

January 21, 2021

Town of Chilmark
c/o Christine Flynn - MVC
via email
flynn@mvcommission.org

RE: Peaked Hill Pasture Rd., Chilmark
VLS&E Job No. 1644

Dear Christine,

We have completed the site analysis work requested on the above referenced project. Below is a list of the information requested and provided.

- 1. Quantify the total maximum number of bedrooms that the entire 16 acre site can accommodate.** – The site is comprised of 16.67 acres, excluding any fee within the adjacent roads. The total number of bedrooms permissible by State and Chilmark regulations is 72. This number assumes standard treatment (ie. without enhanced treatment credit). A review of the Martha's Vineyard Commission Watershed Maps indicate that this parcel is not located within a watershed area.
- 2. Conduct Perc Test(s):** Seven (7) soil tests were performed on the property providing a general understanding of well-drained and poorly-drained soil areas. The completed site plan indicates the location of the tests and the test results can be found at the back of this report under Appendix A.
- 3. Identify Site Placement of Advanced Denitrifying (IA) Septic System(s) for a Multi-family Cluster Design or Pocket Neighborhood:** A general area for the leaching facility/system has been identified on the site plan, however it must be noted that the size of the system will be dependent on the number of bedrooms designed. The location is relatively flexible but should be located on the rear hillside. Landscape design will play an important role to determine the appropriate location relative to use and landscaped areas.
- 4. Identify site placement of Public Wells for Drinking Water (and private wells):** We have identified two (2) potential well sites on the site plan, however additional wells could be installed. It is our recommendation that multiple wells be installed to serve a number of units and avoid installing a larger public water supply well.

5. Identify any other infrastructure needs and development limitations relative to the site such as the following:

a. height restrictions or topography: The building height restriction is 24' from mean average grade at this site. The topography shown on the plan has been obtained from Chris Sidell at the MVC. As can be seen on the plan, the northwestern portion of the land (front) around the ball field is relatively level and the southeastern portion of the lot (rear) rises sharply to a high hill. The lower level land yielded poorly drained soils with the hills in the rear being very well drained sands. Of note are the very large boulders that exist on the hill sides in the rear. A number of these boulders will need to be considered through design as they would be difficult to remove.

b. access, road(s), and utilities: Access and utilities exist on the site. Development of house sites will require the extension of the utilities and roads, however there does not appear to be any significant constraints.

6. Flag and locate wetlands on the site: Wetlands have been identified on the site and are located on the site plan. The wetlands do not border a resource and are too small to be considered Isolated Land Subject to Flooding under the Wetlands Protection Act. The wetlands are however considered isolated wetlands under the Chilmark Wetland Bylaw and have a 100' Buffer Zone around them.

7. Confirm location of existing developed/cleared area on the site: identified on the plan.

I hope this information is useful in the development analysis you have undertaken. Please call or email me with any questions or if you need additional information.

Sincerely,



Reid G. Silva, PE PLS
Professional Engineer
Professional Land Surveyor

APPENDIX A

Soil Logs

Location: Peaked Hill Pastures, Chilmark

Date: 28-Dec-20

Test Hole 1		
Depth	Soil Horizon	Classification
0-8	A	sandy loam (topsoil)
46	B	sandy loam
76	C1	Clay Loam
96	C2	loamy sand
144	C3	sandy loam
Groundwater found @ 30"		

Test Hole 2		
Depth (inches)	Soil Horizon	Classification
0-6	A	sandy loam (topsoil)
24	B	sandy loam (dense)
60	C1	loam sand
132	C2	sandy loam w/pockets clay and Kaolin
no groundwater found		

Test Hole 3		
Depth	Soil Horizon	Classification
0-8	A	sandy loam (topsoil)
32	B	loamy sand
50	C1	loamy sand
96	C2	medium sand
132	C3	fine sand - perc<10 mpi
no groundwater found		

Test Hole 4		
Depth	Soil Horizon	Classification
0-8	A	sandy loam (topsoil)
24	B	loamy sand
42	C1	loamy sand
108	C2	med/fine sand - perc<5 mpi
132	C3	sandy loam w/pockets of silt
no groundwater found		

Test Hole 5		
Depth (inches)	Soil Horizon	Classification
0-8	A	sandy loam (topsoil)
24	B	sandy loam
72	C1	silt loam
144	C2	sandy loam w/pockets clay and Kaolin
no groundwater found		

Test Hole	6	
Depth (inches)	Soil Horizon	Classification
0-8	A	sandy loam (topsoil)
36	B	loamy sand
48	C1	loamy sand
120	C2	med./fine sand - perc<5 mpi
		no groundwater found
		large boulders present

Test Hole	7	
Depth (inches)	Soil Horizon	Classification
0-8	A	sandy loam (topsoil)
32	B	loamy sand
120	C	Medium sand - perc<5 mpi
		no groundwater found
		large boulders present