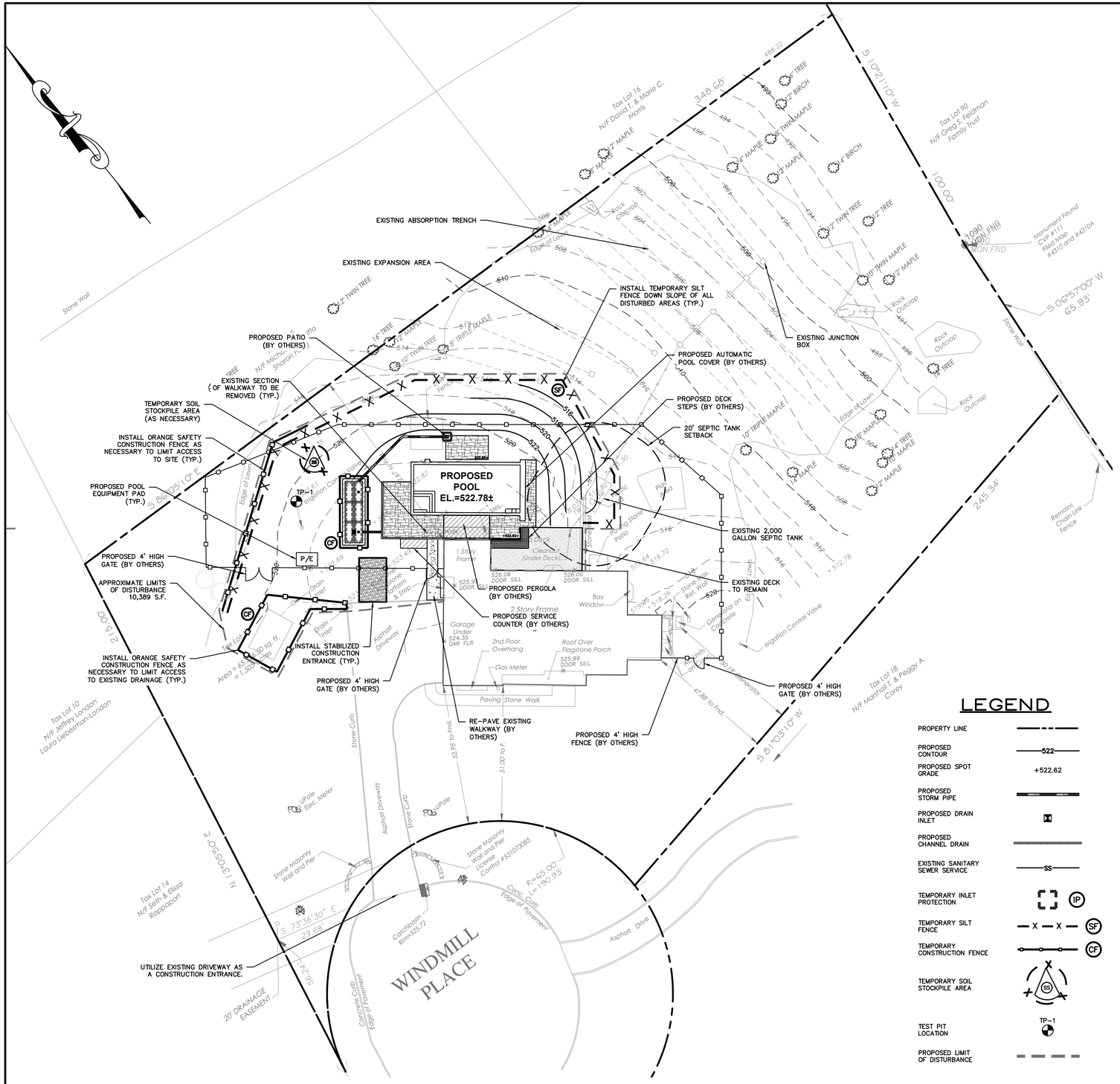


LEGEND

- PROPERTY LINE
- PROPOSED CONTOUR — 522
- PROPOSED SPOT GRADE — +522.62
- PROPOSED STORM PIPE
- PROPOSED DRAIN INLET
- PROPOSED CHANNEL DRAIN
- EXISTING SANITARY SEWER SERVICE — SS
- TEMPORARY INLET PROTECTION — IP
- TEMPORARY SILT FENCE — SF
- TEMPORARY CONSTRUCTION FENCE — CF
- TEMPORARY SOIL STOCKPILE AREA — SS
- TEST PIT LOCATION — TP-1
- PROPOSED LIMIT OF DISTURBANCE

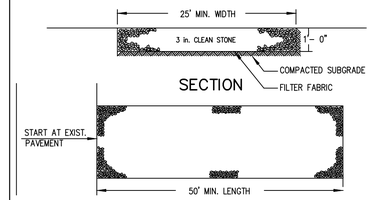
24 WINDMILL PLACE EROSION & SEDIMENT CONTROL PLAN BASED UPON EXISTING INFORMATION PROVIDED BY TC MERRITTS LAND SURVEYORS, P.C., DATED OCTOBER 10, 2014.

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

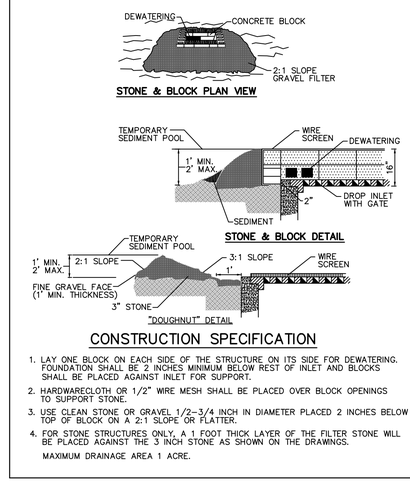
STABILIZED CONSTRUCTION ENTRANCE



INSTALLATION NOTES:
1. STONE SIZE – USE 3" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH – AS REQUIRED, BUT NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY.
3. THICKNESS – NOT LESS THAN SIX (6) INCHES.
4. WIDTH – 25 FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCUR.
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 WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT OF WAY THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT OF WAY MUST BE REMOVED IMMEDIATELY.
8. WASHING – WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT OF WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

LOCATION MAP
SCALE: 1"=500'

STONE & BLOCK DROP INLET PROTECTION

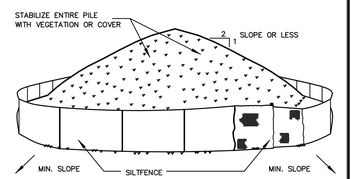


CONSTRUCTION SPECIFICATION

1. LAY ONE BLOCK ON EACH SIDE OF THE STRUCTURE ON ITS SIDE FOR DEWATERING. FOUNDATION SHALL BE 2 INCHES MINIMUM BELOW REST OF INLET AND BLOCKS SHALL BE PLACED AGAINST INLET FOR SUPPORT.
2. HARDWARECLOTH OR 1/2" WIRE MESH SHALL BE PLACED OVER BLOCK OPENINGS TO SUPPORT STONE.
3. USE CLEAN STONE OR GRAVEL 1/2-3/4 INCH IN DIAMETER PLACED 2 INCHES BELOW TOP OF BLOCK ON A 2:1 SLOPE OR FLATTER.
4. FOR STONE STRUCTURES ONLY, A 1 FOOT THICK LAYER OF THE FILTER STONE WILL BE PLACED AGAINST THE 3 INCH STONE AS SHOWN ON THE DRAWINGS.

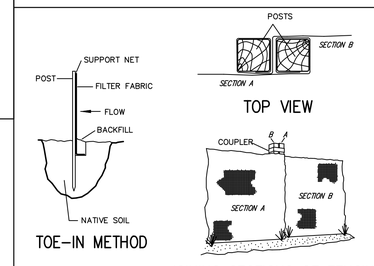
MAXIMUM DRAINAGE AREA 1 ACRE.

SOIL STOCKPILING

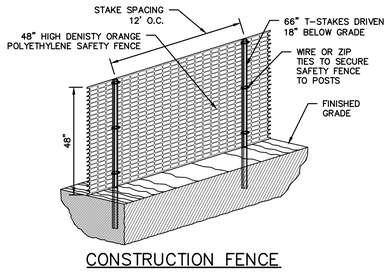


INSTALLATION NOTES:
1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
2. SOILS OR FILL TO BE STOCKPILED ON SITE DURING CUTTING AND FILLING ACTIVITIES SHOULD BE LOCATED ON LEVEL PORTIONS OF THE SITE WITH A MINIMUM OF 50–75 FOOT SETBACKS FROM TEMPORARY DRAINAGE SWALES.
3. MAXIMUM SLOPE OF STOCKPILE SHALL BE 1:2.
4. UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE SURROUNDED WITH EITHER SILT FENCING OR STRAWBALES, THEN STABILIZED WITH VEGETATION OR COVERED.
5. STOCKPILES REMAINING IN PLACE FOR MORE THAN A WEEK SHOULD BE SEEDED AND MULCHED OR COVERED WITH GEOTEXTILE FABRIC SURROUNDED BY SILT FENCE.
6. SEE SPECIFICATIONS (THIS MANUAL) FOR INSTALLATION OF SILT FENCE.

SILT FENCE



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



CONSTRUCTION FENCE

ANY ALTERATIONS OR REVISIONS OF THESE PLANS, UNLESS DONE BY OR UNDER THE DIRECTION OF THE NYS LICENSED AND REGISTERED ENGINEER THAT PREPARED THEM, IS A VIOLATION OF THE NYS EDUCATION LAW.

No.	Description / Revisions	Date
	THIS PLAN NOT VALID FOR CONSTRUCTION WITHOUT ENGINEERS SEAL & SIGNATURE	

PROJECT:

PROPOSED POOL & ALTERATIONS
24 WINDMILL PLACE
TOWN OF NORTH CASTLE
WESTCHESTER COUNTY – NEW YORK

EROSION & SEDIMENT CONTROL PLAN

STATE OF NEW YORK · MICHAEL F. STERN · LICENSED PROFESSIONAL ENGINEER · No. 80697

HUDSON ENGINEERING & CONSULTING, P.C.
45 Knollwood Road – Suite 201
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T: 914-909-0420
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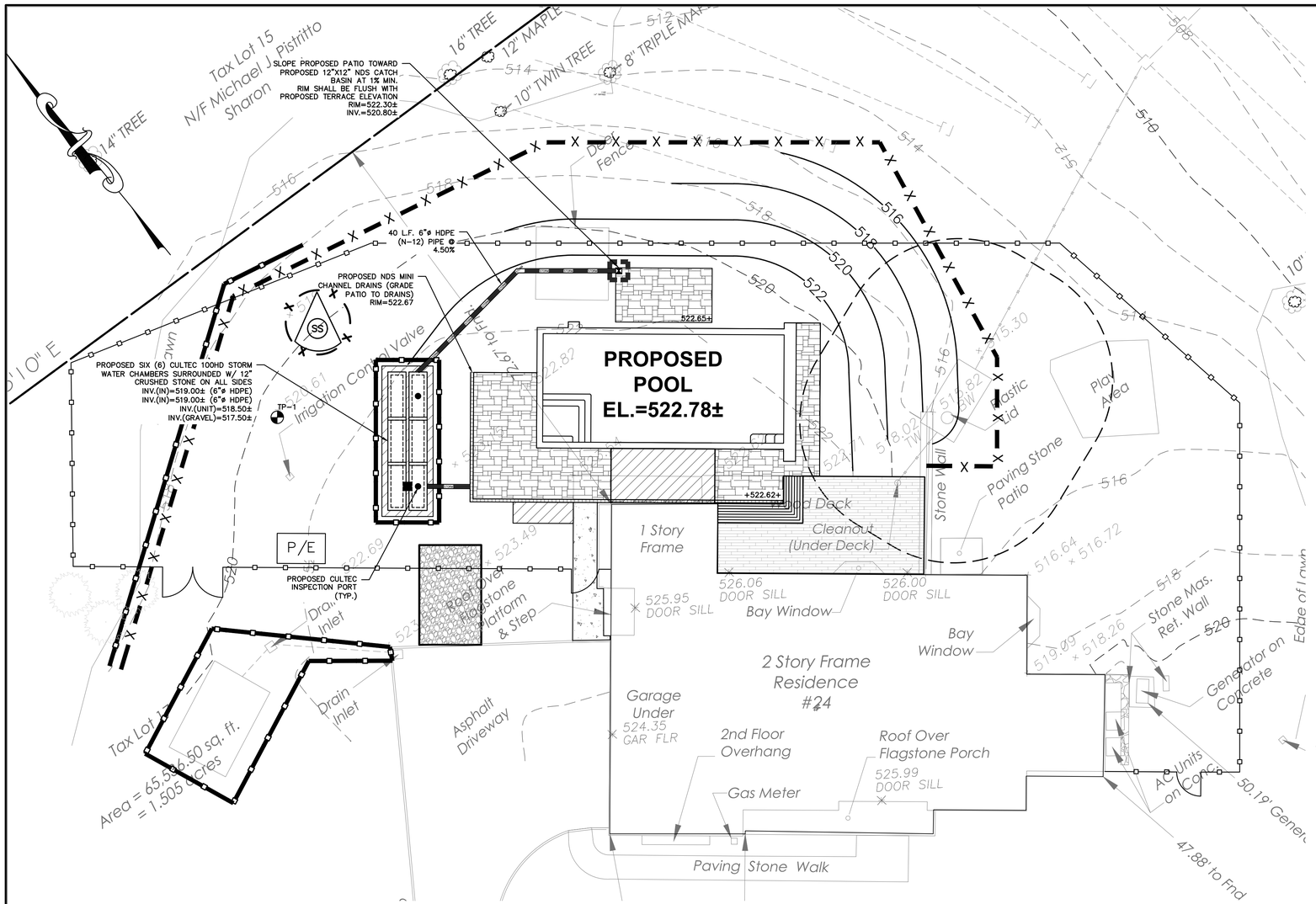
Date: 03/06/21 Sheet: 1
Scale: 1" = 20' 3
Designed By: N.S.
Checked By: M.S.
Sheet No. C-1



INSTALLATION & MAINTENANCE OF EROSION CONTROL:

CONSTRUCTION SCHEDULE
NOTIFY APPROPRIATE MUNICIPAL AGENCY HAVING JURISDICTION AT LEAST 5 DAYS PRIOR TO START.

EROSION CONTROL MEASURES
INSTALL ALL EROSION CONTROL MEASURES PRIOR TO START OF CONSTRUCTION. CALL FOR INSPECTION FROM THE APPROPRIATE MUNICIPAL AGENCY HAVING JURISDICTION AT LEAST 2 DAYS PRIOR TO FINISH.

INSPECTION BY MUNICIPALITY
MAINTENANCE (TO BE PERFORMED DURING ALL PHASES OF CONSTRUCTION)

AFTER ANY RAIN CAUSING RUNOFF, CONTRACTOR TO INSPECT HAYBALES, ETC. AND REMOVE ANY EXCESSIVE SEDIMENT AND INSPECT STOCKPILES AND CORRECT ANY PROBLEMS WITH SEED ESTABLISHMENT.
INSPECTIONS SHALL BE DOCUMENTED IN WRITING AND SUBMITTED TO THE APPROPRIATE MUNICIPAL AGENCY HAVING JURISDICTION.

INSPECTION BY MUNICIPALITY – FINAL GRADING
REMOVE UNNEEDED SUBGRADE FROM SITE.
CALL FOR INSPECTION FROM THE APPROPRIATE MUNICIPAL AGENCY HAVING JURISDICTION AT LEAST 2 DAYS PRIOR TO FINISH.

INSPECTION BY MUNICIPALITY – LANDSCAPING

SPREAD TOPSOIL EVENLY OVER AREAS TO BE SEEDED. HAND RAKE LEVEL. BROADCAST 1.25 LB. BAG OF JONATHAN GREEN "FASTGROW" MIX OR EQUAL OVER AREA TO BE SEEDED. APPLY STRAW MULCH AND WATER WITHIN 2 DAYS OF COMPLETION OF TOPSOILING. CALL FOR INSPECTION FROM THE APPROPRIATE MUNICIPAL AGENCY HAVING JURISDICTION AT LEAST 2 DAYS PRIOR TO FINISH.

INSPECTION BY MUNICIPALITY – FINAL LANDSCAPING

GRASS ESTABLISHED.
CALL FOR INSPECTION FROM THE APPROPRIATE MUNICIPAL AGENCY HAVING JURISDICTION AT LEAST 2 DAYS PRIOR TO FINISH.

INSPECTION BY MUNICIPALITY – FINAL INSPECTION

ALL EROSION CONTROL MEASURES REMOVED AND GRASS ESTABLISHED.
CALL FOR INSPECTION FROM THE APPROPRIATE MUNICIPAL AGENCY HAVING JURISDICTION AT LEAST 2 DAYS PRIOR TO FINISH.

LEGEND

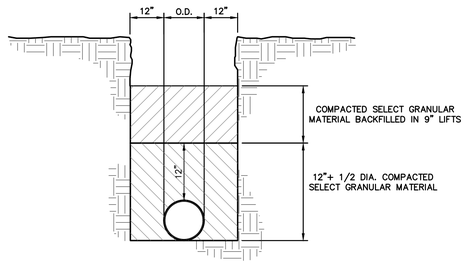
PROPERTY LINE	
PROPOSED CONTOUR	522
PROPOSED SPOT GRADE	+522.62
PROPOSED STORM PIPE	
PROPOSED DRAIN INLET	
PROPOSED CHANNEL DRAIN	

TEST HOLE DATA:

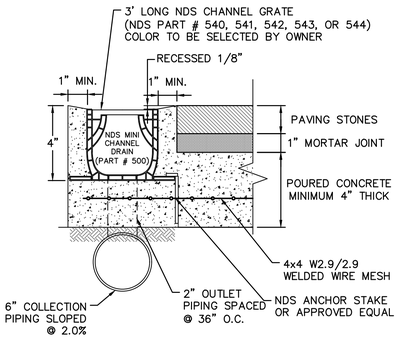
TEST HOLE #1
DEPTH – 78"
0–6" TOPSOIL
6–78" LOOSELY COMPACT BROWN SANDY LOAM
VERY ROCKY
NO GROUNDWATER
LEDGE ROCK @ 78"
PERC. = 20" INCHES/HOUR

GENERAL NOTES:

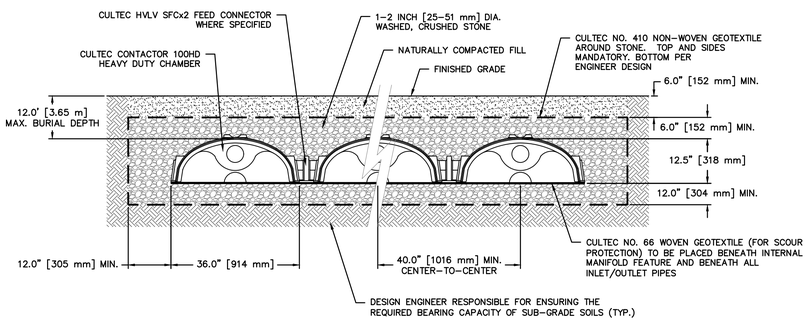
1. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE SUPERVISION OF THE CONSTRUCTION.
2. NO CHANGES SHALL BE MADE TO THESE PLANS EXCEPT AS PER NYS LAW CHAPTER 987.
3. ALL WORK AND MATERIALS SHALL COMPLY WITH ALL APPLICABLE CODES, INCLUDING BUT NOT LIMITED TO ACI, AISC, ZONING, AND THE NEW YORK STATE BUILDING CODE.
4. ALL CONDITIONS, LOCATIONS AND DIMENSIONS SHALL BE FIELD VERIFIED AND THE ENGINEER SHALL BE IMMEDIATELY NOTIFIED OF ANY DISCREPANCIES.
5. ALL CHANGES MADE TO THE PLANS SHALL BE APPROVED BY THE ENGINEER AND ANY SUCH CHANGES SHALL BE FILED AS AMENDMENTS TO THE ORIGINAL BUILDING PERMIT.
6. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING HIS BEST SKILL AND ATTENTION. HE SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
7. THE CONTRACTOR SHALL BE RESPONSIBLE TO THE OWNER FOR THE ACTS AND OMISSIONS OF HIS EMPLOYEES, SUBCONTRACTORS AND THEIR AGENTS AND EMPLOYEES, AND OTHER PERSONS PERFORMING ANY OF THE WORK UNDER A CONTACT WITH THE CONTRACTOR.
8. SAFETY DURING CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL CONFORM TO ALL LOCAL, STATE AND FEDERAL AGENCIES IN EFFECT DURING THE PERIOD OF CONSTRUCTION.
9. THE CONTRACTOR AND HIS SUBCONTRACTORS SHALL MAKE APPLICATION TO RECEIVE ALL NECESSARY PERMITS TO PERFORM THE WORK UNDER CONTRACT. THE CONTRACTOR AND HIS SUBCONTRACTORS SHALL BE LICENSED TO DO ALL WORK AS REQUIRED BY THE LOCAL, COUNTY, AND STATE AGENCIES WHICH MAY HAVE JURISDICTION OVER THOSE TRADES, AND SHALL PRESENT THE OWNER WITH COPIES OF ALL LICENSES AND INSURANCE CERTIFICATES.
10. FINAL GRADING AROUND THE BUILDING AREA SHALL SLOPE AWAY FROM THE STRUCTURE.
11. ALL WRITTEN DIMENSIONS ON THE DRAWINGS SHALL TAKE PRECEDENCE OVER ANY SCALED DIMENSIONS.
12. ADJOINING PUBLIC AND PRIVATE PROPERTY SHALL BE PROTECTED FROM DAMAGE DURING CONSTRUCTION, REMODELING AND DEMOLITION WORK. PROTECTION MUST BE PROVIDED FOR FOOTINGS, FOUNDATIONS, PARTY WALLS, CHIMNEYS, SKYLIGHTS AND ROOFS. PROVISIONS SHALL BE MADE TO CONTROL WATER RUNOFF AND EROSION DURING CONSTRUCTION OR DEMOLITION ACTIVITIES. THE PERSON MAKING OR CAUSING AN EXCAVATION TO BE MADE SHALL PROVIDE WRITTEN NOTICE TO THE OWNERS OF ADJOINING BUILDINGS ADVISING THEM THAT THE EXCAVATION IS TO BE MADE AND THAT THE ADJOINING BUILDING SHOULD BE PROTECTED. SAID NOTIFICATION SHALL BE DELIVERED NOT LESS THAN 10 DAYS PRIOR TO THE SCHEDULED STARTING DATE OF THE EXCAVATION.
13. OWNER SHALL INSURE THAT THE INSURANCE PROVIDED BY THE CONTRACTOR HIRED TO PERFORM THE WORK SHALL BE ENDORSED TO NAME HUDSON ENGINEERING & CONSULTING, P.C., AND ANY DIRECTORS, OFFICERS, EMPLOYEES, SUBSIDIARIES, AND AFFILIATES, AS ADDITIONAL INSURED ON ALL POLICIES AND HOLD HARMLESS DOCUMENTS, AND SHALL STIPULATE THAT THIS INSURANCE IS PRIMARY, AND THAT ANY OTHER INSURANCE OR SELF-INSURANCE MAINTAINED BY HUDSON ENGINEERING & CONSULTING, P.C., SHALL BE EXCESS ONLY AND SHALL NOT BE CALLED UPON TO CONTRIBUTE WITH THIS INSURANCE. ISO ADDITIONAL INSURED ENDORSEMENT FORM NUMBER CG2010 1185 UNDER GL. COPIES OF THE INSURANCE POLICIES SHALL BE SUBMITTED TO HUDSON ENGINEERING & CONSULTING, P.C., FOR APPROVAL PRIOR TO THE SIGNING OF THE CONTRACT.
14. INDUSTRIAL CODE RULE 753: THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES 72 HOURS PRIOR TO THE START OF HIS OPERATIONS AND SHALL COMPLY WITH ALL THE LATEST INDUSTRIAL CODE RULE 753 REGULATIONS.



TRENCH BEDDING



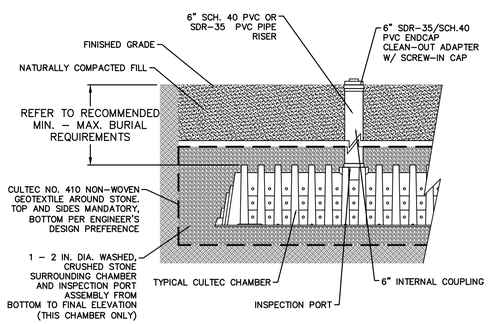
NDS MINI CHANNEL DRAIN



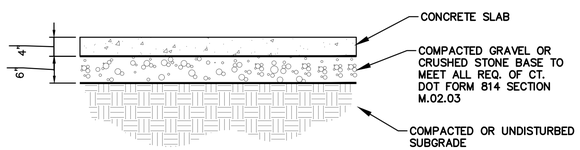
GENERAL NOTES
CONTACTOR 100HD BY CULTEC, INC. OF BROOKFIELD, CT.
STORAGE PROVIDED = 3.84 CF/FT [0.82 M^3/] PER DESIGN UNIT.
REFER TO CULTEC, INC.'S CURRENT RECOMMENDED INSTALLATION GUIDELINES.
MAXIMUM ALLOWED COVER ON TOP OF UNIT SHALL BE 12.0' [3.66 m] THE CHAMBER WILL BE DESIGNED TO WITHSTAND TRAFFIC LOADS

WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS.ALL CONTACTOR 100HD HEAVY DUTY UNITS ARE MARKED WITH A COLOR STRIPE FORMED INTO THE PART ALONG THE LENGTH OF THE CHAMBER. ALL CONTACTOR 100 CHAMBERS MUST BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.

CULTEC CONTACTOR 100HD



CULTEC ACCESS PORT



POOL EQUIPMENT PAD DETAIL

24 WINDMILL PLACE STORMWATER MANAGEMENT PLAN BASED UPON EXISTING INFORMATION PROVIDED BY TC MERRITTS LAND SURVEYORS, P.C., DATED OCTOBER 10, 2014.

GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)
1 inch = 10 ft.

ANY ALTERATIONS OR REVISIONS OF THESE PLANS, UNLESS DONE BY OR UNDER THE DIRECTION OF THE NYS LICENSED AND REGISTERED ENGINEER THAT PREPARED THEM, IS A VIOLATION OF THE NYS EDUCATION LAW.

Date | Description | No.
Revisions
THIS PLAN NOT VALID FOR CONSTRUCTION WITHOUT ENGINEERS SEAL & SIGNATURE

PROJECT:
PROPOSED POOL & ALTERATIONS
24 WINDMILL PLACE
TOWN OF NORTH CASTLE
WESTCHESTER COUNTY – NEW YORK

STORMWATER MANAGEMENT PLAN

STATE OF NEW YORK · MICHAEL F. SHEIN · 080637 · LICENSED PROFESSIONAL ENGINEER

HEC
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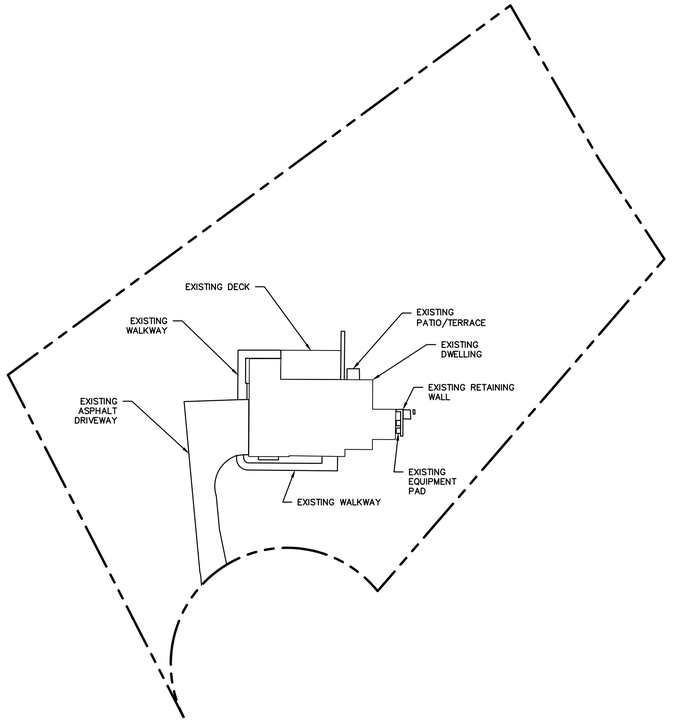
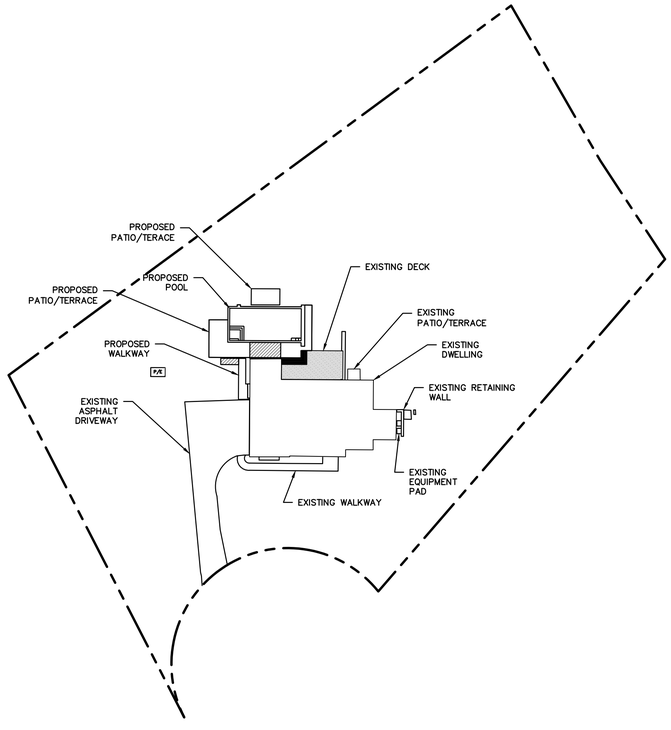
Date: 02/25/21 Sheet: 2 / 3
Scale: 1" = 10'
Designed By: N.S.
Checked By: M.S.
Sheet No.
C-2



LOT COVERAGE CALCULATIONS (EXISTING)	
SHEET: 102.01 BLOCK: 01 LOT: 17	
ZONE: R-1.5	EXISTING (sf)
LOT AREA:	65,536.50
DWELLING:	3,328.00
DECK:	553.73
DRIVEWAYS & WALKWAYS:	2,497.36
TERRACES:	41.42
OTHER STRUCTURES:	97.05
TOTAL COVERAGE:	**6,517.56**



LOT COVERAGE CALCULATIONS (PROPOSED)	
SHEET: 102.01 BLOCK: 01 LOT: 17	
ZONE: R-1.5	EXISTING (sf)
LOT AREA:	65,536.50
DWELLING:	3,328.00
DECK:	443.16
DRIVEWAYS & WALKWAYS:	2,599.01
TERRACES:	289.42
POOL/MECH. EQUIPMENT:	760.00
ALL OTHER STRUCTURES	877.73
TOTAL COVERAGE:	**8,297.32**

24 WINDMILL PLACE LOT COVERAGE PLAN BASED UPON EXISTING INFORMATION PROVIDED BY TC MERRITTS LAND SURVEYORS, P.C., DATED OCTOBER 10, 2014.

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

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No.	Description Revisions	Date

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PROJECT:

PROPOSED POOL & ALTERATIONS
24 WINDMILL PLACE
TOWN OF NORTH CASTLE
WESTCHESTER COUNTY – NEW YORK

LOT COVERAGE PLAN

STATE OF NEW YORK · MICHAEL F. STEIN · No. 80697 · LICENSED PROFESSIONAL ENGINEER

HEC

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Date: 04/07/21 Sheet: 3
Scale: 1" = 20' 3
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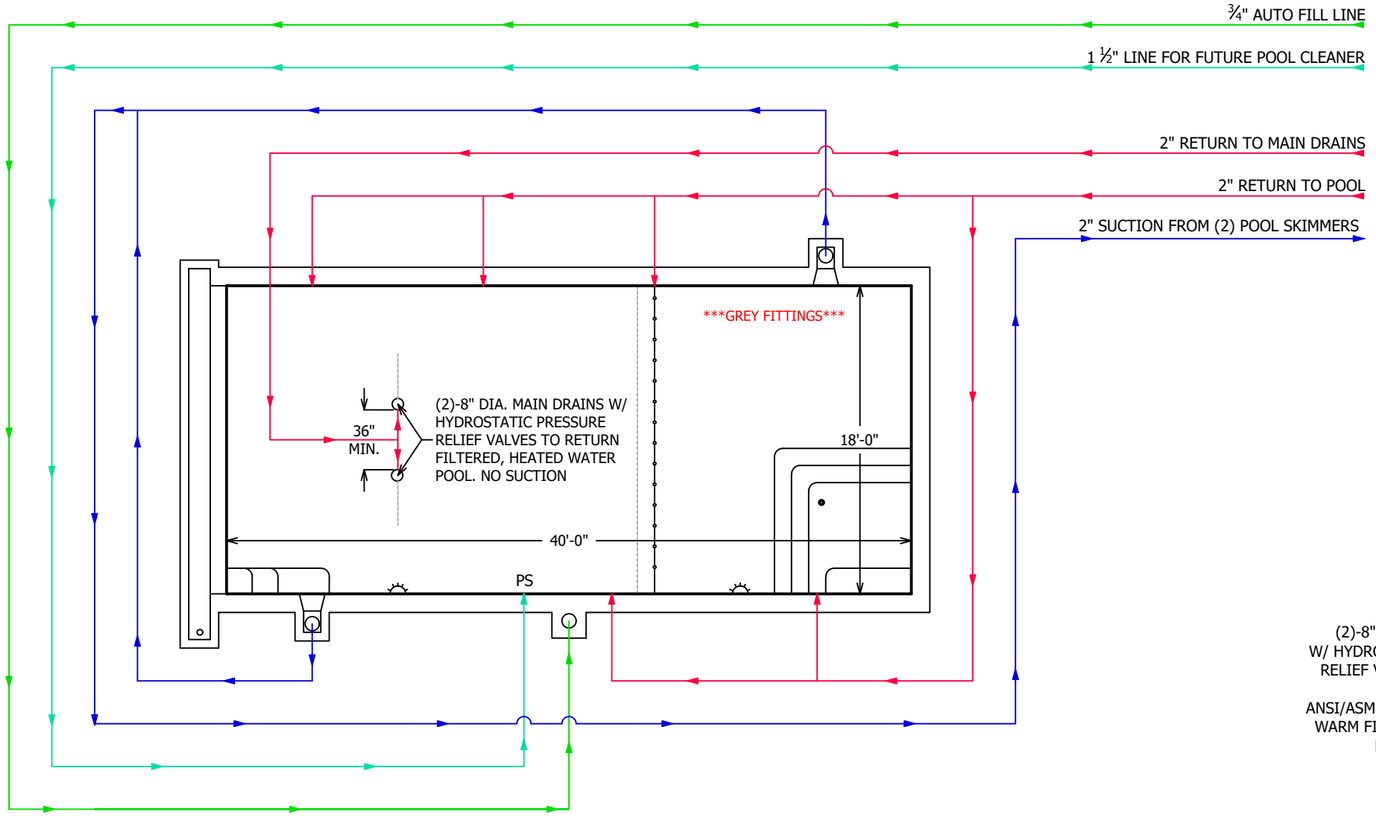
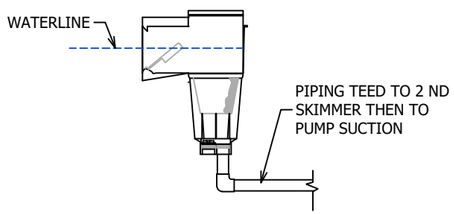
Checked By: M.S.
Sheet No.

C-3



1 POOL FILTER PLUMBING
1/8" = 1'-0"



2 TYP. DETAIL (2) POOL SKIMMERS
N.T.S.

3 POOL PLUMBING SCHEMATIC
N.T.S.

NOTES

1. THE ENGINEER IS RESPONSIBLE FOR THE CONTENTS OF THIS DRAWING ONLY AND NOT ANY OTHER DOCUMENTS SUBMITTED IN SUPPORT OF THIS APPLICATION. THE ENGINEER HAS NOT REVIEWED ZONING CRITERIA AND PERMITTING REQUIREMENTS AND SHALL BE INDEMNIFIED AGAINST ALL DAMAGES ARISING FROM NON COMPLIANCE WITH ZONING AND PERMITTING REQUIREMENTS.
2. THE POOL SHALL BE WIRED AND GROUNDED IN STRICT ACCORDANCE WITH NFPA-70 AND THE ADOPTED LOCAL ELECTRICAL CODE.
3. ELECTRICAL EQUIPMENT AND MATERIAL SHALL BE LISTED BY UNDERWRITERS LABORATORIES (U.L. - LISTED) FOR THE USE INTENDED. PANEL ENCLOSURES FOR OUTDOOR USE SHALL BE NEMA 2 IF EXPOSED TO PRECIPITATION ONLY, OR NEMA 4 IF EXPOSED TO CONCENTRATED SPRAY.
4. CONCRETE CYLINDER STRENGTH SHALL BE A MINIMUM OF 3000 PSI AFTER 28 DAYS. REINFORCING STEEL SHALL BE GRADE A-60.
5. THE ENGINEER HAS NOT REVIEWED SUBSURFACE CONDITIONS, UNLESS NOTED ON THESE PLANS. THE ENGINEER SHALL BE INDEMNIFIED AGAINST ALL DAMAGES ARISING FROM SUBSURFACE CONDITIONS.
6. LIGHTING W.P. RECEPTICLES, CIRCULATION PUMP(S), CHEMICALS FEEDER(S) AND ALL OTHER ELECTRICALLY POWERED EQUIPMENT SHALL BE MANUFACTURER APPROVED FOR SPA AND SWIMMING POOL USE AND SHALL BE WIRED AND GROUNDED BY A LICENSED ELECTRICIAN IN ACCORDANCE WITH THE MOST STRINGENT REQUIREMENTS OF THE MANUFACTURER, GOVERNING LOCAL ELECTRICAL CODE AND NFPA -70 (NATIONAL ELECTRICAL CODE NEC) LATEST EDITION.
7. ENGINEER IS RESPONSIBLE ONLY FOR THE STRUCTURAL PLANS SHOWN HEREIN. SITE ENGINEER IS NOT RESPONSIBLE FOR THE DESIGN, CHOICE, INSTALLATION, AND FUNCTIONALITY OF ANY AND ALL MECHANICAL EQUIPMENT USED ON THIS PROJECT. MECHANICAL EQUIPMENT SKETCH SHOWN HEREIN IS TO BE USED FOR ILLUSTRATIVE PURPOSES ONLY AND IS NOT AN ENDORSEMENT OF ANY PARTICULAR MECHANICAL SYSTEM.
8. RETURNS, SKIMMERS, AND SUCTION GRATES MAY BE RELOCATED PER FIELD LAYOUT.
9. ALL SUBMERGED SUCTION OUTLETS TO BE SEPARATED BY A MINIMUM OF 36" AND TEED IN TOGETHER.
10. THIS POOL IS NOT APPROVED FOR DIVING.
11. THIS POOL HAS BEEN DESIGNED IN ACCORDANCE WITH ANSI/APSP/ICC-5 2011 STANDARD FOR RESIDENTIAL INGROUND SWIMMING POOLS AND 2015 INTERNATIONAL RESIDENTIAL CODE SECTIONS R326.4.1 THROUGH R326.4.3.
12. THIS SPA HAS BEEN DESIGNED IN ACCOD WITH ANSI/NSPI-3-99 STANDARD FOR PERMANENTLY INSTALLED RESIDENTIAL SPAS.
13. THE POOLAND SPA HAS BEEN DESIGNED IN ACCORDANCE WITH ANSI/APSP-7-06 STANDARD FOR SUCTION ENTRAPMENT AVOIDANCE IN SWIMMING POOLS, WADING POOLS,SPAS, HOT TUBS AND CATCH BASINS.
14. THE AUTOMATIC POOL COVER MEETS ASTM 1346-91 (2003) PERFORMANCE SPECIFICATION FOR SAFETY COVERS AND LABELING REQUIREMENTS FOR ALL COVERS FOR SWIMMING POOLS, SPAS AND HOT TUBS.

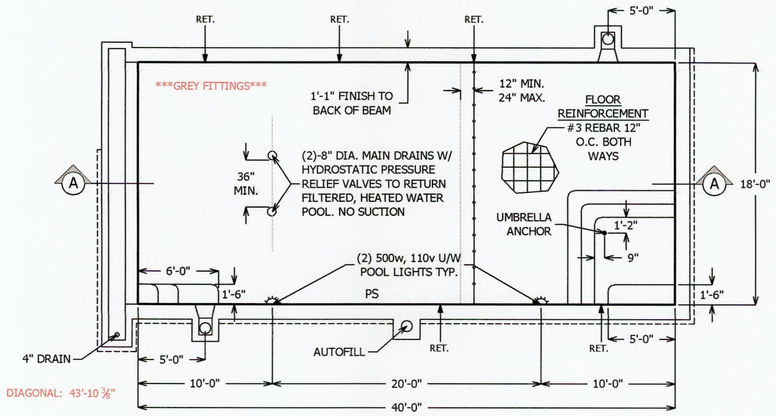
PLUMBING SCHEMATIC FOR THE

FERN RESIDENCE

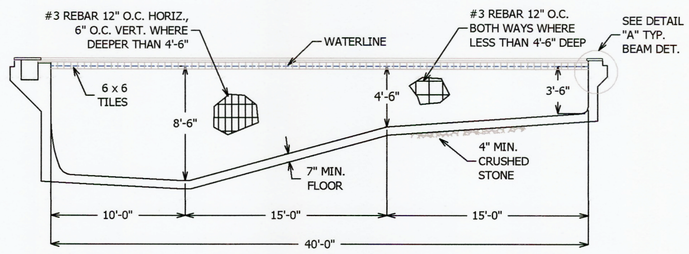
24 WINDMILL PLACE
ARMONK, NY

SHORELINE POOLS
393 WEST AVE
STAMFORD, CT 06902
TEL. (203) 967-1203
LICENSES: **NJ:** 13VH02627600 **CT:** 0508652
Westchester: WC02092 **Rockland:** H-11107-26-00-00 **Putnam:** 1832

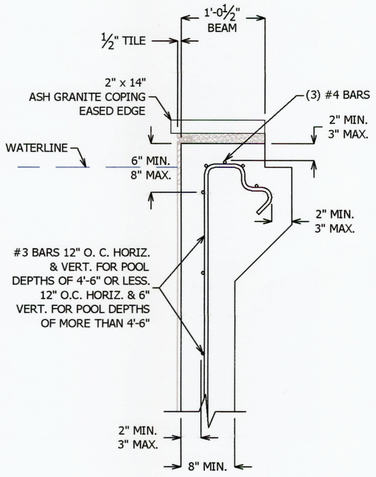
DRAWN BY:	LL
DATE:	11-05-2020
SCALE:	AS NOTED
DWG LOCATION:	2020 NY POOL
FILE NUMBER:	20-071-NOV
DWG:	P-1



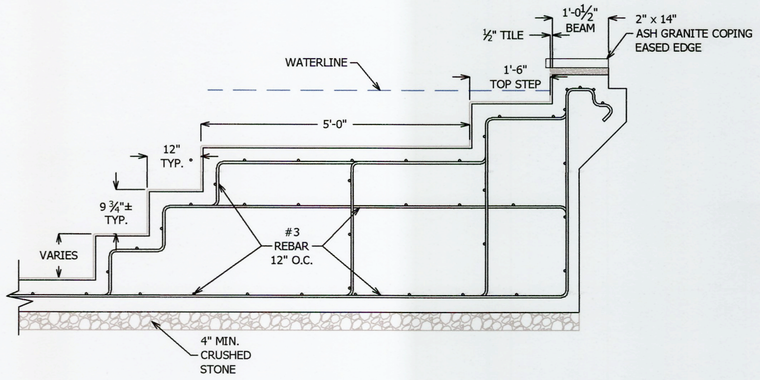
1 PLAN VIEW
⅛"=1'-0"



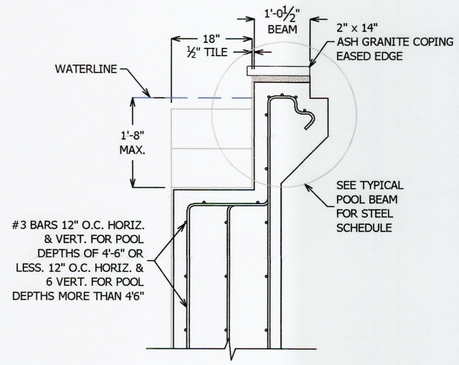
2 SECTION "A-A"
⅛"=1'-0"



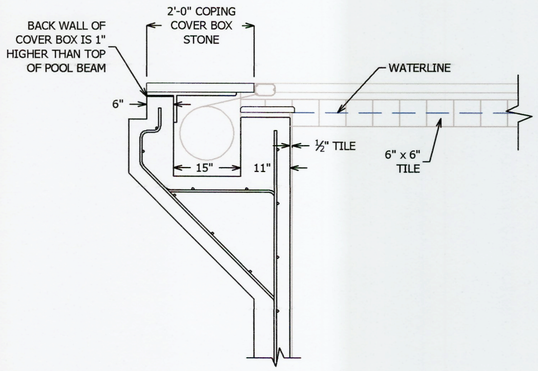
3 DETAIL "A" TYPICAL BEAM
¾"=1'-0"



4 TYP. SEC @ STEPS
½"=1'-0"



5 TYP. SEC. @ SWIMOUT BENCH
½"=1'-0"



6 TYP.SEC. @ COVERBOX
½"=1'-0"

POOL AREA = 720 SQ. FT.
POOL PERIM. = 116 LF

SHORELINE POOLS

393 WEST AVE
STAMFORD, CT 06902
TEL. (203) 967-1203

LICENSES: NJ: 13VH02627600 **CT:** 0508652
Westchester: WC02092 **Rockland:** H-11107-26-00-00 **Putnam:** 1832

NOTES

1. THE ENGINEER IS RESPONSIBLE FOR THE CONTENTS OF THIS DRAWING ONLY AND NOT ANY OTHER DOCUMENTS SUBMITTED IN SUPPORT OF THIS APPLICATION. THE ENGINEER HAS NOT REVIEWED ZONING CRITERIA AND PERMITTING REQUIREMENTS AND SHALL BE INDEMNIFIED AGAINST ALL DAMAGES ARISING FROM NON COMPLIANCE WITH ZONING AND PERMITTING REQUIREMENTS.
2. THE POOL SHALL BE WIRED AND GROUNDED IN STRICT ACCORDANCE WITH NFPA-70 AND THE ADOPTED LOCAL ELECTRICAL CODE.
3. ELECTRICAL EQUIPMENT AND MATERIAL SHALL BE LISTED BY UNDERWRITERS LABORATORIES (U.L. - LISTED) FOR THE USE INTENDED. PANEL ENCLOSURES FOR OUTDOOR USE SHALL BE NEMA 2 IF EXPOSED TO PRECIPITATION ONLY, OR NEMA 4 IF EXPOSED TO CONCENTRATED SPRAY.
4. CONCRETE CYLINDER STRENGTH SHALL BE A MINIMUM OF 3000 PSI AFTER 28 DAYS. REINFORCING STEEL SHALL BE GRADE A-60.
5. THE ENGINEER HAS NOT REVIEWED SUBSURFACE CONDITIONS, UNLESS NOTED ON THESE PLANS. THE ENGINEER SHALL BE INDEMNIFIED AGAINST ALL DAMAGES ARISING FROM SUBSURFACE CONDITIONS.
6. LIGHTING W.P. RECEPTICLES, CIRCULATION PUMP(S), CHEMICALS FEEDER(S) AND ALL OTHER ELECTRICALLY POWERED EQUIPMENT SHALL BE MANUFACTURER APPROVED FOR SPA AND SWIMMING POOL USE AND SHALL BE WIRED AND GROUNDED BY A LICENSED ELECTRICIAN IN ACCORDANCE WITH THE MOST STRINGENT REQUIREMENTS OF THE MANUFACTURER, GOVERNING LOCAL ELECTRICAL CODE AND NFPA -70 (NATIONAL ELECTRICAL CODE NEC) LATEST EDITION.
7. ENGINEER IS RESPONSIBLE ONLY FOR THE STRUCTURAL PLANS SHOWN HEREIN. SITE ENGINEER IS NOT RESPONSIBLE FOR THE DESIGN, CHOICE, INSTALLATION, AND FUNCTIONALITY OF ANY AND ALL MECHANICAL EQUIPMENT USED ON THIS PROJECT. MECHANICAL EQUIPMENT SKETCH SHOWN HEREIN IS TO BE USED FOR ILLUSTRATIVE PURPOSES ONLY AND IS NOT AN ENDORSEMENT OF ANY PARTICULAR MECHANICAL SYSTEM.
8. RETURNS, SKIMMERS, AND SUCTION GRATES MAY BE RELOCATED PER FIELD LAYOUT.
9. ALL SUBMERGED SUCTION OUTLETS TO BE SEPARATED BY A MINIMUM OF 36" AND TEED IN TOGETHER.
10. THIS POOL IS NOT APPROVED FOR DIVING.
11. THIS POOL HAS BEEN DESIGNED IN ACCORDANCE WITH ANSI/APSP/ICC-5 2011 STANDARD FOR RESIDENTIAL INGROUND SWIMMING POOLS AND 2015 INTERNATIONAL RESIDENTIAL CODE SECTIONS R326.4.1 THROUGH R326.4.3.
12. THIS SPA HAS BEEN DESIGNED IN ACCORDANCE WITH ANSI/NSPI-3-99 STANDARD FOR PERMANENTLY INSTALLED RESIDENTIAL SPAS.
13. THIS POOL AND SPA HAS BEEN DESIGNED IN ACCORDANCE WITH ANSI/APSP-7-06 STANDARD FOR SUCTION ENTRAPMENT AVOIDANCE IN SWIMMING POOLS, WADING POOLS, SPAS, HOT TUBS AND CATCH BASINS.
14. THE AUTOMATIC POOL COVER MEETS ASTM F 1346-91 (2003) PERFORMANCE SPECIFICATION FOR SAFETY COVERS AND LABELING REQUIREMENTS FOR ALL COVERS FOR SWIMMING POOLS, SPAS AND HOT TUBS.

LICENSED PROFESSIONAL ENGINEER
CARL E. RUSPINI
056746
STATE OF NEW YORK
11/10/20

CARL RUSPINI P.E.
CONSULTING ENGINEER
CT LIC No: 11426 NY LIC No: 056746

SWIMMING POOL DETAILS FOR THE

FERN RESIDENCE

24 WINDMILL PLACE
ARMONK, NY

DRAWN BY:	LL
DATE:	11-05-2020
SCALE:	AS NOTED
DWG LOCATION:	2020 NY POOL
FILE NUMBER:	20-071-NOV
DWG:	S-1

STORMWATER MANAGEMENT PLAN & DRAINAGE ANALYSIS

24 Windmill Place
Town of North Castle - New York

March 6, 2021

Hudson Engineering & Consulting, P.C.
45 Knollwood Road - Suite 201
Elmsford, NY 10523
(914) 909-0420

STORMWATER MANAGEMENT
PLAN & DRAINAGE ANALYSIS
24 Windmill Place
Town of North Castle - New York

INTRODUCTION

This Stormwater Management Plan presents the proposed Best Management Practices (BMPs) to control erosion and sedimentation and manage stormwater during and upon construction of a pool and patio on a 1.5 Acre lot at 24 Windmill Place, Armonk [SBL:102.01-1-17] in the Town of North Castle, Westchester County, New York.

This Plan consists of this narrative and a plan set entitled: "Proposed Pool & Alterations, 24 Windmill Place, Town of North Castle, Westchester County - New York", all as prepared by Hudson Engineering and Consulting, P.C., Elmsford, New York, latest date March 6, 2021. The design is in accordance with the Town of North Castle's requirements. The approximate area of the limits of disturbance is 0.24-acres. Since the project disturbance is less than one acre the New York State Department of Environmental Conservation [NYSDEC] stormwater regulations are not applicable.

METHODOLOGY

The stormwater analysis was developed utilizing the Soil Conservation Service (SCS) TR-20, 24-hour Type III storm events (HydroCad®) to assist with the design of the mitigating practices. The "Complex Number" (CN) value determination is based on soil type, vegetation and land use. The design is in accordance with the Town of North Castle's stormwater regulations. The "Time of Concentration" (T_c) was determined as a direct entry of one-minute. The CN and T_c data are input into the computer model. The project site was modeled for the 25-year Type III – 24-hour storm event.

PRE-DESIGN INVESTIGATIVE ANALYSIS

A pre-design investigative analysis was performed including percolation and deep hole tests in the locations shown on the plans. A series of percolation tests were performed in the vicinity of the potential stormwater mitigation practice [TP-1] and [TP-2] until constant rates were achieved, their results as follows:

- TP-1: A percolation rate of 3-minutes per inch (20-inches per hour) was observed. A rate of 15-inches per hour was utilized in the design.

One (1) deep test hole was excavated and labeled TP-1 as shown on the plans.
.

- TP-1 was excavated to a depth of 78-inches. The test revealed topsoil to a depth of 6-inches, loosely compacted brown, sandy loam, very rocky to the invert. No groundwater was observed. Ledge rock was encountered at 78-inches.

The deep test hole log and percolation test data sheets are attached.

PRE-DEVELOPED CONDITION

In the pre-developed condition, the site is characterized as sloping from southwest to east. The soil classification based upon Westchester County Soils Mapping is primarily of Charlton-Chatfield complex, 0 to 15 and 15 to 35 percent slopes, very rocky. The site vegetation can be characterized as lawn and landscaped. All rock out cropping located on the site has been called out on the existing conditions map. The site is located at the north end of the cul de sac on Windmill Place. The site consists of an existing dwelling, stone walkways, asphalt driveway and wooden deck.

POST-DEVELOPED CONDITION

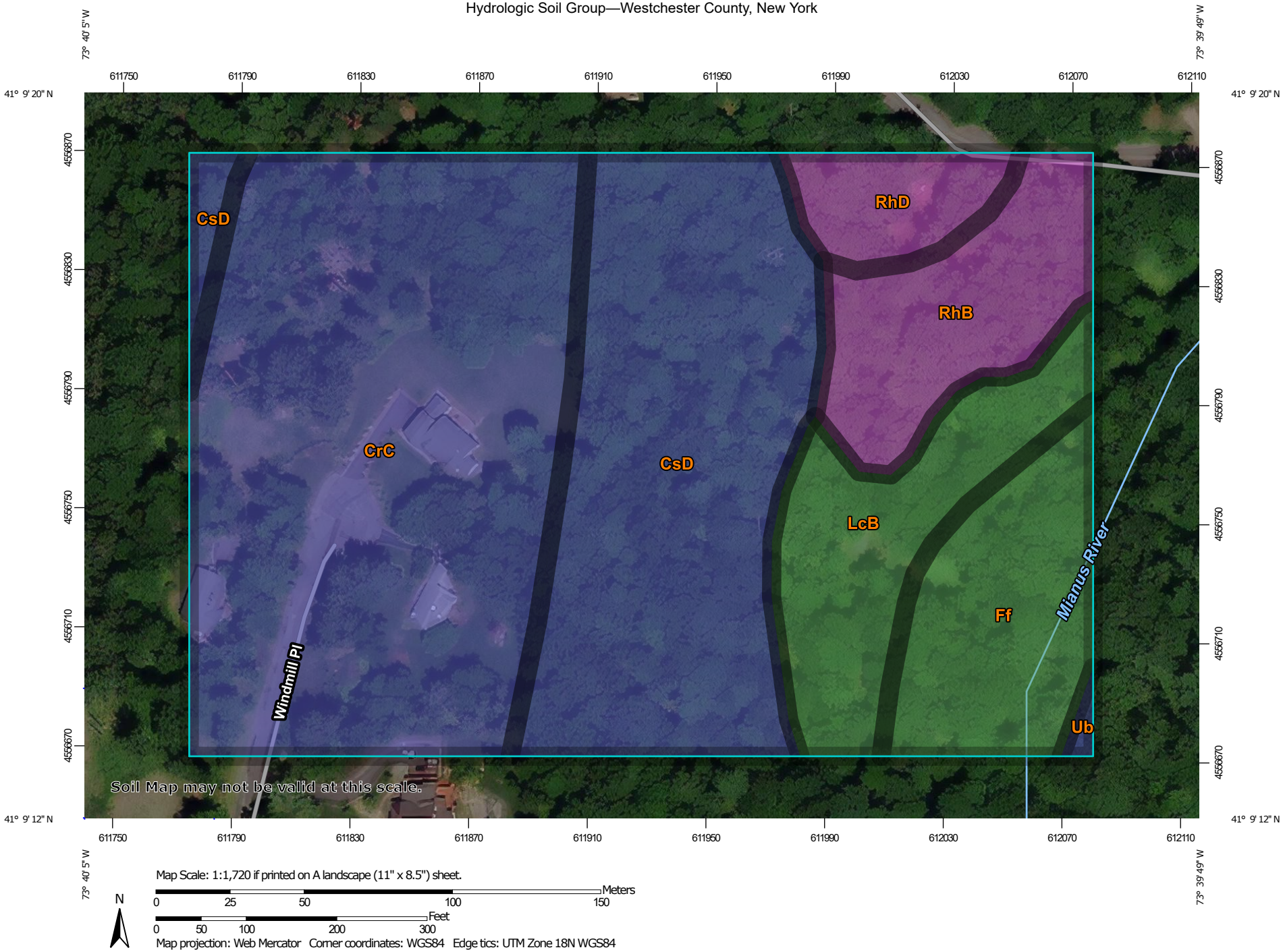
The proposed pool and patio were modeled as one watershed, Watershed 1. Watershed 1 was analyzed as follows:

Watershed 1 contains approximately 1,688 square feet of impervious area consisting of the proposed pool and patio. The weighted Complex Number (CN) value for this area is 98 and the Time of Concentration (Tc) is calculated as a direct entry of 1 minute. The stormwater runoff from this tributary area is conveyed via a comprehensive drainage system to Six (6) Cultec® 100HD stormwater chambers set in one foot of gravel at the sides and twelve inches of gravel at the invert. The system is designed to fully accept (no release) the entire stormwater runoff volume for the 25-year storm event from the watershed and ex-filtrate the runoff into the surrounding soil sub-strata.

CONCLUSION:

The stormwater management plan meets all the requirements set forth by the Town of North Castle. Design modification requirements that may occur during the approval process will be performed and submitted for review to the Town of North Castle

Hydrologic Soil Group—Westchester County, New York



Map Scale: 1:1,720 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 25 50 100 150

Feet: 0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

A

A/D

B

B/D

C

C/D

D

Not rated or not available

Soil Rating Lines

A

A/D

B

B/D

C

C/D

D

Not rated or not available

Soil Rating Points

A

A/D

B

B/D

C

C/D

D

Not rated or not available

Water Features

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

Background

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

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: Westchester County, New York
Survey Area Data: Version 16, 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 16, 2017

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.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
CrC	Charlton-Chatfield complex, 0 to 15 percent slopes, very rocky	B	6.1	39.6%
CsD	Chatfield-Charlton complex, 15 to 35 percent slopes, very rocky	B	4.2	27.5%
Ff	Fluvaquents-Udifluvents complex, frequently flooded	A/D	1.5	9.5%
LcB	Leicester loam, 3 to 8 percent slopes, stony	A/D	1.6	10.2%
RhB	Riverhead loam, 3 to 8 percent slopes	A	1.4	9.0%
RhD	Riverhead loam, 15 to 25 percent slopes	A	0.6	3.8%
Ub	Udorthents, smoothed	B	0.0	0.3%
Totals for Area of Interest			**15.3**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Extreme Precipitation Tables

Northeast Regional Climate Center

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

Smoothing	Yes
State	New York
Location	
Longitude	73.667 degrees West
Latitude	41.154 degrees North
Elevation	0 feet
Date/Time	Wed, 24 Feb 2021 17:34:27 -0500

Extreme Precipitation Estimates

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.34	0.52	0.64	0.84	1.05	1.31	**1yr**	0.91	1.23	1.50	1.86	2.29	2.81	3.18	**1yr**	2.49	3.06	3.55	4.26	4.90	**1yr**
2yr	0.40	0.62	0.77	1.02	1.28	1.60	**2yr**	1.10	1.49	1.84	2.27	2.79	3.42	3.85	**2yr**	3.03	3.70	4.26	5.04	5.70	**2yr**
5yr	0.47	0.73	0.92	1.23	1.57	1.99	**5yr**	1.36	1.83	2.30	2.85	3.51	4.30	4.87	**5yr**	3.81	4.69	5.43	6.31	7.08	**5yr**
10yr	0.53	0.83	1.04	1.42	1.84	2.35	**10yr**	1.59	2.15	2.72	3.39	4.17	5.11	5.83	**10yr**	4.52	5.60	6.53	7.49	8.34	**10yr**
25yr	0.61	0.97	1.24	1.71	2.28	2.94	**25yr**	1.96	2.65	3.42	4.27	5.27	6.43	7.38	**25yr**	5.69	7.10	8.34	9.40	10.37	**25yr**
50yr	0.69	1.11	1.42	1.99	2.68	3.48	**50yr**	2.31	3.12	4.06	5.08	6.27	7.65	8.84	**50yr**	6.77	8.50	10.05	11.16	12.22	**50yr**
100yr	0.78	1.27	1.63	2.31	3.15	4.13	**100yr**	2.72	3.66	4.83	6.06	7.47	9.12	10.58	**100yr**	8.07	10.17	12.10	13.25	14.41	**100yr**
200yr	0.89	1.45	1.88	2.69	3.72	4.90	**200yr**	3.21	4.31	5.75	7.23	8.92	10.87	12.68	**200yr**	9.62	12.19	14.59	15.74	17.00	**200yr**
500yr	1.06	1.74	2.27	3.30	4.63	6.14	**500yr**	3.99	5.34	7.24	9.11	11.26	13.72	16.10	**500yr**	12.14	15.48	18.68	19.77	21.16	**500yr**

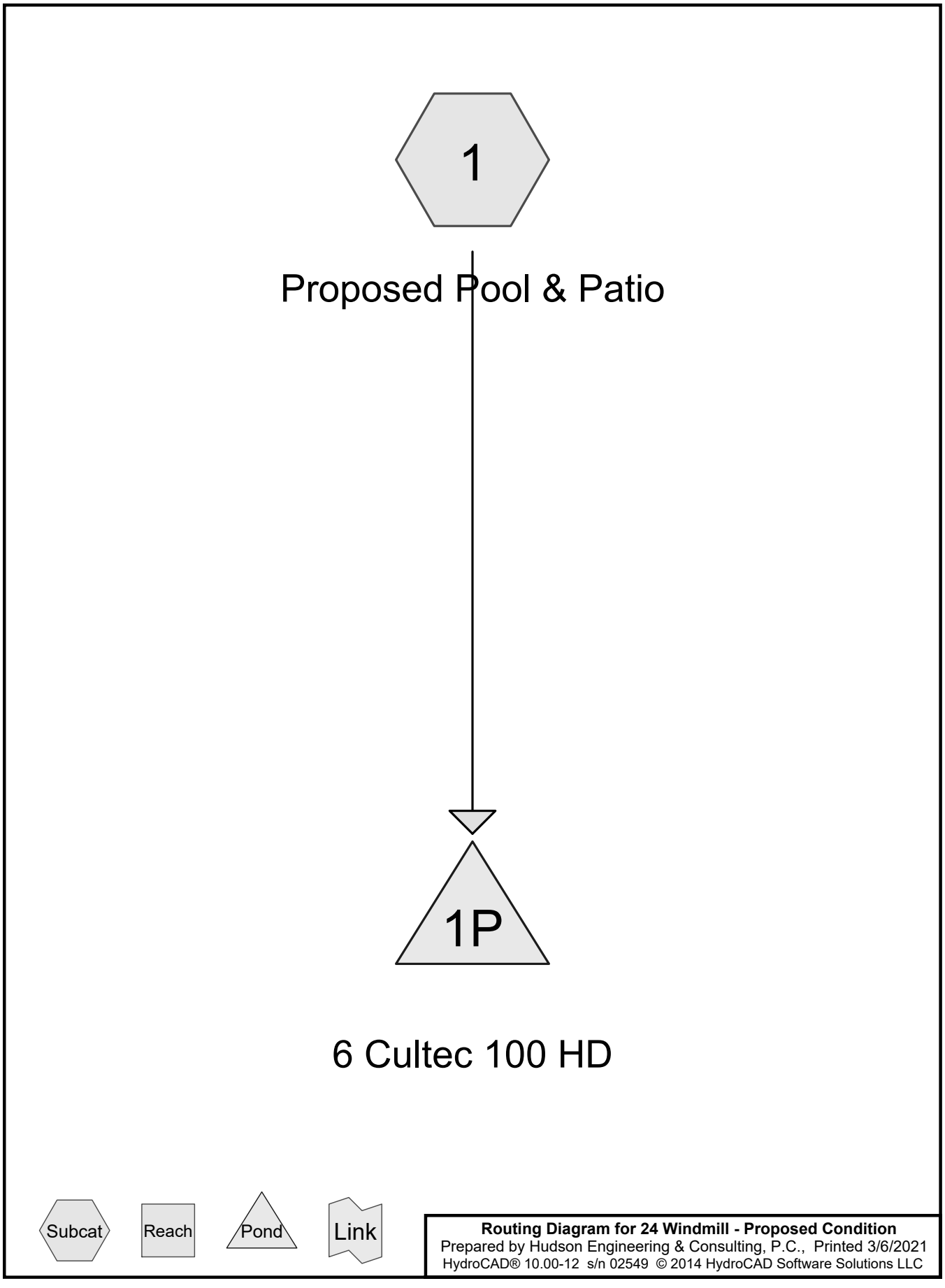
Lower Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.26	0.39	0.48	0.65	0.80	0.96	**1yr**	0.69	0.94	1.28	1.60	2.00	2.58	2.81	**1yr**	2.28	2.70	3.23	3.77	4.20	**1yr**
2yr	0.39	0.60	0.74	1.01	1.24	1.49	**2yr**	1.07	1.45	1.70	2.17	2.74	3.32	3.74	**2yr**	2.94	3.59	4.13	4.88	5.54	**2yr**
5yr	0.43	0.66	0.82	1.13	1.43	1.74	**5yr**	1.24	1.70	1.97	2.57	3.20	3.95	4.50	**5yr**	3.49	4.33	5.00	5.80	6.56	**5yr**
10yr	0.46	0.71	0.88	1.23	1.59	1.96	**10yr**	1.38	1.92	2.22	2.92	3.63	4.51	5.17	**10yr**	3.99	4.97	5.76	6.57	7.44	**10yr**
25yr	0.50	0.76	0.95	1.35	1.78	2.27	**25yr**	1.53	2.22	2.58	3.46	4.27	5.33	6.22	**25yr**	4.72	5.99	6.94	7.76	8.77	**25yr**
50yr	0.52	0.80	0.99	1.42	1.92	2.53	**50yr**	1.65	2.47	2.91	3.94	4.83	6.05	7.17	**50yr**	5.36	6.90	7.97	8.76	9.92	**50yr**
100yr	0.55	0.83	1.04	1.51	2.07	2.80	**100yr**	1.79	2.74	3.28	4.50	5.43	6.87	8.26	**100yr**	6.08	7.94	9.15	9.89	11.23	**100yr**
200yr	0.58	0.87	1.11	1.60	2.24	3.12	**200yr**	1.93	3.05	3.69	5.16	6.16	7.77	9.50	**200yr**	6.88	9.14	10.52	11.11	12.71	**200yr**
500yr	0.62	0.92	1.18	1.72	2.44	3.60	**500yr**	2.11	3.52	4.35	6.22	7.28	9.15	11.43	**500yr**	8.10	10.99	12.61	12.94	14.95	**500yr**

Upper Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.37	0.58	0.70	0.94	1.16	1.40	**1yr**	1.00	1.37	1.59	2.07	2.61	3.03	3.42	**1yr**	2.68	3.29	3.83	4.59	5.31	**1yr**
2yr	0.43	0.66	0.82	1.10	1.36	1.58	**2yr**	1.18	1.55	1.81	2.31	2.89	3.55	3.99	**2yr**	3.14	3.84	4.43	5.25	5.91	**2yr**
5yr	0.51	0.79	0.98	1.35	1.71	2.01	**5yr**	1.48	1.97	2.32	2.97	3.70	4.66	5.25	**5yr**	4.12	5.05	5.87	6.84	7.62	**5yr**
10yr	0.61	0.93	1.15	1.61	2.08	2.42	**10yr**	1.80	2.37	2.82	3.59	4.50	5.75	6.48	**10yr**	5.09	6.23	7.30	8.39	9.26	**10yr**
25yr	0.77	1.17	1.45	2.07	2.73	3.12	**25yr**	2.35	3.05	3.65	4.63	5.80	7.59	8.58	**25yr**	6.72	8.25	9.75	11.01	11.99	**25yr**
50yr	0.91	1.39	1.73	2.48	3.34	3.79	**50yr**	2.89	3.71	4.44	5.60	7.04	9.39	10.62	**50yr**	8.31	10.21	12.17	13.54	14.59	**50yr**
100yr	1.10	1.66	2.08	3.00	4.12	4.61	**100yr**	3.56	4.51	5.40	6.80	8.77	11.64	13.14	**100yr**	10.30	12.64	15.20	16.67	17.76	**100yr**
200yr	1.32	1.99	2.52	3.64	5.08	5.61	**200yr**	4.38	5.48	6.57	8.22	10.70	14.44	16.28	**200yr**	12.78	15.65	18.97	20.53	21.65	**200yr**
500yr	1.71	2.54	3.27	4.75	6.75	7.25	**500yr**	5.82	7.08	8.53	10.59	13.93	19.20	21.62	**500yr**	16.99	20.79	25.50	27.12	28.10	**500yr**

Powered by ACIS Northeast Regional Climate Center



Routing Diagram for 24 Windmill - Proposed Condition
Prepared by Hudson Engineering & Consulting, P.C., Printed 3/6/2021

Summary for Subcatchment 1: Proposed Pool & Patio

Runoff = 0.29 cfs @ 12.01 hrs, Volume= 0.020 af, Depth= 6.23"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-Year Rainfall=6.47"

	Area (sf)	CN	Description
*	1,544	98	Proposed Pool & Patio
*	144	98	Proposed Patio
	1,688	98	Weighted Average
	1,688		100.00% Impervious Area

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

Summary for Pond 1P: 6 Cultec 100 HD

Inflow Area = 0.039 ac,100.00% Impervious, Inflow Depth = 6.23" for 25-Year event
Inflow = 0.29 cfs @ 12.01 hrs, Volume= 0.020 af
Outflow = 0.07 cfs @ 11.72 hrs, Volume= 0.020 af, Atten= 75%, Lag= 0.0 min
Discarded = 0.07 cfs @ 11.72 hrs, Volume= 0.020 af

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Peak Elev= 1.49' @ 12.32 hrs Surf.Area= 213 sf Storage= 133 cf

Plug-Flow detention time= 7.4 min calculated for 0.020 af (100% of inflow)
Center-of-Mass det. time= 7.4 min (746.8 - 739.4)

Volume	Invert	Avail.Storage	Storage Description
#1A	0.00'	104 cf	**8.50'W x 25.00'L x 2.04'H Field A** 434 cf Overall - 86 cf Embedded = 348 cf x 30.0% Voids
#2A	1.00'	86 cf	**Cultec C-100HD** x 6 Inside #1 Effective Size= 32.1"W x 12.0"H => 1.86 sf x 7.50'L = 14.0 cf Overall Size= 36.0"W x 12.5"H x 8.00'L with 0.50' Overlap Row Length Adjustment= +0.50' x 1.86 sf x 2 rows
		190 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**15.000 in/hr Exfiltration over Surface area**

Discarded OutFlow Max=0.07 cfs @ 11.72 hrs HW=0.02' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.07 cfs)

HUDSON ENGINEERING & CONSULTING, P.C.

SITE ADDRESS: 24 Windmill Place

TOWN/VILLAGE: North Castle (Armonk)

DATE: 01-28-2021 TIME: 9:30am

WEATHER: Sunny TEMP. 27° F

WITNESSED BY: Nicholas Shirriah

DEEP TEST HOLE DATA SHEET – STORMWATER MANAGEMENT SYSTEM

DEPTH	HOLE NO. 1	HOLE NO. 2	HOLE NO. 3	HOLE NO. 4
G.L.	0 – 6”			
6”	Topsoil			
12”				
18”				
24”	6 – 78”			
30”	Loosely Compact			
36”	Brown, Sandy			
42”	Loam, very rocky			
48”				
54”	Ledge @ 78”			
60”	No GW			
66”				
72”				
78”				
84”				
90”				
96”				
102”				
108”				

- *Indicate level at which Ground Water (GW), Mottling and/or Ledge Rock is encountered.*
- *Indicate level for which water level rises after being encountered.*

EXCAVATION PERFORMED BY: Precision Field Testing

HUDSON ENGINEERING & CONSULTING, P.C.

SITE ADDRESS: 24 Windmill Place

TOWN/VILLAGE: North Castle (Armonk)

DATE: 01-28-2021 TIME: 9:30am

WEATHER: Sunny TEMP. 27˚ F

WITNESSED BY: Nicholas Shirriah

PERCOLATION TEST HOLE DATA SHEET – STORMWATER MANAGEMENT SYSTEM

Owner _____

HOLE #	CLOCK TIME				PERCOLATION				
					Depth to Water From Ground Surface			Soil Rate	
Hole Number	Run No.	Start	Stop	Elapse Time (Min.)	Start Inches	Stop Inches	Water Level in Inches Drop in inches	Min. per inch	Inches per Hour
# 1	1	10:37	10:45	8	28.5	31.5	3	2.67	22.47
	2	10:46	10:54	8	28	31	3	2.67	22.47
4" Ø	3	10:55	11:04	9	28	31	3	3	20
	4								
	5								
# 2	1								
	2								
4" Ø	3								
	4								
	5								
# 3	1								
	2								
4" Ø	3								
	4								
	5								

Notes:

1) Tests to be repeated at the same depth until approximately equal soil rates are obtained at each percolation test hole. All data to be submitted for review.
2) Depth measurements to be made from top of hole

TOWN OF NORTH CASTLE

WESTCHESTER COUNTY
17 Bedford Road
Armonk, New York 10504-1898

RESIDENTIAL PROJECT
REVIEW COMMITTEE
Adam R. Kaufman AICP, Chair

Telephone: (914) 273-8625
Fax: (914) 273-3554
www.nortcastleny.com

RESIDENTIAL PROJECT REVIEW COMMITTEE (RPRC) PROCEDURES

The RPRC was created to streamline the residential review process and quickly reviews all residential projects. Projects determined to have no impact are permitted to apply to the Building Department while more complicated projects are directed to the appropriate review board(s).

THE RPRC reviews all applications for residential permits (including, but not limited to, buildings permits, steep slope permits, wetlands permits and pool permits), but excluding permits only relating to interior alterations/renovations.

The RPRC conducts internal meetings on the first and third Tuesday of the month from 3:30 - 4:30 p.m.

To get on an RPRC agenda you must submit the following to the Building Department:

1. Complete all items on the RPRC checklist
2. Completed Building Permit application form.
3. Building Permit Application fee of $100. Check made payable to: Town of North Castle
4. RPRC Application fee. Check made payable to: Town of North Castle.
5. Floor Area and Gross Land Coverage work sheets (with backup information)
6. Plans for your project according the RPRC Checklist
7. Submit three individual sets of everything listed above to the Building Dept.

Once your application has been submitted to the Building Department, you may follow your application on the RPRC webpage located at http://www.northcastleny.comlresidential-project-review-committee-rprc

Town of North Castle
Residential Project Review Committee
17 Bedford Road Armonk, New York 10504
(914) 273-3542 (914) 273-3554 (fax)

RPRC COMPLETENESS REVIEW FORM

This form represents the standard requirements for a completeness review for all Residential Project Review Committee submissions. Failure to provide all of the information requested will result in a determination that the application is incomplete.

Project Name on Plan: Proposed Pool & Alterations - 24 Windmill Place

☒ Initial Submittal ☐ Revised Preliminary

Street Location: 24 Windmill Place, Armonk

Zoning District: R-1.5 Property Acreage: 1.50 Tax Map Parcel ID: 102.01-1-17

Date: March 6, 2021

DEPARTMENTAL USE ONLY

Date Filed: _____ Staff Name: _____

Preliminary Plan Completeness Review Checklist
Items marked with a "☒" are complete, items left blank "☐" are incomplete and must be completed, "NA" means not applicable.

☐1. Plan prepared by a registered architect or professional engineer

☐2. Aerial photo (Google Earth) showing the applicant's entire property and adjacent properties and streets

☐3. Map showing the applicant's entire property and adjacent properties and streets

☐4. A locator map at a convenient scale

☐5. The proposed location, use and design of all buildings and structures

☐9. Description of method of water supply and sewage disposal and location of such facilities

☐10. The name and address of the applicant, property owner(s) if other than the applicant and of the planner, engineer, architect, surveyor and/or other professionals engaged to work

☐11. Submission of a Zoning Conformance Table depicting the plan's compliance with the minimum requirements of the Zoning District

☐12. If a tree removal permit is being sought, submission of a plan depicting the location and graphical removal status of all Town-regulated trees within the proposed area of disturbance. In addition, the tree plan shall be accompanied by a tree inventory includes a unique ID number, the species, size, health condition and removal status of each tree.

☐13. If a wetlands permit is being sought, identification of the wetland and the 100-foot wetland buffer.

More information about the items required herein can be obtained from the North Castle Planning Department. A copy of the Town Code can be obtained from Town Clerk or on the North Castle homepage: http://www.northcastleny.com/townhall.html

_____ On this date, all items necessary for a technical review of the proposed site plan have been submitted and constitute a COMPLETE APPLICATION.

Town of North Castle Building Department
17 Bedford Road
Armonk, New York 10504-1898
Telephone: (914) 273-3000 ext. 44 Fax: (914) 273-3554
www.northcastleny.com

Residential Building Permit Application

NOTE: TWO (2) SETS OF ALL REQUIRED DOCUMENTS MUST BE SUBMITTED WITH THIS APPLICATION

Section I- PROJECT ADDRESS: 24 WINDMILL PLACE DATE: 3/18/21

Section II- CONTACT INFORMATION: (Please print clearly. All information must be current.)

APPLICANT: MIGUEL FRAGA

ADDRESS: 393 WEST AVE STAMFORD, CT

PHONE: _____ MOBILE: 203-727-3924 EMAIL: mfraga@sharelinepools.com

PROPERTY OWNER: SHARON FERN

ADDRESS: 24 WINDMILL PLACE ARMONK NY

PHONE: _____ MOBILE: 917-622-6280 EMAIL: sharon.fern27@gmail.com

Section III- DESCRIPTION OF WORK: (Any work conducted outside of the house requires approval from the RPRC unless the proposed action is minor in nature and complies with 355-26 C (3) of the Town of North Castle code.)

PROPOSED construction of a pool and patio and the accompanying stormwater system.

Section IV- USE AND OCCUPANCY:

EXISTING/ CURRENT USE: RESIDENTIAL

PROPOSED RESIDENTIAL:

☒ One Family Dwelling ☐ Two Family Dwelling ☐ Townhouse ☒ Detached Accessory Structure POOL

Town of North Castle Building Department

Section V- (Continued)

I Michael Stein, P.E. do hereby affirm and certify as follows: (i) I am the architect/engineer (circle one) licensed by the State of New York; (ii) I have reviewed the plans, drawings and specifications for this application and am fully familiar with the proposed construction; (iii) based on my experience, I estimate the total cost of construction including all labor, all materials, all professional fees and all associated costs to be approximately $ 100,000.00 and (iv) pursuant to Penal Law 210.45, I acknowledge that a false statement made knowingly is a Class A misdemeanor.

Signature: _____ Date: 3/18/21

Sign in Affixed Here

STATE OF NEW YORK MICHAEL F. STEIN No. 80637 LICENSED PROFESSIONAL

Section VI- CONTACT INFORMATION: (Please print clearly. All information must be current)

ARCHITECT/ ENG: Hudson Engineering & Consulting, P.C.

ADDRESS: 45 Knollwood Road, Suite 201, Elmsford, NY 10523

PHONE: 914-909-0420 MOBILE: _____

EMAIL: michael@hudsonec.com

CONTRACTOR: Shoreline Pools

ADDRESS: 393 WEST AVE STAMFORD, CT

PHONE: _____ MOBILE: 203-727-3924 EMAIL: mfraga@shorelinepools.com

PLUMBER: _____

ADDRESS: _____

PHONE: _____ MOBILE: _____ EMAIL: _____

ELECTRICIAN: _____

ADDRESS: _____

PHONE: _____ MOBILE: _____ EMAIL: _____

Section VII- APPLICANT CERTIFICATION

Town of North Castle Building Department

Section VIII- AFFIDAVIT OF OWNER AUTHORIZATION IF APPLICABLE: **(To be notarized)**

STATE OF NEW YORK }
COUNTY OF WESTCHESTER } SS:

The applicant MIGUEL FRAGA has proper consent from said owner to make this application as submitted and said owner agrees to all terms and conditions placed upon same.

Owner's Name (PRINT) Sharon Fern Owner's Signature SIGN HERE

Sworn to before me this 18th day of March, 2021

Notary Signature

Maria E. Palmer
NOTARY PUBLIC
State of Connecticut
My Commission Expires 11/30/22

Notary Stamp Here

OFFICE USE ONLY – DO NOT WRITE BELOW THIS LINE

Zone:_____ Section:_____ Block:_____ Lot:_____

Building Department Checklist:

Does this permit require RPRC approval? ☐ Yes ☐ No

☐ GC License ☐ Work. Comp. ☐ Liability. Ins. ☐ Disability ☐ Two sets of documents

☐ Permit Fee _____ Payment: ☐ Check #: _____ ☐ Cash ☐ Credit Card

Name on check: _____

Received By:_____ Application No.:_____

BUILDING INSPECTOR APPROVAL

Has all the conditions of the RPRC been met? ☐ Yes ☐ NA

Is a Flood Development permit required? ☐ Yes ☐ No

TOWN OF NORTH CASTLE
WESTCHESTER COUNTY
17 Bedford Road
Armonk, New York 10504-1898

PLANNING DEPARTMENT
Adam R. Kaufman, AICP
Director of Planning

Telephone: (914) 273-3542
Fax: (914) 273-3554
www.northcastleny.com

GROSS LAND COVERAGE CALCULATIONS WORKSHEET

Application Name or Identifying Title: 24 Windmill Place Date: 03-06-2021

Tax Map Designation or Proposed Lot No.: 102.01-1-17

Gross Lot Coverage

1.	Total lot Area (Net Lot Area for Lots Created After 12/13/06):	65,536 50
2.	**Maximum** permitted gross land coverage (per Section 355-26.C(1)(b)):	11,327 89
3.	**BONUS** maximum gross land cover (per Section 355-26.C(1)(b)):	
	Distance principal home is beyond minimum front yard setback 1 x 10 =	10
4.	**TOTAL Maximum Permitted gross land coverage** = Sum of lines 2 and 3	11,427.89
5.	Amount of lot area covered by **principal building:** 3328 existing + 0 proposed =	3328
6.	Amount of lot area covered by **accessory buildings:** 0 existing + 0 proposed =	0
7.	Amount of lot area covered by **decks:** 553.73 existing + 443.16 proposed =	443.16
8.	Amount of lot area covered by **porches:** 0 existing + 0 proposed =	0
9.	Amount of lot area covered by **driveway, parking areas and walkways:** 2,497.36 existing + 101.65 proposed =	2,599.01
10.	Amount of lot area covered by **terraces:** 41.42 existing + 968 proposed =	1,009 42
11.	Amount of lot area covered by **tennis court, pool and mechanical equip:** 0 existing + 40 proposed =	40
12.	Amount of lot area covered by **all other structures:** 97.05 existing + 780.68 proposed =	877.73

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	Distance principal home is beyond minimum front yard setback 1 x 10 =	10
4.	**TOTAL Maximum Permitted gross land coverage** = Sum of lines 2 and 3	11,427.89
5.	Amount of lot area covered by **principal building:** 3328 existing + 0 proposed =	3328
6.	Amount of lot area covered by **accessory buildings:** 0 existing + 0 proposed =	0
7.	Amount of lot area covered by **decks:** 553.73 existing + -110.57 proposed =	443.16
8.	Amount of lot area covered by **porches:** 0 existing + 0 proposed =	0
9.	Amount of lot area covered by **driveway, parking areas and walkways:** 2,497.36 existing + 101.65 proposed =	2,599.01
10.	Amount of lot area covered by **terraces:** 41.42 existing + 248 proposed =	289.42
11.	Amount of lot area covered by **tennis court, pool and mechanical equip:** 0 existing + 760 proposed =	760
12.	Amount of lot area covered by **all other structures:** 97.05 existing + 780.68 proposed =	877.73
13.	Proposed **gross land coverage:** Total of Lines 5 – 12 =	8,297.32

If Line 13 is less than or equal to Line 4, your proposal complies with the Town's maximum gross land coverage regulations and the project may proceed to the Residential Project Review Committee for review. If Line 13 is greater than Line 4 your proposal does not comply with the Town's regulations.

Signature and Seal of Professional Preparing Worksheet

STATE OF NEW YORK
MICHAEL F. STEIN
No. 80637
LICENSED PROFESSIONAL ENGINEER

4/7/21
Date

TOWN OF NORTH CASTLE

WESTCHESTER COUNTY
17 Bedford Road
Armonk, New York 10504-1898

RESIDENTIAL PROJECT
REVIEW COMMITTEE
Adam R. Kaufman AICP, Chair

Telephone: (914) 273-3000 x 43
Fax: (914) 273-3554
www.nortcastleny.com

RESIDENTIAL PROJECT REVIEW COMMITTEE (RPRC) APPLICATION

Section I- PROJECT

ADDRESS: 24 WINDMILL PLACE ARMONK, NY

Section III- DESCRIPTION OF WORK:

PROPOSED CONSTRUCTION OF A 40'x18' INGROUND POOL / PATIO / & ACCOMPANYING STORM WATER SYSTEM

Section III- CONTACT INFORMATION:

APPLICANT: MIGUEL FRAGA

ADDRESS: 393 WEST AVE STAMFORD, CT 06902

PHONE: 203-727-3924 MOBILE: N/A EMAIL: mfraga@shorelinepools.com

PROPERTY OWNER: SHARON FERN

ADDRESS: 24 WINDMILL PLACE ARMONK, NY

PHONE: MOBILE: 917-622-6280 EMAIL: Sharon.fern27@gmail.com

PROFESSIONAL:: HUDSON ENGINEERING & CONSULTING P.C

ADDRESS: 45 KNOLLWOOD ROAD - SUITE 29

PHONE: 914-909-0420 MOBILE:

EMAIL: nick@hudsonec.com

Section IV- PROPERTY INFORMATION:

Zone: R-1.5A Tax ID (lot designation) 102.01-1-17