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TOWN OF CARMEL
PLANNING BOARD



60 McAlpin Avenue
Mahopac, New York 10541
Tel. (845) 628-1500 – Ext.190
www.ci.carmel.ny.us

MICHAEL CARNAZZA
*Director of Code
Enforcement*

RICHARD FRANZETTI,
P.E., BCEE
Town Engineer

PATRICK CLEARY,
AICP, CEP, PP, LEED AP
Town Planner

PLANNING BOARD AGENDA
FEBRUARY 8, 2024 – 7:00 P.M.

TAX MAP # PUB. HEARING MAP DATE COMMENTS

PUBLIC HEARING

1. Carmel Terminals – 79 Old Route 6, Carmel	55.11-1-23,24,27	2/8/24	1/24/24	Open Public Hearing (Amended Site Plan)
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RESOLUTION

2. Pani, Fabian – 112 Stillwater Road	75.17-1-52		12/10/23	Regrading Application
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SITE PLAN

3. Veolia (formerly Suez) Water – Mahopac Wells	75.20-2-68		1/19/24	Site Plan
4. Union Energy Center, LLC – 24 Miller Road	86.11-1-14		1/29/24	Site Plan
5. Rosamilia, Massimo & Robert – 585 Union Valley Rd	87.8-1-2 & 3		1/16/24	Site Plan

SUBDIVISION

6. Shllaku Development, Inc. – 345 Austin Road	64.9-1-13		1/26/24	Sketch Plan – 2 lots
7. Kass Subdivision – 90 Mexico Lane	53.-2-17		8/31/23	Sketch Plan – 2 lots



ATZL, NASHER & ZIGLER P.C.

ENGINEERS - SURVEYORS - PLANNERS

Web: www.anzny.com

January 25, 2024

Planning Board
Town of Carmel
60 McAlpin Avenue
Mahopac, NY 10541
Attn: Craig Paeprer, Chairman

Re: Veolia (formerly Suez) Water
Mahopac Wells
Tax Lot 75.20-2-68

Dear Chairman Paeprer and Honorable Board Members,

Veolia and the Hunter's Run HOA have negotiated an agreement where the HOA has agreed to approve the proposed project if Veolia makes certain changes to the proposed plans. Those changes include relocating the proposed treatment building approximately 62 feet to the south of the originally proposed location, a 5' reduction in the current peak elevation of the treatment building, the removal of the existing treatment trailer, and a robust landscaping plan, amongst other things. The attached site plans reflect the changes agreed to by Veolia and the HOA.

The following is our response to Richard J. Franzetti, P.E, letter dated March 8, 2022:

General Comments

1. Comment: The following referrals are required:
 - a. New York State Department of Environmental Conservation (NYSDEC).
 - b. Putnam County Department of Health (PCDOH).
 - c. The Town of Carmel Environmental Conservation Board (ECB).
 - d. The Town of Carmel Highway Department.
 - e. Mahopac Fire Department.

The applicant has previously noted these referrals.

Response: No response required.

2. Comment: The following permits are required.
- a. NYSDEC - for stormwater and wetlands.
 - b. PCDOH for well and treatment system.
 - c. Town of Carmel Highway- work permit.
 - d. ECB for wetlands.

The applicant has previously noted these permit requirements.

Response: No response required.

3. Comment: The area of disturbance for the work as provided is now 2.07 acres. The threshold criteria of disturbances for the NYSDEC stormwater regulation are between 5,000 square feet and one (1) acre and over one (1) acre. The project will require coverage under the NYSEC SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-20-001) and the development of Stormwater Pollution Prevention Plan (SWPPP) that has permanent stormwater controls.

The applicant has provided a SWPPP, but not for the updated area of disturbance. This document will need to be updated.

The applicant should further note that the threshold for NYCDEP stormwater is 2 acres. A SWPPP will need to be submitted for review and approval by the NYCDEP.

Applicant has noted that a cut and fill analysis will be provided.

Response: The area of disturbance has been revised to 0.994 acres. This has been noted on sheet 4 – grading plan. An updated SWPPP is being provided with this submission for review by the Town Engineer. Cut fill analysis along with a note regarding fill has also been provided on sheet 4.

4. Traffic and Vehicle Movement Plans should be provided which provide the following:

- a. Comment: Slopes at the entrance way need to be defined. It is suggested that slopes of less than 6% be used for the first 20 feet of entry and that slopes of no greater than 8% be used entering the site. Please refer to AASHTO guidelines for commercial properties.

A driveway profile should be provided.

Response: Driveway plan profile off of Bucks Hollow Road has been provided. Entrance conforms with AASHTO requirements. Refer to sheet 4. Asphaltic concrete pavement detail has been updated to match Town's driveway specification (see sheet 4).

5. Comment: All easement information regarding the areas for the proposed underground utility service must be provided.

Applicant has provided easement information. This should be reviewed by Planning Counsel.

Response: No response required.

6. Comment: Should any public improvements be deemed necessary as part of the development of the tract, a Performance Bond and associated Engineering Fee must eventually be established for the work. The applicant will need to develop a quantity take off for bonding purposes.

The applicant has noted this requirement. The applicant should note that a Performance Bond and associated Engineering fee is minimally required for the stormwater management practices, erosion and sediment control drainage features, landscaping etc. installed on the site. Please see §156-61 J and K of the Town Code for additional information.

Response: No response required.

Detailed Comments

1. Comment: The rain garden locations have been provided. The applicant should note that they must meet the criteria as defined by the NYSDEC. This includes providing sufficient depth to groundwater.

Applicant indicated that the calculation will be provide prior to construction. Minimally these calculations will need to be provided/approved as part of the Planning Board approval. The applicant has noted that testing for groundwater will be performed as soon as weather permits.

Rain gardens areas should be shown on the drawing as protected.

Response: The drainage plans have been updated to provide a proposed dry pond (see sheet 1). Depth to groundwater has been showcased in the dry pond detail provided on sheet 5.

2. Comment: The wastewater report should provide loading values (#/dy) for the proposed system.

The applicant has provided a wastewater report. The report should provide the parameters in alphabetical order.

Response: Updated wastewater report has been provided with this submission.

3. Comment: Details for the proposed connection into the Town of Carmel Sewer system must be provided.

Applicant has provided some additional information which is currently under review. The drawings provided in the water discharge package should be provided as a full size set and included as part of the overall submittal package.

Response: A full size set of these drawings has been provided with this submission.

The following comments are generic and are only applicable if being installed by the

applicant, notes should be added to the drawing as needed:

4. Comment: Gate valves shall be AWWA non-rising stem type, as manufactured by Mueller Company, Model A-2360-23, or approved equal, conforming to the latest AWWA Standard for Gate Valves - 3" through 48" - for Water and Other Liquids, AWWA Designation C-509.

Response: No response required.

5. Comment: Sizes up to and including 12" shall be 250 psi working pressure. The valve body and bonnet shall be ductile iron. All interior and exterior metal surfaces shall be coated with a two-part thermo setting epoxy complying with AWWA C550.

Response: No response required.

6. Comment: Valves shall have dual "O" ring seals, inside screw, resilient wedge seats in accordance with AWWA Designation C-550 and shall be constructed so as to provide unobstructed full port clearance when fully open and immediate complete closure when closed. The ends of the valves shall be mechanical joint.

Response: No response required.

7. Comment: All valves shall be arranged to open in counterclockwise direction unless otherwise specifically indicated and operating nuts shall be 2" square.

Response: Veolia valves are arranged to open in a clockwise direction.

8. Comment: Valves shall be tested to a pressure of not less than two times the working pressure.

Response: No response required.

9. Comment: All hydrants shall be six inches in size with six-inch mechanical joint inlet connection and shall be equal to the Mueller Centurion A-421, with one (1) 4 ½" pumper nozzle and two (2) 2½ " hose nozzles.

Response: Veolia's standard is the Sigelock Systems Spartan 300. Hydrants will be green in color to signify they are only for company use.

10. Comment: Water Service Saddles shall be equal to those manufactured by Mueller, Model 7 ½" x 1" SS Series Stainless Steel Saddle, Double Stud.

Response: No response required.

11. Comment: Corporation stops shall be equal to those as manufactured by Mueller Company, Model B- 25000Series, NRS and of the size required. Such corporation stops shall meet the requirements of AWWA Specification No. C800.

Response: No response required.

12. Comment: Curb valves (stops) shall be equal to those as manufactured by Mueller Company, Model H-15214 and shall conform to AVVWA Specification No. C800.

Response: No response required.

13. Comment: Curb boxes shall be equal to those as manufactured by Mueller Company and similar to Mueller extension type with arch pattern base model H-10314 all extension rods shall be stainless steel.

Response: No response required.

14. Comment: All fire hydrants shall be the approved AWWA type fire hydrants in conformance with the American Water Works Association Standard for Fire Hydrants for Ordinary Water Works Service, AWWA Designation C502, and shall have a 5-1/4" valve opening, a 6" mechanical joint inlet complete with an auxiliary gate valve (close coupled), a 6" mechanical joint shoe, and all appurtenances.

Response: No response required.

15. Comment: Fire hydrants shall be rated for a working pressure of 250 Psi. Fire hydrants shall be sized for a 4'-6" bury.

Response: No response required.

Comment: Applicant has noted these comments. The only exception is comment 11 where the Veolia standard is to open right.

Response: Applicant takes exception to comment 7 and 9. Please see the responses to these comments above.

SUEZ Water New York, Inc.

PFAS COMPLIANCE PROJECT F MAHOPAC WELLS

Putnam County, New York

TOWN OF CARMEL WASTEWATER DISCHARGE PERMIT PACKAGE

SUEZ Water New York Inc.
162 Old Mill Road
West Nyack, NY 10944

Prepared by:



January 2024

Project Number: 068577

CONTENTS

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 - 1.2. Existing Conditions 1
- 2. PROPOSED SYSTEM 2
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- APPENDIX B – Design Drawings
- APPENDIX C - Backwash Laboratory Results

1. PROJECT DESCRIPTION

1.1. Background

Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonate (PFOS) are chemical substances that have been used for decades to manufacture firefighting foam and many common household and consumer products the public uses frequently, including non-stick cookware, fast food packaging, adhesives, paints, shampoo and cosmetics. In late August 2020, the State of New York adopted new drinking water standards that set a Maximum Contaminant Level (MCL) of 10 ppt for these substances in drinking water.

To comply with these new MCLs, SUEZ Water New York, Inc. (SWNY) plans to construct a treatment facility at the existing Mahopac Well site. The planned upgrade will not increase the firm capacity of the wells but add Granular Activated Carbon (GAC) as treatment to remove the PFOS and PFOA prior to entering the distribution system and ensuring compliance with the new regulations. To maintain effectivity, Greensand filters will also be installed to remove the excess iron and manganese from the water and will serve to prevent solids from plugging the GAC and requiring regular backwashing. As a result, the GAC will only be backwashed when it is replaced. SWNY will use frac tanks to contain the spent backwash water during the carbon installation/ replacement process. Backwash from the proposed Greensand filters decant tank is proposed to be discharged into the existing Town's sewer through a new sewer connection.

A pilot system using the well with the highest level of iron and manganese is currently at the site. This pilot system has been used to confirm proof of concept for the iron and manganese removal, as well as to provide specimens to analyze the water quality makeup of both the effluent and the backwash waste. The backwash waste information is presented below as well as the quality of backwash that will enter the Town's sewer system per day.

1.2. Existing Conditions

Mahopac Wells 1, 2, & 3 are located in a residential area 150 feet southwest of 34 Coventry Circle, Mahopac, Putnam County, New York and serve approximately 300 customers. The site is surrounded by Federal and State wetland areas. It is also located in an area with confirmed bog turtle and bat habitats.

The well water comes from three constant speed well pumps that convey water into a 34,200-gallon above ground finished water storage tank. Well No. 2 has been closed for production until iron and manganese mitigation is achieved. An existing temporary iron and manganese treatment trailer is currently in place at the Well No. 2 location. Existing on-site control includes the ability to operate the site remotely through the SCADA system.

The Mahopac Well site has a capacity of 130 gpm that will not be increased. The Standard Industrial Classification (SIC) Code for this facility is 4941, which corresponds to facilities primarily engaged in distributing water for domestic, commercial, and industrial use.

2. PROPOSED SYSTEM

The proposed treatment system will include upsizing of the well pumps. The well water will be conveyed by three variable speed well pumps into Greensand filtration units. Raw water will be dosed with sodium hypochlorite for oxidation before passing thru the filtration units. Backwash waste is transferred to a decant tank to separate the sludge. Decant water is recycled back to the inlet of the Greensand units and sludge will be discharge into the existing sewer thru a new sewer connection.

Following the Greensand units, the water shall pass through the GAC treatment system. Backwash water from the GAC treatment system will be transferred to a frac tank. The treated water will be dosed with sodium hypochlorite after treatment to achieve proper chlorination and will be transferred into an off-site 34,200-gallon aboveground finished water storage tank before distribution.

Sodium hypochlorite will be housed in two 50-gallon double walled chemical storage tanks.

Design drawings for the proposed treatment system are included in Appendix B.

2.1. Greensand Filtration System

A Greensand Plus Catalytic Filtration System will be provided to remove iron and manganese in the well water. Filtration will be provided via four vertical Greensand plus pressure filters operated in parallel and capable of automatic backwashes to clean the media. A 7,400-gallon decant tank for backwashing waste, along with sludge and decant pumps with associated piping and valves, are also included with the system.

Table 1 below summarizes the Greensand filtration criteria.

Table 1. Greensand Filtration Criteria

DESCRIPTION	MAHOPAC WELLS
Number Of Greensand Plus Vessels	4 (3 In Parallel And 1 Redundant)
Vessel Diameter (in)	42
Service Flow (gpm)	130
Filter Surface Area (ft ²)	9.62
Design Surface Loading Rate (gpm/Ft ²)	4.5
Backwash Rate Max Per Vessel (gpm @50f)	125
Rinse Rate (gpm)	130
Vessel Pressure Rating (psi)	150
Total Media Content (ft ³)	120
Backwash Duration	15 Min Plus A 2 Min Rinse

Backwashing is typically performed once every 24 to 48 hours depending on the contaminant levels. It can be performed sequentially or be set to go off at predetermined times. A maximum daily flow of 588.5 gal will be discharge into the sewer in a 6 hour batch, flow calculations are presented below:

Backwash Rate=	125	gal/min*vessel
No. Vessels=	3	vessels
Backwash Duration=	15	min
Backwash Flow=	5625	gal
<hr/>		
Rinse Rate=	130	gal/min
Rinse Duration=	2	min
Rinse Flow=	260	gal
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Total Flow to Decant Tank=	5885	gal
90% Recycled=	5296.5	gal
10% Sewer Discharge=	588.5	gal

3. WATER QUALITY

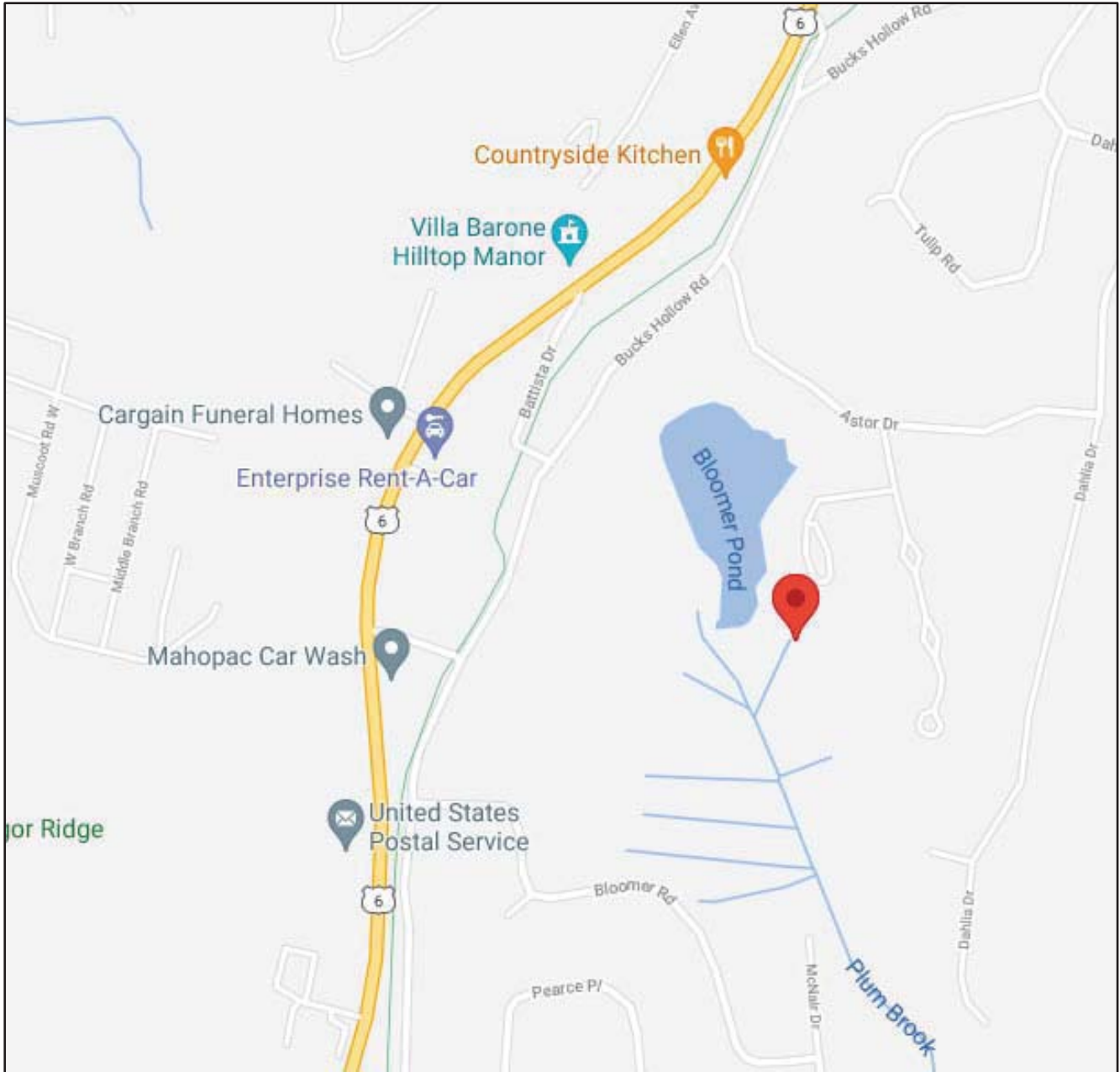
The temporary iron and manganese treatment system pilot is currently being operated at the Mahopac Wells site. On August 4, 2021, September 3, 2021, and November 22, 2021 representative samples were taken and tested from the backwash water line. Results are included in Appendix C and summarized in Table 2 below.

Table 2. Backwash Test Results

PARAMETER	RESULTS AUGUST SAMPLE	RESULTS SEPTEMBER SAMPLE	RESULTS NOVEMBER SAMPLE
Ammonia as Nitrogen (lb/day)	0.0008	0.00047	-
Arsenic (lb/day)	-	<0.000009	-
BOD/5day (lb/day)	<0.0186	<0.186	-
Cadmium (lb/day)	-	<0.000005	-
Chlorine Demand (lb/day)	0.0093	-	-
Chromium (lb/day)	-	0.000019	-
COD (lb/day)	0.275	-	-
Copper (lb/day)	-	0.0001	-

PARAMETER	RESULTS AUGUST SAMPLE	RESULTS SEPTEMBER SAMPLE	RESULTS NOVEMBER SAMPLE
Iron (lb/day)	-	-	0.163
Lead (lb/day)	-	0.000014	-
Manganese (lb/day)	-	0.0717	0.239
Mercury (lb/day)	-	<0.0000009	-
Molybdenum (lb/day)	-	<0.000017	-
Nickel (lb/day)	-	0.000061	-
Nitrogen (lb/day)	0.0028	-	-
Oil and Grease (lb/day)	<0.0065	<0.0065	-
pH	7.92	-	-
Phosphorus as P (lb/day)	0.0005	0.00095	-
Selenium (lb/day)	-	<0.000023	-
Silver (lb/day)	-	0.000009	-
Total Cyanide (lb/day)	-	<0.000093	-
Total Suspended Solids (lb/day)	0.466	0.978	-
Zinc (lb/day)	-	0.00137	-

**APPENDIX A
LOCATION MAP**



**MAHOPAC WELLS
LOCATION MAP**

**APPENDIX B
CIVIL AND PROCESS
DESIGN DRAWINGS**

FULL SIZE DRAWINGS HAVE BEEN PROVIDED

SUEZ WATER NEW YORK INC

ONLY CIVIL AND PROCESS DRAWINGS INCLUDED

PUTNAM COUNTY, NEW YORK

PFAS COMPLIANCE MAHOPAC WELLS



LOCATION MAP

SCALE: 1" = 5000'

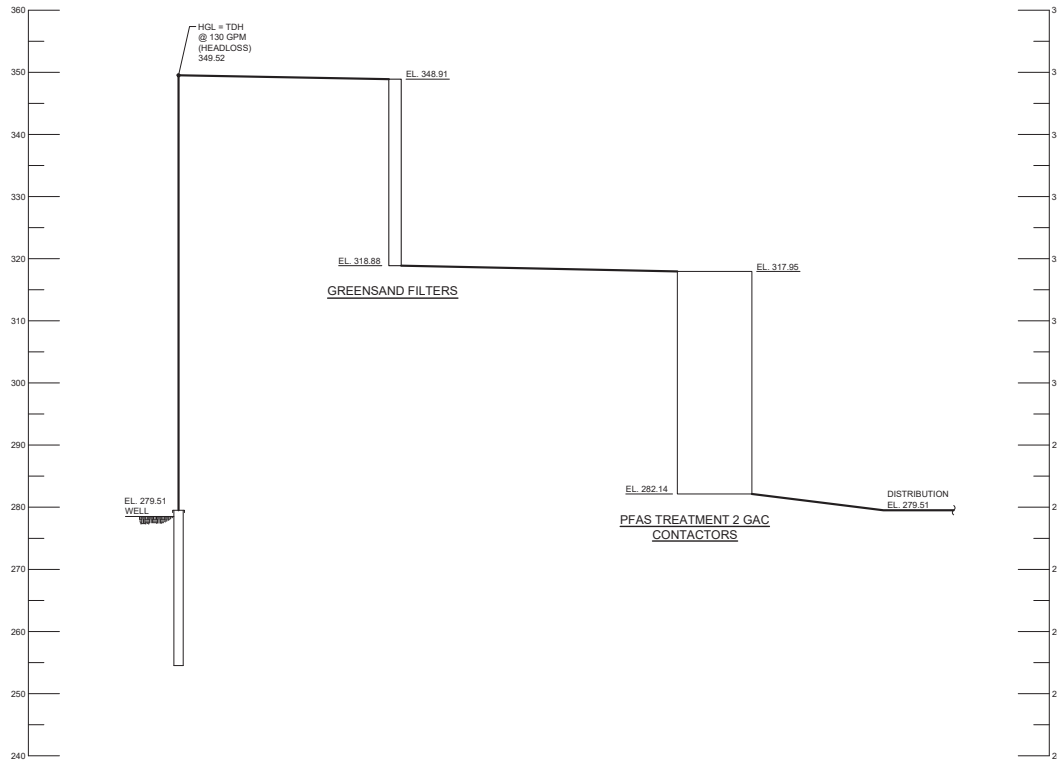
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68577

JANUARY 2024



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 DATE PLOTTED: 10/19/2021 1:58 PM



HYDRAULIC PROFILE

HORZ: NO SCALE
 VERT: 1" = 10'
 VERTICAL



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DESIGNED	CADD	SCALE
	T.L.M.	AS NOTED
CHECKED	APPROVED	APPROVED

GANNETT FLEMING
 ENGINEERS AND ARCHITECTS, P.C.

CREAMER
 FLETCHER CREAMER & SOIL, INC.
MEMBER OF AEC GROUP

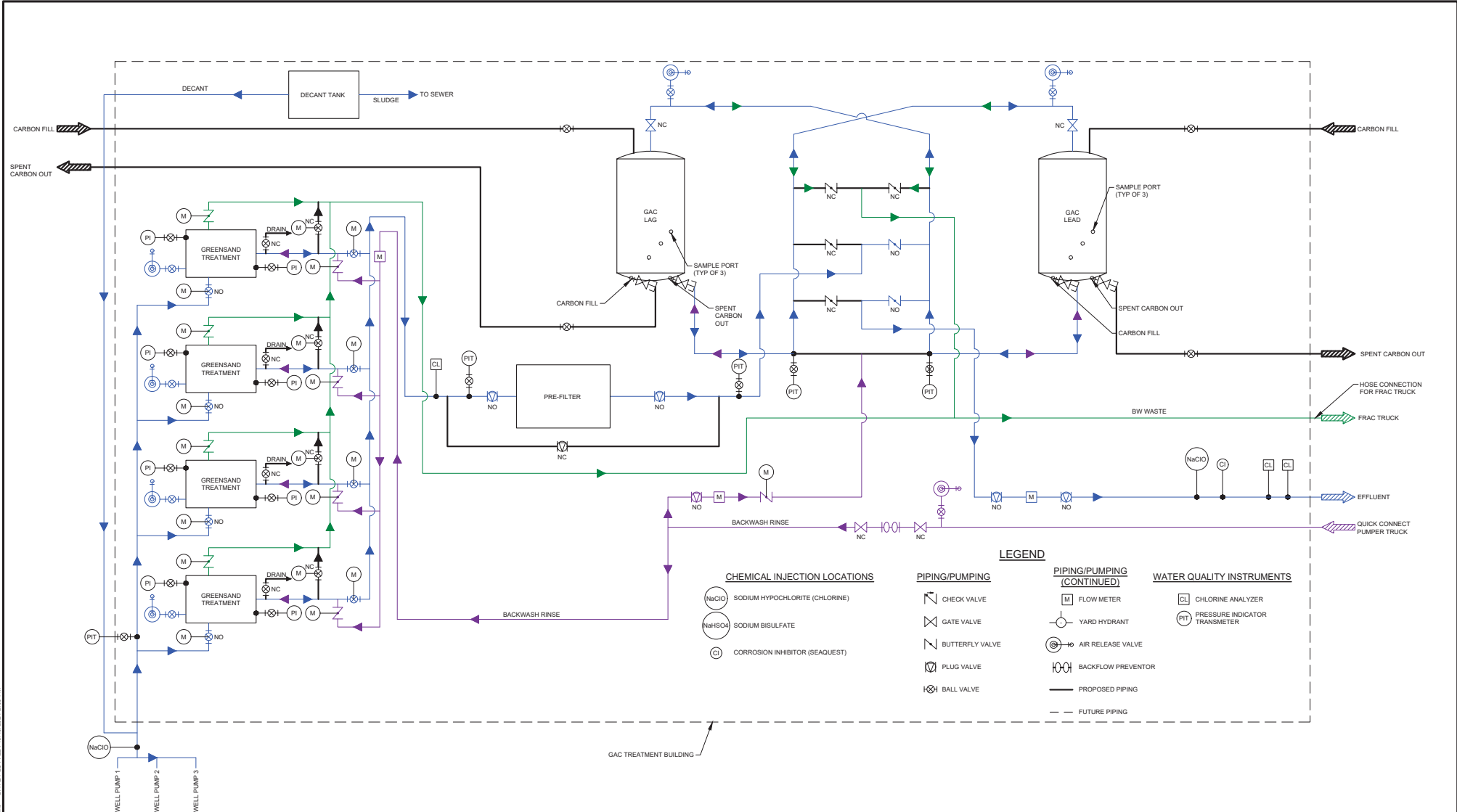
SUEZ WATER NEW YORK INC.
 WEST NYACK, ROCKLAND COUNTY, NEW YORK

PFAS COMPLIANCE

**MAHOPAC WELLS
 PROCESS
 HYDRAULIC PROFILE**

JOB No.	SHEET No.
68577	G-501
DATE	
JANUARY 2024	

FILE PATH: C:\Users\mcc\Documents\GANNETT FLEMING\INC\088577-Susquy PFAS_Proj\Proc_E_and_A_DB\Project Files\Water\DWG\General\88577-0202.dwg
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- CHEMICAL INJECTION LOCATIONS**
- NaClO SODIUM HYPOCHLORITE (CHLORINE)
 - NaHSO5 SODIUM BISULFATE
 - CI CORROSION INHIBITOR (SEAQUEST)

- PIPING/PUMPING**
- CHECK VALVE
 - GATE VALVE
 - BUTTERFLY VALVE
 - PLUG VALVE
 - BALL VALVE

- LEGEND**
- PIPING/PUMPING (CONTINUED)**
- FLOW METER
 - YARD HYDRANT
 - AIR RELEASE VALVE
 - BACKFLOW PREVENTOR
 - PROPOSED PIPING
 - FUTURE PIPING

- WATER QUALITY INSTRUMENTS**
- CHLORINE ANALYZER
 - PRESSURE INDICATOR TRANSMITTER

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NO.	DESCRIPTION	DATE	BY

DESIGNED: []
 CADD: T.L.M.
 SCALE: AS NOTED
 CHECKED: []
 APPROVED: []
 APPROVED: []

GANNETT FLEMING
 ENGINEERS AND ARCHITECTS, P.C.

SUEZ WATER NEW YORK INC.
 WEST NYACK, ROCKLAND COUNTY, NEW YORK

PFAS COMPLIANCE

MAHOPAC WELLS
 PROCESS
 PROCESS FLOW DIAGRAM

JOB No. 68577
 DATE JANUARY 2024

SHEET No. G-502

SHADED FACILITIES

- MASONRY WALL (PLANS AND SECTIONS)
- FILL CONCRETE (USED ON SECTIONS)
- REINFORCED CONCRETE (USED ON SECTIONS)
- DEMOLITION
- STABILIZED TURF

CIVIL/SITE SYMBOLS

- AIR RELEASE MANHOLE
- BENCH MARK
- BORING
- BUTTERFLY VALVE AND VALVE BOX
- CATCH BASIN/INLET
- CHECK VALVE
- CONTROL POINT
- EXISTING GAS VALVE
- EXISTING GAS CURB BOX
- GATE VALVE AND VALVE BOX
- HYDRANT
- LIGHT
- MANHOLE
- SIGN
- SIGNAL
- UTILITY POLE
- TEST PIT
- TREES, BUSHES AND SHRUBS
- VENT
- WATER CURB BOX
- EXISTING WATER VALVE

ANY BORINGS, SOUNDINGS, TEST PILES, SUBSURFACE CONDITIONS AND LOCATIONS OF AND NATURE OF EXISTING UNDERGROUND STRUCTURES SHOWN OR INDICATED ON THIS DRAWING ARE FOR THE INFORMATION OF THE OWNER AND IN NO EVENT IS THIS INFORMATION TO BE CONSIDERED AS PART OF THE CONTRACT. SEE PROJECT MANUAL.

THIS SHEET IS FOR CIVIL/SITE SYMBOLS AND ABBREVIATIONS ONLY. REFER TO ARCHITECTURAL, STRUCTURAL, PROCESS, INSTRUMENTATION, MECHANICAL AND ELECTRICAL DRAWINGS FOR SYMBOLS AND ABBREVIATIONS FOR THAT WORK.

EXISTING LINE WORK

- AIR LINE
- BITUMINOUS ROAD SURFACE AND DRIVES
- CENTER LINE
- CONCRETE SIDEWALK OR RETAINING WALL
- DITCH, STREAM OR SWALE
- FENCE
- FIVE FOOT CONTOUR INTERVAL
- GAS MAIN AND VALVE
- GRAVEL OR EARTH DRIVES
- MISCELLANEOUS UTILITY
- TWO FOOT CONTOUR INTERVAL
- OVERHEAD ELECTRIC LINE
- OVERHEAD TELEPHONE LINE
- PROPERTY LINE
- RIGHT-OF-WAY LINE
- SANITARY FORCE MAIN
- SANITARY SEWER AND MANHOLE
- STORM SEWER AND INLET
- SOIL BOUNDARY LINE
- UNDERGROUND ELECTRIC CABLE
- UNDERGROUND TELEPHONE CABLE
- WASTEWATER MAIN
- WATER MAIN AND VALVE
- WOOD OR VEGETATION LINE

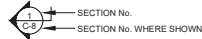
PROPOSED LINE WORK

- PROPOSED PIPE (4" DIA. AND LARGER)
- PROPOSED PIPE (3" DIA. AND SMALLER)
- STORM SEWER AND INLET
- PROPERTY LINE
- RIGHT-OF-WAY LINE
- TEMP. CONSTRUCTION EASEMENT LINE
- GRADING SLOPE
- SLOPE DIRECTION

LINE COMPOSITION

PROPOSED FACILITIES SHOWN WITH HEAVIER AND BOLDER LINE WORK WITH CALLOUTS IN UPPERCASE LETTERS. EXISTING FACILITIES SHOWN WITH LIGHT LINE WORK WITH CALLOUTS IN UPPER AND LOWERCASE LETTERS.
EXAMPLES:
Existing Callout
PROPOSED CALLOUT

CIVIL SHEET REFERENCE LEGEND



GENERAL NOTES

- ALL ELEVATIONS REFER TO U.S.G.S. NAVD 88 DATUM.
- HORIZONTAL CONTROL IS BASED UPON STATE PLANE COORDINATE SYSTEM.
- INFORMATION SHOWN HEREIN IS BASED ON FIELD SURVEY PERFORMED BY ATZI, NASHER & ZIGLER P.C. APRIL AND MAY 2021.
- FROM INVESTIGATIONS AND FIELD SURVEYS, IT IS ASSUMED THAT LOCATIONS OF PHYSICAL CONDITIONS, UTILITIES, ETC., ARE APPROXIMATE AND THE NATURE OF MATERIALS IS NOT GUARANTEED.
- THE CONTRACTOR SHALL BE REQUIRED TO VERIFY ALL CONDITIONS AND DIMENSIONS OF THE JOB SITE BEFORE PROCEEDING WITH THE WORK AND SHALL MAKE MINOR ADJUSTMENTS AS REQUIRED ON THE JOB. SUCH ADJUSTMENTS ARE TO BE APPROVED BY THE ENGINEER AND THE OWNER.
- LOCATION AND DEPTH OF EXISTING UTILITY LINES INCLUDING SERVICES SHALL BE VERIFIED BY THE CONTRACTOR IN ADVANCE OF THE NEW UTILITIES CONSTRUCTION. EXTREME CARE SHALL BE EXERCISED WHEN EXCAVATING EXISTING UTILITY LINES. HAND EXCAVATION ONLY WILL BE PERMITTED IN THE VICINITY OF EXISTING PIPES AND/OR CONDUITS. ANY DAMAGE TO UTILITIES SHALL BE REPAIRED BY CONTRACTOR AT NO ADDITIONAL COST TO OWNER.
- THE CONTRACTOR SHALL SUSTAIN IN THEIR PLACES AND PROTECT FROM DIRECT OR INDIRECT INJURY ALL PIPES, CONDUITS, TRACKS, UTILITY POLES, GUIDE RAILS, GUARD POSTS, WALLS, FOUNDATIONS, BUILDINGS, AND OTHER STRUCTURES OR PROPERTY IN THE VICINITY OF HIS WORK, WHETHER ABOVE OR BELOW GROUND, OR THAT MAY APPEAR IN THE TRENCH, PIPES AND UNDERGROUND CONDUITS EXPOSED AS A RESULT OF THE CONTRACTOR'S OPERATIONS SHALL BE ADEQUATELY SUPPORTED ALONG THEIR ENTIRE EXPOSED LENGTHS.
- AT POINTS OF CONNECTION, CONTRACTOR SHALL EXPOSE EXISTING WATER MAINS TO VERIFY LOCATION, GEOMETRY, AND MATERIAL REQUIREMENTS PRIOR TO ORDERING MATERIALS OR STARTING CONSTRUCTION OF ANY MAIN CONNECTING THERE TO.

GENERAL ABBREVIATIONS

- CLR - CLEARANCE
- ℓ - CENTERLINE
- CMU - CONCRETE MASONRY UNIT
- DIA - DIAMETER
- EC - ELECTRICAL CONTRACT
- EL or ELEV - ELEVATION
- EX - EXISTING
- FT - FOOT OR FEET
- GC - GENERAL CONTRACT
- ID - INSIDE DIAMETER
- INV - INVERT
- MAX - MAXIMUM
- MC - MECHANICAL CONTRACT
- MIN - MINIMUM
- NA - NOT APPLICABLE
- NTS - NOT TO SCALE
- OD - OUTSIDE DIAMETER
- PC - PLUMBING CONTRACT
- ℓ - PLATE
- SHT - SHEET
- SQ - SQUARE
- STA - STATION
- TYP - TYPICAL
- W - WATER
- WW - WASTEWATER
- LOX - LIQUID OXYGEN
- LIN - LIQUID NITROGEN

CIVIL/SITE ABBREVIATIONS

- AVE - AVENUE
- BIT - BITUMINOUS
- CB - CATCH BASIN
- CC - CHEMICAL CONDUIT
- CIR - CIRCLE
- CM - CONCRETE MONUMENT
- D - DRAIN
- DR - DRIVE
- FH - FIRE HYDRANT
- G - GAS
- GCB - GAS CURB BOX
- GV - GAS VALVE
- HYD - HYDRANT
- IP - IRON PIN
- MAC - MACADAM
- MH - MANHOLE
- MJ - MECHANICAL JOINT
- NC - NETWORK CABLE
- OE - OVERHEAD ELECTRICAL
- OT - OVERHEAD TELEPHONE
- ℓ - PROPERTY LINE
- PM - PIPELINE MARKER
- PC - POINT OF CURVE
- PI - POINT OF INTERSECTION
- POB - POINT OF BEGINNING
- POE - POINT OF ENDING
- POL - POINT ON LINE
- PT - POINT OF TANGENT
- PVC - POINT OF VERTICAL CURVE
- PVT - POINT OF VERTICAL TANGENT
- RD - ROAD
- RJ - RESTRAINED JOINT
- RTE - ROUTE
- RW - RAW WATER
- S - SANITARY SEWER
- SD - STORM DRAIN
- SEG - SEGMENT
- SS - STORM SEWER
- ST - STREET
- SWS - SHORT WATER SERVICE
- UGE - UNDERGROUND ELECTRIC
- UGT - UNDERGROUND TELEPHONE
- W - WATER
- WARG - WEDGE ACTION RETAINING GLAND
- WCB - WATER CURB BOX
- WS - WATER SERVICE
- WV - WATER VALVE

MATERIAL

- AL - ALUMINUM
- ACP - ASBESTOS CEMENT PIPE
- CI - CAST IRON
- CIP - CAST IRON PIPE
- CISP - CAST IRON SOIL PIPE
- CMP - CORRUGATED METAL PIPE
- CPVC - CHLORINATED POLYVINYL CHLORIDE PIPE
- CU - COPPER
- DI - DUCTILE IRON
- DIP - DUCTILE IRON PIPE
- FRP - FIBERGLASS REINFORCED PLASTIC
- GI - GALVANIZED IRON
- GLDIP - GLASS LINED DUCTILE IRON PIPE
- HDPE - HIGH DENSITY POLYETHYLENE
- POCC - PRESTRESSED CONCRETE CYLINDER PIPE
- PEX - CROSS-LINKED POLYETHYLENE
- PVC - POLYVINYL CHLORIDE PIPE
- RCCP - REINFORCED CEMENT CONCRETE PIPE
- SS - STAINLESS STEEL
- STL - STEEL

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DESIGNED	CADD	SCALE
J.L.G.	J.L.G.	AS NOTED
CHECKED	APPROVED	APPROVED
S.Z.L.		

GANNETT FLEMING
ENGINEERS AND ARCHITECTS, P.C.

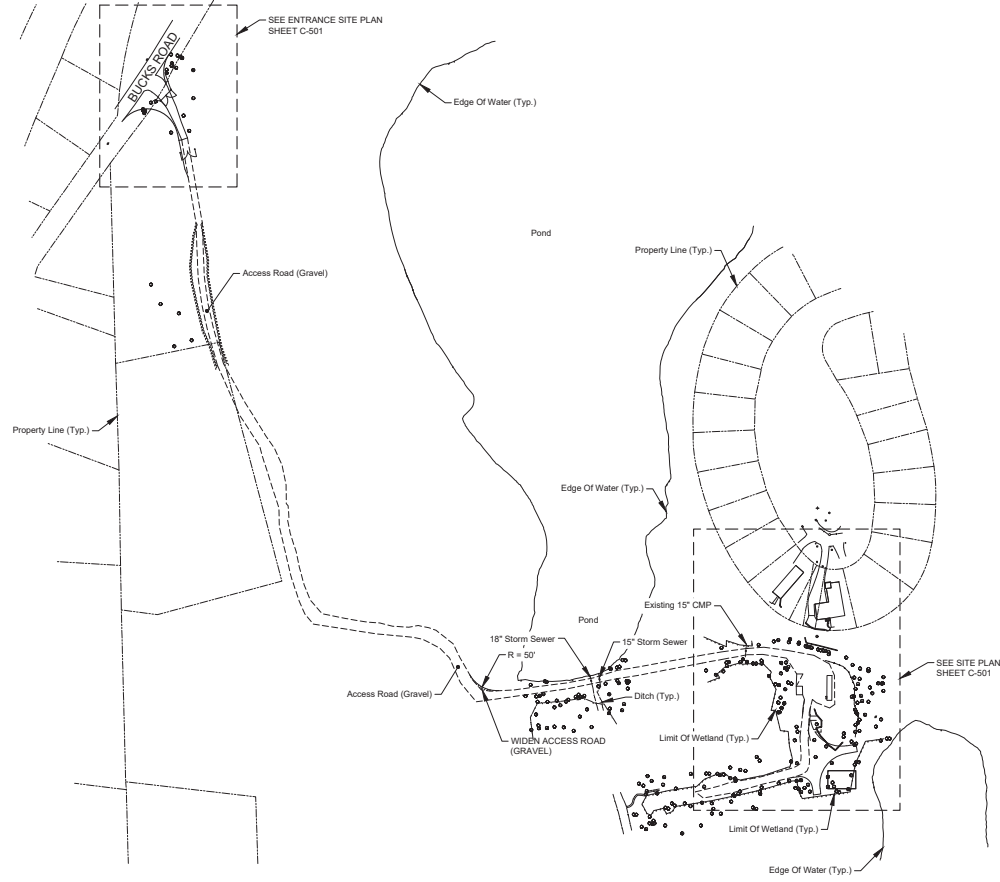
CREAMER
FLETCHER CREAMER & SOIL, INC.
a division of AEC GROUP

SUEZ WATER NEW YORK INC.
WEST NYACK, ROCKLAND COUNTY, NEW YORK

PFAS COMPLIANCE

CIVIL
GENERAL NOTES, LEGENDS AND
ABBREVIATIONS

JOB No.	SHEET No.
68577	C-1
DATE	
JANUARY 2024	



LOCATION PLAN
SCALE 1" = 100'

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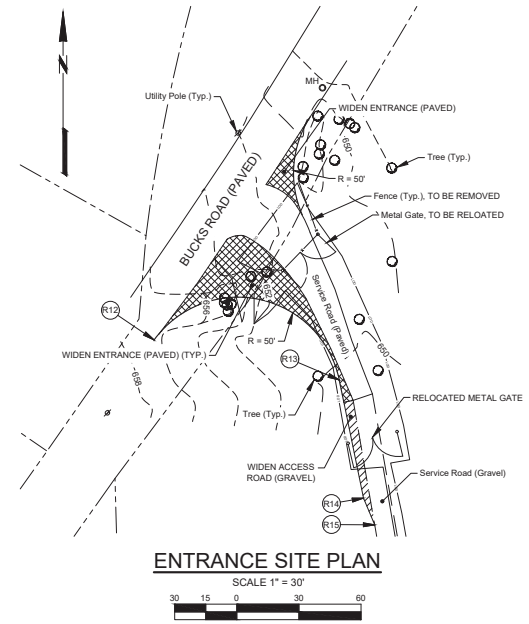
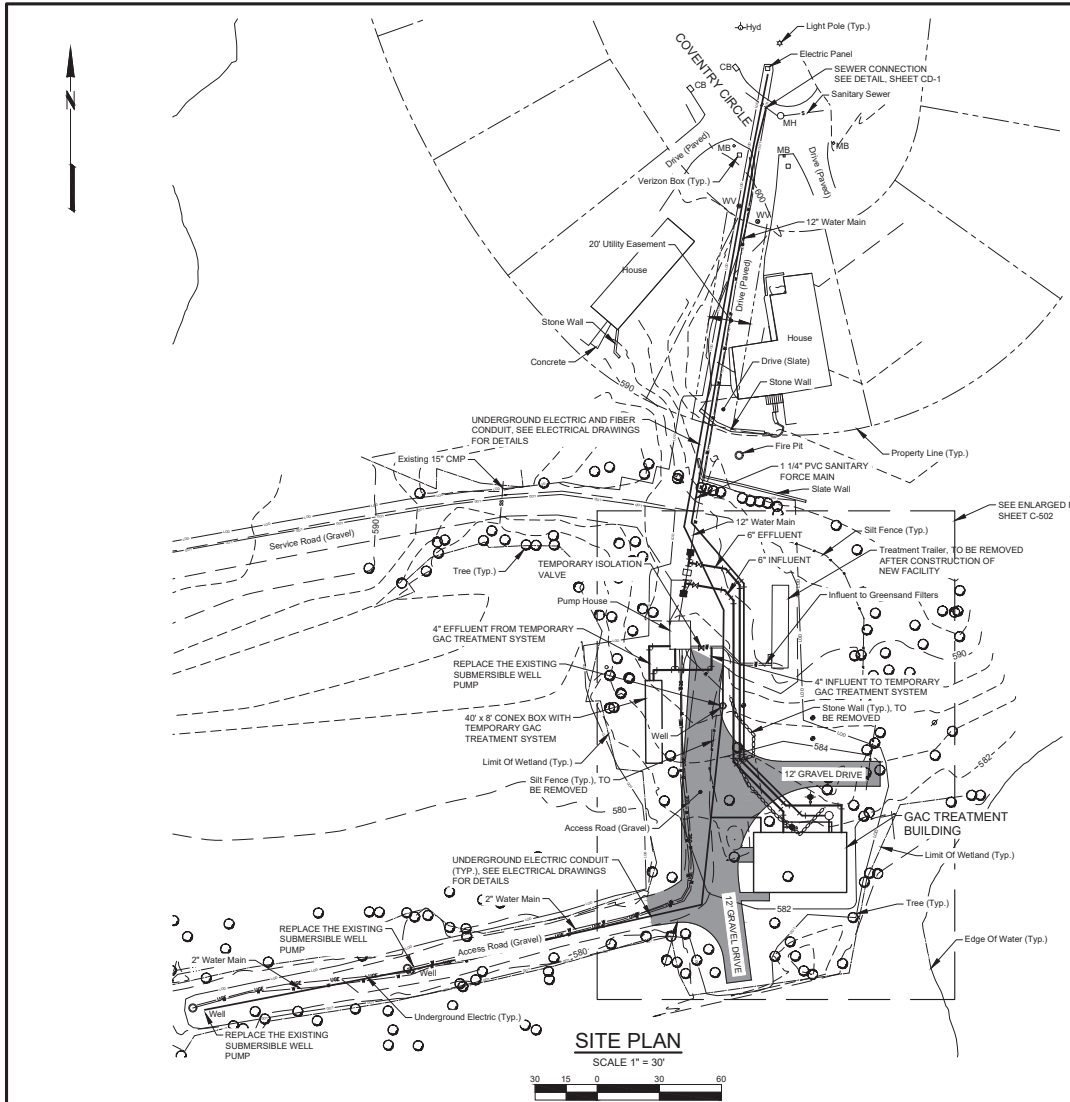
GANNETT FLEMING
ENGINEERS AND ARCHITECTS, P.C.

SUEZ WATER NEW YORK INC.
WEST NYACK, ROCKLAND COUNTY, NEW YORK

PFAS COMPLIANCE

MAHOPAC WELLS
CIVIL
LOCATION PLAN

JOB No.	SHEET No.
68577	C-500
DATE	
JANUARY 2024	



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			CHECKED	APPROVED	APPROVED
			S.Z.L.		
DESCRIPTION	DATE	BY			
REVISIONS					

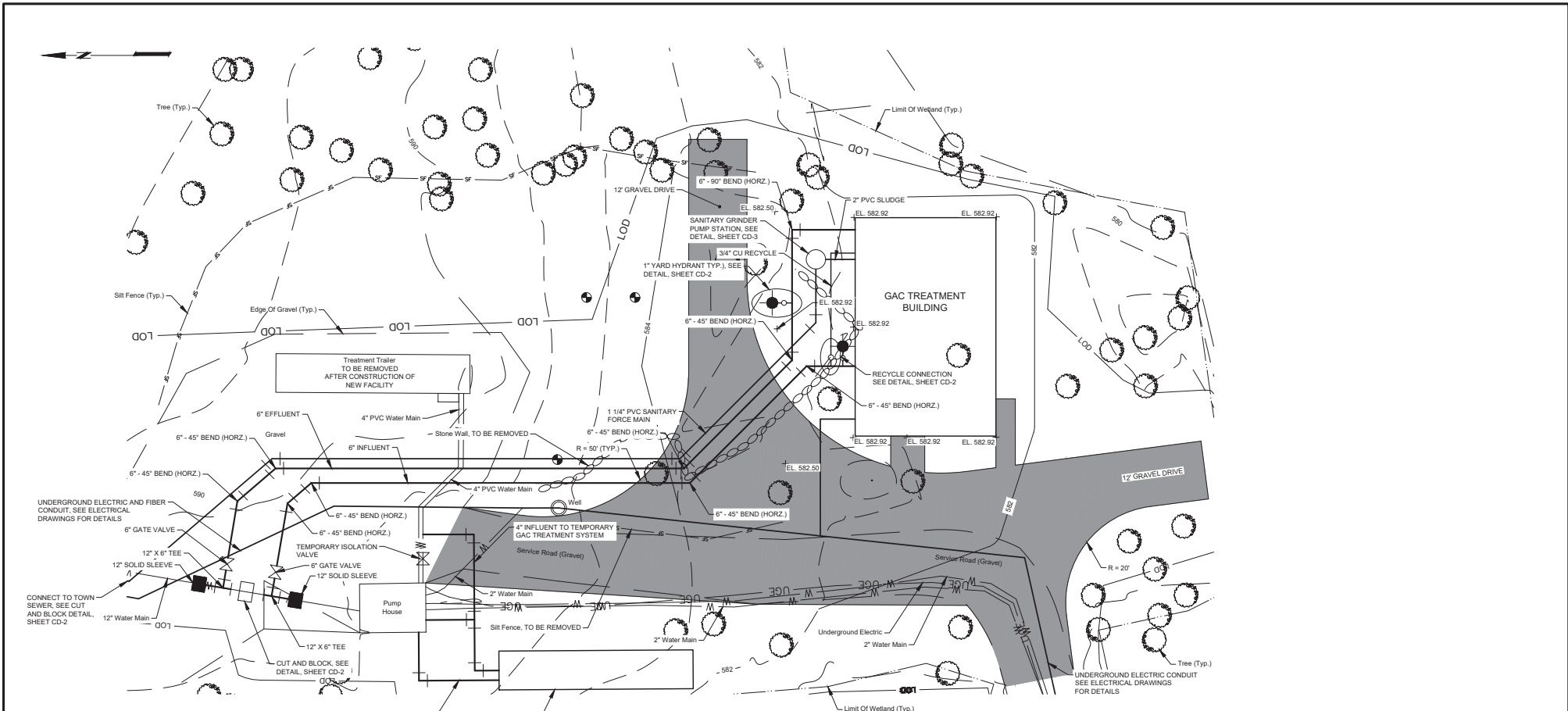


SUEZ WATER NEW YORK INC.
WEST NYACK, ROCKLAND COUNTY, NEW YORK

PFAS COMPLIANCE

MAHOPAC WELLS
CIVIL
SITE AND ENTRANCE SITE PLANS

JOB No. 68577
DATE JANUARY 2024
SHEET No. C-501



- NOTES**
1. ALL PIPING TO BE DUCTILE IRON UNLESS NOTED OTHERWISE.
 2. PIPING AND FITTINGS TO BE RESTRAINED JOINT UNLESS NOTED OTHERWISE.
 3. AT POINTS OF CONNECTION, CONTRACTOR SHALL EXPOSE EXISTING WATER MAINS TO VERIFY LOCATION, GEOMETRY, AND MATERIAL REQUIREMENTS PRIOR TO ORDERING MATERIALS OR STARTING CONSTRUCTION OF ANY MAIN CONNECTING THERE TO.

ENLARGED PLAN
SCALE 1" = 10'

FILE PATH: C:\Users\mshel\OneDrive\GANNETT FLEMING INC\68577-SuezNY_PFA3_Project_F_and_H_DB\Project Files\Civil-Site\Proj\A\Site\68577C502.dwg
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NO.	DESCRIPTION	DATE	BY
1	REVISED DRAWING	1/23	S.Z.L.

DESIGNED	CADD	SCALE
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CHECKED	APPROVED	APPROVED
S.Z.L.		

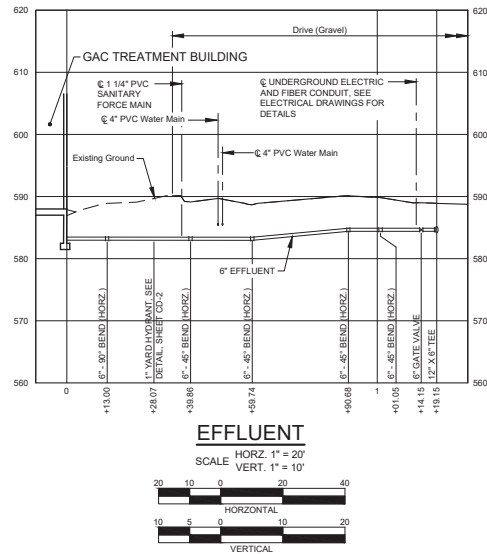
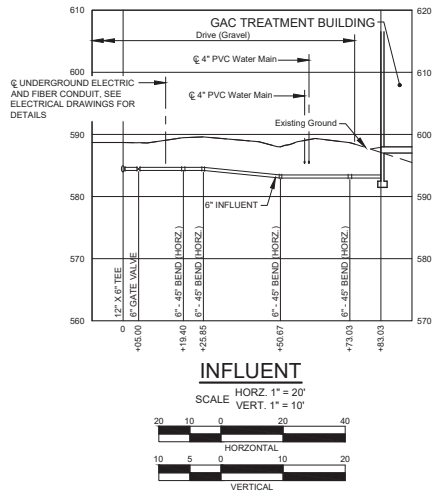
GANNETT FLEMING
ENGINEERS AND ARCHITECTS, P.C.

CREAMER
FLETCHER CREAMER & SOLO, INC.
A Division of AECOM

SUEZ WATER NEW YORK INC.
WEST NYACK, ROCKLAND COUNTY, NEW YORK

PFAS COMPLIANCE

90% SUBMISSION		JOB No.	SHEET No.
MAHOPAC WELLS CIVIL ENLARGED PLAN		68577	C-502
DATE		JANUARY 2024	



NOTES

1. ALL PIPING TO BE DUCTILE IRON UNLESS NOTED OTHERWISE.
2. PIPING AND FITTINGS TO BE RESTRAINED JOINT UNLESS NOTED OTHERWISE.
3. AT POINTS OF CONNECTION, CONTRACTOR SHALL EXPOSE EXISTING WATER MAINS TO VERIFY LOCATION, GEOMETRY, AND MATERIAL REQUIREMENTS PRIOR TO ORDERING MATERIALS OR STARTING CONSTRUCTION OF ANY MAIN CONNECTING THERE TO.

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NO.	DESCRIPTION	DATE	BY

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J.L.L.G.	J.L.L.G.	AS NOTED
CHECKED	APPROVED	APPROVED
S.Z.L.		


GANNETT FLEMING
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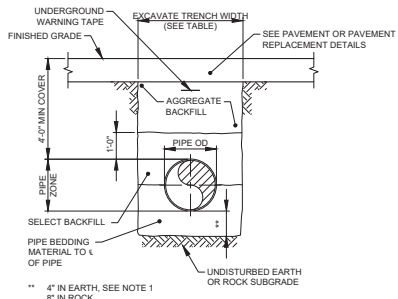

CREAMER
 FLETCHER CREAMER & SOIL, INC.
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SUEZ WATER NEW YORK INC.
 WEST NYACK, ROCKLAND COUNTY, NEW YORK

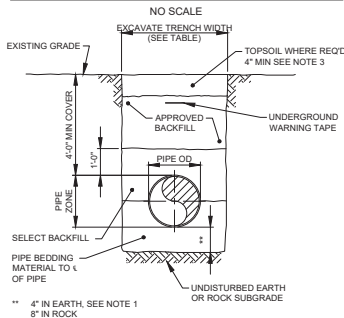
PFAS COMPLIANCE

MAHOPAC WELLS
 CIVIL
 PROFILES

JOB No.	SHEET No.
68577	C-503
DATE	
JANUARY 2024	



TYPICAL TRENCH PAVED AREAS



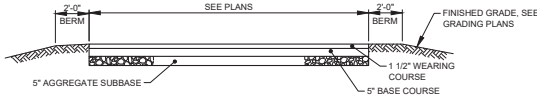
TYPICAL TRENCH UNPAVED AREAS

NO SCALE

PRESSURIZED PIPE TRENCH WIDTH TABLE	
DIAMETER OF PIPE	MAX TRENCH WIDTH (OD OF PIPE AT BARREL PLUS)
3" - 36"	24"

TRENCH NOTES:

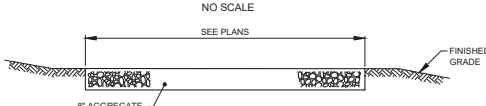
- IF UNSUITABLE SUBSOIL IS ENCOUNTERED AT THE NORMAL TRENCH SUBGRADE, THE CONTRACTOR SHALL REMOVE IT TO THE DEPTH DIRECTED BY THE ENGINEER IN THE FIELD, AND BACKFILL W/ PIPE BEDDING MATERIAL IN 4" LAYERS.
- BOTTOM OF TRENCH SHALL BE FREE OF WATER PRIOR TO PLACING BEDDING.
- PROVIDE 4" OF TOPSOIL WHERE SEEDING IS REQUIRED.
- CONTRACTOR SHALL SHORE THE TRENCH IN ACCORDANCE WITH SECTION 0255 OF THE SPECIFICATIONS.
- GRAVEL AND PAVED DRIVEWAYS TO BE RESTORED IN KIND WITH MINIMUM REQUIREMENTS AS INDICATED ON THIS SHEET.



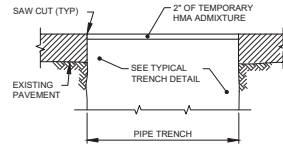
NOTES:

- WHERE STRUCTURES ARE INDICATED ON DRAWINGS, NO BERM REQUIRED. SEE CONCRETE CURB SECTION THIS SHEET.
- SEE PLANS FOR SLOPE OF ROAD.

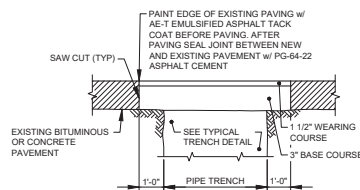
PAVING DETAIL



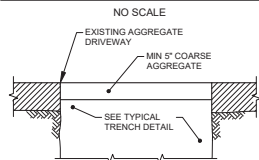
GRAVEL ROAD DETAIL



TEMPORARY PAVEMENT REPLACEMENT



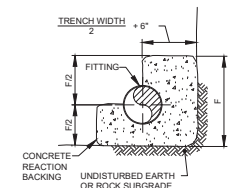
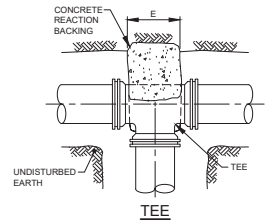
BITUMINOUS DRIVEWAY PAVEMENT REPLACEMENT



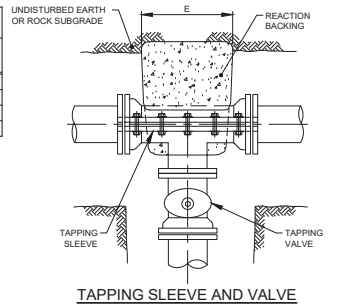
AGGREGATE DRIVEWAY REPLACEMENT

TABLE OF REACTION BACKING DIMENSIONS

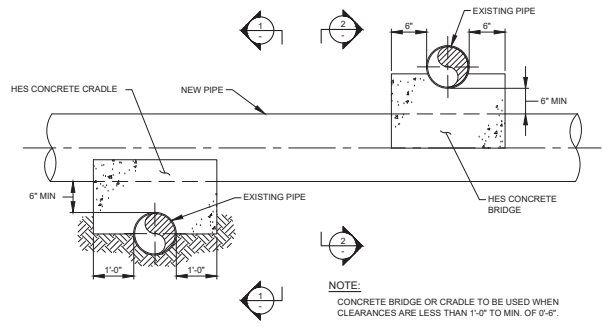
PIPE DIA	TEST PRESSURE (PSI)	A	B	C	D	E	F	G	H	I	J	K	L	M
8"	150	3/8"	2/8"	1/2"	1/2"	2/8"	2/8"	1/8"	22 1/2"	11 1/4"	45"	22 1/2"	11 1/4"	45"
6"	150	2/8"	1/8"	1/2"	1/2"	2/8"	1/8"	1/2"	17 1/2"	8 1/2"	36"	2/8"	1/8"	2/8"
4"	150	2/8"	1/8"	1/2"	1/2"	1/8"	2/4"	1/8"	17 1/2"	8 1/2"	36"	2/8"	1/8"	2/8"
2"	150	1/8"	1/8"	1/2"	1/2"	1/8"	2/8"	1/8"	17 1/2"	8 1/2"	36"	2/8"	1/8"	2/8"



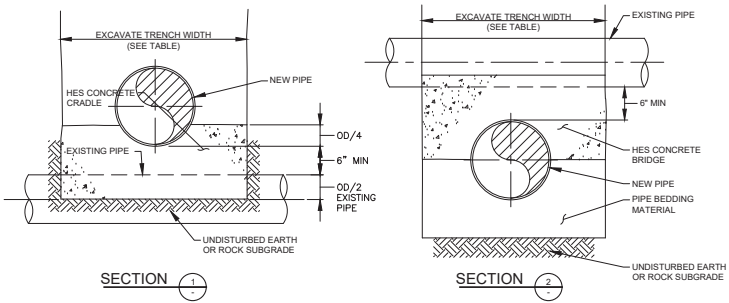
SECTION REACTION BACKINGS



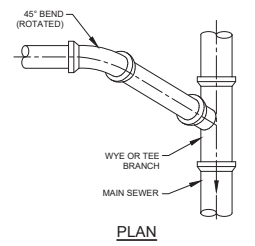
TAPPING SLEEVE AND VALVE



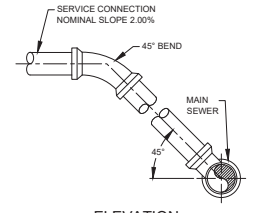
NOTE: CONCRETE BRIDGE OR CRADLE TO BE USED WHEN CLEARANCES ARE LESS THAN 1'-0" TO MIN. OF 0'-6".



SECTION 1 CONCRETE CRADLE AND CONCRETE BRIDGE



PLAN



ELEVATION SERVICE CONNECTION

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 CHECKED: S.Z.L. APPROVED: [Signature]

GANNETT FLEMING ENGINEERS AND ARCHITECTS, P.C.

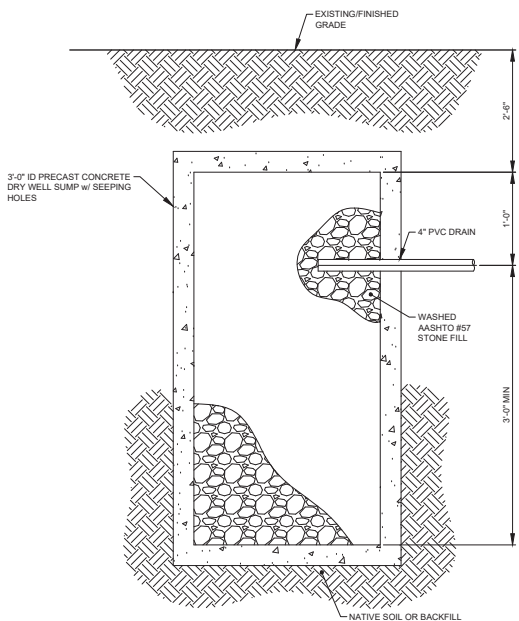
CREAMER
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 SUEZ WATER NEW YORK INC.
 WEST NYACK, ROCKLAND COUNTY, NEW YORK

PFAS COMPLIANCE

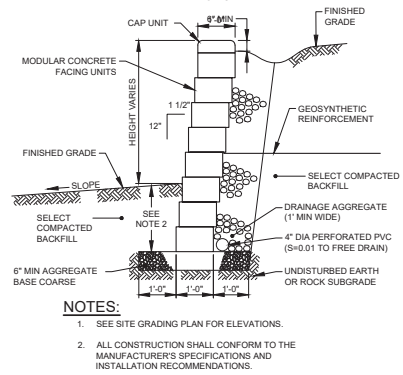
CIVIL
TRENCH, PAVING AND PIPING DETAILS

JOB No. 68577
 DATE: JANUARY 2024

SHEET No. CD-1



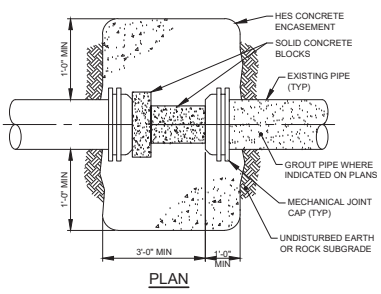
GRAVEL SUMP



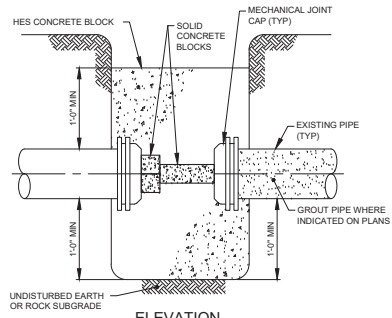
- NOTES:**
1. SEE SITE GRADING PLAN FOR ELEVATIONS.
 2. ALL CONSTRUCTION SHALL CONFORM TO THE MANUFACTURER'S SPECIFICATIONS AND INSTALLATION RECOMMENDATIONS.

MODULAR CONCRETE RETAINING WALL

NO SCALE



PLAN



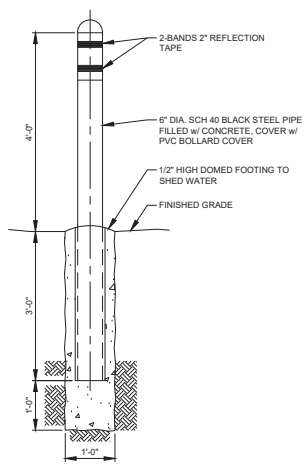
ELEVATION

NOTES:

1. UNCOVER EXISTING PIPE.
2. CUT 2'-0" SECTION FROM MAIN IN CENTER OF EXCAVATION.
3. CAP EXISTING MAIN.
4. PLACE SOLID CONCRETE BLOCKS AS SHOWN. WEDGE TIGHTLY BETWEEN ENDS OF PIPE CAPS OR PLUGS.
5. CONCRETE ENCASMENT OPPOSITE CAP MUST BEAR ON UNDISTURBED EARTH.

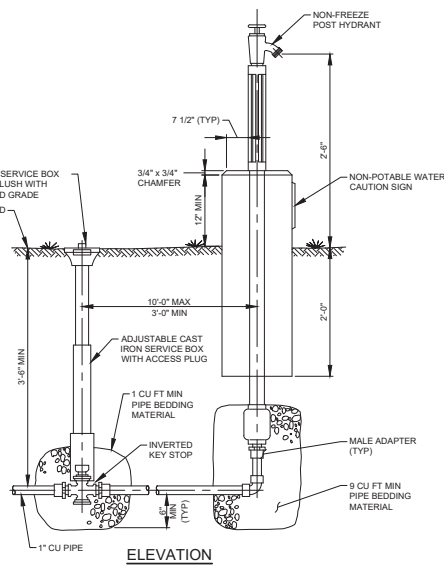
CUT AND BLOCK

NO SCALE



PIPE BOLLARD

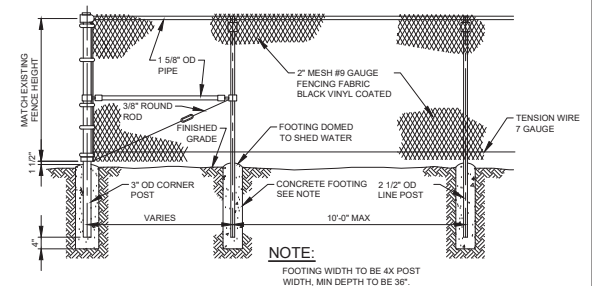
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ELEVATION

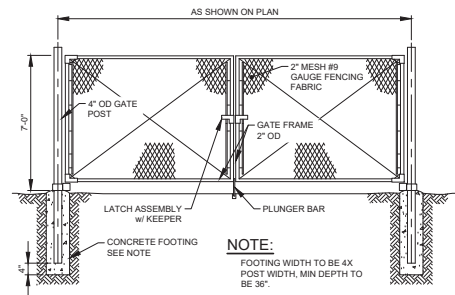
YARD HYDRANT

NO SCALE



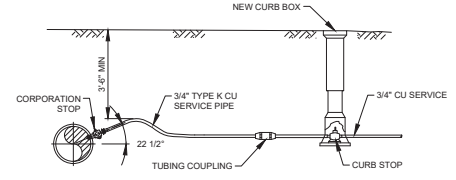
CHAIN LINK FENCE

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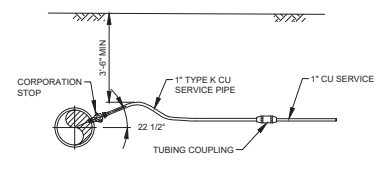
DOUBLE SWING GATE

NO SCALE



RECYCLE CONNECTION

NO SCALE



YARD HYDRANT CONNECTION

NO SCALE

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

SUEZ WATER NEW YORK INC.
WEST NYACK, ROCKLAND COUNTY, NEW YORK

PFAS COMPLIANCE

CIVIL
MISCELLANEOUS DETAILS

JOB No.	SHEET No.
68577	CD-2
DATE	
JANUARY 2024	

SHADED FACILITIES

-  MASONRY WALL (PLANS AND SECTIONS)
-  FILL CONCRETE (USED ON SECTIONS)
-  REINFORCED CONCRETE (USED ON SECTIONS)

CHEMICAL FEED SYSTEMS

- A — ALUM
- AC — ALTERNATE COAGULANT
- AM — AMMONIA
- CA — COAGULANT AID
- CD — CHLORINE DIOXIDE
- CI — CORROSION INHIBITOR
- CL — CHLORINE
- CO — CARBON DIOXIDE
- CP — COAGULANT POLYMER
- CS — CAUSTIC SODA
- F — FLUORIDE
- FA — FILTER AID
- FC — FERRIC CHLORIDE
- FS — FERRIC SULFATE
- HP — HYDROGEN PEROXIDE
- HW — HOT WATER
- K — POTASSIUM PERMANGANATE
- L — LIME
- O — OXYGEN
- OZ — OZONE
- PAC — POWDERED ACTIVATED CARBON
- PACL — POLYALUMINUM CHLORIDE
- S — SPARE
- SA — SODA ASH
- SB — SODIUM BISULFITE
- SBP — SLUDGE BLANKET POLYMER
- SC — SODIUM CHLORIDE
- SCP — SLUDGE CONDITIONER POLYMER
- SHC — SODIUM HYPOCHLORITE
- SO — SULFUR DIOXIDE
- WCP — WASTEWATER CONDITIONER POLYMER
- 'X' D — 'X' DRAIN
- 'X' F — 'X' FILL
- 'X' V — 'X' VENT

PROCESS PIPING ABBREVIATIONS

- AIR — AIR
- B — BELL
- BW — BACKWASH WATER
- CE — CONTACTOR EFFLUENT
- CI — CLEARWELL INFLUENT
- D — DRAIN
- FE — FILTER EFFLUENT
- FI — FILTER INFLUENT
- FLG — FLANGE
- FR — FILTER RINSE
- FW — FINISHED WATER
- GAC — GRANULAR ACTIVATED CARBON
- MJ — MECHANICAL JOINT
- MW — MIXED WATER
- PE — PLAIN END
- PS — PLANT SERVICE
- RJ — RESTRAINED JOINT
- RW — RAW WATER
- SL — SLUDGE
- SW — SETTLED WATER
- V — VENT
- WW — WASTEWATER
- W — WATER

SAMPLE LINES

- CES — CONTACTOR EFFLUENT SAMPLE
- CIS — CLEARWELL INFLUENT SAMPLE
- FIS — FILTER INFLUENT SAMPLE
- FES — FILTER EFFLUENT SAMPLE
- FWS — FINISHED WATER SAMPLE
- MWS — MIXED WATER SAMPLE
- PES — PLANT EFFLUENT SAMPLE
- PIS — PLANT INFLUENT SAMPLE
- RWS — RAW WATER SAMPLE

PROCESS FLOW ABBREVIATIONS

- CFM — CUBIC FEET PER MINUTE
- CFS — CUBIC FEET PER SECOND
- FPS — FEET PER SECOND
- GPM — GALLONS PER MINUTE
- MGD — MILLION GALLONS PER DAY

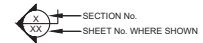
GENERAL ABBREVIATIONS

- CLR — CLEARANCE
- ε — CENTERLINE
- CMU — CONCRETE MASONRY UNIT
- DIA — DIAMETER
- EC — ELECTRICAL CONTRACT
- EL or ELEV — ELEVATION
- EX — EXISTING
- FT — FOOT OR FEET
- GC — GENERAL CONTRACT
- ID — INSIDE DIAMETER
- INV — INVERT
- MAX — MAXIMUM
- MC — MECHANICAL CONTRACT
- MIN — MINIMUM
- NA — NOT APPLICABLE
- NTS — NOT TO SCALE
- OD — OUTSIDE DIAMETER
- PC — PLUMBING CONTRACT
- ε — PLATE
- SHT — SHEET
- SQ — SQUARE
- STA — STATION
- TYP — TYPICAL
- W — WATER
- WW — WASTEWATER

MATERIAL

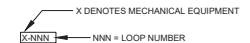
- AL — ALUMINUM
- ACP — ASBESTOS CEMENT PIPE
- CI — CAST IRON
- CIP — CAST IRON PIPE
- CISP — CAST IRON SOIL PIPE
- CMP — CORRUGATED METAL PIPE
- CPVC — CHLORINATED POLYVINYL CHLORIDE PIPE
- CU — COPPER
- DI — DUCTILE IRON
- DIP — DUCTILE IRON PIPE
- FRP — FIBERGLASS REINFORCED PLASTIC
- GI — GALVANIZED IRON
- GLDIP — GLASS LINED DUCTILE IRON PIPE
- HDPE — HIGH DENSITY POLYETHYLENE
- PCCP — PRESTRESSED CONCRETE CYLINDER PIPE
- PEX — CROSS-LINKED POLYETHYLENE
- PVC — POLYVINYL CHLORIDE
- RCCP — REINFORCED CEMENT CONCRETE PIPE
- SS — STAINLESS STEEL
- STL — STEEL

PROCESS SHEET REFERENCE LEGEND



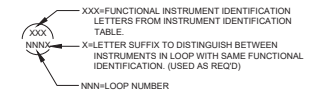
PROCESS INSTRUMENTATION IDENTIFICATION LEGEND

EQUIPMENT TAGGING



* SEE INSTRUMENTATION DRAWINGS FOR INSTRUMENTATION IDENTIFICATION ABBREVIATIONS.

INSTRUMENT & FUNCTION TAGGING



* SEE INSTRUMENTATION DRAWINGS FOR INSTRUMENTATION IDENTIFICATION ABBREVIATIONS.

LINE COMPOSITION

- NEW FACILITIES SHOWN WITH HEAVIER LINE WORK AND BOLDER TEXT THAN EXISTING FACILITIES.

NOTE:

'X' - INSERT CHEMICAL ABBREVIATION AS REQUIRED. (EXAMPLE CSV - CAUSTIC SODA VENT)

THIS SHEET IS FOR PROCESS SYMBOLS AND ABBREVIATIONS ONLY. REFER TO ARCHITECTURAL, STRUCTURAL, MECHANICAL AND ELECTRICAL DRAWINGS FOR SYMBOLS AND ABBREVIATIONS FOR THAT WORK.

FILE PATH: C:\Users\mcc\Documents\GANNETT FLEMING\INC08677-SuezNY-PFAS-Project_F_and_I\DWG\Project Flow\Water\DWG\Process\68577P1.dwg
DATE SAVED: 10/06/2021 8:22 AM BY: mcc
DATE PLOTTED: 10/19/2021 2:48 PM

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NO.	DESCRIPTION	DATE	BY	DESIGNED	CADD	SCALE
						AS NOTED
				CHECKED	APPROVED	APPROVED


GANNETT FLEMING
 ENGINEERS AND ARCHITECTS, P.C.


CREMER
 FLETCHER CREMER & SOIL, INC.
MEMBER OF AEC GROUP

SUEZ WATER NEW YORK INC.
 WEST NYACK, ROCKLAND COUNTY, NEW YORK
PFAS COMPLIANCE

PROCESS
PROCESS LEGEND AND ABBREVIATIONS

JOB No.
 68577
 DATE
 JANUARY 2024

SHEET No.
P-1

FILE PATH: C:\Users\mcc\Documents\GANNETT FLEMING\INC08677-SuezNY_PFA5_Project_F_and_J\J\Project Files\Water\DWG\Process\68577P2.dwg
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WALL FITTINGS		
DESCRIPTION	SINGLE LINE	THREE LINE
WALL SLEEVE CAULKED (P.E., F. & P.E.)		
WALL SLEEVE MODULAR TYPE SEAL (P.E., F. & P.E.)		
WALL SLEEVE (M.J., F. & M.J.)		
WALL PIPE (F., F. & F.)		
WALL PIPE (B., F. & B.)		
WALL PIPE (B., F. & F.)		
WALL PIPE (M.J., F. & F.)		
WALL PIPE (F., F. & P.E.)		

NOTE: APPLIES TO FLOOR SLEEVES ALSO.

PIPE FITTINGS (CONT.)		
DESCRIPTION	SINGLE LINE	THREE LINE
REDUCER		
ECCENTRIC REDUCER		
BLIND FLANGE		
CLAMPED RESTRAINED COUPLING		
MECHANICAL COUPLING		
RESTRAINED MECH. COUPLING		
FLANGED ADAPTOR	N.A.	
FLANGED ADAPTOR W/ ANCHOR STUDS	N.A.	

VALVE SYMBOLS			
DESCRIPTION	SINGLE LINE	THREE LINE PLAN	THREE LINE ELEVATION
GATE			
BUTTERFLY			
BALL			
BALL CHECK		N.A.	N.A.
CHECK			
DIAPHRAGM		N.A.	N.A.
PLUG			
GLOBE		N.A.	N.A.
PINCH		N.A.	N.A.
NEEDLE		N.A.	N.A.
SOLENOID		N.A.	N.A.
AIR RELEASE	N.A.		
AIR VACUUM	N.A.		
COMBINATION AIR RELEASE - AIR/VACUUM	N.A.		
KINETIC AIR VACUUM	N.A.		
KINETIC COMBINATION AIR RELEASE - AIR VACUUM	N.A.		
PRESSURE REDUCING		N.A.	N.A.
HOSE BIBB			
STOP AND DRAIN			
PRESSURE RELIEF		N.A.	N.A.

PIPE FITTINGS		
DESCRIPTION	SINGLE LINE	THREE LINE
CROSS		
CROSS (VERT.)		
TEE		
TEE (VERT. UP)		
TEE (VERT. DOWN)		
90 ELBOW		
90 ELBOW (VERT. DOWN)		
90 ELBOW (VERT. UP)		
90 LONG RADIUS ELBOW		
45 ELBOW		
90 BASE ELBOW		
45° WYE		
UNION (SCREWED)		N.A.
ADAPTOR		N.A.
HOSE CONNECTION		N.A.

VALVE OPERATOR		
DESCRIPTION	SINGLE LINE	THREE LINE
MANUAL OPERATOR	N.A.	
MOTOR OPERATOR	N.A.	
CYLINDER OPERATOR	N.A.	

PIPE JOINTS		
DESCRIPTION	SINGLE LINE	THREE LINE
FLANGE		
MECHANICAL JOINT		
RESTRAINED JOINT		
PUSH ON OR BELL AND SPIGOT		
THREADED		
VICTAULIC COUPLING		
WELDED	N.A.	

PIPING ACCESSORIES		
DESCRIPTION	SINGLE LINE	THREE LINE
VENTURI METER		
STRAINER		
PRESSURE SWITCH		
PRESSURE GAUGE		
PRESSURE GAUGE W/ PRESSURE SWITCH		
THERMOMETER		
PROPELLER OR TURBINE METER		N.A.
MAGNETIC FLOWMETER		

NO.	DESCRIPTION	DATE	BY

DESIGNED M.J.C./M.M.S.	CADD M.T.K.	SCALE AS NOTED
CHECKED J.L.R.	APPROVED	APPROVED

GANNETT FLEMING
ENGINEERS AND ARCHITECTS, P.C.

CREAMER
FLETCHER CREAMER & SOIL, INC.
MEMBER OF AEC GROUP

SUEZ WATER NEW YORK INC.
WEST NYACK, ROCKLAND COUNTY, NEW YORK

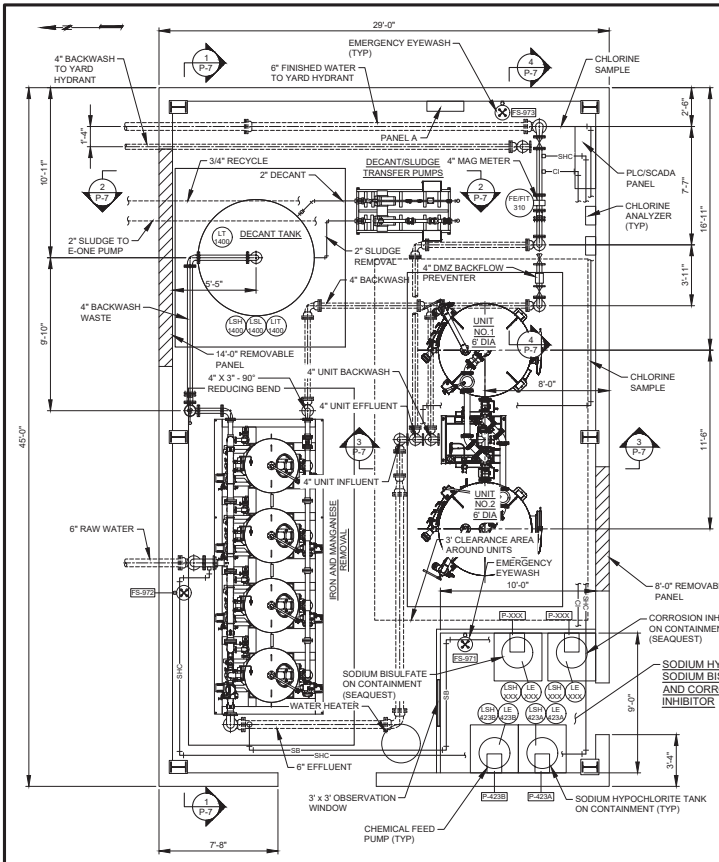
PFA5 COMPLIANCE

PROCESS
PROCESS PIPING SYMBOLS

JOB No.
68577

DATE
JANUARY 2024

SHEET No.
P-2



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

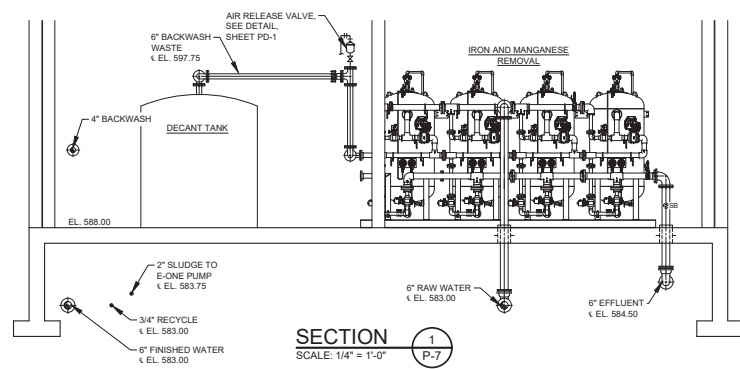
- NOTES**
1. PROVIDE AIR RELEASE/AIR VACUUM VALVES ON TOP OF FILTER AND UNITS.
 2. PROVIDE PRESSURE RELIEF VALVE AT EACH UNIT.

- CHEMICAL PIPING NOTES:**
1. PIPING 3" OR SMALLER TO BE WALL MOUNTED WITH PVC COATED UNISTRUT SUPPORTS UNLESS OTHERWISE NOTED.
 2. ALL SMALL PIPING TO BE MOUNTED A MINIMUM 9'-0" ABOVE FINISHED FLOOR UNLESS OTHERWISE NOTED.
 3. PROVIDE DOUBLE CONTAINMENT PIPE FOR CHEMICAL FILL LINES ON THE CHEMICAL SCHEMATICS.
 4. SEE CHEMICAL FEED SYSTEM SCHEMATICS FOR ADDITIONAL SMALL PIPING INFORMATION.
 5. CHEMICAL PIPING OUTSIDE CONTAINMENT AREA TO BE DOUBLE CONTAINMENT PIPE.

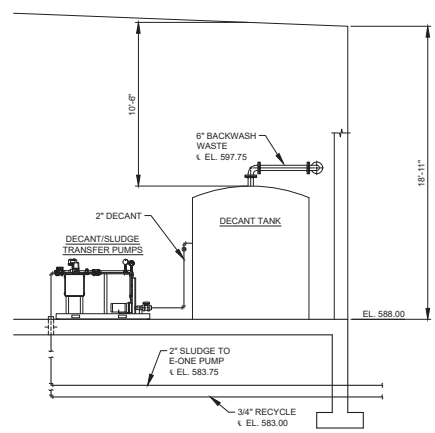
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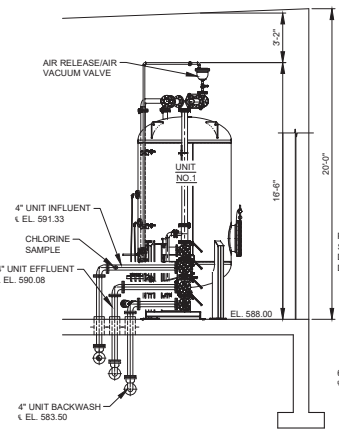
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				CHECKED	APPROVED	APPROVED



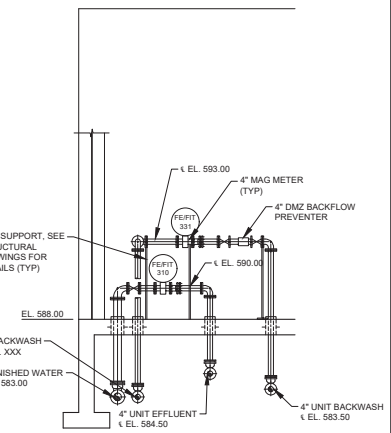
SECTION 1
SCALE: 1/4" = 1'-0"
P-7



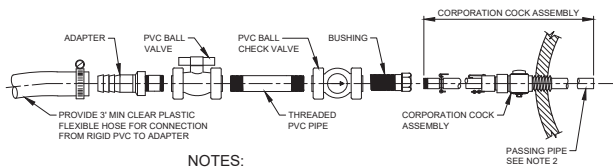
SECTION 2
SCALE: 1/4" = 1'-0"
P-7



SECTION 3
SCALE: 1/4" = 1'-0"
P-7



SECTION 4
SCALE: 1/4" = 1'-0"
P-7

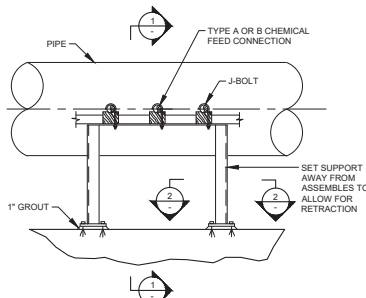


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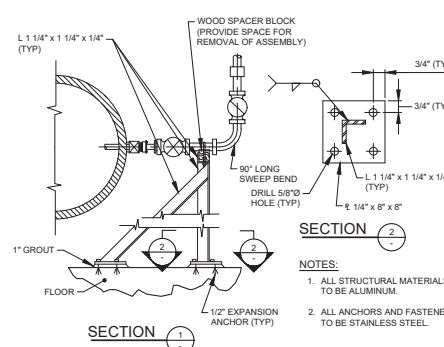
1. TYPE 'A' CONNECTION IS WHERE FEED LINE PROJECTS 1/3 DIA TO 1/2 DIA INTO MAIN.
2. FEED LINES UP TO AND INCLUDING 1" IN SIZE SHALL USE A 1/2" PASSING PIPE IN THE ASSEMBLY. ALL LARGER FEED LINES SHALL USE A 1 1/2" PASSING PIPE.

TYPE 'A' CONNECTION

NO SCALE



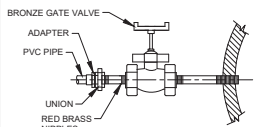
ELEVATION



SECTION 2

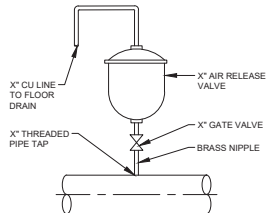
NOTES:

1. ALL STRUCTURAL MATERIALS TO BE ALUMINUM.
2. ALL ANCHORS AND FASTENERS TO BE STAINLESS STEEL.



TYPE 'C' CONNECTION

NO SCALE



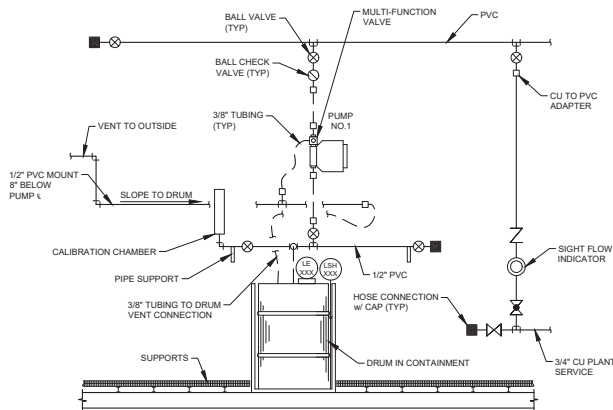
AIR RELEASE VALVE

NO SCALE

NOTE:
"X" = SIZE OF AIR VALVE NOTED ON PLANS.

FLOOR SUPPORT FOR CHEMICAL FEED CONNECTIONS

NO SCALE



TYPICAL CHEMICAL SCHEMATIC

NO SCALE

FILE PATH: C:\Users\mcc\Documents\GANNETT FLEMING\INC\08677\SuezNY_PFA_S\Project_F_and_I\DWG\Project Plans\Water\DWG\Process\68577\FD-1.dwg
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No.	DESCRIPTION	DATE	BY

DESIGNED	CADD	SCALE
CHECKED	APPROVED	APPROVED

GANNETT FLEMING
ENGINEERS AND ARCHITECTS, P.C.

SUEZ WATER NEW YORK INC.
WEST NYACK, ROCKLAND COUNTY, NEW YORK

PFAS COMPLIANCE

PROCESS
DETAILS AND CHEMICAL
FEED SYSTEM SCHEMATIC

JOB No.	SHEET No.
68577	PD-1
DATE	JANUARY 2024

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DESIGNED	CADD	SCALE
CHECKED	T.L.M.	AS NOTED
	APPROVED	APPROVED

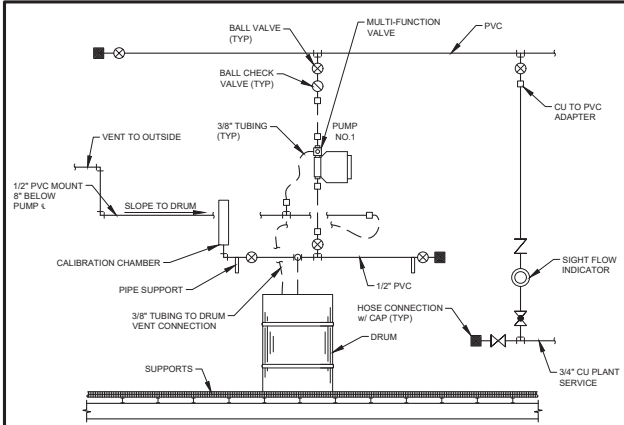
GANNETT FLEMING
 ENGINEERS AND ARCHITECTS, P.C.

SUEZ WATER NEW YORK INC.
 WEST NYACK, ROCKLAND COUNTY, NEW YORK

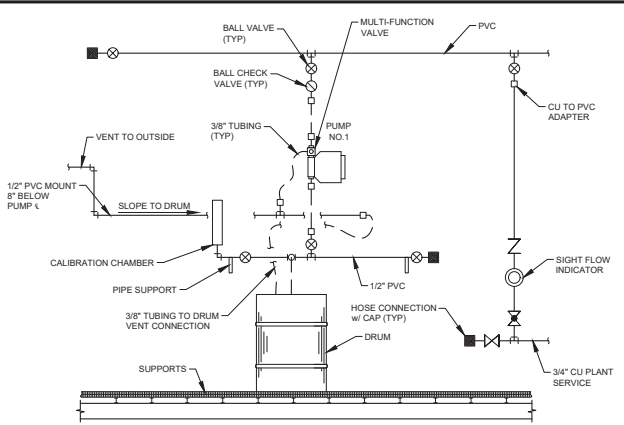
PFAS COMPLIANCE

PROCESS
 CHEMICAL FEED SYSTEM SCHEMATICS

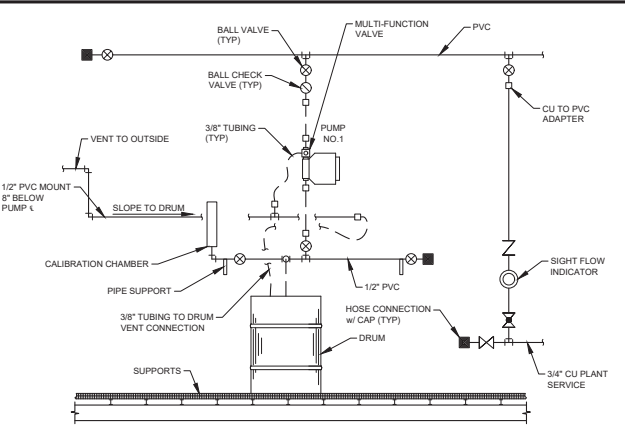
JOB No.	SHEET No.
68577	PD-2
DATE	JANUARY 2024



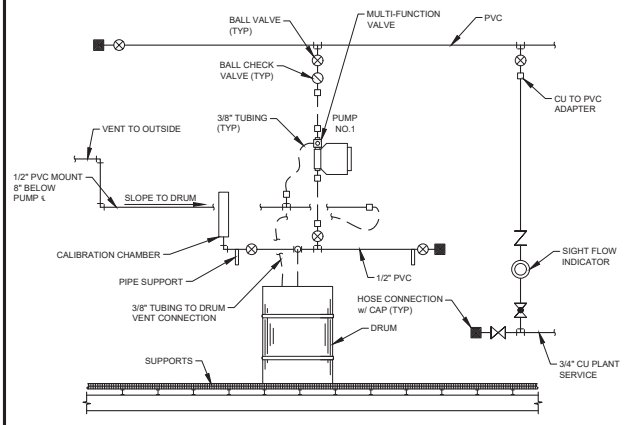
SODIUM HYPCHLORITE SCHEMATIC
 CHATEAU
 NO SCALE



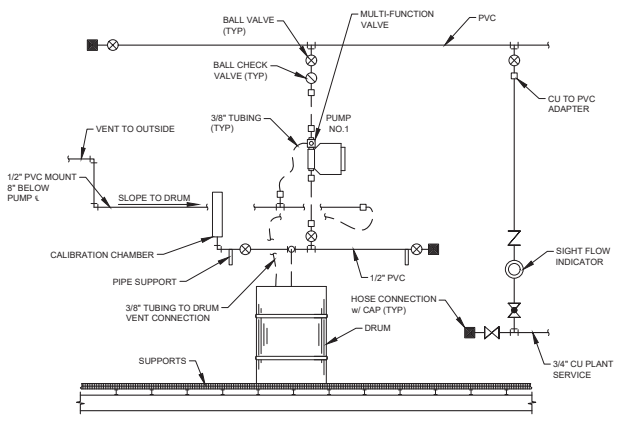
CORROSION INHIBITOR SCHEMATIC
 MAHOPAC
 NO SCALE



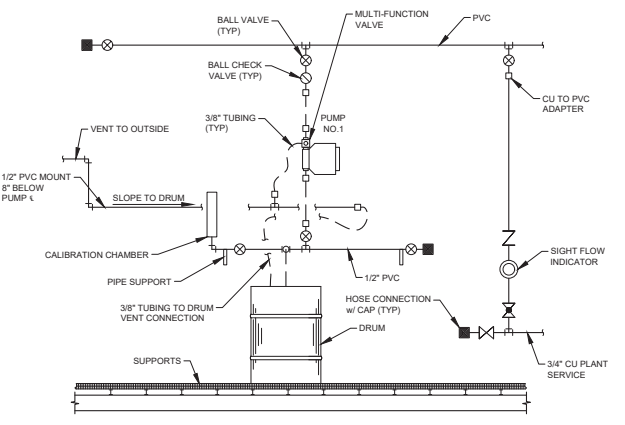
SODIUM HYPCHLORITE SCHEMATIC
 MAHOPAC
 NO SCALE



SODIUM HYPCHLORITE SCHEMATIC
 ARCHER
 NO SCALE



CORROSION INHIBITOR SCHEMATIC
 ARCHER
 NO SCALE



CAUSTIC SODA SCHEMATIC
 ARCHER
 NO SCALE

APPENDIX C
BACKWASH LABORATORY
TEST RESULTS



Friday, August 13, 2021

Attn: Roy Barticciotto
CEMCO Water & Wastewater Specialists Inc
59 Healey Lane
Stormville, NY 12582

Project ID: MAHPOPAC TREATMENT TRAILER
SDG ID: GCI88573
Sample ID#s: CI88573

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

A handwritten signature in black ink that reads "Phyllis Shiller". The signature is written in a cursive style.

Phyllis Shiller

Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B

NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
UT Lab Registration #CT00007
VT Lab Registration #VT11301



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Sample Id Cross Reference

August 13, 2021

SDG I.D.: GCI88573

Project ID: MAHPOPAC TREATMENT TRAILER

Client Id	Lab Id	Matrix
BACKWASH	CI88573	WATER



Environmental Laboratories, Inc.
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
 Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

August 13, 2021

FOR: Attn: Roy Barticcio
 CEMCO Water & Wastewater Specialists Inc
 59 Healey Lane
 Stormville, NY 12582

Sample Information

Matrix: WATER
 Location Code: CEMCO
 Rush Request: Standard
 P.O.#:

Custody Information

Collected by:
 Received by: LB
 Analyzed by: see "By" below

Date

08/04/21
 08/04/21

Time

11:00
 17:34

Laboratory Data

SDG ID: GCI88573
 Phoenix ID: CI88573

Project ID: MAHPOPAC TREATMENT TRAILER
 Client ID: BACKWASH

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
B.O.D./5 day	< 4.0	4.0	mg/L	2	08/04/21 17:34	J/LJ	SM 5210B-11
B.O.D./5 day End Incubation					08/09/21 15:00	J/LJ	SM 5210B-11
Chlorine Demand	2.00	0.1	mg/L	1	08/13/21	KDB	SM2350
C.O.D.	59	10	mg/L	1	08/05/21	QH	SM 5220D-11
Ammonia as Nitrogen	0.18	0.10	mg/L	2	08/11/21	KDB	E350.1
Oil and Grease by EPA 1664A	< 1.4	1.4	mg/L	1	08/06/21	BJA	EPA 1664
pH	7.92	1.00	pH Units	1	08/05/21 01:25	MW/EG	SM4500-H B-11
Nitrogen Tot Kjeldahl	0.60	0.20	mg/L	2	08/11/21	KDB	E351.1
Phosphorus, as P	0.11	0.10	mg/L	10	08/06/21	JR	SM4500PE-11
Total Suspended Solids	100	6.3	mg/L	1.3	08/05/21	MCH/QH	SM 2540D-11

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL
 BRL=Below Reporting Level L=Biased Low

Comments:

The regulatory hold time for pH is immediately. This pH was performed in the laboratory and may be considered outside of hold-time.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

August 13, 2021

Reviewed and Released by: Helen Geoghegan, Project Manager



Environmental Laboratories, Inc.
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
 Tel. (860) 645-1102 Fax (860) 645-0823



QA/QC Report

August 13, 2021


QA/QC Data

SDG I.D.: GCI88573

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 586491 (pH), QC Sample No: CI88378 (CI88573)													
pH			8.4	8.16	2.90	97.9						85 - 115	20
QA/QC Batch 586721 (mg/L), QC Sample No: CI88387 (CI88573)													
Phosphorus, as P	BRL	0.01	0.019	0.022	NC	95.2			104			85 - 115	20
Comment: Additional criteria matrix spike acceptance range is 75-125%.													
QA/QC Batch 586589 (mg/L), QC Sample No: CI88430 (CI88573)													
C.O.D.	BRL	10	31	31	NC	104			105			85 - 115	20
Comment: Additional criteria matrix spike acceptance range is 75-125%.													
QA/QC Batch 586542 (mg/L), QC Sample No: CI88558 (CI88573)													
Total Suspended Solids	BRL	2.5	<3.3	<3.5	NC	93.0						85 - 115	20
QA/QC Batch 586394 (mg/L), QC Sample No: CI88570 (CI88573)													
B.O.D./5 day	BRL	2.0	<4.0	<4.0	NC	100			92.5			70 - 130	20
B.O.D./5 day GGA BOD						111						84 - 115	20
QA/QC Batch 586699 (mg/L), QC Sample No: CI89235 (CI88573)													
Oil and Grease by EPA 1664A	BRL	1.4	<1.4	<1.4	NC	103			97.0			85 - 115	20
Comment: Additional: MS acceptance range 75-125%.													
QA/QC Batch 587135 (mg/L), QC Sample No: CI88389 (CI88573)													
Ammonia as Nitrogen	BRL	0.05	21.8	21.9	0.50	96.1			101			90 - 110	20
Nitrogen Tot Kjeldahl	BRL	0.10	28.8	29.34	1.90	99.0			104			85 - 115	20
Comment: TKN is reported as Organic Nitrogen in the Blank, LCS, DUP and MS.													

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

- RPD - Relative Percent Difference
- LCS - Laboratory Control Sample
- LCSD - Laboratory Control Sample Duplicate
- MS - Matrix Spike
- MS Dup - Matrix Spike Duplicate
- NC - No Criteria
- Intf - Interference


 Phyllis Shiller, Laboratory Director
 August 13, 2021

Friday, August 13, 2021

Criteria: None

State: NY

Sample Criteria Exceedances Report

GCI88573 - CEMCO

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
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*** No Data to Display ***

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.



Environmental Laboratories, Inc.
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Analysis Comments

August 13, 2021

SDG I.D.: GCI88573

The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report: None.



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NY Temperature Narration

August 13, 2021

SDG I.D.: GCI88573

The samples in this delivery group were received at 1.4°C.
(Note acceptance criteria for relevant matrices is above freezing up to 6°C)



NY/NJ CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
 Email: info@phoenixlabs.com Fax (860) 645-0823

Client Services (860) 645-8726

Temp 1-4 Pg 1 of 1

Data Delivery:
 Fax #:
 Email: Cemco59@gmail.com

Customer: Cemco Water and Wastewater Specialists, Inc.
 Address: 59 Healey Lane
Stormville, NY 12582

Project: Mahopac Treatment Trailer
 Report to: Cemco
 Invoice to: Cemco

Project P.O.:
 Phone #: 845-878-9711
 Fax #: 845-878-6578

Client Sample - Information - Identification

Sampler's Signature: [Signature] Date: 8/14

Analysis Request

					BOD (FIVE DAY)	PH, TSS, CHLORINE DEMAND	TP, NH3, TKN, COD	OIL & GREASE	+ + + + +	+ + + + +	+ + + + +	+ + + + +	+ + + + +	+ + + + +	+ + + + +	+ + + + +	GL AMBER 32 oz. H2SO4	Soil /VOA / Methanol / S. Bisulfate / H2O	GL Soil container () oz	GL Soil container () oz	40 ml /VOA Vial / As is / X /HCl	PL Amber 1000ml / 1500ml / 1000ml	PL H2SO4 / 250ml / 1500ml	PL HNO3 250ml	Bacteria Bottle	
Phoenix Sample #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	X																					
88573	Backwash	DW	8/14	11:00		X															X					
	Back wash	DW	↓	↓		X															X					
	Back wash	DW	↓	↓			X															X				
	Back wash	DW	↓	↓				X									X									

Matrix Code:
 DW=drinking water WW=wastewater S=soil/solid O=oil
 GW=groundwater SL=sludge A=air X=other

Relinquished by: [Signature] **Accepted by:** [Signature] **Date:** 8/14/21 **Time:** 12:58

Turnaround:
 1 Day*
 2 Days*
 3 Days*
 Standard
 Other

NJ:
 Res. Criteria
 Non-Res. Criteria
 Impact to GW Soil Cleanup Criteria
 GW Criteria

NY:
 TAGM 4046 GW
 TAGM 4046 SOIL
 NY375 Unrestricted Soil
 NY375 Residential Soil
 NY375 Restricted Non-Residential Soil

Data Format:
 Phoenix Std Report
 Excel
 PDF
 GIS/Key
 EQUIS
 NJ Hazsite EDD
 NY EZ EDD (ASP)
 Other

*** SURCHARGE APPLIES**

State where samples were collected: NY

Data Package:
 NJ Reduced Deliv. *
 NY Enhanced (ASP B) *
 Other

Comments, Special Requirements or Regulations:
 Cl2 residual: Sample is not DW per Cecelia (LB)



Monday, September 13, 2021

Attn: Roy Barticciotto
CEMCO Water & Wastewater Specialists Inc
59 Healey Lane
Stormville, NY 12582

Project ID: MAHOPAC TREATMENT TRAILER
SDG ID: GCJ19988
Sample ID#s: CJ19988

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

A handwritten signature in black ink that reads "Phyllis Shiller". The signature is written in a cursive style.

Phyllis Shiller

Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B

NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
UT Lab Registration #CT00007
VT Lab Registration #VT11301



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Tel. (860) 645-1102 Fax (860) 645-0823



Sample Id Cross Reference

September 13, 2021

SDG I.D.: GCJ19988

Project ID: MAHOPAC TREATMENT TRAILER

Client Id	Lab Id	Matrix
BACKWASH	CJ19988	WASTE WATER



Environmental Laboratories, Inc.
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
 Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

September 13, 2021

FOR: Attn: Roy Barticcio
 CEMCO Water & Wastewater Specialists Inc
 59 Healey Lane
 Stormville, NY 12582

Sample Information

Matrix: WASTE WATER
 Location Code: CEMCO
 Rush Request: Standard
 P.O.#:

Custody Information

Collected by:
 Received by: LB
 Analyzed by: see "By" below

Date

09/03/21
 09/03/21

Time

11:00
 17:05

Laboratory Data

SDG ID: GCJ19988
 Phoenix ID: CJ19988

Project ID: MAHOPAC TREATMENT TRAILER
 Client ID: BACKWASH

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	0.002	0.001		mg/L	1	09/08/21	EK	E200.7
Arsenic	< 0.002	0.002		mg/L	1	09/08/21	EK	E200.7
Cadmium	< 0.001	0.001		mg/L	1	09/08/21	EK	E200.7
Chromium	0.004	0.001		mg/L	1	09/08/21	EK	E200.7
Copper	0.022	0.003		mg/L	1	09/08/21	EK	E200.7
Mercury	< 0.0002	0.0002		mg/L	1	09/08/21	AT	E245.1
Manganese	15.4	0.050		mg/L	100	09/09/21	EK	E200.7
Molybdenum	< 0.003	0.003		mg/L	1	09/08/21	EK	E200.7
Nickel	0.013	0.001		mg/L	1	09/08/21	EK	E200.7
Lead	0.003	0.001		mg/L	1	09/08/21	EK	E200.7
Selenium	< 0.005	0.005		mg/L	1	09/08/21	EK	E200.7
Zinc	0.294	0.002		mg/L	1	09/08/21	EK	E200.7
B.O.D./5 day	< 40	40		mg/L	30	09/03/21 17:05	A/LJ	SM 5210B-11
B.O.D./5 day End Incubation						09/08/21 15:01	A/LJ	SM 5210B-11
Ammonia as Nitrogen	0.10	0.05		mg/L	1	09/10/21	KDB	E350.1
Oil and Grease by EPA 1664A	< 1.4	1.4		mg/L	1	09/11/21	MSF	EPA 1664
Total Cyanide	< 0.020	0.020		mg/L	2	09/13/21	ARC/GD	E335.4
Phosphorus, as P	0.203	0.010		mg/L	1	09/09/21	JR	SM4500PE-11
Total Suspended Solids	210	13		mg/L	2.5	09/08/21	AMM/ARGSM	2540D-11
Mercury Digestion	Completed					09/05/21	AB/AB	E245.1
Total Metals Digestion	Completed					09/07/21	AG	

Acrolein, Acrylonitrile, 2 CEVE

2-Chloroethyl vinyl ether	ND	5.0	5.0	ug/L	1	09/03/21	MH	E624.1 As is
Acrolein	ND	5.0	1.0	ug/L	1	09/03/21	MH	E624.1 As is
Acrylonitrile	ND	5.0	0.50	ug/L	1	09/03/21	MH	E624.1 As is

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<u>Volatiles</u>								
1,1,1-Trichloroethane	ND	5.0	0.50	ug/L	1	09/03/21	MH	E624.1
1,1,2,2-tetrachloroethane	ND	5.0	0.50	ug/L	1	09/03/21	MH	E624.1
1,1,2-Trichloroethane	ND	5.0	0.50	ug/L	1	09/03/21	MH	E624.1
1,1-Dichloroethane	ND	5.0	0.50	ug/L	1	09/03/21	MH	E624.1
1,1-Dichloroethene	ND	5.0	0.50	ug/L	1	09/03/21	MH	E624.1
1,2-Dichlorobenzene	ND	5.0	0.50	ug/L	1	09/03/21	MH	E624.1
1,2-Dichloroethane	ND	5.0	0.50	ug/L	1	09/03/21	MH	E624.1
1,2-Dichloropropane	ND	5.0	0.50	ug/L	1	09/03/21	MH	E624.1
1,3-Dichlorobenzene	ND	5.0	0.50	ug/L	1	09/03/21	MH	E624.1
1,3-Dichloropropene	ND	5.0	5.0	ug/L	1	09/03/21	MH	E624.1
1,4-Dichlorobenzene	ND	5.0	0.50	ug/L	1	09/03/21	MH	E624.1
Benzene	ND	5.0	0.50	ug/L	1	09/03/21	MH	E624.1
Bromodichloromethane	9.1	5.0	0.50	ug/L	1	09/03/21	MH	E624.1
Bromoform	0.89	J 5.0	0.50	ug/L	1	09/03/21	MH	E624.1
Bromomethane	ND	5.0	0.50	ug/L	1	09/03/21	MH	E624.1
Carbon tetrachloride	ND	5.0	0.50	ug/L	1	09/03/21	MH	E624.1
Chlorobenzene	ND	5.0	0.50	ug/L	1	09/03/21	MH	E624.1
Chloroethane	ND	5.0	0.50	ug/L	1	09/03/21	MH	E624.1
Chloroform	9.5	5.0	0.50	ug/L	1	09/03/21	MH	E624.1
Chloromethane	ND	5.0	0.50	ug/L	1	09/03/21	MH	E624.1
cis-1,2-Dichloroethene	ND	5.0	0.50	ug/L	1	09/03/21	MH	E624.1
cis-1,3-Dichloropropene	ND	5.0	0.50	ug/L	1	09/03/21	MH	E624.1
Dibromochloromethane	6.3	5.0	0.50	ug/L	1	09/03/21	MH	E624.1
Ethylbenzene	ND	5.0	0.50	ug/L	1	09/03/21	MH	E624.1
m&p-Xylenes	ND	5.0	0.50	ug/L	1	09/03/21	MH	E624.1
Methyl t-butyl ether (MTBE)	ND	5.0	0.50	ug/L	1	09/03/21	MH	E624.1
Methylene chloride	ND	5.0	0.50	ug/L	1	09/03/21	MH	E624.1
o-Xylene	ND	5.0	0.45	ug/L	1	09/03/21	MH	E624.1
Tetrachloroethene	ND	5.0	0.50	ug/L	1	09/03/21	MH	E624.1
Toluene	0.52	J 5.0	0.50	ug/L	1	09/03/21	MH	E624.1
Total Xylenes	ND	5.0	5.0	ug/L	1	09/03/21	MH	E624.1
trans-1,2-Dichloroethene	ND	5.0	0.50	ug/L	1	09/03/21	MH	E624.1
trans-1,3-Dichloropropene	ND	5.0	0.50	ug/L	1	09/03/21	MH	E624.1
Trichloroethene	ND	5.0	0.50	ug/L	1	09/03/21	MH	E624.1
Trichlorofluoromethane	ND	5.0	0.50	ug/L	1	09/03/21	MH	E624.1
Vinyl chloride	ND	5.0	0.50	ug/L	1	09/03/21	MH	E624.1
<u>QA/QC Surrogates</u>								
% 1,2-dichlorobenzene-d4	101			%	1	09/03/21	MH	70 - 130 %
% Bromofluorobenzene	97			%	1	09/03/21	MH	70 - 130 %
% Dibromofluoromethane	106			%	1	09/03/21	MH	70 - 130 %
% Toluene-d8	102			%	1	09/03/21	MH	70 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

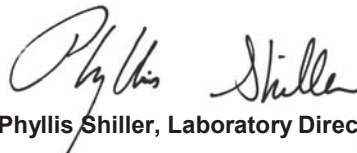
RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL
 BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit
 QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Total Cyanide:

Chlorine was present; Sample was de-chlorinated prior to digestion/analysis. (EPA requires dechlorination at time of sampling.) A sample bias can not be ruled out.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

September 13, 2021

Reviewed and Released by: Helen Geoghegan, Project Manager



Environmental Laboratories, Inc.
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
 Tel. (860) 645-1102 Fax (860) 645-0823



QA/QC Report

September 13, 2021

QA/QC Data

SDG I.D.: GCJ19988

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 590698 (mg/L), QC Sample No: CJ19853 (CJ19988)													
Mercury - Water	BRL	0.0002	<0.0002	<0.0002	NC	96.0			99.9			80 - 120	20
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.													
QA/QC Batch 590802 (mg/L), QC Sample No: CJ20437 (CJ19988)													
<u>ICP Metals - Aqueous</u>													
Arsenic	BRL	0.0020	<0.002	<0.0020	NC	97.5	97.0	0.5	96.2			80 - 120	20
Cadmium	BRL	0.0005	<0.001	<0.0005	NC	97.2	96.8	0.4	93.0			80 - 120	20
Chromium	BRL	0.0005	<0.001	0.0007	NC	97.6	96.8	0.8	94.3			80 - 120	20
Copper	BRL	0.0025	0.009	0.0084	NC	101	100	1.0	102			80 - 120	20
Lead	BRL	0.0010	<0.001	<0.0010	NC	98.7	98.6	0.1	95.8			80 - 120	20
Manganese	BRL	0.0005	0.160	0.160	0	98.9	98.6	0.3	95.0			80 - 120	20
Molybdenum	BRL	0.0025	<0.003	<0.0025	NC	100	99.0	1.0	97.2			80 - 120	20
Nickel	BRL	0.0005	0.005	0.0045	10.5	98.7	98.4	0.3	94.8			80 - 120	20
Selenium	BRL	0.0050	<0.005	<0.0050	NC	90.9	90.8	0.1	88.9			80 - 120	20
Silver	BRL	0.0005	<0.001	<0.0005	NC	95.4	95.8	0.4	96.4			80 - 120	20
Zinc	BRL	0.0020	0.083	0.0819	1.30	95.8	95.4	0.4	94.5			80 - 120	20

Comment:

Additional Criteria: LCS acceptance range is 80-120% MS acceptance range 75-125%.



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QA/QC Report

September 13, 2021

QA/QC Data

SDG I.D.: GCJ19988

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 591319 (mg/L), QC Sample No: CJ21229 (CJ19988)													
Total Cyanide	BRL	0.010	0.102	0.103	1.00	102			94.0			90 - 110	20
Comment:													
Additional: LCS acceptance range is 80-120% for soils MS acceptance range 75-125% for soils													
QA/QC Batch 590611 (mg/L), QC Sample No: CJ19902 (CJ19988 (10X))													
B.O.D./5 day	BRL	2.0	<4.0	<4.0	NC	102			104			70 - 130	20
B.O.D./5 day GGA BOD						107						84 - 115	20
QA/QC Batch 590946 (mg/L), QC Sample No: CJ19903 (CJ19988)													
Total Suspended Solids	BRL	2.5	6.7	7.3	NC	108						85 - 115	20
QA/QC Batch 591534 (mg/L), QC Sample No: CJ19988 (CJ19988)													
Oil and Grease by EPA 1664A	BRL	1.4				96.0	98.0	2.1				85 - 115	20
Comment:													
Additional: MS acceptance range 75-125%.													
QA/QC Batch 591165 (mg/L), QC Sample No: CJ20520 (CJ19988)													
Phosphorus, as P	BRL	0.01	4.10	4.19	2.20	97.8			101			85 - 115	20
Comment:													
Additional criteria matrix spike acceptance range is 75-125%.													
QA/QC Batch 591233 (mg/L), QC Sample No: CJ19322 (CJ19988)													
Ammonia as Nitrogen	BRL	0.05	<0.10	0.12	NC	94.9			100			90 - 110	20



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QA/QC Report

September 13, 2021

QA/QC Data

SDG I.D.: GCJ19988

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 590759 (ug/L), QC Sample No: CJ19372 (CJ19988)										
<u>Volatiles - Waste Water</u>										
1,1,1-Trichloroethane	ND	1.0	84	84	0.0				75 - 125	20
1,1,2,2-Tetrachloroethane	ND	0.50	81	80	1.2				60 - 140	20
1,1,2-Trichloroethane	ND	1.0	90	89	1.1				71 - 129	20
1,1-Dichloroethane	ND	1.0	95	92	3.2				72 - 128	20
1,1-Dichloroethene	ND	1.0	81	81	0.0				50 - 150	20
1,2-Dichlorobenzene	ND	1.0	87	86	1.2				63 - 137	20
1,2-Dichloroethane	ND	1.0	91	89	2.2				68 - 132	20
1,2-Dichloropropane	ND	1.0	98	98	0.0				40 - 160	20
1,3-Dichlorobenzene	ND	1.0	92	90	2.2				73 - 127	20
1,4-Dichlorobenzene	ND	1.0	85	84	1.2				63 - 137	20
2 chlorethyl vinyl ether	ND	1.0	84	80	4.9				50 - 150	20
Acrolein	ND	5.0	90	88	2.2				50 - 150	20
Acrylonitrile	ND	5.0	83	80	3.7				50 - 150	20
Benzene	ND	0.70	97	95	2.1				64 - 136	20
Bromodichloromethane	ND	0.50	92	91	1.1				65 - 135	20
Bromoform	ND	1.0	77	75	2.6				71 - 129	20
Bromomethane	ND	1.0	90	89	1.1				40 - 160	20
Carbon tetrachloride	ND	1.0	91	91	0.0				73 - 127	20
Chlorobenzene	ND	1.0	89	87	2.3				66 - 134	20
Chloroethane	ND	1.0	89	89	0.0				40 - 160	20
Chloroform	ND	1.0	90	89	1.1				67 - 133	20
Chloromethane	ND	1.0	93	93	0.0				40 - 160	20
cis-1,2-Dichloroethene	ND	1.0	99	99	0.0				69 - 131	20
cis-1,3-Dichloropropene	ND	0.40	101	99	2.0				40 - 160	20
Dibromochloromethane	ND	0.50	87	83	4.7				67 - 133	20
Ethylbenzene	ND	1.0	91	88	3.4				59 - 141	20
m&p-Xylene	ND	1.0	91	90	1.1				70 - 130	30
Methyl t-butyl ether (MTBE)	ND	1.0	94	92	2.2				70 - 130	30
Methylene chloride	ND	1.0	98	97	1.0				60 - 140	20
o-Xylene	ND	1.0	96	93	3.2				70 - 130	30
Tetrachloroethene	ND	1.0	83	83	0.0				73 - 127	20
Toluene	ND	1.0	93	91	2.2				74 - 126	20
trans-1,2-Dichloroethene	ND	1.0	92	92	0.0				69 - 131	20
trans-1,3-Dichloropropene	ND	0.40	96	94	2.1				50 - 150	20
Trichloroethene	ND	1.0	87	86	1.2				66 - 134	20
Trichlorofluoromethane	ND	1.0	82	82	0.0				48 - 152	20
Vinyl chloride	ND	1.0	93	94	1.1				40 - 160	20
% 1,2-dichlorobenzene-d4	103	%	97	98	1.0				70 - 130	30
% Bromofluorobenzene	99	%	101	100	1.0				70 - 130	30
% Dibromofluoromethane	127	%	101	103	2.0				70 - 130	30
% Toluene-d8	104	%	102	102	0.0				70 - 130	30

QA/QC Data

SDG I.D.: GCJ19988

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
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Comment:

The MS/MSD are not reported for this batch.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference



Phyllis Shiller, Laboratory Director
September 13, 2021

Monday, September 13, 2021

Criteria: None

State: NY

Sample Criteria Exceedances Report

GCJ19988 - CEMCO

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
--------	-------	-----------------	----------	--------	----	----------	----------------	-------------------

*** No Data to Display ***

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Comments

September 13, 2021

SDG I.D.: GCJ19988

The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report: None.



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NY Temperature Narration

September 13, 2021

SDG I.D.: GCJ19988

The samples in this delivery group were received at 1.4°C.
(Note acceptance criteria for relevant matrices is above freezing up to 6°C)



NY/NJ CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
 Email: info@phoenixlabs.com Fax (860) 645-0823

WC
JPK

Temp 1.4 Pg of

Data Delivery:

Fax #: _____
 Email: Cemco59@gmail.com

Client Services (860) 645-8726

Customer: Cemco Water and Wastewater Specialists, Inc.
 Address: 59 Healey Lane
Stormville, NY 12582

Project: Mahopac Treatment Trailer
 Report to: Cemco
 Invoice to: Cemco

Project P.O.: _____
 Phone #: 845-878-9711
 Fax #: 845-878-6578

Client Sample - Information - Identification

Sampler's Signature: _____ Date: 9/13

Analysis Request

Matrix Code:

DW=drinking water WW=wastewater S=soil/solid O=oil
 GW=groundwater SL=sludge A=air X=other

Phoenix Sample #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	BOD	TSS	Cyanide	624	metals	oil and grease	ammonia and TP	X	X	X	X	120 ml AS IS	Soil VOA [] Methanol [] S. Bisulfate [] H2O	GL Soil container () oz	GL Soil container () oz	40 ml VOA Vial [] As is [X] HCl	GL Amber 1000ml [] As is [] H2SO4	PL As is [] 250ml [] 500ml [] 1000ml	PL H2SO4 [] 250ml [] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
19988	backwash	ww	9/3/2021	11am	X																					
	backwash	ww	9/3/2021	11am		x																				
	backwash	ww	9/3/2021	11am			x																			
	backwash	ww	9/3/2021	11am				x																		
	backwash	ww	9/3/2021	11am					x																	
	backwash	ww	9/3/2021	11am						x																
	backwash	ww	9/3/2021	11am							x															
	backwash	ww	9/3/2021	11am								x														
	backwash	ww	3-Sep	11am									x													
	backwash	ww	3-Sep	11am										x												

Relinquished by: _____ Accepted by: Manja Florio Date: 9/13 Time: 13:30
 Turnaround: 1 Day* 2 Days* 3 Days* Standard Other
 * SURCHARGE APPLIES

Comments, Special Requirements or Regulations:
 C12 residual: NO TRENDS per body

NJ
 Res. Criteria
 Non-Res. Criteria
 Impact to GW Soil Cleanup Criteria
 GW Criteria

NY
 TAGM 4046 GW
 TAGM 4046 SOIL
 NY375 Unrestricted Soil
 NY375 Residential Soil
 NY375 Restricted Non-Residential Soil

Data Format
 Phoenix Std Report
 Excel
 PDF
 GIS/Key
 EQUIS
 NJ Hazsite EDD
 NY EZ EDD (ASP)
 Other _____

Data Package
 NJ Reduced Deliv. *
 NY Enhanced (ASP B) *
 Other _____

State where samples were collected: NY



Environmental Laboratories, Inc.
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
 Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report
 December 02, 2021

FOR: Attn: Roy Barticcio
 CEMCO Water & Wastewater Specialists Inc
 59 Healey Lane
 Stormville, NY 12582

Sample Information

Matrix: DRINKING WATER
 Location Code: CEMCO
 Rush Request: Standard
 P.O.#:

Custody Information

Collected by:
 Received by: CP
 Analyzed by: see "By" below

Date Time
 11/22/21 13:09
 11/23/21 17:22

Laboratory Data

SDG ID: GCJ84535
 Phoenix ID: CJ84537

Project ID: MAHOPAC TREATMENT TRAILER
 Client ID: TREATMENT TRAILER WASTE

Parameter	Result	RL/ PQL	DIL	Units	AL	MCL	MCLG	Date/Time	By	Reference
Iron	35.1	0.20	1	mg/L		0.3		11/27/21	CPP	E200.7
*** Iron exceeds MCL levels of 0.3 ***										
Manganese	51.4	0.20	10	mg/L		0.3		12/01/21	EK	E200.7
*** Manganese exceeds MCL levels of 0.3 ***										
Total Metal Digestion	Completed							11/24/21		E200.5/E200.7

RL/PQL=Reporting/Practical Quantitation Level DIL=Dilution (analysis required diluting to evaluate) ND=Not Detected
 BRL=Below Reporting Level (less than the reporting level, the lowest amount the laboratory can detect and report.)
 AL = Action Level MCL = Maximum Contaminant Level MCLG = Maximum Contaminant Level Goal

Comments:

Maximum Contaminant Level (MCL): New York State Public Health Law, Section 225 Part 5. The highest level of a contaminant that is allowed in drinking water. MCLs are enforceable standards.

Secondary DW Maximum Contaminant Level Goal (MCLG): 40 CFR Part 143 Secondary Goals. The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are non-enforceable public health goals.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

December 02, 2021

Reviewed and Released by: Helen Geoghegan, Project Manager

This SWPPP was prepared in accordance with SPDES Permit No. GP-0-20-001 and must be kept on the job site and available for use of contractors and sub-contractors. Certifications by applicant/developer and by the contractors/subcontractors are included. A copy of the Notice of Intent (NOI), which must be filed at least 5 days prior to the commencement of any work along with the MS4 SWPPP acceptance form, is included herein. Notice of Termination (NOT) must be filed when all stormwater management facilities are in place and the site has been stabilized with specified vegetation. Sample inspection forms are included. Operation and maintenance plan is attached and included both temporary and permanent facilities maintenance. This SWPPP, together with all required plans, completed inspection forms and log of activities including any mitigation of items noted on inspection forms must be kept on the job site and available for inspection by all regulatory authorities.

FULL STORMWATER POLLUTION PREVENTION PLAN (SWPPP) REPORT

Prepared For:

Mahopac Wells 1, 2, & 3
Town of Carmel, Putnam County, New York

Prepared By:



ATZL, NASHER & ZIGLER
Engineers – Surveyors – Planners
232 North Main Street
New City, New York 10956
Tel. (845) 634-4694 • Fax (845) 634-5543

This plan has been prepared to comply with the provisions of the SPDES general permit no. GP-0-20-001, issued by the New York State Department of Environmental Conservation for storm water discharges from construction site activities.

I certify under penalty of law that this document and all attachments were prepared and revised under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment of knowing violations.

Revision 3: January 19, 2024
Revision 2: May 02, 2022
Revision 1: September 30, 2021
Date: August 27, 2021
Job No. 4870


Ryan A. Nasher, P.E. License No.: 89066
New York State Professional Engineer

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Full Stormwater Pollution Prevention Plan Report

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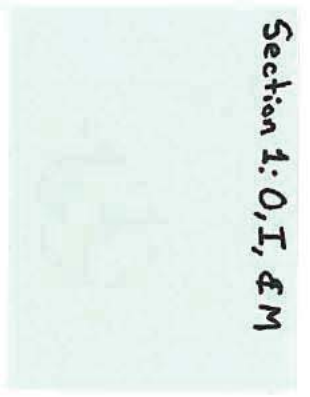
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Section 1: O, I, & M



MAHOPAC WELLS 1, 2, & 3

**TOWN OF CARMEL
PUTNAM COUNTY
NEW YORK**

SECTION 1:

OPERATION INSPECTION AND MAINTENANCE PLAN REPORT

BY

ATZL, NASHER & ZIGLER

ENGINEERS-SURVEYORS-PLANNERS

232 NORTH MAIN STREET

NEW CITY, NY 10956

TEL: (845) 634-4694

FAX: (845) 634-5543

E-MAIL: rnasher@anzny.com

1.0 INTRODUCTION

1.1 Notice of Intent:

Section 402 of the Clean Water Act requires permits for stormwater discharge from construction activities, which disturb one or more acres of land to obtain a permit. To implement this law, the New York State Department of Environmental Conservation (NYSDEC) issued the General Permit GP-0-20-001 for Stormwater Discharges from Construction Activities. The Notice of Intent (NOI) is the means to obtain coverage under this permit.

1.2 SWPPP Goals and Objective:

The goal of the Stormwater Pollution Prevention Plan (SWPPP) is to control runoff of pollutants from the project site during and after construction activities by complying with the NY State Pollutant Discharge Elimination System (SPDES) Stormwater Permit for construction activities and local rules and regulations. The SWPPP will implement the following practices:

- Reduction or elimination of erosion and sediment loading to waterbodies during construction;
- Control of the impact of stormwater runoff on the water quality of the receiving waters;
- Control of the increased volume and peak rate of runoff during and after construction; and
- Maintenance of stormwater controls during and after completion of construction.

The SWPPP will incorporate the proper selection, sizing and siting of the Stormwater Management Practices (SMPs) to protect water resources from stormwater impacts. The design of the proposed SMPs were determined using current engineering methodologies to provide appropriate sizing criteria to avoid overburdening stormwater conveyance structures. Erosion and Sediment Control (ESC), Water Quantity Control, and Water Quality Controls are inter-related components of the SWPPP.

The SWPPP is intended to be a “living” document. The document should be revised and updated by a qualified professional whenever site conditions dictate. Any proposed revisions shall undergo review by the owner or his designated representative prior to incorporation in the SWPPP and implementation at the site. Any proposed modifications shall be in accordance with the New York State Department of Environmental Conservation’s technical standards.

2.0 SITE DESCRIPTION

2.1 Project Name & Location:

Mahopac Wells 1, 2, & 3
Town of Carmel
Putnam County, New York
Town of Ramapo Tax Map: Section 75.20, Block 2, Lot 68

2.2 Owner/Operator Name & Address:

Suez Water New York, Inc.
Attention: Steven Garabed
162 Old Mill Road
West Nyack, NY 10994
Email: steven.garabed@suez.com

2.3 General Contractor*:

(Company Name)

(Street Address)

(City, State, Zip Code)

(Phone Number)

*note – General Contractor shall be identified prior to commencement of work.

2.4 Description:

The project site is located east of Bucks Hollow Road, $\pm 890ft$ south of Astor Drive in the Town of Carmel, Putnam County, New York. The site has an area of about 53.382 acres. The existing site consists of a pond, woods, grass, an access gravel area road, and some impervious area. The developed site includes the construction of a building and an increase in the gravel coverage.

**MAHOPAC WELLS 1, 2, & 3
Full Stormwater Pollution Prevention Plan (SWPPP) Report**

Soil Name	Soil Map Symbol	Hydrological Soil Group
Charlton-Chatfield complex, 0 to 15 percent slopes, very rocky	CrC	B
Natchaug muck, 0 to 2 percent slopes	NcA	D
Sun loam	Sh	D

* Source: <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>

** HSG "B & D" were used in the drainage calculation.

Soil disturbing activities will include clearing and grubbing; installation of a stabilized construction entrance; grading (cuts & fills); excavation for the installation of drainage pipes, SMPs, sanitary sewer connections, water main connections, building foundations, stormwater management facilities and the preparation for final planting and seeding.

2.5 Impervious Cover:

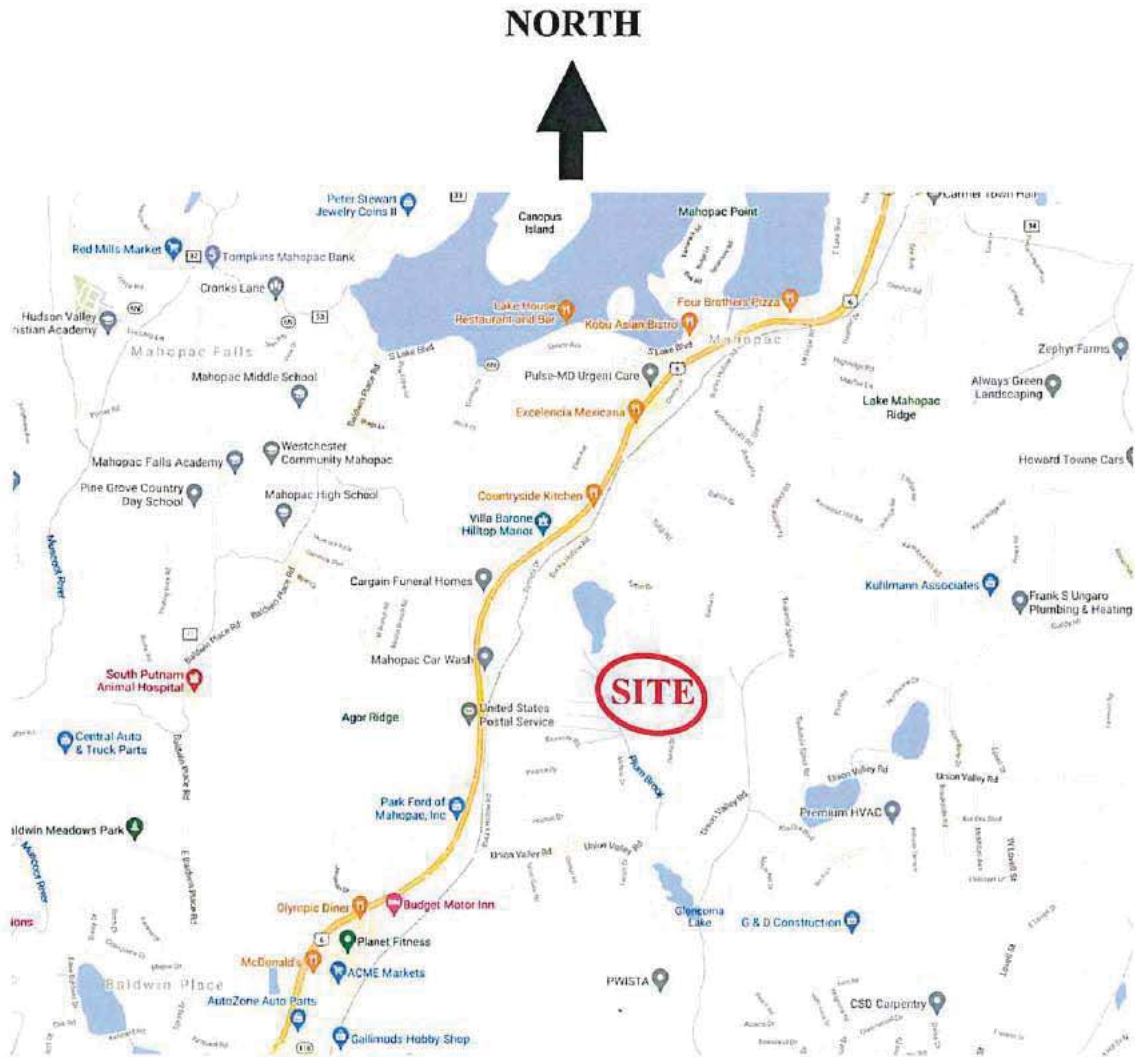
Impervious cover within the planned disturbance will be increased from 0.126 acres in the existing condition to 0.242 acres in the proposed condition.

2.6 Site Area:

The site is approximately 53.382 acres and about 0.994 acres will be disturbed by the proposed construction activities.

**MAHOPAC WELLS 1, 2, & 3
Full Stormwater Pollution Prevention Plan (SWPPP) Report**

2.7 Location Map:



STREET MAP
Source: maps.google.com

2.8 Sequence of Major Activities:

Phasing and schedule of construction is as follows (several phases will overlap):

Phase 1: Clearing and grubbing of designated areas

Phase 2: Land grading according to the approved site development plan

Phase 3: Building construction

Phase 4: Utilities construction

Phase 5: Final Grading, landscaping

The general order of activities will be as follows:

1. Schedule a pre-construction meeting.
2. Locate natural resources and the limit of disturbance per approved plans.
3. Install perimeter erosion and sediment control practices (silt fences).
4. Install construction entrances and temporary staging.
5. Limit grading for installation of E&SC practices.
6. Dispose clearing and grading materials as construction progresses.
7. Stockpile top soil and stabilize.
8. Perform rough grading/cut & fill and stabilize inactive areas.
9. Install utilities and drainage structures.
10. Construct foundation and building structure as per plan.
11. Apply soil restoration practices as described in the plan.
12. Perform final stabilization, i.e. top soil and landscaping.
13. Remove sediment accumulations and complete permanent post construction SMPs per the approved plan.
14. Remove E&SC practices and apply for a Notice of Termination (N.O.T.).

3.0 CONTROLS

3.1 Erosion and Sediment Controls Stabilization Practices:

3.1.1 Temporary Stabilization:

Topsoil, stockpiles, and soils that are exposed and left bare for a period of 14 days which are not being graded, not under active construction for 14 days or more, or not scheduled for permanent seeding within 14 days will be stabilized with temporary seed and mulch. All grass seed mixtures and application rates shall comply with Sediment and Erosion Control Plan.

Areas of the site, which are to be paved; will be temporarily stabilized by applying stone sub-base until bituminous pavement can be applied.

3.1.2 Permanent Stabilization:

Disturbed portions of the site where construction activities permanently cease shall be stabilized with permanent seed no later than 14 days after the last construction activity.

3.2 Structural Practices:

Proposed measures will include silt fences, construction fence, concrete washout, stockpile, and stabilized construction entrance.

3.3 Stormwater Management Water Quality:

Stormwater runoff generated by the rooftop will be directed towards the proposed dry pond system through a combination of downspouts and pipes.

The stormwater management system has been designed to comply with the most recent NYSDEC design manual requirements. The dry pond system is designed to treat the first flush water quality volume of required impervious area, according to NYSDEC redevelopment rules.

The property owner shall be responsible for the long-term operation, maintenance and inspection of the proposed stormwater management facilities and provide maintenance records to the Town of Carmel.

MAHOPAC WELLS 1, 2, & 3
Full Stormwater Pollution Prevention Plan (SWPPP) Report

3.3.1 Name of Receiving Waters:

The site drains towards a NYSDEC wetland. The site is located in one of the watersheds identified in Appendix C of GP-0-20-001.

3.4 Peak Flow Attenuation:

In order to provide the zero net increase of peak runoff, a Dry Pond System has been proposed.

3.5 Runoff Conveyance Systems:

The stormwater pipes and the 12-inch riser with domed structure are design to convey the 10-year peak flow discharge.

3.6 Other Controls:

3.6.1 Waste Materials:

All waste materials will be collected and stored in securely lidded metal dumpsters rented from _____, a solid waste management company located in Putnam County (name of carting company to be identified 30 days prior to commencement of work). The dumpsters will meet Town of Carmel, Putnam County, and New York State solid waste management regulations. All trash and construction debris from the site will be deposited in the dumpsters. The dumpsters will be emptied as necessary, and the trash will be hauled off site to _____ (destination to be identified 30 days prior to commencement of work). No construction waste materials will be buried on site. All personnel will be instructed regarding the correct procedure for waste disposal. Notices stating these practices will be posted in the office trailer and _____, the Job Supervisor, individual who is responsible for managing the day to day site operations, will be responsible for seeing that these procedures are followed (Job Supervisor shall be identified 30 days prior to commencement of work).

3.6.2 Hazardous waste:

All hazardous waste materials will be disposed of in the manner specified by local or state regulation or by the manufacturer. Site personnel will be instructed in these practices and _____, Job Supervisor, individual who is responsible for managing the day to day site operations, will be responsible for seeing that these procedures are followed (Job Supervisor shall be identified 30 days prior to commencement of work).

MAHOPAC WELLS 1, 2, & 3
Full Stormwater Pollution Prevention Plan (SWPPP) Report

3.6.3 Sanitary Waste:

A licensed sanitary waste management contractor (sanitary waste management contractor to be identified 30 days prior to commencement of work) will collect all sanitary waste from the portable units.

3.6.4 Offsite Vehicle Tracking:

A stabilized construction entrance and gravel pad will be provided to wash or spray-clean trucks over before leaving the site in order to prevent track-out of dirt, mud, debris and dust. In addition, trucks will be covered with a tarp and at least 6 inches of freeboard clearance will be maintained to keep excessive dust from escaping the truck during hauling operations.

3.7 Timing of Control Measures:

As indicated in the Sequence of Major Activities, the stabilized construction entrance and other sediment and erosion control activities will be constructed prior to earthwork activities on any part of the site. Any soil areas that are exposed and left bare for a period of 14 days which are not being graded, not under active construction for 14 days or more, or not scheduled for permanent seeding within 14 days will be treated with temporary seed and mulch. Once construction activity ceases permanently in an area, that area will be stabilized with permanent seed and mulch. After the entire site is stabilized, accumulated sediments will be removed from the sediment and erosion control structures and the controls will be removed.

3.8 Certification of Compliance With Federal, State And Local Regulations:

The stormwater pollution prevention plan reflects New York State Department of Environmental Conservation requirements for storm water management and erosion and sediment control, as established in Article 17, Titles 7, 8 and Article 70 of the Environmental Conservation Law. To ensure compliance, this plan was prepared in accordance with guidelines issued with the SPDES General Permit for Storm Water Discharges from Construction Activities that are Classified as “Associated with Construction Activity”, published by the NYSDEC.

4.0 MAINTENANCE & INSPECTION PROCEDURES

4.1 Sediment & Erosion Control Inspection And Maintenance Practices:

The following are inspection and maintenance practices that will be used in coordination with the SWPPP Construction Log Book prepared for this project, the template which is included in Appendix A, to maintain sediment and erosion controls:

- The Operator shall have a qualified professional conduct an assessment of the site prior to the commencement of construction and certify in this inspection report that the appropriate erosion and sediment controls described in the SWPPP, as required by the SPDES General Permit for Stormwater Discharges, have been adequately installed or implemented to ensure overall preparedness of the site for commencement of construction. Qualified professional means a person knowledgeable in the principles and practice of erosion and sediment controls, such as a licensed professional engineer, Certified Professional in Erosion and Sediment Control (CPESC), soil scientist, or someone working under the direction and supervision of a licensed professional engineer, Certified Professional in Erosion and Sediment Control (CPESC), or soil scientist (person must have experience in the principles and practices of erosion and sediment control). The template for the initial inspection and assessment is included in Appendix A.
- All control measures will be inspected by a qualified professional at least once each week (7 days) and immediately following any storm event of 0.5 inches or greater.
- All measures will be maintained in good working order. If a repair is necessary, it will be initiated within 24 hours of discovery.
- Provide sprinkle water on the dirt road during hot summer or when appropriate to prevent particles to be air born.
- Built up sediment to be removed from the silt fence when it has reached 1/3 the height of the fence. Sediment traps will be cleaned when built up sediments reaches 25 percent of design capacity.
- Silt fence will be inspected for depth of sediment, tears, to see if the fabric is securely attached to the fence posts, and to see that the fence posts are firmly in the ground.
- Temporary and permanent seeding and planting will be inspected for bare spots, washouts, and healthy growth.
- A maintenance inspection report will be filled out after each inspection and will become part of the SWPPP.
- _____, Job Supervisor – Trained Individual per GP-0-20-001, will select individuals who will be responsible for coordinating efforts with the qualified professional for regular inspections, maintenance and repair activities, and filling out the inspection and maintenance report forms. Inspection reports will summarize:

MAHOPAC WELLS 1, 2, & 3
Full Stormwater Pollution Prevention Plan (SWPPP) Report

1. Name of Inspector
2. Qualifications of Inspector
3. Date of Inspection
4. Weather Conditions
5. Areas inspected, including measurements
6. Areas that have undergone temporary and permanent stabilization
7. Indicate all disturbed areas that have not undergone active site work during the previous 14-day period
8. Observed condition of all erosion and sediment control practices
9. Inspect all sediment control practices and record approximate degree of sediment accumulation as a percentage of the sediment storage volume
10. Actions Taken to Correct Problems
11. Incorporate changes necessary to the SWPPP

The template for regular inspections is included in Appendix A.

- Personnel selected for inspection and maintenance responsibilities will receive training from the Job Supervisor and/or the qualified professional. They will be trained in all the inspection and maintenance practices necessary for keeping the erosion and sediment controls used on site in good working order.
- The Operator shall ensure that a record of all inspection reports is maintained in the SWPPP Construction Log Book. The site logbook shall be maintained on site and be made available to the permitting authorities upon request. Prior to the commencement of construction, the Operator shall certify in the site log book that the SWPPP was prepared in accordance with the State's standards and meets all Federal, State and local erosion and sediment control requirements. The Operator shall retain copies of SWPPPs and any reports submitted in conjunction with this permit, and records of all data used to complete the NOI to be covered by this permit, for a period of at least three years from the date that the site is finally stabilized. The Operator shall post at the site, in a publicly accessible location, a summary of the site inspection activities on a monthly basis. The template for SWPPP Construction Log Book is included in Appendix A.
- Prior to filing of the Notice of Termination (NOT) or the end of permit term, the Operator shall have the qualified professional perform a final site inspection. The qualified professional shall certify that the site has undergone final stabilization using either vegetative or structural stabilization methods and that all temporary erosion and sediment controls (such as silt fencing) not needed for long-term erosion control have been removed. Final stabilization means that all soil-disturbing activities at the site have been completed and a uniform, perennial vegetative cover with a density of 80% has been established, or equivalent stabilization measures (such as the use of mulches or geotextiles) have been employed on all unpaved areas and areas not covered by permanent structure. The template for final inspections is included in Appendix A.

**MAHOPAC WELLS 1, 2, & 3
Full Stormwater Pollution Prevention Plan (SWPPP) Report**

- Clean out all **temporary** structures and pipes upon completion of the project.
- When the site has been finally stabilized, the operator must submit a Notice of Termination form to terminate coverage under the SPDES General Permit GP 0-20-001. The permittee must identify all of the permanent stormwater management structures that have been constructed. In addition, an manual describing the operation and maintenance practices that will be necessary for the structures to function as designed after the site is stabilized must be finalized and in-place. The permittee must also certify that the permanent structure have been constructed as described in the SWPPP.

The inspection procedures that will be used for the construction of the proposed Stormwater management facilities are included in the CONSTRUCTION INSPECTION CHECKLIST FORM prepared for this project, the template of which is included in Appendix B, to be used to ensure proper construction.

4.2 Summary of SWPPP Required Document Filings:

The following table provides a summary of the required forms and inspections that need to be completed as part of the SWPPP requirements and which checklist or report document forms need to be used for each:

<u>Name of Document</u>	<u>Form to be Used</u>	<u>When to complete</u>
Pre-Construction Meeting Documents Form	Appendix A – SWPPP Construction Site Log Book	Prior to beginning of construction
Owner/Operator Certification	Appendix A, SWPPP Report	Prior to beginning of construction
Prime Contractor Certification	SWPPP Report	Prior to beginning of construction
Sub-Contractor Certification	SWPPP Report	Prior to beginning of construction
Pre-Construction Site Assessment Form	Appendix A	Prior to beginning of construction
Construction Duration Inspection Forms	Appendix A	Every seven days
Three-Month Status Reports	Appendix A	Every three months
SMPs Construction Inspection Checklist Form	Appendix B	During the construction of the proposed stormwater facilities
Final Stabilization and Retention of Records	Appendix B	At completion of project
Spill Control & Prevention Log	Appendix C	Before and after completion of Project
Stormwater Facilities Maintenance Plan and Inspection Checklists	Appendix D	After completion of Project

5.0 NON-STORM WATER DISCHARGES

5.1 Non-Stormwater Discharges:

It is expected that the following non-storm water discharges will occur from the site during the construction period:

- Water from water line flushing.
- Pavement wash waters (where no spills or leaks of toxic or hazardous materials have occurred).
- Uncontaminated groundwater (from natural springs)

6.0 INVENTORY FOR POLLUTION PREVENTION PLAN

6.1 Material substances:

The materials or substances listed below are expected to be present on the site during construction:

- Concrete
- Detergents
- Paints (enamels and latex)
- Metal Studs
- Roofing Materials
- Tar and Paving Materials
- Fertilizers
- Petroleum Based Products
- Cleaning Solvents
- Wood
- Masonry Block

7.0 SPILL CONTROL & PREVENTION

7.1 Material Management Practices:

The following are the material management practices that will be used to reduce the risk of spills or other accidental exposure of materials and substances to storm water runoff:

MAHOPAC WELLS 1, 2, & 3
Full Stormwater Pollution Prevention Plan (SWPPP) Report

7.1.1 Good Housekeeping:

The following good housekeeping practices will be followed on site during the construction project:

- An effort will be made to store only enough products required to do the job.
- All materials stored on site will be stored in a neat, orderly manner in their appropriate containers and, if possible, under a roof or other enclosure.
- Product will be kept in their original containers with the original manufacturer's label.
- Substances will not be mixed with one another unless recommended by the manufacturer.
- Whenever possible, all of a product will be used up before disposing of the container.
- Manufacturer's recommendations for proper use and disposal will be followed.
- The Job Supervisor will inspect daily to ensure proper use and disposal of materials on site.

7.1.2 Hazardous Products:

The following practices will be used to reduce the risks associated with hazardous materials:

- Products will be kept in original containers unless they are not reseal able.
- Original labels and material safety data will be retained; they contain important product information.
- If surplus product must be disposed of, manufacturer's or local and State recommended methods for proper disposal will be followed.

7.2 Product Specific Practices:

The following product specific practices will be followed on site:

7.2.1 Petroleum Products:

All onsite vehicles will be monitored for leaks and receive regular preventative maintenance to reduce the chance of leakage. Petroleum products will be stored in tightly sealed containers, which are clearly labeled. Any asphalt substances used on site will be applied according to the manufacturer's recommendations.

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7.2.2 Fertilizers:

Fertilizers will be applied only in the minimum amounts recommended by the manufacturer. Once applied, fertilizer will be worked into the soil to limit exposure to stormwater. Storage will be in a covered shed. The content of any partially used bags of fertilizer will be transferred to a sealable plastic bin to avoid spills.

7.2.3 Paints:

All containers will be tightly sealed and stored when not required for use. Excess paint will not be discharged to the storm drainage system, but will be properly disposed of according to manufacturer's instructions or State and local regulations.

7.2.4 Concrete Trucks:

Concrete trucks will not be allowed to wash out or discharge surplus concrete or drum wash water on the site.

7.3 Spill Control Practices:

In addition to the good housekeeping and material management practices discussed in the previous sections of this plan, the following practices will be followed for spill prevention and cleanups:

- Manufacturer's recommended methods for spill cleanup will be clearly posted and site personnel will be made aware of the procedures and the location of the information and cleanup supplies.
- Materials and equipment necessary for spill cleanup will be kept in the material storage areas on site. Equipment and materials will include, but not be limited to, brooms, dustpans, mops, rags, gloves, goggles, kitty litter, sand, sawdust, and plastic and metal trash containers specifically for this purpose.
- All spills will be cleaned up immediately after discovery.
- The spill area will be kept well ventilated, and personnel will wear appropriate protective clothing to prevent injury from contact with hazardous substances.
- Spills of toxic or hazardous material will be reported to the appropriate State or local government agency, regardless of the size of the spill. The Spill Control & Prevention Log form provided in Appendix C should be used for this purpose.
- The spill prevention plan will be adjusted to include measures to prevent a repetitive type of spill from re-occurring and how to clean up the spill if it does re-occur. A description of the spill, what caused it, and the cleanup measures will also be included.
- The Job Supervisor responsible for daily site operations, will be designated as the spill prevention and cleanup coordinator. He will designate at least

MAHOPAC WELLS 1, 2, & 3
Full Stormwater Pollution Prevention Plan (SWPPP) Report

three other site personnel who will receive spill prevention and cleanup training. These individuals will each become responsible for a particular phase of prevention and cleanup. The names of the responsible spill personnel will be posted in the material storage area and in the office trailer on site.

8.0 SUPPORTING PLANS & REPORTS

1. Site Plan Drawings prepared by Atzl, Nasher & Zigler
2. Soil & Erosion Control Plans prepared by Atzl, Nasher & Zigler
3. Stormwater Management Design Report by Atzl, Nasher & Zigler

9.0 POLLUTION PREVENTION PLAN CERTIFICATION

9.1 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 also certify under penalty of law that this document and all corresponding attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person(s) who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. 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 acknowledgement that I will receive as a result of submitting this NOI. 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 agree to comply with all the terms and conditions of the general permit for which this NOI is being submitted.”

Signed: _____
(Owner/Operator)

Date: _____

(Printed Name & Title)

(Company Name, Address & Telephone Number)

10.0 CERTIFICATION BY CONTRACTORS

Made pursuant to the State Pollution Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity (Permit No. GP 0-20-001) for:

Mahopac Wells 1, 2, & 3, Town of Carmel, Putnam County, New York

10.1 Prime Contractor Certification:

“I certify under penalty of law that I understand and agree to comply with the terms and conditions of the stormwater pollution prevention plan for the construction site identified in this plan as a condition of authorization to discharge stormwater. I also understand that the operator must comply with the terms and conditions 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.”

Prime Contractor:

(Signature)

(Company)

(Name)

(Street Address)

(Title)

(City, State, Zip Code)

(Date)

(Phone Number)

**MAHOPAC WELLS 1, 2, & 3
Full Stormwater Pollution Prevention Plan (SWPPP) Report**

10.2 Sub-Contractor Certification:

“I certify under penalty of law that I understand and agree to comply with the terms and conditions of the stormwater pollution prevention plan for the construction site identified in this plan as a condition of authorization to discharge stormwater. I also understand that the operator must comply with the terms and conditions 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.”

Sub-Contractor:

(Signature)

(Company)

(Name)

(Street Address)

(Title)

(City, State, Zip Code)

(Date)

(Phone Number)

**MAHOPAC WELLS 1, 2, & 3
Full Stormwater Pollution Prevention Plan (SWPPP) Report**

CONTRACTOR and SUBCONTRACTOR CERTIFICATION STATEMENT

for the New York State Department of Environmental Conservation (DEC) State Pollutant Discharge Elimination System Permit for Stormwater Discharges from Construction Activity (GP-0-20-001)

As per Part III.A.6 on page 13 of GP-0-20-001 (effective January 29, 2020):

'Prior to the commencement of construction activity, the owner or operator must identify the contractor(s) and subcontractor(s) that will be responsible for installing, constructing, repairing, replacing, inspecting and maintaining the erosion and sediment control practices included in the SWPPP; and the contractor(s) and subcontractor(s) that will be responsible for constructing the post-construction stormwater management practices included in the SWPPP. The owner or operator shall have each of the contractors and sub-contractors identify at least one person from their company that will be responsible for implementation of the SWPPP. This person shall be known as the trained contractor. The owner or operator shall ensure that at least one trained contractor is on site on a daily basis when soil disturbance activities are being performed.'

The owner or operator shall have each contractor and subcontractor involved in soil disturbance sign a copy of the following certification statement before they commence any construction activity:

_____	NYR _____	_____
<i>Name of Construction Site</i>	<i>DEC Permit ID</i>	<i>Municipality (MS4)</i>
<p><i>"I hereby certify that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the qualified inspector during a site inspection. I also understand that the owner or operator must comply with the terms and conditions of the most current version of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for stormwater discharges from construction activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.</i></p>		
_____	_____	
Responsible Corporate Officer/Partner Signature	Date	
_____	_____	
Name of above Signatory	Name of Company	
_____	_____	
Title of above Signatory	Mailing Address	
_____	_____	
Telephone of Company	City, State, and Zip	

Identify the specific elements of the SWPPP the contractor or subcontractor is responsible for:

'TRAINED CONTRACTOR' FOR THE CERTIFIED CONTRACTOR OR SUBCONTRACTOR		
_____	_____	_____
<i>Name of Trained Employee</i>	<i>Title of Trained Employee</i>	<i>NYSDEC SWT #</i>

A copy of this signed contractor certification statement must be maintained at the SWPPP on site

Appendix - A



MAHOPAC WELLS 1, 2, & 3

**TOWN OF CARMEL
PUTNAM COUNTY
NEW YORK**

APPENDIX-A

CONSTRUCTION SITE LOGBOOK

BY

ATZL, NASHER & ZIGLER
ENGINEERS-SURVEYORS-PLANNERS
232 NORTH MAIN STREET
NEW CITY, NY 10956
TEL: (845) 634-4694
FAX: (845) 634-5543
E-MAIL: rnasher@anzny.com

SWPPP CONSTRUCTION SITE LOG BOOK FOR MAHOPAC WELLS 1, 2, & 3

**NY STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM
FOR CONSTRUCTION ACTIVITIES**

SWPPP CONSTRUCTION SITE LOG BOOK

For

**Mahopac Wells 1, 2, & 3
Town of Carmel
Putnam County, New York**

Table of Contents

- I. Pre-Construction Meeting Documents.
 - a. Preamble to Site Assessment and Inspections
 - b. Operator's Certification
 - c. Qualified Professional's Credentials & Certification
 - d. Pre-Construction Site Assessment Checklist
- II. Construction Duration Inspections
 - a. Directions
 - b. Modification to the SWPPP
- III. Monthly Summary Reports
- IV. Monitoring, Reporting, and Three-Month Status Reports
 - a. Operator's Compliance Response Format

Properly completing forms such as those contained in this document meet the inspection requirement of NYSDEC SPDES GP for Construction Activities. Completed forms shall be kept on site at all times and made available to authorities upon request.

SWPPP CONSTRUCTION SITE LOG BOOK FOR MAHOPAC WELLS 1, 2, & 3

I. PRE-CONSTRUCTION MEETING DOCUMENTS

Project Name MAHOPAC WELLS 1, 2, & 3
Permit No. _____ Date of Authorization _____
Name of Operator _____
Prime Contractor _____

a. Preamble to Site Assessment and Inspections -the following information to be read by all person's involved in the construction of stormwater related activities:

The Operator agrees to have a qualified professional¹ conduct an assessment of the site prior to the commencement of construction² and certify in this inspection report that the appropriate erosion and sediment controls described in the SWPPP have been adequately installed or implemented to ensure overall preparedness of the site for the commencement of construction.

Prior to the commencement of construction, the Operator shall certify in this site logbook that the SWPPP has been prepared in accordance with the State's standards and meets all Federal, State and local erosion and sediment control requirements.

When construction starts, site inspections shall be conducted by the qualified professional at least every 7 calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater (Construction Duration Inspections). The Operator shall maintain a record of all inspection reports in this site log book. The site log book shall be maintained on site and be made available to the permitting authorities upon request. The Operator shall post at the site, in a publicly accessible location, a summary of the site inspection activities on a monthly basis (Monthly Summary Report).

The operator shall also prepare a written summary of compliance with this general permit at a minimum frequency of every three months (Operator's Compliance Response Form), while coverage exists. The summary should address the status of achieving each component of the SWPPP.

Prior to filing the Notice of Termination or the end of permit term, the Operator shall have a qualified professional perform a final site inspection. The qualified professional shall certify that the site has undergone final stabilization³ using either vegetative or structural stabilization methods and that all temporary erosion and sediment controls (such as silt fencing) not needed for long-term erosion control have been removed. In addition, the Operator must identify and certify that all permanent structures described in the SWPPP have been constructed and provide the owner(s) with an operation and maintenance plan that ensures the structure(s) continuously functions as designed.

1 "Qualified Professional means a person knowledgeable in the principles and practice of erosion and sediment controls, such as a Certified Professional in Erosion and Sediment Control (CPESC), soil scientist, licensed engineer or someone working under the direction and supervision of a licensed engineer (person must have experience in the principles and practices of erosion and sediment control).
2 "Commencement of construction" means the initial removal of vegetation and disturbance of soils associated with clearing, grading or excavating activities or other construction activities.
3 "Final stabilization" means that all soil-disturbing activities at the site have been completed and a uniform, perennial vegetative cover with a density of eighty (80) percent has been established or equivalent stabilization measures (such as the use of mulches or geotextiles) have been employed on all unpaved areas and areas not covered by permanent structures.

b. Operators Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. Further, I hereby certify that the SWPPP meets all Federal, State, and local erosion and sediment control requirements. I am aware that false statements made herein are punishable as a class A misdemeanor pursuant to Section 210.45 of the Penal Law. "

Name (Please Print): _____

Title _____ Date: _____

Address: _____

Phone: _____ Email: _____

Signature: _____

c. Qualified Professional's Credentials & Certification

"I hereby certify that I meet the criteria set forth in the General Permit to conduct site inspections for this project and that the appropriate erosion and sediment controls described in the SWPPP and as described in the following Pre-construction Site Assessment Checklist have been adequately installed or implemented, ensuring the overall preparedness of this site for the commencement of construction."

Name (Please Print): _____

Title _____ Date: _____

Address: _____

Phone: _____ Email: _____

Signature: _____

d. Pre-construction Site Assessment Checklist (NOTE: Provide comments below as necessary)

1. Notice of Intent, SWPPP, and Contractors Certification:

Yes No NA

- Has a Notice of Intent been filed with the NYS Department of Conservation?
- Is the SWPPP on-site? Where? _____
- Is the Plan current? What is the latest revision date? _____
- Is a copy of the NOI (with brief description) onsite? Where? _____
- Have all contractors involved with stormwater related activities signed a contractor's certification?

Pre-construction Site Assessment Checklist (continued)

SWPPP CONSTRUCTION SITE LOG BOOK FOR MAHOPAC WELLS 1, 2, & 3

2. Resource Protection

Yes No NA

- Are construction limits clearly flagged or fenced?
- Important trees and associated rooting zones, on-site septic system absorption fields, existing vegetated areas suitable for filter strips, especially in perimeter areas, have been flagged for protection.
- Creek crossings installed prior to land-disturbing activity, including clearing and blasting.

3. Surface Water Protection

Yes No NA

- Clean stormwater runoff has been diverted from areas to be disturbed.
- Bodies of water located either on site or in the vicinity of the site have been identified and protected.
- Appropriate practices to protect on-site or downstream surface water are installed.
- Are clearing and grading operations divided into areas <5 acres?

4. Stabilized Construction Entrance

Yes No NA

- A temporary construction entrance to capture mud and debris from construction vehicles before they enter the public highway has been installed.
- Other access areas (entrances, construction routes, equipment parking areas) are stabilized immediately as work takes place with gravel or other cover.
- Sediment tracked onto public streets is removed or cleaned on a regular basis.

5. Perimeter Sediment Controls

Yes No NA

- Silt fence material and installation comply with the standard drawing and specifications.
- Silt fences are installed at appropriate spacing intervals
- Sediment/detention basin was installed as first land disturbing activity.
- Sediment traps and barriers are installed.

6. Pollution Prevention for Waste and Hazardous Materials

Yes No NA

- The Operator or designated representative has been assigned to implement the spill prevention avoidance and response plan.
- The plan is contained in the SWPPP on page _____
- Appropriate materials to control spills are onsite. Where? _____

II. CONSTRUCTION DURATION INSPECTIONS

a. Directions:

Inspection Forms will be filled out during the entire construction phase of the project.

Required Elements:

(1) On a site map, indicate the extent of all disturbed site areas and drainage pathways. Indicate site areas that are expected to undergo initial disturbance or significant site work within the next 14-day period;

(2) Indicate on a site map all areas of the site that have undergone temporary or permanent stabilization;

(3) Indicate all disturbed site areas that have not undergone active site work during the previous 14-day period;

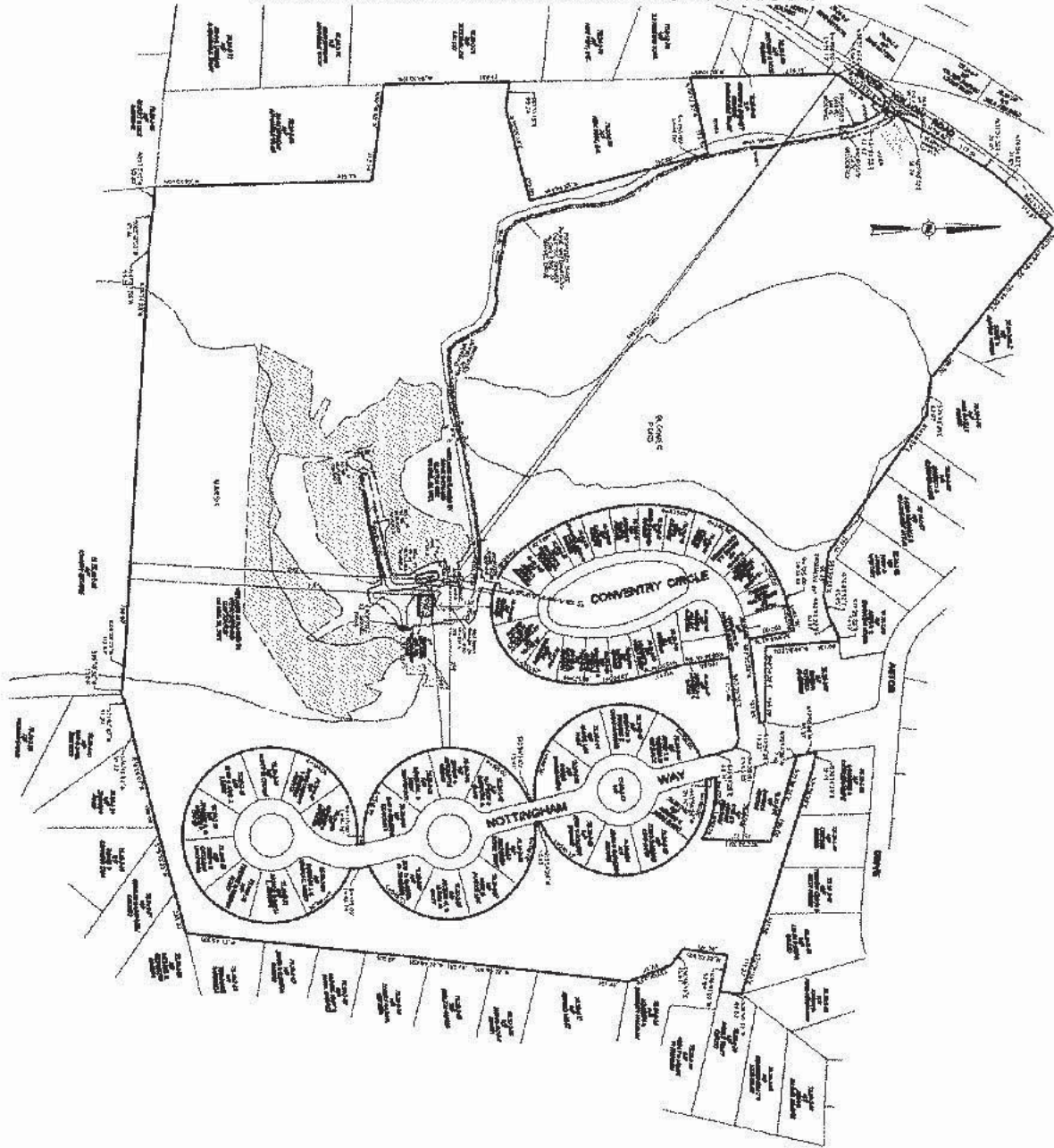
Inspect all sediment control practices and record the approximate degree of sediment accumulation as a percentage of sediment storage volume (for example, 10 percent, 20 percent, 50 percent);

(5) Inspect all erosion and sediment control practices and record all maintenance requirements such as verifying the integrity of barrier or diversion systems (earthen berms or silt fencing) and containment systems (sediment basins and sediment traps). Identify any evidence of rill or gully erosion occurring on slopes and any loss of stabilizing vegetation or seeding/mulching. Document any excessive deposition of sediment or ponding water along barrier or diversion systems. Record the depth of sediment within containment structures, any erosion near outlet and overflow structures, and verify the ability of rock filters around perforated riser pipes to pass water; and

(6) Immediately report to the Operator any deficiencies that are identified with the implementation of the SWPPP.

SWPPP CONSTRUCTION SITE LOG BOOK FOR MAHOPAC WELLS 1, 2, & 3

CONSTRUCTION DURATION INSPECTIONS



SITE PLAN/SKETCH

Inspector (Print Name)

Date of Inspection

Qualified Professional (Print Name)

Qualified Professional Signature

The above signed acknowledges that, to the best of his/her knowledge, all information provided on the forms is accurate and complete.

CONSTRUCTION DURATION INSPECTIONS

Maintaining Water Quality

Yes No NA

- Is there an increase in turbidity causing a substantial visible contrast to natural conditions?
- Is there residue from oil and floating substances, visible oil film, or globules or grease?
- All disturbance is within the limits of the approved plans.
- Have receiving lake/bay, stream, and/or wetland been impacted by silt from project?

Housekeeping

1. General Site Conditions

Yes No NA

- Is construction site litter and debris appropriately managed?
- Are facilities and equipment necessary for implementation of erosion and sediment control in working order and/or properly maintained?
- Is construction impacting the adjacent property?
- Is dust adequately controlled?

2. Temporary Stream Crossing

Yes No NA

- Maximum diameter pipes necessary to span creek without dredging are installed.
- Installed non-woven geotextile fabric beneath approaches.
- Is fill composed of aggregate (no earth or soil)?
- Rock on approaches is clean enough to remove mud from vehicles & prevent sediment from entering stream during high flow.

Runoff Control Practices

1. Excavation Dewatering

Yes No NA

- Upstream and downstream berms (sandbags, inflatable dams, etc.) are installed per plan.
- Clean water from upstream pool is being pumped to the downstream pool.
- Sediment laden water from work area is being discharged to a silt-trapping device.
- Constructed upstream berm with one-foot minimum freeboard.

2. Level Spreader

Yes No NA

- Installed per plan.
- Constructed on undisturbed soil, not on fill, receiving only clear, non-sediment laden flow.
- Flow sheets out of level spreader without erosion on downstream edge.

3. Interceptor Dikes and Swales

Yes No NA

- Installed per plan with minimum side slopes 2H:1V or flatter.
- Stabilized by geotextile fabric, seed, or mulch with no erosion occurring.
- Sediment-laden runoff directed to sediment trapping structure

4. Stone Check Dam

SWPPP CONSTRUCTION SITE LOG BOOK FOR MAHOPAC WELLS 1, 2, & 3

Yes No NA

- Is channel stable? (flow is not eroding soil underneath or around the structure).
- Check is in good condition (rocks in place and no permanent pools behind the structure).
- Has accumulated sediment been removed?.

5. Rock Outlet Protection

Yes No NA

- Installed per plan.
- Installed concurrently with pipe installation.

Soil Stabilization

1. Topsoil and Spoil Stockpiles

Yes No NA

- Stockpiles are stabilized with vegetation and/or mulch.
- Sediment control is installed at the toe of the slope.

2. Revegetation

Yes No NA

- Temporary seedings and mulch have been applied to idle areas.
- 4 inches minimum of topsoil has been applied under permanent seedings

Sediment Control

1. Stabilized Construction Entrance

Yes No NA

- Stone is clean enough to effectively remove mud from vehicles.
- Installed per standards and specifications?
- Does all traffic use the stabilized entrance to enter and leave site?
- Is adequate drainage provided to prevent ponding at entrance?

2. Silt Fence

Yes No NA

- Installed on Contour, 10 feet from toe of slope (not across conveyance channels).
- Joints constructed by wrapping the two ends together for continuous support.
- Fabric buried 6 inches minimum.
- Posts are stable, fabric is tight and without rips or frayed areas.
- Sediment accumulation is ___% of design capacity.

3. Storm Drain Inlet Protection (Use for Stone & Block; Filter Fabric; Curb; or, Excavated practices)

Yes No NA

- Installed concrete blocks lengthwise so open ends face outward, not upward.
- Placed wire screen between No. 3 crushed stone and concrete blocks.
- Drainage area is 1acre or less.
- Excavated area is 900 cubic feet.
- Excavated side slopes should be 2:1.

SWPPP CONSTRUCTION SITE LOG BOOK FOR MAHOPAC WELLS 1, 2, & 3

- 2" x 4" frame is constructed and structurally sound.
- Posts 3-foot maximum spacing between posts.
- Fabric is embedded 1 to 1.5 feet below ground and secured to frame/posts with staples at max 8-inch spacing.
- Posts are stable, fabric is tight and without rips or frayed areas.
- Sediment accumulation ___% of design capacity.

4. Temporary Sediment Trap

Yes No NA

- Outlet structure is constructed per the approved plan or drawing.
- Geotextile fabric has been placed beneath rock fill.
- Sediment accumulation is ___% of design capacity.

5. Temporary Sediment Basin

Yes No NA

- Basin and outlet structure constructed per the approved plan.
- Basin side slopes are stabilized with seed/mulch.
- Drainage structure flushed and basin surface restored upon removal of sediment basin facility.
- Sediment accumulation is ___% of design capacity.

Note: Not all erosion and sediment control practices are included in this listing. Add additional pages to this list as required by site specific design.

Construction inspection checklists for post-development stormwater management practices can be found in Appendix F of the New York Stormwater Management Design Manual.

III. Monthly Summary of Site Inspection Activities

Name of Permitted Facility:		Today's Date:	Reporting Month:
Location:		Permit Identification #:	
Name and Telephone Number of Site Inspector:			

Date of Inspection	Regular / Rainfall based Inspection	Name of Inspector	Items of Concern

Owner/Operator Certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that false statements made herein are punishable as a class A misdemeanor pursuant to Section 210.45 of the Penal Law."

Signature of Permittee or Duly Authorized Representative _____ Name of Permittee or Duly Authorized Representative _____ date _____

Duly authorized representatives must have written authorization, submitted to DEC, to sign any permit documents.

Appendix - B

MAHOPAC WELLS 1, 2, & 3

**TOWN OF CARMEL
PUTNAM COUNTY
NEW YORK**

APPENDIX-B

CONSTRUCTION INSPECTION CHECKLISTS

BY

ATZL, NASHER & ZIGLER
ENGINEERS-SURVEYORS-PLANNERS
232 NORTH MAIN STREET
NEW CITY, NY 10956
TEL: (845) 634-4694
FAX: (845) 634-5543
E-MAIL: rnasher@anzny.com

MAHOPAC WELLS 1, 2, & 3
Stormwater System Design
Construction Inspection Checklist Form

STORMWATER MANAGEMENT
CONSTRUCTION INSPECTION CHECKLIST FORM

Project: **Mahopac Wells 1, 2, & 3**
 Location: **Town of Carmel, Putnam County, NY**

Site Status: _____

Date of Inspection: _____

Time of Inspection: _____

Weather Conditions
 (including recent rainfall): _____

Inspector's Name: _____

CONSTRUCTION SEQUENCE	SATISFACTORY/ UNSATISFACTORY	COMMENTS
1. Pre-Construction/Materials and Equipment		
Pre-construction meeting		
Pipe and appurtenances on-site prior to construction and dimensions checked		
1. Material (including protective coating, if specified)		
2. Diameter		
3. Dimensions of metal riser or pre-cast concrete outlet structure		
4. Required dimensions between water control structures (orifices, weirs, etc.) are in accordance with approved plans		
5. Barrel stub for prefabricated pipe structures at proper angle for design barrel slope		
6. Number and dimensions of prefabricated anti-seep collars		
7. Watertight connectors and gaskets		
8. Outlet drain valve		
Project benchmark near pond site		
Equipment for temporary de-watering		

MAHOPAC WELLS 1, 2, & 3
Stormwater System Design
Construction Inspection Checklist Form

2. Subgrade Preparation		
Area beneath embankment stripped of all Vegetation, topsoil, and organic matter		
3. Pipe Spillway Installation		
Method of installation detailed on plans		
A. Bed preparation		
Installation trench excavated with specified side slopes		
CONSTRUCTION SEQUENCE	SATISFACTORY/ UNSATISFACTORY	COMMENTS
Stable, uniform, dry subgrade of relatively impervious material (If subgrade is wet, contractor shall have defined steps before proceeding with installation)		
Invert at proper elevation and grade		
B. Pipe placement		
Metal / plastic pipe		
1. Watertight connectors and gaskets properly installed		
2. Anti-seep collars properly spaced and having watertight connections to pipe		
3. Backfill placed and tamped by hand under "haunches" of pipe		
4. Remaining backfill placed in max. 8 inch lifts using small power tamping equipment until 2 feet cover over pipe is reached		
3. Pipe Spillway Installation		
Concrete pipe		
1. Pipe set on blocks or concrete slab for pouring of low cradle		
2. Pipe installed with rubber gasket joints with no spalling in gasket interface area		
3. Excavation for lower half of anti-seep collar(s) with reinforcing steel set		

MAHOPAC WELLS 1, 2, & 3
Stormwater System Design
Construction Inspection Checklist Form

4. Entire area where anti-seep collar(s) will come in contact with pipe coated with mastic or other approved waterproof sealant		
5. Low cradle and bottom half of anti-seep collar installed as monolithic pour and of an approved mix		
6. Upper half of anti-seep collar(s) formed with reinforcing steel set		
7. Concrete for collar of an approved mix and vibrated into place (protected from freezing while curing, if necessary)		
8. Forms stripped and collar inspected for honeycomb prior to backfilling. Parge if necessary.		
C. Backfilling		
Fill placed in maximum 8 inch lifts		
Backfill taken minimum 2 feet above top of anti-seep collar elevation before traversing with heavy equipment		
4. Riser / Outlet Structure Installation		
Riser located within embankment		
A. Metal riser		
Riser base excavated or formed on stable subgrade to design dimensions		
CONSTRUCTION SEQUENCE	SATISFACTORY/ UNSATISFACTORY	COMMENTS
Set on blocks to design elevations and plumbed		
Reinforcing bars placed at right angles and projecting into sides of riser		
Concrete poured so as to fill inside of riser to invert of barrel		
B. Pre-cast concrete structure		

MAHOPAC WELLS 1, 2, & 3
Stormwater System Design
Construction Inspection Checklist Form

Dry and stable subgrade		
Riser base set to design elevation		
If more than one section, no spalling in gasket interface area; gasket or approved caulking material placed securely		
Watertight and structurally sound collar or Gasket joint where structure connects to pipe spillway		
C. Poured concrete structure		
Footing excavated or formed on stable Subgrade, to design dimensions with reinforcing steel set		
Structure formed to design dimensions, with reinforcing steel set as per plan		
Concrete of an approved mix and vibrated into place (protected from freezing while curing, if necessary)		
Forms stripped & inspected for "honeycomb" prior to backfilling; parge if necessary		
5. Embankment Construction		
Fill material		
Compaction		
Embankment		
1. Fill placed in specified lifts and compacted with appropriate equipment		
2. Constructed to design cross-section, side slopes and top width		
3. Constructed to design elevation plus allowance for settlement		
6. Impounded Area Construction		
Excavated / graded to design contours and side slopes		
Inlet pipes have adequate outfall protection		
Forebay(s)		

MAHOPAC WELLS 1, 2, & 3
Stormwater System Design
Construction Inspection Checklist Form

Pond benches		
7. Earth Emergency Spillway Construction		
Spillway located in cut or structurally stabilized with riprap, gabions, concrete, etc.		
Excavated to proper cross-section, side slopes and bottom width		
Entrance channel, crest, and exit channel Constructed to design grades and elevations		
CONSTRUCTION SEQUENCE	SATISFACTORY/ UNSATISFACTORY	COMMENTS
8. Outlet Protection		
A. End section		
Securely in place and properly backfilled		
B. Endwall		
Footing excavated or formed on stable Subgrade, to design dimensions and reinforcing steel set, if specified		
Endwall formed to design dimensions with Reinforcing steel set as per plan		
Concrete of an approved mix and vibrated into place (protected from freezing, if necessary)		
Forms stripped and structure inspected for "honeycomb" prior to backfilling; parge if necessary		
C. Riprap apron / channel		
Apron / channel excavated to design cross-section with proper transition to existing ground		
Filter fabric in place		
Stone sized as per plan and uniformly place at the thickness specified		
9. Vegetative Stabilization		
Approved seed mixture or sod		
Proper surface preparation and required soil Amendments		

MAHOPAC WELLS 1, 2, & 3
Stormwater System Design
Construction Inspection Checklist Form

Excelsior mat or other stabilization, as per plan		
10. Miscellaneous		
Drain for ponds having a permanent pool		
Trash rack / anti-vortex device secured to outlet structure		
Trash protection for low flow pipes, orifices, etc.		
Fencing (when required)		
Access road		
Set aside for clean-out maintenance		
11. Stormwater Wetlands		
Adequate water balance		
Variety of depth zones present		
Approved pondscaping plan in place reinforcement budget for additional plantings		
Plants and materials ordered 6 months prior to construction		
Construction planned to allow for adequate planting and establishment of plant community (April-June planting window)		
Wetland buffer area preserved to maximum extent possible		

Comments:

Actions to be Taken:

Appendix - C

MAHOPAC WELLS 1, 2, & 3

**TOWN OF CARMEL
PUTNAM COUNTY
NEW YORK**

APPENDIX-C

SPILL CONTROL AND PREVENTION LOG

BY

ATZL, NASHER & ZIGLER
ENGINEERS-SURVEYORS-PLANNERS
232 NORTH MAIN STREET
NEW CITY, NY 10956
TEL: (845) 634-4694
FAX: (845) 634-5543
E-MAIL: rnasher@anzny.com

Appendix - D

MAHOPAC WELLS 1, 2, & 3

**TOWN OF CARMEL
PUTNAM COUNTY
NEW YORK**

APPENDIX-D MAINTENANCE AGREEMENT

BY

ATZL, NASHER & ZIGLER
ENGINEERS-SURVEYORS-PLANNERS
232 NORTH MAIN STREET
NEW CITY, NY 10956
TEL: (845) 634-4694
FAX: (845) 634-5543
E-MAIL: rnasher@anzny.com

Town of Carmel
Stormwater Facility Maintenance Agreement

Whereas, the Town of Carmel, County of Putnam, State of New York ("Municipality") and Suez Water New York, Inc ("facility owner") want to enter into an agreement to provide for the long term maintenance and continuation of stormwater control measures approved by the Municipality for the below named project, Mahopac Wells 1, 2, & 3.

Whereas, the Municipality and the facility owner desire that the stormwater control measures be built in accordance with the approved project plans and thereafter be maintained, cleaned, repaired, replaced and continued in perpetuity in order to ensure optimum performance of the components.

Therefore, the Municipality and the facility owner agree as follows:

1. This agreement inures to the benefit of the Municipality and binds the facility owner, its successors and assigns, to the maintenance provisions depicted in the approved project plans which are attached as Schedule A of this agreement.
2. The facility owner shall maintain, clean, repair, replace and continue the stormwater control measures depicted in Schedule A-1 and A-2 as necessary to ensure optimum performance of the measures to design specifications. The stormwater control measures shall include, but shall not be limited to, the following: pipes, and dry pond system.
3. The facility owner shall be responsible for all expenses related to the maintenance of the stormwater control measures and shall establish a means for the collection and distribution of expenses among parties for any commonly owned facilities.
4. The facility owner shall provide for the periodic inspection of the stormwater control measures, not less than once in every five-year period, to determine the condition and integrity of the measures. Such inspection shall be performed by a professional engineer licensed by the State of New York. The inspecting engineer shall prepare and submit to the Municipality, within 30 days of the inspection, a written report of the findings, including recommendations for those actions necessary for the continuation of the stormwater control measures.
5. The facility owner shall not authorize, undertake or permit alteration, abandonment, modification or discontinuation of the stormwater control measures except in accordance with written approval of the Municipality.

6. The facility owner shall undertake necessary repairs and replacement of the stormwater control measures at the direction of the Municipality or in accordance with the recommendations of the inspecting engineer.
7. The facility owner shall provide to the Municipality, within 30 days of the date of this agreement, a security for the maintenance and continuation of the stormwater control measures in the form of a bond, letter of credit or escrow account in the amount not to exceed \$2,500.00.
8. This agreement shall be recorded in the Office of the County Clerk, County of Putnam together with the deed for the subject premises.
9. In the event that the Municipality determines that the facility owner has failed to construct or maintain the stormwater control measures in accordance with the project plan or has failed to undertake corrective action specified by the Municipality or by the inspecting engineer, the Municipality is authorized to undertake such steps as reasonably necessary for the preservation, continuation or maintenance of the stormwater control measures and to affix the expenses thereof as a lien against the property.
10. Nothing within this agreement shall be construed to impose any affirmative obligation or covenant of performance on the Municipality.
11. This agreement is effective _____.

Facility Owner: Suez Water New York, INC

Owner's Representative: Steven Garabed, Manager of Engineering West Nyack Operations

Representative Signature: _____

ACKNOWLEDGEMENTS

State of New York)
)
County of _____) ss:

On the _____ day of _____ in the year _____ before me, the undersigned, personally appeared Christopher Graziano, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

Signature and office of individual taking acknowledgment

Town of Carmel: _____

Representative Signature: Richard J. Franzetti, P.E, BCEE, Town Engineer

ACKNOWLEDGEMENTS

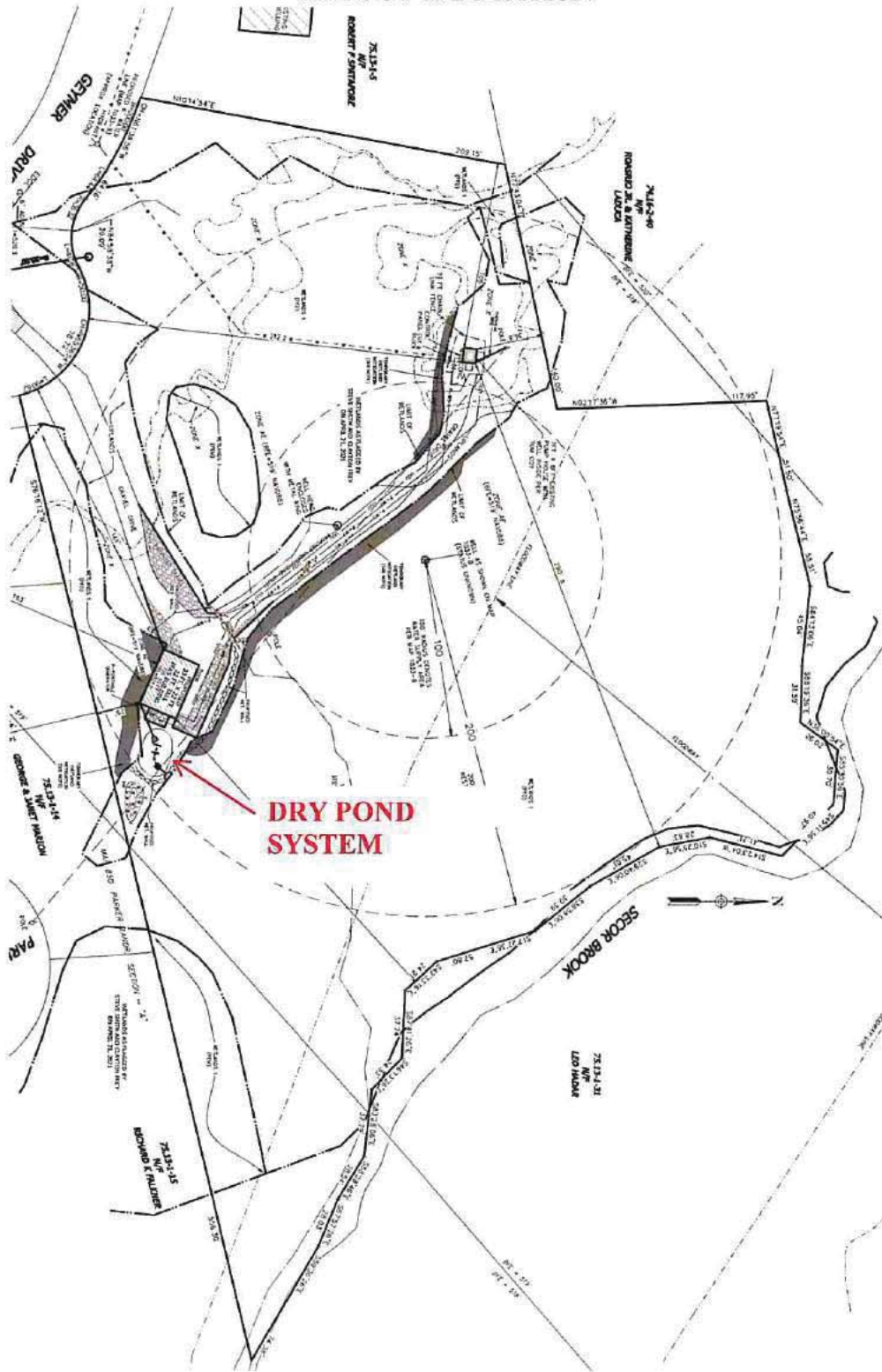
State of New York)
)
County of _____) ss:

On the _____ day of _____ in the year _____ before me, the undersigned, personally appeared Steven Garabed, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

Signature and office of individual taking acknowledgment

SCHEDULE "A-1"

STORMWATER MANAGEMENT FACILITIES LAYOUT & LOCATION



SCHEDULE "A-2"

STORMWATER MANAGEMENT SYSTEM INSPECTION AND MAINTENANCE SCHEDULE

Stormwater Management Structures:

- Stormwater Piping
- Dry Pond System

Inspections Schedule:

- Stormwater Pipes, Catch Basins and Control Structures:
 - Monthly, and after major storms: Check for debris at inlets, outlets, and cleanouts.
- Dry Pond System
 - Monthly inspections during construction and on an annual basis thereafter.

Maintenance Schedule:

- Stormwater Piping: Must be cleaned as found necessary by inspection.
- Dry Pond System
 - Remove accumulated sediment and clean out and/or replace the filter gravel bed at the outfall pipe whenever accumulated sediment reaches a volume of 10% of the available basin capacity.
 - Restore any eroded embankments.
 - Remove accumulated debris within the basin and at outfall structures.

Stormwater Piping Inspection and Maintenance Checklist

Project: _____
 Location: _____
 Site _____
 Status: _____

Date: _____
 Time: _____

Inspector: _____

Inspection/Maintenance Items	Satisfactory or Unsatisfactory	Comments/Corrective Action
1. Inspection (Quarter-annually, After Major Storms)		
1. Accumulated sediment exceeds 10% of the diameter of the pipe.		
2. Vegetation the reduces free movement of water through pipes.		
3. Pipe damage: Any dent that increases flow area by more than 10% or puncture that impacts performance		
4. Trash accumulated to reduce free movement of water through pipes.		

Inspector shall use one sheet for each individual pipe run.

(Provide sketch to show location of unsatisfactory items)

ACTIONS TO BE TAKEN:

COMMENTS:

Dry Pond System Inspection and Maintenance Checklist

Project: _____
 Location: _____
 Site _____
 Status: _____

Date: _____
 Time: _____

Inspector: _____

Inspection/Maintenance Items	Satisfactory or Unsatisfactory	Comments/Corrective Action
1. Embankment and emergency spillway (Annual, After Major Storms)		
1. Vegetation and ground cover adequate		
2. Embankment erosion		
3. Animal burrows		
4. Unauthorized planting		
5. Cracking, bulging, or sliding of dam		
a) Upstream face		
b) Downstream face		
c) At or beyond toe		
• Downstream		
• Upstream		
d) Emergency spillway		
6. Pond, toe & chimney drains clear and functioning		
7. Seeps/leaks on downstream face		
8. Slope protection or riprap failure		
9. Vertical/horizontal alignment of top of dam "As-Built"		
10. Emergency spillway clear of obstructions and debris		

11. Other (specify)		
2. Riser and principal spillway	(Annual)	
Type: Reinforced concrete		
- Corrugated pipe		
- Masonry		
1. Low flow orifice obstructed		
2. Low flow trash rack.		
a) Debris removal necessary		
b) Corrosion control		
3. Weir trash rack maintenance		
a) Debris removal necessary		
b) corrosion control		
4. Excessive sediment accumulation insider riser		
5. Concrete/masonry condition riser and barrels		
a) cracks or displacement		
b) Minor spalling (1")		
c) Major spalling (rebars exposed)		
d) Joint failures		
e) Water tightness		
6. Metal pipe condition		
7. Control valve		
a) Operational/exercised		
b) Chained and locked		
8. Pond drain valve		
a) Operational/exercised		
b) Chained and locked		
9. Outfall channels functioning		
10. Other (specify)		
3. Dry Pond Areas		
1. Vegetation adequate		

2. Undesirable vegetative growth		
3. Undesirable woody vegetation		
4. Low flow channels clear of obstructions		
5. Standing water or wet spots		
6. Sediment and / or trash accumulation		
7. Other (specify)		
4. Condition of Outfalls	(Annual, After Major Storms)	
1. Riprap failures		
2. Slope erosion		
3. Storm drain pipes		
4. Endwalls / Headwalls		
5. Other (specify)		
5. Other	(Annual)	
1. Encroachment on pond, wetland or easement area		
2. Complaints from residents		
3. Aesthetics		
a) Grass growing required		
b) Graffiti removal needed		
c) Other (specify)		
4. Conditions of maintenance access routes.		
5. Signs of hydrocarbon build-up		
6. Any public hazards (specify)		

ACTIONS TO BE TAKEN:

COMMENTS:

Appendix - E

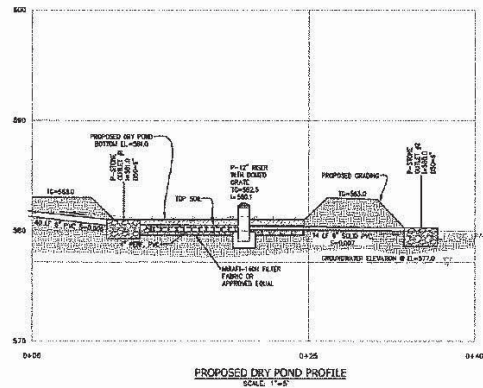
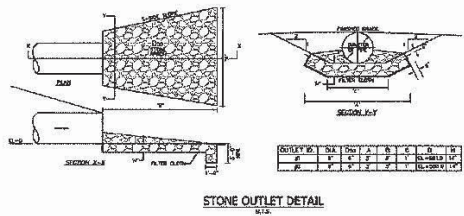
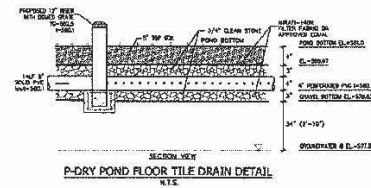
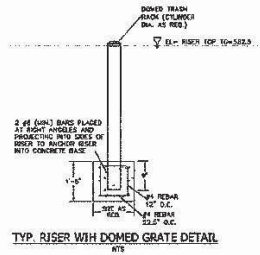
MAHOPAC WELLS 1, 2, & 3

**TOWN OF CARMEL
PUTNAM COUNTY
NEW YORK**

APPENDIX-E CONSTRUCTION PLANS IN (11"X17") FORMAT

BY

ATZL, NASHER & ZIGLER
ENGINEERS-SURVEYORS-PLANNERS
232 NORTH MAIN STREET
NEW CITY, NY 10956
TEL: (845) 634-4694
FAX: (845) 634-5543
E-MAIL: rnasher@anzny.com



THESE PLANS AND SPECIFICATIONS ARE PREPARED BY THE ENGINEER AND SURVEYOR AND ARE TO BE USED IN CONNECTION WITH THE CONTRACT DOCUMENTS FOR THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND FOR COMPLYING WITH ALL APPLICABLE REGULATIONS AND ORDINANCES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND FOR COMPLYING WITH ALL APPLICABLE REGULATIONS AND ORDINANCES.



8	01-19-24	REVISION FOR BUILDING LAYOUT
7	05-02-23	CHANGE REVISION FOR UTILIZATION TEST
6	03-03-23	FOR PLANNING BOARD 2-10-23
5	05-07-22	FOR 2-3-22 FOR WRITING
2	01-25-22	FOR PER. NO. 1-19-22, PER. NO. 8 FOR SUBMISSION
1	11-18-21	FOR PER. NO. 2-23-21
REVISION	DATE	DESCRIPTION

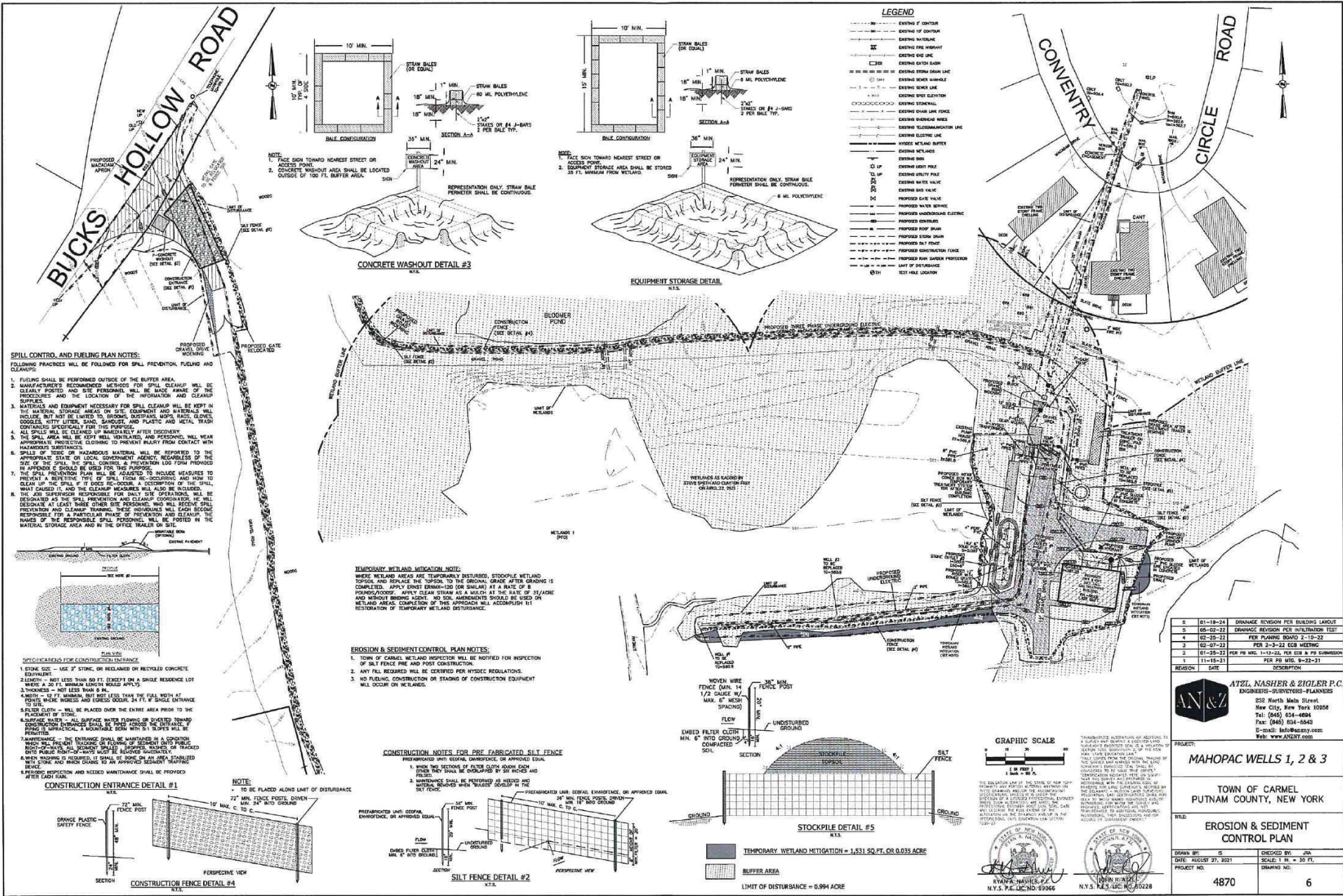
ATZL NASHER & ZIGLER P.C.
 ENGINEERS-SURVEYORS-PLANNERS
 899 North Main Street
 New City, New York 10958
 Tel: (845) 834-4894
 Fax: (845) 834-5843
 E-mail: info@atnz.com
 Web: www.atnz.com

PROJECT:
MAHOPAC WELLS 1, 2 & 3

TOWN OF CARMEL
PUTNAM COUNTY, NEW YORK

TITLE:
DETAILS

DESIGNED BY: JS	CHECKED BY: JS
DATE: AUGUST 27, 2021	SCALE: AS SHOWN
PROJECT NO: 4870	DRAWING NO: 5



SPILL CONTROL AND FUELING PLAN NOTES:

- FUELING SHALL BE PERFORMED OUTSIDE OF THE BUFFER AREA.
- MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND SITE PERSONNEL WILL BE MADE AWARE OF THESE PROCEDURES AND THE LOCATION OF THE INFORMATION AND SUPPLIES.
- MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREAS ON SITE. EQUIPMENT AND MATERIALS WILL INCLUDE BUT NOT BE LIMITED TO: ROPS, SUFFERS, WIPES, GLOVES, COGGLER, ROTTY LITTER, SAND, SANDST, AND PLASTIC AND METAL TRASH CONTAINERS SPECIFICALLY FOR THE PURPOSES.
- ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.
- THE SPILL AREA WILL BE LEFT WELL VENTILATED, AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH HAZARDOUS SUBSTANCES.
- SPILLS OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY. REGULATIONS OF THE STATE OF NEW YORK DEPARTMENT OF ENVIRONMENTAL CONSERVATION IN APPENDIX C SHOULD BE USED FOR THIS PURPOSE.
- THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT A REPEATING TYPE OF SPILL FROM RE-OCCURRING AND HOW TO CLEAN UP THE SPILL IF IT DOES RE-OCCUR. A DESCRIPTION OF THE SPILL, WHAT CAUSED IT, AND THE CLEANUP MEASURES WILL ALSO BE INCLUDED.
- THE JOB SUPERVISOR RESPONSIBLE FOR ONLY SITE OPERATIONS WILL BE DESIGNATED AS THE SPILL PREVENTION AND CLEANUP COORDINATOR. HE WILL DESIGNATE AT LEAST THREE OTHER SITE PERSONNEL WHO WILL RECEIVE SPILL PREVENTION AND CLEANUP TRAINING. THESE INDIVIDUALS WILL BECOME RESPONSIBLE FOR A PARTICULAR PHASE OF PREVENTION AND CLEANUP. THE NAMES OF THE RESPONSIBLE SPILL PERSONNEL WILL BE POSTED IN THE MATERIAL STORAGE AREA AND IN THE OFFICE TRAILS ON SITE.

TEMPORARY WETLAND MITIGATION NOTES:

- WHERE WETLAND AREAS ARE TEMPORARILY DISTURBED, STOCKPILE WETLAND TOPSOIL AND REPLACE THE TOPSOIL TO THE GROUND. GRADE AFTER GRADING IS COMPLETED. APPLY DRYED ENHANCER-120 (OR SIMILAR) AT A RATE OF 8 POUNDS PER SQUARE FOOT. APPLY CLEAN STRAW AS A MULCH AT THE RATE OF 3 TONS PER ACRE. WHERE APPROPRIATE, COMPOST SHOULD BE USED ON WETLAND AREAS. COMPLETION OF THIS APPROACH WILL ACCOMPLISH 81% RESTORATION OF TEMPORARY WETLAND DISTURBANCE.

EROSION & SEDIMENT CONTROL PLAN NOTES:

- TOURN OF CARMEL WETLAND INSPECTOR WILL BE NOTIFIED FOR INSPECTION OF SILT FENCE PRE AND POST CONSTRUCTION.
- ANY FILL REQUIRED WILL BE OBTAINED FOR NYSDC REGULATIONS.
- NO FUELING, CONSTRUCTION OR CERTAINS OF CONSTRUCTION EQUIPMENT WILL OCCUR ON WETLANDS.

CONSTRUCTION NOTES FOR PRE-FABRICATED SILT FENCE

- PRE-FABRICATED UNIT: SERIAL, UNMORPHIC, OR APPROVED EQUAL.
- OTHER THEY SHALL BE OBTAINED BY SIX INCHES AND FORTY.
- MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIALS BROUGHT WHEN TRUCKS APPROX IN THE SILT FENCE.

REVISION	DATE	DESCRIPTION
8	01-18-24	DRAINAGE REVISION PER BUILDING LAYOUT
5	05-02-23	DRAINAGE REVISION PER WETLANDS TEST
4	02-28-22	PER PLANNING BOARD 2-10-22
3	02-07-22	PER 2-3-22 ECR MEETING
2	01-25-22	PER PB MTD. 1-19-22, PER ECR & PB SUBMISSION
1	11-16-21	PER PB MTD. 9-23-21

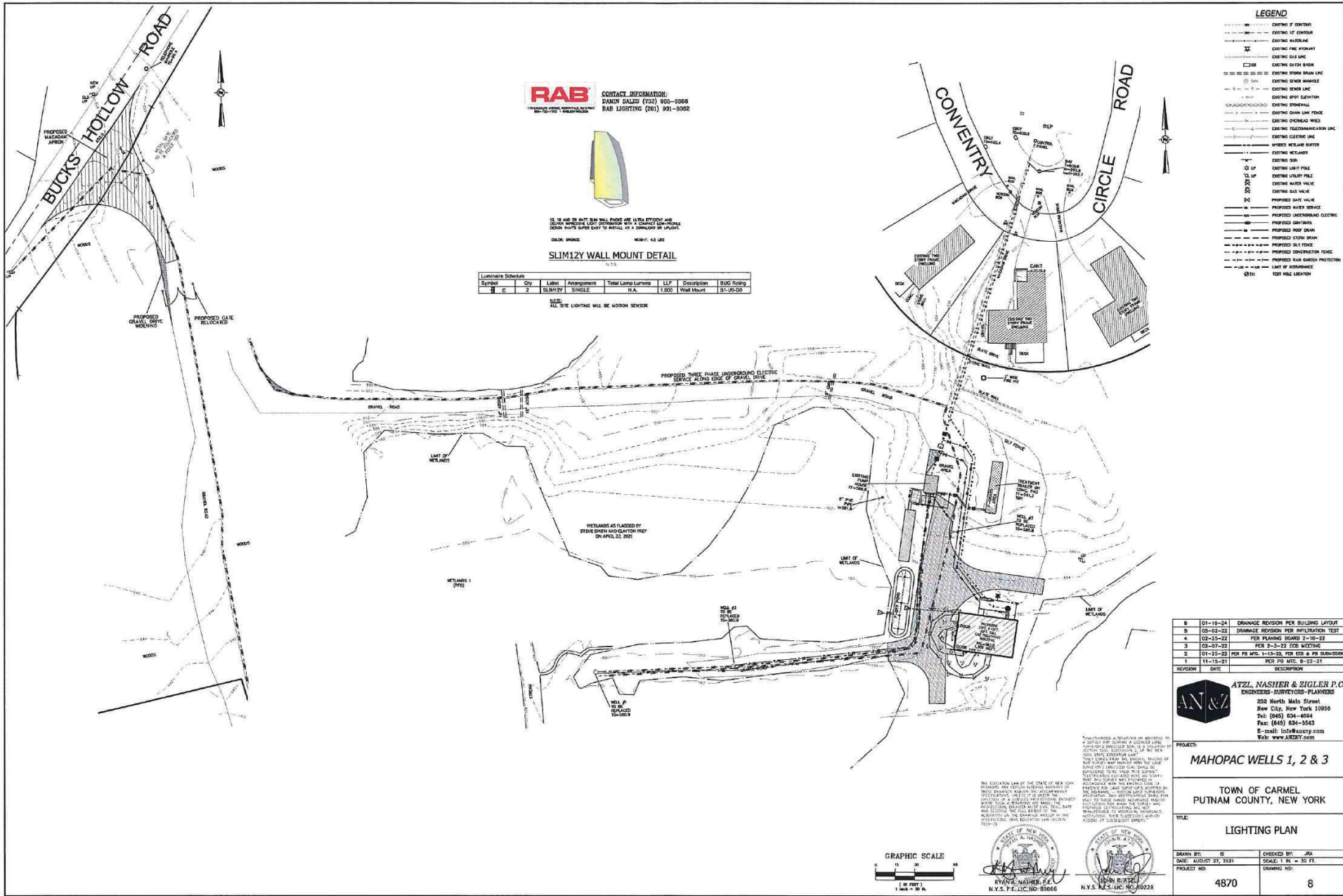
ATZL NASHER & ZIGLER P.C.
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 232 North Main Street
 New City, New York 10956
 Tel: (845) 634-4694
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 E-mail: info@atnz.com
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PROJECT:
 MAHOPAC WELLS 1, 2 & 3

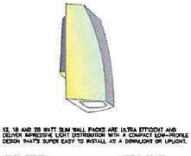
TOWN OF CARMEL
 PUTNAM COUNTY, NEW YORK

TITLE:
 EROSION & SEDIMENT CONTROL PLAN

DRAWN BY: JS **CHECKED BY:** JWA
DATE: AUGUST 07, 2021 **SCALE:** 1" = 30' FT.
PROJECT NO.: 4870 **DRAWING NO.:** 6



RAB CONTACT INFORMATION:
 STANLEY GALLIS (703) 805-0068
 RAB LIGHTING (201) 901-0062



SLIM12ZY WALL MOUNT DETAIL

Luminaire Schedule	Symbol	Qty	Label	Arrangement	Total Lamp Lumens	LLF	Description	BWG Rating
1	C	2	SLIM12ZY	SINGLE	N/A	1,000	Wall Mount	3'-0" x 3'-0"

NOTE: ALL SITE LIGHTING WILL BE WADON SENSORS

REVISION	DATE	DESCRIPTION
6	01-18-24	DRAINAGE REVISION PER BUILDING LAYOUT
5	02-02-23	DRAINAGE REVISION PER POLLUTION TEST
4	02-23-22	PER PLANNING BOARD 2-10-22
3	02-07-22	PER 7-3-22 EOB MEETING
2	01-25-22	PER PD MTS 1-13-22 PER EOB & PER SUBDIVISION
1	11-15-21	PER PD MTS 9-22-21

ATZL, NASHER & ZIGLER P.C.
 ENGINEERS - SURVEYORS - PLANNERS
 202 North Main Street
 New City, New York 10955
 Tel: (845) 634-4894
 Fax: (845) 634-5543
 E-mail: info@anzy.com
 Web: www.ANZY.com

PROJECT: **MAHOPAC WELLS 1, 2 & 3**

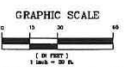
TOWN OF CARMEL
 PUTNAM COUNTY, NEW YORK

TITLE: **LIGHTING PLAN**

DRAWN BY: JSA	CHECKED BY: JSA
DATE: AUGUST 27, 2021	SCALE: 1 IN. = 30 FT.
PROJECT NO: 4870	DRAWING NO: 8

STATE OF NEW YORK
 EVAN A. NASHER, P.E.
 N.Y.S. P.E. LIC. NO. 85666

STATE OF NEW YORK
 JOHN R. ATZL, P.E.
 N.Y.S. P.E. LIC. NO. 81028



THIS DOCUMENT IS PREPARED BY THE ENGINEER OR ARCHITECT IN CONNECTION WITH THE DESIGN AND CONSTRUCTION OF THE PROJECT DESCRIBED HEREIN. IT IS NOT TO BE USED FOR ANY OTHER PROJECT WITHOUT THE WRITTEN CONSENT OF THE ENGINEER OR ARCHITECT. THE ENGINEER OR ARCHITECT ASSUMES NO LIABILITY FOR ANY DAMAGE OR INJURY TO PERSONS OR PROPERTY ARISING FROM THE USE OF THIS DOCUMENT, WHETHER OR NOT SUCH DAMAGE OR INJURY IS CAUSED BY NEGLIGENCE OR OTHERWISE.

Section 2: Drainage



MAHOPAC WELLS 1, 2, & 3

**TOWN OF CARMEL
PUTNAM COUNTY
NEW YORK**

SECTION 2:

STORMWATER SYSTEM DESIGN REPORT COMPLYING WITH NYS STORMWATER MANAGEMENT DESIGN MANUAL JANUARY 2015

BY

ATZL, NASHER & ZIGLER
ENGINEERS-SURVEYORS-PLANNERS
232 NORTH MAIN STREET
NEW CITY, NY 10956
TEL: (845) 634-4694
FAX: (845) 634-5543
E-MAIL: rnasher@anzny.com



ATZL, NASHER & ZIGLER

ENGINEERS-SURVEYORS-PLANNERS

232 North Main Street, New City, NY 10956

Tel: (845) 634-4694

Fax: (845) 634-5543

Email: rnasher@anzny.com

Revision 3: January 19, 2024

Revision 2: May 02, 2022

Revision 1: September 30, 2021

August 27, 2021

Town of Carmel
60 McAlpin Avenue
Mahopac, NY 10541

Att.: Richard Franzetti, PE, LEED
Town Engineer

Ref.: Mahopac Wells 1, 2, & 3 (Job #4870)
Town of Carmel
Putnam County, New York

Sub: Hydraulic and Hydrological Study

1.0 REVISION OVERVIEW:

The previous SWPPP report dated May 02, 2022, proposed a dry pond system to achieve zero net increase of peak runoff. However, the proposed building has been relocated towards the south of its original location. Therefore, the proposed dry pond system has been moved towards the south. We have revised the site plan and the drainage report. Regardless of the revision, the overall hydraulics of the SMP System remains the same.

1.1 INTRODUCTION:

The following hydraulic/hydrological study has been proposed for the above-mentioned project to provide zero net increase of peak runoff for the proposed project. The project disturbed area is 0.994 acres (43,300 sq.ft.), which is smaller than 1 acre. Therefore, a general construction permit is not required according to the NYSDEC 2015 version of the design manual. However, a zero-net increase of peak runoff is required per Town code.

1.2 SITE LOCATION:

The project is located at Bucks Hollow Road, ± 890 ft south of Astor Drive in the Town of Carmel, Putnam County, New York.

2.0 HYDROLOGICAL SOIL GROUP:

The soil onsite is the following, based on data from the Soil Survey of Putnam County, New York, dated October 1994.

Soil Name	Soil Map Symbol	Hydrological Soil Group
Charlton-Chatfield complex, 0 to 15 percent slopes, very rocky	CrC	B
Natchaug muck, 0 to 2 percent slopes	NcA	D
Sun loam	Sh	D

* Source: <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>

** HSG "B & D" were used in the drainage calculation.

3.1 EXISTING CONDITION:

The existing drainage area is 0.536 acres. The land cover of the drainage area consists of woods, gravel and grass area, plus some impervious area. The drainage area delineation is shown on the Existing Condition Drainage Map (E-1).

3.2 DEVELOPED CONDITION:

The proposed development includes the construction of a building and an increase in the gravel coverage. The peak runoff from the study area will be increased upon completion of the proposed development. The drainage area delineation is shown on the Developed Condition Drainage Map (D-1).

4.0 DRAINAGE STUDY:

Due to the proposed improvement the peak runoff of the designated drainage area will be increased. The hydrological software, HydroCAD has been used to calculate pre and post peak runoff rates for 1, 10, 100-year design storm events.

5.0 MITIGATION MEASURES:

To attenuate the post-developed peak flow to pre-developed peak flow, we are proposing a Dry Pond System. The Westchester Method was used to calculate the 10-year storm maximum storage.

The drainage study shows that the required 10-year storage for the site is 1,187.0 cu.ft. The Dry Pond System provides 1,234.0 cu.ft (@ELV= 582.50'), which is more than the required volume. The software HydroCAD was used to calculate peak flows for different storm events at

the outlet "Point of Interest", for the Existing and Developed Condition. The summary table for the peak flow of different storm frequencies (1, 10, & 100-year storms) at the point of interest (P.O.I.), and water quantity design calculations are attached for your reference.

If you have further questions or concerns, feel free to contact me. Thank you.

Very Truly Yours,



P:\STORMWATER MANAGEMENT\4870\CURRENT SWPPP REPORT\SECTION 2 - DRAINAGE\4870 DRAINAGE NARRATIVE.docx

Summary Table

The sticky note contains a table with a grid of approximately 10 columns and 10 rows. The text within the grid is extremely faint and illegible.

MAHOPAC WELLS 1, 2, & 3

**TOWN OF CARMEL
PUTNAM COUNTY
NEW YORK**

SUMMARY TABLE

BY

ATZL, NASHER & ZIGLER

ENGINEERS-SURVEYORS-PLANNERS

232 NORTH MAIN STREET

NEW CITY, NY 10956

TEL: (845) 634-4694

FAX: (845) 634-5543

E-MAIL: rnasher@anzny.com

**SUMMARY FLOW
 EXSITING AND DEVELOPED CONDITIONS
 1, 10, & 100 YEAR STORMS PEAK RUNOFF**

STORM FREQUENCY (YEAR)	EXISTING CONDITION PEAK FLOW (CFS) (PER HYDROCAD)	DEVELOPED CONDITION PEAK FLOW, NO ROUTING (CFS) (PER HYDROCAD)	CHANGE IN FLOW, ΔQ (CFS)	REMARK
1	0.16	0.39	+0.23	*
10	0.95	1.37	+0.42	*
100	2.81	3.40	+0.59	*

* Note: Zero net increase of peak runoff will be achieved by the proposed Dry Pond System. The location of the system is shown on the site plan drawings.

Location Maps

Location Maps

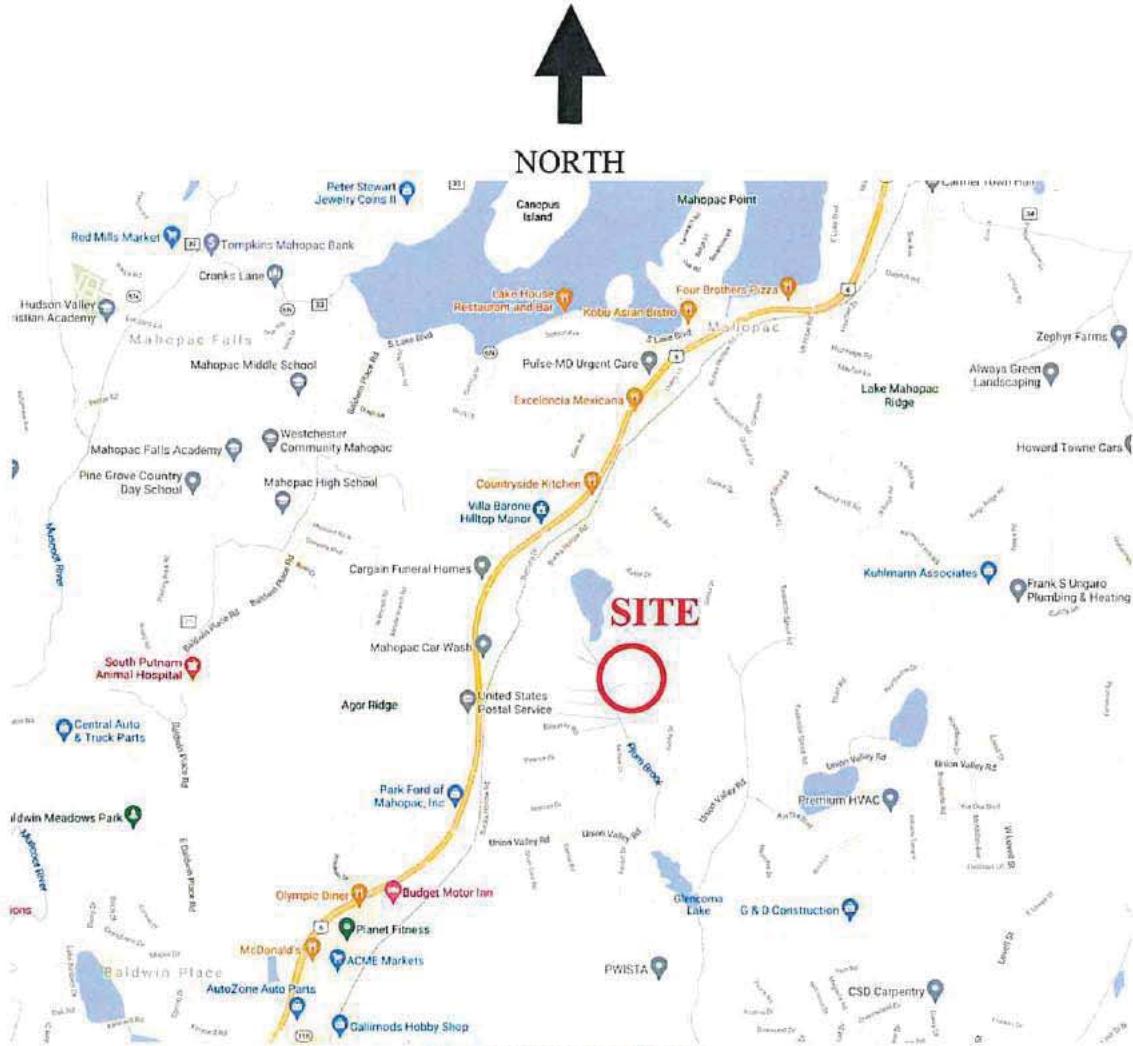
MAHOPAC WELLS 1, 2, & 3

**TOWN OF CARMEL
PUTNAM COUNTY
NEW YORK**

LOCATION MAPS

BY

ATZL, NASHER & ZIGLER
ENGINEERS-SURVEYORS-PLANNERS
232 NORTH MAIN STREET
NEW CITY, NY 10956
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FAX: (845) 634-5543
E-MAIL: rnasher@anzny.com



Source: maps.google.com

STREET MAP



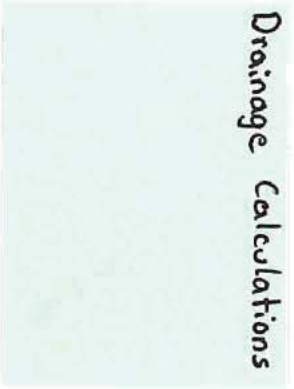
NORTH



Source: <http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>

SOIL MAP

Drainage Calculations



MAHOPAC WELLS 1, 2, & 3

**TOWN OF CARMEL
PUTNAM COUNTY
NEW YORK**

DRAINAGE CALCULATION

BY

ATZL, NASHER & ZIGLER

ENGINEERS-SURVEYORS-PLANNERS

232 NORTH MAIN STREET

NEW CITY, NY 10956

TEL: (845) 634-4694

FAX: (845) 634-5543

E-MAIL: rnasher@anzny.com

EXISTING CONDITION:

The existing area of interest consists of one watershed (WS#1), with an area of about 0.536 acres. The site consists of woods/grass and gravel, plus some impervious areas. The drainage area is delineated on the Existing Condition Drainage Map (E-1).

WS#1E:

The soil within WS#1E belongs to Hydrological Soil Group "B".

Composition	HSG "B"
A_{Gravel}	0.116 acres
$A_{Impervious}$	0.01 acres
$A_{Wood/Grass}$	0.41 acres

A = 0.536 Acres

Due to the small size of the watershed, the time of concentration is considered the minimum of 0.1 hours.

WS#1E → P.O.I.#1

DEVELOPED CONDITION:

Upon development of the site, the total area of the developed watershed will remain the same as the existing watershed area (0.536 acres). The developed condition consists of the construction of a building and an increase in gravel coverage. The watershed area is delineated on the Developed Condition Drainage Map (D-1).

WS#1D:

The soil within WS#1D belongs to Hydrological Soil Group "B".

Composition	HSG "B"
A_{Gravel}	0.194 acres
$A_{Impervious}$	0.048 acres
$A_{Wood/Grass}$	0.294 acres

A = 0.536 Acres

Due to the small size of the watershed, the time of concentration is considered the minimum of 0.1 hours.

ROOFTOP → DRY POND SYSTEM → P.O.I.#1.

WS#1 → P.O.I.#1.

SMP Design



MAHOPAC WELLS 1, 2, & 3

**TOWN OF CARMEL
PUTNAM COUNTY
NEW YORK**

STORMWATER MANAGEMENT PRACTICE DESIGN CALCULATIONS

BY

ATZL, NASHER & ZIGLER

ENGINEERS-SURVEYORS-PLANNERS

232 NORTH MAIN STREET

NEW CITY, NY 10956

TEL: (845) 634-4694

FAX: (845) 634-5543

E-MAIL: rnasher@anzny.com

WATER QUANTITY CALCULATION
WESTCHESTER METHOD

1. **Select Design Storm**
(Use 1-Year, 24-Hour Storm)
Total Rainfall = 4.90 inches

2. **Discount Additional Soil Percolation**
Use Infiltration rate 0.00 inch/hr

3. **Calculate The Storage Volume (Vs):**
1-Year, 24-Hour Rainfall = 4.90 inches

Soil: Hydrologic Soil Group (HSG) is "B", see attached Soil Survey Map.

Existing CN (WS#1) = 65, (QE)₁ = 0.95 cfs (Hydrocad, attached)
Runoff depth = 1.59 inches

Proposed CN (WS#1) = 73, (QD)₁ = 1.37 cfs (Hydrocad, attached)
Runoff depth = 2.20 inches

Drainage Area = 23,349 ft²

$$\Delta Vr = 2.20 \text{ in} - 1.59 \text{ in} = 0.61 \text{ in}$$

$$\Delta Vr = 0.61 \text{ in} * \frac{1 \text{ ft}}{12 \text{ in}}$$

$$\Delta Vr = 0.05 \text{ ft}$$

$$V_s = \Delta Vr * \text{Area}$$

$$V_s = 0.05 \text{ ft} * 23,349 \text{ ft}^2$$

$$V_s = 1,187.0 \text{ ft}^3$$

The 1-year storm storage volume is 1,187.0 ft³

SMP SIZING CALCULATION

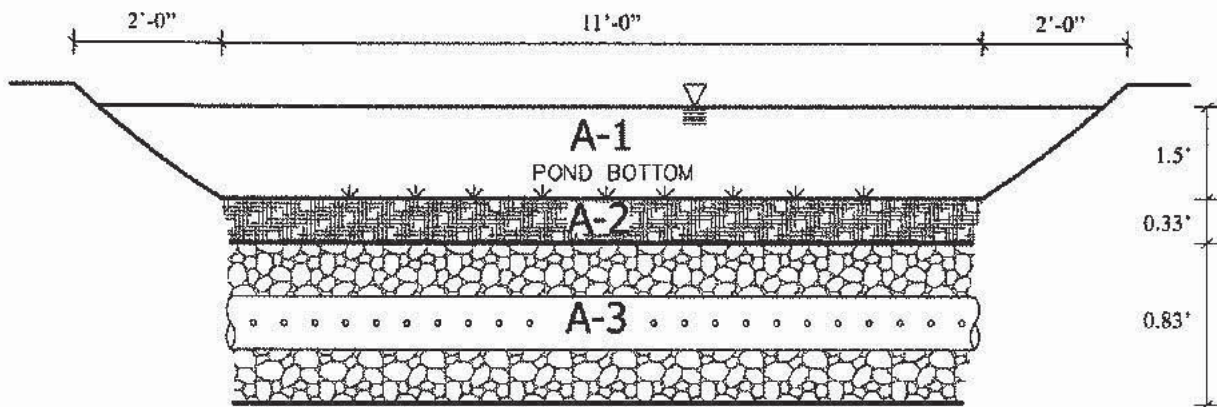
In order to provide zero net increase of peak runoff a dry pond system has been proposed. The storage is calculated as 1,187.0 cu.ft. for the entire WS#1.

Calculate Provided Storage Volume:

The Dry Pond has the following characteristics:

- 34" deep
- 12" of ¾" gravel (porosity = 0.4) on bottom
- 4" of soil (porosity = 0.2) above the gravel
- 18" of freeboard between the top of the catch basin to the surface of the soil

A cross-sectional, not to scale sketch of the dry pond system is shown below:



DRY POND CROSS SECTION

N.T.S.

Void space in the dry pond cross-section:

$$= A1 \text{ (Void area above-ground)} + A2 \text{ (Void area in planting soil)} + A3 \text{ (Void area in gravel)}$$

$$= \left[(1.5') \left(\frac{1}{2} \right) (15.0' + 11.0') \right] + (0.2)(11.0')(0.33') + (0.4)(11.0')(0.83')$$

$$= 23.88 \text{ ft}^2$$

Required dry pond length (total):

$$= \frac{1,187.0 \text{ ft}^3}{23.88 \text{ ft}^2} = 49.7 \text{ ft}$$

Use one (1) dry pond. Required length of the dry pond:

$$= 50.0 \text{ ft}$$

Provided Storage:

$$= (50.0 \text{ ft})(24.0 \text{ ft}^2) = 1,200.0 \text{ ft}^3$$

Note: HydroCAD was used to calculate the actual storage provided by the proposed system.

The proposed Dry Pond will provide 1,234.0 ft³ (@ ELV= 582.50') > 1,187.0 ft³

OK✓

(Please see HydroCAD for detailed calculations)

HydroCAD Model



MAHOPAC WELLS 1, 2, & 3

**TOWN OF CARMEL
PUTNAM COUNTY
NEW YORK**

HYDROCAD MODEL FOR EXISTING AND PROPOSED CONDITIONS 1, 10, AND 100 YEAR STORMS

BY

ATZL, NASHER & ZIGLER
ENGINEERS-SURVEYORS-PLANNERS
232 NORTH MAIN STREET
NEW CITY, NY 10956
TEL: (845) 634-4694
FAX: (845) 634-5543
E-MAIL: rnasher@anzny.com

EXISTING
CONDITIONS

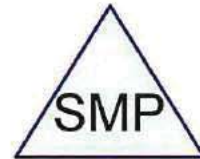
DEVELOPED
CONDITIONS



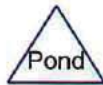
EXISTING



DEVELOPED



P-DRY DETENTION
BASIN



Routing Diagram for 4870 MAHOPAC WELLS 1, 2, & 3
Prepared by ATZL NASHER & ZIGLER, Printed 1/24/2024
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4870 MAHOPAC WELLS 1, 2, & 3

Prepared by ATZL NASHER & ZIGLER

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Type III 24-hr 1-Year Rainfall=2.73"

Printed 1/24/2024

Page 2

Time span=0.00-30.00 hrs, dt=0.01 hrs, 3001 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 D-WS#1A: DEVELOPED

Runoff Area=0.536 ac 8.96% Impervious Runoff Depth=0.70"

Tc=6.0 min CN=73 Runoff=0.39 cfs 0.031 af

Subcatchment E-WS#1: EXISTING

Runoff Area=0.536 ac 1.87% Impervious Runoff Depth=0.39"

Tc=6.0 min CN=65 Runoff=0.16 cfs 0.017 af

Pond SMP: P-DRY DETENTION BASIN

Peak Elev=0.00' Storage=0 cf

Total Runoff Area = 1.072 ac Runoff Volume = 0.048 af Average Runoff Depth = 0.54"
94.59% Pervious = 1.014 ac 5.41% Impervious = 0.058 ac

4870 MAHOPAC WELLS 1, 2, & 3

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Type III 24-hr 1-Year Rainfall=2.73"

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Summary for Subcatchment D-WS#1A: DEVELOPED

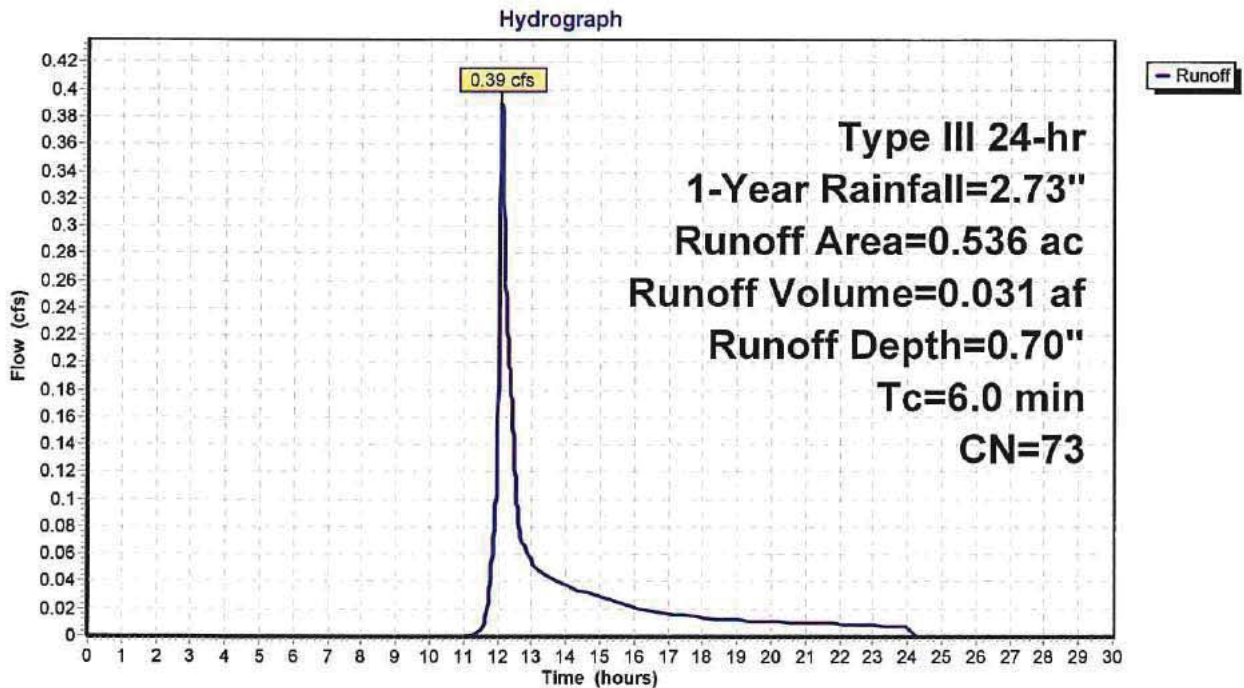
Runoff = 0.39 cfs @ 12.10 hrs, Volume= 0.031 af, Depth= 0.70"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 1-Year Rainfall=2.73"

Area (ac)	CN	Description
0.194	85	Gravel roads, HSG B
0.048	98	Paved parking, HSG B
0.294	61	>75% Grass cover, Good, HSG B
0.536	73	Weighted Average
0.488		91.04% Pervious Area
0.048		8.96% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment D-WS#1A: DEVELOPED



Summary for Subcatchment E-WS#1: EXISTING

Runoff = 0.16 cfs @ 12.12 hrs, Volume= 0.017 af, Depth= 0.39"

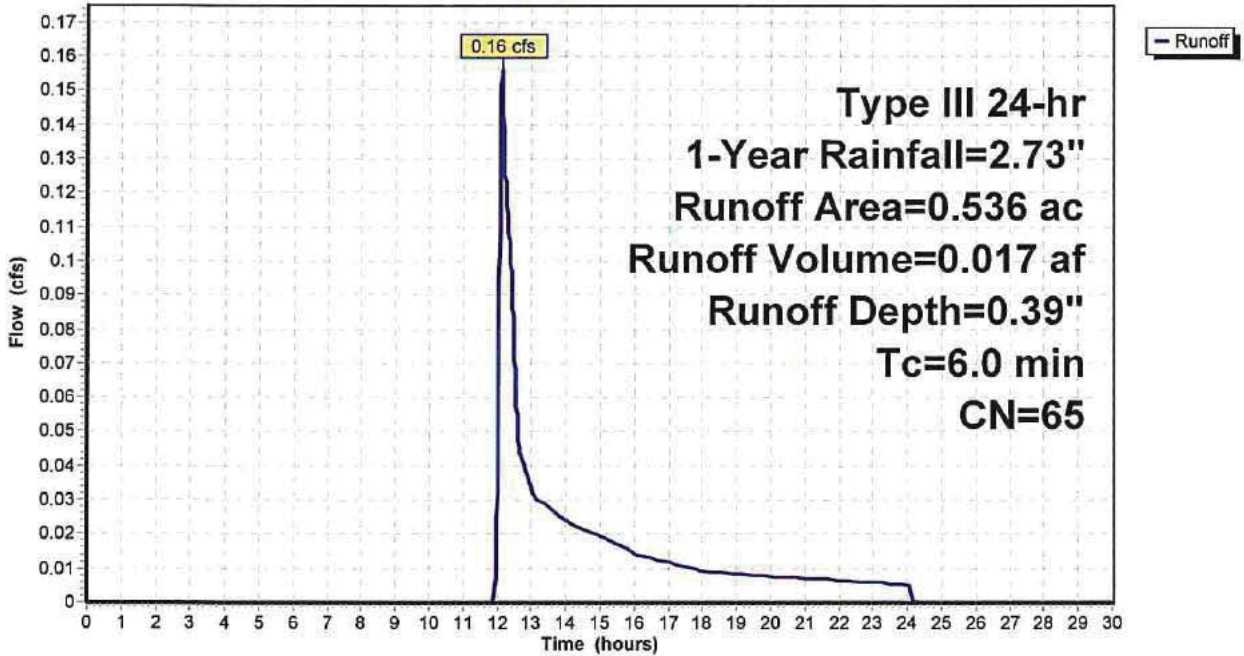
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
 Type III 24-hr 1-Year Rainfall=2.73"

Area (ac)	CN	Description
0.116	85	Gravel roads, HSG B
0.010	98	Paved parking, HSG B
0.410	58	Woods/grass comb., Good, HSG B
0.536	65	Weighted Average
0.526		98.13% Pervious Area
0.010		1.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment E-WS#1: EXISTING

Hydrograph



Summary for Pond SMP: P-DRY DETENTION BASIN

Volume #1	Invert	Avail.Storage	Storage Description	
	579.83'	1,602 cf	Custom Stage Data (Prismatic) Listed below (Recalc)	
Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
579.83	767	0.0	0	0
580.67	767	40.0	258	258
581.00	767	20.0	51	308
581.01	527	100.0	6	315
583.00	767	100.0	1,288	1,602

4870 MAHOPAC WELLS 1, 2, & 3

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Type III 24-hr 1-Year Rainfall=2.73"

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Stage-Discharge for Pond SMP: P-DRY DETENTION BASIN

Elevation (feet)	Discharge (cfs)	Elevation (feet)	Discharge (cfs)	Elevation (feet)	Discharge (cfs)
579.83	0.00	580.89	0.00	581.95	0.00
579.85	0.00	580.91	0.00	581.97	0.00
579.87	0.00	580.93	0.00	581.99	0.00
579.89	0.00	580.95	0.00	582.01	0.00
579.91	0.00	580.97	0.00	582.03	0.00
579.93	0.00	580.99	0.00	582.05	0.00
579.95	0.00	581.01	0.00	582.07	0.00
579.97	0.00	581.03	0.00	582.09	0.00
579.99	0.00	581.05	0.00	582.11	0.00
580.01	0.00	581.07	0.00	582.13	0.00
580.03	0.00	581.09	0.00	582.15	0.00
580.05	0.00	581.11	0.00	582.17	0.00
580.07	0.00	581.13	0.00	582.19	0.00
580.09	0.00	581.15	0.00	582.21	0.00
580.11	0.00	581.17	0.00	582.23	0.00
580.13	0.00	581.19	0.00	582.25	0.00
580.15	0.00	581.21	0.00	582.27	0.00
580.17	0.00	581.23	0.00	582.29	0.00
580.19	0.00	581.25	0.00	582.31	0.00
580.21	0.00	581.27	0.00	582.33	0.00
580.23	0.00	581.29	0.00	582.35	0.00
580.25	0.00	581.31	0.00	582.37	0.00
580.27	0.00	581.33	0.00	582.39	0.00
580.29	0.00	581.35	0.00	582.41	0.00
580.31	0.00	581.37	0.00	582.43	0.00
580.33	0.00	581.39	0.00	582.45	0.00
580.35	0.00	581.41	0.00	582.47	0.00
580.37	0.00	581.43	0.00	582.49	0.00
580.39	0.00	581.45	0.00	582.51	0.00
580.41	0.00	581.47	0.00	582.53	0.00
580.43	0.00	581.49	0.00	582.55	0.00
580.45	0.00	581.51	0.00	582.57	0.00
580.47	0.00	581.53	0.00	582.59	0.00
580.49	0.00	581.55	0.00	582.61	0.00
580.51	0.00	581.57	0.00	582.63	0.00
580.53	0.00	581.59	0.00	582.65	0.00
580.55	0.00	581.61	0.00	582.67	0.00
580.57	0.00	581.63	0.00	582.69	0.00
580.59	0.00	581.65	0.00	582.71	0.00
580.61	0.00	581.67	0.00	582.73	0.00
580.63	0.00	581.69	0.00	582.75	0.00
580.65	0.00	581.71	0.00	582.77	0.00
580.67	0.00	581.73	0.00	582.79	0.00
580.69	0.00	581.75	0.00	582.81	0.00
580.71	0.00	581.77	0.00	582.83	0.00
580.73	0.00	581.79	0.00	582.85	0.00
580.75	0.00	581.81	0.00	582.87	0.00
580.77	0.00	581.83	0.00	582.89	0.00
580.79	0.00	581.85	0.00	582.91	0.00
580.81	0.00	581.87	0.00	582.93	0.00
580.83	0.00	581.89	0.00	582.95	0.00
580.85	0.00	581.91	0.00	582.97	0.00
580.87	0.00	581.93	0.00	582.99	0.00

4870 MAHOPAC WELLS 1, 2, & 3

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Type III 24-hr 1-Year Rainfall=2.73"

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Stage-Area-Storage for Pond SMP: P-DRY DETENTION BASIN

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
579.83	767	0	582.48	704	1,220
579.88	767	15	582.53	710	1,255
579.93	767	31	582.58	716	1,291
579.98	767	46	582.63	722	1,327
580.03	767	61	582.68	728	1,363
580.08	767	77	582.73	734	1,400
580.13	767	92	582.78	740	1,437
580.18	767	107	582.83	746	1,474
580.23	767	123	582.88	753	1,511
580.28	767	138	582.93	759	1,549
580.33	767	153	582.98	765	1,587
580.38	767	169			
580.43	767	184			
580.48	767	199			
580.53	767	215			
580.58	767	230			
580.63	767	245			
580.68	767	259			
580.73	767	267			
580.78	767	275			
580.83	767	282			
580.88	767	290			
580.93	767	298			
580.98	767	305			
581.03	529	325			
581.08	535	352			
581.13	541	379			
581.18	548	406			
581.23	554	434			
581.28	560	461			
581.33	566	490			
581.38	572	518			
581.43	578	547			
581.48	584	576			
581.53	590	605			
581.58	596	635			
581.63	602	665			
581.68	608	695			
581.73	614	726			
581.78	620	756			
581.83	626	787			
581.88	632	819			
581.93	638	851			
581.98	644	883			
582.03	650	915			
582.08	656	948			
582.13	662	981			
582.18	668	1,014			
582.23	674	1,047			
582.28	680	1,081			
582.33	686	1,116			
582.38	692	1,150			
582.43	698	1,185			

Time span=0.00-30.00 hrs, dt=0.01 hrs, 3001 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 D-WS#1A: DEVELOPED

Runoff Area=0.536 ac 8.96% Impervious Runoff Depth=2.20"
Tc=6.0 min CN=73 Runoff=1.37 cfs 0.098 af

Subcatchment E-WS#1: EXISTING

Runoff Area=0.536 ac 1.87% Impervious Runoff Depth=1.59"
Tc=6.0 min CN=65 Runoff=0.95 cfs 0.071 af

Pond SMP: P-DRY DETENTION BASIN

Peak Elev=0.00' Storage=0 cf

Total Runoff Area = 1.072 ac Runoff Volume = 0.169 af Average Runoff Depth = 1.89"
94.59% Pervious = 1.014 ac 5.41% Impervious = 0.058 ac

Summary for Subcatchment D-WS#1A: DEVELOPED

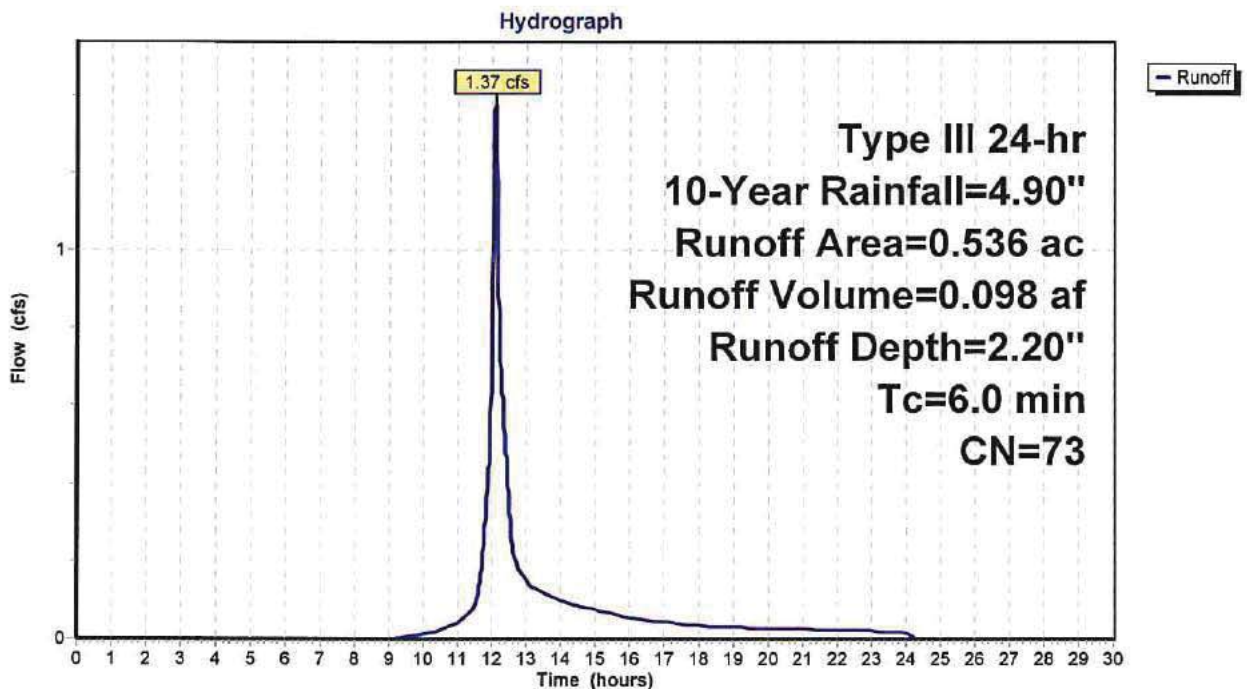
Runoff = 1.37 cfs @ 12.09 hrs, Volume= 0.098 af, Depth= 2.20"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
 Type III 24-hr 10-Year Rainfall=4.90"

Area (ac)	CN	Description
0.194	85	Gravel roads, HSG B
0.048	98	Paved parking, HSG B
0.294	61	>75% Grass cover, Good, HSG B
0.536	73	Weighted Average
0.488		91.04% Pervious Area
0.048		8.96% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment D-WS#1A: DEVELOPED



Summary for Subcatchment E-WS#1: EXISTING

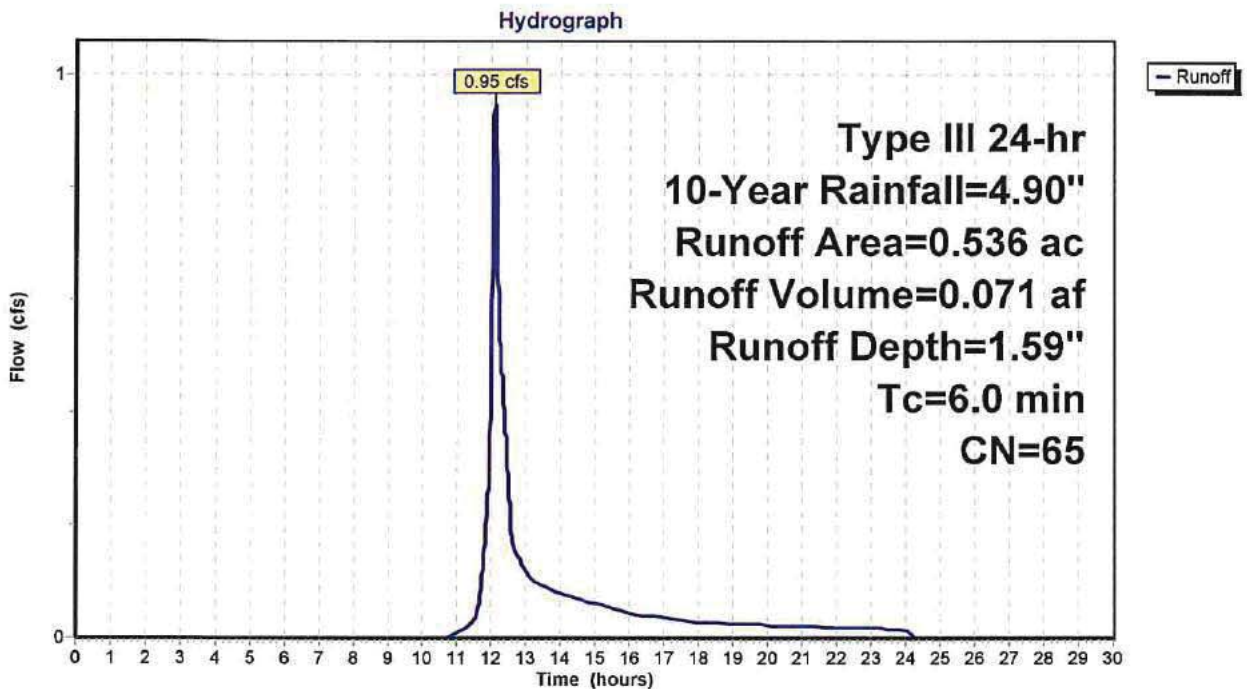
Runoff = 0.95 cfs @ 12.10 hrs, Volume= 0.071 af, Depth= 1.59"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
 Type III 24-hr 10-Year Rainfall=4.90"

Area (ac)	CN	Description
0.116	85	Gravel roads, HSG B
0.010	98	Paved parking, HSG B
0.410	58	Woods/grass comb., Good, HSG B
0.536	65	Weighted Average
0.526		98.13% Pervious Area
0.010		1.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment E-WS#1: EXISTING



Summary for Pond SMP: P-DRY DETENTION BASIN

Volume	Invert	Avail.Storage	Storage Description	
#1	579.83'	1,602 cf	Custom Stage Data (Prismatic) Listed below (Recalc)	
Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
579.83	767	0.0	0	0
580.67	767	40.0	258	258
581.00	767	20.0	51	308
581.01	527	100.0	6	315
583.00	767	100.0	1,288	1,602

4870 MAHOPAC WELLS 1, 2, & 3

Type III 24-hr 10-Year Rainfall=4.90"

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Stage-Discharge for Pond SMP: P-DRY DETENTION BASIN

Elevation (feet)	Discharge (cfs)	Elevation (feet)	Discharge (cfs)	Elevation (feet)	Discharge (cfs)
579.83	0.00	580.89	0.00	581.95	0.00
579.85	0.00	580.91	0.00	581.97	0.00
579.87	0.00	580.93	0.00	581.99	0.00
579.89	0.00	580.95	0.00	582.01	0.00
579.91	0.00	580.97	0.00	582.03	0.00
579.93	0.00	580.99	0.00	582.05	0.00
579.95	0.00	581.01	0.00	582.07	0.00
579.97	0.00	581.03	0.00	582.09	0.00
579.99	0.00	581.05	0.00	582.11	0.00
580.01	0.00	581.07	0.00	582.13	0.00
580.03	0.00	581.09	0.00	582.15	0.00
580.05	0.00	581.11	0.00	582.17	0.00
580.07	0.00	581.13	0.00	582.19	0.00
580.09	0.00	581.15	0.00	582.21	0.00
580.11	0.00	581.17	0.00	582.23	0.00
580.13	0.00	581.19	0.00	582.25	0.00
580.15	0.00	581.21	0.00	582.27	0.00
580.17	0.00	581.23	0.00	582.29	0.00
580.19	0.00	581.25	0.00	582.31	0.00
580.21	0.00	581.27	0.00	582.33	0.00
580.23	0.00	581.29	0.00	582.35	0.00
580.25	0.00	581.31	0.00	582.37	0.00
580.27	0.00	581.33	0.00	582.39	0.00
580.29	0.00	581.35	0.00	582.41	0.00
580.31	0.00	581.37	0.00	582.43	0.00
580.33	0.00	581.39	0.00	582.45	0.00
580.35	0.00	581.41	0.00	582.47	0.00
580.37	0.00	581.43	0.00	582.49	0.00
580.39	0.00	581.45	0.00	582.51	0.00
580.41	0.00	581.47	0.00	582.53	0.00
580.43	0.00	581.49	0.00	582.55	0.00
580.45	0.00	581.51	0.00	582.57	0.00
580.47	0.00	581.53	0.00	582.59	0.00
580.49	0.00	581.55	0.00	582.61	0.00
580.51	0.00	581.57	0.00	582.63	0.00
580.53	0.00	581.59	0.00	582.65	0.00
580.55	0.00	581.61	0.00	582.67	0.00
580.57	0.00	581.63	0.00	582.69	0.00
580.59	0.00	581.65	0.00	582.71	0.00
580.61	0.00	581.67	0.00	582.73	0.00
580.63	0.00	581.69	0.00	582.75	0.00
580.65	0.00	581.71	0.00	582.77	0.00
580.67	0.00	581.73	0.00	582.79	0.00
580.69	0.00	581.75	0.00	582.81	0.00
580.71	0.00	581.77	0.00	582.83	0.00
580.73	0.00	581.79	0.00	582.85	0.00
580.75	0.00	581.81	0.00	582.87	0.00
580.77	0.00	581.83	0.00	582.89	0.00
580.79	0.00	581.85	0.00	582.91	0.00
580.81	0.00	581.87	0.00	582.93	0.00
580.83	0.00	581.89	0.00	582.95	0.00
580.85	0.00	581.91	0.00	582.97	0.00
580.87	0.00	581.93	0.00	582.99	0.00

4870 MAHOPAC WELLS 1, 2, & 3

Type III 24-hr 10-Year Rainfall=4.90"

Prepared by ATZL NASHER & ZIGLER

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Stage-Area-Storage for Pond SMP: P-DRY DETENTION BASIN

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
579.83	767	0	582.48	704	1,220
579.88	767	15	582.53	710	1,255
579.93	767	31	582.58	716	1,291
579.98	767	46	582.63	722	1,327
580.03	767	61	582.68	728	1,363
580.08	767	77	582.73	734	1,400
580.13	767	92	582.78	740	1,437
580.18	767	107	582.83	746	1,474
580.23	767	123	582.88	753	1,511
580.28	767	138	582.93	759	1,549
580.33	767	153	582.98	765	1,587
580.38	767	169			
580.43	767	184			
580.48	767	199			
580.53	767	215			
580.58	767	230			
580.63	767	245			
580.68	767	259			
580.73	767	267			
580.78	767	275			
580.83	767	282			
580.88	767	290			
580.93	767	298			
580.98	767	305			
581.03	529	325			
581.08	535	352			
581.13	541	379			
581.18	548	406			
581.23	554	434			
581.28	560	461			
581.33	566	490			
581.38	572	518			
581.43	578	547			
581.48	584	576			
581.53	590	605			
581.58	596	635			
581.63	602	665			
581.68	608	695			
581.73	614	726			
581.78	620	756			
581.83	626	787			
581.88	632	819			
581.93	638	851			
581.98	644	883			
582.03	650	915			
582.08	656	948			
582.13	662	981			
582.18	668	1,014			
582.23	674	1,047			
582.28	680	1,081			
582.33	686	1,116			
582.38	692	1,150			
582.43	698	1,185			

Time span=0.00-30.00 hrs, dt=0.01 hrs, 3001 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 D-WS#1A: DEVELOPED	Runoff Area=0.536 ac 8.96% Impervious Runoff Depth=5.43" Tc=6.0 min CN=73 Runoff=3.40 cfs 0.243 af
Subcatchment E-WS#1: EXISTING	Runoff Area=0.536 ac 1.87% Impervious Runoff Depth=4.47" Tc=6.0 min CN=65 Runoff=2.81 cfs 0.200 af
Pond SMP: P-DRY DETENTION BASIN	Peak Elev=0.00' Storage=0 cf

Total Runoff Area = 1.072 ac Runoff Volume = 0.442 af Average Runoff Depth = 4.95"
94.59% Pervious = 1.014 ac 5.41% Impervious = 0.058 ac

4870 MAHOPAC WELLS 1, 2, & 3

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Type III 24-hr 100-Year Rainfall=8.70"

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Summary for Subcatchment D-WS#1A: DEVELOPED

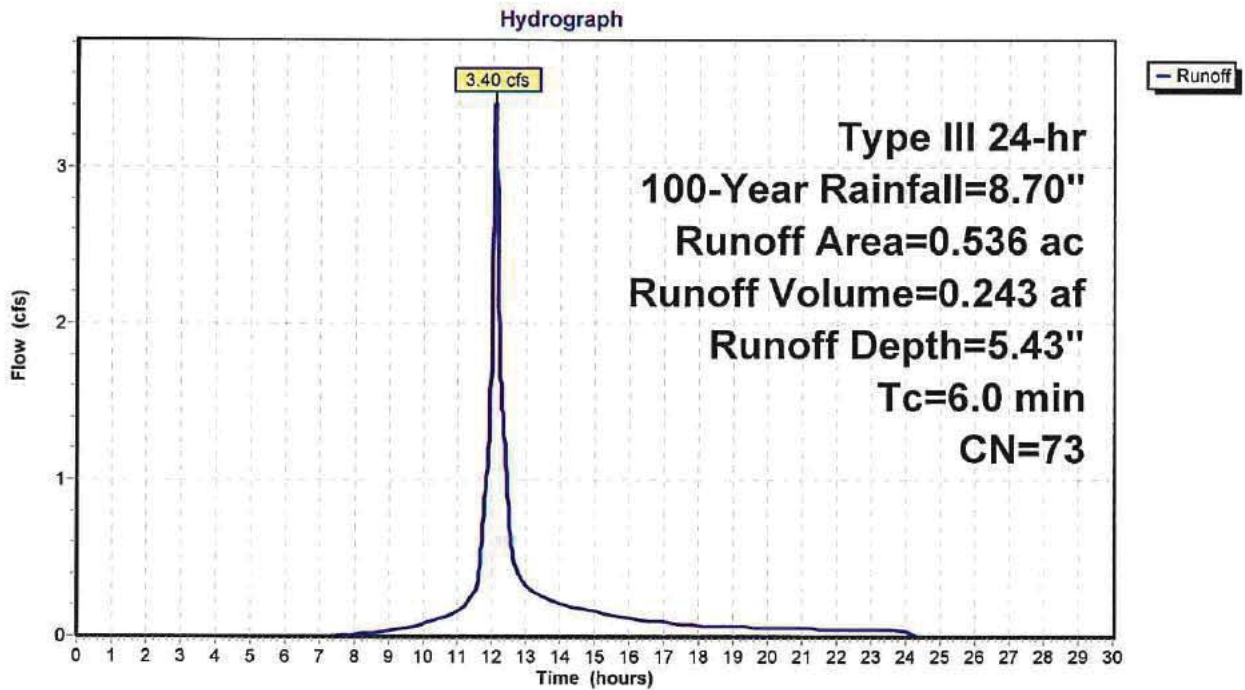
Runoff = 3.40 cfs @ 12.09 hrs, Volume= 0.243 af, Depth= 5.43"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
 Type III 24-hr 100-Year Rainfall=8.70"

Area (ac)	CN	Description
0.194	85	Gravel roads, HSG B
0.048	98	Paved parking, HSG B
0.294	61	>75% Grass cover, Good, HSG B
0.536	73	Weighted Average
0.488		91.04% Pervious Area
0.048		8.96% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment D-WS#1A: DEVELOPED



Summary for Subcatchment E-WS#1: EXISTING

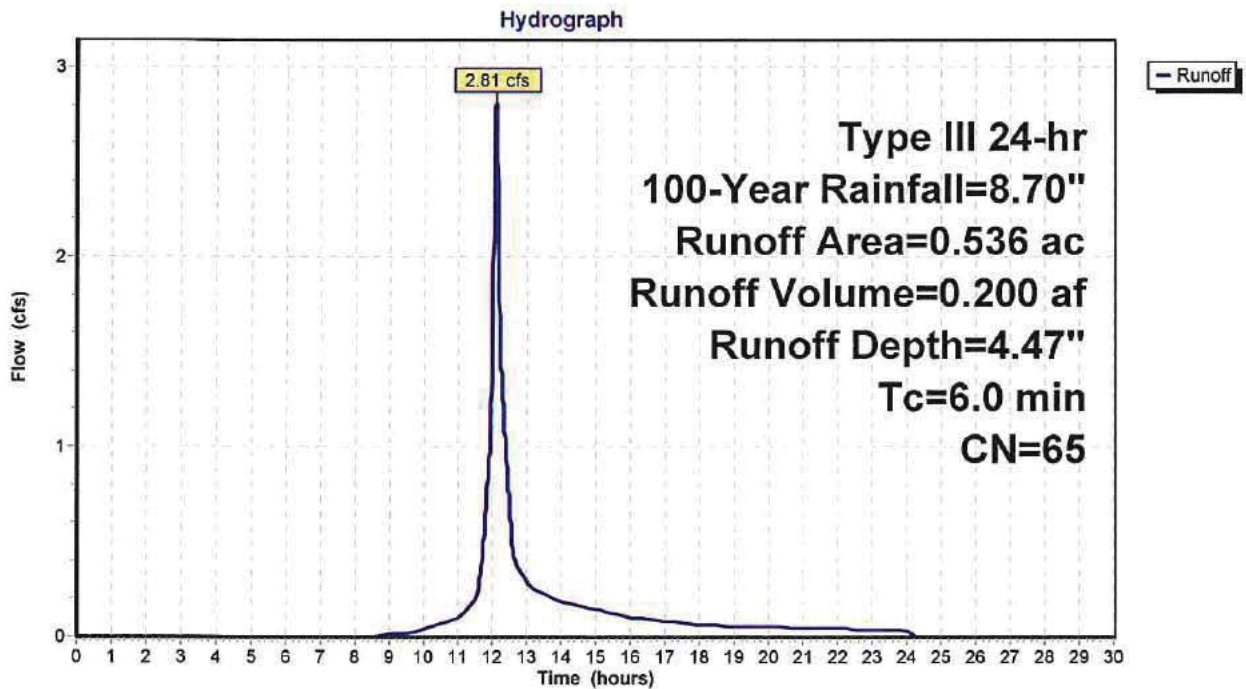
Runoff = 2.81 cfs @ 12.09 hrs, Volume= 0.200 af, Depth= 4.47"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
 Type III 24-hr 100-Year Rainfall=8.70"

Area (ac)	CN	Description
0.116	85	Gravel roads, HSG B
0.010	98	Paved parking, HSG B
0.410	58	Woods/grass comb., Good, HSG B
0.536	65	Weighted Average
0.526		98.13% Pervious Area
0.010		1.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment E-WS#1: EXISTING



Summary for Pond SMP: P-DRY DETENTION BASIN

Volume #1	Invert	Avail.Storage	Storage Description	
	579.83'	1,602 cf	Custom Stage Data (Prismatic) Listed below (Recalc)	
Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
579.83	767	0.0	0	0
580.67	767	40.0	258	258
581.00	767	20.0	51	308
581.01	527	100.0	6	315
583.00	767	100.0	1,288	1,602

4870 MAHOPAC WELLS 1, 2, & 3

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Type III 24-hr 100-Year Rainfall=8.70"

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Stage-Discharge for Pond SMP: P-DRY DETENTION BASIN

Elevation (feet)	Discharge (cfs)	Elevation (feet)	Discharge (cfs)	Elevation (feet)	Discharge (cfs)
579.83	0.00	580.89	0.00	581.95	0.00
579.85	0.00	580.91	0.00	581.97	0.00
579.87	0.00	580.93	0.00	581.99	0.00
579.89	0.00	580.95	0.00	582.01	0.00
579.91	0.00	580.97	0.00	582.03	0.00
579.93	0.00	580.99	0.00	582.05	0.00
579.95	0.00	581.01	0.00	582.07	0.00
579.97	0.00	581.03	0.00	582.09	0.00
579.99	0.00	581.05	0.00	582.11	0.00
580.01	0.00	581.07	0.00	582.13	0.00
580.03	0.00	581.09	0.00	582.15	0.00
580.05	0.00	581.11	0.00	582.17	0.00
580.07	0.00	581.13	0.00	582.19	0.00
580.09	0.00	581.15	0.00	582.21	0.00
580.11	0.00	581.17	0.00	582.23	0.00
580.13	0.00	581.19	0.00	582.25	0.00
580.15	0.00	581.21	0.00	582.27	0.00
580.17	0.00	581.23	0.00	582.29	0.00
580.19	0.00	581.25	0.00	582.31	0.00
580.21	0.00	581.27	0.00	582.33	0.00
580.23	0.00	581.29	0.00	582.35	0.00
580.25	0.00	581.31	0.00	582.37	0.00
580.27	0.00	581.33	0.00	582.39	0.00
580.29	0.00	581.35	0.00	582.41	0.00
580.31	0.00	581.37	0.00	582.43	0.00
580.33	0.00	581.39	0.00	582.45	0.00
580.35	0.00	581.41	0.00	582.47	0.00
580.37	0.00	581.43	0.00	582.49	0.00
580.39	0.00	581.45	0.00	582.51	0.00
580.41	0.00	581.47	0.00	582.53	0.00
580.43	0.00	581.49	0.00	582.55	0.00
580.45	0.00	581.51	0.00	582.57	0.00
580.47	0.00	581.53	0.00	582.59	0.00
580.49	0.00	581.55	0.00	582.61	0.00
580.51	0.00	581.57	0.00	582.63	0.00
580.53	0.00	581.59	0.00	582.65	0.00
580.55	0.00	581.61	0.00	582.67	0.00
580.57	0.00	581.63	0.00	582.69	0.00
580.59	0.00	581.65	0.00	582.71	0.00
580.61	0.00	581.67	0.00	582.73	0.00
580.63	0.00	581.69	0.00	582.75	0.00
580.65	0.00	581.71	0.00	582.77	0.00
580.67	0.00	581.73	0.00	582.79	0.00
580.69	0.00	581.75	0.00	582.81	0.00
580.71	0.00	581.77	0.00	582.83	0.00
580.73	0.00	581.79	0.00	582.85	0.00
580.75	0.00	581.81	0.00	582.87	0.00
580.77	0.00	581.83	0.00	582.89	0.00
580.79	0.00	581.85	0.00	582.91	0.00
580.81	0.00	581.87	0.00	582.93	0.00
580.83	0.00	581.89	0.00	582.95	0.00
580.85	0.00	581.91	0.00	582.97	0.00
580.87	0.00	581.93	0.00	582.99	0.00

4870 MAHOPAC WELLS 1, 2, & 3

Type III 24-hr 100-Year Rainfall=8.70"

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Stage-Area-Storage for Pond SMP: P-DRY DETENTION BASIN

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
579.83	767	0	582.48	704	1,220
579.88	767	15	582.53	710	1,255
579.93	767	31	582.58	716	1,291
579.98	767	46	582.63	722	1,327
580.03	767	61	582.68	728	1,363
580.08	767	77	582.73	734	1,400
580.13	767	92	582.78	740	1,437
580.18	767	107	582.83	746	1,474
580.23	767	123	582.88	753	1,511
580.28	767	138	582.93	759	1,549
580.33	767	153	582.98	765	1,587
580.38	767	169			
580.43	767	184			
580.48	767	199			
580.53	767	215			
580.58	767	230			
580.63	767	245			
580.68	767	259			
580.73	767	267			
580.78	767	275			
580.83	767	282			
580.88	767	290			
580.93	767	298			
580.98	767	305			
581.03	529	325			
581.08	535	352			
581.13	541	379			
581.18	548	406			
581.23	554	434			
581.28	560	461			
581.33	566	490			
581.38	572	518			
581.43	578	547			
581.48	584	576			
581.53	590	605			
581.58	596	635			
581.63	602	665			
581.68	608	695			
581.73	614	726			
581.78	620	756			
581.83	626	787			
581.88	632	819			
581.93	638	851			
581.98	644	883			
582.03	650	915			
582.08	656	948			
582.13	662	981			
582.18	668	1,014			
582.23	674	1,047			
582.28	680	1,081			
582.33	686	1,116			
582.38	692	1,150			
582.43	698	1,185			

Section 3: NOI & MS4

MAHOPAC WELLS 1, 2, & 3

**TOWN OF CARMEL
PUTNAM COUNTY
NEW YORK**

SECTION 3:

**SPDES ACKNOWLEDGEMENT LETTER,
FILLED OUT NOTICE OF INTENT (N.O.I.),
AND
MS4 SWPPP ACCEPTANCE FORM**

BY

ATZL, NASHER & ZIGLER
ENGINEERS-SURVEYORS-PLANNERS
232 NORTH MAIN STREET
NEW CITY, NY 10956
TEL: (845) 634-4694
FAX: (845) 634-5543
E-MAIL: rnasher@anzny.com

NOTICE OF INTENT



New York State Department of Environmental Conservation Division of Water

625 Broadway, 4th Floor
Albany, New York 12233-3505

NYR
(for DEC use only)

Stormwater Discharges Associated with Construction Activity Under State Pollutant Discharge Elimination System (SPDES) General Permit # GP-0-20-001
All sections must be completed unless otherwise noted. Failure to complete all items may result in this form being returned to you, thereby delaying your coverage under this General Permit. Applicants must read and understand the conditions of the permit and prepare a Stormwater Pollution Prevention Plan prior to submitting this NOI. Applicants are responsible for identifying and obtaining other DEC permits that may be required.

- IMPORTANT -
RETURN THIS FORM TO THE ADDRESS ABOVE
OWNER/OPERATOR MUST SIGN FORM

Owner/Operator Information

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

S U E Z W A T E R N E W Y O R K , I N C

Owner/Operator Contact Person Last Name (NOT CONSULTANT)

G A R A B E D

Owner/Operator Contact Person First Name

S T E V E N

Owner/Operator Mailing Address

1 6 3 O L D M I L L R O A D

City

W E S T N Y A C K

State

N Y

Zip

1 0 9 9 4 -

Phone (Owner/Operator)

8 4 5 - 6 2 0 - 3 3 1 9

Fax (Owner/Operator)

- - -

Email (Owner/Operator)

S T E V E N . G A R A B E D @ S U E Z . C O M

FED TAX ID

- (not required for individuals)

Project Site Information

Project/Site Name

MAHOPAC WELLS 1, 2, & 3

Street Address (NOT P.O. BOX)

BUCKS HOLLOW ROAD

Side of Street

North South East West

City/Town/Village (THAT ISSUES BUILDING PERMIT)

TOWN OF CARMEL

State

NY

Zip

10541 -

County

PUTNAM

DEC Region

3

Name of Nearest Cross Street

ASTOR DRIVE

Distance to Nearest Cross Street (Feet)

890

Project In Relation to Cross Street

North South East West

Tax Map Numbers

Section-Block-Parcel

75.20-2-68

Tax Map Numbers

1. Provide the Geographic Coordinates for the project site. To do this, go to the NYSDEC Stormwater Interactive Map on the DEC website at:

<https://gisservices.dec.ny.gov/gis/stormwater/>

Zoom into your Project Location such that you can accurately click on the centroid of your site. Once you have located the centroid of your project site, go to the bottom right hand corner of the map for the X, Y coordinates. Enter the coordinates into the boxes below. For problems with the interactive map use the help function.

X Coordinates (Easting)

-7 3 7 4 0

Ex. -73.749

Y Coordinates (Northing)

4 1 3 6 0

Ex. 42.652

2. What is the nature of this construction project?

New Construction

Redevelopment with increase in impervious area

Redevelopment with no increase in impervious area

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

SELECT ONLY ONE CHOICE FOR EACH

**Pre-Development
Existing Land Use**

- FOREST
- PASTURE/OPEN LAND
- CULTIVATED LAND
- SINGLE FAMILY HOME
- SINGLE FAMILY SUBDIVISION
- TOWN HOME RESIDENTIAL
- MULTIFAMILY RESIDENTIAL
- INSTITUTIONAL/SCHOOL
- INDUSTRIAL
- COMMERCIAL
- ROAD/HIGHWAY
- RECREATIONAL/SPORTS FIELD
- BIKE PATH/TRAIL
- LINEAR UTILITY
- PARKING LOT
- OTHER

W A T E R F A C I L I T Y

**Post-Development
Future Land Use**

- SINGLE FAMILY HOME
- 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

Number of Lots

W A T E R F A C I L I T Y

*Note: for gas well drilling, non-high volume hydraulic fractured wells only

4. In accordance with the larger common plan of development or sale, enter the total project site area; the total area to be disturbed; existing impervious area to be disturbed (for redevelopment activities); and the future impervious area constructed within the disturbed area. (Round to the nearest tenth of an acre.)

Total Site Area	Total Area To Be Disturbed	Existing Impervious Area To Be Disturbed	Future Impervious Area Within Disturbed Area
<input type="text"/> <input type="text"/> 5 <input type="text"/> 3 <input type="text"/> . <input type="text"/> 4	<input type="text"/> <input type="text"/> <input type="text"/> 0 <input type="text"/> . <input type="text"/> 9	<input type="text"/> <input type="text"/> <input type="text"/> 0 <input type="text"/> . <input type="text"/> 1	<input type="text"/> <input type="text"/> <input type="text"/> 0 <input type="text"/> . <input type="text"/> 2

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

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

A	B	C	D
<input type="text"/> <input type="text"/> <input type="text"/> %	<input type="text"/> 1 <input type="text"/> 0 <input type="text"/> 0 %	<input type="text"/> <input type="text"/> <input type="text"/> %	<input type="text"/> <input type="text"/> <input type="text"/> %

7. Is this a phased project? Yes No

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

Start Date: 0 3 / 0 4 / 2 0 2 4 - End Date: 0 3 / 0 7 / 2 0 2 5

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

Name

P L U M B R O O K

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

9a. Type of waterbody identified in Question 9?

- Wetland / State Jurisdiction On Site (Answer 9b)
- Wetland / State Jurisdiction Off Site
- Wetland / Federal Jurisdiction On Site (Answer 9b)
- Wetland / Federal Jurisdiction Off Site
- Stream / Creek On Site
- Stream / Creek Off Site
- River On Site
- River Off Site
- Lake On Site
- Lake Off Site
- Other Type On Site
- Other Type Off Site

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9b. How was the wetland identified?

- Regulatory Map
- Delineated by Consultant
- Delineated by Army Corps of Engineers
- Other (identify)

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

11. Is this project located in one of the Watersheds identified in Appendix C of GP-0-20-001? Yes No

12. Is the project located in one of the watershed areas associated with AA and AA-S classified waters? Yes No
 If no, skip question 13.

13. Does this construction activity disturb land with no existing impervious cover and where the Soil Slope Phase is identified as an E or F on the USDA Soil Survey? Yes No
 If Yes, what is the acreage to be disturbed?

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

14. Will the project disturb soils within a State regulated wetland or the protected 100 foot adjacent area? Yes No

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

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

T O W N O F C A R M E L

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

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

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

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

21. Has the required Erosion and Sediment Control component of the SWPPP been developed in conformance with the current NYS Standards and Specifications for Erosion and Sediment Control (aka Blue Book)? Yes No

22. Does this construction activity require the development of a SWPPP that includes the post-construction stormwater management practice component (i.e. Runoff Reduction, Water Quality and Quantity Control practices/techniques)? Yes No
If No, skip questions 23 and 27-39.

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

24. The Stormwater Pollution Prevention Plan (SWPPP) was prepared by:

- Professional Engineer (P.E.)
- Soil and Water Conservation District (SWCD)
- Registered Landscape Architect (R.L.A.)
- Certified Professional in Erosion and Sediment Control (CPESC)
- Owner/Operator
- Other

[Empty grid for Other details]

SWPPP Preparer

A T Z L , N A S H E R & Z I G L E R

Contact Name (Last, Space, First)

N A S H E R , R Y A N , A .

Mailing Address

2 3 2 N O R T H M A I N S T R E E T

City

N E W C I T Y

State Zip

N Y 1 0 9 5 6 - [] [] [] []

Phone

8 4 5 - 6 3 4 - 4 6 9 4

Fax

8 4 5 - 6 3 4 - 5 5 4 3

Email

R N A S H E R @ A N Z N Y . C O M

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

R Y A N

MI

A

Last Name

N A S H E R

Signature

[Empty signature box]

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

Vegetative Measures

- 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

- 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

Biotechnical

- Brush Matting
- Wattling

Other

S	T	O	C	K	P	I	L	E	,		C	O	N	C	R	E	T	E	W	A	S	H	O	U	T	,															
C	O	N	S	T	R	U	C	T	I	O	N	F	E	N	C	E																									

Post-construction Stormwater Management Practice (SMP) Requirements

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

27. Identify all site planning practices that were used to prepare the final site plan/layout for the project.

- Preservation of Undisturbed Areas
- Preservation of Buffers
- Reduction of Clearing and Grading
- Locating Development in Less Sensitive Areas
- Roadway Reduction
- Sidewalk Reduction
- Driveway Reduction
- Cul-de-sac Reduction
- Building Footprint Reduction
- Parking Reduction

27a. Indicate which of the following soil restoration criteria was used to address the requirements in Section 5.1.6 ("Soil Restoration") of the Design Manual (2010 version).

- All disturbed areas will be restored in accordance with the Soil Restoration requirements in Table 5.3 of the Design Manual (see page 5-22).
- Compacted areas were considered as impervious cover when calculating the **WQv Required**, and the compacted areas were assigned a post-construction Hydrologic Soil Group (HSG) designation that is one level less permeable than existing conditions for the hydrology analysis.

28. Provide the total Water Quality Volume (WQv) required for this project (based on final site plan/layout).

Total WQv Required

. acre-feet

29. Identify the RR techniques (Area Reduction), RR techniques (Volume Reduction) and Standard SMPs with RR 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.

Table 1 - Runoff Reduction (RR) Techniques and Standard Stormwater Management Practices (SMPs)

<u>RR Techniques (Area Reduction)</u>	<u>Total Contributing Area (acres)</u>		<u>Total Contributing Impervious Area (acres)</u>	
<input type="checkbox"/> Conservation of Natural Areas (RR-1) ...	<input type="text"/>	<input type="text"/>	and/or	<input type="text"/>
<input type="checkbox"/> Sheetflow to Riparian Buffers/Filters Strips (RR-2)	<input type="text"/>	<input type="text"/>	and/or	<input type="text"/>
<input type="checkbox"/> Tree Planting/Tree Pit (RR-3)	<input type="text"/>	<input type="text"/>	and/or	<input type="text"/>
<input type="checkbox"/> Disconnection of Rooftop Runoff (RR-4) ..	<input type="text"/>	<input type="text"/>	and/or	<input type="text"/>
<u>RR Techniques (Volume Reduction)</u>				
<input type="checkbox"/> Vegetated Swale (RR-5)	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="checkbox"/> Rain Garden (RR-6)	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="checkbox"/> Stormwater Planter (RR-7)	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="checkbox"/> Rain Barrel/Cistern (RR-8)	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="checkbox"/> Porous Pavement (RR-9)	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="checkbox"/> Green Roof (RR-10)	<input type="text"/>	<input type="text"/>		<input type="text"/>
<u>Standard SMPs with RRv Capacity</u>				
<input type="checkbox"/> Infiltration Trench (I-1)	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="checkbox"/> Infiltration Basin (I-2)	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="checkbox"/> Dry Well (I-3)	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="checkbox"/> Underground Infiltration System (I-4)	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="checkbox"/> Bioretention (F-5)	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="checkbox"/> Dry Swale (O-1)	<input type="text"/>	<input type="text"/>		<input type="text"/>
<u>Standard SMPs</u>				
<input type="checkbox"/> Micropool Extended Detention (P-1)	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="checkbox"/> Wet Pond (P-2)	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="checkbox"/> Wet Extended Detention (P-3)	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="checkbox"/> Multiple Pond System (P-4)	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="checkbox"/> Pocket Pond (P-5)	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="checkbox"/> Surface Sand Filter (F-1)	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="checkbox"/> Underground Sand Filter (F-2)	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="checkbox"/> Perimeter Sand Filter (F-3)	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="checkbox"/> Organic Filter (F-4)	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="checkbox"/> Shallow Wetland (W-1)	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="checkbox"/> Extended Detention Wetland (W-2)	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="checkbox"/> Pond/Wetland System (W-3)	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="checkbox"/> Pocket Wetland (W-4)	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="checkbox"/> Wet Swale (O-2)	<input type="text"/>	<input type="text"/>		<input type="text"/>

Table 2 - Alternative SMPs
(DO NOT INCLUDE PRACTICES BEING
USED FOR PRETREATMENT ONLY)

<u>Alternative SMP</u>	<u>Total Contributing Impervious Area (acres)</u>			
<input type="radio"/> Hydrodynamic				
<input type="radio"/> Wet Vault				
<input type="radio"/> Media Filter				
<input type="radio"/> Other <input type="text"/>				

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

Name

Manufacturer

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

30. Indicate the Total RRv provided by the RR techniques (Area/Volume Reduction) and Standard SMPs with RRv capacity identified in question 29.

Total RRv provided

. acre-feet

31. Is the Total RRv provided (#30) greater than or equal to the total WQv required (#28).

Yes No

If Yes, go to question 36.

If No, go to question 32.

32. Provide the Minimum RRv required based on HSG.
[Minimum RRv Required = (P) (0.95) (Ai) / 12, Ai = (S) (Aic)]

Minimum RRv Required

. acre-feet

- 32a. Is the Total RRv provided (#30) greater than or equal to the Minimum RRv Required (#32)?

Yes No

If Yes, go to question 33.

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

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

33. Identify the Standard SMPs in Table 1 and, if applicable, the Alternative SMPs in Table 2 that were used to treat the remaining total WQv(=Total WQv Required in 28 - Total RRV Provided in 30).

Also, provide in Table 1 and 2 the total impervious area that contributes runoff to each practice selected.

Note: Use Tables 1 and 2 to identify the SMPs used on Redevelopment projects.

33a. Indicate the Total WQv provided (i.e. WQv treated) by the SMPs identified in question #33 and Standard SMPs with RRV Capacity identified in question 29.

WQv Provided

. acre-feet

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

34. Provide the sum of the Total RRV provided (#30) and the WQv provided (#33a).

.

35. Is the sum of the RRV provided (#30) and the WQv provided (#33a) greater than or equal to the total WQv required (#28)? Yes No

If Yes, go to question 36.

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

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

CPv Required

. acre-feet

CPv Provided

. acre-feet

36a. The need to provide channel protection has been waived because:

- Site discharges directly to tidal waters or a fifth order or larger stream.
- Reduction of the total CPv is achieved on site through runoff reduction techniques or infiltration systems.

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

Total Overbank Flood Control Criteria (Qp)

Pre-Development

. CFS

Post-development

. CFS

Total Extreme Flood Control Criteria (Qf)

Pre-Development

. CFS

Post-development

. CFS

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

- Air Pollution Control
- Coastal Erosion
- Hazardous Waste
- Long Island Wells
- Mined Land Reclamation
- Solid Waste
- Navigable Waters Protection / Article 15
- Water Quality Certificate
- Dam Safety
- Water Supply
- Freshwater Wetlands/Article 24
- Tidal Wetlands
- Wild, Scenic and Recreational Rivers
- Stream Bed or Bank Protection / Article 15
- Endangered or Threatened Species (Incidental Take Permit)
- Individual SPDES
- SPDES Multi-Sector GP

N	Y	R																	
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- Other

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
- None

41. Does this project require a US Army Corps of Engineers Wetland Permit? If Yes, Indicate Size of Impact. <table border="1" style="display: inline-table; border-collapse: collapse;"><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>										<input checked="" type="radio"/> Yes <input type="radio"/> No

42. Is this project subject to the requirements of a regulated, traditional land use control MS4?
(If No, skip question 43) Yes No

43. Has the "MS4 SWPPP Acceptance" form been signed by the principal executive officer or ranking elected official and submitted along with this NOI?	<input checked="" type="radio"/> Yes <input type="radio"/> No
---	---

44. If this NOI is being submitted for the purpose of continuing or transferring coverage under a general permit for stormwater runoff from construction activities, please indicate the former SPDES number assigned.

N	Y	R									
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Owner/Operator Certification

I have read or been advised of the permit conditions and believe that I understand them. I also understand that, under the terms of the permit, there may be reporting requirements. I hereby certify that this document and the corresponding documents were prepared under my direction or supervision. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further understand that coverage under the general permit will be identified in the acknowledgment that I will receive as a result of submitting this NOI and can be as long as sixty (60) business days as provided for in the general permit. I also understand that, by submitting this NOI, I am acknowledging that the SWPPP has been developed and will be implemented as the first element of construction, and agreeing to comply with all the terms and conditions of the general permit for which this NOI is being submitted.

Print First Name

S	T	E	V	E	N														
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MI

--

Print Last Name

G	A	R	A	B	E	D													
---	---	---	---	---	---	---	--	--	--	--	--	--	--	--	--	--	--	--	--

Owner/Operator Signature

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Date

		/			/				
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Department of
Environmental
Conservation

NYS Department of Environmental Conservation
Division of Water
625 Broadway, 4th Floor
Albany, New York 12233-3505

**MS4 Stormwater Pollution Prevention Plan (SWPPP) Acceptance
Form**
for

Construction Activities Seeking Authorization Under SPDES General Permit
*(NOTE: Attach Completed Form to Notice Of Intent and Submit to Address Above)

I. Project Owner/Operator Information	
1. Owner/Operator Name:	SUEZ WATER NEW YORK, INC
2. Contact Person:	STEVEN GARABED
3. Street Address:	163 OLD MILL ROAD
4. City/State/Zip:	WEST NYACK / NY / 10994
II. Project Site Information	
5. Project/Site Name:	MAHOPAC WELLS 1, 2, & 3
6. Street Address:	BUCKS HOLLOW ROAD
7. City/State/Zip:	CARMEL / NY / 10541
III. Stormwater Pollution Prevention Plan (SWPPP) Review and Acceptance Information	
8. SWPPP Reviewed by:	RICHARD FRANZETTI, PE, LEED
9. Title/Position:	TOWN ENGINEER
10. Date Final SWPPP Reviewed and Accepted:	
IV. Regulated MS4 Information	
11. Name of MS4:	TOWN OF CARMEL
12. MS4 SPDES Permit Identification Number:	NYR20A 294
13. Contact Person:	RICHARD FRANZETTI, PE, LEED
14. Street Address:	60 MCALPIN AVENUE
15. City/State/Zip:	MAHOPAC, NY 10541
16. Telephone Number:	845-628-1500

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: **RICHARD FRANZETTI, PE, LEED**

Title/Position: **TOWN ENGINEER**

Signature:

Date:

VI. Additional Information

Appendix - F



MAHOPAC WELLS 1, 2, & 3

**TOWN OF CARMEL
PUTNAM COUNTY
NEW YORK**

APPENDIX-F INFILTRATION TEST CERTIFICATION

BY

ATZL, NASHER & ZIGLER
ENGINEERS-SURVEYORS-PLANNERS
232 NORTH MAIN STREET
NEW CITY, NY 10956
TEL: (845) 634-4694
FAX: (845) 634-5543
E-MAIL: rnasher@anzny.com



ATZL, NASHER & ZIGLER P.C.

ENGINEERS-SURVEYORS-PLANNERS

232 North Main Street, New City, NY 10956

Tel: (845) 634-4694

Fax: (845) 634-5543

Email: rnasher@anzny.com

April 15, 2022

Town of Carmel
60 McAlpin Avenue
Mahopac, NY 10541

Attn: Richard Franzetti, PE, LEED
Town Engineer

Re: Infiltration Test Certification
Mahopac Wells 1, 2, & 3 (Job #4870)
Town of Carmel
Putnam County, New York

Dear Mr. Franzetti,

A soil infiltration test was performed on April 11, 2022. The infiltration test location map is attached to this report for your reference (Page F-5). The infiltration test failed due to the presence of groundwater.

The results are as follows.

Test Hole #1

Infiltration test was proposed at a depth of 72-inches (6-feet):

<u>Soil Log</u>	<u>Soil Type</u>
0" to 12"	Topsoil
12" to 96"	Silt & Sand

Groundwater was found at 72-inches (6-feet) deep, El.: 577.0.

Note: An infiltration practice is not acceptable on the site per the infiltration test.

If you have further questions or concerns, feel free to contact our office. Thank you.

Very Truly Yours,



Ryan A. Nasher, P.E.



Figure 1: View of deep test hole (Test Hole#1) at 72-inches deep and the 30-inch pvc pipe used to determine the infiltration rate.

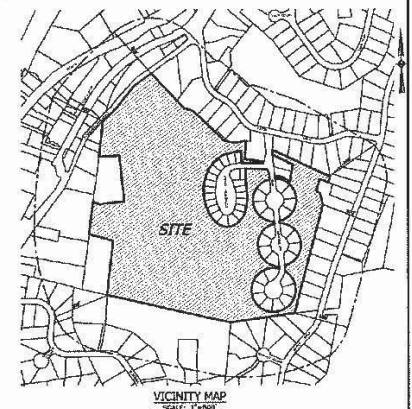
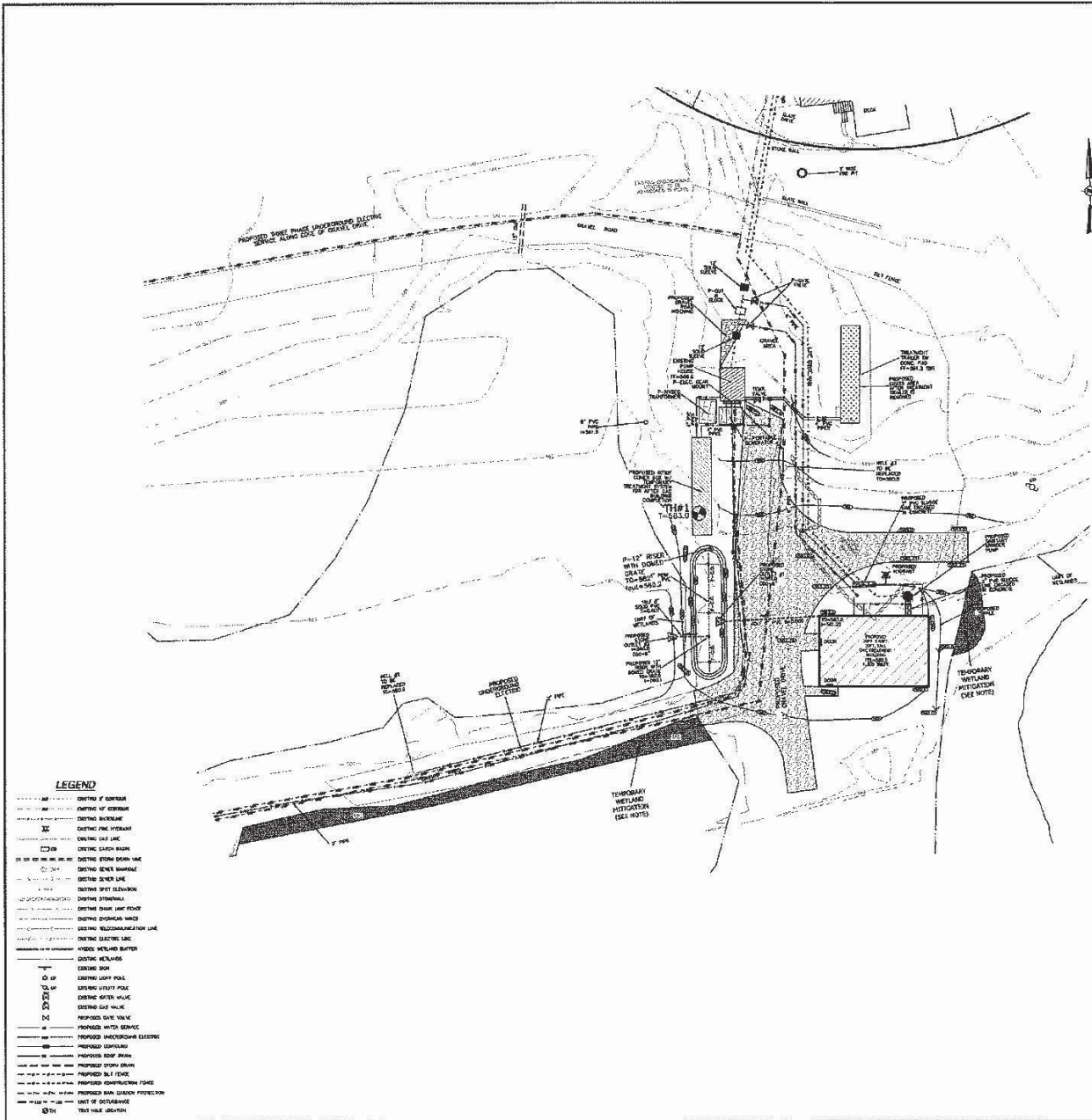


Figure 2: View of the soil profile (Test Hole#1).

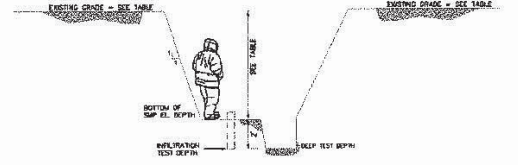
Job no 4870 4/11/22 PPTK

TH #1
0-12" Top Soil
12"-46" Silt-sand-rocks
72" Water
Failed

Figure 3: Field notes (Test Hole #1).



- NOTES**
1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A SAFE AND PROTECT EXCAVATION OPERATIONS BY ALL PERSONNEL SO THAT THE WORKERS, PUBLIC AND AUTHORITIES WILL BE PROTECTED FROM UNDESIRABLE FALLING.
 2. IN THE CASE OF EXCAVATION TO COMPLY WITH LOCAL CODES AND ORDINANCES HAVING JURISDICTION, SHIELD AND BRACE SHALL BE INSTALLED AS NOT POSSIBLE BECAUSE OF SPACE RESTRICTIONS OR STABILITY OF MATERIAL EXCAVATED. COMPLY WITH LOCAL REQUIREMENTS.
 3. FOR THE SAFETY OF PERSONNEL, SHEETING SHALL BE USED AS REQUIRED IN ANY TRENCH OR EXCAVATION MORE THAN FIVE (5) FEET ABOVE THE PERSONNEL'S FOOTING.



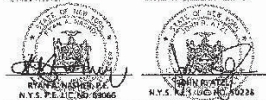
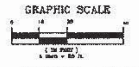
TYPICAL INFILTRATION TEST CROSS SECTION

INFILTRATION AND DEEP TEST FOR STORMWATER MITIGATION PRACTICES

TEST HOLE	EXISTING GRADE	INFILTRATION TEST DEPTH	DEEP TEST DEPTH
1#	EL=382.6 (8'-0")	EL=376.0 (6'-0")	EL=376.5 (6'-0")

LEGEND

--- (dashed line)	EXISTING OF COURSE
--- (dotted line)	EXISTING OF COURSE
--- (dash-dot line)	EXISTING SURVEY
--- (long dash-short dash)	EXISTING FIRE HYDRANT
--- (solid line)	EXISTING GAS LINE
--- (solid line)	EXISTING CATCH BASIN
--- (solid line)	EXISTING DOWN SUMP LINE
--- (solid line)	EXISTING SEWER MANHOLE
--- (solid line)	EXISTING SEWER LINE
--- (solid line)	EXISTING SPIT ELEVATION
--- (solid line)	EXISTING STORMWATER
--- (solid line)	EXISTING SUMP SUMP FENCE
--- (solid line)	EXISTING DISCHARGE WEIR
--- (solid line)	EXISTING TELECOMMUNICATION LINE
--- (solid line)	EXISTING ELECTRIC LINE
--- (solid line)	PROPOSED WETLAND BUFFER
--- (solid line)	EXISTING WETLAND
--- (solid line)	EXISTING SUMP
--- (solid line)	EXISTING LIGHT POLE
--- (solid line)	EXISTING UTILITY POLE
--- (solid line)	EXISTING WATER VALVE
--- (solid line)	EXISTING GAS VALVE
--- (solid line)	PROPOSED GATE VALVE
--- (solid line)	PROPOSED WATER SERVICE
--- (solid line)	PROPOSED UNDERGROUND ELECTRIC
--- (solid line)	PROPOSED CATCH BASIN
--- (solid line)	PROPOSED DOWN SUMP
--- (solid line)	PROPOSED SUMP FENCE
--- (solid line)	PROPOSED DISCHARGE WEIR
--- (solid line)	PROPOSED TELECOMMUNICATION LINE
--- (solid line)	PROPOSED BARRIERS PROTECTION
--- (solid line)	LINE OF DISTURBANCE
--- (solid line)	TEST HOLE LOCATION



REVISION	DATE	DESCRIPTION
 ATZL, NASHER & ZIGLER P.C. ENGINEERS-SURVEYORS-PLANNERS 332 North Main Street New City, New York 10956 Tel: (845) 636-6614 Fax: (845) 636-6543 E-mail: info@atzy.com Web: www.atzy.com		
PROJECT: MAHOPAC WELLS 1, 2 & 3		
TOWN OF CARMEL PUTNAM COUNTY, NEW YORK		
TITLE: TEST HOLE LOCATION PLAN		
DRAWN BY: ES DATE: MARCH 31, 2022	CHECKED BY: BH SCALE: 1" = 30 FT.	
PROJECT NO.: 4870	DRAWING NO.: 1	

Drainage Maps

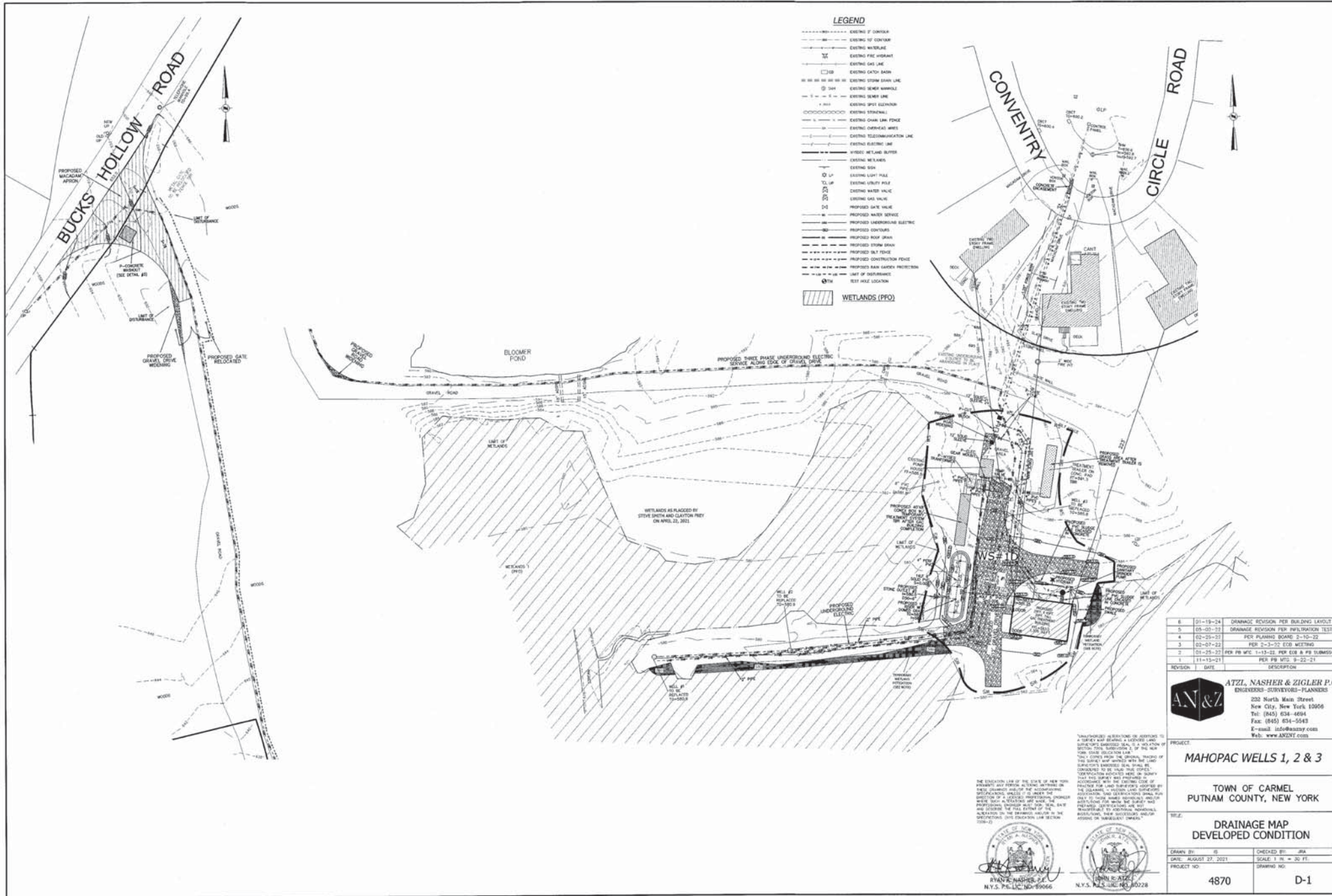
MAHOPAC WELLS 1, 2, & 3

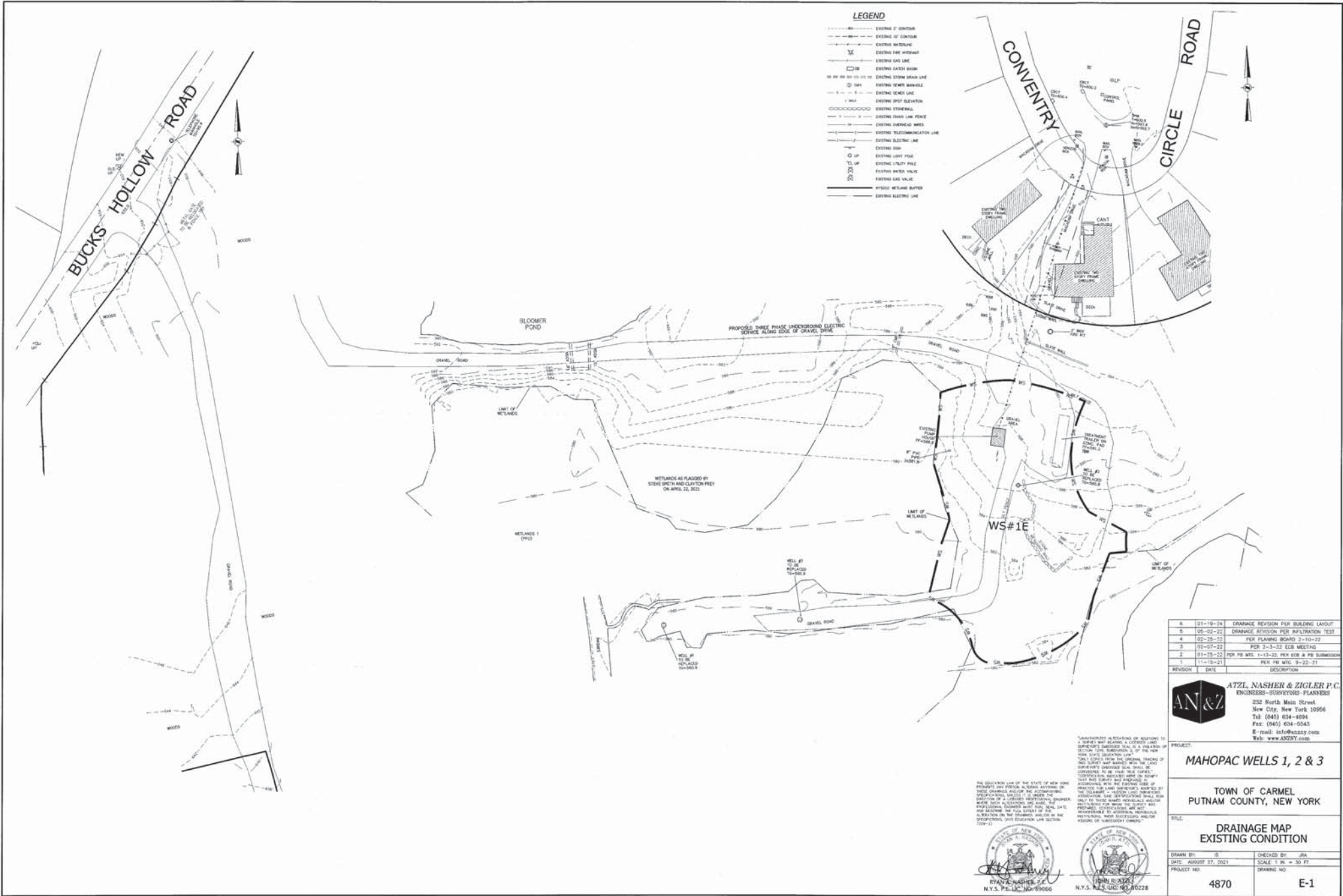
**TOWN OF CARMEL
PUTNAM COUNTY
NEW YORK**

DRAINAGE MAPS

BY

ATZL, NASHER & ZIGLER
ENGINEERS-SURVEYORS-PLANNERS
232 NORTH MAIN STREET
NEW CITY, NY 10956
TEL: (845) 634-4694
FAX: (845) 634-5543
E-MAIL: rnasher@anzny.com





- LEGEND**
- EXISTING 2' CONTOUR
 - EXISTING 5' CONTOUR
 - EXISTING WATERLINE
 - EXISTING FIRE HYDRANT
 - EXISTING GAS LINE
 - EXISTING CATCH BASIN
 - EXISTING STORM DRAIN LINE
 - EXISTING SEWER MAINLINE
 - EXISTING SLOPE LINE
 - EXISTING HOIST ELEVATION
 - EXISTING FIBER/OPTICAL
 - EXISTING CHAIN LINK FENCE
 - EXISTING OVERHEAD WIRE
 - EXISTING TELECOMMUNICATION LINE
 - EXISTING ELECTRIC LINE
 - EXISTING SIGN
 - EXISTING LIGHT POLE
 - EXISTING UTILITY POLE
 - EXISTING WATER VALVE
 - EXISTING GAS VALVE
 - EXISTING RETAIN BUFFER
 - EXISTING ELECTRIC LINE

REVISION	DATE	DESCRIPTION
6	01-18-24	DRAINAGE REVISION PER BUILDING LAYOUT
5	08-03-23	DRAINAGE REVISION PER INFILTRATION TEST
4	02-28-23	PER PLANNING BOARD 2-10-23
3	03-07-22	PER 2-3-22 EOB MEETING
2	01-25-22	PER PB MTS. 1-13-22. PER EOB & PB SUBMISSION
1	11-15-21	PER PB MTS. 9-22-21

ATZL, NASHER & ZIGLER P.C.
 ENGINEERS-GEOTECHNICAL PLANNERS
 232 North Main Street
 New City, New York 10956
 Tel: (845) 634-6004
 Fax: (845) 634-6043
 E-mail: info@anzny.com
 Web: www.anzny.com

PROJECT: **MAHOPAC WELLS 1, 2 & 3**

TOWN OF CARMEL
 PUTNAM COUNTY, NEW YORK

DRAINAGE MAP
 EXISTING CONDITION

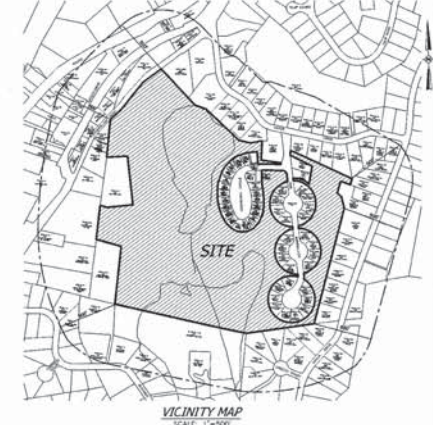
DESIGNED BY: JE	CHECKED BY: JJA
DATE: AUGUST 22, 2021	SCALE: 1" = 30'
PROJECT NO: 4870	DRAWING NO: E-1

CONSTRUCTION AS SHOWN OR ACCORDING TO A SURVEY MAP SHOWING A LOCATION AND BOUNDARY THEREOF SHALL BE A VARIATION OF SECTION 1705 SUBSECTION 3 OF THE NEW YORK STATE EASEMENT LAW. THE SURVEY MAP SHALL BE SUPPLIED AND MAINTAINED BY THE CLIENT. THE ENGINEER SHALL BE RESPONSIBLE FOR OBTAINING AND REVIEWING SUCH SURVEY MAPS AND FOR CORRECTING ANY ERRORS THEREIN. CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE EXISTING USE OF PROPERTY AND ANY DEVIATIONS THEREFROM SHALL BE THE RESPONSIBILITY OF THE CLIENT. THE ENGINEER SHALL BE RESPONSIBLE FOR OBTAINING AND REVIEWING SUCH SURVEY MAPS AND FOR CORRECTING ANY ERRORS THEREIN. CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE EXISTING USE OF PROPERTY AND ANY DEVIATIONS THEREFROM SHALL BE THE RESPONSIBILITY OF THE CLIENT.



OWNERS WITHIN 500 FEET:

Table listing owners within 500 feet of the site, including names, addresses, and parcel numbers. Includes a central 'LOCATION MAP' showing the site boundary.



TAX MAP REFERENCE:
TOWN OF CARMEL TAX MAP
SECTION 75.20, BLOCK 2, LOT 88
ADDRESS:
BUCKS HOLLOW ROAD
MAHOPAC, NY 10541
AREA:
33.32 ACRES
DATE:
VERTICAL: NAVD 1988
HORIZONTAL: NAD 1983, NEW YORK STATE PLANE COORDINATE SYSTEM, EAST ZONE

SUBDIVISION REFERENCES table with columns for revision number, date, and description.

ATZL, NASHER & ZIGLER P.C. ENGINEERS-SURVEYORS-PLANNERS
230 North Main Street
New City, NY 10956
Tel: (845) 834-4994
Fax: (845) 834-0543
E-mail: info@atnz.com
Web: www.atnz.com

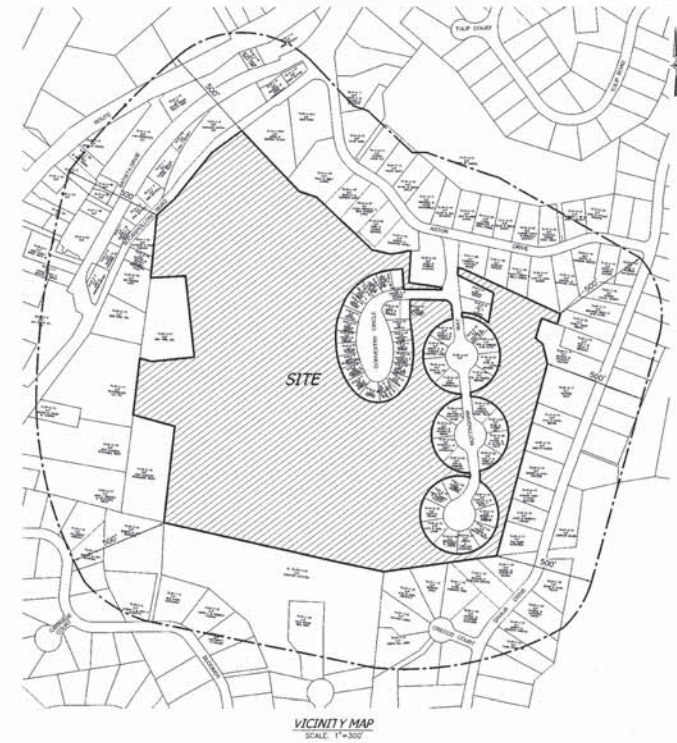
PROJECT: MAHOPAC WELLS 1, 2 & 3
TOWN OF CARMEL, NEW YORK
COUNTY OF PUTNAM

DATE: AUGUST 27, 2021
SCALE: AS SHOWN
DRAWING NO: 4870
PROJECT NO: LM



OWNERS WITHIN 500 FEET:
Town of Carmel, Tax Map

75.16-1-1	GEORGE P & TRACY E SALIANO 140 BUCKS HOLLOW ROAD MAHOPLIC, NY 10541	75.16-1-43	JAMES & CAROLINE COOKE 140 BUCKS HOLLOW ROAD MAHOPLIC, NY 10541	75.20-2-25	KENT & COLLEEN BROWNE 21 NOTTINGHAM WAY MAHOPLIC, NY 10541	75.20-2-41	ANTHONY & ROSE M. FABIANO PO BOX 634 MAHOPLIC, NY 10541
75.16-1-2	JOHN BATTISTA 110 BUCKS HOLLOW ROAD MAHOPLIC, NY 10541	75.16-1-44	JACOB & TRACY POSNAN 137 DAVIDA DRIVE MAHOPLIC, NY 10541	75.20-2-26	HYMAN RECOBACH REVOC TRUST 27 NOTTINGHAM WAY MAHOPLIC, NY 10541	75.20-2-42	SAVA & CARMEN GARZANO 23 COVENTRY DR MAHOPLIC, NY 10541
75.16-1-3	JOHN BATTISTA 110 BUCKS HOLLOW ROAD MAHOPLIC, NY 10541	75.16-1-41	MATTHEW & CAROLYN TORRONE 133 DAVIDA DRIVE MAHOPLIC, NY 10541	75.20-2-27	MARIA & PATRICE LIFT 29 NOTTINGHAM WAY MAHOPLIC, NY 10541	75.20-2-43	LINDA CARUSO 20 COVENTRY DR MAHOPLIC, NY 10541
75.16-1-4	KALINDER BREVOC LIVING TRUST 163 BUCKS HOLLOW ROAD MAHOPLIC, NY 10541	75.16-2-10	NORBERT VOGL 6 ASTOR DRIVE MAHOPLIC, NY 10541	75.20-2-28	FAYROIK M. & ALISA M. DALEY 33 NOTTINGHAM WAY MAHOPLIC, NY 10541	75.20-2-44	JONETER FISCHER 18 COVENTRY DR MAHOPLIC, NY 10541
75.16-1-6	ZOLA V MATELO & MARVEL L ORLIGLIANO 175 BUCKS HOLLOW ROAD MAHOPLIC, NY 10541	75.16-2-11	DONAL K & MEGAN W HARTNETT 13 ASTOR DRIVE MAHOPLIC, NY 10541	75.20-2-29	JACK D. & ROBIN M. ZINCHOK 13 NOTTINGHAM WAY MAHOPLIC, NY 10541	75.20-2-45	MICHAEL J & EILEEN O'BRIEN 15 COVENTRY DR MAHOPLIC, NY 10541
75.16-1-8	CHARLES MARINA INC 897 BUCKS HOLLOW ROAD MAHOPLIC, NY 10541	75.16-2-12	TOWN OF CARMEL 60 WALTON AVENUE MAHOPLIC, NY 10541	75.20-2-30	DOUGLAS J & MARGU C. HICKY 37 NOTTINGHAM WAY MAHOPLIC, NY 10541	75.20-2-46	JOSEPH & DANIEL MARI D'AMORE 14 COVENTRY DR MAHOPLIC, NY 10541
75.16-1-9	STEFANO & IRINA VAKOSULUS 153 BUCKS HOLLOW ROAD MAHOPLIC, NY 10541	75.16-2-13	DANIE KESH 32 ASTOR DRIVE MAHOPLIC, NY 10541	75.20-2-31	ARTHUR & MARIA L. CEDONE 38 NOTTINGHAM WAY MAHOPLIC, NY 10541	75.20-2-48	REHARD & BRIDGET CERVONE 154 BUCKSHOLLOW RD MAHOPLIC, NY 10541
75.16-1-10	JAMES MCCOY 7 BOX 875 BALDWIN PLACE, NY 10505	75.16-2-14	HUNTER JAMES LLC 32 ASTOR DRIVE MAHOPLIC, NY 10541	75.20-2-32	TERENCE & KRISTEN MOORE 41 NOTTINGHAM WAY MAHOPLIC, NY 10541	75.20-2-50	J.R. HOLDINGS CORP 144 BUCKS HOLLOW ROAD MAHOPLIC, NY 10541
75.16-1-15	BRIAN BEUKMAN 485 ROUTE 6 MAHOPLIC, NY 10541	75.16-2-15	FRANK GLAIS 41 NOTTINGHAM WAY MAHOPLIC, NY 10541	75.20-2-33	JOSEPH & CAROLANN LACOPPARA 43 NOTTINGHAM WAY MAHOPLIC, NY 10541	75.20-2-71	VERIZON NEW YORK INC PO BOX 2749 MAHOPLIC, NY 10541
75.16-1-16	HILLTOP MANOR REALTY CORP 486 ROUTE 6 MAHOPLIC, NY 10541	75.16-2-16	WAYNE & SUSAN SPEAR 38 ASTOR DRIVE MAHOPLIC, NY 10541	75.20-2-34	JENNIFER A. & ANDREW T. DWYER 44 NOTTINGHAM WAY MAHOPLIC, NY 10541	75.20-2-72	VERIZON NEW YORK INC PO BOX 2749 MAHOPLIC, NY 10541
75.16-1-17	HILLTOP MANOR REALTY CORP 486 ROUTE 6 MAHOPLIC, NY 10541	75.16-2-17	DONOVAN & LOUISE SACCHITELLO 48 ASTOR DRIVE MAHOPLIC, NY 10541	75.20-2-35	ELVIS & APRIL J. LAMAC 42 NOTTINGHAM WAY MAHOPLIC, NY 10541	75.20-2-73	BUCKSHOLLOW LLC 122 43 BUCKSHOLLOW COURT MAHOPLIC, NY 10541
75.16-1-18	JACQUES DUPUIS 441 ROUTE 6 MAHOPLIC, NY 10541	75.16-2-18	FRANK & LISA QUARBERO 60 NOTTINGHAM WAY MAHOPLIC, NY 10541	75.20-2-36	SCOTT J. CRONIN 113 BUCKS HOLLOW ROAD MAHOPLIC, NY 10541	75.20-2-74	WILLIAM & LOUISE DE GASPERI 113 BUCKS HOLLOW ROAD MAHOPLIC, NY 10541
75.16-1-19	F.W. ROBERTS, LLC 44 BLOOMER ROAD MAHOPLIC, NY 10541	75.16-2-19	JOHN & LINDA NANNI 54 ASTOR DRIVE MAHOPLIC, NY 10541	75.20-2-37	JAMES CLIBERTI & SERGIANA PARELLI 39 NOTTINGHAM WAY MAHOPLIC, NY 10541	75.20-2-76	JOHN LEAMING REVOCABLE TRUST 103 BUCKS HOLLOW ROAD MAHOPLIC, NY 10541
75.16-1-20	THOMAS & GENE SMOKE 150 BUCKS HOLLOW ROAD MAHOPLIC, NY 10541	75.16-2-20	LINDA RODRIGUEZ & ERICA RIVERA 58 NOTTINGHAM WAY MAHOPLIC, NY 10541	75.20-2-38	ANTHONY & PATRICIA DEMATELO 30 COVENTRY DR MAHOPLIC, NY 10541	75.20-2-78	JOHN LEAMING REVOCABLE TRUST 103 BUCKS HOLLOW ROAD MAHOPLIC, NY 10541
75.16-1-21	THOMAS & GENE SMOKE 150 BUCKS HOLLOW ROAD MAHOPLIC, NY 10541	75.16-2-21	KEVIN & MELBA DANNO 62 ASTOR DRIVE MAHOPLIC, NY 10541	75.20-2-39	DAN & ANDRINE TAVELINSKY 32 NOTTINGHAM WAY MAHOPLIC, NY 10541	75.20-2-77	JOHN LEAMING REVOCABLE TRUST 103 BUCKS HOLLOW ROAD MAHOPLIC, NY 10541
75.16-1-22	SCOTT NIGARD 421 ROUTE 6 MAHOPLIC, NY 10541	75.16-2-22	VLADIMIR KIJACK & BOHUMILA KUNDOVA 48 ASTOR DRIVE MAHOPLIC, NY 10541	75.20-2-40	KENNETH L. & JANET SCHNEIDER 28 NOTTINGHAM WAY MAHOPLIC, NY 10541	75.20-2-32	DANE SCHWABE 14 DAVIDA DRIVE MAHOPLIC, NY 10541
75.16-1-23	SCOTT NIGARD 421 ROUTE 6 MAHOPLIC, NY 10541	75.16-2-23	PAULINA GEORGE JUREY TRUST 19 ASTOR DRIVE MAHOPLIC, NY 10541	75.20-2-41	JEFFREY & ANTONIETTA WENNER 25 NOTTINGHAM WAY MAHOPLIC, NY 10541	75.20-2-31	JOSEPH & DEBORAH KERRICK 48 DAVIDA DRIVE MAHOPLIC, NY 10541
75.16-1-24	JACKIE REALTY CORP. 421 ROUTE 6 MAHOPLIC, NY 10541	75.16-2-24	MATTHEW & SARANTHA A. CLAIR 78 ASTOR DRIVE MAHOPLIC, NY 10541	75.20-2-42	MATTHEW & SARANTHA A. CLAIR 78 ASTOR DRIVE MAHOPLIC, NY 10541	75.20-2-30	PATRICK & CATHY-ANNE TAYLOR 74 DAVIDA DRIVE MAHOPLIC, NY 10541
75.16-1-27	WERRA REAL ESTATE LLC 15 SOUTH VESPA LANE MAHOPLIC, NY 10541	75.16-2-25	JOHN & HELENE DIAPOLI 50 ASTOR DRIVE MAHOPLIC, NY 10541	75.20-2-43	DORNA ROSSADOMO 18 NOTTINGHAM WAY MAHOPLIC, NY 10541	75.20-2-29	EDWIN & MARIE TRILLAS 80 DAVIDA DRIVE MAHOPLIC, NY 10541
75.16-1-28	BOHANA & ROSALIE FLIP 5 PATRICIA DRIVE MAHOPLIC, NY 10541	75.20-2-2	BOHANA FAMILY TRUST TRUST #1 5 SOUTH VESPA LANE MAHOPLIC, NY 10541	75.20-2-44	ADAM & LAY PHAM 18 NOTTINGHAM WAY MAHOPLIC, NY 10541	75.20-2-28	MICHAEL & GEORGETTE MARION 71 DAVIDA DRIVE MAHOPLIC, NY 10541
75.16-1-29	SANTA & ROBERT FORTINO 7 PATRICIA DRIVE MAHOPLIC, NY 10541	75.20-2-3	WOLFE STONER & MICHAEL A. BARRE 186 ROUTE 6 MAHOPLIC, NY 10541	75.20-2-45	JOSEPH M. & MARLENE S. WOLFE STONER 14 NOTTINGHAM WAY MAHOPLIC, NY 10541	75.20-2-27	ROHARD & KATHLEEN DRUSO 71 DAVIDA DRIVE MAHOPLIC, NY 10541
75.16-1-30	THOMAS SMOKE 150 BUCKS HOLLOW ROAD MAHOPLIC, NY 10541	75.20-2-5	DAS ROUTE SIX LLC PO BOX 106 MAHOPLIC, NY 10541	75.20-2-46	PETER J. & ROSITA M. GARBARA 12 NOTTINGHAM WAY MAHOPLIC, NY 10541	75.20-2-38	MICHAEL & CATHERINE SCARABIA 2 CRESCO COURT MAHOPLIC, NY 10541
75.16-1-41	ANTHONY & ROSE FABIANO 154 BUCKS HOLLOW ROAD MAHOPLIC, NY 10541	75.20-2-7	ITALIAN AMERICAN CLUB INC PO BOX 331 MAHOPLIC, NY 10541	75.20-2-47	JEFFREY A. & KATHLEEN A. TOTTLE 30 COVENTRY DR MAHOPLIC, NY 10541	75.20-2-25	PAUL & VANDANA ZABA 8 CRESCO COURT MAHOPLIC, NY 10541
75.16-1-40.1	JOHN PARK 7 ASTOR DRIVE MAHOPLIC, NY 10541	75.20-2-8	ADRIANA CERQUEIRA PO BOX 707 CROTON FALLS, NY 10519	75.20-2-48	YVESAN & HAN H. FAROUKH 15 COVENTRY DR MAHOPLIC, NY 10541	75.20-2-24	JOSEPH FRANKS PO BOX 333 BALDWIN PLACE, NY 10505
75.16-1-40.2	JORGE & RUFFINA REJADA 37 ASTOR DRIVE MAHOPLIC, NY 10541	75.20-2-11	THE MARIE FARGARDIA 85 DAVIDA DRIVE MAHOPLIC, NY 10541	75.20-2-49	JILL BONHELD 15 COVENTRY DR MAHOPLIC, NY 10541	75.20-2-23	JOSE Y DANA BERNHETS 15 CRESCO COURT MAHOPLIC, NY 10541
75.16-1-58	PAUL & KELLY HARRIS 15 ASTOR DRIVE MAHOPLIC, NY 10541	75.20-2-12	JAMES & ROBERTA FIGARRO 89 DAVIDA DRIVE MAHOPLIC, NY 10541	75.20-2-50	DEBASTRO FAMILY TRUST 17 COVENTRY DR MAHOPLIC, NY 10541	75.20-2-22	WILLIAM LINDO 11 CRESCO COURT MAHOPLIC, NY 10541
75.16-1-58	ERNESTO & GLORIESE LOPEZ 73 ASTOR DRIVE MAHOPLIC, NY 10541	75.20-2-13	MICHAEL, HART & DIANA SMOYNER 83 DAVIDA DRIVE MAHOPLIC, NY 10541	75.20-2-51	BARBARA CRISMAN 19 COVENTRY DR MAHOPLIC, NY 10541	75.20-2-21	GLEAD HILL CORP 300 SENECA PARK AVENUE YONKERS, NY 10725
75.16-1-57	AYANA MONTALI & DEAN HELMER ATYUC 27 ASTOR DRIVE MAHOPLIC, NY 10541	75.20-2-14	ROBERT & LARA WERTZER 37 DAVIDA DRIVE MAHOPLIC, NY 10541	75.20-2-52	CHARLES W. & PAMELA E. BLOESER 21 COVENTRY DR MAHOPLIC, NY 10541	75.20-2-19	STEPHEN A. & MARY BETH VAREL 16 BLOOMER ROAD MAHOPLIC, NY 10541
75.16-1-56	MARN & LINDAN WHITERS 31 ASTOR DRIVE MAHOPLIC, NY 10541	75.20-2-15	EMILYI GARCA 111 DAVIDA DRIVE MAHOPLIC, NY 10541	75.20-2-53	DANIEL & JEAN MARIE SHERIDAN 21 COVENTRY DR MAHOPLIC, NY 10541	75.20-2-18	MARIE A. RIZZO 14 BLOOMER ROAD MAHOPLIC, NY 10541
75.16-1-55	JOSHUA & SARANTHA MOSEY 37 ASTOR DRIVE MAHOPLIC, NY 10541	75.20-2-16	JOHN & DONNA BOWEN 37 COVENTRY DR MAHOPLIC, NY 10541	75.20-2-54	KATHY SONNBERG 27 COVENTRY DR MAHOPLIC, NY 10541	75.20-2-17	ALBERT & LUCI BARRERA 86 BLOOMER ROAD MAHOPLIC, NY 10541
75.16-1-54	JAMES & PATRICIA MCGOWN 41 ASTOR DRIVE MAHOPLIC, NY 10541	75.20-2-17	HOWARD WELLS 111 DAVIDA DRIVE MAHOPLIC, NY 10541	75.20-2-55	NY CWP-LLC CT WEST CROTON 2 COVENTRY DR MAHOPLIC, NY 10541	75.20-2-16	JOSEPH & JOHN G. MAGNITA 86 BLOOMER ROAD MAHOPLIC, NY 10541
75.16-1-50	LAWRENCE & KATHLEEN KEANE 51 ASTOR DRIVE MAHOPLIC, NY 10541	75.20-2-18	KENNETH & ROSEMARY WALDRON 113 DAVIDA DRIVE MAHOPLIC, NY 10541	75.20-2-56	WHITE PLAINS, NY 10606	75.20-2-15	ALBERT & LUCI BARRERA 86 BLOOMER ROAD MAHOPLIC, NY 10541
75.16-1-49	CARLOS PROSSA 55 ASTOR DRIVE MAHOPLIC, NY 10541	75.20-2-19	HENRI & HELEN H. SHENKIN 15 DAVIDA DRIVE MAHOPLIC, NY 10541	75.20-2-56	MARLENE BURNETT 14 COVENTRY DR MAHOPLIC, NY 10541	75.20-2-14	ALBERT & LUCI BARRERA 86 BLOOMER ROAD MAHOPLIC, NY 10541
75.16-1-45	THOMAS CREAM & KELLY HOKAN MAHOPLIC, NY 10541	75.20-2-20	FAMILY TRUST CRESCO 138 DAVIDA DRIVE MAHOPLIC, NY 10541	75.20-2-57	JAMES & SANDRA MARTELLO 35 NOTTINGHAM WAY MAHOPLIC, NY 10541	75.20-2-13	ALEXANDRO MELINGO 18 BLOOMER ROAD MAHOPLIC, NY 10541
75.16-1-47	LOUIS & JADA GALDO 88 ASTOR DRIVE MAHOPLIC, NY 10541	75.20-2-21	SCOTTALYN A.Y.S. & SCOTTALYN WANDANA 35 NOTTINGHAM WAY MAHOPLIC, NY 10541	75.20-2-58	ANTHONY & ROSEANNE M. PERUZZA 26 COVENTRY DR MAHOPLIC, NY 10541	75.20-2-12	STEPHEN MILLER 86 DAVIDA DRIVE MAHOPLIC, NY 10541
75.16-1-46	JOSEPH & ROSEANNE BRUSO 88 ASTOR DRIVE MAHOPLIC, NY 10541	75.20-2-22	ROBERT & DEBRA RUSSO 15 NOTTINGHAM WAY MAHOPLIC, NY 10541	75.20-2-59	GREGORY A. WILLIAMS & MELINDA MARRAS 28 COVENTRY DR MAHOPLIC, NY 10541	75.20-2-11	ANTHONY CHANDI & DEN COHEN 100 DAVIDA DRIVE MAHOPLIC, NY 10541
75.16-1-45	MICHAEL & WANDANE WCALE 73 ASTOR DRIVE MAHOPLIC, NY 10541	75.20-2-23	RON & CHARLENE LOVE GAFNI 17 NOTTINGHAM WAY MAHOPLIC, NY 10541	75.20-2-60	KATHLEEN BARRETT 26 COVENTRY DR MAHOPLIC, NY 10541	75.17-1-28	PARENT EST. L. PO BOX 106 MAHOPLIC, NY 10541
75.16-1-44	VINCENT & ANNAMARE MAUGO 88 ASTOR DRIVE MAHOPLIC, NY 10541	75.20-2-24	KLARA & CATLEEN BROWNE 19 NOTTINGHAM WAY MAHOPLIC, NY 10541	75.20-2-61	MARIE F. & LEE M. DOBRYNS 78 DAVIDA DRIVE MAHOPLIC, NY 10541	75.17-1-26	ANTHONY CHANDI & DEN COHEN 100 DAVIDA DRIVE MAHOPLIC, NY 10541



LEGEND

- EXTENDING CONTAIN
- EXTENDING OUTLINE
- EXTENDING WALLS
- EXTENDING FIRE HYDRANT
- EXTENDING GAS LINE
- EXTENDING CROWN DRAIN
- EXTENDING STORM DRAIN LINE
- EXTENDING SEWER MANHOLE
- EXTENDING SEWER LINE
- EXTENDING SHOT ELEVATION
- EXTENDING STRENGTH
- EXTENDING SHOWN LINE FENCE
- EXTENDING TELECOMMUNICATION LINE
- EXTENDING ELECTRIC LINE
- EXTENDING SHOT
- EXTENDING LIGHT POLE
- EXTENDING UTILITIES
- EXTENDING WATER MAIN
- EXTENDING GAS VALVE
- HYDRA METLAND BUFFER
- EXTENDING ELECTRIC LINE



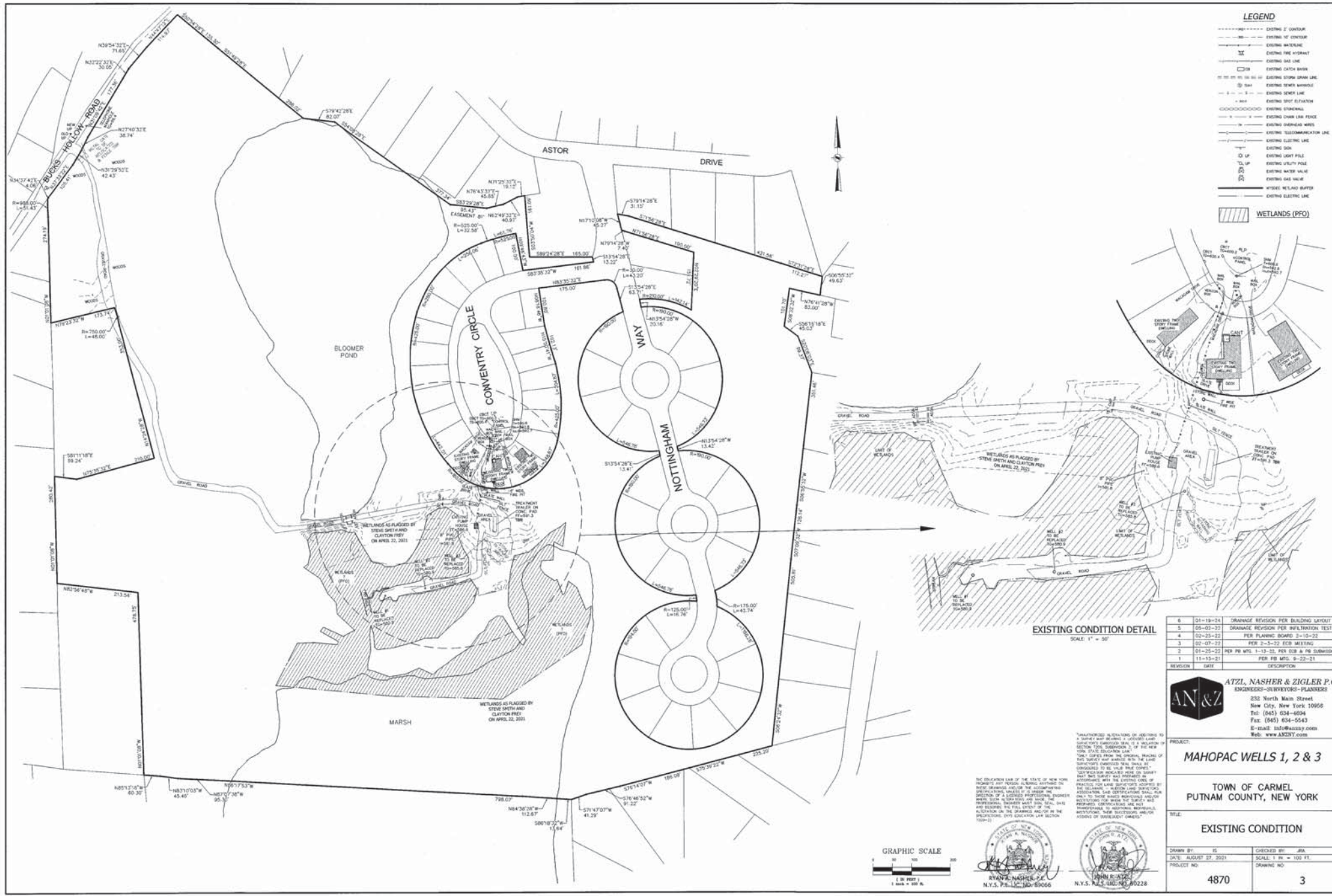
6	05-18-24	DRAINAGE REVISION PER BUILDING LAYOUT
5	05-02-23	DRAINAGE REVISION PER INSTALLATION TEST
4	02-20-22	PER PLANNING BOARD 2-10-22
3	02-07-22	PER 2-3-22 ECR MEETING
2	01-05-22	PER PUB. WTS. 1-13-22, PER PUB. & PD SUBMISSION
1	11-15-21	PER PUB. WTS. 11-23-21

REVISION	DATE	DESCRIPTION
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AN&Z
ATZLA, NASHER & ZICLER P.C.
ENGINEERS - SURVEYORS - PLANNERS
232 North Main Street
New City, New York 10956
Tel: (845) 634-4664
Fax: (845) 634-5543
E-mail: info@anzny.com
Web: www.anzny.com

MAHOPAC WELLS 1, 2 & 3
TOWN OF CARMEL
PUTNAM COUNTY, NEW YORK

TITLE:	OWNERS WITHIN 500 FT. LIST		
DRAWN BY:	SS	CHECKED BY:	JAA
DATE:	AUGUST 27, 2021	SCALE:	1" = 60' FT.
PROJECT NO.:		SHEETING NO.:	4870



LEGEND

- EXISTING 2' CONTOUR
- EXISTING 10' CONTOUR
- EXISTING WATERLINE
- EXISTING FIRE HYDRANT
- EXISTING GAS LINE
- EXISTING CATCH BASIN
- EXISTING STORM DRAIN LINE
- EXISTING POWER MAINLINE
- EXISTING SEWER LINE
- EXISTING SPOUT PLUMBING
- EXISTING STORMWATER
- EXISTING UNDER LAK FENCE
- EXISTING UNDERPASS
- EXISTING TELECOMMUNICATION LINE
- EXISTING ELECTRIC LINE
- EXISTING SIGN
- EXISTING LIGHT POLE
- EXISTING UTILITY POLE
- EXISTING WATER VALVE
- EXISTING GAS VALVE
- EXISTING WETLAND BUFFER
- EXISTING ELECTRIC LINE

WETLANDS (PFO)

EXISTING CONDITION DETAIL
SCALE: 1" = 50'

REVISION	DATE	DESCRIPTION
6	01-18-04	DRAINAGE REVISION PER BUILDING DEPT
5	05-05-03	DRAINAGE REVISION PER INFILTRATION TEST
4	02-25-03	PER PLANNING BOARD 2-10-02
3	02-07-03	PER 2-5-02 ECR MEETING
2	01-25-02	PER PUB MTC 1-13-02, PER PUB & PUB SUBMISSION
1	11-15-01	PER PUB MTC 9-22-01

ATZL, NASHER & ZIGLER P.C.
ENGINEERS-SURVEYORS-PLANNERS

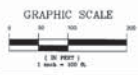
232 North Main Street
New City, New York 10956
Tel: (845) 634-6004
Fax: (845) 634-5543
E-mail: info@an&z.com
Web: www.an&z.com

PROJECT: **MAHOPAC WELLS 1, 2 & 3**

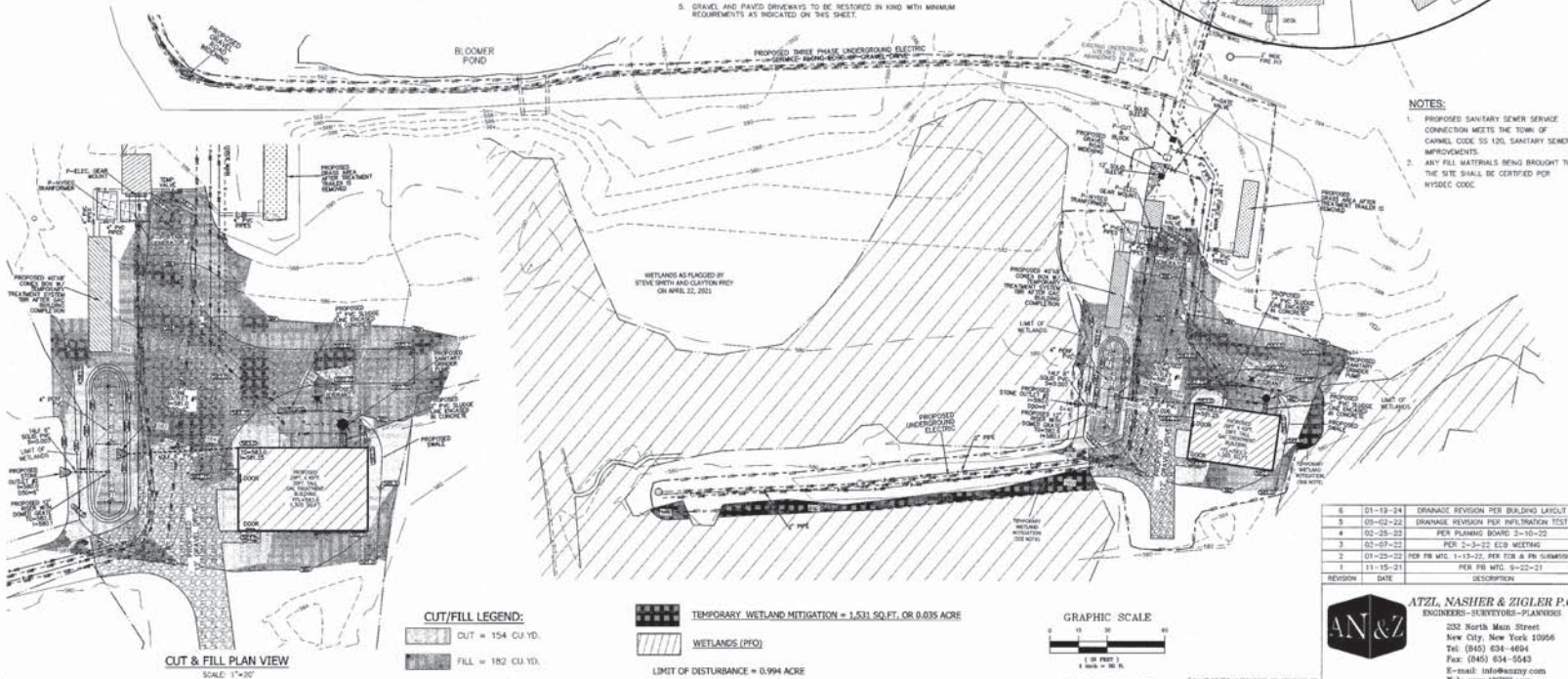
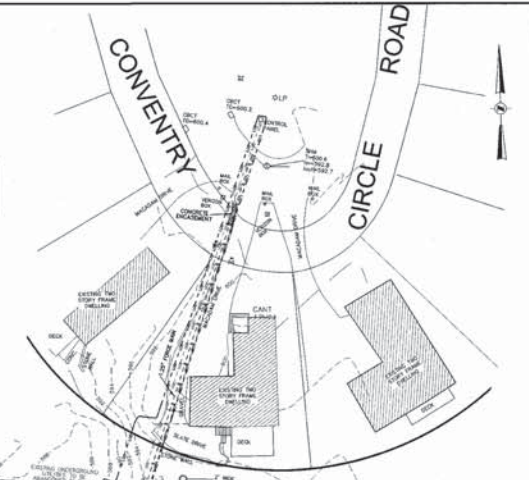
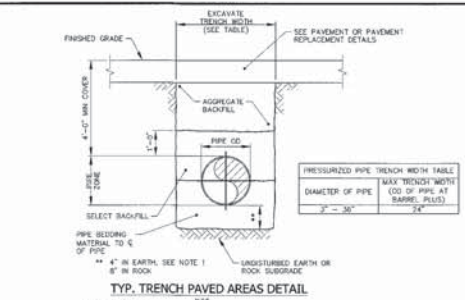
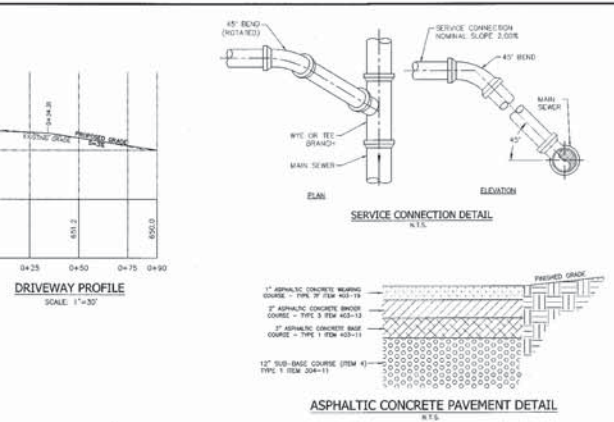
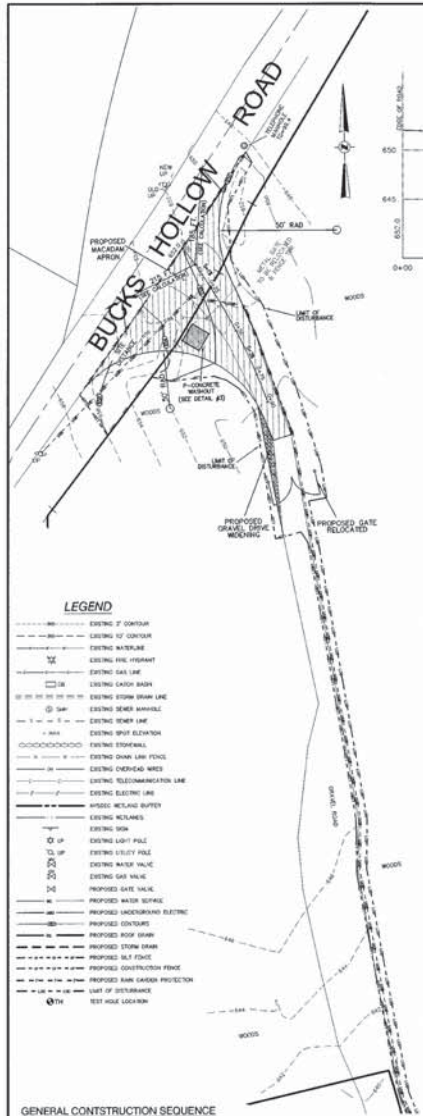
TOWN OF CARMEL
PUTNAM COUNTY, NEW YORK

TITLE: **EXISTING CONDITION**

DRAWN BY: IS	CHECKED BY: JGA
DATE: AUGUST 27, 2001	SCALE: 1" = 100 FT
PROJECT NO: 4870	DRAWING NO: 3



UNAUTHORIZED ALTERATION OR ADDITION TO A PLANNING MAP OR MAP OF THE STATE OF NEW YORK IS PROHIBITED BY SECTION 1707 OF THE STATE EDUCATION LAW. ANY VIOLATION OF THIS SECTION IS A VIOLATION OF THE STATE EDUCATION LAW AND IS A VIOLATION OF THE STATE EDUCATION LAW. ANY VIOLATION OF THIS SECTION IS A VIOLATION OF THE STATE EDUCATION LAW AND IS A VIOLATION OF THE STATE EDUCATION LAW.



- GENERAL CONSTRUCTION SEQUENCE**
- SCHEDULE A PRE-CONSTRUCTION MEETING
 - LOCATE NATURAL RESOURCE AND LIMIT OF DISTURBANCE PER PLAN
 - INSTALL PERMITS EASC PRACTICE PER PLAN
 - CREATE CONSTRUCTION ENTRANCE & TEMPORARY STAGING
 - LIMIT GRADING FOR EASC PRACTICES
 - INSTALL DIVERSION SWALES, CHECK DAMS, INTERNAL SWALE FOR STABILIZATION WHERE APPLICABLE
 - INSTALL SEDIMENT BASIN / SEDIMENT TRAP PER PLAN
 - DISPOSE CLEARING AND GRADING MATERIALS AS CONSTRUCTION IS IN PROGRESS
 - STOCK PILE TOP SOIL AND STABILIZE
 - REMOVE GRADING/CUT & FILL AND STABILIZE
 - INSTALL UTILITIES AND DRAINAGE STRUCTURES
 - PROCEED PARTIAL ROAD CONSTRUCTION WHERE APPLICABLE
 - CONSTRUCT FOUNDATION & BEARING STRUCTURES AS PER PLAN
 - CONSTRUCT FINAL GRADING AND STABILIZE AS PER PLAN
 - APPLY SOIL RESTORATION AS SHOWN ON PLAN
 - FINAL STABILIZATION TO APPLY, I.E. TOP SOIL, PERMANENT GREEN INFRASTRUCTURE PRACTICES AND LANDSCAPING
 - REMOVE SEDIMENT & COMPLETE PERMANENT POST CONSTRUCTION (SMP) PER PLAN
 - REMOVE EASC PRACTICES AND APPLY FOR NOTICE OF TERMINATION (N.O.T.)

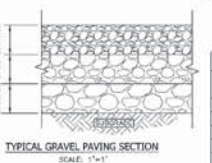
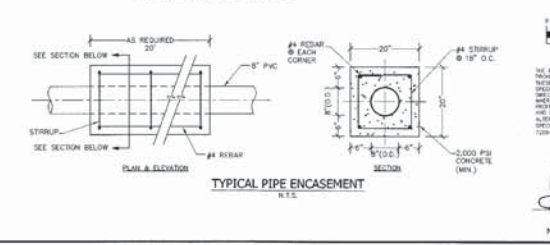


TABLE-1 PERCENT PASSING BY WEIGHT OF GRAVEL MATERIALS

SIEVE (U.S. SIEVE)	OPTION TYPE		
	SURFACE	BASE	SUBBASE
3"	100	100	100
2"	100	100	100
1.5"	100	85-100	70-100
1"	100	85-100	70-100
3/4"	100	85-100	70-100
1/2"	50-75	30-50	30-55
#40	15-30	5-20	5-25
#100	8-15	0-85	0-8

- NOTES:**
- SUBGRADE, BASE AND SURFACE MATERIAL SHALL CONFORM TO GRADING LIMITS IN TABLE-1.
 - USE UNIFORM GRAVEL TYPES AND MATERIALS BETWEEN THE ROADDED LIMITS.



ATZLA, NASHER & ZIGLER P.C.
ENGINEERS-ARCHITECTS-PLANNERS

332 North Main Street
New City, New York 10956
Tel: (845) 634-4664
Fax: (845) 634-5543
E-mail: info@atnzy.com
Web: www.atnzy.com

PROJECT: MAHOPAC WELLS 1, 2 & 3

TOWN OF CARMEL
PUTNAM COUNTY, NEW YORK

TITLE: GRADING PLAN

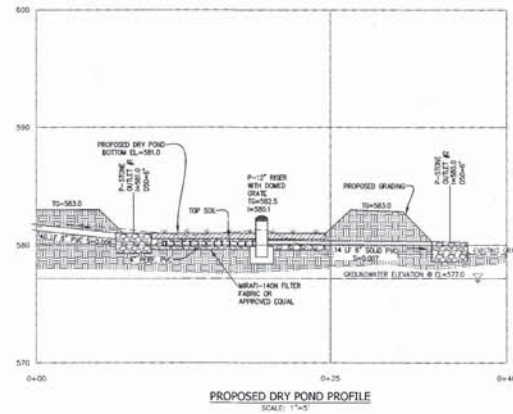
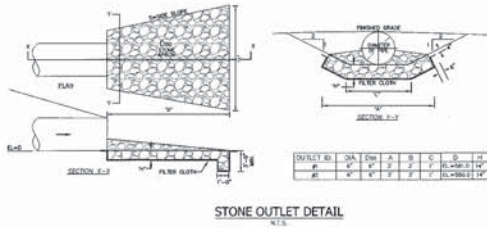
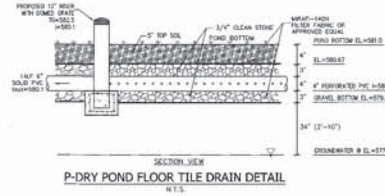
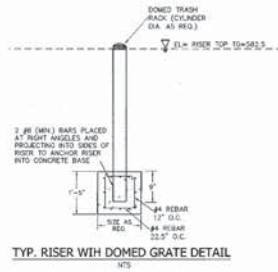
DATE: AUGUST 27, 2021
SCALE: 1" = 30' P.T.

DESIGNED BY: JSA
CHECKED BY: JSA

PROJECT NO.: 4870
DRAWING NO.: 4

STATE OF NEW YORK
RWAN E. NASHER, D.E.
N.Y.S. P.E. LIC. NO. 69066

STATE OF NEW YORK
JOHN E. ATZLA
N.Y.S. P.E. LIC. NO. 60228



THE SEPARATION LAW OF THE STATE OF NEW YORK PROVIDES THAT ANY PERSON OR FIRM ENGAGED IN PROFESSIONAL SERVICE SHALL BE UNDER THE SUPERVISION OF A LICENSED PROFESSIONAL ENGINEER OR ARCHITECT. THE PROFESSIONAL ENGINEER OR ARCHITECT HAS NOT REVIEWED THE FULL EXTENT OF THE INFORMATION IN THE DRAWING AND/OR IN THE SPECIFICATIONS, WITH EXCEPTION FOR DESIGN AND DESIGNER'S RESPONSIBILITY.

STATE OF NEW YORK
RYAN A. NASHIER, P.E.
N.Y.S. P.E. LIC. NO. 87066

STATE OF NEW YORK
JOHN R. ZIGLER, P.E.
N.Y.S. P.E. LIC. NO. 40228

6	01-18-24	CHANGE REVISION PER BUILDING AGENCY
5	08-02-22	DRAINAGE REVISION PER INSPECTION TEST
4	08-25-22	PER PLANNING BOARD 2-10-22
3	02-07-22	PER 2-3-22 SCW MEETING
2	07-28-22	PER PUB. WKS. 1-13-22, FOR USE IN PUB. SUBMISSION
1	11-10-21	PER PUB. WKS. 9-22-21

REVISION DATE DESCRIPTION

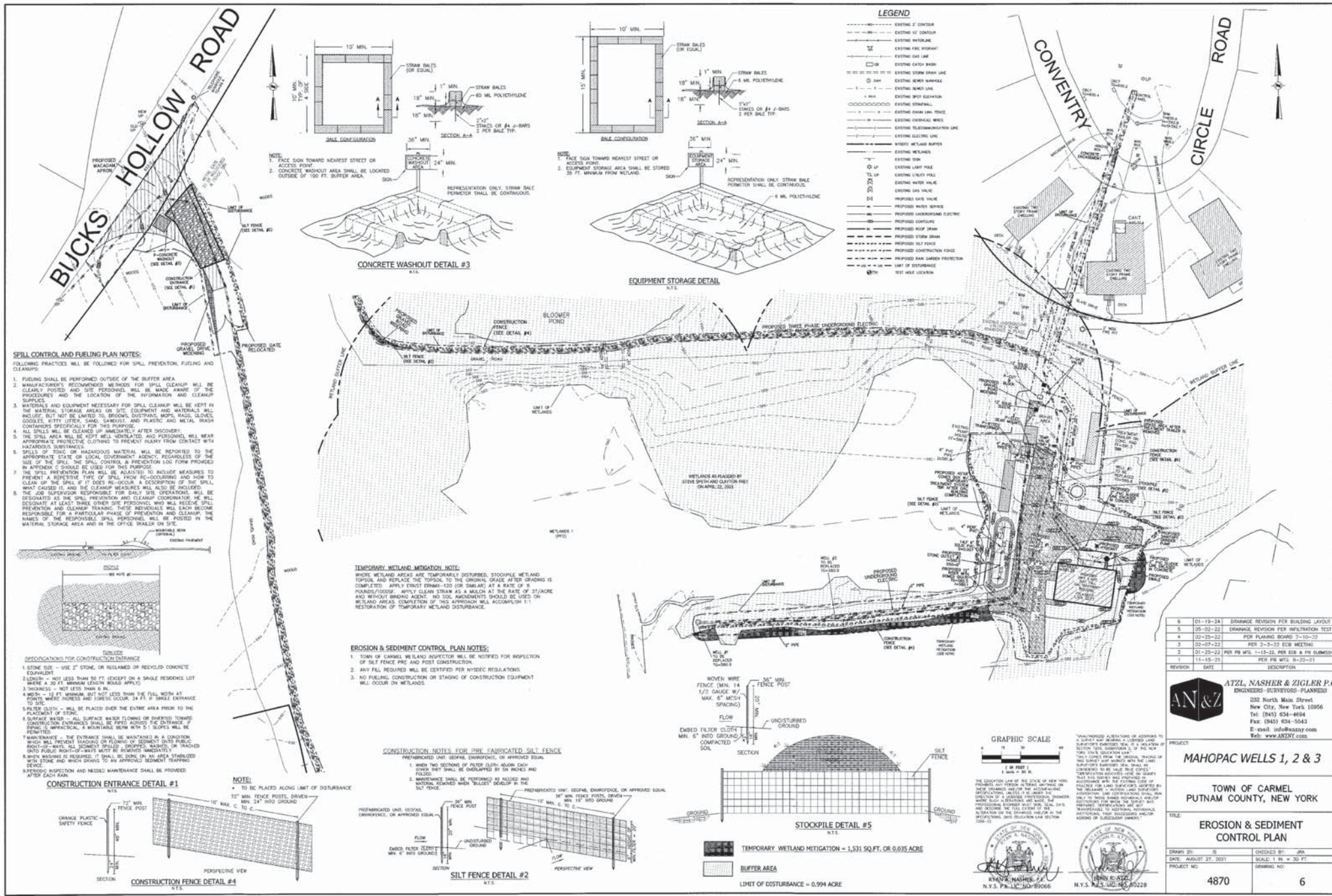
AN&Z ATZLI, NASHIER & ZIGLER P.C.
ENGINEERS-SURVEYORS-PLANNERS
232 North Main Street
New City, New York 10956
Tel: (845) 634-6054
Fax: (845) 634-5543
E-mail: info@anzny.com
Web: www.ANZNY.com

PROJECT: MAHOPAC WELLS 1, 2 & 3

TOWN OF CARMEL
PUTNAM COUNTY, NEW YORK

TITLE: DETAILS

DRAWN BY: JB CHECKED BY: JBA
DATE: AUGUST 27, 2021 SCALE: AS SHOWN
PROJECT NO.: 4870 DRAWING NO.: 5

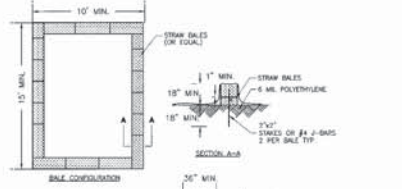


SPILL CONTROL AND FUELING PLAN NOTES:

1. FUELING SHALL BE PERFORMED OUTSIDE OF THE BUFFER AREA.
2. MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.
3. THE MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN MATERIALS STORAGE AREA OR SITE OFFICE AND MATERIALS WILL INCLUDE, BUT NOT BE LIMITED TO, BROOMS, DUSTPANS, MOPS, RAGS, GLOVES, SHOES, KITTY LITTER, SAND, SHAMPOO AND PLASTIC BAGS. METAL BRUSH CONTAINERS SPECIFICALLY FOR THIS PURPOSE.
4. ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER OCCURRENCE.
5. THE SPILL AREA WILL BE KEPT WELL VENTILATED, AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT FLAMMABLE CONTACT WITH HAZARDOUS SUBSTANCES.
6. SPILLS OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY, REGARDLESS OF THE SIZE OF THE SPILL. THE SPILL CONTROLER IS PRECISELY TO PROVIDE IN APPENDIX C SHOULD BE USED FOR THIS PURPOSE.
7. THE SPILL PREVENTION PLAN WILL BE ADAPTED TO INCLUDE MEASURES TO PREVENT A RECURRING TYPE OF SPILL FROM RE-OCCURRING AND HOW TO CLEAN UP THE SPILL IF IT DOES RE-OCCUR. A DESCRIPTION OF THE SPILL, WHAT CAUSED IT, AND THE CLEANUP MEASURES WILL ALSO BE INCLUDED.
8. THE JOB SUPERVISION RESPONSIBLE FOR ONLY SITE OPERATIONS WILL BE DESIGNATED AS THE SPILL PREVENTION AND CLEANUP COORDINATOR. HE WILL BE RESPONSIBLE AT LEAST THREE OTHER SITE PERSONNEL WHO WILL RECEIVE SPILL PREVENTION AND CLEANUP TRAINING. THESE INDIVIDUALS WILL EACH BECOME RESPONSIBLE FOR A PARTICULAR PHASE OF PREVENTION AND CLEANUP. THE NAMES OF THE RESPONSIBLE SPILL PERSONNEL WILL BE POSTED IN THE MATERIALS STORAGE AREA AND IN THE OFFICE TRAILER ON SITE.



CONCRETE WASHOUT DETAIL #3



EQUIPMENT STORAGE DETAIL

TEMPORARY WETLAND MITIGATION NOTE:

- WHERE WETLAND AREAS ARE TEMPORARILY DISTURBED, STOCKPILE WETLAND TOPSOIL AND REPLACE THE TOPSOIL TO THE ORIGINAL GRADE AFTER GRADING IS COMPLETED. APPLY EROSION STRIPS (100 OR SIMILAR) AT A RATE OF 8 POUNDS/1000 SQ. FT. APPLY CLEAN STRAW AS A MULCH AT THE RATE OF 37/ACRE AND REFOUR BRINDING AGENT. NO SOIL ADJUSTMENTS SHOULD BE USED ON WETLANDS. COMPLETION OF THIS APPROACH WILL ACCOMPLISH 1:1 RESTORATION OF TEMPORARY WETLAND DISTURBANCE.

EROSION & SEDIMENT CONTROL PLAN NOTES:

1. TOWN OF CARMEL WETLAND INSPECTOR WILL BE NOTIFIED FOR INSPECTION OF SILT FENCE PRE AND POST CONSTRUCTION.
2. ANY FILL REQUIRED WILL BE CERTIFIED PER HYDREC REGULATIONS.
3. NO FILLING, CONSTRUCTION OR STAGING OF CONSTRUCTION EQUIPMENT WILL OCCUR ON WETLANDS.

CONSTRUCTION NOTES FOR PRE-FABRICATED SILT FENCE:

1. PRE-FABRICATED UNIT: GEOTEX, EMERGENCY, OR APPROVED EQUAL.
2. WHEN TWO SECTIONS OF SILT FENCE MEET, EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND NEEDED.
3. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND NOTIFIED, ADVISING WHEN "RAILWAY" DEVELOPS IN THE SILT FENCE.

CONSTRUCTION ENTRANCE DETAIL #1

CONSTRUCTION FENCE DETAIL #4

SILT FENCE DETAIL #2

STOCKPILE DETAIL #5

LEGEND

- EXISTING 2' CONTOUR
- EXISTING 10' CONTOUR
- EXISTING WETLAND
- EXISTING FIRE WOODS
- EXISTING GAS LINE
- EXISTING CATCH BASIN
- EXISTING DRAIN BANK LINE
- EXISTING SEWER MAINLINE
- EXISTING SEWER LATERAL
- EXISTING SPOW ELECTRIAN
- EXISTING UTILITY
- EXISTING CHAIN LINK FENCE
- EXISTING TELECOMMUNICATION LINE
- EXISTING ELECTRIC LINE
- HYDREC WETLAND BUFFER
- EXISTING WETLANDS
- EXISTING SIGN
- EXISTING LIGHT POLE
- EXISTING UTILITY POLE
- EXISTING WATER VALVE
- EXISTING GAS VALVE
- PROPOSED GAS VALVE
- PROPOSED WATER SERVICE
- PROPOSED UNDERGROUND ELECTRIC
- PROPOSED UNDERGROUND GAS
- PROPOSED STORM DRAIN
- PROPOSED SILT FENCE
- PROPOSED CONSTRUCTION FENCE
- PROPOSED RAIN GARDEN PROTECTION
- LIMIT OF DISTURBANCE
- WETLAND BUFFER

GRAPHIC SCALE



THE LOCATION AND EXTENT OF ANY DISTURBANCE TO A WETLAND SHALL BE A WETLAND DISTURBANCE. THE LOCATION AND EXTENT OF ANY DISTURBANCE TO A WETLAND SHALL BE A WETLAND DISTURBANCE. THE LOCATION AND EXTENT OF ANY DISTURBANCE TO A WETLAND SHALL BE A WETLAND DISTURBANCE.

REVISION	DATE	DESCRIPTION
1	11-15-21	PER PER WFLS 1-13-22, PER ESB & PW SUBMISSION
2	11-15-21	PER PER WFLS 1-13-22, PER PER WFLS 1-13-22
3	02-07-22	PER 2-3-22 ESB MEETING
4	02-25-22	PER PLANNING BOARD 7-10-22
5	05-02-22	DRAINAGE REVISION PER WETLAND TEST
6	01-19-24	DRAINAGE REVISION PER BUILDING LAYOUT

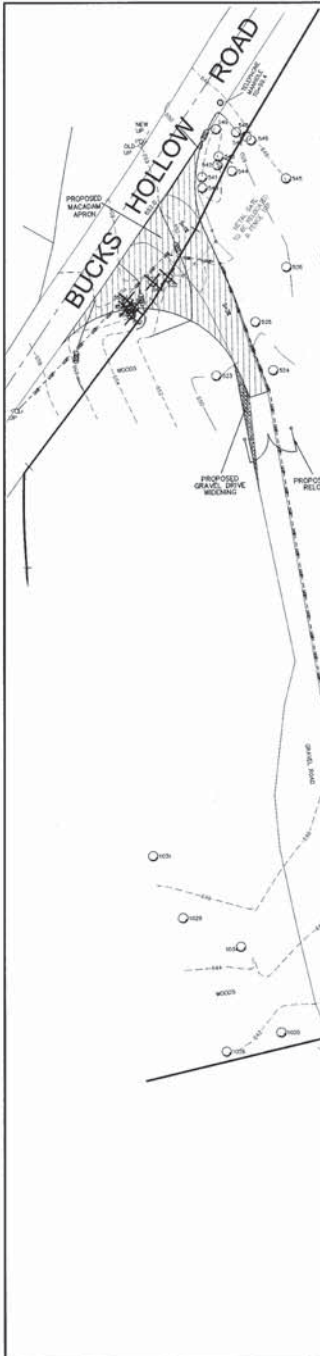
ATZL, NASHER & ZICLER P.C.
 ENGINEERS-SURVEYORS-PLANNERS
 232 North Main Street
 New City, New York 10956
 Tel: (845) 654-4664
 Fax: (845) 634-5543
 E-mail: info@anz.com
 Web: www.anz.com

MAHOPAC WELLS 1, 2 & 3
 TOWN OF CARMEL
 PUTNAM COUNTY, NEW YORK

EROSION & SEDIMENT CONTROL PLAN

DESIGN BY: JWA	CHECKED BY: JWA
DATE: AUGUST 27, 2021	SCALE: 1" = 30' FT.
PROJECT NO: 4870	DRAWING NO: 6



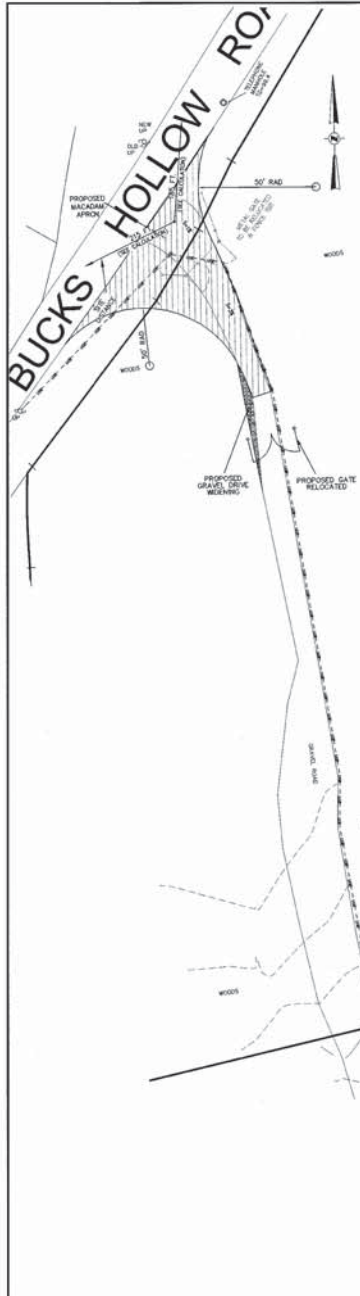


TREE LEGEND

- EXISTING TREE
- TREE TO BE PRESERVED
- ⊗ TREE TO BE REMOVED

TREE LIST

NO.	SIZE	DESCRIPTION	NO.	SIZE	DESCRIPTION	NO.	SIZE	DESCRIPTION
41	8"	BRCH	0000	2041	4"	MAPLE	0000	
42	10"	POPLAR	0000	2023	14"	MAPLE	0000	
54	10"	ASH	0000	2028	8"	BRCH	0000	
55	8"	QUAD BRCH	0000	2024	10"	MAPLE	0000	
56	8"	TRIN MAPLE	0000	2025	10"	TRIN MAPLE	0000	
57	8"	TRIN BRCH	0000	2008	8"	MAPLE	0000	
58	10"	BRCH	0000	2009	10"	MAPLE	0000	
59	8"	BRCH	0000	2008	8"	TRIN MAPLE	0000	
60	7"	TRIN BRCH	0000	2008	10"	MAPLE	0000	
61	12"	ASH	0000	2010	10"	MAPLE	0000	
62	8"	MAPLE	0000	2011	10"	TRIN MAPLE	0000	
63	8"	ELM	0000	2012	10"	ASH	0000	
64	10"	CAJ	0000	2013	10"	MAPLE	0000	
65	8"	BRCH	0000	2013	10"	MAPLE	0000	
66	10"	BRCH	0000	2015	10"	MAPLE	0000	
67	10"	ASH	0000	2016	10"	MAPLE	0000	
68	10"	CAJ	0000	2017	10"	MAPLE	0000	
69	10"	MAPLE	0000	2018	10"	TRIN MAPLE	0000	
70	30"	BRCH	0000	2019	8"	MAPLE	0000	
71	10"	REEDS	0000	2020	8"	TRIN MAPLE	0000	
72	12"	BRCH	0000	2021	12"	POPLAR	0000	
73	8"	BRCH	0000	2022	8"	MAPLE	0000	
74	8"	MAPLE	0000	2023	10"	TRIN MAPLE	0000	
75	10"	CAJ	0000	2024	10"	MAPLE	0000	
76	14"	CAJ	0000	2025	8"	MAPLE	0000	
77	10"	BRCH	0000	2026	10"	MAPLE	0000	
78	8"	BRCH	0000	2027	10"	BRCH	0000	
79	8"	REEDS	0000	2028	10"	TRIN MAPLE	0000	
80	8"	REEDS	0000	2029	8"	BRCH	0000	
81	10"	REEDS	0000	2030	10"	BRCH	0000	
82	8"	ASH	0000	2031	10"	BRCH	0000	
83	8"	BRCH	0000	2032	10"	BRCH	0000	
84	12"	BRCH	0000	2034	8"	MAPLE	0000	
85	14"	CAJ	0000	2036	12"	TRIN MAPLE	0000	
86	10"	POPLAR	0000	2038	10"	MAPLE	0000	
87	8"	ASH	0000	2039	10"	MAPLE	0000	
88	12"	BRCH	0000	2040	10"	MAPLE	0000	
89	10"	CAJ	0000	2041	10"	MAPLE	0000	
90	8"	POPLAR	0000	2042	10"	MAPLE	0000	
91	10"	POPLAR	0000	2043	10"	MAPLE	0000	
92	10"	POPLAR	0000	2044	10"	MAPLE	0000	
93	10"	POPLAR	0000	2045	10"	MAPLE	0000	
94	10"	POPLAR	0000	2046	10"	MAPLE	0000	
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109	10"	POPLAR	0000	2061	10"	MAPLE	0000	
110	8"	TRIN BRCH	0000	2062	10"	MAPLE	0000	
111	8"	CAJ	0000	2063	10"	MAPLE	0000	
112	8"	CAJ	0000	2064	10"	MAPLE	0000	
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118	10"	CAJ	0000	2070	10"	MAPLE	0000	
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157	10"	MAPLE	0000	2109	10"	MAPLE	0000	
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189	10"	MAPLE	0000	2141	10"	MAPLE	0000	
190	10"	MAPLE	0000	2142	10"	MAPLE	0000	
191	10"	MAPLE	0000	2143	10"	MAPLE	0000	
192	10"	MAPLE	0000	2144	10"	MAPLE	0000	
193	10"	MAPLE	0000	2145	10"	MAPLE	0000	
194	10"	MAPLE	0000	2146	10"	MAPLE	0000	
195	10"	MAPLE	0000	2147	10"	MAPLE	0000	
196	10"	MAPLE	0000	2148	10"	MAPLE	0000	
197	10"	MAPLE	0000	2149	10"	MAPLE	0000	
198	10"	MAPLE	0000	2150	10"	MAPLE	0000	
199	10"	MAPLE	0000	2151	10"	MAPLE	0000	
200	10"	MAPLE	0000	2152	10"	MAPLE	0000	
201	10"	MAPLE	0000	2153	10"	MAPLE	0000	
202	10"	MAPLE	0000	2154	10"	MAPLE	0000	
203	10"	MAPLE	0000	2155	10"	MAPLE	0000	
204	10"	MAPLE	0000	2156	10"	MAPLE	0000	
205	10"	MAPLE	0000	2157	10"	MAPLE	0000	
206	10"	MAPLE	0000	2158	10"	MAPLE	0000	
207	10"	MAPLE	0000	2159	10"	MAPLE	0000	
208	10"	MAPLE	0000	2160	10"	MAPLE	0000	
209	10"	MAPLE	0000	2161	10"	MAPLE	0000	
210	10"	MAPLE	0000	2162	10"	MAPLE	0000	
211	10"	MAPLE	0000	2163	10"	MAPLE	0000	
212	10"	MAPLE	0000	2164	10"	MAPLE	0000	
213	10"	MAPLE	0000	2165	10"	MAPLE	0000	
214	10"	MAPLE	0000	2166	10"	MAPLE	0000	
215	10"	MAPLE	0000	2167	10"	MAPLE	0000	
216	10"	MAPLE	0000	2168	10"	MAPLE	0000	
217	10"	MAPLE	0000	2169	10"	MAPLE	0000	
218	10"	MAPLE	0000	2170	10"	MAPLE	0000	
219	10"	MAPLE	0000	2171	10"	MAPLE	0000	
220	10"	MAPLE	0000	2172	10"	MAPLE	0000	

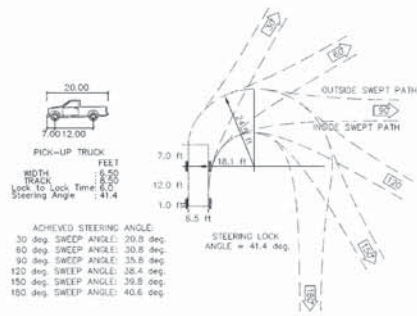


VEHICLE TRAVELING DOWNHILL TOWARD THE SITE:
 SIGHT DISTANCE, S = $(1.47 \times 10^4) \times \frac{V^2}{30(4.7 + 0)}$
 1. PERCEPTION TIME = 2.5 SEC
 2. VEHICLE DESIGN SPEED = 30 MPH
 3. DECELERATION RATE = 11.2 FT/SEC²
 4. ACCELERATION OF GRAVITY = 32.2 FT/SEC²
 5. ROAD SLOPE IN DECIMAL (NEGATIVE IF THE ROADWAY IS DOWNHILL) = - 0.096

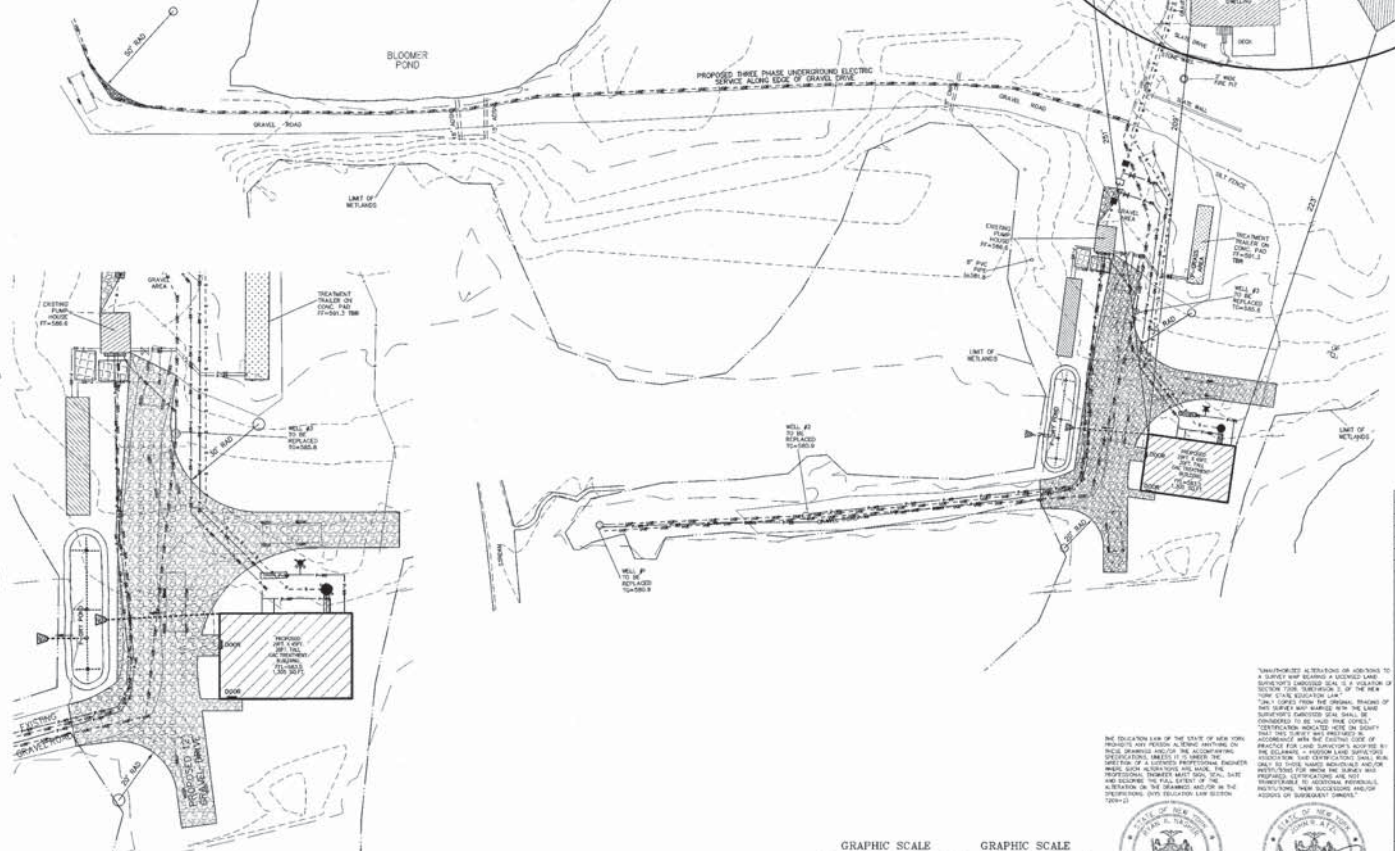
SIGHT DISTANCE, S = $(1.47 \times 2.5 \times 30) \times \frac{30}{32.2}$
 => SIGHT DISTANCE, S = 213.06 FT. => USE 215 FT.

VEHICLE TRAVELING UPHILL TOWARD THE SITE:
 SIGHT DISTANCE, S = $(1.47 \times 10^4) \times \frac{V^2}{30(4.7 + 0)}$
 1. PERCEPTION TIME = 2.5 SEC
 2. VEHICLE DESIGN SPEED = 30 MPH
 3. DECELERATION RATE = 11.2 FT/SEC²
 4. ACCELERATION OF GRAVITY = 32.2 FT/SEC²
 5. ROAD SLOPE IN DECIMAL (POSITIVE IF THE ROADWAY IS UPHILL) = + 0.073

SIGHT DISTANCE, S = $(1.47 \times 2.5 \times 30) \times \frac{30}{32.2}$
 => SIGHT DISTANCE, S = 181.8 FT. => USE 185 FT.



LARGE PICK-UP TRUCK RADIUS DETAIL



TRUCK RADIUS PLAN
 SCALE: 1" = 20'

LEGEND

- EXISTING CENTERLINE
- EXISTING WATERLINE
- EXISTING FIRE HYDRANT
- EXISTING GAS LINE
- EXISTING CATCH BASIN
- EXISTING STORM MAIN LINE
- EXISTING SEWER MAINLINE
- EXISTING SEWER LATERAL
- EXISTING SLOTTED EXHAUSTION
- EXISTING UNDERPASS
- EXISTING UNDERPASS WINGS
- EXISTING TELECOMMUNICATION LINE
- EXISTING ELECTRIC LINE
- EXISTING WELAND BUFFER
- EXISTING WELANDS
- EXISTING DRAIN
- EXISTING LIGHT POLE
- EXISTING UTILITY POLE
- EXISTING WATER VALVE
- EXISTING GAS VALVE
- EXISTING GATE VALVE
- PROPOSED WATER SERVICE
- PROPOSED UNDERGROUND ELECTRIC
- PROPOSED CONDUITS
- PROPOSED ROOF DRAIN
- PROPOSED STORM DRAIN
- PROPOSED ROOF GUTTER
- PROPOSED CONSTRUCTION FENCE
- PROPOSED SIGN GARDEN PROTECTION
- LIMIT OF DISTURBANCE
- TEST HOLE LOCATION

6	01-18-14	DRAINAGE REVISION PER BUILDING LAYOUT
5	09-02-12	DRAINAGE REVISION PER PERMITATION FEES
4	03-25-12	PER PLANNING BOARD 2-10-12
3	02-07-12	PER 2-3-12 EOB MEETING
2	07-25-12	PER PER WHO 1-15-12, PER PER IN THE SUBMITTAL
1	11-15-11	PER PER WHO 8-22-11

ATZEL, NASHER & ZIGLER P.C.
 ENGINEERS-SURVEYORS-PLANNERS
 232 North Main Street
 New City, New York 10956
 Tel: (845) 634-6084
 Fax: (845) 634-5543
 E-mail: info@atnzny.com
 Web: www.atnzny.com

PROJECT:
MAHOPAC WELLS 1, 2 & 3

TOWN OF CARMEL
 PUTNAM COUNTY, NEW YORK

TITLE:
**TURNING RADIUS
 MANEUVERABILITY PLAN**

DRAWN BY: IS CHECKED BY: JWA
 DATE: NOVEMBER 15, 2021 SCALE: 1" = 30 FT.
 PROJECT NO: 4870 DRAWING NO: 9



THE EDUCATION LAW OF THE STATE OF NEW YORK
 PROVIDES AND PROVIDES A STATE ENGINEER OR
 PROFESSIONAL ENGINEER TO DESIGN, PREPARE AND
 SEAL PLANS FOR THE CONSTRUCTION OF ANY
 STRUCTURE, INCLUDING ANY BRIDGE, AND ANY
 PROFESSIONAL ENGINEER MUST REGISTER WITH THE
 STATE ENGINEERING BOARD AND MAINTAIN HIS
 LICENSE AND REGISTER IN THE STATE OF NEW YORK
 AND BE A RESIDENT OF THE STATE OF NEW YORK
 AT THE TIME OF HIS REGISTRATION. ANY
 VIOLATION OF THE EDUCATION LAW OF THE STATE
 OF NEW YORK IS A VIOLATION OF THE
 PROFESSIONAL ENGINEERING LAW SYSTEM.

STATE OF NEW YORK
 ENGINEERING BOARD
 RYAN A. NASHER, E.E.
 N.Y.S. P.E. LIC. NO. 89066

STATE OF NEW YORK
 ENGINEERING BOARD
 JOHN E. ATZEL
 N.Y.S. P.E. LIC. NO. 40228



January 29, 2024

Town of Carmel Planning Board
60 McAlpin Avenue
Mahopac, New York 10541

RE: Union Energy Center, LLC Site Plan
24 Miller Road
Mahopac, NY 10541
TM#s: 86.11-1-14

Dear Chairman Paepre and Members of the Board:

Please find enclosed the following plans and documents in support of an application for site plan approval for the above referenced project:

- Site Plan Set, last revised January 29, 2024.
- Full EAF, last revised January 29, 2024.

It is our intent with this resubmission to ask the Board to re-declare its intent to act as lead agency under SEQRA and re-circulate to the involved/interested agencies, as the Public Service Commission needs to be included as an involved agency. In addition, we have also responded to previous driveway comments, and wish to update the Board on our recent meeting with the ECB.

In response to open comments received from Director of Code Enforcement, Michael Carnazza, dated December 11, 2023, we offer the below responses:

2. The project was introduced to the Environmental Conservation Board on January 18, 2024. It was generally well received and the members acknowledged the advantages of the battery energy storage system (BESS) technology that is proposed for the site, noting its potential to stabilize the grid and improve the viability renewable energy sources. Dialogue will be maintained with the ECB as the applicant pursues permits with NYSDEC and AOC.
3. The applicant was recently asked by the Fire Department to reduce the driveway slope to 8%. Previously the driveway was shown at 12%. The fire code requires that the driveway be a maximum of 10%, but this maximum can be varied by the fire code official. The plans have been revised to show the driveway at the Fire Code prescribed 10%. Further reduction of the slope would cause the driveway to be further lengthened, which would create additional disturbance, including in the wetland buffer/adjacent area. The applicant is seeking approval of the 10% driveway as permitted by the code.

In response to open comments received from Town Engineer Richard Franzetti, PE, dated December 5, 2023, we offer the following responses:

General Comments

3 Garrett Place, Carmel, New York 10512 (845) 225-9690 Fax (845) 225-9717
www.insite-eng.com

1. The applicant is requesting that the Public Service Commission be added as an involved agency and that the project be referred to them as well.
2. A revised Wetland Function, Value and Impact report will be provided with a future submission addressing these concerns.


Detailed Comments

1. Sight distance calculations and a driveway profile will be provided with a future submission.
2. Stormwater testing has been scheduled and the stormwater management design and supporting calculations will be provided with a future submission.
3. Stormwater testing has been scheduled and the stormwater management design and supporting calculations will be provided with a future submission.

Very truly yours,

INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.

By:


Richard D. Williams, Jr., PE
Senior Principal Engineer

JJC/adt

Enclosures

cc: (All via email only)

Scott Connuck
Compton Donohue
Frank Smith, Esq
William Shilling, Esq
Mahopac Volunteer Fire Dept

Insite Project#: 21120.100

Full Environmental Assessment Form
Part 1 - Project and Setting

Instructions for Completing Part 1

Part 1 is to be completed by the applicant or project sponsor. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification.

Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information; indicate whether missing information does not exist, or is not reasonably available to the sponsor; and, when possible, generally describe work or studies which would be necessary to update or fully develop that information.

Applicants/sponsors must complete all items in Sections A & B. In Sections C, D & E, most items contain an initial question that must be answered either “Yes” or “No”. If the answer to the initial question is “Yes”, complete the sub-questions that follow. If the answer to the initial question is “No”, proceed to the next question. Section F allows the project sponsor to identify and attach any additional information. Section G requires the name and signature of the applicant or project sponsor to verify that the information contained in Part 1 is accurate and complete.

A. Project and Applicant/Sponsor Information.

Name of Action or Project: Union Energy Center, LLC		
Project Location (describe, and attach a general location map): Union Valley Road and Miller Road		
Brief Description of Proposed Action (include purpose or need): The applicant is seeking to construct a 116-megawatt battery energy storage system. The project includes the construction of a system of gravel driveways, two pads for battery storage, two substations, and the associated landscaping and stormwater management practices. The batteries would be stored in above ground enclosures similar to shipping containers and the project would connect to NYSEG transmission lines that currently traverse an easement on the site. The 93.5 acre site, where the proposed development would occur is currently undeveloped. The applicant is also seeking to modify existing property lines between the proposed development site, and two neighboring sites. One is to the north which contains a New York State Electric and Gas (NYSEG) substation. Of the two proposed substations, one would be owned and controlled by NYSEG. The proposed lot line adjustment would allow NYSEG ownership of this substation. Additionally, the adjacent lot known as now or formerly The Teal Door, LLC, would be enlarged into the project site. In the proposed configuration, the proposed development lot would contain 78.9 acres, the NYSEG lot would be 12.3 acres, and the Teal Door lot would be 4.3 acres. The proposed subdivision would add 10.7 acres to the NYSEG lot, 3.9 acres to the Teal Door lot, and deduct the sum of the two from the development lot. There are no water or wastewater improvements proposed.		
Name of Applicant/Sponsor: East Point Energy c/o Scott Connuck	Telephone: E-Mail: sconnuck@eastpointenergy.com	
Address: 310 4th Street NE, 3rd Floor		
City/PO: Charlottesville	State: VA	Zip Code: 22902
Project Contact (if not same as sponsor; give name and title/role): Jeffrey J. Contelmo, P.E., Insite Engineering, Surveying & Landscape Architecture, P.C.	Telephone: 845-225-9690 E-Mail: jcontelmo@insite-eng.com	
Address: 3 Garrett Place		
City/PO: Carmel	State: NY	Zip Code: 10512
Property Owner (if not same as sponsor): Miller Road, LLC c/o Nicole Stern	Telephone: E-Mail:	
Address: 888 Route 6		
City/PO: Mahopac	State: NY	Zip Code: 10541

B. Government Approvals

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

Government Entity	If Yes: Identify Agency and Approval(s) Required	Application Date (Actual or projected)
a. City Counsel, Town Board, <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No or Village Board of Trustees		
b. City, Town or Village Planning Board or Commission <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Planning Board - Site Plan Approval, Subdivision approval	
c. City, Town or Village Zoning Board of Appeals <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
d. Other local agencies <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Building Permit Town Wetland Permit Permit	
e. County agencies <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
f. Regional agencies <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	NYCDEP SWPPP Acceptance	
g. State agencies <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	NYSDEC GP-0-20-001 Coverage; NYSDEC Freshwater Wetlands Permit; NYS Public Service Commission Section 68 Certificate of Public Convenience and Need	
h. Federal agencies <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	ACOE Permitting Wetland Fill Permit	
i. Coastal Resources. <p>i. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>ii. Is the project site located in a community with an approved Local Waterfront Revitalization Program? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>iii. Is the project site within a Coastal Erosion Hazard Area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>		

C. Planning and Zoning

C.1. Planning and zoning actions.

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

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

C.2. Adopted land use plans.

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

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

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

If Yes, identify the plan(s):

NYC Watershed Boundary _____

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

If Yes, identify the plan(s):

C.3. Zoning

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

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

c. Is a zoning change requested as part of the proposed action? Yes No
If Yes,
i. What is the proposed new zoning for the site? _____

C.4. Existing community services.

a. In what school district is the project site located? Carmel Central School District

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

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

d. What parks serve the project site?
Empire State Trail, Donald J. Trump State Park, Baldwin Meadows Park

D. Project Details

D.1. Proposed and Potential Development

a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if mixed, include all components)? Industrial / Utility

b. a. Total acreage of the site of the proposed action? 1.6±, 0.4 & 93.5± acres
b. Total acreage to be physically disturbed? 18.0± acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 95.5± acres

c. Is the proposed action an expansion of an existing project or use? Yes No
i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, miles, housing units, square feet)? % _____ Units: _____

d. Is the proposed action a subdivision, or does it include a subdivision? Yes No
If Yes,
i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types)
Lot line adjustments for industrial / utility & commercial use.

ii. Is a cluster/conservation layout proposed? Yes No
iii. Number of lots proposed? 3
iv. Minimum and maximum proposed lot sizes? Minimum 4.3 Maximum 12.3

e. Will the proposed action be constructed in multiple phases? Yes No
i. If No, anticipated period of construction: 12-18 months
ii. If Yes:
• Total number of phases anticipated _____
• Anticipated commencement date of phase 1 (including demolition) _____ month _____ year
• Anticipated completion date of final phase _____ month _____ year
• Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases: _____

f. Does the project include new residential uses? Yes No

If Yes, show numbers of units proposed.

	<u>One Family</u>	<u>Two Family</u>	<u>Three Family</u>	<u>Multiple Family (four or more)</u>
Initial Phase	_____	_____	_____	_____
At completion	_____	_____	_____	_____
of all phases	_____	_____	_____	_____

g. Does the proposed action include new non-residential construction (including expansions)? Yes No

If Yes,

i. Total number of structures 180

ii. Dimensions (in feet) of largest proposed structure: 10.7' height; 10' width; and 60' length

iii. Approximate extent of building space to be heated or cooled: 108,000 square feet

h. Does the proposed action include construction or other activities that will result in the impoundment of any liquids, such as creation of a water supply, reservoir, pond, lake, waste lagoon or other storage? Yes No

If Yes,

i. Purpose of the impoundment: _____

ii. If a water impoundment, the principal source of the water: Ground water Surface water streams Other specify: _____

iii. If other than water, identify the type of impounded/contained liquids and their source. _____

iv. Approximate size of the proposed impoundment. Volume: _____ million gallons; surface area: _____ acres

v. Dimensions of the proposed dam or impounding structure: _____ height; _____ length

vi. Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock, wood, concrete): _____

D.2. Project Operations

a. Does the proposed action include any excavation, mining, or dredging, during construction, operations, or both? Yes No
(Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite)

If Yes:

i. What is the purpose of the excavation or dredging? _____

ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?

- Volume (specify tons or cubic yards): _____
- Over what duration of time? _____

iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them. _____

iv. Will there be onsite dewatering or processing of excavated materials? Yes No
If yes, describe. _____

v. What is the total area to be dredged or excavated? _____ acres

vi. What is the maximum area to be worked at any one time? _____ acres

vii. What would be the maximum depth of excavation or dredging? _____ feet

viii. Will the excavation require blasting? Yes No

ix. Summarize site reclamation goals and plan: _____

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area? Yes No

If Yes:

i. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): Crossing over NYSDEC Wetland F-26 and associated watercourse for access to the site.

ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placement of structures, or alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres:
A culvert and headwall would be constructed to allow for access to the site from Miller Road. The action would result in disturbance of about 3,000 sf of the wetland. ACOE permitting will be sought for this part of the project. Other portions of the site would create some disturbance within the 100 adjacent area, but these disturbances would primarily be for the construction of stormwater management practices. A NYSDEC Freshwater Wetlands Permit will be sought for these disturbances.

iii. Will the proposed action cause or result in disturbance to bottom sediments? Yes No

If Yes, describe: Culvert and headwalls to be constructed.

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

If Yes:

- acres of aquatic vegetation proposed to be removed: 3,000 sf±
- expected acreage of aquatic vegetation remaining after project completion: 42.8±ac
- purpose of proposed removal (e.g. beach clearing, invasive species control, boat access): Crossing for access to the site.
- proposed method of plant removal: Mechanical
- if chemical/herbicide treatment will be used, specify product(s): N/A

v. Describe any proposed reclamation/mitigation following disturbance: Wetland Mitigation will be provided per ACOE.

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

If Yes:

i. Total anticipated water usage/demand per day: _____ gallons/day

ii. Will the proposed action obtain water from an existing public water supply? Yes No

If Yes:

- Name of district or service area: _____
- Does the existing public water supply have capacity to serve the proposal? Yes No
- Is the project site in the existing district? Yes No
- Is expansion of the district needed? Yes No
- Do existing lines serve the project site? Yes No

iii. Will line extension within an existing district be necessary to supply the project? Yes No

If Yes:

- Describe extensions or capacity expansions proposed to serve this project: _____
- Source(s) of supply for the district: _____

iv. Is a new water supply district or service area proposed to be formed to serve the project site? Yes No

If Yes:

- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- Proposed source(s) of supply for new district: _____

v. If a public water supply will not be used, describe plans to provide water supply for the project: _____

vi. If water supply will be from wells (public or private), what is the maximum pumping capacity: _____ gallons/minute.

d. Will the proposed action generate liquid wastes? Yes No

If Yes:

i. Total anticipated liquid waste generation per day: _____ gallons/day

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

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

If Yes:

- Name of wastewater treatment plant to be used: _____
- Name of district: _____
- Does the existing wastewater treatment plant have capacity to serve the project? Yes No
- Is the project site in the existing district? Yes No
- Is expansion of the district needed? Yes No

• Do existing sewer lines serve the project site? Yes No
 • Will a line extension within an existing district be necessary to serve the project? Yes No
 If Yes:
 • Describe extensions or capacity expansions proposed to serve this project: _____

iv. Will a new wastewater (sewage) treatment district be formed to serve the project site? Yes No
 If Yes:
 • Applicant/sponsor for new district: _____
 • Date application submitted or anticipated: _____
 • What is the receiving water for the wastewater discharge? _____

v. If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge or describe subsurface disposal plans):

vi. Describe any plans or designs to capture, recycle or reuse liquid waste: _____

e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction? Yes No
 If Yes:
 i. How much impervious surface will the project create in relation to total size of project parcel?
 56,120 Square feet or 1.3 acres (impervious surface)
 4,142,137 Square feet or 95.1 acres (parcel size)
 ii. Describe types of new point sources. Battery enclosure structures.

iii. Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)?
Proposed stormwater management practices

• If to surface waters, identify receiving water bodies or wetlands: _____

• Will stormwater runoff flow to adjacent properties? Yes No

iv. Does the proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater? Yes No

f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations? Yes No
 If Yes, identify:
 i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles)

 ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers)

 iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation)

g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit? Yes No
 If Yes:
 i. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year) Yes No
 ii. In addition to emissions as calculated in the application, the project will generate:
 • _____ Tons/year (short tons) of Carbon Dioxide (CO₂)
 • _____ Tons/year (short tons) of Nitrous Oxide (N₂O)
 • _____ Tons/year (short tons) of Perfluorocarbons (PFCs)
 • _____ Tons/year (short tons) of Sulfur Hexafluoride (SF₆)
 • _____ Tons/year (short tons) of Carbon Dioxide equivalent of Hydroflouorocarbons (HFCs)
 • _____ Tons/year (short tons) of Hazardous Air Pollutants (HAPs)

h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)? Yes No

If Yes:

i. Estimate methane generation in tons/year (metric): _____

ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring): _____

i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations? Yes No

If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust): _____

j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services? Yes No

If Yes:

i. When is the peak traffic expected (Check all that apply): Morning Evening Weekend
 Randomly between hours of _____ to _____.

ii. For commercial activities only, projected number of truck trips/day and type (e.g., semi trailers and dump trucks): _____

iii. Parking spaces: Existing _____ Proposed _____ Net increase/decrease _____

iv. Does the proposed action include any shared use parking? Yes No

v. If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe: _____

vi. Are public/private transportation service(s) or facilities available within 1/2 mile of the proposed site? Yes No

vii. Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? Yes No

viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? Yes No

k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy? Yes No

If Yes:

i. Estimate annual electricity demand during operation of the proposed action: _____

ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other): _____

iii. Will the proposed action require a new, or an upgrade, to an existing substation? Yes No

l. Hours of operation. Answer all items which apply.

<p>i. During Construction:</p> <ul style="list-style-type: none"> • Monday - Friday: _____ 8:00 am - 6:00 pm • Saturday: _____ 8:00 am - 5:00 pm • Sunday: _____ None • Holidays: _____ None 	<p>ii. During Operations:</p> <ul style="list-style-type: none"> • Monday - Friday: _____ Occasional • Saturday: _____ Onsite Employee (1-3) present through the week • Sunday: _____ • Holidays: _____
--	---

m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both? Yes No

If yes:

i. Provide details including sources, time of day and duration:
 During construction: Typical construction and earthwork noise.
 During Operation: Sound from HVAC system.

ii. Will the proposed action remove existing natural barriers that could act as a noise barrier or screen? Yes No
 Describe: Tree removal as needed. Developed area to receive evergreen plantings to mitigate sound.

n. Will the proposed action have outdoor lighting? Yes No

If yes:

i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:
 Downward facing site lighting, provided for security and safety. Lighting will be limited, motion sensor operated, and dark sky compliant.

ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen? Yes No
 Describe: Tree removal as needed. Developed area to receive evergreen plantings to mitigate light.

o. Does the proposed action have the potential to produce odors for more than one hour per day? Yes No
 If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures:

p. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) or chemical products 185 gallons in above ground storage or any amount in underground storage? Yes No

If Yes:

i. Product(s) to be stored _____

ii. Volume(s) _____ per unit time _____ (e.g., month, year)

iii. Generally, describe the proposed storage facilities: _____

q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation? Yes No

If Yes:

i. Describe proposed treatment(s):

ii. Will the proposed action use Integrated Pest Management Practices? Yes No

r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)? Yes No

If Yes:

i. Describe any solid waste(s) to be generated during construction or operation of the facility:

- Construction: _____ tons per _____ (unit of time)
- Operation : _____ tons per _____ (unit of time)

ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:

- Construction: _____
- Operation: _____

iii. Proposed disposal methods/facilities for solid waste generated on-site:

- Construction: _____
- Operation: _____

s. Does the proposed action include construction or modification of a solid waste management facility? Yes No
 If Yes:
 i. Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill, or other disposal activities): _____
 ii. Anticipated rate of disposal/processing:
 • _____ Tons/month, if transfer or other non-combustion/thermal treatment, or
 • _____ Tons/hour, if combustion or thermal treatment
 iii. If landfill, anticipated site life: _____ years

t. Will the proposed action at the site involve the commercial generation, treatment, storage, or disposal of hazardous waste? Yes No
 If Yes:
 i. Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility: _____

 ii. Generally describe processes or activities involving hazardous wastes or constituents: _____

 iii. Specify amount to be handled or generated _____ tons/month
 iv. Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents: _____

 v. Will any hazardous wastes be disposed at an existing offsite hazardous waste facility? Yes No
 If Yes: provide name and location of facility: _____

 If No: describe proposed management of any hazardous wastes which will not be sent to a hazardous waste facility:

E. Site and Setting of Proposed Action

E.1. Land uses on and surrounding the project site

a. Existing land uses.
 i. Check all uses that occur on, adjoining and near the project site.
 Urban Industrial Commercial Residential (suburban) Rural (non-farm)
 Forest Agriculture Aquatic Other (specify): Public Trail
 ii. If mix of uses, generally describe:

b. Land uses and covertypes on the project site.

Land use or Covertypes	Current Acreage	Acreage After Project Completion	Change (Acres +/-)
• Roads, buildings, and other paved or impervious surfaces	0.4 ac	9.2 ac±	+8.8 ac
• Forested	52.8 ac±	34.8 ac±	-18 ac
• Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)	0 ac	0 ac	No Change
• Agricultural (includes active orchards, field, greenhouse etc.)	0 ac	0 ac	No Change
• Surface water features (lakes, ponds, streams, rivers, etc.)	0 ac	0 ac	No Change
• Wetlands (freshwater or tidal)	42.3± ac	42.3± ac	Less than 0.1ac change
• Non-vegetated (bare rock, earth or fill)	0 ac	0 ac	No Change
• Other Describe: <u>Stormwater Management Practices</u> <u>Lawn/meadow/landscape-buffers</u>	0 AC 0 AC	2.2 ± ac 7 ± ac	+2.2 ± ac +7 ± ac

c. Is the project site presently used by members of the community for public recreation? Yes No
i. If Yes: explain: _____

d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers, or group homes) within 1500 feet of the project site? Yes No
If Yes,
i. Identify Facilities:
Creative Kids Childcare Center

e. Does the project site contain an existing dam? Yes No
If Yes:
i. Dimensions of the dam and impoundment:
• Dam height: _____ feet
• Dam length: _____ feet
• Surface area: _____ acres
• Volume impounded: _____ gallons OR acre-feet
ii. Dam's existing hazard classification: _____
iii. Provide date and summarize results of last inspection:

f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility? Yes No
If Yes:
i. Has the facility been formally closed? Yes No
• If yes, cite sources/documentation: _____
ii. Describe the location of the project site relative to the boundaries of the solid waste management facility:

iii. Describe any development constraints due to the prior solid waste activities: _____

g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste? Yes No
If Yes:
i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred:

h. Potential contamination history. Has there been a reported spill at the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site? Yes No
If Yes:
i. Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply: Yes No
 Yes – Spills Incidents database Provide DEC ID number(s): _____
 Yes – Environmental Site Remediation database Provide DEC ID number(s): _____
 Neither database
ii. If site has been subject of RCRA corrective activities, describe control measures: _____

iii. Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database? Yes No
If yes, provide DEC ID number(s): 360023
iv. If yes to (i), (ii) or (iii) above, describe current status of site(s):

v. Is the project site subject to an institutional control limiting property uses? Yes No

- If yes, DEC site ID number: _____
- Describe the type of institutional control (e.g., deed restriction or easement): _____
- Describe any use limitations: _____
- Describe any engineering controls: _____
- Will the project affect the institutional or engineering controls in place? Yes No
- Explain: _____

E.2. Natural Resources On or Near Project Site

a. What is the average depth to bedrock on the project site? _____ 6.5 feet

b. Are there bedrock outcroppings on the project site? Yes No
 If Yes, what proportion of the site is comprised of bedrock outcroppings? _____ %

c. Predominant soil type(s) present on project site:

Paxton Fine Sandy Loam, 3-8% slopes	_____	33 %
Ridgebury Complex, 0-8% slopes	_____	35 %
Woodbridge Loam, 3-8% slopes	_____	11 %

d. What is the average depth to the water table on the project site? Average: _____ 2 feet

e. Drainage status of project site soils:

<input checked="" type="checkbox"/> Well Drained:	_____	35 % of site
<input checked="" type="checkbox"/> Moderately Well Drained:	_____	11 % of site
<input checked="" type="checkbox"/> Poorly Drained	_____	54 % of site

f. Approximate proportion of proposed action site with slopes:

<input checked="" type="checkbox"/> 0-10%:	_____	73 % of site
<input checked="" type="checkbox"/> 10-15%:	_____	15 % of site
<input checked="" type="checkbox"/> 15% or greater:	_____	12 % of site

g. Are there any unique geologic features on the project site? Yes No
 If Yes, describe: _____

h. Surface water features.

i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)? Yes No

ii. Do any wetlands or other waterbodies adjoin the project site? Yes No
 If Yes to either *i* or *ii*, continue. If No, skip to E.2.i.

iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency? Yes No

iv. For each identified regulated wetland and waterbody on the project site, provide the following information:

- Streams: Name _____ Classification _____
- Lakes or Ponds: Name _____ Classification _____
- Wetlands: Name Federal Waters, NYS Wetland, Federal Waters Approximate Size NYS Wetland (in a...)
- Wetland No. (if regulated by DEC) F-26 _____

v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies? Yes No
 If yes, name of impaired water body/bodies and basis for listing as impaired: _____

i. Is the project site in a designated Floodway? Yes No

j. Is the project site in the 100-year Floodplain? Yes No

k. Is the project site in the 500-year Floodplain? Yes No

l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? Yes No
 If Yes:
 i. Name of aquifer: _____

m. Identify the predominant wildlife species that occupy or use the project site: Fauna typical to northeast forest and wetlands. _____ _____	_____ _____
n. Does the project site contain a designated significant natural community? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes:	
i. Describe the habitat/community (composition, function, and basis for designation): _____ _____	
ii. Source(s) of description or evaluation: _____	
iii. Extent of community/habitat:	
<ul style="list-style-type: none"> • Currently: _____ acres • Following completion of project as proposed: _____ acres • Gain or loss (indicate + or -): _____ acres 	
o. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes:	
i. Species and listing (endangered or threatened): _____ Northern Long-eared Bat _____	
p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes:	
i. Species and listing: _____ _____	
q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, give a brief description of how the proposed action may affect that use: _____ _____	
E.3. Designated Public Resources On or Near Project Site	
a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, provide county plus district name/number: _____	
b. Are agricultural lands consisting of highly productive soils present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No i. If Yes: acreage(s) on project site? _____ ii. Source(s) of soil rating(s): _____	
c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes:	
i. Nature of the natural landmark: <input type="checkbox"/> Biological Community <input type="checkbox"/> Geological Feature ii. Provide brief description of landmark, including values behind designation and approximate size/extent: _____ _____	
d. Is the project site located in or does it adjoin a state listed Critical Environmental Area? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes:	
i. CEA name: <u>Baldwin Place Area</u> ii. Basis for designation: <u>Difficulties w/ portable water source</u> iii. Designating agency and date: <u>Agency: Somers, Town of, Date: 9-26-90</u>	

e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If Yes:	
<i>i.</i> Nature of historic/archaeological resource: <input type="checkbox"/> Archaeological Site <input type="checkbox"/> Historic Building or District	
<i>ii.</i> Name: _____	
<i>iii.</i> Brief description of attributes on which listing is based: _____	
f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
g. Have additional archaeological or historic site(s) or resources been identified on the project site?	
If Yes:	
<i>i.</i> Describe possible resource(s): _____	
<i>ii.</i> Basis for identification: _____	
h. Is the project site within five miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If Yes:	
<i>i.</i> Identify resource: <u>Empire Trail</u>	
<i>ii.</i> Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): <u>State Trail</u>	
<i>iii.</i> Distance between project and resource: _____ <u>0</u> miles.	
i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If Yes:	
<i>i.</i> Identify the name of the river and its designation: _____	
<i>ii.</i> Is the activity consistent with development restrictions contained in 6NYCRR Part 666?	
<input type="checkbox"/> Yes <input type="checkbox"/> No	

F. Additional Information

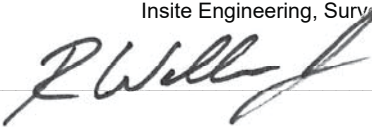
Attach any additional information which may be needed to clarify your project.

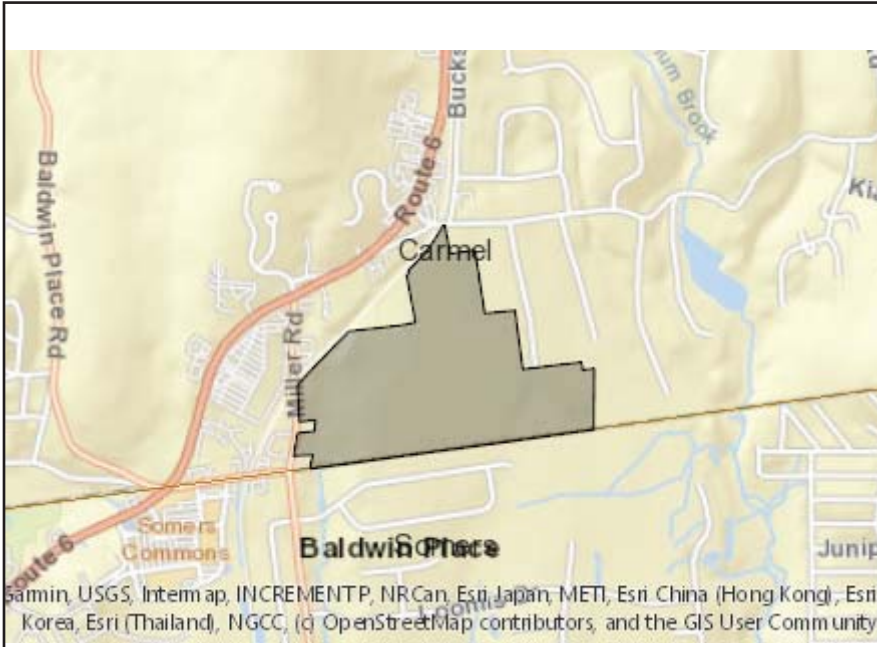
If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

G. Verification

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

Applicant/Sponsor Name Richard D. Williams, Jr, P.E. Date revised 1/29/24
Insite Engineering, Surveying & Landscape Architecture, P.C.

Signature  Title Senior Principal Engineer

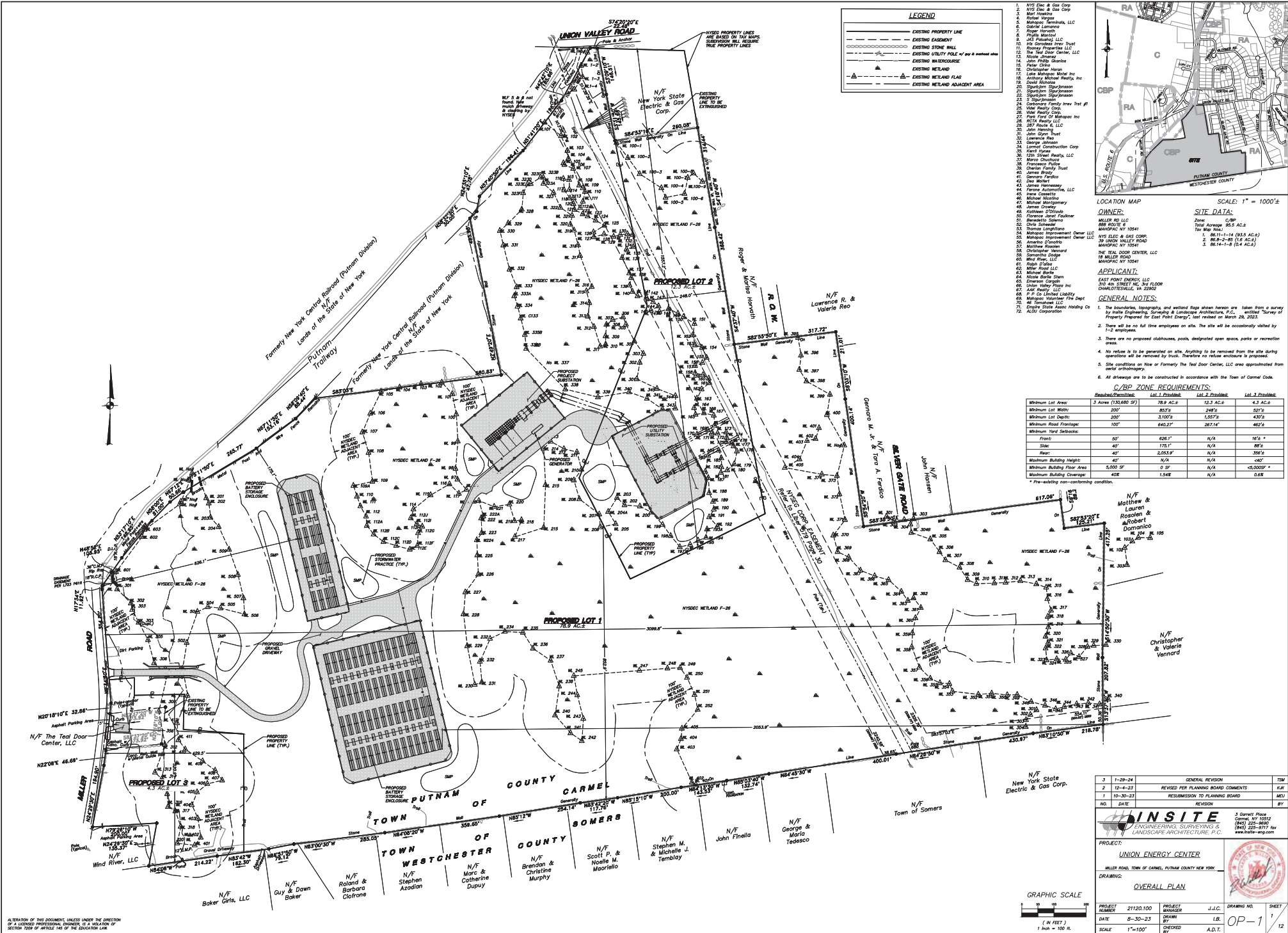


Disclaimer: The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the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



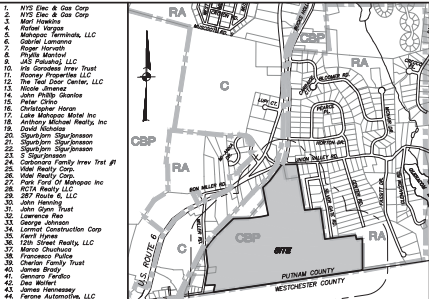
B.i.i [Coastal or Waterfront Area]	No
B.i.ii [Local Waterfront Revitalization Area]	No
C.2.b. [Special Planning District]	Yes - Digital mapping data are not available for all Special Planning Districts. Refer to EAF Workbook.
C.2.b. [Special Planning District - Name]	NYC Watershed Boundary
E.1.h [DEC Spills or Remediation Site - Potential Contamination History]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Listed]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Environmental Site Remediation Database]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.iii [Within 2,000' of DEC Remediation Site]	Yes
E.1.h.iii [Within 2,000' of DEC Remediation Site - DEC ID]	360023
E.2.g [Unique Geologic Features]	No
E.2.h.i [Surface Water Features]	Yes
E.2.h.ii [Surface Water Features]	Yes
E.2.h.iii [Surface Water Features]	Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook.
E.2.h.iv [Surface Water Features - Wetlands Name]	Federal Waters, NYS Wetland
E.2.h.iv [Surface Water Features - Wetlands Size]	NYS Wetland (in acres):322.1, NYS Wetland (in acres):42.8
E.2.h.iv [Surface Water Features - DEC Wetlands Number]	F-26
E.2.h.v [Impaired Water Bodies]	No

E.2.i. [Floodway]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.2.j. [100 Year Floodplain]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.2.k. [500 Year Floodplain]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.2.l. [Aquifers]	No
E.2.n. [Natural Communities]	No
E.2.o. [Endangered or Threatened Species]	Yes
E.2.o. [Endangered or Threatened Species - Name]	Northern Long-eared Bat
E.2.p. [Rare Plants or Animals]	No
E.3.a. [Agricultural District]	No
E.3.c. [National Natural Landmark]	No
E.3.d [Critical Environmental Area]	Yes
E.3.d [Critical Environmental Area - Name]	Baldwin Place Area
E.3.d.ii [Critical Environmental Area - Reason]	Difficulties w/ portable water source
E.3.d.iii [Critical Environmental Area – Date and Agency]	Agency:Somers, Town of, Date:9-26-90
E.3.e. [National or State Register of Historic Places or State Eligible Sites]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.3.f. [Archeological Sites]	Yes
E.3.i. [Designated River Corridor]	No



LEGEND

- EXISTING PROPERTY LINE
- EXISTING EASEMENT
- EXISTING STONE WALL
- EXISTING WATERCOURSE
- EXISTING UTILITY POLE W/ 6" OR LARGER CABLE
- EXISTING WETLAND
- EXISTING WETLAND FLAG
- EXISTING WETLAND ADJACENT AREA



LOCATION MAP SCALE: 1" = 1000'

OWNER: MILLER RD LLC
DATE: 08/11/2021
PROJECT: NYS ELE & GAS CORP
ADDRESS: 18 MILLER ROAD, MARIETTA NY 10541

APPLICANT: EAST POINT ENERGY, LLC
 113 W STREET, 3RD FLOOR, CHARLOTTE, VA 22902

SITE DATA:

Zone:	C/BP
Total Average AC:	95.5 AC
Per Map:	1. 86.11-14 (83.3 AC)
	2. 86.8-89 (14 AC)
	3. 86.14-18 (84 AC)

- GENERAL NOTES:**
- The boundaries, topography, and wetland flags shown herein are taken from a survey by Insite Engineering, Surveying & Landscape Architecture, P.C., entitled "Survey of Property Prepared for East Point Energy", last revised on March 29, 2021.
 - There will be no full time employees on site. The site will be occasionally visited by 1-2 employees.
 - There are no proposed clubhouses, pools, designated open spaces, parks or recreation areas.
 - No refuse is to be generated on site. Anything to be removed from the site during operations will be removed by truck. Therefore no refuse enclosure is proposed.
 - Site conditions on site or formerly the Teal Door Center, LLC are approximated from aerial orthophotography.
 - All setbacks are to be constructed in accordance with the Town of Carmel Code.

C/BP ZONE REQUIREMENTS:

Requirement	Lot 1 (76.9 AC)	Lot 2 (72.3 AC)	Lot 3 (15.3 AC)	
Minimum Lot Area	3 Acres (130,680 SF)	78.9 AC.8	12.3 AC.8	4.3 AC.8
Minimum Lot Width	200'	83.3'	244'	521'
Minimum Lot Depth	200'	3,100.3'	1,557.2'	432.3'
Minimum Road Frontage	100'	845.27'	287.14'	462.5'
Minimum Yard Setback	50'	626.1'	N/A	175.1'
Front:	40'	178.1'	N/A	88.8'
Side:	40'	2,053.8'	N/A	356.2'
Rear:	40'	N/A	N/A	400'
Minimum Building Height	5,000.0'	0.0'	N/A	<5,000.0'
Minimum Building Footprint	0.0 SF	N/A	N/A	<5,000.0 SF
Maximum Building Coverage	40%	1.54%	N/A	0.6%

* Pre-existing non-conforming condition.

3	1-29-24	GENERAL REVISION	TSW
2	12-6-23	REVISED PER PLANNING BOARD COMMENTS	KJR
1	10-30-23	RESUBMISSION TO PLANNING BOARD	MEL
NO.	DATE	REVISION	BY

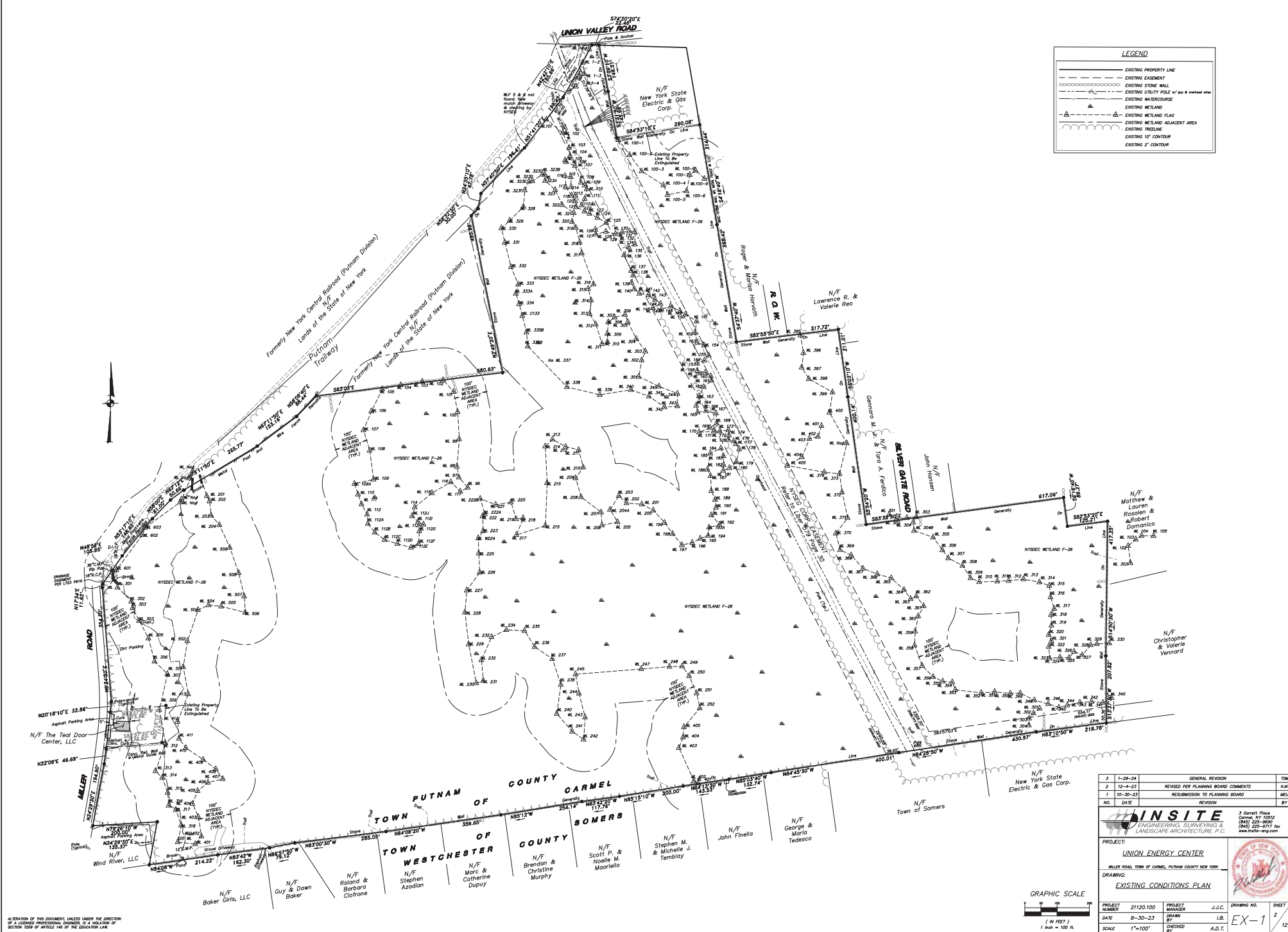
INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.

PROJECT: UNION ENERGY CENTER
 MILLER ROAD, TOWN OF CARMEL, PUTNAM COUNTY, NEW YORK

DRAWING: **OVERALL PLAN**

PROJECT NUMBER: 21120.100 PROJECT MANAGER: J.J.C. DRAWING NO.: SHEET
 DATE: 8-30-23 DRAWN: J.B. CHECKED: OP-1
 SCALE: 1"=100' BY: A.D.T.

ALL INFORMATION ON THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 1009 OF ARTICLE 146 OF THE EDUCATION LAW.



LEGEND

---	EXISTING PROPERTY LINE
- - -	EXISTING EASEMENT
-----	EXISTING STONE WALL
-----	EXISTING UTILITY POLE W/ WY & INSTALLED WIRE
-----	EXISTING WATERCOURSE
-----	EXISTING WETLAND
-----	EXISTING WETLAND FLAG
-----	EXISTING WETLAND ADJACENT AREA
-----	EXISTING TIELINE
-----	EXISTING 1" CONTOUR
-----	EXISTING 2" CONTOUR

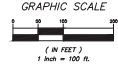


3	1-29-24	GENERAL REVISION	TSW
2	12-6-23	REVISED PER PLANNING BOARD COMMENTS	KJR
1	10-30-23	RESPONSE TO PLANNING BOARD	MEL
NO.	DATE	REVISION	BY

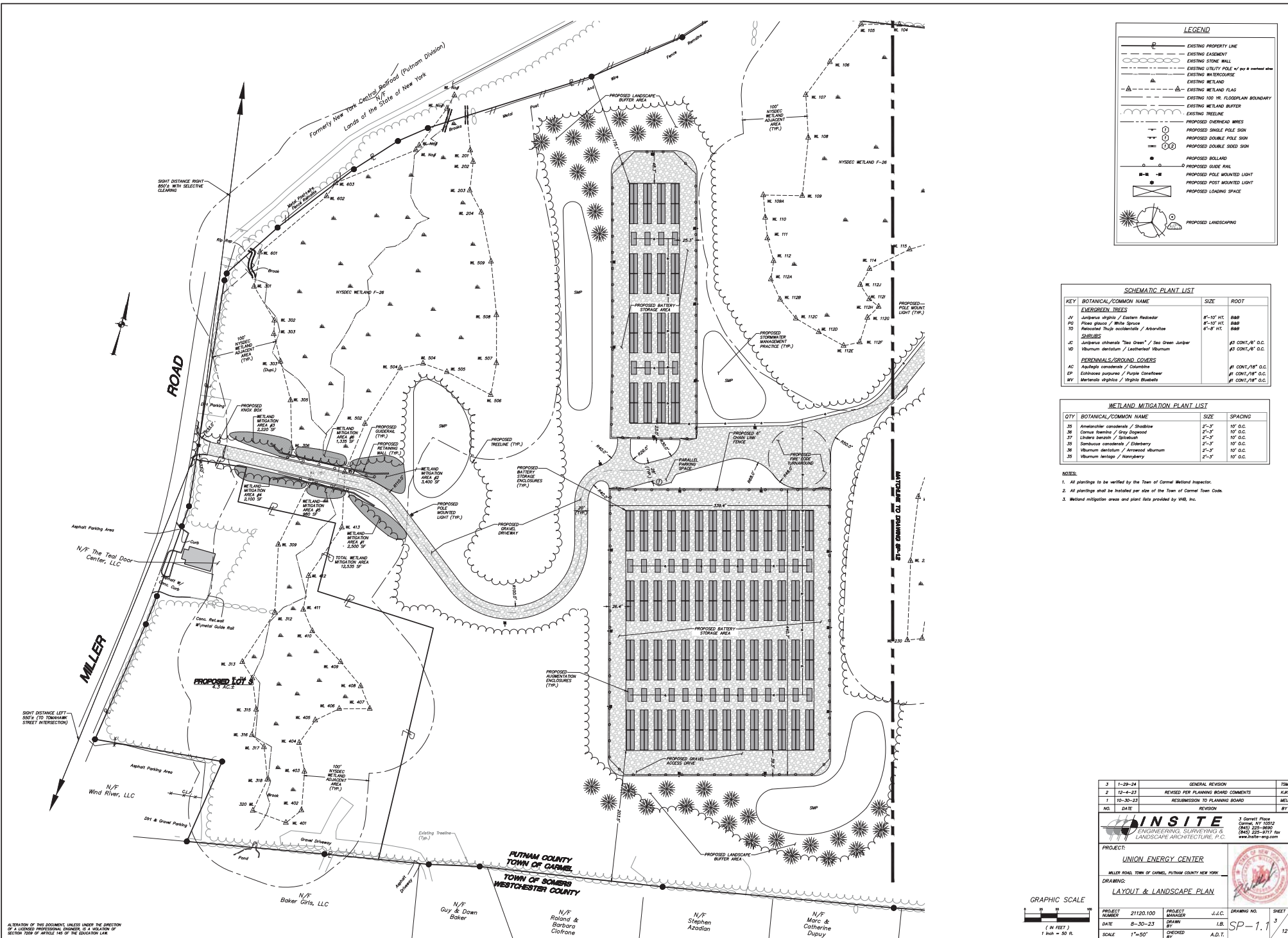
INSITE
ENGINEERING, SURVEYING &
LANDSCAPE ARCHITECTURE, P.C.

3 Carroll Place
Carmel, NY 10512
(845) 225-8997
www.insite-arg.com

PROJECT:		UNION ENERGY CENTER	
DRAWING:		EXISTING CONDITIONS PLAN	
PROJECT NUMBER	21205.100	PROJECT MANAGER	J.J.C.
DATE	8-30-23	DRAWN	J.B.
SCALE	1"=100'	CHECKED BY	A.D.T.



ALL INFORMATION ON THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 2009 OF ARTICLE 146 OF THE EDUCATION LAW.



LEGEND

- EXISTING PROPERTY LINE
- - - EXISTING EASEMENT
- EXISTING STONE WALL
- - - EXISTING UTILITY POLE w/ # & overhead wires
- - - EXISTING WATERCOURSE
- - - EXISTING WETLAND
- - - EXISTING WETLAND FLAG
- - - EXISTING 100 YR. FLOODPLAIN BOUNDARY
- - - EXISTING WETLAND BUFFER
- - - EXISTING TREELINE
- PROPOSED OVERHEAD WIRES
- PROPOSED SINGLE POLE SIGN
- PROPOSED DOUBLE POLE SIGN
- PROPOSED DOUBLE SIDED SIGN
- PROPOSED BOLLARD
- PROPOSED GUAGE RAIL
- PROPOSED POLE MOUNTED LIGHT
- PROPOSED POST MOUNTED LIGHT
- PROPOSED LOADING SPACE
- PROPOSED LANDSCAPING

SCHEMATIC PLANT LIST

KEY	BOTANICAL/COMMON NAME	SIZE	ROOT
EMERGENCY TREES			
J1	Juniperus virginiana / Eastern Redcedar	6'-10' HT.	B&B
FS	Pinus strobus / White Spruce	6'-10' HT.	B&B
TD	Thuja occidentalis / Arborvitae	6'-8' HT.	B&B
SHRUBS			
JC	Juniperus chinensis "Sea Green" / Sea Green Juniper	#3 CONT./8' O.C.	
VB	Viburnum dentatum / Lacebarked Viburnum	#3 CONT./8' O.C.	
PERENNIALS/GROUND COVERS			
AC	Asarum canadense / Canadian Snakeroot	#1 CONT./18" O.C.	
EP	Echinacea purpurea / Purple Coneflower	#1 CONT./18" O.C.	
MY	Mertensia virginica / Virginia Bluebells	#1 CONT./18" O.C.	

WETLAND MITIGATION PLANT LIST

QTY	BOTANICAL/COMMON NAME	SIZE	SPACING
33	Asterionia canadensis / Shadbush	2'-3"	10' O.C.
36	Cornus racemosa / Gray Dogwood	2'-3"	10' O.C.
37	Lonicera canadensis / Shadblow	2'-3"	10' O.C.
38	Sambucus canadensis / Elderberry	2'-3"	10' O.C.
36	Viburnum dentatum / Arched Viburnum	2'-3"	10' O.C.
35	Viburnum lentago / Honeysuckle	2'-3"	10' O.C.

- NOTES:**
- All plantings to be verified by the Town of Carmel Natural Inspector.
 - All plantings shall be installed per size of the Town of Carmel Tree Code.
 - Wetland mitigation areas and plant data provided by W&E, Inc.

3	1-29-24	GENERAL REVISION	TSM
2	12-6-23	REVISED PER PLANNING BOARD COMMENTS	KJR
1	10-30-23	RESUBMISSION TO PLANNING BOARD	MEL
NO.	DATE	REVISION	BY

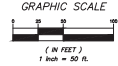
INSITE
ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.

3 Carroll Place
Carmel, NY 12012
(845) 225-8997
(845) 225-8997 fax
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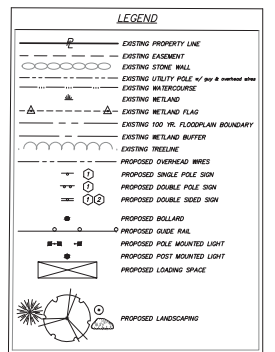
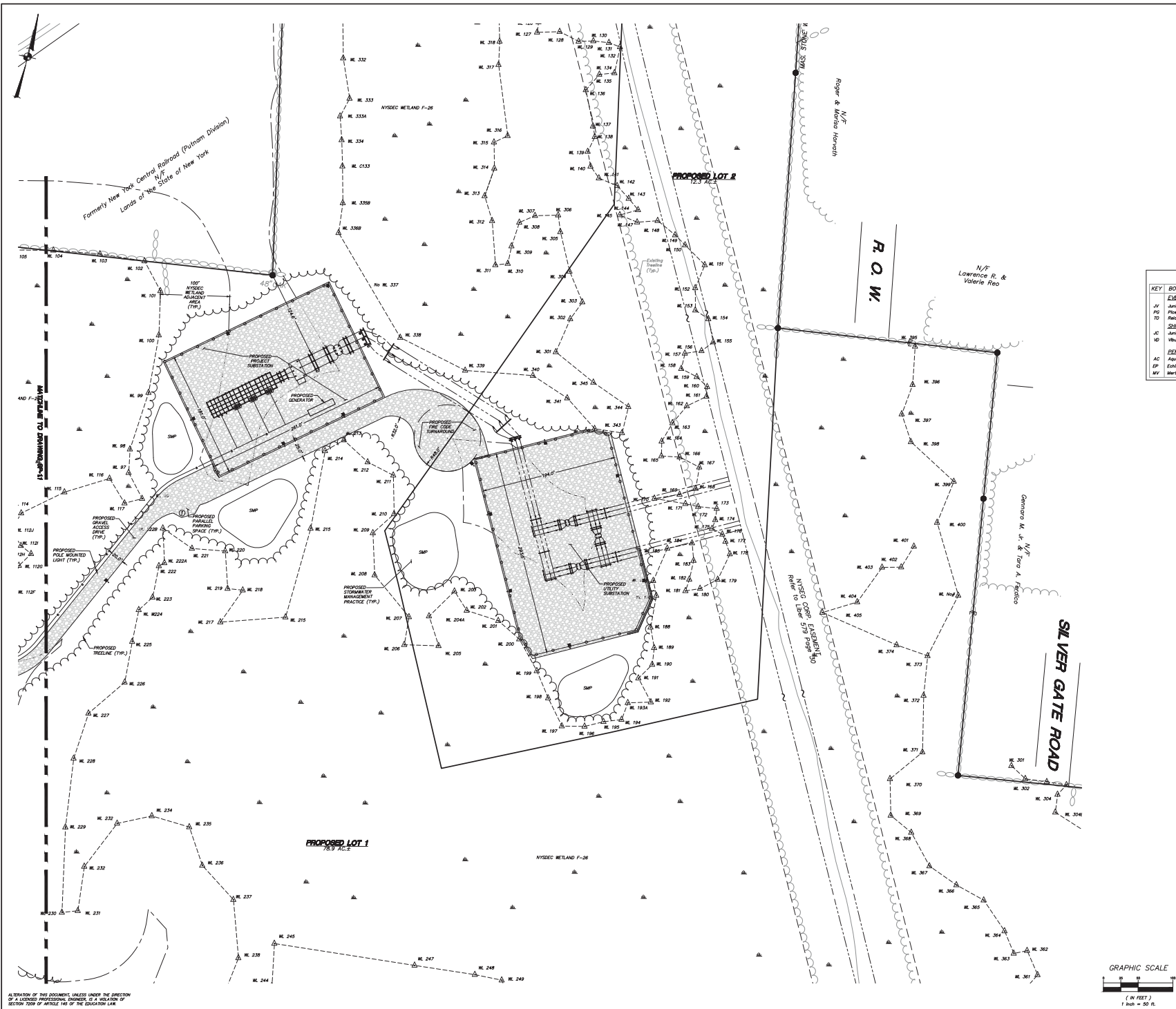
PROJECT: **UNION ENERGY CENTER**
MILLER ROAD, TOWN OF CARMEL, PUTNAM COUNTY NEW YORK

DRAWING: **LAYOUT & LANDSCAPE PLAN**

PROJECT NUMBER: 21120.100 PROJECT MANAGER: J.J.C. DRAWING NO.: SHEET
DATE: 8-30-23 DRAWN BY: J.B. CHECKED BY: SP-1.1
SCALE: 1"=50' A.D.T. 3 12



ALLOCATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 1009 OF ARTICLE 146 OF THE EDUCATION LAW.



SCHEMATIC PLANT LIST

KEY	BOTANICAL/Common NAME	SIZE	ROOT
EVERGREEN TREES			
JV	Japanese Yew / Eastern Redcedar	8'-10' HT.	B&B
PG	Pine glauca / White Spruce	8'-10' HT.	B&B
TD	Redwood Thuja occidentalis / Arborvitae	6'-8' HT.	B&B
SHRUBS			
VC	Japanese alternate "Sea Green" / Sea Green Juniper	#3 CONT./18" G.C.	
WD	Wiburnum dentatum / Leatherleaf Viburnum	#1 CONT./18" G.C.	
PERENNIALS/GROUND COVERS			
AC	Aquilegia canadensis / Columbine	#1 CONT./18" G.C.	
EP	Echinacea purpurea / Purple Coneflower	#1 CONT./18" G.C.	
MY	Mercurialis virginica / Virginia Bluebell	#1 CONT./18" G.C.	

3	1-29-24	GENERAL REVISION	TSM
2	12-6-23	REVISED PER PLANNING BOARD COMMENTS	KJR
1	10-30-23	RESUBMITTED TO PLANNING BOARD	MEL
NO.	DATE	REVISION	BY

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LANDSCAPE ARCHITECTURE, P.C.

3 Corbett Plaza
Carmel, NY 12016
(518) 225-8997
(518) 225-8997 fax
www.insite-arg.com

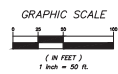
PROJECT:
UNION ENERGY CENTER
SILVER GATE ROAD, TOWN OF CARMEL, PUTNAM COUNTY NEW YORK

DRAWING:
LAYOUT & LANDSCAPE PLAN

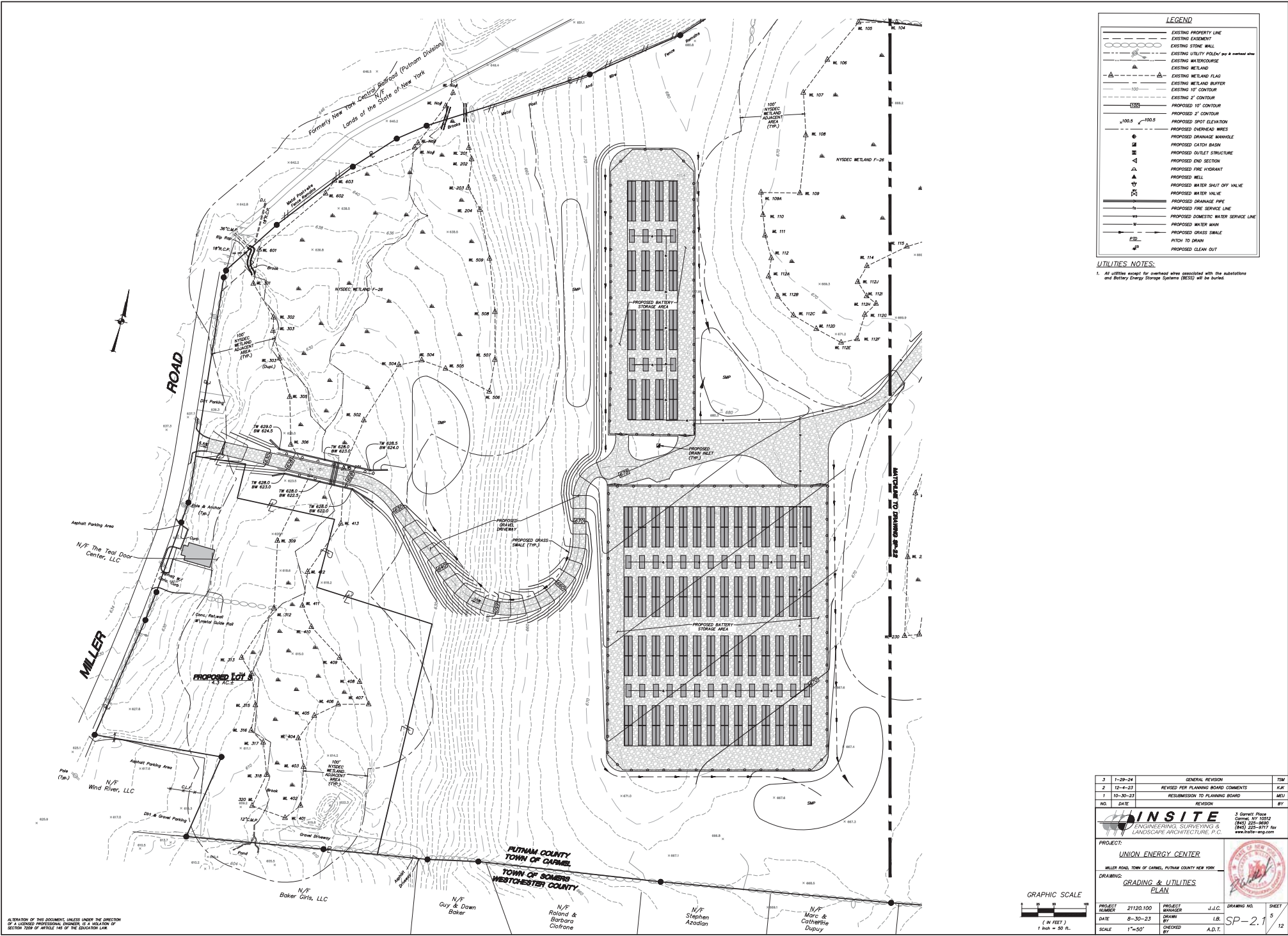
PROJECT NUMBER: 21120-100
DATE: 8-30-23
SCALE: 1"=50'

PROJECT MANAGER: J.J.C.
DRAWN BY: J.L.B.
CHECKED BY: A.D.T.

DRAWING NO. SHEET
SP-1.2 4 12



ALLOCATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 2009 OF ARTICLE 146 OF THE EDUCATION LAW.



LEGEND

	EXISTING PROPERTY LINE
	EXISTING EASEMENT
	EXISTING STONE WALL
	EXISTING UTILITY POLE/ W/ & conduct wire
	EXISTING WATERCOURSE
	EXISTING WETLAND
	EXISTING WETLAND FLAG
	EXISTING WETLAND BUFFER
	EXISTING 10' CONTOUR
	EXISTING 2' CONTOUR
	PROPOSED 10' CONTOUR
	PROPOSED 2' CONTOUR
	PROPOSED SPOT ELEVATION
	PROPOSED DRAINAGE PIPE
	PROPOSED DRAINAGE MANHOLE
	PROPOSED CATCH BASIN
	PROPOSED OUTLET STRUCTURE
	PROPOSED END SECTION
	PROPOSED FIRE HYDRANT
	PROPOSED FIRE WELL
	PROPOSED WATER SHUT OFF VALVE
	PROPOSED WATER VALVE
	PROPOSED DRAINAGE PIPE
	PROPOSED FIRE SERVICE LINE
	PROPOSED DOMESTIC WATER SERVICE LINE
	PROPOSED WATER MAIN
	PROPOSED GRASS SWALE
	PITCH TO DRAIN
	PROPOSED CLEAN OUT

UTILITIES NOTES:

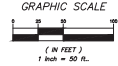
- All utilities except for overhead wires associated with the substations and Battery Energy Storage Systems (BESS) will be buried.

3	1-29-24	GENERAL REVISION	TSM
2	12-4-23	REVISED PER PLANNING BOARD COMMENTS	KJR
1	10-30-23	RESUBMITTING TO PLANNING BOARD	MEL
NO.	DATE	REVISION	BY

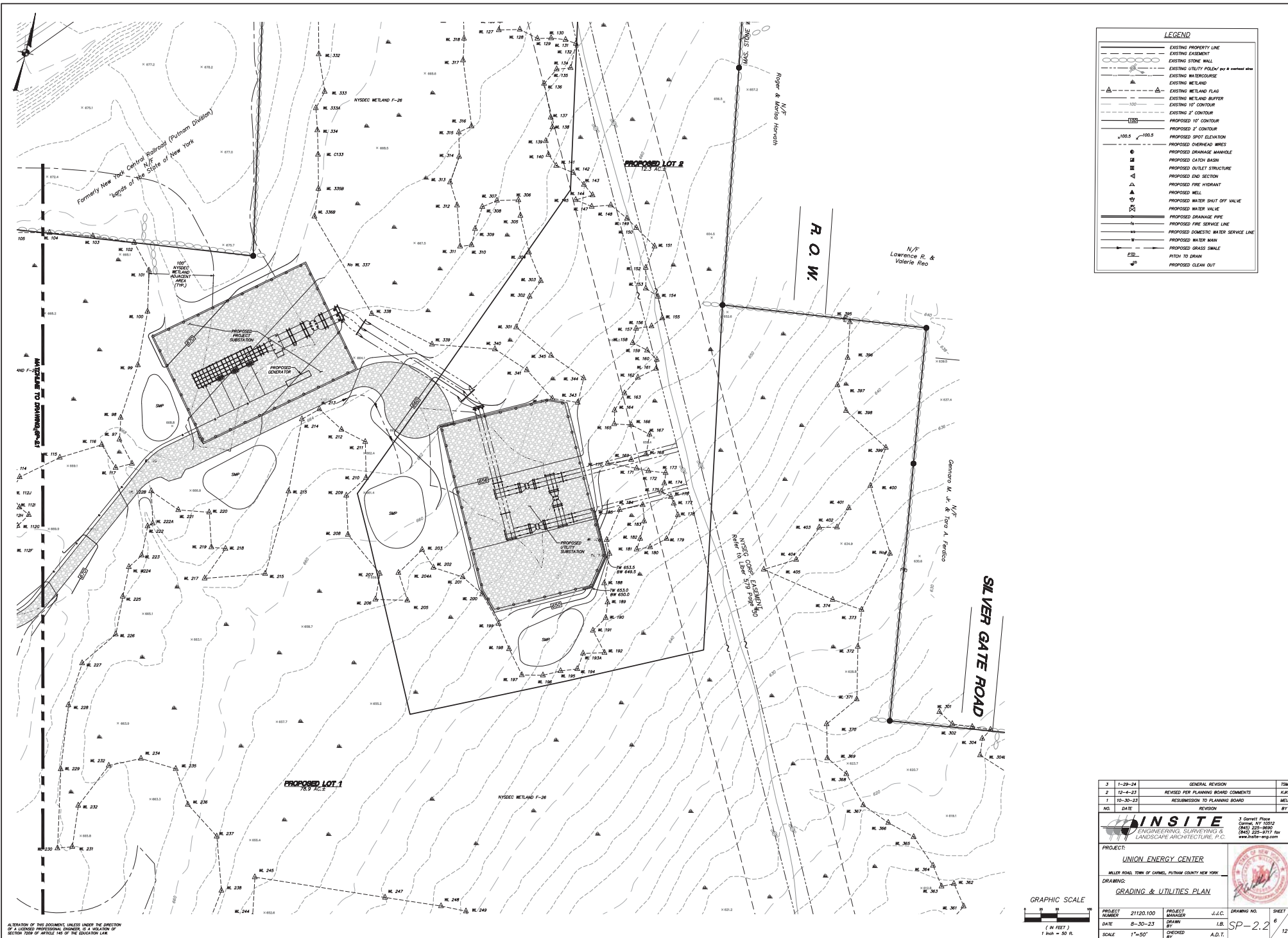
INSITE
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3 Carroll Place
Carmel, NY 12016
(845) 225-8997
(845) 225-8997 fax
www.insite-erg.com

PROJECT: MILLER ROAD, TOWN OF CARMEL, PUTNAM COUNTY NEW YORK			
DRAWING: GRADING & UTILITIES PLAN			
PROJECT NUMBER: 21120.100	J.L.C.	DRAWING NO.	SHEET
DATE: 8-30-23	PROJECT MANAGER	BY: J.L.C.	5
SCALE: 1"=50'	DRAWN BY: J.L.C.	CHECKED BY: A.D.T.	12



ALTERATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 2009 OF ARTICLE 146 OF THE EDUCATION LAW.



LEGEND

- EXISTING PROPERTY LINE
- EXISTING EASEMENT
- EXISTING STONE WALL
- EXISTING UTILITY POLES per & revised area
- EXISTING WATERCOURSE
- EXISTING WETLAND
- EXISTING WETLAND FLAG
- EXISTING WETLAND BUFFER
- EXISTING 10' CONTOUR
- EXISTING 2' CONTOUR
- PROPOSED 10' CONTOUR
- PROPOSED 2' CONTOUR
- PROPOSED SPOT ELEVATION
- PROPOSED OVERHEAD WIRES
- PROPOSED DRAINAGE MANHOLE
- PROPOSED CATCH BASIN
- PROPOSED OUTLET STRUCTURE
- PROPOSED END SECTION
- PROPOSED FINE HYDRANT
- PROPOSED WELL
- PROPOSED WATER SHUT OFF VALVE
- PROPOSED WATER VALVE
- PROPOSED DRAINAGE PIPE
- PROPOSED FINE SERVICE LINE
- PROPOSED DOMESTIC WATER SERVICE LINE
- PROPOSED WATER MAIN
- PROPOSED GRASS SWALE
- PITCH TO DRAIN
- PROPOSED CLEAN OUT

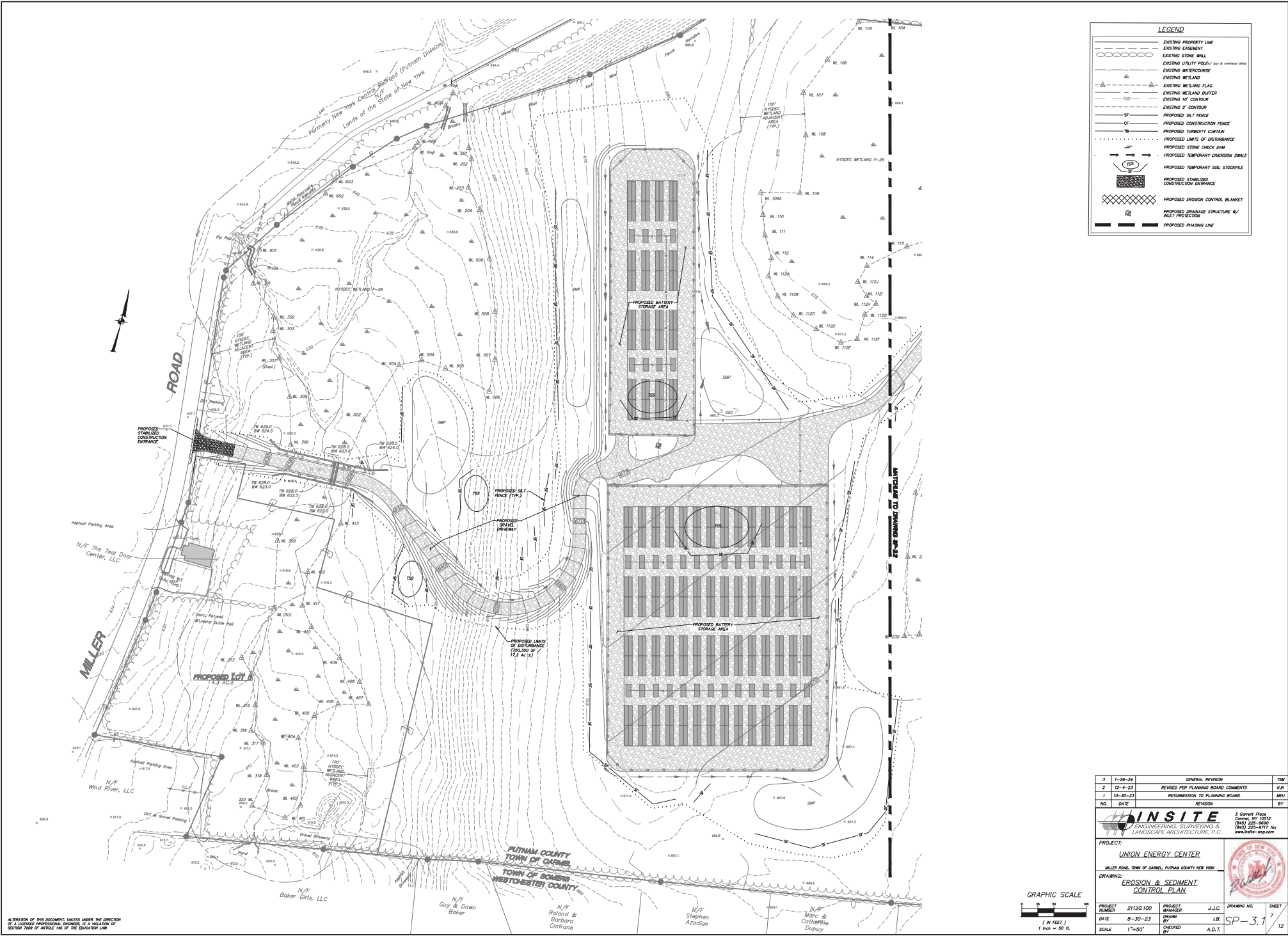
3	1-29-24	GENERAL REVISION	TSM
2	12-6-23	REVISED PER PLANNING BOARD COMMENTS	KJR
1	10-30-23	RESUBMISSION TO PLANNING BOARD	MEL
NO.	DATE	REVISION	BY

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LANDSCAPE ARCHITECTURE, P.C.

3 Corbett Plaza
Camden, NJ 08102
(856) 225-8997
(856) 225-8997 fax
www.insite-arg.com

PROJECT: UNION ENERGY CENTER			
DRAWING: GRADING & UTILITIES PLAN			
PROJECT NUMBER 21120.100	PROJECT MANAGER J.J.C.	DRAWING NO. SP-2.2	SHEET 6
DATE 8-30-23	DRAWN BY J.L.B.	CHECKED BY A.D.T.	12
SCALE 1"=50'			

ALLOCATION OF THIS DOCUMENT, UNLESS UNDER THE AEGIS OF AN LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 1309 OF ARTICLE 146 OF THE EDUCATION LAW



LEGEND

- EXISTING PROPERTY LINE
- EXISTING EASEMENT
- EXISTING STONE WALL
- EXISTING UTILITY POLE/PIPE (or 2' overhead wires)
- EXISTING WATERCOURSE
- EXISTING METLAND
- EXISTING METLAND FLAG
- EXISTING METLAND BUFFER
- EXISTING 10' CONTOUR
- EXISTING 2' CONTOUR
- SF PROPOSED SILT FENCE
- CF PROPOSED CONSTRUCTION FENCE
- TF PROPOSED TOWNSHIP CURTAIN
- PROPOSED LIMITS OF DISTURBANCE
- PROPOSED STONE CHECK DAM
- PROPOSED TEMPORARY SOIL STOCKPILE
- PROPOSED TEMPORARY SOIL STOCKPILE
- PROPOSED STABILIZED CONSTRUCTION ENTRANCE
- PROPOSED EROSION CONTROL BLANKET
- PROPOSED DRAINAGE STRUCTURE W/ INLET PROTECTION
- PROPOSED PHASING LINE

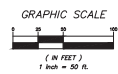
3	1-29-24	GENERAL REVISION	TSM
2	12-6-23	REVISED PER PLANNING BOARD COMMENTS	KJR
1	10-30-23	RESUBMISSION TO PLANNING BOARD	MEL
NO.	DATE	REVISION	BY

		3 Carroll Place Carroll, NY 13012 (845) 225-8997 (845) 225-8997 fax www.insite-erg.com	
PROJECT: UNION ENERGY CENTER MILLER ROAD, TOWN OF GARDEL, PUTNAM COUNTY NEW YORK			
DRAWING: EROSION & SEDIMENT CONTROL PLAN			
PROJECT NUMBER	21120.100	PROJECT MANAGER	J.J.C.
DATE	8-30-23	DRAWN BY	J.L.B.
SCALE	1"=50'	CHECKED BY	A.D.T.
			DRAWING NO. SHEET SP-3.1 7 12

ALLOCATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 2009 OF ARTICLE 146 OF THE EDUCATION LAW.



LEGEND	
	EXISTING PROPERTY LINE
	EXISTING EASEMENT
	EXISTING STONE WALL
	EXISTING UTILITY POLE/ (per 8 overhead wires)
	EXISTING WETCOURSE
	EXISTING WETLAND
	EXISTING WETLAND FLAG
	EXISTING WETLAND BUFFER
	EXISTING 10' CONTOUR
	EXISTING 2' CONTOUR
	PROPOSED SALT FENCE
	PROPOSED CONSTRUCTION FENCE
	PROPOSED TEMPORARY CURTAIN
	PROPOSED LIMITS OF DISTURBANCE
	PROPOSED STONE CHECK DAM
	PROPOSED TEMPORARY DIVERSION SILTALE
	PROPOSED TEMPORARY SOIL STOCKPILE
	PROPOSED STABILIZED CONSTRUCTION ENTRANCE
	PROPOSED EROSION CONTROL BLANKET
	PROPOSED DRAINAGE STRUCTURE W/ INLET PROTECTION
	PROPOSED PHASING LINE



NO.	DATE	REVISION	BY
3	1-29-24	GENERAL REVISION	TSM
2	12-6-23	REVISED PER PLANNING BOARD COMMENTS	KJR
1	10-30-23	RESUBMITTED TO PLANNING BOARD	MEL

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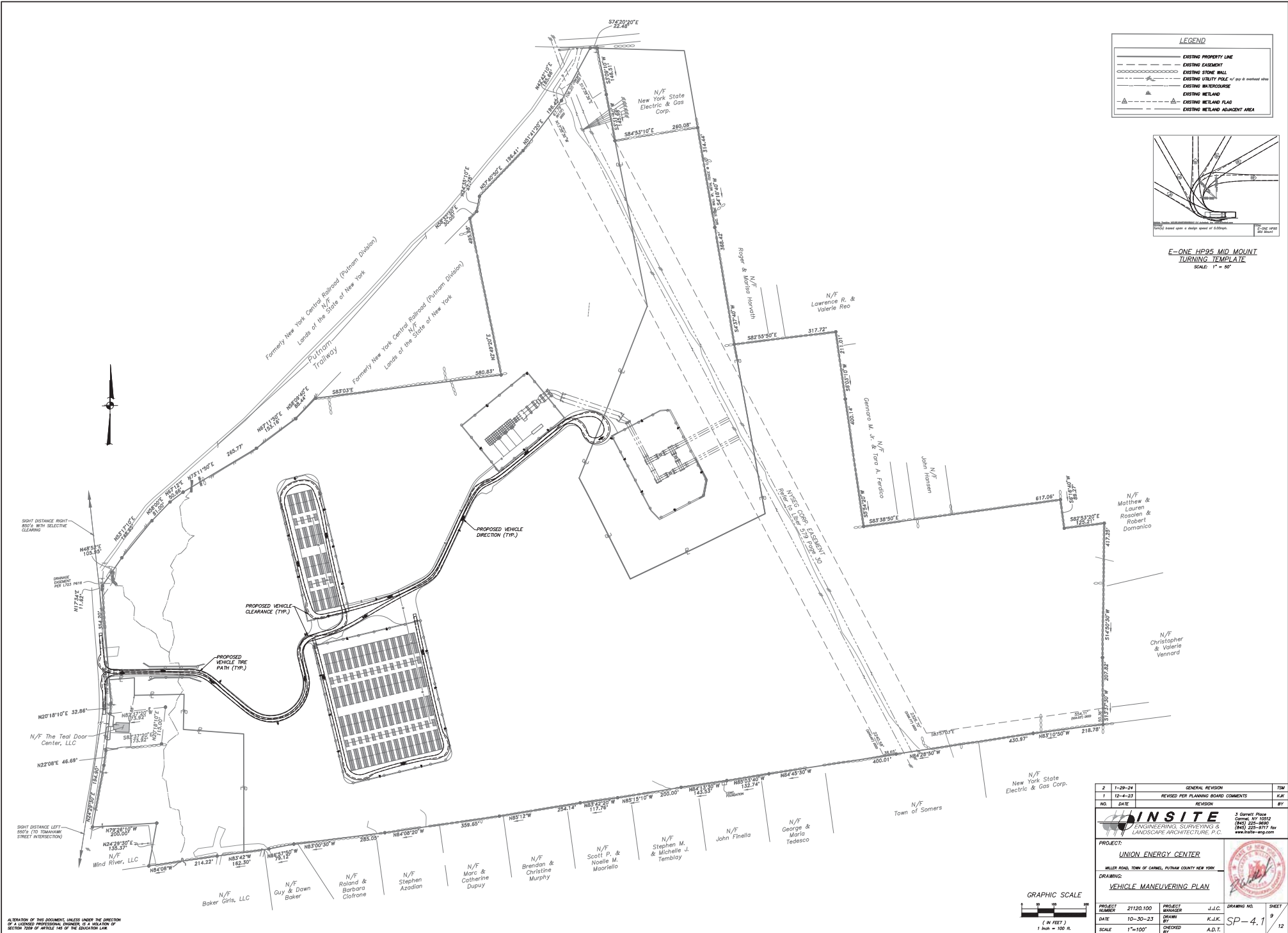
3 Carroll Place
Carmel, NY 12016
(518) 225-8997
(518) 225-8997 fax
www.insite-erg.com

PROJECT: UNION ENERGY CENTER WELLS ROAD, TOWN OF CARMEL, PUTNAM COUNTY NEW YORK			
DRAWING: EROSION & SEDIMENT CONTROL PLAN			
PROJECT NUMBER	2120.100	PROJECT MANAGER	J.J.C.
DATE	8-30-23	DRAWN BY	J.B.
SCALE	1"=50'	CHECKED BY	A.D.T.



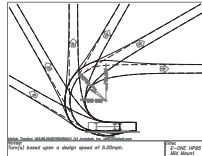
ALLOCATION OF THIS DOCUMENT, UNLESS UNDER THE AEGIS OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 2009 OF ARTICLE 146 OF THE EDUCATION LAW.

SHEET 8 OF 12
SP-3.2



LEGEND

- EXISTING PROPERTY LINE
- - - EXISTING EASEMENT
- ⊘ EXISTING STONE WALL
- ⊘ EXISTING UTILITY POLE w/ guy to adjacent area
- ⊘ EXISTING INTERCOURSE
- △ EXISTING WETLAND
- △ EXISTING WETLAND FLAG
- ⊘ EXISTING WETLAND ADJACENT AREA



E-ONE HQ95 MID MOUNT TURNING TEMPLATE
SCALE: 1" = 50'

ALLOCATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 2009 OF ARTICLE 146 OF THE EDUCATION LAW.

NO.	DATE	REVISION	BY
2	1-29-24	GENERAL REVISION	J.M.
1	12-14-23	REVISED PER PLANNING BOARD COMMENTS	K.J.K.

INSITE
ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.

PROJECT: **UNION ENERGY CENTER**
SHELL ROAD, TOWN OF CARROLL, PUTNAM COUNTY NEW YORKDRAWING: **VEHICLE MANEUVERING PLAN**

PROJECT NUMBER: 21120-100
PROJECT MANAGER: J.J.C.
DATE: 10-30-23
DRAWN BY: K.J.K.
SCALE: 1"=100'
CHECKED BY: A.D.T.

DRAWING NO. **SP-4.1**
SHEET 9 OF 12

LUMINAIRE SCHEDULE						
Sym	Qty	City Catalog Number	Description	Lamp Mounting Height	Notes	
☐	34	RSX2 LED P1 30X R3 EBY	LITHONIX LIGHTING LED POLE MOUNTED LIGHT TYPE 3M DISTRIBUTION	LED	20'-0"	721



- LIGHTING NOTES:**
- All lighting shall be as noted on the plan or approved equat.
 - Style and finish of all luminaires to be selected by owner.
 - Proposed lights will run on motion sensors after hours for security only.
 - Type, location, and quantity of all proposed lighting shall prevent the spill-over of light onto all adjacent residential properties.
 - All light fixtures to be full cutoff to comply with state city guidelines.

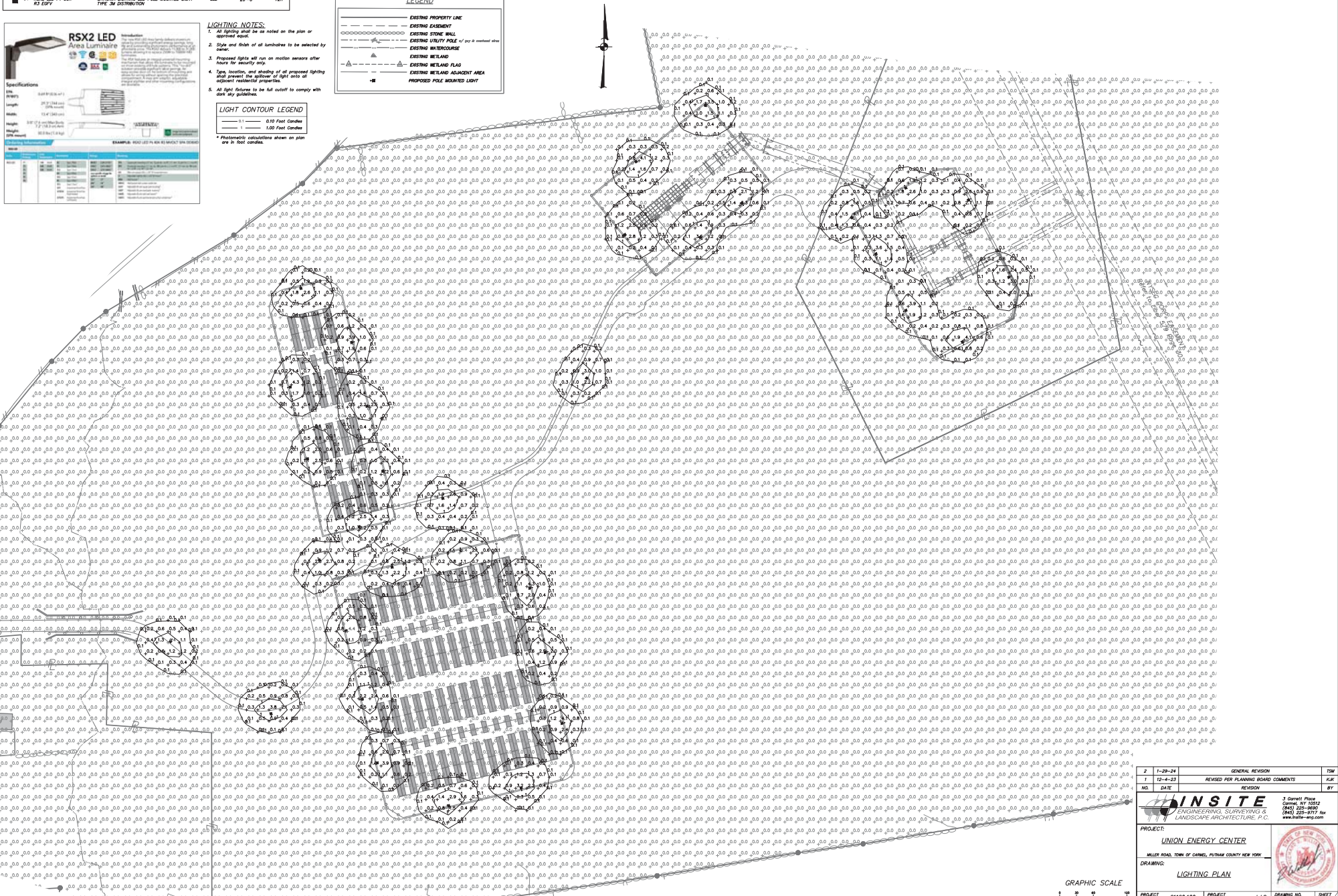
LIGHT CONTOUR LEGEND

—	0.10 Foot Candles
—	1.00 Foot Candles

* Photometric calculations shown on plan are in foot candles.

LEGEND

---	EXISTING PROPERTY LINE
---	EXISTING EASEMENT
---	EXISTING STONE WALL
---	EXISTING UTILITY POLE w/ 30' or less in setback area
---	EXISTING BARRICADE
---	EXISTING WETLAND
---	EXISTING WETLAND FLAG
---	EXISTING WETLAND ADJACENT AREA
---	PROPOSED POLE MOUNTED LIGHT



ALLOCATION OF THE DOCUMENT: UNDER THE PROVISIONS OF A LICENSED PROFESSIONAL ENGINEER, A PORTION OF SECTION 2008 OF ARTICLE 146 OF THE EDUCATION LAW

NO.	DATE	REVISION	BY
2	1-29-24	GENERAL REVISION	J.M.
1	12-4-23	REVISED PER PLANNING BOARD COMMENTS	K.S.T.

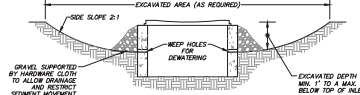
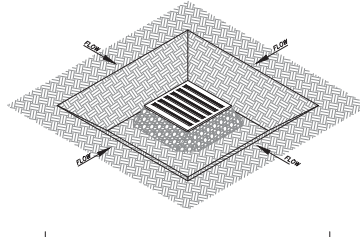
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PROJECT: **UNION ENERGY CENTER**
SULLY ROAD, TOWN OF GARDEL, PUTNAM COUNTY NEW YORK

DRAWING: **LIGHTING PLAN**

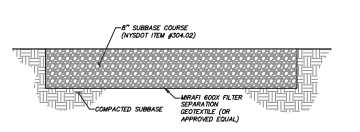
PROJECT NUMBER	21120-100	PROJECT MANAGER	J.J.C.	DRAWING NO.		SHEET	
DATE	10-30-23	DRAWN BY	K.K.K.	CHECKED BY		10	
SCALE	1"=60'		A.D.T.			12	

GRAPHIC SCALE
1" = 60'
(IN FEET)
1 inch = 60 ft.

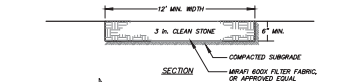


1. CLEAN THE AREA OF ALL RUBBISH THAT WOULD OBSTRUCT DRAINAGE.
2. GRADE APPROACH TO THE INLET UNFORMALLY ABOVE THE EXCAVATION.
3. WEEP HOLES SHALL BE PROTECTED BY GRAVEL.
4. UNIFORM STABILIZATION OF CONTRIBUTING DRAINAGE AREA, SEAL WEEP HOLES TO PREVENT LEAKAGE, PROTECT WEEP HOLES WITH PERMANENT SEEDING, COMPACT T PROPERLY, AND STABILIZE WITH PERMANENT SEEDING.
5. MAXIMUM DRAINAGE AREA = 1 ACRE

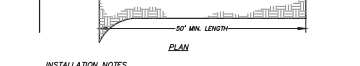
EXCAVATED DROP-INLET PROTECTION DETAIL (N.T.S.)



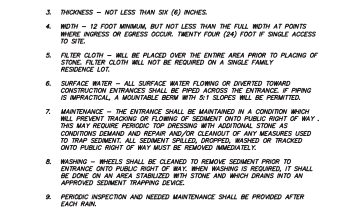
GRAVEL PAVEMENT DETAIL (N.T.S.)



TEMPORARY SOIL STOCKPILE DETAIL (N.T.S.)



STANDARD SILT FENCE DETAIL (N.T.S.)



STABILIZED CONSTRUCTION ACCESS DETAIL (N.T.S.)

INSTALLATION NOTES
1. STONE SIZE - USE 3" STONE
2. LENGTH - AS REQUIRED, BUT NOT LESS THAN 80 FEET EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 20 FOOT MINIMUM LENGTH MINIMUM APPLIES
3. THICKNESS - NOT LESS THAN SIX (6) INCHES
4. WIDTH - 12 FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCUR, TWENTY FOUR (24) FOOT IF SINGLE ACCESS TO SITE
5. FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE. FILTER CLOTH WILL NOT BE REQUIRED ON A SINGLE FAMILY RESIDENCE LOT.
6. SURFACE WEED - ALL SURFACE WATER FLOWING ON EXISTING TOPSOIL CONSTRUCTION ENTRANCES SHALL BE PAVED ACROSS THE ENTRANCE IF PAVING IS IMPRACTICAL, A WEEDABLE BARRIER WITH 5:1 SLOPE SHALL BE PROVIDED.
7. FILTER CLOTH - TO BE MAINTAINED AS A CONDITION WHICH PREVENTS TRACKING OF RUBBISH OR SEDIMENT ONTO PUBLIC RIGHT OF WAY. WEEDS MAY BE REMOVED PERIODICALLY BY HAND OR WITH A PLOW. WHERE NECESSARY, WEEDS MAY BE REMOVED PERIODICALLY BY HAND OR WITH A PLOW. WHERE NECESSARY, WEEDS MAY BE REMOVED PERIODICALLY BY HAND OR WITH A PLOW.
8. WEEDING - WEEDS SHALL BE CLEANED TO REMOVE SEDIMENT FROM ENTRANCE ONTO PUBLIC RIGHT OF WAY. WHEN WEEDING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINAGE IS AN APPROVED SEEDING TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

ALLOCATION OF THIS DOCUMENT UNDER THE SUPERVISION OF A LICENSED PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 205B OF ARTICLE 146 OF THE EDUCATION LAW

EROSION AND SEDIMENT CONTROL MAINTENANCE SCHEDULE

MONITORING REQUIREMENTS	MAINTENANCE REQUIREMENTS				
PRACTICE	DAILY	WEEKLY	AFTER RAINFALL	DURING CONSTRUCTION	AFTER CONSTRUCTION
SILT FENCE BARRIER	Inspect	Inspect	Inspect	Clear/Repair	Remove
STABILIZED CONSTRUCTION ENTRANCE	Inspect	Inspect	Inspect	Clear/Repair/ Stone and Fabric	Remove
JUST CONTROL	Inspect	Inspect	Inspect	Mulching/ Spraying Water	N/A
"RESTORE" ESTABLISHMENT	Inspect	Inspect	Inspect	Water/Re seed/ Reattach	Return to BCC Coverage
INLET PROTECTION	Inspect	Inspect	Inspect	Clear/Repair/ Replace	Remove
SOIL STOCKPILES	Inspect	Inspect	Inspect	Mulching/ Silt Fence Repair	Remove
EMBANKS	Inspect	Inspect	Inspect	Clear/Repair/ Repair	Max Permanent Grass/Plants/ Reattach/ Re-Seed
CHECK DAMS	Inspect	Inspect	Inspect	Clear/Repair/ Stone/Repair	Clear/Repair/ Stone/Repair
CONCRETE DRAINAGE STRUCTURES	Inspect	Inspect	Inspect	Clean/Repair/ Remove/Repair/ Replace	Clean/Repair/ Remove/Repair/ Replace
ROAD & PAVEMENT	Inspect	Inspect	Inspect	Clean	Clean
STORMWATER TRAP/BASIN	Inspect	Inspect	Inspect	Clear/Mulch/ Repair/Re seed	See Permanent Stormwater Facilities Maintenance Schedule on Drawing SF-3.1

Permanent vegetation to be considered established when 80% of the plant density is established. Erosion control measures shall remain in place until all disturbed areas are permanently stabilized. Note: The party responsible for implementation of the maintenance schedule during and after construction is:

East Field Energy, LLC
150 4th Street SE, 2nd floor
Charlotte, NC 28202

and/or the current owner of the subject property.

REQUIRED POST-CONSTRUCTION STORMWATER MANAGEMENT PRACTICE COMPONENTS:

1. Pursuant to the NYCDEC "03ES General Permit for Stormwater Discharges from Construction Activity" (GP-0-30-003), all construction projects receiving post-construction stormwater management practices shall prepare a plan that includes practices designed in accordance with the most current version of the technical standards, New York State Stormwater Management Design Manual ("Design Manual"). Where post-construction stormwater management practices are not designed in accordance with the technical standards, the contractor or operator must demonstrate compliance in accordance with Part II.B.1.7.1 of General Permit GP-0-30-003.
2. All construction activities involving the removal or disposition of soil are to be performed in accordance with the technical standards, New York State Stormwater Management Design Manual ("Design Manual"). Where post-construction stormwater management practices are not designed in accordance with the technical standards, the contractor or operator must demonstrate compliance in accordance with Part II.B.1.7.1 of General Permit GP-0-30-003.
3. Wherever feasible, natural vegetation should be retained and protected. Disturbance shall be minimized in the areas required to perform construction. No more than 5 acres of unexcavated soil shall be exposed at any one time.
4. When land is exposed during development, the exposure shall be to the shortest practical period of time. In the areas where soil disturbance activity has temporarily or permanently ceased, the application of soil stabilization measures shall be initiated by the contractor or operator as soon as possible and completed within areas (7) feet from the site the current soil disturbance activity ceased. Disturbance shall be minimized to the areas required to perform construction.
5. Silt fence shall be installed across the plans prior to beginning any clearing, grading or earthwork.
6. All topsoil to be salvaged from the area being developed shall be stored, and stored in a manner that will ensure the topsoil is protected from erosion and is available for use for the project. Topsoil shall be used for temporary seeding in spring, summer or early fall. Topsoil water (used) may be used for temporary seeding in late fall and winter.
7. Any disturbed areas not subject to further disturbance or construction activity, permanent or temporary, shall have soil stabilization measures initiated for permanent stabilization in accordance with the technical standards. Topsoil shall be stored in a manner that will ensure the topsoil is protected from erosion and is available for use for the project. Topsoil shall be used for temporary seeding in spring, summer or early fall. Topsoil water (used) may be used for temporary seeding in late fall and winter.
8. Flood control shall be kept clear of all sites.
9. The site shall be kept clear of all sites.
10. All stream discharge activities shall be stabilized immediately after grading with Gravel, Gravel and Erosion Control Blanket, or approved equivalent.
11. All stream discharge activities shall be stabilized as required, before the discharge points become operational.
12. Stormwater from disturbed areas must be passed through erosion control barriers before discharge to any stream, ditch, or discharge to other drainage systems.

CONSTRUCTION PRACTICE:

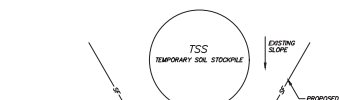
1. Install stabilized construction entrance/silt-trapping pad at driveway entrance.
2. Apply silt fence in general locations indicated on the plans.
3. Begin clearing and grading operations accompanied by an erosion and sediment control plan.
4. Strip and stockpile topsoil on site to later use in lawn and landscape areas.
5. Begin construction of the driveway and entrance areas.
6. Begin construction of the stormwater management practices and construction system.
7. Begin utility installations.
8. Final completion of grading operations, install finished driveway surfaces.
9. Install, seed, and mulch all disturbed areas as soon as practical in accordance with the Erosion and Sediment Control Notes contained on this page.

EROSION & SEDIMENT CONTROL NOTES:

1. The owner's field representative (FFR) shall be responsible for the implementation and maintenance of erosion and sediment control measures on this site prior to and during construction. The FFR shall be responsible for the implementation and maintenance of erosion and sediment control measures on this site prior to and during construction.
2. All construction activities involving the removal or disposition of soil are to be performed in accordance with the technical standards, New York State Stormwater Management Design Manual ("Design Manual"). Where post-construction stormwater management practices are not designed in accordance with the technical standards, the contractor or operator must demonstrate compliance in accordance with Part II.B.1.7.1 of General Permit GP-0-30-003.
3. Wherever feasible, natural vegetation should be retained and protected. Disturbance shall be minimized in the areas required to perform construction. No more than 5 acres of unexcavated soil shall be exposed at any one time.
4. When land is exposed during development, the exposure shall be to the shortest practical period of time. In the areas where soil disturbance activity has temporarily or permanently ceased, the application of soil stabilization measures shall be initiated by the contractor or operator as soon as possible and completed within areas (7) feet from the site the current soil disturbance activity ceased. Disturbance shall be minimized to the areas required to perform construction.
5. Silt fence shall be installed across the plans prior to beginning any clearing, grading or earthwork.
6. All topsoil to be salvaged from the area being developed shall be stored, and stored in a manner that will ensure the topsoil is protected from erosion and is available for use for the project. Topsoil shall be used for temporary seeding in spring, summer or early fall. Topsoil water (used) may be used for temporary seeding in late fall and winter.
7. Any disturbed areas not subject to further disturbance or construction activity, permanent or temporary, shall have soil stabilization measures initiated for permanent stabilization in accordance with the technical standards. Topsoil shall be stored in a manner that will ensure the topsoil is protected from erosion and is available for use for the project. Topsoil shall be used for temporary seeding in spring, summer or early fall. Topsoil water (used) may be used for temporary seeding in late fall and winter.
8. Flood control shall be kept clear of all sites.
9. The site shall be kept clear of all sites.
10. All stream discharge activities shall be stabilized immediately after grading with Gravel, Gravel and Erosion Control Blanket, or approved equivalent.
11. All stream discharge activities shall be stabilized as required, before the discharge points become operational.
12. Stormwater from disturbed areas must be passed through erosion control barriers before discharge to any stream, ditch, or discharge to other drainage systems.

REQUIRED EROSION CONTROL SWPPP CONTENTS:

1. A description of the site to be developed, including the location of all structures, utilities, and other features.
2. A description of the proposed construction activities, including the location of all structures, utilities, and other features.
3. A description of the erosion and sediment control measures to be installed on the site, including the location of all structures, utilities, and other features.
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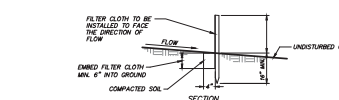
NOTES

1. AREA CHOSEN FOR STOCKPILE LOCATION SHALL BE DRY AND STABLE.
2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 2:1.
3. UNIFORM COMPLETION OF SOIL STOCKPILES, READY FILE SHALL BE IMMEDIATELY SEEDING WITH 3:1 PERMANENT TALL PEGS.
4. ALL STOCKPILES SHALL BE PROTECTED WITH SILT FENCING INSTALLED ON THE DOWNWIND SIDE.

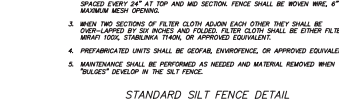
TEMPORARY SOIL STOCKPILE DETAIL (N.T.S.)



PERSPECTIVE VIEW



SECTION



STANDARD SILT FENCE DETAIL (N.T.S.)

CONSTRUCTION NOTES FOR FABRICATED SILT FENCE:

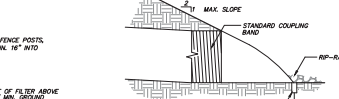
1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL EITHER 1" OR 1 1/2" DIA OR HARDWOOD.
2. FILTER CLOTH TO BE TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 6" MAXIMUM BENCH CROWNING.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED FILTER CLOTH SHALL BE EITHER FILTER X MARIAT 100G, STABILANAKA TRAIL, OR APPROVED EQUIVALENT.
4. PREPARED UNITS SHALL BE GENERAL ENVIRONMENT, OR APPROVED EQUIVALENT.
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "MUDS" DEVELOP IN THE "SOUTH" DIRECTION.



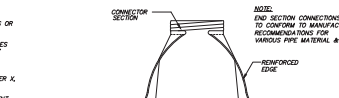
DRAINAGE LINE TRENCH DETAIL (N.T.S.)



RIP RAP SWALE DETAIL (N.T.S.)



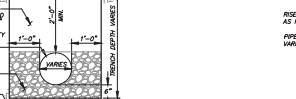
GRASS SWALE DETAIL (N.T.S.)



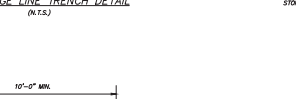
HDPE END SECTION DETAIL (N.T.S.)



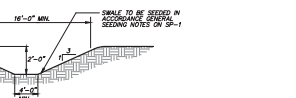
DRAIN INLET DETAIL (N.T.S.)



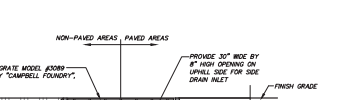
DRAIN INLET DETAIL (N.T.S.)



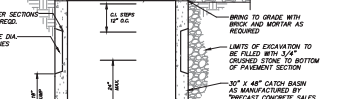
RIP RAP SWALE DETAIL (N.T.S.)



GRASS SWALE DETAIL (N.T.S.)



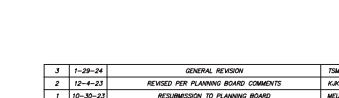
NON-PAVED AREAS, PAVED AREAS DETAIL (N.T.S.)



DRAIN INLET DETAIL (N.T.S.)



RIP RAP SWALE DETAIL (N.T.S.)



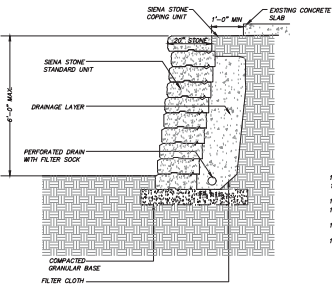
GRASS SWALE DETAIL (N.T.S.)

NO.	DATE	REVISION	BY
1	11-29-24	GENERAL REVISION	TSJ
2	12-02-23	REVISION FOR PLANNING BOARD COMMENTS	KAR
1	10-10-23	REVISIONS TO PLANNING BOARD	MLL

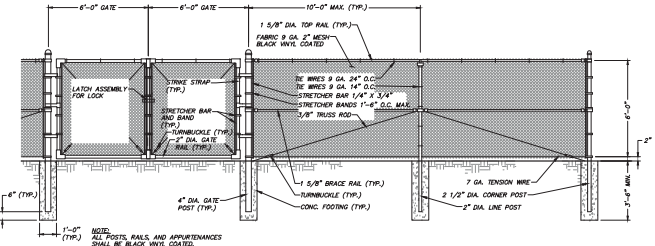
PROJECT: UNION ENERGY CENTER
DRAWING: DETAILS AND NOTES

PROJECT NUMBER	DATE	SCALE	PROJECT MANAGER	DRAWING NO.	SHEET
21120100	8-30-23	NTS	J.L.C.	D-2	12

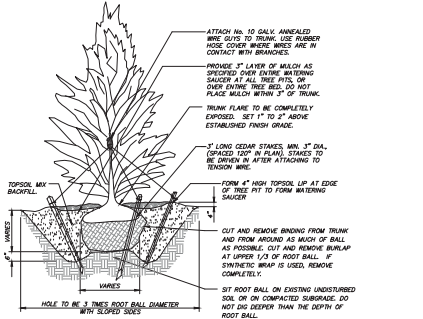




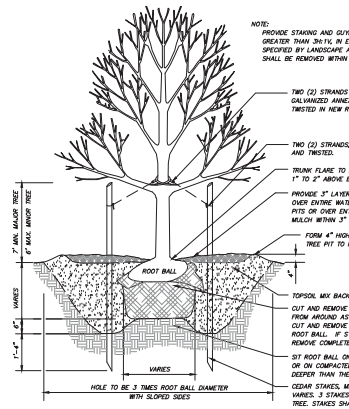
RETAINING WALL DETAIL (N.T.S.)



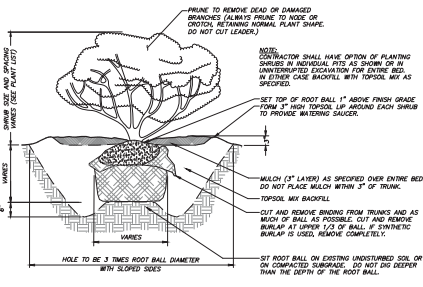
CHAIN LINK FENCE DETAIL (N.T.S.)



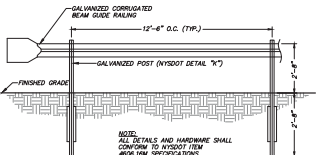
EVERGREEN TREE PLANTING DETAIL (N.T.S.)



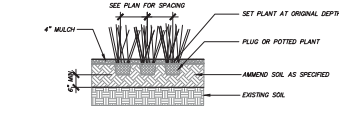
TREE PLANTING DETAIL (N.T.S.)



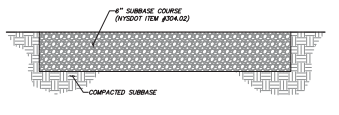
SHRUB PLANTING DETAIL (N.T.S.)



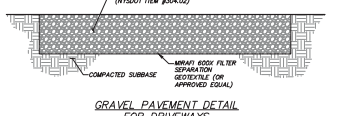
GUIDERAIL DETAIL (N.T.S.)



PERENNIAL / ORNAMENTAL GRASS PLANTING DETAIL (N.T.S.)



GRAVEL PAVEMENT DETAIL FOR ENCLOSURES (N.T.S.)



GRAVEL PAVEMENT DETAIL FOR DRIVEWAYS (N.T.S.)

GENERAL PLANTING NOTES:

- All proposed planting beds to receive a 12" min. depth of topsoil. Soil amendments and fertilizer application rates shall be determined based on specific testing of topsoil material.
- Any new site added will be amended as required by results of soil testing and placed using a method that will not cause compaction.
- No fertilizer shall be added in stormwater basin plantings. Nutrient requirements to be met by incorporation of acceptable organic matter.
- All plant material to be nursery grown.
- Plants shall conform with ANSI 2001 American Standard for Nursery Stock in all uses including dimensions.
- Plant material shall be taken from healthy nursery stock.
- All plants shall be grown under climate conditions similar to those in the locality of the project.
- Plants shall be oriented in all locations designed on the plan or as stated in the field by the Landscape Architect.
- The location and layout of landscape plants shown on the site plan shall take precedence in any discrepancies between the quantities of plants shown on the plans and the quantity of plants in the Plant List.
- Provide a 2" layer of shredded pine bark mulch (or an equivalent low volatile wetting saucer) of all new pits or new shrub planting beds. Do not place mulch within 2" of tree or shrub trunk.
- All landscape plantings shall be installed in a healthy condition at all times. Any dead or diseased plants shall be immediately replaced "in kind" by the contractor (during warranty period) at project owner's expense.

GENERAL SITE SEEDING NOTES:

- 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 material.
- For temporary stabilization, apply annual ryegrass (Latin name: Lolium perenne) at 30 lbs./acre.
- Upon final grading and placement of topsoil and any required soil amendments, areas to receive permanent vegetation cover in conjunction with sods shall be as follows:
 - select seed mixture per drawings and seeding rates;
 - fertilizer applied at the manufacturer's recommended rate using Leaso;
 - 10-10-10 (no phosphorus) fertilizer or equivalent;
 - mulch - well hay or straw or other straw applied at a rate of 90 lbs./1000 sq. ft. or 2 tons/acre to be applied and anchored according to New York State Standards and Specifications for Gravel and Stabilization Materials, Section 810-3.03.04.
 - If the season prevents the establishment of a permanent vegetation cover, the disturbed areas will be mulched with straw or equivalent.
- Seed Mix #1 for areas as shown on the drawings, including tops of berms, backfills of embankments of stormwater basins, & any area to be seeded within the NYSDOT Right-of-Way Adjacent Area, at a rate of 20 lbs. per acre. 20% annual ryegrass (Latin name: Lolium perenne sp.), and 70% New England Conservatory/Walpole Mix from New England Wetland Plants, Inc. of Amherst, MA.
- Seed Mix #2 for areas as shown on the drawings in stormwater basins with no standing water at a rate of 18 lbs. per acre: Grasses: Colonial/Prairie Mix from Dominion Botanic and Moist Sites from New England Wetland Plants, Inc. of Amherst, MA.
- Seed Mix #3 for all other disturbed areas not specified as seed mix #1 or #2. Primary Seeding Rate: 20% Annual Ryegrass 20% Cynodon Dactylon 20% Cynodon Dactylon 20% Annual Ryegrass.

- Seed mixes to be planted between March 21 and May 20, or between August 15 and October 15 or as directed by project representative.
- Method: Soil prep for small grasses shall be at a rate of 90 lbs./1000 sq. ft. or 2 tons/acre. To be applied and anchored according to New York Standards and Specifications For Gravel and Stabilization Materials, latest edition.
- Grass seed mix may be applied by either mechanical or hand-seeding methods. Seeding shall be performed in accordance with the current edition of the NYSDOT Standard Specifications for Construction Materials, Section 810-3.03.04. Method No. 1. Hydroseeding shall be performed using materials and methods as approved by the site engineer.

ALLOCATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 1009 OF ARTICLE 148 OF THE EDUCATION LAW.

NO.	DATE	REVISION	BY
3	1-29-24	GENERAL REVISION	TSM
2	12-6-23	REVISED PER PLANNING BOARD COMMENTS	KJR
1	10-30-23	RESUBMISSION TO PLANNING BOARD	MEL
		REVISION	BY

		3 Current Phone Contact by 15512 (845) 225-8997 (845) 225-8997 www.insite-arg.com
PROJECT: UNION ENERGY CENTER MILLER ROAD, TOWN OF CARROLL, PUTNAM COUNTY NEW YORK		
DRAWING: DETAILS & NOTES		
PROJECT NUMBER: 21120.100	PROJECT MANAGER: J.J.C.	DRAWING NO. / SHEET: D-1 / 11
DATE: 8-30-23	DRAWN BY: J.L.B.	CHECKED BY: A.D.T.
SCALE: AS SHOWN	CHECKED BY: A.D.T.	



January 2, 2024
Revised January 17, 2024

Craig Paepre Chairman & Members Of The Carmel Planning Board
Town of Carmel
60 McAlpin Ave
Mahopac, NY 10541

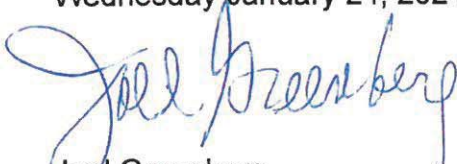
RE: Rosamilia
585 Union Valley Rd
Mahopac, NY 10541
TM# 87.8-1-3

Dear Mr Paepre & Members of the Planning Board

The applicant wishes to continue parking his 12 Tree Service Trucks and parking for 8 employees at the above mentioned property. My clients understand that Site Plan approval is required from the Planning Board and approval of a use variance is required from the Zoning Board Of Appeals. In addition approval from the Conservation Board may also be required due to the location of wetlands.

The wetlands boundary is located on the Site Plan. A remediation plan will be submitted when we apply to the Conservation Board. The attached Site Plan shows the contours as they exist today and no change in grading is proposed. In addition I have attached the Soil Testing Report and I have updated the Site Plan (Easement noted) and the Planning Board Application and the short EAF.

We look forward to discussing the project at your next Planning Board Meeting on Wednesday January 24, 2024


Joel Greenberg

Two Muscoot Road North
Mahopac, New York 10541
P: (845) 628-6613 F: (845) 628-2807
Email: joel.greenberg@arch-visions.com
www.arch-visions.com





TOWN OF CARMEL SITE PLAN APPLICATION INSTRUCTIONS



The Town of Carmel Planning Board meetings are held twice a month, on the second **Thursday** and fourth **Wednesday**, at 7:00 PM at Carmel Town Hall, 60 McAlpin Avenue, Carmel

The submission deadline is 10 days prior to the Planning Board meeting. New site plan applications that have been deemed complete will be placed on the agenda in the order they are received.

No application will be placed on the agenda that is incomplete

Pre-Submission:

Prior to the formal submission of the site plan, a pre-submission conference may be requested by the applicant to be conducted with representatives from the Town, which may include the Town Planner, Town Engineer, Director of Code Enforcement and/or the Planning Board Attorney. This conference will serve to educate the applicant on the process he/she must follow, clarify the information required to submit a complete site plan application, and to highlight any specific areas of concern. You may arrange a pre-submission conference through the Planning Board Secretary at (845) 628-1500 extension 190.

Submission Requirements:

At least 10 days prior to the Planning Board meeting, the site plan application shall be submitted to the Planning Board Secretary as follows:

All site plans shall be signed, sealed and folded with the title box legible. The application package shall include:

- 5 copies of the Site Plan Application Form, signed and notarized.
- 5 copies of the SEQR Environmental Assessment Form (use of short form or long form shall be determined at pre-submission conference).
- 5 full size sets of the Site Plan (including floor plans and elevations)
- 1 CD (in pdf. format) containing an electronic version of the Site Plan
- 2 copies of the Disclosure Statement
- 5 copies of the Site Plan Completeness Certification Form
- All supplemental studies, reports, plans and renderings.
- 2 copies of the current deed.
- 2 copies of all easements, covenants and restrictions.
- The appropriate fee, determined from the attached fee schedule. Make checks payable to the *Town of Carmel*.

do not submit

Rose Yonahella 1/17/24
Planning Board Secretary; Date

Rudolph [Signature] 1/17/24
Town Engineer; Date



TOWN OF CARMEL SITE PLAN APPLICATION



Per Town of Carmel Code – Section 156 - Zoning

SITE IDENTIFICATION INFORMATION		
Application Name: Massimo Rosamilia & Robert Rosamilia	Application # 24-0003	Date Submitted: 1/8/2024
Site Address: No. 585 +589 Street: Union Valley Road Hamlet: Mahopac, NY 10541		
Property Location: (Identify landmarks, distance from intersections, etc.) 585 Union Valley Road		
Town of Carmel Tax Map Designation: Section 87.8 Block 1 Lot(s) 2 & 3	Zoning Designation of Site: R-120	
Property Deed Recorded in County Clerk's Office Date Liber Page	Liens, Mortgages or other Encumbrances Yes No <input checked="" type="checkbox"/>	
Existing Easements Relating to the Site No <input checked="" type="checkbox"/> Yes Describe and attach copies:	Are Easements Proposed? No Yes <input checked="" type="checkbox"/> Describe and attach copies: Cross easements between lots 2&3	
Have Property Owners within a 500' Radius of the Site Been Identified? Yes <input checked="" type="checkbox"/> No Attached List to this Application Form		
APPLICANT/OWNER INFORMATION		
Property Owner: Massimo Rosamilia	Phone #: Fax#: 914-507-6587	Email: massimorosamilia@gmail.com
Owners Address: No. 585 Street: Union Valley Road Town: Mahopac State: NY Zip: 10541		
Applicant (If different than owner):	Phone #: Fax#:	Email:
Applicant Address (If different than owner): No. Street: Town: State: Zip:		
Individual/ Firm Responsible for Preparing Site Plan: Joel Greenberg	Phone #: 845-628-6613 Fax#: 845-628-2807	Email: joel.greenberg@arch-visions.com
Address: No. 2 Street: Muscoot Road North Town: Mahopac State: NY Zip: 10541		
Other Representatives: None	Phone #: Fax#:	Email:
Owners Address: No. Street: Town: State: Zip:		
PROJECT DESCRIPTION		
Describe the project, proposed use and operation thereof: Remove debris from Wetlands & permit trucks for tree service business to park on existing gravel area on Lot # 3 & 8 employees to park on Lot # 2 There are 8 employees		

TOWN OF CARMEL SITE PLAN APPLICATION

PROJECT INFORMATION			
Lot size: Acres: 0.8 Square Feet: 34,960		Square footage of all existing structures (by floor): 2,100	
# of existing parking spaces: 2		# of proposed parking spaces: 0	
# of existing dwelling units: 1		# of proposed dwelling units: 0	
Is the site served by the following public utility infrastructure:			
▪ Is project in sewer district or will private septic system(s) be installed? Existing SSTS			
▪ If yes to Sanitary Sewer answer the following:			
▶ Does approval exist to connect to sewer main? Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>			
▶ Is this an in-district connection? <u>N/A</u> Out-of district connection? <u>NA</u>			
▶ What is the total sewer capacity at time of application? <u>N/A</u>			
▶ What is your anticipated average and maximum daily flow <u>NA</u>			
For Town of Carmel Town Engineer			
▶ What is the sewer capacity _____			
▪ Water Supply		Yes: <input type="checkbox"/> No: <input type="checkbox"/> N/A	
If Yes:		▶ Does approval exist to connect to water main? Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/> Existing Well	
		▶ What is the total water capacity at time of application? <u>NA</u>	
		▶ What is your anticipated average and maximum daily demand <u>NA</u>	
▪ Storm Sewer		Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>	
▪ Electric Service		Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>	
▪ Gas Service		Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>	
• Telephone/Cable Lines		Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>	
For Town of Carmel Town Engineer			
Water Flows _____		Sewer Flows _____	
Town Engineer; Date _____			
What is the predominant soil type(s) on the site? NA		What is the approximate depth to water table? NA	
Site slope categories:		15-25% _____ % 100	25-35% _____ %
		>35% _____ %	
Estimated quantity of excavation:		Cut (C.Y.) <small>None</small>	Fill (C.Y.) <small>None</small>
Is Blasting Proposed Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/> Unknown: <input type="checkbox"/>			
Is the site located in a designated Critical Environmental Area?			Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>
Does a curb cut exist on the site? Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>		Are new curb cuts proposed? Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>	What is the sight distance? Left <u>200'</u> Right <u>200'</u>
Is the site located within 500' of:			
• The boundary of an adjoining city, town or village		Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>	
• The boundary of a state or county park, recreation area or road right-of-way		Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>	
• A county drainage channel line.		Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>	
• The boundary of state or county owned land on which a building is located		Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>	

TOWN OF CARMEL SITE PLAN APPLICATION

Is the site listed on the State or Federal Register of Historic Place (or substantially contiguous)
 Yes: No:

Is the site located in a designated floodplain?
 Yes: No:

Will the project require coverage under the Current NYSDEC Stormwater Regulations
 Yes: No:

Will the project require coverage under the Current NYCDEP Stormwater Regulations
 Yes: No:

Does the site disturb more than 5,000 sq ft
 Yes: No:

Does the site disturb more than 1 acre
 Yes: No:

Does the site contain freshwater wetlands?
 Yes: No:

Jurisdiction:
 NYSDEC: Town of Carmel:

If present, the wetlands must be delineated in the field by a Wetland Professional, and survey located on the Site Plan.

Are encroachments in regulated wetlands or wetland buffers proposed? Yes: No:

Does this application require a referral to the Environmental Conservation Board? Yes: No:

Does the site contain waterbodies, streams or watercourses? Yes: No:

Are any encroachments, crossings or alterations proposed? Yes: No:

Is the site located adjacent to New York City watershed lands? Yes: No:

Is the project funded, partially or in total, by grants or loans from a public source?
 Yes: No:

Will municipal or private solid waste disposal be utilized?
 Public: Private:

Has this application been referred to the Fire Department? Yes: No:

What is the estimated time of construction for the project?
 3 Months

ZONING COMPLIANCE INFORMATION			
Zoning Provision	Required	Existing	Proposed
Lot Area	120,000SF	71,381 SF	71,381 SF
Lot Coverage	65%	6%	6%
Lot Width	200 FT	92 FT	92 FT
Lot Depth	200FT	384 FT	384 FT
Front Yard	40Ft	62 Ft	62 FT
Side Yard	25 Ft	25 FT	25 FT
Rear Yard	40 Ft	200 Ft	200 FT
Minimum Required Floor Area	N/A		
Floor Area Ratio	N/A		
Height	35 FT	30 FT	30 Ft
Off-Street Parking	2	3	3
Off-Street Loading Truck Parking	N/A	8	8



TOWN OF CARMEL SITE PLAN COMPLETENESS CERTIFICATION FORM



All Site Plans submitted to the Planning Board for review shall include the following information and details, as set forth in Section 156-61 B of the Town of Carmel Zoning Ordinance.

This form shall be included with the site plan submission

	<i>Requirement Data</i>	<i>To Be Completed by the Applicant</i>	<i>Waived by the Town</i>
1	Name and title of person preparing the site plan	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2	Name of the applicant and owner (if different from applicant)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3	Original drawing date, revision dates, scale and north arrow	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4	Tax map, block and lot number(s), zoning district	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5	All existing property lines, name of owner of each property within a 500' radius of the site	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6	Contour lines at two-foot intervals, grades of all roads, driveways, sanitary and storm sewers	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7	The location of all water bodies, streams, watercourses, wetland areas, wooded areas, rights-of-way, streets, roads, highways, railroads, buildings, structures	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8	The location of all existing and proposed easements	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9	The location of all existing and proposed structures, their use, setback dimensions, floor plans, front, side and rear elevations, buildable area.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10	On site circulation systems, access, egress ways and service roads, emergency service access and traffic mitigation measures	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11	Sidewalks, paths and other means of pedestrian circulation	N/A <input type="checkbox"/>	<input type="checkbox"/>
12	On-site parking and loading spaces and travel aisles with dimensions	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13	The location, height and type of exterior lighting fixtures	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14	Proposed signage	<input type="checkbox"/> None	<input type="checkbox"/>
15	For non-residential uses, an estimate of the number of employees who will be using the site, description of the operation, types of products sold, types of machinery and equipment used	<input checked="" type="checkbox"/>	<input type="checkbox"/>



TOWN OF CARMEL SITE PLAN COMPLETENESS CERTIFICATION FORM



Requirement Data		To Be Completed by the Applicant	Waived by the Town
16	The location of clubhouses, swimming pools, open spaces, parks or other recreational areas, and identification of who is responsible for maintenance	N/A <input type="checkbox"/>	<input type="checkbox"/>
17	The location and design of buffer areas, screening or other landscaping, including grading and water management. A comprehensive landscaping plan in accordance with the Tree Conservation Law	N/A <input type="checkbox"/>	<input type="checkbox"/>
18	The location of public and private utilities, maintenance responsibilities, trash and garbage areas	<input checked="" type="checkbox"/>	<input type="checkbox"/>
19	A list, certified by the Town Assessor, of all property owners within 500 feet of the site boundary	<input checked="" type="checkbox"/>	<input type="checkbox"/>
20	Any other information required by the Planning Board which is reasonably necessary to ascertain compliance with this chapter	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Applicants Certification (to be completed by the licensed professional preparing the site plan:

I Joel Greenberg hereby certify that the site plan to which I have attached my seal and signature, meets all of the requirements of §156-61B of the Town of Carmel Zoning Ordinance:

Joel Greenberg
 Signature - Applicant

1/8/2024

Date

Paul Rosenthal
 Signature - Owner

1/8/2024

Date



Professionals Seal



TOWN OF CARMEL
 SITE PLAN COMPLETENESS
 CERTIFICATION FORM



Town Certification (to be completed by the Town)

I _____ hereby confirm that the site plan meets all of the requirements of §156-61B of the Town of Carmel Zoning Ordinance:

Rose Tomblitta
 Signature - Planning Board Secretary

1/17/24
 Date

[Signature]
 Signature - Town Engineer

1/17/24
 Date

Short Environmental Assessment Form

Part 1 - Project Information

Instructions for Completing

Part 1 – Project Information. The applicant or project sponsor is responsible for the completion of Part 1. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

Part 1 – Project and Sponsor Information			
Name of Action or Project: Massimo Rosamilia and Robert Rosamilia			
Project Location (describe, and attach a location map): 585 Union Valley Road Mahopac, NY 10541			
Brief Description of Proposed Action: Remove debris from Wetlands & Permit trucks for Tree Service Business to park on existing gravel area behind existing garage. 8 Employees			
Name of Applicant or Sponsor: Massimo Rosamilia and Robert Rosamilia		Telephone: 914-507-6587	
		E-Mail: massimorosamilia@gmail.com	
Address: 585 Union Valley Road			
City/PO: Mahopac		State: NY	Zip Code: 10541
1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation? If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2.			NO <input checked="" type="checkbox"/>
			YES <input type="checkbox"/>
2. Does the proposed action require a permit, approval or funding from any other government Agency? If Yes, list agency(s) name and permit or approval: ZBA & ECB & Building Department			NO <input type="checkbox"/>
			YES <input checked="" type="checkbox"/>
3. a. Total acreage of the site of the proposed action?		_____ 0.8 acres	
b. Total acreage to be physically disturbed?		_____ 0.2 acres	
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor?		_____ 0.8 acres	
4. Check all land uses that occur on, are adjoining or near the proposed action:			
5. <input type="checkbox"/> Urban <input type="checkbox"/> Rural (non-agriculture) <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input checked="" type="checkbox"/> Residential (suburban)			
<input type="checkbox"/> Forest <input type="checkbox"/> Agriculture <input type="checkbox"/> Aquatic <input type="checkbox"/> Other(Specify):			
<input type="checkbox"/> Parkland			

		NO	YES	N/A
5.	Is the proposed action,			
a.	A permitted use under the zoning regulations?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b.	Consistent with the adopted comprehensive plan?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.	Is the proposed action consistent with the predominant character of the existing built or natural landscape?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
7.	Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area? If Yes, identify: _____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
8.	a. Will the proposed action result in a substantial increase in traffic above present levels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b.	Are public transportation services available at or near the site of the proposed action?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c.	Are any pedestrian accommodations or bicycle routes available on or near the site of the proposed action?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
9.	Does the proposed action meet or exceed the state energy code requirements? If the proposed action will exceed requirements, describe design features and technologies: <u>NA</u> _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	
10.	Will the proposed action connect to an existing public/private water supply? If No, describe method for providing potable water: <u>NA - Existing Wells</u> _____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
11.	Will the proposed action connect to existing wastewater utilities? If No, describe method for providing wastewater treatment: <u>NA</u> _____	<input type="checkbox"/>	<input type="checkbox"/>	
12.	a. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places? b. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
13.	a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
b.	Would the proposed action physically alter, or encroach into, any existing wetland or waterbody?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres: _____ _____ _____				

14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check all that apply:

- Shoreline
 Forest
 Agricultural/grasslands
 Early mid-successional
 Wetland
 Urban
 Suburban

15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered?

NO YES

NO YES

16. Is the project site located in the 100-year flood plan?

17. Will the proposed action create storm water discharge, either from point or non-point sources?
If Yes,

NO YES

a. Will storm water discharges flow to adjacent properties?

b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)?
If Yes, briefly describe:

18. Does the proposed action include construction or other activities that would result in the impoundment of water or other liquids (e.g., retention pond, waste lagoon, dam)?
If Yes, explain the purpose and size of the impoundment:

NO YES

19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility?
If Yes, describe:

NO YES

20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste?
If Yes, describe:

NO YES

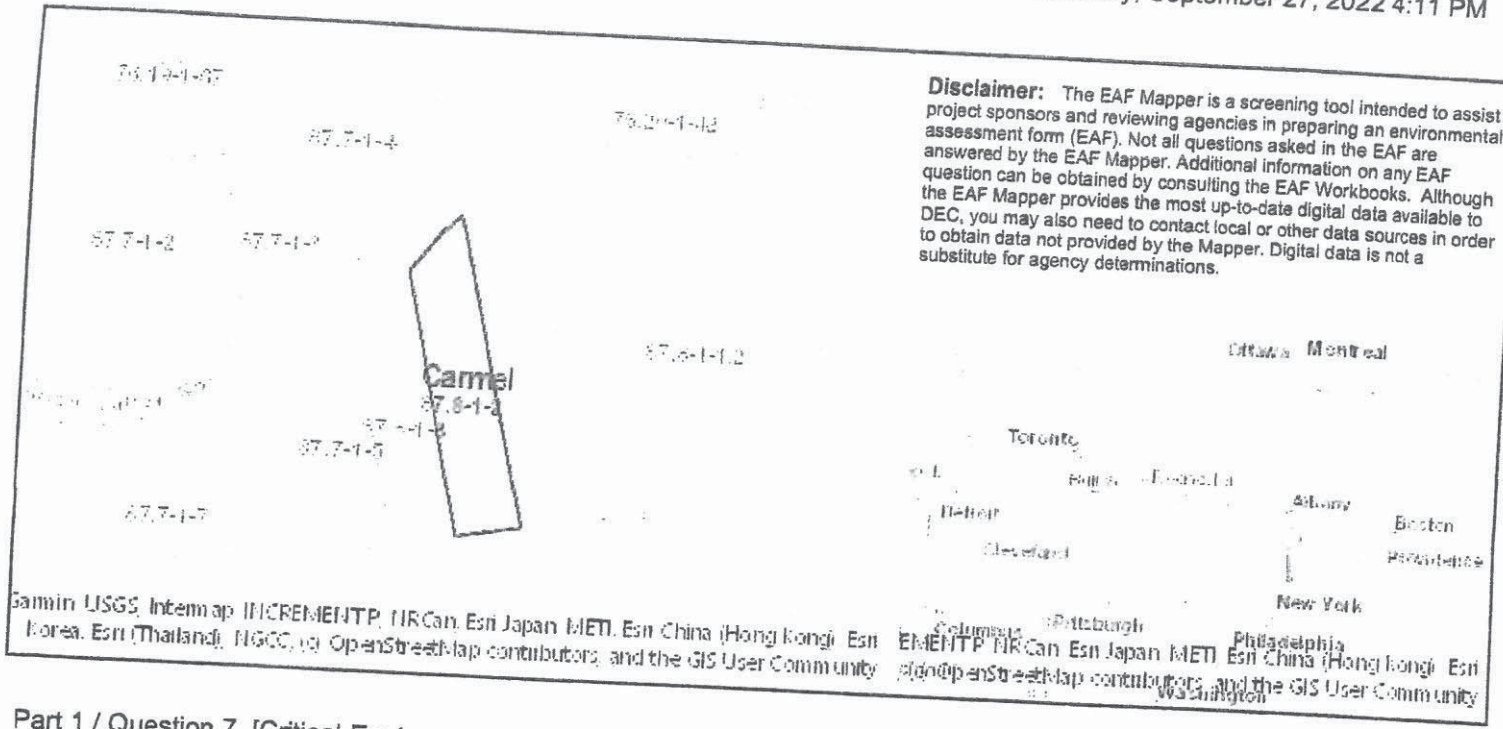
I CERTIFY THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE

Applicant/sponsor/name: Joel Greenberg

Date: 1/8/2024

Signature: *Joel Greenberg*

Title: Project architect



Source: USGS, Intermap, INCREMENTP, IIRCan, Esri, Japan METI, Esri, China (Hong Kong), Esri, Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

Source: USGS, Intermap, INCREMENTP, IIRCan, Esri, Japan METI, Esri, China (Hong Kong), Esri, Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

- Part 1 / Question 7 [Critical Environmental Area] No
- Part 1 / Question 12a [National or State Register of Historic Places or State Eligible Sites] No
- Part 1 / Question 12b [Archeological Sites] Yes
- Part 1 / Question 13a [Wetlands or Other Regulated Waterbodies] Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook.
- Part 1 / Question 15 [Threatened or Endangered Animal] Yes
- Part 1 / Question 15 [Threatened or Endangered Animal - Name] Northern Long-eared Bat
- Part 1 / Question 16 [100 Year Flood Plain] No
- Part 1 / Question 20 [Remediation Site] No

TED KOZLOWSKI
136 BIG ELM ROAD
BREWSTER, NY 10509

July 15, 2021

Mr. Massimo Rosamalia
PO Box 716
Mahopac, NY

RE: Wetland Delineation, 585 Union Valley Road
Mahopac, NY

Dear Mr. Rosamalia:

As per your request I delineated the estimated wetland areas with pink survey flags on the above site on July 12, 2021. As you are aware, this site has been disturbed with a tree processing operation in which portions of the wetland have been covered by a deep layer of wood chips and other debris associated with this operation. I placed 10 survey flags along the delineation boundary.

My delineation is an educated estimate of the wetland area affected. I based this delineation upon the enclosed soil survey indicating approximate boundaries of two hydric soil types within the area, Udorthents (Uc) and Catden Muck (Ce), and by estimating the delineation from existing wetland indicator trees (red maple) that have wood chips piled upon their root zones. The wetland areas to the west and east of the disturbance are unaffected and the delineation there is exact.

This wetland is associated with State Wetland F-1 and is likely regulated by both the Town of Carmel and the NYSDEC. You will need to discuss this with the Town and proceed from there.

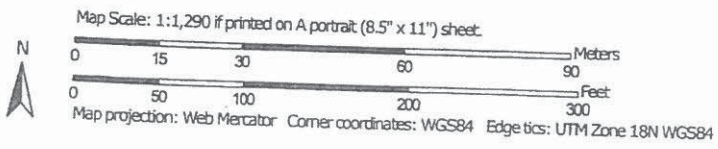
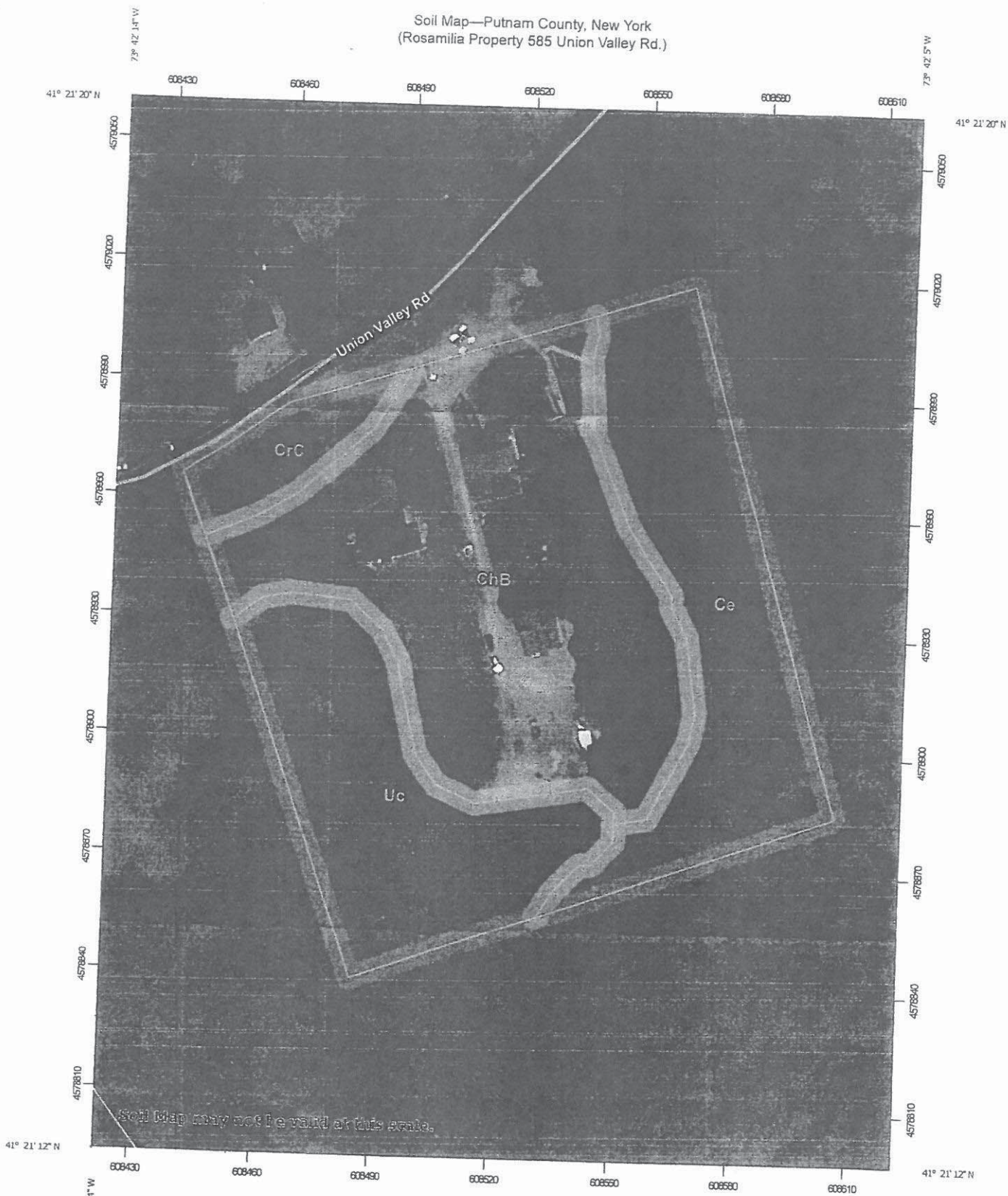
Please contact me if you have any questions.

Sincerely,



Ted Kozlowski, Certified Wetland Delineator

Soil Map—Putnam County, New York
(Rosamilia Property 585 Union Valley Rd.)



Soil Map—Putnam County, New York
(Rosamilla Property 585 Union Valley Rd.)

MAP LEGEND

- | | | | |
|--|------------------------|--|-----------------------|
| | Area of Interest (AOI) | | Spoil Area |
| | Soils | | Stony Spot |
| | Soil Map Unit Polygons | | Very Stony Spot |
| | Soil Map Unit Lines | | Wet Spot |
| | Soil Map Unit Points | | Other |
| | Special Point Features | | Special Line Features |
| | Blowout | | Water Features |
| | Borrow Pit | | Streams and Canals |
| | Clay Spot | | Transportation |
| | Closed Depression | | Rails |
| | Gravel Pit | | Interstate Highways |
| | Gravelly Spot | | US Routes |
| | Landfill | | Major Roads |
| | Lava Flow | | Local Roads |
| | Marsh or swamp | | Background |
| | Mine or Quarry | | Aerial Photography |
| | Miscellaneous Water | | |
| | Perennial Water | | |
| | Rock Outcrop | | |
| | Saline Spot | | |
| | Sandy Spot | | |
| | Severely Eroded Spot | | |
| | Sinkhole | | |
| | Slide or Slip | | |
| | Sodic Spot | | |

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Putnam County, New York
Survey Area Data: Version 17, Jun 11, 2020

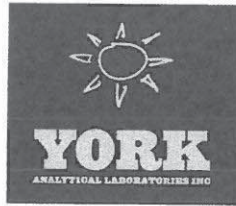
Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Dec 31, 2009—Oct 5, 2016

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Ce	Catden muck, 0 to 2 percent slopes	1.2	25.7%
ChB	Charlton fine sandy loam, 3 to 8 percent slopes	2.1	45.8%
CrC	Charlton-Chatfield complex, 0 to 15 percent slopes, very rocky	0.2	5.3%
Uc	Udorthents, wet substratum	1.1	23.3%
Totals for Area of Interest		4.6	100.0%



Technical Report

prepared for:

Architectural Visions
2 Muscoot Rd North
Mahopac NY, 10541
Attention: Joel Greenberg

Report Date: 07/06/2023
Client Project ID: Metals Testing
York Project (SDG) No.: 23F0674

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

120 RESEARCH DRIVE
www.YORKLAB.com

STRATFORD, CT 06615
(203) 325-1371

132-02 89th AVENUE
FAX (203) 357-0166

RICHMOND HILL, NY 11418
ClientServices@yorklab.com

Report Date: 07/06/2023
Client Project ID: Metals Testing
York Project (SDG) No.: 23F0674

Architectural Visions
2 Muscoot Rd North
Mahopac NY, 10541
Attention: Joel Greenberg

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on June 12, 2023 and listed below. The project was identified as your project: **Metals Testing**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Sample and Analysis Qualifiers section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
23F0674-01	1	Soil	06/08/2023	06/12/2023
23F0674-02	2	Soil	06/08/2023	06/12/2023
23F0674-03	3	Soil	06/08/2023	06/12/2023

General Notes for York Project (SDG) No.: 23F0674

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

Approved By: 

Cassie L. Mosher
Laboratory Manager

Date: 07/06/2023





Sample Information

Client Sample ID: 1

York Sample ID: 23F0674-01

York Project (SDG) No.
23F0674

Client Project ID
Metals Testing

Matrix
Soil

Collection Date/Time
June 8, 2023 3:00 pm

Date Received
06/12/2023

Metals, Target Analyte

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony	ND	M-CCV 1	mg/kg dry	2.19	1	EPA 6010D Certifications: CTDOH-PH-0723,NELAC-NY10854,NJDEP,PADEP	06/14/2023 14:07	06/19/2023 18:49	CEG
7440-38-2	Arsenic	ND		mg/kg dry	1.31	1	EPA 6010D Certifications: CTDOH-PH-0723,NELAC-NY10854,NJDEP,PADEP	06/14/2023 14:07	06/19/2023 18:49	CEG
7440-39-3	Barium	53.6		mg/kg dry	2.19	1	EPA 6010D Certifications: CTDOI-PH-0723,NELAC-NY10854,NJDEP,PADEP	06/14/2023 14:07	06/19/2023 18:49	CEG
7440-41-7	Beryllium	ND		mg/kg dry	0.044	1	EPA 6010D Certifications: CTDOH-PH-0723,NELAC-NY10854,NJDEP,PADEP	06/14/2023 14:07	06/19/2023 18:49	CEG
7440-43-9	Cadmium	0.349		mg/kg dry	0.263	1	EPA 6010D Certifications: CTDOH-PH-0723,NELAC-NY10854,NJDEP,PADEP	06/14/2023 14:07	06/19/2023 18:49	CEG
7440-47-3	Chromium	14.6		mg/kg dry	0.438	1	EPA 6010D Certifications: CTDOI-PH-0723,NELAC-NY10854,NJDEP,PADEP	06/14/2023 14:07	06/19/2023 18:49	CEG
7440-50-8	Copper	34.7		mg/kg dry	1.75	1	EPA 6010D Certifications: CTDOH-PH-0723,NELAC-NY10854,NJDEP,PADEP	06/14/2023 14:07	06/19/2023 18:49	CEG
7439-92-1	Lead	24.0		mg/kg dry	0.438	1	EPA 6010D Certifications: CTDOH-PH-0723,NELAC-NY10854,NJDEP,PADEP	06/14/2023 14:07	06/19/2023 18:49	CEG
7440-02-0	Nickel	14.5		mg/kg dry	0.872	1	EPA 6010D Certifications: CTDOH-PH-0723,NELAC-NY10854,NJDEP,PADEP	06/14/2023 14:07	06/19/2023 18:49	CEG
7782-49-2	Selenium	ND		mg/kg dry	2.19	1	EPA 6010D Certifications: CTDOH-PH-0723,NELAC-NY10854,NJDEP,PADEP	06/14/2023 14:07	06/19/2023 18:49	CEG
7440-22-4	Silver	ND		mg/kg dry	0.441	1	EPA 6010D Certifications: CTDOH-PH-0723,NELAC-NY10854,NJDEP,PADEP	06/14/2023 14:07	06/19/2023 18:49	CEG
7440-62-2	Vanadium	37.2		mg/kg dry	0.872	1	EPA 6010D Certifications: CTDOH-PH-0723,NELAC-NY10854,NJDEP,PADEP	06/14/2023 14:07	06/19/2023 18:49	CEG
7440-66-6	Zinc	35.4		mg/kg dry	2.18	1	EPA 6010D Certifications: CTDOH-PH-0723,NELAC-NY10854,NJDEP,PADEP	06/14/2023 14:07	06/19/2023 18:49	CEG

Mercury by 7470/7471

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA SW846-7471B

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	0.144		mg/kg dry	0.0347	1	EPA 7471B Certifications: CTDOI-PH-0723,NJDEP,NELAC-NY10854,PADEP	06/16/2023 10:28	06/19/2023 00:00	AA

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
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Sample Information

Client Sample ID: 1

York Sample ID: 23F0674-01

York Project (SDG) No.
23F0674

Client Project ID
Metals Testing

Matrix
Soil

Collection Date/Time
June 8, 2023 3:00 pm

Date Received
06/12/2023

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	95.1		%	0.100	1	SM 2540G Certifications: CTDOH-PH-0723	06/19/2023 15:18	06/20/2023 08:50	S_S

Sample Information

Client Sample ID: 2

York Sample ID: 23F0674-02

York Project (SDG) No.
23F0674

Client Project ID
Metals Testing

Matrix
Soil

Collection Date/Time
June 8, 2023 3:00 pm

Date Received
06/12/2023

Metals, Target Analyte

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony	ND	M-CCV 1	mg/kg dry	2.30	1	EPA 6010D Certifications: CTDOH-PH-0723,NELAC-NY10854,NJDEP,PADEP	06/15/2023 14:03	06/19/2023 17:40	CEG
7440-38-2	Arsenic	2.57		mg/kg dry	1.38	1	EPA 6010D Certifications: CTDOH-PH-0723,NELAC-NY10854,NJDEP,PADEP	06/15/2023 14:03	06/19/2023 17:40	CEG
7440-39-3	Barium	37.4		mg/kg dry	2.29	1	EPA 6010D Certifications: CTDOH-PH-0723,NELAC-NY10854,NJDEP,PADEP	06/15/2023 14:03	06/19/2023 17:40	CEG
7440-41-7	Beryllium	ND		mg/kg dry	0.046	1	EPA 6010D Certifications: CTDOH-PH-0723,NELAC-NY10854,NJDEP,PADEP	06/15/2023 14:03	06/19/2023 17:40	CEG
7440-43-9	Cadmium	ND		mg/kg dry	0.276	1	EPA 6010D Certifications: CTDOH-PH-0723,NELAC-NY10854,NJDEP,PADEP	06/15/2023 14:03	06/19/2023 17:40	CEG
7440-47-3	Chromium	11.0		mg/kg dry	0.460	1	EPA 6010D Certifications: CTDOH-PH-0723,NELAC-NY10854,NJDEP,PADEP	06/15/2023 14:03	06/19/2023 17:40	CEG
7440-50-8	Copper	21.8		mg/kg dry	1.84	1	EPA 6010D Certifications: CTDOH-PH-0723,NELAC-NY10854,NJDEP,PADEP	06/15/2023 14:03	06/19/2023 17:40	CEG
7439-92-1	Lead	23.3		mg/kg dry	0.460	1	EPA 6010D Certifications: CTDOH-PH-0723,NELAC-NY10854,NJDEP,PADEP	06/15/2023 14:03	06/19/2023 17:40	CEG
7440-02-0	Nickel	12.9		mg/kg dry	0.915	1	EPA 6010D Certifications: CTDOH-PH-0723,NELAC-NY10854,NJDEP,PADEP	06/15/2023 14:03	06/19/2023 17:40	CEG
7782-49-2	Selenium	15.7		mg/kg dry	2.30	1	EPA 6010D Certifications: CTDOH-PH-0723,NELAC-NY10854,NJDEP,PADEP	06/15/2023 14:03	06/19/2023 17:40	CEG
7440-22-4	Silver	ND		mg/kg dry	0.463	1	EPA 6010D Certifications: CTDOH-PH-0723,NELAC-NY10854,NJDEP,PADEP	06/15/2023 14:03	06/19/2023 17:40	CEG
7440-62-2	Vanadium	27.2		mg/kg dry	0.915	1	EPA 6010D Certifications: CTDOH-PH-0723,NELAC-NY10854,NJDEP,PADEP	06/15/2023 14:03	06/19/2023 17:40	CEG



Sample Information

Client Sample ID: 2

York Sample ID: 23F0674-02

York Project (SDG) No.
23F0674

Client Project ID
Metals Testing

Matrix
Soil

Collection Date/Time
June 8, 2023 3:00 pm

Date Received
06/12/2023

Metals, Target Analyte

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-66-6	Zinc	27.8		mg/kg dry	2.29	1	EPA 6010D Certifications: CTDOH-PH-0723,NELAC-NY10854,NJDEP,PADEP	06/15/2023 14:03	06/19/2023 17:40	CEG

Mercury by 7470/7471

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA SW846-7471B

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	0.121		mg/kg dry	0.0364	1	EPA 7471B Certifications: CTDOH-PH-0723,NJDEP,NELAC-NY10854,PADEP	06/16/2023 10:28	06/19/2023 00:00	AA

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	90.7		%	0.100	1	SM 2540G Certifications: CTDOH-PH-0723	06/19/2023 15:18	06/20/2023 08:50	S_S

Sample Information

Client Sample ID: 3

York Sample ID: 23F0674-03

York Project (SDG) No.
23F0674

Client Project ID
Metals Testing

Matrix
Soil

Collection Date/Time
June 8, 2023 3:00 pm

Date Received
06/12/2023

Metals, Target Analyte

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony	ND	M-CCV I	mg/kg dry	2.10	1	EPA 6010D Certifications: CTDOH-PH-0723,NELAC-NY10854,NJDEP,PADEP	06/15/2023 14:03	06/19/2023 17:42	CEG
7440-38-2	Arsenic	5.75		mg/kg dry	1.26	1	EPA 6010D Certifications: CTDOH-PH-0723,NELAC-NY10854,NJDEP,PADEP	06/15/2023 14:03	06/19/2023 17:42	CEG
7440-39-3	Barium	71.3		mg/kg dry	2.10	1	EPA 6010D Certifications: CTDOH-PH-0723,NELAC-NY10854,NJDEP,PADEP	06/15/2023 14:03	06/19/2023 17:42	CEG
7440-41-7	Beryllium	ND		mg/kg dry	0.042	1	EPA 6010D Certifications: CTDOH-PH-0723,NELAC-NY10854,NJDEP,PADEP	06/15/2023 14:03	06/19/2023 17:42	CEG
7440-43-9	Cadmium	ND		mg/kg dry	0.252	1	EPA 6010D Certifications: CTDOH-PH-0723,NELAC-NY10854,NJDEP,PADEP	06/15/2023 14:03	06/19/2023 17:42	CEG



Sample Information

Client Sample ID: 3

York Sample ID: 23F0674-03

York Project (SDG) No.
23F0674

Client Project ID
Metals Testing

Matrix
Soil

Collection Date/Time
June 8, 2023 3:00 pm

Date Received
06/12/2023

Metals, Target Analyte

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-47-3	Chromium	19.0		mg/kg dry	0.421	1	EPA 6010D Certifications: CTDOH-PH-0723,NELAC-NY10854,NJDEP,PADEP	06/15/2023 14:03	06/19/2023 17:42	CEG
7440-50-8	Copper	32.7		mg/kg dry	1.68	1	EPA 6010D Certifications: CTDOI-PH-0723,NELAC-NY10854,NJDEP,PADEP	06/15/2023 14:03	06/19/2023 17:42	CEG
7439-92-1	Lead	26.4		mg/kg dry	0.421	1	EPA 6010D Certifications: CTDOH-PH-0723,NELAC-NY10854,NJDEP,PADEP	06/15/2023 14:03	06/19/2023 17:42	CEG
7440-02-0	Nickel	23.0		mg/kg dry	0.837	1	EPA 6010D Certifications: CTDOH-PH-0723,NELAC-NY10854,NJDEP,PADEP	06/15/2023 14:03	06/19/2023 17:42	CEG
7782-49-2	Selenium	ND		mg/kg dry	2.10	1	EPA 6010D Certifications: CTDOI-PH-0723,NELAC-NY10854,NJDEP,PADEP	06/15/2023 14:03	06/19/2023 17:42	CEG
7440-22-4	Silver	ND		mg/kg dry	0.424	1	EPA 6010D Certifications: CTDOH-PH-0723,NELAC-NY10854,NJDEP,PADEP	06/15/2023 14:03	06/19/2023 17:42	CEG
7440-62-2	Vanadium	54.5		mg/kg dry	0.837	1	EPA 6010D Certifications: CTDOH-PH-0723,NELAC-NY10854,NJDEP,PADEP	06/15/2023 14:03	06/19/2023 17:42	CEG
7440-66-6	Zinc	46.2		mg/kg dry	2.09	1	EPA 6010D Certifications: CTDOI-PH-0723,NELAC-NY10854,NJDEP,PADEP	06/15/2023 14:03	06/19/2023 17:42	CEG

Mercury by 7470/7471

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA SW846-7471B

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	0.0501		mg/kg dry	0.0333	1	EPA 7471B Certifications: CTDOH-PH-0723,NJDEP,NELAC-NY10854,PADEP	06/16/2023 10:28	06/19/2023 00:00	AA

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	99.1		%	0.100	1	SM 2540G Certifications: CTDOI-PH-0723	06/19/2023 15:18	06/20/2023 08:50	S_S





Sample and Data Qualifiers Relating to This Work Order

- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
- M-CCV1 The recovery for this element in the Continuing Calibration Verification (CCV) exceeded 110% of the expected value. Positive detections may be biased high.

Definitions and Other Explanations

- * Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
- ND NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
- RL REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
- LOQ LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon current NELAC/TNI Standards and applies to all analyses.
- LOD LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
- MDL METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
- Reported to This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
- NR Not reported
- RPD Relative Percent Difference
- Wet The data has been reported on an as-received (wet weight) basis
- Low Bias Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
- High Bias High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
- Non-Dir. Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.



For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.



YORK
ANALYTICAL LABORATORIES INC.

Field Chain-of-Custody Record

York Analytical Laboratories, Inc. (YORK)'s Standard Terms & Conditions are listed on the back side of this document. This document serves as your written authorization for YORK to proceed with the analyses requested below. Your signature binds you to YORK's Standard Terms & Conditions.

YORK Project No.
231-0674

120 Research Drive Stratford, CT 06615 132-02 89th Ave Queens, NY 11418 56 Church Hill Rd #2 Newtown, CT 06470 clientservices@yorklab.com www.yorklab.com 800-306-YORK Page of

YOUR Information	Report To:	Invoice To:	YOUR Project Number	Turn-Around Time
Architectural Visions 2000 + 10 North Mahopac, N.Y. 10541 845-628-6613 Jodi	York Analytical Labs 120 Research Drive Stratford, CT 06615	Architectural Visions 2000 + 10 North Mahopac, N.Y. 10541 845-628-6613 Jodi		RUSH - Next Day RUSH - Two Day RUSH - Three Day RUSH - Four Day RUSH - Five Day Standard (5-9 Day)
Administrative and archival	J.P. Haldeman		YOUR Project Name	Standard (5-9 Day)
			YOUR Project Name	PFAS Standard is 7-10 Days
			YOUR PO#:	YORK Reg. Comp.

Please print clearly and legibly. All information must be complete. Samples will not be logged in and the turn-around-time clock will not begin until any questions by YORK are resolved.

Matrix Codes	Samples From	Report / EDD Type (circle selections)	YORK Reg. Comp.
S - soil / solid GW - groundwater DW - drinking water WW - wastewater O - Oil Other	New York New Jersey Connecticut Pennsylvania Other:	Summary Report <input type="checkbox"/> CT RCP <input type="checkbox"/> EQUIS (Standard) QA Report <input type="checkbox"/> CT RCP DQA/DUE NYSDEC EQUIS CMDP <input type="checkbox"/> NJDEP Reduced <input type="checkbox"/> NJDKQP Standard Excel EDD <input type="checkbox"/> Deliverables <input type="checkbox"/> NJDEP SRP HazSite NY ASP B Package <input type="checkbox"/> Other: <input type="checkbox"/>	Compared to the following Regulation(s) (please list):

Sample Identification	Sample Matrix	Date/Time Sampled	Analyses Requested	Container Type	No.
1	Soil		Metals		
2	Soil		Metals		
3	Soil		Metals		

Comments:

Samples analyzed at time of lab pickup? circle YES or NO

Preservation: (check all that apply)	Special Instruction
HCl <input type="checkbox"/> MeOH <input type="checkbox"/> HNO3 <input type="checkbox"/> H2SO4 <input type="checkbox"/> NaOH <input type="checkbox"/>	Field Filtered <input type="checkbox"/>
ZnAc <input type="checkbox"/> Ascorbic Acid <input type="checkbox"/> Other <input type="checkbox"/>	Lab to Filter <input type="checkbox"/>

Andrew S. York - 6/12/23 12:25 Andrew S. York 6/12/23 6:40

6/14/23 J.S.
1640

Sample ID York ID Sampling Date Client Matrix		NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Residential	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Industrial	1 23F0674-01 6/8/2023 3:00:00 PM Soil		2 23F0674-02 6/8/2023 3:00:00 PM Soil		3 23F0674-03 6/8/2023 3:00:00 PM Soil	
Compound	CAS Number				Result	Q	Result	Q	Result	Q
Metals, Target Analyte		mg/Kg	mg/Kg	mg/Kg	mg/Kg		mg/Kg		mg/Kg	
Dilution Factor					1		1		1	
Antimony	7440-36-0	~	~	~	2.190	U	2.300	U	2.100	U
Arsenic	7440-38-2	16	16	16	1.310	U	2.570		5.750	
Barium	7440-39-3	350	400	10000	53.600		37.400		71.300	
Beryllium	7440-41-7	14	590	2700	0.0440	U	0.0460	U	0.0420	U
Cadmium	7440-43-9	2.5	9.3	60	0.349		0.276	U	0.252	U
Chromium	7440-47-3	~	~	~	14.600		11		19	
Copper	7440-50-8	270	270	10000	34.700		21.800		32.700	
Lead	7439-92-1	400	1000	3900	24		23.300		26.400	
Nickel	7440-02-0	140	310	10000	14.500		12.900		23	
Selenium	7782-49-2	36	1500	6800	2.190	U	15.700		2.100	U
Silver	7440-22-4	36	1500	6800	0.441	U	0.463	U	0.424	U
Vanadium	7440-62-2	~	~	~	37.200		27.200		54.500	
Zinc	7440-66-6	2200	10000	10000	35.400		27.800		46.200	
Mercury by 7470/7471		mg/Kg	mg/Kg	mg/Kg	mg/Kg		mg/Kg		mg/Kg	
Dilution Factor					1		1		1	
Mercury	7439-97-6	0.81	2.8	5.7	0.144		0.121		0.0501	
Total Solids					%		%		%	
Dilution Factor					1		1		1	
% Solids		solids	~	~	95.100		90.700		99.100	

NOTES:

Any Regulatory Exceedences are color coded by Regulation

Q is the Qualifier Column with definitions as follows:

D=result is from an analysis that required a dilution

J=analyte detected at or above the MDL (method detection limit) but below the RL (Reporting Limit) - data is estimated

U=analyte not detected at or above the level indicated

B=analyte found in the analysis batch blank

E=result is estimated and cannot be accurately reported due to levels encountered or interferences

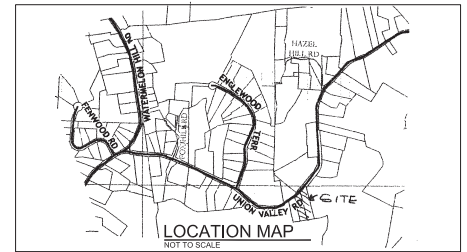
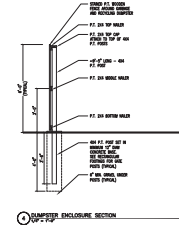
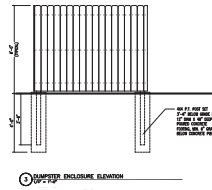
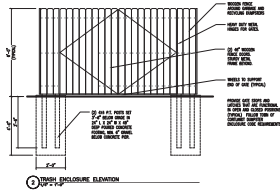
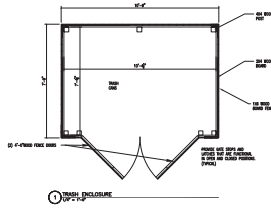
P=this flag is used for pesticide and PCB (Aroclor) target compounds when there is a % difference for detected concentrations that exceed method dictated limits between the two GC columns used for analysis

NT=this indicates the analyte was not a target for this sample

~=this indicates that no regulatory limit has been established for this analyte

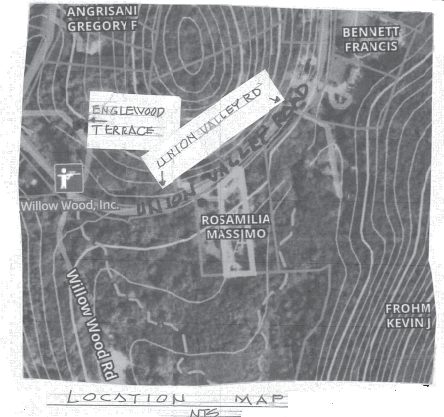
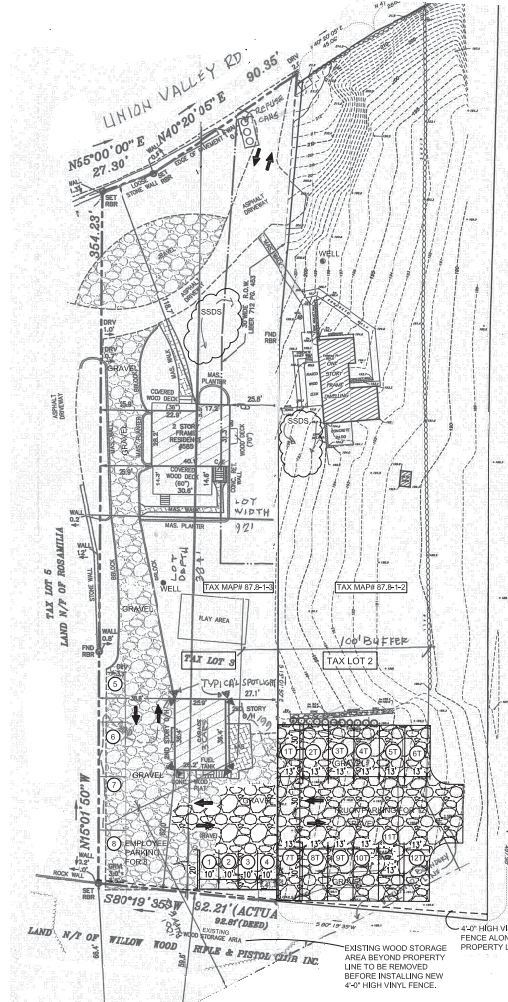
DISCLAIMER:

York Analytical Laboratories, Inc. is providing this information as a convenience to you. York makes no representations or warranties that these data are accurate, complete or represent the latest regulatory authority limits or analytes. York is not responsible for any errors or omissions in these specific regulations. Your use of these data constitute your understanding of these limitations and you agree to hold York harmless from any and all action that may arise from use of said information. As regulations change often, we encourage the user to review the regulatory limits and lists of interest to confirm these data.



ZONING		CHART	
OWNER: MASSIMO & ROBERT ROSAMILIA			
535 UNION VALLEY ROAD			
MAHOPAC, NY 10541			
ZONE: P-120			
TAX MAPS 87-8-1 & 2			
ZONING		REQUIREMENTS	
Zoning Provision	Required	Existing	Proposed
Lot Coverage	120,000 SF	71,381 SF	71,381 SF
Lot Width	200 FT	82 FT	39 FT
Lot Depth	200 FT	382 FT	382 FT
Front Yard	40 FT	82 FT	39 FT
Side Yard	25 FT	25 FT	25 FT
Rear Yard	20 FT	200 FT	200 FT
Minimum Required Floor Area	N/A	N/A	N/A
Floor Area Ratio	N/A	35 FT	30 FT
Height	35 FT	30 FT	30 FT
Off-Street Parking	4 PS	4 PS	8 PS
Off-Street	12	0	12

- NOTE:**
1. THE SITE INCLUDES TWO PARCELS, LOTS 2 & 3, TAX MAPS 87-8-1-2 AND TAX MAPS 87-8-1-3.
 2. CROSS EASEMENTS REQUIRED AS APPROVED BY THE PLANNING BOARD ATTORNEY.
 3. PARKING PROVIDED FOR 8 EMPLOYEES FOR TREE CUTTING SERVICE BUSINESS.
 4. OUTDOOR LIGHTING - DOUBLE SPOT LIGHTS AT 8'-0" ABOVE GRADE LOCATED ON CORNERS OF EXISTING GARAGE.
 5. REFUSE ENCLOSURE AT CURB CUT AT UNION VALLEY ROAD.
 6. NO BUSINESS SEWAGE IS PROPOSED FOR THE SITE.



PROPERTY OWNERS WITHIN 500 FT.

87-3-1-2 Nelson Yari Pacha 540 Union Valley Rd Mahopac, NY 10541	87-3-1-1 Willow Wood Rifle & Pistol Club PO BOX 181 Lincolnton, NY 10540018	87-3-1-3 Adam Mokat 566 Union Valley Rd Mahopac, NY 10541
87-3-1-4 Steven Depp 532 Union Valley Rd Mahopac, NY 10541	87-3-1-5 Massimo Rosamilia 79 Steiner Dr Mahopac, NY 10541	87-3-1-3 Massimo Rosamilia 581 Union Valley Rd Mahopac, NY 10541
87-3-1-2 Massimo Rosamilia 589 Union Valley Rd Mahopac, NY 10541	87-3-1-12 Kevin Frim 397 Union Valley Rd Mahopac, NY 10541	76-20-1-43 Owen McCallum 603 Union Valley Rd Mahopac, NY 10541
76-20-1-24 The 2022 Bennett Family Irrevocable Trust 611 Union Valley Rd Mahopac, NY 10541	76-20-1-1 Michael Grippo 616 Union Valley Rd Mahopac, NY 10541	76-19-1-47 Tandis Maloney 630 Union Valley Rd Mahopac, NY 10541

SITE PLAN
1" = 300'-0"

BASED ON A SURVEY BY
SCALISE LAND SURVEYING,
DATED 10/07/2021.
TOPOGRAPHY PROVIDED BY
LINK LAND SURVEYORS,
DATED 01/19/2023.

ARCHITECTURAL VISIONS LLC
CONSULTANTS OF ARCHITECTURE

2 MUSCODOC ROAD NORTH
MAHOPAC, NY 10541
P: 845-428-4613
F: 845-428-2807

PROJECT:
MASSIMO & ROBERT ROSAMILIA

PROJECT ADDRESS: 535 UNION VALLEY RD, MAHOPAC, NY 10541
MAILING ADDRESS: MASSIMO & ROBERT ROSAMILIA, SAME AS PROJECT ADDRESS

TAX MAP NO. 87-8-1 & 2

SITE PLAN

SCALE: AS NOTED
DRAWN BY: CHD BY S.C. MASSIMO
PROJECT NO. 11-21212

S-100



January 25, 2024

Mr. Craig Paeprer, Chairman
Town of Carmel Planning Board
60 McAlpin Avenue
Mahopac, NY 10541

Re: Shllaku 2 Lot Subdivision
345 Austin Road
(T) Carmel
T.M. 64.9-1-13

Dear Chairman Paeprer and Members of the Board,

This project last appeared before the Planning Board on July 13, 2023. The parcel has a shared driveway with the northern neighbor and easements are in place for both properties to use the existing driveway. We have attached the deeds for both parcels for the Planning Board's attorney to review.

Access comes off Austin Road at 349 which is the adjoining neighbor to the north and then crosses over onto the Shllaku property before splitting off and having a segment of driveway cross back onto the neighbor's land.

We have discussed regrading the entrance and providing adequate site distance with the DeFinos (northern neighbor). We have prepared a grading plan and reviewed the plan with the DeFinos.

The current proposal is to regrade the entrance and comply with the Town driveway standards. A new easement area will be executed for all lots.

I have attached copies of both easements as they appear in each property owner's deed.

Sincerely,

PUTNAM ENGINEERING, PLLC



Paul M. Lynch, P.E.
PML/rrm

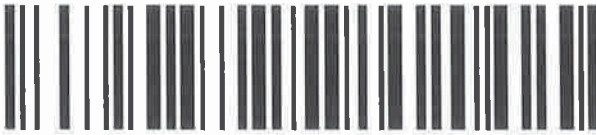
Attachments

L2155



PUTNAM COUNTY – STATE OF NEW YORK
 MICHAEL C. BARTOLOTTI, COUNTY CLERK
 40 GLENEIDA AVENUE, ROOM 100
 CARMEL, NEW YORK 10512

COUNTY CLERK'S RECORDING PAGE
 THIS PAGE IS PART OF THE DOCUMENT – DO NOT DETACH



BOOK/PAGE: 2300 / 331
 INSTRUMENT #: 10470-2022
 Receipt#: 2022102350
 Clerk: DT
 Rec Date: 12/06/2022 03:40:09 PM
 Doc Grp: D
 Descrip: DEED
 Num Pgs: 5
 Rec'd Frm: BARTECH TITLE AGENCY INC

Party1: INZANO FRANK
 Party2: SHLLAKU RICHARD
 Town: CARMEL
 64.9-1-13

Recording:

Cover Page	5.00
Recording Fee	40.00
Cultural Ed	14.25
Records Management - Coun	1.00
Records Management - Stat	4.75
Processing Fee	1.00
Notice of Transfer of Sal	10.00
TP584	5.00
RP5217 - County	9.00
RP5217 Residential Vacant	241.00

Sub Total: 331.00

Transfer Tax	
Transfer Tax - State	1280.00

Sub Total: 1280.00

Total: 1611.00

**** NOTICE: THIS IS NOT A BILL ****

***** Transfer Tax *****

Transfer Tax #: 1067
 Transfer Tax
 Consideration: 320000.00

Transfer Tax - State	1280.00
----------------------	---------

Total: 1280.00

Record and Return To:

ALFRED A DELICATA ESQ
 484 WHITE PLAINS RD
 EASTCHESTER NY 10709

WARNING***

*** Information may be amended during the verification process, and may not be reflected on this cover page.

THIS PAGE CONSTITUTES THE CLERK'S ENDORSEMENT,
 AS REQUIRED BY SECTIONS 315, 316-a(5) & 319 OF THE
 REAL PROPERTY LAW OF THE STATE OF NEW YORK

Michael C. Bartolotti
 Putnam County Clerk

**Bargain and Sale Deed, with Covenants against Grantor's Acts – Individual or Corporation.
CONSULT YOUR LAWYER BEFORE SIGNING THIS INSTRUMENT – THIS INSTRUMENT SHOULD BE USED BY LAWYERS ONLY.**

THIS INDENTURE, made the 8th day of November, 2022

BETWEEN

FRANK INZANO, residing at 124 Bullet Hole Road, Mahopac, NY 10541, party of the first part, and

RICHARD SHLLAKU & ^{→ ARISTID} ARI SHLLAKU, residing at S9 THURTON PLACE,
party of the second part, Yonkers, New York 10704

WITNESSETH, that the party of the first part, in consideration of ten dollars and other valuable consideration paid by the party of the second part, does hereby grant and release unto the party of the second part, the heirs or successors and assigns of the party of the second part forever,

ALL that certain plot, piece or parcel of land, with the buildings and improvements thereon erected, situate, lying and being in the town of Carmel, County of Putnam and State of New York, more particularly bounded and described as shown on the Schedule A attached hereto and made a part hereof.

SEE SCHEDULED A ATTACHED.

BEING & INTENDED ON BEING the same premises conveyed to the grantor herein by deed made by Lorraine Caruana dated 6/23/2017 recorded on 6/20/2017 in liber 2048 page 191 in the office of the Putnam County Clerk;

TOGETHER with all right, title and interest, if any, of the party of the first part, in and to any streets and roads abutting the above-described premises to the center lines thereof; TOGETHER with the appurtenances and all the estate and rights of the party of the first part in and to said premises; TO HAVE AND TO HOLD the premises herein granted unto the party of the second part, the heirs or successors and assigns of the party of the second part forever.

AND the party of the first part covenants that the party of the first part has not done or suffered anything whereby the said premises have been encumbered in any way whatever, except as aforesaid.

AND the party of the first part, in compliance with Section 13 of the Lien Law, covenants that the party first part will receive the consideration for this conveyance and will hold the right to receive such consideration as a trust fund to be applied first for the purpose of paying the cost of the improvement and will apply the same first to the payment of the cost of the improvement before using any part of the total of the same for any other purpose.

The word "party" shall be construed as if it read "parties" whenever the sense of this indenture so requires.

IN WITNESS WHEREOF, the party of the first part has duly executed this deed the day and year first above written.

IN PRESENCE OF


FRANK INZANO

**SCHEDULE A
DESCRIPTION OF PREMISES**

Title No. 722-1220051

Section 64.9 Block 1 Lot 13 on the Tax Maps of the Town of Carmel,
Putnam County.

ALL that certain plot piece or parcel of land, situate, lying and being in the Town of Carmel, County of Putnam and State of New York, being more particularly bounded and described as follows:

BEGINNING at a point on the road face of a stone wall on the westerly line of a public highway known as Austin Road where the said wall is intersected by another stone wall and which said point of beginning is distant 750 feet, more or less, as measured along said line of Austin Road from its intersection with the northerly side of Agor Road, and said point being also where said Austin Road is intersected by the dividing line between lands now or formerly of Edward P. Baker and lands herein described;

RUNNING THENCE along the center of a stone wall and along said lands of Baker, the following three courses and distances:

- 1) North 58 degrees 55 minutes 00 seconds West, 305.17 feet,
- 2) North 26 degrees 09 minutes 00 seconds East, 25.72 feet, and
- 3) North 66 degrees 04 minutes 20 seconds West, 290.52 feet to a point;

RUNNING THENCE South 08 degrees 53 minutes 10 seconds East, 16.13 feet to another point;

RUNNING THENCE along the center of another stone wall and along lands now or formerly of Edward P. Baker, South 18 degrees 14 minutes 30 seconds West, 171.94 feet to an intersecting stone wall;

RUNNING THENCE along the center of said intersecting stone wall and along said lands of Baker, North 55 degrees 30 minutes 40 seconds West, 178.57 feet and North 59 degrees 24 minutes 40 seconds West, 107.79 feet to a corner;

RUNNING THENCE along the center of another stone wall and lands now or formerly of Edward P. Baker, the following three courses and distances:

- 1) North 16 degrees 42 minutes 50 seconds East, 214.25 feet,
- 2) North 17 degrees 37 minutes 40 seconds East, 249.72 feet, and
- 3) North 18 degrees 14 minutes 50 seconds East, 123.40 to another intersecting stone wall;

-continued-

Old Republic National Title Insurance Company

SCHEDULE A CONTINUED
PAGE 2 OF 2
DESCRIPTION OF PREMISES

Title No. 722-1220051

RUNNING THENCE along the center of said stone wall and along lands now or formerly of Edward P. Baker, South 53 degrees 01 minute 40 seconds, East, 338.52 feet to a corner;

RUNNING THENCE along lands now or formerly of Jan H. Jansen and Bo R. Jansen, the following three courses and distances:

- 1) South 25 degrees 07 minutes 15 seconds West, 254.77 feet,
- 2) South 66 degrees 50 minutes 40 seconds East, 292.95 feet, and
- 3) South 58 degrees 55 minutes 00 seconds East, 314.75 feet to the westerly line of Austin Road;

RUNNING THENCE along the westerly line of Austin Road, South 29 degrees 51 minutes 50 seconds West, 148.12 feet to the point or place of BEGINNING.

The policy to be issued under this report will insure the title to such building and improvements erected on the premises which by law constitute real property.

FOR CONVEYANCING ONLY:

TOGETHER with all right, title and interest of the party of the first part, of, in and to the land lying in the street in front of and adjoining said premises.

DESCRIPTION

Acknowledgment Taken Within New York State (RPL 309(a))

State of New York :
County of Westchester : ss.:

On the 8th day of November in the year 2022 before me, the undersigned, personally appeared FRANK INZANO, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

[Signature]
Notary Public

DAWN FUSCO
NOTARY PUBLIC STATE OF NEW YORK
BRONX COUNTY
LIC. #01FU4988238
COMM. EXP. 11/4/2025

Acknowledgment Taken Outside New York State (RPL 309(b))

State, District of Columbia, :
Territory, Possession, or : ss.:
Foreign Country :

On the _____ day of _____ in the year _____ before me, the undersigned, personally appeared _____, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

Notary Public

722-1220051

BARGAIN AND SALE DEED WITH COVENANTS

Frank Inzano

TO

**Frank Shllaku
Ari Shllaku**

**ADDRESS: 345 Austin Road
Mahopac, NY
SECTION: 64.9
BLOCK:1
LOT:13
COUNTY:Putnam**

**Record and Return to:
Alfred A. Delicata, Esq.
484 White Plains Road
Eastchester, NY 10709**

On the 5th day of August 1980, before me personally came John F. Alberti and Marilyn Alberti

to me known to be the individuals described in and who executed the foregoing instrument, and acknowledged that they executed the same.

Lionel J. Hillburn
LIONEL J. HILLBURN
Notary Public, State of New York
No. 41 1799175
Qualified in Queens County
Commission Expires March 30, 1981

STATE OF NEW YORK, COUNTY OF

On the day of 19, before me personally came to me known, who, being by me duly sworn, did depose and say that he resides at No.

that he is the of

, the corporation described in and which executed the foregoing instrument; that he knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the board of directors of said corporation, and that he signed his name thereto by like order.

On the day of 19, before me personally came

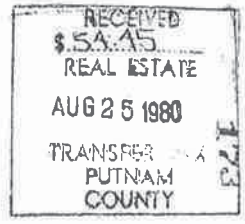
to me known to be the individual described in and who executed the foregoing instrument, and acknowledged that they executed the same.

STATE OF NEW YORK, COUNTY OF

On the day of 19, before me personally came the subscribing witness to the foregoing instrument, with whom I am personally acquainted, who, being by me duly sworn, did depose and say that he resides at No.

that he knows

to be the individual described in and who executed the foregoing instrument; that he, said subscribing witness, was present and saw execute the same; and that he, said witness, at the same time subscribed his name as witness thereto.



Bargain and Sale Deed
WITH COVENANT AGAINST GRANTOR'S ACTS

TITLE No. _____

10.00
54.45
TAX

SECTION 39
BLOCK 2
LOT 4.2
COUNTY OR TOWN *Camel*
TAX BILLING ADDRESS
*Austin Rd.
Mahopac NY 10541*

Recorded At Request of The Title Guarantee Company
RETURN BY MAIL TO:



*Stephen A. Abels
154 E. Main St.
Brewster, New York
Zip No. 10809*

RESERVE THIS SPACE FOR USE OF RECORDING OFFICE

PUTNAM COUNTY CLERK'S OFFICE
RECEIVED ON THE 25 DAY OF Aug 19 80
AT 10 H 36 M A M. RECORDED IN
BOOK No. 771 OF Deeds
AT PAGE 946 AND EXAMINED
Joseph A. Abels
CLERK
PUTNAM COUNTY CLERK'S OFFICE
1980 AUG 25 8H 10 46

THIS INDENTURE, made the 5th day of August, nineteen hundred and eighty

BETWEEN

JOHN F. ALBERTI and MARILYN ALBERTI, his wife,

previously of Mahopaq, N.Y., now of Manhattan, N.Y.

party of the first part, and

STEPHEN DE FINO and MARIANN DE FINO, his wife,

party of the second part,

WITNESSETH, that the party of the first part, in consideration of

one hundred dollars,

lawful money of the United States, to them paid

by the party of the second part, does hereby grant and release unto the party of the second part, the heirs or successors and assigns of the party of the second part forever,

ALL that certain plot, piece or parcel of land, with the buildings and improvements thereon erected, situate, lying and being in the Town of Carmel, County of Putnam and State of New York being bounded and described as follows:

BEGINNING at a point on the assumed Northwesterly side of Austin Road distant 154.22 feet Northeasterly from a point where said assumed Northwesterly side of Austin Road is intersected by the Northerly line of land now or formerly of Edward P. Baker and which point is also 904.22 feet more or less Northeasterly as measured along said assumed Northwesterly side of Austin Road from the corner formed by the intersection of the same with the Northerly side of Agor Road; thence running North 58° 55' 00" West 314.75 feet and North 66° 50' 40" West 292.95 feet along other lands of Richard H. Sampietro and Evelyn R. Sampietro, his wife; thence running still along said other lands, North 25° 07' 15" West 254.77 feet to other lands now or formerly of Edward P. Baker; thence running along said land now or formerly of Edward P. Baker, South 53° 01' 40" East 620.45 feet to the assumed Northwesterly side of Austin Road; thence running along said assumed Northwest line of Austin Road, South 25° 39' 30" West 150.00 feet to the point or place of beginning.

Together with an easement for all normal purposes of ingress or egress over a 10 foot dirt drive the center of which is described as follows: Beginning at a point which is distant from a point on the assumed Northwesterly side of Austin Road at the Northeasterly corner of the above described parcel, the following courses and distances: Along the said Northwesterly side of Austin Road South 25° 39' 30" West 31.24 feet; along the center of the aforesaid dirt drive North 50° 49' 30" West 34.19 feet; North 73° 56' 40" West 18.32 feet South 84° 45' 10" West 31.45 feet and South 60° 46' 40" West 114.72 feet; Thence from said point of beginning which is located in the Southwesterly line of the premises described above and continuing along the center line of the said dirt drive the following courses and distances: South 60° 46' 40" West 18.55 feet South 67° 49' 10" West 112.96 feet North 87° 48' 40" West 42.03 feet North 43° 03' 50" West 65.30 feet North 71° 21' 10" West 52.99 feet North 54° 15' 50" West 21.91 feet North 12° 48' 00" West 39.72 feet North 12° 30' 20" East 75.70 feet to the Southwesterly line of the premises described above.

Being and intended to be the premises conveyed to the party of the first part by Richard H. Sampietro and Evelyn R. Sampietro, his wife, by deed dated June 28, 1968, and recorded in Putnam County Clerk's records in Liber 668 of Deeds at pages 885-887.

11
5445

TAX MAP DESIGNATION
Dist.
Sec.
Blk.
Lot(s)

TOGETHER with all right, title and interest, if any, of the party of the first part in and to any streets and roads abutting the above described premises to the center lines thereof,

TOGETHER with the appurtenances and all the estate and rights of the party of the first part in and to said premises,

TO HAVE AND TO HOLD the premises herein granted unto the party of the second part, the heirs or successors and assigns of the party of the second part forever.

AND the party of the first part covenants that the party of the first part has not done or suffered anything whereby the said premises have been incumbered in any way whatever, except as aforesaid.

AND the party of the first part, in compliance with Section 13 of the Lien Law, covenants that the party of the first part will receive the consideration for this conveyance and will hold the right to receive such consideration as a trust fund to be applied first for the purpose of paying the cost of the improvement and will apply the same first to the payment of the cost of the improvement before using any part of the total of the same for any other purpose.

The word "party" shall be construed as if it read "parties" whenever the sense of this indenture so requires.

IN WITNESS WHEREOF, the party of the first part has duly executed this deed the day and year first above written.

IN PRESENCE OF:

x John J. Albruzzi
John Albruzzi
x x Marilyn Albruzzi

ADJOINERS:

TAX MAP #	OWNER	TAX MAP #	OWNER
643-1-14	DEFINO STEPHEN	643-1-10	MARGOTTO GARY M.
643-1-15	VITALIANO III ANTHONY J.	643-1-11	MAKAJ ZEP
643-1-12	MARANO LINDA T.	643-1-12	TAPIA WALTER
643-1-13	WILLIAMS RICHARD	643-1-13	NEUMAYER MADELINE
643-1-22	PUNYAH COUNTY	643-1-14	AMBROSINO ALYSSA M.
643-1-23	GENNINE ROBERT E.	643-1-15	JEDIOKA RONALD G.
643-1-205	WALLACE BRETT	643-1-16	JEDIOKA RONALD G.
643-1-206	LALLIERA EUGENE	643-1-17	WELAND GREGORY H.
643-1-151	ROGALLBY GLENN	643-1-18	RODGERS EDWARD A.
643-1-152	HOLMES ANGELA	643-1-133	AMALFITANO ANDREU

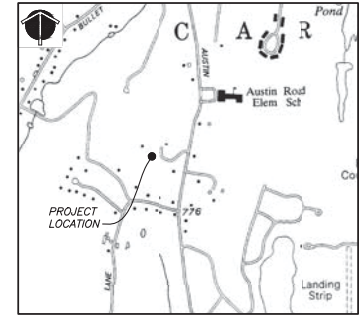
ZONING SCHEDULE

R - RESIDENTIAL	REQUIRED	LOT 1	LOT 2
MIN. LOT DIMENSIONS	150'00"00	100'23"	142'24"
MIN. AREA (SQ. FT.)	2000	6447	6529
MIN. WIDTH (FT.)	200	870	948
MIN. DEPTH (FT.)	200	870	948
MIN. YARD DIMENSIONS			
FRONT (FT.)	40	602	712
SIDE (FT.)	25	100	71
REAR (FT.)	40	168	154
MAX. HEIGHT OF BUILDING (FT.)	35	35	35
MAX. LOT COVERAGE (%)	15	2	18
MIN. ROAD FRONTAGE (FT.)	100	113	111

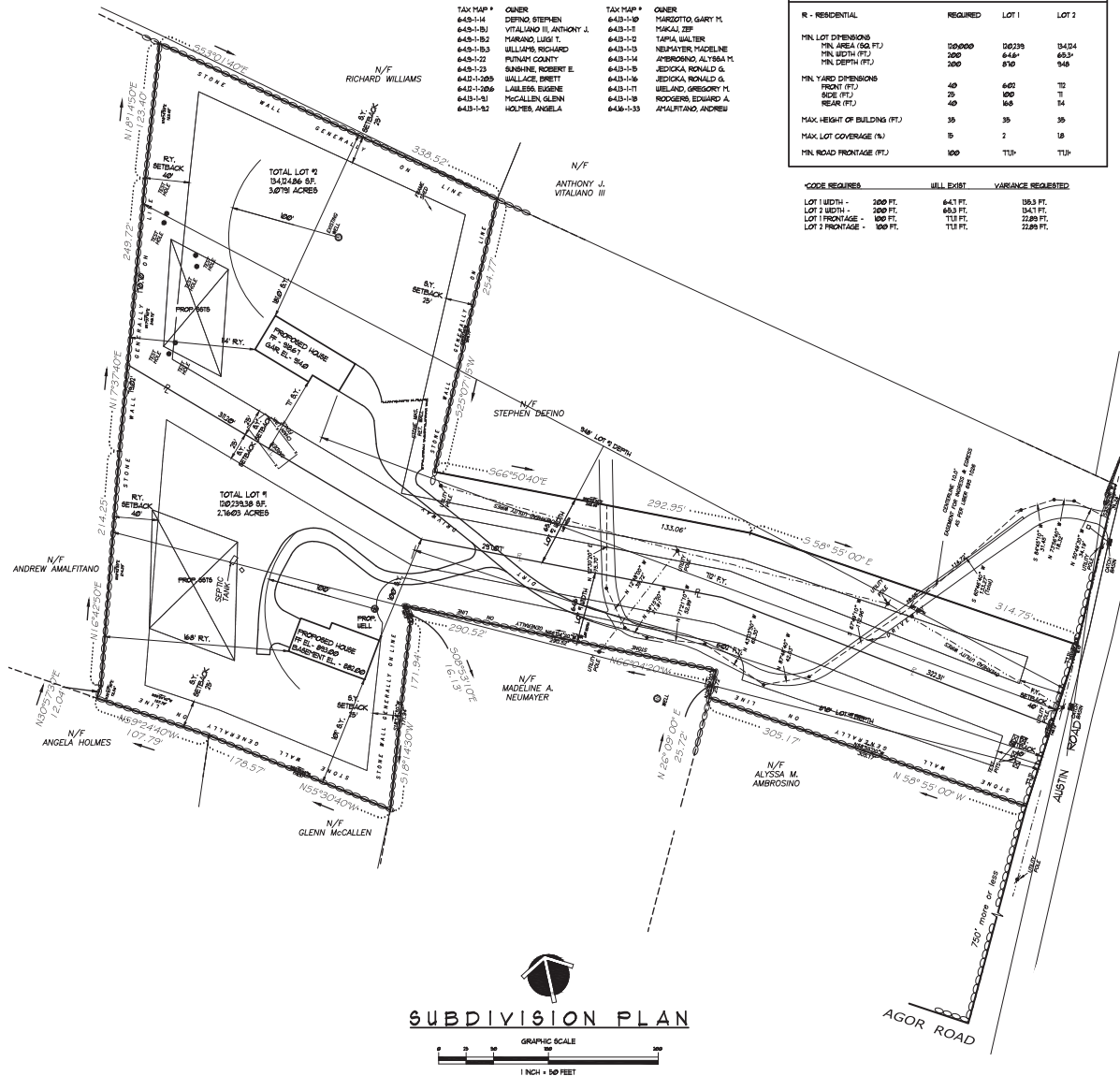
CODE REQUIRES	WILL EXIST	VARIANCE REQUESTED
LOT 1 WIDTH - 200 FT.	647 FT.	183.3 FT.
LOT 2 WIDTH - 200 FT.	653 FT.	154.1 FT.
LOT FRONTAGE - 100 FT.	713 FT.	228.9 FT.
LOT 2 FRONTAGE - 100 FT.	113 FT.	228.9 FT.



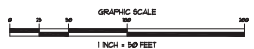
AREA MAP
SCALE: 1"=500'



LOCATION MAP
SCALE: 1"=1000'



SUBDIVISION PLAN



SUBDIVISION PLAN NOTES:

- OWNER/APPLICANT: SHLLAKU DEVELOPMENT, INC. RICHARD SHLLAKU 97 THORON PLACE YONKERS, NY 10704
- PROJECT LOCATION: 345 AUSTIN ROAD TOWN OF CARMEL, TAX MAP 643-1-13
- TOPOGRAPHIC AND BOUNDARY INFORMATION BASED UPON A SURVEY KNOWN AS 'SURVEY OF PROPERTY SITUATE IN THE TOWN OF CARMEL, PUTNAM COUNTY, NEW YORK' PREPARED BY LINK LAND SURVEYORS, 21 CLARK PLACE, HANOVER, NY 10941, LAST REVISED JULY 20, 2020.
- LOT AREA = 254,364 SF (5,8394 ACRES); NUMBER OF PROPOSED LOTS = 2
- VERTICAL DATUM: 7 FOOT CONTOUR INTERVAL, NAVD 88 (NORTH AMERICAN VERTICAL DATUM 1988).
- THERE ARE NO WATERCOURSES, WETLANDS OR FLOODPLAINS WITHIN 200 FEET, EXCEPT AS NOTED.
- THE APPLICANT SHALL NOTIFY THE TOWN OF CARMEL ENGINEERING DEPARTMENT AT LEAST 3 DAYS PRIOR TO THE COMMENCEMENT OF ANY WORK ON THE SITE. CONTACT NUMBER IS 845-409-3600, EXTENSION 86.
- PROPOSED LOTS ARE TO BE SERVED BY ON SITE DRILLED WELLS AND INDIVIDUAL SUB SURFACE SANITARY TREATMENT SYSTEMS.
- ALL PROPOSED UTILITIES FROM THE LAST EXISTING POLE ON SITE SHALL BE INSTALLED UNDERGROUND AND IN CONFORMANCE WITH THE UTILITY COMPANY AND TOWN REQUIREMENTS.
- THERE ARE NO AREAS TO BE RESERVED FOR RECREATION OPEN SPACE.

OWNER/APPLICANT APPROVAL

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

SIGNED THIS _____ DAY OF _____, 20____

PLANNING BOARD APPROVAL

APPROVAL HEREBY GRANTED THIS _____ DAY OF _____, 20____ IF BUILDING PERMIT IS NOT ISSUED WITHIN 12 MONTHS FROM THE ABOVE DATE, THE APPROVAL BECOMES NULL AND VOID.

TOWN OF CARMEL PLANNING BOARD
SIGNED THIS _____ DAY OF _____, 20____ BY _____

CHAIRMAN _____

TABLE OF AREAS:

LOT #1	2,1603 AC
LOT #2	3,6791 AC
TOTAL SITE AREA	5,8394 AC



4 OLD ROUTE 6 BREWSTER NEW YORK 10509
(845) 279-6189 FAX (845) 279-6163
PUTNAM ENGINEERING PLLC 2020

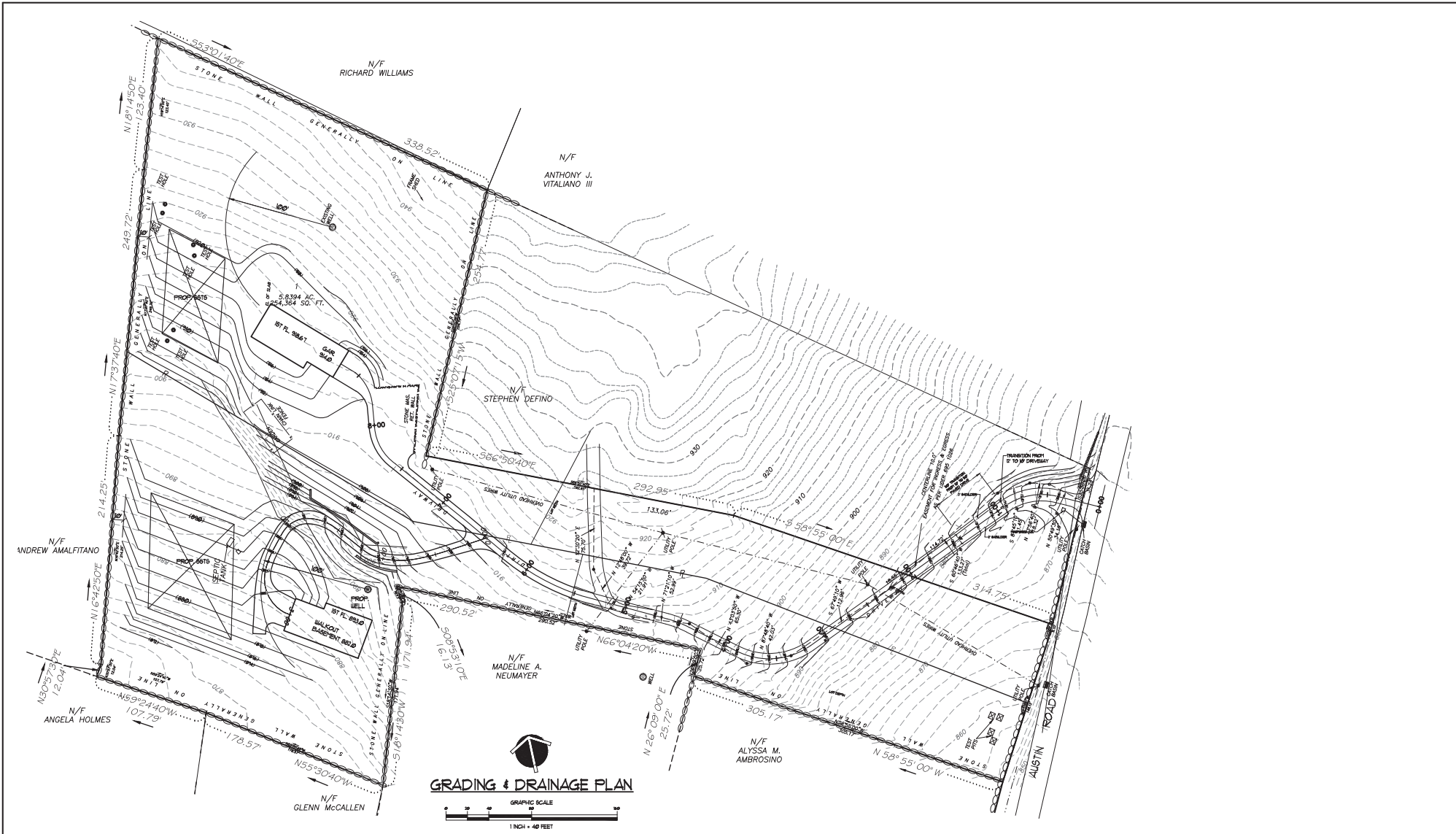
PURSUANT TO NEW YORK STATE EDUCATION LAW, ARTICLE 145, SECTION 7209 SUBDIVISION 2, "IT IS A VIOLATION OF THIS LAW FOR ANY PERSON UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER AN ITEM IN ANY WAY, IF AN ITEM BEARING THE SEAL OF AN ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL, AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION."

NO.	DATE	DESCRIPTION
1	1/26/2024	DRIVEWAY LAYOUT & NEW TOPOGRAPHY

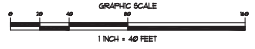
INTEGRATED PLOT PLAN PREPARED FOR:
SHLLAKU DEVELOPMENT, INC.
PROPERTY LOCATION:
345 AUSTIN ROAD, MAHOPAC, NY
(TOWN OF CARMEL)
PUTNAM COUNTY, NEW YORK
TAX MAP NO. 643, BLOCK 1 LOT 13

DATE: 20 JUNE 2023
PROJECT MANAGER: PFL
DRAWN BY: KSB
CHECKED BY: PFL
SCALE: AS NOTED

DRAWING: SKETCH SUBDIVISION PLAN
PROJECT NUMBER: 8442
DRAWING NUMBER: C-110
SHEET 1 OF 3



GRADING & DRAINAGE PLAN



PUNAM ENGINEERING, PLLC
 ENGINEERS - ARCHITECTS
 4 OLD ROUTE 6 BREWSTER NEW YORK 10509
 (845) 279-6189 FAX (845) 279-6163
 PUNAM ENGINEERING PLLC 2009

PURSUANT TO NEW YORK STATE EDUCATION LAW, ARTICLE 145, SECTION 7209 SUBDIVISION 2, IT IS A VIOLATION OF THIS LAW FOR ANY PERSON UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER AN ITEM IN ANY WAY, IF AN ITEM BEARING THE SEAL OF AN ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL, AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

REVISIONS		
NO.	DATE	DESCRIPTION
1	1/26/2024	DRIVEWAY LAYOUT & NEW TOPOGRAPHY

PROJECT
 INTEGRATED PLOT PLAN PREPARED FOR
SHLLAKU DEVELOPMENT, INC.
 PROPERTY LOCATION
 345 AUSTIN ROAD, MAHOOPAC, NY
 (TOWN OF GARFIELD)
 PUTNAM COUNTY, NEW YORK
 TAX MAP NO. 64B, BLOCK 1, LOT 13

DATE: 20 JUNE 2023
 PROJECT MANAGER: PFL
 DRAWN BY: ESB
 CHECKED BY: PFL
 SCALE: AS NOTED

DRAWING
GRADING & DRAINAGE PLAN
 2 LOT SUBDIVISION

PROJECT NUMBER: 8448
 DRAWING NUMBER: **C-120**
 SHEET 2 OF 3



January 25, 2024

Mr. Craig Paeprer, Chairman
Town of Carmel Planning Board
60 McAlpin Avenue
Mahopac, NY 10541

Re: Kass 2 Lot Subdivision
90 Mexico Lane
T.M. 53-2-17

Dear Chairman Paeprer and Members of the Board,

As discussed at our last meeting, Putnam Engineering has prepared plans showing the existing tax lots in the vicinity of the Kass property. We have prepared three (3) drawings. The first drawing shows the existing tax map. The second drawing shows the proposed subdivision and how the created lots compare to adjoiners. The third map adds constraints to all the properties. N.Y.C.D.E.P. watershed topography at two (2) foot contour interval was used for this plan. The constraints show lands sloping between 0 and 15 percent, 15 to 25 percent and greater than 25 percent. We also added N.Y.S.D.E.C. regulated wetland OL-52 which was taken from D.E.C. mapping.

Sincerely,

PUTNAM ENGINEERING, PLLC

A handwritten signature in black ink, appearing to read 'Paul M. Lynch', written over a horizontal line.

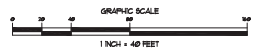
Paul M. Lynch, P.E.
PML/rmm

Attachments

L2157



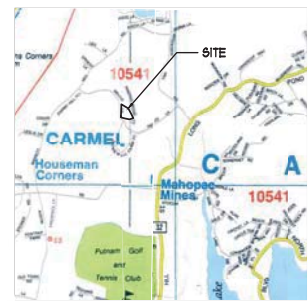
SKETCH SUBDIVISION MAP



- LEGEND**
- PERCOLATION TEST HOLE
 - ⊙ DEEP TEST HOLE
 - ⊕ EXISTING WELL
 - ⊞ SOIL GROUP
 - ⊘ STONE WALL
 - ⋯ WATERCOURSE



AREA MAP
SCALE 1"=1000'



LOCATION MAP
SCALE 1"=2000'

ADJOINERS:

TAX MAP #	OWNER	TAX MAP #	OWNER
53B-1-24	HIGHT, RICHARD	53-2-5	LARA, JEAN PAUL
53B-1-25	HIGHT, JEFF	53-2-16	LARA, SARAH
53B-1-26	FORTESSANO, CHRISTOPHER	53-2-16	DIAMOND, COREY
53B-1-26	FORTESSANO, CATHERINE	53-2-16	DIAMOND, LILIANE
53B-1-27	ZANE, AILEEN	53-2-16	HORAN, WALTER
53B-1-27	ZANE, MADELINE	53-2-16	HORAN, SHARON
53B-1-27	GRANGER, CHRISTOPHER	53-2-16	GABRIELLA PULICHO REVOCABLE TRUST
53B-1-27	GRANGER, DANETTE	53-2-16	
53B-1-28	CORBELLI, ALBERT	53-2-21	CHN, EDMOND Y.
53B-1-28	CORBELLI, BLAINE	53-2-21	TAN, KOT LAM
53-2-1	MERYAGALLA, MANJIRA MALHI	53-2-22	KAMBER, KAREN B.
53-2-1	MERYAGALLA, VANISHA DEEMPA	53-2-22	KAMBER, STEVEN G.
53-2-3	FORTESSANO, CHRISTOPHER	53-2-23	UCCI, TONY M.
53-2-3	FORTESSANO, CATHERINE	53-2-23	UCCI, LOUISE J.
53-2-4	WOOLLEY, ROBIN	53-2-24	GALLICCHIO, ALAN A.
53-2-4	WOOLLEY, ERIC M.	53-2-24	

ZONING SCHEDULE

R - RESIDENTIAL	REQUIRED	LOT 1	LOT 2
MIN LOT DIMENSIONS			
MIN AREA (SQ. FT.)	100,000	61,953.6*	64,468.8*
MIN WIDTH (FT.)	250	240	243.3
MIN DEPTH (FT.)	200	202.8	204.1
MIN YARD DIMENSIONS			
FRONT (FT.)	40	35	34.0
SIDE (FT.)	25	42.94	43
REAR (FT.)	40	13.0	14.9
MAX HEIGHT OF BUILDING (FT.)	35	35	35
MAX LOT COVERAGE (%)	5	9.84	6.78
MIN ROAD FRONTAGE (FT.)	100	284.00	460.00

CODE	REQUIRED	WILL EXIST	VARIANCE REQUESTED
LOT # AREA -	100,000 SQ. FT.	61,953.6 SQ. FT.	32,046.4 SQ. FT.
LOT # AREA -	100,000 SQ. FT.	64,468.8 SQ. FT.	35,531.2 SQ. FT.

TABLE OF AREAS:

LOT #1:	61,953.6 SF.	1.56 AC
LOT #2:	64,468.8 SF.	1.48 AC
TOTAL SITE:	132,422.4 SF.	3.04 AC
AREA		
LOT #1 NEEDS REAR YARD SETBACK VARIANCE OF 32.70 FEET.		

SUBDIVISION PLAN NOTES:

- OWNER/APPLICANT: AARON KASS
25 CAROLAN ROAD EAST
CARMEL, NY 10503
- PROJECT LOCATION: 90 MEXICO LANE
TOWN OF CARMEL
TAX MAP 93-2-11
- TOPOGRAPHIC AND BOUNDARY INFORMATION BASED UPON A SURVEY KNOWN AS SURVEY OF PROPERTY PREPARED FOR ALBERT I. HELLER HONORARIUM PREPARED BY RICHARD H. GORR, P.L.A. DATED JANUARY 28, 1980.
- LOT AREA: 132,422.4 SF. (3.04 ACRES)
NUMBER OF PROPOSED LOTS: 3
- VERTICAL DATUM: 3 FOOT CONTOUR INTERVAL, NAVD 88 (NORTH AMERICAN VERTICAL DATUM 1988).
- THERE ARE NO WATERCOURSES, WETLANDS OR FLOODPLAINS WITHIN 500 FEET EXCEPT AS NOTED.
- THE APPLICANT SHALL NOTIFY THE TOWN OF CARMEL, ENGINEERING DEPARTMENT AT LEAST 3 DAYS PRIOR TO THE COMMENCEMENT OF ANY WORK ON THE SITE. CONTACT NUMBER IS 845-632-5500, EXTENSION 10.
- PROPOSED LOTS ARE TO BE SERVED BY ON SITE DRILLED WELLS AND INDIVIDUAL SUB SURFACE SANITARY TREATMENT SYSTEMS.
- ALL PROPOSED UTILITIES FROM THE LAST EXISTING POLE ON SITE SHALL BE INSTALLED UNDERGROUND AND IN CONFORMANCE WITH THE UTILITY COMPANY AND TOWN REQUIREMENTS.
- THERE ARE NO AREAS TO BE RESERVED FOR RECREATION OPEN SPACE.

OWNER/APPLICANT APPROVAL

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

SIGNED THIS _____ DAY OF _____, 20____

PLANNING BOARD APPROVAL

APPROVAL HEREBY GRANTED THIS _____ DAY OF _____, 20____ IF BUILDING PERMIT IS NOT ISSUED WITHIN 12 MONTHS FROM THE ABOVE DATE, THE APPROVAL BECOMES NULL AND VOID.

TOWN OF CARMEL PLANNING BOARD
SIGNED THIS _____ DAY OF _____, 20____ BY
CHAIRMAN _____



4 OLD ROUTE 6, BREWSTER, NEW YORK 10509
(845) 275-6159 FAX (845) 275-6165
PITMAN ENGINEERING PLLC 2003

PURSUANT TO NEW YORK STATE EDUCATION LAW, ARTICLE 148, SECTION 7209 SUBDIVISION 2, "IT IS A VIOLATION OF THIS LAW FOR ANY PERSON UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL, AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION."

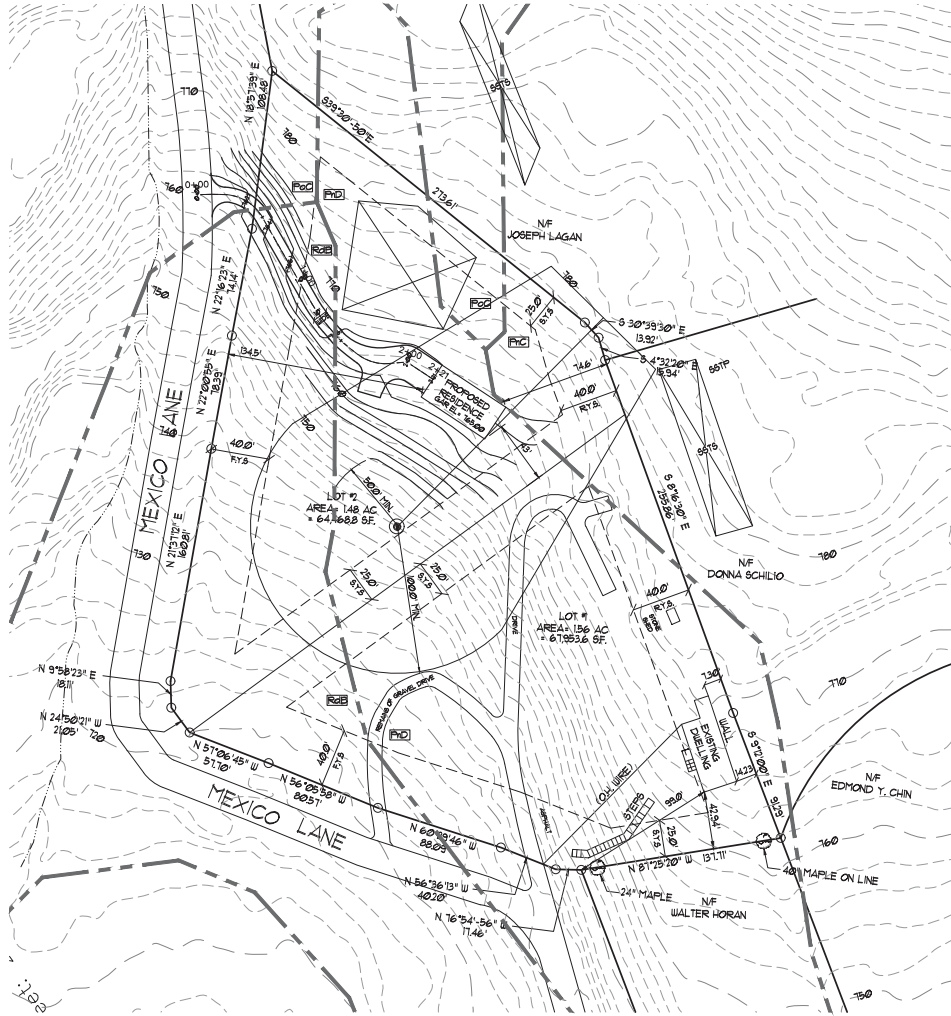
REVISIONS		PROJECT	
NO.	DATE	NO.	DESCRIPTION

PLAN PREPARED FOR:
AARON KASS
90 MEXICO LANE
TOWN OF CARMEL
FUTUNAM COUNTY, NEW YORK
TAX MAP NO. 93, BLOCK 2, LOT 11

DATE: 31 AUG 2003
PROJECT MANAGER: PML
DRAWN BY: JPK
CHECKED BY: PML
SCALE: AS NOTED

SKETCH SUBDIVISION MAP

PROJECT NUMBER: 8443
DRAWING NUMBER: C-110
SHEET 1 OF 2

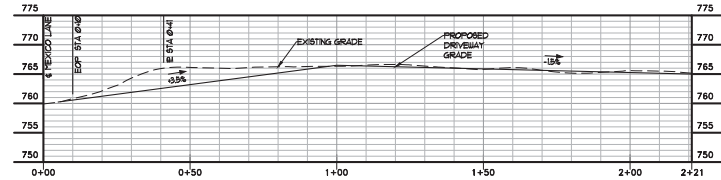


GRADING PLAN



LEGEND

- P PERCOLATION TEST HOLE
- D DEEP TEST HOLE
- E EXISTING WELL
- SOIL GROUP
- STONE WALL
- WATERCOURSE
- — — — — EXISTING GRADE
- (---) — — — — — PROPOSED GRADE



DRIVEWAY PROFILE

SCALE:
VERT. 1"=10'
HORIZ. 1"=20'

SOILS LEGEND

SOIL SYMBOL	SOIL GROUP	SOIL NAME
PIC	C	PAXTON FINE SANDY LOAM, 8 TO 9 PERCENT SLOPES
PHD	C	PAXTON FINE SANDY LOAM, 9 TO 15 PERCENT SLOPES
PUC	C	PAXTON FINE SANDY LOAM, 8 TO 9 PERCENT SLOPES, VERY STONE
RUB	D	REDGURBY COMPLEX, 3 TO 8 PERCENT SLOPES

NOTE: APPROPRIATE LIFTS OF SOIL TYPES TAKEN FROM REEBOURNE/RYERKON/DAVAY



4 OLD ROUTE 6, BREWSTER, NEW YORK 12509
(845) 279-6189 FAX (845) 279-6169
FUTNAM ENGINEERING PLLC 2003

PURSUANT TO NEW YORK STATE EDUCATION LAW, ARTICLE 148, SECTION 7209 SUBSECTION 2, IT IS A VIOLATION OF THIS LAW FOR ANY PERSON UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL, AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

REVISIONS		PROJECT			
NO.	DATE	DESCRIPTION	NO.	DATE	DESCRIPTION

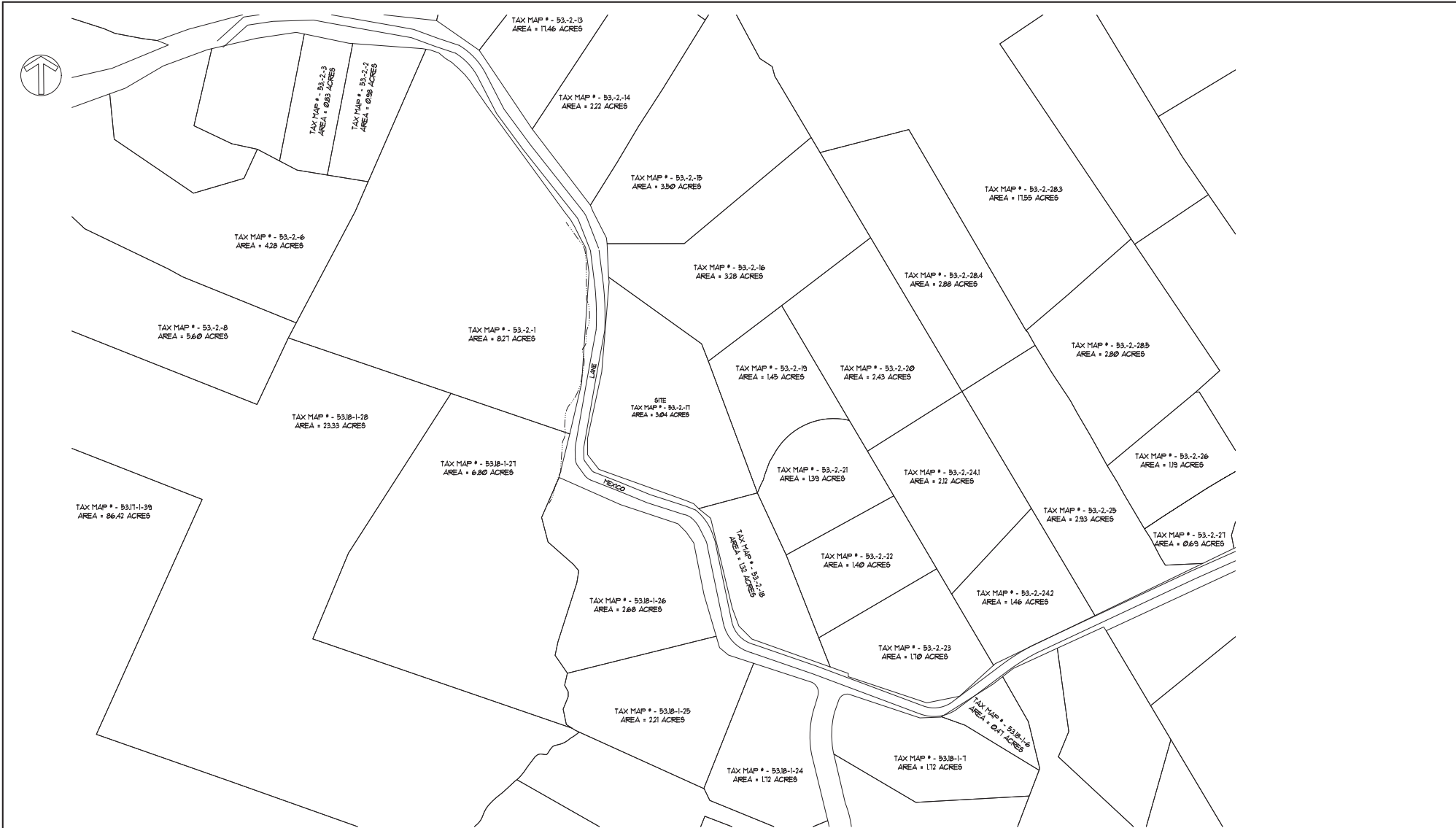
PLAN PREPARED FOR:
AARON KASS
90 MEXICO LANE
TOWN OF CARMEL
FUTNAM COUNTY, NEW YORK
TAX MAP No. 93, BLOCK 2, LOT 11

(Signature)

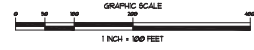
DATE: 31 JUL 2003
PROJECT MANAGER:
DRAWN BY: PML
CHECKED BY: PML
SCALE: AS NOTED

DRAWING: **GRADING PLAN & PROFILE**
SKETCH SUBDIVISION MAP

PROJECT NUMBER: 844J
DRAWING NUMBER: **C-120**
SHEET 2 OF 2



EXISTING TAX MAP



FUTNAM ENGINEERING, PLLC
 ENGINEERS - ARCHITECTS
 4 OLD ROUTE 6, BREWSTER, NEW YORK 12509
 (845) 279-6789 FAX (845) 279-6769
 FULTAM ENGINEERING PLLC 269

PURSUANT TO NEW YORK STATE EDUCATION LAW, ARTICLE 148, SECTION 7200 SUBDIVISION 2, "IT IS A VIOLATION OF THIS LAW FOR ANY PERSON UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION."

REVISIONS					
NO.	DATE	DESCRIPTION	NO.	DATE	DESCRIPTION

PROJECT
 PLAN PREPARED FOR:
AARON KASS
 90 MEXICO LANE
 TOWN OF CARMEL
 FULTAM COUNTY, NEW YORK
 TAX MAP No. 53, BLOCK 2, LOT 11

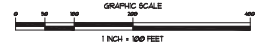
DATE: 31 AUG 2003
 PROJECT MANAGER: PML
 DRAWN BY: JPK
 CHECKED BY: PML
 SCALE: AS NOTED

DRAWING
EXISTING TAX MAP

PROJECT NUMBER: 844J
 DRAWING NUMBER: **T-110**
 SHEET 1 of 3



TAX MAP WITH SUBDIVIDED LOT LINE



PUTNAM ENGINEERING PLLC
ENGINEERS - ARCHITECTS

4 OLD ROUTE 6, BREWSTER, NEW YORK 12509
(845) 719-6159 FAX (845) 719-6165
PUTNAM ENGINEERING PLLC 2693

PURSUANT TO NEW YORK STATE EDUCATION LAW, ARTICLE 148, SECTION 7200 SUBDIVISION 2, "IT IS A VIOLATION OF THIS LAW FOR ANY PERSON UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL, AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION."

REVISIONS					
NO.	DATE	DESCRIPTION	NO.	DATE	DESCRIPTION

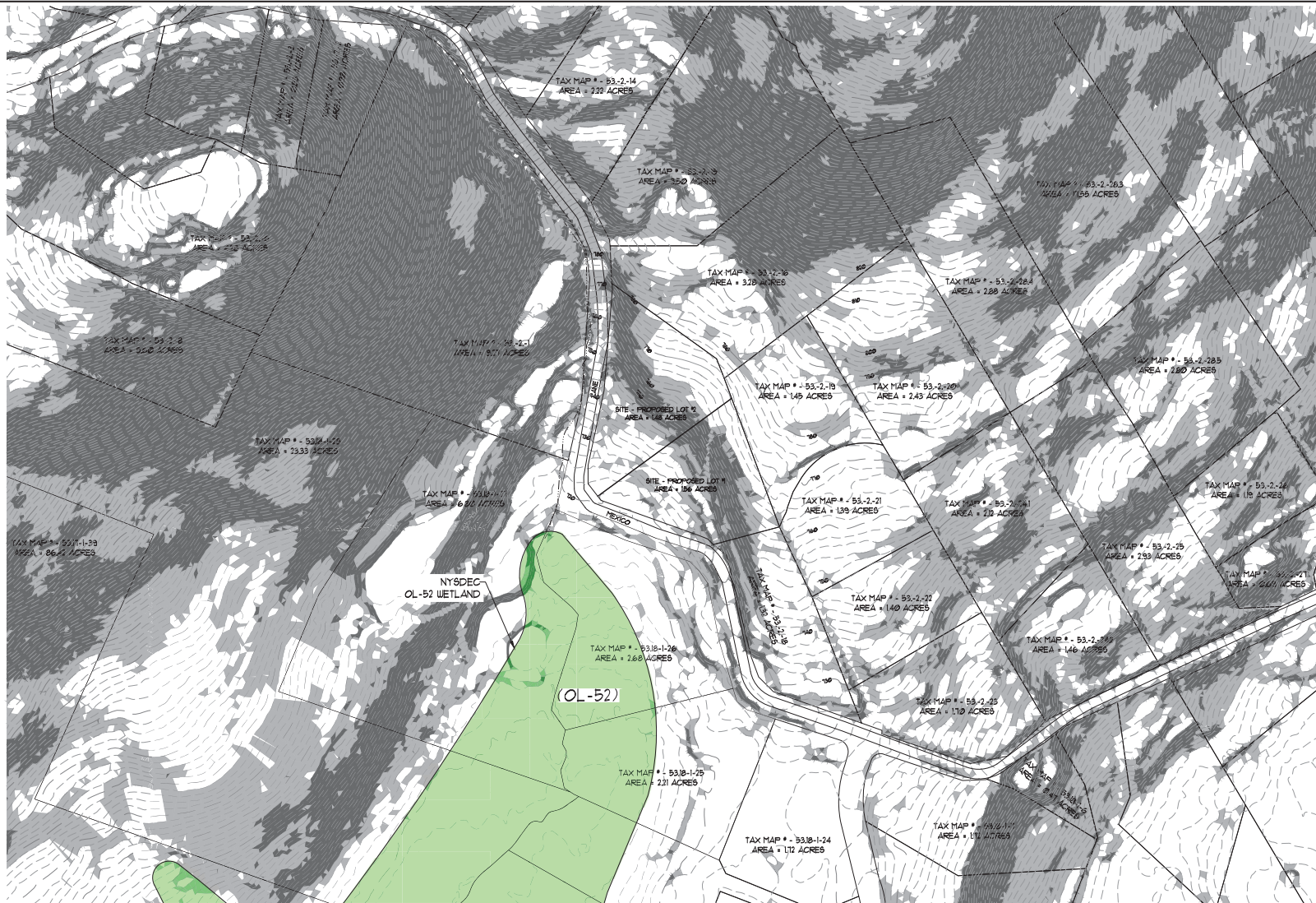
PROJECT

PLAN PREPARED FOR:
AARON KASS
90 MEXICO LANE
TOWN OF CARMEL
PUTNAM COUNTY, NEW YORK
TAX MAP No. 53, BLOCK 2, LOT 11

DATE: 31 JUL 2003
PROJECT MANAGER: PML
DRAWN BY: JPK
CHECKED BY: PML
SCALE: AS NOTED

DRAWING: **TAX MAP W/ PROPOSED SUBDIVIDED LOT LINE**

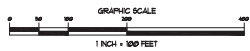
PROJECT NUMBER: 84431
DRAWING NUMBER: **T-120**
SHEET 2 OF 3



SLOPES LEGEND

- 0% TO 5%
- 5% TO 25%
- SLOPES > 25%

TAX MAP WITH TOPOGRAPHY AND WETLAND AREA



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 (845) 279-6789 FAX (845) 279-6765
 PUTNAM ENGINEERING PLLC 2003

PURSUANT TO NEW YORK STATE EDUCATION LAW, ARTICLE 148, SECTION 7009 SUBDIVISION 2, "IT IS A VIOLATION OF THIS LAW FOR ANY PERSON UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION."

REVISIONS		PROJECT	
NO.	DATE	DESCRIPTION	

PLAN PREPARED FOR:
AARON KASS
 90 MEXICO LANE
 TOWN OF CARMEL
 PUTNAM COUNTY, NEW YORK
 TAX MAP No. 53, BLOCK 2, LOT 11

[Handwritten signature]

DATE: 31 AUG 2003
 PROJECT MANAGER: PML
 DRAWN BY: JPK
 CHECKED BY: PML
 SCALE: AS NOTED

DRAWING: TAX MAP W/
 STEEP SLOPES AND
 NYSDEC WETLAND AREA

PROJECT NUMBER: 8443J
 DRAWING NUMBER: T-130