



Commonwealth of Massachusetts
City/Town of

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

A. Facility Information

Town of Hingham

Owner Name

31 Bare Cove Park Drive

Street Address

Hingham

City

MA
State

66-0-44
Map/Lot #

02043
Zip Code

B. Site Information

1. (Check one) ☒ New Construction ☐ Upgrade stormwater
2. Soil Survey NRCS udorthents 659B
Source Soil Map Unit Soil Series
Kame terrace Fill
Landform Soil Limitations
Glacial Till
Soil Parent material
3. Surficial Geological Report 2018 USGS Sd-C
Year Published/Source Map Unit
Coarse stratified deposits
Description of Geologic Map Unit:
4. Flood Rate Insurance Map Within a regulatory floodway? ☐ Yes ☒ No
5. Within a velocity zone? ☐ Yes ☒ No
6. Within a Mapped Wetland Area? ☐ Yes ☒ No If yes, MassGIS Wetland Data Layer: _____
Wetland Type
7. Current Water Resource Conditions (USGS): 04/06/2026 Range: ☐ Above Normal ☒ Normal ☐ Below Normal
Month/Day/ Year
8. Other references reviewed:
(Zone II, IWPA, Zone A, EEA Data Portal, etc.) _____



Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

C. On-Site Review (minimum of two holes required at every proposed primary and reserve disposal area)

Deep Observation Hole Number: TP-1 04/28/26 9:00 am 48 Clear
Hole # Date Time Weather Latitude Longitude

1. Land Use Commercial wooded
(e.g., woodland, agricultural field, vacant lot, etc.) Vegetation Surface Stones (e.g., cobbles, stones, boulders, etc.) 3-5%
Slope (%)

Description of Location: Back of Building

2. Soil Parent Material: Glacial Till Kame Terrace SH
Landform Position on Landscape (SU, SH, BS, FS, TS, Plain)

3. Distances from: Open Water Body >100 feet Drainage Way >20 feet Wetlands >100 feet

Property Line >20 feet Drinking Water Well _____ feet Other _____ feet

4. Unsuitable Materials Present: ☒ Yes ☐ No If Yes: ☒ Disturbed Soil/Fill Material ☐ Weathered/Fractured Rock ☐ Bedrock

5. Groundwater Observed: ☐ Yes ☒ No If yes: _____ Depth to Weeping in Hole _____ Depth to Standing Water in Hole

Soil Log

Depth (in)	Soil Horizon /Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
				Depth	Color	Percent	Gravel	Cobbles & Stones			
0-6	AP	S. loam	10YR 3/2		Cnc : Dpl:				Granular	Friable	
6-80	Fill	G. Sandy Loam	10YR 5/4		Cnc : Dpl:	30	30		massive	Friable	
80-94	A	SANDY loam	10YR 3/1		Cnc : Dpl:				massive	Friable	
94-104	C ₁	G. SANDY Loam	10YR 6/8		Cnc : Dpl:		25		massive	Friable	
104-136	C ₂	silty clay	2.5Y 6/2	104	Cnc : 10YR 5/6 Dpl: 2.5Y 6/1	many			massive	Blocky	
					Cnc : Dpl:						

Additional Notes:



Commonwealth of Massachusetts
City/Town of

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

C. On-Site Review (minimum of two holes required at every proposed primary and reserve disposal area)

Deep Observation Hole Number: TP-2 Hole # 04/28/26 Date 9:30 Time 48 Clear Weather Latitude Longitude 3-51 Slope (%)
1. Land Use: Commercial (e.g., woodland, agricultural field, vacant lot, etc.) mix Vegetation Surface Stones (e.g., cobbles, stones, boulders, etc.)

Description of Location:

2. Soil Parent Material: Glacial Till Landform Kame Terrace Position on Landscape (SU, SH, BS, FS, TS, Plain) SH
3. Distances from: Open Water Body >100 feet Drainage Way >20 feet Wetlands >100 feet
Property Line >20 feet Drinking Water Well _____ feet Other _____ feet
4. Unsuitable Materials Present: ☒ Yes ☐ No If Yes: ☒ Disturbed Soil/Fill Material ☐ Weathered/Fractured Rock ☐ Bedrock
5. Groundwater Observed: ☒ Yes ☐ No If yes: 128 Depth to Weeping in Hole _____ Depth Standing Water in Hole

Soil Log

Depth (in)	Soil Horizon /Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
				Depth	Color	Percent	Gravel	Cobbles & Stones			
0-6	AP	S. Loam	10YR 3/2		Cnc : Dpl:				Granular	Friable	
6-84	Fill	G. SANDY Loam	10YR 5/4		Cnc : Dpl:		25		massive	Friable	
84-90	A	S. Loam	10YR 3/1		Cnc : Dpl:				massive	Friable	
90-112	C ₁	G. SANDY Loam	10YR 5/4		Cnc : Dpl:		30		massive	Friable	
112-128	C ₂	Silty clay	2.5Y 6/2	112	Cnc : 10YR 5/6 Dpl: 2.5Y 6/1	many			massive	Blocky	
128-136	C ₃	S. Loam	2.5Y 6/3		Cnc : Dpl:				massive	Friable	

Additional Notes:



Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

D. Determination of High Groundwater Elevation

1. Method Used (Choose one):

☒ Depth to soil redoximorphic features

Obs. Hole # TP-1
104 inches

Obs. Hole # TP-2
112 inches

☐ Depth to observed standing water in observation hole

_____ inches

_____ inches

☐ Depth to adjusted seasonal high groundwater (S_h)
(USGS methodology)

_____ inches

_____ inches

Index Well Number _____

Reading Date _____

$$S_h = S_c - [S_r \times (OW_c - OW_{max}) / OW_r]$$

Obs. Hole/Well# _____ S_c _____ S_r _____ OW_c _____ OW_{max} _____ OW_r _____ S_h _____

E. Depth of Pervious Material

1. Depth of Naturally Occurring Pervious Material

a. Does at least four feet of naturally occurring pervious material exist in all areas observed throughout the area proposed for the soil absorption system?

☒ Yes ☐ No

b. If yes, at what depth was it observed (exclude O, A, and E Horizons)?

Upper boundary: 80
inches

Lower boundary: 136
inches

c. If no, at what depth was impervious material observed?

Upper boundary: _____
inches

Lower boundary: _____
inches



Commonwealth of Massachusetts
City/Town of

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

F. Certification

I certify that I am currently approved by the Department of Environmental Protection pursuant to 310 CMR 15.017 to conduct soil evaluations and that the above analysis has been performed by me consistent with the required training, expertise and experience described in 310 CMR 15.017. I further certify that the results of my soil evaluation, as indicated in the attached Soil Evaluation Form, are accurate and in accordance with 310 CMR 15.100 through 15.107.

Signature of Soil Evaluator

Typed or Printed Name of Soil Evaluator / License #

Date

Expiration Date of License

Name of Approving Authority Witness

Approving Authority

Note: In accordance with 310 CMR 15.018(2) this form must be submitted to the approving authority within 60 days of the date of field testing, and to the designer and the property owner with Percolation Test Form 12.

Field Diagrams: Use this area for field diagrams: