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JUNE 21, 2022 MEETING

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TOWN OF LEWISBORO Westchester County, New York



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

AGENDA

Tuesday, June 21, 2022

South Salem, New York 10590

Planning Board

79 Bouton Road

Via Zoom videoconferencing and live streaming to Lewisboro TV YouTube channel

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

Join Zoom Meeting

https://us06web.zoom.us/j/87195112740?pwd=NEpOQitNTmJqVFAyNE9mQTBqTysvdz09

Meeting ID: 871 9511 2740 Passcode: 257579

https://www.youtube.com/channel/UCNUNE5gXs5rnHcyR4l6dikA

I. DECISION

Cal #09-22PB, Cal #17-22WP, Cal #10-22SW

Indian Hills Water System, 0 Apache Circle, Katonah, NY 10536, Sheet 10, Block 11152, Lot 189 (Waccabuc Water Works, Inc, owner of record) - Application for construction of a water treatment facility and three new wells.

<u>Cal #07-22PB</u>

Waccabuc Country Club/Harder Lot Line Change, 0 Carriage House Road, Waccabuc, NY, 10597, Sheet 22, Block 10802, Lot 36 (Waccabuc Country Club Co., owner of record) and 128 Mead Street, Waccabuc, NY, Sheet 22, Block 10802, Lots 59 & 83 (Donald & Teresa Harder Revocable Trust, owners of record) - Application for a lot line change.

Cal #05-22PB

The Boro Café, 873 Route 35, Cross River, NY 10518, Sheet 20, Block 10800, Lots 2 & 8 (GHI Real Estate Corp., owner of record) - Application for change of use from office to restaurant and yoga studio.

II. EXTENSION OF TIME REQUEST

Cal #07-21PB

Cross River Pharmacy, 890 Route 35, Cross River, NY 10518, Sheet 20, Block 10801, Lot 30 (Central Ave., White Plains, LLC., owner of record) - Application for a change of use.

III. PUBLIC HEARING

Cal #03-13PB, Cal #03-16WP

"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) - Applications for Subdivision, Wetland Activity and Stormwater Permits for the construction of a 13-lot subdivision.

IV. SITE DEVELOPMENT PLAN REVIEW AND LEAD AGENCY DISCUSSION

Cal #06-22PB, Cal #05-22WP, Cal #03-22SW

Waccabuc Country Club Snack Bar, 0 Perch Bay Road, Waccabuc, NY 10597, Sheet 25, Block 11155, Lot 148 & Sheet 25A, Block 10813, Lot 1 (Waccabuc Country Club Co., owner of record for both lots) - Application for beachfront improvements including renovation of the boathouse, construction of a pavilion, replacement of the snack bar, and installation of accessible parking and walkways.

V. SUBDIVISION

<u>Cal #10-22PB</u>

JJE33 Holdings LLC, 27 Old Oscaleta Road, South Salem, NY 10590; Sheet 35, Block 11826, Lots 3, 11 & 12 (JJE33 Holdings LLC, owner of record) – Application for a lot-line change.

VI. WETLAND PERMIT REVIEW

Cal #29-21WP, #03-20WV

Schilke Residence, 3 Beaver Pond, South Salem, NY 10590, Sheet 46, Block 9827, Lot 184 (Sophia Chenevert-Schilke and D. Chenevert, owners of record) - Application for the remediation of wetlands.

Cal #72-21WP, Cal #21-21SW

Dayton Pool/Patio, 62 Mead Street, Waccabuc, NY 10597, Sheet 22, Block 10802, Lot 70 (Duncan and Rena Dayton, owners of record) - Application for a courtyard including new pool, fire pit and pavers.

VII. SITE VISIT REPORT

Cal #15-22WP, Cal #07-22SW

Rini/Langel Residence,15 Benedict Road, South Salem, NY 10590, Sheet 33, Block 11155, Lot 10 (James Rini and Elizabeth Langel, owners of record) - Application for a garage/cabana, pool and patio

VIII. CORRESPONDENCE

Referral from Wilton, CT Inland Wetlands Commission – Amadeo Residence, 101 Silver Spring Road, Wilton, CT – Application for proposed driveway reconfiguration, septic modification and new infiltration system.

- IX. MINUTES OF May 17, 2022.
- X. NEXT MEETING DATE: July 19, 2022.
- XI. ADJOURN MEETING.



architects + engineers

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May 27, 2022

Janet Andersen, Chairperson Town of Lewisboro Planning Board 79 Bouton Road South Salem, NY 10590

Re: Liberty Utilities Indian Hills Water System Improvements Sheet 0010, Block 11152, Lot 184 Site Plan Submission

Dear Chairperson Andersen,

The subject project proposes a new water treatment building (public utility) on the existing site of a water treatment and supply facility on an 8.2134-acre parcel (31.4-3-3) in the R-2A (One Family Residence, 2-acre min. lot area) having frontage on Apache Circle Road and Waccabuc Road (County Route 138) requiring site plan and special permit approval from your Board.

Background: The existing site is a water treatment and supply facility previously owned by Indian Hill Water System. In 2012, Liberty Utilities (previously New York American Water) acquired the system and assumed responsibility for maintenance and operation of the Indian Hills Water System. Recent water quality sampling noted instances of contaminants exceeding maximum containment levels (MCLs) in the three existing onsite wells (Wells No. 2, 3 and 4). Liberty Utilities is currently working with the Westchester County Department of Health (WCDOH) to provide required treatment and system upgrades. The proposed treatment building will be designed for the removal radionuclides, iron and manganese, and per- and polyfluoroalkyl substances (PFAS) from the onsite wells to non-detectable concentrations below permitted MCLs.

In addition to the treatment upgrades, the project will seek to install a new water storage tank and new onsite water supply. Up to three test wells (TW-5, TW-6, and TW-7) will be drilled and tested. If a suitable well is found, it will pipe to the treatment building as part of the proposed site improvements. This new water supply will be added as a redundant water source and will allow the system to comply with the Recommended Standards for Water Works (also known as Ten States Standards). By adding a new water supply, the water system will be able to meet maximum day demand with the largest well out of operation.

The project Sketch Plan was presented at your April 19, 2022 meeting and determined to meet the criteria of a Type II Action under SEQRA. A Public Hearing was held May 17, 2022 meeting; your Board closed the public hearing and requested we provide additional information on items specified in correspondence from your consultants.

- A. <u>Materials Submitted</u>: Three (3) copies of the following documents have been submitted for your consideration:
 - 1. Stormwater Report prepared by H2M architects and Engineers, dated April 2022, last revised May 26, 2022;
 - ² Site Plans, prepared by H2M architects + engineers, dated April 2022, last revised May 26, 2022, consisting of the following sheets:



Drawing No.	Sheet Title	Date
V 100.00	Existing Conditions Plan	05/27/2022
CD 100.00	Demolition Site Plan	05/27/2022
CS 100.00	Dimensional Site Plan	05/27/2022
C 100.00	Grading & Drainage and	05/27/2022
	Erosion & Sediment Control Plan	05/27/2022
C 101.00	Wetland Mitigation Plan	05/27/2022
C 500.00	Site Details	05/27/2022
C 501.00	Site Details	05/27/2022

B. <u>Response to Comments</u>: On May 13, 2022, the office of Kellard Sessions provided our office with comments pertaining to the Site Plan submission. Comments are repeated below for your reference followed by our response:

<u>SEQRA</u> – The proposed action has been preliminarily identified as a Type II Action¹ and is therefore categorically exempt from the State Environmental Quality Review Act (SEQRA).

H2M Response: We agree that the project meets the criteria of a Type II.

Required Approvals -

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

H2M Response: A Stormwater Report and Wetlands Report have been provided. The Public Hearing was closed at your Board's May 17, 2022 meeting.

 The subject property is located within the NYC East of Hudson Watershed and proposed land disturbance exceeds 5,000 s.f. Coverage under New York State Department of Environmental Conservation (NYSDEC) SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-20-001) will be required.

H2M Response: The disturbance area has been delineated on Sheet C 100.00. A copy of the eNOI was been included in the appendix of the Stormwater Report.

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

H2M Response: Agreed, a submission to the NYSDEC was made on April 11, 2022. No disturbance to wetland areas under NYSDEC jurisdiction shall be made until permit approval.

4. The water system requires approval from the Westchester County Department of Health (WCHD).

¹ Construction or expansion of a primary or accessory/appurtenant, nonresidential structure or facility involving less than 4,000 square feet of gross floor area and not involving a change in zoning or a use variance and consistent with local land use controls, but not radio communication or microwave transmission facilities.



H2M Response: Agreed, our office will be making a formal submission to the WCHD upon conditional approval and will address comments received from the Department. The proposed treatment system will not be placed online without approval from the WCDH.

Comments -

1. 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. The mitigation plan shall be incorporated into the plan set.

H2M Response: Areas of disturbance for the test well access and associated improvements are be restored and seeded with a wetland seed mix. This will allow restoration of areas while also allowing for future access to wells as necessary. In areas where seeding could not be achieved due to site improvements (new treatment building, storage tanks, gravel access, etc) the project proposes to remove thorn bushes and overgrown vegetation to the south of the driveway. This area (totally slightly more than 3,000 square feet) will provide mitigation to offset said improvements. The area will be seeded with an upland wetland seed mix and will feature a new planting with native trees and shrubs. A 1:1 or greater mitigation area has been achieved for the project. The proposed seed mix and concept for planting and removal of vegetation was discussed with the office of your consultant, Kellard Sessions, on May 26, 2022.

2. Based on the boring taken at that proposed stormwater detention structure location, groundwater was encountered at 6'-2" below existing grade. The existing grade at this location is roughly 404 ft. Based on this data, the current design would require that the proposed detention tank be partially submerged. The applicant shall provide buoyancy calculations to demonstrate that the tank will not float when empty during high groundwater conditions.

H2M Response: Groundwater encountered at this location may have been unusually high as the boring located 60' away, B-2, experienced groundwater at a depth of 14'-6". Regardless, the stormwater detention structure has been made slightly more shallow and wider to provide separation from the groundwater table. Please see Sheet C 100 and C 501 demonstrating this change. The SWPPP has also been revised to account for the change to the detention basin.

3. The stormwater mitigation calculations shall be revised to have sheet flow distances equal to or less than 100 ft. Please revise.

H2M Response: The sheet flow distances have been revised as requested. Please see Appendix G of the SWPPP.

4. The plans shall include profiles for the proposed water service mains as well as specifications and construction details related to the proposed stream crossing and crossing with the proposed stormwater outlet pipe.

H2M Response: Site plans now identify invert elevations to confirm no conflicts with utility crossings. Additionally, a detail for the watermain and stream crossing are provided.



5. It is anticipated that the construction for the project will require that the existing drive be resurfaced, in addition to the modest widening proposed. The application should consider including this resurfacing and illustrating the limits on the plan.

H2M Response: As discussed at your May 17, 2022 meeting, there is no resurfacing or driveway widening proposed with the exception of the driveway replacement adjacent to the treatment building. However, in the event asphalt surfaces are damaged (see Note 12 Sheet C 100), a driveway repair detail has been provided (Sheet C 501, Detail 5).

6. The plans shall be revised to identify the correct Tax Parcel Sheet, Block and Lot.

H2M Response: As requested, the plans have been updated, see Note 2, Sheet V 100.

7. The plans shall be signed/sealed by the design professional.

H2M Response: Prior to final submission for site plan approval, the plans will be signed and sealed.

8. The applicant shall submit architectural floor plans and elevations of the building, signed and sealed by a NYS Registered Architect or Professional Engineer.

H2M Response: As discussed, Architectural Plans will be submitted as soon as confirmation of proposed layout of the treatment process by Department of Health is completed. As soon as this is confirmed, we will submit final Architectural Plans. Please note that the project does not object to any recommendations from the Planning Board regarding Building color.

- 9. The following comments pertain to the Notice of Intent:
 - a. Please correct the tax number
 - b. Question #13 should be answered "No"
 - c. Question #15 should be answered "No"
 - d. Question #22 should be answered "No"
 - e. Question #23 should have no answer

H2M Response: As requested, the NOI has been updated. See Appendix D of the attached SWPPP.

- **C.** <u>Response to Conservation Advisory Council Comments</u>: On May 10, 2022, the Lewisboro Conservation Advisory Council provided our office with comments pertaining to the Site Plan submission. Comments are repeated below for your reference followed by our response:
 - 1. In addition to the wetland mitigation plan, the CAC would also like to know if any chemicals are added to the water that could have a negative impact on the wetlands.

H2M Response: As discussed at your May 17, 2022 meeting, the project does not propose any use of chemicals at the wellheads. Any treatment will be performed inside of the treatment building. The storage, use and handling of chemicals shall be in accordance with regulatory requirements.

2. The plans also show the removal of a 26 inch maple tree, a specimen tree. This tree appears to be on the edge of the road and the CAC would like to understand if the road could be moved slightly to preserve this tree.

Janet Andersen, Chairperson Town of Lewisboro Planning Board May 27, 2022 Page 5 of 5



H2M Response: Sheet CD 100 now identifies the 26" maple to remain and be protected during construction.

With this submission, we are requesting placement on your Planning Board's June 21, 2022, Agenda for continued discussion of our Site Plan. We look forward to further discussion of the project with your Board. Should you have any questions, please advise.

Very truly yours,

H2M architects + engineers

James J. Roberts, P.E. Senior Vice President

Enclosures

cc: Christopher Peters, Liberty Utilities (w/ enclosures) John Kilpatrick, Liberty Utilities (w/ enclosures) Steve Wondrack, Liberty Utilities (w/ enclosures) Christopher Wright, Project Manager (w/ enclosures)







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LEGEND

DESCRIPTION

REMOVE AND DISPOSE EXISTING TREE

EXISTING TREE TO BE PROTECTED

SAWCUT PAVEMENT LINE

REMOVE AND DISPOSE EXISTING ASPHALT PAVEMENT

LIMITS OF VEGETATION/ TREE CLEARING



<u>SYMBOL</u>

SITE DEMOLITION NOTES:

1. REPORT ANY DISCREPANCIES BETWEEN ACTUAL FIELD CONDITIONS AND THE PLANS TO THE ENGINEER IN WRITING IMMEDIATELY.

2. UNDERGROUND UTILITY INFORMATION SHOWN ON THESE PLANS WAS OBTAINED FOR DESIGN PURPOSES ONLY. PROVIDE FOR CONSTRUCTION MARKOUT AND LOCATE EXISTING UNDERGROUND UTILITIES. NO EXCAVATION CAN COMMENCE UNTIL UTILITY DOCUMENTATION HAS BEEN COMPLETED.

3. NO COMPENSATION WILL BE MADE FOR ANY INCONVENIENCE CAUSED BY ENCOUNTERING UTILITIES AND STRUCTURES WHICH ARE NOT SHOWN, OR ARE INACCURATELY SHOWN ON THE PLANS.

4. REPAIR ANY DAMAGE TO EXISTING UTILITIES RESULTING FROM CONTRACTOR OPERATIONS IMMEDIATELY AT NO COST TO OWNER.

5. REPAIR ANY DAMAGE TO EXISTING SITE FEATURES SCHEDULED TO REMAIN RESULTING FROM CONTRACTOR OPERATIONS AT NO COST TO OWNER.

6. INSTALL EROSION CONTROL MEASURES AS SHOWN ON THE EROSION AND SEDIMENT CONTROL PLAN PRIOR TO ANY GROUND DISTURBANCE.

7. DELINEATE THE LIMITS OF CLEARING AND REVIEW WITH THE OWNER PRIOR TO COMMENCING WORK.

8. NOTIFY OWNER AND ENGINEER IMMEDIATELY IN WRITING WHEN UNKNOWN STRUCTURES OR SUSPECTED HAZARDOUS OR CONTAMINATED MATERIALS ARE ENCOUNTERED PRIOR TO REMOVAL OR DISTURBANCE.

9. TAKE APPROPRIATE MEASURES TO PROTECT PEDESTRIANS AND VEHICULAR TRAFFIC DURING REMOVAL ACTIVITIES, AND PROVIDE TEMPORARY MEASURES FOR THE PROTECTION AND SAFETY OF THE PUBLIC UNTIL FINAL ACCEPTANCE BY THE OWNER.

10. BACKFILL ALL VOIDS RESULTING FROM THE REMOVAL OF EXISTING SITE FEATURES. BACKFILL TO BE SOIL, FREE OF ORGANIC MATERIAL, DEBRIS, TRASH, CLAY AND STONES LARGER THAN 4 INCHES.

OTAL TREE/VEGETATION REMOVAL AREA = 12,200 SF (0.28 AC.) TOTAL TREES FOR REMOVAL = 26 TREES	Liberty Utilities
	Indian Hills System Improvements
	Liberty ™
GRAPHIC SCALE	Town of Lewisboro Westchester County, NY
(IN FEET) 1 inch = 20 ft.	PWS ID: NY 5918382
APPROVED BY RESOLUTION OF THE LEWISBORO PLANNING BOARD Janet Andersen, Chair Date	ALL CONTRACTS
Ciorsdan Conran, Administrator Date	STATUS REGULATORY REVIEW
TOWN ENGINEER'S CERTIFICATION Reviewed for compliance with the Planning Board Resolution dated	SHEET TITLE
Joseph M. Cermele, P.E. Date Kellard Sessions Consulting Town Consulting Engineer	DEMOLITION SITE PLAN
OWNER'S CERTIFICATION The undersigned is the owner(s) of the property shown hereon, is familiar with this drawing and its contents, and hereby approves same for filing.	
Owners Name (Insert Name) Date Owners Address (Insert Address) Date	



ONSULTANTS:

architects engineers

2 Executive Blvd., Suite 401 Suffern, NY 10901 845.357.7238 • www.h2m.com

MARK		DESCRIPTION
1	05-27-22	REVISED PER TOWN COMMENTS

"ALTEF	RATION OF T	HIS DOCUMENT EXCEPT	BY A LICENSED PROFESS	SIONAL IS IL	LEGAL"
DESIGNED BY:	DRAWN	SFP	CHECKED BY:		Q Q REVIEWED BY:
PROJECT No.:		DATE:		SCALE	<u> </u>
NYAW 2004		APRIL	_ 2022	Å	AS SHOWN

Jtilities





LEGEND	
DESCRIPTION	<u>SYMBOL</u>
DOOR	\square
OVERHEAD DOOR	
DRAINAGE CLEAN OUT	
WALL MOUNTED LIGHT	\boxtimes
CHAIN LINK FENCE	x x
ASPHALT PAVEMENT	
GRAVEL DRIVEWAY	
CONCRETE PAVEMENT	



EROSION CONTROL NOTES:

1. DURING THE COURSE OF CONSTRUCTION, EROSION AND SEDIMENT CONTROL MEASURES ARE NECESSARY TO PREVENT THE TRANSPORT OF SEDIMENT TO UNDISTURBED AREAS, PONDS, WATER COURSES, DRAINAGE SYSTEMS, RECHARGE BASINS, AND ROADS. THE MINIMUM EROSION CONTROL MEASURES REQUIRED ARE INDICATED ON THIS PLAN. IN ADDITION, THE FOLLOWING GENERAL CONDITIONS SHALL BE OBSERVED:

- a. EXISTING VEGETATION SCHEDULED TO REMAIN SHALL BE PROTECTED AND REMAIN UNDISTURBED.
- b. INSTALL ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES AS REQUIRED TO PREVENT THE INCIDENTAL DISCHARGE OF SEDIMENT FROM THE SITE.

SPECIFIC METHODS AND MATERIALS EMPLOYED IN THE INSTALLATION AND MAINTENANCE OF EROSION CONTROL MEASURES MUST CONFORM TO THE LATEST EDITION OF THE "NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL".

3. INSTALL PROPRIETARY EROSION AND SEDIMENT CONTROL PRODUCTS IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS.

4. ADJUST EROSION AND SEDIMENT CONTROL MEASURES TO ACCOMMODATE CONSTRUCTION PHASING TO MAINTAIN EFFECTIVENESS OF EROSION AND SEDIMENT CONTROL MEASURES.

PROTECT EXISTING DRAINAGE INLETS WITHIN THE PROJECT LIMITS AND NEW DRAINAGE INLETS INSTALLED AS PART OF THIS PROJECT FROM SEDIMENT INTRUSION.

PERFORM INSPECTION AND MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES ON A WEEKLY BASIS AND AFTER HEAVY OR PROLONGED STORMS. MAINTENANCE MEASURES INCLUDE, BUT ARE NOT LIMITED TO, CLEANING AND REPAIR OF ALL EROSION AND SEDIMENT CONTROL MEASURES.

7. UTILIZE APPROPRIATE MEANS TO CONTROL DUST DURING CONSTRUCTION, INCLUDING BUT NOT LIMITED TO APPLYING WATER TO BARE SOIL SURFACES.

MAINTAIN THE SITE ENTRANCE TO PREVENT SOIL AND LOOSE DEBRIS FROM BEING TRACKED ONTO LOCAL ROADS. IF DETERMINED NECESSARY BY ENGINEER OR TOWN OF LEWISBORO, A CONSTRUCTION ENTRANCE SHALL BE INSTALLED. MAINTAIN THE CONSTRUCTION ENTRANCE WEEKLY UNTIL THE SITE IS PERMANENTLY STABILIZED.

ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL DISTURBED AREAS ARE PERMANENTLY STABILIZED. AFTER PERMANENT STABILIZATION, REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES AND ALL ACCUMULATED SEDIMENT AND DEBRIS FROM THE SITE AND DRAINAGE STRUCTURES.

TOTAL LAND DISTURBANCE = 17,740 SF OR 0.41 ACRES NYSDEC WETLAND DISTURBANCE = 8,832 SF OR 0.20 ACRES

GRADING AND DRAINAGE NOTES:

1. FOR NEW CONSTRUCTION THAT MEETS EXISTING CONDITIONS, ABUTTING SURFACES SHALL BE FLUSH AND ALIGNED.

2. THE CONTRACTOR SHALL CONFIRM INVERT ELEVATIONS OF ALL ROOF DRAINS AND STORMWATER CONNECTIONS PRIOR TO COMMENCING SITE DRAINAGE CONSTRUCTION.

3. ADJUST ALL EXISTING CASTINGS AND VALVE COVERS AS NECESSARY TO MEET PROPOSED GRADE.

4. CONSTRUCTION DEBRIS AND EXCESS SOIL SHALL BE REMOVED AND LEGALLY DISPOSED OFF SITE.

5. UNSUITABLE SOILS ENCOUNTERED DURING CONSTRUCTION SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER IMMEDIATELY IN WRITING BEFORE REMOVAL OR DISTURBANCE.

PIPE MATERIAL SPECIFICATIONS:

• ROOF LEADER TO FES CONNECTION: 6"Ø PVC

APPROVED BY RESOLUTION OF THE LEWISBORO PLANNING BOARD



architects + engineers

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CONSULTANTS:		
MARK	DATE	DESCRIPTION
1	05-27-22	REVISED PER TOWN COMMENTS

"ALTEF	ATION OF T	HIS DOCUMENT EXCEPT	BY A LICENSED PROFESS	SIONAL IS ILI	LEGAL"
DESIGNED BY: SFP	DRAWN	IBY: SFP	CHECKED BY:		REVIEWED BY:
PROJECT No.: NYAW 2004		DATE: APRII	_ 2022	SCALE:	AS SHOWN

Liberty Utilities

Indian Hills System Improvements



Town of Lewisboro Westchester County, NY

PWS ID: NY 5918382

ALL CONTRACTS

REGULATORY REVIEW

HEET TITL

GRADING & DRAINAGE AND EROSION & SEDIMENT CONTROL PLAN

C 100.00



PLANTING NOTES

1. ALL PLANTINGS TO BE COMPLETED BY PHASE 2 CONTRACTOR. REFER TO C 501.00 FOR TREE AND SHRUB PLANTING DETAILS. ALL SUPPLIED AND INSTALLED PLANT MATERIAL SHALL BE NURSERY GROWN STOCK IN ACCORDANCE WITH THE LATEST EDITION OF THE "AMERICAN STANDARD FOR NURSERY STOCK" (ANSI Z60.1). PLANT MATERIAL SHALL BE OF THE APPROVED SPECIES AND GROWN UNDER THE SAME CLIMATIC CONDITIONS AS THE SUBJECT SITE. THEY SHALL BE OF SYMMETRICAL GROWTH, FREE OF INSECTS, PESTS, AND DISEASE. SUBSTITUTIONS MUST BE APPROVED IN WRITING BY THE LANDSCAPE ARCHITECT.

2. CONFIRM THE LOCATION OF EXISTING SUBSURFACE UTILITIES WITH THE RESPECTIVE UTILITY COMPANIES AND COORDINATE WITH THE GRADING AND DRAINAGE PLAN OR UTILITY PLAN FOR THE LOCATION OF PROPOSED SUBSURFACE UTILITY LINES AND STRUCTURES PRIOR TO ANY EXCAVATION. NOTIFY THE LANDSCAPE ARCHITECT IF ANY CONFLICTS EXIST.

3. NOTIFY THE OWNER IMMEDIATELY AND PRIOR TO THE INSTALLATION OF ANY PLANT MATERIALS IF SUB-GRADE SOIL CONDITIONS ARE DELETERIOUS TO PLANT GROWTH OR WILL INHIBIT DRAINAGE.

4. IF ANY DISCREPANCY EXISTS BETWEEN THE PLANT COUNT SHOWN IN THE PLANT MATERIAL LIST AND THE PLANTING PLAN. THE PLAN SHALL TAKE PRECEDENCE.

5. UNLESS OTHERWISE APPROVED IN WRITING, INSTALL VEGETATION DURING THE FOLLOWING PERIODS: a. DECIDUOUS WOODY PLANTS: SEPTEMBER 15 TO MAY 15 WHENEVER TEMPERATURE IS ABOVE 40 DEGREES F. b. EVERGREENS: AUGUST 15 TO SEPTEMBER 15 OR DURING APRIL AND MAY BEFORE THE START OF NEW GROWTH. c. SEEDING: APRIL 1 TO MAY 15 AND SEPTEMBER 1 TO OCTOBER 15.

6. PLANTS SHALL BEAR THE SAME RELATIONSHIP TO FINISHED GRADE AS THEY BORE TO THE EXISTING GRADE IN THE NURSERY.

7. THE TRUNK DIAMETER OF DECIDUOUS TREES SHALL BE MEASURED IN ACCORDANCE WITH THE LATEST EDITION OF THE "AMERICAN STANDARD FOR NURSERY STOCK" (ANSI Z60.1) FOR THE CALIPER SIZE AS SHOWN IN THE PLANT MATERIAL LIST.

8. ALL DECIDUOUS TREES SHALL BE BRANCHED NOT LOWER THAN SEVEN (7) FEET WITH AN AVERAGE HEIGHT AND SPREAD FOR THE PARTICULAR SIZE AND SPECIES SPECIFIED, IN ACCORDANCE WITH THE LATEST EDITION OF THE AMERICAN STANDARD FOR

9. DO NOT LOCATE TREE TRUNKS WITHIN THREE (3) FEET OF ANY PARKING LOT OR STREET CURBS.

10. INSTALL A 2"-3" LAYER OF SHREDDED BARK MULCH IN ALL TREE PLANTING AREAS AND SHRUB BEDS. DO NOT PLACE MULCH DIRECTLY AGAINST TRUNKS OF TREES. FORM AN EARTH SAUCER AROUND EACH PLANT OR SHRUB BED SO AS TO HOLD WATER AND MULCH. PROVIDE SUFFICIENT IRRIGATION FOR ALL PLANT MATERIALS TO MAINTAIN HEALTHY AND VIGOROUS CONDITION UNTIL THE PROJECT IS ACCEPTED BY THE OWNER.

11. REMOVE TREE STAKES AND OTHER PLANTING GUIDE MATERIALS, IF SPECIFIED, AFTER ONE YEAR FROM THE TIME OF PLANTING.

12. ALL PLANT MATERIAL SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR AFTER PLANTING FOLLOWING ACCEPTANCE BY THE OWNER. UPON COMPLETION OF THE ONE YEAR PLANT GUARANTEE PERIOD, REPLACE ALL PLANT MATERIAL DEEMED DEAD, DYING OR DISEASED AS DETERMINED BY THE LANDSCAPE ARCHITECT. REPLACE PLANT WITH THE SAME SPECIES AND SIZE IMMEDIATELY DURING THE CURRENT GROWING SEASON OR AT THE BEGINNING OF THE NEXT GROWING SEASON.

13. UPON COMPLETION OF PLANTING OPERATION CULTIVATE AND NEATLY RAKE ALL PLANTING AREAS.

14. RESTORE ALL DISTURBED GRASS AREAS AND ALL AREAS NOT SPECIFICALLY IDENTIFIED FOR OTHER IMPROVEMENTS WITH 4 INCHES OF TOPSOIL AND SEED. PROVIDE SUFFICIENT MULCH AND IRRIGATION TO ESTABLISH AND MAINTAIN A HEALTHY STAND OF GRASS UNTIL PROJECT IS ACCEPTED BY THE OWNER.

PERMANENT SEEDING AND SOIL RESTORATION NOTES:

1. SOIL RESTORATION SHALL BE IN ACCORDANCE WITH CHAPTER 5, TABLE 5.3 OF THE NYS STORMWATER MANAGEMENT DESIGN MANUAL.

2. SOIL RESTORATION SHALL BE REQUIRED ON ALL AREAS OF THE SITE WHICH TOPSOIL WAS STRIPPED. SOIL RESTORATION STEPS ARE AS FOLLOWS:

2.1. APPLY 3 INCHES OF COMPOST OVER SUBSOIL

2.2. TILL COMPOST INTO SUBSOIL TO A DEPTH OF AT LEAST 12 INCHES USING A CAT-MOUNTED RIPPER,

TRACTOR-MOUNTED DISC, OR TILLER, MIXING, AND CIRCULATING AIR AND COMPOST INTO SUBSOILS 2.3. ROCK-PICK UNTIL UPLIFTED STONE/ROCK MATERIALS OF FOUR INCHES AND LARGER SIZE ARE CLEANED

OFF THE SITE 2.4. APPLY TOPSOIL TO A DEPTH OF 6 INCHES, COMPACT TO A UNIFORM THICKNESS OF 4" AND FINELY GRADE

AND LOOSEN WITH MECHANICAL RAKES TO ENSURE SEED ACCEPTANCE 2.5. SEED AND FERTILIZE AS REQUIRED BELOW

3. SEEDING, MULCHING, AND FERTILIZING FOR ALL DISTURBED AREAS NOT SPECIFIED FOR WETLAND SEED MIX SHALL BE AS FOLLOWS:

3.1. FERTILIZER SHALL BE APPLIED AT 6 LBS OF 5-10-10 COMMERCIAL FERTILIZER/1,000 SQ. FT. 3.2. SEEDING SHALL BE APPLIED AT 5 LBS/1,000 SQ. FT. CONSISTING OF 60% KENTUCKY BLUE GRASS, 20% CHEWINGS FESCUE AND 20% PERENNIAL RYE. 3.3. MULCH AREA WITH HAY OR STRAW AT 2 TONS/ACRE (APPROX. 90 LBS./1000 SQ. FT. OR 2 BALES). TO

4. SEEDING AND MULCHING FOR WETLAND BUFFER AREAS SPECIFIED SHALL BE AS FOLLOWS:

4.1 SEEDING SHALL BE APPLIED AT 20 LBS PER ACRE OR 1/2 LB PER 1,000 SQ.FT. CONSISTING OF ERNST SEEDS "SPECIALIZED WETLAND MIX FOR SHADED OBL-FACW AREAS".

4.2. MULCH AREA WITH HAY OR STRAW AT 2 TONS/ACRE (APPROX. 90 LBS./1000 SQ. FT. OR 2 BALES) TO MAINTAIN SOIL MOISTURE LEVEL.

5. SEEDING AND MULCHING FOR UPLAND MITIGATION AREAS SPECIFIED SHALL BE AS FOLLOWS:

5.1 SEEDING SHALL BE APPLIED AT 20 LBS PER ACRE OR 1/2 LB PER 1,000 SQ.FT. CONSISTING OF ERNST SEEDS "FACW WETLAND MEADOW MIX".

5.2. MULCH AREA WITH HAY OR STRAW AT 2 TONS/ACRE (APPROX. 90 LBS./1000 SQ. FT. OR 2 BALES) TO MAINTAIN SOIL MOISTURE LEVEL.

N
g Board Resolution dated
Date

	The undersigned is the owner(s) of the property shown hereon, is familiar with this drawing an
-	its contents, and hereby approves same for filing.
_	

wners Name (Insert Name) Date wners Address (Insert Address)



architects engineers

2 Executive Blvd., Suite 401 Suffern, NY 10901 845.357.7238 • www.h2m.com

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05-27-22	REVISED PER TOWN COMMENTS
	DATE 05-27-22

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Liberty Utilities

Indian Hills System Improvements



Town of Lewisboro Westchester County, NY

PWS ID: NY 5918382

ALL CONTRACTS

REGULATORY REVIEW

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CENTER ONE LENGTH OF

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- RIM ELEVATION



9'-0"

FINISHED GRADE

FINAL GRADE

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THE UTILITY AND OFFSET JOINTS MECH. JT. BENDS -



WHERE ONE LENGTH OF PIPE CANNOT BE

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WATER MAIN

AS REQUIRED

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	Liberty™
	Town of Lewisboro Westchester County, NY
	PWS ID: NY 5918382
APPROVED BY RESOLUTION OF THE LEWISBORO PLANNING BOARD	ALL CONTRACTS
Ciorsdan Conran, Administrator Date	STATUS REGULATORY REVIEW
TOWN ENGINEER'S CERTIFICATION Reviewed for compliance with the Planning Board Resolution dated	SHEET TITLE
Joseph M. Cermele, P.E. Date Kellard Sessions Consulting Town Consulting Engineer	SITE DETAILS
OWNER'S CERTIFICATION The undersigned is the owner(s) of the property shown hereon, is familiar with this drawing and its contents, and hereby approves same for filing. Owners Name (Insert Name) Date Owners Address (Insert Address)	DRAWING No. C 501.00

STORMWATER REPORT

FOR

INDIAN HILLS WATER SYSTEM IMPROVEMENTS

Town of Lewisboro Westchester County, New York

H2M Project No. NYAW 2004

April, 2022

Revised May 26, 2022

Prepared for:

Liberty Utilities 60 Brooklyn Avenue Merrick, NY 11566

Prepared by:

H2M architects + engineers 2 Executive Blvd., Suite 401 Suffern, NY 10901



architects + engineers

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STORMWATER REPORT FOR INDIAN HILLS WATER SYSTEM IMPROVEMENTS

Town of Lewisboro Westchester County, New York

1. EROSION AND SEDIMENT CONTROL

This Stormwater Pollution Prevention Plan (SWPPP) has been prepared in accordance with the specifications put forth in the New York State Department of Environmental Conservation SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-20-001). Erosion and sediment control practices are designed in conformance with the New York State Standards and Specifications for Erosion and Sediment Control.

A. PROJECT DESCRIPTION AND SCOPE

The Indian Hills Water System Improvements a site development project having frontage on Waccabuc Road and Apache Circle in Town of Lewisboro, Westchester County, NY (see location map in Appendix A). The project site is 8.21 acres in area. The proposed area of disturbance encompasses approximately 0.34 acres (approx. 14,740 sf) of the site.

The project scope includes proposes a new water treatment building on the existing site of a water treatment and supply facility on an 8.21-acre parcel. The interior of the new treatment building will include several vessels for the removals of contaminants discussed above as well as necessary pumps and mechanical accessories. Outside of the building, a 34,600-gallon water storage tank and backwash tank will be installed. Other site improvements include minimal site grading, gravel area building access, a small stormwater detention system and necessary site piping as shown on the detailed construction drawings included as Appendix H.

The primary potential source of pollution from construction activity associated with this project is sediment resulting from soil disturbance and stormwater runoff. Fuel from equipment used during construction activities and/or stored on-site is another potential source of pollution from this project.

B. <u>SOILS</u>

According to the Soil Survey of Westchester County, New York (USDA-NRCS, Web Soil Survey), the soils found at the project site are comprised of the following: ChD (Charlton fine sandy loam, 15 to 25 percent slopes), CsD (Chatfield-Charlton complex, 15 to 35 percent slopes, very rocky), Ff (Fluvaquents-Udifluvents complex, frequently flooded), PnB (Paxton fine sandy loam, 3 to 8 percent slopes), PnC (Paxton fine sandy loam, 8 to 15 percent slopes), PoC (Paxton fine sandy loam, 8 to 15 percent slopes, very stony), RdB (Ridgebury complex, 3 to 8 percent slopes), RdB (Ridgebury complex, 0 to 8 percent slopes, very stony), RhC (Riverhead loam, 8 to 15 percent slopes) and Ub (Udorthents, smoothed) . Soils at this site belong to Hydrologic Soil Group A, B, A/D, C and D. A soils report for this site is included in Appendix B of this report.

C. CONSTRUCTION SCHEDULE

The following general construction schedule provides the anticipated sequence of the proposed construction activities that may result in soil disturbance. Stabilization of disturbed areas shall be performed as the project progresses in order to minimize the potential for contamination of stormwater runoff.

Sequence of Construction

- Installation of silt fencing, inlet protection, and E&SC practices as shown on the Erosion & Sediment Control Plan;
- Clearing and grubbing of the project site areas indicated for development and removal of existing site features as necessary for the installation of the proposed improvements. All trees adjacent to disturbance areas shall receive tree protection;
- 3) Rough grading of the site;
- Installation of building and water storage tank foundation and site utilities including new water supply connections to proposed treatment building, stormwater detention system and any other necessary utility piping;
- 5) Construction of new water treatment building and water storage tank;
- 6) Final grading of disturbed areas to finished grade.
- 7) Installation of new aggregate base course for driveway access. Resurfacing and final pavement of any new pavement areas;
- 8) Seeding and mulching of disturbed areas;
- 9) Following final stabilization of disturbed areas, removal of remaining temporary erosion and sediment controls.

D. TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL PRACTICES

Temporary and permanent erosion and sediment control measures shall be installed and maintained by the general contractor (or subcontractor) in accordance with the engineering plans and details, and the New York State Standards and Specifications for Erosion and Sediment Control (NYS Soil and Water Conservation Committee, 2016). Descriptions for these measures are identified in the engineering plans and details in Appendix H.

Additional details for the duration of individual practices are provided below:

<u>Silt Fencing</u>: All silt fencing shall remain in place until all contributing areas have been fully stabilized (> 80% vegetative cover). Silt fencing shall be installed in accordance with the plans and any damaged silt fencing shall be repaired immediately. In wetland areas, a double row of silt fencing shall be used.

<u>Construction Entrance</u>: The intent of the construction entrance is to prevent tracking of sediment onto local roadways. Construction entrance shall remain in place until all soil disturbance activities have been completed and sediment tracking is no longer an issue. Any sediment which tracks off the site will be removed immediately.

<u>Concrete Washout</u>: If necessary, a concrete washout shall be provided by the contractor which will allow concrete truck mixers and equipment can be washed after their loads have been discharged, to prevent highly alkaline runoff from entering storm drainage systems or leaching into soil. The concrete washout shall be designed in accordance with Page 2.24 of the NYSDEC Erosion and Sediment Control Manual and shall remain onsite until all concrete work is completed.

<u>Soil Stockpile</u>: If necessary, soil stockpile areas shall serve to protect materials from washing offsite or into waterways. Stockpiles shall be surrounded with silt fencing or hay bales and shall remain in place until the stockpile has been removed. Any stockpile which are inactive shall be stabilized.

E. MAINTENANCE AND INSPECTION

Installation and maintenance of all temporary and permanent erosion and sediment control measures will be the responsibility of the general contractor. The general contractor shall ensure that a copy of the approved SWPPP is present on-site and that all sub-contractors are aware of the terms of the approved SWPPP and have signed the proper Certification Form.

The contractor shall have a trained contractor (as defined by GP-0-20-001) inspect the erosion and sediment control practices and pollution prevention measures within the active work area daily to ensure that they are being maintained in effective operating conditions at all times. If deficiencies are identified, the contractor shall begin implementing corrective actions within one business day and shall complete the corrective actions in a reasonable time frame. The trained contractor may stop conducting the maintenance inspections in accordance with the provisions of Part IV.B of GP-0-20-001.

A qualified inspector shall conduct regular site inspections of all erosion and sediment control practices and pollution prevention measures, post construction stormwater management practices, areas of disturbance, points of discharge to surface waters within or immediately adjacent to the construction site, and points of discharge from the construction site. Specifically, the qualified inspector shall inspect all sediment barriers, inlet protection, silt fencing and construction entrances; catch basins and field inlets for accumulation of sediments; any unstabilized, disturbed areas, mulch, and permanent vegetative controls; and staging areas and storage areas for construction materials, waste materials, and construction chemicals. The inspector shall notify the general contractor of any necessary repairs to damaged or ineffective measures, and any necessary corrective action, including, but not limited to the removal of sediment, stabilization of disturbed areas, or placement of additional measures to ensure proper functioning of the erosion and sediment control practices. The general contractor shall be responsible for immediate implementation of the corrective actions. The inspections shall be conducted at least once every seven days. For construction sites that disturb greater than five (5) acres of soil at any one time, the inspections shall be conducted at least twice every seven days with the two inspections separated by a minimum of two days. The qualified inspector may reduce the frequency of or stop conducting the inspections in accordance with the provisions of Part IV.C.3 of GP-0-20-001. The qualified inspector shall prepare an inspection report for each inspection. An example SWPPP inspection form is provided in Appendix C. All inspection reports shall be maintained on site with the SWPPP.

F. SOLID WASTE MANAGEMENT

Construction debris and waste expected to be generated during the project include concrete compounds, wood, cardboard, metals, masonry, PVC, packing material, and domestic waste (*i.e.* beverage containers, coffee cups, plastic bags and wrappers, etc.). Temporary waste containers (*i.e.* roll-off containers) of sufficient size and number shall be placed within the equipment/material storage areas, to be determined by the general contractor, and accessible on the project site in order to facilitate disposal of construction debris. Waste containers shall have lids or shall be covered during periods of rain to prevent accumulation of water within the containers and to prevent loss of debris from wind. Waste containers shall have watertight bottoms. Waste containers shall not be cleaned or hosed out on the project site. Solid waste containers shall be

removed bi-weekly or more frequently as needed. No on-site disposal of any construction materials shall be permitted.

Work areas shall be maintained in an orderly and clean manner to prevent windblown litter from exiting the site. Littering on the project site shall be prohibited. Trash receptacles shall be placed in locations where workers congregate for lunches and breaks. Litter shall be bagged before placement in large waste containers.

Potential toxic and hazardous materials, if any, shall not be disposed of in solid waste containers and shall be segregated in separate containers for transport to an approved off-site receiving area.

G. CHEMICAL STORAGE AND SPILL PREVENTION/RESPONSE

The general contractor is responsible for proper storage of potentially hazardous chemicals onsite and enforcement of proper spill prevention and control measures. Proper storage, clean-up, and spill reporting instructions will be present in the project trailer and will be posted in a conspicuous and accessible location.

Potentially hazardous chemicals and materials that may be used on site include solvents, adhesives, lubricants, gasoline, diesel fuel, asphalt and concrete compounds. All chemicals shall be stored in their original containers, and according to manufacturer's specifications. Materials shall be stored in covered storage with an impervious lined bottom to prevent leaching of chemicals into the ground. The storage shall be secured to prevent unauthorized entry during non-working hours. An ample supply of appropriate absorbent spill clean-up material will be kept in or near the storage area. The storage area is to be kept clean and well-organized.

In the event of a chemical spill, the contractor should contain the spill in accordance with the manufacture's recommended methods and must report the spill to the NYS Spill Hotline (1-800-457-7362) within 2 hours of discovery.

H. STORMWATER DISCHARGES FROM INDUSTRIAL ACTIVITY

There are no stormwater discharges associated with industrial activity at the construction site (i.e. asphalt plants and/or concrete plants) proposed as part of this project.

2. POST-CONSTRUCTION STORMWATER MANAGEMENT

The post-construction stormwater management practices for this project have been designed in conformance with requirements of the Town of Lewisboro.

A. STORMWATER MANAGEMENT PRACTICES

Clearing limits are identified on the construction drawings in order to establish areas of natural features to be preserved and protected while the remainder of the site is being developed. The preservation of natural areas associated with this project also serves to limit the amount of impervious surfaces on the site.

B. STORMWATER MODELING AND ANALYSIS

Pre-Development Conditions

A Pre-Development Drainage Area Map is provided in Appendix H identifying watershed boundaries, flow paths and design points. The existing site is predominantly wooded with a small treatment building, paved access, and a mobile generator and water system components. The site generally slopes toward the center of the site where a small stream bisects the site flowing east to west. Slopes onsite are generally 15% or less with some steeper areas ranging from 15% to 25%. For the purposes of this analysis the site has been defined as one 2.14-acre watershed (WS#1) which encompasses areas of the site which will be disturbed or runoff conditions will be altered. The study point for WS#1 is Study Point #1. This study point is defined as the onsite stream running through the center of the parcel and exiting the site along the western boundary. Flow is directed to the stream as sheet flow through wooded areas to the north and south.

Post-Development Conditions

A Post-Development Drainage Area Map is provided in Appendix H identifying watershed boundaries, flow paths, design points and SMP's. The proposed site will remain predominantly wooded with new treatment building, resurfacing of paved access, and a revised fenced area containing two water treatment process tanks. As before, the site slopes toward the center of the site where a small stream bisects the site flowing east to west. Slopes onsite are generally 15% or less with some steeper areas ranging from 15% to 25%. Similar to the existing conditions the proposed conditions been defined as one 2.14-acre watershed (WS#1) which encompasses areas of the site which will be disturbed or runoff conditions will be altered. The study point for WS#1 is Study Point #1. In the post-development conditions, the watershed is divided into two subwatersheds (WS#1A and WS#1B). WS#1A consists of all areas in WS#1 with the exception of the new treatment building. The study point and Tc remain the same as the pre-developed conditions.

WS#1B consists of the new water treatment building. The entirety of the rooftop area is directed to a small detention system before being released to Study Point #1.

Stormwater Modeling

Stormwater runoff from watershed areas in the pre and post-development conditions and the postconstruction stormwater management practices have been modeled for the 1, 10 and 100-year, 24-hour storm events using Hydraflow Hydrographs. Time of Concentration (Tc) values for pre and post-development conditions were determined using the TR-55 methodology. A minimum Tc value of 6 minutes was used for each tributary area. Runoff rates have been calculated using the SCS Unit Hydrograph method.

A small underground detention system has been designed to attenuate runoff from the new treatment building. Additional information on the design can be found on the plans included in Appendix H. The detention system was sized utilizing the Hydraflow Hydrographs software. The Hydraflow Hydrographs reports are provided in Appendix G. A summary comparing pre- and post-development runoff rates for the 25-year storm event is provided in Table 01 below.

Watershed ID	Peak Outflow (25-Yr Storm)		
Pre-Development Drainage Conditions			
WS#1	7.304 cfs		
Post-Development Drainage Conditions			
WS#1A	7.168 cfs		
WS#1B	0.240 cfs		
WS#1 Total*	7.294 cfs		

Table 01 – Stormwater Modeling Summary

*WS#1 total taken after WS#1B passes through underground detention system

C. SOIL TESTING RESULTS AND LOCATIONS

Test boring locations and the reported boring log information from soil testing performed for this site are located in Appendix B and on the site plans in Appendix H.

D. OPERATIONS AND MAINTENANCE PLAN

Upon completion of construction the Owner will be responsible for inspection, maintenance and repair of the post-construction SMPs. Debris, trash, sediment and other waste generated by the site should be removed and disposed of at suitable disposal/recycling sites and in compliance with applicable local, state, and federal waste regulations by the entity responsible.

The underground detention system shall be inspected at least twice annually. The system contains two 24" diameter maintenance access manholes for access to the two sides of the

detention system. Every six (6) months or less, the system shall be inspected, and any sediment or debris shall be removed. The inspection should include confirmation that the orifices are not clogged or impeded. Additionally, the outfall (FES#1) for the system shall be inspected to confirm no obstructions or debris accumulation. Any debris shall be removed. If necessary, any riprap shall be replaced and any eroded areas restabilized (most likely in first six months before vegetation fully established).

Appendix A

Location Map



<u>Appendix B</u> USDA-NRCS Soil Report

<u>Soil Borings</u>



USDA United States Department of Agriculture

> Natural Resources Conservation

Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Westchester **County, New** York

NYAW2004 - Arbor



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/? cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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CsD—Chatfield-Charlton complex, 15 to 35 percent slopes, very rocky	15
Ff—Fluvaquents-Udifluvents complex, frequently flooded	18
PnB—Paxton fine sandy loam, 3 to 8 percent slopes	20
PnC—Paxton fine sandy loam, 8 to 15 percent slopes	21
PoC—Paxton fine sandy loam, 8 to 15 percent slopes, very stony	23
RdB—Ridgebury complex, 3 to 8 percent slopes	24
RgB—Ridgebury complex, 0 to 8 percent slopes, very stony	27
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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and
identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report Soil Map



Area of Interest (AOI) Spiol Area The soil surveys that comprise your AOI were mapped 112,000. Soils Soil Map Unit Polygons Wet Spot Soil Map Unit Dints Wet Spot Uarning: Soil Map unit Polygons Wet Spot Soil Map Unit Dints Other Special Point Features Special Point Features Special Line Features Special Composition Streams and Canals Soil Sorow Pit Transportation Transportation Meain Resources Conservation Streams and Canals Please rely on the bar scale on each map sheet for measurements. Soil Coded Depression Transportation Major Roads Source of Map: Natural Resources Conservation Streams and Canals Mark or swamp Mark or swamp Aerial Photography Source of Map: Natural Resources Conservation Streams and Canals Mark or swamp Aerial Photography Source of Map: Natural Resources Conservation Streams and Canals Mark or swamp Aerial Photography Source of Map: Natural Resources Conservation Streams and Canals Mark or swamp Aerial Photography Source of Map: Natural Resources Conservation Streams and Canals Mark or swamp Aerial Photography Source of Map: Natural Resources Conservation Streams and Canals Mark or swamp Aerial Photography S		MAP LEGEND			MAP INFORMATION
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Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
ChD	Charlton fine sandy loam, 15 to 25 percent slopes	0.2	2.8%
CsD	Chatfield-Charlton complex, 15 to 35 percent slopes, very rocky	0.0	0.3%
Ff	Fluvaquents-Udifluvents complex, frequently flooded	3.3	39.9%
PnB	Paxton fine sandy loam, 3 to 8 percent slopes	0.3	3.9%
PnC	Paxton fine sandy loam, 8 to 15 percent slopes	0.8	9.4%
PoC	Paxton fine sandy loam, 8 to 15 percent slopes, very stony	0.2	2.9%
RdB	Ridgebury complex, 3 to 8 percent slopes	0.5	5.6%
RgB	Ridgebury complex, 0 to 8 percent slopes, very stony	1.2	14.9%
RhC	Riverhead loam, 8 to 15 percent slopes	1.2	14.0%
Ub	Udorthents, smoothed	0.5	6.3%
Totals for Area of Interest		8.3	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties

and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

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Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Westchester County, New York

ChD—Charlton fine sandy loam, 15 to 25 percent slopes

Map Unit Setting

National map unit symbol: 2wh0t Elevation: 0 to 1,290 feet Mean annual precipitation: 36 to 71 inches Mean annual air temperature: 39 to 55 degrees F Frost-free period: 140 to 240 days Farmland classification: Not prime farmland

Map Unit Composition

Charlton and similar soils: 85 percent *Minor components:* 15 percent *Estimates are based on observations, descriptions, and transects of the mapunit.*

Description of Charlton

Setting

Landform: Ridges, ground moraines, hills Landform position (two-dimensional): Backslope Landform position (three-dimensional): Side slope Down-slope shape: Convex, linear Across-slope shape: Convex Parent material: Coarse-loamy melt-out till derived from granite, gneiss and/or schist

Typical profile

Ap - 0 to 7 inches: fine sandy loam *Bw - 7 to 22 inches:* gravelly fine sandy loam *C - 22 to 65 inches:* gravelly fine sandy loam

Properties and qualities

Slope: 15 to 25 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.14 to 14.17 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 6.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 4e Hydrologic Soil Group: B Ecological site: F144AY034CT - Well Drained Till Uplands Hydric soil rating: No

Minor Components

Sutton, fine sandy loam

Percent of map unit: 5 percent Landform: Ridges, hills, ground moraines Landform position (two-dimensional): Footslope Landform position (three-dimensional): Base slope Down-slope shape: Concave Across-slope shape: Linear Hydric soil rating: No

Paxton

Percent of map unit: 5 percent Landform: Ground moraines, hills, drumlins Landform position (two-dimensional): Backslope Landform position (three-dimensional): Side slope Down-slope shape: Convex, linear Across-slope shape: Convex Hydric soil rating: No

Chatfield

Percent of map unit: 3 percent Landform: Ridges, hills Landform position (two-dimensional): Backslope, shoulder, summit Landform position (three-dimensional): Nose slope, crest, side slope Down-slope shape: Convex Across-slope shape: Convex Hydric soil rating: No

Canton

Percent of map unit: 2 percent Landform: Moraines, hills, ridges Landform position (two-dimensional): Backslope Landform position (three-dimensional): Side slope Down-slope shape: Convex, linear Across-slope shape: Convex Hydric soil rating: No

CsD—Chatfield-Charlton complex, 15 to 35 percent slopes, very rocky

Map Unit Setting

National map unit symbol: 2w69k Elevation: 0 to 1,290 feet Mean annual precipitation: 36 to 71 inches Mean annual air temperature: 39 to 55 degrees F Frost-free period: 140 to 240 days Farmland classification: Not prime farmland

Map Unit Composition

Chatfield, very stony, and similar soils: 45 percent

Charlton, very stony, and similar soils: 35 percent *Minor components:* 20 percent *Estimates are based on observations, descriptions, and transects of the mapunit.*

Description of Chatfield, Very Stony

Setting

Landform: Ridges, hills Landform position (two-dimensional): Backslope, shoulder, summit Landform position (three-dimensional): Crest, side slope, nose slope Down-slope shape: Convex Across-slope shape: Linear, convex Parent material: Coarse-loamy melt-out till derived from granite, gneiss, and/or schist

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material *A - 1 to 2 inches:* fine sandy loam *Bw - 2 to 30 inches:* gravelly fine sandy loam *2R - 30 to 40 inches:* bedrock

Properties and qualities

Slope: 15 to 35 percent
Surface area covered with cobbles, stones or boulders: 1.6 percent
Depth to restrictive feature: 20 to 41 inches to lithic bedrock
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 4.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 7s Hydrologic Soil Group: B Ecological site: F144AY034CT - Well Drained Till Uplands Hydric soil rating: No

Description of Charlton, Very Stony

Setting

Landform: Ridges, hills Landform position (two-dimensional): Backslope Landform position (three-dimensional): Side slope Down-slope shape: Convex, linear Across-slope shape: Convex Parent material: Coarse-loamy melt-out till derived from granite, gneiss, and/or schist

Typical profile

Oe - 0 to 2 inches: moderately decomposed plant material *A - 2 to 4 inches:* fine sandy loam *Bw - 4 to 27 inches:* gravelly fine sandy loam

C - 27 to 65 inches: gravelly fine sandy loam

Properties and qualities

Slope: 15 to 35 percent
Surface area covered with cobbles, stones or boulders: 1.6 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.14 to 14.17 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 8.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 7s Hydrologic Soil Group: B Ecological site: F144AY034CT - Well Drained Till Uplands Hydric soil rating: No

Minor Components

Leicester, very stony

Percent of map unit: 6 percent Landform: Depressions, ground moraines, hills, drainageways Landform position (two-dimensional): Toeslope, footslope Landform position (three-dimensional): Base slope Down-slope shape: Linear, concave Across-slope shape: Concave Hydric soil rating: Yes

Hollis, very stony

Percent of map unit: 5 percent Landform: Ridges, hills Landform position (two-dimensional): Backslope, shoulder, summit Landform position (three-dimensional): Side slope, nose slope, crest Down-slope shape: Convex Across-slope shape: Linear, convex Hydric soil rating: No

Rock outcrop

Percent of map unit: 5 percent Landform: Ridges, hills Hydric soil rating: No

Sutton, very stony

Percent of map unit: 4 percent Landform: Ground moraines, hills Landform position (two-dimensional): Footslope Landform position (three-dimensional): Base slope Down-slope shape: Concave Across-slope shape: Linear Hydric soil rating: No

Ff—Fluvaquents-Udifluvents complex, frequently flooded

Map Unit Setting

National map unit symbol: bd8k Elevation: 100 to 3,000 feet Mean annual precipitation: 46 to 50 inches Mean annual air temperature: 46 to 52 degrees F Frost-free period: 115 to 215 days Farmland classification: Not prime farmland

Map Unit Composition

Fluvaquents and similar soils: 50 percent *Udifluvents and similar soils:* 35 percent *Minor components:* 15 percent *Estimates are based on observations, descriptions, and transects of the mapunit.*

Description of Fluvaquents

Setting

Landform: Flood plains Landform position (two-dimensional): Toeslope Landform position (three-dimensional): Dip Down-slope shape: Concave Across-slope shape: Concave Parent material: Alluvium with highly variable texture

Typical profile

H1 - 0 to 5 inches: gravelly silt loam *H2 - 5 to 70 inches:* very gravelly silt loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to very high (0.06 to 19.98 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: FrequentNone
Frequency of ponding: Frequent
Calcium carbonate, maximum content: 15 percent
Available water supply, 0 to 60 inches: Moderate (about 6.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 5w Hydrologic Soil Group: A/D Hydric soil rating: Yes

Description of Udifluvents

Setting

Landform: Flood plains Landform position (two-dimensional): Summit Landform position (three-dimensional): Rise Down-slope shape: Convex Across-slope shape: Convex Parent material: Alluvium with a wide range of texture

Typical profile

H1 - 0 to 4 inches: gravelly silt loam *H2 - 4 to 70 inches:* very gravelly loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to very high (0.06 to 19.98 in/hr)
Depth to water table: About 24 to 72 inches
Frequency of flooding: NoneFrequent
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Available water supply, 0 to 60 inches: Low (about 5.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 5w Hydrologic Soil Group: A Hydric soil rating: No

Minor Components

Sun

Percent of map unit: 3 percent Landform: Depressions Hydric soil rating: Yes

Riverhead

Percent of map unit: 2 percent Hydric soil rating: No

Hinckley

Percent of map unit: 2 percent Hydric soil rating: No

Knickerbocker

Percent of map unit: 2 percent Hydric soil rating: No

Leicester

Percent of map unit: 2 percent Landform: Depressions Hydric soil rating: Yes

Ridgebury

Percent of map unit: 2 percent

Landform: Depressions Hydric soil rating: Yes

Palms

Percent of map unit: 1 percent Landform: Marshes, swamps Hydric soil rating: Yes

Carlisle

Percent of map unit: 1 percent Landform: Swamps, marshes Hydric soil rating: Yes

PnB—Paxton fine sandy loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2t2qp Elevation: 0 to 1,570 feet Mean annual precipitation: 36 to 71 inches Mean annual air temperature: 39 to 55 degrees F Frost-free period: 140 to 240 days Farmland classification: All areas are prime farmland

Map Unit Composition

Paxton and similar soils: 80 percent Minor components: 20 percent Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Paxton

Setting

Landform: Ground moraines, drumlins, hills Landform position (two-dimensional): Backslope, summit, shoulder Landform position (three-dimensional): Side slope, crest, nose slope Down-slope shape: Convex, linear Across-slope shape: Convex Parent material: Coarse-loamy lodgment till derived from gneiss, granite, and/or schist

Typical profile

Ap - 0 to 8 inches: fine sandy loam Bw1 - 8 to 15 inches: fine sandy loam Bw2 - 15 to 26 inches: fine sandy loam Cd - 26 to 65 inches: gravelly fine sandy loam

Properties and qualities

Slope: 3 to 8 percent Depth to restrictive feature: 18 to 39 inches to densic material Drainage class: Well drained Runoff class: Medium

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Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.14 in/hr)
Depth to water table: About 18 to 37 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 3.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 2s Hydrologic Soil Group: C Ecological site: F144AY007CT - Well Drained Dense Till Uplands Hydric soil rating: No

Minor Components

Woodbridge

Percent of map unit: 9 percent Landform: Ground moraines, drumlins, hills Landform position (two-dimensional): Backslope, footslope, summit Landform position (three-dimensional): Side slope Down-slope shape: Concave Across-slope shape: Linear Hydric soil rating: No

Ridgebury

Percent of map unit: 6 percent Landform: Depressions, ground moraines, hills, drainageways Landform position (two-dimensional): Toeslope, backslope, footslope Landform position (three-dimensional): Base slope, head slope, dip Down-slope shape: Concave Across-slope shape: Concave Hydric soil rating: Yes

Charlton

Percent of map unit: 5 percent Landform: Hills Down-slope shape: Linear Across-slope shape: Linear Hydric soil rating: No

PnC—Paxton fine sandy loam, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: 2w66y Elevation: 0 to 1,320 feet Mean annual precipitation: 36 to 71 inches Mean annual air temperature: 39 to 55 degrees F Frost-free period: 140 to 240 days Farmland classification: Farmland of statewide importance

Map Unit Composition

Paxton and similar soils: 85 percent *Minor components:* 15 percent *Estimates are based on observations, descriptions, and transects of the mapunit.*

Description of Paxton

Setting

Landform: Ground moraines, hills, drumlins Landform position (two-dimensional): Backslope Landform position (three-dimensional): Side slope Down-slope shape: Convex, linear Across-slope shape: Convex Parent material: Coarse-loamy lodgment till derived from gneiss, granite, and/or schist

Typical profile

Ap - 0 to 8 inches: fine sandy loam Bw1 - 8 to 15 inches: fine sandy loam Bw2 - 15 to 26 inches: fine sandy loam Cd - 26 to 65 inches: gravelly fine sandy loam

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: 20 to 39 inches to densic material
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.14 in/hr)
Depth to water table: About 18 to 37 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 4.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 3e Hydrologic Soil Group: C Ecological site: F144AY007CT - Well Drained Dense Till Uplands Hydric soil rating: No

Minor Components

Charlton

Percent of map unit: 7 percent Landform: Hills Landform position (two-dimensional): Backslope Landform position (three-dimensional): Side slope Down-slope shape: Convex Across-slope shape: Convex Hydric soil rating: No

Woodbridge

Percent of map unit: 6 percent Landform: Hills, drumlins, ground moraines Landform position (two-dimensional): Footslope, summit, backslope Landform position (three-dimensional): Side slope Down-slope shape: Concave Across-slope shape: Linear Hydric soil rating: No

Ridgebury

Percent of map unit: 2 percent Landform: Drumlins, drainageways, depressions, ground moraines, hills Landform position (two-dimensional): Toeslope, footslope Landform position (three-dimensional): Base slope, head slope Down-slope shape: Concave, linear Across-slope shape: Concave, linear Hydric soil rating: Yes

PoC—Paxton fine sandy loam, 8 to 15 percent slopes, very stony

Map Unit Setting

National map unit symbol: 2w677 Elevation: 0 to 1,330 feet Mean annual precipitation: 36 to 71 inches Mean annual air temperature: 39 to 55 degrees F Frost-free period: 140 to 240 days Farmland classification: Not prime farmland

Map Unit Composition

Paxton, very stony, and similar soils: 85 percent *Minor components:* 15 percent *Estimates are based on observations, descriptions, and transects of the mapunit.*

Description of Paxton, Very Stony

Setting

Landform: Ground moraines, hills, drumlins Landform position (two-dimensional): Backslope Landform position (three-dimensional): Side slope Down-slope shape: Convex, linear Across-slope shape: Linear, convex Parent material: Coarse-loamy lodgment till derived from gneiss, granite, and/or schist

Typical profile

Oe - 0 to 2 inches: moderately decomposed plant material *A - 2 to 10 inches:* fine sandy loam *Bw1 - 10 to 17 inches:* fine sandy loam *Bw2 - 17 to 28 inches:* fine sandy loam *Cd - 28 to 67 inches:* gravelly fine sandy loam

Properties and qualities

Slope: 8 to 15 percent *Surface area covered with cobbles, stones or boulders:* 1.6 percent Depth to restrictive feature: 20 to 43 inches to densic material
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.14 in/hr)
Depth to water table: About 18 to 37 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 4.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 6s Hydrologic Soil Group: C Ecological site: F144AY007CT - Well Drained Dense Till Uplands Hydric soil rating: No

Minor Components

Woodbridge, very stony

Percent of map unit: 8 percent Landform: Hills, drumlins, ground moraines Landform position (two-dimensional): Backslope, footslope Landform position (three-dimensional): Side slope Down-slope shape: Concave Across-slope shape: Linear Hydric soil rating: No

Charlton, very stony

Percent of map unit: 5 percent Landform: Hills Landform position (two-dimensional): Backslope Landform position (three-dimensional): Side slope Down-slope shape: Convex Across-slope shape: Convex Hydric soil rating: No

Ridgebury, very stony

Percent of map unit: 2 percent Landform: Drumlins, depressions, ground moraines, hills, drainageways Landform position (two-dimensional): Toeslope, footslope Landform position (three-dimensional): Base slope, head slope Down-slope shape: Concave Across-slope shape: Concave Hydric soil rating: Yes

RdB—Ridgebury complex, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2xfg2

Elevation: 10 to 1,180 feet *Mean annual precipitation:* 36 to 71 inches *Mean annual air temperature:* 39 to 55 degrees F *Frost-free period:* 145 to 240 days *Farmland classification:* Farmland of statewide importance

Map Unit Composition

Ridgebury, loam, and similar soils: 50 percent Ridgebury, somewhat poorly drained, and similar soils: 35 percent Minor components: 15 percent Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Ridgebury, Loam

Setting

Landform: Drumlins, depressions, ground moraines, hills, drainageways Landform position (two-dimensional): Toeslope, footslope Landform position (three-dimensional): Base slope, head slope Down-slope shape: Concave Across-slope shape: Concave Parent material: Coarse-loamy lodgment till derived from gneiss, granite, and/or schist

Typical profile

Oe - 0 to 1 inches: moderately decomposed plant material

A - 1 to 6 inches: loam

Bw - 6 to 10 inches: gravelly fine sandy loam

Bg - 10 to 19 inches: gravelly fine sandy loam

Cd - 19 to 66 inches: gravelly loam

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: 15 to 35 inches to densic material
Drainage class: Poorly drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.14 in/hr)
Depth to water table: About 0 to 6 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 3.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 4w Hydrologic Soil Group: D Ecological site: F144AY009CT - Wet Till Depressions Hydric soil rating: Yes

Description of Ridgebury, Somewhat Poorly Drained

Setting

Landform: Hills, drainageways, drumlins, depressions, ground moraines Landform position (two-dimensional): Toeslope, footslope Landform position (three-dimensional): Head slope, base slope Down-slope shape: Concave Across-slope shape: Concave

Parent material: Coarse-loamy lodgment till derived from gneiss, granite, and/or schist

Typical profile

Oa - 0 to 1 inches: highly decomposed plant material

A - 1 to 7 inches: loam

Bw - 7 to 13 inches: loam

Bg - 13 to 21 inches: fine sandy loam

Cd - 21 to 60 inches: gravelly fine sandy loam

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: 15 to 35 inches to densic material
Drainage class: Somewhat poorly drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.14 in/hr)
Depth to water table: About 10 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 3.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 3w Hydrologic Soil Group: D Ecological site: F144AY009CT - Wet Till Depressions Hydric soil rating: No

Minor Components

Woodbridge, loam

Percent of map unit: 5 percent Landform: Hills, drumlins, ground moraines Landform position (two-dimensional): Backslope, summit, footslope Landform position (three-dimensional): Side slope, crest Down-slope shape: Convex Across-slope shape: Linear Hydric soil rating: No

Sun, very poorly drained

Percent of map unit: 5 percent Landform: Depressions Down-slope shape: Concave Across-slope shape: Concave Hydric soil rating: Yes

Leicester, loam

Percent of map unit: 3 percent Landform: Ground moraines, depressions, hills, drainageways Landform position (two-dimensional): Toeslope, footslope Landform position (three-dimensional): Base slope Down-slope shape: Concave, linear Across-slope shape: Concave Hydric soil rating: Yes

Paxton

Percent of map unit: 2 percent Landform: Hills, drumlins, ground moraines Landform position (two-dimensional): Backslope, shoulder, summit Landform position (three-dimensional): Side slope, crest Down-slope shape: Convex, linear Across-slope shape: Linear, convex Hydric soil rating: No

RgB—Ridgebury complex, 0 to 8 percent slopes, very stony

Map Unit Setting

National map unit symbol: 2xfg3 Elevation: 110 to 1,200 feet Mean annual precipitation: 36 to 71 inches Mean annual air temperature: 39 to 55 degrees F Frost-free period: 145 to 240 days Farmland classification: Not prime farmland

Map Unit Composition

Ridgebury, loam, very stony, and similar soils: 50 percent *Ridgebury, somewhat poorly drained, very stony, and similar soils:* 35 percent *Minor components:* 15 percent *Estimates are based on observations, descriptions, and transects of the mapunit.*

Description of Ridgebury, Loam, Very Stony

Setting

Landform: Drumlins, depressions, ground moraines, hills, drainageways Landform position (two-dimensional): Toeslope, footslope Landform position (three-dimensional): Base slope, head slope Down-slope shape: Concave Across-slope shape: Concave Parent material: Coarse-loamy lodgment till derived from gneiss, granite, and/or schist

Typical profile

Oe - 0 to 1 inches: moderately decomposed plant material

A - 1 to 6 inches: loam

Bw - 6 to 10 inches: gravelly fine sandy loam

Bg - 10 to 19 inches: gravelly fine sandy loam

Cd - 19 to 66 inches: gravelly loam

Properties and qualities

Slope: 0 to 8 percent Surface area covered with cobbles, stones or boulders: 1.6 percent Depth to restrictive feature: 15 to 35 inches to densic material Drainage class: Poorly drained Runoff class: Very high

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Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.14 in/hr) Depth to water table: About 0 to 6 inches Frequency of flooding: None Frequency of ponding: None Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)

Available water supply, 0 to 60 inches: Low (about 3.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 6s Hydrologic Soil Group: D Ecological site: F144AY009CT - Wet Till Depressions Hydric soil rating: Yes

Description of Ridgebury, Somewhat Poorly Drained, Very Stony

Setting

Landform: Hills, drainageways, drumlins, depressions, ground moraines Landform position (two-dimensional): Toeslope, footslope Landform position (three-dimensional): Base slope, head slope Down-slope shape: Concave Across-slope shape: Concave Parent material: Coarse-loamy lodgment till derived from gneiss, granite, and/or schist

Typical profile

Oa - 0 to 1 inches: highly decomposed plant material

A - 1 to 7 inches: loam

Bw - 7 to 13 inches: loam

Bg - 13 to 21 inches: fine sandy loam

Cd - 21 to 60 inches: gravelly fine sandy loam

Properties and qualities

Slope: 0 to 8 percent
Surface area covered with cobbles, stones or boulders: 1.6 percent
Depth to restrictive feature: 15 to 35 inches to densic material
Drainage class: Somewhat poorly drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.14 in/hr)
Depth to water table: About 10 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 3.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 6s Hydrologic Soil Group: D Ecological site: F144AY009CT - Wet Till Depressions Hydric soil rating: No

Minor Components

Sun, very poorly drained, very stony

Percent of map unit: 5 percent Landform: Depressions Down-slope shape: Concave Across-slope shape: Concave Hydric soil rating: Yes

Woodbridge, loam, very stony

Percent of map unit: 5 percent Landform: Ground moraines, hills, drumlins Landform position (two-dimensional): Summit, footslope, backslope Landform position (three-dimensional): Crest, side slope Down-slope shape: Convex Across-slope shape: Linear Hydric soil rating: No

Ridgebury, loam, bouldery

Percent of map unit: 3 percent Landform: Drumlins, depressions, ground moraines, hills, drainageways Landform position (two-dimensional): Toeslope, footslope Landform position (three-dimensional): Head slope, base slope Down-slope shape: Concave Across-slope shape: Concave Hydric soil rating: Yes

Paxton, very stony

Percent of map unit: 2 percent Landform: Ground moraines, hills, drumlins Landform position (two-dimensional): Backslope, shoulder, summit Landform position (three-dimensional): Side slope, crest Down-slope shape: Convex, linear Across-slope shape: Linear, convex Hydric soil rating: No

RhC—Riverhead loam, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: bd9h Elevation: 0 to 920 feet Mean annual precipitation: 46 to 50 inches Mean annual air temperature: 46 to 52 degrees F Frost-free period: 115 to 215 days Farmland classification: Farmland of statewide importance

Map Unit Composition

Riverhead and similar soils: 85 percent *Minor components:* 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Riverhead

Setting

Landform: Terraces, deltas Landform position (two-dimensional): Shoulder Landform position (three-dimensional): Tread Down-slope shape: Convex Across-slope shape: Convex Parent material: Loamy glaciofluvial deposits overlying stratified sand and gravel

Typical profile

H1 - 0 to 6 inches: loam *H2 - 6 to 25 inches:* sandy loam *H3 - 25 to 30 inches:* loamy sand *H4 - 30 to 60 inches:* loamy sand

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 3e Hydrologic Soil Group: A Hydric soil rating: No

Minor Components

Pompton

Percent of map unit: 5 percent Hydric soil rating: No

Charlton

Percent of map unit: 4 percent Hydric soil rating: No

Hinckley

Percent of map unit: 3 percent Hydric soil rating: No

Knickerbocker

Percent of map unit: 3 percent Hydric soil rating: No

Ub-Udorthents, smoothed

Map Unit Setting

National map unit symbol: bd7f Elevation: 0 to 2,400 feet Mean annual precipitation: 46 to 50 inches Mean annual air temperature: 46 to 52 degrees F Frost-free period: 115 to 215 days Farmland classification: Not prime farmland

Map Unit Composition

Udorthents, smoothed, and similar soils: 80 percent *Minor components:* 20 percent *Estimates are based on observations, descriptions, and transects of the mapunit.*

Description of Udorthents, Smoothed

Typical profile

H1 - 0 to 4 inches: gravelly loam *H2 - 4 to 70 inches:* very gravelly loam

Properties and qualities

Slope: 0 to 8 percent
Depth to restrictive feature: 40 to 60 inches to lithic bedrock
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.06 to 5.95 in/hr)
Depth to water table: About 18 to 48 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Available water supply, 0 to 60 inches: Low (about 4.6 inches)

Minor Components

Udorthents, wet substratum

Percent of map unit: 5 percent Hydric soil rating: No

Urban land

Percent of map unit: 5 percent Hydric soil rating: Unranked

Leicester

Percent of map unit: 2 percent Hydric soil rating: No

Hollis

Percent of map unit: 2 percent Hydric soil rating: No

Charlton

Percent of map unit: 2 percent *Hydric soil rating:* No

Riverhead

Percent of map unit: 2 percent Hydric soil rating: No

Sun

Percent of map unit: 2 percent Landform: Depressions Hydric soil rating: Yes

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Attn: Mr. Tom Kaley, P.E. Project Engineer 2

Re: Report on Subsurface Soil and Foundation Investigation Proposed Water Treatment Building Indian Hills Waccabuc Pump Station – Apache Drive Lewisboro, NY (CSA Job #22-09B)

Dear Mr. Kaley:

In accordance with our revised proposal dated 23 February 2022 and your subsequent authorization, we have completed a Subsurface Soil and Foundation Investigation for the referenced site. The purpose of this study was to determine the nature and engineering properties of the subsurface soil and the groundwater conditions for the new construction, to recommend a practical foundation scheme, and to determine the allowable bearing capacity of the site soils.

We understand that the proposed construction will consist of a new water treatment building. To guide us in this study, you have provided us with a plan that indicates the location of the proposed construction.

Our scope of work for this project included the following:

- 1. Reviewed the proposed layout, the existing site conditions, the expected soil conditions, and planned this study.
- 2. Retained General Borings, Inc. to advance two (2) test borings at selected locations on the subject site.
- 3. Laid out the boring locations in the field, visually identified the soil layers encountered, obtained soil samples, and prepared detailed boring logs and a Boring Location Plan.
- 4. Performed soil identification tests on selected soil samples in our laboratory.

5. Analyzed the field data and prepared this report containing the results of this study.

1.0 <u>SITE DESCRIPTION</u>

The project site is located off Apache Circle in Lewisboro, New York. The site is currently an active water treatment facility and is occupied by a one-story masonry building. The remainder of the site is wooded with an asphalt driveway. Existing structures are present on the site including underground utilities, mobile generator and electrical cabinet. Located within the property is wetlands and two streams. Site grades generally slope down from south to north ranging from elevation +406.0 to elevation +380.0.

2.0 PROPOSED CONSTRUCTION

We understand that proposed construction will consist of a new water treatment building. The building will be approximately 1,680 square feet with a finished floor elevation of +403.2. Site development will include new underground utilities and above ground water storage tanks.

The following evaluation is based on information that has been provided to our office as of the date of this report. Once the planned construction has been further developed, a copy of the plans should be forwarded to our office so that we can review it along with the recommendations in this report. At that time, any changes or additional recommendations can be provided, if required.

3.0 <u>SUBSURFACE CONDITIONS</u>

To determine the subsurface soil and groundwater conditions at the site, two (2) test borings were advanced by General Borings, Inc. at the locations shown on the enclosed Boring Location Plan. The borings were performed using hollow stem augers and split spoon sampling. The borings were completed on 23 March 2022 under the full-time inspection of Carlin-Simpson & Associates.

Detailed boring logs have been prepared and are included in this report. Our field engineer visually identified all of the soil samples obtained during the boring operations and select samples were tested in our laboratory. The results of the laboratory testing are included in this report.

3.1 <u>Soils</u>

The soil descriptions shown on the boring logs are based on the Burmister Classification System. In this system, the soil is divided into three components: Sand (S), Silt (\$) and Gravel (G). The major component is indicated in all capital letters, the lesser in lower case letters. The following modifiers indicate the quantity of each lesser component:

<u>Modifier</u>	<u>Quantity</u>
trace (t)	0 -10%
little (l)	10% - 20%
some (s)	20% - 35%
and (a)	35% - 50%

In addition, the unified soil classification system (USCS) was determined for each major stratum and was provided on the attached boring logs and listed below. The subsurface soil conditions observed in the borings can be summarized as follows:

Stratum 1 The surface layer in boring B-2 is topsoil that is approximately 7 inches in Topsoil thickness. Stratum 2 At the surface in test boring B-1 is loose existing fill that generally consists of Existing Fill brown coarse to fine SAND, some (-) Silt, trace coarse to fine Gravel with asphalt. The existing fill extends to a depth of 1'0" below the existing ground surface at the boring locations. <u>Stratum 3</u> Beneath the existing fill in test boring B-1 and below the topsoil in test boring Silty Sand with B-2 is medium dense to very dense gray brown, gray, brown coarse to fine Gravel SAND, little (to some) Silt, trace (to and) coarse to fine Gravel. Each of the borings were terminated in this stratum at a depth of 21'5" and 17'0" below the [USCS: SM] existing ground surface in boring B-1 and B-2, respectively.

3.2 Groundwater

During this investigation, groundwater was encountered at depths of 6'2" and 14'6" (approximate elevations +396.8 and +387.5) below existing ground surface elevation in borings B-1 and B-2, respectively. Based on the anticipated construction and subsurface conditions, groundwater may be encountered during construction. Proper groundwater control measures will be required in the event that water is encountered in the site excavations. Where groundwater is encountered in the site excavations, dewatering with sumps and pumps will be required. In addition, permanent sumps and pumps will be required for the new building if below grade levels and basements are planned.

Variations in the location of the long-term water table may occur as a result of changes in precipitation, evaporation, surface water runoff, and other factors not immediately apparent at the time of this exploration. Based on the proposed construction and groundwater observations, we do not anticipate that groundwater will be encountered during construction.

3.3 <u>Summary of Boring Observations</u>

Borings B-1 and B-2 were performed in the area of the proposed building. A summary of the boring observations is provided in Table 1 below.

Boring No.	Existing Ground Surface Elevation	Depth to Groundwater (Elevation)	Depth to Bottom of Existing Fill (Elevation)
B-1	+403.0	6'2" (+396.8)	1'0" (+402.0)
B-2	+402.0	14'6" (+387.5)	NE

Table 1 – Summary of Boring Observations

NE- Not Encountered

4.0 <u>SUMMARY OF DESIGN RECOMMENDATIONS</u>

Below is a summary of the major design and construction considerations for this project. Additional recommendations are provided in the following sections of this report.

- <u>Subsurface Conditions (Section 3.0)</u>
 - Existing fill at the site extends to a depth of 1'0" (approximate elevation +402.0) below the existing ground surface.
 - Groundwater was encountered at depths of 6'2" and 14'6" (approximate elevations +396.8 and +387.5) below existing ground surface elevation in borings B-1 and B-2, respectively.
 - A summary of the subsurface observations is provided in Table 1 above.
- <u>New Building Area Preparation (Section 5.1)</u>
 - Surface materials must be stripped from proposed construction area.
 - Exposed subgrade soil shall be densified prior to excavating foundations.
 - New backfill shall be compacted to at least 95% of its Maximum Modified Dry Density (ASTM D-1557).
- <u>New Structure Foundation Recommendations (Section 5.2)</u>
 - The existing fill is not suitable for support of the proposed building foundation.
 - The new building foundation shall be lowered to bear directly on virgin soil below the existing fill.
 - Alternatively, the existing fill can be completely removed from below the foundation areas and replaced with new compacted fill.
 - The new foundation may be designed as a shallow spread footing type bearing on virgin soil or engineer-approved compacted fill.
 - Net design bearing pressure is 4,000 psf.
 - Minimum depth for frost protection is 42 inches.
 - Seismic Site Class is D or Stiff Soil Profile.
- Floor Slab Recommendations (Section 5.3)
 - The existing fill can be densified in-place for support of the proposed floor slab.
 - The floor slab may be designed as slab on grade.
 - Modulus of subgrade reaction is 200 pci.
- Additional Site Recommendations (Section 6.0)
 - Utilities (Section 6.1): New utilities may bear in the densified existing fill, virgin soil, or new compacted fill.

5.0 <u>NEW STRUCTURE EVALUATION</u>

We understand that the planned construction will consist of a new building. The building will be approximately 1,680 square feet with a finished floor elevation of +403.2. Site development may include new underground utilities and above ground storage tanks. Based on the proposed construction and existing grades, we anticipate only minor cuts and fills will be required to achieve the final grades. A summary of the boring observations performed in the proposed building area is provided in Table 1 above.

Existing fill was encountered in test boring B-1 to a depth of 1'0" below the existing ground surface (approximate elevation +402.0) The depth of the existing fill is expected to be variable and may be deeper in unexplored areas of the site. The existing fill is not an acceptable bearing material for the new building foundation. The consistency and density of the soil fill are not predictable. Certain areas may contain clean dense soils while other areas may contain loose material, void

spaces, and/or debris. The existing soil fill creates the possibility of intolerable differential settlements under loading.

To eliminate the potential for damaging differential settlements, the new structure foundations shall be lowered to bear directly on the virgin silty sand with gravel (Stratum 3, USCS: SM) below the existing fill layer or bear on new engineer approved compacted fill. Where loose existing fill extends beyond a depth where lowering the proposed footings is practical, it should be removed to virgin soil and replaced with new compacted fill to the planned subgrade elevation.

Recommendations for preparation of the site are provided in Section 5.1. Foundation recommendations for the new building are provided in Section 5.2 below. In addition, the proposed building floor slab may be designed as slab on grade bearing on new compacted fill or densified virgin soils. Floor slab recommendations can be found in Section 5.3 below.

5.1 <u>New Building Area Preparation</u>

In order to prepare the site for construction, all surface materials such as topsoil shall be removed from the planned building area, extending at least ten (10) feet beyond the new construction limits, where practical.

Existing utilities, where they are encountered within the planned building area, should be either abandoned or rerouted around the new structure. Once the utility has been rerouted or abandoned, the section of pipe and any associated structure within the building area should be completely removed. The removal of the pipe and structure must also include any loose fill around the pipe or structure. After the pipe, associated structure, and associated loose backfill have been removed, the resulting excavation shall be backfilled with new controlled fill as described below.

Handling Groundwater and Wet Subgrades

Groundwater was encountered at depths of 6'2" and 14'6" (approximate elevations +396.8 and +387.5) below existing ground surface elevation in borings B-1 and B-2, respectively. The excavations for the building foundations are expected to extend near the groundwater table. Based on the boring observations and the site conditions, groundwater and wet subgrades may be encountered during excavations for the building foundations. Proper groundwater control measures (i.e. sumps and pumps) will be required in the event that water is encountered in the site excavations.

Where required, temporary groundwater control measures shall consist of one (1) or more sumps and pumps. The sumps shall consist of a perforated pipe at least eight (8) inches in diameter, surrounded by crushed stone and filter fabric. The sump pits must be installed just outside the planned excavation area.

In the event that the exposed foundation subgrade at the bottom of the excavation is wet, stabilizing the subgrade surface with geotextile fabric and crushed stone may be required to stabilize the subgrade. Carlin-Simpson & Associates or qualified geotechnical engineer will determine this during construction as the conditions are exposed. Where needed, the subgrade should be stabilized with geotextile fabric, such as Mirafi 500X or equivalent, and 3/4-inch clean crushed stone.

Densification of Subgrade Soils (Proofrolling)

After the surface materials are removed as outlined above, the exposed subgrade shall be proofrolled with at least five (5) passes of a large vibratory drum roller (i.e. Dynapac CA 250 or equivalent). The proofrolling is necessary to densify the underlying soils. The proofrolling must be performed prior to the excavation for new foundations and the placement of new fill in the structure area. In areas where the existing subgrade is to be cut, the proofrolling of the subgrade in those areas should be performed once the proposed subgrade is achieved.

A representative from Carlin-Simpson & Associates or qualified geotechnical engineering firm shall observe the proofrolling operation. If any excessive movement is noted during the proofrolling, the unstable soil shall be removed and replaced with new compacted fill. The Carlin-Simpson & Associates representative or a qualified geotechnical engineering firm shall be responsible for determining what material, if any, is to be removed and will direct the contractor during this operation.

Installation of New Structural Fill

New fill required to achieve final grades shall consist of either engineer-approved on-site soil or imported sand and gravel. Imported sand and gravel shall contain less than 20% by weight passing a No. 200 sieve. The new fill shall be placed in layers not exceeding one (1) foot in thickness and each layer shall be compacted to at least 95% of its Maximum Modified Dry Density (ASTM D1557). Each layer must be compacted, tested, and approved by the Carlin-Simpson & Associates field representative or a qualified geotechnical engineering firm prior to placing subsequent layers. The suitability of the excavated soil for reuse as compacted structural fill is discussed in Section 6.4 below.

If imported structural fill is required during construction, the imported structural fill shall meet the following specified gradation:

US Standard Sieve Size	Percent Finer By Weight
3 inch	100
No. 4	30-80
No. 40	10-50
No. 200	0-20

5.2 <u>New Building Foundation</u>

The new building foundation may be designed as shallow spread footings lowered to bear on virgin soil. If the existing fill extends below the planned foundation bearing elevation, the existing fill must be completely removed from beneath the "zone of influence" of the new structure foundations. Therefore, at the bottom of the excavation, the removal of the existing fill shall extend horizontally beyond the foundation footprint a minimum distance equal to the depth of the excavation below the planned foundation bearing elevation on each side of the foundation. For example, if the removal of the existing fill extends vertically 2'0" below the planned foundation bearing elevation, the excavation must extend horizontally a minimum of 3'0" (1'0" plus 2'0") beyond the new structure limits at that location. The foundation design parameters in Table 2 below shall be used for design.

All foundations shall bear on the virgin soil or on new engineer-approved compacted fill. All of the exterior footings shall bear at the minimum depth listed below for protection from frost. Interior column footings may bear on the virgin soil or new structural fill just below the floor slab provided the structure is heated during winter. The footings shall have minimum dimensions as listed below.

Description	Value
Foundation Bearing Material	Virgin Soil or New Compacted Fill
Net Design Bearing Pressure	4,000 psf
Minimum Frost Depth	42 inches
Minimum Column Dimension	30 inches
Minimum Wall Dimension	18 inches

Table 2 – New Building Foundation Design Parameters

The excavations for the new foundations shall be performed under the full-time inspection of Carlin-Simpson & Associates or a qualified geotechnical engineering firm. The on-site representative shall confirm that the foundation bearing material is capable of supporting the design bearing pressure.

Prior to the installation of the reinforcement steel and concrete, the bottoms of the foundation excavations should be cleaned of all loose material. The foundation subgrade shall be compacted with a small vibratory drum trench compactor (i.e. Wacker Model RT560), a heavy vibratory plate tamper (i.e. Wacker BPU 3545A or equivalent), or a "jumping jack" style tamper (i.e. Wacker Model BS 600). The preparation of the footing bearing subgrade should be performed under the observation of a representative from Carlin-Simpson & Associates or a qualified geotechnical engineering firm. If instability is observed during the compaction of the bearing subgrade, the soft soil shall be removed and replaced with new compacted fill.

5.3 Floor Slab on Grade

The floor may be designed as a slab on grade bearing on densified existing fill, densified virgin soil, or on new engineer-approved structural fill. Floor slab design parameters are provided in Table 3 below. A layer of 3/4-inch crushed stone is recommended beneath the concrete slab for additional support and drainage.

If lower levels are planned for portions of the new building, the thickness of the crushed stone cushion shall be increased to 12 inches. In addition, permanent sumps and pumps are required for all below grade levels and basements.

Description	Value
Slab Subgrade Material	Densified Existing Fill, Densified Virgin Soil or New Compacted Fill
Modulus of Subgrade Reaction (k)	200 pci
Crushed Stone Cushion Thickness	6 inches

Table 3 – Floor Slab Design Parameters

We anticipate that small cuts and fills will be required in the proposed building areas to achieve the desired finished floor elevations. New fill for the floor slabs shall consist of either suitable on-site soil or imported sand and gravel. Imported sand and gravel shall contain less than 20% material by weight passing a No. 200 sieve. The new fill shall be placed in layers not exceeding one (1) foot in loose thickness and each layer shall be compacted to at least 92% of its Maximum Modified Dry Density (ASTM D1557). Fill layers shall be compacted, tested, and approved before placing subsequent layers.

5.4 <u>Foundation Walls</u>

In the event foundation walls are required, the soil adjacent to the building walls will exert a horizontal pressure against the wall. This pressure is based on the soil density and Coefficient of Earth Pressure at Rest (k_o), which is applicable to non-yielding building walls. Foundation wall design parameters are listed in Table 4 below.

Soil Type	On-Site Soils
Moist Unit Weight (γ)	130 pcf
Friction Angle (ϕ , deg)	30
Cohesion (c, psf)	0
Coefficient of Earth Pressure at Rest (k _o)	0.5
Equivalent Fluid Pressure	65 psf/ft
Foundation Sliding Coefficient	0.45

Table 4 – Foundation Wall Design Parameters

Where foundation walls are required, we recommend that a footing drain be placed around the exterior of the new structure to prevent water from accumulating against the foundation wall. This drain may consist of a minimum four (4) inch diameter, rigid wall perforated PVC pipe surrounded by at least 12 inches of 3/4-inch clean crushed stone. The stone shall be wrapped in a geotextile fabric, such as Mirafi 140N or equivalent. The foundation drainpipe should be extended to daylight or to the stormwater collection system. The outside face of the foundation wall, where it extends below grade, must be waterproofed.

Outside the structure, the backfill placed adjacent to the foundation walls and above the footing drain shall consist of either clean crushed stone or an imported sand and gravel mixture containing less than 10% by weight passing a No. 200 sieve and placed in layers not exceeding one (1) foot in thickness. This clean sand and gravel or crushed stone backfill shall extend a minimum of one (1) foot horizontally from the back face of the foundation walls, and shall extend vertically up the wall face to two (2) feet below the finished ground surface elevation. Where retained soils are not covered by concrete or pavement and are exposed to weather, the top two (2) feet of backfill should consist of low permeable soil. This will help to minimize water infiltration behind the wall. Surface grades should be sloped away from the building to prevent water from accumulating adjacent to the wall.

Beyond this point, the foundation walls should be backfilled with suitable soil placed in layers up to one (1) foot in thickness. The suitability of the on-site soil for reuse as compacted fill is discussed in a separate section below. The new fill should be compacted with a vibratory drum trench compactor (i.e. Wacker Model RT560), a heavy vibratory plate tamper (i.e. Wacker BPU 3545A or equivalent), or "jumping jack" style tamper (i.e. Wacker Model BS 600) to at least 92% of its
Maximum Modified Dry Density (ASTM D-1557). Heavy equipment should not be operated near the building walls as damage to the walls could occur.

5.5 <u>New Building Settlement</u>

Settlement of individual footings, designed in accordance with recommendations presented in this report, is expected to be within tolerable limits for the proposed structure. For footings placed on natural soils or new engineer-approved compacted fill and constructed in accordance with the requirements outlined in this report, maximum total settlement is expected to be on the order of 1-inch or less. Maximum differential settlement between adjacent columns or load bearing walls is expected to be ¹/₂-inch or less.

The above settlement values are based on our engineering experience with similar soil conditions and the anticipated structural loading. These estimated settlements are intended to guide the structural engineer with their design. It is critical that Carlin-Simpson & Associates or a qualified geotechnical engineer be retained to observe the foundation bearing surfaces and to confirm the recommended bearing pressures during construction.

5.6 Seismic Design Considerations

From site-specific test boring data, the Site Class was determined from New York State Building Code Section 1613.2.2. The site-specific data used to determine the Site Class typically includes soil test borings to determine Standard Penetration resistances (N-values). Based on estimated average N-values in the upper 100 feet of soil profile, the site can be classified as Site Class D - Stiff Soil Profile.

The new building should be designed to resist stress produced by lateral forces computed in accordance with Section 1613 of the New York State Building Code. The values in Table 5 shall be used for this project.

Description	Value
Mapped Spectral Response Acceleration for Short Periods, [Fig 1613.2.1 (1)]	S _S =0.26g
Mapped Spectral Response Acceleration at 1-Second Period, [Fig 1613.2.1 (2)]	S ₁ =0.059g
Site Coefficient [Table 1613.2.3 (1)]	$F_a = 1.592$
Site Coefficient [Table 1613.2.3 (2)]	$F_{v}=2.4$
Max Considered Earthquake Spectral Response for Short Periods [Eq 16-36]	S _{MS} =0.414g
Max Considered Earthquake Spectral Response at 1-Second Period [Eq 16-37]	S _{M1} =0.142g
Design Spectral Response Acceleration for Short Periods [Eq 16-38]	S _{DS} =0.276g
Design Spectral Response Acceleration for 1-Second Period [Eq 16-39]	S _{D1} =0.094g

Table 5 – Seismic Design Values

We expect that the proposed building will be an essential facility with a Risk Category of IV. Based on this assumption and the above Seismic Design Values, the Seismic Design Category (SDC) is C. The Risk Category and SDC should be verified by the project structural engineer. In the event that the structure has a different Risk Category, the SDC should be updated in accordance with Section 1613 of the New York State Building Code.

6.0 <u>SITE EVALUATION</u>

Our recommendations for the proposed site development includes new utilities, temporary excavation and bracing, and suitability of the existing site soils for reuse are provided below. A summary of the boring observations is provided in Table 1 above.

6.1 <u>Utilities</u>

For areas where existing fill is encountered within the utility excavations, the subgrade at the bottom of the utility excavation shall be compacted in place with a vibratory drum trench compactor or "jumping jack" style tamper. Carlin-Simpson & Associates or a qualified geotechnical engineering firm must evaluate these areas for the presence of soft or unsuitable material within the existing fill matrix. If instability is observed, portions of this fill may have to be removed and replaced with new compacted fill. Carlin-Simpson & Associates or a qualified geotechnical engineering firm will determine this during construction.

New utilities may bear in the densified existing fill, densified virgin soils, or new compacted fill. The bottom of all trenches shall be excavated clean so a hard bottom is provided for pipe support. If any soft areas or unsuitable existing fill conditions are encountered during the construction operation, these materials must be removed and replaced with new compacted fill.

In the event that water is encountered within the utility trench excavation or if the trench bottom becomes soft due to the inflow of surface water or trapped water, a layer of geotextile filter fabric and a minimum of six (6) inches of crushed stone shall be placed on the bearing soil to provide a firm base for support of the pipe. Sump pits and pumps should be used to keep the excavations dry.

After the utility is installed, the trench must be backfilled with compacted fill. The fill shall consist of suitable on-site soil or imported sand and gravel containing less than 20% by weight passing a No. 200 sieve. Large rock fragments must not be placed directly against the pipe. Controlled compacted fill shall be placed in one (1) foot loose layers and each layer shall be compacted to at least 92% of its Maximum Modified Dry Density (ASTM D1557). The backfill must be free of topsoil, debris, and large boulders or rock fragments.

6.2 <u>Temporary Construction Excavations and Excavation Protection</u>

Temporary construction excavations should be conducted in accordance with the most recent OSHA guidelines or applicable federal, state or local codes. A qualified person should evaluate the excavations at the time of construction to determine the appropriate soil type and allowable slope configuration. Based on the boring data, we believe the site soils would have the following classifications as defined by the OSHA guidelines.

Soil/Rock Type	Possible Classification	Maximum Slope or Bench
Existing Fill	Type "C"	1H:1V
Virgin Soil	Type "C"	1H:1V

Temporary support (i.e. trench boxes, sheeting and shoring, etc.) should be used for any excavation that cannot be sloped or benched in accordance with the applicable regulations, where necessary to protect adjacent utilities and structures, or where saturated soils or water seepage is encountered within the excavation.

A New York State licensed professional engineer must design all temporary and permanent support systems. The contractor will select the shoring type and submit design calculations for the proposed shoring method to Carlin-Simpson & Associates for review. The soil adjacent to the temporary support system will exert a horizontal pressure against the system. This pressure is based on the soil unit weight, coefficient of active earth pressure, and depth of the excavation. Support of Excavation design parameters are listed in Table 6 below.

Description	Value
Moist Unit Weight (pcf)	130
Friction Angle (ϕ , deg)	30
Cohesion (c, psf)	0
Active Earth Pressure Coefficient (k _a)	0.33
Equivalent Fluid Pressure (pcf)	42.9
Passive Earth Pressure Coefficient (k _p)	3.0

Table 6 – Temporary Sheeting and Shoring Design Parameters

6.3 Suitability of the In-Situ Soils for Use as Compacted Fill

The suitability of each soil stratum for use as compacted fill is discussed below.

Stratum 1Topsoil is not suitable for use as compacted fill. During construction, it shall be
stripped from the construction areas. The topsoil may be reused in non-
structural, non-sloped landscape areas or be hauled offsite.

Stratum 2The existing fill generally consists of brown coarse to fine SAND, some (-) Silt,
trace coarse to fine Gravel with asphalt. This material is generally suitable for use
as compacted fill in the building and pavement areas, provided that it remains
relatively dry for optimum compaction and all debris has been removed prior to
use.

Stratum 3The virgin silty sand with gravel consists of gray brown, gray, brown coarse toSilty Sand withfine SAND, little (to some) Silt, trace (to some) coarse to fine Gravel. ThisGravelmaterial is generally suitable for use as compacted fill, provided that it remains[USCS: SM]relatavely dry for optimum compaction prior to its use.

The boring observations indicate that the on-site soils contain a moderate percentage of silt (15.0% to 35.0%). The moderate silt content soils, particularly some of the virgin soil, will be moisture sensitive. If the soil becomes too wet, it will be difficult to achieve adequate compaction.

Proper moisture conditioning of the soil will be required. New compacted fill should be within 2% (+/-) of its optimum moisture content at the time of placement. In the event that the on-site material is too wet at the time of placement and cannot be adequately compacted, the soil should be aerated and allowed to dry or the material removed and a drier cleaner fill material used. In the event that the on-site material is too dry at the time of placement and cannot be adequately compacted, water may be needed to increase the soil moisture content for proper compaction.

The in-situ soils which exist throughout the site may become soft and weave if exposed to excessive moisture and construction traffic. The instability will occur quickly when exposed to these elements and it will be difficult to stabilize the subgrade. We recommend that adequate site drainage be implemented early in the construction schedule and if the subgrade becomes wet, the contractor should limit construction activity until the soil has dried.

The minimum compaction requirements for the various areas of the site are summarized in Table 7 below.

Area	Maximum Modified Dry Density (ASTM D-1557)
Building (below foundations)	95%
Building Slab (above foundations)	92%
Pavement Areas	92%
Exterior Slabs and Sidewalks	92%
Utility Trenches	92%
Landscape Areas	90%

Table 7 - Minimum Compaction Requirements

7.0 <u>GENERAL</u>

The findings, conclusions and recommendations presented in this report represent our professional opinions concerning subsurface conditions at the site. The opinions presented are relative to the dates of our site work and should not be relied on to represent conditions at later dates or at locations not explored. The opinions included herein are based on information provided to us, the data obtained at specific locations during the study and our past experience. If additional information becomes available that might impact our geotechnical opinions, it will be necessary for Carlin-Simpson & Associates to review the information, reassess the potential concerns, and re-evaluate our conclusions and recommendations.

Regardless of the thoroughness of a geotechnical exploration, there is the possibility that conditions between borings and test pits will differ from those encountered at specific boring or test pit locations, that conditions are not as anticipated by the designers and/or the contractors, or that either natural events or the construction process have altered the subsurface conditions. These variations are an inherent risk associated with subsurface conditions in this region and the approximate methods used to obtain the data. These variations may not be apparent until construction.

The professional opinions presented in this geotechnical report are not final. Field observations and foundation installation monitoring by the geotechnical engineer, as well as soil density testing and other quality assurance functions associated with site earthwork and foundation construction, are an extension of this report. Therefore, Carlin-Simpson & Associates should be retained by the Owner to observe all earthwork and foundation construction, to document that the conditions anticipated in this study actually exist, and to finalize or amend our conclusions and recommendations Carlin-Simpson & Associates is not responsible or liable for the conclusions and recommendations presented in this report if Carlin-Simpson & Associates does not perform the observation and testing services.

Therefore, in order to preserve continuity in this project, the Owner must retain the services of Carlin-Simpson & Associates to provide full time geotechnical related monitoring and testing during construction. At a minimum, this shall include the observation and testing of the following: 1) the removal of existing fill and unsuitable soil, where required; 2) the proofrolling of the subgrade soil prior to the placement of new compacted fill; 3) the placement and compaction of controlled fill; 4) the excavation for the structure foundations; and 5) the preparation of the subgrade for the floor slab.

This report has been prepared in accordance with generally accepted geotechnical engineering practice. No other warranty is expressed or implied. The evaluations and recommendations presented in this report are based on the available project information, as well as on the results of the exploration. Carlin-Simpson & Associates should be given the opportunity to review the final drawings and site plans for this project to determine if changes to the recommendations outlined in this report are needed. Should the nature of the project change, these recommendations should be re-evaluated.

This report is provided for the exclusive use of H2M Architects + Engineers and the project specific design team and may not be used or relied upon in connection with other projects or by other third parties. Carlin-Simpson & Associates disclaims liability for any such third party use or reliance without express written permission. Use of this report or the findings, conclusions or recommendations by others will be at the sole risk of the user. Carlin-Simpson & Associates is not responsible or liable for the interpretation by others of the data in this report, nor their conclusions, recommendations or opinions.

If the conditions encountered during construction vary significantly from those stated in this report, this office should be notified immediately so that additional recommendations can be made.

Thank you for allowing us to assist you with this project. Should you have any questions or comments, please contact this office.

Very truly yours,

CARLIN-SIMPSON & ASSOCIATES, LLC

MICHAL WROBLEWSKI, E.I.T. Project Manager

ROBERT B. SIMPSON



CARLIN-SIMPSON & ASSOCIATES				TEST BORING LOG					BORING NUME	SER	
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					WGHT		140#			DRILLER:	J Casson
					FALL		30"			INSPECTOR:	KWA
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CARLIN-SIMPSON & ASSOCIATES			TEST BORING LOG					BORING NUMBER			
D	Sa	yreville, I	NJ							CHEDE NO	B-2
Project	Project: Proposed Indian Hills Water Treatment Plant, Lewisboro, NY									SHEET NO.:	
Client: Drillin	g Contre	H2M Ar	Ceneral R	engineers					JUB NUMBER: FLEVATION:	22-09B +402.0	
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DA	ГЕ	TIME	DEPTH	CASING	ТҮРЕ	HSA	SS	COIL	1022	START DATE:	23/Mar/22
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					WGHT		140#			DRILLER:	J Casson
					FALL		30"			INSPECTOR:	KWA
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GENERAL NOTES:

- GENERAL LAYOUT WAS OBTAINED FROM A DRAWING THAT WAS 1. PREPARED BY H2M ARCHITECTS + ENGINEERS, ENTITLED "SKETCH PLAN", DATED JANUARY 2022, DRAWING NUMBER C-100.
- BORING LOCATIONS WERE LAID OUT IN THE FIELD BY 2. CARLIN-SIMPSON & ASSOCIATES (CSA).
- THE BORINGS WERE PERFORMED BY GENERAL BORINGS, INC. ON 23 MARCH 2022, UNDER THE FULL TIME INSPECTION OF CSA. 3.
- 4. LOCATIONS ARE APPROXIMATE.

LEGEND:



- BORING LOCATION

ROBERT B. SIMPSON, P.E. PROFESSIONAL ENGINEER

BORING LOCATION PLAN

PROPOSED WATER TREATMENT BUILDING INDIAN HILLS - APACHE CIRCLE TOWNSHIP OF LEWISBORO, NEW YORK

	DRAWN	SCALE	
	MW	1'' = 20'	CARLIN-SIMPSON AND ASSOCIATES, LLC
+	CHECKED	DATE	61 Main Street
	RBS	28 APRIL 2022	Sayreville, NJ 08872
	PROJECT NO.	DWG NO.	
+	22-09B	FIG -1	Consulting Geotechnical and Environmental Engineers
	APPROVED		



CARLIN-SIMPSON & ASSOCIATES					TEST BORING LOG					BORING NUMBER		
Sayreville, NJ							<u>DR</u>	<u>AFT</u>				B-1
Project: Proposed Indian Hills Water Tre							Plant, Lewis	sboro, NY			SHEET NO.:	1 of 1
Client: H2M Architects + Engineers											JOB NUMBER:	22-09B
Drillin	g Contra	actor:	General B	orin	ngs Inc			-	-		ELEVATION:	+403.0
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						WGHT		140#			DRILLER:	J Casson
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CARLIN-SIMPSON & ASSOCIATES					TEST BORING LOG					BORING NUMBER		
Sayreville, NJ							<u>DR</u>	<u>AFT</u>				B-2
Project	:	Proposed	l Indian Hi	lls '	Water Tr	eatment I	Plant, Lewis	sboro, NY			SHEET NO.:	1 of 1
Client:	~	H2M Architects + Engineers									JOB NUMBER:	22-09B
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GROU	NDWA'.	TER		~			CASING	SAMPLE	CORE	TUBE	DATUM:	Торо
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Appendix C

Example SWPPP Inspection Report

CONSTRUCTION STORMWATER INSPECTION REPORT

SECTION A: Site Information

Permit No.:	Date of Inspection:	Time of Inspection:	Date of Last Inspection:	
Project Name:		Stage of Construction	Weather Conditions	
Site Location:		Site Description:		
		T:41- 1		
Contact at Site.		litte.		
Phone No.:		e-mail:		

SECTION B: Applicant's Information

Name:	e-mail:
Phone No.	Fax No.:
Address:	

SECTION C: General Contractor's Information

Name:	e-mail:
Phone No.	Fax No.:
Address:	

SECTION D: Engineer's Information

Name:	e-mail:
Phone No.	Fax No.:
Address:	

SECTION E: Document Verification

Criteria	NA	YES	NO	Comments
NOI posted at construction site				
SPDES General Permit retained at construction site				
SWPPP retained at construction site				
Updated as site conditions change				
 Contains monthly/quarterly written summaries of compliance status 				

SECTION F: Area of Disturbance

Criteria	NA	YES	NO	Comments
Less than 5 acres of disturbed soil				
If no, was there prior written approval?				
Disturbance within limits of approved plans				

SECTION G: Water Quality

Polluted discharges	NA	No	Yes	Comments:		
Discharges show visible signs of:	Sedir	ment _	_ Floatabl	es Oil/Grease	Turbidity	Other
Receiving waters impacted:	Lake	·	_ Bay	Stream	Wetland	Other

SECTION H: General Site Conditions

		Condit	ion*		
Criteria	NA	S	М	U	Comments
Litter/debris management					
Sediment and erosion control facilities					
Impact on adjacent property					
Dust control					

* NA=Not Applicable; S=Satisfactory; M=Marginal; U=Unsatisfactory

SECTION I: Temporary Stream Crossings

		Condit	ion*		
Criteria	NA	S	М	U	Comments
Pipe size spanning creeks					
Non-woven geotextile fabric installed beneath approaches					
Aggregate fill					
Rock on approaches removes sediment from vehicles and prevents Sediment from entering streams					

* NA=Not Applicable; S=Satisfactory; M=Marginal; U=Unsatisfactory

SECTION J: Runoff Control Practices

Criteria		Condit	tion*		
		S	М	U	Comments
Excavation dewatering					
Upstream berms (one-foot min. freeboard)					
Downstream berms					
Clean water from upstream pool pumped to downstream pool					
Sediment-laden water discharged to silt trapping device					
Level spreader installation (constructed on undisturbed soil)					
Flow sheets do not erode downstream edge					
Interceptor dikes and swales installation					
Side slopes 2:1 or flatter					
Stabilized by geotextile fabric, seed or mulch					
Sediment-laden runoff is directed to sediment trapping device					
Stone check dams installation					
Stable channel					
Lack of a permanent pool behind dam					
Regular removal of accumulated sediment					
Rock outlet protection installation					
Installed concurrently with pipe installation					

* NA=Not Applicable; S=Satisfactory; M=Marginal; U=Unsatisfactory

SECTION K: Soil Stabilization

Criteria		Condit	ion*		
		S	М	U	Comments
Topsoil and stockpiles					
With vegetation					
With mulch					
Sediment control installed at toe of slope					
Revegetation					
 Temporary seeding and mulch applied to idle areas 					
Minimum of 4 inches topsoil applied under permanent seedings					
* NA-Not Applicable: S-Satisfactory: M-Marginal: II-Upsatisfactory					

NA=Not Applicable; S=Satisfactory; M=Marginal; U=Unsatisfactory

SECTION L: Sediment Control Practices

Criteria		Cond	ition*		
		S	м	U	Comments
Stabilized construction entrance installation					
Drainage prevents ponding					
Stone removes mud from vehicles					
All traffic uses the entrance					
Silt fence installation					
• On contour and 10' from toe of slope					
Not across conveyance channels					
End stakes wrapped together at joints					
• Fabric is buried min 6"					
Posts are stable, fabric is tight and not damaged					
• Sediment accumulation (note % of design capacity in comments)					
Storm drain inlet protection					
Drainage area is less than 1 acre					
Sediment accumulation (note % of design capacity in comments)					
Excavated drop inlet protection					
- 900 cu. ft. per acre of disturbed land					
- 2:1 side slopes					
Stone and block drop inlet protection					
- Concrete blocks installed lengthwise					
- Wire screen placed between #3 crushed stone & concrete blocks					
Filter fabric drop inlet protection					
- 2"x4" frame					
- Posts (stable; spaced max. 3' apart)					
 Fabric *undamaged; embedded 1' to 1.5' below ground; stapled to frame/posts at max. spacing of 8" 					
Curb drop inlet protection					
- 2"x4" frame					
 Continuous wire mesh across throat (30" min. width, 4' longer than throat) shaped and nailed to 2"x4" weir 					
- Weir nailed to 2"x4" spacers (9" long, 6' max. apart)					
 Placed across inlet and secured by 2"x4" 					

* NA=Not Applicable; S=Satisfactory; M=Marginal; U=Unsatisfactory

SECTION L: Sediment Control Practices (Con't)

Criteria		Conc	lition*		
		S	М	U	Comments
Temporary sediment trap installation					
Geotextile fabric placed beneath rock fill					
Sediment accumulation (note % of design capacity in comments)					
Temporary sediment basin installation					
Side slopes stabilized with seed or mulch					
Structure flushed and surface restored upon removal of facility					
Sediment accumulation (note % of design capacity in comments)					
Inspections occur at least every 7 calendar days					
Inspections occur at within 24 hours of any storm event of 0.5" or greater					
Effectiveness of erosion and sediment control practices is evaluated at time of inspection and documented					
Inspection reports maintained in log book at site and are available for review					
Sediment is removed from traps/ponds when design capacity is reduced by 50%					
Site inspections are being performed by a qualified inspector					
Reports are properly signed/certified					

* NA=Not Applicable; S=Satisfactory; M=Marginal; U=Unsatisfactory

SECTION N: Additional Comments/Notes

SECTION O: Overall Inspection Rating

Satisfactory	🗆 Marginal	Unsatisfactory
form Completed By:		

Name (Print):

F

Signature:

Date:

S:_H2M STANDARDS\7000 (Civil & Transport)\SWPPP Forms\CONSTRUCTION STORMWATER INSPECTION REPORT.doc

Appendix D

<u>Copy of Electronic Notice of Intent (eNOI)</u> <u>& Supplemental Signatory Forms</u>

NOI for coverage under Stormwater General Permit for Construction Activity

version 1.35

(Submission #: HPH-2ZYW-3TGVZ, version 1)

Details

Originally Started By	Sean Peters
Alternate Identifier	Indian Hills Water System Improvements
Submission ID	HPH-2ZYW-3TGVZ
Submission Reason	New
Status	Draft

Form Input

Owner/Operator Information

Owner/Operator Name (Company/Private Owner/Municipality/Agency/Institution, etc.) Liberty Utilities

Owner/Operator Contact Person Last Name (NOT CONSULTANT) Kilpatrick

Owner/Operator Contact Person First Name John

Owner/Operator Mailing Address 60 Brooklyn Ave

City Merrick

State NY

Zip

11566

Phone 5164062625

Email john.kilpatrick@libertyutilities.com

Federal Tax ID 11-1516966

11-1310900

Project Location

Project/Site Name

Indian Hills Water System Improvements

Street Address (Not P.O. Box)

94 Waccabuc Road

Side of Street East

City/Town/Village (THAT ISSUES BUILDING PERMIT) Town of Lewisboro

State NY

Zip 10526

DEC Region 3

County WESTCHESTER

Name of Nearest Cross Street Indian Hill

Distance to Nearest Cross Street (Feet) 475

Project In Relation to Cross Street North

Tax Map Numbers Section-Block-Parcel 10-11152-184

Tax Map Numbers 10-11152-184

1. Coordinates

Provide the Geographic Coordinates for the project site. The two methods are:

- Navigate to the project location on the map (below) and click to place a marker and obtain the XY coordinates.

- The "Find Me" button will provide the lat/long for the person filling out this form. Then pan the map to the correct location and click the map to place a marker and obtain the XY coordinates.

Navigate to your location and click on the map to get the X,Y coordinates 41.29843819565898,-73.63447982142173

Project Details

2. What is the nature of this project?

Redevelopment with increase in impervious area

3. Select the predominant land use for both pre and post development conditions.

Pre-Development Existing Landuse

Other: Water Supply and Treatment

Post-Development Future Land Use

Other: Water Supply, Storage, and Treatment

3a. If Single Family Subdivision was selected in question 3, enter the number of subdivision lots.

NONE PROVIDED

4. In accordance with the larger common plan of development or sale, enter the total project site acreage, the acreage to be disturbed and the future impervious area (acreage)within the disturbed area.

*** ROUND TO THE NEAREST TENTH OF AN ACRE. ***

Total Site Area (acres) 8.2

Total Area to be Disturbed (acres) 0.34

Existing Impervious Area to be Disturbed (acres)

Future Impervious Area Within Disturbed Area (acres)

.1

5. Do you plan to disturb more than 5 acres of soil at any one time? No

6. Indicate the percentage (%) of each Hydrologic Soil Group(HSG) at the site.

A 26	(% 5	%)	

B (%) 3

C (%) 16

D (%) 55

7. Is this a phased project? No

8. Enter the planned start and end dates of the disturbance activities.

Start Date

02/01/2023

End Date

10/01/2023

9. Identify the nearest surface waterbody(ies) to which construction site runoff will discharge.

Onsite Stream/Wetland (Unlisted/Unclassified)

9a. Type of waterbody identified in question 9? Stream/Creek On Site

Other Waterbody Type Off Site Description

Freshwater Wetland F-75

9b. If "wetland" was selected in 9A, how was the wetland identified? Regulatory Map Delineated by Consultant

10. Has the surface waterbody(ies in question 9 been identified as a 303(d) segment in Appendix E of GP-0-20-001? No

11. Is this project located in one of the Watersheds identified in Appendix C of GP-0-20-001?

Yes

12. Is the project located in one of the watershed areas associated with AA and AA-S classified waters? Yes

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 D (provided the map unit name is inclusive of slopes greater than 25%), E or F on the USDA Soil Survey? No

If Yes, what is the acreage to be disturbed? NONE PROVIDED

14. Will the project disturb soils within a State regulated wetland or the protected 100 foot adjacent area?

Yes

15. Does the site runoff enter a separate storm sewer system (including roadside drains, swales, ditches, culverts, etc)? No

16. What is the name of the municipality/entity that owns the separate storm sewer system?

Town of Lewisboro

17. Does any runoff from the site enter a sewer classified as a Combined Sewer? No

18. Will future use of this site be an agricultural property as defined by the NYS Agriculture and Markets Law? No

19. Is this property owned by a state authority, state agency, federal government or local government? No

20. Is this a remediation project being done under a Department approved work plan? (i.e. CERCLA, RCRA, Voluntary Cleanup Agreement, etc.) No

Required SWPPP Components

21. Has the required Erosion and Sediment Control component of the SWPPP been developed in conformance with the current NYS Standards and Specifications for Erosion and Sediment Control (aka Blue Book)? Yes

22. Does this construction activity require the development of a SWPPP that includes the post-construction stormwater management practice component (i.e. Runoff Reduction, Water Quality and Quantity Control practices/techniques)? No

If you answered No in question 22, skip question 23 and the Post-construction Criteria and Post-construction SMP Identification sections.

23. Has the post-construction stormwater management practice component of the SWPPP been developed in conformance with the current NYS Stormwater Management Design Manual? No

24. The Stormwater Pollution Prevention Plan (SWPPP) was prepared by: Professional Engineer (P.E.)

SWPPP Preparer

Sean T. Hoffman, PE

Contact Name (Last, Space, First) Peters, Sean

Mailing Address 2 Executive Blvd

City Suffern

State

NY

Zip 10901

Phone 8453577238

Email speters@h2m.com

Download SWPPP Preparer Certification Form

Please take the following steps to prepare and upload your preparer certification form:

- 1) Click on the link below to download a blank certification form
- 2) The certified SWPPP preparer should sign this form

3) Scan the signed form4) Upload the scanned document<u>Download SWPPP Preparer Certification Form</u>

Please upload the SWPPP Preparer Certification NONE PROVIDED Comment NONE PROVIDED

Erosion & Sediment Control Criteria

25. Has a construction sequence schedule for the planned management practices been prepared? Yes

26. Select all of the erosion and sediment control practices that will be employed on the project site:

Temporary Structural Silt Fence Stabilized Construction Entrance

Biotechnical None

Vegetative Measures Mulching Seeding

Permanent Structural Rock Outlet Protection

Other

Slope Stabilization Matting

Post-Construction Criteria

* IMPORTANT: Completion of Questions 27-39 is not required if response to Question 22 is No.

27. Identify all site planning practices that were used to prepare the final site plan/layout for the project. NONE PROVIDED

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). NONE PROVIDED

28. Provide the total Water Quality Volume (WQv) required for this project (based on final site plan/layout). (Acre-feet) NONE PROVIDED

29. Post-construction SMP Identification

Use the Post-construction SMP Identification section to identify the RR techniques (Area Reduction), RR techniques(Volume Reduction) and Standard SMPs with RRv Capacity that were used to reduce the Total WQv Required (#28).

Identify the SMPs to be used by providing the total impervious area that contributes runoff to each technique/practice selected. For the Area Reduction Techniques, provide the total contributing area (includes pervious area) and, if applicable, the total impervious area that contributes runoff to the technique/practice.

Note: Redevelopment projects shall use the Post-Construction SMP Identification section to identify the SMPs used to treat and/or reduce the WQv required. If runoff reduction techniques will not be used to reduce the required WQv, skip to question 33a after identifying the SMPs.

30. Indicate the Total RRv provided by the RR techniques (Area/Volume Reduction) and Standard SMPs with RRv capacity identified in question 29. (acre-feet) NONE PROVIDED

31. Is the Total RRv provided (#30) greater than or equal to the total WQv required (#28)? NONE PROVIDED

If Yes, go to question 36. If No, go to question 32.

32. Provide the Minimum RRv required based on HSG. [Minimum RRv Required = (P) (0.95) (Ai) / 12, Ai=(s) (Aic)] (acre-feet) NONE PROVIDED

32a. Is the Total RRv provided (#30) greater than or equal to the Minimum RRv Required (#32)? NONE PROVIDED

If Yes, go to question 33.

Note: Use the space provided in question #39 to summarize the specific site limitations and justification for not reducing 100% of WQv required (#28). A detailed evaluation of the specific site limitations and justification for not reducing 100% of the WQv required (#28) must also be included in the SWPPP.

If No, sizing criteria has not been met; therefore, NOI can not be processed. SWPPP preparer must modify design to meet sizing criteria.

33. SMPs

Use the Post-construction SMP Identification section to identify the Standard SMPs and, if applicable, the Alternative SMPs to be used to treat the remaining total WQv (=Total WQv Required in #28 - Total RRv Provided in #30).

Also, provide the total impervious area that contributes runoff to each practice selected.

NOTE: Use the Post-construction SMP Identification section to identify the SMPs used on Redevelopment projects.

33a. Indicate the Total WQv provided (i.e. WQv treated) by the SMPs identified in question #33 and Standard SMPs with RRv Capacity identified in question #29. (acre-feet) NONE PROVIDED

Note: For the standard SMPs with RRv capacity, the WQv provided by each practice = the WQv calculated using the contributing drainage area to the practice - provided by the practice. (See Table 3.5 in Design Manual)

34. Provide the sum of the Total RRv provided (#30) and the WQv provided (#33a). NONE PROVIDED

35. Is the sum of the RRv provided (#30) and the WQv provided (#33a) greater than or equal to the total WQv required (#28)? NONE PROVIDED

If Yes, go to question 36.

If No, sizing criteria has not been met; therefore, NOI can not be processed. SWPPP preparer must modify design to meet sizing criteria.

36. Provide the total Channel Protection Storage Volume (CPv required and provided or select waiver (#36a), if applicable.

CPv Required (acre-feet) NONE PROVIDED

CPv Provided (acre-feet) NONE PROVIDED

36a. The need to provide channel protection has been waived because: NONE PROVIDED

37. Provide the Overbank Flood (Qp) and Extreme Flood (Qf) control criteria or select waiver (#37a), if applicable.

Overbank Flood Control Criteria (Qp)

Pre-Development (CFS) NONE PROVIDED

Post-Development (CFS) NONE PROVIDED

Total Extreme Flood Control Criteria (Qf)

Pre-Development (CFS) NONE PROVIDED

Post-Development (CFS) NONE PROVIDED

37a. The need to meet the Qp and Qf criteria has been waived because: NONE PROVIDED

38. Has a long term Operation and Maintenance Plan for the post-construction stormwater management practice(s) been developed? NONE PROVIDED

If Yes, Identify the entity responsible for the long term Operation and Maintenance NONE PROVIDED

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. NONE PROVIDED

Post-Construction SMP Identification

Runoff Reduction (RR) Techniques, Standard Stormwater Management Practices (SMPs) and Alternative SMPs

Identify the Post-construction SMPs to be used by providing the total impervious area that contributes runoff to each technique/practice selected. For the Area Reduction Techniques, provide the total contributing area (includes pervious area) and, if applicable, the total impervious area that contributes runoff to the technique/practice.

RR Techniques (Area Reduction)

Round to the nearest tenth

Total Contributing Acres for Conservation of Natural Area (RR-1) NONE PROVIDED

Total Contributing Impervious Acres for Conservation of Natural Area (RR-1) NONE PROVIDED

Total Contributing Acres for Sheetflow to Riparian Buffers/Filter Strips (RR-2) NONE PROVIDED

Total Contributing Impervious Acres for Sheetflow to Riparian Buffers/Filter Strips (RR-2) NONE PROVIDED Total Contributing Acres for Tree Planting/Tree Pit (RR-3) NONE PROVIDED

Total Contributing Impervious Acres for Tree Planting/Tree Pit (RR-3) NONE PROVIDED

Total Contributing Acres for Disconnection of Rooftop Runoff (RR-4) NONE PROVIDED

RR Techniques (Volume Reduction)

Total Contributing Impervious Acres for Disconnection of Rooftop Runoff (RR-4) NONE PROVIDED

Total Contributing Impervious Acres for Vegetated Swale (RR-5) NONE PROVIDED

Total Contributing Impervious Acres for Rain Garden (RR-6) NONE PROVIDED

Total Contributing Impervious Acres for Stormwater Planter (RR-7) NONE PROVIDED

Total Contributing Impervious Acres for Rain Barrel/Cistern (RR-8) NONE PROVIDED

Total Contributing Impervious Acres for Porous Pavement (RR-9) NONE PROVIDED

Total Contributing Impervious Acres for Green Roof (RR-10) NONE PROVIDED

Standard SMPs with RRv Capacity

Total Contributing Impervious Acres for Infiltration Trench (I-1) NONE PROVIDED

Total Contributing Impervious Acres for Infiltration Basin (I-2) NONE PROVIDED

Total Contributing Impervious Acres for Dry Well (I-3) NONE PROVIDED

Total Contributing Impervious Acres for Underground Infiltration System (I-4) NONE PROVIDED

Total Contributing Impervious Acres for Bioretention (F-5) NONE PROVIDED Total Contributing Impervious Acres for Dry Swale (O-1) NONE PROVIDED

Standard SMPs

Total Contributing Impervious Acres for Micropool Extended Detention (P-1) NONE PROVIDED

Total Contributing Impervious Acres for Wet Pond (P-2) NONE PROVIDED

Total Contributing Impervious Acres for Wet Extended Detention (P-3) NONE PROVIDED

Total Contributing Impervious Acres for Multiple Pond System (P-4) NONE PROVIDED

Total Contributing Impervious Acres for Pocket Pond (P-5) NONE PROVIDED

Total Contributing Impervious Acres for Surface Sand Filter (F-1) NONE PROVIDED

Total Contributing Impervious Acres for Underground Sand Filter (F-2) NONE PROVIDED

Total Contributing Impervious Acres for Perimeter Sand Filter (F-3) NONE PROVIDED

Total Contributing Impervious Acres for Organic Filter (F-4) NONE PROVIDED

Total Contributing Impervious Acres for Shallow Wetland (W-1) NONE PROVIDED

Total Contributing Impervious Acres for Extended Detention Wetland (W-2) NONE PROVIDED

Total Contributing Impervious Acres for Pond/Wetland System (W-3) NONE PROVIDED

Total Contributing Impervious Acres for Pocket Wetland (W-4) NONE PROVIDED

Total Contributing Impervious Acres for Wet Swale (O-2) NONE PROVIDED

Alternative SMPs (DO NOT INCLUDE PRACTICES BEING USED FOR PRETREATMENT ONLY)

Total Contributing Impervious Area for Hydrodynamic NONE PROVIDED

Total Contributing Impervious Area for Wet Vault NONE PROVIDED

Total Contributing Impervious Area for Media Filter NONE PROVIDED

"Other" Alternative SMP? NONE PROVIDED

Total Contributing Impervious Area for "Other" NONE PROVIDED

Provide the name and manufaturer of the alternative SMPs (i.e. proprietary practice(s)) being used for WQv treatment.

Note: Redevelopment projects which do not use RR techniques, shall use questions 28, 29, 33 and 33a to provide SMPs used, total WQv required and total WQv provided for the project.

Manufacturer of Alternative SMP NONE PROVIDED

Name of Alternative SMP NONE PROVIDED

Other Permits

40. Identify other DEC permits, existing and new, that are required for this project/facility. Freshwater Wetlands/Article 24

If SPDES Multi-Sector GP, then give permit ID NONE PROVIDED

If Other, then identify NONE PROVIDED

41. Does this project require a US Army Corps of Engineers Wetland Permit? No

If "Yes," then indicate Size of Impact, in acres, to the nearest tenth NONE PROVIDED

42. If this NOI is being submitted for the purpose of continuing or transferring coverage under a general permit for stormwater runoff from construction activities, please indicate the former SPDES number assigned. NONE PROVIDED

MS4 SWPPP Acceptance

43. Is this project subject to the requirements of a regulated, traditional land use control MS4? Yes - Please attach the MS4 Acceptance form below

If No, skip question 44

44. Has the "MS4 SWPPP Acceptance" form been signed by the principal executive officer or ranking elected official and submitted along with this NOI? Yes

MS4 SWPPP Acceptance Form Download Download form from the link below. Complete, sign, and upload. <u>MS4 SWPPP Acceptance Form</u>

MS4 Acceptance Form Upload

NONE PROVIDED Comment NONE PROVIDED

Owner/Operator Certification

Owner/Operator Certification Form Download

Download the certification form by clicking the link below. Complete, sign, scan, and upload the form. <u>Owner/Operator Certification Form (PDF, 45KB)</u>

Upload Owner/Operator Certification Form

NONE PROVIDED Comment NONE PROVIDED



Department of Environmental Conservation

SWPPP Preparer Certification Form

SPDES General Permit for Stormwater Discharges From Construction Activity (GP-0-20-001)

Project Site Information Project/Site Name

Owner/Operator Information

Owner/Operator (Company Name/Private Owner/Municipality Name)

Certification Statement – SWPPP Preparer

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

MI Last Name

Signature

Date

NEW YORK STATE OF OPPORTUNITYDepartment of Environmental ConservationNYS 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:		
2. Contact Person:		
3. Street Address:		
4. City/State/Zip:		
II. Project Site Information		
5. Project/Site Name:		
6. Street Address:		
7. City/State/Zip:		
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:		
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)



Department of Environmental Conservation

Owner/Operator Certification Form

SPDES General Permit For Stormwater Discharges From Construction Activity (GP-0-20-001)

Project/Site Name:			
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.

Owner/Operator First Name

M.I. Last Name

Signature

Date

Appendix E

Signatory Requirements

Signatory Requirements:

Pursuant to NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-20-001), signatory requirements for all NOIs, NOTs, SWPPPs, MS4 SWPPP Acceptance forms, reports, certifications or information required by the aforementioned permit are as follows:

- 1) All NOIs and NOTs shall be signed as follows:
 - a) For a corporation these forms shall be signed by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:
 - a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or
 - ii) the manager of one or more manufacturing, production or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
 - b) For a partnership or sole proprietorship these forms shall be signed by a general partner or the proprietor, respectively; or
 - c) For a municipality, State, Federal, or other public agency these forms shall be signed by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:
 - i) the chief executive officer of the agency, or
 - ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g. Regional Administrators of EPA).
- 2) The SWPPP and other information requested by the Department shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a) The authorization is made in writing by a person described in 1) above;
 - b) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant

manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position) and,

- c) The written authorization shall include the name, title and signature of the authorized representative and be attached to the SWPPP.
- 3) All inspection reports shall be signed by the *qualified inspector* that performs the inspection.
- 4) The MS4 SWPPP Acceptance form shall be signed by the principal executive officer or ranking elected official from the *regulated, traditional land use control MS4,* or by a duly authorized representative of that person.

It shall constitute a permit violation if an incorrect and/or improper signatory authorizes any required forms, SWPPP and/or inspection reports.

Appendix F

<u>Contractor & Subcontractor</u> <u>Certification Statements</u>

Contractor or Subcontractor Certification Statement

"I hereby certify under penalty of law that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the *qualified inspector* during a site inspection. I also understand that the *owner or operator* must comply with the terms and conditions of the most current version of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for stormwater discharges from construction activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards. Furthermore, I am aware that there are significant penalties for submitting false information, that I do not believe to be true, including the possibility of fine and imprisonment for knowing violations."

Contractor Name:		-
Address:		
Telephone number:		-
Contractor Representative:		
Name:	Title:	
Signature:	Date:	
Trained Contractor (if different from above):		
Name:	Title:	
Signature:	Date:	

SWPPP Responsibilities

Elements of SWPPP above contractor is responsible for implementing:

Contractor or Subcontractor Certification Statement

"I hereby certify under penalty of law that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the *qualified inspector* during a site inspection. I also understand that the *owner or operator* must comply with the terms and conditions of the most current version of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for stormwater discharges from construction activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards. Furthermore, I am aware that there are significant penalties for submitting false information, that I do not believe to be true, including the possibility of fine and imprisonment for knowing violations."

Contractor Name:		-
Address:		-
Telephone number:		-
		-
Contractor Representative:		
Name:	Title:	
Signature:	Date:	
Trained Contractor (if different from above):		
Name:	Title:	
Signature:	Date:	

SWPPP Responsibilities

Elements of SWPPP above contractor is responsible for implementing:

Contractor or Subcontractor Certification Statement

"I hereby certify under penalty of law that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the *qualified inspector* during a site inspection. I also understand that the *owner or operator* must comply with the terms and conditions of the most current version of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for stormwater discharges from construction activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards. Furthermore, I am aware that there are significant penalties for submitting false information, that I do not believe to be true, including the possibility of fine and imprisonment for knowing violations."

Contractor Name:		-
Address:		-
Telephone number:		-
Contractor Representative:		-
Name:	Title:	
Signature:	Date:	
Trained Contractor (if different from above):		
Name:	Title:	
Signature:	Date:	

SWPPP Responsibilities

Elements of SWPPP above contractor is responsible for implementing:

Appendix G

Time of Concentration Worksheets Hydraflow Hydrograph Results

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2021



Legend

Hyd. Origin Description

1 SCS Runoff WS#1

Project: Pre-Development Conditions.gpw

Hydrograph Return Period Recap Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2021

Hyd.	Hydrograph	Inflow				Hydrograph					
NO.	(origin)	nya(s)	1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr	Description
No.	type (origin)	hyd(s)	1-yr	2-yr	3-yr	5-yr	10-yr	25-yr 7.304	50-yr	100-yr	WS#1

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2021

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	7.304	2	736	35,001				WS#1
Pre	-Developmen	t Conditio	ons.gpw		Return P	eriod: 25 Y	ear	Wednesday	/, 05 / 18 / 2022

Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2021

Hyd. No. 1

Hydrograph type	= SCS Runoff	Peak discharge	= 7.304 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.27 hrs
Time interval	= 2 min	Hyd. volume	= 35,001 cuft
Drainage area	= 2.140 ac	Curve number	= 83*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 21.70 min
Total precip.	= 6.36 in	Distribution	= Type III
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(0.335 x 84) + (1.757 x 82) + (0.049 x 98)] / 2.140



Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2021

Hyd. No. 1

WS#1

<u>Description</u>	<u>A</u>		<u>B</u>		<u>C</u>		<u>Totals</u>
Sheet Flow Manning's n-value Flow length (ft) Two-year 24-hr precip. (in) Land slope (%)	= 0.400 = 100.0 = 3.39 = 2.00		0.011 0.0 0.00 0.00		0.011 0.0 0.00 0.00		
Travel Time (min)	= 20.86	+	0.00	+	0.00	=	20.86
Shallow Concentrated Flow Flow length (ft) Watercourse slope (%) Surface description Average velocity (ft/s)	= 236.00 = 8.50 = Unpaved =4.70	I	0.00 0.00 Paved 0.00		0.00 0.00 Paved 0.00		
Travel Time (min)	= 0.84	+	0.00	+	0.00	=	0.84
Channel Flow X sectional flow area (sqft) Wetted perimeter (ft) Channel slope (%) Manning's n-value Velocity (ft/s)	= 0.00 = 0.00 = 0.015 =0.00		0.00 0.00 0.00 0.015 0.00		0.00 0.00 0.00 0.015 0.00		
Flow length (ft)	({0})0.0		0.0		0.0		
Travel Time (min)	= 0.00	+	0.00	+	0.00	=	0.00
Total Travel Time, Tc							21.70 min

Watershed Model Schematic

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2021



Hydrograph Return Period Recap Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2021

No. rype inyct(s) 1-yr 2-yr 3-yr 5-yr 10-yr 25-yr 50-yr 100-yr 100-yr 1 SCS Runoff 7.168 WS#1A 2 SCS Runoff 0.240 WS#1B 3 Reservoir 2 0.202 New Bldg. to UG Syst. 4 Combine 1, 3 7.294 Combine to WS#1	Hydrograph Description		
1 SCS Runoff 7.168 WS#1A 2 SCS Runoff 0.240 WS#1B 3 Reservoir 2 0.202 New Bldg. to UG Syst. 4 Combine 1, 3 7.294 Combine to WS#1			
	n		

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2021

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	7.168	2	736	34,347				WS#1A
2	SCS Runoff	0.240	2	724	833				WS#1B
3	Reservoir	0.202	2	728	832	2	400.86	114	New Bldg. to UG Syst.
4	Combine	7.294	2	736	35,179	1, 3			Combine to WS#1
	Combine	7.294		/36	35,179	1, 3			Combine to WS#1
Pos	st-Developmer	nt Conditi	ons1.gp	w	Return P	eriod: 25 Y	/ ear	Wednesday	v, 05 / 18 / 2022

Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2021

Hyd. No. 1

WS#1A

Hydrograph type	= SCS Runoff	Peak discharge	= 7.168 cfs
Storm frequency	= 25 yrs	Time to peak	= 736 min
Time interval	= 2 min	Hyd. volume	= 34,347 cuft
Drainage area	= 2.100 ac	Curve number	= 83*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 21.70 min
Total precip.	= 6.36 in	Distribution	= Type III
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(0.510 x 84) + (1.530 x 82) + (0.050 x 98) + (0.010 x 91)] / 2.100



Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2021

Hyd. No. 1

WS#1A

<u>Description</u>	<u>A</u>		<u>B</u>		<u>C</u>		<u>Totals</u>
Sheet Flow Manning's n-value Flow length (ft) Two-year 24-hr precip. (in) Land slope (%) Travel Time (min)	= 0.400 = 100.0 = 3.39 = 2.00 = 20.86	+	0.011 0.0 0.00 0.00 0.00	+	0.011 0.0 0.00 0.00 0.00	=	20.86
Shallow Concentrated Flow Flow length (ft) Watercourse slope (%) Surface description Average velocity (ft/s)	= 236.00 = 8.50 = Unpavec =4.70	1	0.00 0.00 Paved 0.00		0.00 0.00 Paved 0.00		
Travel Time (min)	= 0.84	+	0.00	+	0.00	=	0.84
Channel Flow X sectional flow area (sqft) Wetted perimeter (ft) Channel slope (%) Manning's n-value Velocity (ft/s)	= 0.00 = 0.00 = 0.00 = 0.015 =0.00		0.00 0.00 0.00 0.015 0.00		0.00 0.00 0.00 0.015 0.00		
Flow length (ft)	({0})0.0		0.0		0.0		
Travel Time (min)	= 0.00	+	0.00	+	0.00	=	0.00
Total Travel Time, Tc							21.70 min

Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2021

Hyd. No. 2

WS#1B

Hydrograph type	= SCS Runoff	Peak discharge	= 0.240 cfs
Storm frequency	= 25 yrs	Time to peak	= 724 min
Time interval	= 2 min	Hyd. volume	= 833 cuft
Drainage area	= 0.040 ac	Curve number	= 98*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 6.36 in	Distribution	= Type III
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(0.040 x 98)] / 0.040



Wednesday, 05 / 18 / 2022

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Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2021

Hyd. No. 3

New Bldg. to UG Syst.

Hydrograph type	= Reservoir	Peak discharge	= 0.202 cfs
Storm frequency	= 25 yrs	Time to peak	= 728 min
Time interval	= 2 min	Hyd. volume	= 832 cuft
Inflow hyd. No.	= 2 - WS#1B	Max. Elevation	= 400.86 ft
Reservoir name	= UG Detention	Max. Storage	= 114 cuft

Storage Indication method used.



7

Pond Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2021

Pond No. 1 - UG Detention

Pond Data

UG Chambers -Invert elev. = 398.83 ft, Rise x Span = 3.00 x 7.00 ft, Barrel Len = 8.00 ft, No. Barrels = 1, Slope = 0.00%, Headers = No

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	398.83	n/a	0	0
0.30	399.13	n/a	17	17
0.60	399.43	n/a	17	34
0.90	399.73	n/a	17	50
1.20	400.03	n/a	17	67
1.50	400.33	n/a	17	84
1.80	400.63	n/a	17	101
2.10	400.93	n/a	17	118
2.40	401.23	n/a	17	134
2.70	401.53	n/a	17	151
3.00	401.83	n/a	17	168

Culvert / Orifice Structures

Weir Structures

	[A]	[B]	[C]	[PrfRsr]		[A]	[B]	[C]	[D]
Rise (in)	= 6.00	1.50	1.50	0.00	Crest Len (ft)	= 3.50	0.00	0.00	0.00
Span (in)	= 6.00	1.50	1.50	0.00	Crest El. (ft)	= 400.83	0.00	0.00	0.00
No. Barrels	= 1	1	1	0	Weir Coeff.	= 3.33	3.33	3.33	3.33
Invert El. (ft)	= 398.83	398.83	399.83	0.00	Weir Type	= Rect			
Length (ft)	= 50.00	0.50	0.50	0.00	Multi-Stage	= Yes	No	No	No
Slope (%)	= 1.00	0.00	0.00	n/a					
N-Value	= .012	.013	.013	n/a					
Orifice Coeff.	= 0.60	0.60	0.60	0.60	Exfil.(in/hr)	= 0.000 (by	Contour)		
Multi-Stage	= n/a	Yes	Yes	No	TW Elev. (ft)	= 0.00			

Note: Culvert/Orifice outflows are analyzed under inlet (ic) and outlet (oc) control. Weir risers checked for orifice conditions (ic) and submergence (s).

Stage / Storage / Discharge Table

Stage ft	Storage cuft	Elevation ft	Clv A cfs	Clv B cfs	Clv C cfs	PrfRsr cfs	Wr A cfs	Wr B cfs	Wr C cfs	Wr D cfs	Exfil cfs	User cfs	Total cfs
0.00	0	398.83	0.00	0.00	0.00		0.00						0.000
0.03	2	398.86	0.00 ic	0.00 ic	0.00		0.00						0.001
0.06	3	398.89	0.00 ic	0.00 ic	0.00		0.00						0.004
0.09	5	398.92	0.01 ic	0.01 ic	0.00		0.00						0.009
0.12	7	398.95	0.01 ic	0.01 ic	0.00		0.00						0.014
0.15	8	398.98	0.02 ic	0.02 ic	0.00		0.00						0.016
0.18	10	399.01	0.02 ic	0.02 ic	0.00		0.00						0.019
0.21	12	399.04	0.02 ic	0.02 ic	0.00		0.00						0.021
0.24	13	399.07	0.02 ic	0.02 ic	0.00		0.00						0.023
0.27	15	399.10	0.03 ic	0.03 ic	0.00		0.00						0.025
0.30	17	399.13	0.03 ic	0.03 ic	0.00		0.00						0.027
0.33	18	399.16	0.03 ic	0.03 ic	0.00		0.00						0.029
0.36	20	399.19	0.03 ic	0.03 ic	0.00		0.00						0.030
0.39	22	399.22	0.03 ic	0.03 ic	0.00		0.00						0.032
0.42	24	399.25	0.03 ic	0.03 ic	0.00		0.00						0.033
0.45	25	399.28	0.04 ic	0.03 ic	0.00		0.00						0.035
0.48	27	399.31	0.04 ic	0.04 ic	0.00		0.00						0.036
0.51	29	399.34	0.04 ic	0.04 ic	0.00		0.00						0.037
0.54	30	399.37	0.04 ic	0.04 ic	0.00		0.00						0.039
0.57	32	399.40	0.04 ic	0.04 ic	0.00		0.00						0.040
0.60	34	399.43	0.04 ic	0.04 ic	0.00		0.00						0.041
0.63	35	399.46	0.04 ic	0.04 ic	0.00		0.00						0.042
0.66	37	399.49	0.04 ic	0.04 ic	0.00		0.00						0.043
0.69	39	399.52	0.04 ic	0.04 ic	0.00		0.00						0.045
0.72	40	399.55	0.05 ic	0.05 ic	0.00		0.00						0.046
0.75	42	399.58	0.05 ic	0.05 ic	0.00		0.00						0.047
0.78	44	399.61	0.05 ic	0.05 ic	0.00		0.00						0.048
0.81	45	399.64	0.05 ic	0.05 ic	0.00		0.00						0.049
0.84	47	399.67	0.05 ic	0.05 ic	0.00		0.00						0.050
0.87	49	399.70	0.05 ic	0.05 ic	0.00		0.00						0.051
0.90	50	399.73	0.05 ic	0.05 ic	0.00		0.00						0.052
0.93	52	399.76	0.05 ic	0.05 ic	0.00		0.00						0.053

Continues on next page ...

UG Detention Stage / Storage / Discharge Table

Stage ft	Storage cuft	Elevation ft	Clv A cfs	Clv B cfs	Clv C cfs	PrfRsr cfs	Wr A cfs	Wr B cfs	Wr C cfs	Wr D cfs	Exfil cfs	User cfs	Total cfs
0.96	54	399.79	0.05 ic	0.05 ic	0.00		0.00						0.054
0.99	55	399.82	0.05 ic	0.05 ic	0.00		0.00						0.055
1.02	57	399.85	0.06 ic	0.06 ic	0.00 ic		0.00						0.056
1.05	59	399.88	0.06 ic	0.06 ic	0.00 ic		0.00						0.060
1.08	60	399.91	0.07 ic	0.06 ic	0.01 ic		0.00						0.065
1.11	62	399.94	0.07 ic	0.06 ic	0.01 ic		0.00						0.071
1.14	64	399.97	0.07 ic	0.06 ic	0.02 ic		0.00						0.075
1.17	66	400.00	0.08 ic	0.06 ic	0.02 ic		0.00						0.079
1.20	67	400.03	0.08 ic	0.06 ic	0.02 ic		0.00						0.082
1.23	69	400.06	0.08 ic	0.06 ic	0.02 ic		0.00						0.085
1.26	71	400.09	0.09 ic	0.06 ic	0.03 ic		0.00						0.088
1.29	72	400.12	0.09 ic	0.06 ic	0.03 ic		0.00						0.091
1.32	74	400.15	0.09 ic	0.06 ic	0.03 ic		0.00						0.093
1.35	76	400.18	0.10 ic	0.06 ic	0.03 ic		0.00						0.096
1.38	77	400.21	0.10 ic	0.06 ic	0.03 ic		0.00						0.098
1.41	79	400.24	0.10 ic	0.07 ic	0.03 ic		0.00						0.100
1.44	81	400.27	0.10 ic	0.07 ic	0.04 ic		0.00						0.102
1.47	82	400.30	0.11 ic	0.07 ic	0.04 ic		0.00						0.105
1.50	84	400.33	0.11 ic	0.07 ic	0.04 ic		0.00						0.107
1.53	86	400.36	0.11 ic	0.07 ic	0.04 ic		0.00						0.109
1.56	87	400.39	0.11 ic	0.07 ic	0.04 ic		0.00						0.111
1.59	89	400.42	0.11 ic	0.07 ic	0.04 ic		0.00						0.113
1.62	91	400.45	0.11 ic	0.07 ic	0.04 ic		0.00						0.114
1.65	92	400.48	0.12 ic	0.07 ic	0.05 ic		0.00						0.116
1.68	94	400.51	0.12 ic	0.07 ic	0.05 ic		0.00						0.118
1.71	96	400.54	0.12 ic	0.07 ic	0.05 ic		0.00						0.120
1.74	97	400.57	0.12 ic	0.07 ic	0.05 ic		0.00						0.122
1.77	99	400.60	0.13 ic	0.07 ic	0.05 ic		0.00						0.123
1.80	101	400.63	0.13 ic	0.07 ic	0.05 ic		0.00						0.125
1.83	102	400.66	0.13 ic	0.08 ic	0.05 ic		0.00						0.127
1.86	104	400.69	0.13 ic	0.08 ic	0.05 ic		0.00						0.129
1.89	106	400.72	0.13 ic	0.08 ic	0.05 ic		0.00						0.130
1.92	108	400 75	0 13 ic	0.08 ic	0.05 ic		0.00						0 132
1.95	109	400.78	0.13 ic	0.08 ic	0.06 ic		0.00						0.133
1.98	111	400.81	0 13 ic	0.08 ic	0.06 ic		0.00						0 135
2 01	113	400.84	0.15 ic	0.08 ic	0.06 ic		0.00						0.148
2 04	114	400.87	0.23 ic	0.08 ic	0.06 ic		0.09						0 230
2.07	116	400.90	0.35 ic	0.08 ic	0.06 ic		0.22						0.352
2 10	118	400.93	0.50 ic	0.00 ic	0.06 ic		0.37						0.503
2.10	110	400.00	0.67 oc	0.07 ic	0.06 ic		0.55						0.673
2.10	121	400.00	0.85 oc	0.07 ic	0.00 ic		0.00						0.070
2 19	123	401.02	1.02.00	0.03 ic	0.03 ic		0.96 s						1 016
2.10	120	401.02	1.02.00	0.00 ic	0.02 ic		1 00 s						1 043
2 25	126	401.08	1.06.00	0.02 ic	0.02 ic		1.00 c						1 059
2.28	128	401 11	1.00.00	0.01 ic	0.01 ic		1.00 C						1.000
2.20	120	401.11	1.07.00	0.01 ic	0.01 ic		1.04 S						1 081
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2.49	139	401.32	1.13.00	0.01 ic	0.01 ic		1.12.5						1.129
2.52	141	401.33	1.14.00	0.01 ic	0.01 ic		1.12.5						1 1 1 2 0
2.55	143	401.30	1.14.00	0.01 ic	0.01 ic		1.135						1.142
2.50	145	401.41	1.15.00		0.01 10		1.145						1.150
2.01	140	401.44	1.10.00	0.00 ic	0.00 ic		1.145						1.100
2.04	140	401.47	1.10.00	0.00 ic	0.00 ic		1.105						1.100
2.07	150	401.50	1.17 00	0.00 ic	0.00 IC		1.10 5						1.100
2.70	151	401.55	1.10.00	0.00 ic	0.00 ic		1.175						1.173
2.13	155	401.50	1.10.00	0.00 ic	0.00 ic		1.175						1.1//
2.70	155	401.59	1.19 00	0.00 IC			1.10 S						1.184
2.19	156	401.62	1.20 00		0.00 IC		1.19 S						1.19/
2.82	158	401.05			0.00 IC		1.18 S						1.191
2.85	160	401.68	1.21 OC	U.UU IC	0.00 IC		1.20 s						1.208
2.88	161	401./1	1.22 OC	0.00 IC	0.00 IC		1.20 S						1.203
2.91	163	401.74	1.22 OC	U.UU IC	0.00 IC		1.21 S						1.211
2.94	165	401.77	1.23 00	0.00 IC	U.UU IC		1.21 S						1.214
2.97	166	401.80	1.24 oc	0.00 ic	0.00 ic		1.23 s						1.235
3.00	168	401.83	1.24 oc	0.00 ic	0.00 ic		1.22 s						1.230

Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2021

Hyd. No. 4

Combine to WS#1

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Wednesday, 05 / 18 / 2022

Appendix H

Pre- & Post-Development Drainage Area Map Engineering Plans



NYAW (New York American Water) -INYAW2004 - Indian Hill Arbor/02-BIM-CADD (Indian Hills))Con-docs/civil/Permitting Plans/STM 100.00 Pre-Development Drainage Map.dwg Last Modified: Apr 19, 2022 - 2:16pm Plotted on: Apr 19, 2022 - 2:16pm Plotted on

+ + + + + +		Н		architects + engineers
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		CONSULTANTS:		
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	H 2 architects
	M engineers
	2 Executive Blvd., Suite 401 Suffern, NY 10901 845.357.7238 • www.h2m.com
	CONSULTANTS:
	MARK DATE DESCRIPTION
	1 05-27-22 REVISED PER TOWN COMMENTS
	"ALTERATION OF THIS DOCUMENT EXCEPT BY A LICENSED PROFESSIONAL IS ILLEGAL" DESIGNED BY: DRAWN BY: CHECKED BY: REVIEWED BY:
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	Liberty Utilities
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 CONDITIONS WOULD BE ALTERED. THE TIME OF CONCENTRATION FOR WS#1B IS LESS THAN 6 MINUTES BUT IS SHOWN 	DRAWING No. STM 101.00

/

RECEIVED BY

JUN 1 5 2022

Town Clerk Town of Lewisboro

RESOLUTION TOWN OF LEWISBORO ZONING BOARD OF APPEALS IN THE MATTER OF THE APPLICATION OF Waccabuc Country Club/Harder FOR A Lot Line Change ARTICLE III §220-9B(1) CAL. NO. 12-22-BZ

INTRODUCED BY: Board Member Chair Price

SECONDED BY: Board Member Mr. Casper

DATE OF CONSIDERATION/ADOPTION: May 25, 2022

WHEREAS, Waccabuc Country Club, as the applicant (Waccabuc Country Club Co, owner of record) and Donald A. & Teresa E. Harder, as the co applicant (The Donald A. Harder Revocable Living Trust & The Teresa E. Harder Revocable Living Trust, owner of record) has made application to the Lewisboro Zoning Board of Appeals (the "ZBA"), on the subject premises located at, 0 Carriage House Road, Waccabuc, NY, Tax Map as Sheet 0022, Block 10802, Lot 036, and Sheet 0022, Block 10802 Lot 059 & 083, ("the properties"), for the following variance of the Waccabuc Country Club, which is an existing non-conforming use, proposes to acquire a portion of a neighboring lot whereas this is not permitted per Article III Section 220-9B(1).

WHEREAS, this application for an area variance constitutes a Type II action under 6 NYCRR Part 617, and therefore, requires no further review under the State Environmental Quality Review Act (SEQRA), and

WHEREAS, a public hearing at the Town Offices, 79 Bouton Road, South Salem, New York in this matter on May 25, 2022, and a site walk was conducted on May 21, 2022 to consider the application, after which a vote was taken with regard to the variance as set forth above, and

WHEREAS, The Lewisboro Zoning Board of Appeals has given careful consideration to the facts presented in the application at the public hearing based upon the criteria set forth in Section 267-b(3)(b) of the Town Law of the State of New York, and finds as follows:

- 1. The property is an approximate 42.50-acres parcel in the 4-AC, Four Acre Residential District owned by Waccabuc Country Club Co. The Waccabuc Country Club, which is an existing non-conforming use, and is improved with a golf course. The property is an approximate 48.62-acres parcel in the 4-AC, Four Acre Residential District owned by The Donald A. Harder Revocable Living Trust & The Teresa E. Harder Revocable Living Trust and is improved with a single-family residence.
- 2. The applicant, Waccabuc Country Club Co. wishes to acquire a portion of a neighboring lot whereas this is not permitted per Article III Section 220-9B(1). of the Town of Lewisboro Zoning Code.

Waccabuc Country Club Co. Resolution Cal. No. 12-22-BZ

- 3. There will be no undesirable change in the character of the neighborhood or detriment to nearby properties.
- 4. There is no practical alternative to the variance requested.
- 5. The Board found that the variance is not substantial.
- 6. There will not be an adverse effect or impact to the physical or environmental conditions of the neighborhood.
- 7. The Board found that the difficulty was not self-created.

WHEREAS, pursuant to Section 267-b(3)(c), the ZBA hereby determines that the lot line change of the Waccabuc Country Club, which is an existing non-conforming use, and the acquired portion of approximately five (5) acres from the neighboring property will be permitted per Article III section 220-9B(1).

NOW, THEREFORE BE IT RESOLVED, that the Lewisboro Zoning Board of Appeals hereby grants a variance for lot line change of the Waccabuc Country Club, which is an existing non-conforming use, and the acquired portion of approximately five (5) acres from the neighboring property will be permitted per Article III section 220-9B(1).Town of Lewisboro Zoning Code.

BE IT FURTHER RESOLVED THAT, Lewisboro Zoning Board of Appeals have made a motion to approve the lot line change as proposed and any change or use of the parcel would require approval of the town agencies.

VOTE:

Chair Price	-	In Favor
Board Member Mandelker	-	Absent
Board Member Casper	-	In Favor
Board Member Infield	-	In Favor
Board Member Rendo	-	In Favor

VOTE:

Resolution carried by a vote of 4 to 0.

Row An 2

Robin Price, Jr. Chair Dated in South Salem, New York

This $\frac{17}{2}$ day of June 2022

STATE OF NEW YORK

COUNTY OF WESTCHESTER

) ss.:

Waccabuc Country Club Co. Resolution Cal. No. 12-22-BZ

I, Donna Orban, Secretary of the Zoning Board of Appeals, do hereby certify that the above is an excerpt/summary/fair representation of the Resolution adopted by the Zoning Board of Appeals of the Town of Lewisboro at a meeting of said Board on May 25, 2022.

Dated: fune 14, 2022

Voren rben

Donna Orban Secretary Zoning Board of Appeals

BUSINESS PLAN THE BORO (cafe & market)

Prepared by: Shkelzen (Skaz) Gecaj, John Swertfager

> 873 Route 35 Cross River, New York 10518

> > www.theborocafe.com

theborocafeandmarket@gmail.com

I. EXECUTIVE SUMMARY:

THE BORO cafe & market (referred to from hereon in as the "Company") is intended to be established as a Limited Liability Company at 873 Route 35, Cross River, New York 10518 with the expectation of rapid expansion in the cafe & market industry. The Company solicits financial backing in order to be able to introduce its new service (described below).

Business Description:

The Company shall be formed as Limited Liability Company under New York state laws and headed by Shkelzen (Skaz) Gecaj, John Swertfager.

Mission Statement:

To create a vibrant cafe that reflects, improves, and inspires our community.

Management Team:

Marketing - John Swertfager

Management - Skaz Gecaj

Advisor- John Crabtree (Kittle house & River Market)

Staff:

2 Cashiers

2 Barista's

Mission Statement:

To create a vibrant cafe that reflects, improves, and inspires our community.

New Service:

The Company is prepared to introduce the following service to the market:

Coffee, Food, Local Produce: Offering the best coffee in town supplemented with "to-go" style food and produce.

coffee, pastries, "to-go" egg sandwiches, sandwiches, salads, soups, prepared meals and much more

"to-go" style options with seating. We will have panini press, microwave, toaster, and open refrigerators for all high shelf life items.

Shelving for non fridge items as well.

II. BUSINESS SUMMARY Industry Overview:

In the United States, the cafe & market industry presently makes 5.4B dollars in sales. More people working from home, Coffee shops/cafes are becoming part of communities.

Research shows that consumers in this industry primarily focus on the following factors when making purchasing decisions:

-good coffee good vibe -hangout spot or on the go -app based checkout and online order options

Business Goals and Objectives:

Short Term: Develop a stable business in a growing community. Allow our ideas to slowly flourish and become a staple in our area. Develop a class schedule of 10 classes per week and build from there. Average attendance is anywhere between 6-8 per class.

Long Term:

Long term is limitless but we want to create THE SPOT in town. Where people go to socialize and enjoy good food, coffee. Our main focus is to integrate our business with our community. Build a class schedule for yoga 20-25 classes per week average attendance 6-8 people per class

Legal Issues:

The Company affirms that its promoters have acquired all legally required trademarks and patents.

III. MARKETING SUMMARY Target Markets:

Hours Of Operation

6am-5pm Monday-Sunday

Event space will be held on the deck area, as well as inside of building.

The Company's major target markets are as follows:

-Morning Commuters (Ridgefield to katonah train. Our entire town)
-Middle/High School drop off/pick up
-Stay at home spouse (many in our town)
-Gym members
-yoga traffic from above -tenants

Pricing Strategy:

The Company has completed a thorough analysis of its competitors' pricing. Keeping in mind our competition's pricing and the costs of customer acquisition, we have decided on the following pricing strategy:

Cafe/coffee houses in the area are generally high priced because of the clientele. We will be equally priced with competitors but offer better tasting coffee and better goods offered.

Promotional Strategy:

The Company will promote sales using the following methods:

Our marketing will be based around our pull and presence in this community. We have perfected the social media side of marketing and will roll that right into the new cafe. Word of mouth in this small town will travel fast. The sheer location on the corner at the light, right in the center of town will almost be enough to do the marketing itself.

Need to keep it cool and hip..... Not too much marketing for this business

SWOT Analysis:

Strengths

Location is everything. Best corner in town. Easiest/quickest coffee to get in and out.

Largest space in comparison to competitors. Indoor and outdoor.

Our Apex Brand, Our Personal Brand. We believe we can build the entire community around these places and have a positive influence in the area. Charity work, Community events and a social scene for our residents.

Weaknesses

Lack of knowledge in field (but consulting from Johns Father-in-law (John Crabtree of Crabtrees Kittle House & River Market Bar+Kitchen)

Opportunities

Endless between the traffic on route 35 and 121 our target audience stretches from katonah - Ridgefield; Pound Ridge - North Salem.

Competition: Dunkin Donuts (national chain)

In the cafe & market-industry, customers make choices based upon -good coffee good vibe -hangout spot or on the go. App based checkout and online order options.

However, we believe that the Company has the following competitive advantages: Our community presence is a big advantage we have. We live in town and are known here by the majority. People want to support local! Especially local business owners.

Services

First-rate service is intended to be the focus of the Company and a cornerstone of the brand's success. All clients will receive conscientious, one-on-one, timely service in all capacities, be they transactions, conflicts or complaints. This is expected to create a loyal brand following and return business.
BUSINESS PLAN Second Wind (YOGA)

Prepared by: Shkelzen (Skaz) Gecaj, John Swertfager

> 873 Route 35 Cross River, New York 10518

Mission: Strive to create a friendly, welcoming community where people feel inspired to create a life they love and live it fully through a consistent yoga practice. We are about creating moments of challenge that show our grit, removing stereotypes of what yoga is and should look like, and providing an opportunity for our community to move, sweat and invest in themselves!

Vibes and values: We focus on how the the practice makes us feel, rather than what it should look. All body types // all levels of yoga experience are welcome. Clear eyes, full hearts: We find clarity and freedom by getting lost in the movement, the music and the power of our own breath.

What we are after: Our studio will fill a health and wellness need in the community.

Cross River / Bedford / Katonah and surrounding areas lack the following:

- a conveniently located and challenging yoga studio.
- group fitness classes within a 20 minute radius
- a yoga studio for students who look to yoga as a full body workout.

Together, with The Boro Cafe, we are providing a hip new place to both work out and hang out, (a one stop shop) in an area where neither exists. This is how we will build our community.

Class Specifics: Our services will provide our community with yoga fitness classes that boost metabolism, sculpt muscles and leave students feeling relaxed, energized, and strong. All classes focus on flexibility, mobility and strength with a big dose of breath work woven in. To

start, we will offer both Power Vinyasa - a dynamic, athletic flow - and Sculpt - a vigorous vinyasa sequence with the added challenge of free weights and bursts of cardio.

We will offer modifications that simplify the poses to be more suitable for the beginner and cues to level up the practice for the more advanced student, creating a truly "alllevels" experience.

Classes are heated to 80-85. This is not Bikram or what some refer to as Hot Style yoga (110 degrees)

All classes start slowly, are music-driven, and end in a series of slow, restorative stretching and savasana (hard earned rest).

Classes will fall within the same hours as the cafe.



PROPOSED ALTERATIONS & CHANGE OF USE TO EXISTING BUILDING FOR: THE BORO CAFE & YOGA STUDIO CROSS RIVER, TOWN OF LEWISBORO, NY

TABLE R301.2(1) CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

						-							
GROUND	WIND DESIGN			Seismic	SUBJECT '	TO DAMAG	E FROM		Ice Barrier	ELOOD		Mean Assura	
Snow	Speed	Topographic	Special Wind	WIND-BORNEM	Design f		Frost Line	Tenure	DESIGN TEMP	Underlayment h	HAZAPDS		
Load	(мрн) d	Effects k	Region 1	Debris Zone	Category	WEATHEKING a	Dертн b			Required	TIAZARDOg		TENT J
30 psf	115	NO	YES	NO	в	SEVERE	42"	MODERATE TO HEAVY	15 day	YES	4/24/84 11/1/07	1500	48.5
													-

ACCESSORY STRUCTURE, CONVERTED TO STORAGE USE FOR CAFE (OUTDOOR

ING WATER USAGE CALCULATION					
OCCUPANCI	(B-BUSINESS)	REQUIRED	USAGE		
PER 150 G.S.F.	1,789 S.F./150 = 11.93 = 12.00 OCCUPANTS	15 GAL./ OCCUPANTS	180 GAL. PER DAY		
PER 150 G.S.F.	844 S.F./150 = 5.63 = 6.00 OCCUPANTS	15 GAL./ OCCUPANTS	90 GAL. PER DAY		
PER 150 G.S.F.	742 S.F./150 = 4.95 = 5.00 OCCUPANTS	15 GAL./ OCCUPANTS	75 GAL. PER DAY		
1 PER 50 G.S.F.	481 S.F./50 = 9.62 = 10.00 OCCUPANTS	20 GAL./ OCCUPANTS	200 GAL. PER DAY		
545 GAL. PER DAY					
DSED WATE	DSED WATER USAGE CALCULATION				
OCCL	JPANCY	REQUIRED	USAGE		
A-2 AS 978 36	SSEMBLY NET S.F. SEATS	20 GAL. PER SEAT	720 gal. Per day		
B BU 844 GROSS = 6 OC	SINESS S.F./150 = 5.62 CCUPANTS	15 GAL./ OCCUPANTS	90 gal. Per day		
B BU 275 GROSS = 2 OC	SINESS S.F./150 = 1.83 CCUPANTS	15 GAL./ OCCUPANTS	30 gal. Per day		
1	٩/Α	N/A	N/A		
0 840 GAL. PER DAY					



PARCEL MAPS

SCALE: NOT TO SCALE

EXISTING SQUARE FOOT/PARKING ANALYSIS				
USE	REQUIRED	EXISTING S.F.	REQUIRED PARKING SPACES	
FIRST FLOOR LEVEL:	1 SPACE FOR EACH 250 S.F. OF GROSS FLOOR AREA	(1,789 S.F.)	7.15 = SPACES	
SECOND FLOOR LEVEL:	1 SPACE FOR EACH 250 S.F. OF GROSS FLOOR AREA	(844 S.F.)	3.37 = SPACES	
THRID FLOOR LEVEL:	1 SPACE FOR EACH 250 S.F. OF GROSS FLOOR AREA	(742 S.F.)	2.96 = SPACES	
DETACHED GARAGE:	1 SPACE FOR EACH 250 S.F. OF GROSS FLOOR AREA	(481 S.F.)	1.92 = SPACES	

15.40 = 16 SPACES

TOTAL PARKING REQUIRED:

PROPOSED SQUARE FOOT/PARKING ANALYSIS				
USE	REQUIRED	PROPOSED S.F.	REQUIRED PARKING SPACES	
FIRST FLOOR LEVEL: (CAFE) Full-service restaurants, and imited-service carry-out restaurants with fore than 10 seats	1 SPACE FOR EACH 2 SEATS OR 1 SPACE FOR EACH 100 SQUARE FEET OF GROSS FLOOR AREA, WHICHEVER IS GREATER	(1,789 GROSS SF) 1,789/100=17.89 17.89 ≈ 18.00	36 SEATS INSIDE/OUTSIDE 17.89 ≈ 18.00 SPACES	
SECOND FLOOR LEVEL: (YOGA STUDIO) Recreation facility	1 SPACE FOR EACH 200 SQUARE FEET OF GROSS FLOOR AREA OF THAT PART OF THE RECREATION FACILITY OTHER THAN THAT CONSISTING OF WATER SURFACE AREA FOR A SWIMMING POOL OR COURTS FOR RACQUET SPORTS 1 ADDITIONAL SPACE FOR EACH EMPLOYEE ON THE LARGEST WORK SHIFT	(844 GROSS S.F.)	4.22 = SPACES PLUS 1 SPACE FOR EMPOYLEE 5.22 ≈6.00	
THIRD FLOOR LEVEL: Office for business or professional use other than accessory to residential use) For use with less than 75,000 square feet of gross floor area DETACHED GARAGE: (STORAGE)	1 SPACE FOR EACH 250 S.F. OF GROSS FLOOR AREA	(275 GROSS S.F.) (481 S.F.)	1.10 = SPACES 1.10 ≈2.00	
FOTAL PARKING REQUIRED:	EXISTIN PROPO <i>EXISTIN</i>	L G REQUIRED SPACES SED REQUIRED SPAC IG PARKING PROVIDEL	i: = 16 SPACE IES: = 26 SPACE I: = <u>26 SPACE</u>	







BUILDING & ZONING DATA

TOWN OF LEWISBORO, NEW YORK

Table of Dimensional Requirements SECTION 0020, BLOCK 10800, LOT 008 ZONING DISTRICT RB (Retail Business District)

Minimum Lot Size	Required	Existing	Proposed Deck
Area	1/2 Acre 21,780 SF	0.699 Acres 30,448.44 SF	NO CHANGE
Frontage	100 FT	195.49 FT	NO CHANGE
Minimum Yards			
Front (Route 35)	20 FT	70.91 FT	57.90 FT
Front (North Salem Road)	20 FT	129.16 FT	118.16 FT
Left Side (East)	15 FT	17.60 FT	30.42 FT
Rear	15 FT	50.19 FT	65.54 FT
Maximum Height			
Stories Feet	2 1/2 35 FT	2 1/2 30 FT	NO CHANGE
Maximum Building Coverage	5511	5011	
Lot Area (Percent)	20% 4,356 SF	7.46 % 2,270 SF	9.65 % 2,937 SF
Maximum Site Coverage			
Lot Area (Percent)	60% 13,068 SF	45.21 % 13,766 SF	47.40 % 14,433 SF
Maximum Floor Area Ratio			
Lot Area (Percent)	0.3 6,534 SF	0.15 3,375 SF	NO CHANGE

FLOOR AREA CALCULATIONS:

AREA	SQUARE FOOTAGE
EXISTING UNFINISHED BASEMENT LEVEL (NET)	868
EXISTING FIRST FLOOR LEVEL	1,789*
EXISTING SECOND FLOOR LEVEL	844*
EXISTING THIRD FLOOR LEVEL	<u>742*</u>
TOTAL FLOOR AREA OF EXISTING BUILDING	3,375
PROPOSED WOOD DECK	667
EXISTING DETACHED GARAGE STRUCTURE	481

OWNERS: GECAJ ASSOCIATES, LLC & SWERTFAGER REALTY, LLC SECTION 0020, BLOCK 10800, LOT 008

ISSUE DATES:	PROPOSED ALTERATIONS & CHANGE OF USE TO EXISTING BUILDING FOR:				
	873 ROUTE 35	THE BORO CAFE & YOGA STUDIO	CROSS RIVER, NY		
	STERED ARCHIP	SITE PLAN/ZONING DATA/WATER USAGE/	DRAWN BY: GNA		
	Connes Real	SCALE: AS NOTED	CHECKED BY: SCH		
05/20/22 PER PLANNING BOARD COMMENTS	× S	THE HELMES GROUP, LLP	DRAWING NO.:		
04/29/22 FOR ACARC FILING 04/19/22 FOR PLANNING BOARD MEETING 04/11/22 ADDED SEPTIC INFORMATION 03/28/22 PER PLANNING BOARD COMMENTS 02/04/22 PLANNING BOARD FILING	Stere Of Men	ARCHITECTURE • ENGINEERING PROJECT MANAGEMENT 184 KATONAH AVENUE, KATONAH, NY 10536 TEL: (914) 232-4633 FAX: (914) 232-0768 EMAIL: thg@thehelmesgroup.com	<u>1 of 7</u>		

RECEIVED BY

MAY 1 9 2022

Town Clerk Town of Lewisboro

ARCHITECTURE AND COMMUNITY APPEARANCE REVIEW COUNCIL

TOWN OF LEWISBORO

CAL. NO. 11-22-ACARC/PB

Applicant(s):	Skaz Gecaj and John Swertfager, Apex Personal Training; and Steven Helmes, Helmes Group Architects		
Owner(s) of Record:	GHI Realty		
Reason for Referral:	Planning Board referral		
Address:	873 Route 35, Cross River		
Tax Map I.D. and Zone:	Sheet 20, Block 10800, Lots 2 & 8; Zone RB		
Decision Date:	May 11, 2022		
The Vote: To approve:	Rose Bonanno, Chair Darren Mercer Ed Ozols		
Absent:	Chris Winter		
Presentation by:	Steven Helmes, Helmes Group Architects		
Nature of Application:	new deck and windows at the Boro Café		
Evidence Presented:	Site and architectural plans, Helmes Group Architects, dated 042922		

Mr. Ozols made a motion to approve the application for a new deck, exterior finishes and windows at the The Boro Café, 873 Route 35, Cross River, as submitted with the condition that site plan approval be granted by the Planning Board and a building permit is issued; seconded by Mr. Mercer; In favor: Rose Bonanno, Darren Mercer and Ed Ozols. Absent: Chris Winter.

The improvements are:

- first floor is to be converted into a 36-seat café;
- second floor is to be converted into a yoga studio;
- landscaping;
- a deck for outdoor dining;
- four black-trimmed 10' x 7' folding doors (three on the north elevation, one on the west);
- the second-floor fenestration is to be replaced with new black-trimmed six-over-one windows;
- dark grey Hardie ship lap siding; and
- charcoal grey shingle roof.

Rue Beranno

Rose Bonanno, Chair

Dated in South Salem, New York This <u>1</u>?th of May, 2022

Lisa Marie Miller

23 MARK MEAD ROAD, CROSS RIVER, NY 10518 914-282-9582 LISAMARIEMILLER1962@GMAIL.COM

May 9, 2022

To: Lewisboro Planning Board, ACARAC and Building Department Re: Boro Cafe, change of use

To Whom it May Concern,

As the owner of the property at 23 Mark Mead Road, I have the follow questions and concerns regarding the change of use for Boro Cafe.

- Traffic and pedestrian safety. If part of the target demographic for Boro Cafe are John Jay students, what will be done to create cross-walks for safety? Vehicles on Route 35 do not adhere to the posted speed limits which make crossing by foot unsafe. Is the current parking lot and drive way adequate for multiple vehicles entering and exiting at the same time? Will a traffic study be conducted? Based on the projected number of yoga classes, seating for 36 on the outside deck and staff of 6(?), is parking adequate?
- For vehicles traveling on Route 35 westbound, making a left-hand turn onto 121 South is difficult without a a dedicated left turn arrow. I know this from experience having lived at 23 Mark Mead Road since 2001. This may be a means of egress to Boro Cafe.
- As part of the conversation that I had with Mr. Swerfager and Mr. Gecaj they indicated that Boro Cafe would close at 4pm so that Bacio Restaurant could use the parking lot for over-flow parking. As there is an re-zoning application for 19 Mark Mead Road from a residence to business; part of this re-zoning is for increased parking for Bacio. How much parking does Bacio need as part of the expansion which was approved many years ago?
- If the application of Boro Cafe is approved, will the hours of operation be limited? If a Special Use Permit is granted, how often will it come up for review?
- Is the septic system adequate to handle the increased use?
- If the outdoor deck is approved as per the plans, will the deck interfere with the septic system? Will there be a curfew on the use of the outdoor deck to mitigate noise?
- Will on-site cooking be allowed? The documentation makes reference to a panni press and outdoor pizza oven.

- According to the landscaping plans provided as part of the application it shows a line of plants on the East side of the property. The owners of the property removed and trimmed trees on my property without my permission to plant 12 evergreen trees. John Swertfager and Shkelzen Gecaj cited verbally to me that Lewisboro has an ordinance that allows them to remove tress within 100 feet of their foundation. Reading Local Law #3, 2021, Chapter 203 I was unable to find a law that allowed a neighbor to cut down trees without permission. Mr. Swertfager and Mr. Gecaj removed multiple trees that were on my property as well as one mature, healthy tree that was on the property line between 23 Mark Mead Road and 873 NY-35. Was this removal of trees without my permission allowable under Chapter 203? If not, how can this issue be resolved?
- Landscaping plans were submitted on March 29th for the April 19th meeting. Removal of the tress on my property took place on April 7th. Were permits secured to remove trees? According to Mr. Gecaj the large historical tree removed from the front of the property was diseased, is there documentation from a licensed arborist to back up this claim? I have attached photos of the removal of the trees from my property from April 7th.
- How will my property value be addressed? When I purchased my house over 20 years ago 873 NY-35 property was zoned for office use, Bacio was a small restaurant and 19 Mark Mead Road as a residence. If both properties are rezoned how will the Planning Board address the potential loss of value to my home? I would have made a different decision to purchase 23 Mark Mead Road if the two adjacent properties were zoned commercial and one was a cafe.

I am available to speak to the board and answer questions; I would welcome a site visit to view my property and the area where my tress were removed.

Sincerely yours,

Lisa Marie Miller

Ciorsdan Conran

From:	Jessica Hornstein <jessicahornstein@gmail.com></jessicahornstein@gmail.com>
Sent:	Tuesday, May 17, 2022 7:20 PM
То:	planning@lewisborogov.com
Subject:	Comments re: Public Hearing on 5/17/2022 for The Boro Cafe/Second Wind Yoga

My JJHS son is a member at Apex Fitness which has given me a firsthand opportunity to see how positive John and Skaz are for the community and how well they run a business. So I am a big fan and support them.

I am also a resident of Mark Mead Road, which as you know has two ways to access Rt 35—one of which is North Salem Road passing the property (and driveway) where this new enterprise is planned. I believe that a cafe/yoga space would be a wonderful addition to the area.

The only concern I have isn't about this project per se, but about the traffic at the intersection of Rt. 35/121/North Salem Rd. and, frankly, that is something which needs to be addressed by the town whether this business goes into that space or not. Clearly, if their business goes in, it will give even more cars more reasons to engage that intersection.

It is already a mess there and a tragedy waiting to happen—especially during school drop off and pick up times. It's a large intersection to start and then there are multiple points of egress that affect the traffic flow: the shopping center, the liquor store, the retail area with Bluebird, the Shell station, Bacio's, even Cameron's just a bit past it. When you add in the extra cars and buses from the schools that are backed up on the road, it is just too crowded already and too chaotic. As it is, every morning around 7:45-7:50am when I leave for work, I see cars turning onto North Salem Rd. to use either Bacio's driveway, the parking lot of the property in question, or just the street itself to turn around and point north on North Salem Rd. so they don't have to make a left turn onto 121 towards the schools.

Even at other times of the day, it feels treacherous there. Apparently, a large number of people don't understand that a car going straight has the right of way over a car making a left or that a car going straight has priority over a car making a right on red. I can't tell you how many times I've avoided accidents in that spot because fortunately, I was paying attention when people darted out to make turns when they shouldn't have. I know others have had the same experience.

Please, let's not wait for a horrible incident before anything is done.

So, I say, as part of approving this new business which would enhance our community, the town must also incorporate plans to ameliorate this traffic problem. Doing so will not only enhance the quality of life in our community but also protect life in our community. This serves both the residents *and* the businesses of Cross River and the larger Katonah-Lewisboro community. Thank you.

3 Mark Mead Rd Cross River

Linda Press Wolfe 87 Locust Ridge Cross River, NY 10518 914.643.6930 presslinda@hotmail.com

May 19, 2022

Town of Lewisboro Planning Board Via Email: <u>planning@lewisborogov.com</u>

Dear Planning Board Members,

This letter is to express my support for the proposed plans for The Boro Café & Yoga Studio in Cross River. In my view, the plan will provide several pleasant amenities for Lewisboro residents.

The plans and design seem adequate in terms of overall curb appeal, meeting all building codes and town land use requirements, and necessary parking. Based on the owners business experience, acumen and professional approach to launching a new business (Apex Fitness for example), I am confident their proposal for The Boro Café & Yoga Studio will be completed in a timely manner following all best practices.

In conclusion, I urge the Planning Board to vote "yes" and fully approve the proposal.

Respectfully,

Linda Press Wolfe

Lewisboro Planning Board,

On Tuesday evenings planning board meeting, I chose not comment live since there were many comments similar to my thoughts in regards to the approval of The Boro. I did want to take a moment to echo how wonderful it would be to have a new place in town to not only support. As an educator of a local environmental center here in town, I would love to have a place that I can suggest our visitors go to before they go home. It would be great to keep that additional income in town at local restaurants, but at the moment, we often find ourselves recommending Ridgefield as a better alternative since there is no real charm to places like Dunkin'. The Boro would the perfect place to send people to.

Additionally, many of the comments made during the meeting were in regards to concerns about pedestrian traffic, however, as mentioned, that is an issue for the town to be discussing with the DOT and state, and holding up permits for the Boro due to something like that doesn't make sense since there is nothing they can do about that. In conclusion, I want express my support for The Boro and hope to see the plan approved next month at the next meeting

Alex Spitzer 99 Ridgefield Ave South Salem, NY 10590

Justin Brown

21 Mt Holly Rd E Katonah, NY, 10536 914 334 2555 justbugs@me.com

May 22, 2022

Town Of Lewisboro Planning Board

To Whom It May Concern,

I am writing this letter in support of John Swertfager and Skaz Gecaj in relation to their development of The Boro Cafe in Cross River.

I have lived in the Town of Lewisboro for almost 13 years at the one thing the town has always lacked is an establishment in Cross River where people could come together, relax and meet their fellow Lewisboro residents.

If you travel in any direction from Cross River to any of the surrounding towns there is a cafe that serves this purpose. In Somers there is Bobo Cafe, Katonah has Tazza, North Salem has Hayfields, and Ridgefield has several options.

It is not just the ability to gather with friends and neighbors that drives my support for The Boro Cafe in Cross River. It is the loss of income for The Town of Lewisboro. Every time someone drinks a coffee and has a sandwich or dessert at the cafes surrounding Cross River the town is losing tax revenue.

Based on their track record of already developing a successful business in Cross River I believe that John and Skaz will develop another successful business with The Boro Cafe. They are two young hardworking individuals who are determined that Cross River and the Town of Lewisboro are places where locally owned and operated businesses should be able to establish themselves and grow.

Sincerely yours,

Justin Brown

Ciorsdan Conran

Elaine <misselaineous56@aol.com></misselaineous56@aol.com>
Monday, May 16, 2022 1:03 PM
Ciorsdan Conran
Re: Cross River Pharmacy PB Res 101921 stamped.pdf

To Ciorsdan Conran and the Lewisboro Planning Board -

Thank you all for your help with our proposal to build a new state-of-the-art pharmacy at 890 Route 35 in Cross River, New York. We are proceeding with the project, but have had a few setbacks. The original materials we submitted were lost in a flood by the Health Department. I was there four times in the past few months, but was never told that they lost our paperwork. Now we have to update the water and septic records for the past few months. Stuart and I are hoping to get a 6-month extension of the change of use permit approval.

Please let me know if this extension can be granted . Thank you very much.

Stuart and Elaine Feldman Cross River Pharmacy

TOWN OF LEWISBORO NOTICE OF PUBLIC HEARING

NOTICE IS HEREBY GIVEN that the Planning Board of the Town of Lewisboro, Westchester County, New York will convene a Public Hearing on June 21, 2022 at 7:30 p.m., or soon thereafter, either in person at 79 Bouton Road, South Salem or (if permitted by law) using the videoconferencing app Zoom, regarding the following:

Cal #03-13PB, #03-16WP, #19-21SW

Application for Final Subdivision Plat Approval, Wetland Activity Permit Approval and Town Stormwater Permit Approval for Silvermine Preserve, Silvermine Drive and Lockwood Road, South Salem, NY; Sheet 48, Block 10057, Lot 15 (Ridgeview Designer Builders, owner of record) and Sheet 51, Block 10057, Lot 104 (Daniel Higgins, owner of record) to permit the construction of a 13-lot cluster subdivision and dedication of one open space parcel. The property is located between Silvermine Drive and Lockwood Road, consists of approximately 57.976 acres and is located within a Residential Two-Acre (R-2A) Zoning District.

Due to public health and safety concerns related to the COVID-19 virus, the Planning Board is preparing to conduct the meeting either in person at 79 Bouton Road, South Salem or virtually over Zoom. If the meeting is held via Zoom, the public may view or participate through the Zoom app at https://us06web.zoom.us/j/87195112740?pwd=NEpOQitNTmJqVFAyNE9mQTBqTysvdz09 by clicking "Join a Meeting," and entering Meeting ID: 871 9511 2740 Passcode: 257579. You may call in to the Zoom meeting at 1-929-205-6099 when prompted, enter Meeting ID: 871 9511 2740 Passcode: 257579. Please consult the Town of Lewisboro website https://www.lewisborogov.com/planningboard or call 914-763-5592 to confirm whether the meeting will be conducted in person or by videoconferencing.

The public will have the opportunity to review digital copies of materials and proposed site documents at https://www.lewisborogov.com/planningboard and a transcript will be available at a later date.

Interested members of the public are encouraged to provide written comments prior to and during the virtual public hearing by emailing Ciorsdan Conran, Planning Board Administrator, at <u>planning@lewisborogov.com</u> Please check the meeting agenda posted on the Board's web page for additional instructions and updates.

A copy of materials and proposed site documents may be inspected at the office of the Planning Board Administrator, 79 Bouton Road, South Salem, New York during regular Planning Board hours. Persons wishing to object to the application should file a notice of objection with the Planning Board together with a statement of the grounds of objection prior to the closing of the Public Hearing. All interested parties are encouraged to attend the Public Hearing and all will be provided an opportunity to be heard.

PLANNING BOARD TOWN OF LEWISBORO By: Janet Andersen Chair

AFFIDAVIT OF MAILING

STATE OF NEW YORK }ss.: COUNTY OF WESTCHESTER }

Hope Caulfield, being duly sworn, deposes and says.

Hope Caulfield, being duly sworn, deposes and says that she is over the age of eighteen years, resides in Croton on Hudson, New York, and is an employee of Hocherman Tortorella & Wekstein, LLP; that on the 31st day of May, 2022, the deponent served the attached Notice of a Public Hearing annexed hereto as Exhibit A upon the owners of property within 500 feet of the perimeter of the Property designated on the Town Tax Map as Sheet 48, Block 10057, Lot 15 and Sheet 51, Block 10057, Lot 104 listed in Exhibit B annexed hereto, by mailing the same by Certified Mail, Return Receipt Requested, in a sealed envelope, with postage prepaid thereon, in an official depository of the U.S. Postal Service within the State of New York to their last known addresses as indicated on the attached list. Copies of all Certified Mail Receipts and those Return Receipts received to date are annexed hereto as Exhibit C.

u Caulfule

Sworn to before me on this 134 day of June, 2022

Notary

GERALDINE N. TORTORELLA NOTARY PUBLIC-STATE OF NEW YORK No. 0210493. 447 Qualified in Westchesiet County My Commission Expires May 09, 20 26

S:/# MATTERS\Moss 0056\Lewisboro (Silvermine) 002\Submissions\Notice Mailing PB PH 6-21-22\Aff of Mailing for 6-21-22 PH.docx

EXHIBIT A

TOWN OF LEWISBORO

NOTICE OF PUBLIC HEARING

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> PLANNING BOARD TOWN OF LEWISBORO By: Janet Andersen Chair

Dated: May 25, 2022

The Town of Lewisboro is committed to equal access for all citizens. Anyone needing accommodations to attend or participate in this meeting is encouraged to notify the Administrator to the Planning Board in advance.

EXHIBIT B

LASKA, WIOLETA LASKI, PAWEL 92 LOCKWOOD RD SOUTH SALEM, NY 10590

MULLER, EDGAR 45 LOCKWOOD RD SOUTH SALEM, NY 10590

MOORE, DOUGLAS & DANA 25 SILVERMINE DR SOUTH SALEM, NY 10590

TESTANI, MARIO R. & MARY Y. 86 LOCKWOOD RD SOUTH SALEM, NY 10590

ALLWOOD, THOMAS MICHAEL & ANNE M. 83 LOCKWOOD RD SOUTH SALEM, NY 10590

HURTADO, HAROLD 10 RESERVOIR RD SOUTH SALEM, NY 10590

LAFRENIERE, LINDSAY 69 LOCKWOOD RD SOUTH SALEM, NY 10590

WELCH, ROBERT S. & HELEN J. 47 LOCKWOOD RD SOUTH SALEM, NY 10590

FORBES, SCOTT J. & ROSEMARY G. 9 LAUREL RD SOUTH SALEM, NY 10590

ELLRODT, RICHARD & LINDA 19 LAUREL RD SOUTH SALEM, NY 10590 DOST, EDMOND & HARED, TAMARA 106 LOCKWOOD RD SOUTH SALEM, NY 10590

LEWISBORO-SILVERMINE ESTATES PARK DISTRICT SILVERMINE DRIVE SOUTH SALEM, NY 10590

SCERRA, ANTHONY & CARMEN 8 RESERVOIR RD SOUTH SALEM, NY 10590

IGNAL, MATTHEW E. & TYROL, KATLIN S. 5 LAUREL RD SOUTH SALEM, NY 10590

HAMMER, SCOTT ALAN & LAURIE 21 SILVERMINE DR SOUTH SALEM, NY 10590

LEGENZOWSKI, RAYMOND J. & JOAN P. 17 LAUREL RD SOUTH SALEM, NY 10590

MANGIERI, PAUL & LAUREN 63 LOCKWOOD RD SOUTH SALEM, NY 10590

RIDGEVIEW DESIGNER LOCKWOOD RD SOUTH SALEM, NY 10590

GARREFFA, CARMINE & MARY N. 100 LOCKWOOD RD SOUTH SALEM, NY 10590

MARCARELLO, JAMES J. & KYRIAKI 14 SILVERMINE DR SOUTH SALEM, NY 10590 ANIELLO, JOHN S. & WIOLETTA 77 LOCKWOOD RD SOUTH SALEM, NY 10590

LEVINSOHN, KENNETH P. & ELLEN A. STRAUSS 22 SILVERMINE DR SOUTH SALEM, NY 10590

CARATZAS, PETER & NATALIYA YAKOVCHUK 16 SILVERMINE DR SOUTH SALEM, NY 10590

JULIAN, PETER 3 LAUREL RD SOUTH SALEM, NY 10590

FRUMKES, RONALD & FELICE 5 RESERVOIR RD SOUTH SALEM, NY 10590

BULL, DAVID & LONGYEAR, TERESA 57 LOCKWOOD RD SOUTH SALEM, NY 10590

HANLEY, DAWN & DE CATUR, TODD 49 LOCKWOOD RD SOUTH SALEM, NY 10590

SJK, LLC & PVK, LLC C/O PEGGY VANDERVOORT KUMBLE 99 SILVER SPRING RD WILTON, CT 06897

MALICHIO, JOSEPH F. & LINDA S. 20 SILVERMINE DR SOUTH SALEM, NY 10590

GORMAN, ROBERT & REGINA 112 LOCKWOOD RD SOUTH SALEM, NY 10590 WILLE, MJ & WILLE, KA AS TTES 2020 WIILE FAMILY IRRV TRST 109 LOCKWOOD RD SOUTH SALEM, NY 10590

POLOWCZYK, BARBARA 96 LOCKWOOD RD SOUTH SALEM, NY 10590

AUGUST, JEROME & KATHERINE 24 SILVERMINE DR SOUTH SALEM, NY 10590

LAVELANET, LUCIEN & MARIE C. 15 LAUREL RD SOUTH SALEM, NY 10590

HIGGINS, DANIEL F. 105 LOCKWOOD RD SOUTH SALEM, NY 10590

MC KAY, JOHN & BARBARA 12 RESERVOIR RD SOUTH SALEM, NY 10590 DONOVAN, WILLIAM F. & VALENCIA ONDES 1 RESERVOIR RD SOUTH SALEM, NY 10590

D'URSO, RAYMOND & STEPHAINE G. 107 LOCKWOOD RD SOUTH SALEM, NY 10590

BENDER, BRIAN A. & CAROLYN M. 6 RESERVOIR RD SOUTH SALEM, NY 10590

JOHNSTON, MARY BETH & MICHAEL 7 LAUREL RD SOUTH SALEM, NY 10590

MINIO, PA & MINEO, JE TTE OF 2020 MINIO FAM REV LIV TRST 23 SILVERMINE DR SOUTH SALEM, NY 10590 CHONG, KELVIN & JIN, GRACE D. 7 RESERVOIR RD SOUTH SALEM, NY 10590

SHAW, RHONDA J. 18 SILVERMINE DR SOUTH SALEM, NY 10590

NORWALK CITY FIRST TAXING DISTRICT EAST ST SOUTH SALEM, NY 10590

TRAUBER, ROY 87 LOCKWOOD RD SOUTH SALEM, NY 10590

HOLMES, ROGER A. BARBARA ANN 9 RESERVOIR RD SOUTH SALEM, NY 10590 LOCKWOOD RD. ID: 66.4-4-5 (Lewisboro)





Tax parcel data was provided by local municipality. This map is generated as a public service to Westchester County residents for general information and planning purposes only, and should not be relied upon as a sole informational source. The County of Westchester hereby disclaims any liability from the use of this GIS mapping system by any person or entity. Tax parcel boundaries represent approximate property line location and should NOT be interpreted as or used in lieu of a survey or property boundary description. Property descriptions must be obtained from surveys or deeds. For more information please contact local municipality assessor's office.



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105 LOCKWOOD RD. ID: 77.2-4-1 (Lewisboro)



June 2, 2022

Tax parcel data was provided by local municipality. This map is generated as a public service to Westchester County residents for general information and planning purposes only, and should not be relied upon as a sole informational source. The County of Westchester hereby disclaims any liability from the use of this GIS mapping system by any person or entity. Tax parcel boundaries represent approximate property line location and should NOT be interpreted as or used in lieu of a survey or property boundary description. Property descriptions must be obtained from surveys or deeds. For more information please contact local municipality assessor's office.

Westchester County GIS

240

1:5,000

http://giswww.westchestergov.com Michaellan Office Building 148 Martine Avenue Rm 214 White Plains, New York 10601

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EXHIBIT C























ENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
 Complete items 1, 2, and 3. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. MC KAY, JOHN & BARBARA 12 RESERVOIR RD SOUTH SALEM, NY 10590 	Agent Addressee B Received by (Printed Name) C. Date of Delivery G. Bate of Delivery <t< td=""></t<>
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	IGNAL, MATTHEW E. & TYROL, KATLIN S. 51 AUREL RD SOUTH SALEM, NY 10590	D. Is delivery address different from item 1? Yes If YES, enter delivery address below: No
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	PS Form 3811, July 2020 PSN 7530-02-000-9053	HoSI 52-2 Domestic Return Receipt
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	 Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. Article Addressed to: 	Addresse Breceived by (Printed Name) C. Date of Deliver JCV0VIC J. AUSUST G-3-22 D. Is delivery address different from Item 12 □ Yes
	AUGUST, JEROME & KATHERINE 24 SILVERMINE DR SOUTH SALEM NY 10500	If YES, enter delivery address below: No
	SUGTI SALEM, NY 10590	3. Service Type
	9590 9402 6206 0220 6085 21	Adult Signature Restricted Delivery Certified Mall Restricted Delivery Certified Mall Restricted Delivery Collect on Delivery Collect on Delivery Restricted Delivery Collect on Delivery Restricted Delivery
	2. Article Number (Transfer from service label) 7020 1810 0002 3205 35	I Hour Mail I Hour Mail Restricted Delivery
27	PS Form 3811, July 2020 PSN 7530-02-000-9053	Nos 56-72 Domestic Return Receipt














Complete items 1, 2, and 3. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. 1. Article Addressed to: MALICHIO, JOSEPH F. & LINDA S. 20 SILVERMINE DR SOUTH SALEM, NY 10590 3. Service Type Adult Signature Adult Signature Adult Signature Adult Signature Registered Mail? Priority Mail Expression South Salem, NY 10590 3. Article Number (Transfer from service label)	SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
20 SILVERMINE DR SOUTH SALEM, NY 10590 3. Service Type 9590 9402 6206 0220 6084 84 2. Article Number (Transfer from service label)	 Complete items 1, 2, and 3. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. Article Addressed to: MALICHIO, JOSEPH F. & LINDA S. 	A. Signature X Agent B. Received by (Printed liame) D. Is delivery address different from item 1? If YES, enter delivery address below: No
9590 9402 6206 0220 6084 84 2. Article Number (Transfer from service label) 3. Service type Adult Signature Adult Signature Adult Signature Adult Signature Certified Mail Collect on Delivery Collect on D	20 SILVERMINE DR SOUTH SALEM, NY 10590	(2. Carries T
2. Article Number (Transfer from service label)	9590 9402 6206 0220 6084 84	S. SerVice Type □ Priority Mail Express® □ Adult Signature □ Registered Mail™ □ Adult Signature Restricted Delivery □ Registered Mail Restricted Delivery □ Certified Mail® □ Signature Confirmation™
7020 1810 0002 3205 2735	2. Article Number (Transfer from service label) 7020 1810 0002 3205 273	Collect on Delivery Restricted Delivery Iall Iestricted Delivery J





AFFIDAVIT VERIFYING PLACEMENT OF REQUIRED NOTICE SIGN

}ss.:

}

STATE OF NEW YORK

COUNTY OF WESTCHESTER

Eric Moss, being duly sworn, deposes and says: That I am a member of one of the Applicants in connection with the application to the Planning Board of the Town of Lewisboro for a Conditional Final Subdivision Approval for the Silvermine Preserve Subdivision with respect to the property located at Silvermine Drive and Lockwood Road, designated on the Town Tax Map as Sheet 48, Block 10057, Lot 15 and Sheet 51, Block 10057, Lot 104 and, that I have placed and will maintain, the required notification signs on such Lots in accordance with the provisions of Section 195-15(G) of the Code of the Town of Lewisboro as may have been modified by the Planning Board Chairman. Annexed hereto as Exhibit A are photographs of the required notification signs as posted on the subject property on June 13, 2022.

Sworn to before me on this

Notary Public

DANIEL S. PASCHKES NOTARY PUBLIC-STATE OF NEW YORK No. 4958001 Qualified in Westchester County Commission Expires January 03, 2026 February 9,

S:\# MATTERS\Moss 0056\Lewisboro (Silvermine) 002\Submissions\Aff of Sign Posting 6-13-22.docx

EXHIBIT A

Draft a Artonist Control Frindstatist or later soor en states Generation from Superstatist or artonist Control from Superstatist or artonist Streets and from Superstatist



NOTICE

This property is the subject of an application before the Lewisboro Planning Board. A Public Hearing has been scheduled at which time all interested parties will be afforded an opportunity to be heard.

Please contact the Planning Board Secretary at 914-763-5592 or visit www.lewisborogov.com for additional information

TOWN OF LEWISBORO Westchester County, New York



Tel: (914) 763-3060 Fax: (914) 875-9148 Email: jangiello@lewisborogov.com

May 19, 2022

Building Department

South Salem, New York 10590

79 Bouton Road

Ms. Janet Andersen, Chair Town of Lewisboro Planning Board

Re: Cal#03-13PB, Cal#03-16WP, Cal#19-21SW Silvermine Preserve, Silvermine Drive & Lockwood Rd., South Salem sheet 0048, block 10057, lot 15 and sheet 0051, block 10057, lot 104

Dear Ms. Andersen and Members of the Board,

I have reviewed the plans from Insite Engineering, Surveying & Landscape Architecture, P.C. latest revision dated 4/25/2022, the subdivision plat from Terry Bergendorff Collins latest revision dated 4/25/2022 as well the memo from Jan K. Johannessen, AICP and Joseph M. Cermele, P.E. dated 11/12/2021. I have also discussed the project with Vista Fire Chief Jeff Peck.

I have the following comments:

- 1. I concur with Kellard Sessions' memo dated 11/12/2021.
- 2. The driveway for lot #1 is more than 500' long and must conform to Section 511.2.3 of the 2020 Fire Code of NYS.
- 3. Chief Peck should be sent the latest plan iteration.

Joseph Angiello Building Inspector



MEMORANDUM

TO:	Chairman Janet Andersen and Members of Lewisboro Planning Board
CC:	Ciorsdan Conran
	Judson Siebert, Esq.
FROM:	Jan K. Johannessen, AICP
	Joseph M. Cermele, P.E., CFM
	Town Consulting Professionals
DATE:	November 12, 2021
RE:	Silvermine Preserve Subdivision
	Lockwood Road
	Sheet 48, Block 10057, Lot 15

PROJECT DESCRIPTION

The applicant, Silvermine Group, is proposing a 13-lot subdivision on ±57.9 acres of land located between Silvermine and Lockwood Roads and within the R-2A Zoning District. On April 18, 2017 the Planning Board issued a Negative Declaration of Significance and granted Preliminary Subdivision Plat Approval, subject to conditions. The applicant has applied to the Planning Board for Final Subdivision Plat Approval.

REQUIRED APPROVALS

- 1. Final Subdivision Plat Approval, a Wetland Activity Permit and a Town Stormwater Permit is required from the Planning Board.
- 2. Open Development Area Approval was granted by the Town Board on May 22, 2021.
- 3. Town Board Approval is required for those lots that do not meet the dimensional zoning requirements of the R-1A Zoning District. This approval was granted on May 22, 2021.
- 4. Construction within the right-of-way of Lockwood Road will require approval from the Town Highway Superintendent.

CIVIL ENGINEERING | LANDSCAPE ARCHITECTURE | SITE & ENVIRONMENTAL PLANNING

Chairman Janet Andersen November 12, 2021 Page 2 of 4

- 5. Realty Subdivision Approval is required from the Westchester County Department of Health (WCDH).
- 6. Coverage under the NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activities (GP-0-20-001) will be required.

COMMENTS

- 1. It is recommended that the plans be referred to the Building Inspector for review.
- 2. An updated Stormwater Pollution Prevention Plan (SWPPP), Notice of Intent (NOI) and SWPPP Acceptance form shall be submitted for review; the SWPPP shall be prepared in compliance with the Town's Stormwater Management and Erosion and Sediment Control Law (Chapter 189) and the NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activities (GP-0-20-001).
- 3. Regarding the signature blocks appearing on the plat and construction plans, please change "Chairman" to "Chairperson" and "Secretary" to "Administrator". As the Town Engineer is signing along with the Chairperson and Administrator on the same block, separate signature blocks for the Town Engineer, such as the one provided on Sheet PP-1, can be removed. Signature blocks for the Chairperson, Administrator and Town Engineer shall appear on both sheets of the plat.
- 4. The submitted wetland mitigation plans do not reflect the most current subdivision layout, including Lot 13. The wetland mitigation plans shall be updated accordingly.
- 5. We defer review of the legal memorandum prepared on behalf of the applicant relating to the open space parcel, Homeowners Association, and proposed easements to the Planning Board Attorney. While the memorandum appears to provide a thorough overview of what these documents will contain, we note that the Preliminary Subdivision Resolution requires their actual preparation for review. The Board may wish to consider deferring as a condition of the final approving Resolution. Regarding paragraph No. 9 on Page 3, relating to the underground water storage tank, it should be clear that while the fire department shall have the right to access, inspect, and fill the tank, that the HOA is responsible for its maintenance, repair, and replacement.
- 6. We have reviewed the submitted planting cost estimate and have no comments; we will review the construction cost estimate following submission of an updated SWPPP and construction plans.
- 7. Certain notes on the plat and on Sheet PP-1 are outdated or are no longer applicable; please review.
- 8. The NYSDEC Wetland Validation has expired; the plat shall contain an updated validation.

Chairman Janet Andersen November 12, 2021 Page 3 of 4

- 9. As per Condition #5 of the Preliminary Subdivision Resolution, to improve the clarity on Sheet 1 of the Plat, the house, driveway, and pool locations shall be removed as shall the lot width circle. This condition should also apply to Sheet PP-1 and the title of Sheet PP-1 should be revised to "Final Plat".
- 10. As per Condition #6 of the Preliminary Subdivision Resolution, the construction plans shall include a detail for the street sign. The location of the sign shall be provided on the construction plans.
- 11. As per Condition #8 of the Preliminary Subdivision Resolution, the proposed stormwater facility to be constructed at the terminus of Silvermine Drive shall be fully engineered and shall appear on the construction drawings.

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 BIBBO ASSOCIATES, LLC, DATED OCTOBER 6, 2021:

- Existing Conditions Map Conservation Subdivision (EX-1)
- Preliminary Plat Conservation Subdivision (PP-1)
- Zoning Conformance (ZON)
- Construction Plan I (CP-1)
- Construction Plan II (CP-2)
- Erosion Control Plan (EC-1)
- Phasing Plan (PH-1)
- Profiles and Details (RP-1)
- Miscellaneous Details (D-1)
- Additional Details (D-2)
- Stormwater Management (SW-1 & SW-2)

PLANS REVIEWED, PREPARED BY TERRY BERGENDORFF COLLINS, DATED APRIL 12, 2018:

• Final Subdivision Plat – Conservation Subdivision (Sheet 1 of 2 and 2 of 2

PLANS REVIEWED, PREPARED BY EVANS ASSOCIATES, DATED JUNE 1, 2016:

- Mitigation Planting Plan (MP-1 & MP-2)
- Overall Subdivision/Mitigation Planting Plan (MP-3)
- Proposed Stormwater Management Practice for Silvermine Road (ST-1)

Chairman Janet Andersen November 12, 2021 Page 4 of 4

DOCUMENTS REVIEWED:

- Letter, prepared by Hocherman, Tortorella & Wekstein, LLP, dated October 5, 2021
- Letter, prepared by Bibbo Associates, LLP, dated October 7, 2021
- Step III Planning Board Application, dated June 4, 2021
- Stormwater Permit Application
- Cost Estimate for Mitigation Plantings, prepared by ALP, dated July 22, 2021
- Construction Cost Estimate for Public Improvements & Common Driveways, prepared by Bibbo Associates, LLP, dated October 1, 2021

JKJ/dc

https://kellardsessionsconsulti.sharepoint.com/sites/Kellard/Municipal/Lewisboro/Correspondence/2021-11-12_LWPB_Silvermine Subd - Silvermine Dr & Lockwood Rd_Review Memo.docx

Moss Silvermine - Construction Cost Estimate for Public Improvements & Common Driveways

	Priva	te Road			
Item #	Description	Quantity	Unit	Unit Cost	Total Cost
1	Clear/Grub	1.97	Ac.	\$6,000.00	\$11,820
	Subtotal				\$11,820
2	Strip/Stockpile Topsoil	1.585	CY	\$3.00 \$8	00 \$4.755
	Subtotal	,	_	φυ	\$4,755
3	Roads				, , , , , , , , , , , , , , , , , , ,
Ũ	Earthwork (Cut as Fill)	61	CY	\$6.00 \$1	2.00 \$364
	Earthwork (Cut to be removed from site)	1,886	CY	\$12.50	\$23,579
	8" Foundation Course (Item 304.05)	703	CY	\$40.00 \$6	0.00 \$28,120.00
	2.5" Binder Course (Item 403.13)	462	Tons	\$1/0.00 \$1	60.00 \$69,300.00
	1.5" Top Course (Item 403.16)	277	Tons	\$150.00 \$1	60.00 \$41,550.00
	Asphalt Concrete Curb	1,400	LF	\$23.00	\$32,200.00
	Guide Rail	146	LF	\$17.00	\$2,482
	Subtotal				\$197,594
4	Drainage				
	Catch Basins	6	Ea.	\$3,500.00	4,200.00 ,000.00
	Diversion Manholes	1	Ea.	\$4,500.00	\$4,500.00
	12" HDPE	388.8	LF	\$28.00	\$10,886.40
	15" HDPE	66.8	LF	\$31.00	\$2,070.80
	18" HDPE	50	LF	\$37.00	\$1,850.00
	Infiltration Systems	25	Unit	\$855.00 \$1	,000.00 ,250.00
	Grass Swales	785	LF	\$20.00	\$15,700
	Stormwater Quality Basin 1	1	Ea.	\$1,000.00	\$1,000.00
	Stormwater Quality Basin 2, 3, & 4	3	Ea.	\$20,000.00	\$60,0 <u>00.00</u>
	CDS Pretreatment Units	2	Ea.	\$12,000.00	20,000.00 00.00
	Outlet Protection	1	Ea.	\$1,000.00	\$1,0 <mark>00.00</mark>
	Rip Rap Outlet Protection	3	Ea.	\$1,000.00	\$3,000.00
	Subtotal				\$166,257
5	Erosion Control				
	Silt Fence	705.04	LF	\$4.50	<u>\$3.</u> 172.68
	Stabilized Construction Entrance	1	Ea.	\$3,500.00	7,000.00 500.00
	Subtotal			•	\$6,673
6	Misc.				
	30,000 Gallon Fire Storage Tank	1	Ea.	\$30,000.00	\$30,000.00
	Hydrant	1	Ea.	\$2,500.00	\$2,500.00
	Signage	1	Ea.	\$1,000.00	\$1,000.00
	Subtotal				\$33,500
	Private Road Total				\$420,599

* Lump Sum Price includes piping connecting basins, swales, Anti-seepage collars, and other features associated with basin construction



10/1/2021

REVISED: 4/25/22

	Common Drive - I	Lots 1, 2, and 3	3		
Item #	Description	Quantity	Unit	Unit Cost	Total Cost
1	Clear/Grub	0,99	Ac.	\$6,000,00	\$5,940
•	Subtotal	0.00		+0,000.00	\$5,940
2	Strip/Stockpile Topsoil	797	CY	\$7.00 \$8	.00 \$2,390
	Subtotal			••••••••••••••••••••••••••••••••••••••	\$2,390
3	Roads				•
	Earthwork (Cut as Fill)	175	CY	\$6.00 \$1	2.00 \$1,049
	Earthwork (Cut to be removed from site)	295	CY	\$12.50	\$3,693
	6" R.O.B. Foundation Course (Item 304.05)	139	CY	\$40,00 \$6	0.00 \$5,560
	2.5" Binder Course (Item 403.13)	122	Tons	\$150.00 \$1	60 00 \$18,300.00
	1.5" Top Course (Item 403.16)	73	Tons	\$150.00 \$1	60.00 10,950.00
	Asphalt Concrete Curb	243	LF	\$23.00	\$5,589.00
	Subtotal	•			\$45,141
4	Drainage			•	
	Catch Basins	2	Ea.	\$3,500.00 \$4	1,200.00 \$7,000
	Drainage Manholes	1	Ea.	\$5,500.00	\$5,500
	Grass Swales	213	LF	\$20.00	\$4,260
	15" HDPE	482	LF	\$31.00	\$14,942.00
	8" HDPE	31	LF	\$23,00	\$713.00
	Infiltration Systems	36	Unit	\$850.00\$1.	,000.00 0,600.00
	CDS Pretreatment Units	2	Ea.	\$20,000.00	\$40,000.00
	Outlet Protection	1	Ea.	\$1,000.00	\$1,000.00
	Rip Rap Outlet Protection	2	Ea.	\$1,000.00	\$2,000.00
	Level Spreaders	1	Ea.	\$2,500.00	\$2,500.00
	Subtotal				\$108,515
5	Erosion Control				
	Silt Fence	880.12	LF	\$4.50	\$3,960.54
	Stabilized Construction Entrance	1	Ea.	\$3,500.00	\$3,500.00
	Subtotal				\$7,461
	Common Drive Total				\$169,446
6	Project Totals				
	Subtotal				\$590,045.47
	Contengency (10%)				\$59,004.55
	Project Total				\$649,050

* Lump Sum Price includes piping connecting basins, swales, Anti-seepage collars, and other features associated with basin construction



SITE DATA

1.TOTAL AREA OF PARCEL: 57.976 Ac ± 2. OWNER:

> RIDGEVIEW DESIGNER BUILDERS & D. HIGGINS 45 BENDER WAY POUND RIDGE, NEW YORK 10576

2. APPLICANT:

TREE TYP.

MA MAPLE

BE BEECH

OA OAK

EL ELM

HI HICKORY

TU TULIP AS ASH

BB BLACK BIRCH

YB YELLOW BIRCH

TW TWIN TRP TRIPLE QU QUAD

D. HIGGINS, S. HAFT AND E. MOSS dba SILVERMINE GROUP 45 BENDER WAY

POUND RIDGE, NEW YORK 10576 3. ZONING DISTRICT: R-2A RESIDENTIAL

4. TAX I.D. #: SHEET 48, BLOCK 10057, LOT 15 SHEET 51, BLOCK 10057, LOT 105 5. SURVEYOR:

> DONNELLY LAND SURVEYING 1929 COMMERCE STREET YORKTOWN HEIGHTS , N.Y.

6. SURVEY LAST UPDATE: NOV , 2003



SOIL LEGEND

CrC USDA SOIL CLASSIFICATION

SOIL BOUNDARY								
SYMBOL	DESCRIPTION	HYD. SOIL TYPE						
ChB	CHARLTON	В						
ChC	CHARLTON	В						
CIB	CHARLTON STONY	В						
CrC	CHARLTON CHATFIELD	В						
CsD	CHATFIELD CHARLTON	В						
HrF	HOLLIS	С						
LcB	LEICESTER	С						
LeB	LEICESTER	С						
Pa	PALMS MUCK	D						
Sh	SUN							

<u>SITE LEGEND</u>

_____420-____ EXISTING 10' CONTOUR



EXISTING 2' CONTOUR

EXISTING WETLAND AS FLAGGED BY: TIM MILLER ASSOCIATES CONFIRMED BY EVANS ASSOCIATES ______ 150' WETLAND SETBACK 100' STATE WETLAND ADJACENT AREA EX. PROPERTY LINE

TITLE
EXISTING CONDITIONS
PRELIMINARY PLAT
ZONING CONFORMANCE
CONSTRUCTION PLAN I
CONSTRUCTION PLAN II
EROSION CONTROL PLAN
PHASING PLAN
PROFILES AND DETAILS
MISCELLANEOUS DETAILS
ADDITIONAL DETAILS
STORMWATER MANAGEM
STORMWATER MANAGEM
OVERALL WETLAND IMPA & MITIGATION PLAN

MITIGATION PLANTING PLAN MITIGATION PLANTING PLAN

$\sum - 1$

SHEET INDEX

<u>SHT #</u>	<u>DWG</u> #
1	EX-1
2	PP-1
3	ZON
4	CP-1
5	CP-2
6	EC-1
7	PH-1
8	RP-1
9	D-1
10	D-2
11	SW-1
12	SW-2

MP-1
MP-2
MP-3





HEALTH DEPARTMENT SEPTIC SCHEDULE

Lat	LOT		%	PERC		IMPERV. LF OF FIELDS		IMPERV.	LF OF FIELDS		BANK R	UN FILL	CURTAI	N DRAIN	
No.	AREA (AC.)	TEST FIT DESCRIPTION	SLOPE S.D.A.	RATE MIN/IN	G.W. ELEV.	LAYER ELEV.	4 BRM	ADD. BRM	DEPTH (FT)	VOLUME (CY)	DEPTH (FT)	LENGTH (FT)	REMARKS		
1	2.039	MED. SANDS / MOD. COMPACT MEDIUM SANDS.	8	3-5	>7'	>7'	184	46	N/A	N/A	N/A	N/A	ROB FILL MAY BE REQ'D FOR GRADING		
2	0.970	SANDY LOAM / MOD. COMPACT MED. FINE SANDS	11	8-10	>7'	>7'	245	61	N/A	N/A	N/A	N/A	ROB FILL MAY BE REQ'D FOR GRADING		
3	1.040	SANDY LOAM / MOD. COMPACT MED. FINE SANDS W/ TRACE OF SILT	10	3-5	>7'	>7'	184	46	N/A	N/A	N/A	N/A	ROB FILL MAY BE REQ'D FOR GRADING		
4	1.041	SANDY LOAM / MOD. COMPACT MED. FINE SANDS W/ TRACE OF SILT	8	6-7	>7'	>7'	220	55	N/A	N/A	N/A	N/A	ROB FILL MAY BE REQ'D FOR GRADING		
5	1.041	SANDY LOAM / MOD. COMPACT MED. SANDS	9	6-7	>7'	>7'	220	55	N/A	N/A	N/A	N/A	ROB FILL MAY BE REQ'D FOR GRADING		
6	1.404	SANDY LOAM / MOD. COMPACT MED. SANDS	6	3-5	>7'	>7'	184	46	N/A	N/A	N/A	N/A	PUMP REQUIRED ROB FILL MAY BE REQ'D FOR GRADING		
7	1.041	MOD. COMPACT SANDY LOAM / LOOSE, ROCKY, MED. SANDS W/ TRACE OF SILT	8	8-10	>7'	>7'	245	61	N/A	N/A	N/A	N/A	ROB FILL MAY BE REQ'D FOR GRADING		
8	1.403	MOD. COMPACT SANDY LOAM / LOOSE, ROCKY, MED. SANDS W/ TRACE OF SILT	8	8-10	>7'	>7'	245	61	N/A	N/A	N/A	N/A	PUMP REQUIRED ROB FILL MAY BE REQ'D FOR GRADING		
9	0.970	SANDY LOAM / MOD. COMPACT MED. SANDS	7	8-10	>7'	>7'	245	61	N/A	N/A	N/A	N/A	ROB FILL MAY BE REQ'D FOR GRADING		
10	0.889	SANDY LOAM / MOD. COMPACT MED. SANDS	7	8-10	>7'	>7'	245	61	N/A	N/A	N/A	N/A	ROB FILL MAY BE REQ'D FOR GRADING		
11	0.922	SANDY LOAM / MOD. COMPACT MED. SANDS W/ TRACE OF SILT	9	8-10	>7'	>7'	245	61	N/A	N/A	N/A	N/A	PUMP REQUIRED ROB FILL MAY BE REQ'D FOR GRADING		
12	1.051	SANDY LOAM / MOD. COMPACT MED. SANDS	6	6-7	>7'	>7'	220	55	N/A	N/A	N/A	N/A	PUMP REQUIRED ROB FILL MAY BE REQ'D FOR GRADING		
13	1.333	SANDY LOAM / MOD. COMPACT MED. SANDS	9	8-10	>7'	>7'	245	61	N/A	N/A	N/A	N/A	PUMP REQUIRED ROB FILL MAY BE REQ'D FOR GRADING		

NOTE: THERE SHALL BE NO FURTHER SUBDIVISION OF ANY LOT.

SITE LEGEND

----- PROPOSED LOT LINE

----- ----- 100' STATE WETLAND ADJACENT AREA

EX. STONE WALL AS LOT LINE

WETLAND BOUNDARY (STATE AND LOCAL) (FLAGGED BY TIM MILLER ASSOCIATES) RECONFIRMED BY EVANS ASSOCIATES, 2010

PROPOSED MINIMUM LOT SIZE = 40,000 SF

— — DRAINAGE, UTILITY AND ACCESS EASEMENT PROPOSED BUILDING SETBACKS: (BASED ON R-1A) ______ AND "BUILDING ENVELOPE" FRONT YARD = 40'SIDE YARD = 30' REAR YARD = 40' PROPOSED STORMWATER TREATMENT AREA PROPOSED DWELLING AND DRIVEWAY BE BE BE BE BE PROPOSED "BUILDING ENVELOPE" NOTE: THE PROPOSED DWELLING, FUTURE GARAGE, BARN, SHED, OR POOL SHALL BE LOCATED WITHIN THE BUILDING ENVELOPE SHOWN HEREON. THE PURPOSE OF THIS BUILDING ENVELOPE IS TO ALLOW FLEXIBILITY IN THE LOCATION OF THE DWELLING AND ACCESSORY STURCTURES AND IMPROVEMENTS. THE LOCATION OF THE PROPOSED DRIVEWAY, SEPTIC SYSTEM, WELL AND STORMWATER STRUCTURES AND FACILITIES SHALL BE LOCATED, AS SHOWN ON THE APPROVED CONSTRUCTION DRAWINGS. ANY PROPOSED S.S.T.A DEVIATION SHALL REQUIRE PLANNING BOARD APPROVAL. PROPOSED WELL WITH WELL SETBACK WN ® APPROVED BY RESOLUTION OF THE LEWISBORO TOWN PLANNING BOARD. DATE CHAIRPERSON ADMINISTRATOR DATE REVIEWED FOR COMPIANCE WITH THE PLANNING BOARD RESOLUTION, DATED JOSEPH M. CERMELE, P.E. KELLARD SESSIONS CONSULTING, P.C. CONSULTING TOWN ENGINEERS APPROVED FOR FILING IN THE WESTCHESTER COUNTY CLERK'S OFFICE, DIVISION OF LAND RECORDS SUSAN HAFT, OWNER DATE NOTES: SILVERMINE GROUP 1. THERE SHALL BE NO FURTHER SUBDIVISION OF THE LOTS SHOWN ON THIS PLAT. 2. THE DRAINAGE EASEMENTS (OR THE DRAINAGE DISCHARGE POINTS) SHOWN HEREON ESTABLISH THE PERPETUAL RIGHT TO DISCHARGE STORMWATER RUNOFF FROM THE PRIVATE ROAD AND COMMON DRIVE AND FROM THE SURROUNDING AREA ONTO AND OVER THE AFFECTED PREMISES BY MEANS OF PIPES, CULVERTS OR DITCHES, OR A COMBINATION THEREOF, TOGETHER WITH THE RIGHT OF THE HOLDER OF FEE TITLE TO THE PRIVATE ROAD OR COMMON DRIVE, OR HIS REPRESENTATIVES, TO ENTER SAID PREMISES FOR PURPOSES OF MAKING SUCH INSTALLATIONS AND DOING SUCH MAINTENANCE WORK AS SAID HOLDER OF FEE TITLE MAY DEEM NECESSARY TO ADEQUATELY DRAIN THE COMMON DRIVE AND SURROUNDING AREA. 3. ALL PHASES OF THE CONSTRUCTION OF THE NEW ROAD AND COMMON DRIVEWAY AND DRAINAGE IMPROVEMENTS MUST BE INSPECTED BY THE TOWN CONSULTING ENGINEER. THE OWNER IS RESPONSIBLE TO NOTIFY THE TOWN ENGINEER OF THE CONSTRUCTION SCHEDULE AND DATE WHEN INSPECTIONS WILL BE REQUIRED. 4. PRIOR TO THE ISSUANCE OF ANY INDIVIDUAL BUILDING PERMIT, THE NEW ROAD AND COMMON DRIVEWAY AND DRAINAGE IMPROVEMENTS SHALL BE SUBSTANTIALLY COMPLETED TO THE SATISFACTION OF THE TOWN CONSULTING ENGINEER. 5. PRIOR TO THE ISSUANCE OF ANY INDIVIDUAL CERTIFICATE OF OCCUPANCY, AN AS-BUILT PLAN OF THE COMMON DRIVEWAY AND DRAINAGE IMPROVEMENTS SHALL BE PREPARED BY A LICENSED SURVEYOR AND SUBMITTED TO THE TOWN CONSULTING ENGINEER, AND THE COMMON DRIVEWAY AND DRAINAGE IMPROVEMENTS SHALL BE DEEMED "COMPLETE" TO THE SATISFACTION OF THE TOWN CONSULTING ENGINEER. 6. ALL SITE UTILITY FACILITIES AND LINES (ELECTRIC, TELEPHONE, CABLE, SEWER AND WATER) SHALL BE INSTALLED UNDERGROUND. 7. ANY FUTURE OIL STORAGE TANK FACILITIES, IF UTILIZED, SHALL BE RESTRICTED TO THE CONFINES OF THE PRINCIPAL BUILDING BASEMENT, GARAGE OR A FOUNDATION VAULT. 8. NO WORK, INCLUDING, BUT NOT LIMITED TO, REGRADING, DISPOSITION OR EXTRACTION OF MATERIALS OR VEGETATION, OR PHYSICAL ALTERATION IN, UPON, OR WITHIN 150 FEET (AS MAY BE AMENDED FROM TIME TO TIME) OF SITE WETLANDS, WATERCOURSES OR WATER BODIES, EXCEPT AS AUTHORIZED BY A DULY ISSUED WETLAND ACTIVITY PERMIT SHALL BE PERMITTED. 9. PRIOR TO THE COMMENCEMENT OF ANY SITE WORK OR CONSTRUCTION ACTIVITY, EROSION AND SEDIMENTATION CONTROLS SHALL BE INSTALLED AND SHALL BE SUBJECT TO CONTINUAL MAINTENANCE AND ADDITIONAL CONTROLS AS MAY BE REQUIRED BY THE BUILDING INSPECTOR, WETLANDS INSPECTOR, TOWN CONSULTING ENGINEER, OR THEIR AUTHORIZED AGENTS. A NEW YORK STATE LICENSED SURVEYOR IS REQUIRED TO LOCATE AND FIELD DELINEATE THE LIMITS OF EASEMENT AREAS AND REGULATED WETLANDS BUFFER AREAS PRIOR TO ANY RELATED SITE CLEARING, DISTURBANCE, EXCAVATION, OR CONSTRUCTION. 10. STORMWATER DRAINAGE SHALL BE CONTROLLED AT ALL TIMES DURING AND AFTER CONSTRUCTION TO PREVENT EROSION OF THE SITE AREA AND TO PREVENT SEDIMENTATION UPON AREAS ADJACENT TO THE CONSTRUCTION SITE, PARTICULARLY OFF-SITE LOCATIONS AND WETLANDS/WATERCOURSES, AND WETLAND BUFFER AREA RESOURCES. SILT FENCING, ANTI-TRACKING APRONS AND ALL OTHER REQUIRED EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE REGULARLY INSPECTED AND MAINTAINED IN AN ORDERLY AND FUNCTIONING MANNER. ADDITIONAL SUPPLIES OF SILT FENCING SHALL BE KEPT ON THE SITE DURING CONSTRUCTION FOR USE AS NEEDED. 11. ANY SUBSTANTIAL CHANGE IN THE LOCATION OF HOUSES, DRIVEWAYS AND STORMWATER CONTROL IMPROVEMENTS OR UTILITIES AS SHOWN ON THE FINAL CONSTRUCTION PLANS SHALL REQUIRE THE PRIOR REVIEW AND APPROVAL OF THE PLANNING BOARD. 12. ALL DISTURBED AREAS SHALL BE REGRADED AND COVERED WITH A MINIMUM OF FOUR (4) INCHES OF TOPSOIL, THEN SEEDED OR PLANTED WITH TREES, SHRUBS OR OTHER PERENNIAL GROUNDCOVERS. REGRADED AREAS SHALL NOT EXCEED A SLOPE OF 1:2; AND SAID SLOPES SHALL BE STABILIZED UTILIZING JUTE NETTING (OR EQUIVALENT) OR SHRUB PLANTINGS. 13. REFER TO DRAWING "ZON" FOR NOTATIONS REGARDING "BUILDING ENVELOPE". 14. IT IS PROPOSED THAT THE OPEN SPACE PARCEL SHALL BE OWNED BY THE WESTCHESTER COUNTY LAND TRUST, ACCESS TO THIS OPEN SPACE WILL BE AVAILABLE TO THE PUBLIC, WITH CERTAIN RESTRICTIONS, AT LOCATIONS TO BE DETERMINED BY THE PLAANING BOARD AND DESIGNATED ON THE FINAL PLANS. 15. REFER TO MAINTENANCE. COVENANTS, RESTRICTIONS & EASEMENTS. FILED ______ DOCUMENT _____, 20___, WESTCHESTER COUNTY CLERK'S OFFICE SPECIAL NOTES: AREA IN LOTS . . . AS THE PROPOSED ROAD IS TO BE PRIVATELY OWNED AND MAINTAINED, OPEN DEVELOPMENT AREA APPROVAL OF THE TOWN BOARD IS AREA IN ROADS . REQUIRED.

IN ORDER THAT CERTAIN LOTS (1, 2, 3, 6, 9, 10 & 11) PRESERVE EXISTING STONE WALLS AS LOT LINES, APPROVAL FROM THE TOWN BOARD IS ALSO REQUIRED FOR VARIANCE FROM THE DIMENSIONAL REQUIREMENTS OF § 200 - 88 B AND § 200 - 10E(2)(c) OF TOWN CODE. REFER TO

DRAWING "ZON" FOR SPECIFIC INSTANCES WHERE APPROVAL OF NON-CONFORMANCE IS REQUIRED.

INDICATED ON THIS PLAN.

DURING CONSTRUCTION, SOME EXISTING STONE WALLS WILL BE REMOVED TO MAKE WAY FOR THE PROPOSED SITE IMPROVEMENTS. STONE FROM THEASE WALLS SHALL BE RELOCATED ALONG NEW LOT LINES. ALL EXISTING STONE WALLS SHALL BE PRESERVED AS LOT LINES WHERE AREA IN OPEN SPACE .

TOTAL AREA OF PROPERTY .

Lii	NYSDEC FRESHWATER WETLAND BOUNDARY VALIDATION
The freshwate Wetland	wetland boundary as represented on these plans accurately depicts the limits of Freshwater F-1 as delineated by EVANS ASSOCIATES on 12-2-10
DEC Staff:	
Date Valid:	Expiration Date:SEAL
Wetland bo Conservation 1 practices chan DEC staff. R Any propos wetland or wit Department of	undary delineations as validated by the New York State Department of Environmental emain valid for five (5) years unless existing exempt activities, area hydrology, or land use ge (e.g., agricultural to residential). After five (5) years the boundary must be revalidated by validation may include a new delineation and survey of the wetland boundary. ed construction, grading, filling, excavating, clearing or other regulated activity in the freshwater in 100 feet of the wetland boundary as depicted on this plan requires a permit from the NYS Environmental Conservation under Article 24 of the Environmental Conservation Law

(Freshwater Wetlands Act) prior to commencement of work.



LOT 3

<u>LOT 11</u>

Lipsoport and port and a second and a second

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LOT 12

EASEMENT FOR ACC ADÍNG. UTILITIES AI

LOT 2



_∄ 595.00'

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(IN FEET) 1 inch = 80 ft.

N.Y.S. WETLAND "D-6"

£1 207

PLAN

RAPHIC SCAL

-"SUBDIVISION OF PROPERTY TO BE KNOWN AS SILVERMINE EXTENSION" Filed Map No. 23749 ____

NO0°25'00" E

40.80 Ac . 55.90 Ac

13.55 Ac

1.55 Ac

.







PE IS TO ALLOW FLEXIBILITY IN THE	
CESSORY STURCTURES AND	
HE PROPOSED DRIVEWAY, SEPTIC	
TRUCTURES AND FACILITIES SHALL BE	

OT SIZE = 40,000 SF
DT LINE
SETBACKS: (BASED ON R-1A)

) LOCAL) ATES) ATES, 2010			

1	71	
		<u>111</u>
	<u>111</u>	

	<u>111</u>	
<u>1111</u>		<u>111</u>

~N00°28°25″W 23.85

N10°20'48"E 72.18"

N17°58'09"W 60.81' —

240'

- S21°29'09"E 35.00'

 $AREA = 1.041 Ac \pm$

N74°27'45''W 62.82' --

-

LOT 11

AREA = 0.922 Ac $\pm \frac{1}{2}$

10.1

LOT 4

159' ±

∀ N88°1725″E 15.28″

) B - H20' SACHEM WAY-

 $AREA = 1.041 Ac \pm 1000$

LOT 5

PROPOSED MONUMENT-(TYPICAL)

-N81°07'17"E 60.04'

-N04°34'58"W 14.02'

N04°42'43"W 100.89'

191' ±

LOT 10

AREA = 0.889 AC ±

]		

ZONING	

S77°29'04"W 45.56' -

LOT 9

 $AREA = 0.970 Ac \pm$

N00°12'47"E 36.47

_105°40'53"W 14.68

N04°1915W 95.94'

IAREA = 1,404 Ac ± 0

LOT 6

					ZONING CON	IFORMANCE: (CONSERVATIO	ON SUBDIVISIO						
	REQUIRED							PROV	/IDED					
FRONT YARD		LOT#1	LOT#2	LOT#3	LOT#4	LOT#5	LOT#6	LOT#7	LOT#8	LOT#9	LOT#10	LOT#11	LOT#12	LOT#13
+ FROM STREET CENTER LINE	65'	n/a	n/a	n/a	n/a	146.4'	78.7'	66.3'	255.4'	65.0'	65.1'	n/a	n/a	89.5'
+ FROM FRONT LOT LINE	40'	606'	338.7'	211.9'	166.2'	121.4'	53.7'	41.3'	230.4'	40.0'	40.1'	66.0'	165.2'	64.5'
SIDE YARD	30'	145.8'	34.2'	30.3'	30.0'	32.5'	88.5'	33.7'	72.1'	32.5'	50.2'	69.2'	48.9'	87.5'
REAR YARD	40'	54.7'	67.4'	55.9'	59.3'	92.0'	50.3'	47.7'	59.4'	163.1'	123.0'	47.3'	79.2'	44.4'
BUILDING COVERAGE	12 %	3.1 %	6.6%	6.1 %	6.1 %	6.1 %	4.5 %	6.1 %	4.5 %	6.5 %	6.9 %	6.9 %	6.1 %	4.8 %
	2.5 STORIES	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
BOILDING HEIGHT	35' MAX.	<35'	<35'	<35'	<35'	<35'	<35'	<35'	<35'	<35'	<35'	<35'	<35'	<35'
LOT WIDTH	150' DIA. CIRCLE	150'	150'	150'	150'	150'	150'	150'	150'	150'	150'	150'	150'	150'
LOT DEPTH	300' MAX	732'	455.2'	327.1	293.5'	257.5'	256.9'	259.6'	359.3'	250.8'	213.3'	181.1'	313.9'	300'
ACTUAL LOT AREA	MIN 1 AC.	2.039 AC +/-	0.970 AC +/- (SEE NOTE 'A')	1.040 AC +/-	1.041 AC +/-	1.041 AC +/-	1.404 AC +/-	1.041 AC +/-	1.403 AC +/-	0.970 AC +/- (SEE NOTE 'A')	0.889 AC +/- (SEE NOTE 'A')	0.922 AC +/- (SEE NOTE 'A')	1.051 AC +/-	1.333 AC +/-
MIN LOT AREA REQ'D.*		2.44 AC +/-	1.52 AC +/-	1.09 AC +/-	1.0 AC +/-	1.0 AC +/-	1.0 AC	1.0 AC	1.19 AC	1.0 AC	1.0 AC	1.0 AC	1.04 AC +/-	1.33 AC +/-
MIN LOT AREA PROVIDED **		1.819 AC +/- (SEE NOTE 'A')	0.829 AC +/- (SEE NOTE 'A')	1.006 AC +/- (SEE NOTE 'A')	1.041 AC +/-	1.041 AC +/-	1.404 AC +/-	1.041 AC +/-	1.333 AC +/-	0.970 AC +/- (SEE NOTE 'A')	0.889 AC +/- (SEE NOTE 'A')	0.922 AC +/- (SEE NOTE 'A')	1.040 AC +/-	1.33 AC +/-
STREET FRONTAGE	25'	26'	26'	52'	117'	180'	523'	254'	42'	165'	179'	115'	52'	381'
CONTIGUOUS BUILDABLE AREA ***	35,000 SF MIN.	69,642 SF +/-	34,549 SF +	40,999 SF +/-	43,505 SF +/-	43,014 SF +/-	48,737 SF +/-	45,356 SF +/-	61,126 SF +/-	41,530 SF +/-	38,661 SF +/-	40,162 SF +/-	45,778 SF+/-	58,049 SF+/-

* REQUIRED LOT AREA BASED ON LOT DEPTH §220-25B

** LAND EXCLUDING AREAS WITH LESS THAN 1/3 THE REQUIRED LOT WIDTH

*** LAND EXCLUDING STEEP SLOPES (>15%), WETLANDS PER §220-10E(2)(a) OF THE AMENDED ZONING CODE

T AREA REQ'D.*		2.44 AC +/-	
T AREA PROVIDED **		1.819 AC +/- (SEE NOTE 'A')	
T FRONTAGE	25'	26'	
GUOUS BLE AREA ***	35,000 SF MIN.	69,642 SF +/-	

NOTE 'A': IN ORDER TO PRESERVE EXISTING STONE WALLS AND MINIMIZE INCURSION WITHIN WETLAND BUFFERS, VARIANCE FROM LOT SHAPE AND DIMENSIONAL REQUIREMENTS OF THE R-1A DISTRICT RECEIVED FROM THE LEWISBORO TOWN BOARD







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CAAP_



T CATCH BASIN	1	A	B	C STRUC		E	F	G	H PIPE	I	
CATCH BASIN AIN (2' x 2' INSIDE DIMENSION NHOLE	2	FROM	то	TYPE	RIM EL.	SIDE INLET	INV OUT INV IN	LENGTH	SLOPE	DIA	BOARD.
TON YNAMIC SEPARATOR N MANHOLE	4 5 6	CB #1 -	- CB #2	CL CL	612.4 612.2	-	609.4 609.2	- 15'	1.3%	12" HDPE	CHAIRPERSON DATE
TON CHAMBERS TRUCTURE	7 8	CB #2 -	- DMH #1	CL DIV MH	612.2 613.0	-	609.2 608.6	59.8'	1.0%	12" HDPE	
	9 10 11	YD #2 -	- CB #2	YD CL	617.8 612.2	-	613.8 609.2	- 318'	1.4%	10" HDPE	RESOLUTION, DATED
E OF FROM MWATER	12 13 14	DMH #1	- CDS #1	DIV MH HDS	613.0	-	608.6 608.5	- 7'	1.4%	12" HDPE	DATE: JOSEPH M. CERMELE, P.E.
VELS FO FULLY	15 16	DMH #1	-		613.0	-	610.8	50'	1.6%	18" HDPE	CONSULTING TOWN ENGINEERS
	17 18 19	- CB #5	- ES #1	CL	622.5	-	610.0	14'	3.6%	12"	APPROVED FOR FILING IN THE WESTCHESTER COUNTY CLERK'S OF DIVISION OF LAND RECORDS
	20 21 22	CB #6	CB #6	CL CL	622.5 622.5	-	618.0 618.0		0.070	HDPE	SUSAN HAFT, OWNER DATE
	23 24 25	- CDS #2	CDS #2	HDS	622.0	-	617.5	28	1.8%	HDPE	
	26 27	-	ES #2	ES	-	-	616.0	48.8'	3.1%	15" HDPE	NYSDEC FRESHWATER WETLAND BOUNDARY VALIDATION
	28 29 30	OS #1 _	 ES #3	OS ES	615.5	-	614.25 614.0	- 18'	1.4%	15" HDPE	Wetland as delineated by EVANS ASSOCIATES DEC Staff:
	31 32	ES #4 _	- ES #5	ES ES	-	-	625.0 624.2	- 29'	2.8%	12" HDPE	Date Valid:Expiration Date:SEAL
	34 35	ES #6 _	- ES #7	ES ES	-	-	626.5 626.0	- 35'	1.4%	12" HDPE	Wetland boundary delineations as validated by the New York State Department of Environmental Conservation remain valid for five (5) years unless existing exempt activities, area hydrology, or land a practices change (e.g., agricultural to residential). After five (5) years the boundary must be revalidated DEC staff. Revalidation may include a new delineation and survey of the wetland boundary.
	36 37 38	ES #8 -	- ES #9	ES	-	-	619.5 618.5	42'	2.4%	12" HDPE	Any proposed construction, grading, filling, excavating, clearing or other regulated activity in the fr wetland or within 100 feet of the wetland boundary as depicted on this plan requires a permit from the Department of Environmental Conservation under Article 24 of the Environmental Conservation Law (Freshwater Wetlands Act) prior to commencement of work.
	39 40	ES #10	-	ES	-	-	620.5	90'	2.2%	12" HDPE	
	41 42 43	CB #7	-	SI	617.0	616.0	618.5	69'	0.7%	12"	
	44 45 46	- CB #8	CB #8	SI SI	617.0	616.0 616.0	612.0			HDPE	
	47 48	- 	DMH #2	DMH	603.0	-	596.5	289'	5.4%	HDPE	
	49 50 51	-	DMH #2	DMH	603.0	-	597.5	- 54'	1.9%	12" HDPE	
	52 53 54	DMH #2 -	- CDS #3	DMH HDS	603.0 595.0	-	596.5 591.5	- 58'	8.6%	15" HDPE	
	55 56	CDS #3	 ES #14	HDS ES	595.0 -	-	591.5 584.0	- 29'	25.9%	15" HDPE	
	57 58 59	CB #9	- CDS #4	CL HDS	625.0 626.0	-	620.0 619.75	- 24'	1.0%	8" HDPE	
	60 61	CB #9		CL	625.0	- -	621.5	- 38'	1.3%	15" HDPE	
	62 63 64	OS #2	-	OS	600.0	-	596.0	74'	1.4%	12"	
	65 66 67	OS #3	ES #12	ES OS	601.0	-	595.0 596.0	07	1 49/	12"	
	68 69 70	- OS #4	ES #13	ES	587.0	-	595.5		1.4%	HDPE	-
	70 71 72	-	ES #15	ES	-	-	583.0	21'	2.4%	HDPE	
		PROF BUS & MA	POSED STOP ILBOX AREA CB#2 =612.2 =609.2	019	R	CB# =612 =609	PF SI EA #1 -4 -4	ROPOS GHT ASEME		RT	Wetland Flag WETLAND BOUNDARY (STATE AND LO (FLAGGED BY TIM MILLER ASSOCIATES RECONFIRMED BY EVANS ASSOCIATES RECONFIRMED BY EVANS ASSOCIATES Image: Constraint of the second
									CUR	B	BE DESIGNED BY A NEW YORK STATE PROFES ENGINEER PRIOR TO ISSUANCE OF BUILDING P
											O EXISTING TREE TO BE PROTECTED
	-U	U					g C	0			
	<u>1H #</u>	1	- 14-2					7		, de f	TOTAL ESTIMATED DISTORBANCE
EATMENT	508.0	6		PD 34	NIL O			5W	 A	tone	DRAINAGE, UTILITY AND ACCESS EASE
ER CDS#1 ECH CDS)	\leq			$\left \right\rangle$		Pole			, it	, n N	
					Mir	V / \ /	\square	F	PROV		← ← V.S. ← ← PROPOSED VEGETATED SWALE
FILTRATION	\								STOP	-SIGN	N PROPOSED ROOF & FOOTINGS DRAIN
SYSTEM #2 (LHD UNITS)	X- Y-		H			× V,	\mathbb{R}	<u>f</u>	, , , , , , , , , , , , , , , , , , , ,		
					MO	\mathbb{A}		/ /	/		
\frown							+	-2/FOC		H	PROPOSED STORMWATER BASIN (SE
	/	<u>ES #1</u> I = 61	<u> </u>	\sim				FORE		LS WAY	
				, .		O					610 PROPOSED 2' CONTOUR 610 PROPOSED 10' CONTOUR
						S/	/				PROPOSED SPLIT RAIL FENCE
		Trave	eltu	1†		/ /	\mathbf{X}				PROPOSED DWELLING AND DRIVEW.
	-			f / /		* / /	, ['] \				
				/			/ \				PROPOSED S. D. S.
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- HELD WITH THE CONTRACTOR, ENGINEER AND TOWN CONSULTANTS TO DISCUSS THE PROCESS OF CONSTRUCTION.
- GRADING, STORMWATER AREAS AND DRAINAGE FACILITIES AS WELL AS SHALL ALSO BE STAKED OUT.
- SILT FENCING WHERE SHOWN ON PLANS.
- LIMITS SHALL BE REMOVED, INCLUDING STUMPS. NO ON-SITE BURIAL OF STUMPS SHALL BE PERMITTED.
- AREAS AND SEWAGE TREATMENT AREAS (ON LOTS 6 AND 7) ADJACENT TO WITHIN THESE AREAS.
- INDICATED ON PLANS. SB-2, SB-3, AND SB-4 SHALL BE USED AS TEMPORARY SEDIMENT BASINS DURING CONSTRUCTION HOWEVER. THE BASINS MUST THE TEMPORARY BOTTOM ELEVATION AS SHOWN ON SHEET "SW-1". VEGATATIVE SWALES LOCATED ON LOTS 8-11 SHOULD BE CONSTRUCTED IN CONJUCTION WITH SB-2 AND SB-3. (NOTE: THESE PRACTICES SHALL REMAIN IN PLACE AND BE MAINTAINED IN PROPER FUNCTION UNTIL ALL OF THE TRIBUTARY AREAS HAVE BEEN STABILIZED. IN ADDITION, INFILTRATION SYSTEMS SHALL BE KEPT OFF-LINE AND ALL CONSTRUCTION EQUIPMENT SHALL BE KEPT "OFF- LIMITS" UNTIL THEN.)

- EXPOSURE.
- SHOWN ON PLAN AND DETAILS.
- WATER BREAKS AND SILT TRAPS SHALL BE REMOVED PRIOR.
- AND SB-3 SHALL BE INSTALLED AND STABILIZED.
- SILT FENCING WHERE SHOWN ON PLANS.





N.T.S.

REPLACE, IF NECESSARY.

N.T.S.

. E 5.							
AP - 0	MIN. APRON LENGTH	APRON WIDTH (FT)					
ES)	(FT) L	w	А				
	10 (**)	11.5	4.5				
	10 (**)	11	3				
	10 (**)	11	3				
	10 (**)	11	3				
	10 (**)	11	3				
	10 (**)	11	3				
	10 (**)	11.5	4.5				

ELEVATIONS SHOWN.

5. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

(*) SB-1 (EXISTING WETLAND) SHALL NOT BE USED AS SEDIMENT BASIN DURING CONSTRUCTION. USE TEMP. WATER BREAKS TO DIVERT RUNOFF PAST BASIN AND INTO TEMPORARY SILT TRAPS DOWNSTREAM. THE OUTLET FROM CB #6 SHALL BE PLUGGED DURING CONSTRUCTION.

(**) SB-2, SB-3, SB-4 (INFILTRATION BASINS) TO BE EXCAVATED TO 1 FOOT ABOVE FINAL BASIN BOTTOM (EL. "F"). ONCE THE TRIBUTARY AREAS HAVE BEEN STABILIZED; REMOVE ACCUMULATED SEDIMENT, REGRADE BASIN TO FINAL ELEVATIONS, AND ADJUST OUTLET STRUCTURE TO FINAL SPECIFICATIONS AS PER THE PLANS AND DETAILS.

TEMPORARY SEDIMENT BASIN RISER DETAIL

н	Temporary Bottom El. "L"
-	-
2.0'	597.0
.25'	597.0
2.4'	583.0
	<u>*</u>

OUTLET CONTROL STRUCTURE AND GRATE DETAIL N.T.S.

Grate: #4 Rebars @ 6"o.c.

STORMWATER BASINS

N.T.S.

ORMWATER JALITY SIN #	DESIGN FUNCTION	ELEVATIONS							DIMENSIONS	OUTLET PIPE			
		EL. "A"	EL. "B"	EL. "D"	EL. "E"	EL. "F"	EL. "G"	EL. "H"	EL. "J"	DIM. "B" (Ø INCH)	DIA./MATERIAL (INCH)	SLOPE	LENGTH
SB-1	EXISTING WETLAND	617.0	615.5	614.75	614.25	613.5	615.64	-	614.5	1.0"	15" HDPE	1.4 %	18'
SB-2	INFILTRATION BASIN (I-2)	602.2	600.0	598.4	596.0	596.0	600.25	601.2	598.4	1.0"	12" HDPE	1.4 %	74'
SB-3	INFILTRATION BASIN (I-2)	602.0	601.0	597.8	596.0	596.0	600.77	601.5	597.8	0.8"	12" HDPE	1.4 %	37'
SB-4	INFILTRATION BASIN (I-2)	588.40	587.0	584.1	583.5	582.0	587.37	587.9	586.0	1.0"	15" HDPE	2.4 %	21'

- TO THE DEPTH INDICATED ON THE DETAIL. AFTER STRIPPING TO SUBGRADE THE EARTH SHALL BE MOISTENED, IF DRY, AND COMPACTED BEFORE PLACEMENT OF THE FIRST LAYER OF EMBANKMENT MATERIAL.
- 3. THE EMBANKMENT SHALL BE CONSTRUCTED IN EVEN EIGHT(8) INCH LIFTS AND MECHANICALLY COMPACTED TO A MINIMUM DRY DENSITY OF 95% OF MAXIMUM DENSITY AS DETERMINED BY THE STANDARD COMPACTION TEST.

4. COMPACTION EQUIPMENT

- A) EMBANKMENT LIFTS-LIFTS SHALL BE COMPACTED WITH A SMOOTH STEEL WHEEL VIBRATORY ROLLER HAVING A NOMINAL GROSS WEIGHT OF NOT LESS THAN 10 TONS AND EXERT A MINIMUM FORCE OF NOT LESS THAN 300 POUNDS PER INCH OF WIDTH ON THE COMPRESSION ROLL FACES.
- B) SPECIALLY COMPACTED EARTH FILL- WHERE COMPACTION BY MEANS OF THE SPECIFIED ROLLER IS IMPRACTICAL AT SUCH LOCATIONS AS STEEP AND IRREGULAR ABUTMENTS, ROUGH AND IRREGULAR FOUNDATIONS, ADJACENT TO OUTLET WORKS, COMPACTION EQUIPMENT SHALL INCLUDE IMPACT RAMMERS, SMALL DRUM VIBRATORS, OR OTHER APPROVED MECHANICAL TAMPERS. THE MATERIAL, MOISTURE AND DENSITY SHALL BE AS SPECIFIED ABOVE EXCEPT THAT ROCK SIZE SHALL BE LIMITED TO 2 INCHES. LIFT THICKNESS SHALL BE REDUCED IF NECESSARY TO ACHIEVE THE REQUIRED COMPACTION WITH THE EQUIPMENT USED.
- 5. ANTI-SEEP COLLARS AS SUPPLIED BY SCHEIB DRAINAGE PRODUCTS, OREGON, MO. TO BE INSTALLED ON ALL OUTLET PIPES PENETRATING THE BERM.

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

PLANT	LIST	—	MITIGATION	AREAS	

		TREES AND SHRUBS			
SYM	QUANT.	BOTANICAL NAME / COMMON NAME	SIZE/CONT.	SPACING	
AA	50	Aronia arbutifolia / Red Chokeberry	18-24"ht.	5' min.	
AC	6	Amelanchier canadensis / Shadblow	6—7'ht.	A.S.	
AM	18	Aronia melanocarpa / Black Chokeberry	18-24"ht.	5' min.	
AR	14	Acer rubrum / Red Maple	2-2.5" cal.	A.S.	
CA	18	Clethra alnifolia / Sweet Pepperbush	18–24"ht.	5' min.	
CR	20	Cornus racemosa / Gray Dogwood	18-24" ht.	8' min.	
IV	28	llex verticillata / Winterberry (11 Female; 2 Male)	18-24" ht.	6' min.	
KL	22	Kalmia latifolia / Mountain Laurel	18—24" ht.	8' min.	
MP	89	Myrica pensylvanica / Northern Bayberry	18-24" ht.	8' min.	
PG	20	Picea glauca / White Spruce	6—7'ht.	A.S.	
PS	28	Pinus strobus / Eastern White Pine	6—7'ht.	A.S.	
QA	5	Quercus alba / White Oak	2-2.5" cal.	A.S.	
QR	15	Quercus rubra / Red Oak	2-2.5" cal.	A.S.	
RM	31	Rhododendron maximum / Rosebay Rhododendron	3-4'ht.	A.S.	
SEED MIXES					
cwm	as needed	New England Conservation Wildlife Mix*	1 lb. per 1,750	s.f.	
nuws	9.5 lb	Northeast Upland Warm Season Grass Mix**	1 lb. per 2,200	s.f.	

APPROVED FOR FILING IN THE WESTCHESTER COUNTY CLERK'S OFFIC
DIVISION OF LAND RECORDS

Ciorsdan Conran

From:	jerrya1@optonline.net
Sent:	Monday, June 13, 2022 3:58 PM
То:	planning@lewisborogov.com
Subject:	Silvermine Drive Trails and Parking related to the new 13 unit development

Ciorsdan, thank you for meeting with us today. When available we would like to view the proposed walking trails to see how they relate to the homes on Silvermine Drive. In addition we would like to know if the Town intends to place a No Parking sign at the dead end of Silvermine Drive as was promised four years ago to prevent hikers from parking for trail entrance.

Jerome & Katherine August 24 Silvermine Prive

Ciorsdan Conran

From: Sent: To: Subject: Stacy McKelvey <stacy.marie.mckelvey@gmail.com> Thursday, June 16, 2022 12:02 PM Ciorsdan Conran Re: Inquiry

Hello Ciorsdan,

Thank you for taking the time to speak with me on the phone! I am very grateful for your help and guidance.

As discussed, below are the questions I request be answered in advance of the public hearing so I can prepare a statement based on an accurate understanding of the Lewisboro Town Code. I would like to enter this email into official records to be reviewed at the June 21st Public Hearing.

- 1. My first concern is why the Silvermine Preserve is using R-1A space requirements when it is in an R-2A zoning area. I was informed that is because it is considered a "Cluster Development" and that special rules apply. From Article XI § 220-88. Development standards: "Density. A cluster development shall result in a permitted number of building lots or dwelling units which shall in no case exceed the number which could be permitted, in the Planning Board's judgment, if the land were subdivided in lots conforming to the minimum lot size and density requirements of the zoning district or districts in which such land is situated and conforming to all other applicable requirements." I interpret this to mean that the zoning requirements must remain in tact. How or why are they allowed to be changed without rezoning?
- 2. If there is law backing the ability of Cluster Developments to bend zoning requirements (i.e. response to question 1), what was the rationale the Planning Board, etc. gave for approving this change? Is this change still valid considering my note in question 4 below?
- 3. Am I understanding correctly that the building developers are petitioning to have six of the thirteen properties (Lots 1, 2, 3, 9, 10, and 11) violate the most minimal R-1A code? Has that been approved or is it still pending? The rationale put forward in 'Note A' on page 4 of the "silvermine_ph_materials_062122_1.pdf" document states the variance is due to the need for "wetland buffers." However, § 220-74. Zoning Board of Appeals under D.2 states: "No variation or adjustment in the strict application of any provisions of this chapter shall be granted by the Board of Appeals unless it finds that: (a) The hardship is due to unique circumstances and not to general conditions in the neighborhood." Are not the wetlands, which are everywhere and part of the exigencies of building in this area for everyone, considered the neighborhood's "general conditions?" Does it make sense to see Note A as clever rhetoric to cram more lots into a small space? If developers cannot make their plan work according to code, shouldn't the response be to reduce the number of lots so they can fit?
- 4. Most of the variations seem to stem from the Preliminary Subdivision Plat approved on April 18, 2017: that was more than five years ago. Per § 195-15. Preparation and review of preliminary plat and construction plans, J: "Expiration of approval. Approval of a preliminary application shall expire six months from the date of approval if no application for final approval is submitted within such period, except where such time limit is extended by the Planning Board after an application for an extension is submitted to the Planning Board. In general, the Planning Board will not grant extensions for a period extending beyond 18 months after the date of approval of the preliminary application." How are the developers able to submit a final plat when their preliminary plat must certainly be expired?
- 5. How does the Planning Board see their decisions of allowing only 1 acre per dwelling upholding the spirit of the Town of Lewiboro Master Plan (which, according to § 195-3. General policy. C should be considered when subdividing and developing land), that states on pg 77 in the section on 1 housing unit per 2 acres policy "on certain lands, clustering of units may be desirable; however, the net density should remain at the low density level [defined as 1 dwelling per 2 acres]. A minimum lot area requirement of one acre for undeveloped land is only consistent with this density recommendation within areas now substantially developed at that higher

density level and on land located in close proximity to a hamlet center where such a density level is supported by the development limitations information?" Moreover, how does the Planning Board see its decisions in light of the overall spirit of that plan, which begins in its very first lines with "The rolling hills and numerous lakes of Lewisboro along with heavily wooded areas- and scattered open fields crossed by streams provide an exceptional, and relatively rural, environment for the Town's residents... But continued development and the concentration of population in small areas lacking central water or sanitary sewer systems is beginning to alter the balance that had long been maintained between the land's ability to sustain development and the level of development. The challenge faced by the Town over the past twenty years has been the preservation of Lewisboro as a special place to live with a sound ecological system?"

- 6. The Lewisboro Master Plan references a **Development Limitations Summary** that I am unable to locate. Can that please be shared?
- 7. Considering the fragility of our wetlands and wildlife populations, what evaluations were conducted on the environmental/wildlife impact of such a development, especially at the density proposed? Has any assessment been conducted since the initial application in 2017? If not, shouldn't there be considering how rapidly conditions change and that that application was over five years ago?

As my questions point towards, I feel the proposed development violates the spirit of our town code and advocate for requiring any development plan to conform with our R-2A zoning guidelines and be made in light of any environmental concerns identified by authorities.

With gratitude, Stacy

On Thu, Jun 16, 2022 at 11:01 AM Ciorsdan Conran <<u>Planning@lewisborogov.onmicrosoft.com</u>> wrote:

Hi Stacy-

Here's the section of the Town Code that speaks to cluster development.

Town of Lewisboro, NY / Part II: General Legislation / Zoning

Article XI

Cluster Development

https://ecode360.com/15577528

Also, attached are the minutes from the Town Board meeting where they granted the Planning Board authority to approve a cluster development at Silvermine.

Ciorsdan
From: Stacy McKelvey <<u>stacy.marie.mckelvey@gmail.com</u>> Sent: Wednesday, June 15, 2022 5:12 PM To: <u>planning@lewisborogov.com</u> Subject: Inquiry

Hello,

I hope this message finds you well. I recently reviewed this proposal for a 13-house subdivision in my neighborhood: https://www.lewisborogov.com/sites/default/files/fileattachments/planning_board/page/20306/silvermine_ph_materials_062122_1.pdf

We are part of a Residential Two-Acre (R-2A) district, but the proposal includes many lots significantly smaller. The justification is that the lots were decreased in size to protect existing stone walls and wetlands. That sounds like an excuse to cram more houses into a smaller area. If there are natural obstructions, shouldn't they instead rework the plan so there are fewer parcels? Are there any resources to which you can provide me on the R-2A district guidelines and when and why such guidelines may be violated?

Thank you,

Stacy

- 5 Serenity place, South Salem

Stacy McKelvey

(they/she: Mx)

Justice Writing LLC

Writing & Grants Consultant

917.935.2305

Stacy McKelvey (<u>they/she; Mx</u>) <u>Justice Writing LLC</u> Writing & Grants Consultant



MEMORANDUM

TO:	Chairperson Janet Andersen and Members of Lewisboro Planning Board
CC:	Ciorsdan Conran Judson Siebert, Esq. Jeff Farrell
FROM:	Jan K. Johannessen, AICP Joseph M. Cermele, P.E., CFM Town Consulting Professionals
DATE:	June 16, 2022
RE:	Waccabuc Beach Club Improvements Waccabuc Country Club Perch Bay Road Sheet 25A, Block 10813, Lot 1 Sheet 25, Block 11155, Lot 148

PROJECT DESCRIPTION

The subject property consists of ±9.1 acres of land and is located off of Perch Bay Road within the R-4A Zoning District. The property is owned by the Waccabuc County Club, has frontage on Lake Waccabuc, and is developed with various recreational buildings and amenities to support its private membership. The property obtains access from Perch Bay Road and contains parking areas, a public water well and septic system. The applicant is proposing to renovate the existing boathouse, construct a covered pavilion, replace the existing docks, demolish an existing building, install an outdoor seating area, construct a new snack bar and construct driveways, walkways, handicap access, a new septic system, and stormwater management facilities. The subject property consists of two (2) parcels that are proposed to be merged.

SEQRA

The proposed action has been preliminarily identified as an Unlisted Action pursuant to the State Environmental Quality Review Act (SEQRA). The Planning Board declared its intent to serve as Lead Agency on April 19, 2022 and a coordinated review is underway. Prior to taking action on this pending application, the Planning Board must issue a determination of significance.

CIVIL ENGINEERING | LANDSCAPE ARCHITECTURE | SITE & ENVIRONMENTAL PLANNING

Chairperson Janet Andersen June 16, 2022 Page 2 of 5

REQUIRED APPROVALS/REFERRALS

- 1. Site Development Plan Approval, a Town Stormwater Permit, and a Wetland Activity Permit is required from the Planning Board; a public hearing is required to be held.
- 2. It appears that structures and improvements are proposed within the regulated rear yard zoning setback and area variances will be required from the Zoning Board of Appeals. The proposed action may also require approval from the Zoning Board relating to the expansion/alteration of a nonconforming use.
- 3. The proposed action has been referred to and approved by the Architecture and Community Appearance Review Council (ACARC).
- 4. A Floodplain Development Permit may be required from the Building Inspector.
- 5. The applicant is proposing new impervious surfaces within the 100-foot limiting distance of the lake and a variance from the New York City Department of Environmental Protection (NYCDEP) is required.
- 6. The proposed septic system will require approval from the Westchester County Department of Health (WCHD). It is noted that the existing well operates as a public water supply.
- 7. The subject property is located within the NYC East of Hudson Watershed and proposed land disturbance equals one (1) acre. Coverage under New York State Department of Environmental Conservation (NYSDEC) SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-20-001) will be required.
- 8. The subject property is located within the Waccabuc Historic District and the existing boathouse is listed on the State and National registers of historic places. Consultation with the State Historic Preservation Office (SHPO) is required.
- 9. The application must be referred to the Westchester County Planning Board in accordance with Section 239-m of the General Municipal Law.

COMMENTS

- 1. This office defers review of the plan for zoning compliance to the Building Inspector.
- 2. The application has been referred to the Fire Department for review; we await their response.

Chairperson Janet Andersen June 16, 2022 Page 3 of 5

- 3. The applicant has submitted Part 1 of the Full EAF. On behalf of the Planning Board, it is recommended that the applicant complete Part 2 of the EAF for the Board's review and discussion and complete Part 3, as applicable.
- 4. Provide a cut and fill calculation on the grading plan, indicating net cut or fill quantities required for the project, as well as to demonstrate no net loss of flood storage within the FEMA 100-year Floodplain.
- 5. The following comments pertain to tree removal and the landscaping plan:
 - Please identify all proposed shade trees in caliper inches; it is recommended that the minimum proposed tree size equal 3-inches (min.).
 - Please identify total tree loss in caliper inches and compare this to the total caliper inches proposed (shade, flowering and evergreen trees only).
 - A 30-inch elm tree is proposed to be removed; the tree is identified as being in good condition. This is a significant tree that should be preserved, if possible.
 - Given the extent of tree loss, it is recommended that additional trees be incorporated into the design. There appears to be tree planting opportunities throughout the site including proximate to the detention pond and between the proposed improvements and the pond.
- 6. In our opinion, it would be reasonable to eliminate the asphalt walkway in favor of reducing steep slope disturbance, impervious cover, and disturbance within the buffer. It appears that the driveway could provide the same accommodation (for stroller use) and a walkway from the upper parking area to the snack bar location already exists.
- 7. An existing trail bisects the wetland located on the west side of the existing driveway. It is recommended that the trail be rerouted around the wetland and that the portion of the trail located within the wetland be removed and restored as part of the mitigation plan.
- 8. The applicant is required to provide mitigation at a ratio of 1:1 (min.). While a planting plan has been provided, a mitigation schedule shall be incorporated and the applicant shall demonstrate that the minimum required mitigation ratio has been achieved. Note that stormwater improvements do not count toward wetland mitigation if they are otherwise required by the stormwater permit.
- 9. Are any improvements to the existing gravel driveway or parking areas proposed to further reduce erosion and runoff from existing surfaces?

Chairperson Janet Andersen June 16, 2022 Page 4 of 5

- 10. 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. Any modifications to the hydrologic analysis as a result of the soil testing shall be provided for review. Contact this office to schedule the testing.
- 11. We note that the applicant has received a Notice of Incomplete Application from the NYCDEP, dated June 10, 2022, related to the variance request from the NYC Watershed Rules and Regulations for new impervious surfaces located within regulating distances of regulated waterbodies. We will defer further comment on the proposed stormwater mitigation systems until such time that the NYCDEP has provided review and/or approval.
- 12. The Permanent Pool Elevation and Bottom of Pond Elevation indicated in the Pond Permanent Outlet Structure Detail have the same elevation. Please confirm this is accurate and adjust as needed.
- 13. Please provide top and bottom elevations of the proposed boulder wall adjacent to the proposed detention pond. Provide a detail for the proposed boulder wall.
- 14. As previously noted, the parcel size is inconsistently referenced on the application, plans and SWPPP Report; please revise.

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 INSITE ENGINEERING, DATED MAY 31, 2022:

- Overall Plan (1/8)
- Existing Conditions & Removals Plan (2/8)
- Layout & Landscape Plan (3/8)
- Grading & Utilities Plan (4/8)
- Erosion & Sediment Control Plan (5/8)
- Site Details (6/8, 7/8, 8/8)
- Lighting Plan (LP/1)
- Fire Access Plan (FAP-1)
- Parking Study (PS-1)
- Topographic Survey

DOCUMENTS REVIEWED:

- Letter, prepared by Insite Engineering, dated May 31, 2022
- Preliminary Stormwater Pollution Prevention Plan, dated May 31, 2022

Chairperson Janet Andersen June 16, 2022 Page 5 of 5

- Full EAF, dated May 31, 2022
- Wetland, Watercourse and Wildlife Report, prepared by James Bates Ecological Analysis, LLC, dated May, 2022
- Wetland Permit Narrative, prepared by Insite Engineering, dated May 31, 2022
- NYCDEP Notice of Incomplete Application Letter, dated June 10, 2022

JKJ/dc

https://kellardsessionsconsulti.sharepoint.com/sites/Kellard/Municipal/Lewisboro/Correspondence/2022-06-16_LWPB_Waccabuc CC - Perch Bay Road Beachfront_Review Memo.docx

TO: The Town of Lewisboro Planning Board FROM: Lewisboro Conservation Advisory Council SUBJECT: Waccabuc Country Club, 0 Perch Bay Road, Waccabuc, NY 10597 DATE: June 7, 2022

The Conservation Advisory Council (CAC) has reviewed the materials submitted by the applicant for the construction of beachfront improvements including the renovation of the boathouse, construction of a pavilion, replacement of the snack bar, and installation of accessible parking and walkways, and offers the following comments.

- A "Wetland, Watercourse and Wildlife Report" was submitted, which indicated the presence of two wetlands, "Wetland A" and "Wetland B". The Report goes on to state that 49 trees are to be removed within the URA; however, there are inconsistencies between subsequent site plans and total trees to be removed. Site plan labeled, "Existing Conditions and Removals Plan", has 56 trees proposed to be removed. And in the site plan labeled, "Layout and Landscape Plan," 50 trees are proposed to be removed. The applicant needs to clarify this.
 - All trees proposed to be removed (49-56 trees) are in the two wetland pocket buffers or watercourse buffer (Lake Waccabuc).
 - o The "Report" identifies a number of bird species, which, "require a closed canopy woodland to thrive, are likely to use this site, either as a stopover during seasonal migrations or for feeding or nesting activities." The report goes on to state, "while these species are not specifically state protected, they are of concern as areas of woodlands are cleared for development. The presence of wooded areas and undeveloped parcels extending for several miles in all directions within numerous regional preserves, parklands and undeveloped portions of this and other parcels results in continuous woodland corridors that may be used by these species if displaced either temporarily or permanently from the hilltop areas of the site proposed for this development."
 - The "Report" finds there are no direct impacts proposed to the wetland vegetation in the area of Wetland "A." The proposed plan anticipates the installation of a stormwater pond near Wetland "B", but does not find adverse impacts to this wetland. However, this report fails to include if there are any adverse direct or indirect impacts to Lake Waccabuc and the buffer to this watercourse.
- A significant tree at the beginning of the proposed asphalt driveway should be preserved. Tree #21, a 30" Elm, is recorded to be in "good condition". This tree stood out during the site walk as being a healthy specimen tree and should be considered to be preserved. Can the driveway entrance be shifted north?

- A compensatory planting plan was submitted that proposed 37 trees and 85 shrubs. While the planting plan does bolster "Wetland A" with native plans, the plan does not adequately address the lost dbh or lost tree canopy provided by the 49-59 mature shade trees proposed to be removed across the development. A new 6-10' tree is not the same as a 30-50' tree in terms of tree canopy, carbon absorption, habitat, and wetland buffer stabilization. The loss of mature tree canopy coverage and growth will adversely impact both wildlife and the soil stability, especially on 8-15% slopes.
 - Of the 37 proposed trees, only 12 are shade trees.
 - CAC recommends the tree replacement reflect at least a 1:1 ratio for the trees proposed to be removed.
- What BMP and LID alternatives are there to the cistern? Can the cistern be placed in a different location to avoid removing two trees and being along the waterfront?
- Are there other alternatives for the side stairs east of the proposed covered pavilion?



May 31, 2022

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

RE: Beach Club Improvements Project Waccabuc Country Club Perch Bay Road Waccabuc, NY TM# Block 11155, Lot 148, Sheet 25 and Block 10813, Lot 01, Sheet 25A

Dear Chair Anderson and Members of the Board:

Please find four (4) copies (unless otherwise noted) of the following plans and documents enclosed here in support of an application for site plan development plan, wetland permit and stormwater permit approvals for the above referenced project:

- Eight (8) sheet Site Plan set, last revised May 31, 2022.
- Drawing LP-1 Lighting Plan, dated May 31, 2022.
- Preliminary Stormwater Pollution Prevention Plan, last revised May 31, 2022. (2 copies)
- Full Environmental Assessment Form Part 1, last revised May 31, 2022.
- Figure FAP-1 Fire Access Plan, dated May 31, 2022.
- Figure PS-1 Parking Study, last revised May 31, 2022.
- Wetland Report prepared by Ecological Analysis, last revised May 31, 2022.
- Wetland Permit Narrative prepared by this office, dated May 31, 2022.
- Topographic Survey prepared for Waccabuc Country Club, dated June 7, 2021.

Based on comments from the Board at the April 9th, 2022 site walk and the April 19th Planning Board meeting, we offer the following:

1. Pursuant to the Board's questions relative to stormwater treatment on the subject property the location of the infiltration area was reviewed in the field. Based on office's inspection there was a wet area in the vicinity of the proposed infiltration area that was then flagged by the project's wetland scientist as a local wetland (wetland B). The limits of the recently flagged wetland were survey located and are shown on the revised plan set. The proposed stormwater treatment was relocated away from the wetland and testing was completed in the new area proposed for stormwater treatment. Given the depths of groundwater witnessed during testing, infiltration in this area is no longer feasible and the treatment practice has been changed to a micropool extended detention pond.

Memorandum from Jan Johannessen, AICP of Kellard Sessions, dated March 11, 2022:

A number of the following comments were responded to with our March 29th, 2022 submission. The previous responses have been included to provide a complete response to the memorandum as we have not received comments since the March 29th submission.

Required Approvals / Referrals:

- 1. It is understood that Site Development Plan Approval, a Town Stormwater Permit, and a Wetland Activity Permit is required from the Planning Board and a public hearing is required to be held.
- 2. It is understood that area variances may be required from the Zoning Board of Appeals (ZBA) and the proposed action may also require approval from the ZBA relating to the expansion / alteration of an existing nonconforming use.
- 3. The project received approval from the Architecture and Community Appearance Review Council (ACARC).
- 4. The applicant will defer to the Building Inspector for whether a Floodplain Development Permit will be required.
- 5. The applicant is proposing new impervious surfaces within the 100-foot limiting distance and an application has been submitted to NYCDEP for a variance.
- 6. The proposed onsite use is the same as the existing, but the applicant is proposing to install a new code conforming onsite wastewater treatment system (OWTS) on the property. The existing OWTS is located beneath the parking area and is proposed to be replaced. The new OWTS will include new septic tanks, a grease trap, pump pit, forcemain and absorption trenches. Details of this OWTS design will be added to the project plans with future submissions pending the completion of witnessed soil testing on the property.
- 7. It is noted that the project is located within the NYC East of Hudson Watershed and will consist of land disturbance greater than 1 acre. NYSDEC SPDES General Permit GP-0-20-001 coverage will be required for the subject project.
- 8. The applicant has completed a submission to the State Historic Preservation Office (SHPO) for their determination on the proposed improvements.
- 9. Westchester County Planning Board Section 239-m referral has been made on behalf of the project.

Comments:

- 1. The application has been referred to the Building Inspector. Refer to responses to Building Inspector comment memorandum provided in this letter.
- 2. The application has been referred to the Fire Department. To date, the applicant has not received comments from the Fire Department.
- 3. Refer to responses to Building Inspector comment memorandum provided in this letter relative to the existing non-conforming use. The applicant has already requested referral to the Zoning Board of Appeals.
- 4. A draft business plan prepared by the applicant was provided in the previous submission.
- 5. The Full Environmental Assessment Form Part 1 was updated based on comments received from the Planner prior to SEQRA Lead Agency circulation. In addition, the EAF Part 1 was updated to reflect recent changes to the site plans for this submission.
- 6. The limits of the 100-year floodplain have been added to the plans.
- 7. Slopes in excess of 15% are shown on the revised plans.
- 8. A cut and fill calculation has been provided as part of this submission.
- 9. A driveway profile is included in the plan set. The proposed driveway is in compliance with the Town's driveway standards. The driveway is not intended to be used for firetruck access.
- 10. Additional information and labelling was added to Drawing SP-1 to clarify existing and proposed gravel and asphalt surfaces and curb locations as part of the previous submission.

- 11. Dimensions were added to the site plan for the driveway and parking spaces on Drawing SP-1 as part of the previous submission. A parking calculation has been provided based on discussion with the Building Inspector.
- 12. The landscaping plan has been further developed as part of this submission.
- 13. A wetland mitigation plan has been developed for the project and included as part of this submission. Proposed plantings and seeding are detailed on Drawing SP-1 of the site plan set and additional information is provided in the Wetland Permit Narrative included in this submission.
- 14. The Wetland Report has been further developed and included in this submission. In addition, a Wetland Permit Narrative has been prepared by this office to provide a summary of how the project has been designed to minimize and mitigate potential impacts.
- 15. The proposed asphalt path provides a pedestrian route down to the lake that is separate from the vehicular route along the driveway and only includes a few steps at the bottom which will be easier to traverse with gear and small children. In addition, the path provides places for users to rest, to experience the walk through the forest, and to pause and appreciate the changing view of the lake. The path is located in the general location of the existing driveway to be removed. This area will be replanted with native species. The applicant looked into using pervious materials for the path. Due to the proximity to the existing public water supply, and the presence of shallow groundwater, porous pavement materials could not be used.
- 16. The Club is not proposing a dock replacement at this time. The labels have been removed from the site plans as part of the previous submission.
- 17. A detailed site lighting plan has been prepared for the project and included in this submission.
- 18. The area of disturbance has been updated for this submission based on changes to the proposed stormwater management for the project. A note was added to the General Notes on Drawing OP-1 as part of the previous submission stating that disturbance limits shall be staked in the field prior to construction.
- 19. The updated SWPPP has been included in this submission. The SWPPP has been prepared in accordance with Town and NYSDEC standards. It is understood that the project will require coverage under NYSDEC SPDES General Permit GP-0-20-001. Draft copies of the Notice of Intent and the MS4 SWPPP Acceptance Form will be submitted for review in a future submission.
- 20. The applicant is proposing new impervious surfaces within the 100-foot limiting distance of the lake, and a application for a variance from the NYCDEP has been submitted to that agency.
- 21. Onsite soil testing with the WCDOH, NYCDEP and Town Engineer was completed at the site on May 19, 2022. The project SWPPP has been revised to reflect the results of the onsite witnessed testing.
- 22. The existing drainage pipes and features are shown on Drawing EX-1.
- 23. A detailed construction sequence is provided on Drawing SP-3.
- 24. An updated drainage table is provided on Drawing SP-2, which includes rim and invert elevation for all proposed drainage structures.
- 25. The grading and utilities plan, Drawing SP-2, shows the proposed locations of the roof drains.
- 26. The SWPPP has been revised to include a figure illustrating the areas of new development and redevelopment.
- 27. Sizing calculations for the proposed level spreaders are included as part of the Level Spreader Detail on Drawing D-2.
- 28. Pipe sizing calculations are included in the revised SWPPP.

- 29. The plans have been revised to clearly notate the existing OWTS, septic tank and pump station. As the OWTS design advances, the proposed improvements relative to that design will be shown on the project plans.
- 30. Top and bottom of wall elevations are provided on Drawing SP-2. Proposed fencing is provided on the site plans above the retaining wall at the handicap parking area, with a detail for the fencing provided on Drawing D-1. Details have been provided for the proposed retaining walls. A note is provided in the General Notes on Drawing OP-1 and as part of the retaining wall detail on Drawing D-1 stating that all walls with a retained height of 4 foot or greater will need to be designed by a NYS Licensed Professional Engineer.
- 31. A note has been added to the General Notes on Drawing OP-1.
- 32. The parcel size has been coordinated on the submitted information as part of this submission.
- 33. Existing conditions surveys are provided in this submission.
- 34. The deeds for the property are provided as part of this submission.
- 35. The Planning Board's standard signature blocks have been added to the site plan set.
- 36. A site visit was conducted on April 9, 2022.

Memorandum from Lewisboro Building Department, dated April 1, 2022:

- 1. No response required.
- 2. It is acknowledged that a flood plain permit will be required, the FEMA floodplain line has been added to the revised plans.
- 3. It is acknowledged that the club is a non-conforming use in the zone and requires approval from the Zoning Board of Appeals.
- 4. It is acknowledged that the accessory building is proposed to have a floor area greater than the maximum permitted and will require a variance from the Zoning Board of Appeals.
- 5. It is acknowledged that the rear yard setback for the concession building is proposed to be less than the 50' required and will require a variance from the Zoning Board of Appeals.
- 6. It is acknowledged that the rear yard setback for the covered pavilion is proposed to be less than the 50' required and will require a variance from the Zoning Board of Appeals.
- 7. A Fire Access Plan has been provided as part of this submission to demonstrate that a firetruck can get to within 150' of the existing / proposed buildings, adequate room is available at the site for passing spaces along the existing driveway and the proposed upgrades to the driveway provide a code conforming firetruck turnaround at the existing parking area. We will address further comments from the building department and / or the fire department once received.
- 8. The architect is looking into the requirements for fire protection supply.
- 9. The access drive to accessible parking area is not intended for fire access.
- 10. The access drive to accessible parking area is not intended for fire access.
- 11. The applicant will work with the Fire Code Official relative to the security gate.
- 12. The occupant load and parking calculations are provided herewith.
- 13. No response required; it is acknowledged ADA accessibility will be reviewed as part of building code review.

Memorandum from Lewisboro Conservation Advisory Council, dated March 9, 2022:

- The proposed project has been designed to minimize disturbance and tree removal within the buffer. Proposed improvements have been placed in areas of previous disturbance to the greatest extent practicable. The Pavilion is in the location of an existing storage building and the existing sewer pump pit. The proposed Snack bar and firepit/patio area replace the existing snack bar, firepit and driveway parking area. The proposed handicap ramps and path with steps to the Boathouse are proposed to be elevated. Much of the proposed improvements and site disturbance for the project is to provide handicap access to the existing facilities, including the proposed driveway, handicap parking area, and the handicap ramp from the existing wood deck to the Boathouse. Currently there are only stairs to access the Boathouse. The only construction proposed at the water's edge is the restoration of the existing boathouse. Appropriate measures to protect the lake during construction will be employed as part of the project. A detailed construction sequence will be developed and reviewed / approved by the Town and NYSDEC.
- The applicant has reviewed potential alternative pavement materials Due to the proximity to the existing public water supply, and the presence of shallow groundwater, porous pavement materials could not be used.
- A mitigation plan meeting the requirements of the Town code has been provided as part of this submission. Refer to Drawing SP-1, the Wetland Permit Narrative and the updated Wetland Report for detailed information.
- Size and type of trees to be removed are noted on Drawing EX-1. A table of trees to be removed including their condition has been provided.
- A site visit was conducted on April 9, 2022.

Please place the project on the June 21, 2022 Planning Board agenda for continued discussion of the project with the Board. Should you have any questions or comments regarding this information, please feel free to contact our office.

Very truly yours,

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

Zachary M. Pearson, PE, Sr. Associate Senior Project Engineer

ZMP/dlm/amk

Enclosures

By:

cc: Mr. Peter Hall, via email Mr. John Assuma, via email Mr. John M. Doyle, AIA, Doyle Coffin Architecture LLC, via email

Insite File No. 20228.100

TOWN OF LEWISBORO PLANNING BOARD COORDINATED ENVIRONMENTAL REVIEW

LEAD AGENCY AGREEMENT

Waccubuc Beach Club Improvements Perch Bay Road Cal# 06-22PB

On behalf of

(INSERT NAME OF AGENCY)

I acknowledge receipt of the Lead Agency Not	tice on the a	bove referenced matter, which was
-mailed on 5/11/22.	1	1
hand delivered	Kne	Benam
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The above named Involved Agency hereby:

(Please Check One)

AGREES that the Lewisboro Planning Board serve as Lead Agency for the coordinated environmental review of the proposed action and requests that the undersigned continue to be notified of all filings and hearings on this matter.

() DOES NOT AGREE to the Lewisboro Planning Board serving as Lead Agency and wishes that _______ serve as Lead Agency. To contest Lead Agency designation, the undersigned intends to follow the procedures in accordance with SEQRA 6 NYCRR Part 617.6.

Please return within 30 days of the mailing of this correspondence. In addition, please specify the jurisdiction that your agency has over this project, what issues you believe are relevant in connection with this project and any addition comments or questions.

Ciorsdan Conran, Planning Board Administrator Town of Lewisboro 79 Bouton Road, South Salem, NY 10590 Phone: (914) 763-5592 Fax: (914) 763-3637 Email: Planning@lewisborogov.onmicrosoft.com

TOWN OF LEWISBORO PLANNING BOARD COORDINATED ENVIRONMENTAL REVIEW

LEAD AGENCY AGREEMENT

Waccubuc Beach Club Improvements Perch Bay Road Cal# 06-22PB

On behalf of Town of Lawisboro Building Dept. (INSERT NAME OF AGENCY)

I acknowledge receipt of the Lead Agency Notice on the above referenced matter, which was mailed on <u>3</u> 11 22.

The above named Involved Agency hereby:

(Please Check One)

- AGREES that the Lewisboro Planning Board serve as Lead Agency for the coordinated environmental review of the proposed action and requests that the undersigned continue to be notified of all filings and hearings on this matter.
- () DOES NOT AGREE to the Lewisboro Planning Board serving as Lead Agency and wishes that _______ serve as Lead Agency. To contest Lead Agency designation, the undersigned intends to follow the procedures in accordance with SEQRA 6 NYCRR Part 617.6.

Please return within 30 days of the mailing of this correspondence. In addition, please specify the jurisdiction that your agency has over this project, what issues you believe are relevant in connection with this project and any addition comments or questions.

Ciorsdan Conran, Planning Board Administrator Town of Lewisboro 79 Bouton Road, South Salem, NY 10590 Phone: (914) 763-5592 Fax: (914) 763-3637 Email: Planning@lewisborogov.onmicrosoft.com



George Latimer County Executive

May 20, 2022

Ciorsdan Conran, Planning Board Administrator Town of Lewisboro 79 Bouton Road South Salem, NY 10590

County Planning Board Referral File LEW 22-001 – Waccabuc Beach Club Improvements Perch Bay Road Site Plan Approval

Dear Ms. Conran:

The Westchester County Planning Board has received a site plan (revised March 29, 2022) and related materials for the renovation of the Waccabuc Beach Club, which is a part of the Waccabuc Country Club. The site is located on Perch Bay Road (SBLs 32.4-3-13 & 14) with frontage on Lake Waccabuc, and is zoned R-4A – One-Family Residence. The applicant proposes to renovate the existing boat house and construct a covered pavilion, outdoor seating area, and snack bar. Various auxiliary buildings on the site would be renovated or demolished. A new driveway would be constructed to provide accessible parking near the amenity buildings, and new pathways would be constructed to connect the existing parking areas. The existing docks are to be replaced, and a new septic system and stormwater management facility installed. The site currently consists of two tax parcels, which are proposed to be combined.

We have no objection to the Lewisboro Planning Board assuming Lead Agency status for this review.

We have reviewed this matter under the provisions of Section 239 L, M and N of the General Municipal Law and Section 277.61 of the County Administrative Code and we offer the following comment:

1. Croton Watershed protection.

The site is located in the Croton Watershed. Components of the site development may be subject to compliance with the New York City Department of Environmental Protection (NYC DEP) *Rules and Regulations for the Protection from Contamination, Degradation and Pollution of the New York City Water Supply and its Sources*, including the preparation of a Stormwater Pollution Prevention Plan. Adequate erosion and sediment control and stormwater runoff water quality protection, both during and after construction, are of critical importance.

Please inform us of the Town's decision so that we can make it a part of the record.

Respectfully, WESTCHESTER COUNTY PLANNING BOARD

By:

Jana Usummend

Norma V. Drummond Commissioner

NVD/MV

cc: Cynthia Garcia, Bureau of Water Supply, SEQR Coordination Section, NYC DEP

TOWN OF LEWISBORO PLANNING BOARD **COORDINATED ENVIRONMENTAL REVIEW**

LEAD AGENCY AGREEMENT

Waccubuc Beach Club Improvements Perch Bay Road Cal# 06-22PB

On behalf of ZOWING BOARD OF APPEALS

(INSERT NAME OF AGENCY)

I acknowled	dge receipt of the Lead Agency	Notice or	h the above	e refere	nced matte	er, which was
mailed on _	5/11/22	- A due	7 Aus	2	201	CHAIN
		row				

The above named Involved Agency hereby:

(Please Check One)

Print march

- (LY AGREES that the Lewisboro Planning Board serve as Lead Agency for the coordinated environmental review of the proposed action and requests that the undersigned continue to be notified of all filings and hearings on this matter.
- () DOES NOT AGREE to the Lewisboro Planning Board serving as Lead Agency and wishes that _____ serve as Lead Agency. To contest Lead Agency designation, the undersigned intends to follow the procedures in accordance with SEQRA 6 NYCRR Part 617.6.

Please return within 30 days of the mailing of this correspondence. In addition, please specify the jurisdiction that your agency has over this project, what issues you believe are relevant in connection with this project and any addition comments or questions.

> **Ciorsdan Conran, Planning Board Administrator Town of Lewisboro** 79 Bouton Road, South Salem, NY 10590 Phone: (914) 763-5592 Fax: (914) 763-3637 Email: Planning@lewisborogov.onmicrosoft.com



Vincent Sapienza P.E. Commissioner

Paul V. Rush, P.E. Deputy Commissioner Bureau of Water Supply prush@dep.nyc.gov

465 Columbus Avenue Valhalla, NY 10595

T: (845) 340-7800 F: (845) 334-7175

June 3, 2022

Ciorsdan Conran, Planning Board Administrator Lewisboro Town Offices 79 Bouton Road South Salem, NY 10590

Re: Notice of Intent to be Lead Agency Waccabuc Beach Club Improvements Perch Bay Road Town of Lewisboro; Westchester County, NY Tax Map #: 10813-001-025A & 11155-148-0025 DEP Log #: 2022-CR-0297-SQ.1

Dear Ms. Conran and Members of the Planning Board:

The New York City Department of Environmental Protection (DEP) has reviewed the Town of Lewisboro Planning Board's (Board) Notice of Intent to act as Lead Agency and full Environmental Assessment Form (EAF) for the above-referenced project. DEP does not object to the Board acting as Lead Agency for the Coordinated Review of the proposed action pursuant to the New York State Environmental Quality Review Act (SEQRA).

The proposed site is located in the Cross River Reservoir drainage basin of New York City's Water Supply. Cross River Reservoir is a priority reservoir and, as such, has been subject to heightened protection and various on-going DEP water quality protection initiatives associated with Long Term Protection Program(s). The proposed project and any associated mitigation measures should not conflict with the goals of this management plan.

The proposed action involves improvements to the existing beach club house, relocation of a driveway, a new parking area and ramp, stormwater controls, and the merger of two lots.

As indicated in the EAF, DEP's status as an involved agency stems from its review and discretionary approval authority for a Variance from Section 18-39(a)(1) of the *Rules and Regulations for the Protection from Contamination*, *Degradation, and Pollution of the New York City Water Supply and Its Sources* (Watershed Regulations). DEP also maintains review and approval authority for any new subsurface treatment systems, pursuant to Section 18-38 of the Watershed Regulations.

Based upon review of the circulated documents, DEP respectfully submits the following comments for the Board's consideration:

- DEP recommends a pre-application meeting with the applicant to discuss options to minimize the impacts of new imperviousness proposed within 100 feet of the watercourse. It is advised that the applicant contact DEP representative, Mariyam Zachariah at <u>MZachariah@dep.nvc.gov</u> or (914)749-5357 to schedule a virtual pre-application meeting to discuss the site layout design and to confirm any DEP permit requirements and prohibitions.
- 2. DEP recently witnessed soil testing for the SSTS and stormwater practices. As the area tested for stormwater practices exhibited high groundwater levels, other suitable options should be explored to minimize the impacts of new development within the buffer area. For instance, open pavers or gravel surfacing for the proposed driveway, other than the handicapped parking spaces, is recommended to minimize adverse impacts associated with new impervious surfaces.
- 3. The EAF mentions that the predominant NRCS soil present onsite is Paxton. While, well drained, the key limitation to these soils is a seasonal high groundwater table. The project sponsor should consider the impacts associated with disturbance, cutting and filling soils with high ground water, and demonstrate how the impacts are either mitigated or avoided.
- 4. For temporary stabilization, it is recommended that annual ryegrass (*Lolium perenne ssp. multiflorum*) be used at a rate of 30 lbs./acre as it does not interfere with later establishment of native grass or meadow mixes.
- 5. For permanent stabilization, a mix containing 30% annual ryegrass (Lolium perenne ssp. multiflorum) and 70% mixture of 2 or more native grasses such as big bluestem (Andropogon gerardii), little bluestem (Schizachyrium scoparium), switchgrass (Panicum virgatum), Indiangrass (Sorghastrum nutans), tufted hairgrass (Deschampsia cespitosa), deertongue (Dichanthelium clandestinum), Canada wild rye (Elymus canadensis), Virginia wild rye (Elymus virginicus), and/or sideoats grama (Bouteloua curtipendula) be used in areas adjacent to wetlands or in areas not to be mowed regularly. Native grass/annual ryegrass mixes should be seeded at a rate of 30 lbs./acre.
- 6. The Layout and Landscape Plan includes numerous non-native species proposed for the planting plan. Given the close proximity of Lake Waccabuc and a town-regulated wetland, it is recommended that, to the greatest extent possible, only native species be planted.

Thank you for the opportunity to provide comments. You may reach the undersigned at <u>cgarcia@dep.nyc.gov</u> or (914) 749-5302 with any questions or if you care to discuss the matter further.

Sincerely,

Cypethin Harcis

Cynthia Garcia, Supervisor SEQRA Coordination Section

X: J. Petronella, NYSDEC Region 3 A. Kunny, P.E., WCDH



MEMORANDUM

TO:	Chairperson Janet Andersen and Members of Lewisboro Planning Board
CC:	Ciorsdan Conran Judson Siebert, Esq. Jeff Farrell
FROM:	Jan K. Johannessen, AICP Joseph M. Cermele, P.E., CFM Town Consulting Professionals
DATE:	June 16, 2022
RE:	JJE33 Holdings, LLC – Lot Line Chane 27 Old Oscaleta Road Sheet 35 Block 11826 Lots 3, 11, and 12

PROJECT DESCRIPTION

The subject property consists of ± 73.32 acres of land and is located at 27 Old Oscaleta Road within R-4A Zoning District and fronting on Lake Oscaleta. The subject property consists of three (3) tax parcels referred to herein as Lots 3, 11, and 12. Lot 3 consists of ± 68.1 acres of land and is developed with a single-family residence and numerous accessory dwellings and or ancillary residential structures; Lot 3 is accessed from Old Oscaleta Road. Lot 11 is a vacant land-locked lot consisting of ± 1.5 acres and Lot 12 consists of ± 3.7 acres of vacant land fronting on Oscaleta Road. The applicant is proposing a lot line change and is proposing to merge Lots 11 and 12 into a portion of Lot 3, which will result in a total of two (2) parcels. Parcel 1 will consist of ± 59.4 acres of land and will contain the main residence, accessory residence, and garage. Parcel 2 will consist of ± 8.7 acres, will front on Oscaleta Road and will contain an existing cottage, barn, stables, and solar array. Parcel 2 will be access from Old Oscaleta Road through a proposed easement.

SEQRA

The proposed action has been preliminarily identified as an Unlisted Action pursuant to the State Environmental Quality Review Act (SEQRA). Prior to taking action on this pending application, a Determination of Significance must be issued.

CIVIL ENGINEERING | LANDSCAPE ARCHITECTURE | SITE & ENVIRONMENTAL PLANNING

Chairperson Janet Andersen June 16, 2022 Page 2 of 3

REQUIRED APPROVALS

- 1. Subdivision Plat Approval is required from the Planning Board; unless waived by the Planning Board, a public hearing is required to be held on the Preliminary Subdivision Plat.
- 2. Parcel 2 may require a setback variance from the Zoning Board of Appeals (pending Building Inspector review).
- 3. The proposed subdivision requires Realty Subdivision Approval from the Westchester County Department of Health (WCDH).

COMMENTS

- 1. It is recommended that the application be referred to the Building Inspector for zoning review.
- 2. It appears that a small section of the existing cottage and stable on Parcel 2 extend over the zoning setback line; the proposed property line should be adjusted.
- 3. Access to Parcel 2 is through an easement over Parcel 1. Reference is made to Section 220-11 of the Zoning Code which states "each lot must be shown to be capable of providing access to a street and access for emergency vehicles between the frontage and any existing or proposed principal building and/or principal use on said lot."
- 4. We note that Section 220-12G(2)(a), regarding ground-mounted solar panels, which existing on proposed Parcel 2, states that such panels can only be located within the side or rear yards only. The modification of the lot lines will result in the location of the existing panel being located within the front yard.
- 5. The plan shall be revised to graphically illustrate and quantify (s.f.) the contiguous buildable area in accordance with Section 220-10E of the Zoning Code.
- 6. Will either of the parcels be used for the keeping of horses? If so, demonstrate compliance with Section 220-23D(8) of the Zoning Code.
- 7. Do any utilities (water, sewer, electric, gas, etc.) cross a proposed property line?
- 8. Please clarify location of utilities serving each building (water and sewer). Clarify which well(s) will serve each parcel.
- 9. Several proposed features are indicated on the plat, including a proposed residence, pool, gym, stormwater management facilities, septic systems, etc. The Applicant should clarify, in writing, the purpose of the lot line change, all anticipated future improvements, and timing of same. Future proposed buildings and facilities should be discussed and graphically illustrated on a separate plan but should be removed from the plat unless proposed at this time.

Chairperson Janet Andersen June 16, 2022 Page 3 of 3

- 10. All on-site wetlands and watercourses shall be delineated and shall appear on the plat, including the Town's 150-foot wetland buffer line (some wetland areas are illustrated; however, others have been excluded).
- 11. All existing traveled ways should be illustrated on the plat.
- 12. The applicant shall submit the current property deeds for all lots included within the subdivision.
- 13. The applicant shall prepare and submit Parts 1 and 2 of the Short Environmental Assessment Form (EAF) for review.

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

PLAN REVIEWED, PREPARED BY STANLEY JOHNSON AND COMPANY, DATED MAY 16, 2022:

Preliminary Lot Line Change Plat

DOCUMENT REVIEWED:

Subdivision Plat Planning Board Application

JKJ/dc

https://kellardsessionsconsulti.sharepoint.com/sites/Kellard/Municipal/Lewisboro/Correspondence/2022-06-16_LWPB_JJE33 Holdings Lot Line Change_Review Memo.docx

TOWN OF 79 Bouton Road, South Salem , NY 10590 Tel:	LEWISBORO PL (914) 763-5592 Em	ANNING BOARD ail: <u>planning@lewisb</u> d	orogov.com	\$ 205	pd (ant)
Site Development Plan/S	ubdivision Plat App	plication - Check all I	that apply:	5/10/2	22
Waiver of Site Development Plan Procedures Site Development Plan Approval Special Use Permit Approval Subdivision Plat Approval	Step I Step I Step I	Step II Step II Step II	₩10- Step III	JOPB	YES GO
Project Information					
Project Name: JJE33 Holding	gs, LLC	Lot Line	chau	nge	
Project Address: 27 Old Oscal	eta Road	1			
Gross Parcel Area: 73,318 Zoning District: R-	. <u>4</u> Sheet(s): _	35 Block (s): [182]	<u>6</u> Lot(s): <u>3</u> 1	18.12
Project Description: Lot line adj	usements	to recon	Figur	<u>e 3 cor</u>	Piquod
having Frontage on Oscaleta	n foad and	Drop ased nev	v Arcel	1 having	FORCA92
Is the site located within 500 feet of any Town bou Is the site located within the New York City Waters Is the site located on a State or County Highway?	ndary? shed?	YES YES YES		NO NO NO NO	Kand.
Does the proposed action require any other permit Town Board ZBA ACARC NYSDEC NYSDOT Town W	ts/approvals from ot Bui C NY Vetland Tot	her agencies/departm Iding Dept. CDEP wn Stormwater	nents? Towr WCD	h Highway 📙 H	
Other					111-1 1
Owner's Information					
Name: JJE33 Holdings, LC clo MC Management Address: 888 Sevent Avenue, No	Partners LC v 9016, NY	ail: pzukon C 10107	rsty@1	MLMGM- 2)333-5	<u>T.com</u> 665
Applicant's Information (if different)				ŝ	
Name:	Em	ail:	in the second		
Address:			Phone:		
Authorized Agent's Information		. ~			
Name: Michaelfulles Sirgeras	<u>20, ESq.</u> Em:	ail: lausoffe	ie@Sir	ignano. a	15
Address: P.O. Box 784, Crass R.	Ver, Non	405610518	Phone: (9/1	22:55 /	60
THE APPLICANT understands that any application is consider received by the Planning Board. The applicant further unders incurred by the Planning Board.	red complete only when a stands that the applicant i	ll information and documen s responsible for the payme	its required have int of all application	been submitted and on and review fees	
THE UNDERSIGNED WARRANTS the truth of all statements co and belief, and authorizes visitation and inspection of the sub	ontained herein and in all ject property by the Town	supporting documents acco of Lewisboro and its agent	brding to the best s. $\leftarrow 1$	of his/her knowled	ge
OWNER'S SIGNATURE				122	-
	5				
]		

TOWN OF LEWISBORO PLANNING BOARD

79 Bouton Road, South Salem, NY 10590 Email: <u>planning@lewisborogov.com</u> Tel: (914) 763-5592 Fax: (914) 875-9148

Affidavit of Ownership

TOWN OF LEWISBORO PLANNING BOARD

79 Bouton Road, South Salem, NY 10590 Email: <u>planning@lewisborogov.com</u> Tel: (914) 763-5592 Fax: (914) 875-9148

Tax Payment Affidavit Requirement

This form must accompany all applications to the Planning Board.

Under regulations adopted by the Town of Lewisboro, the Planning Board may not accept any application unless an affidavit from the Town of Lewisboro Receiver of Taxes is on file in the Planning Board office. The affidavit must show that all amounts due to the Town of Lewisboro as real estate taxes and special assessments on the total area encompassed by the application, together with all penalties and interest thereon, have been paid.

Under New York State law, the Westchester County Clerk may not accept any subdivision map for filing unless the same type of affidavit from the Town of Lewisboro Receiver of Taxes is submitted by the applicant at the time of filing.

This form must be completed by the applicant and must accompany all applications to the Planning Board. Upon receipt, the Planning Board Secretary will send the form to the Receiver of Taxes for signature and notarization. If preferred, the applicant may directly obtain the signature of the Receiver of Taxes and notarization prior to submission.

To Be Completed by Applicant (Please type or print)				
JJE33 Holdings, LLC Name of Applicant	Lot Line Change Project Name			
Property Description	Property Assessed to:			
Tax Block(s):	JJE33 Holdings, LLC			
Tax Lot(s): 3, 11 & 12	C/O ML Management Partners LLC			
Tax Sheet(s): <u>35</u>	City State Zin			
The undersigned, being duly sworn deposes and says that a search of the tax records in the office of the Receiver of Taxes, Town of Lewisboro, reveals that all amounts due to the Town of Lewisboro as real estate taxes and special assessments, together with all penalties and interest thereon, affecting the premises described below, have been paid.				
Signature - Receiver of Taxes: Sworn to before me this				
2022				
JANET L. DONOHUE NOTARY PUBLIC, STATE OF NEW YORK No. 01D06259627 Qualified in Westchester County 4 Commission Expires April 16, 2029				
Signature - Notary Public (ujjix stamp)				



	R-4A H	ESIDENTIAL ZUN			
	REQUIRED	EXISTING Parcel "A"	PROPOSED AREAS		
		Filed Map 29401	PARCEL 1	PARCEL	
ot Area:	4 Ac. Min.	68.098 AC	59.399 Ac	8.699 Au	
ot Width/Circle	250' Min.	>250 '	>250 '	>250 '	
ard Setbacks					
Front					
From Street Center Line	75' Min.	>75 '	>75 '	>75 '	
From Front Lot Line	50' Min.	621.5 '	753.5 '	1,248 '	
ide	50' Min.	11.8 '	11.8 '	50.0'	
ear	50' Min.	-2.9*	-2.9*	50.0 '	
uilding Height (Main Res.	idences)				
tories	2½ Sty. Max.	2	2	1	
eet	35' Max.	<35 '	<35 '	<35 '	
uilding Coverage Allowed	6% Max.	6%	6%	6%	
vilding Coverage	6% Max.	0.27%	0.14%	0.76%	

11155 BENEDICT ROAU 11164 11826 SITE 10804 11163 1117 STREE 10809 TRUESDALE LAKE LOCATION MAP SCALE: 1"=1000 ' Notes: 1) Premises shown hereon located in the R-4A (Four Acre Residential) and the R-2A (Two Acre Residential) zone in the Town of Lewisboro. 2) Premises shown hereon known and designated as: Sheet 35 Block 11826 part of Lot 3 Sheet 35 Block 11826 Lot 11 Sheet 35 Block 11826 Lot 12 Sheet 35 Block 11164 part of Lot 2 on the Town of Lewisboro Tax Maps. 3) Additional underground easements, utilities or structures, etc. other than those shown hereon may be encountered. 4) Unauthorized alterations or additions to this drawing is a violation of Section 7209 (2) of the New York State Education Law. 5) Wetland Flagged in field February 27, 2009 by: Paul J. Jaehnig Wetlands and Šoils Consulting P.O. Box 1071 Ridgefield CT 06877 203-438-9993 6) Wetland and buffer areas exist on the subject property that have not been located or shown. 7) The purpose of this map is to subdivide Parcel "A" F.M. 29401 into Parcel 1 and Parcel 2 and combine lot 11 and 12 in block 11826 into Parcel 2. 8) Lots that are not part of this lot line change: Sheet 35 Block 11826 Lot 57 Sheet 35 Block 11826 Lot 61 Sheet 35 Block 11164 Lot 15 9) Additional interior trails and stone walls not located. 10) Lot 15 in Block 11164 (Lot "C" Filed Map 20281) rotated 2°52'50" to the right to be in accordance with this plat. OLD SCALETA PRELIMINAR Y LOT LINE CHANGE PLAT PREPARED FOR JJE33 HOLDINGS, LLC SITUATE IN THE Being Lot A as shown on a certain map entitled "Lot Line Change Plat Prepared For JJE33 Holdings, LLC and JJE33, LLC, etc." said map filed in the Westchester County Clerk's Office, Division of Land Records: March 16, 2020 as Map No. 29401. and Tax Lots Sheet 35 Block 11826 Lots 11 and 12 from the Town of Lewisboro tax maps. TOWN OF LEWISBORO WESTCHESTER COUNTY, NEW YORK *SCALE:* 1" = 100' 200 100 300 SHEETS 271 and 272 BLOCKS 11826 and 11164 IN COUNTY INDEX SYSTEM

WETLAND IMPLEMENTATION PERMIT

TOWN OF LEWISBORO

Town Offices 79 Bouton Road, South Salem, New York 10590 Phone: (914) 763-3060 Fax: (914) 533-0097

Date Issued: February 7, 2022

Permit #: 03-20 W.V. & 29-21 W.P.

Permit is hereby issued to: Sophia Chenevert Schilke & Garrett Schilke and Debra L. Chenevert <u>3 Beaver Pond Lane</u>

Description of Approved Activity: <u>The applicant is proposing to remedy Wetland Violation #03-20 W.V.</u> relating to the removal and cutting of vegetation and deposition of fill within the Town of Lewisboro wetland buffer. At the December 14, 2021 Planning Board Meeting, the Board determined the project could be handled administratively.

Location of Proposed Activity: <u>3 Beaver Pond Lane</u>

Sheet: <u>46</u> Block: <u>9827</u> Lot(s): <u>184</u>

CONDITIONS:

- 1. No land disturbance activity shall be permitted within the wetlands or within 150 feet of the wetlands, except as specifically approved herein.
- 2. The proposed activity is illustrated on the below-referenced plans, prepared Steve Marino, PWS, dated December 21, 2021, which are hereby approved and are incorporated into this permit by reference:
 - Buffer Restoration Plan Planting Plan
 - Buffer Restoration Plan Existing Conditions Plan
- 3. All work shall be conducted in accordance with the plans and documents referenced herein. Any plant substitutions shall be previously approved by the Town Wetland Inspector prior to installation.
- 4. No additional tree removal shall be conducted without approval from the Wetland Inspector.
- 5. Prior to the installation of any planting material, including seeding, the subject property shall be inspected by the Town Wetland Inspector.
- 6. The owner shall be responsible for monitoring and maintenance of the mitigation in accordance with notes provided on the plans approved herein. Monitoring conducted on behalf of the owner shall be conducted by a qualified environmental monitor, to be approved by the Town Wetland Inspector.

- 7. Prior to the commencement of any site work, the owner/applicant is responsible for obtaining a Building Permit from the Town of Lewisboro Building Inspector, unless such Permit is determined by the Building Inspector to be unnecessary.
- 8. Prior to commencement of any site work, silt fencing shall be installed downslope of the disturbed area and perpendicular to the direction of the slope.
- 9. The area of land disturbance shall not exceed that illustrated on the plans approved herein. All disturbed areas shall be restored, raked, seeded, and mulched upon completion of land disturbance activities.
- 10. Following completion of all site work, a final site inspection shall be conducted by the Town Wetland Inspector; please call 914-763-3060 to schedule an appointment.
- 11. The issuance of this permit does not necessarily authorize the commencement of site work. No site work shall commence until the conditions of this permit have been satisfied (the conditions required to be satisfied prior to the commencement of any site work) and until the owner/applicant has obtained any and all required permits from other Town, County, State or Federal Departments and/or Agencies.
- 12. All work covered by this permit is to be completed before <u>February 7, 2024</u>, unless an extension of this period is requested in writing and granted.

an Johannessen

Jan K. Channessen, AICP Kellard Sessions Consulting

Plant Species Choices for Wetland Buffer Enhancement/Restoration				
Map Symbol Trees	Quantity*	Scientific Name	Common Name	Size
Aru	8	Acer rubrum	Red Maple	2" caliper
Ns	3	Nyssasylvatica	Black gum	2" caliper
Qp	5	Quercus palustris	Pin oak	2" caliper
Shrubs		-		
CSe	15	Cornus sericea	Redosier dogwood	3' - 4'
IV	15	llex verticillata	Winterberry holly	3' - 4'
VP	5	Viburnum prunifolium	Nannyberry viburnum	4' - 5'
VD	15	Viburnum dentatum	Arrowwood	4' - 5'
Cam	20	Cornus amomum	Silky dogwood	3' - 4'
Seed Mix				
PPM	6 pounds	ERNST Showy Northeast Wildflower Mix or equivalent		
PWS	6 pounds	Pinelands Warm Season Grass Mix or equivalent		

* Plant quantities will be held, but final locations will be determined in the field following removal of invasive and dead plant materials.

Wetland Buffer Restoration Areas

The intent of this plan is to restore areas of the wetland controlled area that were cleared of trees and undergrowth and mulched with wood chips to suppress weed growth.

The wood chips, thatch, vegetation and other woody debris that have not decomposed will be raked off by hand and stockpiled to be used as mulch around the new trees and shrubs. The underlying compost and native soil will be used as a base for the plantings and seeding of the area as shown on the plan. This compost will be raked and/or scarified, and a thin layer of topsoil applied if necessary. After germination of the seed and establishment of the woody plantings, the area will be mowed once per year to prevent reinfestation with knotweed and stiltgrass. "Limited mow zones" shall be delineated in the field by use of monuments or other permanent demarcation.

All planting will proceed by hand. Materials will be brought to the site in good condition (see below) and then placed in central drop locations. The materials will then be hand-carried to their planting locations and in turn, planted by hand. Only rounded, shallow planting shovels will be used in this effort.

Planting will be done in spring or early summer (between April 1 and July 1). Shrubs may also be planted in the late summer to early fall (September 1 to October 30). In all cases, a hole will be dug twice as deep as the root ball. The only shovels allowed are rounded, shallow spades. The hole will then be backfilled with a thin layer (two to four inches) of rich, organic topsoil, the plant placed inside, the hole backfield to the top and then gently tamped down. Routine inspections will occur for evidence of deer browsing and deer repellent applied every three months as specified on the Landscaping Plan. If necessary deer fencing will be considered in areas where browsing is most intense.

Seeding within and adjacent to wetland areas should not be completed when there is more than two inches of standing water, or in areas that are likely to be flooded. Seeds should be broadcast by hand or knapsack seeder using the proper seeding rate (15 pounds per acre), and carefully proportioning seed for the entire area. If area has been recently cleared and raked, cover with a light layer of straw mulch following seeding.

At least one pre-construction meeting will occur between the chosen planting contractor/subcontractor and the site environmental systems planner prior to beginning construction on site. The construction monitor will have experience in wetland construction and a Bachelor of Science degree in Natural and/or Physical Resources.

Monitoring and maintenance efforts for the buffer enhancement plantings will take place over a three year period following construction. This will include site visits twice a year, with additional inspections as required depending on conditions. The applicant's environmental monitor will conduct a survey of the site and site conditions will be noted and adjusted as necessary. Plantings will meet or exceed an 85 percent survival rate by the end of the third growing season. If this goal is not met, the site will be re-evaluated, and replanting will be completed as necessary. Invasive species (i.e., Lythrum salicaria and Phragmites australis) will not constitute more than 10 percent of the vegetative community. If this goal is exceeded, measures will be taken to eradicate the invasive species.

Showy Northeast Native Wildflower Mix

Mix Composition

- 25.7% Echinacea purpurea (Purple Coneflower)
- 12.0% Rudbeckia hirta (Blackeyed Susan)
- 10.6% Coreopsis lanceolata (Lanceleaf Coreopsis) 8.0% Chamaecrista fasciculata, PA Ecotype (Partridge Pea, PA Ecotype)
- 6.4% Tradescantia ohiensis, PA Ecotype (Ohio Spiderwort, PA Ecotype)
- 6.0% Heliopsis helianthoides, PA Ecotype (Oxeye Sunflower, PA Ecotype)
 5.0% Liatris spicata, PA Ecotype (Marsh Blazing Star, PA Ecotype)
 3.5% Aster oblongifolius, PA Ecotype (Aromatic Aster, PA Ecotype)

- 3.5% Aster prenanthoides, PA Ecotype (Zigzag Aster, PA Ecotype)
- 3.0% Zizia aurea, PA Ecotype (Golden Alexanders, PA Ecotype)
- 2.4% Pycnanthemum tenuifolium (Narrowleaf Mountainmint)
 2.0% Aster laevis, NY Ecotype (Smooth Blue Aster, NY Ecotype)
- 2.0% Aster novae-angliae, PA Ecotype (New England Aster, PA Ecotype)
 2.0% Baptisia australis, Southern WV Ecotype (Blue False Indigo, Southern WV Ecotype)
- 1.6% Monarda fistulosa, Fort Indiantown Gap-PA Ecotype (Wild Bergamot, PA Ecotype)
- 1.5% Asclepias tuberosa (Butterfly Milkweed)
- 1.5% Senna hebecarpa, VA & WV Ecotype (Wild Senna, VA & WV Ecotype)
 1.1% Penstemon digitalis (Tall White Beardtongue)
 1.0% Solidago nemoralis, PA Ecotype (Gray Goldenrod, PA Ecotype)
 0.5% Senna marilandica (Maryland Senna)

0.4% Oenothera fruticosa var. fruticosa (Sundrops)

0.2% Solidago odora, PA Ecotype (Licorice Scented Goldenrod, PA Ecotype) 0.1% Solidago juncea, PA Ecotype (Early Goldenrod, PA Ecotype)

Pinelands Warm Season Grass Mix Andropogon gerardii 20.00% Chasmanthium latifolium 2.00% Panicum amarum 7.00% Panicum virgatum 18.00% Schizachyrium scoparium 24.00% Sorghastrum nutans 14.00% Tridens flavus 15.00%

grasses (PWS) 8,400 sf to be mowed once per year

Beaver





ACCEPTED BY **KELLARD SESSIONS CONSULTING**

Johannessen an (

PERMIT NO.

03-20 W.V. & 29-21 W.P.

Mitigation plan prepared by Steve Marino, PWS Tim Miller Associates, Inc.

Buffer Restoration Plan - Planting Plan 3 Beaver Pond Road Town of Lewisboro, Westchester County Basemap Source: Bibbo Associates December 21, 2021

ACCEPTED BY **KELLARD SESSIONS CONSULTING**

Jan Johannessen

PERMIT NO.



Buffer Restoration Plan - Existing Conditions Plan 3 Beaver Pond Road Town of Lewisboro, Westchester County Basemap Source: Bibbo Associates



MEMORANDUM

TO:	Chairperson Janet Andersen and Members of Lewisboro Planning Board
CC:	Ciorsdan Conran Judson Siebert, Esq. Jeff Farrell
FROM:	Jan K. Johannessen, AICP Joseph M. Cermele, P.E., CFM Town Consulting Professionals
DATE:	June 16, 2022
RE:	Wetland and Stormwater Permit Dayton Residence 62 Mead Street Sheet 22, Block 10802, Lot 70

PROJECT DESCRIPTION

The subject property consists of ± 6.145 acres of land and is located at 62 Mead Street within the R4-A Zoning District. The applicant is proposing to replace the existing pool and to construct a pool terrace, fire pit and ancillary improvements. The applicant is also proposing a mudroom addition, as well as a new detached garage and grotto and driveway reconfiguration. The subject wetland is located off-site and portions of the project are located within the buffer.

<u>SEQRA</u>

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

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.

CIVIL ENGINEERING | LANDSCAPE ARCHITECTURE | SITE & ENVIRONMENTAL PLANNING

Chairperson Janet Andersen June 16, 2022 Page 2 of 2

2. The subject property is located within the NYC East of Hudson Watershed and proposed land disturbance exceeds 5,000 s.f. Coverage under New York State Department of Environmental Conservation (NYSDEC) SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-20-001) will be required.

COMMENTS

- 1. The five (5) proposed Shadblow Serviceberries are not shown on Sheet OP-1 or SP-1, as noted on the plans. Please revise.
- 2. The plans have been referred to the Westchester County Department of Health (WCHD) for review and determination regarding the adequacy of the existing septic system for the proposed improvements. The applicant should provide any update on their review.

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 INSITE ENGINEERING, DATED MAY 31, 2022:

- Overall Plan (OP-1)
- Existing Conditions & Removals Plan (EX-1)
- Grading, Utility, Erosion and Sediment Control Plan (SP-1)
- Details (D-1)
- Details (D-1)

DOCUMENTS REVIEWED:

- Letter, prepared by Insite Engineering, dated May 31, 2022
- Draft Notice of Intent
- Letter, prepared by Two Tall Trees Design, dated May 26, 2022
- Architecturals, prepared by Two Tall Trees Design, dated April 1, 2022
- Stormwater Management Report, prepared by Insite Engineering, dated May 31, 2022

JKJ/dc

https://kellardsessionsconsulti.sharepoint.com/sites/Kellard/Municipal/Lewisboro/Correspondence/2022-06-16_LWPB_Dayton - 62 Mead Street_Review Memo.docx



May 31, 2022

Ms. Janet Anderson Town of Lewisboro Planning Board 79 Bouton Road South Salem, New York 10590

RE: Dayton Residence 62 Mead Street Town of Lewisboro Tax Map # 42.2-1-12

Dear Ms. Anderson:

Enclosed please find four (4) full size, and one (1) electronic copy (via email) of the following documents that have been revised in accordance with the Town Consultant's memo:

- Site Development Plan Set by Insite Engineering, Surveying, and Landscape Architecture P.C. (5 Sheets), last revised May 31, 2022.
- Stormwater Management Report by Insite Engineering, Surveying, and Landscape Architecture P.C. dated May 31, 2022.
- Draft NYSDEC Notice of Intent.
- Memo by Two Tall Trees dated May 26, 2022
- Architectural Floor Plans and Elevations for the New Garage / Grotto Area and Mud Room, prepared by Two Tall Trees Design, dated April 1, 2022.
- Architectural Floor Plans and Elevations for Mud Room, prepared by Two Tall Trees Design, dated May 26, 2022.

The following are responses to the Kellard Sessions memo dated December 16, 2021, regarding the subject project:

<u>SEQRA</u>

 It is acknowledged that the proposed actions have been preliminary identified as a Type II Action and is therefore categorically exempt from the State Environmental Quality Act (SEQRA).

REQUIRED APPROVALS

- 2. It is understood that a Wetland Activity Permit and Town Stormwater Permit are required from the Planning Board; and a public hearing may be required on the Wetland Permit.
- 3. It is acknowledged that a NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-20-001) is required. A Draft Notice of Intent (NOI) is enclosed.

COMMENTS

1. The wetland mitigation area connects an existing meadow to the stone wall. In order to blend with the vegetation in this area, meadow is proposed as the predominant planting for this

space. In order to separate this area from the mowed area, five Amelanchier canadensis/ shadblow serviceberry trees are proposed at the northern and southern end of the mitigation area to visually designate the boundary of the no mow area. A plant list and seeding notes are located on drawing SP-1

- 2. Applicable front, rear, and side yard setbacks have been shown on the project drawings.
- 3. Architectural floors plans and elevations for the mud room is included in the attached submission.
- 4. Applicable minimum required Westchester County Department of Health separation distances have been shown on plan.
- 5. The project plans have been coordinated with the building department for a referral and subsequently submitted to the WCDOH for a determination. It is expected to have a determination prior to the meeting.
- 6. Proposed sewer, water, and electric connections to the new garage/grotto area are shown on plan. Additionally, the existing well has been clarified on plan.
- 7. The pool barrier is comprised by the surrounding stone wall, two gates, the residence on the north side and the garage to the west. The existing gates to be reinstalled are self-closing and self-latching and latches will be located 54" minimum above finished grade. The house and garage will be alarmed per NYS code. Please see pool compliant notes on drawing D-2.
- 8. Tree protection measures for trees to be preserved, which are located in proximity of the limit of disturbance, are shown on plan and in the project details. The cherry tree and island within the gravel parking area will be removed.
- 9. The site location coordinates have been added to the Notice of Intent (NOI). Soil types and percentages have been coordinated between the NOI and project SWPPP.

The following are responses to the Conservation Advisory Council memo dated December 10, 2021, regarding the subject project:

- The level spreader for the stormwater system has been slightly repositioned to outlet at the maximum elevation feasible. In order to appropriately daylight the overflow for the stormwater system with suitable cover over the pipe and maintain an appropriate slope on the pipe the level spreader has been place as far away from the wetland as practicable.
- Five Amelanchier canadensis/shadblow serviceberry trees are proposed at the northern and southern end of the mitigation area to visually designate the boundary of the no mow area.

The following are responses to the Building Department Memo memo dated December 15, 2021, regarding the subject project:

- 1. The detached garage plans have been updated and are included in the attached submission. The applicant received a Zoning Variance for the garage floor area from the Zoning Board of Appeals on April 27, 2022.
- 2. The detached garage plans have been updated and are included in the attached submission. Additional information related to the building height has been included in the drawings and the building height is in compliance with Town Code.

We respectfully request this matter be placed on your June 21, 2022 meeting for discussion. Should you have any questions of concerns feel free to contact this office.

Very truly yours,

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

By: John/M. Watson, P.E.

Senior Principal Engineer

JMW/kmg/tmb

Enclosure(s)

cc: Duncan Dayton Richard O'Leary, Two Tall Trees Design Joseph Angiello / Town of Lewisboro Building Inspector

Insite File No. 21170.100


\square	
	EXISTING PROPERTY LINE
<u>L</u>	EXISTING WETLAND BUFFER
<u></u>	EXISTING WETLAND
	EXISTING WETLAND FLAG
	EXISTING YARD SETBACKS

<u>ZONE_REQUIREMENTS</u> <u>R4A (ONE_FAMILY_RESIDENCE)</u>				
	<u>REQUIRED/</u> <u>PERMITTED</u>	<u>EXISTING</u>	<u>PROPOSED</u>	
Minimum Lot Area:	4 AC	6.145 AC	6.145 AC	
Minimum Lot Width:	250'	210.8' ¹	210.8 ^{,1}	
Minimum Yard Dimensions:				
Front Yard (From Street Center Line):	75'	147.7'	147.7'	
Front Yard (From Front Lot Line):	50'	125.9'	125.9'	
Side Yard:	50'	<i>32.0' ²</i>	32.0' ²	
Rear Yard:	50'	64.4'	<i>50.2</i> '	
Maximum Height:				
Principal Building (Stories):	2.5 Stories	2.0 Stories	2.0 Stories	
Principal Building (Feet):	35'	Less Than 35'	Less Than 35'	
Accessory Building (Feet):	20'	Less Than 20'	18' (Mean)	
Maximum Building Coverage:	6%	2%	2%	



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REVISED PER PLANNING BOARD COMMENTS			
ZONING BOARD OF APPEALS SUBMISSION			КMG
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RE	VISION		BY
S / T ERING, SURVE PE ARCHITECTU	YING & IRE, P.C.	3 Garrett Place Carmel, NY 105 (845) 225–9690 (845) 225–9717 www.insite–eng.c	12) 7 fax com
<u>RESIDENCE</u> BORO, WESTCHESTER CO CONDITIONS ALS PLAN), NEW YORK	M. WATS	ALL X X
PROJECT MANAGER	J.M.W.	DRAWING NO.	SHEET
DRAWN BY	Т.М.В.	FX-1	2
CHECKED BY	J.M.W.		/ 5



)	EXISTING PROPERTY LINE
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	EXISTING STONE WALL
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	PROPOSED DRAINAGE PIPE
	PROPOSED 6ø SDR 35 ROOF DRAIN
	PROPOSED SILT FENCE OR STRAW WATTLE
	PROPOSED CONSTRUCTION FENCE
• • • •	PROPOSED LIMITS OF DISTURBANCE
/	PROPOSED TEMPORARY SOIL STOCKPILE
	PROPOSED STABILIZED CONSTRUCTION ENTRANCE
	PROPOSED DRAINAGE STRUCTURE WITH INLET PROTECTION

1. Minimum OSHA site standards must be maintained including personal protective equipment and vests. The contractor shall be responsible for guarding and protecting all open excavations in accordance with the latest edition and current 2. The contractor shall field verify all dimensions relative to the scope of work. 3. The contractor shall field verify the existing grades / utility locations prior to commencement of any work. Any discrepancy shall be reported to the project 4. Contractor shall be responsible for removal of all excess rock, topsoil, subsoil, 5. The contractor shall place boards/planks to protect lawn from construction access to site. Boards/planks shall be pulled up and stored when not in use. 2. Strip and stockpile topsoil within limits of disturbance for later use in 7. Upon completion of all grading operations and pool & wall construction, practical in accordance with the Erosion and Sediment Control Notes 1. All proposed seeded areas to receive 4" min. depth of topsoil. Soil amendments and fertilizer application rates shall be determined based on specific testing of topsoil 2. Upon final grading and placement of topsoil and any required soil amendments, areas to receive permanent vegetation cover in combination with suitable mulch as follows: - select seed mixture per drawings and seeding notes. – fertilizer applied at the manufacturer's recommended rate using Lesco 10–0–18 (no phosphorous) fertilizer or equivalent. — mulch: salt hay or small grain straw applied at a rate of 90 lbs./1000 s.f. or 2 tons/acre, to be applied and anchored according to <u>New York State</u> <u>Standards and Specifications for Erosion and Sediment Control</u>, August 2005. – if the season prevents the establishment of a permanent vegetation cover, the disturbed areas will be mulched with straw or equivalent. A. Seed Mix for lawn areas and mow strip along roads at a rate of 100 lbs. per acre: 40% 20% 20% B. Seed Mix for Mitigation area as shown on the drawings at a rate of 15 lbs. per Low—Growing Wildflower & Grass Mix (ERNMX—156) from Ernst Conservation <u>PLANT LIST</u> BOTANICAL/COMMON NAME SIZE ROOT/SPACING Amelanchier canadensis / 10'-12' HT. B & B REVISED PER PLANNING BOARD COMMENTS TMB REVISED FOR WCDOH SUBMISSION TMR ZONING BOARD OF APPEALS SUBMISSION PLANNING BOARD SUBMISSION MEU REVISION ΤE S 3 Garrett Place Carmel, NY 10512 (845) 225-9690 / ENGINEERING, SURVEYING & (845) 225–9717 fax LANDSCAPE ARCHITECTURE, P.C. www.insite-eng.com (In Mlotan # 62 MEAD STREET, TOWN OF LEWISBORO, WESTCHESTER CO, NEW YORK <u>CONTROL PLAN</u> PROJECT DRAWING NO. SHEET J.M.W.

SP-7

Т.М.В.

J.M.W.

SCALE

EROSION &	<u>SEDIMENT</u>	<u>CONTROL</u>	NOTES:

- and during construction.
- provided with appropriate protective measures to minimize erosion and contain with "New York Standards and Specifications For Erosion and Sediment Control," latest edition.
- . When land is exposed during development, the exposure shall be kept to the must be initiated by the end of the next business day and completed within seven (7) days from the date the current soil disturbance activity ceased. Disturbance shall be minimized to the areas required to perform construction.
- grubbing or earthwork.
- or early fall. 'Aristook' Winter Rye (cereal rye) shall be used for temporary seeding in late fall and winter.
- permanent or temporary, shall have soil stabilization measures initiated for day of final grading. All seeded areas to receive a minimum 4" topsoil (from stockpile area) and be seeded and mulched as follows: • Seed mixture to be planted between March 21 and May 20, or between

 - 20% Annual Ryegrass
- or 2 tons/acre, to be applied and anchored according to "New York Standards and Specification For Erosion and Sediment Control," latest edition
- Seeding shall be performed in accordance with the current edition of the "NYSDOT Standard Specification, Construction and Materials, Section 610–3.02, Method No. the site engineer.
- with Curlex I Single Net Erosion Control Blanket, or approved equal.
- runoff is diverted to soil erosion and sediment control facilities.
- points become operational.
- before discharge beyond disturbed areas or discharged into other drainage svstems.
- daily basis by the O.F.R. to insure that channels, temporary and permanent ditches and pipes are clear of debris, that embankments and berms have not erosion and sediment control measures shall be immediately repaired by the contractor and inspected for approval by the O.F.R. and/or site engineer.
- as directed by the O.F.R.
- property of others.
- and to prevent settlement.
- weekly basis and after rainstorms.
- installed by the contractor.
- areas are suitably stabilized.

- a contractor's outdoor storage yard.
- practicable.

- requirement.
- weekly for evidence of leaking holding tanks.











4" BELGIUM BLOCK CURB DETAIL (N.T.S.)



NOTE: PROVIDE STAKING AND GUYING FOR TREES PLANTED ON SLOPES GREATER THAN 3H:1V, IN EXPOSED, WINDY AREAS AND AS SPECIFIED BY LANDSCAPE ARCHITECT. GUY WIRES AND STAKES SHALL BE REMOVED WITHIN TWELVE (12) MONTHS OF PLANTING.

> – TWO (2) STRANDS NO. 12 GAUGE GALVANIZED ANNEALED STEEL WIRE TWISTED IN NEW RUBBER HOSE.

- TWO (2) STRANDS, DOUBLE WRAPPED AND TWISTED.

- TRUNK FLARE TO BE COMPLETELY EXPOSED. SET 1" TO 2" ABOVE ESTABLISHED FINISH GRADE. PROVIDE 3" LAYER OF MULCH AS SPECIFIED OVER ENTIRE WATERING SAUCER AT ALL TREE PITS OR OVER ENTIRE TREE BED. DO NOT PLACE MULCH WITHIN 3" OF TRUNK.

----- FORM 4" HIGH TOPSOIL LIP AROUND EACH TREE PIT TO FORM WATERING SAUCER.

- TOPSOIL MIX BACKFILL. - CUT AND REMOVE BINDING FROM TRUNK AND

FROM AROUND AS MUCH OF BALL AS POSSIBLE. CUT AND REMOVE BURLAP AT UPPER 1/3 OF ROOT BALL. IF SYNTHETIC WRAP IS USED, REMOVE COMPLETELY. - SIT ROOT BALL ON EXISTING UNDISTURBED SOIL

OR ON COMPACTED SUBGRADE. DO NOT DIG DEEPER THAN THE DEPTH OF ROOT BALL. — CEDAR STAKES, MIN. 3" DIA., LENGTH VARIES. 3 STAKES @ 120 DEG. PER MAJOR

TREE. STAKES SHALL CLEAR ROOT BALL.









POOL BARRIER COMPLIANCE NOTES:

- 1. Pool barrier shall be compliant with section R326 Swimming Pools, Spas and Hot Tubs in 2020 New York State Residential Code.
- 2. An outdoor swimming pool shall be surrounded by a temporary barrier during installation or construction that shall remain in place until a permanent barrier in compliance with R326.4.2 is provided. See R326.4.1 in 2020 New York State Residential Code for details.
- 3. Swimming pools shall be completely enclosed by a permanent barrier complying with Sections R326.4.2.1 through R326.4.2.3 of the 2020 New York State Residential Code
- 4. Gates shall comply with the requirements of Section R326.4.2.1 through R326.4.2.6 in 2020 New York State Residential Code including but not limited to: All gates shall be self closing. In addition if the gate is a pedestrian access gate, the gate shall open outward, away from the pool.
 All gates shall be self latching, with latch handle located within the enclosure and at least 40 inches above grade. In addition, if the latch handle is latched the located of the latch handle is latened. located less than 54 inches from grade, the latch handle shall be located at least 3 inches below the top of the gate, and neither the gate nor the barrier shall have openings greater than 0.5 inches within 18 inches of the latch.
- All gates shall be securely locked with a key, combination or other shield—proof lock sufficient to prevent access to the swimming pool through such gate when the swimming pool is not in use or supervised.
- 5. A wall or walls of a dwelling may serve as part of the barrier, provided that the wall or walls meet the applicable barrier requirements of Sections R325.4.2.1 through R326.4.2.3 and one of the following conditions are met: 1.a) Doors with direct access to the pool through that wall shall be equipped
 - with an alarm that produces and audible warning when the door and/or its screen, if present, are opened. The alarm shall be listed in accordance with UL 2017. The audible alarm shall activate within 7 seconds and the sound continuously for a minimum of 30 seconds after the door and/or its screen, if present, are opened and be capable of being heard throughout the house during normal household activities. The alarm shall automatically reset under all conditions. The alarm system shall be equipped with a manual means, such as touch pad or switch to temporarily deactivate the alarm for a single opening. Deactivation shall last for not more than 15 seconds; and
 - b) Operable window in the wall or walls used as a barrier shall have a atching devise located no less than 48 inches above the floor. Openings in operable windows shall not allow a 4—inch—diameter sphere to pass through the opening when the window is in its larges opened position; and c) Where the dwelling is wholly contained within the pool barrier or enclosure; alarms shall be provided at every door with direct access to the pool; or
- 2) Other approved means of protection, such as self–closing with self–latching devices, so long as the degree of protection afforded is not less than the
- protection afford by Item 1 described above. 2. See Section R326 Swimming Pools, Spas and Hot Tubs in 2020 New York State Residential Code for full code requirements.



NO. DATE / ENGINE LANDSCA PROJECT: <u>DAYTON R</u> 62 MEAD STREET, TOWN OF LEWISBO DRAWING: <u>DET</u>A

21170.100

05-31-22

AS SHOWN

PROJECT NUMBER

SCALE

DATE

<u>NOTES:</u> 1. STONE SHALL BE GREY TONES TO MATCH COLOR OF STONE AT WASHINGTON AVENUE CLOCK PLANTER, FLAT STONES OF ASSORTED SIZES 4" THICK X 12" LONG MINIMUM. 2. EACH STONE TO BE SET FIRM AND FLUSH ON PREVIOUS STONE TO PREVENT ANY "PLAY" OR MOVEMENT BETWEEN ADJACENT STONES. MORTAR TO BE USED AS REQUIRED TO FILL VOIDS ON INTERIOR OF WALL AND BACK

SUBGRADE

OF WALL.

REVISION		BY
S / T E ERING, SURVEYING & PE ARCHITECTURE, P.C.	3 Garrett Place Carmel, NY 10512 (845) 225–9690 (845) 225–9717 1 www.insite–eng.cor	fax n
<u>RESIDENCE</u> boro, westchester co, new york	ADFESSIONAL ST	*
PROJECT J.M.W.	DRAWING NO. S	HEET
DRAWN BY T.M.B.	$D - 1^{5}$	5
CHECKED K.M.G. BY		/ 5

T W O T A L L T R E E S D E S I G N One Front Street P.O. Box 637 Croton Falls, New York 10519 914.669.0014 ttt@twotalltreesdesign.com

To:Lewisboro Planning BoardFrom:Rick O'LearyRe:62 Mead Street: Mudroom Location and Existing Pool Enclosure Stone WallDate:May 26, 2022

M E M O R A N D U M

Clarification Images for Planning Board Reference



IMAGE 1: Existing Mudroom Window -Mudroom Expansion Proposed for the area with bluestone



IMAGE 2: Existing Courtyard looking from Existing Garage towards Existing House – Showing Existing Pool Enclosure Stone Wall and Gate

(Note: Pre-Purchase Photo)

See Insite Engineering Planning Board Submission Drawings for proposed new work

T W O T A L L T R E E S D E S I G N One Front Street P.O. Box 637 Croton Falls, New York 10519 914.669.0014 ttt@twotalltreesdesign.com

To: Lewisboro Planning Board
From: Rick O'Leary
Re: 62 Mead Street: Existing Pool Enclosure Stone Wall and Gates
Date: May 26, 2022

M E M O R A N D U M

Clarification Images for Planning Board Reference



IMAGE 3: Existing Pool Gate All Gates and Enclosure Shall Conform with NYS Code

GARAGE ALTERATION - SUBMITTAL -

PREPARED FOR

ZONING BOARD OF APPEALS

LIST OF DRAWINGS

G-SKO	TITLE SHEET
G-SK1	SOUTH GARAGE - FLOOR PLANS
G-SK2	GARAGE ALTERATION - EXTERIOR ELEVATIONS
G-EX1	SOUTH GARAGE - EXISTING PLANS & ELEVATIONS





XX H ÷ TERRACE DRIVEWAY SIDE SIDE ENTRY



NORTH ELEVATION



EAST ELEVATION (POOL GROTTO)







2# CLOSED CELL SPRAY FOAM INSULATION TO ACHIEVE R-49 'CERTIGRADE' RED CEDAR SHINGLES #1 GRADE BLUE LABEL WITH 5" EXPOSURES 'CEDAR BREATHER' CONTINUOUS ROOF VENTILATION 30# FELT BUILDING PAPER OVER 5/8" CDX PLYWOOD SHEATHING 2X8 ROOF RAFTERS @ 16" O.C. 'SIMPSON' H2.5A HURRICANE CLIPS @ EACH RAFTER TO PLATE CONNECTION 16 OZ. COPPER DRIP EDGE GUTTER TO MATCH EXISTING 1X8 PREPRIMED CEDAR FASCIA \ge 1X PREPRIMED CEDAR SOFFIT PREPRIMED CEDAR CROWN MOLDING TO MATCH EXISTING 5/4 X PREPRIMED CEDAR FRIEZE BOARD TO MATCH EXISTING PREPRIMED CEDAR BOARD AND BATTEN SIDING TO MATCH EXISTING 'TYVEK' HOUSE WRAP OVER 1/2" CDX PLYWOOD SHEATHING 2X6 STUDWALL @ 16" O.C. .7# OPEN CELL SPRAY FOAM INSULATION SPRAYED TO FULL DEPTH OF 2X6 STUDWALL TO ACHIEVE MIN. R-21 P.T. 2X6 SOLE PLATE OVER SILL SEAL 1/2" DIAMETER X 18" LONG STEEL ANCHOR BOLTS @ 48" O.C. MAXIMUM SPACING PARGE EXPOSED CONCRETE FOUNDATION WALL

6 WALL SECTION / 1" = 1'-0"

DESIGI ËS ч. <u>С</u> TREI δĀ A TALL BOX 014 & ≴ ΜΟ 22 4 <u>13</u> 137 OWNERSHIP AND USE OF DOCUMENTS DRAWINGS AND SPECIFICATIONS ARE AND SHALL REMAIN COPYRIGHTED PROPERTY AND SHALL NOT BE USED IN WHOLE OR IN PART, FOR ANY OTHER PROJECT OR PURPOSE, BY ANY OTHER PARTY, BEYOND THE AGREEMENT AND PARTIES FOR WHICH THE DRAWINGS AND SPECIFICATIONS WERE PREPARED, WITHOUT SPECIFIC WRITTEN PERMISSION AND AUTHORIZATION. PROJECT North MUDROOM ADDITION Ш Ш RESIDI TON STREET, WA > DA 62 MEA 20 A3



STORMWATER MANAGEMENT REPORT

Prepared For

Dayton Residence

62 Mead Street

Town of Lewisboro, New York

May 31, 2022

The subject project is located on 62 Mead Street in the Town of Lewisboro. The property is designated as Tax Map Number 42.2-1-12 and is in the R-4A zoning district. The property is currently developed with a 2-story main residence with a detached garage, a cottage with a detached garage, driveway, individual drilled well and onsite wastewater treatment system (OWTS). It is proposed to remodel the existing courtyard, lengthen the existing main residence detached garage, install a patio/deck off the north side of the main residence, adjust the layout of the driveway and auto court for the main residence and install associated appurtenances. The property is located in Waccabuc, directly west of the Waccabuc Country Club Golf Course. To the east of the main residence is a large open field classified as a wetland, as such much of the property, existing house, existing well, and existing OWTS are within the 150-foot wetland buffer.

The primary residence is located along a small local highpoint/ridge running north to south which results in the stormwater runoff for main residence flowing either to the east or to the west. The east runoff flows into the existing wetland and the west runoff flows onto the neighbor's property. Both portions of the stormwater runoff from the main residences will ultimately drain on the Waccabuc Country Club Golf Course. The stormwater quantity analysis included in this report utilizes Design Line 1 along the wetland boundary to the east of the main residence and Design Line 2 along the western property line. This design line was chosen to limit the analysis of the property to within the limits of disturbance (LOD) and focus on the effects of the redevelopment. See Figure 1 for the Pre-Development Drainage Area Map depicting the existing site conditions mentioned above and Attachment A for the Pre-Development HydroCAD Stormwater Analysis.

The onsite soil located within the proposed limits of disturbance consist of Paxton Fine Sandy Loam (PnB) and Woodbridge Loam (Wdb) as identified on the Soil Conservation Service Web Soil Survey. The PnB soils are identified with a hydrologic soil group C and the WdB soils are identified with a hydrologic soil group D. Soil infiltration and deep testing was completed and witnessed to verify onsite soil conditions. See Figure 3 for testing results.

Since the project consists of proposed disturbances between 5,000 square feet and 1 acre, and is located in the New York City Watershed, an erosion control only Stormwater Prevention Plan (SWPPP) is required by the New York State Department Environmental Conservation (NYSDEC) per the *NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity Permit Number GP-0-20-001*. However, the Town, as a policy typically requires new impervious surfaces to be treated with permanent stormwater management practices (SMP's) to address both stormwater quality and quantity.

A proposed subsurface infiltration system has been sized to capture, treat, and store the Runoff Reduction Volume / Water Quality Volume from the tributary area. The subject project is located in the New York City Watershed, which is listed as a phosphorus-limited watershed per the NYSDEC regulations. Therefore, the stormwater management practices have been designed in general accordance with Chapter 9 Redevelopment and the Enhanced Phosphorus Removal Supplement (Chapter 10) of the Design Manual. Per Chapter 9 of the design manual, 25% of the WQv from redevelopment is required to be captured. As outlined in Chapter 10, the treatment volume for the WQv is the runoff volume produced during the 1-year 24-hour design storm.

A total of 4,800 s.f. of new impervious surfaces and 8,000 s.f. of redeveloped impervious surfaces are proposed. In general accordance with Chapter 9 of the design manual at least 25% of the redeveloped impervious area will be captured and conveyed to the subsurface stormwater infiltration system. This results in



4,800 s.f. of new impervious and 2,000 s.f. of redeveloped impervious required to be conveyed to the subsurface infiltration system, totaling 6,800 s.f. of required treated impervious surfaces. It is proposed to treat the impervious surfaces associated with the courtyard, detached garage, pathways, and a section of the driveway totaling an impervious area of 7,300 s.f. This area is greater than the required treatment area of 6,800 s.f. and as such the contributing impervious area to the proposed Stormwater Management practice (SMP) is sized to treat an increase in impervious area and redevelopment on the site. This total new site impervious area is also oversized by 500 s.f. to account for the potential future addition of a 3rd garage bay on the attached garage of the primary residence. See Figure 2 for the Post Development Drainage Area Map depicting the proposed site conditions mentioned above. It should be noted there is currently no known stormwater treatment onsite.

The proposed stormwater management practice consists of an infiltration practice (NYSDEC Design I-4) to meet both the WQv and RRv requirements as well as provide the necessary peak flow attenuation to satisfy the overbank and extreme overbank flood control requirements. The infiltration system is designed as an offline practice and to store the WQv from the contributing area. A flow splitter is proposed upstream of the infiltrator to make the practice offline. Proposed drain inlets and roof drains will collect stormwater from the proposed terrace, garage, pathways, and driveway and discharge to a proposed flow splitter. The flow splitter discharges into the infiltration system with an overflow pipe to a level spreader.

The volume provided in the infiltration system is equal to or higher than the Runoff Reduction Volume / Water Quality Volume as shown in Table 1 below:

Subcatchment	Treatment Practice	NYSDEC Design Practice Designation	Total Required WQv (c.f.)	Proposed Storage Volume of Infiltration System (c.f.)
1.1S	1.1P	Infiltration System (I-4)	1,482	1,536

Table 1 Infiltration Area Water Quality Volume Treatment Summary

As shown in Table 1 above, the WQv provided in the SMP's exceeds the required WQv. See Attachment B of this report for further information regarding the volume provided.

The peak flows generated by the increase in impervious surfaces will be mitigated by the proposed SMP. The 10-year, 25-year and 100-year, 24-hour storms were design storms were used in the analysis. As seen in the attached calculations the SMP provides the necessary volume reduction to reduce the post-development peak flows to below pre-development levels.

The following table summarizes the pre- and post-development peak flows expected for the proposed project:

24-HOUR DESIGN STORM PEAK FLOWS (c.f.s.)						
10-YEAR 25-YEAR 100-YEAR						/EAR
	Pre	Post	Pre	Post	Pre	Post
Design Line 1	2.89	2.66	3.83	3.53	5.73	5.36
Design Line 2	2.03	1.46	2.57	1.88	3.65	2.71

Table 2 – Existing and Proposed Condition Peak Flows (cfs)

As seen by the above summary, the post-development peak flows for 10-year, 25-year and 100-year design storms have been attenuated to be less than the pre-development peak flows. Coupled with the minimal increase in impervious area, and stormwater treatment being provided (currently there is no treatment onsite) there will be a net benefit in stormwater quality to the site.

Attachments:

Attachment A – Pre-Development HydroCAD Stormwater Analysis

Attachment B - Post-Development HydroCAD Stormwater Analysis

Attachment C – Pool Drawdown Calculation

Figure 1 – Pre-Development Drainage Map

Figure 2 – Post-Development Drainage Map

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Figure 3 – Testing Plan
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ATTACHMENT A Pre-Development HydroCAD Stormwater Analysis



Pre-Development	NY-62 Mead St 24-hr S0P	I-yr Rainfall=2.82"
Prepared by Insite Engineering, Surveying & Landso	cape Architecture, P.C.	Printed 11/29/2021
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Summary for Subcatchment 1.0S: Pre

Runoff = 1.07 cfs @ 12.07 hrs, Volume= 0.076 af, Depth= 0.95"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-120.00 hrs, dt= 0.02 hrs NY-62 Mead St 24-hr S0P 1-yr Rainfall=2.82"

 Ai	rea (sf)	CN	Description		
	2,600	98	Paved park	ing, HSG C	
	29,700	74	>75% Gras	s cover, Go	bod, HSG C
	9,800	80	>75% Gras	s cover, Go	bod, HSG D
	42,100	77	Weighted A	verage	
	39,500		93.82% Pe	rvious Area	
	2,600		6.18% Impe	ervious Area	a
Tc	Length	Slope	e Velocity	Capacity	Description
 (min)	(feet)	(ft/ft) (ft/sec)	(cfs)	
7.2	100	0.040	0.23		Sheet Flow,
					Grass: Short n= 0.150 P2= 3.38"
0.6	50	0.040	0 1.40		Shallow Concentrated Flow,
					Short Grass Pasture Kv= 7.0 fps
7.8	150	Total			

Subcatchment 1.0S: Pre



Pre-DevelopmentNY-62 Mead St 24-hr SOP 1-yr Rainfall=2.82"Prepared by Insite Engineering, Surveying & Landscape Architecture, P.C.Printed 11/29/2021HydroCAD® 10.00-15 s/n 00891 © 2015 HydroCAD Software Solutions LLCPage 3

Summary for Subcatchment 2.0S: Pre

Runoff = 0.91 cfs @ 12.06 hrs, Volume= 0.060 af, Depth= 1.30"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-120.00 hrs, dt= 0.02 hrs NY-62 Mead St 24-hr SOP 1-yr Rainfall=2.82"

_	Ai	rea (sf)	CN	Description			
		9,000	98	Paved park	ing, HSG C		
		15,100	74 :	>75% Ġras	s cover, Go	ood, HSG C	
		24,100	83	Weighted A	verage		
		15,100		62.66% Pei	vious Area		
		9,000	:	37.34% Imp	pervious Are	ea	
	_						
	Tc	Length	Slope	Velocity	Capacity	Description	
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)		
	6.9	100	0.0450	0.24		Sheet Flow,	
						Grass: Short n= 0.150 P2= 3.38"	
	0.1	15	0.0450	4.31		Shallow Concentrated Flow,	
						Paved Kv= 20.3 fps	
	0.4	35	0.0450	1.48		Shallow Concentrated Flow,	
_						Short Grass Pasture Kv= 7.0 fps	
	7.4	150	Total				

Subcatchment 2.0S: Pre



Pre-DevelopmentNY-62 Mead St 24-hr SOP 10-yr Rainfall=5.07"Prepared by Insite Engineering, Surveying & Landscape Architecture, P.C.Printed 11/29/2021HydroCAD® 10.00-15 s/n 00891 © 2015 HydroCAD Software Solutions LLCPage 4

Summary for Subcatchment 1.0S: Pre

Runoff = 2.89 cfs @ 12.07 hrs, Volume= 0.216 af, Depth= 2.68"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-120.00 hrs, dt= 0.02 hrs NY-62 Mead St 24-hr S0P 10-yr Rainfall=5.07"

A	rea (sf)	CN	Description		
	2,600	98	Paved park	ing, HSG C	
	29,700	74	>75% Gras	s cover, Go	bod, HSG C
	9,800	80	>75% Gras	s cover, Go	bod, HSG D
	42,100	77	Weighted A	verage	
	39,500		93.82% Per	rvious Area	
	2,600		6.18% Impe	ervious Area	a
Тс	Length	Slope	e Velocity	Capacity	Description
(min)	(feet)	(ft/ft) (ft/sec)	(cfs)	
7.2	100	0.040	0.23		Sheet Flow,
					Grass: Short n= 0.150 P2= 3.38"
0.6	50	0.040	0 1.40		Shallow Concentrated Flow,
					Short Grass Pasture Kv= 7.0 fps
7.8	150	Total			

Subcatchment 1.0S: Pre



Pre-DevelopmentNY-62 Mead St 24-hr SOP 10-yr Rainfall=5.07"Prepared by Insite Engineering, Surveying & Landscape Architecture, P.C.Printed 11/29/2021HydroCAD® 10.00-15 s/n 00891 © 2015 HydroCAD Software Solutions LLCPage 5

Summary for Subcatchment 2.0S: Pre

Runoff = 2.03 cfs @ 12.06 hrs, Volume= 0.149 af, Depth= 3.24"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-120.00 hrs, dt= 0.02 hrs NY-62 Mead St 24-hr SOP 10-yr Rainfall=5.07"

_	A	rea (sf)	CN	Description			
		9,000	98	Paved park	ing, HSG C		
_		15,100	74	>75% Ġras	s cover, Go	ood, HSG C	
		24,100	83	Weighted A	verage		
		15,100		62.66% Per	vious Area		
		9,000		37.34% Imp	pervious Are	ea	
					_		
	Tc	Length	Slope	Velocity	Capacity	Description	
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)		
	6.9	100	0.0450	0.24		Sheet Flow,	
						Grass: Short n= 0.150 P2= 3.38"	
	0.1	15	0.0450	4.31		Shallow Concentrated Flow,	
						Paved Kv= 20.3 fps	
	0.4	35	0.0450	1.48		Shallow Concentrated Flow,	
_						Short Grass Pasture Kv= 7.0 fps	
	7.4	150	Total				

Subcatchment 2.0S: Pre



Pre-DevelopmentNY-62 Mead St 24-hr S0P 25-yr Rainfall=6.38"Prepared by Insite Engineering, Surveying & Landscape Architecture, P.C.Printed 11/29/2021HydroCAD® 10.00-15 s/n 00891 © 2015 HydroCAD Software Solutions LLCPage 6

Summary for Subcatchment 1.0S: Pre

Runoff = 3.83 cfs @ 12.07 hrs, Volume= 0.307 af, Depth= 3.81"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-120.00 hrs, dt= 0.02 hrs NY-62 Mead St 24-hr S0P 25-yr Rainfall=6.38"

A	rea (sf)	CN	Description		
	2,600	98	Paved park	ing, HSG C	
	29,700	74	>75% Ġras	s cover, Go	ood, HSG C
	9,800	80	>75% Gras	s cover, Go	ood, HSG D
	42,100	77	Weighted A	verage	
	39,500		93.82% Per	vious Area	
	2,600		6.18% Impe	ervious Area	a
Tc	Length	Slop	e Velocity	Capacity	Description
(min)	(feet)	(ft/ft) (ft/sec)	(cfs)	
7.2	100	0.040	0.23		Sheet Flow,
					Grass: Short n= 0.150 P2= 3.38"
0.6	50	0.040	0 1.40		Shallow Concentrated Flow,
					Short Grass Pasture Kv= 7.0 fps
7.8	150	Total			

Subcatchment 1.0S: Pre



Pre-DevelopmentNY-62 Mead St 24-hr SOP 25-yr Rainfall=6.38"Prepared by Insite Engineering, Surveying & Landscape Architecture, P.C.Printed 11/29/2021HydroCAD® 10.00-15 s/n 00891 © 2015 HydroCAD Software Solutions LLCPage 7

Summary for Subcatchment 2.0S: Pre

Runoff = 2.57 cfs @ 12.06 hrs, Volume= 0.205 af, Depth= 4.45"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-120.00 hrs, dt= 0.02 hrs NY-62 Mead St 24-hr S0P 25-yr Rainfall=6.38"

	A	rea (sf)	CN	Description			
		9,000	98	aved park	ing, HSG C		
_		15,100	74 :	>75% Ġras	s cover, Go	ood, HSG C	
		24,100	83	Neighted A	verage		
		15,100	(52.66% Per	vious Area		
		9,000		37.34% Imp	pervious Are	ea	
					_		
	Tc	Length	Slope	Velocity	Capacity	Description	
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)		
	6.9	100	0.0450	0.24		Sheet Flow,	
						Grass: Short n= 0.150 P2= 3.38"	
	0.1	15	0.0450	4.31		Shallow Concentrated Flow,	
						Paved Kv= 20.3 fps	
	0.4	35	0.0450	1.48		Shallow Concentrated Flow,	
_						Short Grass Pasture Kv= 7.0 fps	
	7.4	150	Total				

Subcatchment 2.0S: Pre



Pre-DevelopmentNY-62 Mead St 24-hr SOP 100-yr Rainfall=9.03"Prepared by Insite Engineering, Surveying & Landscape Architecture, P.C.Printed 11/29/2021HydroCAD® 10.00-15 s/n 00891 © 2015 HydroCAD Software Solutions LLCPage 8

Summary for Subcatchment 1.0S: Pre

Runoff = 5.73 cfs @ 12.07 hrs, Volume= 0.502 af, Depth= 6.23"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-120.00 hrs, dt= 0.02 hrs NY-62 Mead St 24-hr S0P 100-yr Rainfall=9.03"

A	rea (sf)	CN	Description		
	2,600	98	Paved park	ing, HSG C	
	29,700	74	>75% Gras	s cover, Go	bod, HSG C
	9,800	80	>75% Gras	s cover, Go	bod, HSG D
	42,100	77	Weighted A	verage	
	39,500		93.82% Per	rvious Area	
	2,600		6.18% Impe	ervious Area	a
Тс	Length	Slope	e Velocity	Capacity	Description
(min)	(feet)	(ft/ft) (ft/sec)	(cfs)	
7.2	100	0.040	0.23		Sheet Flow,
					Grass: Short n= 0.150 P2= 3.38"
0.6	50	0.040	0 1.40		Shallow Concentrated Flow,
					Short Grass Pasture Kv= 7.0 fps
7.8	150	Total			

Subcatchment 1.0S: Pre



Pre-DevelopmentNY-62 Mead St 24-hr S0P 100-yr Rainfall=9.03"Prepared by Insite Engineering, Surveying & Landscape Architecture, P.C.Printed 11/29/2021HydroCAD® 10.00-15 s/n 00891 © 2015 HydroCAD Software Solutions LLCPage 9

Summary for Subcatchment 2.0S: Pre

Runoff = 3.65 cfs @ 12.06 hrs, Volume= 0.321 af, Depth= 6.97"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-120.00 hrs, dt= 0.02 hrs NY-62 Mead St 24-hr S0P 100-yr Rainfall=9.03"

_	A	rea (sf)	CN E	Description			
		9,000	98 F	aved park	ing, HSG C		
_		15,100	74 >	75% Gras	s cover, Go	ood, HSG C	
		24,100	83 V	Veighted A	verage		
		15,100	6	2.66% Per	vious Area		
		9,000	3	37.34% Imp	pervious Are	ea	
	Tc	Length	Slope	Velocity	Capacity	Description	
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)		
	6.9	100	0.0450	0.24		Sheet Flow,	
						Grass: Short n= 0.150 P2= 3.38"	
	0.1	15	0.0450	4.31		Shallow Concentrated Flow,	
						Paved Kv= 20.3 fps	
	0.4	35	0.0450	1.48		Shallow Concentrated Flow,	
_						Short Grass Pasture Kv= 7.0 fps	
	7.4	150	Total				

Subcatchment 2.0S: Pre



ATTACHMENT B Post Development HydroCAD Stormwater Analysis



Post-Development	NY-62 Mead St 24-hr S0P 1-y	r Rainfall=2.82"
Prepared by Insite Engineering, Surveying & Landso	cape Architecture, P.C.	Printed 5/26/2022
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Summary for Subcatchment 1.1S-NG: Post New Impervious & Grass

Runoff = 0.40 cfs @ 12.04 hrs, Volume= 0.024 af, Depth= 1.82"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-120.00 hrs, dt= 0.02 hrs NY-62 Mead St 24-hr S0P 1-yr Rainfall=2.82"

A	rea (sf)	CN	Description		
	4,800	98	Paved park	ing, HSG C	3
	2,200	74	>75% Gras	s cover, Go	ood, HSG C
	7,000	90	Weighted A	verage	
	2,200		31.43% Pe	rvious Area	a
	4,800		68.57% lm	pervious Are	rea
Тс	Lenath	Slon	a Valocity	Canacity	Description
(min)	(feet)	(ft/f	(ft/sec)	(cfs)	Description
<u> (IIIII)</u>	(1001)	(101	.) (17,000)	(010)	Direct Entry
0.0					

Subcatchment 1.1S-NG: Post New Impervious & Grass



Summary for Subcatchment 1.1S-R: Post Redeveloped Impervious

Runoff = 0.15 cfs @ 12.04 hrs, Volume= 0.010 af, Depth= 2.59"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-120.00 hrs, dt= 0.02 hrs NY-62 Mead St 24-hr S0P 1-yr Rainfall=2.82"

A	rea (sf)	CN	Description		
	2,000	98	Paved park	ing, HSG C	C
	2,000		100.00% In	npervious A	Area
Tc (min)	Length (feet)	Slope (ft/ft	e Velocity) (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment 1.1S-R: Post Redeveloped Impervious



Post-Development	NY-62 Mead St 24-hr S0P 1-y	r Rainfall=2.82"
Prepared by Insite Engineering, Surveying & Landso	cape Architecture, P.C. P	rinted 5/26/2022
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Summary for Subcatchment 1.2S:

Runoff = 0.99 cfs @ 12.07 hrs, Volume= 0.070 af, Depth= 0.95"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-120.00 hrs, dt= 0.02 hrs NY-62 Mead St 24-hr S0P 1-yr Rainfall=2.82"

A	rea (sf)	CN	Description		
	1,700	98	Paved park	ing, HSG C	
	27,300	74	>75% Gras	s cover, Go	bod, HSG C
	9,800	80	>75% Gras	s cover, Go	bod, HSG D
	38,800	77	Weighted A	verage	
	37,100		95.62% Per	rvious Area	
	1,700		4.38% Impe	ervious Area	a
Тс	Length	Slope	e Velocity	Capacity	Description
(min)	(feet)	(ft/ft) (ft/sec)	(cfs)	
7.2	100	0.040	0.23		Sheet Flow,
					Grass: Short n= 0.150 P2= 3.38"
0.6	50	0.040	0 1.40		Shallow Concentrated Flow,
					Short Grass Pasture Kv= 7.0 fps
7.8	150	Total			

Subcatchment 1.2S:



Post-Development	NY-62 Mead St 24-hr S0P 1-yr	Rainfall=2.82"
Prepared by Insite Engineering, Surveying & Landso	cape Architecture, P.C. Prin	nted 5/26/2022
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Summary for Subcatchment 2.1S:

Runoff = 0.62 cfs @ 12.06 hrs, Volume= 0.041 af, Depth= 1.18"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-120.00 hrs, dt= 0.02 hrs NY-62 Mead St 24-hr S0P 1-yr Rainfall=2.82"

_	Ai	rea (sf)	CN	Description			
		5,700	98	Paved park	ing, HSG C		
_		12,700	74 :	>75% Ġras	s cover, Go	ood, HSG C	
		18,400	81	Weighted A	verage		
		12,700		69.02% Per	vious Area		
		5,700	:	30.98% Imp	pervious Are	ea	
					_		
	Тс	Length	Slope	Velocity	Capacity	Description	
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)		
	6.9	100	0.0450	0.24		Sheet Flow,	
						Grass: Short n= 0.150 P2= 3.38"	
	0.1	15	0.0450	4.31		Shallow Concentrated Flow,	
						Paved Kv= 20.3 fps	
	0.4	35	0.0450	1.48		Shallow Concentrated Flow,	
_						Short Grass Pasture Kv= 7.0 fps	
	7.4	150	Total				

Subcatchment 2.1S:



Post-Development	NY-62 Mead St 24-hr S0P 1-y	r Rainfall=2.82"
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Summary for Reach DL1: Design Line 1

Inflow A	Area	=	0.891 ac,	4.38% Impe	ervious,	Inflow Depth =	0.9	95" for 1-y	r event
Inflow		=	0.99 cfs @	12.07 hrs,	Volume	= 0.070) af		
Outflow	v	=	0.99 cfs @	12.07 hrs,	Volume	= 0.070) af,	Atten= 0%,	Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-120.00 hrs, dt= 0.02 hrs

Reach DL1: Design Line 1

Post-Development	NY-62 Mead St 24-hr S0P 1-	yr Rainfall=2.8	32"
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Summary for Reach DL2: Design Line 2

Inflow Ar	'ea =	0.422 ac, 3	0.98% Impervio	ous, Inflow Depth	i = 1.1	18" for 1-y	r event
Inflow	=	0.62 cfs @	12.06 hrs, Vol	ume= 0.0)41 af		
Outflow	=	0.62 cfs @	12.06 hrs, Vol	ume= 0.0	941 af,	Atten= 0%,	Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-120.00 hrs, dt= 0.02 hrs

Hydrograph Inflow Outflow 0.65 0.62 cfs 0.6 Inflow Area=0.422 ac 0.55-0.5 0.45 0.4 Flow (cfs) 0.35 0.3 0.25 0.2 0.15 0.1 0.05 0-5 10 15 20 25 30 35 40 45 50 55 60 65 Time (hours) 70 75 80 85 90 95 100 105 110 115 120 Ó

Reach DL2: Design Line 2

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Summary for Pond 1.1P:

Inflow Area =	=	0.207 ac, 7	75.56% Impe	ervious,	Inflow Dept	h = 1.99	9" for	1-yr e	event
Inflow =	:	0.54 cfs @	12.04 hrs,	Volume	= 0.	034 af			
Outflow =	:	0.48 cfs @	12.06 hrs,	Volume	= 0.	034 af, <i>i</i>	Atten= '	13%,	Lag= 1.2 min
Discarded =	:	0.48 cfs @	12.06 hrs,	Volume	= 0.	034 af			

Routing by Dyn-Stor-Ind method, Time Span= 0.00-120.00 hrs, dt= 0.02 hrs Peak Elev= 562.75' @ 12.08 hrs Surf.Area= 1,140 sf Storage= 21 cf

Plug-Flow detention time= 0.4 min calculated for 0.034 af (100% of inflow) Center-of-Mass det. time= 0.4 min (806.6 - 806.2)

Volume	Invert	Avail.Storage	Storage Description
#1A	562.70'	1,268 cf	25.25'W x 45.16'L x 4.00'H Field A
			4,561 cf Overall - 1,392 cf Embedded = 3,169 cf x 40.0% Voids
#2A	563.70'	1,392 cf	ADS_StormTech SC-740 x 30 Inside #1
			Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf
			Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap
			Row Length Adjustment= +0.44' x 6.45 sf x 5 rows
		2,660 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices	
#1	Discarded	562.70'	18.000 in/hr Exfiltration over Surface area Phas	e-In= 0.02'

Discarded OutFlow Max=0.48 cfs @ 12.06 hrs HW=562.74' (Free Discharge) **1=Exfiltration** (Exfiltration Controls 0.48 cfs)

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Post-Development

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Stage-Area-Storage for Pond 1.1P:

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
562.70	1.140	0	565.30	1,140	1.860
562.75	1,140	23	565.35	1,140	1,898
562.80	1 140	46	565 40	1 140	1,936
562.85	1,140	68	565.45	1,140	1,974
562.90	1 140	91	565 50	1 140	2 010
562.95	1 140	114	565.55	1 140	2 047
563.00	1 140	137	565.60	1 140	2 082
563.05	1 140	160	565.65	1 140	2 117
563 10	1 140	182	565 70	1 140	2 152
563 15	1 140	205	565 75	1 140	2 185
563.20	1,140	228	565.80	1,140	2,218
563 25	1 140	251	565.85	1 140	2 249
563.30	1,140	274	565.90	1,140	2,279
563.35	1,140	296	565.95	1,140	2,308
563.40	1,140	319	566.00	1,140	2,335
563.45	1,140	342	566.05	1,140	2,360
563.50	1.140	365	566.10	1.140	2,385
563.55	1.140	388	566.15	1.140	2,409
563.60	1.140	411	566.20	1.140	2,432
563.65	1,140	433	566.25	1,140	2,455
563.70	1.140	456	566.30	1.140	2,477
563.75	1,140	503	566.35	1,140	2,500
563.80	1.140	550	566.40	1.140	2,523
563.85	1,140	597	566.45	1,140	2,546
563.90	1,140	643	566.50	1,140	2,569
563.95	1,140	690	566.55	1,140	2,591
564.00	1,140	736	566.60	1,140	2,614
564.05	1,140	782	566.65	1,140	2,637
564.10	1,140	828	566.70	1,140	2,660
564.15	1,140	874		,	,
564.20	1,140	920			
564.25	1,140	966			
564.30	1,140	1,011			
564.35	1,140	1,056			
564.40	1,140	1,101			
564.45	1,140	1,145			
564.50	1,140	1,190			
564.55	1,140	1,234			
564.60	1,140	1,278			
564.65	1,140	1,322			
564.70	1,140	1,365			
564.75	1,140	1,408			
564.80	1,140	1,451			
564.85	1,140	1,493			
564.90	1,140	1,536			
564.95	1,140	1,577			
565.00	1,140	1,619			
565.05	1,140	1,660			
565.10	1,140	1,701			
565.15	1,140	1,741			
565.20	1,140	1,781			
565.25	1,140	1,820			
Post-Development	NY-62 Mead St 24-hr S0P 1-y	r Rainfall=2.82"			
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Summary for Pond FS:

Inflow Area =	0.207 ac, 75.56% Impervious, Inflow [Depth = 1.99" for 1-yr event
Inflow =	0.54 cfs @ 12.04 hrs, Volume=	0.034 af
Outflow =	0.54 cfs @ 12.04 hrs, Volume=	0.034 af, Atten= 0%, Lag= 0.0 min
Primary =	0.54 cfs @ 12.04 hrs, Volume=	0.034 af
Secondary =	0.00 cfs @ 0.00 hrs, Volume=	0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-120.00 hrs, dt= 0.02 hrs Peak Elev= 564.33' @ 12.04 hrs Flood Elev= 570.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	563.70'	8.0" Round Culvert
	-		L= 20.0' CPP, square edge headwall, Ke= 0.500
			Inlet / Outlet Invert= 563.70' / 563.70' S= 0.0000 '/' Cc= 0.900
			n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.35 sf
#2	Secondary	564.90'	12.0" Round Culvert
			L= 150.0' CPP, square edge headwall, Ke= 0.500
			Inlet / Outlet Invert= 564.90° / 563.00° S= 0.0127° Cc= 0.900° n= 0.013° Corrugated PE, smooth interior, Flow Area= 0.79° sf

Primary OutFlow Max=0.54 cfs @ 12.04 hrs HW=564.33' TW=562.73' (Dynamic Tailwater) -1=Culvert (Barrel Controls 0.54 cfs @ 2.07 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=563.70' TW=0.00' (Dynamic Tailwater) -2=Culvert (Controls 0.00 cfs)



Pond FS:

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Stage-Area-Storage for Pond FS:

Elevation	Storage	Elevation	Storage
(teet)	(cubic-feet)	(feet)	(cubic-feet)
563.70	0	568.90	0
563.80	0	569.00	0
563.90	0	569.10	0
564.00	0	569.20	0
564.10	0	569.30	0
564.20	0	569.40	0
564.30	0	569.50	0
564 50	0	569 70	0
564.60	0 0	569.80	0
564.70	0	569.90	0
564.80	0	570.00	0
564.90	0	570.10	0
565.00	0	570.20	0
565.10	0		
565.20	0		
565.30	0		
565.40	0		
565.50	0		
565.00	0		
565.80	0		
565.90	0		
566.00	ů 0		
566.10	0		
566.20	0		
566.30	0		
566.40	0		
566.50	0		
566.60	0		
566.70	0		
566.80	0		
567.00	0		
567.00	0		
567.20	0		
567.30	0 0		
567.40	0		
567.50	0		
567.60	0		
567.70	0		
567.80	0		
567.90	0		
568.00	0		
568.10	U		
208.20 569.20	U		
569 10	0		
568 50	0		
568 60	0		
568.70	0		
568.80	Ő		

Post-Development	NY-62 Mead St 24-hr S0P 10	-yr Rainfall=5.07"
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Summary for Subcatchment 1.1S-NG: Post New Impervious & Grass

Runoff = 0.74 cfs @ 12.04 hrs, Volume= 0.053 af, Depth= 3.94"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-120.00 hrs, dt= 0.02 hrs NY-62 Mead St 24-hr S0P 10-yr Rainfall=5.07"

A	rea (sf)	CN	Description			
	4,800	98	Paved park	ing, HSG C	;	
	2,200	74	>75% Gras	s cover, Go	ood, HSG C	
	7,000	90	Weighted A	verage		
	2,200	0 31.43% Pervious Area				
	4,800	68.57% Impervious Area				
-				o	D	
IC	Length	Slop	e Velocity	Capacity	Description	
(min)	(feet)	(ft/f	t) (ft/sec)	(cfs)		
6.0					Direct Entry,	

Subcatchment 1.1S-NG: Post New Impervious & Grass



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Summary for Subcatchment 1.1S-R: Post Redeveloped Impervious

Runoff = 0.24 cfs @ 12.04 hrs, Volume= 0.018 af, Depth= 4.83"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-120.00 hrs, dt= 0.02 hrs NY-62 Mead St 24-hr S0P 10-yr Rainfall=5.07"

A	rea (sf)	CN	Description				
	2,000	98	Paved parking, HSG C				
	2,000		100.00% In	npervious A	Area		
Tc (min)	Length (feet)	Slope (ft/ft	e Velocity) (ft/sec)	Capacity (cfs)	Description		
6.0					Direct Entry,		

Subcatchment 1.1S-R: Post Redeveloped Impervious



Post-Development	NY-62 Mead St 24-hr S0P 10)-yr Rainfall=5.07"
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Summary for Subcatchment 1.2S:

Runoff = 2.66 cfs @ 12.07 hrs, Volume= 0.199 af, Depth= 2.68"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-120.00 hrs, dt= 0.02 hrs NY-62 Mead St 24-hr S0P 10-yr Rainfall=5.07"

A	rea (sf)	CN	Description				
	1,700	98	98 Paved parking, HSG C				
	27,300	74	>75% Gras	s cover, Go	ood, HSG C		
	9,800	80	>75% Gras	s cover, Go	ood, HSG D		
	38,800	77	Weighted A	verage			
	37,100		95.62% Per	rvious Area			
	1,700		4.38% Impe	ervious Area	a		
Тс	Length	Slope	e Velocity	Capacity	Description		
(min)	(feet)	(ft/ft) (ft/sec)	(cfs)			
7.2	100	0.0400	0.23		Sheet Flow,		
					Grass: Short n= 0.150 P2= 3.38"		
0.6	50	0.0400	0 1.40		Shallow Concentrated Flow,		
					Short Grass Pasture Kv= 7.0 fps		
7.8	150	Total					

Subcatchment 1.2S:



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Summary for Subcatchment 2.1S:

Runoff = 1.46 cfs @ 12.06 hrs, Volume= 0.107 af, Depth= 3.05"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-120.00 hrs, dt= 0.02 hrs NY-62 Mead St 24-hr S0P 10-yr Rainfall=5.07"

_	Ai	rea (sf)	CN	Description			
		5,700	98	Paved park	ing, HSG C		
_		12,700	74	>75% Ġras	s cover, Go	ood, HSG C	
		18,400	81	Weighted A	verage		
		12,700		69.02% Per	vious Area		
		5,700		30.98% Imp	pervious Are	ea	
	Tc	Length	Slope	Velocity	Capacity	Description	
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)		
	6.9	100	0.0450	0.24		Sheet Flow,	
						Grass: Short n= 0.150 P2= 3.38"	
	0.1	15	0.0450	4.31		Shallow Concentrated Flow,	
						Paved Kv= 20.3 fps	
	0.4	35	0.0450	1.48		Shallow Concentrated Flow,	
_						Short Grass Pasture Kv= 7.0 fps	
	7.4	150	Total				

Subcatchment 2.1S:



Post-Development	NY-62 Mead St 24-hr S0P 1	0-yr Rainfall=5.07"
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Summary for Reach DL1: Design Line 1

Inflow /	Area	ι =	0.891 ac,	4.38% Impervious,	Inflow Depth = 2.6	58" for 10-yr event
Inflow		=	2.66 cfs @	12.07 hrs, Volume	= 0.199 af	
Outflov	N	=	2.66 cfs @	12.07 hrs, Volume	= 0.199 af,	Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-120.00 hrs, dt= 0.02 hrs



Reach DL1: Design Line 1

Post-Development	NY-62 Mead St 24-hr S0P	10-yr Rainfall=5.07"
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Summary for Reach DL2: Design Line 2

Inflow Ar	rea =	0.422 ac, 30.98% Impervious, Inflow	Depth = 3.05"	for 10-yr event
Inflow	=	1.46 cfs @ 12.06 hrs, Volume=	0.107 af	
Outflow	=	1.46 cfs @ 12.06 hrs, Volume=	0.107 af, Atte	n= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-120.00 hrs, dt= 0.02 hrs

0-

0 5

10 15 20

25 30 35

40 45 50

(g) Ng

55 60 65 Time (hours) 70 75 80 85 90 95 100 105 110 115 120

Reach DL2: Design Line 2

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Summary for Pond 1.1P:

Inflow Area	=	0.207 ac, 7	75.56% Impervio	ous, Inflow [Depth =	4.14"	for 10-y	r event
Inflow	=	0.98 cfs @	12.04 hrs, Volu	ume=	0.071 a	af		
Outflow	=	0.48 cfs @	11.98 hrs, Volu	ume=	0.071 a	af, Atte	n= 52%,	Lag= 0.0 min
Discarded	=	0.48 cfs @	11.98 hrs, Volu	ume=	0.071 a	af		

Routing by Dyn-Stor-Ind method, Time Span= 0.00-120.00 hrs, dt= 0.02 hrs Peak Elev= 563.24' @ 12.19 hrs Surf.Area= 1,140 sf Storage= 246 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow) Center-of-Mass det. time= 1.7 min (786.4 - 784.7)

Volume	Invert	Avail.Storage	Storage Description
#1A	562.70'	1,268 cf	25.25'W x 45.16'L x 4.00'H Field A
			4,561 cf Overall - 1,392 cf Embedded = 3,169 cf x 40.0% Voids
#2A	563.70'	1,392 cf	ADS_StormTech SC-740 x 30 Inside #1
			Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf
			Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap
			Row Length Adjustment= +0.44' x 6.45 sf x 5 rows
		2,660 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices	
#1	Discarded	562.70'	18.000 in/hr Exfiltration over Surface area	Phase-In= 0.02'

Discarded OutFlow Max=0.48 cfs @ 11.98 hrs HW=562.75' (Free Discharge) **1=Exfiltration** (Exfiltration Controls 0.48 cfs)

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Pond 1.1P:

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Stage-Area-Storage for Pond 1.1P:

Elevation (feet)	Surface	Storage	Elevation	Surface	Storage
562 70	1 140	0	565.30	1 140	1 860
562.75	1,140	23	565.35	1,140	1,898
562.80	1.140	46	565.40	1.140	1.936
562.85	1,140	68	565.45	1,140	1,974
562.90	1,140	91	565.50	1,140	2,010
562.95	1,140	114	565.55	1,140	2,047
563.00	1,140	137	565.60	1,140	2,082
563.05	1,140	160	565.65	1,140	2,117
563.10	1,140	182	565.70	1,140	2,152
563.15	1,140	205	565.75	1,140	2,185
563.20	1,140	228	565.80	1,140	2,218
563.25	1,140	251	565.85	1,140	2,249
563.30	1,140	274	565.90	1,140	2,279
563.35	1,140	296	565.95	1,140	2,308
563.40	1,140	319	566.00	1,140	2,335
563.45	1,140	342	566.05	1,140	2,360
563.50	1,140	365	566.10	1,140	2,385
563.55	1,140	388	566.15	1,140	2,409
563.60	1,140	411	566.20	1,140	2,432
563.65	1,140	433	566.25	1,140	2,455
563.70	1,140	456	566.30	1,140	2,477
503.75 562.90	1,140	503	000.30 566.40	1,140	2,500
562.60	1,140	500 507	566.40	1,140	2,523
563.00	1,140	597 643	566 50	1,140	2,540
563.90	1,140	690	566 55	1,140	2,509
564.00	1,140	736	566 60	1,140	2,591
564.05	1,140	782	566 65	1,140	2,014
564 10	1 140	828	566 70	1 140	2,660
564 15	1 140	874	000.70	1,110	2,000
564.20	1,140	920			
564.25	1.140	966			
564.30	1,140	1.011			
564.35	1,140	1,056			
564.40	1,140	1,101			
564.45	1,140	1,145			
564.50	1,140	1,190			
564.55	1,140	1,234			
564.60	1,140	1,278			
564.65	1,140	1,322			
564.70	1,140	1,365			
564.75	1,140	1,408			
564.80	1,140	1,451			
564.85	1,140	1,493			
564.90	1,140	1,536			
564.95	1,140	1,577			
505.UU	1,140	1,619			
000.00 565 10	1,140	1,000			
565.1U	1,140	1,/01			
565 20	1,140	1,/41			
565.20	1,140	1,/01			
000.20	1,140	1,020			
			l		

Post-Development	NY-62 Mead St 24-hr S0P 1	0-yr Rainfall=5.07"
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Summary for Pond FS:

Inflow Area =	0.207 ac, 75.56% Impervious, Inflow De	epth = 4.14" for 10-yr event
Inflow =	0.98 cfs @ 12.04 hrs, Volume=	0.071 af
Outflow =	0.98 cfs @ 12.04 hrs, Volume=	0.071 af, Atten= 0%, Lag= 0.0 min
Primary =	0.98 cfs @ 12.04 hrs, Volume=	0.071 af
Secondary =	0.00 cfs @ 0.00 hrs, Volume=	0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-120.00 hrs, dt= 0.02 hrs Peak Elev= 564.68' @ 12.04 hrs Flood Elev= 570.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	563.70'	8.0" Round Culvert
	-		L= 20.0' CPP, square edge headwall, Ke= 0.500
			Inlet / Outlet Invert= 563.70' / 563.70' S= 0.0000 '/' Cc= 0.900
			n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.35 sf
#2	Secondary	564.90'	12.0" Round Culvert
			L= 150.0' CPP, square edge headwall, Ke= 0.500
			Inlet / Outlet Invert= 564.90° / 563.00° S= 0.0127° Cc= 0.900° n= 0.013° Corrugated PE, smooth interior, Flow Area= 0.79° sf

Primary OutFlow Max=0.98 cfs @ 12.04 hrs HW=564.68' TW=562.93' (Dynamic Tailwater) -1=Culvert (Barrel Controls 0.98 cfs @ 2.81 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=563.70' TW=0.00' (Dynamic Tailwater) 2=Culvert (Controls 0.00 cfs)



Pond FS:

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Stage-Area-Storage for Pond FS:

Elevation	Storage	Elevation	Storage
(feet)	(cubic-feet)	(teet)	(cubic-feet)
563.70	0	569.90	0
563.90	0	569.10	0
564.00	0	569.20	0
564.10	0	569.30	0
564.20	0	569.40	0
564.30	0	569.50	0
564.40 564.50	0	569.60 569.70	0
564.60	0	569.80	0
564.70	Ő	569.90	0 0
564.80	0	570.00	0
564.90	0	570.10	0
565.00	0	570.20	0
565.10	0		
565.30	0		
565.40	0		
565.50	0		
565.60	0		
565.70	0		
565.90	0		
566.00	Ő		
566.10	0		
566.20	0		
566.30	0		
566 50	0		
566.60	0		
566.70	Ő		
566.80	0		
566.90	0		
567.00	0		
567.10	0		
567.30	0		
567.40	0		
567.50	0		
567.60	0		
567.70	0		
567.00	0		
568.00	0		
568.10	Ő		
568.20	0		
568.30	0		
568.40	0		
568.50	0		
568.70	0		
568.80	Ő		

Post-Development	NY-62 Mead St 24-hr S0P 25-yr I	Rainfall=6.38"
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Summary for Subcatchment 1.1S-NG: Post New Impervious & Grass

Runoff = 0.90 cfs @ 12.04 hrs, Volume= 0.070 af, Depth= 5.22"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-120.00 hrs, dt= 0.02 hrs NY-62 Mead St 24-hr S0P 25-yr Rainfall=6.38"

A	rea (sf)	CN	Description			
	4,800	98	Paved park	ing, HSG C	3	
	2,200	74	>75% Ġras	s cover, Go	ood, HSG C	
	7,000 90 Weighted Average					
	2,200	2,200 31.43% Pervious Area				
	4,800 68.57% Impervious Area					
Та	l a a atta	Clar		Conceitu	Description	
	Length	Siop		Capacity	Description	
<u>(min)</u>	(teet)	(11/1	(IT/SeC)	(CIS)		
6.0					Direct Entry,	





Post-DevelopmentNY-62 Mead St 24-hr S0P 25-yrRainfall=6.38"Prepared by Insite Engineering, Surveying & Landscape Architecture, P.C.Printed 5/26/2022HydroCAD® 10.00-15 s/n 00891 © 2015 HydroCAD Software Solutions LLCPage 25

Summary for Subcatchment 1.1S-R: Post Redeveloped Impervious

Runoff = 0.28 cfs @ 12.04 hrs, Volume= 0.023 af, Depth= 6.14"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-120.00 hrs, dt= 0.02 hrs NY-62 Mead St 24-hr S0P 25-yr Rainfall=6.38"

A	rea (sf)	CN	Description					
	2,000	98	98 Paved parking, HSG C					
	2,000		100.00% Impervious Area					
Tc (min)	Length (feet)	Slope (ft/ft	e Velocity) (ft/sec)	Capacity (cfs)	Description			
6.0					Direct Entry,			

Subcatchment 1.1S-R: Post Redeveloped Impervious



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Summary for Subcatchment 1.2S:

Runoff = 3.53 cfs @ 12.07 hrs, Volume= 0.283 af, Depth= 3.81"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-120.00 hrs, dt= 0.02 hrs NY-62 Mead St 24-hr S0P 25-yr Rainfall=6.38"

A	rea (sf)	CN	Description		
	1,700	98	Paved park	ing, HSG C	
	27,300	74	>75% Gras	s cover, Go	bod, HSG C
	9,800	80	>75% Gras	s cover, Go	bod, HSG D
	38,800	77	Weighted A	verage	
	37,100		95.62% Per	rvious Area	
	1,700		4.38% Impe	ervious Are	a
Tc	Length	Slope	e Velocity	Capacity	Description
(min)	(feet)	(ft/ft) (ft/sec)	(cfs)	
7.2	100	0.040	0.23		Sheet Flow,
					Grass: Short n= 0.150 P2= 3.38"
0.6	50	0.040	0 1.40		Shallow Concentrated Flow,
					Short Grass Pasture Kv= 7.0 fps
7.8	150	Total			

Subcatchment 1.2S:



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Summary for Subcatchment 2.1S:

Runoff = 1.88 cfs @ 12.06 hrs, Volume= 0.149 af, Depth= 4.23"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-120.00 hrs, dt= 0.02 hrs NY-62 Mead St 24-hr S0P 25-yr Rainfall=6.38"

_	Ai	rea (sf)	CN	Description			
		5,700	98	Paved park	ing, HSG C		
_		12,700	74	>75% Ġras	s cover, Go	ood, HSG C	
		18,400	81	Weighted A	verage		
		12,700		69.02% Per	vious Area		
		5,700		30.98% Imp	pervious Are	ea	
	Tc	Length	Slope	Velocity	Capacity	Description	
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)		
	6.9	100	0.0450	0.24		Sheet Flow,	
						Grass: Short n= 0.150 P2= 3.38"	
	0.1	15	0.0450	4.31		Shallow Concentrated Flow,	
						Paved Kv= 20.3 fps	
	0.4	35	0.0450	1.48		Shallow Concentrated Flow,	
_						Short Grass Pasture Kv= 7.0 fps	
	7.4	150	Total				

Subcatchment 2.1S:



Post-Development	NY-62 Mead St 24-hr S0P 25-yr Rainfall=6.3	38"
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Summary for Reach DL1: Design Line 1

Inflow /	Area	ι =	0.891 ac,	4.38% Impervious,	Inflow Depth = 3.8	31" for 25-yr event
Inflow		=	3.53 cfs @	12.07 hrs, Volume	= 0.283 af	
Outflov	v	=	3.53 cfs @	12.07 hrs, Volume	= 0.283 af,	Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-120.00 hrs, dt= 0.02 hrs



Reach DL1: Design Line 1

Post-Development	NY-62 Mead St 24-hr S0P 25-yr Ra	infall=6.38"
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Summary for Reach DL2: Design Line 2

Inflow A	rea =	0.422 ac, 30.98% Impervious, I	nflow Depth = 4.23" for 25-yr event
Inflow	=	1.88 cfs @ 12.06 hrs, Volume=	0.149 af
Outflow	=	1.88 cfs @ 12.06 hrs, Volume=	0.149 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-120.00 hrs, dt= 0.02 hrs

Reach DL2: Design Line 2



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Summary for Pond 1.1P:

Inflow Area	=	0.207 ac, 7	75.56% Imper	vious, Inflow	Depth =	5.42"	for	25-yr event
Inflow	=	1.18 cfs @	12.04 hrs, V	/olume=	0.093	af		
Outflow	=	0.48 cfs @	11.96 hrs, V	/olume=	0.093	af, Atte	n= 6	0%, Lag= 0.0 min
Discarded	=	0.48 cfs @	11.96 hrs, V	/olume=	0.093	af		

Routing by Dyn-Stor-Ind method, Time Span= 0.00-120.00 hrs, dt= 0.02 hrs Peak Elev= 563.57' @ 12.22 hrs Surf.Area= 1,140 sf Storage= 397 cf

Plug-Flow detention time= 2.8 min calculated for 0.093 af (100% of inflow) Center-of-Mass det. time= 2.8 min (780.1 - 777.3)

Volume	Invert	Avail.Storage	Storage Description
#1A	562.70'	1,268 cf	25.25'W x 45.16'L x 4.00'H Field A
			4,561 cf Overall - 1,392 cf Embedded = 3,169 cf x 40.0% Voids
#2A	563.70'	1,392 cf	ADS_StormTech SC-740 x 30 Inside #1
			Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf
			Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap
			Row Length Adjustment= +0.44' x 6.45 sf x 5 rows
		2,660 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices	
#1	Discarded	562.70'	18.000 in/hr Exfiltration over Surface area	Phase-In= 0.02'

Discarded OutFlow Max=0.48 cfs @ 11.96 hrs HW=562.75' (Free Discharge) **1=Exfiltration** (Exfiltration Controls 0.48 cfs)

Pond 1.1P: Hydrograph - Inflow 1.18 cfs - Discarded Inflow Area=0.207 ac Peak Elev=563.57' 1 Storage=397 cf Flow (cfs) 0.48 cfs 0-5 10 15 20 25 30 35 40 45 70 75 80 85 90 95 100 105 110 115 120 50 55 60 65 Ó Time (hours)

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Stage-Area-Storage for Pond 1.1P:

Elevation	Surface	Storage	Elevation	Surface	Storage
562 70	1 140	0	565 30	1 140	1 860
562.75	1 140	23	565.35	1 140	1,000
562.80	1 140	46	565.40	1 140	1,000
562.85	1,140	68	565.45	1.140	1,974
562.90	1.140	91	565.50	1.140	2.010
562.95	1,140	114	565.55	1,140	2,047
563.00	1,140	137	565.60	1,140	2,082
563.05	1,140	160	565.65	1,140	2,117
563.10	1,140	182	565.70	1,140	2,152
563.15	1,140	205	565.75	1,140	2,185
563.20	1,140	228	565.80	1,140	2,218
563.25	1,140	251	565.85	1,140	2,249
563.30	1,140	274	565.90	1,140	2,279
563.35	1,140	296	565.95	1,140	2,308
563.40	1,140	319	566.00	1,140	2,335
563.45	1,140	342	566.05	1,140	2,360
563.50	1,140	365	566.10	1,140	2,385
563.55	1,140	388	566.15	1,140	2,409
562.65	1,140	411	566.25	1,140	2,432
563.05	1,140	433	566 30	1,140	2,400
563 75	1,140	400 503	566.35	1,140	2,477
563.80	1 140	550	566 40	1,140	2,500
563.85	1,140	597	566.45	1,140	2,546
563.90	1.140	643	566.50	1.140	2.569
563.95	1,140	690	566.55	1,140	2,591
564.00	1,140	736	566.60	1,140	2,614
564.05	1,140	782	566.65	1,140	2,637
564.10	1,140	828	566.70	1,140	2,660
564.15	1,140	874			
564.20	1,140	920			
564.25	1,140	966			
564.30	1,140	1,011			
564.35	1,140	1,056			
564.40	1,140	1,101			
564.45	1,140	1,145			
564.50 564.55	1,140	1,190			
564.55	1,140	1,204			
564.65	1,140	1,270			
564 70	1,140	1,365			
564 75	1 140	1 408			
564.80	1,140	1,451			
564.85	1,140	1,493			
564.90	1,140	1,536			
564.95	1,140	1,577			
565.00	1,140	1,619			
565.05	1,140	1,660			
565.10	1,140	1,701			
565.15	1,140	1,741			
565.20	1,140	1,781			
565.25	1,140	1,820			

Summary for Pond FS:

Inflow Area	=	0.207 ac, 7	'5.56% Impe	ervious, Inflow	Depth = 5.4	2" for 25-	yr event
Inflow =	=	1.18 cfs @	12.04 hrs,	Volume=	0.093 af		
Outflow =	=	1.18 cfs @	12.04 hrs,	Volume=	0.093 af,	Atten= 0%,	Lag= 0.0 min
Primary =	=	1.18 cfs @	12.04 hrs,	Volume=	0.093 af		•
Secondary =	=	0.00 cfs @	0.00 hrs,	Volume=	0.000 af		

Routing by Dyn-Stor-Ind method, Time Span= 0.00-120.00 hrs, dt= 0.02 hrs Peak Elev= 564.82' @ 12.04 hrs Flood Elev= 570.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	563.70'	8.0" Round Culvert
	-		L= 20.0' CPP, square edge headwall, Ke= 0.500
			Inlet / Outlet Invert= 563.70' / 563.70' S= 0.0000 '/' Cc= 0.900
			n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.35 sf
#2	Secondary	564.90'	12.0" Round Culvert
			L= 150.0' CPP, square edge headwall, Ke= 0.500
			Inlet / Outlet Invert= 564.90' / 563.00' S= 0.0127 '/' Cc= 0.900
			n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.18 cfs @ 12.04 hrs HW=564.82' TW=563.06' (Dynamic Tailwater) -1=Culvert (Barrel Controls 1.18 cfs @ 3.37 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=563.70' TW=0.00' (Dynamic Tailwater)



Pond FS:

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Stage-Area-Storage for Pond FS:

Elevation	Storage	Elevation	Storage
(feet)	(cubic-feet)	(feet)	(cubic-feet)
563.70	0	568.90	0
562.00	0	569.00	0
564.00	0	569.10	0
564 10	0	569.30	0
564.20	Ő	569.40	0 0
564.30	0	569.50	0
564.40	0	569.60	0
564.50	0	569.70	0
564.60	0	569.80	0
564.70	0	569.90	0
564.80	0	570.00	0
565.00	0	570.10	0
565.00	0	570.20	0
565.20	0		
565.30	Ő		
565.40	0		
565.50	0		
565.60	0		
565.70	0		
565.80	0		
565.90	0		
566 10	0		
566 20	0		
566.30	Ő		
566.40	0		
566.50	0		
566.60	0		
566.70	0		
566.80	0		
566.90	0		
567.00	0		
567.10	0		
567.30	0		
567.40	Ő		
567.50	0		
567.60	0		
567.70	0		
567.80	0		
567.90	0		
569 10	U		
568 20	0		
568.30	0		
568.40	õ		
568.50	0		
568.60	0		
568.70	0		
568.80	0		
		l	

Post-DevelopmentNY-62 Mead St 24-hr S0P 100-yr Rainfall=9.03"Prepared by Insite Engineering, Surveying & Landscape Architecture, P.C.Printed 5/26/2022HydroCAD® 10.00-15 s/n 00891 © 2015 HydroCAD Software Solutions LLCPage 35

Summary for Subcatchment 1.1S-NG: Post New Impervious & Grass

Runoff = 1.21 cfs @ 12.04 hrs, Volume= 0.105 af, Depth= 7.82"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-120.00 hrs, dt= 0.02 hrs NY-62 Mead St 24-hr S0P 100-yr Rainfall=9.03"

A	rea (sf)	CN	Description			
	4,800	98	Paved park	ing, HSG C	0	
	2,200	74	>75% Gras	s cover, Go	ood, HSG C	
	7,000	90	Weighted A	verage		
	2,200		31.43% Pe	rvious Area	a	
	4,800	300 68.57% Impervious Area				
Tc (min)	Length (feet)	Slop (ft/f	e Velocity) (ft/sec)	Capacity (cfs)	Description	
6.0					Direct Entry,	

Subcatchment 1.1S-NG: Post New Impervious & Grass



Post-DevelopmentNY-62 Mead St 24-hr S0P 100-yr Rainfall=9.03"Prepared by Insite Engineering, Surveying & Landscape Architecture, P.C.Printed 5/26/2022HydroCAD® 10.00-15 s/n 00891 © 2015 HydroCAD Software Solutions LLCPage 36

Summary for Subcatchment 1.1S-R: Post Redeveloped Impervious

Runoff = 0.36 cfs @ 12.04 hrs, Volume= 0.034 af, Depth= 8.79"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-120.00 hrs, dt= 0.02 hrs NY-62 Mead St 24-hr S0P 100-yr Rainfall=9.03"

A	rea (sf)	CN	Description				
	2,000	98	Paved parking, HSG C				
	2,000		100.00% In	npervious A	Area		
Tc (min)	Length (feet)	Slope (ft/ft	Velocity (ft/sec)	Capacity (cfs)	Description		
6.0					Direct Entry,		

Subcatchment 1.1S-R: Post Redeveloped Impervious



Post-Development	NY-62 Mead St 24-hr S0P 100-yr F	ainfall=9.03"
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Summary for Subcatchment 1.2S:

Runoff = 5.28 cfs @ 12.07 hrs, Volume= 0.462 af, Depth= 6.23"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-120.00 hrs, dt= 0.02 hrs NY-62 Mead St 24-hr S0P 100-yr Rainfall=9.03"

A	rea (sf)	CN	Description		
	1,700	98	Paved park	ing, HSG C	
	27,300	74	>75% Gras	s cover, Go	ood, HSG C
	9,800	80	>75% Gras	s cover, Go	bod, HSG D
	38,800	77	Weighted A	verage	
	37,100		95.62% Per	rvious Area	
	1,700		4.38% Impe	ervious Area	a
Tc	Length	Slope	e Velocity	Capacity	Description
(min)	(feet)	(ft/ft) (ft/sec)	(cfs)	
7.2	100	0.0400	0.23		Sheet Flow,
					Grass: Short n= 0.150 P2= 3.38"
0.6	50	0.0400	0 1.40		Shallow Concentrated Flow,
					Short Grass Pasture Kv= 7.0 fps
7.8	150	Total			

Subcatchment 1.2S:



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Summary for Subcatchment 2.1S:

Runoff = 2.71 cfs @ 12.06 hrs, Volume= 0.237 af, Depth= 6.72"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-120.00 hrs, dt= 0.02 hrs NY-62 Mead St 24-hr S0P 100-yr Rainfall=9.03"

_	A	rea (sf)	CN I	Description			
		5,700	98 I	Paved park	ing, HSG C		
_		12,700	74 :	>75% Ġras	s cover, Go	ood, HSG C	
		18,400	81	Weighted A	verage		
		12,700	(69.02% Per	vious Area		
		5,700	(30.98% Imp	pervious Are	ea	
	Tc	Length	Slope	Velocity	Capacity	Description	
-	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)		
	6.9	100	0.0450	0.24		Sheet Flow,	
						Grass: Short n= 0.150 P2= 3.38"	
	0.1	15	0.0450	4.31		Shallow Concentrated Flow,	
						Paved Kv= 20.3 fps	
	0.4	35	0.0450	1.48		Shallow Concentrated Flow,	
_						Short Grass Pasture Kv= 7.0 fps	
	7.4	150	Total				

Subcatchment 2.1S:



Post-Development	NY-62 Mead St 24-hr S0P 100-yr Ra	infall=9.03"
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Summary for Reach DL1: Design Line 1

Inflow A	Area =	0.891 ac,	4.38% Impervious,	Inflow Depth = 6.2	23" for 100-yr event
Inflow	=	5.36 cfs @	12.06 hrs, Volume	= 0.463 af	
Outflow	- =	5.36 cfs @	12.06 hrs, Volume	= 0.463 af,	Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-120.00 hrs, dt= 0.02 hrs



Reach DL1: Design Line 1

Post-Development	NY-62 Mead St 24-hr S0P 100-yr R	ainfall=9.03"
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Summary for Reach DL2: Design Line 2

Inflow Are	ea =	0.422 ac, 30.9	8% Impervious,	Inflow Depth =	6.72"	for 100-yr event
Inflow	=	2.71 cfs @ 12	.06 hrs, Volume	e= 0.237 a	af	
Outflow	=	2.71 cfs @ 12	.06 hrs, Volume	e= 0.237 a	af, At	ten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-120.00 hrs, dt= 0.02 hrs

Reach DL2: Design Line 2



Post-DevelopmentNY-62 Mead St 24-hr SOP 100-yr Rainfall=9.03"Prepared by Insite Engineering, Surveying & Landscape Architecture, P.C.Printed 5/26/2022HydroCAD® 10.00-15 s/n 00891 © 2015 HydroCAD Software Solutions LLCPage 41

Summary for Pond 1.1P:

Inflow Area	=	0.207 ac, 7	75.56% Impervious	Inflow Depth =	8.00" for	100-yr event
Inflow	=	1.46 cfs @	12.04 hrs, Volum	e= 0.138	af	
Outflow	=	0.48 cfs @	11.90 hrs, Volum	e= 0.138	af, Atten= 6	67%, Lag= 0.0 min
Discarded	=	0.48 cfs @	11.90 hrs, Volum	e= 0.138	af	

Routing by Dyn-Stor-Ind method, Time Span= 0.00-120.00 hrs, dt= 0.02 hrs Peak Elev= 564.03' @ 12.30 hrs Surf.Area= 1,140 sf Storage= 762 cf

Plug-Flow detention time= 6.1 min calculated for 0.138 af (100% of inflow) Center-of-Mass det. time= 6.1 min (773.5 - 767.5)

Volume	Invert	Avail.Storage	Storage Description
#1A	562.70'	1,268 cf	25.25'W x 45.16'L x 4.00'H Field A
			4,561 cf Overall - 1,392 cf Embedded = 3,169 cf x 40.0% Voids
#2A	563.70'	1,392 cf	ADS_StormTech SC-740 x 30 Inside #1
			Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf
			Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap
			Row Length Adjustment= +0.44' x 6.45 sf x 5 rows
		2,660 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices	
#1	Discarded	562.70'	18.000 in/hr Exfiltration over Surface area	Phase-In= 0.02'

Discarded OutFlow Max=0.48 cfs @ 11.90 hrs HW=562.76' (Free Discharge) **1=Exfiltration** (Exfiltration Controls 0.48 cfs)





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Stage-Area-Storage for Pond 1.1P:

Elevation (feet)	Surface (sg-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
562 70	1.140	0	565.30	1 140	1 860
562 75	1 140	23	565.35	1 140	1 898
562.80	1 140	46	565 40	1 140	1,936
562.85	1,140	68	565.45	1,140	1,974
562.90	1 140	91	565 50	1 140	2 010
562.95	1,140	114	565.55	1,140	2.047
563.00	1 140	137	565.60	1 140	2 082
563.05	1,140	160	565.65	1.140	2,117
563.10	1,140	182	565.70	1,140	2,152
563.15	1,140	205	565.75	1,140	2.185
563.20	1,140	228	565.80	1,140	2,218
563.25	1,140	251	565.85	1,140	2,249
563.30	1,140	274	565.90	1,140	2,279
563.35	1,140	296	565.95	1,140	2,308
563.40	1,140	319	566.00	1,140	2,335
563.45	1,140	342	566.05	1,140	2,360
563.50	1,140	365	566.10	1,140	2,385
563.55	1,140	388	566.15	1,140	2,409
563.60	1,140	411	566.20	1,140	2,432
563.65	1,140	433	566.25	1,140	2,455
563.70	1,140	456	566.30	1,140	2,477
563.75	1,140	503	566.35	1,140	2,500
563.80	1,140	550	566.40	1,140	2,523
563.85	1,140	597	566.45	1,140	2,546
563.90	1,140	643	566.50	1,140	2,569
563.95	1,140	690	566.55	1,140	2,591
564.00	1,140	/36	566.60	1,140	2,614
564.05	1,140	782	566.65	1,140	2,637
564.10	1,140	828	566.70	1,140	2,660
564.15	1,140	874			
564.20	1,140	920			
564.20	1,140	900			
564.30	1,140	1,011			
564.33	1,140	1,050			
564.45	1,140	1,101			
564 50	1,140	1,140			
564 55	1 140	1,100			
564 60	1 140	1,204			
564 65	1 140	1,322			
564 70	1 140	1,365			
564 75	1 140	1,000			
564.80	1,140	1,451			
564.85	1,140	1,493			
564.90	1,140	1.536			
564.95	1,140	1,577			
565.00	1,140	1,619			
565.05	1,140	1,660			
565.10	1,140	1,701			
565.15	1,140	1,741			
565.20	1,140	1,781			
565.25	1,140	1,820			

Summary for Pond FS:

Inflow Area =	0.207 ac, 75.5	6% Impervious, Inflow	w Depth = 8.04" f	or 100-yr event
Inflow =	1.57 cfs @ 12	.04 hrs, Volume=	0.138 af	
Outflow =	1.57 cfs @ 12	.04 hrs, Volume=	0.138 af, Atten	= 0%, Lag= 0.0 min
Primary =	1.46 cfs @ 12	.04 hrs, Volume=	0.138 af	-
Secondary =	0.12 cfs @ 12	.04 hrs, Volume=	0.001 af	

Routing by Dyn-Stor-Ind method, Time Span= 0.00-120.00 hrs, dt= 0.02 hrs Peak Elev= 565.06' @ 12.04 hrs Flood Elev= 570.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	563.70'	8.0" Round Culvert
	-		L= 20.0' CPP, square edge headwall, Ke= 0.500
			Inlet / Outlet Invert= 563.70' / 563.70' S= 0.0000 '/' Cc= 0.900
			n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.35 sf
#2	Secondary	564.90'	12.0" Round Culvert
			L= 150.0' CPP, square edge headwall, Ke= 0.500
			Inlet / Outlet Invert= 564.90° / 563.00° S= 0.0127° Cc= 0.900° n= 0.013° Corrugated PE, smooth interior, Flow Area= 0.79° sf

Primary OutFlow Max=1.46 cfs @ 12.04 hrs HW=565.06' TW=563.39' (Dynamic Tailwater) **1=Culvert** (Barrel Controls 1.46 cfs @ 4.17 fps)

Secondary OutFlow Max=0.11 cfs @ 12.04 hrs HW=565.06' TW=0.00' (Dynamic Tailwater) 2=Culvert (Inlet Controls 0.11 cfs @ 1.38 fps)



Pond FS:

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Stage-Area-Storage for Pond FS:

Elevation	Storage	Elevation	Storage
(feet)	(cubic-feet)	(feet)	(cubic-feet)
563.70	0	568.90	0
563.80	0	569.00	0
563.90	0	569.10	0
564.00	0	569.20	0
564.10	0	569.30	0
564.20	0	569.40	0
564 40	0	569.60	0
564.50	0	569.70	0
564.60	0	569.80	0
564.70	0	569.90	0
564.80	0	570.00	0
564.90	0	570.10	0
565.00	0	570.20	0
565.10	0		
565.20	0		
565.30	0		
565 50	0		
565.60	Ő		
565.70	0		
565.80	0		
565.90	0		
566.00	0		
566.10	0		
566.20	0		
566 40	0		
566.50	0		
566.60	0 0		
566.70	0		
566.80	0		
566.90	0		
567.00	0		
567.10	0		
567.20	0		
567.30	0		
567.50	0		
567.60	0		
567.70	0		
567.80	0		
567.90	0		
568.00	0		
568.10	0		
568.20	U		
569.30	U		
568 50	0		
568 60	0		
568.70	0		
568.80	Ő		

ATTACHMENT C Pool Drawdown Calculation

Pool Length = 25'

Pool Width = 23'

Pool Area = Length x Width = $23' \times 25' = 575$ s.f.

Drawdown Depth = 0.5'

Drawdown Volume = Pool Area x Drawdown Depth = 575 s.f. x 0.5' = 287.5 c.f.

Storage volume provided below infiltration system overflow = 1,536 c.f. (as sown in Table 1)

1,536 c.f. is greater then 287.5 c.f. therefore enough volume is provided in the infiltration system to accommodate a 6" drawdown.
FIGURES





		_
<u>LEG</u>	<u>SEND</u>	
\rangle	SUBCATCHMENT	
\rightarrow	TIME OF CONCENTRATION SHEET FLOW	
\rightarrow	TIME OF CONCENTRATION SHALLOW CONCENTRATED FLOW	
	DESIGN LINE	
	SUBCATCHMENT CONTRIBUTING AREA	

	REVISION		BY
S / ERING, SURV PE ARCHITECT	TEYING & TURE, P.C.	3 Garrett Place Carmel, NY 10512 (845) 225–9690 (845) 225–9717 fo www.insite–eng.con	ax 1
RESIDENCE BORO, WESTCHESTER	CO, NEW YORK		
<u>ELOPMENT</u> GE_MAP			
PROJECT MANAGER	J.M.W.	FIGURE NO.	
DRAWN BY	Т.М.В.	1	
CHECKED BY	J.M.W.	1	





<u>LEG</u>	END
>	SUBCATCHMENT
7	STORMWATER MANAGEMENT PRACTICE
\rightarrow	TIME OF CONCENTRATION SHEET FLOW
\rightarrow	TIME OF CONCENTRATION SHALLOW CONCENTRATED FLOW
	DESIGN LINE
	SUBCATCHMENT CONTRIBUTING AREA
	STORMWATER MANAGEMENT / GREEN INFRASTRUCTURE PRACTICE AREA

REVISION		BY
S / T E ERING, SURVEYING & PE ARCHITECTURE, P.C.	3 Garrett Place Carmel, NY 10512 (845) 225–9690 (845) 225–9717 fo www.insite–eng.con	ax 1
RESIDENCE BORO, WESTCHESTER CO, NEW YORK IPMENT		
<u>GE MAP</u>		
PROJECT J.M.W.	FIGURE NO.	
DRAWN BY T.M.B.	2	
CHECKED J.M.W. BY		







	<u>LEGEND</u>
)	- FXISTING PROPERTY LINE
	- EXISTING SETBACK
	EXISTING STONE WALL
	- EXISTING 10' CONTOUR
	- EXISTING 2' CONTOUR
	EXISTING SPOT GRADE
-0	— EXISTING CHAIN LINK FENCE
	— EXISTING WETLAND LIMIT LINE
	- EXISTING WETLAND BUFFER
	EXISTING WELL
	— PROPOSED 2' CONTOUR
	PROPOSED RETAINING WALL
00.5	PROPOSED SPOT ELEVATION
	PROPOSED CATCH BASIN
	PROPOSED END SECTION
	PROPOSED DRAINAGE PIPE
	- PROPOSED SILT FENCE OR STRAW WATTLE
	- PROPOSED CONSTRUCTION FENCE
••••	• PROPOSED LIMITS OF DISTURBANCE
/	PROPOSED TEMPORARY SOIL STOCKPILE
	PROPOSED STABILIZED CONSTRUCTION ENTRANCE
	PROPOSED DRAINAGE STRUCTURE W/ INLET PROTECTION
	PROPOSED INFILTRATION TEST HOLE LOCATION
	PROPOSED DEEP TEST HOLE LOCATION

D-1: 0"-12" TOPSOIL 12"-102" SANDY LOAM WITH SOME GRAVEL SEEP AT 92" D–2: 0"–8" TOPSOIL 8"–96"+ BROWN SANDY LOAM WITH SOME GRAVEL WATER AT 96"

RE	VISION		BY
S / T ERING, SURVE PE ARCHITECTU	YING & IRE, P.C.	3 Garrett Place Carmel, NY 10512 (845) 225–9690 (845) 225–9717 fr www.insite–eng.com	ax n
<u>RESIDENCE</u> boro, westchester co <u>G PLAN</u>), NEW YORK		
PROJECT MANAGER	J.M.W.	FIGURE NO.	
DRAWN BY	P.J.M.	.3	
CHECKED BY	Т.М.В.)	



NOTICE OF INTENT

New York State Department of Environmental Conservation

Division of Water

625 Broadway, 4th Floor

NYR						
	(fc	or E	EC	use	onl	y)

Albany, New York 12233-3505

Stormwater Discharges Associated with <u>Construction Activity</u> 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

							C	Owne	er/	Ope	era	to	r]	Inf	or	nat	tio	n											\searrow
Owner/Ope	rator ((Comp	bany	γN	ame	e/Pi	riv	rate	e O1	wne	er	Nar	ne/	Mu	nic	cip	al	it	y 1	Jan	ne)	_		1		1			
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	Project Si	ite Inform	ation		
Project/Site Name					
Dayton Residen	се				
Street Address (NOT P.O. BOX)					
62 Mead Street					
Side of Street O North O South O East @ West					
City/Town/Village (THAT ISSUES BU	JILDING PE	RMIT)			
Lewisboro					
State Zip N Y 1 0 5 9 7 -	County West	ches	t e r	DEC Regi	ion
Name of Nearest Cross Street E a s t R i d g e R o a	d				
Distance to Nearest Cross Street	(Feet)		Project In Re O North @ So	lation to Cross uth O East ()	s Street) West
Tax Map Numbers Section-Block-Parcel			Tax Map Numbe	rs	
	2				

1. Provide the Geographic Coordinates for the project site in NYTM Units. To do this you **must** go to the NYSDEC Stormwater Interactive Map on the DEC website at:

www.dec.ny.gov/imsmaps/stormwater/viewer.htm

Zoom into your Project Location such that you can accurately click on the centroid of your site. Once you have located your project site, go to the tool boxes on the top and choose "i"(identify). Then click on the center of your site and a new window containing the X, Y coordinates in UTM will pop up. Transcribe these coordinates into the boxes below. For problems with the interactive map use the help function.

Х	Coc	rdi	nate	es (Eas	ting	J
	6	1	7	4	2	4	

чc	oor	dina	(N	orth	ning)	
4	5	7	1	5	5	З	

2 What is the nature of this construction project?
2. What is the hatare of this construction project:
O New Construction
@ Redevelopment with increase in improving one
V Redevelopment with increase in impervious area
\bigcirc Redevelopment with no increase in impervious area

4	1	0	7	0	8	9	8	2	9



3.	Select the predominant land us SELECT ONLY ONE CHOICE FOR EAC	e for H	r both pi	re and	post	devel	opment	condi	ltions.
	Pre-Development Existing Land Use					Pos Fu	t-Deve ture La	lopmer ind Us	e e
	⊖ FOREST			Ø SING	GLE FA	MILY	HOME		Number of
	○ PASTURE/OPEN LAND			OSING	GLE FA	MILY	SUBDIV	ISION	
	○ CULTIVATED LAND			O TOW	N HOME	E RESI	DENTIA	L	
	⊘ SINGLE FAMILY HOME			O MUL	FIFAMI	LY RE	SIDENT	IAL	

○ SINGLE FAMILY SUBDIVISION

\sim			
\bigcirc	'I'OWN	HOME	RESIDENTIAL

\cap MIILTTFAMTLY	RESTDENTIAL.

\bigcirc	INSTITUTIONAL	/SCHOOL

- \bigcirc INDUSTRIAL
- COMMERCIAL

\bigcirc	ROAD/	ΗТ	GHWA	17
\cup	NOAD/	TT T	GIIWE	77

○ RECREATIONAL/SPORTS FIELD

 \bigcirc LINEAR UTILITY

O PARKING LOT

 \bigcirc OTHER

○ SINGLE FAMILY SUBDIVISION
○ 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

Lots

*Note: for gas well drilling, non-high volume hydraulic fractured wells only

4. In accordance with the larger commenter the total project site area; existing impervious area to be disactivities); and the future impervious disturbed area. (Round to the near section of the near sec	non plan of development or sa the total area to be distur sturbed (for redevelopment vious area constructed within rest tenth of an acre.)	ule, bed; h the
Total Site AreaTotal Area To Be Disturbed610	Existing Impervious Area To Be Disturbed	Future Impervious Area Within Disturbed Area
5. Do you plan to disturb more than 5	5 acres of soil at any one t	ime? Yes 'No
6. Indicate the percentage of each Hy A B Ø Ø	ydrologic Soil Group(HSG) at C D 8 5 % 1	the site. 5 %
7. Is this a phased project?) Yes 🕐 No
 Enter the planned start and end dates of the disturbance activities. 	Start Date 0 7 / 0 1 / 2 0 2 2 - []]	End Date 0 7 0 1 2 0 2 3

DRAFT

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R	e		s e	1	r	v	0	i	r																													
R	R e s e r r 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 Vetland / Federal Jurisdiction Off Site Vetland / Federal Jurisdiction Off Site Vetland / Federal Jurisdiction Off Site Stream / Creek On Site River On Site River Off Site Lake Off Site Lake Off Site Vetland by Consultant																																					
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14. Will the project disturb soils within a State regulated wetland or the protected 100 foot adjacent O Yes @ No area?

03089820	DRAFT	
Does the site runoff enter a system (including roadside o culverts, etc)?	a separate storm sewer drains, swales, ditches,	0 Ye

es 🕑 No 🛛 Unknown

What is the name of the municipality/entity that owns the separate storm sewer 16. system?

6403089820

15.

17.	Does any runoff from the site enter a sewer classified \bigcirc Yes \oslash A as a Combined Sewer?	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)? If No, skip questions 23 and 27-39.	⊖Yes ●No
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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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	MI
John	Μ
Last Name	
W a t s o n	
Signature	1
	Date



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

Other

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

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0	1	8	2	0	8	9	8	2	8	
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Post-construction Stormwater Management Practice (SMP) Requirements

<u>Important</u>: 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).
 - O 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	Requi	ired	
	 .		acre-fee	t

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 Co	mtributing	г	Total Co	ntr	ibuting
DD Machenieuros (Auss Dadustian)	Area	(acres)	Ī	mpervious	Ar	ea (acres)
RK Techniques (Area Reduction)						
Conservation of Natural Areas (RR-1) .			and/c	or		
Sheetflow to Riparian Buffers/Filters Strips (RR-2)			and/c	or].[
Tree Planting/Tree Pit (RR-3)			and/c	or]-[
Disconnection of Rooftop Runoff (RR-4))		and/c	or]•[
RR Techniques (Volume Reduction)						
Vegetated Swale (RR-5)				•	- - -	
Rain Garden (RR-6)				•	- !- -	
Stormwater Planter (RR-7)	•••••		••••	•	- • -	
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)		•••••			<u></u> - • -	
Underground Infiltration System (I-4)	• • • • • • • • •		• • • • •		- • -	
Bioretention (F-5)	•••••				╡╍┝	
Dry Swale (O-1)			• • • • • •			
Standard SMPs						
Micropool Extended Detention (P-1)			••••		<u></u> • -	

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 (0-2)	

-	
×	DRAFT

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Table 2 -Alternative SMPs(DO NOT INCLUDE PRACTICES BEINGUSED FOR PRETREATMENT ONLY)	;		
Alternative SMP	Total Impervio	Contri ous Are	buting a(acres)
O Hydrodynamic			
O Wet Vault		-	
O Media Filter			
O Other	•		
Provide the name and manufacturer of the Alternative SMPs (i.e. proprietary practice(s)) being used for WQv treatment.			
Note: Redevelopment projects which do not use RR techniques, shall			
Wole we development projects which do not use RK techniques, sha use questions 28, 29, 33 and 33a to provide SMPs used, tota WQv required and total WQv provided for the project.	al		
30. Indicate the Total RRv provided by the RR techniques (Area, Standard SMPs with RRv capacity identified in question 29.	/Volume	Reduct	cion) and
Total RRv provided			
acre-feet			
31. Is the Total RRv provided (#30) greater than or equal to the total WQv required (#28).	he		
If Yes, go to question 36. If No, go to question 32.		03	(es 🔿 No
32 Provide the Minimum BRy required based on HSG			
[Minimum RRv Required = (P) (0.95) (Ai) /12, Ai=(S) (Aic)]			
Minimum RRv Required			
acre-feet			
32a. Is the Total RRv provided (#30) greater than or equal to the Minimum RRv Required (#32)?	he	03	les O No
<pre>If Yes, go to question 33. Note: Use the space provided in question #39 to summarial specific site limitations and justification for not reduce 100% of WQv required (#28). A detailed evaluation of the specific site limitations and justification for not reduce 100% of the WQv required (#28) must also be included in SWPPP.</pre>	ze the ucing he ucing the		
If No, sizing criteria has not been met, so NOI can not be processed. SWPPP preparer must modify design to meet sizing criteria.	3		
Page 10 of 14			



1/000090Z/	1	7	6	6	0	8	9	8	2	7
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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 <u>impervious</u> 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 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) Provide the sum of the Total RRv provided (#30) and 34. the WQv provided (#33a). Is the sum of the RRv provided (#30) and the WQv provided 35. (#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. Provide the total Channel Protection Storage Volume (CPv) required and 36. provided or select waiver (36a), if applicable. **CPv** Provided CPv Required acre-feet acre-feet 36a. The need to provide channel protection has been waived because: O Site discharges directly to tidal waters or a fifth order or larger stream. \bigcirc 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	Post-development
Total Extreme Flood Control	Criteria (Qf)
Pre-Development	Post-development
CFS	CFS



37a. The need to meet the Qp and Qf criteria has been waived because:

- O Site discharges directly to tidal waters
- or a fifth order or larger stream. O 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 O developed?

 \bigcirc Yes \bigcirc No

If Yes, Identify the entity responsible for the long term $\ensuremath{\mathsf{Operation}}$ and $\ensuremath{\mathsf{Maintenance}}$

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.



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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	Mu	lti	i–s	Sec	tor	GP	Ν	Y	R								
Other																	
✔ _{None}																 	

41.	Does this project require a US Army Corps of Engineers Wetland Permit? If Yes, Indicate Size of Impact.	⊖ Yes	Ø No
42.	Is this project subject to the requirements of a regulated, traditional land use control MS4? (If No, skip question 43)	Ø Yes	○ No
43	Has the "MS4 SWPPP Acceptance" form been signed by the principal		

- 🕑 Yes 🛛 🔿 No executive officer or ranking elected official and submitted along with this NOI?
- 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. NYR



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	MI
Print Last Name	
Owner/Operator Signature	
	Date

TOWN OF LEWISBORO Westchester County, New York



Tel: (914) 763-3060 Fax: (914) 875-9148 Email: jfarrell@lewisborogov.com

June 16, 2022

79 Bouton Road

Building Department

South Salem, New York 10590

Ms. Janet Andersen, Chair Town of Lewisboro Planning Board

Re: Cal#07-22SW, Cal#15-22WP Rini/Langel Residence, 15 Benedict Rd., sheet 0033, block 11155, lot 10

Dear Ms. Andersen and Members of the Board,

I have reviewed the plans from Granoff Architects dated 3/28/22, as well as the memo from Jan K. Johannessen, AICPI and Joseph M. Cermele, P.E. dated 5/13/2022. I agree with the comments from our Town Consulting Professionals and will not repeat them here. I have the following comments:

- 1. Please see the attached zoning denial letter dated 4/20/22 created by the previous Building Inspector, Joe Angiello.
- 2. I would not consider the upstairs Rec Room area as a bedroom due to the lack of a full bathroom on that level.
- 3. This property has no open permits or violations.

Please do not hesitate to contact me with any questions.

Sincerely,

Jeff Farrell Acting Building Inspector

TOWN OF LEWISBORO Westchester County, New York



Tel: (914) 763-3060 Fax: (914) 875-9148 Email: jangiello@lewisborogov.com

<u>4/20/22</u> Zoning Denial app. #2022-0227

<u>Rini</u> <u>15 Benedict Rd.</u> <u>0033-11155-010</u>

The proposed accessory garage/office will have a floor area of 1875 square feet whereas 600 square feet is the maximum permitted per Article IV Section 220-23D(11) of the Town of Lewisboro Zoning Code.

Joseph Angiello

Building Inspector

Building Department 79 Bouton Road South Salem, New York 10590

RECEIVED BY

JUN 1 5 2022

Town of Lewisporo

RESOLUTION TOWN OF LEWISBORO ZONING BOARD OF APPEALS IN THE MATTER OF THE APPLICATION OF *Rini*

FOR A VARIANCE OF ARTICLE IV §220-23D(11) CAL. NO. 13-22-BZ

INTRODUCED BY:	Board Member Casper
-----------------------	----------------------------

SECONDED BY: Board Member Rendo

DATE OF CONSIDERATION/ADOPTION: May 25, 2022

WHEREAS, James Rini & Elizabeth Langel, as the applicant, (Rini, James M. & Langel, Elizabeth M, owner of record) has made application to the Lewisboro Zoning Board of Appeals (the "ZBA"), on the subject premises located at, 15 Benedict Road, South Salem, NY, Tax Map as, Sheet 0033, Block 11155, Lot 010 ("the property"), for a variance in the matter of the proposed accessory garage/office which will have a floor area of 1875 square feet whereas 600 square feet is the maximum permitted per Article IV Section 220-23D(11) of the Town of Lewisboro Zoning Code.

WHEREAS, this application for an area variance constitutes a Type II action under 6 NYCRR Part 617, and therefore, requires no further review under the State Environmental Quality Review Act (SEQRA), and

WHEREAS, a public hearing at the Town Offices, 79 Bouton Road, South Salem, New York in this matter on May 25, 2022 and a site walk was conducted on May 21, 2022 to consider the application, after which a vote was taken with regard to the variance as set forth above, and

WHEREAS, The Lewisboro Zoning Board of Appeals has given careful consideration to the facts presented in the application at the public hearing based upon the criteria set forth in Section 267-b(3)(b) of the Town Law of the State of New York, and finds as follows:

- 1. The property is an approximate 1.07-acre parcel in a 2A, Two Acre Residential District owned by James Rini & Elizabeth Langel and is improved with a single-family residence. The applicant wishes to construct an accessory garage/office with a floor area of 1875 square feet whereas 600 square feet is the maximum permitted per Article IV Section 220-23D(11) of the Town of Lewisboro Zoning Code, the applicant sought a variance of 1275 square feet.
- 2. There will be no undesirable change in the character of the neighborhood or detriment to nearby properties.
- 3. There is no practical alternative to the variance requested.

Rini Resolution Cal. No. 13-22-BZ

- 4. The Board found that the variance is not substantial.
- 5. There will not be an adverse effect or impact to the physical or environmental conditions of the neighborhood.
- 6. The Board found that the difficulty was not self-created.

WHEREAS, pursuant to Section 267-b(3)(c), the ZBA hereby determines that the minimum area variance necessary in this application is 1275 square feet from the maximum 600' square feet allowed, per Article IV Section 220-23D(11) of the Town of Lewisboro Zoning Code, thereby permitting the construction of the 1875 square foot accessory garage/office.

NOW, THEREFORE BE IT RESOLVED, that the Lewisboro Zoning Board of Appeals hereby grants an area variance of 1,275 square feet from the maximum 600' square feet allowed, thereby permitting the construction of the 1875 square foot accessory garage/ office, per Article I Section 220-2 of the Town of Lewisboro Zoning Code,

VOTE:

Chairman Price	-	In Favor
Board Member Mandelker	-	Absent
Board Member Casper	-	In Favor
Board Member Infield	-	In Favor
Board Member Rendo	-	In Favor

VOTE:

Resolution carried by a vote of 4 to 1.

Ron Anz

Robin Price Jr., Chair

Dated in South Salem, New York This $\underline{/ 9}$ day of June 2022

STATE OF NEW YORK

)) ss.:

COUNTY OF WESTCHESTER

Rini Resolution Cal. No. 13-22-BZ

I, Donna Orban, Secretary of the Zoning Board of Appeals, do hereby certify that the above is an excerpt/summary/fair representation of the Resolution adopted by the Zoning Board of Appeals of the Town of Lewisboro at a meeting of said Board on May 25, 2022.

Dated: fine 14, 2022

Donna Orban Secretary Zoning Board of Appeals

INLAND WETLANDS COMMISSION Telephone (203) 563-0180 Fax (203) 563-0284



TOWN HALL 238 Danbury Road Wilton, Connecticut 06897

RECEIVED BY

MAY 3 1 2022

Town of Lewisboro

May 24, 2022

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Town Clerk Town of Lewisboro PO Box 500 11 Main Street South Salem, NY 10590

Town Clerk:

Pursuant to Public Act 87-533, the Wilton Inland Wetland Commission hereby gives written notice of an application involving regulated activities within 500 feet of the Lewisboro/Wilton Town Boundary. The subject of the application is for a proposed driveway reconfiguration, septic modification, and new infiltration system within a regulated area at 101 Silver Spring Road, Wilton, CT.

Should you have any questions or comments, please contact our office at the above number. The application is available for review on our website at <u>www.wiltonct.org</u>.

Sincerely,

Inquit Lai

Liz Larkin Administrative Assistant

INLAND WETLANDS COMMISSION Telephone (203) 563-0180 Fax (203) 563-0284



TOWN HALL 238 Danbury Road Wilton, Connecticut 06897

APPLICATION FOR AN INTERMEDIATE REGULATED ACTIVITY

For Office Use Only:	
	WET#
Filing Fee \$	Wilton Land Record Map#
Date of Submission	Volume # Page #
Date of Acceptance	Assessor's Map # Lot#
APPLICANT IN	FORMATION:
Applicant Jennifer Amadeo	Agent (if applicable) LaurelRock
Address 101 Silver Spring Road	Address
Wilton, CT	Wilton, CT 06897
Telephone	Telephone 203-313-3935
_{Email} jenamadeo@gmail.com	_{Email} _emily.weckman@laurelrock.com
PROJECT INF	ORMATION:
Property Address 101 Silver Spring Road	4.385 acres
Acres of altered Wetlands On-Site_0	Cu. Yds. of Material Excavated 40
Linear Feet of Watercourse	Cu. Yds. of Material to be Deposited 40
Linear Feet of Open Water	Acres of altered upland buffer
Sq. Ft. of proposed and/or altered impervious coverage 2,106 sf	Sq. Ft. of disturbed land in regulated area 7,398 sf

APPLICATION REQUIREMENTS:

Is The Site Within a Pul	olic <u>Water</u>	Supply	7
Watershed Boundary?	NO	YES*	\checkmark

Is The Site Within 500 Feet of a Town Boundary? N0_____ YES*_ ✓

* If the answer is yes, then the applicant is responsible for notifying the appropriate water authority and/or adjoining community's Wetlands Department. Instructions for notification are available at the office of the commission.

Project Description and Purpose: Proposed reconfiguration of the existing driveway to include a exit loop, gate, and courtyard. Existing septic system to be modified to achieve vehicular rating and new infiltration system to be located between driveway loop to accept all new storm runoff.

In addition, the applicant shall provide nine (9) collated copies of the following information as well as an electronic submission via email to <u>mike.conklin@wiltonct.org</u> & <u>elizabeth.larkin@wiltonct.org</u> **

\checkmark	А.	Written consent from the owner authorizing the agent to act on his/her behalf						
\checkmark	В.	Location Map at a scale of 1" = 800'						
\checkmark	C.	A Site Plan showing existing and proposed features at a scale not to exceed $1'' = 40'$						
\checkmark	D.	Sketch Plans depicting the alternatives considered						
\checkmark	E.	Names and addresses of adjoining property owners						
\checkmark	F.	A narrative describing, in detail						
		a. the proposed activityc. impactsb. the alternatives consideredd. proposed mitigation measures						
\checkmark	G.	Soils Report prepared by a Certified Soil Scientist and Wetlands Map prepared by a Registered Land Surveyor						
\checkmark	H.	Description of the chemical and physical characteristics of fill material to be used in the Regulated Area						
\checkmark	I.	Description and maps detailing the watershed of the Regulated Area						
\checkmark	J.	One original application and eight (8) copies						

**Application materials shall be collated and copies of documents more than two pages in length shall be double sided.

See Section 7 of the Wetlands and Watercourses Regulations of the Town of Wilton for a more detailed description of applications requirements.

The Applicant or his/her agent certifies that he is familiar with the information provided in this application and is aware of the penalties for obtaining a permit through deception, inaccurate or misleading information.

By signing this application, permission is hereby given to necessary and proper inspections of the subject property by the Commissioners and designated agents of the Commission or consultants to the Commission, at reasonable times, both before and after a final decision has been rendered.

Applicant's Signature:	Date: 5/19/2022	

Agent's Signature (if applicable): Emily E Weckman

Date: 5/19/2022

.



Agent Authorization Form

May 2, 2022

To Whom It May Concern:

made O, residing at 101 Silver Spring Road do hereby authorize lennit 1, 1 LaurelRock, residing at 969 Danbury Road, Wilton, CT to act as my agent in securing an Intermediate Regulated Activity Application for 101 Silver Spring Road, Wilton, CT.

Thank You,

(Owner Name) 2 May 2022 Date

Jennifer Amadeo jenamadeo@gmail.com



Project Narrative

May 19, 2022

To: Wilton Inland Wetland Commission

From: Emily Weckman LaurelRock 969 Danbury Road Connecticut, CT 06897

RE: 101 Silver Spring Road, Wilton, CT Intermediate Activity Application

Dear Commission,

See below narrative that describes the proposed improvements associated with our Intermediate Activity Application.

The proposed design includes improvements to the existing driveway located at 101 Silver Spring Road. Improvements include an exit loop extension, courtyard space, stone retaining wall, automated vehicular entry gates, plantings, and associated drainage and septic improvements.

Like the existing driveway, the proposed exit extension will be finished as bituminous pavement. Meanwhile the courtyard will be finished with paver bands and decorative gravel. The improvements will provide safe vehicular circulation in and out of the property.

The septic improvements will upgrade the existing system to provide vehicular rated components where necessary. Existing drainage systems will also be updated to provide vehicle rated components where necessary. A new infiltration system will be located in between the vehicular loops to capture and treat additional run-off from the driveway extension.

Three existing trees and one dead tree are to be removed. We propose a cluster of three small flowering trees in the buffer. Lawn is proposed at the base of the wall and will transition into meadow to match the existing condition.

A portion of this work encroaches in the 100' Wetland Buffer; no work is proposed in the wetlands. Currently the area to be disturbed is maintained as meadow. The impacts of the proposed improvements are minimal as run off will be captured by the infiltration system. Earthwork within this area is less than 100 cuyds. Fill material in the buffer include topsoil, processed aggregate base and gravel. Silt fence will be installed at the construction limit line. While silt sacks will be installed at catch basins in Silver Spring Road.

If you should have any questions, do not hesitate to contact us.

Best Regards,

mily C. Weckman

Emily Weckman LaurelRock <u>emily.weckman@laurelrock.com</u> 203-313-3935

Print Map

Town of Wilton

Geographic Information System (GIS)



Date Printed: 4/25/2022



MAP DISCLAIMER - NOTICE OF LIABILITY

This map is for assessment purposes only. It is not for legal description or conveyances. All information is subject to verification by any user. The Town of Wilton and its mapping contractors assume no legal responsibility for the information contained herein.

Zoning Effective: July 28, 2017 **Planimetrics Updated: 2014** Approximate Scale: 1 inch = 800 feet 0 800





November 2, 2021

Mr. Mark Sorosiak The LaurelRock Company 969 Danbury Road Wilton, CT 06897

Re: Wetland and Watercourse Delineation 101 Silver Spring Road, Wilton, Connecticut

Dear Mr. Sorosiak:

As requested, we investigated a portion of the referenced property and the property to the north to determine the presence or absence of wetlands and/or watercourses, to demarcate (flag) the boundaries of wetlands and watercourses identified, and to identify onsite soil types. This letter includes the methods and results of our investigation, which we completed today, November 2, 2021. In summary, one inland wetland and watercourse system was identified and delineated. The system, which is located in the eastern portions of the properties, is a woodland and shrubland wetland.

Regulatory Definitions

The Inland Wetlands and Watercourses Act (Connecticut General Statutes §22a-38) defines <u>inland</u> <u>wetlands</u> as "land, including submerged land...which consists of any soil types designated as poorly drained, very poorly drained, alluvial, and floodplain." <u>Watercourses</u> are defined in the act as "rivers, streams, brooks, waterways, lakes, ponds, marshes, swamps, bogs and all other bodies of water, natural or artificial, vernal or intermittent, public or private, which are contained within, flow through or border upon the state or any portion thereof." The Act defines <u>Intermittent Watercourses</u> as having a defined permanent channel and bank and the occurrence of two or more of the following characteristics: A) evidence of scour or deposits of recent alluvium or detritus, B) the presence of standing or flowing water for a duration longer than a particular storm incident, and C) the presence of hydrophytic vegetation.

Methodology

A second order soil survey in accordance with the principles and practices noted in the USDA publication *Soil Survey Manual* (1993) was completed at the subject site. The classification system of the National Cooperative Soil Survey was used in this investigation. Soil map units identified at the project site generally correspond to those included in the *Soil Survey of the State of Connecticut* (USDA 2005).

Mr. Mark Sorosiak Re: 101 Silver Spring Road, Wilton, Connecticut

<u>Wetland</u> determinations were completed based on the presence of poorly drained, very poorly drained, alluvial, or floodplain soils. Soil types were identified by observation of soil morphology (soil texture, color, structure, etc.). To observe the morphology of the property's soils, test pits and/or borings (maximum depth of two feet) were completed at the site.

<u>Intermittent watercourse</u> determinations were made based on the presence of a defined permanent channel and bank and the occurrence of two or more of the following characteristics: A) evidence of scour or deposits of recent alluvium or detritus, B) the presence of standing or flowing water for a duration longer than a particular storm incident, and C) the presence of hydrophytic vegetation.

Wetland boundaries were demarcated (flagged) with pink surveyor's tape (hung from vegetation) or small flags (on wire stakes) labeled "William Kenny Associates" that are generally spaced a maximum of every 50 feet. Complete boundaries are located along the lines that connect these sequentially numbered flags. <u>The wetland boundaries are subject to change until adopted by local, state, or federal regulatory agencies.</u>

Results

The approximate 6.2-acre residential property is located at 101 Silver Spring Road in Wilton, Connecticut. Silver Spring Road borders the eastern property boundary. The investigation was limited to the area in the eastern portion of 101 Silver Spring Road and in the adjacent property to the north as shown on the attached map. Property improvements include a single-family residence, an inground pool and an asphalt driveway. The primary vegetative cover in the investigation area is a broadleaved deciduous woodland and a shrubland.

One inland wetland and watercourse system was identified and delineated. The system, which is located in the eastern portions of the properties, is a woodland and shrubland wetland. Wetland soils are primarily poorly drained and formed from glacial till deposits. The approximate location of the system is shown on the attached map. The boundary of the system was marked at the site with flags numbered 1 to 22.

Three soil map units were identified on the property (one wetland and two upland). Each map unit represents a specific area on the landscape and consists of one or more soils for which the unit is named. Other soils (inclusions that are generally too small to be delineated separately) may account for 10 to 15 percent of each map unit. The mapped units are identified in the following table by name and symbol and typical characteristics (parent material, drainage class, high water table, depth to bedrock, and slope). These characteristics are generally the primary characteristics to be considered in land use planning and management. A description of each characteristic and their land use implications follows the table. A complete description of each soil map unit can be found in the *Soil Survey of the State of Connecticut* (USDA 2005), and at

https://soilseries.sc.egov.usda.gov/osdname.aspx. On the day of the review, the upland soil was moist and the wetland soil was moist to wet. The sky was partly cloudy and air temperatures were in the 60's ° F.

<u>Sym</u> .	<u>Map Unit</u> <u>Name</u>	Parent <u>Material</u>	<u>Slope</u> (%)	Drainage <u>Class</u>	<u>His</u> <u>Depth</u> (ft)	gh Water Ta <u>Kind</u>	<u>able</u> <u>Mos</u> .	Depth To <u>Bedrock</u> (in)
<u> </u>	Ipland Soil							
45	Woodbridge fine sandy loam	Compact Glacial Till	0-15	Moderately Well Drained	1.5-3.0	Perched	Nov-May	>60
308	Udorthents, Smoothed	Excavated or Filled Soil (>2 feet)	0-45	Well Drained to Somewhat Poorly Drained	1.5->6.0	Apparent	Nov-May	>60
ļ	Vetland Soil							
3	Ridgebury	Compact Glacial Till	0-8	Poorly Drained	0.0-1.5	Perched	Nov-May	>60
	Leicester	Loose glacial Till	0-3	Poorly Drained	0.0-1.5	Apparent	Nov-May	>60
	Whitman	Compact Glacial	0-3	Very Poorly	0.0-0.5	Perched	Sep-Jun	>60
	extremely stony	Till		Drained				
	fine sandy loam							

Parent material is the unconsolidated organic and mineral material in which soil forms. Soil inherits characteristics, such as mineralogy and texture, from its parent material. Glacial till is unsorted, nonstratified glacial drift consisting of clay, silt, sand, and boulders transported and deposited by glacial ice. Glacial outwash consists of gravel, sand, and silt, which are commonly stratified and deposited by glacial melt water. Alluvium is material such as sand, silt, or clay, deposited on land by streams. Organic deposits consist of decomposed plant and animal parts.

A soil's texture affects the ease of digging, filling, and compacting and the permeability of a soil. Generally sand and gravel soils, such as outwash soils, have higher permeability rates than most glacial till soils. Soil permeability affects the cost to design and construct subsurface sanitary disposal facilities and, if too slow or too fast, may preclude their use. Outwash soils are generally excellent sources of natural aggregates (sand and gravel) suitable for commercial use, such as construction sub base material. Organic layers in soils can cause movement of structural footings. Compacted glacial till layers make excavating more difficult and may preclude the use of subsurface sanitary disposal systems or increase their design and construction costs if fill material is required.

Generally, soils with steeper slopes increase construction costs, increase the potential for erosion and sedimentation impacts, and reduce the feasibility of locating subsurface sanitary disposal facilities.

Drainage class refers to the frequency and duration of periods of soil saturation or partial saturation during soil formation. Seven classes of natural drainage classes exist. They range from excessively drained, where water is removed from the soil very rapidly, to very poorly drained, where water is removed so slowly that free water remains at or near the soil surface during most of the growing season. Soil drainage affects the type and growth of plants found in an area. When landscaping or gardening, drainage class information can be used to assure that proposed plants are adapted to existing drainage conditions or that necessary alterations to drainage conditions (irrigation or drainage systems) are provided to assure plant survival.

Mr. Mark Sorosiak Re: 101 Silver Spring Road, Wilton, Connecticut

High water table is the highest level of a saturated zone in the soil in most years. The water table can affect the timing of excavations; the ease of excavating, constructing, and grading; and the supporting capacity of the soil. Shallow water tables may preclude the use of subsurface sanitary disposal systems or increase design and construction costs if fill material is required.

The depth to bedrock refers to the depth to fixed rock. Bedrock depth affects the ease and cost of construction, such as digging, filling, compacting, and planting. Shallow depth bedrock may preclude the use of subsurface sanitary disposal systems or increase design and construction costs if fill material is required.

Conclusions

Today, we investigated a portion of the property at 101 Silver Spring Road in Wilton, Connecticut and identified and delineated one inland wetland and watercourse system. Thank you for the opportunity to assist you. If you should have any questions or comments, please do not hesitate to contact us.

Sincerely,

William L. Kenny, PWS, PLA Soil Scientist

Enclosure

Ref. No. 4931

Alexander Wojtkowiak Soil Scientist





101 Silver Spring Road Watershed Diagram



MAP DISCLAIMER - NOTICE OF LIABILITY

This map is for assessment purposes only. It is not for legal description or conveyances. All information is subject to verification by any user. The Town of Wilton and its mapping contractors assume no legal responsibility for the information contained herein.

Zoning Effective: July 28, 2017 Planimetrics Updated: 2014 Approximate Scale: 1 inch = 800 feet 0 800


Drainage Computations

for the Proposed Drive Expansion Improvements at 101 Silver Spring Road; Wilton, CT

May 18, 2022

Prepared for Claude & Jennifer Amadeo

by Chappa Site Consulting, LLC

CLIENT: Claude & Jennifer Amadeo

PROPERTY LOCATION: 101 Silver Spring Road; Wilton, CT

SOILS: The United States Department of Agriculture, Soil Conservation Service, <u>Soil Survey of Fairfield County, Connecticut</u> indicates that the onsite upland soil is Paxton, (PbC) very stony fine sandy loam. The onsite soil is considered a hydrological group "C" soil.

EXISTING

CONDITIONS: The site presently contains a single family dwelling, detached garage/studio, media barn, pool and pool pavilion. There are also several sheds located throughout the parcel. A private paved drive provides access from Silver Spring Road. The existing structures are serviced by a private subsurface sewage disposal system and private well. The area to be developed is comprised of moderately sloping lawn.

- **PROPOSAL:** The applicant is proposing to construct a front gravel courtyard with a paver border and add a paved exit loop extension. The proposed improvements have an approximate impervious area of 3,040 s.f..
- DRAINAGE: 13 8' long x 1.0 high x 4' wide precast concrete galleries will be installed to collect the post developed stormwater runoff. The proposed stormwater system has been designed to accommodate the additional runoff produced during a 25 year storm. Furthermore in order to remove storm water pollutants and provide water quality treatment the drainage system has been sized to handle the first 1.0" of rainfall from the proposed impervious patio areas as recommended in the Connecticut Stormwater Quality Manual. The following pages contain the necessary drainage computations. Future development may require additional storm-water runoff retention/detention

Laura Ruocco Púlie, P.E. CT REG. NO. 149

Chappa Site Consulting, LLC

55 Ridgeview Avenue; Trumbull, CT 06611

Address	<i>Project #</i>
101 Silver Spring Road; Wilton, CT	30371
	Address 101 Silver Spring Road; Wilton, CT

1. Concrete Gallery & Stone Volume:

Nominal Gallery Dimension = 1.0' High x 4' Wide x 8' Long / Net Volume = 18.7 c.f.*

Calculate 40% Trap Rock Void Ratio: (2.0' wide x 1' high x 8' long) x 2 sides = $32 \times 0.40 = 12.8$ c.f. Total Trap Rock Void Volume per 8' section = 12.8Total Gallery & Trap Rock Void Volume per 8' section = 18.7 cf + 12.8 c.f. = <u>31.5 c.f.</u>

* Net Volume Taken from Hydrocad Software Program

2. Galleries Required for storage of first 1"of runoff:

A. New Impervious Area = 3,040 s.f.*

*(This is the area of the Proposed Impervious Drive Expansion)

B. Volume of runoff from 1" of rainfall

= 3,040 s.f. x (1/12) = 253.33 c.f. - Use 254 c.f.

C. Volume Runoff/Gallery Capacity

 $254 \div 31.5 \text{ c.f.} = 8.06 \text{ galleries}$

Use 9 galleries or 72 l.f. of 1.0' H x 4' W Gallery

Conclusion:

9 - 1.0' high x 4' wide x 8' long precast concrete galleries will be more than sufficient to handle the first 1" of runoff from the proposed site development, however in order to accommodate the additional runoff produced during a 25 year storm event <u>13 - 1.0' high x 4' wide x 8' long</u> precast concrete galleries have been proposed.



c30371-XCONHYD Prepared by CHAPPA SITE CONSULTING, LLC HydroCAD® 10.00-13 s/n 04134 © 2014 HydroCAD Software Solutions LLC

Printed 5/17/2022 Page 2

Area Listing (all nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
 3,040	74	>75% Grass cover, Good, HSG C (1XC)
3,040	74	TOTAL AREA

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points Runoff by SCS TR-20 method, UH=SCS, Weighted-CN Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

 Subcatchment 1XC: PROPOSED IMPERVIOUS DRIVE EXPANSION
 Runoff Area=3,040 sf
 0.00% Impervious
 Runoff Depth>3.52"

 Flow Length=200'
 Slope=0.0800 '/'
 Tc=9.6 min
 CN=74
 Runoff=0.25 cfs
 891 cf

Total Runoff Area = 3,040 sf Runoff Volume = 891 cf Average Runoff Depth = 3.52" 100.00% Pervious = 3,040 sf 0.00% Impervious = 0 sf

Summary for Subcatchment 1XC: PROPOSED IMPERVIOUS DRIVE EXPANSION AREAS AS LAWN

Runoff = 0.25 cfs @ 12.14 hrs, Volume= 891 cf, Depth> 3.52"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs Type III 24-hr 25 year Rainfall=6.40"

A	rea (sf)	CN	Description	1		
	3,040	74	>75% Gras	ss cover, G	Good, HSG C	
	3,040		100.00% F	Pervious Are	rea	
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description	
9.6	200	0.0800	0.35		Sheet Flow, EXISTING LAWN Grass: Short n= 0.150 P2= 3.30"	







c30371-PROPHYD Prepared by CHAPPA SITE CONSULTING, LLC HydroCAD® 10.00-13 s/n 04134 © 2014 HydroCAD Software Solutions LLC

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Area Listing (all nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
608	98	20% PROPOSED IMPERVIOUS DRIVE EXPANSION AREA (2PI)
2,432	98	80% PROPOSED DRIVE EXPANSION AREA (1PI)
3,040	98	TOTAL AREA

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points Runoff by SCS TR-20 method, UH=SCS, Weighted-CN Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1PI: 80% PROPOSED IMPERVIOUS DRIVE EXPANSION Runoff Area=2,432 sf 100.00% Impervious Runoff Depth>6.16" Tc=3.0 min CN=98 Runoff=0.38 cfs 1,248 cf

Subcatchment 2PI: 20% PROPOSED IMPERVIOUS DRIVE EXPANSION Runoff Area=608 sf 100.00% Impervious Runoff Depth>6.16" Tc=3.0 min CN=98 Runoff=0.09 cfs 312 cf

> Peak Elev=643.45' Storage=387 cf Inflow=0.38 cfs 1,248 cf Outflow=0.04 cfs 1,248 cf

Pond P1: DETENTION GALLERIES

Inflow=0.09 cfs 312 cf Primary=0.09 cfs 312 cf

Link C30371: COMBINED HYDROGRAPHS

Total Runoff Area = 3,040 sf Runoff Volume = 1,561 cf Average Runoff Depth = 6.16" 0.00% Pervious = 0 sf 100.00% Impervious = 3,040 sf

Summary for Subcatchment 1PI: 80% PROPOSED IMPERVIOUS DRIVE EXPANSION IMPROVEMENTS AREA

Runoff = 0.38 cfs @ 12.05 hrs, Volume= 1,248 cf, Depth> 6.16"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs Type III 24-hr 25 YR Rainfall=6.40"

	Area (sf)	CN	Description			
*	2,432	98	80% PRO	POSED DR	RIVE EXPANSION AREA	
	2,432		100.00% lı	npervious /	Area	
T (miı	c Length 1) (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	/ Description)	
3	.0				Direct Entry, PROP COND	

Subcatchment 1PI: 80% PROPOSED IMPERVIOUS DRIVE EXPANSION IMPROVEMENTS AREA



Summary for Subcatchment 2PI: 20% PROPOSED IMPERVIOUS DRIVE EXPANSION IMPROVEMENTS AREA

Runoff = 0.09 cfs @ 12.05 hrs, Volume= 312 cf, Depth> 6.16"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs Type III 24-hr 25 YR Rainfall=6.40"

	Area (sf)	CN I	Description			
*	608	98 2	20% PROP	POSED IM	IPERVIOUS DRIVE EXPANSION AREA	
	608		100.00% Ir	npervious /	Area	
To (min	E Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	y Description)	
3.0)				Direct Entry, PROP COND	

Subcatchment 2PI: 20% PROPOSED IMPERVIOUS DRIVE EXPANSION IMPROVEMENTS AREA



Summary for Pond P1: DETENTION GALLERIES

Inflow Area	a =	2,432 sf,100.00% Impervious, Inflow D	epth > 6.16" for 25 YR event
Inflow	=	0.38 cfs @ 12.05 hrs, Volume=	1,248 cf
Outflow	=	0.04 cfs @ 12.59 hrs, Volume=	1,248 cf, Atten= 89%, Lag= 32.5 min
Discarded	=	0.04 cfs @ 12.59 hrs, Volume=	1,248 cf

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs Peak Elev= 643.45' @ 12.59 hrs Surf.Area= 784 sf Storage= 387 cf

Plug-Flow detention time= 60.2 min calculated for 1,248 cf (100% of inflow) Center-of-Mass det. time= 59.9 min (801.2 - 741.3)

Volume	Invert	Avail.Storage	Storage Description	
#1	642.50'	152 cf	14.00'W x 56.00'L x 1.00'H Prismatoid 784 cf Overall - 404 cf Embedded = 380 cf x 40.0% Voids	
#2	642.50'	243 cf	Galley 4x8x1 x 13 Inside #1 Inside= 42.0"W x 9.0"H => 2.49 sf x 7.50'L = 18.7 cf Outside= 48.0"W x 12.0"H => 3.88 sf x 8.00'L = 31.0 cf 2 Rows of 6 Chambers	
		395 cf	Total Available Storage	
_	-			

Device	Routing	Invert	Outlet Devices
#1	Discarded	642.50'	2.000 in/hr Exfiltration over Wetted area

Discarded OutFlow Max=0.04 cfs @ 12.59 hrs HW=643.45' (Free Discharge)

Pond P1: DETENTION GALLERIES



1

Summary for Link C30371: COMBINED HYDROGRAPHS

Inflow Are	ea =	3,040 sf,100.00% Impervious	, Inflow Depth > 1.	.23" for 25 YR event
Inflow	=	0.09 cfs @ 12.05 hrs, Volume=	312 cf	
Primary	=	0.09 cfs @ 12.05 hrs, Volume=	: 312 cf,	Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs



Link C30371: COMBINED HYDROGRAPHS

From:	Donald Ukers
То:	Emily Weckman
Cc:	Eleanor Militana; Anthony Franceschini; John Setias
Subject:	RE: 101 Silver Spring Road
Date:	Monday, May 23, 2022 11:03:32 AM

Good Morning Emily,

Thank you for sending over the plans. The District has reviewed the plans and does not have any questions,

Comments and does **not** have any issues with proposed project.

Thank you and have a nice day,

Don

Don Ukers, P.E. Interim District Engineer First Taxing District Water Department 12 New Canaan Avenue Norwalk, Connecticut 06851 Office (203) 847-7387 Ext.7269 Cell (203) 505-9618

From: Emily Weckman <emily.weckman@laurelrock.com>
Sent: Friday, May 20, 2022 11:24 AM
To: Donald Ukers <DUkers@firstdistrictwater.org>
Cc: Eleanor Militana <EMilitana@firstdistrictwater.org>; Anthony Franceschini
<AFranceschini@firstdistrictwater.org>
Subject: RE: 101 Silver Spring Road

HI Don,

See attached Survey, Landscape Plan, and Drainage/ Utility Plan for the proposed driveway extension at 101 Silver Spring Road. Please let me know if PDF works or if you need a hard copy mailed out.

The use let the know in the works of it you need a hard copy in

Thank You,

Emily Weckman Landscape Architect

Wilton, Connecticut 06897



ZONING INFORMATION

ITEM	REQUIRED/PERMITTED		EXISTING
zone: R—2A RESIDENCE WILTON, CT			
FRONT SETBACK:	50'	MIN.	174.8' (GARAGE & STUDIO)
REAR:	50'	MIN.	66.8' (POOL PAVILION)
SIDE:	40'	MIN.	40' (POTTING SHED)
LOT WIDTH:	200'	MIN.	262'+
LOT AREA:	87,120 S.F.	MIN.	191,040 S.F.
BUILDING HEIGHT:	35'	МАХ.	29.1' (RESIDENCE) 21.6' (MEDIA BARN) 35.0' (OBSERVATORY DOME)
NO. STORIES:	2.5	МАХ.	2.5
OT COVERAGE- BUILDING	7% = 13,372 S.F.	МАХ.	8,669 S.F. = 4.5%
_OT COVERAGE- SITE	12% = 22,924 S.F.	MAX.	16,926 S.F. = 8.8%

* ZONING COMPUTATIONS BASED ON LOT AREA IN WILTON, CT ONLY

NOTES:

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637.45

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S24°24'15"W 8.42'

636.54

637.92

* 639.8

641.60

42.90

- 1. This survey has been prepared in accordance with Sections 20-300b-1 thru 20-300b-20 of the Regulations of Connecticut State Agencies and the Standards for Surveys and Maps in the State of Connecticut as adopted by the Connecticut Association of Land Surveyors, Inc. as a Property and Topographic Survey the Boundary Determination Category of which is a Resurvey conforming to Horizontal Accuracy Class A-2 and the locations and elevations of which conform to Topographic Accuracy Class T-2. It is intended to depict property boundaries, locations and elevations of improvements and topographic features.
- 2. Reference is hereby made to the following: Deed Vol. 1890, Pg. 155 Wilton Land Records (W.L.R.) Maps 4710 & 5663 W.L.R. Map 28306 Westchester County Land Records
- 3. Property Located in R-2A Residence Zone (Wilton, CT).
- 4. Property Located in R-4A Residence District (Lewisboro, NY).
- 5. Elevations depicted hereon are based on North American Vertical Datum of 1988 (NAVD88).
- 6. Reference is made to FEMA Flood Insurance Rate Map (FIRM) No. 09001C0376F, effective date 6/18/2010 and No. 36119C0205F, effective date 9/28/2007. Subject parcel does not lie within a Special Flood Hazard Area.
- 7. Wetlands depicted hereon were identified and flagged by William Kenny Associates on November 2, 2021 and located by Redniss & Mead in the field on December 28, 2021.

SURVEY CERTIFICATION:

I, Jorge P. Pereira, the surveyor who made this map do hereby certify that the field survey on which this map is based was completed on February 8, 2022 and that this map was completed on February 11, 2022. Certifications indicated hereon signify that 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. Said certifications shall run only to the person for whom the survey is prepared, and on his behalf to the title company, governmental agency and lending institution listed hereon, and to the assignees of the lending institution. Certifications are not transferable to additional institutions or subsequent owners.

ON 2/11/2022 JORGE P. PERIERA N.Y. REG. NO. 050780

Only title surveys bearing the makers embossed seal should be relied upon since other than embossed-seal copies may contain unauthorized and undetectable modifications, deletions, additions and changes.

A copy of this document without a proper application of the surveyor's embossed seal should be assumed to be an unauthorized copy.





AMADEO RESIDENCE

ISSUE	DATE	DESCRIPTION
1	5/19/2022	INLAND WETLAND SUBMISSION
2		
3		
4		
5		
6		
7		
8		
9		
10		
DATE:		MAY 19, 2022
DRAW	/N BY:	EW
REVIE	WED BY.	MAS

DATE:	MAY 19, 2022
DRAWN BY:	EW
REVIEWED BY:	MAS
SCALE:	1"=20'-0"

10	
DATE:	MAY 19, 2022
DRAWN BY:	EW
REVIEWED BY:	MAS
SCALE:	1"=20'-0"