

November 1, 2022

Revised Plan to 5 Willow Road Application to construct: Swimming Pool/spa with patio, fencing, and roofed over rear patio with outdoor kitchen.

Below are the variances which have been reduced:

- 1. <u>Code §150-39. A</u> Residence B: Max 15% or 3,567.32 SF.
 - a. The revised proposed lot coverage will be 19.3% or 4,580.3 square feet.
- 2. <u>Code §150-47. B</u> Swimming Pool fences shall not be located less than 25 ft from the rear lot line and not less than 25 ft from the side lot line.
 - a. The revised proposed pool fencing will be 15.3 ft from the northeast side lot line and the other 3 sides will be code complaint.

The **required** variances for pools and sports courts:

- 1. <u>Code §150-47. B</u> Swimming Pools, states no swimming pool shall be constructed or erected unless a permit for the same shall have been issued by the Board of Appeals of the Village of Woodsburgh. An application for such permit shall be accompanied by plot, site and building plans of such pool showing dimensions, design, location and use of all structures, equipment, drainage, sanitary filtration, water supply and disposal facilities, fencing, covering of pool and such information as may be required by said Board.
 - a. Proposed in-ground swimming pool and a raised spa.



Christopher W. Robinson, PE President Wayne A. Muller, PE Vice President

> Matthew P. Scheiner, PE Partner Matthew K. Aylward, PE Partner Gino Tedesco, Associate

November 1, 2022

Zoning Board of Appeals Incorporated Village of Woodsburgh 30 Piermont Avenue Hewlett, NY 11557

RE:

5 Willow Road Village of Woodsburgh, Drainage review No.3 NCTM: 41-39-767 R&M No. 2022-065

To Whom it may Concern:

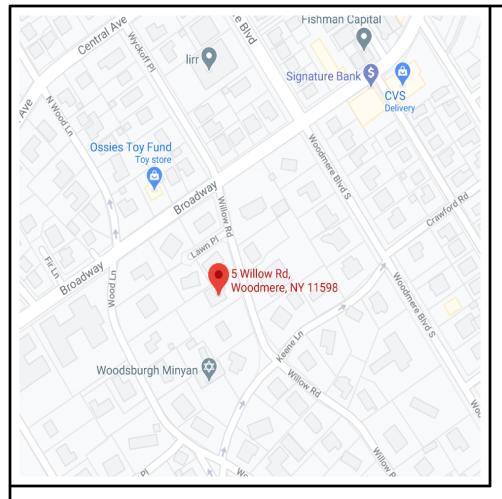
R&M Engineering has reviewed the revised Grading & Drainage Plan for the subject parcel as prepared by Northcoast Civil Land Surveying and Civil Engineering, dated 4/20/2022, last revised 8/25/2022 and find the drainage calculations have been revised to provide for a 5-inch rainfall which includes the 6,000-squre foot tributary lawn area. The stormwater runoff generated from the proposed impervious and tributary pervious area is captured and conveyed to six (6)-10-foot diameter by 4-foot effective depth drywells with a storage capacity of 1,644 cubic feet with the bottom of structure more than 4 feet above groundwater. The proposed improvements also incorporate permeable pavers thereby decreasing the impervious coverage and to capture runoff from the patio. The area beneath the patio is capable of storing 848.2 cubic feet of stormwater in the 12-inch-deep stone void, the combined storage is equivalent to 2,492.2 c.f. and exceeds the required 2,459.0 c.f. of storage for the 5-inch rainfall event. We find the drainage as re-designed provides substantial storage for the new impervious areas more than the 5-inch rainfall as requested by the Village. Furthermore, in combination with the sandy underlying soils as determined by the Test Boring performed by Ace Boring Inc. and confirmed by the two additional borings performed by Slacke Test Boring Inc. on August 11, 2022, we find the sandy soils encountered shall naturally infiltrate the runoff at a high rate to the underlying soils that substantiates the proposed storage that is proposed.

In addition, the proposed grading incorporates drainage swales and a +/- 6-inch berm to convey, capture and store stormwater runoff and maintain it on-site without disturbance to adjoining properties. Based on the findings above, it is our professional opinion that the improvements are in compliance with the Village Code as set forth within § 150-47-Swimming Pools, Article IX- Erosion and Sediment Control and the Village of Woodsburgh Swimming Pool permit application requirements for less than 1-acre of disturbance. The proposed catch basins and drainage system will contain the stormwater on-site and rainfall runoff will not leave the property in the event of a 10 year, -24- hour storm occurrence and thereby will have no adverse effect on adjoining properties.

If you have any questions, or would like to discuss the above further, please do not hesitate to contact us.

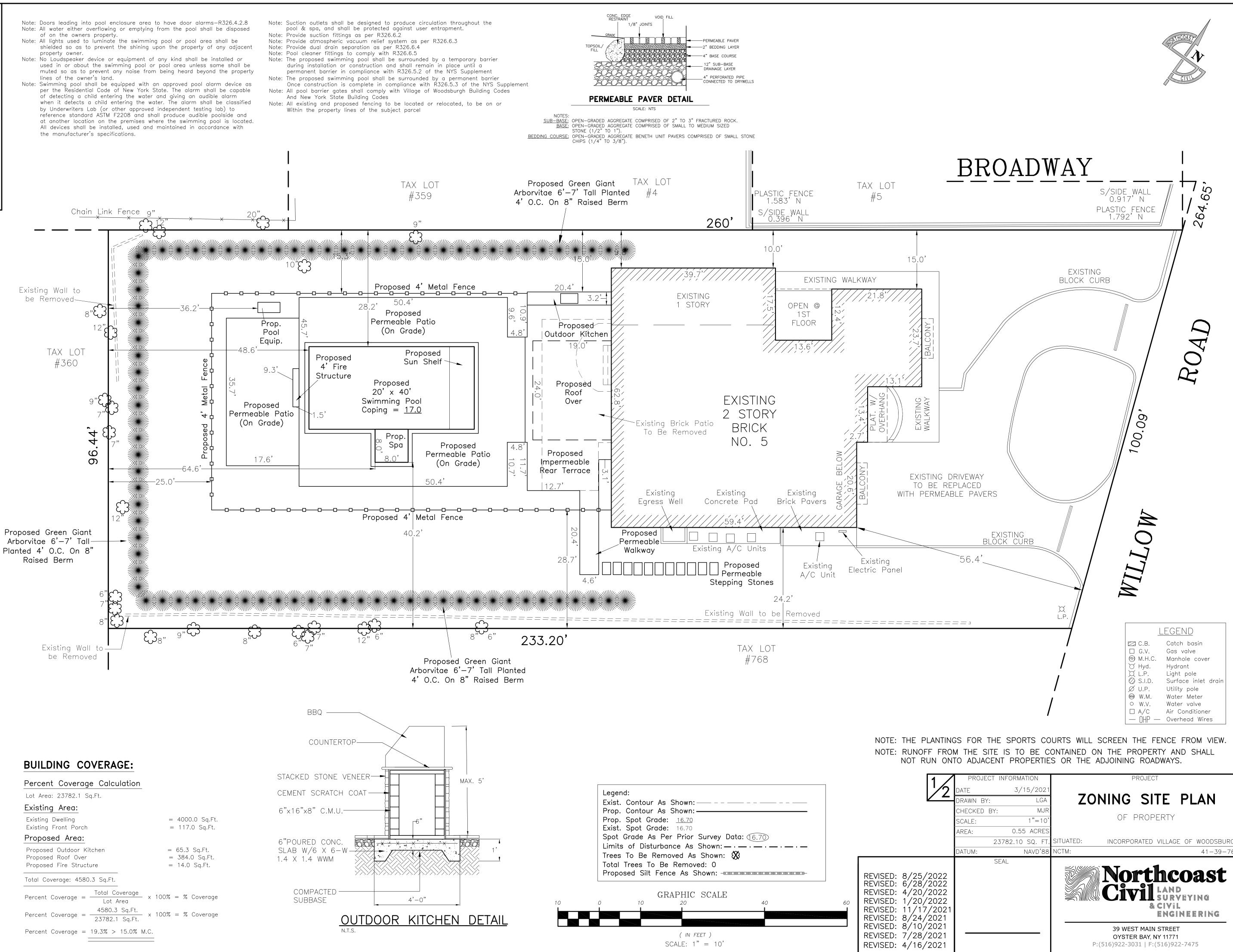
Sincerely, **R&M Engineering** Gino Tedesco. Assobiate For Christopher w. Robinson PE PROFESSIONA

gt/md cc: John C. Armentano, Farrell Fritz, P.C.



ATLAS LOCATION

- of on the owners property.
- used in or about the swimming pool or pool area unless same shall be muted so as to prevent any noise from being heard beyond the property
- per the Residential Code of New York State. The alarm shall be capable of detecting a child entering the water and giving an audible alarm when it detects a child entering the water. The alarm shall be classified by Underwriters Lab (or other approved independent testing lab) to reference standard ASTM F2208 and shall produce audible poolside and at another location on the premises where the swimming pool is located. All devices shall be installed, used and maintained in accordance with the manufacturer's specifications.



ZONING	REQUIRED	EXISTING	PROPOSED	
Area	14500 SQ. FT.	23782.1 SQ. FT.	23782.1 SQ. FT.	
Front Yard	35'	50.7'	50.7'	
Side Yard	15'	9.8'	9.8'	
Rear Yard	25'	121.7'	121.7'	
Street Frontage	100'	100.1'	100.1'	
Max. Building Coverage	15%	17.3%	19.3%	
Max. Permitted Impervious Coverage	7467.5 SQ. FT.	8464.4 SQ. FT.	6539.2 SQ. FT.	
70NFD: Residence District B				

ZONED: Residence District B

IMPERMEABLE LOT COVERAGE:

Existing Lot Coverage Calculation

Lot Area: 23782.10 Sq. Ft.		
Existing Area:		
Existing Dwelling Existing Driveway	=	4000.0 Sq. Ft. 3100.0 Sq. Ft.
Existing Patio	=	650.0 Sq. Ft.
Existing Walkway	_	475 0 Sa Et

Existing Walkway	=	475.0 Sq. Ft.
Existing Concrete Utility Pad	=	239.4 Sq. Ft.

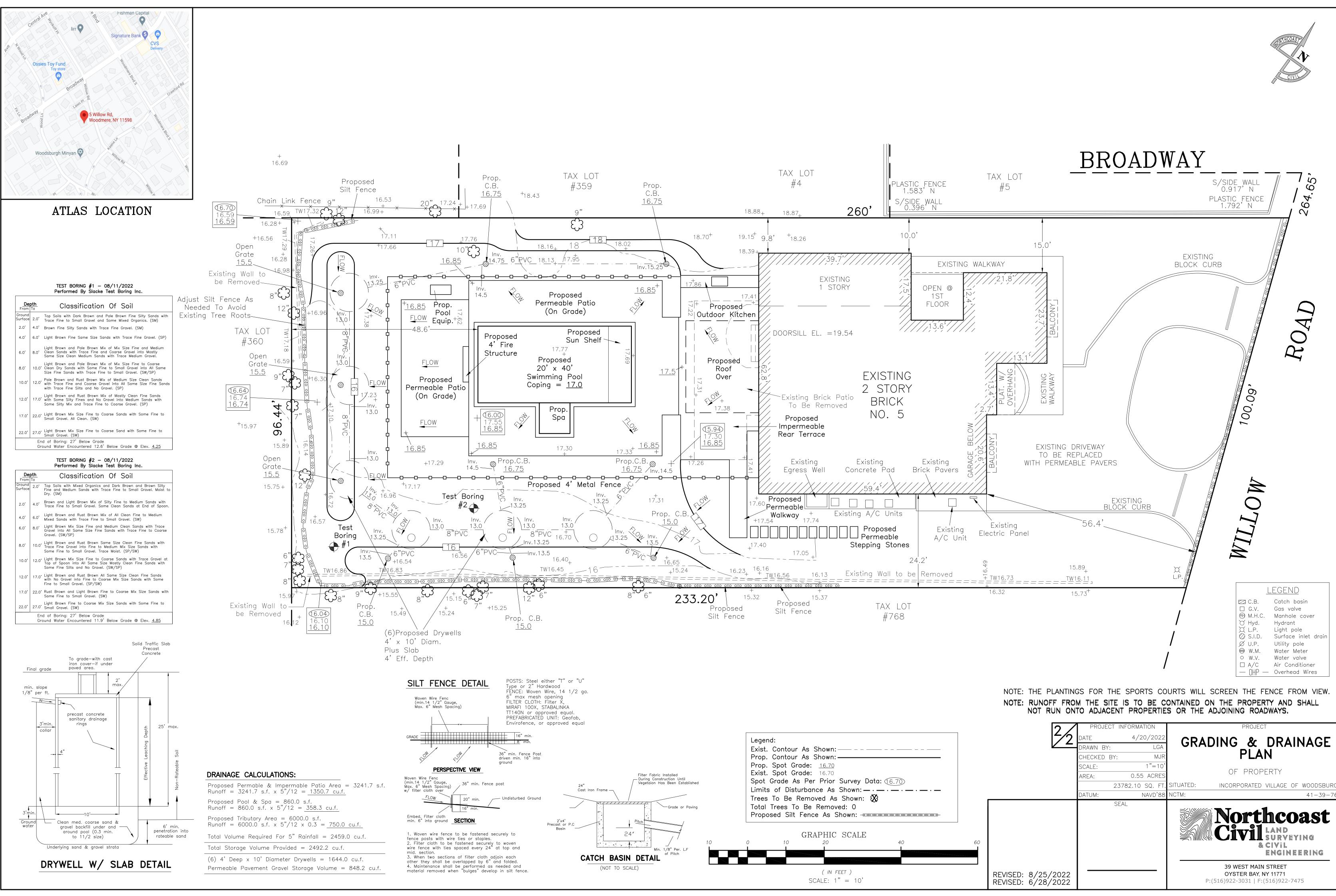
Total Coverage: 8464.4 Sq. Ft. > 7467.50 Sq. Ft.

Proposed Lot Coverage Calculation

Lot Area: 23782.10 Sq. Ft.						
Existing Area:						
Existing Dwelling Existing Walkway Existing Concrete Utility Pad	= = =	4000.0 Sq. Ft. 475.0 Sq. Ft. 239.4 Sq. Ft.				
Proposed Area:						
Proposed Pool	=	800.0 Sq. Ft.				
Proposed Spa	=	100.0 Sq. Ft.				
Proposed Outdoor Kitchen	=	65.3 Sq. Ft.				
Proposed Pool Equipment	=	13.5 Sq. Ft.				
Proposed Fire Structure	=	14.0 Sq. Ft.				
Proposed Roof Over	=	384.0 Sq. Ft.				
Proposed Impermeable Terrace	=	448.0 Sq. Ft.				
Total Coverage: 6539.2 Sq. Ft. < 7467.50 S	Sq. Ft.					

Percent Coverage Calculation		STA
Lot Area: 23782.1 Sq.Ft.		CEN
Existing Area:		6"×
Existing Dwelling Existing Front Porch	= 4000.0 Sq.Ft. = 117.0 Sq.Ft.	0 /
Proposed Area:		6"P
Proposed Outdoor Kitchen Proposed Roof Over Proposed Fire Structure	= 65.3 Sq.Ft. = 384.0 Sq.Ft. = 14.0 Sq.Ft.	SLA 1.4
Total Coverage: 4580.3 Sq.Ft.		
Percent Coverage = Total Coverage Lot Area	x 100% = % Coverage	
Percent Coverage = $\frac{4580.3 \text{ Sq.Ft.}}{23782.1 \text{ Sq.Ft.}}$	x 100% = % Coverage	
Percent Coverage - 19.3% > 15.0% N		







Eco-Ridge 80MM

An oversized brick shape with a slightly textured riven surface. Slightly chamfered edges with a 13% open surface area. Joint opening which is compliant with the Americans with Disabilities Act. (ADA)



Environmental Pavers

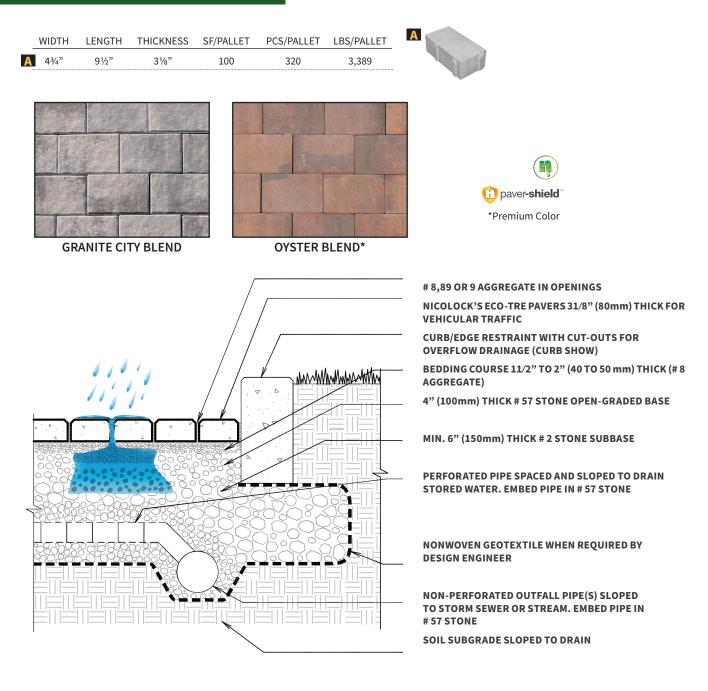
Granite City Blend

OVERSIZED BRICK SHAPE SLIGHTLY CHAMFERED EDGES 13% OPEN SURFACE AREA

JOINT OPENING COMPLIANT WITH THE AMERICANS WITH DISABILITIES ACT (ADA)



Eco-Ridge 80MM



DISCLAIMER: These typical details are provided for general information purposes only. Anyone making use of these details does so at their own risk and assumes all liability for such use. Site specific design should be performed by a licensed professional engineer who is familiar with actual site conditions, soil, other materials and local practices.

NOTES:

- 1. Subgrade must have adequate bearing capacity and be suitable for infiltration practices. Do not compact unless specified by design engineer.
- 2. Pavers, aggregate base and subbase must be properly compacted.
- 3. # 2 stone may be replaced with # 3 or # 4 stone.
- 4. Pavers shall be installed with a surface tolerance of $\pm \frac{3}{8}$ " over 10ft with no paver lippage greater than $\frac{1}{8}$ "
- 5. Consult ICPI's current permeable pavement design manual for design and installation information.





	Subsi		BORING, INC. dation Explorations 4 • (631) 269-7930 • info@slacketestbe	oring.com
		Number of B		
Job Location				
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			ONS AT THE BORING LOCA DITIONS AT OTHER LOCAT	



Subsurface Soils & Foundation Explorations

P.O. Box 64, Kings Park, Long Island, New York 11754 • (631) 269-7930 • info@slacketestboring.com

Date: August 11, 2022

Client: Michael Berry

Job Number: 22-291 Boring Number: 1

Job Location: 5 Willow Road, Woodsburgh NY 11598

Water Level: 12.6 Feet Below Ground Surface at 10:30AM

Recorded High Tide: 8:22AM Low Tide: 2:51PM

Drilling Method: Geoprobe

Depth		Classification of Soil	30" Blows Sample	Penetration of Spoon in	
То	From		Spoon	Inches	
Ground 2' Surface		Top Soils with Dark Brown and Pale Brown Fine Silty Sands with Trace Fine to Small Gravel and Some Mixed Organics. (SM) Sample #1 @ 0' to 2'	3-4-6-8	24"	
2'	4'	Brown Fine Silty Sands with Trace Fine Gravel. (SM) Sample #2 @ 2' to 4'	6-4-3-6	24"	
4'	6'	Light Brown Fine Same Size Sands with Trace Fine Gravel. (SP) Sample #3 @ 4' to 6'	5-6-8-8	24"	
6'	8'	Light Brown and Pale Brown Mix of Mix Size Fine and Medium Clean Sands with Trace Fine and Coarse Gravel into Mostly Same Size Clean Medium Sands with Trace Medium Gravel. (SW/SP) Sample #4 @ 6' to 8'	9-10-11-14	24"	
8′	10'	Light Brown and Pale Brown Mix of Mix Size Fine to Coarse Clean Dry Sands with Some Fine to Small Gravel into All Same Size Fine Sands with Trace Fine to Small Gravel. (SW/SP) Sample #5 @ 8' to 10'	12-9-9-8	24"	
10'	12'	Pale Brown and Rust Brown Mix of Medium Size Clean Sands with Trace Fine and Coarse Gravel into All Same Size Fine Sands with Trace Fine Silts and No Gravel. (SP) Sample #6 @ 10' to 12'	10-10-11-10	24"	
12'	17'	Light Brown and Rust Brown Mix of Mostly Clean Fine Sands with Some Silty Fines and No Gravel into Medium Sands with	2-5-4-6	24"	

Subsurface Soils & Foundation Explorations

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		Some Silty Mix and Trace Fine to Coarse Gravel. (SP)		
		Sample #7 @ 15' to 17'		
17'	22′	Light Brown Mix Size Fine to Coarse Sands with Some Fine to	6-12-18-17	24"
		Small Gravel. All Clean. (SW)		
		Sample #8 @ 20' to 22'		
22'	27′	Light Brown Mix Size Fine to Coarse Sand with Some Fine to	22-25-27-30	24"
		Small Gravel. (SW)		
		Sample #9 @ 25' to 27'		
		END OF BORING 27'0"		
			1	



Subsurface Soils & Foundation Explorations

P.O. Box 64, Kings Park, Long Island, New York 11754 • (631) 269-7930 • info@slacketestboring.com

Date: August 11, 2022

Client: Michael Berry

Job Number: 22-291 Boring Number: 1

Job Location: 5 Willow Road, Woodsburgh NY 11598

Water Level: 11.9 Feet Below Ground Surface at 11:35AM

Recorded High Tide: 8:22AM Low Tide: 2:51PM

Drilling Method: Geoprobe

ToFromGround2'Top Soils with MixSurfaceFine and Mediumto Dry. (SM)		Classification of Soil	30" Blows Sample	Penetration of Spoon in	
			Spoon	Inches	
		Top Soils with Mixed Organics and Dark Brown and Brown Silty Fine and Medium Sands with Trace Fine to Small Gravel. Moist to Dry. (SM) Sample #1 @ 0' to 2'	Dark Brown and Brown Silty 4-3-3-5		
2'	4'	Brown and Light Brown Mix of Silty Fine to Medium Sands with Trace Fine to Small Gravel. Some Clean Sands at End of Spoon. (SM) Sample #2 @ 2' to 4'	5-5-6-4	24"	
4'	6'	Light Brown and Rust Brown Mix of All Clean Fine to Medium Mixed Sands with Trace Fine to Small Gravel. (SW) Sample #3 @ 4' to 6'	3-4-4-5	24"	
6'	8'	Light Brown Mix Size Fine and Medium Clean Sands with Trace Gravel into All Same Size Fine Sands with Trace Fine to Coarse Gravel. (SW/SP) Sample #4 @ 6' to 8'	8-9-10-10	24"	
8′	10'	Light Brown and Rust Brown Same Size Clean Fine Sands with Trace Fine Gravel into Fine to Medium Mix Size Sands with Some Fine to Small Gravel. Trace Moist. (SP/SW) Sample #5 @ 8' to 10'	15-14-12-12	24"	
10′	12'	Light Brown Mix Size Fine to Coarse Sands with Trace Gravel at Top of Spoon into All Same Size Mostly Clean Fine Sands with Some Fine Silts and No Gravel. (SW/SP) Sample #6 @ 10' to 12'	11-12-11-12	24"	

Subsurface Soils & Foundation Explorations

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12'	17'	Light Brown and Rust Brown All Same Size Clean Fine Sands with No Gravel into Fine to Coarse Mix Size Sands with Some Fine to Small Gravel. (SP/SW) Sample #7 @ 15' to 17'	12-9-8-6	24"
17'	22'	Rust Brown and Light Brown Fine to Coarse Mix Size Sands with Some Fine to Small Gravel. (SW) Sample #8 @ 20' to 22'	23-23-20-18	24"
22'	27′	Light Brown Fine to Coarse Mix Size Sands with Some Fine to Small Gravel. (SW) Sample #9 @ 25' to 27'	15-19-19-20	24"
		END OF BORING 27'0"		

	Sub	SLACKE TEST E osurface Soils & Found Park, Long Island, New York 11754	
Date	Job Number	Drawing	of
Job Location			
Image: state stat	B	TAX_BCT	