of these metal containers (dumpsters in appearance) in various sizes are on the property today - in violation of code.

There are environmental and water quality concerns. As I understand it, the property abuts wetlands. It also sits on higher ground in proximity to The Meadows condominium. It is unknown what these containers would store - as the property owner has stated an intent to rent out the containers and allow something (unknown at this writing) to be stored.

An additional unknown is what these containers originally stored before being place on the property - waste, toxic material, chemicals, hazardous, flammable? Are there traces or residue of anything harmful or contaminated within the containers today?

And, as I understand, the property owner intentionaly misled a tenant renting the residential zoned structure for commercial use.

I urge the Planning Board to decline this application.

Sincerely,
Linda Press Wolfe
Cross River, NY

Linda Jeanne
crossriverhamlet@gmail.com
Cross River, NY

TOWN OF LEWISBORO

BUILDING DEPARTMENT
79 Bouton Road
South Salem, NY 10590
(914)763-3060

ORDER TO REMEDY VIOLATION

Complaint #: 43-22 **Notice Date:** 09/26/2022 **Comply Date:** 09/26/2022

To: BICHON LLC
876 ROUTE 35
CROSS RIVER, NY 10518

Occupant: Physical Therapist / Dumpster storage

Site Address: 876 ROUTE 35

Sheet/Block/Lot: 10801-002-0020

Certified Mail #: 7020 1290 0000 0408 2980

On 09/22/2022 a lawful inspection and/or review of Building Department records was conducted of the above referenced premises and the following violation(s) of the Town of Lewisboro and/or the 2020 NYS Uniform Code and/or codes applicable at the time of construction was observed:

ORDINANCE CODE

105.5.2 –

Without regard to whether a certificate of occupancy shall have been issued, no person or entity shall convert the use or occupancy of a building or structure, or any portion thereof, from one use or occupancy to another without first obtaining a building permit to perform the work, if any, required for such conversion; performing such work, if any; and obtaining a certificate of occupancy from the authority having jurisdiction.

ORDINANCE CODE

220-44A –

NO BUILDING PERMIT SHALL BE ISSUED, NO STRUCTURE OR USE SHALL BE ESTABLISHED, NO USE SHALL BE CHANGED TO ANOTHER USE AND, ON LOTS LOCATED IN NON-RESIDENTIAL DISTRICTS, NO EXISTING GRADES SHALL BE ALTERED NOR IMPERVIOUS SURFACE PLACED WITHOUT PRIOR CONFORMITY WITH THE SITE DEVELOPMENT PLAN APPROVAL PROCEDURES SET FORTH IN THIS ARTICLE.

ORDINANCE CODE

92-7A –

Certificates of occupancy required. A Certificate of Occupancy shall be required for any work which is the subject of a building permit and for all structures, buildings, or portions thereof which are converted from one use or occupancy classification or subclassification to another. Permission to use or occupy a building or structure, or portion thereof, for which a building permit was previously issued shall be granted only by the issuance of a certificate of occupancy.

TO WIT: Site being utilized as commercial storage and business without proper permitting, change of use or site plan approval.

REMEDY: Remove unapproved uses and apply for proper approvals to code.

TOWN OF LEWISBORO

BUILDING DEPARTMENT

79 Bouton Road
South Salem, NY 10590
(914)763-3060

NOTICE: Full compliance with this order to remedy is required by 09/26/2022 which is thirty (30) days after the date of this order. If the person or entity served with this order fails to comply fully with this order to remedy within the thirty (30) day period, that person or entity will be subject to a fine of not more than $1,000 per day per violation, or imprisonment not exceeding one year, or both. You are hereby notified that you have thirty (30) calendar days to remove/restore and make safe the above noted violations in the prescribed manner, apply for required permits and/or provide evidence that the apparent unlawful improvements were completed in accordance with the Code. Further, you are hereby directed to bring the referenced violations into compliance and arrange for a re-inspection within the aforementioned time frame. Failure to comply will result in alternative action as prescribed by law in order to gain compliance including, but not limited to: a summons to appear in court. Please be advised that any person(s), corporation partnership, association or other legal entity found guilty of violations to the Code of the Town of Lewisboro and each day the violation exists shall constitute a separate and distinct violation

Jeff Farrell
Building Inspector

Ciorsdan Conran

From: Linda Jeanne <crossriverhamlet@gmail.com>
Sent: Thursday, June 15, 2023 6:23 PM
To: Ciorsdan Conran; Kara Sullivan
Subject: Request for an update. RE: Objection to change of use application in Cross River

To the Lewisboro Town Planning Board Chair and Members; and Lewisboro Building Inspector:

As of this writing, a large number of garbage dumpsters remain on the property referenced below. Not only are these an eye-sore, these containers - its content or use are unknown and may or may not contain or have contained hazardous waste/material - content that may negatively impact the wetlands abutting the property and/or Cross River's aquifer.

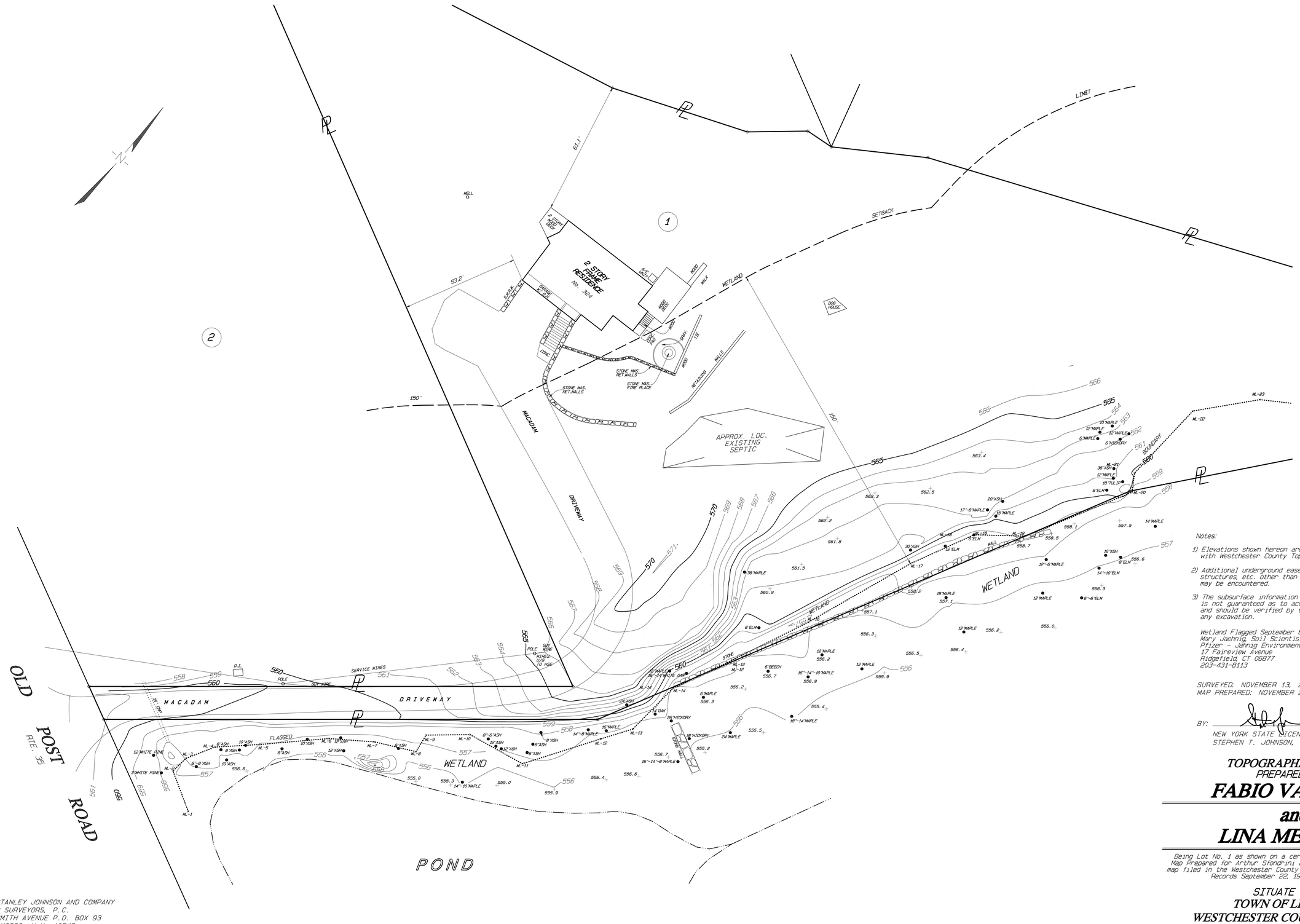
The property was also issued violations by the Town.

I am requesting to understand what action if any has been taken to remove these containers; have the violations been satisfied/remedied; has the property owner been denied the application to use the property for garbage container storage.

Respectfully,

Linda Press Wolfe
Cross River, NY

Linda Jeanne
crossriverhamlet@gmail.com
Cross River, NY



Notes:

1) Elevations shown hereon are generally in accordance with Westchester County Topographic Datum.

2) Additional underground easements, utilities or structures, etc. other than those shown hereon may be encountered.

3) The subsurface information shown hereon, if any, is not guaranteed as to accuracy or completeness and should be verified by the contractor before any excavation.

Wetland Flagged September 6, 2023 by:
Mary Laehnig Soil Scientist
Pfizer - Jahnig Environmental Consulting
17 Fairview Avenue
Ridgefield, CT 06877
203-431-8113

SURVEYED: NOVEMBER 13, 2023
MAP PREPARED: NOVEMBER 29, 2023

BY: _____
NEW YORK STATE LICENSED LAND SURVEYOR NO. 49749
STEPHEN T. JOHNSON, P.L.S.

LICENSED LAND SURVEYOR
STEPHEN T. JOHNSON
No. 49749
STATE OF NEW YORK

TOPOGRAPHIC SURVEY
PREPARED FOR

FABIO VALENCIA
and
LINA MERCHAN

Being Lot No. 1 as shown on a certain map entitled "Subdivision Map Prepared for Arthur Sfondrini and Alfred Sfondrini, etc." said map filed in the Westchester County Clerk's Office, Division of Land Records September 22, 1982 as Map No. 21025

SITUATE IN THE
TOWN OF LEWISBORO
WESTCHESTER COUNTY, NEW YORK

SCALE: 1" = 20'

H. STANLEY JOHNSON AND COMPANY
LAND SURVEYORS, P.C.
42 SMITH AVENUE P.O. BOX 93
MT. KISCO, N.Y. 10549
TEL. 914-241-3872
FAX. 914-241-0438

PREPARED BY: SMS CHECKED BY: STJ

JOB No. F23-076_TOPO

GENERAL NOTES:

1. CONTACT DIG SAFELY NEW YORK AT 800-962-7962 WWW.DIGSAFELYNEWYORK.ORG TO HAVE UNDERGROUND UTILITY LINES MARKED PRIOR TO START OF ANY EXCAVATION WORK.
2. BASE MAP INFORMATION WAS TAKEN FROM "TOPOGRAPHIC SURVEY" PREPARED BY H. STANLEY JOHNSON AND COMPANY LAND SURVEYORS, P.C. DATED NOVEMBER 29, 2023.
3. WETLANDS WERE DELINEATED ON SEPTEMBER 6, 2023 BY MARY JAEHNIG, SOIL SCIENTIST, PFEIZER-JAEHNIG ENVIRONMENTAL CONSULTING.

WORK SEQUENCE:

1. INSTALL SILT FENCE.
2. REMOVE TRASH, BRUSH, LOGS AND DEBRIS FROM THE WETLANDS AND FROM WITHIN THE FIRST 20 FEET OF WETLAND BUFFER.
3. UTILIZING TRACKED MACHINERY, AND PERFORMING WORK BY HAND IN SENSITIVE AREAS, REMOVE FILL FROM AREAS SHOWN ON PLAN.
4. EXISTING TREES ARE TO BE PROTECTED. FILL ADJACENT TO TREES SHALL BE REMOVED BY HAND. DO NOT OPERATE MACHINERY WITHIN 5 FEET OF ANY EXISTING TREES.
5. EXPORT EXCESS FILL FROM THE SITE.
6. VERIFY THE SUITABILITY OF SOIL WITHIN THE AREAS WHERE FILL HAS BEEN REMOVED FOR RE-PLANTING. IF EXISTING SOIL IS FOUND TO BE DEFICIENT, PROVIDE A MINIMUM OF FOUR INCHES OF CLEAN, SCREENED TOPSOIL IN AREAS TO BE SEEDED. IN AREAS OF SHRUB PLANTING PROVIDE A MINIMUM OF 12 INCHES DEPTH OF CLEAN, SCREENED TOPSOIL WITHIN THE PLANT HOLES, OR AMEND THE EXISTING SOIL.
7. INSTALL NEW NATIVE SHRUBS ACCORDING TO THE PLAN.
8. APPLY CONSERVATION/WILDLIFE MIX BY NEW ENGLAND WETLAND PLANTS, INC, OR EQUAL TO ALL DISTURBED AREAS WITHIN THE WETLAND BUFFER, ACCORDING TO MANUFACTURER'S DIRECTIONS.
9. RESTORE ALL DISTURBED LAWN AREAS: TOPSOIL, FINE RAKE, SEED AND HAY MULCH ALL DISTURBED AREAS TO BE MAINTAINED AS LAWN.

PLANTING NOTES:

1. EXACT LOCATION OF PLANTINGS, SPECIES TYPES AND QUANTITIES MAY VARY FROM THIS PLAN BASED ON SITE PLAN REVISIONS AND/OR ACTUAL FIELD CONDITIONS.
2. PLANT SPECIES SUBSTITUTIONS MAY BE MADE WITH THE APPROVAL OF THE PROJECT LANDSCAPE ARCHITECT PRIOR TO PLANTING. SUBSTITUTED PLANTS SHALL BE AT AN EQUAL OR GREATER SIZE AS NOTED USING A SIMILAR TYPE, NATIVE PLANT.
3. ALL PLANTING METHODS SHALL BE IN ACCORDANCE WITH THE 'AMERICAN STANDARDS FOR NURSERY STOCK' LATEST EDITION, AS PUBLISHED BY THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION.
4. IN THE EVENT OF A DISCREPANCY BETWEEN THE QUANTITIES OF PLANTS IN THE 'PLANT LIST' AND THE ACTUAL QUANTITIES SHOWN ON THE PLAN THE PLAN SHALL GOVERN.
5. ALL PLANTING WORK SHALL BE PERFORMED EITHER BY HAND.
6. ANY PLANTINGS SUSCEPTIBLE TO DEER BROWSING SHALL BE SPRAYED WITH ORGANIC DEER REPELLENT AND/OR PROTECTED WITH A PHYSICAL BARRIER, SUCH AS TREE TUPES, MESH FENCING, OR SIMILAR.
7. PLANTINGS SHALL BE HAND WATERED OR WATERED BY A TEMPORARY IRRIGATION SYSTEM UNTIL ESTABLISHMENT

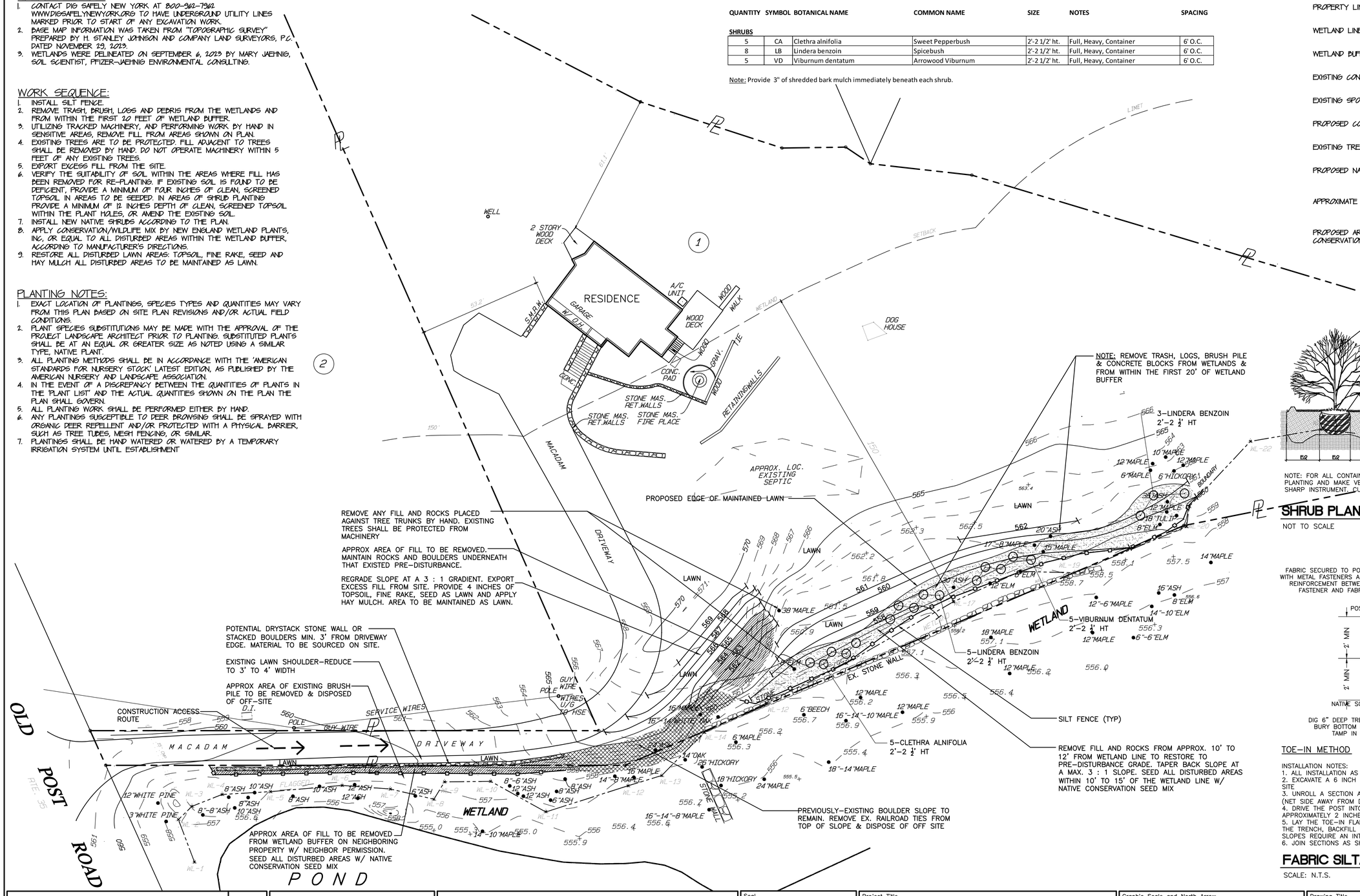
PLANT LIST-1324 Route 35

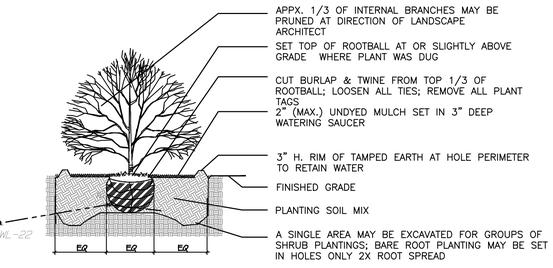
QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	NOTES	SPACING
SHRUBS						
5	CA	Clethra alnifolia	Sweet Pepperbush	2'-2 1/2' ht.	Full, Heavy, Container	6' O.C.
8	LB	Lindera benzoin	Spicebush	2'-2 1/2' ht.	Full, Heavy, Container	6' O.C.
5	VD	Viburnum dentatum	Arrowood Viburnum	2'-2 1/2' ht.	Full, Heavy, Container	6' O.C.

Note: Provide 3" of shredded bark mulch immediately beneath each shrub.

GENERAL LEGEND

PROPERTY LINE
WETLAND LINE — WL-19
WETLAND BUFFER LINE
EXISTING CONTOUR — 569
EXISTING SPOT GRADE — 563.4
PROPOSED CONTOUR — 562
EXISTING TREE TO REMAIN — 38"MAPLE
PROPOSED NATIVE SHRUB
APPROXIMATE AREA OF FILL REMOVAL
PROPOSED AREA OF NATIVE CONSERVATION SEED MIX

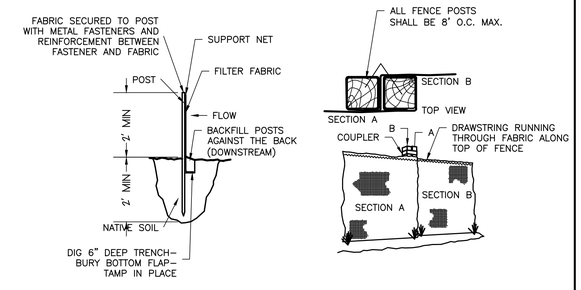




NOTE: FOR ALL CONTAINER GROWN PLANTS, REMOVE FROM CONTAINER JUST PRIOR TO PLANTING AND MAKE VERTICAL INCISIONS ALONG THE SURFACE OF THE ROOTBALL WITH A SHARP INSTRUMENT. CUT THROUGH CIRCULAR ROOTS AND GENTLY COMB OUT ROOTS.

SHRUB PLANTING DETAIL

NOT TO SCALE



TOE-IN METHOD

JOINING SECTIONS OF FENCING

INSTALLATION NOTES:
1. ALL INSTALLATION AS PER ASTM STANDARDS
2. EXCAVATE A 6 INCH TRENCH ALONG THE LOWER PERIMETER OF THE SITE
3. UNROLL A SECTION AT A TIME AND POSITION WALL OF THE TRENCH (NET SIDE AWAY FROM DIRECTION OF FLOW)
4. DRIVE THE POST INTO THE GROUND UNTIL THE NETTING IS APPROXIMATELY 2 INCHES FROM THE TRENCH BOTTOM
5. LAY THE TOE-IN FLAP OF FABRIC ONTO THE UNDISTURBED BOTTOM OF THE TRENCH, BACKFILL THE TRENCH AND TAMP THE SOIL. STEEPER SLOPES REQUIRE AN INTERCEPT TRENCH
6. JOIN SECTIONS AS SHOWN ABOVE

FABRIC SILTATION FENCE DETAIL

SCALE: N.T.S.

Revisions	Date

Tracy Chalifoux LLC
Landscape Architect
7 King Street, Danbury, CT 06811
Office: 845-364-1360
E-mail: tlchalifoux@gmail.com

Seal: REGISTERED LANDSCAPE ARCHITECT TRACY LEE CHALIFOUX LA NO. 001985 STATE OF NEW YORK

Project Title: **RESTORATION PLAN**
PREPARED FOR:
FABIO VALENCIA AD LINA MERCHAN

Location: 1324 ROUTE 35
SOUTH SALEM, NEW YORK, TOWN OF LEWISBORO

Graphic Scale and North Arrow: 0 20' 40'

Date: February 9, 2024

Scale: 1" = 20'-0" | Checked: TLC | Drawn: TLC

Drawing Title: CONCEPTUAL RESTORATION PLAN

Drawing No. **WP-1**

SHEET 1 OF 1

KSCJ CONSULTING

John Kellard, P.E.
David Sessions, RLA, AICP
Joseph M. Cermele, P.E., CFM
Jan K. Johannessen, AICP

MEMORANDUM

TO: Chairperson Janet Andersen and
Members of Lewisboro Planning Board

CC: Ciorsdan Conran
Judson Siebert, Esq.
Kevin Kelly, Building Inspector

FROM: Jan K. Johannessen, AICP
Joseph M. Cermele, P.E., CFM
Town Consulting Professionals

DATE: February 16, 2024

RE: Alex Bernabo
96 Post Office Road
Sheet 25, Block 10812, Lot 3

PROJECT DESCRIPTION

The subject property consists of ±4 acres of land and is located at 96 Post Office Road within the R-4A Zoning District. The subject property is currently vacant land. The applicant is proposing a two (2) bedroom dwelling with attached garage. Improvements include a paver driveway, septic system, well and associated stormwater treatment system.

SEQRA

The proposed action is a Type II Action and is categorically exempt from the State Environmental Quality Review Act (SEQRA).

REQUIRED APPROVALS

1. A Wetland Activity Permit and Town Stormwater Permit is required from the Planning Board; a public hearing is required to be held on the Wetland Permit.

2. A front yard setback variance may be required from the Zoning Board of Appeals.

3. Work proposed within the Town right-of-way will require a Driveway Opening Permit from the Town Highway Superintendent.

4. The applicant has obtained approval from the Westchester County Department of Health (WCHD) regarding the proposed septic system and water well.

   This office is only in receipt of the Construction Approval Application. A complete set of signed and approved plans from the WCHD shall be provided.

5. The applicant has obtained Individual Residential Stormwater Permit Approval from the New York City Department of Environmental Protection (NYCDEP).

6. Coverage under the New York State Department of Environmental Conservation (NYSDEC) SPEDES General Permit for Stormwater Discharges from Construction Activity (GP-0-20-001) is required.

COMMENTS

Previously issued comments are provided below; new comments or follow up comments are provided in **bold** text.

1. The application should be referred to the Building Inspector for review of zoning compliance.

2. An existing conditions topography and tree survey shall be submitted, prepared by a NYS Licensed Land Surveyor.

   The requested tree survey has been provided. See additional comment below.

3. As previously noted, the wetland boundary shall be delineated by a qualified wetland scientist, in accordance with Chapter 217, Wetlands and Watercourse, of the Town Code. Wetland flags shall be survey-located and shall appear on the plan, along with the Town's 150-foot regulated wetland buffer line. In accordance with the Town's wetland ordinance, the wetland delineation must have been conducted within one (1) year of the date of application and this office must confirm the wetland boundary line.

   Provide a note on Sheet CS identifying the wetland delineator and date of delineation.

4. As previously noted, there appears to be an off-site wetland on the opposite side of the street at 101 Post Office Road; off-site wetlands shall be shown, as should the 150-foot buffer.

This comment has not been addressed. There is a dotted line on the plan which may be reflecting the wetland, but these lines are not labeled. Clearly identify the off-site wetland and buffer area.

5. As previously noted, the applicant shall submit a Wetland Report, which shall contain the information required under Sections 217-5 and 6 of the Town's Wetland Ordinance.

   This comment has not been addressed. There is a series of dotted lines on the plan which may be an attempt to address the comment, but these lines are not labeled.

6. As previously noted, the applicant shall develop a Wetland Mitigation Plan, which provides, at a minimum, mitigation at a ratio of 1:1 (for every s.f. of wetland or wetland buffer disturbance proposed, an equal or greater amount of mitigation shall be provided). Reference is made to the Town's mitigation guidelines provided in Chapter 217, Appendix B. Note that stormwater mitigation does not count toward satisfying the wetland mitigation requirement.

   This comment has not been addressed.

7. **The plan continues to include direct wetland impacts, including grading, a sediment trap, proposed well, gravel access to the well, utility trenching, fencing and planting within the wetland proper. These impacts should be eliminated or reduced to the extent possible. The disturbance proposed within the wetland and wetland buffer shall be clearly presented on a table to be included on Sheet CS, along with a calculation of mitigation (1:1 mitigation required). Direct disturbance to on-site wetlands will likely require permitting through the Army Corps of Engineers (ACOE), as previously identified.**

8. A cut and fill calculation shall be provided on the grading plan.

   The applicant has indicated a total import of 553 c.y. of fill required for the project, including 260 c.y. required for construction of the septic field.

9. Indicate trees to be removed and/or protected.

   The applicant has provided the requested tree survey and indicated those trees to be removed and protected. However, the tree survey should be illustrated on the improvement plans for coordination purposes. Specifically, this office questions the ability to save Tree #9, a 42-inch diameter Elm, which appears to be within ten (10) feet of the proposed primary septic field and would otherwise require removal by the WCHD. Sheet SY4 shall include a note referencing the surveyor responsible for locating the trees and the date of tree survey.

10. As previously noted, show any proposed contours and/or spot grades at the southern side of the proposed dwelling.

    The grading plan has been revised, as requested. We note that the deck will be constructed on piers, minimizing or eliminating the need to regrade this portion of the site.

11. Provide construction details for the gravel driveway and parking area.

    The applicant has revised the proposed driveway construction to include grass-crete pavers for its entirety. The detail should be revised to specify the layer thickness of the granular subbase depth.

12. Regarding the driveway profile, changes in grades require vertical curves.

    Comment satisfied.

13. All walls equal to or greater than four (4) feet in height must be designed by a Professional Engineer. We understand that these designs, including the planter wall design, will occur at the time of Building Permit.

14. As previously noted, the plan shall note that the construction of all walls greater than or equal to four (4) feet in height shall be certified by the Design Professional, prior to issuance of a Certificate of Occupancy/Completion.

    The requested note shall be provided.

15. As previously noted, the site plan shall quantify the limits of disturbance in (s.f.). The plan shall note that disturbance limits shall be staked in the field prior to construction.

    The requested note has been provided. However, as previously requested, the Site Plan shall quantify the limits of disturbance and include those areas within the right-of-way.

16. Question #12 of the NOI shall be answered “yes”.

    Comment satisfied.

17. The disturbance area noted in the NOI does not match the disturbances noted on plan Sheet CS. Please clarify or correct.

The disturbance area noted on the NOI shall be coordinated with Comment #15 above.

18. Plan sheets should be coordinated. Info appears to vary from sheet to sheet. Driveway slopes shown on the profile do not match those noted on the site plans. The same issue applies to driveway grades and driveway surface treatments.

    The site plans indicate a 14% maximum driveway slope. This should be revised to reflect the 12.3% grade illustrated on the profile.

19. As previously noted, the applicant shall provide stormwater mitigation and design calculations for the runoff generated by the net increase in impervious surface for the 100-year, 24-hour storm event.

    See comment below related to the proposed stormwater mitigation.

20. As previously noted, the roof leaders for the garage <u>should be shown on the plan</u> to clarify how stormwater will be conveyed to the storm water planter.

    Comment satisfied.

21. As previously noted, the plan shall include the size, slope, and material of the footing drain pipe and provide outlet protection details.

    Comment satisfied.

22. **The plan proposes planting a total of 18 Green Giant Arborvitae along the northern property line, eight (8) of which are proposed to be planted on the adjoining property. The applicant should provide an agreement with the neighboring property owner to install the plantings as proposed.**

<u>DRAINAGE ANALYSIS REVIEW COMMENTS:</u>

1. Add stone at the stormwater planter weir discharge locations to act as a splash pad.

   Comment satisfied.

2. The Northeast Regional Climate Center Extreme Precipitation Estimates for rainfall should be used in the stormwater calculations, not the 2002 NYSDEC Manual estimates.

While the NRCS Extreme Precipitation rainfall data has been used for the filter bed design, the hydrologic analysis has not been updated. The routing analysis shall be revised, as needed, utilizing the updated storm data.

3. Water Quality Calculations, in accordance with the New York State Stormwater Management Design Manual (NYS SMDM) – Chapter 5 Design Guidelines, should be added to the Drainage Analysis Synopsis.

   The applicant has provided the filter bed design consistent with the NYS SMDM. Comment satisfied.

4. The two (2), 6" perforated pipes at the base of each of the stormwater planters, which discharge towards the wetlands, should be modeled within the design calculations. These discharges were not included in the current calculations.

   The hydrologic analysis correctly models the ponding and overflow conditions for each of the filter bed planters. As previously stated, however, the two (2) underdrains for each planter should be included in the hydrologic analysis to accurately reflect the outlet discharges associated with the lower storm events. The model currently provides no discharge flows for the 1-, 2- and 10-year storm events. Please revise as necessary.

5. The stone outlet sediment trap, located west of the driveway, should be modeled within the stormwater calculations, along with the contributing drainage area.

   This has been removed from the plan. Comment satisfied.

6. The soil media specifications for stormwater planters, per the NYS SMDM, should be added to the Site Plan and Drainage Analysis Synopsis.

   Comment satisfied.

7. The applicant shall perform deep and percolation soil testing in the vicinity of the proposed mitigation system to be witnessed by the Town Engineer. The test locations and results shall be shown on the plan. Contact this office to schedule the testing.

   The requested soil testing has not been conducted to be witnessed by this office. We note that because this is a filtering practice and not relying upon underlying soils for infiltration that the previously requested percolation testing can be suspended. We will want to see the deep tests to verify the need for the proposed underdrains.

8. **Because the project does not meet the threshold required to provide post-construction stormwater management, in accordance with the NYSDEC Regulations, Questions 27 through 39 of the NOI shall be left blank. Please revise as necessary.**

9. **The elevation of the overflow wears shown on the planter cross section and plan view shall be coordinated. The cross section indicates an elevation of 487.0, while the planned indicates an elevation of 487.25.**

In order to expedite the review of subsequent submissions, the applicant should provide annotated responses to each of the comments outlined herein.

PLANS REVIEWED, PREPARED BY P.W. SCOTT, DATED JANUARY 24, 2024:

- Cover Sheet (CS)
- IRSP Erosion Control Plan (SY1)
- Concrete Planter Details (SY2)
- Driveway Details (SY3)
- Tree Preservation Plan (SY4)
- Rock Wall Removal Plan
- Pre – Post Drainage Overlay (D1)

DOCUMENTS REVIEWED:

- Letter, prepared by P.W. Scott, dated January 24, 2024
- Stormwater Pollution Prevention Plan Report, dated January 24, 2024
- Drainage Analysis Synopsis, dated January 24, 2024
- House Renderings

JKJ/dc

TO: The Town of Lewisboro Planning Board

FROM: Lewisboro Conservation Advisory Council

SUBJECT: Bernabo vacant land, 96 Post Office Road, Waccabuc, NY 10597

DATE: February 6, 2023

The Conservation Advisory Council (CAC) has reviewed the materials submitted by the applicant for a new well, septic and house.

Based on the building inspector's denial of a building permit, the CAC has not additional comments. The comments from the previous note still apply (below).

The entire project is in the wetland buffer. At one time this property was considered unbuildable due to its nearness to the wetland and possible wetness of the soil.

The CAC would like to see the wetland and the 150 foot buffer lines clearly marked. Given the closeness to the wetland, the CAC would like to see:

- A calculation of the disturbance and the associated mitigation planting plan size to meet the 1 to 1 criteria. The notes imply that a 1 to 1 mitigation plan may not be possible. The applicant stated that off-site mitigation would be achieved by removing invasive off-site. A plan needs to be provided that describes this removal, that demonstrated that such an action actually provides useful mitigation in lieu of the one-to-one criteria and that demonstrates some measure of control of the off-site location as required by the ordinance. Given the closeness to the wetland, the CAC feels a robust mitigation plan should be provided.
- A document titled "Tree Preservation" was submitted but this does not appear to be a list of trees being preserved based on the drawings. The CAC would like to see a more accurate document.
- A stormwater management plan
- A soil report, both for the septic area and to determine if there are wet areas in the buffer that may be disturbed.

		P.W. Scott	pwscott@pwscott.com
		Engineering & Architecture, P.C.	www.pwscott.com
		3871 Danbury Rd (Route 6)	(845) 278-2110
		Brewster, NY 10509	

January 24, 2024

Ms. Janet Anderson, Planning Board Chairperson
Planning Board Members
Town of Lewisboro
79 Bouton Road
South Salem, NY 10590
planning@lewisborogov.com

Re: 96 Post Office Rd

Dear Ms. Anderson and Planning Board Members,

Attached is a revised site plan in response to our recent conversation. The plans have been revised to minimize site development impacts to the site with the house footprint totaling 1,700 sf.

The following is a comparison to the 12/12/23 submission:

1. Moved the driveway closer to the house, with 10' length reduction and Grasscrete reduction from 1,950 sf to 1,850 sf (-100 sf). None in wetland. Septic tanks and grading prevent further compaction of the driveway.
3. Reduced total deck area from 980 sf to 840 sf (-140 sf).
4. Planter remains at 320 sf - size based upon roof size –
   The planter is split with north half inserted into the garage footprint, the south side is the remaining required sf which establishes the length of the southern deck.
   Note: Planter must be 50.0 ft from the septic trenches as noted on the site plan.
5. House footprint remains at 1,700 sf x 2 stories including the garage.
6. SSDA – No change with this amendment.
7. The cantilevered deck on the west side of the residence is narrowed to 6.0 ft wide and is moved beyond the wetland line by making the house narrower for access to the southern deck. This deck width allows doors to open along the west face of the building with room for an aisle.
8. Relocated the upland mitigation plantings closer to the house to replace the barberry which currently covers the east side of the wetland, extending to the stream as mitigation equal to upland disturbances.

   Net reduction of disturbance: 240 sf

These revisions now eliminate any wetland encroachments. Upland areas are mitigated with either planters or grass/wetland plantings.

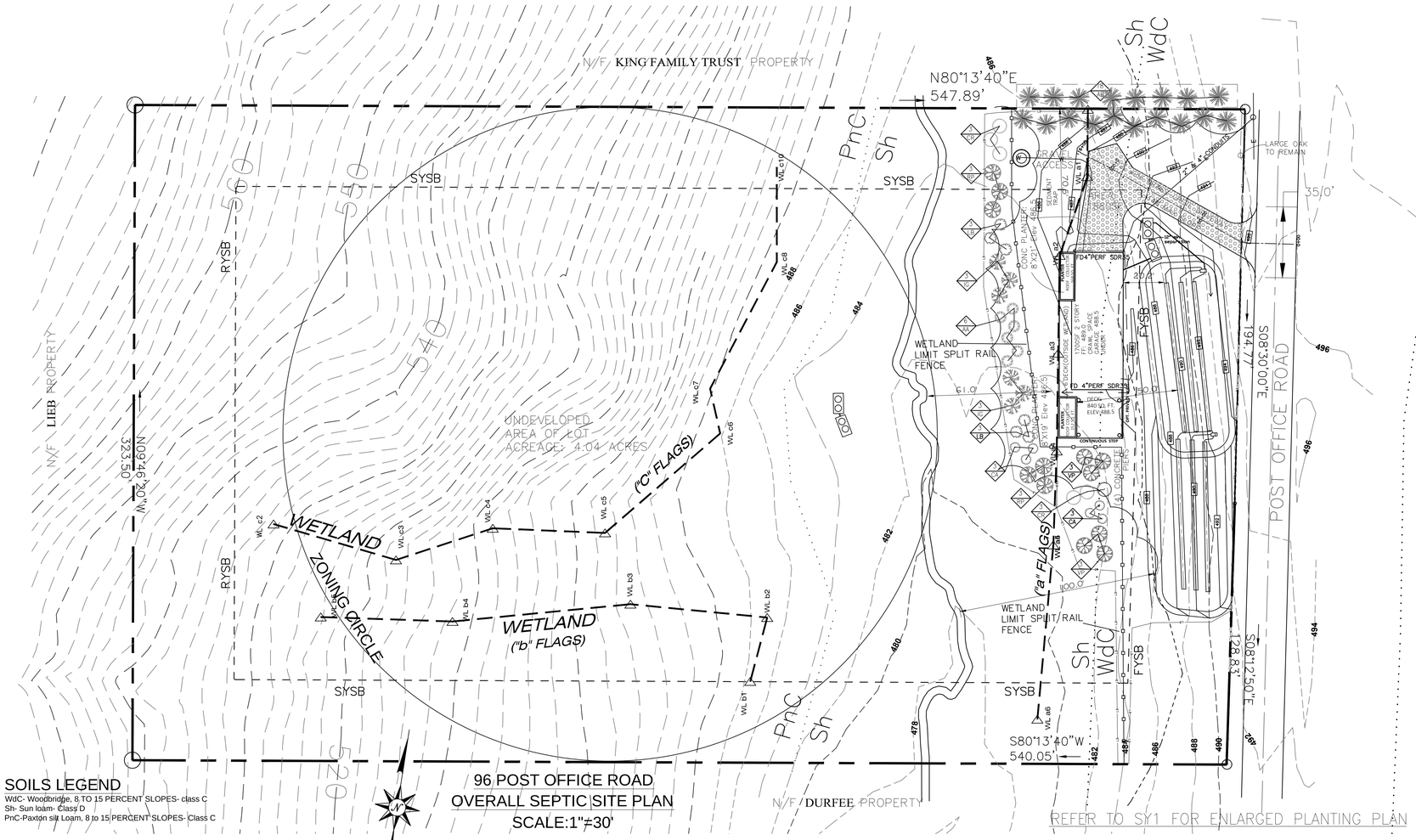
Please accept this site plan for review. Three dimensional renderings of the house architecture and revised SWPPP are included for this.

With regards,

Peder Scott

Peder Scott, P.E., R.A.
President

Attach



SOILS LEGEND

WdC- Woodbridge, 8 TO 15 PERCENT SLOPES- class C
Sh- Sun loam- Class D
PnC-Paxton silt Loam, 8 to 15 PERCENT SLOPES- Class C

96 POST OFFICE ROAD
OVERALL SEPTIC SITE PLAN
SCALE:1"=30'

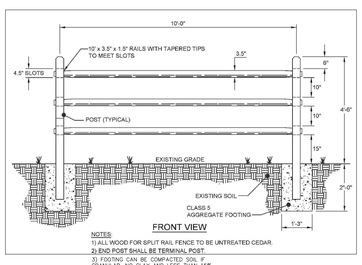
VICINITY MAP
1" = 500'

Zoning Tabluation
Zone: RA4

	Required	Proposed
Min. Lot Area:	4.0	4.04
Lot Width (circle ft):	250.0	320.0
Min. Yards		
Front - Street Center Line	75.0	71.3*
Front - Front Lot Line	50.0	54.0
Side Setback:	50.0	78.5
Rear Setback:	50.0	439.14
Max. Building Steel		
Stories	2.5 Stories	2 Story
Feet	35 Feet	28 Feet
Max. Building Coverage:		
House & Planter Footprint:2,020 sf	6.0%	1.10%
Treatment Planter: 320 sf (included in coverage)		
Including Deck: 1500 sf		2.0%

Disturbances Proposed		
Wetland:	.062 acre; 2694 sf	planter & well & grading
Wetland -incl plantings	0.162 acre; 7074 sf	planter & well & grading
Upland areas:	0.462 acre, 20,124 sf	driveway & SSDS Area
Upland areas-incl plantings	0.50 acre; 21780 sf	driveway & SSDS Area

		5/30/2023	9/20/2023	11/27/2023
CS	COVER SHEET	✓	✓	✓
SY1	IRSP EROSION CONTROL PLAN	✓	✓	
SY2	CONCRETE PLANTER DETAILS	✓	✓	
SY3	DRIVEWAY DETAILS		✓	
SY4	TREE PRESERVATION PLAN		✓	
SP1	SEPTIC PLAN - NEW CONSTRUCTION	✓	No change	No change
D1	DRAINAGE OVERLAYS		✓	



1 CS WETLAND SPLIT RAIL FENCE DETAIL
N.T.S.

NOTES: All wetland buffer planting shall be contained within Deer Fence for a duration of THREE (3) years minimum.
Provide a single 3.0 ft opening for access to property.

WETLAND IMPACT MITIGATION

THE EXISTING PROPERTY, SIMILAR TO THE ADJACENT PROPERTIES ALONG POST OFFICE RD., CONTAINS LOCAL WETLANDS ON THE REAR OF THE PROPERTY. THE SUBJECT LOT IS THE LAST VACANT LOT OF THIS SUBDIVISION APPROVED IN THE LATE 1970'S. THE WETLANDS INCLUDE A STREAM COURSE, AS NOTED ON THE SITE PLAN, WHICH IS NOT NYSDEC REGULATED. THE WETLANDS CONSIST OF A HEAVILY WOODED SITE WITH AN UNDERSTORY OF SYMPLOCARPUS FOETIDUS (SKUNK CABBAGE) AND IS IN GOOD CONDITION. ACCORDINGLY, SITE MITIGATION FOR THE DISTURBANCES IS PROPOSED AS FOLLOWS:

1. SPLIT RAIL FENCE ALONG THE EDGE OF THE LOT DISTURBANCE TO PREVENT ENTRY INTO THE WETLAND.
2. PERMANENT STONE OUTLET SEDIMENT TRAP TO TREAT ANY DRIVEWAY DRAINAGE.
3. CONCRETE PLANTER TO TREAT BUILDING ROOF RUNOFF IN COMPLIANCE WITH NYCDEP & NYSDEC IRSP.
4. BUFFER PLANTS ARE PROPOSED BEYOND THE SPLIT RAIL FENCE AS ON THE CHART PROVIDED, FOR AN AREA OF 0.13 ACRES.
5. SINCE THESE PLANTS ARE WITHIN THE WETLAND, A REPLACEMENT OF 1/1 (.20 ACRES) REPLACEMENT OF WETLAND PLANTS IS NOT FEASIBLE. UPLAND AREAS ON THE WEST SIDE OF THE LOT WILL REQUIRE DISTURBANCES FOR ACCESS, THEREFOR OFFSITE WETLAND MITIGATION IS PROPOSED OR THE REMOVAL OF INVASIVE BARBERRY PLANTS ACROSS THE SITE (2 ACRES PLUS)

WATERCOURSE BUFFER NOTES

1. REMOVE BROKEN LIMBS AND DEBRIS FROM THE WATERCOURSE.
2. CLEAN UP THE BUFFER AREA TO A WIDTH OF 15' ON EACH SIDE OF THE WATERCOURSE.
3. INSTALL FERNS AND SHRUBS AS NOTED ON THE PLAN.
4. OVER-SEED THE FILTER STRIP AREA WITH A CONSERVATION GRASS SEED MIX.
5. MULCH THE ENTIRE AREA WITH WEED FREE STRAW.
6. SURROUND NEW PLANTINGS WITH DEER FENCING FOR 3 YEARS TO ALLOW GROWTH OF PLANTS.

Stream Buffer Plants

SYM	Quant.	Botanical Name	Common Name	Caliper/Cont.	Spacing
Shrubs					
AA	6	*Amelanchier arborea*	Common serviceberry	2 gal.	5'
CA	6	*Clethra alnifolia*	Sweet pepperbush	2 gal.	5'
CR	6	*Cornus racemosa*	Gray dogwood	2 gal.	6'
IG	6	*Ilex glabra*	Inkberry	2 gal.	8'
LB	6	*Lindera benzoin*	Spicebush	2 gal.	6'
RP	6	*Rhododendron periclymenoides*	Pinkster azalea	2 gal.	8'
VP	6	*Vaccinium pallidum*	Blue Ridge blueberry	2 gal.	8'
	42				

SUPPLEMENTAL PLANTINGS

THE PLANTINGS SHALL BE INSPECTED AND SUPPLEMENTAL PLANTINGS ADDED AFTER TWO YEAR GROWING PERIOD IF 85% COVERAGE IS NOT ACHIEVED WITH THE PLANTINGS NOTED ABOVE. THE PERMITTEE SHALL TAKE ALL NECESSARY STEPS TO ENSURE A LEVEL OF SURVIVAL AND REPLANT AND REGRADE WITH TOPSOIL, IF NECESSARY.

EXACT LOCATION OF THE PROPOSED PLANTS SHALL BE COORDINATED WITH EXISTING FOLIAGE AND TREES TO ENSURE THAT MINIMAL DISTURBANCE TAKES PLACE WITH EXISTING VEGETATION

Visual Buffer Plants

SYM	Quant.	Botanical Name	Common Name	Caliper/Cont.	Spacing
Trees					
AB	10	*Arborvitae- Thuja*	Green Giant Arborvitae	2" (8 feet)	12'

LEGEND

- QUANTITY
- SPECIES
- PLANT SYMBOLS
- DEER FENCING ADJACENT TO SPLIT RAIL FENCE

LEGEND

PL — PL	PROPERTY LINE
468	EXISTING CONTOUR
× 463.3	EXISTING SPOT ELEVATION
(472)	PROPOSED CONTOUR
HP	HIGH POINT IN GRADE
X (463.3)	PROPOSED SPOT ELEVATION
PT#	PERCOLATION TEST HOLE
DT#	DEEP TEST HOLE
	WETLAND SPLIT RAIL FENCE
RD/FD	ROOF AND FOOTING DRAIN
	SOIL BOUNDARY
SF	SILT FENCE
	EXISTING CATCH BASIN
	PROPOSED SWALE
W	WATER LINE
	EXISTING WELL
	STREAM 100' SETBACK LINE
WL##	WETLAND LINE

PROPERTY IDENTIFICATION

OWNER: ALEX BERNABO
wDESIGNE, INC.

ADDRESS: 3867 DANBURY ROAD
BREWSTER NY 10509

E911 # : 96 POST OFFICE ROAD, LEWISBORO

LEWISBORO T.M. SHEET 25 BLOCK 10812 LOT 3

PROPERTY ADDRESS: 96 POST OFFICE ROAD
LEWISBORO, NY 10590

NYC DEP WATERSHED: CROSS RIVER BASIN

AREA OF HOUSE
PROPOSED: 2600 SF+ 600SF GARAGE
BEDROOMS: 2 BEDROOM

NOTE: DO NOT SCALE DRAWINGS
DIMENSIONS SUPERCEDE SCALE

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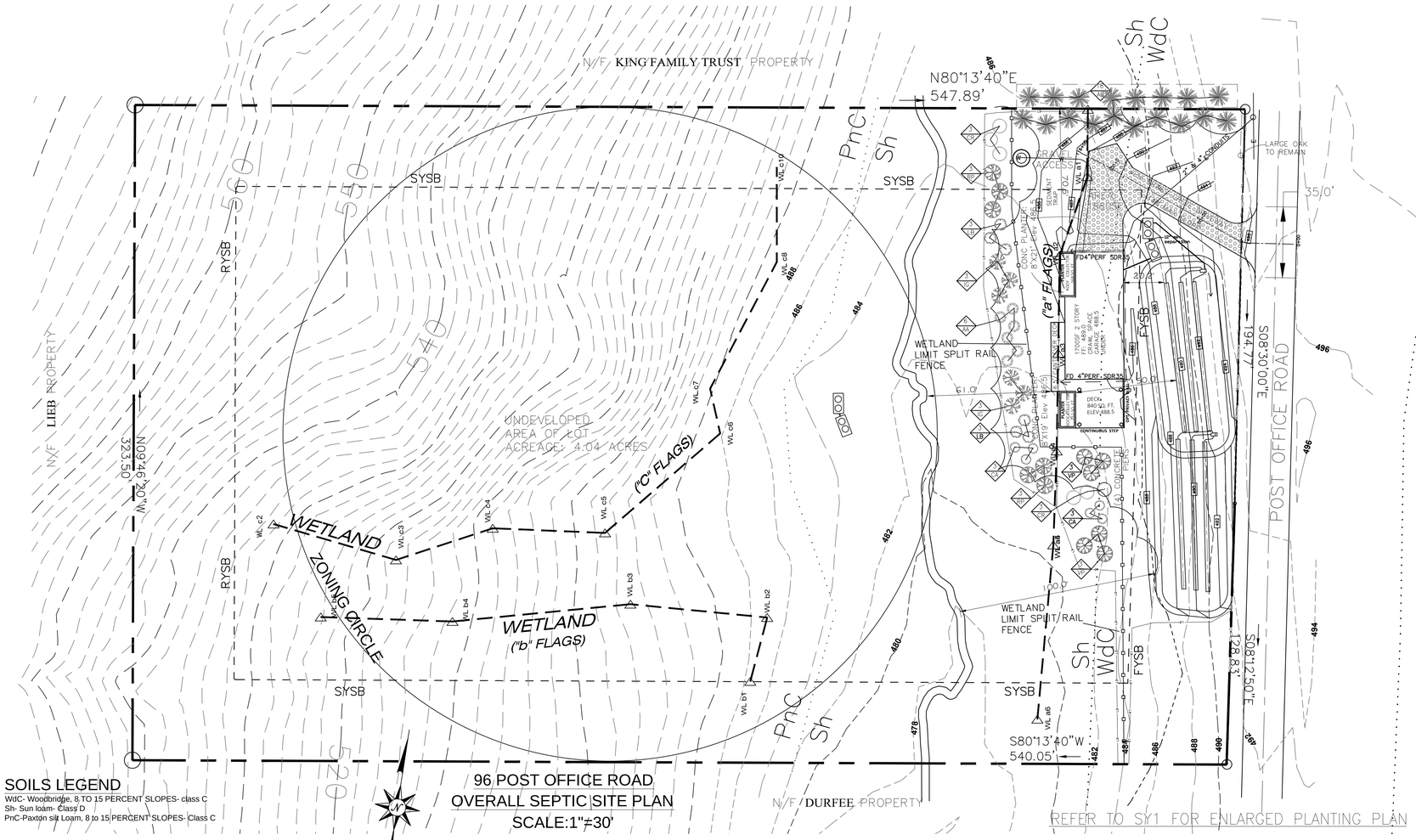
P. W. SCOTT
ENGINEERING & ARCHITECTURE, P.C.
3871 ROUTE 6
BREWSTER, NY 10509 845-278-2110

Revisions

No.	Date	Description
A	8/16/23	REVISED PER TE MEMO
B	9/20/23	REVISED PER TE MEMO
C	11/27/23	2 STORY HOUSE OPTION
D	12/27/23	MOVED DRIVE/SPLIT PLANTER
E	1/24/24	2 PLANTER DESIGN

Dwg. Title	COVER SHEET	Seal	Dwg. No.
Project Title	96 POST OFFICE ROAD LEWISBORO, NY		CS
Proj. No. 21–110	Drawn by MA/PWS		
Date 5/25/23	Scale AS NOTED		



SOILS LEGEND

WdC- Woodbridge, 8 TO 15 PERCENT SLOPES- class C
Sh- Sun loam- Class D
PnC-Paxton silt Loam, 8 to 15 PERCENT SLOPES- Class C

96 POST OFFICE ROAD
OVERALL SEPTIC SITE PLAN
SCALE:1"=30'

VICINITY MAP
1" = 500'

Zoning Tabluation
Zone: RA4

	Required	Proposed
Min. Lot Area:	4.0	4.04
Lot Width (circle ft):	250.0	320.0
Min. Yards		
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Front - Front Lot Line	50.0	54.0
Side Setback:	50.0	78.5
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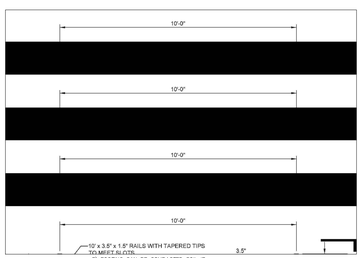

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L E G E N D

	QUANTITY
	SPECIES
	PLANT SYMBOLS
	DEER FENCING ADJACENT TO SPLIT RAIL FENCE

PROPERTY IDENTIFICATION

OWNER:	ALEX BERNABO wDESIGNE, INC.
ADDRESS:	3867 DANBURY ROAD BREWSTER NY 10509
E911 # :	96 POST OFFICE ROAD, LEWISBORO
LEWISBORO T.M.	SHEET 25 BLOCK 10812 LOT 3
PROPERTY ADDRESS:	96 POST OFFICE ROAD LEWISBORO, NY 10590
NYC DEP WATERSHED:	CROSS RIVER BASIN
AREA OF HOUSE PROPOSED: # BEDROOMS:	 2600 SF+ 600SF GARAGE 2 BEDROOM

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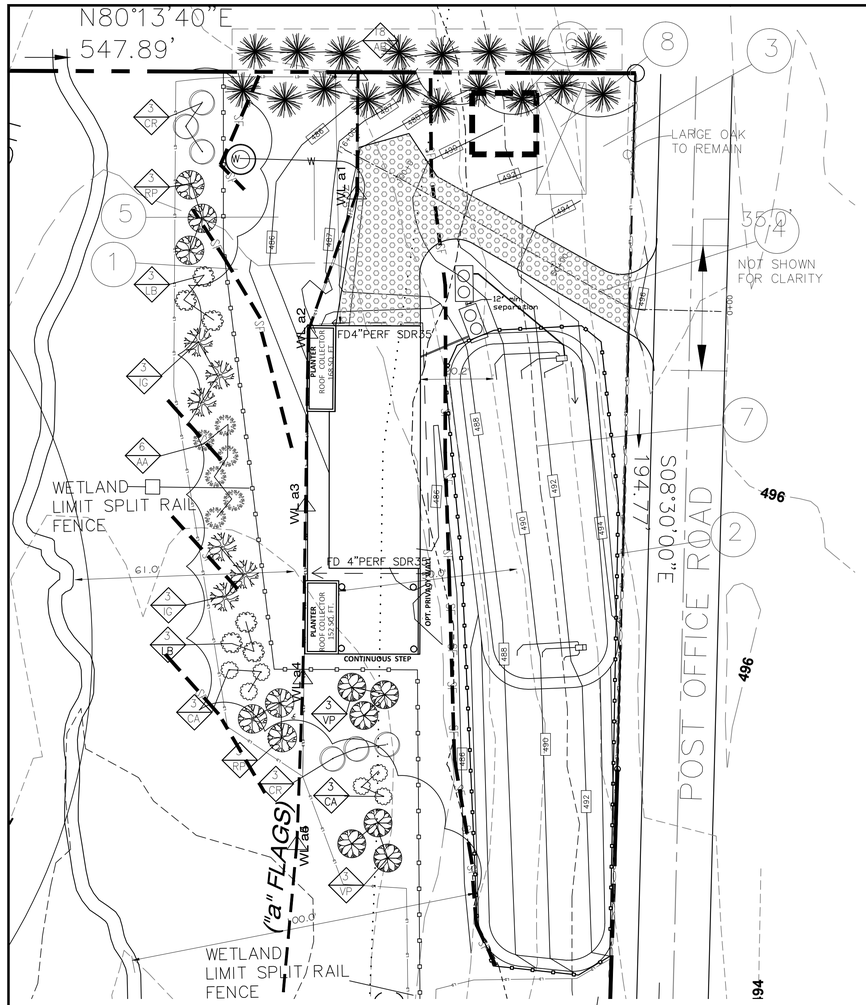


EXPANDED SITE PLAN

SCALE:1"=20'

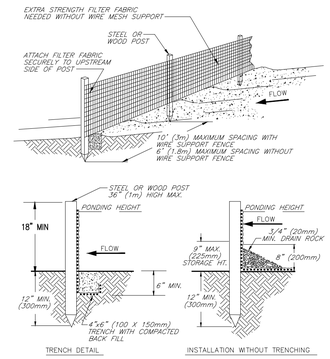
Reference the Cover Sheet CS for lot geometry and setbacks

EROSION CONTROL LEGEND

NO.	SYMBOL	DESCRIPTION	STATUS
1		SILT FENCE	TEMPORARY SEE DET. 1/SY1 PLACE PARALLEL TO GRADE-CONTOURS
2		CONSTRUCTION FENCE	AROUND EDGE SEPTIC FILL: SEE DET.2/SY1
3		TOPSOIL STOCKPILE AREA	TEMPORARY SEE DET. 3/SY1 RING WITH SILT FENCE
4		CONSTRUCTION ENTRANCE	TEMPORARY SEE DET. 4/SY1 PLACE @ EA. POINT OF ENTRY INTO SITE
5		STONE OUTLET SEDIMENT TRAP	PERMANENT SEE DET. 5/SY1
6		CONCRETE PUMP OUT TRAP	TEMPORARY SEE DET. 6/SY1
7		SEED & MULCH SPECIFICATIONS	TEMPORARY SEE DET. 7/SY1
8		STORAGE AREA	
9		LIMIT OF DISTURBANCE	

Maintenance Schedule – During Construction – Temporary Structures

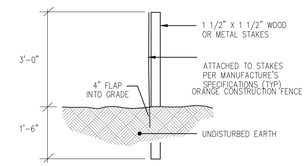
–	Component	MINIMUM Inspection Required	After Every Storm Event	Item to Inspect	Sediment Removal Req'd	Special Inspection Items **Inspect the following:**	Maintenance and Sediment Removal
1	Silt Fence	Bi-Weekly	X	Woven Wire Fence Alignment	Yes	Woven Wire & Fence Stability	Remove material when a "bulge" develops, ensure fence extends into soil and fence upright, staple fencing
2	Construction Fence	Bi-Weekly		Fence Woven Wire Conditions	None	Fence posts and grid	Fix fence up right and staple as required to ensure integrity.
3	Topsoil Stockpile Area	Bi-Weekly	X	Soil Pile Condition	None	Silt Fence at Base of Pile to be inspected and seeding reviewed.	Remove material when a "bulge" develops, ensure fence extends into soil and fence is upright, staple fencing
4	Construction Entrance	Weekly	X	Stone Placement	None	Stone Placement & soil deposit between stones	Repair Top Dressing with additional aggregate and correct stone placement.
5	Stone Outlet Sediment Trap	Bi-Weekly	X	Stone Placement & Location	Yes	Stone & Sediment Accumulation	Bi-weekly, remove sediment, set stones to correct profile, fix berm blow-outs
6	Concrete Pump Out	Monthly	X	Soil Stability	None	Once filled topsoil, seed & mulch	Due to the downhill proximity of the well, it is recommended to remove the concrete off-site once curred



NOTES:
1. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
2. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY. 9" (225mm) MAXIMUM RECOMMENDED STORAGE HEIGHT.
3. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.

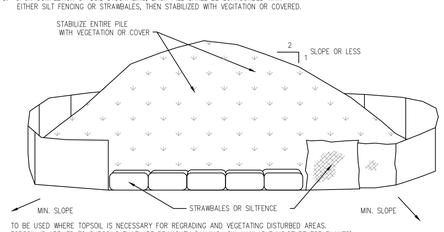
1 SY1 — SILT FENCE– STANDARD ONLY — N.T.S.

NOTES:
1. SPACING MAY VARY AS PER MANUFACTURERES RECOMMENDATIONS. MAXIMUM SPACING IS 8'–0".
2. JOIN CONSTRUCTION FENCE SECTIONS BY OVERLAPPING END STAKES.
3. INSPECT AND REPAIR PERIODICALLY TO MAINTAIN THE INTEGRITY OF THE CONSTRUCTION AREA.



2 SY1 — CONSTRUCTION FENCE — N.T.S.

NOTES:
1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 2:1.
3. UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE SURROUNDED WITH EITHER SILT FENCING OR STRAWBALES, THEN STABILIZED WITH VEGETATION OR COVERED.

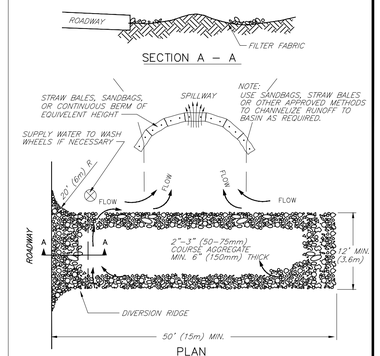


TO BE USED WHERE TOPSOIL IS NECESSARY FOR REGRADING AND VEGETATING DISTURBED AREAS. TOPSOIL IS APPLIED TO SUBSOILS THAT ARE DRAUGHTY (HAVING LOW AVAILABLE MOISTURE FOR PLANTS), STONEY, SALTY, HAVE LOW PERMEABILITY, OR ARE EXTREMELY ACID. IT IS ALSO USED TO BACKFILL AROUND SHRUB AND TREE TRANSPLANTS. PRESERVATION OF EXISTING TOPSOIL IS BENEFICIAL FOR ALL TYPES OF LAWN OR ORNAMENTAL PLANTINGS.

TEMPORARY STOCKPILE STABILIZATION MEASURES INCLUDE VEGETATIVE COVER, MULCH, NONVEGETATIVE COVER, AND PERIPHERAL SEDIMENT TRAPPING BARRIERS. THE STABILIZATION MEASURE(S) SELECTED SHOULD BE APPROPRIATE FOR THE TIME OF YEAR, SITE CONDITIONS, AND REQUIRED PERIOD OF USE.

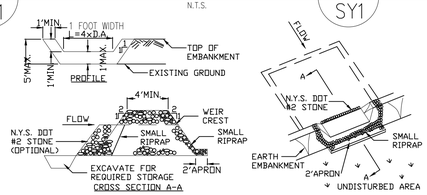
SEE EROSION AND SEDIMENT CONTROL PLAN FOR LOCATIONS.

3 SY1 — SOIL STOCKPILE — N.T.S.



NOTES:
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT–OF–WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT–OF–WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

4 SY1 — CONSTRUCTION ENTRANCE — N.T.S.



OPTION: A ONE FOOT LAYER OF N.Y.S. DOT #2 STONE MAY BE PLACED ON THE UPSTREAM SIDE OF THE RIPRAP INPLACE OF THE EMBEDDED FILTER CLOTH.

CONSTRUCTION SPECIFICATIONS

1. AREA UNDER EMBANKMENT SHALL BE CLEARED, GRUBBED AND STRIPPED OF ANY VEGETATION AND ROOT MAT. THE POOL AREA SHALL BE CLEARED.
2. THE FILL MATERIAL FOR THE EMBANKMENT SHALL BE FREE OF ROOTS AND OTHER WOODY VEGETATION AS WELL AS OVER-SIZED STONES, ROCKS, ORGANIC MATERIAL OR OTHER OBJECTIONABLE MATERIAL. THE EMBANKMENT SHALL BE COMPACTED BY TRAVERSING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED.
3. ALL CUT AND FILL SLOPES SHALL BE 2:1 OR FLATTER.
4. THE STONE USED IN THE OUTLET SHALL BE SMALL RIPRAP 4"–8" ALONG WITH A 1' THICKNESS OF 2" AGGREGATE PLACED ON THE UP-GRADE SIDE ON THE SMALL RIPRAP OR EMBEDDED FILTER CLOTH IN THE RIPRAP.
5. SEDIMENT SHALL BE REMOVED AND TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE TRAP.
6. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NECDED.
7. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION IS MINIMIZED.
8. THE STRUCTURE SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

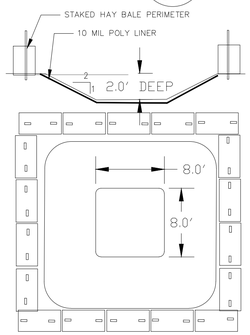
MAXIMUM DRAINAGE AREA 5 ACRES

STONE OUTLET SEDIMENT TRAP CHART

TRAP #	LOCATION	DRAINAGE AREA	REQ'D VOL (CF)	OUTLET WIDTH	DEPTH	TOP DIMENSION L WIDTH W
1	DRIVEWAY	0.10	360	1.0 FEET	3.0	12x25

VOL= .4 AREA (DEPTH)

5 SY1 — SEQUENCE OF CONSTRUCTION



Maintenance

- All concrete washout facilities shall be inspected daily. Damaged or leaking facilities shall be deactivated and repaired or replaced immediately. Excess stormwater that has accumulated over hardened concrete should be pumped to a stabilized area, such as a grass filter strip.
- Accumulated hardened material shall be removed when 75% of the storage capacity of the structure is filled. Any excess wash water shall be pumped into a containment vessel and properly disposed of off-site.
- Dispose of the hardened material off-site in a construction/demolition landfill. On-site disposal may be allowed if this has been approved and accepted as part of the projects SWPPP. In that case, the material should be recycled as specified, or buried and covered with a minimum of 2 feet of clean compacted earth fill that is permanently stabilized to prevent erosion.
- The plastic liner shall be replaced with each cleaning of the washout facility.
- Inspect the project site frequently to ensure that no concrete discharges are taking place in non-designated areas.

6 SY1

SITE PREPARATIONS: LIME PH TO 6.0
FERTILIZER: WITH 800#/ACRE OF 5–10–10 PER ACRE;(20#/1000 SF)

TOP SOIL: 2% WEIGHT FINE TEXTURE ORGANICS
NOT LESS THAN #200 SIEVE, NOT MORE THAN 15% CLAY
FREE OF STONES:1&1.5", LESS THAN 10% GRAVEL
SOLUABLE SALTS LESS THAN 500 PPM.

APPLY: 5 INCHES MINIMUM
MULCH PER SPECIFICATIONS

TEMPORARY SEEDINGS:

SEEDING REQUIRMENTS: RYE GRASS @30#/ACRE(0.7#/1000 SF.)
WINTER CONDITION: CERTIFIED 'aroostook' winter rye(cereal rye) @100 #/acre; (2.5#/1000 sf)
required for november/october seeding

PERMANENT SEEDINGS:

ROUGH OR OCCASSIONALLY MOWED:

EMPIRE BIRDSFOOT @ 8#/ACRE; .20#/1000 SF.
TREFOIL OR COMMON WHITE CLOVER
TALL FESCUE @ 20#/ACRE; .45#/1000 SF.
REDTOP @ 2#/ACRE; .05#/1000 SF.

FREQUENTLY MOWED: SHADY DRY SITES

65% FINE FESCUE @ 140#/ACRE; .3.3#/1000 SF.
15% PERRENIAL RYE @ 33#/ACRE; .0.7#/1000 SF.
20% BLUE GRASS BLEND @ 44#/ACRE; .1.0#/1000 SF.

7 SY1 — SEEDING SPECIFICATIONS

SITE PREPARATIONS:

RAKE OUT ROCKS ON THE SURFACE, REMOVE ANY WOOD STOCKPILE BEYOND AREA DISTURBANCE FOR DISPOSAL

JUTE NETTING

UNDYED, UNBLEACHED PLAINWEAVE WARP:78 END/YD.

APPLICATION RATE: 48" X 50 YDS./1000 SF.(60#ROLL/ACRE)
DEPTH APPLICATION: 60 SQ. YDS.
TIE DOWN PER MANUFACTURERS SPECIFICATIONS.

BEST COMBINATION: FIBERS

STRAW(SMALL GRAINED) MULCH
APPLICATION RATE: 2 TONS (90#S/1000 SF.)
ANCHOR WITH: WOOD FIBER MULCH(HYDRO–MULCH)
APPLICATION RATE: 500–750#/ACRE(11#/1000 SF.)
THE WOOD FIBER MUST BE APPLIED THROUGH HYDRO–SEEDER IMMEDIATELY AFTER MULCHING.

ANCHORING:

MULCH NETTING: HAY OR STRAW: STAPLE:LIGHT–WEIGHT JUTE

MULCH SPECIFICATIONS

This narrative describes the erosion and sediment controls proposed for this project, discusses the construction sequence and states the requirements for inspection and maintenance of the erosion and sediment controls. The plan has been designed in accordance with the State of New York "2016 Standards and Specifications for Erosion and Sediment Control."

The sequences provided include anticipated start dates, which are predicated on municipal and state agency approvals.

INTRODUCTION

1. Pre-application meeting with Town of Lewisboro Town Engineer/MS4 Agent, Contractor & Engineer and NYCDEP for IRSP for project scheduling and final plan coordination. There are no NYSDEC wetlands, wetland approval on local basis.
2. File NYSDEC NOI Forms with start dates
3. E.O.R. to complete NYSDEC inspections twice/week per NOI permit.

GENERAL SPECIFICATIONS

4. Surveyor to locate limits of house, planter, septic & driveway and the limit of disturbance line prior to construction..
5. Cut trees and clear - leave stumps in place.
6. Install erosion control devices including erosion control fence. Refer to Sheet SY2
7. Install construction fence around septic area as noted.
8. Remove topsoil and stockpile as noted.
9. Contractor to verify elevation at planter and limits of building (cut & fill) E.O.R. to verify with site visit.
10. Install stone outlet sediment trap on hillside below driveway to collect runoff from driveway construction.
11. Excavate driveway and stabilize with Item #4 due to slope.
12. Stump the lot with access established for trucks picking up stumps.
13. Install concrete pump out pit adjacent to driveway
14. Install footings for residence & planter
15. Extend power to house site
16. Pour house walls & planter walls, allow sleeves for water, sewer out, and electrical, and propane lines.
17. Install concrete wall, waterproof and backfill
18. Install well by creating concrete gravel pad, install silt fence and install pump out pit for water test.
19. Remove concrete collected in the pump out pit and remove off site.
20. Install septic tanks and pump chamber. Install fill for septic and mechanically compact. Cut in trenches - D-Boxes for primary only. Complete as-built inspections with E.O.R.
21. Spread 6 in to 12 in topsoil, seed and mulch
22. Clean out stone outlet sediment trap
23. Leave stone ring in place as permanent sediment collection point.
24. Complete final utility connection. Electrical overhead or underground per Contractor.
25. Construct wood deck with sono tube piers as footings, poured in cardboard forms.
26. Once deck is complete, complete soil filling of concrete planter per specs. Connect roof leaders to planter (residence has flat roof pitching to rear and common leaders). Ensure overflows are functional in wall perimeter. Install plants between March 15th and June 15th; September 15th to October 15th . Water weekly as required if rainstorms not imminent within one week. Include planting of the northern buffer plants.
27. When entire site is stabilized with grass cover, remove silt fence.
28. Schedule MS4 Inspection with Town of Lewisboro
29. File NOT with NYSDEC.

Project complete

REFER TO SHEET SY2 FOR EROSION CONTROL NOTES

TEMPORARY & PERMANENT MAINTENANCE IMPLEMENTATION

THE REQUIRED PARTIES RESPONSIBLE FOR FOR THE IMPLEMENTATION OF STORMWATER FACILITY INSPECTION AND AND MAINTENANCE PROGRAM CONSISTS OF THE LAND OWNER DURING & AFTER CONSTRUCTION:

OWNER: ALEX BERNABO
wDESIGNE, INC.

ADDRESS: 3867 DANBURY ROAD
BREWSTER NY 10509

EMAIL: info@wdesigne.com

TELE #: (914)–906–1336

ALL SITE WORK SHALL BE COMPLETED UNDER THE DIRECT SUPERVISION OF A LICENSED ENGINEER IN THE STATE OF NEW YORK.

NOTE: DO NOT SCALE DRAWINGS DIMENSIONS SUPERCEDE SCALE

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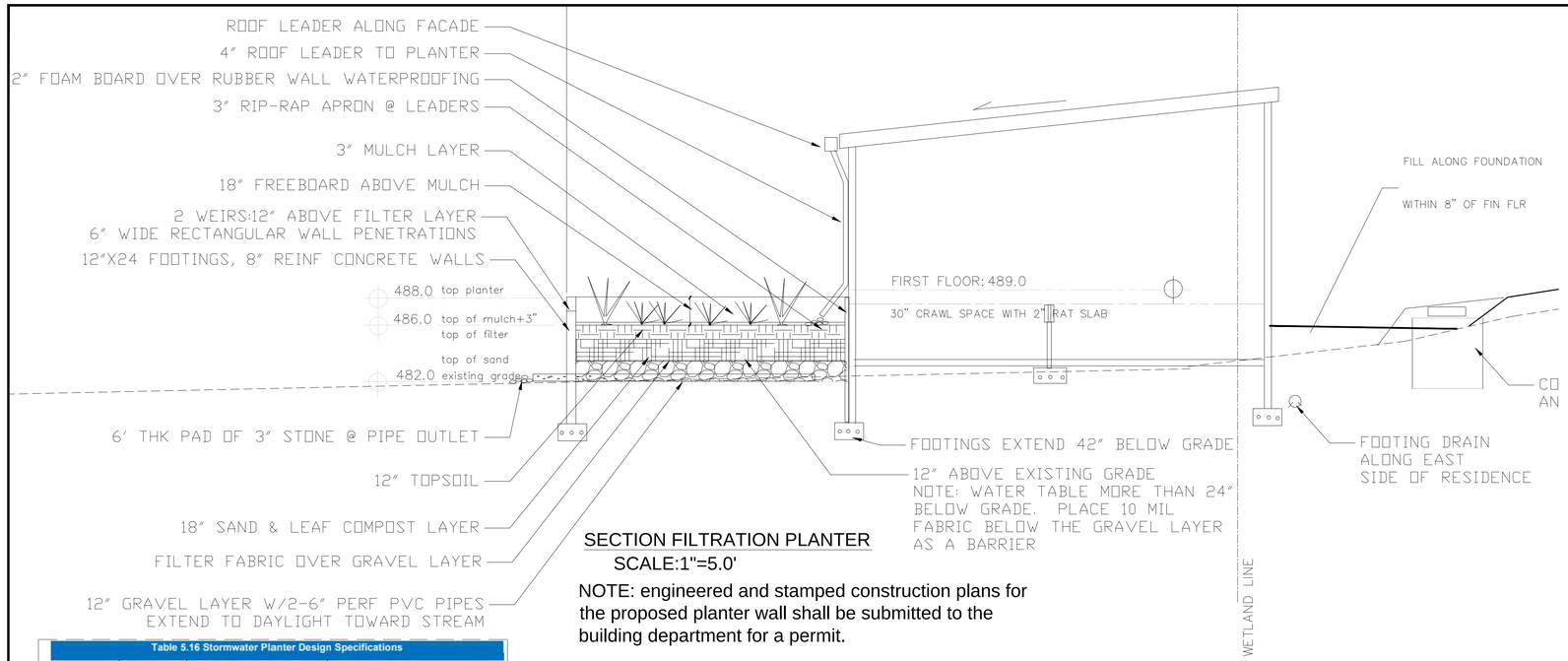
P. W. SCOTT
ENGINEERING & ARCHITECTURE, P.C.
3871 ROUTE 6
BREWSTER, NY 10509 845-278-2110

Revisions

No.	Date	Description
A	5/8/23	REVISE PER WCDOH 5/8/23 MEMO
B	8/16/23	REVISED PER TE MEMO
C	9/20/23	REVISED PER TE MEMO
D	11/27/23	2 STORY HOUSE OPTION
E	1/24/24	2 PLANTER DESIGN

Dwg. Title	IRSP EROSION CONTROL PLAN	Seal	Dwg. No.
Project Title	96 POST OFFICE ROAD, LEWISBORO,NY		SY1
Proj. No.	21–110	Drawn by MA/PWS	
Date	3/30/23	Scale AS NOTED	



SECTION FILTRATION PLANTER
SCALE:1"=5.0'

NOTE: engineered and stamped construction plans for the proposed planter wall shall be submitted to the building department for a permit.

Table 5.16 Stormwater Planter Design Specifications

		Infiltration Stormwater Planter	Filtration Stormwater Planter
Ponding[1]	Depth	12 inch max. (WQv) 18 inch max. (Extreme Flood)	
Surface Layer[1]	Depth	3 inch min.	
	Material	Shredded Hardwood Mulch	
Filter Media[1]	Depth	18 inches min. 30 inches max.	
	Material	ASTM C-33 Sand: 60%-75% Topsoil[3]: 25%-40%	
Drainage Layer[1]	Depth	6 inches min.	10 inches min.
	Material[2]	AASHTO No. 57 stone, washed, no fines	
Drainage Filter Fabric[1]	Material	Non-woven, polypropylene geotextile with flow rate greater than 125 gpm/sf (ASTM D4491) and Apparent Opening Size US #70 sieve (ASTM D4751)	
Impermeable Liner	Applicability	N/A	As Required
	Material	12 - 24 inch of clay soil (min. 50% passing #200 sieve and max. permeability 1×10^{-5} cm/sec) or 40 mil HDPE geomembrane	
Underdrain	Applicability	N/A	Required
	Material	6" perforated PVC or HDPE laid at 0.5% slope min. at 30 ft max. O.C.	

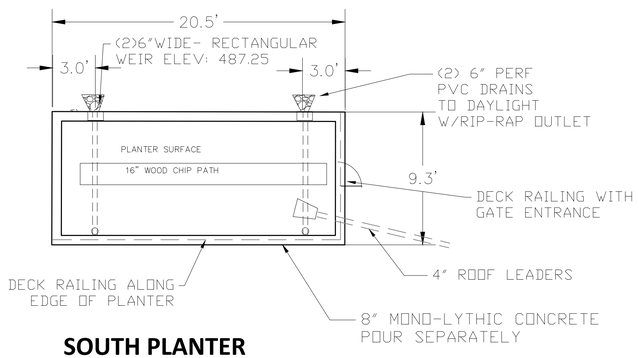
Footnotes:
[1]Required for all Design Variants
[2]Or acceptable alternatives, such as a 3 inch minimum layer of pea gravel
[3]Topsoil shall conform to NYSDOT Standard Specification 713-01 for Roadside Mix or Specialty Planting Mix.

PLANTER MATERIAL SPECS

Sym	Quantity	Botanical Name	Common Name	Hght	Cont.	Spacing
OC	8	Osmunda Cinnanonea	Cinnamon Fern	2'-3'	2 Gal.	4'
OR	8	Osmunda Regalis	Royal Fern	2-'3'	2 Gal.	4'
AN	4	Aster Novae Angliae	New England Aster	1'-6'	2 Gal.	4'
CS	10	Carex Stricta	Tussock Sedge	1'-3'		4'
CG	8	Chelone Glabra	White Turtlehead	2'-3'		4'
EP	8	Eupatorium Perfoliaturn	Bone Set	3'-4'		4'
LC	10	Lobelia Cardinalis	Cardinal Flower	1'-5'		4'
ML	TRAY	Myosotis Laxa	Smaller Forget-Me-Not	3"-6"		4'
FR	TRAY	Festuca Rubra	Red Fescue	1"-10"		2'
IV	10	Iris Versicolor 1	Blue Flag	2'-4'		4'
RH	2	Rhododendrom Canadense	Rhododendroms	2'-4'	2 Gal.	8'

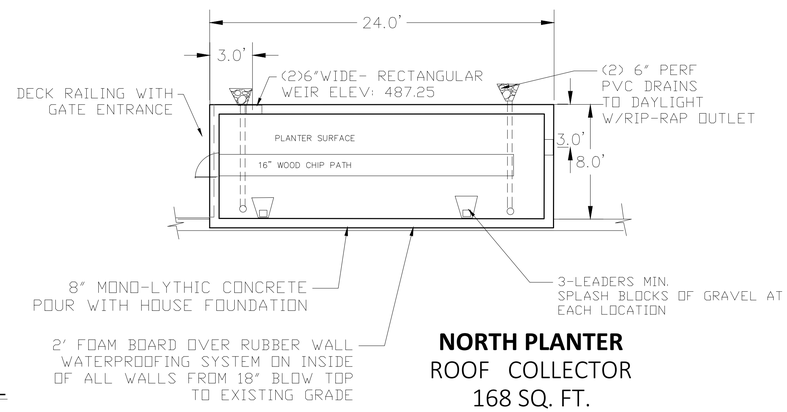
Ornamental Trees
Selected by Owner - Shade Tolerant

PLANTING SCHEDULE TOTAL: 2 PLANTERS

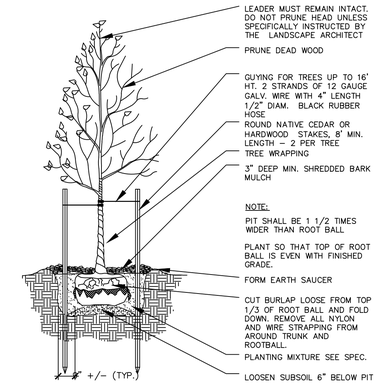


SOUTH PLANTER
ROOF COLLECTOR
152 SQ. FT.

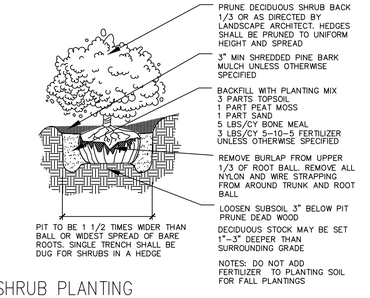
PLANTER PLAN VIEW DETAIL
SCALE:1"=5.0'



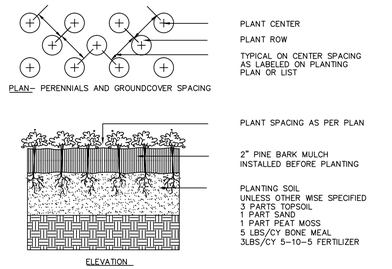
NORTH PLANTER
ROOF COLLECTOR
168 SQ. FT.



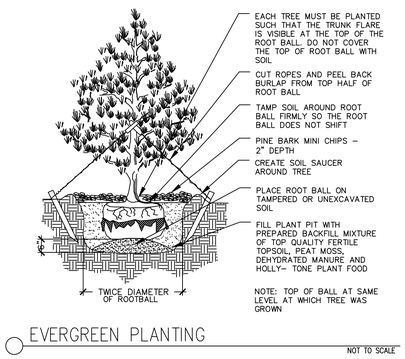
TREE PLANTING
NOT TO SCALE



SHRUB PLANTING
NOT TO SCALE



PERENNIAL & GROUND COVER PLANTING
NOT TO SCALE



EVERGREEN PLANTING
NOT TO SCALE

PLANTING NOTES

1. NOTIFY OWNER OR LANDSCAPE ARCHITECT 72 HOURS MINIMUM IN ADVANCE OF STARTING PLANTING OPERATIONS. RECEIVE APPROVAL FOR LAYOUT OF ALL BED LINES AND MATERIAL LOCATIONS PRIOR TO INSTALLATION.

2. THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO REJECT INFERIOR PLANT MATERIALS AND SUBSTITUTIONS. THE LANDSCAPE ARCHITECT IS WILLING TO MAKE TWO TRIPS TO SUPPLIERS TO REVIEW AND APPROVE MATERIALS. PREVIOUSLY UNAPPROVED MATERIALS MAY BE REJECTED AT THE SITE. MINIMALLY, ALL MATERIALS WILL CONFORM TO THE "AMERICAN STANDARD FOR NURSERY STOCK" (ANSI Z60.1 - 1996) OF THE AMERICAN ASSOCIATION OF NURSERYMEN.

3. BE AWARE OF ALL UNDERGROUND UTILITIES PRIOR TO ANY PLANTING OPERATIONS. CONTACT "CALL BEFORE YOU DIG" PRIOR TO EXCAVATION.

4. MULCH ALL BEDS WITH A 2" MINIMUM OF SHREDDED CEDAR OR PINE BARK MULCH. SAMPLE TO BE SUBMITTED FOR APPROVAL.

5. ALL PLANT MATERIAL (TO INCLUDE TREES, SHRUBS, PERENNIALS, GROUNDCOVERS, AND VINES) SHALL BE GUARANTEED BY THE CONTRACTOR TO BE IN GOOD, HEALTHY AND FLOURISHING CONDITION FOR A PERIOD OF ONE YEAR FROM THE DATE OF ACCEPTANCE. THE CONTRACTOR SHALL REPLACE, AS SOON AS WEATHER AND SEASONAL CONDITIONS PERMIT, ALL DEAD PLANTS AND ALL PLANTS NOT IN A VIGOROUS, THRIVING CONDITION, AS DETERMINED BY THE LANDSCAPE ARCHITECT DURING, AT THE END OF THE GUARANTEE PERIOD. WARRANTY REPLACEMENT WILL BE PROVIDED AT NO COST TO THE OWNER AND INCLUDE MATERIALS AND LABOR. CONTRACTOR IS RESPONSIBLE FOR REPAIR OF ANY DAMAGE INCURRED DURING REPLACEMENT OF WARRANTY MATERIALS.

6. THE CONTRACTOR SHALL BE REQUIRED TO CARRY WORKMEN'S COMPENSATION INSURANCE AND COMPREHENSIVE GENERAL LIABILITY INSURANCE. CERTIFICATES WILL BE REQUIRED PRIOR TO SIGNING CONTRACT.

7. DEER PROTECTION MUST BE MAINTAINED THROUGH INSTALLATION. REPELLANT MUST BE APPROVED BY LANDSCAPE ARCHITECT PRIOR TO APPLICATION. FINAL APPLICATION OF DEER PROTECTION IS REQUIRED AT COMPLETION OF WORK.

EROSION CONTROL MAINTENANCE

9.0 Maintenance Practices - Temporary

Refer to table- drawing SY1

9.2.l Stabilized Construction Entrance/Exit

The stabilized construction entrance/exit shall be maintained in a condition that will prevent the tracking or flow of sediment onto public rights-of-way. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately; streets shall be swept as needed. The gravel pad shall be replaced as necessary. Sediment tracked onto public streets should be removed or cleaned on a daily basis.

9.2.2 Silt Fence

Maintenance of all silt fences shall be performed as needed. If a silt fence is knocked down, it shall be replaced immediately. When a silt fence appears deteriorated or ineffective and/or built-up sediment reaches one-third the height of the fence, the silt fence shall be replaced and/or cleaned accordingly. When "bulges" of material develop on the fence, they shall be removed.

Silt fence controls sediment runoff where the soil has been disturbed by slowing the flow of water and encouraging the deposition of sediment before the water passes through the silt fence. Built-up sediment shall be removed from silt fences when it has reached one-third the height of the fence and properly disposed.

9.2.3 Clean Material Stockpile

The silt fence should be inspected for bulges and proper installation. The soil stockpile should be stabilized with grass or rolled erosion control blanket.

9.2.4 Dust Control

Dust control maintenance requires exposed areas to be covered or seeded and mulched. Maintain through dry periods.

9.2.5 Temporary Seeding and Stabilization

In areas where demolition and construction activities, clearing, and grubbing have ceased, temporary seeding or permanent landscaping shall be performed to control sediment-laden runoff and provide stabilization to control erosion during storm events. This temporary seeding/stabilization or permanent landscaping shall be in place no later than 14 days after demolition and construction activity has ceased.

9.2.6 Construction Fence

Maintenance consists of ensuring that the fence posts are upright and unbroken. The fence shall remain taut between posts and any debris trapped by the fence shall be removed and disposed of off-site. Supplemental posts may be required to support broken fence posts.

9.2.7 Material Handling/ Soil Stabilization

The ensure that the site ls properly seeded and stabilized, the Contractor must initiate stabilization measures as soon as practicable in areas of the site where construction activities have permanently ceased and in no case more than 14 days after the construction activity in that portion of this site has temporarily or permanently ceased. The Contractor will be responsible for the maintenance of the vegetated cover for the duration of construction activities. The areas shall be monitored to ensure that vegetation achieves a good coverage over the entire disturbed section. Additional seeding shall be completed as needed. Watering shall be provided as needed.

In areas where soil disturbance activity has been temporarily ceased, temporary and/or permanent soil stabilization measures shall be installed and/or implemented within seven days from the date the soil disturbance activity ceased. The soil stabilization measures selected shall be in conformance with the most current version of the technical standard, New York State Standards and Specifications for Erosion and Sediment Control.

9.1 Maintenance Practices - Permanent

9.3.l Sediment Trap Stone Outlet

Maintenance consists of weekly inspection during construction for stone placement, edge erosion and sediment build-up. Sediment should be removed every one year or when trap is one half full, 18 in deep.

9.3.2 Concrete Planter

1. Debris and trash removal required on weekly basis initially and monthly if debris not evident. Ensure outlet weirs in wall are clean.
2. Inspect planter after each storm event greater than 0.5 inches and at least twice in the first six months. After six months, inspect seasonally and after storms greater than 1-year storm event.
3. Maintenance consists of:
   - Pruning and replacing dead or dying vegetation.
   - Plant thinning and erosion repair.
4. Inspect surface for sediment build up from roof and for surface ponding.
5. The first season requires special care to ensure plant survival and possible supplemental watering due to rainfall events.

REFER TO FINAL FOUNDATION PLANS FOR REINFORCEMENT AND WALL CONSTRUCTION SPECS

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3871 ROUTE 6
BREWSTER, NY 10509 845-278-2110

Revisions		
No.	Date	Description
A	5/8/23	NO REVISIONS
B	8/16/23	REVISED PER TE MEMO
C	9/20/23	NO PLAN CHANGES
E	1/24/24	2 PLANTER DESIGN

Dwg. Title: CONCRETE PLANTER DETAILS
Project Title: 96 POST OFFICE ROAD, LEWISBORO,NY
Proj. No.: 21-110
Drawn by: MA/PWS
Date: 3/30/23
Scale: AS NOTED
Seal
Dwg. No.: SY2

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96 Post Office Rd

WACCABUC, NY
(T) LEWISBORO
COUNTY OF WESTCHESTER

DRAINAGE ANALYSIS SYNOPSIS

Prepared By:

Peder W. Scott, P.E., R.A.
P. W. Scott Engineering & Architecture, P.C.
3871 Danbury Rd. (Route 6)
Brewster, NY 10509

January 24, 2024

96 Post Office Rd
Waccabuc, NY
(T) Lewisboro

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Stormwater Attenuation Synopsis

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2. Watershed Worksheet EX1
3. Pond Pack Computer Printout
   a. Watershed Summary
   b. Tc Analysis
   c. Hydrographs

Attachment B: Post-Development Analysis Watershed Worksheet
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2. Watershed Worksheet WS1 & WS2
3. Pond Pack Computer Printout
   a. Watershed Summary
   b. Tc Analysis
   c. Hydrographs

Attachment C1-N: North Concrete Flow Through Planters
1. Planter Volume
2. Planter Outlet Structures
3. Planter Routing
4. Planter 1-Year Routing Time

Attachment C1-S: South Concrete Flow Through Planters
1. Planter Volume
2. Planter Outlet Structures
3. Planter Routing
4. Planter 1-Year Routing Time

Existing Condition (Refer to Sheet D1 & Attachment A)

Soil Condition	WdC (Class C)	Along Road
	Sh (Class D)	
Cover	Woods	
Travel Time	From North Street frontage to Analysis Point A location on stream as noted on Dwg D1	

Area of Analysis consists of area disturbed on the lot – remainder is wooded and wetland areas undisturbed.

Input Data
EX1 - Existing Condition
Area = 0.651 acres
CN = 74.8
Tc = .167 hours
Refer to Drainage Worksheet

Proposed Condition (Refer to Sheet D1 & Attachment B)
Soil Condition – Wdc & Sh as noted above.

Cover – Woods remain at north property line and behind house.
Driveway - Gravel
Septic Area – Lawn
Deck – Assumes rainfall drains through deck to brush cover below
House Roof of 1,700 drains to (2) planters (brush cover) of 320 sf total

Input Data
WS1 Roof & Planter – WS1A North Planter
Area = 1,002 sf = .087sf = 0.023 acres
CN = 89.7
Tc = 0.10 hrs.
Tt to Point A (.02 hrs.) insignificant

WS1B South Planter
Area = 1,001 sf = 0.023 acres
CN = 90.6
Tc = 0.10 hrs.
Tt to Point A (.02 hrs.) insignificant

WS2 – Remainder of lot drains directly to rear of lot – Wetlands.
Area = .605 acres
CN = 73.1
Tc = .134 hrs.
Includes Grasscrete driveway and parking area, septic lawn area, brush at rear of house
Refer to Drainage Worksheets.

Concrete Planter Routing Analysis
Storm events per Extreme Precipitation Tables.

1-year	2.82 inches
2-year	3.40 inches
10-year	5.08 inches
100-year	9.04 inches

Concrete Flow through planter modeled as follows.

Planter Model
Filter @ 486.0
Wood Chips @ 486.25 (+3") (start of ponding)
Outlets (2) Weirs @ 487.25
Rectangular – 6" Long
Weir Coef: 2.8 avg.
Infiltration assumed at 2.0 in/hour: Topsoil cover

Routing of Planter - North
The routing of the planter for the above storms is tabulated below:

Storm	In Flow (cfs)	Out Flow (cfs)	Elevation (ft)	Storm (ft)
100-Year	0.17	.08	487.34	0.005
10-Year	0.09	0.0	486.85	0.003
2-Year	0.05	0.0	486.45	0.002
1-Year	0.04	0.0	486.36	0.001

Routing of Planter - South
The routing of the planter for the above storms is tabulated below:

Storm	In Flow (cfs)	Out Flow (cfs)	Elevation (ft)	Storm (ft)
100-Year	0.17	0.12	487.37	0.005
10-Year	0.09	0.0	487.00	0.003
2-Year	0.05	0.0	486.52	0.002
1-Year	0.04	0.0	486.38	0.001

Stormwater Attenuation Synopsis
The following is an overall analysis of the quantitative discharge from the site due to the development proposed. Mitigation is in the form of the concrete flow through the planter providing the required attenuation.

The NYSDEC attenuation requirements are as follows:

A) 1 Year Storm Event – Channel Protection
Reduce by 50% from pre-development levels
Attenuation level met.
B) 2 Year Storm Event
Peak Discharge approx. reduced to 1 Year Storm Event
Attenuation Level met
C) 10 Year Storm Event – Overbank Control
Attenuate to below Pre-Development Levels
D) 100 Year Storm Event – Extreme Flood Control
Attenuate to below Pre-Development Levels.

Analysis Point A				
	1 YR (cfs)	2 YR (cfs)	10 YR (cfs)	100 YR (cfs)
PRE	.48	.73	1.54	3.63
POST	.42	.65	1.41	3.49
NET	-0.6	-0.08	-0.13	-0.14
%	-12%	-11%	-8.5%	-3.8%

Findings

A.	1-Year Storm Event	Channel protection could not be reduced by 50% even though planter did not discharge any of the 1-year storm. Large area of pervious cover discharges off site – reduction by 12%
B.	2-Year Storm Event	Reduced is reduced by 12%. Could not meet the pre-development discharge rate even though planter did not discharge any of the 2-year storm event. Large area of site drained directly into the wetland and stream.
C.	10-Year Storm Event	Attenuation met to pre-development levels.
D.	100-Year Storm Event	Attenuation met to pre-development levels.

Conclusion

Planters attenuate stormwater discharge to the maximum extent possible while providing treatment of impervious areas on the site.

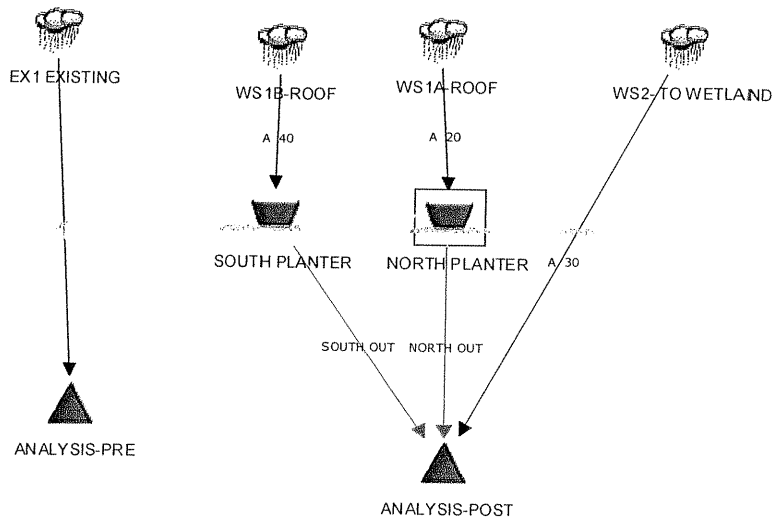
Remainder of the site is treated by riparian buffers in the place along the edge of the wetland, brush strip minimum of 20' wide @ 1% slope.

ATTACHMENT A

Pre-Development Analysis
Watershed Worksheets

1. Pond Pack Model Schematic
2. Watershed Worksheet EX1
3. Pond Pack Computer Printout
   a. Watershed Summary
   b. Tc Analysis
   c. Hydrographs

6


EX1 EXISTING
WS1B-ROOF
WS1A-ROOF
WS2-TO WETLAND
A 40
A 20
SOUTH PLANTER
NORTH PLANTER
A 30
SOUTH OUT
NORTH OUT
ANALYSIS-PRE
ANALYSIS-POST

Extreme Precipitation Tables

Northeast Regional Climate Center

Data represents point estimates calculated from partial duration series. All precipitation amounts are displayed in inches.

Metadata for Point

Smoothing	Yes
State	
Location	
Latitude	41.290 degrees North
Longitude	73.579 degrees West
Elevation	150 feet
Date/Time	Thu Mar 30 2023 14:46:55 GMT-0400 (Eastern Daylight Time)

Extreme Precipitation Estimates

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2da
1yr	0.33	0.51	0.63	0.83	1.03	1.29	**1yr**	0.89	1.22	1.48	1.84	2.28	2.82	3.18	**1yr**	2.50	3.06
2yr	0.39	0.61	0.75	0.99	1.25	1.57	**2yr**	1.08	1.46	1.80	2.23	2.76	3.40	3.82	**2yr**	3.01	3.67
5yr	0.46	0.72	0.90	1.21	1.54	1.95	**5yr**	1.33	1.80	2.26	2.81	3.47	4.27	4.82	**5yr**	3.78	4.64
10yr	0.52	0.81	1.03	1.39	1.81	2.31	**10yr**	1.56	2.11	2.68	3.34	4.13	5.08	5.76	**10yr**	4.50	5.54
25yr	0.60	0.96	1.22	1.69	2.24	2.90	**25yr**	1.94	2.61	3.38	4.22	5.22	6.38	7.29	**25yr**	5.65	7.01
50yr	0.68	1.09	1.40	1.97	2.64	3.44	**50yr**	2.28	3.06	4.02	5.03	6.21	7.59	8.71	**50yr**	6.72	8.31
100yr	0.77	1.25	1.61	2.29	3.12	4.08	**100yr**	2.69	3.60	4.79	6.00	7.41	9.04	10.41	**100yr**	8.00	10.0
200yr	0.88	1.43	1.86	2.66	3.68	4.85	**200yr**	3.18	4.23	5.70	7.16	8.83	10.76	12.46	**200yr**	9.52	11.9
500yr	1.05	1.73	2.26	3.28	4.60	6.10	**500yr**	3.97	5.24	7.18	9.03	11.14	13.55	15.80	**500yr**	11.99	15.1

Lower Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2da
1yr	0.24	0.37	0.45	0.61	0.75	0.95	1yr	0.65	0.93	1.20	1.58	2.02	2.52	2.76	1yr	2.23	2.65

JOB TITLE NOT SPECIFIED
Click Project Summary on the File Menu to enter title

DESIGN STORMS SUMMARY

Design Storm File,ID = STORMS.RNQ WESTCH BRITTON

Storm Tag Name = 1-YR
Description: 1 YEAR FIRST FLUSH

Data Type, File, ID = Synthetic Storm SCSTYPES.RNF TypeIII 24hr
Storm Frequency = 1 yr
Total Rainfall Depth= 2.6987 in
Duration Multiplier = 1
Resulting Duration = 30.0000 hrs
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 30.0000 hrs

Storm Tag Name = 2-YR
Description: 2 YEAR

Data Type, File, ID = Synthetic Storm SCSTYPES.RNF TypeIII 24hr
Storm Frequency = 2 yr
Total Rainfall Depth= 3.2538 in
Duration Multiplier = 1
Resulting Duration = 30.0000 hrs
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 30.0000 hrs

Storm Tag Name = 10-YR
Description: 10 YEAR

Data Type, File, ID = Synthetic Storm SCSTYPES.RNF TypeIII 24hr
Storm Frequency = 10 yr
Total Rainfall Depth= 4.8616 in
Duration Multiplier = 1
Resulting Duration = 30.0000 hrs
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 30.0000 hrs

Storm Tag Name = 100-yr
Description: 100 yr

Data Type, File, ID = Synthetic Storm SCSTYPES.RNF TypeIII 24hr
Storm Frequency = 100 yr
Total Rainfall Depth= 8.6513 in
Duration Multiplier = 1
Resulting Duration = 30.0000 hrs
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 30.0000 hrs

ATTACHMENT A

Pre-Development Analysis
Watershed Worksheets

1. Pond Pack Model Schematic
2. Watershed Worksheet EX1
3. Pond Pack Computer Printout
   a. Watershed Summary
   b. Tc Analysis
   c. Hydrographs

Drainage Area # EX 1			
Development	Pre	X	28,373
	Post		

TOTAL	0.651

Use	Soil Type	Soil Class	CN	Area	CN x Area
Woods-fair	Wdc	C	73	0.351	25.623
Wood-wetland	Sh	D	77	0.300	23.100
Building					
Gravel					
Brush-					
		TOTAL =		0.651	48.723
CN (Weighted) =sum(CN x A) divided by Sum (A) =					74.8

Runoff:	Storm Event Type N10D 24 Hour Rainfall				2002 NYS	DEC MANUAL
	1 Year =	2.82	in		2.50	in
	2 Year =	3.40	in		3.50	in
	10 Year =	5.08	in		5.00	in
	100 Year	9.04	in		7.50	in

Annual Rainfall: 40.2 in

Tc Analysis Calculations: McCuen & Spiess Calculations

A	Sheet Flow			Tc	Flow Length:	83.0	
				0.146	Slope:	11.50%	
					Cover:	woods	
B	Shallow Concentrated Flow				Paved:		no
				0.021	Unpaved:		yes
					Hydraulic		211
			Velocity	2.8	Average Land		3.00%
C	Channel Flow				FlowArea:		Q
				0.000	Descrip.	15" pipe	N= 0.013
					Length:	0	Width:
					Depth		Slope:
					V	8	Wp
				Minimum Tc = 0.10			
				Total T_c	0.167		

TRAVEL TIME TO Point A 0.00 HR.

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********** MASTER SUMMARY **********

Watershed..... Master Network Summary 1.01

********** DESIGN STORMS SUMMARY **********

WESTCH BRITTON.. Design Storms 2.01

********** RUNOFF HYDROGRAPHS **********

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SCS Unit Hyd. Summary 3.01

EX1 EXISTING.... 2-YR
SCS Unit Hyd. Summary 3.02

EX1 EXISTING.... 10-YR
SCS Unit Hyd. Summary 3.03

EX1 EXISTING.... 100-yr
SCS Unit Hyd. Summary 3.04

WS1-ROOF&PLAN... 1-YR
SCS Unit Hyd. Summary 3.05

WS1-ROOF&PLAN... 2-YR
SCS Unit Hyd. Summary 3.06

WS1-ROOF&PLAN... 10-YR
SCS Unit Hyd. Summary 3.07

WS1-ROOF&PLAN... 100-yr
SCS Unit Hyd. Summary 3.08

WS2- TO WETLAND 1-YR
SCS Unit Hyd. Summary 3.09

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WS2- TO WETLAND 2-YR
SCS Unit Hyd. Summary 3.10

WS2- TO WETLAND 10-YR
SCS Unit Hyd. Summary 3.11

WS2- TO WETLAND 100-yr
SCS Unit Hyd. Summary 3.12

********** POND VOLUMES **********

FT PLANTER..... Vol: Planimeter 4.01

********** OUTLET STRUCTURES **********

PLANTER OUT..... Outlet Input Data 5.01

********** POND ROUTING **********

FT PLANTER OUT 1-YR
Pond Routing Summary 6.01
Detention Time 6.02

FT PLANTER OUT 2-YR
Pond Routing Summary 6.03

FT PLANTER OUT 10-YR
Pond Routing Summary 6.04

FT PLANTER OUT 100-yr
Pond Routing Summary 6.05

MASTER DESIGN STORM SUMMARY

Default Network Design Storm File, ID STORMS.RNQ WESTCH BRITTON

Return Event	Total Depth in	Rainfall Type	RNF File	RNF ID
1-YR	2.6987	Synthetic Curve	SCSTYPES	TypeIII 24hr
2-YR	3.2538	Synthetic Curve	SCSTYPES	TypeIII 24hr
10-YR	4.8616	Synthetic Curve	SCSTYPES	TypeIII 24hr
100-yr	8.6513	Synthetic Curve	SCSTYPES	TypeIII 24hr

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

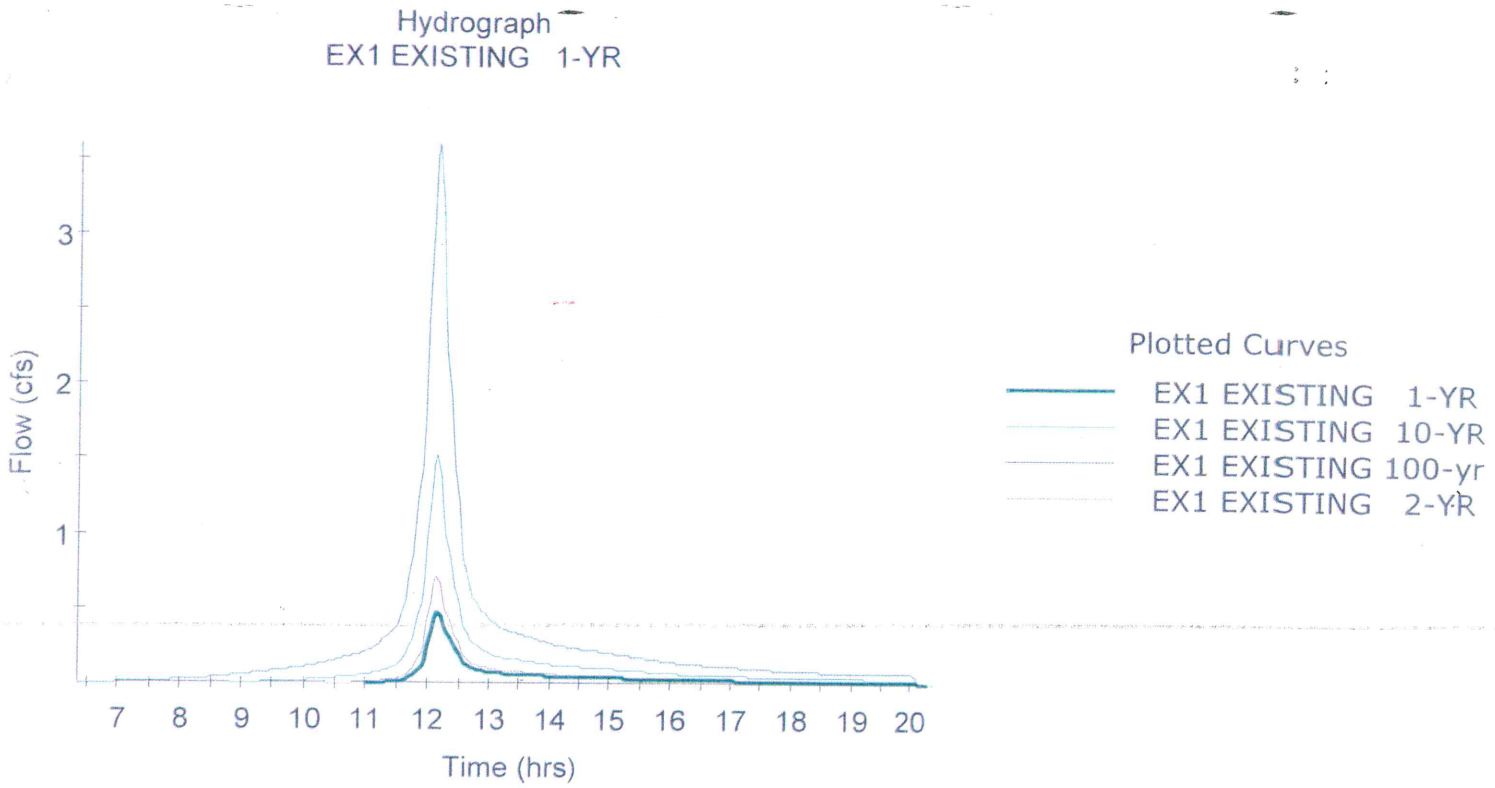
Storage Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond ac-ft
*ANALYSIS-POST	JCT	1	.034		12.1300	.42		
*ANALYSIS-POST	JCT	2	.052		12.1300	.65		
*ANALYSIS-POST	JCT	10	.110		12.1300	1.41		
*ANALYSIS-POST	JCT	100	.280		12.1300	3.49		
*ANALYSIS-PRE	JCT	1	.041		12.1400	.48		
*ANALYSIS-PRE	JCT	2	.061		12.1400	.73		
*ANALYSIS-PRE	JCT	10	.126		12.1400	1.54		
*ANALYSIS-PRE	JCT	100	.304		12.1300	3.63		
EX1 EXISTING	AREA	1	.041		12.1400	.48		
EX1 EXISTING	AREA	2	.061		12.1400	.73		
EX1 EXISTING	AREA	10	.126		12.1400	1.54		
EX1 EXISTING	AREA	100	.304		12.1300	3.63		
NORTH PLANTERIN	POND	1	.003		12.0500	.04		
NORTH PLANTERIN	POND	2	.004		12.0900	.05		
NORTH PLANTERIN	POND	10	.007		12.0800	.09		
NORTH PLANTERIN	POND	100	.014		12.0800	.17		
NORTH PLANTEROUT	POND	1	.000		9.7700	.00	486.36	.001
NORTH PLANTEROUT	POND	2	.000		9.0700	.00	486.45	.002
NORTH PLANTEROUT	POND	10	.000		7.5900	.00	486.85	.003

```
SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 1 year storm
Duration      = 50.0000 hrs     Rain Depth = 2.6987 in
Rain Dir      = C:\HAESTAD\PPKW\RAINFALL\
Rain File -ID = SCSTYPES.RNF - TypeIII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir       = Z:\PROGRAMS\PONDPACK\96 POST OFFICE ROAD\
HYG File - ID =  - EX1 EXISTING 1-YR
Tc            = .1670 hrs
Drainage Area = .651 acres  Runoff CN= 75

============================================
Computational Time Increment   =   .02227 hrs
Computed Peak Time             =  12.1576 hrs
Computed Peak Flow             =       .49 cfs

Time Increment for HYG File    =    .0100 hrs
Peak Time, Interpolated Output =  12.1602 hrs
Peak Flow, Interpolated Output =       .48 cfs
============================================

                 DRAINAGE AREA
              -------------------
              ID:None Selected
              CN   =   75
              Area =        .651 acres
              S    =   3.3690 in
              0.2S =    .6738 in

               Cumulative Runoff
              -------------------
                        .7602 in
                         .041 ac-ft

HYG Volume...            .041 ac-ft (area under HYG curve)

***** UNIT HYDROGRAPH PARAMETERS *****

Time Concentration, Tc =   .16700 hrs (ID: None Selected)
Computational Incr, Tm =   .02227 hrs = 0.20000 Tp

Unit Hyd. Shape Factor =  483.432 (37.46% under rising limb)
K =  483.43/645.333,  K =    .7491 (also, K = 2/(1+(Tr/Tp))
Receding/Rising, Tr/Tp =   1.6698 (solved from K =   .7491)

Unit peak,          qp =     4.42 cfs
Unit peak time      Tp =   .11133 hrs
Unit receding limb, Tr =   .44533 hrs
Total unit time,    Tb =   .55667 hrs
```

```
SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 2 year storm
Duration      = 50.0000 hrs     Rain Depth = 3.2538 in
Rain Dir      = C:\HAESTAD\PPKW\RAINFALL\
Rain File -ID = SCSTYPES.RNF - TypeIII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir       = Z:\PROGRAMS\PONDPACK\96 POST OFFICE ROAD\
HYG File - ID =  - EX1 EXISTING 2-YR
Tc            = .1670 hrs
Drainage Area = .651 acres  Runoff CN= 75

============================================
Computational Time Increment   =   .02227 hrs
Computed Peak Time             =  12.1576 hrs
Computed Peak Flow             =      .73 cfs

Time Increment for HYG File    =    .0100 hrs
Peak Time, Interpolated Output =  12.1502 hrs
Peak Flow, Interpolated Output =      .73 cfs
============================================

                 DRAINAGE AREA
              -------------------
              ID:None Selected
              CN   =   75
              Area =        .651 acres
              S    =   3.3690 in
              0.2S =    .6738 in

               Cumulative Runoff
              -------------------
                      1.1189 in
                        .061 ac-ft

HYG Volume...           .061 ac-ft (area under HYG curve)

***** UNIT HYDROGRAPH PARAMETERS *****

Time Concentration, Tc =   .16700 hrs (ID: None Selected)
Computational Incr, Tm =   .02227 hrs = 0.20000 Tp

Unit Hyd. Shape Factor =  483.432 (37.46% under rising limb)
K =  483.43/645.333,  K =    .7491 (also, K = 2/(1+(Tr/Tp))
Receding/Rising, Tr/Tp =   1.6698 (solved from K =   .7491)

Unit peak,          qp =     4.42 cfs
Unit peak time      Tp =   .11133 hrs
Unit receding limb, Tr =   .44533 hrs
Total unit time,    Tb =   .55667 hrs
```

```
SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 10 year storm
Duration      = 50.0000 hrs     Rain Depth = 4.8616 in
Rain Dir      = C:\HAESTAD\PPKW\RAINFALL\
Rain File -ID = SCSTYPES.RNF - TypeIII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir       = Z:\PROGRAMS\PONDPACK\96 POST OFFICE ROAD\
HYG File - ID =  - EX1 EXISTING 10-YR
Tc            = .1670 hrs
Drainage Area = .651 acres  Runoff CN= 75

============================================
Computational Time Increment   =   .02227 hrs
Computed Peak Time             =  12.1353 hrs
Computed Peak Flow             =     1.54 cfs

Time Increment for HYG File    =    .0100 hrs
Peak Time, Interpolated Output =  12.1402 hrs
Peak Flow, Interpolated Output =     1.54 cfs
============================================

                 DRAINAGE AREA
              -------------------
              ID:None Selected
              CN   =   75
              Area =        .651 acres
              S    =   3.3690 in
              0.2S =    .6738 in

               Cumulative Runoff
              -------------------
                      2.3208 in
                        .126 ac-ft

HYG Volume...           .126 ac-ft (area under HYG curve)

***** UNIT HYDROGRAPH PARAMETERS *****

Time Concentration, Tc =   .16700 hrs (ID: None Selected)
Computational Incr, Tm =   .02227 hrs = 0.20000 Tp

Unit Hyd. Shape Factor =  483.432 (37.46% under rising limb)
K =  483.43/645.333,  K =    .7491 (also, K = 2/(1+(Tr/Tp))
Receding/Rising, Tr/Tp =   1.6698 (solved from K =   .7491)

Unit peak,          qp =     4.42 cfs
Unit peak time      Tp =   .11133 hrs
Unit receding limb, Tr =   .44533 hrs
Total unit time,    Tb =   .55667 hrs
```

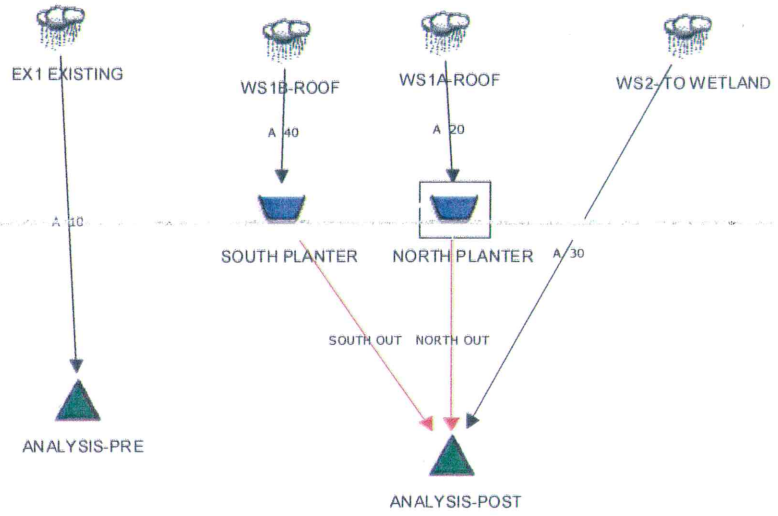
```
SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 100 year storm
Duration      = 50.0000 hrs     Rain Depth = 8.6513 in
Rain Dir      = C:\HAESTAD\PPKW\RAINFALL\
Rain File -ID = SCSTYPES.RNF - TypeIII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir       = Z:\PROGRAMS\PONDPACK\96 POST OFFICE ROAD\
HYG File - ID =  - EX1 EXISTING 100-yr
Tc            = .1670 hrs
Drainage Area = .651 acres  Runoff CN= 75

============================================
Computational Time Increment   =   .02227 hrs
Computed Peak Time             =  12.1353 hrs
Computed Peak Flow             =     3.64 cfs

Time Increment for HYG File    =    .0100 hrs
Peak Time, Interpolated Output =  12.1302 hrs
Peak Flow, Interpolated Output =     3.63 cfs
============================================

                 DRAINAGE AREA
              -------------------
              ID:None Selected
              CN   =   75
              Area =        .651 acres
              S    =   3.3690 in
              0.2S =    .6738 in

               Cumulative Runoff
              -------------------
                      5.6088 in
                        .304 ac-ft

HYG Volume...           .304 ac-ft (area under HYG curve)

***** UNIT HYDROGRAPH PARAMETERS *****

Time Concentration, Tc =   .16700 hrs (ID: None Selected)
Computational Incr, Tm =   .02227 hrs = 0.20000 Tp

Unit Hyd. Shape Factor =  483.432 (37.46% under rising limb)
K =  483.43/645.333,  K =    .7491 (also, K = 2/(1+(Tr/Tp))
Receding/Rising, Tr/Tp =   1.6698 (solved from K =   .7491)

Unit peak,          qp =     4.42 cfs
Unit peak time      Tp =   .11133 hrs
Unit receding limb, Tr =   .44533 hrs
Total unit time,    Tb =   .55667 hrs
```


Hydrograph
EX1 EXISTING 1-YR
Flow (cfs)
3
2
1
7
8
9
10
11
12
13
14
15
16
17
18
19
20
Time (hrs)
Plotted Curves
EX1 EXISTING 1-YR
EX1 EXISTING 10-YR
EX1 EXISTING 100-yr
EX1 EXISTING 2-YR

ATTACHMENT B

Post-Development Watersheds

1. Pond Pack Model Schematic
2. Watershed Worksheet WS1 & WS2
3. Pond Pack Computer Printout
    a. Watershed Summary
    b. Tc Analysis
    c. Hydrographs


EX1 EXISTING
WS1B-ROOF
WS1A-ROOF
WS2-TO WETLAND
A 40
A 20
A 10
SOUTH PLANTER
NORTH PLANTER
A 30
SOUTH OUT
NORTH OUT
ANALYSIS-PRE
ANALYSIS-POST

Drainage Area # WS #1A NORTH PLANTER			
Development	Pre		1,002
	Post	X	

TOTAL	0.023

Use	Soil Type	Soil Class	CN	Area	CN x Area
Woods	WdC	C	73	0.000	0.000
Woods-wetlands	Sh	D	77	0.000	0.000
Building	WdC	C	98	0.0195	1.911
Gravel	Wdc	C	89	0.000	0.000
Brush- planter	Wdc	B	48	0.0039	0.187
Brush-	Sh	D	73	0.000	0.000
Lawn	Wdc	C	61	0.000	0.000
		TOTAL =		0.023	2.098
CN (Weighted) =sum(CN x A) divided by Sum (A) =					89.7

Runoff:	Storm Event Type N10D 24 Hour Rainfall				2002 NYS	DEC MANUAL
	1 Year =	2.82	in		2.50	in
	2 Year =	3.40	in		3.50	in
	10 Year =	5.08	in		5.00	in
	100 Year	9.04	in		7.50	in

Annual Rainfall: 40.2 in

Tc Analysis Calculations: McCuen & Spiess Calculations

A	Sheet Flow			Tc	Flow Length:	50.0	
				0.006	Slope:	8.00%	
					Cover:	rooftop	
B	Shallow Concentrated Flow				Paved:		no
				0.000	Unpaved:		yes
					Hydraulic Length:		0
			Velocity	1.9	Average Land		1%
C	Channel Flow				FlowArea:	Q	
				0.000	Descrip.	15" pipe	N= 0.013
					Length:	0	Width:
					Depth		Slope:
					V	8	Wp
Minimum Tc = 0.10							
				0.006		use Tc=.1 hr	
			Total T_c				

TRAVEL TIME TO point A 142 @ 1.4% brush 0.21 HR.

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Drainage Area # WS #1B SOUTH PLANTER			
Development	Pre		1,001
	Post	X	

TOTAL	0.023

Use	Soil Type	Soil Class	CN	Area	CN x Area
Woods	WdC	C	73	0.000	0.000
Woods-wetlands	Sh	D	77	0.000	0.000
Building	WdC	C	98	0.0195	1.911
Gravel	Wdc	C	89	0.000	0.000
Brush- planter	Wdc	B	48	0.0034	0.163
Brush-	Sh	D	73	0.000	0.000
Lawn	Wdc	C	61	0.000	0.000
		TOTAL =		0.023	2.074
CN (Weighted) =sum(CN x A) divided by Sum (A) =					90.6

Runoff:	Storm Event Type N10D 24 Hour Rainfall				2002 NYS	DEC MANUAL
	1 Year =	2.82	in		2.50	in
	2 Year =	3.40	in		3.50	in
	10 Year =	5.08	in		5.00	in
	100 Year	9.04	in		7.50	in

Annual Rainfall: 40.2 in

Tc Analysis Calculations: McCuen & Spiess Calculations

A	Sheet Flow			Tc	Flow Length:	50.0	
				0.006	Slope:	8.00%	
					Cover:	rooftop	
B	Shallow Concentrated Flow				Paved:		no
				0.000	Unpaved:		yes
					Hydraulic Length:		0
			Velocity	1.9	Average Land		1%
C	Channel Flow				FlowArea:	Q	
				0.000	Descrip.	15" pipe	N= 0.013
					Length:	0	Width:
					Depth		Slope:
					V	8	Wp
Minimum Tc = 0.10							
Total T_c				0.006		use Tc=.1 hr	

TRAVEL TIME TO point A 142 @ 1.4% brush 0.21 HR.

Drainage Area # WS #2 direct offsite			
Development	Pre		26,370
	Post	X	
		TOTAL	0.605

Use	Soil Type	Soil Class	CN	Area	CN x Area
Woods-fair	WdC	C	73	0.140	10.220
Woods-wetlands	Sh	D	77	0.103	7.931
Building	WdC	C	98	0.000	0.000
Gravel	Wdc	C	89	0.042	3.738
Brush-	Wdc	C	65	0.146	9.490
Brush-	Sh	D	73	0.165	12.045
Lawn	Wdc	C	74	0.149	11.026
		TOTAL =		0.605	44.230
CN (Weighted) =sum(CN x A) divided by Sum (A) =					73.1

Runoff:	Storm Event Type N10D 24 Hour Rainfall				2002 NYS	DEC MANUAL
	1 Year =	2.82	in		2.50	in
	2 Year =	3.40	in		3.50	in
	10 Year =	5.08	in		5.00	in
	100 Year	9.04	in		7.50	in

Annual Rainfall: 40.2 in

Tc Analysis Calculations: McCuen & Spiess Calculations

A	Sheet Flow			Tc	Flow Length:	100.0	
				0.113	Slope:	11.50%	
					Cover:	brush	
B	Shallow Concentrated Flow				Paved:		no
				0.021	Unpaved:		yes
					Hydraulic Length:		194
			Velocity	2.5	Average Land		3%
C	Channel Flow				FlowArea:	Q	
				0.000	Descrip.	15" pipe	N= 0.013
					Length:	0	Width:
					Depth		Slope:
					V	8	Wp
Minimum Tc = 0.10							
Total T_c				0.134			

TRAVEL TIME TO point A 0.00 HR.

MASTER DESIGN STORM SUMMARY

Default Network Design Storm File, ID STORMS.RNQ WESTCH BRITTON

Return Event	Total Depth in	Rainfall Type	RNF File	RNF ID
1-YR	2.6987	Synthetic Curve	SCSTYPES	TypeIII 24hr
2-YR	3.2538	Synthetic Curve	SCSTYPES	TypeIII 24hr
10-YR	4.8616	Synthetic Curve	SCSTYPES	TypeIII 24hr
100-yr	8.6513	Synthetic Curve	SCSTYPES	TypeIII 24hr

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Storage Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond ac-ft
*ANALYSIS-POST	JCT	1	.034		12.1300	.42		
*ANALYSIS-POST	JCT	2	.052		12.1300	.65		
*ANALYSIS-POST	JCT	10	.110		12.1300	1.41		
*ANALYSIS-POST	JCT	100	.280		12.1300	3.49		
*ANALYSIS-PRE	JCT	1	.041		12.1400	.48		
*ANALYSIS-PRE	JCT	2	.061		12.1400	.73		
*ANALYSIS-PRE	JCT	10	.126		12.1400	1.54		
*ANALYSIS-PRE	JCT	100	.304		12.1300	3.63		
EX1 EXISTING	AREA	1	.041		12.1400	.48		
EX1 EXISTING	AREA	2	.061		12.1400	.73		
EX1 EXISTING	AREA	10	.126		12.1400	1.54		
EX1 EXISTING	AREA	100	.304		12.1300	3.63		
NORTH PLANTERIN	POND	1	.003		12.0500	.04		
NORTH PLANTERIN	POND	2	.004		12.0900	.05		
NORTH PLANTERIN	POND	10	.007		12.0800	.09		
NORTH PLANTERIN	POND	100	.014		12.0800	.17		
NORTH PLANTEROUT	POND	1	.000		9.7700	.00	486.36	.001
NORTH PLANTEROUT	POND	2	.000		9.0700	.00	486.45	.002
NORTH PLANTEROUT	POND	10	.000		7.5900	.00	486.85	.003

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Storage Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond ac-ft
NORTH PLANTEROUT	POND	100	.003		12.2100	.08	487.34	.005
SOUTH PLANTERIN	POND	1	.003		12.0800	.04		
SOUTH PLANTERIN	POND	2	.004		12.1000	.05		
SOUTH PLANTERIN	POND	10	.007		12.0800	.09		
SOUTH PLANTERIN	POND	100	.014		12.0800	.17		
SOUTH PLANTEROUT	POND	1	.000		9.5500	.00	486.38	.001
SOUTH PLANTEROUT	POND	2	.000		8.8700	.00	486.52	.002
SOUTH PLANTEROUT	POND	10	.000		7.3400	.00	487.00	.003
SOUTH PLANTEROUT	POND	100	.004		12.1600	.12	487.37	.005
WS1A-ROOF	AREA	1	.003		12.0500	.04		
WS1A-ROOF	AREA	2	.004		12.0900	.05		
WS1A-ROOF	AREA	10	.007		12.0800	.09		
WS1A-ROOF	AREA	100	.014		12.0800	.17		
WS1B-ROOF	AREA	1	.003		12.0800	.04		
WS1B-ROOF	AREA	2	.004		12.1000	.05		
WS1B-ROOF	AREA	10	.007		12.0800	.09		
WS1B-ROOF	AREA	100	.014		12.0800	.17		
WS2- TO WETLAND	AREA	1	.034		12.1300	.42		
WS2- TO WETLAND	AREA	2	.052		12.1300	.65		
WS2- TO WETLAND	AREA	10	.110		12.1300	1.41		
WS2- TO WETLAND	AREA	100	.272		12.1200	3.40		

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File.... C:\HAESTAD\PPKW\RAINFALL\STORMS.RNQ
Title... REVISED SITE PLAN WITH TWO PLANTERS

DESIGN STORMS SUMMARY

Design Storm File,ID = STORMS.RNQ WESTCH BRITTON

Storm Tag Name = 1-YR
Description: 1 YEAR FIRST FLUSH

Data Type, File, ID = Synthetic Storm SCSTYPES.RNF TypeIII 24hr
Storm Frequency = 1 yr
Total Rainfall Depth= 2.6987 in
Duration Multiplier = 1
Resulting Duration = 50.0000 hrs
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 50.0000 hrs

Storm Tag Name = 2-YR
Description: 2 YEAR

Data Type, File, ID = Synthetic Storm SCSTYPES.RNF TypeIII 24hr
Storm Frequency = 2 yr
Total Rainfall Depth= 3.2538 in
Duration Multiplier = 1
Resulting Duration = 50.0000 hrs
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 50.0000 hrs

Storm Tag Name = 10-YR
Description: 10 YEAR

Data Type, File, ID = Synthetic Storm SCSTYPES.RNF TypeIII 24hr
Storm Frequency = 10 yr
Total Rainfall Depth= 4.8616 in
Duration Multiplier = 1
Resulting Duration = 50.0000 hrs
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 50.0000 hrs

Storm Tag Name = 100-yr
Description: 100 yr

Data Type, File, ID = Synthetic Storm SCSTYPES.RNF TypeIII 24hr
Storm Frequency = 100 yr
Total Rainfall Depth= 8.6513 in
Duration Multiplier = 1
Resulting Duration = 50.0000 hrs
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 50.0000 hrs

```
SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 1 year storm
Duration      = 50.0000 hrs     Rain Depth = 2.6987 in
Rain Dir      = C:\HAESTAD\PPKW\RAINFALL\
Rain File -ID = SCSTYPES.RNF - TypeIII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir       = Z:\PROGRAMS\PONDPACK\96 POST OFFICE ROAD\
HYG File - ID =  - WS1A-ROOF 1-YR
Tc            = .1000 hrs
Drainage Area = .023 acres  Runoff CN= 90

============================================
Computational Time Increment   =   .01333 hrs
Computed Peak Time             =  12.1067 hrs
Computed Peak Flow             =      .04 cfs

Time Increment for HYG File    =    .0100 hrs
Peak Time, Interpolated Output =  12.1102 hrs
Peak Flow, Interpolated Output =      .04 cfs
============================================

                 DRAINAGE AREA
              -------------------
              ID:None Selected
              CN   =   90
              Area =        .023 acres
              S    =   1.1483 in
              0.2S =    .2297 in

               Cumulative Runoff
              -------------------
                      1.6853 in
                        .003 ac-ft

HYG Volume...           .003 ac-ft (area under HYG curve)

***** UNIT HYDROGRAPH PARAMETERS *****

Time Concentration, Tc =   .10000 hrs (ID: None Selected)
Computational Incr, Tm =   .01333 hrs = 0.20000 Tp

Unit Hyd. Shape Factor =  483.432 (37.46% under rising limb)
K =  483.43/645.333,  K =    .7491 (also, K = 2/(1+(Tr/Tp))
Receding/Rising, Tr/Tp =   1.6698 (solved from K =   .7491)

Unit peak,          qp =      .26 cfs
Unit peak time      Tp =   .06667 hrs
Unit receding limb, Tr =   .26667 hrs
Total unit time,    Tb =   .33333 hrs
```

```
SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 2 year storm
Duration      = 50.0000 hrs     Rain Depth = 3.2538 in
Rain Dir      = C:\HAESTAD\PPKW\RAINFALL\
Rain File -ID = SCSTYPES.RNF - TypeIII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir       = Z:\PROGRAMS\PONDPACK\96 POST OFFICE ROAD\
HYG File - ID =  - WS1A-ROOF 2-YR
Tc            = .1000 hrs
Drainage Area = .023 acres  Runoff CN= 90

============================================
Computational Time Increment   =   .01333 hrs
Computed Peak Time             =  12.1067 hrs
Computed Peak Flow             =       .05 cfs

Time Increment for HYG File    =    .0100 hrs
Peak Time, Interpolated Output =  12.1102 hrs
Peak Flow, Interpolated Output =      .05 cfs
============================================

                 DRAINAGE AREA
              -------------------
              ID:None Selected
              CN   =   90
              Area =        .023 acres
              S    =   1.1483 in
              0.2S =    .2297 in

               Cumulative Runoff
              -------------------
                      2.1919 in
                        .004 ac-ft

HYG Volume...           .004 ac-ft (area under HYG curve)

***** UNIT HYDROGRAPH PARAMETERS *****

Time Concentration, Tc =   .10000 hrs (ID: None Selected)
Computational Incr, Tm =   .01333 hrs = 0.20000 Tp

Unit Hyd. Shape Factor =  483.432 (37.46% under rising limb)
K =  483.43/645.333,  K =    .7491 (also, K = 2/(1+(Tr/Tp))
Receding/Rising, Tr/Tp =   1.6698 (solved from K =   .7491)

Unit peak,          qp =      .26 cfs
Unit peak time      Tp =   .06667 hrs
Unit receding limb, Tr =   .26667 hrs
Total unit time,    Tb =   .33333 hrs
```

```
SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 10 year storm
Duration      = 50.0000 hrs     Rain Depth = 4.8616 in
Rain Dir      = C:\HAESTAD\PPKW\RAINFALL\
Rain File -ID = SCSTYPES.RNF - TypeIII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir       = Z:\PROGRAMS\PONDPACK\96 POST OFFICE ROAD\
HYG File - ID =  - WS1A-ROOF 10-YR
Tc            = .1000 hrs
Drainage Area = .023 acres  Runoff CN= 90

============================================
Computational Time Increment   =   .01333 hrs
Computed Peak Time             =  12.1067 hrs
Computed Peak Flow             =       .09 cfs

Time Increment for HYG File    =    .0100 hrs
Peak Time, Interpolated Output =  12.1002 hrs
Peak Flow, Interpolated Output =      .09 cfs
============================================

                 DRAINAGE AREA
              -------------------
              ID:None Selected
              CN   =   90
              Area =        .023 acres
              S    =   1.1483 in
              0.2S =    .2297 in

               Cumulative Runoff
              -------------------
                      3.7117 in
                        .007 ac-ft

HYG Volume...           .007 ac-ft (area under HYG curve)

***** UNIT HYDROGRAPH PARAMETERS *****

Time Concentration, Tc =   .10000 hrs (ID: None Selected)
Computational Incr, Tm =   .01333 hrs = 0.20000 Tp

Unit Hyd. Shape Factor =  483.432 (37.46% under rising limb)
K =  483.43/645.333,  K =    .7491 (also, K = 2/(1+(Tr/Tp))
Receding/Rising, Tr/Tp =   1.6698 (solved from K =   .7491)

Unit peak,          qp =      .26 cfs
Unit peak time      Tp =   .06667 hrs
Unit receding limb, Tr =   .26667 hrs
Total unit time,    Tb =   .33333 hrs
```

```
SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 100 year storm
Duration      = 50.0000 hrs     Rain Depth = 8.6513 in
Rain Dir      = C:\HAESTAD\PPKW\RAINFALL\
Rain File -ID = SCSTYPES.RNF - TypeIII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir       = Z:\PROGRAMS\PONDPACK\96 POST OFFICE ROAD\
HYG File - ID =  - WS1A-ROOF 100-yr
Tc            = .1000 hrs
Drainage Area = .023 acres  Runoff CN= 90

============================================
Computational Time Increment   =   .01333 hrs
Computed Peak Time             =  12.1067 hrs
Computed Peak Flow             =       .17 cfs

Time Increment for HYG File    =    .0100 hrs
Peak Time, Interpolated Output =  12.1002 hrs
Peak Flow, Interpolated Output =      .17 cfs
============================================

                 DRAINAGE AREA
               -------------------
               ID:None Selected
               CN   =   90
               Area =        .023 acres
               S    =   1.1483 in
               0.2S =    .2297 in

                Cumulative Runoff
               -------------------
                       7.4111 in
                         .014 ac-ft

HYG Volume...           .014 ac-ft (area under HYG curve)

***** UNIT HYDROGRAPH PARAMETERS *****

Time Concentration, Tc =   .10000 hrs (ID: None Selected)
Computational Incr, Tm =   .01333 hrs = 0.20000 Tp

Unit Hyd. Shape Factor =  483.432 (37.46% under rising limb)
K =  483.43/645.333,  K =    .7491 (also, K = 2/(1+(Tr/Tp))
Receding/Rising, Tr/Tp =   1.6698 (solved from K =   .7491)

Unit peak,          qp =      .26 cfs
Unit peak time      Tp =   .06667 hrs
Unit receding limb, Tr =   .26667 hrs
Total unit time,    Tb =   .33333 hrs
```

```
SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 1 year storm
Duration      = 50.0000 hrs     Rain Depth = 2.6987 in
Rain Dir      = C:\HAESTAD\PPKW\RAINFALL\
Rain File -ID = SCSTYPES.RNF - TypeIII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir       = Z:\PROGRAMS\PONDPACK\96 POST OFFICE ROAD\
HYG File - ID =  - WS1B-ROOF 1-YR
Tc            = .1000 hrs
Drainage Area = .023 acres  Runoff CN= 91

============================================
Computational Time Increment   =   .01333 hrs
Computed Peak Time             =  12.1007 hrs
Computed Peak Flow             =      .04 cfs

Time Increment for HYG File    =    .0100 hrs
Peak Time, Interpolated Output =  12.1102 hrs
Peak Flow, Interpolated Output =      .04 cfs
============================================

                 DRAINAGE AREA
              -------------------
              ID:None Selected
              CN   =   91
              Area =        .023 acres
              S    =   1.0375 in
              0.2S =    .2075 in

               Cumulative Runoff
              -------------------
                      1.7588 in
                        .003 ac-ft

HYG Volume...           .003 ac-ft (area under HYG curve)

***** UNIT HYDROGRAPH PARAMETERS *****

Time Concentration, Tc =   .10000 hrs (ID: None Selected)
Computational Incr, Tm =   .01333 hrs = 0.20000 Tp

Unit Hyd. Shape Factor =  483.432 (37.46% under rising limb)
K =  483.43/645.333,  K =    .7491 (also, K = 2/(1+(Tr/Tp))
Receding/Rising, Tr/Tp =   1.6698 (solved from K =   .7491)

Unit peak,          qp =      .26 cfs
Unit peak time      Tp =   .06667 hrs
Unit receding limb, Tr =   .26667 hrs
Total unit time,    Tb =   .33333 hrs
```

```
SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 2 year storm
Duration      = 50.0000 hrs     Rain Depth = 3.2538 in
Rain Dir      = C:\HAESTAD\PPKW\RAINFALL\
Rain File -ID = SCSTYPES.RNF - TypeIII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir       = Z:\PROGRAMS\PONDPACK\96 POST OFFICE ROAD\
HYG File - ID =  - WS1B-ROOF 2-YR
Tc            = .1000 hrs
Drainage Area = .023 acres  Runoff CN= 91

============================================
Computational Time Increment   =   .01333 hrs
Computed Peak Time             =  12.1067 hrs
Computed Peak Flow             =       .06 cfs

Time Increment for HYG File    =    .0100 hrs
Peak Time, Interpolated Output =  12.1102 hrs
Peak Flow, Interpolated Output =      .05 cfs
============================================

                 DRAINAGE AREA
               -------------------
               ID:None Selected
               CN   =   91
               Area =        .023 acres
               S    =   1.0375 in
               0.2S =    .2075 in

                Cumulative Runoff
               -------------------
                       2.2724 in
                         .004 ac-ft

HYG Volume...            .004 ac-ft (area under HYG curve)

***** UNIT HYDROGRAPH PARAMETERS *****

Time Concentration, Tc =   .10000 hrs (ID: None Selected)
Computational Incr, Tm =   .01333 hrs = 0.20000 Tp

Unit Hyd. Shape Factor =  483.432 (37.46% under rising limb)
K =  483.43/645.333,  K =    .7491 (also, K = 2/(1+(Tr/Tp))
Receding/Rising, Tr/Tp =   1.6698 (solved from K =   .7491)

Unit peak,          qp =      .26 cfs
Unit peak time      Tp =   .06667 hrs
Unit receding limb, Tr =   .26667 hrs
Total unit time,    Tb =   .33333 hrs
```

```
SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 10 year storm
Duration      = 50.0000 hrs     Rain Depth = 4.8616 in
Rain Dir      = C:\HAESTAD\PPKW\RAINFALL\
Rain File -ID = SCSTYPES.RNF - TypeIII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir       = Z:\PROGRAMS\PONDPACK\96 POST OFFICE ROAD\
HYG File - ID =  - WS1B-ROOF 10-YR
Tc            = .1000 hrs
Drainage Area = .023 acres  Runoff CN= 91

============================================
Computational Time Increment   =   .01333 hrs
Computed Peak Time             =  12.1067 hrs
Computed Peak Flow             =       .09 cfs

Time Increment for HYG File    =    .0100 hrs
Peak Time, Interpolated Output =  12.1002 hrs
Peak Flow, Interpolated Output =      .09 cfs
============================================

                 DRAINAGE AREA
               -------------------
               ID:None Selected
               CN   =   91
               Area =        .023 acres
               S    =   1.0375 in
               0.2S =    .2075 in

                Cumulative Runoff
               -------------------
                       3.8057 in
                         .007 ac-ft

HYG Volume...            .007 ac-ft (area under HYG curve)

***** UNIT HYDROGRAPH PARAMETERS *****

Time Concentration, Tc =   .10000 hrs (ID: None Selected)
Computational Incr, Tm =   .01333 hrs = 0.20000 Tp

Unit Hyd. Shape Factor =  483.432 (37.46% under rising limb)
K =  483.43/645.333,  K =    .7491 (also, K = 2/(1+(Tr/Tp))
Receding/Rising, Tr/Tp =   1.6698 (solved from K =   .7491)

Unit peak,          qp =      .26 cfs
Unit peak time      Tp =   .06667 hrs
Unit receding limb, Tr =   .26667 hrs
Total unit time,    Tb =   .33333 hrs
```

```
SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 100 year storm
Duration      = 50.0000 hrs     Rain Depth = 8.6513 in
Rain Dir      = C:\HAESTAD\PPKW\RAINFALL\
Rain File -ID = SCSTYPES.RNF - TypeIII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir       = Z:\PROGRAMS\PONDPACK\96 POST OFFICE ROAD\
HYG File - ID =  - WS1B-ROOF 100-yr
Tc            = .1000 hrs
Drainage Area = .023 acres  Runoff CN= 91

============================================
Computational Time Increment   =   .01333 hrs
Computed Peak Time             =  12.1067 hrs
Computed Peak Flow             =       .17 cfs

Time Increment for HYG File    =    .0100 hrs
Peak Time, Interpolated Output =  12.1002 hrs
Peak Flow, Interpolated Output =       .17 cfs
============================================

                 DRAINAGE AREA
              -------------------
              ID:None Selected
              CN   =   91
              Area =        .023 acres
              S    =   1.0375 in
              0.2S =    .2075 in

               Cumulative Runoff
              -------------------
                      7.5198 in
                        .014 ac-ft

HYG Volume...           .014 ac-ft (area under HYG curve)

***** UNIT HYDROGRAPH PARAMETERS *****

Time Concentration, Tc =   .10000 hrs (ID: None Selected)
Computational Incr, Tm =   .01333 hrs = 0.20000 Tp

Unit Hyd. Shape Factor =  483.432 (37.46% under rising limb)
K =  483.43/645.333,  K =    .7491 (also, K = 2/(1+(Tr/Tp))
Receding/Rising, Tr/Tp =   1.6698 (solved from K =   .7491)

Unit peak,          qp =      .26 cfs
Unit peak time      Tp =   .06667 hrs
Unit receding limb, Tr =   .26667 hrs
Total unit time,    Tb =   .33333 hrs
```

```
SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 1 year storm
Duration      = 50.0000 hrs     Rain Depth = 2.6987 in
Rain Dir      = C:\HAESTAD\PPKW\RAINFALL\
Rain File -ID = SCSTYPES.RNF - TypeIII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir       = Z:\PROGRAMS\PONDPACK\96 POST OFFICE ROAD\
HYG File - ID =  - WS2- TO WETLAND 1-YR
Tc            = .1340 hrs
Drainage Area = .605 acres  Runoff CN= 73

============================================
Computational Time Increment   =   .01787 hrs
Computed Peak Time             =  12.1315 hrs
Computed Peak Flow             =      .42 cfs

Time Increment for HYG File    =    .0100 hrs
Peak Time, Interpolated Output =  12.1302 hrs
Peak Flow, Interpolated Output =      .42 cfs
============================================

                 DRAINAGE AREA
               -------------------
               ID:None Selected
               CN   =   73
               Area =        .605 acres
               S    =   3.6799 in
               0.2S =    .7360 in

                Cumulative Runoff
               -------------------
                         .6827 in
                          .034 ac-ft

HYG Volume...             .034 ac-ft (area under HYG curve)

***** UNIT HYDROGRAPH PARAMETERS *****

Time Concentration, Tc =   .13400 hrs (ID: None Selected)
Computational Incr, Tm =   .01787 hrs = 0.20000 Tp

Unit Hyd. Shape Factor =  483.432 (37.46% under rising limb)
K =  483.43/645.333,  K =    .7491 (also, K = 2/(1+(Tr/Tp))
Receding/Rising, Tr/Tp =   1.6698 (solved from K =   .7491)

Unit peak,          qp =     5.12 cfs
Unit peak time      Tp =   .08933 hrs
Unit receding limb, Tr =   .35733 hrs
Total unit time,    Tb =   .44667 hrs
```

```
SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 2 year storm
Duration      = 50.0000 hrs     Rain Depth = 3.2538 in
Rain Dir      = C:\HAESTAD\PPKW\RAINFALL\
Rain File -ID = SCSTYPES.RNF - TypeIII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir       = Z:\PROGRAMS\PONDPACK\96 POST OFFICE ROAD\
HYG File - ID =  - WS2- TO WETLAND 2-YR
Tc            = .1340 hrs
Drainage Area = .605 acres  Runoff CN= 73

============================================
Computational Time Increment   =   .01787 hrs
Computed Peak Time             =  12.1315 hrs
Computed Peak Flow             =       .65 cfs

Time Increment for HYG File    =    .0100 hrs
Peak Time, Interpolated Output =  12.1302 hrs
Peak Flow, Interpolated Output =      .65 cfs
============================================

                 DRAINAGE AREA
              -------------------
              ID:None Selected
              CN   =   73
              Area =        .605 acres
              S    =   3.6799 in
              0.2S =    .7360 in

               Cumulative Runoff
              -------------------
                      1.0229 in
                        .052 ac-ft

HYG Volume...           .052 ac-ft (area under HYG curve)

***** UNIT HYDROGRAPH PARAMETERS *****

Time Concentration, Tc =   .13400 hrs (ID: None Selected)
Computational Incr, Tm =   .01787 hrs = 0.20000 Tp

Unit Hyd. Shape Factor =  483.432 (37.46% under rising limb)
K =  483.43/645.333,  K =    .7491 (also, K = 2/(1+(Tr/Tp))
Receding/Rising, Tr/Tp =   1.6698 (solved from K =   .7491)

Unit peak,          qp =     5.12 cfs
Unit peak time      Tp =   .08933 hrs
Unit receding limb, Tr =   .35733 hrs
Total unit time,    Tb =   .44667 hrs
```

```
SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 10 year storm
Duration      = 50.0000 hrs     Rain Depth = 4.8616 in
Rain Dir      = C:\HAESTAD\PPKW\RAINFALL\
Rain File -ID = SCSTYPES.RNF - TypeIII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir       = Z:\PROGRAMS\PONDPACK\96 POST OFFICE ROAD\
HYG File - ID =  - WS2- TO WETLAND 10-YR
Tc            = .1340 hrs
Drainage Area = .605 acres  Runoff CN= 73

============================================
Computational Time Increment   =   .01787 hrs
Computed Peak Time             =  12.1315 hrs
Computed Peak Flow             =      1.41 cfs

Time Increment for HYG File    =    .0100 hrs
Peak Time, Interpolated Output =  12.1302 hrs
Peak Flow, Interpolated Output =     1.41 cfs
============================================

                 DRAINAGE AREA
              -------------------
              ID:None Selected
              CN   =   73
              Area =        .605 acres
              S    =   3.6799 in
              0.2S =    .7360 in

               Cumulative Runoff
              -------------------
                      2.1806 in
                        .110 ac-ft

HYG Volume...           .110 ac-ft (area under HYG curve)

***** UNIT HYDROGRAPH PARAMETERS *****

Time Concentration, Tc =   .13400 hrs (ID: None Selected)
Computational Incr, Tm =   .01787 hrs = 0.20000 Tp

Unit Hyd. Shape Factor =  483.432 (37.46% under rising limb)
K =  483.43/645.333,  K =    .7491 (also, K = 2/(1+(Tr/Tp))
Receding/Rising, Tr/Tp =   1.6698 (solved from K =   .7491)

Unit peak,          qp =     5.12 cfs
Unit peak time      Tp =   .08933 hrs
Unit receding limb, Tr =   .35733 hrs
Total unit time,    Tb =   .44667 hrs
```

```
SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 100 year storm
Duration      = 50.0000 hrs     Rain Depth = 8.6513 in
Rain Dir      = C:\HAESTAD\PPKW\RAINFALL\
Rain File -ID = SCSTYPES.RNF - TypeIII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir       = Z:\PROGRAMS\PONDPACK\96 POST OFFICE ROAD\
HYG File - ID =  - WS2- TO WETLAND 100-yr
Tc            = .1340 hrs
Drainage Area = .605 acres  Runoff CN= 73

============================================
Computational Time Increment   =   .01787 hrs
Computed Peak Time             =  12.1136 hrs
Computed Peak Flow             =      3.40 cfs

Time Increment for HYG File    =    .0100 hrs
Peak Time, Interpolated Output =  12.1202 hrs
Peak Flow, Interpolated Output =     3.40 cfs
============================================

                 DRAINAGE AREA
              -------------------
              ID:None Selected
              CN   =   73
              Area =        .605 acres
              S    =   3.6799 in
              0.2S =    .7360 in

               Cumulative Runoff
              -------------------
                      5.4033 in
                        .272 ac-ft

HYG Volume...           .272 ac-ft (area under HYG curve)

***** UNIT HYDROGRAPH PARAMETERS *****

Time Concentration, Tc =   .13400 hrs (ID: None Selected)
Computational Incr, Tm =   .01787 hrs = 0.20000 Tp

Unit Hyd. Shape Factor =  483.432 (37.46% under rising limb)
K =  483.43/645.333,  K =    .7491 (also, K = 2/(1+(Tr/Tp))
Receding/Rising, Tr/Tp =   1.6698 (solved from K =   .7491)

Unit peak,          qp =     5.12 cfs
Unit peak time      Tp =   .08933 hrs
Unit receding limb, Tr =   .35733 hrs
Total unit time,    Tb =   .44667 hrs
```

APPENDIX C1-N

North Concrete Flow Through Planter

1. Planter Volume
2. Planter Outlet Structures
3. Planter Routing
4. Planter 1-Year Routing Time

File.... Z:\PROGRAMS\PONDPACK\96 POST OFFICE ROAD\PRE AND POST ANALYSIS.PPW
Title... PLANTER

POND VOLUME CALCULATIONS

Planimeter scale: 1.00 ft/in

Elevation (ft)	Planimeter (sq.in)	Area (acres)	A1+A2+sqr(A1*A2) (acres)	Volume (ac-ft)	Volume Sum (ac-ft)
486.00	168.000	.0039	.0000	.000	.000
488.00	168.000	.0039	.0116	.008	.008

POND VOLUME EQUATIONS

* Incremental volume computed by the Conic Method for Reservoir Volumes.

Volume = (1/3) * (EL2-EL1) * (Area1 + Area2 + sq.rt.(Area1*Area2))

where: EL1, EL2 = Lower and upper elevations of the increment
Area1,Area2 = Areas computed for EL1, EL2, respectively
Volume = Incremental volume between EL1 and EL2

File.... Z:\PROGRAMS\PONDPACK\96 POST OFFICE ROAD\PRE AND POST ANALYSIS.PPW
Title... CONCRETE WIERS

REQUESTED POND WS ELEVATIONS:

Min. Elev.= 486.00 ft
Increment = .10 ft
Max. Elev.= 488.00 ft

****
OUTLET CONNECTIVITY
****

---> Forward Flow Only (UpStream to DnStream)
<--- Reverse Flow Only (DnStream to UpStream)
<---> Forward and Reverse Both Allowed

Structure	No.		Outfall	E1, ft	E2, ft
Weir-Rectangular	A	--->	TW	487.250	488.000
Weir-Rectangular	B	--->	TW	487.250	488.000

TW SETUP, DS Channel

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File.... Z:\PROGRAMS\PONDPACK\96 POST OFFICE ROAD\PRE AND POST ANALYSIS.PPW
Title... CONCRETE WIERS

OUTLET STRUCTURE INPUT DATA

```
Structure ID       = A
Structure Type     = Weir-Rectangular
-----------------------------------
# of Openings      =         1
Crest Elev.        =    487.25 ft
Weir Length        =       .50 ft
Weir Coeff.        =  2.800000

Weir TW effects     (Use adjustment equation)
```

```
Structure ID       = B
Structure Type     = Weir-Rectangular
-----------------------------------
# of Openings      =         1
Crest Elev.        =    487.25 ft
Weir Length        =       .50 ft
Weir Coeff.        =  2.800000

Weir TW effects     (Use adjustment equation)
```

```
Structure ID       = TW
Structure Type     = TW SETUP, DS Channel
-----------------------------------
FREE OUTFALL CONDITIONS SPECIFIED

CONVERGENCE TOLERANCES...
Maximum Iterations=    30
Min. TW tolerance =    .01 ft
Max. TW tolerance =    .01 ft
Min. HW tolerance =    .01 ft
Max. HW tolerance =    .01 ft
Min.  Q tolerance =    .10 cfs
Max.  Q tolerance =    .10 cfs
```

LEVEL POOL ROUTING SUMMARY

```
HYG Dir          = Z:\PROGRAMS\PONDPACK\96 POST OFFICE ROAD\
Inflow  HYG file = NONE STORED - NORTH PLANTERIN  1-YR
Outflow HYG file = NONE STORED - NORTH PLANTEROUT 1-YR

Pond Node   Data = NORTH PLANTER
Pond Volume Data = NORTH PLANTER
Pond Outlet Data = PLANTER OUT

Infiltration =   2.0000 in/hr

INITIAL CONDITIONS
----------------------------------
Starting WS Elev   =   486.33 ft
Starting Volume    =     .001 ac-ft
Starting Outflow   =      .00 cfs
Starting Infiltr.  =      .01 cfs
Starting Total Qout=      .01 cfs
Time Increment     =    .0100 hrs


INFLOW/OUTFLOW HYDROGRAPH SUMMARY
=====================================================
Peak Inflow       =       .04 cfs    at   12.0500 hrs
Peak Outflow      =       .00 cfs    at    9.7700 hrs
Peak Infiltration =       .01 cfs    at    9.7600 hrs
-----------------------------------------------------
Peak Elevation    =    486.36 ft
Peak Storage =           .001 ac-ft
=====================================================


MASS BALANCE (ac-ft)
--------------------------
+ Initial Vol  =        .001
+ HYG Vol IN   =        .003
- Infiltration =        .004
- HYG Vol OUT  =        .000
- Retained Vol =        .000
                  ----------
Unrouted Vol =       -.000 ac-ft  (.107% of Inflow Volume)
```


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DETENTION TIMES SUMMARY

```
HYG Dir          = Z:\PROGRAMS\PONDPACK\96 POST OFFICE ROAD\
Inflow  HYG file = NONE STORED - NORTH PLANTERIN  1-YR
Outflow HYG file = NONE STORED - NORTH PLANTEROUT 1-YR

Pond Node   Data = NORTH PLANTER
Pond Volume Data = NORTH PLANTER
Pond Outlet Data = PLANTER OUT

Infiltration =   2.0000 in/hr

APPROXIMATE DETENTION TIME
--------------------------------------

Qout Infilt. Centroid   =   13.0737 hrs
Inflow Centroid         =   12.8070 hrs
Centroid to Centroid    =     .2668 hrs
--------------------------------------
```

LEVEL POOL ROUTING SUMMARY

```
HYG Dir          = Z:\PROGRAMS\PONDPACK\96 POST OFFICE ROAD\
Inflow  HYG file = NONE STORED - NORTH PLANTERIN  2-YR
Outflow HYG file = NONE STORED - NORTH PLANTEROUT 2-YR

Pond Node   Data = NORTH PLANTER
Pond Volume Data = NORTH PLANTER
Pond Outlet Data = PLANTER OUT

Infiltration =   2.0000 in/hr

INITIAL CONDITIONS
----------------------------------
Starting WS Elev   =   486.33 ft
Starting Volume    =     .001 ac-ft
Starting Outflow   =      .00 cfs
Starting Infiltr.  =      .01 cfs
Starting Total Qout=      .01 cfs
Time Increment     =    .0100 hrs


INFLOW/OUTFLOW HYDROGRAPH SUMMARY
=====================================================
Peak Inflow       =       .05 cfs    at   12.0900 hrs
Peak Outflow      =       .00 cfs    at    9.0700 hrs
Peak Infiltration =       .01 cfs    at    9.0600 hrs
-----------------------------------------------------
Peak Elevation    =    486.45 ft
Peak Storage =           .002 ac-ft
=====================================================


MASS BALANCE (ac-ft)
--------------------------
+ Initial Vol  =        .001
+ HYG Vol IN   =        .004
- Infiltration =        .005
- HYG Vol OUT  =        .000
- Retained Vol =        .000
                 ----------
Unrouted Vol =       -.000 ac-ft  (.078% of Inflow Volume)
```

LEVEL POOL ROUTING SUMMARY

```
HYG Dir          = Z:\PROGRAMS\PONDPACK\96 POST OFFICE ROAD\
Inflow  HYG file = NONE STORED - NORTH PLANTERIN  10-YR
Outflow HYG file = NONE STORED - NORTH PLANTEROUT 10-YR

Pond Node   Data = NORTH PLANTER
Pond Volume Data = NORTH PLANTER
Pond Outlet Data = PLANTER OUT

Infiltration =   2.0000 in/hr

INITIAL CONDITIONS
----------------------------------
Starting WS Elev   =   486.33 ft
Starting Volume    =     .001 ac-ft
Starting Outflow   =      .00 cfs
Starting Infiltr.  =      .01 cfs
Starting Total Qout=      .01 cfs
Time Increment     =    .0100 hrs


INFLOW/OUTFLOW HYDROGRAPH SUMMARY
=====================================================
Peak Inflow       =       .09 cfs    at   12.0800 hrs
Peak Outflow      =       .00 cfs    at    7.5900 hrs
Peak Infiltration =       .01 cfs    at    7.5800 hrs
-----------------------------------------------------
Peak Elevation    =    486.85 ft
Peak Storage =           .003 ac-ft
=====================================================


MASS BALANCE (ac-ft)
--------------------------
+ Initial Vol  =        .001
+ HYG Vol IN   =        .007
- Infiltration =        .008
- HYG Vol OUT  =        .000
- Retained Vol =        .000
                   ----------
Unrouted Vol =       -.000 ac-ft  (.045% of Inflow Volume)
```

LEVEL POOL ROUTING SUMMARY

```
HYG Dir          = Z:\PROGRAMS\PONDPACK\96 POST OFFICE ROAD\
Inflow  HYG file = NONE STORED - NORTH PLANTERIN  100-yr
Outflow HYG file = NONE STORED - NORTH PLANTEROUT 100-yr

Pond Node   Data = NORTH PLANTER
Pond Volume Data = NORTH PLANTER
Pond Outlet Data = PLANTER OUT

Infiltration =   2.0000 in/hr

INITIAL CONDITIONS
----------------------------------
Starting WS Elev   =   486.33 ft
Starting Volume    =     .001 ac-ft
Starting Outflow   =      .00 cfs
Starting Infiltr.  =      .01 cfs
Starting Total Qout=      .01 cfs
Time Increment     =    .0100 hrs


INFLOW/OUTFLOW HYDROGRAPH SUMMARY
=====================================================
Peak Inflow       =       .17 cfs    at   12.0800 hrs
Peak Outflow      =       .09 cfs    at   12.2100 hrs
Peak Infiltration =       .01 cfs    at    4.8900 hrs
-----------------------------------------------------
Peak Elevation    =    487.34 ft
Peak Storage =           .005 ac-ft
=====================================================


MASS BALANCE (ac-ft)
--------------------------
+ Initial Vol  =        .001
+ HYG Vol IN   =        .014
- Infiltration =        .012
- HYG Vol OUT  =        .003
- Retained Vol =        .000
                   ----------
Unrouted Vol =       -.000 ac-ft  (.022% of Inflow Volume)
```

APPENDIX C1-S

South Concrete Flow Through Planter

1. Planter Volume
2. Planter Outlet Structures
3. Planter Routing
4. Planter 1-Year Routing Time

File.... Z:\PROGRAMS\PONDPACK\96 POST OFFICE ROAD\PRE AND POST ANALYSIS.PPW
Title... SOUTH PLANTER

POND VOLUME CALCULATIONS

Planimeter scale: 1.00 ft/in

Elevation (ft)	Planimeter (sq.in)	Area (acres)	A1+A2+sqr(A1*A2) (acres)	Volume (ac-ft)	Volume Sum (ac-ft)
486.00	152.000	.0035	.0000	.000	.000
488.00	152.000	.0035	.0105	.007	.007

POND VOLUME EQUATIONS

* Incremental volume computed by the Conic Method for Reservoir Volumes.

Volume = (1/3) * (EL2-EL1) * (Area1 + Area2 + sq.rt.(Area1*Area2))

where: EL1, EL2 = Lower and upper elevations of the increment
Area1,Area2 = Areas computed for EL1, EL2, respectively
Volume = Incremental volume between EL1 and EL2

File.... Z:\PROGRAMS\PONDPACK\96 POST OFFICE ROAD\PRE AND POST ANALYSIS.PPW
Title... CONCRETE WIERS

REQUESTED POND WS ELEVATIONS:

Min. Elev.= 486.00 ft
Increment = .10 ft
Max. Elev.= 488.00 ft

****
OUTLET CONNECTIVITY
****

---> Forward Flow Only (UpStream to DnStream)
<--- Reverse Flow Only (DnStream to UpStream)
<---> Forward and Reverse Both Allowed

Structure	No.		Outfall	E1, ft	E2, ft
Weir-Rectangular	A	--->	TW	487.250	488.000
Weir-Rectangular	B	--->	TW	487.250	488.000

TW SETUP, DS Channel

File.... Z:\PROGRAMS\PONDPACK\96 POST OFFICE ROAD\PRE AND POST ANALYSIS.PPW
Title... CONCRETE WIERS

OUTLET STRUCTURE INPUT DATA

```
Structure ID      = A
Structure Type    = Weir-Rectangular
-------------------------------------
# of Openings     =         1
Crest Elev.       =    487.25 ft
Weir Length       =       .50 ft
Weir Coeff.       =  2.800000

Weir TW effects     (Use adjustment equation)
```

```
Structure ID      = B
Structure Type    = Weir-Rectangular
-------------------------------------
# of Openings     =         1
Crest Elev.       =    487.25 ft
Weir Length       =       .50 ft
Weir Coeff.       =  2.800000

Weir TW effects     (Use adjustment equation)
```

```
Structure ID      = TW
Structure Type    = TW SETUP, DS Channel
-------------------------------------
FREE OUTFALL CONDITIONS SPECIFIED

CONVERGENCE TOLERANCES...
Maximum Iterations=    30
Min. TW tolerance =    .01 ft
Max. TW tolerance =    .01 ft
Min. HW tolerance =    .01 ft
Max. HW tolerance =    .01 ft
Min.  Q tolerance =    .10 cfs
Max.  Q tolerance =    .10 cfs
```

LEVEL POOL ROUTING SUMMARY

```
HYG Dir          = Z:\PROGRAMS\PONDPACK\96 POST OFFICE ROAD\
Inflow  HYG file = NONE STORED - SOUTH PLANTERIN  1-YR
Outflow HYG file = NONE STORED - SOUTH PLANTEROUT 1-YR

Pond Node   Data = SOUTH PLANTER
Pond Volume Data = SOUTH PLANTER
Pond Outlet Data = PLANTER OUT

Infiltration =   2.0000 in/hr

INITIAL CONDITIONS
----------------------------------
Starting WS Elev   =   486.00 ft
Starting Volume    =     .000 ac-ft
Starting Outflow   =      .00 cfs
Starting Infiltr.  =      .00 cfs
Starting Total Qout=      .00 cfs
Time Increment     =    .0100 hrs


INFLOW/OUTFLOW HYDROGRAPH SUMMARY
=====================================================
Peak Inflow       =       .04 cfs    at   12.0800 hrs
Peak Outflow      =       .00 cfs    at    9.5500 hrs
Peak Infiltration =       .01 cfs    at   11.9200 hrs
-----------------------------------------------------
Peak Elevation    =    486.38 ft
Peak Storage =           .001 ac-ft
=====================================================


MASS BALANCE (ac-ft)
--------------------------
+ Initial Vol  =        .000
+ HYG Vol IN   =        .003
- Infiltration =        .003
- HYG Vol OUT  =        .000
- Retained Vol =        .000
                  ----------
Unrouted Vol =        .000 ac-ft  (.001% of Inflow Volume)
```

LEVEL POOL ROUTING SUMMARY

```
HYG Dir          = Z:\PROGRAMS\PONDPACK\96 POST OFFICE ROAD\
Inflow  HYG file = NONE STORED - SOUTH PLANTERIN  2-YR
Outflow HYG file = NONE STORED - SOUTH PLANTEROUT 2-YR

Pond Node   Data = SOUTH PLANTER
Pond Volume Data = SOUTH PLANTER
Pond Outlet Data = PLANTER OUT

Infiltration =   2.0000 in/hr

INITIAL CONDITIONS
----------------------------------
Starting WS Elev   =   486.00 ft
Starting Volume    =     .000 ac-ft
Starting Outflow   =       .00 cfs
Starting Infiltr.  =       .00 cfs
Starting Total Qout=       .00 cfs
Time Increment     =     .0100 hrs


INFLOW/OUTFLOW HYDROGRAPH SUMMARY
=====================================================
Peak Inflow       =       .05 cfs    at   12.1000 hrs
Peak Outflow      =       .00 cfs    at    8.8700 hrs
Peak Infiltration =       .01 cfs    at   11.8200 hrs
-----------------------------------------------------
Peak Elevation    =    486.52 ft
Peak Storage =           .002 ac-ft
=====================================================


MASS BALANCE (ac-ft)
--------------------------
+ Initial Vol  =        .000
+ HYG Vol IN   =        .004
- Infiltration =        .004
- HYG Vol OUT  =        .000
- Retained Vol =        .000
                  ----------
Unrouted Vol =        .000 ac-ft  (.000% of Inflow Volume)
```

LEVEL POOL ROUTING SUMMARY

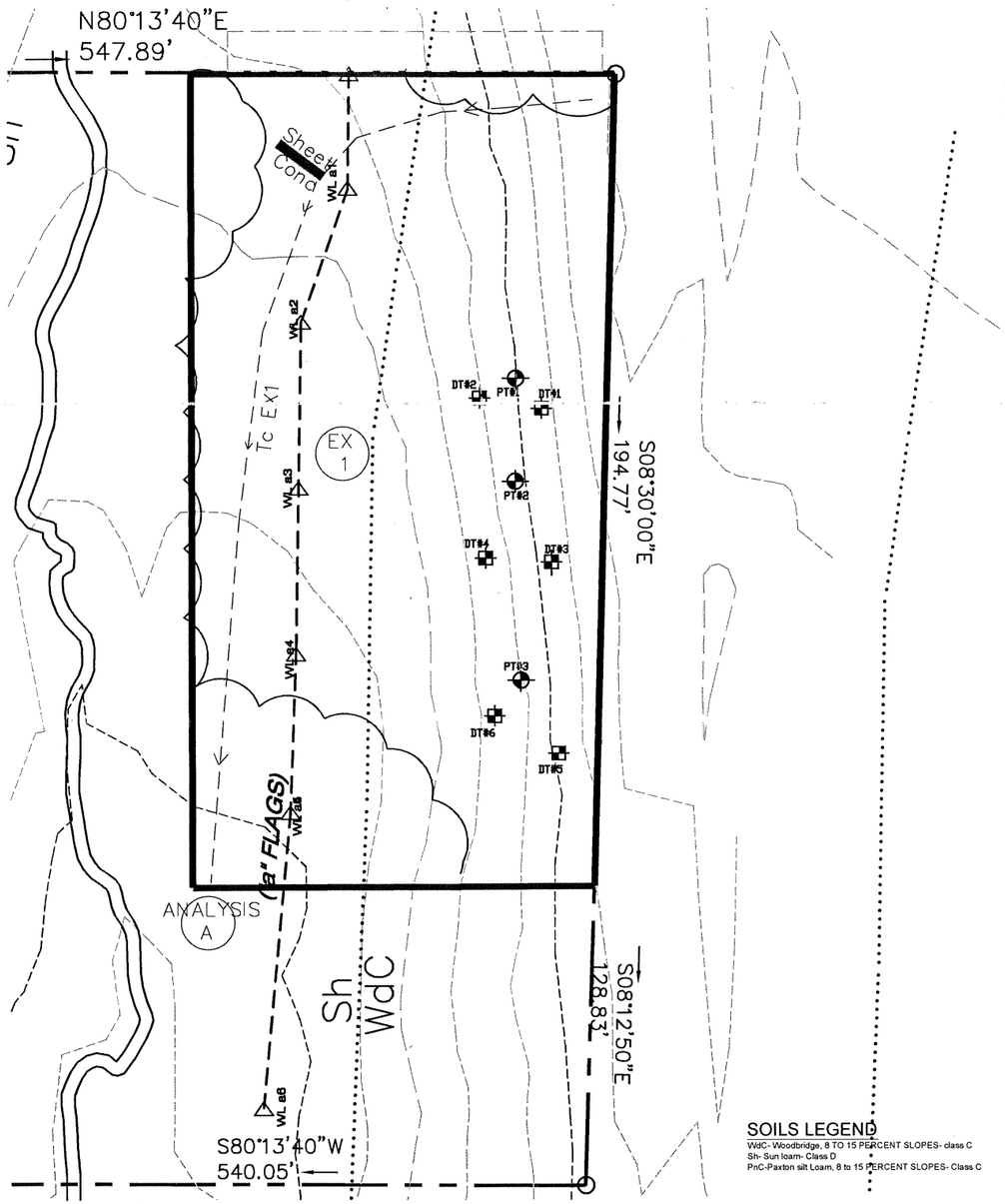
```
HYG Dir          = Z:\PROGRAMS\PONDPACK\96 POST OFFICE ROAD\
Inflow  HYG file = NONE STORED - SOUTH PLANTERIN  10-YR
Outflow HYG file = NONE STORED - SOUTH PLANTEROUT 10-YR

Pond Node   Data = SOUTH PLANTER
Pond Volume Data = SOUTH PLANTER
Pond Outlet Data = PLANTER OUT

Infiltration =   2.0000 in/hr

INITIAL CONDITIONS
----------------------------------
Starting WS Elev   =   486.00 ft
Starting Volume    =     .000 ac-ft
Starting Outflow   =       .00 cfs
Starting Infiltr.  =       .00 cfs
Starting Total Qout=       .00 cfs
Time Increment     =     .0100 hrs


INFLOW/OUTFLOW HYDROGRAPH SUMMARY
=====================================================
Peak Inflow       =       .09 cfs    at   12.0800 hrs
Peak Outflow      =       .00 cfs    at    7.3400 hrs
Peak Infiltration =       .01 cfs    at   11.5300 hrs
-----------------------------------------------------
Peak Elevation    =    487.00 ft
Peak Storage =           .003 ac-ft
=====================================================


MASS BALANCE (ac-ft)
--------------------------
+ Initial Vol  =        .000
+ HYG Vol IN   =        .007
- Infiltration =        .007
- HYG Vol OUT  =        .000
- Retained Vol =        .000
                 ----------
Unrouted Vol =       -.000 ac-ft  (.001% of Inflow Volume)
```

LEVEL POOL ROUTING SUMMARY

```
HYG Dir          = Z:\PROGRAMS\PONDPACK\96 POST OFFICE ROAD\
Inflow  HYG file = NONE STORED - SOUTH PLANTERIN  100-yr
Outflow HYG file = NONE STORED - SOUTH PLANTEROUT 100-yr

Pond Node   Data = SOUTH PLANTER
Pond Volume Data = SOUTH PLANTER
Pond Outlet Data = PLANTER OUT

Infiltration =   2.0000 in/hr

INITIAL CONDITIONS
----------------------------------
Starting WS Elev   =   486.00 ft
Starting Volume    =     .000 ac-ft
Starting Outflow   =      .00 cfs
Starting Infiltr.  =      .00 cfs
Starting Total Qout=      .00 cfs
Time Increment     =    .0100 hrs


INFLOW/OUTFLOW HYDROGRAPH SUMMARY
=====================================================
Peak Inflow       =       .17 cfs    at   12.0800 hrs
Peak Outflow      =       .12 cfs    at   12.1600 hrs
Peak Infiltration =       .01 cfs    at   10.0700 hrs
-----------------------------------------------------
Peak Elevation    =    487.37 ft
Peak Storage =           .005 ac-ft
=====================================================


MASS BALANCE (ac-ft)
--------------------------
+ Initial Vol  =        .000
+ HYG Vol IN   =        .014
- Infiltration =        .010
- HYG Vol OUT  =        .004
- Retained Vol =        .001
                 ----------
Unrouted Vol =       -.000 ac-ft  (.001% of Inflow Volume)
```

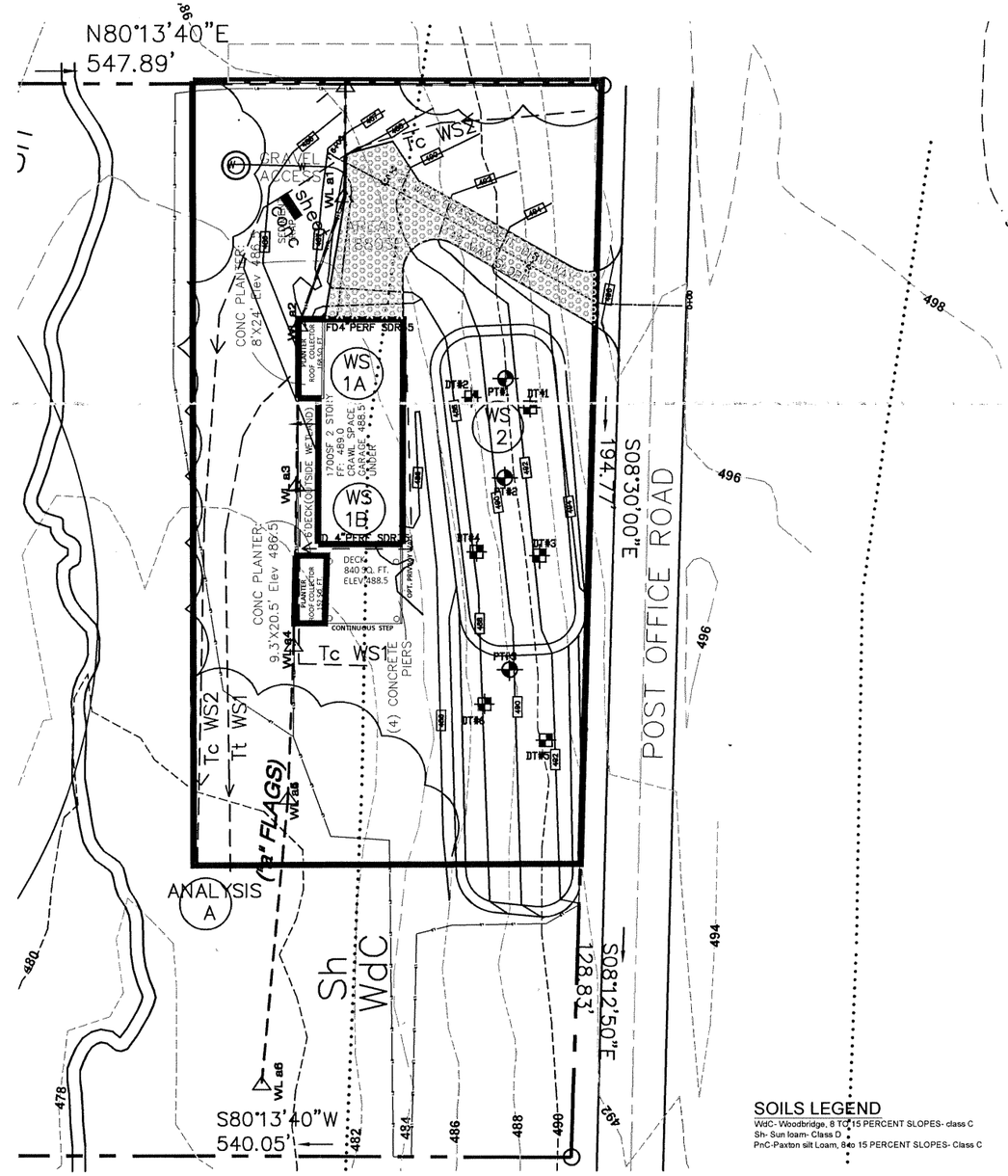
DETENTION TIMES SUMMARY

```
HYG Dir          = Z:\PROGRAMS\PONDPACK\96 POST OFFICE ROAD\
Inflow  HYG file = NONE STORED - SOUTH PLANTERIN  1-YR
Outflow HYG file = NONE STORED - SOUTH PLANTEROUT 1-YR

Pond Node   Data = SOUTH PLANTER
Pond Volume Data = SOUTH PLANTER
Pond Outlet Data = PLANTER OUT

Infiltration =   2.0000 in/hr

APPROXIMATE DETENTION TIME
--------------------------------------

Qout+Infilt. Centroid   =   13.0689 hrs
Inflow Centroid         =   12.7723 hrs
Centroid to Centroid    =    1.1966 hrs
--------------------------------------
```



SOILS LEGEND
WdC- Woodbridge, 8 TO 15 PERCENT SLOPES- class C
Sh- Sun loam- Class D
PnC-Paxton silt Loam, 8 to 15 PERCENT SLOPES- Class C

PRE-DEVELOPMENT DRAINAGE OVERLAY
SCALE:1"=20'



SOILS LEGEND
WdC- Woodbridge, 8 TO 15 PERCENT SLOPES- class C
Sh- Sun loam- Class D
PnC-Paxton silt Loam, 8 to 15 PERCENT SLOPES- Class C

POST -DEVELOPMENT DRAINAGE OVERLAY
SCALE:1"=20'

P. W. SCOTT	Revisions			Dwg. Title PRE–POST DRAINAGE OVERLAY	Seal	Dwg. No.
	No.	Date	Description			
ENGINEERING & ARCHITECTURE, P.C.	C	9/20/23	REVISED PER TE MEMO	Project Title 96 POST OFFICE ROAD, LEWISBORO,NY		D1
	E	1/24/24	2 PLANTER DESIGN			
3871 ROUTE 6				Proj. No. 21-110 / Drawn by MA/PWS		
				Date 9/20/21 / Scale AS NOTED		

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96 Post Office Rd
Waccabuc, NY
(T) Lewisboro

STORMWATER POLLUTION PREVENTION PLAN

Prepared by:

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Brewster, NY 10509
pwscott@pwscott.com

January 24, 2024

96 Post Office Rd
Waccabuc, NY

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APPENDIX A

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FIGURES

Figure 1.0: Lot Aerial Photo
Figure 2.0: NYSDEC Mapper Printout
Figure 3.0: Soils Map

DRAWINGS
(attached)

SWPPP DRAWINGS

DRAWING	SY1:	SWPPP Erosion Control Plan
DRAWING	SY2:	Concrete Planter Details
DRAWING	D1:	Pre & Post Drainage Overlays
DRAWING	A1:	Floor Plan Single Story Residence

OWTS DRAWINGS

DRAWING	SP1:	Septic Plan – New Construction
DRAWING	SP1A:	Overall Septic Site Plan
DRAWING	SP2:	Septic Details
DRAWING	SP3:	Pump Sheet Single Family – OWTS

1.0 Objective

P.W. Scott Engineering & Architecture, P.C. (PWSE&A, PC) prepared this Individual Residential Stormwater Pollution Permit Plan (SWPPP) in accordance with the following applicable rules, regulations, and guidance documents:

- New York State Stormwater Management Design Manual, latest version produced by NYSDEC;
- New York State Standards and Specifications for Erosion and Sediment Control, latest version produced by NYSDEC;
- City of New York, Rules and Regulations for the Protection from Contamination, Degradation and Pollution of the New York City Water Supply and its Sources;
- Town of Lewisboro, Stormwater Management and Erosion and Sediment Control, Chapter 189.

2.0 The Objectives of this SWPPP

1. Outline Owner and Contractor responsibilities to maintain compliance with SPDES GP-0-20-001, including required inspections, maintenance, forms, and certifications.
2. Outline measures to install, inspect, and maintain erosion and sediment control measures for the proposed project. The objective of these measures is to eliminate or significantly minimize pollutant discharges to the adjacent surface water bodies during construction activities.
3. Post construction water quality practices required for disturbance within 100 ft of NYSDEC wetland & watercourse.

2.1 Owner's Responsibilities

Alex Bernabo/wDesigne, Inc., the "Owner," is responsible to ensure that the Contractor installs and maintains the erosion and sediment control measures in accordance with this SWPPP. The Owner is also responsible for ensuring that the appropriate forms and certifications contained herein are completed prior to and throughout the duration of demolition and construction activities. The Owner shall keep a copy of this document, associated attachments, and any inspection reports generated on-site for the duration of the project and for a minimum of 5 years from the date that the site achieves final stabilization. The Owner should 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 appropriate NYSDEC office. The Owner should maintain a copy of the SPDES GP-0-20-001, Notice of Intent (NOI), NOI acknowledgement letter, SWPPP, and inspection reports at the construction site until all disturbed areas have achieved final stabilization and the Notice of Termination (NOT) has been submitted to NYSDEC. The documents must be maintained in a secure location, such as a job trailer, on site construction office, or mailbox with lock that is accessible during normal working hours to an individual performing a compliance inspection. The owner can retain the services of Qualified Stormwater Management Firm for supervision and compliance.

Refer to Appendix A for certification.

2.2 Contractor's Responsibilities

The Contractor is responsible for reading this entire SWPPP and related project specifications and reviewing all forms, certifications, and contract drawings to become familiar with all aspects related to the SPDES GP-0-20-001. The Contractor shall retain a signed copy of this SWPPP and all associated attachments onsite from the initiation of the dredging and proposed fill activities to the date of final stabilization. The Contractor is responsible for completing the certification contained herein prior to the commencement of demolition and proposed construction activities. The certification shall be signed by a president or any person who performs similar decision-making functions and by the on-site individual having responsibility for the firm. Each of the subcontractors involved in the implementation of erosion and sediment control measures must also complete a certification. The Contractor is responsible for each of the subcontractors employed by the Contractor that are involved in the implementation of erosion and sediment controls.

It is the duty of the Contractor to properly install and maintain all erosion and sediment control measures on the site as per this SWPPP. The Contractor shall also be responsible for the inspection of all erosion and sediment control measures for the proposed project site by a qualified inspector as per this SWPPP. Should the Owner, an owner's representative, or any local authority having jurisdiction deem that the SWPPP or the Contractor's implementation of the SWPPP proves to be ineffective in eliminating or significantly minimizing the pollutants or achieving the goals of the SPDES GP-0-20-001, the Contractor shall take any necessary action to conform to the objectives of the permit at no additional cost to the Owner.

The Contractor shall inspect and report the disturbed and stabilized areas for the duration of the project as indicated on the Record of Stabilization and Demolition and Construction Activities form contained herein. It is the duty of the Contractor to properly inspect and maintain all erosion and sediment control measures installed on the site as per this SWPPP. Any revision to the SWPPP in design, demolition and construction activities, inspection, or maintenance shall be reflected by the Contractor in the on-site copy of the SWPPP in a timely manner. At the beginning of this work, the Contractor must designate a qualified inspector. The Contractor shall coordinate with the Engineer of Record to ensure that all of the inspection requirements are in conformance with this SWPPP and the requirements of the SPDES GP-0-20-001. On a **bi-weekly basis,** copies of all inspection forms and maintenance records shall be organized and filed accordingly by the Contractor.

Refer to Appendix A for certifications.

2.3 NOI Compliance Requirements

The owner/operator shall coordinate NOI compliance requirements including inspections by a qualified Stormwater Inspector (CPESC) or licensed Professional Engineer or Architect twice per week and before & after any significant storm event over a 2-year – 24-hour storm event. Refer to Section 9.1.1 of the SWPPP for additional inspection criteria.

3.0 Proposed Activity

Construction of 2600 sf single family 2-bedroom residence with a 600 sf garage(1700 sf footprint) with a gravel driveway and individual well and individual subsurface sewage disposal system (OWTS) with 12' of fill, 1,000 gal. septic tank and pump tank.

4.0 Location and Topography

4.1 Location Description

The subject property is located at 96 Post Office Rd, 500' north of Benedict Rd on Post Rd in the Town of Lewisboro. The subject parcel is identified as **Tax Map: 25, Block: 10812, Lot: 3 of 4.04 acres.**

Existing Condition

The site is a wooded parcel extending from a stone wall at as slope between 18% and 20% to a wetland area extending along a non-regulated stream.

The 2' contours follow the alignment of the front property line for the length of the lot along Post Office Rd. Refer to Dwg SP1.

4.2 Existing Soil Conditions

The following soils are found on the property or adjacent sites based on the United States Department of Agriculture (USDA) Natural Resource Conservation Service Soil Survey of Putnam and Westchester Counties, New York. Refer to Dwg SP1A.

The soils within the site consist of:

Soil	Hydrogeological Classification
Paxton Silt Loam Soil (PbC) - 8 to 15 percent slopes	C
Sun Loam (Sh) – 0 to 3 percent slopes	D
Woodbridge (WdC) - 8 to 15 percent slopes	D

Table 4-1
Project Site Soils

Symbol	Soil Series Name	Hydrologic Soil Group	Drainage Characteristics
PbC	Paxton fine sandy loam, 8 to 15 percent slopes	C	This soil is strongly sloping, very deep, and well drained. It is on tile sides and tops of broad ridges and small hills. (K factor 0.24 to 0.32)
Sh	Sun Loam, 0 to 3 percent slopes	D	This soil consists of very deep, poorly drained soil formed in till derived primarily from limestone and sandstone with smaller amounts of schist, shale and granite in some areas.
WdC	Woodbridge, 8 to 15 percent slopes	C	This is a very deep, moderately well drained, gently sloping soil on tops of hills, on side slopes, and on toe slopes within uplands.

5. **Source:** Soil Survey of Putnam and Westchester Counties, New York, USDA Soil Conservation Service.

Note: * indicates soil unit is within the proposed footprint of disturbance. "K" Factor given indicates the erosion potential of each soil type. This indicates the susceptibility of a soil to sheet and rill erosion by water. Values of "K" range from 0.05 to 0.69. The higher the value the more susceptible the soil to erosion.

4.3 Existing Watercourses

There is a stream which extends through the lot approximately 145 ft from the property line. The NYSDEC Mapper does not denote this stream under jurisdiction of the NYDSDEC.

4.4 Existing Wetlands

The wetlands were flagged for BIBO Associates Approval in 2003. There has been no change in the character of the wetlands. The line is defined by a 'WL' symbol on the site plan. All septic disturbances are beyond the edge of the wetland line. The house site and the planter are within the wetland with top or first floor elevations 6.0 ft above the existing elevation.

4.5 Watershed Determination

The watershed for the lot drains to the subject watercourse and then drains to the south toward the NYSDEC wetland # L50- Class 1 of 23.4 acres. The stream continues to drain to the south through a Regulated #864-317 River – Class A(T) to the Cross River Reservoir and the Croton Reservoir Watershed.

4.6 Enforcement Actions

The property was subdivided prior to 1980. The project was issued a waiver from NYCDEP for slopes exceeding 15% in 1998 under the name Konetchy (Tax ID: 25-10812-3), DEP Log# 1998-CR-0637-IR.

The waiver requires a renewal with an application pending with this submission.

A Judicial Decision dated Sept. 8, 2003 provided conditions of approval including the filing of a

General Release to WCDOH prior to issuance of an Certificate of Completion. No enforcement actions are pending at this time.

5.0 Proposed Project

5.1 Proposal Description (Reference Site Plan on SY I) Site plan improvements include:

- Construction of residence.
- Construction of OWTS
- Installation of well
- Installation of concrete planter
- Installation of gravel driveway & parking area
- Installation of erosion control

Limits of Disturbance

The plans outline the project disturbances on Dwg SP1 as 0.45 acres - Refer to "L/D" Limit of Disturbance Line of this area.

Net area of disturbance under 2.0 acres.

5.2 Proposed Buffers

The plan utilizes the trees as a buffer on the neighbor's property to the north.
A review of properties along Post Office Rd reveals that the proposed encroachment on the wetland & stream is consistent along this roadway.

5.3 Stormwater Management

The site is pervious with regards to the driveway and the septic area. The house and garage of 1,700 sf shall have roof leaders drain two separate (north/souoth) concrete flow through planters for treatment of the stormwater in compliance with the NYSDEC Manual – 2022. Two planters are more than 50.0' from any portion of the OWTS except for the sealed PVC waste pipe extending from the house to the septic tank.

A computer model is completed with the roof draining to the 2 concrete planters with a 12" flood storage zone above the planting soil providing limited attenuation.

5.4 Anticipated Permits

The following is a list of anticipated permits for the construction activities associated with the proposed project.

5.4.1 New York State Department of Environmental Conservation

Coverage under the SPDES GP-0-20-001 will be required as part of the proposed development with development over 5,000 sf in phosphorus restricted watershed. The SWPPP is being prepared in compliance with the requirements of the New York State Stormwater Management Design Manual. NYSDEC Protection of Waters Permit is required (Part 608.8) Joint Application for Permit Form to be filed.

5.4.2 Town of Lewisboro

- Stormwater, Soil Erosion and Sediment Control Permit (Town Code Chapter 119)
- The Town of Lewisboro, as a regulated land use MS4 agent, is responsible to review the SWPPP and complete the MS4 acceptance form prior to filing the Notice of Intent with the NYSDEC.

5.4.3 NYCDEP

Due to the addition of an impervious roof within 100' of a watercourse an SWPPP is required.

5.5 NOI Application Outline

Attached in Appendix D is the NYSDEC Application Outline form prepared by PWSE&A PC, which shall be filed with the Town of Lewisboro and subsequent issuance of an MS-4 permit number (pending). This basic data was used to register the scope of the project within the NYSDEC database.

6.0 Post-Construction Water Quality and Quantity Controls

Post-construction water quality and quantity controls are required to meet pollutant removal goals, reduce channel erosion, prevent overbank flooding, and control extreme floods. These controls help mitigate the effects of development by controlling suspended solids content and peak flows of runoff from developed sites. The NYSDEC has developed unified sizing criteria to size stormwater management measures. However, the project is located within the NYCDEP watershed where the SWPPP design must also address specific NYCDEP requirements. The proposed stormwater management system has been designed to address the criteria outlined in Chapter IO - Enhanced Phosphorous Removal Supplement of the New York State Stormwater Management Design Manual (NYSSMDM). The implementation of a stormwater management system is integral in the mitigation of the potential impacts associated with the proposed project. The NYCDEP requirements for the treatment volume, also referred to as water quality volume (WQv), is to capture and treat the runoff generated from a 1-year, 24-hour storm event. The WQv and channel protection volume criteria will follow the NYCDEP requirements, as they are more stringent. The NYSDEC criteria for water quality is evaluated based upon reduction of impervious surfaces. The NYSDEC requirements for overbank flood and extreme storm are the same as NYCDEP requirements for attenuating the larger storm events.

The stormwater treatment practices have been designed to meet the current WRR, including the requirement that the stormwater ponds be designed to capture and treat the runoff generated from the 1-year, 24-hour storm (EXTREME) 2.83 inch) event from new impervious surfaces. The NYSDEC requirement for Water Quality Volume (WQv) for enhanced phosphorous removal is to capture the estimated runoff from the I -year, 24-hour design storm. The method for estimating the runoff volume is based on the USDA NRCS Technical Release 20 and Technical Release 55.

6.1 Regulations

6.1.1 NYSDEC Sizing Criteria

The following table is representative of the storm design criteria required within the New York State Storm water Management Design Manual.

Table 6-1 NYSDEC
Uniform Sizing Criteria

Water Quality Volume (WQv)*	WQv	Detention of 1-year storm event
Channel Protection (Cpv)*	Cpv	• 24 hour extended detention of post- developed 1-year, 24-hour storm event. • Control the peak discharge from the 10-year storm to 10-year predevelopment rates. • Control the peak discharge from the 100-year storm to 100-year predevelopment rates. • Safely pass the 100-year storm event.
Overbank Flood (Qp)		
Extreme Storm (Qr)		

Runoff reduction Volume
*NYCDEP requirements more stringent

As the project is within the NYCDEP East of Hudson Watershed, the requirements and guidelines within Chapters 9 and 10 of the New York State Stormwater Management Design Manual were used to design the stormwater management system. The major portion of development that will occur in the area of the existing driveway and will incorporate the enhanced phosphorous requirements outlined in Chapter 10.

6.1.2 New York City Department of Environmental Protection Requirements

The project is located within the Croton Reservoir watershed, which is part of New York City's surface water drinking water supply. NYCDEP is currently operating under a Memorandum of Agreement with the United States Environmental Protection Agency for filtration avoidance. Under this agreement certain provisions regarding impervious surface and stormwater runoff were incorporated within the City of New York, Rules and Regulations for the Protection from Contamination, Degradation and Pollution of the New York City Water Supply and its Sources (WRR) promulgated in 1997 and revised in 2010. The following sections of the WRR regarding impervious surfaces and stormwater are applicable to this project.

Section 18-39(c) requires NYCDEP's review and approval of a SWPPP. Section 18-39(c)(2) states that proposed development within a phosphorous restricted basin requires the capture and treatment of storm water runoff generated from a 1-year, 24-hour storm event.

6.2 Design Analysis

In order to evaluate the pre- and post-development drainage conditions, the site has been delineated into one discharge analysis point based on pre-development hydrology: Design Point A. This point was analyzed to evaluate the effects of the proposed development on surface water runoff. The design point and their pre- and post-development contributing sub-catchment areas are shown on Pre- and Post-Development Drainage Maps, Drawings D1. Analysis Point A is the discharge point from the concrete planter which drains across the brush hillside to the edge of the property into the wetland and the stream bisecting the parcel.

To analyze the peak flow in pre-and post-development conditions Haestad Methods Pond Pack, a computer TR-55 based system is used to evaluate and analyze the stormwater runoff from the site. The program also models the surface flow through the proposed stormwater practices determining the center-of-mass detention time within the ponds. A simultaneous routing process is used to evaluate the impacts associated with stormwater practices in series. Runoff volumes and rates are calculated by determining the curve numbers (CN) and calculating the time of concentration (Tc) for each sub catchment area depending on the given rainfall value. The CN values are based on the TR55 table and the hydrologic soil group, cover type, hydrologic condition, and antecedent runoff condition. The Tc represents the time it takes for surface water to travel the hydraulically most distant point within the sub catchment area. Since the site includes an existing pond, the existing and proposed ponds are modeled to determine attenuation characteristics of the site.

The following rainfall values for the site as noted on the NRCC Interactive Website, shown in Table 6-2, were used in the analysis. For the purposes of the hydrologic analysis the runoff was based on Type II rainfall distribution for the northeast region. The following rainfall values represent the rainfall distribution for various 24-hour storm frequencies.

Table 6-2
Rainfall Values

Rainfall Value (inches)	24-hour Storm Event (Year) NRCC
2.82	1
3.40	2
5.08	10
9.04	100

Source: Extreme Precipitation Table (Lat/Long 41.29 / 73.58)

6.2.1 Comparison At Analysis Point A (To the South)

The Pre & Post Discharges are listed as follows: (Includes offsite components not impacted with this property).

Analysis Point A				
	1 YR (cfs)	2 YR (cfs)	10 YR (cfs)	100 YR (cfs)
PRE	.48	.73	1.54	3.63
POST	.42	.65	1.41	3.49
NET	-0.6	-.08	-0.13	-0.14
%	-12%	-11%	-8.5%	-3.8%

NYSDEC Attenuation Requirements

A) 1-Year Storm Event-Channel Protection
Detain l-Year Storm 24 Hours
Reduce by 50% from pre-development levels (NYCDEP).

B) 2-Year Storm Event
Peak Discharge approx. reduced to l-Year Storm Event.

C) 1-Year Storm Event Overbank
Control Attenuate to Pre-Development
Levels

D) 100-Year Storm Event - Extreme Flood
Control Attenuate to Pre-Development
Levels

Findings

The following is an overall review of the project relative to hydraulic requirements of NYSDEC Stormwater Management. The discharge is divided around the disturbed areas with the resulting reduced watershed area meeting the required discharge levels.

A.	1-Year Storm Event	Channel protection could not be reduced by 50% even though planter did not discharge any of the 1-year storm. Large area of pervious cover discharges off site – reduction by 12%
B.	2-Year Storm Event	Reduced is reduced by 11%. Could not meet the pre-development discharge rate even though planter did not discharge any of the 2-year storm event. Large area of site drained directly into the wetland and stream.
C.	10-Year Storm Event	Attenuation met to pre-development levels.
D.	100-Year Storm Event	Attenuation met to pre-development levels.

6.3 Nonstructural Stormwater Management

Nonstructural stormwater management practices include the following:

- Providing site access through the use of gravel driveway at 14% grade.
- Long-term soil stabilization through landscaping and maintenance in the developed areas. Prevention of soil loss, through establishment of vegetation and a landscape plan that will increase the amount of tree canopy and healthy ground cover. The landscape plan will also maximize the travel time of stormwater runoff and minimize concentrated flows.
- The grounds maintenance program limits the potential for excessive nutrient loading, specifically controlling the application of phosphate-based fertilizers to the lawns.
- Limiting development of site to 100' from front property lines

6.4 Summary

The proposed stormwater management system has been designed to attenuate the larger storm events to predevelopment conditions. The project is designed based on Chapter 10 of the NYSSMDM. The proposed drainage systems will be sufficient to mitigate the potential impacts of the proposed project related to the quantity of storm water runoff. Refer to the Green Practice Summary for the extent of Quality Treatment.

7.0 Flow Through Planter

Total volume reduction; reduced to 45% for Class-C soils.

7.1 Analysis of Site Uses

Residence	Metal Roof	Impervious	1700 sf
Driveway	Gravel	Not Impervious	1,850 sf
Septic Area	Grass Cover		5,800 sf

Remaining site uses is grass in disturbed area (10270 sf) with the remainder of the woods or wetlands same CN number.

<u>Overall WQv Analysis</u>

Limited to area of site disturbance: 19,701 sf

WQv = PRv A/12 OVERALL SITE

Where P = 1-year storm event = 2.82 inches
I = 1700 sf roof = 0.039 acres
% I = 8.6
Rv = .05 + .009 (8.6) = .1274
WQv = 2.82 (1.27) (0.45) / 12
= .013 acre-ft = 5850 cubic feet

7.1.2 Proposed Treatment – Flow Through Planter

Treatment limited to roof only (no pretreatment required)

WQv Roof = PRvA / 12
Where P = 2.82 :1-year storm
Area = 1,700 sf Roof + 320 sf planter = 2020 sf = .046 acre
I = 1700 / 2020 = .84
Rv = .05 + .009 (84) = .806

WQv = (2.82) (0.806) (.046) / 12 = 0.0087 acre-ft = 380 cu ft
1-Year Storm Event (extreme precipitation)
Q @ CN=(1700*98+ 320*65)/2020 = 0.92
Volume 1-Year = (2.0 in) (2020 sf) = 336 cu ft

<u>Flow Through Planter</u>
Size Infiltration Planter (RR7)
12" ponding depth

18" larger storm overflow through weirs in concrete perimeter walls
18" to 30" soils – propose df = 30"
Refer to 2010 Design Manual p. 5-101

$$AF = \frac{WQv\ df}{k(hf + df)\ tf} = \frac{(380)\ 2.5}{(6.0)\ (.5 + 2.5)\ (0.17)} = 310\ sf$$

k = 18" leaf compost with 12" soil top = [8.6 (1.5) + 2.0 (1.0)] / 2.5 = 6.0
hf = 1.0 ft. / 2 = 0.5 ft
tf = 4 hrs = .17 days

This is routed with (2) 6" weirs as overflow.
Propose 2 planters: North: 168 sf ; south: 152 sf = 320 sf with separate roof collection gutters
Note: Planters are more than 50.0 ft from OWTS including tank.

7.1.3 Treatment Analysis

RRv min = P Rv (imp) S/12
Rv = .95
Imp = 1700 sf (house)= 0.039 acre
P = 2.82 in. 1-year storm
S Class C = 0.30
RRv = 2.82 (.95) (.039) (.3) / 12 = .0026 acre-ft = 113 cf

Treatment of Roof WQv by Planter

Class C – 45% efficient
RRv = WQv* BMP efficiency = (380 cf) (.45) = 171 cf = 0.0039 acre-ft (exceeds min. RRv)

Remaining disturbed areas treated by riparian buffer with sheet flow across planting beds. Grasscrete infiltrates driveway runoff into gravel sub-base and is considered pervious.

7.2 Erosion and Sediment Controls

The proposed work will have minimal impact on the site. Grading generally follows existing grades. In this way, significant impacts to topography and slopes will be avoided. The slope is approximately between 18% to 20%. The existing and proposed grading plan is shown on Drawing SP 1. An outline of Erosion Control Practices are as follows:

A construction entrance is proposed off the driveway for access to the site. Construction fence will surround the perimeter (approx. 390 linear feet) of the proposed septic area. *A* line of silt fencing (approx. 245 linear feet) will be downhill of the house construction worksite. Other lengths of site fence (approx. 200 linear feet) will be placed as shown on the SP1. Once all erosion control is in place, the work may proceed.

7.3 Erosion and Sediment Control Practices - Temporary

The following are specific erosion control measures as identified in the drawings prepared for this project.

7.3.1 Stabilized Construction Entrance (SCE) /Exit

All construction entrances and exits shall have a stabilized aggregate pad underlain with filter cloth to prevent construction vehicles from tracking sediment off-site. Stabilized construction entrances shall be located throughout the project site at specific transition areas between concrete/asphalt to exposed earth.

7.3.2 Silt Fence

Silt fence shall be installed on the down gradient edge of disturbed areas parallel to existing or proposed contours or along the property line as perimeter control. Silt fences are to be used where stakes can be properly driven into the ground as per the

Silt Fence Barrier Detail in the New York State Standards and Specifications for Erosion and Sediment Control and as shown on the Drawings.

Silt fence controls sediment runoff where the soil has been disturbed by slowing the flow of water and encouraging the deposition of sediment before the water passes through the straw bale or silt fence. Built-up sediment shall be removed from silt fences when it has reached one-third the height of the bale/fence and properly disposed.

7.3.3 Stockpile Detail

Stockpiled soil is to be protected, stabilized, and sited in accordance with the Soil Stockpile Detail, as shown on the Detail Sheets. Soil stockpiles and exposed soil shall be stabilized by seed, mulch, or other appropriate measures, when activities temporarily cease during construction for 7 days or more in accordance with NYSDEC requirements.

7.3.4 Dust Control

During the demolition and construction process, debris and any disturbed earth shall be wet clown with water, if necessary to control dust. After demolition and construction activities, all disturbed areas shall be covered and/or vegetated to provide for dust control on the site.

7.3.5 Temporary Seeding and Stabilization

In areas where demolition and construction activities, clearing, and grubbing have ceased, temporary seeding or permanent landscaping shall be performed to control sediment-laden runoff and provide stabilization to control erosion during storm events. This temporary seeding/stabilization or permanent landscaping shall be in place no later than 14 days after demolition and construction activity has ceased.

7.3.6 Construction Fence

To protect the integrity of soils for the SSTS, at each lot, the perimeter as noted on the plans, must be enclosed with orange construction fence per the EC details (SP2.SY1 series).

7.3.7 Snow Removal

During winter operations, snow accumulations will be removed from active work sites and placed in a snow dump located on the project site. The snow dump will be located in an area that will prevent any potential for stormwater pollution and shall drain to the stone outlet sediment trap.

7.3.8 Materials Handling/Soil Stabilization

The Contractor must store construction and waste materials as far as practical from any environmentally sensitive areas. Where possible, materials shall be stored in a covered area to minimize any potential runoff. The Contractor shall incorporate storage practices to minimize exposure of the materials to stormwater, and spill prevention and response where practicable. Prior to commencing any construction activities the contractor shall obtain all necessary permits or verify that all permits have been obtained.

7.4 Erosion and Sediment Control Practices -Permanent

7.4.1 Stone Outlet Sediment Trap

At the base of the gravel driveway, it is proposed to install an outlet sediment trap to collect runoff from the gravel driveway before said flow discharges into the stream corridor.

7.4.2 Concrete Flow Through Planter

(While not an erosion control device, this requires maintenance as discussed in this SWPPP).

The structure is an 8" thick reinforced concrete wall on footings with an open bottom. The walls extend 16" above the soil strata with overflow 12" above the soil surface. The soil material is leaf compost with topsoil above. Refer to Detail Sheet SY1.

8.0 Sequence of Construction for Erosion and Sediment Control

This narrative describes the erosion and sediment controls proposed for this project, discusses the construction sequence and states the requirements for inspection and maintenance of the erosion and sediment controls. The plan has been designed in accordance with the State of New York "2016 Standards and Specifications for Erosion and Sediment Control."

The sequences provided include anticipated start dates, which are predicated on municipal and state agency approvals.

INTRODUCTION

1. Pre-application meeting with Town of Lewisboro Town Engineer/MS4 Agent, Contractor & Engineer and NYCDEP for SWPPP for project scheduling and final plan coordination. There are no NYSDEC wetlands, wetland approval on local basis.
2. File NYSDEC NOI Forms with start dates
3. E.O.R. to complete NYSDEC inspections twice/week per NOI permit.

GENERAL SPECIFICATIONS – Area Disturbance: 0.45 acres; Anticipated start date: October 2024

4. Surveyor to locate limits of house, planter, septic & driveway.
5. Cut trees and clear – leave stumps in place.
6. Install erosion control devices including erosion control fence. Refer to Sheet SY2
7. Install construction fence around septic area as noted.
8. Remove topsoil and stockpile as noted.
9. Contractor to verify elevation at planter and limits of building (cut & fill) E.O.R. to verify with site visit.
10. Install stone outlet sediment trap on hillside below driveway to collect runoff from driveway construction.
11. Excavate driveway and stabilize with Item #4 due to slope.
12. Stump the lot with access established for trucks picking up stumps.
13. Install concrete pump out pit adjacent to driveway
14. Install footings for residence & planter
15. Extend power to house site
16. Pour house walls & planter walls, allow sleeves for water, sewer out, and electrical, and propane lines. South planter is a separate pour.
17. Install concrete wall, waterproof and backfill
18. Install well by creating concrete gravel pad, install silt fence and install pump out pit for water test.
19. Remove concrete collected in the pump out pit and remove off site.
20. Install septic tanks and pump chamber. Install fill for septic and mechanically compact. Cut in trenches – D-Boxes for primary only. Complete as-built inspections with E.O.R.
21. Spread 6" to 12" topsoil, seed and mulch
22. Clean out stone outlet sediment trap
23. Leave stone ring in place as permanent sediment collection point.
24. Complete final utility connection. Electrical overhead or underground per Contractor.
25. Construct wood deck with sono tube piers as footings, poured in cardboard forms.
26. Once deck is complete, complete soil filling of concrete planter per specs. Connect roof

leaders to planter (residence has flat roof pitching to rear and common leaders). Ensure overflows are functional in wall perimeter. Install plants between March 15th and June 15th; September 15th to October 15th . Water weekly as required if rainstorms not imminent within one week.

27. When entire site is stabilized with grass cover, remove silt fence.
28. Schedule MS4 Inspection with Town of Lewsiboro.
29. File NOT with NYSDEC.

Project complete

9.0 Inspection and Maintenance

9.1 Inspections and Record Keeping During Construction

Once the contract has been let, the name, address, and phone number of responsible parties for maintenance will be provided to the NYSDEC. The following is a description of the maintenance and inspection practices that will be implemented as part of the project. Maintenance and inspection is important to ensure that the stabilization and structural practices that are part of the SWPPP continue to be effective in preventing sediment and other pollutants from entering the storm water system. It is the responsibility of the owner or operator to ensure that inspections are completed in accordance with NYSDEC regulations.

9.1.1 Record Forms

Inspection and maintenance are important to ensure that the erosion and sediment control practices that are part of the SWPPP continue to be effective in preventing sediment and other pollutants from entering the stormwater system. It is the responsibility of the owner to ensure that inspections are completed in accordance with SPDES GP-0-20-001.

As a part of the SWPPP inspection and maintenance activities during construction, forms shall be updated and kept on-site, including:

- Erosion and Sediment Control Inspection Report
- Monthly Summary of Inspection Activities

Inspections would be conducted by the qualified inspector periodically according to the schedule required by the SPDES GP-0-20-001 **twice per week.** During each inspection, the qualified inspector would record the areas of disturbance, deficiencies in erosion and sediment control practices, required maintenance, and areas of temporary or permanent stabilization. The need for modifications to the Erosion and Sediment Control Plan would be identified and implemented immediately.

The Erosion and Sediment Control Inspection Report will be completed by a qualified inspector to fully document each inspection. A qualified inspector is a person 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), licensed Landscape Architect, or other NYSDEC endorsed individual(s). It also means someone working under the direct supervision of the licensed Professional engineer or licensed Landscape Architect, provided the 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 performing the site inspection has received four hours of training, which has been endorsed by the NYSDEC, from a Soil and Water Conservation District, CPESC, Inc., or other NYSDEC endorsed entity, in proper erosion and sediment control principles no later than two years from the date SPDES GP-0-20-001 is issued. After receiving the initial training, an individual working under the direct supervision of the licensed Professional Engineer or licensed Landscape Architect shall receive four hours of training every three years.

9.1.2 Inspections

Inspections shall be conducted by the qualified inspector periodically according to the following schedule:

1. When construction activities are ongoing, the qualified inspector shall conduct a site inspection at least Twice Per Week per NYSDEC regulations.

2. If soil disturbance activities have been 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 clays. The owner or operator shall notify the Regional Office stormwater contact person in writing prior to reducing the frequency of inspections.

3. If soil disturbance activities have been shut clown with partial project completion, the qualified inspector can stop conducting inspections if all areas disturbed as of the project shutdown elate 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 Regional Office stormwater contact person in writing prior to the shutdown. If soil disturbance activities have not resumed within 2 years from the date of shutdown, the owner or operator shall have the qualified inspector(s) 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 Notice of Termination (NOT). The owner or operator shall then submit the completed NOT form in accordance with NYSDEC regulations.

During each inspection, the qualified inspector should fill out the Erosion and Sediment Control Inspection Report as directed below:

On the Erosion and Sediment Control Inspection Report site map show the following:

- Disturbed site areas and drainage pathways.
- Site areas that are expected to undergo initial disturbance or significant site work within the next 14-day period.
- Site areas that have undergone temporary or permanent stabilization.
- In areas where soil disturbance activity has been temporarily or permanently ceased, temporary and/or permanent soil stabilization measures shall be installed and/or implemented within seven (7) days from the date the soil disturbance activity ceased. The soil stabilization measures selected shall be in conformance with the most current version of the technical standard, New York State Standards and Specifications for Erosion and Sediment Control.

Record the following information on the Erosion and Sediment Control Inspection Report:

- For each structural measure, circle YES, NO, or N/A (not applicable) to indicate if the pollutant control measure is in conformance with specifications.
- For each structural measure, circle YES, NO, or N/A to indicate whether the structural measure is performing effectively in minimizing stormwater pollution.

- Inspect all sediment control practices and record the approximate degree of sediment accumulation as a percentage of the sediment storage volume in the allocated location on the Inspection Form Chart (i.e., 10 percent, 20 percent, and 50 percent).
- 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;
- A description of the condition of all natural surface water bodies 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;

The qualified inspector will give a brief explanation for all locations where he/she has noted that the structural practice was either not in conformance with specifications or in need of repair. This should be noted in the Erosion and Sediment Control Inspection Report. The qualified inspector will then give a brief recommendation for soil erosion and sediment control practices that were not installed properly or are not functioning as designed and need to be reinstalled or replaced.

9.1.3 Erosion and Sediment Control Maintenance Measures

All maintenance described below shall be completed in accordance with the New York State Standards and Specifications for Erosion and Sediment Control. Any material removed from erosion and sediment control measure shall be properly disposed.

All measures will be maintained in good working order; if repairs are found to be necessary, the qualified inspector shall notify the owner or operator and appropriate contractor (and subcontractor) of any corrective actions needed within one business day. 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.

A maintenance inspection report, titled "Erosion and Sediment Control Inspection Report," will be made after each inspection conducted by a qualified inspector.

Disturbed areas and materials storage areas will be inspected for evidence of potential pollutants entering stormwater systems. Within one business day of the completion of the inspection, the qualified inspector shall notify the owner or operator and the 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 business day of this notification and shall complete the corrective actions in a reasonable time frame.

A Monthly Summary of Site Inspection Activities will be prepared and kept on file with completed Erosion and Sediment Control Inspection Report. A Record of Stabilization and Construction Activities will be prepared and kept on file with the completed Construction Duration Inspection Forms.

The following are the maintenance requirements for each practice that will be implemented at the site.

9.2 Maintenance Practices - Temporary

Refer to attached table - Appendix C

9.2.1 Stabilized Construction Entrance/Exit

The stabilized construction entrance/exit shall be maintained in a condition that will prevent the tracking or flow of sediment onto public rights-of-way. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately; streets shall be swept as needed. The gravel pad shall be replaced as necessary. Sediment tracked onto public streets should be removed or cleaned on a daily basis.

9.2.2 Silt Fence

Maintenance of all silt fences shall be performed as needed. If a silt fence is knocked down, it shall be replaced immediately. When a silt fence appears deteriorated or ineffective and/or built-up sediment reaches one-third the height of the fence, the silt fence shall be replaced and/or cleaned accordingly. When "bulges" of material develop on the fence, they shall be removed.

Silt fence controls sediment runoff where the soil has been disturbed by slowing the flow of water and encouraging the deposition of sediment before the water passes through the silt fence. Built-up sediment shall be removed from silt fences when it has reached one-third the height of the fence and properly disposed.

9.2.3 Clean Material Stockpile

The silt fence should be inspected for bulges and proper installation. The soil stockpile should be stabilized with grass or rolled erosion control blanket.

9.2.4 Dust Control

Dust control maintenance requires exposed areas to be covered or seeded and mulched. Maintain through dry periods.

9.2.5 Temporary Seeding and Stabilization

In areas where demolition and construction activities, clearing, and grubbing have ceased, temporary seeding or permanent landscaping shall be performed to control sediment-laden runoff and provide stabilization to control erosion during storm events. This temporary seeding/stabilization or permanent landscaping shall be in place no later than 14 days after demolition and construction activity has ceased.

9.2.6 Construction Fence

Maintenance consists of ensuring that the fence posts are upright and unbroken. The fence shall remain taut between posts and any debris trapped by the fence shall be removed and disposed of off-site. Supplemental posts may be required to support broken fence posts.

9.2.7 Material Handling/ Soil Stabilization

The ensure that the site ls properly seeded and stabilized, the Contractor must initiate stabilization measures as soon as practicable in areas of the site where construction activities have permanently ceased and in no case more than 14 days after the construction activity in that portion of this site has temporarily or permanently ceased. The Contractor will be responsible for the maintenance of the vegetated cover for the duration of construction activities. The areas shall be monitored to ensure that vegetation achieves a good coverage over the entire disturbed section. Additional seeding shall be completed as needed. Watering shall be provided as needed.

In areas where soil disturbance activity has been temporarily ceased, temporary and/or permanent soil stabilization measures shall be installed and/or implemented within seven days from the date the soil disturbance activity ceased. The soil stabilization measures selected shall be in conformance with the most current version of the technical standard, New York State Standards and Specifications for Erosion and Sediment Control.

9.3 Maintenance Practices - Permanent

9.3.1 Sediment Trap Stone Outlet

Maintenance consists of weekly inspection during construction for stone placement, edge erosion and sediment build-up. Sediment should be removed every one year or when trap is ½ full, 18" deep.

9.3.2 Concrete Planter

1. Debris and trash removal required on weekly basis initially and monthly if debris not evident. Ensure outlet weirs in wall are clean.
2. Inspect planter after each storm event greater than 0.5 inches and at least twice in the first six months. After six months, inspect seasonally and after storms greater than 1-year storm event.
3. Maintenance consists of:
   - Pruning and replacing dead or dying vegetation.
   - Plant thinning and erosion repair.
4. Inspect surface for sediment build up from roof and for surface ponding.
5. The first season requires special care to ensure plant survival and possible supplemental watering due to rainfall events.

9.4 Maintenance Requirements

The responsibility for the implementation of long-term operation and maintenance of a post-construction storm water management practice shall be vested with the property owner: Alex Bernabo or his successors, by a legally binding and enforceable mechanism as prepared by the project attorney and approved by the NYCDEP legal department. The following items are provided in compliance with Section 3.5 of the NYSSMDM, 2010 Manual.

9.4.1 Responsible Entity

Identity of the entity responsible for long-term operation and maintenance of the storm water practices:

Alex Bernabo
wDesigne, Inc
3867 Danbury Rd
Brewster, NY 10509
(914) 906-1336
info@wdesigne.com

9.5 Long Term Operation and Maintenance

Following completion of construction, a long-term inspection and maintenance program will be implemented to ensure the proper function of the stormwater management system. The program will be carried out by the Owner of Record. Post construction includes maintenance of the permanent erosion control structures, swales, the accessway to the well and infiltration structures.

Following completion of construction, a long-term inspection and maintenance program will be implemented to ensure the proper function of the stormwater management system. This includes the maintenance of permanent Storm water Structures which are listed below.

9.5.1 Site Maintenance

1. Litter and debris will be removed from parking areas and driveway. Sand or silt from parking lot shall be removed if it exceeds 1 inch in the permanent sediment trap.

2. The storm water management system should be inspected after each major storm event (greater than 2-year, 24-hour storm) to ensure concrete planter outlet structure remains clear.
3. Any settlement within lawn areas shall be corrected with topsoil with seed and mulch across the OWTS area.
4. All planting shall be inspected each year and replaced as necessary for a period of 3 years to maintain 80% survival rate.
5. Concrete flow through planter shall follow the Maintenance Inspection Protocol of 9.3.2.
6. Site shall be maintained with lawn mowing, tree trimming, leaf clean-up as is necessary for an acceptable residential environment.
7. Review stability of the soils and vegetation under the dock due to rainfall discharge between the deck boards. Add gravel to stabilize eroded areas.

APPENDIX A

Certifications

Contractor's Certification

"I hereby certify 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 safety quality standards. 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 be subject me to criminal, civil and/or administrative proceedings."

Signed _____ Date _____

Name _____

Company _____

Address _____

_____

Phone _____

Site _____

SWPPP Implementer's Name _____

SWPPP Implementer's Title _____

Contractor's Scope _____

Trained Contractor's Name _____

Trained Contractor's Title _____

* The SWPPP Implementer must be a trainer contractor responsible for SPPP implementation, an employee of the firm who has received training in accordance with SPEDES GP-0-20-001.

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

Owner/Operator Certification Form

SPDES General Permit For Stormwater Discharges From Construction Activity (GP-0-20-001)

Project/Site Name: 96 Post Office Rd

eNOI Submission Number: _____

eNOI Submitted by: ☐ **Owner/Operator** ☐ **SWPPP Preparer** ☐ **Other**

Certification Statement - Owner/Operator

I have read or been advised of the permit conditions and believe that I understand them. I also understand that, under the terms of the permit, there may be reporting requirements. I hereby certify that this document and the corresponding documents were prepared under my direction or supervision. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further understand that coverage under the general permit will be identified in the acknowledgment that I will receive as a result of submitting this NOI and can be as long as sixty (60) business days as provided for in the general permit. I also understand that, by submitting this NOI, I am acknowledging that the SWPPP has been developed and will be implemented as the first element of construction, and agreeing to comply with all the terms and conditions of the general permit for which this NOI is being submitted.

Alex
Owner/Operator First Name

Bernabo
M.I. Last Name

Signature _____

Date 4/4/23

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APPENDIX B

Construction Inspection Logs

APPENDIX F
CONSTRUCTION SITE INSPECTION AND MAINTENANCE LOG BOOK

STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM FOR CONSTRUCTION ACTIVITIES

SAMPLE CONSTRUCTION SITE LOG BOOK

Table of Contents

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   a. Preamble to Site Assessment and Inspections
   b. Pre-Construction Site Assessment Checklist

II. Construction Duration Inspections
   a. Directions
   b. Modification to the SWPPP

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I. PRE-CONSTRUCTION MEETING DOCUMENTS

Project Name _____

Permit No. _____ **Date of Authorization** _____

Name of Operator _____

Prime Contractor _____

a. Preamble to Site Assessment and Inspections

The Following Information To Be Read By All Person's Involved in The Construction of Stormwater Related Activities:

The Operator agrees to have a qualified inspector[1] conduct an assessment of the site prior to the commencement of construction[2] and certify in this inspection report that the appropriate erosion and sediment controls described in the SWPPP have been adequately installed or implemented to ensure overall preparedness of the site for the commencement of construction.

Prior to the commencement of construction, the Operator shall certify in this site logbook that the SWPPP has been prepared in accordance with the State's standards and meets all Federal, State and local erosion and sediment control requirements. A preconstruction meeting should be held to review all of the SWPPP requirements with construction personnel.

When construction starts, site inspections shall be conducted by the qualified inspector at least every 7 calendar days. The Operator shall maintain a record of all inspection reports in this site logbook. The site logbook shall be maintained on site and be made available to the permitting authorities upon request.

Prior to filing the Notice of Termination or the end of permit term, the Operator shall have a qualified inspector perform a final site inspection. The qualified inspector shall certify that the site has undergone final stabilization[3] using either vegetative or structural stabilization methods and that all temporary erosion and sediment controls (such as silt fencing) not needed for long-term erosion control have been removed. In addition, the Operator must identify and certify that all permanent structures described in the SWPPP have been constructed and provide the owner(s) with an operation and maintenance plan that ensures the structure(s) continuously functions as designed.

1 Refer to "Qualified Inspector" inspection requirements in the current SPDES General Permit for Stormwater Discharges from Construction Activity for complete list of inspection requirements.
2 "Commencement of construction" means the initial removal of vegetation and disturbance of soils associated with clearing, grading or excavating activities or other construction activities.
3 "Final stabilization" means that all soil-disturbing activities at the site have been completed and a uniform, perennial vegetative cover with a density of eighty (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.

b. Pre-construction Site Assessment Checklist
(NOTE: Provide comments below as necessary)

1. Notice of Intent, SWPPP, and Contractors Certification:

Yes No NA

[ ] [ ] [ ] Has a Notice of Intent been filed with the NYS Department of Conservation?
[ ] [ ] [ ] Is the SWPPP on-site? Where?_____
[ ] [ ] [ ] Is the Plan current? What is the latest revision date?_____
[ ] [ ] [ ] Is a copy of the NOI (with brief description) onsite? Where?_____
[ ] [ ] [ ] Have all contractors involved with stormwater related activities signed a contractor's certification?

2. Resource Protection

Yes No NA

[ ] [ ] [ ] Are construction limits clearly flagged or fenced?
[ ] [ ] [ ] Important trees and associated rooting zones, on-site septic system absorption fields, existing vegetated areas suitable for filter strips, especially in perimeter areas, have been flagged for protection.
[ ] [ ] [ ] Creek crossings installed prior to land-disturbing activity, including clearing and blasting.

3. Surface Water Protection

Yes No NA

[ ] [ ] [ ] Clean stormwater runoff has been diverted from areas to be disturbed.
[ ] [ ] [ ] Bodies of water located either on site or in the vicinity of the site have been identified and protected.
[ ] [ ] [ ] Appropriate practices to protect on-site or downstream surface water are installed.
[ ] [ ] [ ] Are clearing and grading operations divided into areas <5 acres?

4. Stabilized Construction Access

Yes No NA

[ ] [ ] [ ] A temporary construction entrance to capture mud and debris from construction vehicles before they enter the public highway has been installed.
[ ] [ ] [ ] Other access areas (entrances, construction routes, equipment parking areas) are stabilized immediately as work takes place with gravel or other cover.
[ ] [ ] [ ] Sediment tracked onto public streets is removed or cleaned on a regular basis.

5. Sediment Controls

Yes No NA

[ ] [ ] [ ] Silt fence material and installation comply with the standard drawing and specifications.
[ ] [ ] [ ] Silt fences are installed at appropriate spacing intervals
[ ] [ ] [ ] Sediment/detention basin was installed as first land disturbing activity.
[ ] [ ] [ ] Sediment traps and barriers are installed.

6. Pollution Prevention for Waste and Hazardous Materials

Yes No NA

[ ] [ ] [ ] The Operator or designated representative has been assigned to implement the spill prevention avoidance and response plan.
[ ] [ ] [ ] The plan is contained in the SWPPP on page _____
[ ] [ ] [ ] Appropriate materials to control spills are onsite. Where? _____

II. CONSTRUCTION DURATION INSPECTIONS

a. **Directions:**

Inspection Forms will be filled out during the entire construction phase of the project.

Required Elements:

1) On a site map, indicate the extent of all disturbed site areas and drainage pathways. Indicate site areas that are expected to undergo initial disturbance or significant site work within the next 14-day period;

2) Indicate on a site map all areas of the site that have undergone temporary or permanent stabilization;

3) Indicate all disturbed site areas that have not undergone active site work during the previous 14-day period;

4) Inspect all sediment control practices and record the approximate degree of sediment accumulation as a percentage of sediment storage volume (for example, 10 percent, 20 percent, 50 percent);

5) Inspect all erosion and sediment control practices and record all maintenance requirements such as verifying the integrity of barrier or diversion systems (earthen berms or silt fencing) and containment systems (sediment basins and sediment traps). Identify any evidence of rill or gully erosion occurring on slopes and any loss of stabilizing vegetation or seeding/mulching. Document any excessive deposition of sediment or ponding water along barrier or diversion systems. Record the depth of sediment within containment structures, any erosion near outlet and overflow structures, and verify the ability of rock filters around perforated riser pipes to pass water; and

6) Immediately report to the Operator any deficiencies that are identified with the implementation of the SWPPP.

SITE PLAN/SKETCH

Inspector (print name)	**Date of Inspection**
Qualified Inspector (print name)	**Qualified Inspector Signature**

The above signed acknowledges that, to the best of his/her knowledge, all information provided on the forms is accurate and complete.

Maintaining Water Quality

Yes No NA

[ ] [ ] [ ] Is there an increase in turbidity causing a substantial visible contrast to natural conditions at the outfalls?

[ ] [ ] [ ] Is there residue from oil and floating substances, visible oil film, or globules or grease at the outfalls?

[ ] [ ] [ ] All disturbance is within the limits of the approved plans.

[ ] [ ] [ ] Have receiving lake/bay, stream, and/or wetland been impacted by silt from project?

Housekeeping

1. General Site Conditions

Yes No NA

[ ] [ ] [ ] Is construction site litter, debris and spoils appropriately managed?

[ ] [ ] [ ] Are facilities and equipment necessary for implementation of erosion and sediment control in working order and/or properly maintained?

[ ] [ ] [ ] Is construction impacting the adjacent property?

[ ] [ ] [ ] Is dust adequately controlled?

2. Temporary Stream Crossing

Yes No NA

[ ] [ ] [ ] Maximum diameter pipes necessary to span creek without dredging are installed.

[ ] [ ] [ ] Installed non-woven geotextile fabric beneath approaches.

[ ] [ ] [ ] Is fill composed of aggregate (no earth or soil)?

[ ] [ ] [ ] Rock on approaches is clean enough to remove mud from vehicles & prevent sediment from entering stream during high flow.

3. Stabilized Construction Access

Yes No NA

[ ] [ ] [ ] Stone is clean enough to effectively remove mud from vehicles.

[ ] [ ] [ ] Installed per standards and specifications?

[ ] [ ] [ ] Does all traffic use the stabilized entrance to enter and leave site?

[ ] [ ] [ ] Is adequate drainage provided to prevent ponding at entrance?

Runoff Control Practices

1. Excavation Dewatering

Yes No NA

[ ] [ ] [ ] Upstream and downstream berms (sandbags, inflatable dams, etc.) are installed per plan.

[ ] [ ] [ ] Clean water from upstream pool is being pumped to the downstream pool.

[ ] [ ] [ ] Sediment laden water from work area is being discharged to a silt-trapping device.

[ ] [ ] [ ] Constructed upstream berm with one-foot minimum freeboard.

Runoff Control Practices (continued)

2. Flow Spreader

Yes No NA

[ ] [ ] [ ] Installed per plan.
[ ] [ ] [ ] Constructed on undisturbed soil, not on fill, receiving only clear, non-sediment laden flow.
[ ] [ ] [ ] Flow sheets out of level spreader without erosion on downstream edge.

3. Interceptor Dikes and Swales

Yes No NA

[ ] [ ] [ ] Installed per plan with minimum side slopes 2H:1V or flatter.
[ ] [ ] [ ] Stabilized by geotextile fabric, seed, or mulch with no erosion occurring.
[ ] [ ] [ ] Sediment-laden runoff directed to sediment trapping structure

4. Stone Check Dam

Yes No NA

[ ] [ ] [ ] Is channel stable? (flow is not eroding soil underneath or around the structure).
[ ] [ ] [ ] Check is in good condition (rocks in place and no permanent pools behind the structure).
[ ] [ ] [ ] Has accumulated sediment been removed?.

5. Rock Outlet Protection

Yes No NA

[ ] [ ] [ ] Installed per plan.
[ ] [ ] [ ] Installed concurrently with pipe installation.

Soil Stabilization

1. Topsoil and Spoil Stockpiles

Yes No NA

[ ] [ ] [ ] Stockpiles are stabilized with vegetation and/or mulch.
[ ] [ ] [ ] Sediment control is installed at the toe of the slope.

2. Revegetation

Yes No NA

[ ] [ ] [ ] Temporary seedings and mulch have been applied to idle areas.
[ ] [ ] [ ] 4 inches minimum of topsoil has been applied under permanent seedings

Sediment Control Practices

1. Silt Fence and Linear Barriers

Yes No NA

[ ] [ ] [ ] Installed on Contour, 10 feet from toe of slope (not across conveyance channels).
[ ] [ ] [ ] Joints constructed by wrapping the two ends together for continuous support.
[ ] [ ] [ ] Fabric buried 6 inches minimum.
[ ] [ ] [ ] Posts are stable, fabric is tight and without rips or frayed areas.
Sediment accumulation is ___% of design capacity.

Sediment Control Practices (continued)

2. Storm Drain Inlet Protection (Use for Stone & Block; Filter Fabric; Curb; or, Excavated; Filter Sock or Manufactured practices)

Yes No NA

[ ] [ ] [ ] Installed concrete blocks lengthwise so open ends face outward, not upward.
[ ] [ ] [ ] Placed wire screen between No. 3 crushed stone and concrete blocks.
[ ] [ ] [ ] Drainage area is 1acre or less.
[ ] [ ] [ ] Excavated area is 900 cubic feet.
[ ] [ ] [ ] Excavated side slopes should be 2:1.
[ ] [ ] [ ] 2" x 4" frame is constructed and structurally sound.
[ ] [ ] [ ] Posts 3-foot maximum spacing between posts.
[ ] [ ] [ ] Fabric is embedded 1 to 1.5 feet below ground and secured to frame/posts with staples at max 8-inch spacing.
[ ] [ ] [ ] Posts are stable, fabric is tight and without rips or frayed areas.
[ ] [ ] [ ] Manufactured insert fabric is free of tears and punctures.
[ ] [ ] [ ] Filter Sock is not torn or flattened and fill material is contained within the mesh sock.

Sediment accumulation ___% of design capacity.

3. Temporary Sediment Trap

Yes No NA

[ ] [ ] [ ] Outlet structure is constructed per the approved plan or drawing.
[ ] [ ] [ ] Geotextile fabric has been placed beneath rock fill.
[ ] [ ] [ ] Sediment trap slopes and disturbed areas are stabilized.

Sediment accumulation is ___% of design capacity.

4. Temporary Sediment Basin

Yes No NA

[ ] [ ] [ ] Basin and outlet structure constructed per the approved plan.
[ ] [ ] [ ] Basin side slopes are stabilized with seed/mulch.
[ ] [ ] [ ] Drainage structure flushed and basin surface restored upon removal of sediment basin facility.
[ ] [ ] [ ] Sediment basin dewatering pool is dewatering at appropriate rate.

Sediment accumulation is ___% of design capacity.

Note: Not all erosion and sediment control practices are included in this listing. Add additional pages to this list as required by site specific design. All practices shall be maintained in accordance with their respective standards.

Construction inspection checklists for post-development stormwater management practices can be found in Appendix F of the New York Stormwater Management Design Manual.

CONSTRUCTION DURATION INSPECTIONS

b. Modifications to the SWPPP (To be completed as described below)

The Operator shall amend the SWPPP whenever:

1. There is a significant change in design, construction, operation, or maintenance which may have a significant effect on the potential for the discharge of pollutants to the waters of the United States and which has not otherwise been addressed in the SWPPP; or
2. The SWPPP proves to be ineffective in:
   a. Eliminating or significantly minimizing pollutants from sources identified in the SWPPP and as required by this permit; or
   b. Achieving the general objectives of controlling pollutants in stormwater discharges from permitted construction activity; and
3. Additionally, the SWPPP shall be amended to identify any new contractor or subcontractor that will implement any measure of the SWPPP.

Modification & Reason:

APPENDIX C

Maintenance Schedule - Temporary

Maintenance Schedule – During Construction – Temporary Structures

–	Component	MINIMUM Inspection Required	After Every Storm Event	Item to Inspect	Sediment Removal Req'd	Special Inspection Items **Inspect the following:**	Maintenance and Sediment Removal
1	Silt Fence	Bi-Weekly	X	Woven Wire Fence Alignment	Yes	Woven Wire & Fence Stability	Remove material when a "bulge" develops, ensure fence extends into soil and fence upright, staple fencing
2	Construction Fence	Bi-Weekly		Fence Woven Wire Conditions	None	Fence posts and grid	Fix fence up right and staple as required to ensure integrity.
3	Topsoil Stockpile Area	Bi-Weekly	X	Soil Pile Condition	None	Silt Fence at Base of Pile to be inspected and seeding reviewed.	Remove material when a "bulge" develops, ensure fence extends into soil and fence is upright, staple fencing
4	Construction Entrance	Weekly	X	Stone Placement	None	Stone Placement & soil deposit between stones	Repair Top Dressing with additional aggregate and correct stone placement.
5	Stone Outlet Sediment Trap	Bi-Weekly	X	Stone Placement & Location	Yes	Stone & Sediment Accumulation	Bi-weekly, remove sediment, set stones to correct profile, fix berm blow-outs
6	Concrete Pump Out	Monthly	X	Soil Stability	None	Once filled topsoil, seed & mulch	Due to the downhill proximity of the well, it is recommended to remove the concrete off-site once curred

APPENDIX D

NYSDEC NOI

0644089821

NOTICE OF INTENT

New York State Department of Environmental Conservation
Division of Water
625 Broadway, 4th Floor
Albany, New York 12233-3505

NYR _____ (for DEC use only)

Stormwater Discharges Associated with Construction Activity Under State Pollutant Discharge Elimination System (SPDES) General Permit # GP-0-20-001

All sections must be completed unless otherwise noted. Failure to complete all items may result in this form being returned to you, thereby delaying your coverage under this General Permit. Applicants must read and understand the conditions of the permit and prepare a Stormwater Pollution Prevention Plan prior to submitting this NOI. Applicants are responsible for identifying and obtaining other DEC permits that may be required.

-IMPORTANT-

RETURN THIS FORM TO THE ADDRESS ABOVE

OWNER/OPERATOR **MUST SIGN FORM**

Owner/Operator Information

Owner/Operator (Company Name/Private Owner Name/Municipality Name)
WDesigne, Inc.

Owner/Operator Contact Person Last Name (NOT CONSULTANT)
Bernabo

Owner/Operator Contact Person First Name
Alex

Owner/Operator Mailing Address
5 John Walsh Blvd.

City
Peekskill

State
NY

Zip
10566-

Phone (Owner/Operator)
914-906-1336

Fax (Owner/Operator)
-- -

Email (Owner/Operator)
info@wdesigne.com

FED TAX ID
- (not required for individuals)

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Project Site Information

Project/Site Name
96 Post Office Rd

Street Address (NOT P.O. BOX)

Side of Street
○ North ○ South ○ East ○ West

City/Town/Village (THAT ISSUES BUILDING PERMIT)
Waccabuc

State: NY
Zip: 10597 -
County: Westchester
DEC Region: 3

Name of Nearest Cross Street
Benedict Rd

Distance to Nearest Cross Street (Feet)
2640

Project In Relation to Cross Street
● North ○ South ○ East ○ West

Tax Map Numbers
Section-Block-Parcel
43.1-1-2

Tax Map Numbers

1. Provide the Geographic Coordinates for the project site. To do this, go to the NYSDEC Stormwater Interactive Map on the DEC website at:

https://gisservices.dec.ny.gov/gis/stormwater/

Zoom into your Project Location such that you can accurately click on the centroid of your site. Once you have located the centroid of your project site, go to the bottom right hand corner of the map for the X, Y coordinates. Enter the coordinates into the boxes below. For problems with the interactive map use the help function.

X Coordinates (Easting)
-73579 20
Ex. -73.749

Y Coordinates (Northing)
41288 02
Ex. 42.652

2. What is the nature of this construction project?

● **New Construction**

○ **Redevelopment with increase in impervious area**

○ **Redevelopment with no increase in impervious area**

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3. Select the predominant land use for both pre and post development conditions.
SELECT ONLY ONE CHOICE FOR EACH

Pre-Development Existing Land Use

- ● FOREST
- ○ PASTURE/OPEN LAND
- ○ CULTIVATED LAND
- ○ SINGLE FAMILY HOME
- ○ SINGLE FAMILY SUBDIVISION
- ○ TOWN HOME RESIDENTIAL
- ○ MULTIFAMILY RESIDENTIAL
- ○ INSTITUTIONAL/SCHOOL
- ○ INDUSTRIAL
- ○ COMMERCIAL
- ○ ROAD/HIGHWAY
- ○ RECREATIONAL/SPORTS FIELD
- ○ BIKE PATH/TRAIL
- ○ LINEAR UTILITY
- ○ PARKING LOT
- ○ OTHER

Post-Development Future Land Use

- ● SINGLE FAMILY HOME
- ○ SINGLE FAMILY SUBDIVISION — Number of Lots
- ○ TOWN HOME RESIDENTIAL
- ○ MULTIFAMILY RESIDENTIAL
- ○ INSTITUTIONAL/SCHOOL
- ○ INDUSTRIAL
- ○ COMMERCIAL
- ○ MUNICIPAL
- ○ ROAD/HIGHWAY
- ○ RECREATIONAL/SPORTS FIELD
- ○ BIKE PATH/TRAIL
- ○ LINEAR UTILITY (water, sewer, gas, etc.)
- ○ PARKING LOT
- ○ CLEARING/GRADING ONLY
- ○ DEMOLITION, NO REDEVELOPMENT
- ○ WELL DRILLING ACTIVITY *(Oil, Gas, etc.)
- ○ OTHER

***Note:** for gas well drilling, non-high volume hydraulic fractured wells only

4. In accordance with the larger common plan of development or sale, enter the total project site area; the total area to be disturbed; existing impervious area to be disturbed (for redevelopment activities); and the future impervious area constructed within the disturbed area. (Round to the nearest tenth of an acre.)

Total Site Area	Total Area To Be Disturbed	Existing Impervious Area To Be Disturbed	Future Impervious Area Within Disturbed Area
4.0	0.5	0.0	0.1

5. Do you plan to disturb more than 5 acres of soil at any one time? ○ **Yes** ● **No**

6. Indicate the percentage of each Hydrologic Soil Group(HSG) at the site.

A	B	C	D
%	%	75 %	25 %

7. Is this a phased project? ○ **Yes** ● **No**

8. Enter the planned start and end dates of the disturbance activities.

Start Date 10/01/2024 – **End Date** 12/01/2025

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9. Identify the nearest surface waterbody(ies) to which construction site runoff will discharge.

Name

NYSDEC LFIFTY

9a. Type of waterbody identified in Question 9?

- ○ Wetland / State Jurisdiction On Site (Answer 9b)
- ● Wetland / State Jurisdiction Off Site
- ○ Wetland / Federal Jurisdiction On Site (Answer 9b)
- ○ Wetland / Federal Jurisdiction Off Site
- ○ Stream / Creek On Site
- ○ Stream / Creek Off Site
- ○ River On Site
- ○ River Off Site
- ○ Lake On Site
- ○ Lake Off Site
- ○ Other Type On Site
- ○ Other Type Off Site

9b. How was the wetland identified?

- ○ Regulatory Map
- ○ Delineated by Consultant
- ○ Delineated by Army Corps of Engineers
- ○ Other (identify)

10. Has the surface waterbody(ies) in question 9 been identified as a 303(d) segment in Appendix E of GP-0-20-001? ○ Yes ● No

11. Is this project located in one of the Watersheds identified in Appendix C of GP-0-20-001? ● Yes ○ No

12. Is the project located in one of the watershed areas associated with AA and AA-S classified waters? ● Yes ○ 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? ○ Yes ● No
If Yes, what is the acreage to be disturbed?

14. Will the project disturb soils within a State regulated wetland or the protected 100 foot adjacent area? ○ Yes ● No

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15. Does the site runoff enter a separate storm sewer system (including roadside drains, swales, ditches, culverts, etc)? ○ Yes ● No ○ Unknown

16. What is the name of the municipality/entity that owns the separate storm sewer system?

17. Does any runoff from the site enter a sewer classified as a Combined Sewer? ○ Yes ● No ○ Unknown

18. Will future use of this site be an agricultural property as defined by the NYS Agriculture and Markets Law? ○ Yes ● No

19. Is this property owned by a state authority, state agency, federal government or local government? ○ Yes ● No

20. Is this a remediation project being done under a Department approved work plan? (i.e. CERCLA, RCRA, Voluntary Cleanup Agreement, etc.) ○ Yes ● No

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 ○ No

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 ● No
If No, skip questions 23 and 27-39.

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 ○ No

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24. The Stormwater Pollution Prevention Plan (SWPPP) was prepared by:

- ● **Professional Engineer (P.E.)**
- ○ **Soil and Water Conservation District (SWCD)**
- ○ **Registered Landscape Architect (R.L.A)**
- ○ **Certified Professional in Erosion and Sediment Control (CPESC)**
- ○ **Owner/Operator**
- ○ **Other**

SWPPP Preparer
PW Scott Engineering & Architecture PC

Contact Name (Last, Space, First)
Scott Peder

Mailing Address
3871 Danbury Rd

City
Brewster

State Zip
NY 10509-

Phone
845-278-2110

Fax
-

Email
pwscott@pwscott.com

SWPPP Preparer Certification

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.

First Name
Peder

MI

Last Name
Scott

Signature

Date
11/07/2023

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25. Has a construction sequence schedule for the planned management practices been prepared? ○ Yes ○ No

26. Select **all** of the erosion and sediment control practices that will be employed on the project site:

Temporary Structural

- ○ Check Dams
- ○ Construction Road Stabilization
- ● Dust Control
- ○ Earth Dike
- ○ Level Spreader
- ○ Perimeter Dike/Swale
- ○ Pipe Slope Drain
- ○ Portable Sediment Tank
- ○ Rock Dam
- ○ Sediment Basin
- ● Sediment Traps
- ● Silt Fence
- ● Stabilized Construction Entrance
- ○ Storm Drain Inlet Protection
- ○ Straw/Hay Bale Dike
- ○ Temporary Access Waterway Crossing
- ○ Temporary Stormdrain Diversion
- ○ Temporary Swale
- ○ Turbidity Curtain
- ○ Water bars

Biotechnical

- ○ Brush Matting
- ○ Wattling

Vegetative Measures

- ○ Brush Matting
- ○ Dune Stabilization
- ○ Grassed Waterway
- ○ Mulching
- ○ Protecting Vegetation
- ○ Recreation Area Improvement
- ● Seeding
- ○ Sodding
- ○ Straw/Hay Bale Dike
- ○ Streambank Protection
- ○ Temporary Swale
- ● Topsoiling
- ○ Vegetating Waterways

Permanent Structural

- ○ Debris Basin
- ○ Diversion
- ○ Grade Stabilization Structure
- ● Land Grading
- ○ Lined Waterway (Rock)
- ○ Paved Channel (Concrete)
- ○ Paved Flume
- ○ Retaining Wall
- ○ Riprap Slope Protection
- ○ Rock Outlet Protection
- ○ Streambank Protection

Other

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Post-construction Stormwater Management Practice (SMP) Requirements

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.

- ● **Preservation of Undisturbed Areas**
- ○ **Preservation of Buffers**
- ● **Reduction of Clearing and Grading**
- ● **Locating Development in Less Sensitive Areas**
- ○ **Roadway Reduction**
- ● **Sidewalk Reduction**
- ○ **Driveway Reduction**
- ○ **Cul-de-sac Reduction**
- ○ **Building Footprint 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).
- ○ Compacted areas were considered as impervious cover when calculating the **WQv Required**, and the compacted areas were assigned a post-construction Hydrologic Soil Group (HSG) designation that is one level less permeable than existing conditions for the hydrology analysis.

28. Provide the total Water Quality Volume (WQv) required for this project (based on final site plan/layout).

Total WQv Required

0.013 **acre-feet**

29. Identify the RR techniques (Area Reduction), RR techniques(Volume Reduction) and Standard SMPs with RRv Capacity in Table 1 (See Page 9) that were used to reduce the Total WQv Required(#28).

Also, provide in Table 1 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 Tables 1 and 2 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.

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Table 1 - Runoff Reduction (RR) Techniques and Standard Stormwater Management Practices (SMPs)

	Total Contributing Area (acres)		Total Contributing Impervious Area (acres)
RR Techniques (Area Reduction)			
○ Conservation of Natural Areas (RR-1)		and/or	
○ Sheetflow to Riparian Buffers/Filters Strips (RR-2)		and/or	
○ Tree Planting/Tree Pit (RR-3)		and/or	
○ Disconnection of Rooftop Runoff (RR-4)		and/or	
RR Techniques (Volume Reduction)			
○ Vegetated Swale (RR-5)			
○ Rain Garden (RR-6)			
● Stormwater Planter (RR-7)			0.039
○ Rain Barrel/Cistern (RR-8)			
○ Porous Pavement (RR-9)			
○ Green Roof (RR-10)			
Standard SMPs with RRv Capacity			
○ Infiltration Trench (I-1)			
○ Infiltration Basin (I-2)			
○ Dry Well (I-3)			
○ Underground Infiltration System (I-4)			
○ Bioretention (F-5)			
○ Dry Swale (O-1)			
Standard SMPs			
○ Micropool Extended Detention (P-1)			
○ Wet Pond (P-2)			
○ Wet Extended Detention (P-3)			
○ Multiple Pond System (P-4)			
○ Pocket Pond (P-5)			
○ Surface Sand Filter (F-1)			
○ Underground Sand Filter (F-2)			
○ Perimeter Sand Filter (F-3)			
○ Organic Filter (F-4)			
○ Shallow Wetland (W-1)			
○ Extended Detention Wetland (W-2)			
○ Pond/Wetland System (W-3)			
○ Pocket Wetland (W-4)			
○ Wet Swale (O-2)			

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Table 2 - Alternative SMPs
(DO NOT INCLUDE PRACTICES BEING USED FOR PRETREATMENT ONLY)

Alternative SMP	Total Contributing Impervious Area (acres)
○ Hydrodynamic	
○ Wet Vault	
○ Media Filter	
○ Other	

Provide the name and manufacturer of the Alternative SMPs (i.e. proprietary practice(s)) being used for WQv treatment.

Name

Manufacturer

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.

30. Indicate the Total RRv provided by the RR techniques (Area/Volume Reduction) and Standard SMPs with RRv capacity identified in question 29.

Total RRv provided

0.004 **acre-feet**

31. Is the Total RRv provided (#30) greater than or equal to the total WQv required (#28).

○ Yes ● 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)]

Minimum RRv Required

0.003 **acre-feet**

32a. Is the Total RRv provided (#30) greater than or equal to the Minimum RRv Required (#32)?

● Yes ○ No

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, so NOI can not be processed. SWPPP preparer must modify design to meet sizing criteria.

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33. Identify the Standard SMPs in Table 1 and, if applicable, the Alternative SMPs in Table 2 that were used to treat the remaining total WQv(=Total WQv Required in 28 - Total RRv Provided in 30).

Also, provide in Table 1 and 2 the total impervious area that contributes runoff to each practice selected.

Note: Use Tables 1 and 2 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.

WQv Provided

0.009 **acre-feet**

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 - RRv 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). 0.013

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** ○ **No**

If Yes, go to question 36.
If No, sizing criteria has not been met, so 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

0.041 **acre-feet**

CPv Provided

0.034 **acre-feet**

36a. The need to provide channel protection has been waived because:

○ Site discharges directly to tidal waters or a fifth order or larger stream.

○ Reduction of the total CPv is achieved on site through runoff reduction techniques or infiltration systems.

37. Provide the Overbank Flood (Qp) and Extreme Flood (Qf) control criteria or select waiver (37a), if applicable.

Total Overbank Flood Control Criteria (Qp)

Pre-Development

1.54 **CFS**

Post-development

1.41 **CFS**

Total Extreme Flood Control Criteria (Qf)

Pre-Development

3.63 **CFS**

Post-development

3.49 **CFS**

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37a. The need to meet the Qp and Qf criteria has been waived because:

- ○ Site discharges directly to tidal waters or a fifth order or larger stream.
- ○ 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 ○ No

If Yes, Identify the entity responsible for the long term Operation and Maintenance

Town of Lewisboro MS4

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.

All impervious areas are treated - lawn areas & gravel driveway are not treated - flow across lawn buffer to wetland.

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40. Identify other DEC permits, existing and new, that are required for this project/facility.

- ○ Air Pollution Control
- ○ Coastal Erosion
- ○ Hazardous Waste
- ○ Long Island Wells
- ○ Mined Land Reclamation
- ○ Solid Waste
- ○ Navigable Waters Protection / Article 15
- ○ Water Quality Certificate
- ○ Dam Safety
- ○ Water Supply
- ○ Freshwater Wetlands/Article 24
- ○ Tidal Wetlands
- ○ Wild, Scenic and Recreational Rivers
- ○ Stream Bed or Bank Protection / Article 15
- ○ Endangered or Threatened Species(Incidental Take Permit)
- ○ Individual SPDES
- ○ SPDES Multi-Sector GP N Y R
- ● Other N Y C D E P I R S P
- ○ None

41. Does this project require a US Army Corps of Engineers Wetland Permit? ○ Yes ● No
If Yes, Indicate Size of Impact. .

42. Is this project subject to the requirements of a regulated, traditional land use control MS4? ● Yes ○ No
(If No, skip question 43)

43. Has the "MS4 SWPPP Acceptance" form been signed by the principal executive officer or ranking elected official and submitted along with this NOI? ● Yes ○ No

44. 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. N Y R

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Owner/Operator Certification

I have read or been advised of the permit conditions and believe that I understand them. I also understand that, under the terms of the permit, there may be reporting requirements. I hereby certify that this document and the corresponding documents were prepared under my direction or supervision. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further understand that coverage under the general permit will be identified in the acknowledgment that I will receive as a result of submitting this NOI and can be as long as sixty (60) business days as provided for in the general permit. I also understand that, by submitting this NOI, I am acknowledging that the SWPPP has been developed and will be implemented as the first element of construction, and agreeing to comply with all the terms and conditions of the general permit for which this NOI is being submitted.

Print First Name: Alex

MI:

Print Last Name: Bernabo

Owner/Operator Signature:

Date: 12/42/024

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APPENDIX E

NYSDEC MS4

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

NYS Department of Environmental Conservation
Division of Water
625 Broadway, 4th Floor
Albany, New York 12233-3505

MS4 Stormwater Pollution Prevention Plan (SWPPP) Acceptance Form

for

Construction Activities Seeking Authorization Under SPDES General Permit

*(NOTE: Attach Completed Form to Notice Of Intent and Submit to Address Above)

I. Project Owner/Operator Information	
1. Owner/Operator Name:	Alex Bernabo / WDesigne
2. Contact Person:	Alex Bernabo
3. Street Address:	3867 Danbury Rd
4. City/State/Zip:	Brewster, NY 10509
II. Project Site Information	
5. Project/Site Name:	96 Post Office Rd
6. Street Address:	96 Post Office Rd
7. City/State/Zip:	Waccabuc, NY 10597
III. Stormwater Pollution Prevention Plan (SWPPP) Review and Acceptance Information	
8. SWPPP Reviewed by:	
9. Title/Position:	
10. Date Final SWPPP Reviewed and Accepted:	
IV. Regulated MS4 Information	
11. Name of MS4:	
12. MS4 SPDES Permit Identification Number: NYR20A	
13. Contact Person:	
14. Street Address:	
15. City/State/Zip:	
16. Telephone Number:	

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MS4 SWPPP Acceptance Form - continued

V. Certification Statement - MS4 Official (principal executive officer or ranking elected official) or Duly Authorized Representative

I hereby certify that the final Stormwater Pollution Prevention Plan (SWPPP) for the construction project identified in question 5 has been reviewed and meets the substantive requirements in the SPDES General Permit For Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4s). Note: The MS4, through the acceptance of the SWPPP, assumes no responsibility for the accuracy and adequacy of the design included in the SWPPP. In addition, review and acceptance of the SWPPP by the MS4 does not relieve the owner/operator or their SWPPP preparer of responsibility or liability for errors or omissions in the plan.

Printed Name:

Title/Position:

Signature:

Date:

VI. Additional Information

(NYS DEC - MS4 SWPPP Acceptance Form - January 2015)

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APPENDIX F

Short Form EAF

Short Environmental Assessment Form
Part 1 - Project Information

Instructions for Completing

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

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

Part 1 – Project and Sponsor Information

Name of Action or Project:
96 Post Office Rd

Project Location (describe, and attach a location map):
96 Post Office Rd

Brief Description of Proposed Action:
Construction of 2,600 sf single family 2-bedroom residence with a 600 sf garage with a Grasscrete driveway and individual well and individual subsurface sewage disposal system (OWTS) with 12 inches of fill, 1,000 gal. septic tank and 1,000 gal. pump tank.
Disturbances total 0.50 acres for driveway. House & septic with 0.19 acres mitigation plantings along perimeter
1 to 1 wetland mitigation either on-site buffer or wetland bio-diversity plantings or off-site per PB approval

Name of Applicant or Sponsor:	Telephone: 845-278-2110
Peder Scott, P.E., R.A.	E-Mail: pwscott@pwscott.com

Address:
PW Scott Engineering & Architecture, PC

City/PO:	State:	Zip Code:
Brewster	NY	10509

	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: NYCDEP, WCDOH, Town of Lewisboro, Wetland Permit, NYSDEC NOI, Building Permit, Driveway Permit, Stormwater Permit	☐	☑

3. a. Total acreage of the site of the proposed action? 4.04 acres
   b. Total acreage to be physically disturbed? 0.45 acres Includes Wetland Mitigation Area
   c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 4.04 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): Wetlands
☐ Parkland

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	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?	☐	☑
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area? If Yes, identify: _____	☑	☐
8. a. Will the proposed action result in a substantial increase in traffic above present levels?	☑	☐
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?	☑	☐
9. Does the proposed action meet or exceed the state energy code requirements? If the proposed action will exceed requirements, describe design features and technologies: _____	☐	☑
10. Will the proposed action connect to an existing public/private water supply? If No, describe method for providing potable water: Individual well	☑	☐
11. Will the proposed action connect to existing wastewater utilities? If No, describe method for providing wastewater treatment: Subsurface sewage disposal system	☑	☐
12. a. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places?	☑	☐
b. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory?	☑	☐
13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency?	☐	☑
b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody?	☑	☐
If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres: Local wetland. Waterbody Tributary to NYSDEC River - 864-317 Class A (T) Disturbances: 0.02 acres Well Location		

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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? Long Eared Bat	☐	☑
16. Is the project site located in the 100-year flood plan? Site is located upstream if flood plane limit.	☑	☐
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: Discharges to wetland & stream which bisects the property.		
There is no increase of on-site runoff for 1, 2, 10 & 100-year storm events		
18. Does the proposed action include construction or other activities that would result in the impoundment of water or other liquids (e.g., retention pond, waste lagoon, dam)? If Yes, explain the purpose and size of the impoundment:	☑	☐
19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility? If Yes, describe:	☑	☐
20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste? If Yes, describe:	☑	☐

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

Applicant/sponsor/name: Peder Scott, P.E., R.A. Date: January 24, 2024

Signature: _____ Title: Engineer

PRINT FORM

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FIGURES

Figure 1.0: Lot Aerial Photo
Figure 2.0: NYSDEC Mapper Printout
Figure 3.0: Soils Map

Figure 1.0
Aerial Photo

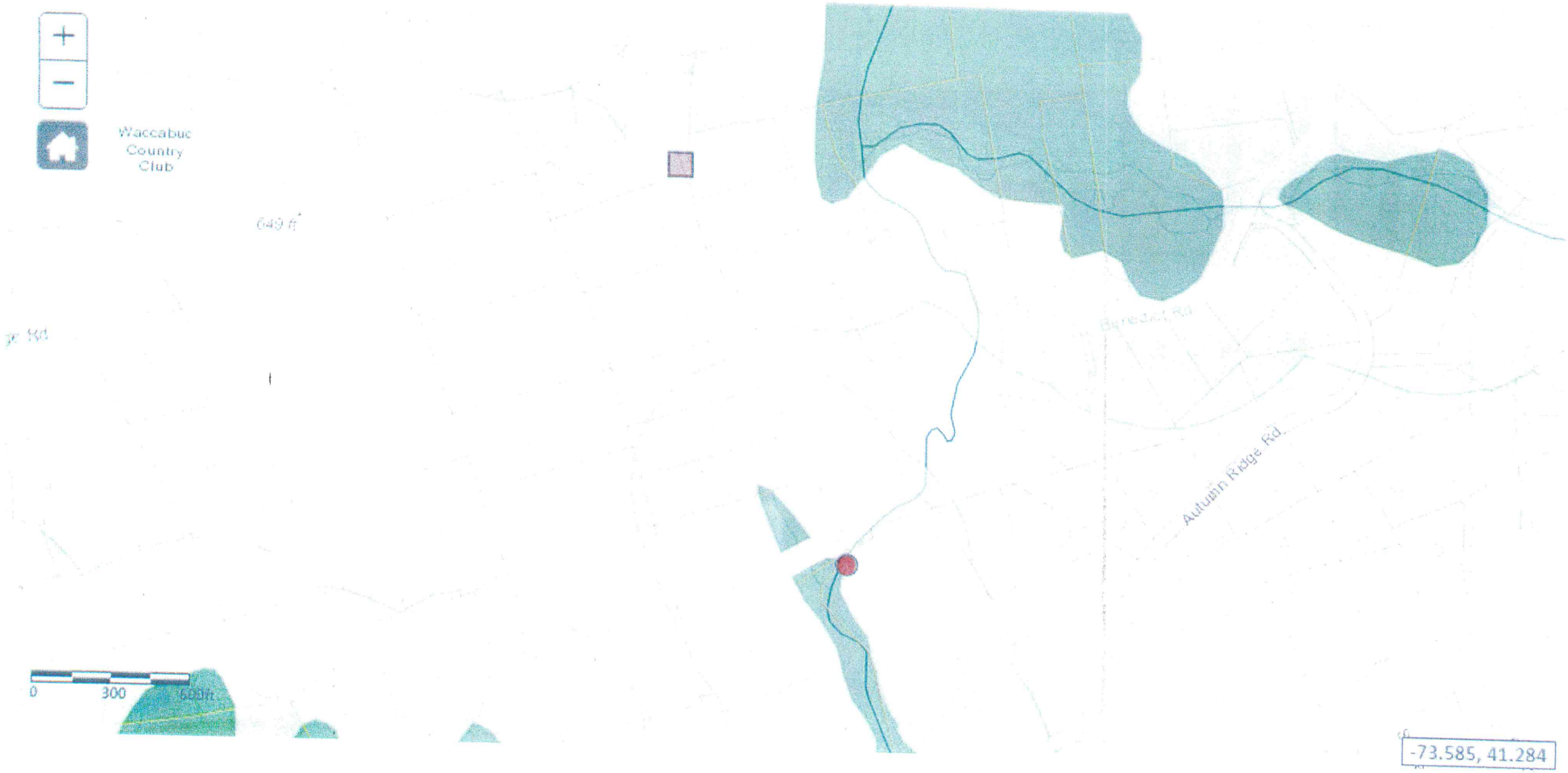
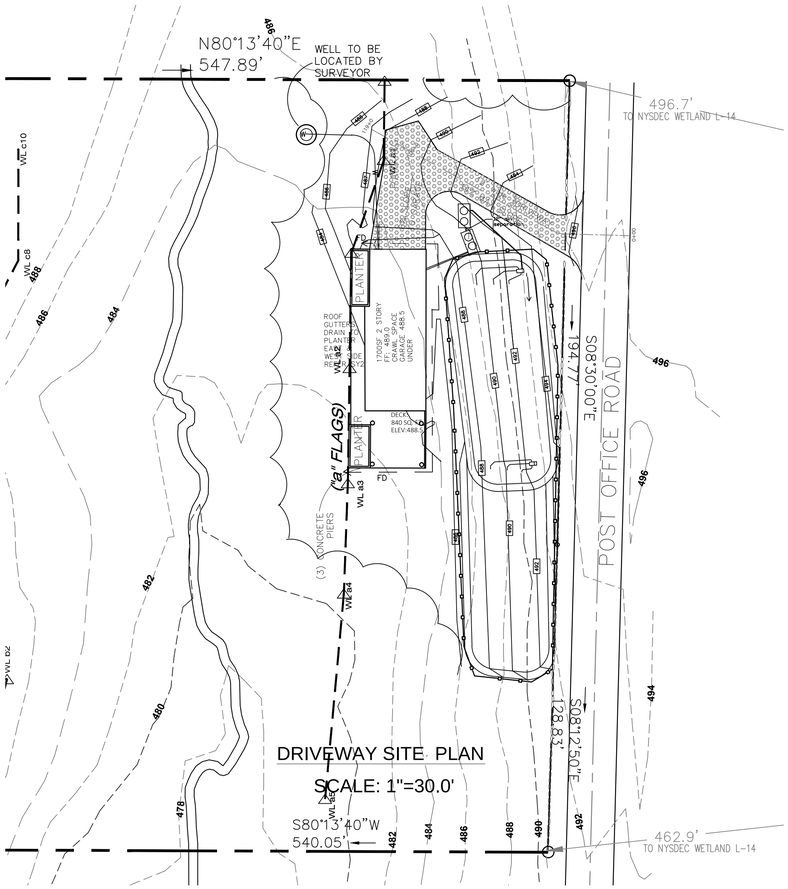
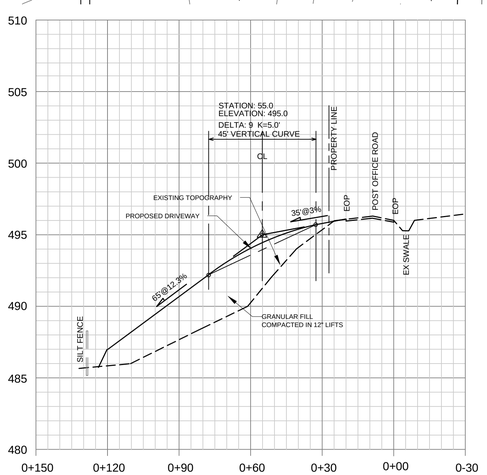


Figure 2.0
NYCDEC Mapper

Figure 3.0
Soils Map

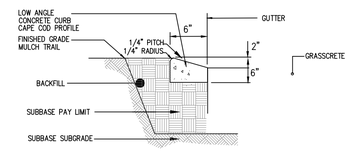




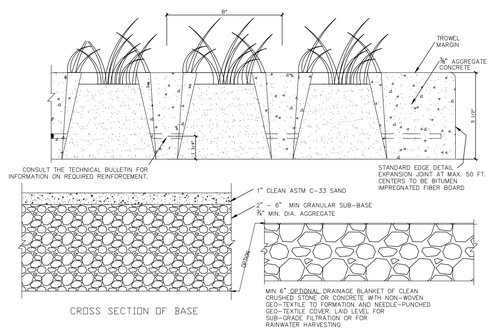
DRIVEWAY PROFILE

SCALE: HOR: 1"=30.0'
SCALE: VERT: 1"=5.0'

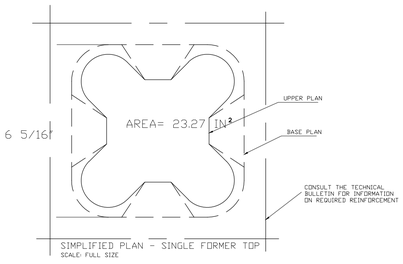
NOTE:
1. REFER TO ROAD CROSS SECTION DETAIL FOR DEPTH OF SUBBASE.



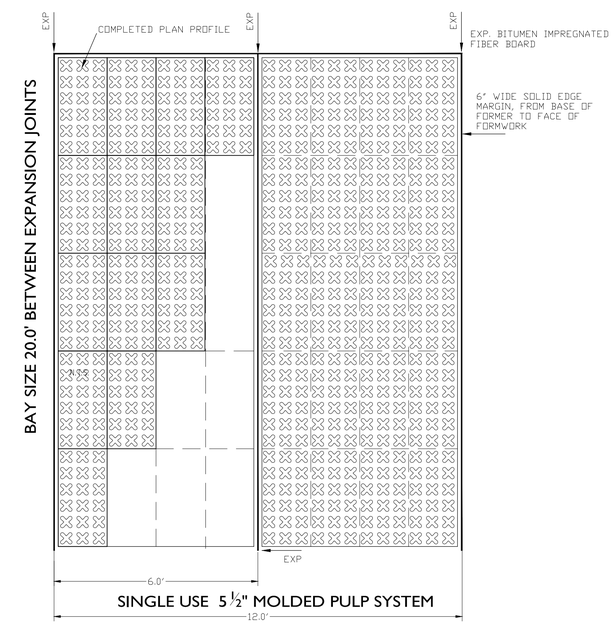
OPTIONAL CONCRETE CURB ON GRASS-CRETE DETAILS
N.T.S.



GRASSCRETE FOUNDATION DETAILS
N.T.S.



OPENING DIMENSIONS
N.T.S.



GRASSCRETE LAYOUT PLAN
N.T.S.

CUT AND FILL ANALYSIS

Site Volume Table: Unadjusted

Site	Stratum	Surf1	Surf2	Cut cy	Fill cy	Net cy	Method
cut and fill	cf2	existing	proposed	143	696	553 (F)	Grid

includes 12" septic fill eqaul to 260 cy primary and reserve areas

A 10'X10' GRID PLAN OF THE CUT AND FILL VOLUMES IS AVAILABLE FOR REVIEW BASED UPON CIVIL 3D ANALYSIS

NOTE: DO NOT SCALE DRAWINGS DIMENSIONS SUPERCEDE SCALE

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3871 ROUTE 6
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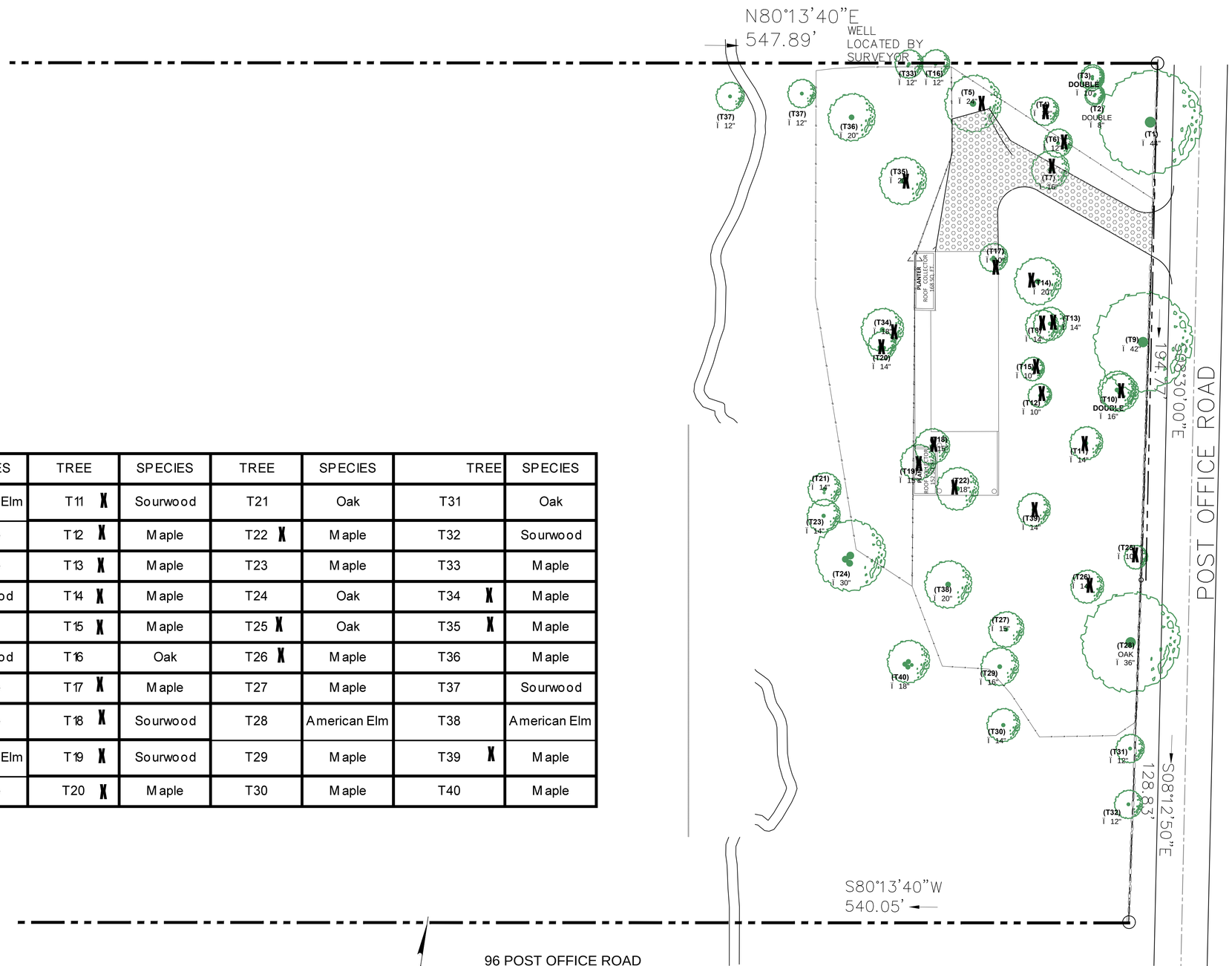
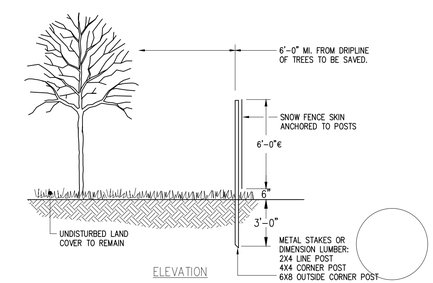
Revisions

No.	Date	Description
C	9/20/23	ADD CUT/FILL VOL PER TE
E	1/24/24	2 PLANTER DESIGN

Dwg. Title: DRIVEWAY DETAILS
Project Title: 96 POST OFFICE ROAD, LEWISBORO,NY
Proj. No. 21-110
Drawn by MA/PWS
Date 8/16/23
Scale AS NOTED
Seal
Dwg. No. SY3



TREE	SPECIES	TREE	SPECIES	TREE	SPECIES	TREE	SPECIES
T1	American Elm	T11 X	Sourwood	T21	Oak	T31	Oak
T2	Maple	T12 X	Maple	T22 X	Maple	T32	Sourwood
T3	Maple	T13 X	Maple	T23	Maple	T33	Maple
T4 X	Sourwood	T14 X	Maple	T24	Oak	T34 X	Maple
T5 X	Oak	T15 X	Maple	T25 X	Oak	T35 X	Maple
T6 X	Sourwood	T16	Oak	T26 X	Maple	T36	Maple
T7 X	Maple	T17 X	Maple	T27	Maple	T37	Sourwood
T8 X	Maple	T18 X	Sourwood	T28	American Elm	T38	American Elm
T9	American Elm	T19 X	Sourwood	T29	Maple	T39 X	Maple
T10 X	Maple	T20 X	Maple	T30	Maple	T40	Maple



1 / SY4 TREE PROTECTION DETAIL
N.T.S.

TREES TO BE REMOVED: X

ANY TREES TO REMAIN SHALL BE PROTECTED FROM THE DISTURBANCE ZONE PER DETAIL 1/SY4 NOTED ABOVE

96 POST OFFICE ROAD
TREE PRESERVATION PLAN
SCALE:1"=20'

NOTE: DO NOT SCALE DRAWINGS DIMENSIONS SUPERCEDE SCALE

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BREWSTER, NY 10509 845-278-2110

Revisions

No.	Date	Description

Dwg. Title: TREE PRESERVATION PLAN
Project Title: 96 POST OFFICE ROAD, LEWISBORO,NY
Proj. No. 21-110 | Drawn by MA/PWS
Date 1/24/24 | Scale AS NOTED
Seal
Dwg. No. SY4