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November 10, 2022

FUSCO ENGINEERING & LAND SURVEYING 233 EAST MAIN SREET MIDDLETOWN, NY 10940

ATT: ALFRED A. FUSCO, JR., P.E.

RE: SITE PLAN FOR HAMLING PROPERTY SECTION 16, BLOCK 3, LOT 14 12 SILVERTAIL ROAD

TOWN OF CHESTER
W.O. #1884.01

Dear Al:

In response to your review comments on the Planning Board application for the Hamling Property, we performed a soil percolation test on November 9, 2022. The test was performed within the approved absorption field area shown on Lot 16 on the filed maps for the Hambletonian Hills subdivision. The test was done at a depth of 24 inches, and was witnessed by your office.

As shown on the enclosed Sewage Disposal System Installation Requirements Table from the filed maps, the system for Lot 16 was designed for a percolation rate of 16 to 20 minutes per inch. During our test yesterday, we measured a stabilized percolation rate of 20.5 minutes per inch, which falls under the 21-to-30 mpi class in the NYS Design Handbook.

The filed maps specify that a field length of 400 lineal feet must be installed for a 4-bedroom home. Based on the new rate of 20.5 minutes per inch and the current NYS design standard of 110 gallons per day per bedroom, the required field length for a four-bedroom home is 367 feet. Therefore, we conclude that the approved design that specifies 400 lineal feet is still applicable for the Hamling project.

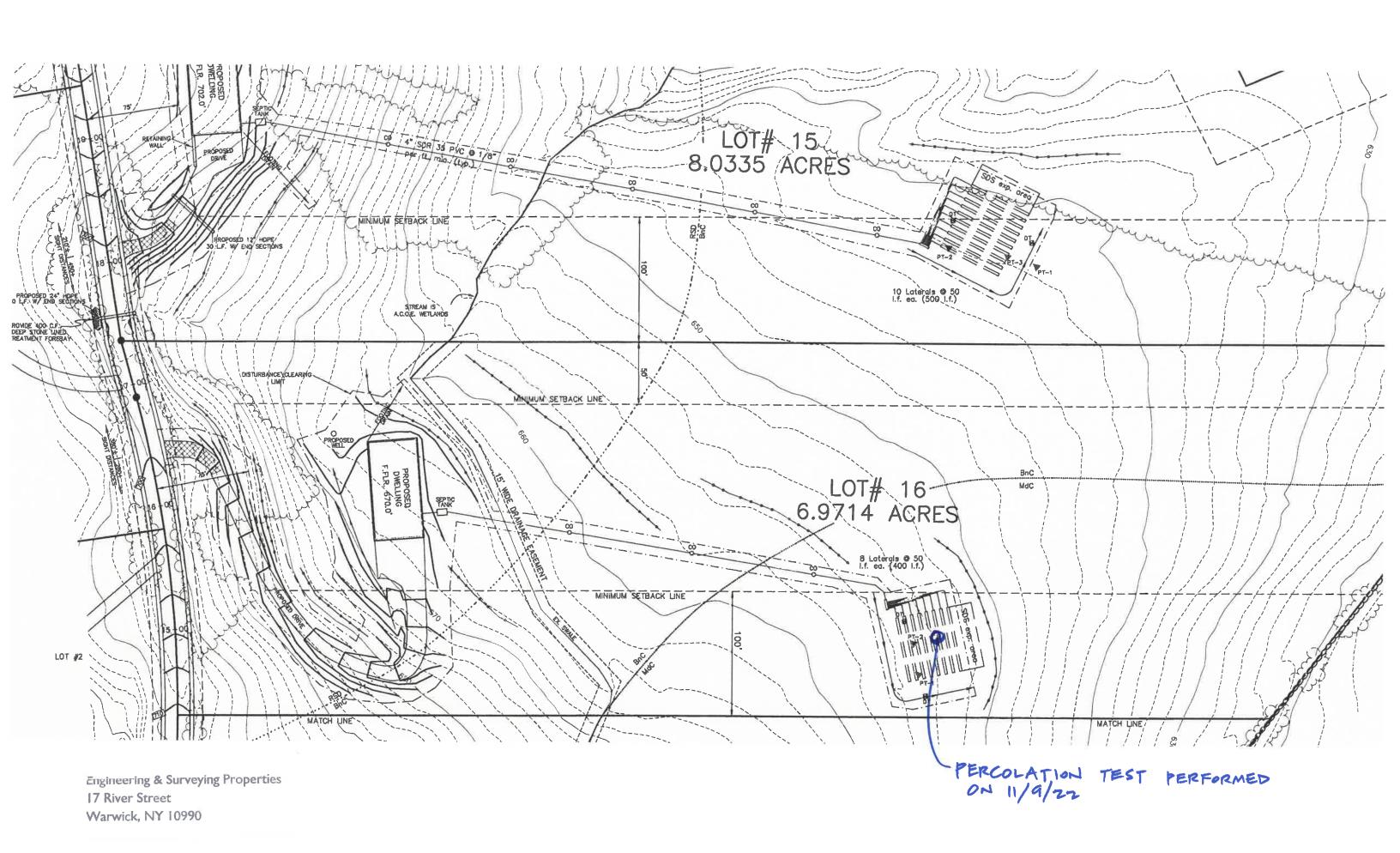
We have enclosed pertinent information from the Hambletonian Hills subdivision plans.

Sincerely,

Engineering & Surveying Properties, P.C.

David A. Getz, P.E.

cc: Caroline & David Hamling
Melissa Foote, Town of Chester



RESULTS - JOINT SITE INSPECTION						
'04	Lot 4 - Test Hole #4 - Date: 6/04/04 8" topsoil					
	8" - 14" Silt loam w/some gravel					
ome silt lo	anl 4" - 30" Rippable shale with a little silt loan					
	30" - 44" Rippable shale w/no soil					
	Bedrock at 44"					
/04	Lot 5 - Test Hole #4 - Date: 6/04/04 8" topsoil					
cobbles	8" - 33" Rippable shale with silt loam					
	Bedrock at 33"					
	No groundwater or mottling					
/04	Lot 5 - Test Hole #4 - Date: 6/04/04 6" topsoil					
am	6" - 38" Rippable shale with silt loam					
	Bedrock at 38"					
	No groundwater or mottling					
4/04	Lot 12 - Test Hole #4 - Date: 6/04/04 10" topsoil					
am	10" - 42" Rippable shale with silt loam					
	Bedrock at 42"					
	Mottling at 40"					
	No groundwater					

	SEWAGE DISPOSAL SYSTEM INSTALLATION REQUIREMENTS TABLE									
Lot#	Design Perc. Rate (min/in.)	Application Rate (g.p.d./s.f.)	Bedrooms (g.p.d.)	Septic tank (gallons)	Length of absorption trench (ft.) *	Bedrooms (g.p.d.)	Septic tank (gallons)	Length of absorption trench (ft.) *		
1	11 - 15	0.80	4 (520 g.p.d.)	1250	325 (330) lineal ft.	3 (390 g.p.d.)	1000	244 (250) lineal ft.		
2	11 - 15	0.80	4 (520 g.p.d.)	1250	325 (330) lineal ft.	3 (390 g.p.d.)	1000	244 (250) lineal ft.		
3	11 - 15	0.80	4 (520 g.p.d.)	1250	325 (330) lineal ft.	3 (390 g.p.d.)	1000	244 (250) lineal ft.		
4	11 - 15	0.80	4 (520 g.p.d.)	1250	325 (330) lineal ft.	3 (390 g.p.d.)	1000	244 (250) lineal ft.		
5	8 - 10	0.90	4 (520 g.p.d.)	1250	84 if of Eljen Units (2Iunits total)	3 (390 g.p.d.)	1000	72 If of Eljen Units (18units total)		
6	11 - 15	0.80	4 (520 g.p.d.)	1250	325 (330) lineal ft.	3 (390 g.p.d.)	1000	244 (250) lineal ft.		
7	11 - 15	0.80	4 (520 g.p.d.)	1250	325 (330) lineal ft.	3 (390 g.p.d.)	1000	244 (250) lineal ft.		
8	11 - 15	0.80	4 (520 g.p.d.)	1250	325 (330) lineal ft.	3 (390 g.p.d.)	1000	244 (250) lineal ft.		
9	11 - 15	0.80	4 (520 g.p.d.)	1250	325 (330) lineal ft.	3 (390 g.p.d.)	1000	244 (250) lineal ft.		
10	11 - 15	0.80	4 (520 g.p.d.)	1250	325 (330) lineal ft.	3 (390 g.p.d.)	1000	244 (250) lineal ft.		
11	11 -15	0.80	4 (520 g.p.d.)	1250	325 (330) lineal ft.	3 (390 g.p.d.)	1000	244 (250) lineal ft.		
12	21 - 30	0.60	4 (520 g.p.d.)	1250	433 (500) lineal ft.	3 (390 g.p.d.)	1000	325 (330) lineal ft.		
13	11 - 15	0.80	4 (520 g.p.d.)	1250	325 (330) lineal ft.	3 (390 g.p.d.)	1000	244 (250) lineal ft.		
14	11 -15	0.80	4 (520 g.p.d.)	1250	325 (330) lineal ft.	3 (390 g.p.d.)	1000	244 (250) lineal ft.		
15	21 - 30	0.60	4 (520 g.p.d.)	1250	433 (500) lineal ft.	3 (390 g.p.d.)	1000	325 (330) lineal ft.		
16	16 - 20	0.70	4 (520 g.p.d.)	1250	372 (400) lineal ft.	3 (390 g.p.d.)	1000	279 (280) lineal ft.		
17	11 - 15	0.80	4 (520 g.p.d.)	1250	325 (330) lineal ft.	3 (390 g.p.d.)	1000	244 (250) lineal ft.		
18	16 - 20	0.70	4 (520 g.p.d.)	1250	372 (400) lineal ft.	3 (390 g.p.d.)	1000	279 (280) lineal ft.		

NOTE:

- 1. LINEAL FEET IN PARENTHESES IS THE DESIGN LENGTH OF ABSORPTION TRENCH.
- 2. LOTS 1, 2, 3, 4, 5, 6, 12, 13, 17 & 18 REQUIRE SHALLOW ABSORPTION TRENCH SYSTEMS AND AEROBIC TREATMENT UNITS AS A SUBSTITUTION TO A SEPTIC TANK.
- 3. LOT 10 ABSORPTION TRENCH SEPARATION IS 7 FT.
- 4. LOTS 3, 5, 11, 12, & 14 REQUIRE PUMP SYSTEMS SEE SHEET 13 FOR PUMP SPECIFICATIONS
- 5. LOT 5 REQUIRES THE USE OF A SHALLOW ABSORPTION TRENCH SYSTEM W/"ELJEN UNITS" SEE SHEET 14