



Commonwealth of Massachusetts

City/Town of Petersham

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

A. Facility Information

AHAVA Realty Trust (% Mr. Chuck Berube)

Owner Name

Old Hardwick Road (between 26 - 36)

Street Address

Petersham

City

MA

State

Map/Lot #

Zip Code

B. Site Information

1. (Check one) [ ] New Construction [ ] Upgrade [ ] Repair

2. Soil Survey Available? [x] Yes [ ] No

If yes:

Source

Soil Map Unit

Soil Name

Soil Limitations

Geologic/Parent Material

Landform

3. Surficial Geological Report Available? [x] Yes [ ] No

If yes:

Year Published/Source

Publication Scale

Map Unit

4. Flood Rate Insurance Map

Above the 500-year flood boundary? [ ] Yes [ ] No
If Yes, continue to #5.

Within the 100-year flood boundary? [ ] Yes [x] No

5. Within a velocity zone? [ ] Yes [x] No

6. Within a Mapped Wetland Area? [ ] Yes [x] No

MassGIS Wetland Data Layer:

Wetland Type

7. Current Water Resource Conditions (USGS):
Month/Year

Range: [ ] Above Normal [x] Normal [ ] Below Normal

8. Other references reviewed:



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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: OH A & B Date: 12/19/2015 Time: 8:00 am Weather:

1. Location

Ground Elevation at Surface of Hole: feet Latitude/Longitude: /

Description of Location:

2. Land Use: Woodland (e.g., woodland, agricultural field, vacant lot, etc.) hard & soft wood Vegetation Large Surface Stones (e.g., cobbles, stones, boulders, etc.) Slope (%) Landform Position on Landscape (SU, SH, BS, FS, TS)

3. Distances from: Open Water Body 100+ feet Drainage Way 75+ feet Wetlands 100+ feet Property Line 20+ feet Drinking Water Well 100+ feet Other feet

4. Parent Material: Loamy Sand Unsuitable Materials Present: Yes No

If Yes: Disturbed Soil Fill Material Impervious Layer(s) Weathered/Fractured Rock Bedrock

5. Groundwater Observed: Yes No If yes: None Depth Weeping from Pit None Depth Standing Water in Hole

Estimated Depth to High Groundwater: OH A 36" OH B 36" inches elevation



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**C. On-Site Review (continued)**

Deep Observation Hole Number: OH A & B

Depth (in.)	Soil Horizon/ Layer	Soil Matrix: Color- Moist (Munsell)	Redoximorphic Features			Soil Texture (USDA)	Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
			Depth	Color	Percent		Gravel	Cobbles & Stones			
0-6"	A	10yr3/4				fsl	2	large	massive		
6-14"	BW	2.5y5/8				sl	10	small	friable		
14-72"	C	2.5y5/4	36"	7.5yr5/8	>30	ls	75	mediu m	granular		
0-12"	A	10yr3/4				fsl	2	large	massive		
12-24"	BW	10yr5/8				sl	12	small	friable		
24-72"	C	2.5y5/6	36"	7.5yr5/8	>30	ls	77	mediu m	granular		

Additional Notes:

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C. On-Site Review (continued)

Deep Observation Hole Number: OH C & OH D Date: 12/19/2015 Time: 8am Weather: sunny

1. Location

Ground Elevation at Surface of Hole: Latitude/Longitude:

2. Land Use: Woodland (e.g., woodland, agricultural field, vacant lot, etc.) Large Surface Stones (e.g., cobbles, stones, boulders, etc.) Slope (%) Hard & Softwood Vegetation

3. Distances from: Open Water Body 100+ feet Drainage Way 75+ feet Wetlands 100+ feet Property Line 30+ feet Drinking Water Well 100+ feet Other feet

4. Parent Material: Loamy sand Unsuitable Materials Present: Yes No

If Yes: Disturbed Soil Fill Material Impervious Layer(s) Weathered/Fractured Rock Bedrock

5. Groundwater Observed: Yes No If yes: None Depth Weeping from Pit None Depth Standing Water in Hole

Estimated Depth to High Groundwater: OH C 36" OH D 36" inches elevation



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**C. On-Site Review (continued)**

Deep Observation Hole Number: OH C & OH D

Depth (in.)	Soil Horizon/ Layer	Soil Matrix: Color- Moist (Munsell)	Redoximorphic Features			Soil Texture (USDA)	Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
			Depth	Color	Percent		Gravel	Cobbles & Stones			
0-8"	A	10yr3/4				fsl	2	small	massive		
8-20"	BW	2.5y5/6				sl	12	mediu m	friable		
20-72"	C	2.5y5/8	36"	7.5yr5/8	>30	ls	75	large	granular		
0-9"	A	10yr3/4				fsl	2	small	massive		
9-18"	BW	2.5y5/6				sl	10	mediu m	friable		
18-67"	C	2.5y5/8	36"	7.5yr5/8	>30	ls	75	large	granular		

Additional Notes:

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**D. Determination of High Groundwater Elevation**

- |   |                              |                              |
|---|------------------------------|------------------------------|
| 1. Method Used:   | Obs. Hole # <u>A &amp; B</u> | Obs. Hole # <u>C &amp; D</u> |
| <input type="checkbox"/> Depth observed standing water in observation hole                        | _____                        | _____                        |
|   | inches                       | inches                       |
| <input type="checkbox"/> Depth weeping from side of observation hole                              | _____                        | _____                        |
|   | inches                       | inches                       |
| <input checked="" type="checkbox"/> Depth to soil redoximorphic features (mottles)                | <u>36"</u>                   | <u>36"</u>                   |
|   | inches                       | inches                       |
| <input type="checkbox"/> 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 #	_____	$S_c$	_____	$S_r$	_____	$OW_c$	_____	$OW_{max}$	_____	$OW_r$	_____	$S_h$	_____
Obs. Hole #	_____	$S_c$	_____	$S_r$	_____	$OW_c$	_____	$OW_{max}$	_____	$OW_r$	_____	$S_h$	_____

**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?
- |                 |            |                 |            |
|-----------------|------------|-----------------|------------|
| Upper boundary: | <u>14"</u> | Lower boundary: | <u>72"</u> |
|                 | inches     |                 | inches     |
- c. If no, at what depth was impervious material observed?
- |                 |        |                 |        |
|-----------------|--------|-----------------|--------|
| Upper boundary: | _____  | Lower boundary: | _____  |
|                 | inches |                 | inches |



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

## F. Board of Health Witness

Mr. Phillip Leger

Name of Board of Health Witness

Petersham

Board of Health

## G. Soil Evaluator 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

Richard C Stevens Se # 2347

Typed or Printed Name of Soil Evaluator / License #

12/19/2015

Date

6/30/16

Expiration Date of License

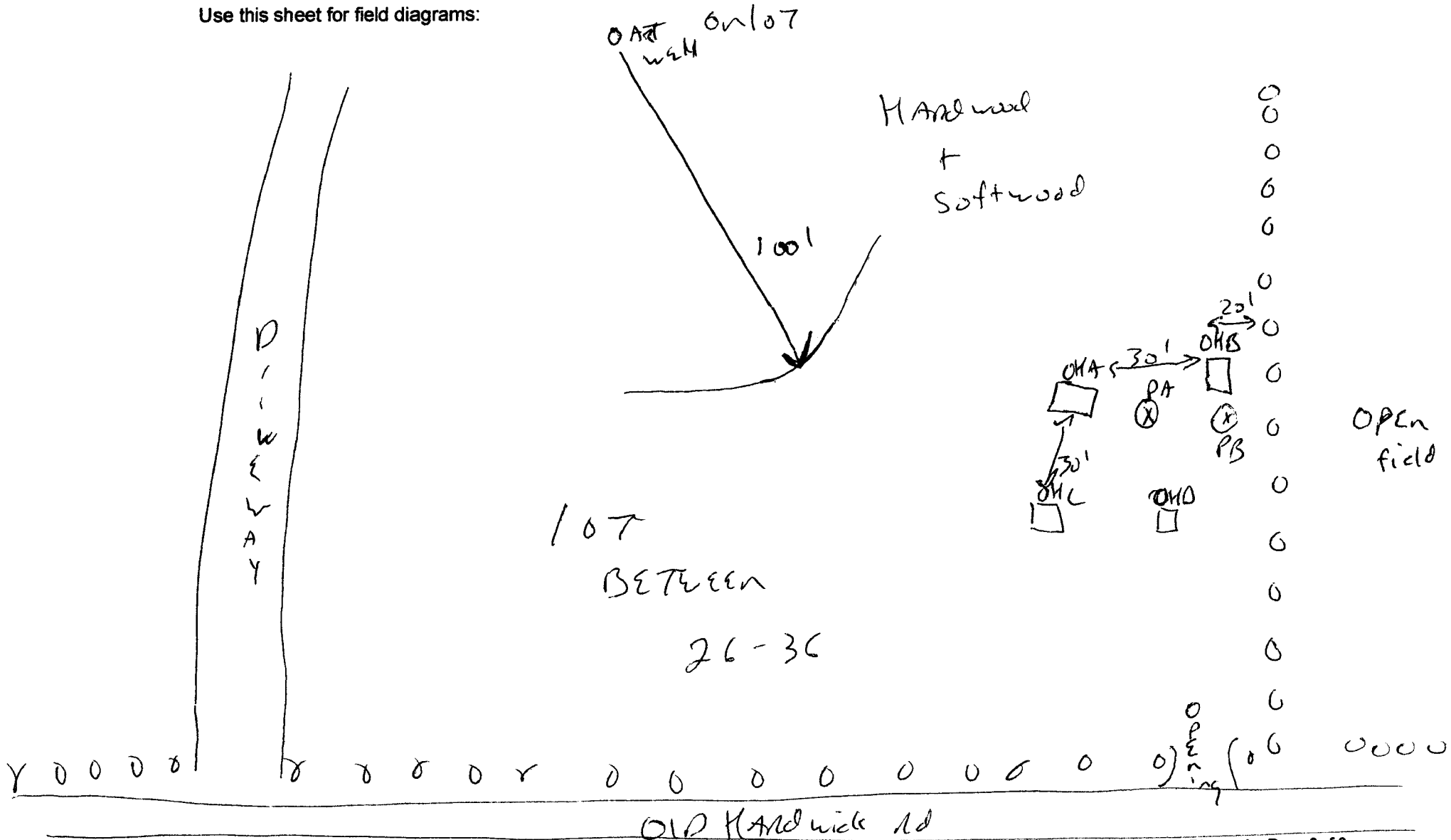
**Note:** In accordance with 310 CMR 15.018(2) this form must be submitted to the approving authority within 60 days of the date of field testing, and to the designer and the property owner with Percolation Test Form 12.



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

## Field Diagrams

Use this sheet for field diagrams:







Commonwealth of Massachusetts  
 City/Town of Petersham  
**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**

AHAVA Realty (% Chuck Berube)  
 Owner Name  
Old Hardwick Road  
 Street Address or Lot #  
Petersham MA  
 City/Town State Zip Code  
 \_\_\_\_\_  
 Contact Person (if different from Owner) Telephone Number

**B. Test Results**

	<u>12/19/2015</u> Date	<u>8:40 am</u> Time	<u>12/19/2015</u> Date	<u>8:50am</u> Time
Observation Hole #	<u>PA</u>		<u>PB</u>	
Depth of Perc	<u>36"</u>		<u>32"</u>	
Start Pre-Soak	<u>8:41 am</u>		<u>8:51 am</u>	
End Pre-Soak	<u>8:58 am</u>		<u>9:06 am</u>	
Time at 12"	<u>8:58 am</u>		<u>9:06 am</u>	
Time at 9"	<u>9:12 am</u>		<u>9:20 AM</u>	
Time at 6"	<u>9:31 am</u>		<u>9:45 am</u>	
Time (9"-6")	<u>18</u>		<u>25</u>	
Rate (Min./Inch)	<u>6 min/ inch</u>		<u>9 min / inch</u>	
	Test Passed: <input checked="" type="checkbox"/>		Test Passed: <input checked="" type="checkbox"/>	
	Test Failed: <input type="checkbox"/>		Test Failed: <input type="checkbox"/>	

Richard C Stevens SE # 2347  
 Test Performed By:  
Mr. Phillip Leger  
 Board of Health Witness

Comments:  
Artesion Well on site