Commonwealth of Massachusetts
City/Town of Dover

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

A. Facility Information

Robert Recchia
Owner Name

Troutbrook Rd
Street Address

Map 5, Lot 11 – Lot 1 on Site Plan
Map/Lot #

Dover
City

MA
State

02030
Zip Code

B. Site Information

1. (Check one) ☒ New Construction ☐ Upgrade

2. Soil Survey — NRCS WebSoilSurvey (Source); Sudbury fine sandy loam (Soil Map Unit); 260B (Soil Series)

   Outwash plains (Landform)

   Depth to restrictive feature: 18 to 36 inches to strongly contrasting textural stratification (Soil Limitations)

   Friable coarse-loamy eolian deposits over loose sandy glaciofluvial deposits (Soil Parent material)

3. Surficial Geological Report — 2018, Stone (Year Published/Source); Flood-plain alluvium (Map Unit)

   Sand, gravel, silt and some organic material, stratified and well sorted to poorly sorted, beneath the flood plains of modern streams
   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): 10/5/2022 (Month/Day/ Year) Range: ☐ Above Normal ☐ Normal ☒ Below Normal

8. Other references reviewed: (Zone II, IWPA, Zone A, EEA Data Portal, etc.) MA-DVW 10R DOVER, MA U.S, Geological Survey

Commonwealth of Massachusetts
City/Town of Dover

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

Deep Observation Hole Number: TP1-1 (Hole #) | 10/5/22 (Date) | 10:12AM (Time) | Raining, high 50s (Weather) | 42.26097 (Latitude) | -71.28645 (Longitude)

1. Land Use: Woodland, vacant lot (e.g., woodland, agricultural field, vacant lot, etc.) | Trees and Shrubs (Vegetation) | None (Surface Stones (e.g., cobbles, stones, boulders, etc.)) | 1% (Slope (%))

Description of Location: east side of parcel (closer to Troutbrook Road)

2. Soil Parent Material: coarse-loamy eolian over sandy glaciofluvial deposits | Outwash plains (Landform) | Plain (Position on Landscape (SU, SH, BS, FS, TS, Plain))

3. Distances from: Open Water Body 50+ feet | Drainage Way 50+ feet | Wetlands 50+ feet | Property Line 10+ feet | Drinking Water Well 100+ 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			
0-48	Fill	NA	NA		Cnc : Dpl:				NA	NA	
48-62	Ab	Sandy Loam	10YR2/1		Cnc : Dpl:				Granular	Friable	
62-80	C1	Medium Sand	5Y7/2	62	Cnc :7.5YR5/8 Dpl:	35%	20%		Single Grain	Loose	
80-110”	C2	Very Fine Loamy Sand	5Y7/1	80	Cnc :7.5YR5/8 Dpl:	25%			Massive	Very Friable	
					Cnc : Dpl:						

Additional Notes:
No Refusal. Alternatively the Fill layer would be deducted from the depth of the Soil Horizons.

Commonwealth of Massachusetts
City/Town of Dover

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: TP1-2 (Hole #) | 10/5/22 (Date) | 2:14PM (Time) | Raining, high 50s (Weather) | -71.28645 (Latitude) | 42.26097 (Longitude)

1. Land Use: Woodland, vacant lot (e.g., woodland, agricultural field, vacant lot, etc.) | Trees and Shrubs (Vegetation) | None (Surface Stones (e.g., cobbles, stones, boulders, etc.)) | 1% (Slope (%))

   Description of Location: East side of parcel (closer to Troutbrook Road)

2. Soil Parent Material: coarse-loamy eolian over sandy glaciofluvial deposits | Outwash plains (Landform) | Plain (Position on Landscape (SU, SH, BS, FS, TS, Plain))

3. Distances from: Open Water Body 50+ feet | Drainage Way 50+ feet | Wetlands 50+ feet | Property Line 10+ feet | Drinking Water Well 100+ 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 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			
0-60	Fill	NA	NA		Cnc : Dpl:				NA	NA	
60-72	A	Sandy Loam	10YR2/1		Cnc : Dpl:				Granular	Friable	
72-85	C1	Medium Sand	5Y7/2	72	Cnc :7.5YR5/8 Dpl:	35%			Massive	Friable	
85-121	C2	Very Fine Sandy Loam	5Y7/1	85	Cnc :7.5YR5/8 Dpl:	25%			Massive	Very Friable	
					Cnc : Dpl:						

Additional Notes:
No Refusal. Alternatively the Fill layer would be deducted from the depth of the Soil Horizons.

Commonwealth of Massachusetts
City/Town of Dover

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

D. Determination of High Groundwater Elevation

1. Method Used (Choose one):	Obs. Hole # TP1-1	Obs. Hole # TP2-2
☒ Depth to soil redoximorphic features	62 inches	72 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: 62 inches Lower boundary: 110 inches

   c. If no, at what depth was impervious material observed? Upper boundary: _____ inches Lower boundary: _____ inches

Commonwealth of Massachusetts
City/Town of Dover

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

11/9/22
Date

Scott Goddard, 893
Typed or Printed Name of Soil Evaluator / License #

6/30/2025
Expiration Date of License

Mike Angieri
Name of Approving Authority Witness

Dover Board of Health
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:

Commonwealth of Massachusetts
City/Town of Dover

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

A. Facility Information

Robert Recchia
Owner Name

Troutbrook Rd
Street Address

Map 5, Lot 11 – Lot 1 on Site Plan
Map/Lot #

Dover
City

MA
State

02030
Zip Code

B. Site Information

1. (Check one) ☒ New Construction ☐ Upgrade

2. Soil Survey
NRCS WebSoilSurvey
Source

Sudbury fine sandy loam
Soil Map Unit

260B
Soil Series

Outwash plains
Landform

Depth to restrictive feature: 18 to 36 inches to strongly contrasting textural stratification
Soil Limitations

Friable coarse-loamy eolian deposits over loose sandy glaciofluvial deposits
Soil Parent material

3. Surficial Geological Report
2018, Stone
Year Published/Source

Flood-plain alluvium
Map Unit

Sand, gravel, silt and some organic material, stratified and well sorted to poorly sorted, beneath the flood plains of modern streams
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): 10/5/2022
Month/Day/ Year
Range: ☐ Above Normal ☐ Normal ☒ Below Normal

8. Other references reviewed:
(Zone II, IWPA, Zone A, EEA Data Portal, etc.)
MA-DVW 10R DOVER, MA U.S, Geological Survey

Commonwealth of Massachusetts
City/Town of Dover

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: TP1-3 (Hole #) | 10/5/2022 (Date) | 3:06 PM (Time) | Partly raining, high 50s (Weather) | -71.28645 (Latitude) | 42.26097 (Longitude)

1. Land Use: Woodland, vacant lot (e.g., woodland, agricultural field, vacant lot, etc.) | Trees and Shrubs (Vegetation) | None (Surface Stones (e.g., cobbles, stones, boulders, etc.)) | 1% (Slope (%))

Description of Location: east side of the parcel (closer to Troutbrook Road)

2. Soil Parent Material: coarse-loamy eolian over sandy glaciofluvial deposits | Outwash plains (Landform) | Plain (Position on Landscape (SU, SH, BS, FS, TS, Plain))

3. Distances from: Open Water Body 50+ feet | Drainage Way 50+ feet | Wetlands 50+ feet | Property Line 10+ feet | Drinking Water Well 100+ 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			
0-36	FILL	NA	NA		Cnc : Dpl:				NA	NA	
36-46	Ab	Sandy Loam	10YR2/1		Cnc : Dpl:				Granular	Friable	
46-95	C1	Fine loamy sand	5Y7/2	46	Cnc :7.5YR5/78 Dpl:	35%			Single grain	Loose	
					Cnc : Dpl:						
					Cnc : Dpl:						

Additional Notes:
No Refusal. Alternatively the Fill layer would be deducted from the depth of the Soil Horizons.

Commonwealth of Massachusetts
City/Town of Dover

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: TP1-4 (Hole #) | 10/5/2022 (Date) | 3:09 PM (Time) | Partly raining, high 50s (Weather) | 42.26097 (Latitude) | -71.28645 (Longitude)

1. Land Use: Woodland, vacant lot (e.g., woodland, agricultural field, vacant lot, etc.) | Trees and Shrubs (Vegetation) | None (Surface Stones (e.g., cobbles, stones, boulders, etc.)) | 1% (Slope (%))

   Description of Location: East side of parcel

2. Soil Parent Material: coarse-loamy eolian over sandy glaciofluvial deposits | Outwash plains (Landform) | Plain (Position on Landscape (SU, SH, BS, FS, TS, Plain))

3. Distances from: Open Water Body 50+ feet | Drainage Way 50+ feet | Wetlands 50+ feet | Property Line 10+ feet | Drinking Water Well 100+ 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: 96" 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			
0-38	Fill	NA	NA		Cnc : Dpl:				NA	NA	
38-46	Ab	Sandy Loam	10YR2/1		Cnc : Dpl:				Granular	Friable	
46-96	C1	Fine loamy sand	5Y7/2	46	Cnc :7.5YR5/8 Dpl:	30%			Single grain	Loose	
					Cnc : Dpl:						

Additional Notes:
No refusal. Alternatively the Fill layer would be deducted from the depth of the Soil Horizons.

Commonwealth of Massachusetts
City/Town of Dover

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

D. Determination of High Groundwater Elevation

1. Method Used (Choose one):	Obs. Hole #TP1-3	Obs. Hole #TP1-4
☒ Depth to soil redoximorphic features	46 inches	46 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: 46 inches Lower boundary: 96 inches

   c. If no, at what depth was impervious material observed? Upper boundary: _____ inches Lower boundary: _____ inches

Commonwealth of Massachusetts
City/Town of Dover

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

11/9/22
Date

Scott Goddard, 893
Typed or Printed Name of Soil Evaluator / License #

6/30/2025
Expiration Date of License

Mike Angieri
Name of Approving Authority Witness

Dover Board of Health
Approving Authority

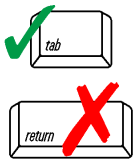
Note: In accordance with 310 CMR 15.018(2) this form must be submitted to the approving authority within 60 days of the date of field testing, and to the designer and the property owner with Percolation Test Form 12.

Field Diagrams: Use this area for field diagrams:

Commonwealth of Massachusetts
City/Town of Dover
Percolation Test
Form 12

Percolation test results must be submitted with the Soil Suitability Assessment for On-site Sewage Disposal. DEP has provided this form for use by local Boards of Health. Other forms may be used, but the information must be substantially the same as that provided here. Before using this form, check with the local Board of Health to determine the form they use.

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



A. Site Information

Robert Recchia
Owner Name

Troutbrook Rd (Map 5, Lot 11) - Lot 1 on Site Plan
Street Address or Lot #

Dover	MA	02030
City/Town	State	Zip Code

Scott Goddard	508-393-3784
Contact Person (if different from Owner)	Telephone Number

B. Test Results

	10/5/22	11:15 am		
	Date	Time	Date	Time
Observation Hole #	TP1-3			
Depth of Perc	58"			
Start Pre-Soak	11:15 am			
End Pre-Soak	Perc doesn't hold water			
Time at 12”				
Time at 9”				
Time at 6”				
Time (9”-6”)				
Rate (Min./Inch)	< 2 MPI			
	Test Passed: ☒		Test Passed: ☐	
	Test Failed: ☐		Test Failed: ☐	

Scott Goddard, 893
Test Performed By:

Mike Angieri, Dover Board of Health
Board of Health Witness

Comments: