APPENDIX C: TEST PIT LOGS (FORM 11) AND PERCOLATION LOGS (FORM 12)

Commonwealth of Massachusetts
City/Town of
Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

DEP has provided this form for use by on-site professionals and local Boards of Health. Other forms may be used, but the information must be substantially the same as provided here. Before using this form, check with your local Board of Health to determine the form they use.

A. Facility Information

1. Facility Information

Town of Acton
Owner Name

43 Wetherbee Street — Map/Lot G4 - 173
Street Address

Acton — MA — 01720
City/Town — State — Zip Code

B. Site Information

1. (Check one) New Construction ☐ Upgrade ☐ Repair ☐ --Future Wastewater Disposal

2. Published Soil Survey available? Yes ☑ No ☐ If yes: 1995 (Year Published) — 1:25,000 (Publication Scale) — 35B (Soil Map Unit)

Hinckley Loamy Sand – 3-8% Slopes (Soil Name) — no major (Soil limitations)

3. Surficial Geological Report available? Yes ☑ No ☐ If yes: 1956 (Year Published) — 1:31,680 (Publication Scale) — Qkt (Map Unit)

Ice Contact (Geologic Material) — Kame Terrace (Landform)

4. Flood Rate Insurance Map:

Above the 500 year flood boundary?	Yes ☑	No ☐	Within the 100 year flood boundary?	Yes ☐	No ☑
Within the 500 year flood boundary?	Yes ☐	No ☑	Within a Velocity Zone?	Yes ☐	No ☑

5. Wetland Area: National Wetland Inventory Map — Map Unit _____ — Name _____

Wetlands Conservancy Program Map — Map Unit _____ — Name _____

6. Current Water Resource Conditions (USGS) 3/2005 (Month/Year) Range: Above Normal ☐ Normal ☑ Below Normal ☐

7. Other references reviewed: _____

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

Deep Observation Hole Number: 32105-1 3/21/2005 (Date) 830 am (Time) Cloudy (Weather)

1. Location

Ground Elevation at Surface of Hole _____

Location (Identify on Plan) _____

2. Land Use: Agricultural field (e.g. woodland, agricultural field, vacant lot, etc.) No (Surface Stones) 0-3% (Slope (%))

crop residue, grass (Vegetation) Kame Terrace (Landform) Flat (Position on landscape (attach sheet))

3. Distances from: Open Water Body 1100 feet Drainage Way 1000 feet Possible Wet Area 1100 feet

Property Line 40 feet Drinking Water Well 2000+ feet Other _____

4. Parent Material: Ice contact _____ 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: Depth Weeping from Pit _____ Depth Standing Water in Hole _____

Estimated Depth to High Groundwater: 204" (inches) _____ (elevation)

Commonwealth of Massachusetts
City/Town of
Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

Deep Observation Hole Number: 32105-1

Depth (In.)	Soil Horizon/ Layer	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features (mottles)			Soil Texture (USDA)	Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
			Depth	Color	Percent		Gravel	Cobbles & Stones			
18	Ap	10 YR 3/2				SL	5	0	SBK	friable	
24	Bw	10 YR 4/6				LS	20	0	SBK	VFR	
60	C1	2.5 Y 5/3				MS	25	5	SG	loose	
204	C2	2.5 Y 5/3				CS	40	20	SG	loose	

Additional Notes

Commonwealth of Massachusetts
City/Town of

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

C. On-Site Review (Cont.)

Deep Observation Hole Number: 32105-2 3/21/2005 (Date) 915 (Time) Cloudy (Weather)

1. Location

   Ground Elevation at Surface of Hole _____

   Location (Identify on Plan) _____

2. Land Use: Agricultural field (e.g. woodland, agricultural field, vacant lot, etc.) No (Surface Stones) 0-3% (Slope (%))

   crop residue, grass (Vegetation) Kame Terrace (Landform) Flat (Position on landscape (attach sheet))

3. Distances from: Open Water Body 900 feet Drainage Way 900 feet Possible Wet Area 900 feet

   Property Line 40 feet Drinking Water Well 2500 feet Other _____

4. Parent Material: Ice Contact 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: Depth Weeping from Pit _____ Depth Standing Water in Hole _____

   Estimated Depth to High Groundwater: 175" inches _____ elevation

Commonwealth of Massachusetts
City/Town of

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

Deep Observation Hole Number: 32105-2

Depth (In.)	Soil Horizon/ Layer	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features (mottles)			Soil Texture (USDA)	Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
			Depth	Color	Percent		Gravel	Cobbles & Stones			
18	Ap	10 YR 3/2				SL	5	0	SBK	Frialbe	
24	bW	10 YR 4/6				LS	10	10	SBK	VFR	
60	C1	2.5 Y 5/3				MS	20	30	SG	Loose	
156	C2	2.5 Y 5/3				CS	40	30	SG	Loose	
180	C3	2.5 y 5/4	175	10 YR 5/6 2.5 y 6/2	> 5%	FLS	5	0	Massive	Friable	

Additional Notes C3 horizon damp to touch

Commonwealth of Massachusetts
City/Town of

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

D. Determination of High Groundwater Elevation

1. Method used:

☐	Depth observed standing water in observation hole	A. _____ inches	B. _____ inches
☐	Depth weeping from side of observation hole	A. _____ inches	B. _____ inches
☑	Depth to soil redoximorphic features (mottles)	A. _____ inches	B. 175 inches
☐	Groundwater adjustment (USGS methodology)	A. _____ inches	B. _____ inches

2. Index Well Number _____ Reading Date _____ Index Well Level _____

Adjustment Factor _____ Adjusted Groundwater Level _____

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: 24 inches Lower boundary: 204/180 inches

F. Certification

I certify that I have passed the soil evaluator examination* approved by the Department of Environmental Protection and that the above analysis was performed by me consistent with the required training, expertise and experience described in 310 CMR 15.017.

Signature of Soil Evaluator — Date: 3/29/05

BRENT L. REAGOR
Typed or Printed Name of Soil Evaluator — *Date of Soil Evaluator Exam: 11/13/03

MARGO WEBBER
Name of Board of Health Witness — Board of Health: MADEP

Note: This form must be submitted to the approving authority with Percolation Test Form 12

Commonwealth of Massachusetts
City/Town of

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

DEP has provided this form for use by on-site professionals and local Boards of Health. Other forms may be used, but the information must be substantially the same as provided here. Before using this form, check with your local Board of Health to determine the form they use.

A. Facility Information

1. Facility Information

Town of Acton
Owner Name

43 Wetherbee Street
Street Address

Map/Lot G4 - 173

Acton
City/Town

MA
State

01720
Zip Code

B. Site Information

1. (Check one) New Construction ☐ Upgrade ☐ Repair ☐ --Future Wastewater Disposal

2. Published Soil Survey available? Yes ☑ No ☐ If yes: 1995 (Year Published) 1:25,000 (Publication Scale) 123 (Soil Map Unit)

Paxton Fine Sandy Loam (Soil Name) slow permeability, stones (Soil limitations)

3. Surficial Geological Report available? Yes ☑ No ☐ If yes: 1956 (Year Published) 1:31,680 (Publication Scale) Qgm (Map Unit)

Till (Geologic Material) Ground Moraine (Landform)

4. Flood Rate Insurance Map:

Above the 500 year flood boundary? Yes ☑ No ☐ Within the 100 year flood boundary? Yes ☐ No ☑

Within the 500 year flood boundary? Yes ☐ No ☑ Within a Velocity Zone? Yes ☐ No ☑

5. Wetland Area: National Wetland Inventory Map — Map Unit — Name

Wetlands Conservancy Program Map — Map Unit — Name

6. Current Water Resource Conditions (USGS) _____3/2005____ (Month/Year) Range: Above Normal ☐ Normal ☑ Below Normal ☐

7. Other references reviewed: _____

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

Deep Observation Hole Number: 32105-3 _3/21/2005_____ (Date) _945 am_____ (Time) __Cloudy_____ (Weather)

1. Location

Ground Elevation at Surface of Hole _____

Location (Identify on Plan) _____

2. Land Use: __Agricultural field_____ (e.g. woodland, agricultural field, vacant lot, etc.) ___No_____ (Surface Stones) _____5%_____ (Slope (%))

___crop residue, grass_____ (Vegetation) _____Ground Moraine_____ (Landform) _____Shoulder_____ (Position on landscape (attach sheet))

3. Distances from: Open Water Body _1100__ feet Drainage Way _1100__ feet Possible Wet Area _1100_ feet

Property Line _40____ feet Drinking Water Well _2500__ feet Other _____

4. Parent Material: __Till_____ 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: Depth Weeping from Pit __72"_____ Depth Standing Water in Hole _72"_____

Estimated Depth to High Groundwater: __12""_____ (inches) _____ (elevation)

Commonwealth of Massachusetts
City/Town of

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

Deep Observation Hole Number: 32105-3

Depth (In.)	Soil Horizon/ Layer	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features (mottles)			Soil Texture (USDA)	Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
			Depth	Color	Percent		Gravel	Cobbles & Stones			
12	Ap	10 YR 3/2				SL	5	0	SBK	friable	
72	Cd	2.5 Y 5/3	12"	10 YR 5/8 2.5 Y 6/1	40% 30%	FSL	>5	0	Massive	Friable	
120	C2	2.5 Y 5/4				SL	10	20	Massive	Friable	

Additional Notes ____refusal at 120"

Commonwealth of Massachusetts
City/Town of

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

D. Determination of High Groundwater Elevation

1. Method used:

☐	Depth observed standing water in observation hole	A. _____ inches	B. _____ inches
☐	Depth weeping from side of observation hole	A. _____ inches	B. _____ inches
☑	Depth to soil redoximorphic features (mottles)	A. 12 inches	B. __ inches
☐	Groundwater adjustment (USGS methodology)	A. _____ inches	B. _____ inches

2. Index Well Number _____ Reading Date _____ Index Well Level _____

Adjustment Factor _____ Adjusted Groundwater Level _____

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: 12 inches Lower boundary: 120 inches

F. Certification

I certify that I have passed the soil evaluator examination* approved by the Department of Environmental Protection and that the above analysis was performed by me consistent with the required training, expertise and experience described in 310 CMR 15.017.

Signature of Soil Evaluator — Date: 3/29/05

BRENT L. REAGOR
Typed or Printed Name of Soil Evaluator — *Date of Soil Evaluator Exam: 11/13/03

MARGO WEBBER
Name of Board of Health Witness — Board of Health: MADEP

Note: This form must be submitted to the approving authority with Percolation Test Form 12

Commonwealth of Massachusetts
City/Town of

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

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A. Facility Information

1. Facility Information

Town of Acton
Owner Name

43 Wetherbee Street — Map/Lot G4 - 173
Street Address

Acton — MA — 01720
City/Town — State — Zip Code

B. Site Information

1. (Check one) New Construction ☐ Upgrade ☐ Repair ☐ --Future Wastewater Disposal

2. Published Soil Survey available? Yes ☑ No ☐ If yes: 1995 (Year Published) — 1:25,000 (Publication Scale) — 35C (Soil Map Unit)

Hinckley Loamy Sand 8-15% slopes (Soil Name) — _____ slopes (Soil limitations)

3. Surficial Geological Report available? Yes ☑ No ☐ If yes: 1956 (Year Published) — 1:31,680 (Publication Scale) — Qkt (Map Unit)

Ice Contact (Geologic Material) — Kame Terrace (Landform)

4. Flood Rate Insurance Map:

Above the 500 year flood boundary?	Yes ☑	No ☐	Within the 100 year flood boundary?	Yes ☐	No ☑
Within the 500 year flood boundary?	Yes ☐	No ☑	Within a Velocity Zone?	Yes ☐	No ☑

5. Wetland Area: National Wetland Inventory Map — Map Unit _____ — Name _____

Wetlands Conservancy Program Map — Map Unit _____ — Name _____

6. Current Water Resource Conditions (USGS) 3/2005 (Month/Year) Range: Above Normal ☐ Normal ☐ Below Normal ☐

7. Other references reviewed: _____

_____

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

Deep Observation Hole Number: 32105-4 3/21/2005 (Date) 1005 am (Time) Cloudy (Weather)

1. Location

Ground Elevation at Surface of Hole _____

Location (Identify on Plan) _____

2. Land Use: Agricultural field (e.g. woodland, agricultural field, vacant lot, etc.) No (Surface Stones) 5% (Slope (%))

crop residue, grass (Vegetation) Kame Terrace (Landform) Shoulder (Position on landscape (attach sheet))

3. Distances from: Open Water Body 1600 feet Drainage Way 700 feet Possible Wet Area 700 feet

Property Line 550 feet Drinking Water Well 3300 feet Other _____

4. Parent Material: Ice Contact 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: Depth Weeping from Pit 36" Depth Standing Water in Hole 60"

Estimated Depth to High Groundwater: 36" (inches) _____ (elevation)

Commonwealth of Massachusetts
City/Town of
Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

Deep Observation Hole Number: 32105-4

Depth (In.)	Soil Horizon/ Layer	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features (mottles)			Soil Texture (USDA)	Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
			Depth	Color	Percent		Gravel	Cobbles & Stones			
12	Ap	10 YR 3/2				SL	5	0	SBK	friable	
18	Bw	10 YR 4/6				LS	5	0	SBK	Friable	
36	C1	2.5 Y 5/3	36"	10 YR 5/8 2.5 Y 6/2	20% 20%	LS	25	0	Massive	Friable	
138	C2	2.5 Y 6/3				VFLS	0	0	Massive	Friable	

Additional Notes

Commonwealth of Massachusetts
City/Town of

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

D. Determination of High Groundwater Elevation

1. Method used:
   - ☐ Depth observed standing water in observation hole — A. _____ inches — B. _____ inches
   - ☐ Depth weeping from side of observation hole — A. _____ inches — B. _____ inches
   - ☑ Depth to soil redoximorphic features (mottles) — A. 36 inches — B. __ inches
   - ☐ Groundwater adjustment (USGS methodology) — A. _____ inches — B. _____ inches

2. Index Well Number _____ Reading Date _____ Index Well Level _____

   Adjustment Factor _____ Adjusted Groundwater Level _____

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: 36 inches Lower boundary: 138 inches

F. Certification

I certify that I have passed the soil evaluator examination* approved by the Department of Environmental Protection and that the above analysis was performed by me consistent with the required training, expertise and experience described in 310 CMR 15.017.

Signature of Soil Evaluator — Date: 3/29/05

Typed or Printed Name of Soil Evaluator: BRENT L. REALOR — *Date of Soil Evaluator Exam: 11/13/03

Name of Board of Health Witness: MARGO WEBBER — Board of Health: MADEP

Note: This form must be submitted to the approving authority with Percolation Test Form 12

Commonwealth of Massachusetts
City/Town of

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

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A. Facility Information

1. Facility Information

Town of Acton
Owner Name

43 Wetherbee Street — Map/Lot G4 - 173
Street Address

Acton — MA — 01720
City/Town — State — Zip Code

B. Site Information

1. (Check one) New Construction ☐ Upgrade ☐ Repair ☐ --Future Wastewater Disposal

2. Published Soil Survey available? Yes ☑ No ☐ If yes: 1995 (Year Published) — 1:25,000 (Publication Scale) — 35B (Soil Map Unit)

Hinckley Loamy Sand – 3-8% Slopes (Soil Name) — no major (Soil limitations)

3. Surficial Geological Report available? Yes ☑ No ☐ If yes: 1956 (Year Published) — 1:31,680 (Publication Scale) — Qkt (Map Unit)

Ice Contact (Geologic Material) — Kame Terrace (Landform)

4. Flood Rate Insurance Map:

Above the 500 year flood boundary?	Yes ☑	No ☐	Within the 100 year flood boundary?	Yes ☐	No ☑
Within the 500 year flood boundary?	Yes ☐	No ☑	Within a Velocity Zone?	Yes ☐	No ☑

5. Wetland Area: National Wetland Inventory Map — Map Unit — Name

Wetlands Conservancy Program Map — Map Unit — Name

6. Current Water Resource Conditions (USGS) _____3/2005____ (Month/Year) Range: Above Normal ☐ Normal ☑ Below Normal ☐

7. Other references reviewed: _____

_____

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

Deep Observation Hole Number: 32105-5 _3/21/2005_____ (Date) _1030 am_____ (Time) __Cloudy_____ (Weather)

1. Location

Ground Elevation at Surface of Hole _____

Location (Identify on Plan) _____

2. Land Use: __Agricultural field_____ (e.g. woodland, agricultural field, vacant lot, etc.) ___No_____ (Surface Stones) _____0-3%_____ (Slope (%))

___crop residue, grass_____ (Vegetation) _____Kame Terrace_____ (Landform) _____Flat_____ (Position on landscape (attach sheet))

3. Distances from: Open Water Body _1400__ feet Drainage Way _550___ feet Possible Wet Area _550__ feet

Property Line _50____ feet Drinking Water Well _2500__ feet Other _____

4. Parent Material: __Ice contact _____ 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: Depth Weeping from Pit _____ Depth Standing Water in Hole __102"___

Estimated Depth to High Groundwater: __66"_____ (inches) _____ (elevation)

Commonwealth of Massachusetts
City/Town of

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

Deep Observation Hole Number: 32105-5

Depth (In.)	Soil Horizon/ Layer	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features (mottles)			Soil Texture (USDA)	Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
			Depth	Color	Percent		Gravel	Cobbles & Stones			
12	Ap	10 YR 3/2				SL	5	0	SBK	friable	
16	Bw	10 YR 4/6				LS	5	0	SBK	VFR	
66	C1	2.5 Y 5/4				FLS	5	0	Massive	Friable	
108	C2	2.5 Y 5/3				MS	35	5	SG	loose	

Additional Notes ____Standing water at 102"

____Coarse Textured Soils in C2 indicate water may be as high as 66" in this hole but no redoximorphic features detected due to soil texture

____Variegated colors from 16" to 66"

C. On-Site Review (Cont.)

Deep Observation Hole Number: 32105-6 3/21/2005 (Date) 1045 (Time) Cloudy (Weather)

1. Location

   Ground Elevation at Surface of Hole _____

   Location (Identify on Plan) _____

2. Land Use: Agricultural field (e.g. woodland, agricultural field, vacant lot, etc.) | No (Surface Stones) | 0-3% (Slope (%))

   crop residue, grass (Vegetation) | Kame Terrace (Landform) | Flat (Position on landscape (attach sheet))

3. Distances from: Open Water Body 1100 feet | Drainage Way 830 feet | Possible Wet Area 830 feet
   Property Line 50 feet | Drinking Water Well 2200 feet | Other _____

4. Parent Material: Ice Contact | 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: Depth Weeping from Pit _____ Depth Standing Water in Hole 156"

   Estimated Depth to High Groundwater: 156" inches | _____ elevation

Commonwealth of Massachusetts
City/Town of
Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

Deep Observation Hole Number: 32105-6

Depth (In.)	Soil Horizon/ Layer	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features (mottles)			Soil Texture (USDA)	Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
			Depth	Color	Percent		Gravel	Cobbles & Stones			
16	Ap	10 YR 3/2				SL	5	0	SBK	Friable	
24	bW	10 YR 4/6				LS	10	10	SBK	VFR	
64	C1	2.5 Y 5/3				MS	20	5	SG	Loose	
76	C2	2.5 Y 5/4				CS	60	10	SG	Loose	
156	C3	2.5 Y 6/3				Cs	30	5	SG	Loose	

Additional Notes Standing water at 156"

Commonwealth of Massachusetts
City/Town of

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

D. Determination of High Groundwater Elevation

1. Method used:
   - ☑ Depth observed standing water in observation hole — A. 102 (66) inches — B. 156 inches
   - ☐ Depth weeping from side of observation hole — A. _____ inches — B. _____ inches
   - ☐ Depth to soil redoximorphic features (mottles) — A. _____ inches — B. _____ inches
   - ☐ Groundwater adjustment (USGS methodology) — A. _____ inches — B. _____ inches

2. Index Well Number _____ Reading Date _____ Index Well Level _____

   Adjustment Factor _____ Adjusted Groundwater Level _____

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: 16/24 inches Lower boundary: 108/156 inches

F. Certification

I certify that I have passed the soil evaluator examination* approved by the Department of Environmental Protection and that the above analysis was performed by me consistent with the required training, expertise and experience described in 310 CMR 15.017.

Signature of Soil Evaluator — Date: 3/29/05

Typed or Printed Name of Soil Evaluator: BRENT L. REAGOR — *Date of Soil Evaluator Exam: 11/13/03

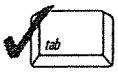
Name of Board of Health Witness: MARCO WEBBER — Board of Health: MADEP

Note: This form must be submitted to the approving authority with Percolation Test Form 12

Commonwealth of Massachusetts
City/Town of
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

Town of Acton
Owner Name

43 Wetherbee Street
Street Address or Lot #

Acton	MA	01720
City/Town	State	Zip Code
	978-264-9634	
Contact Person (if different from Owner)	Telephone Number	

B. Test Results

	3/21/2005 (Date)	830 am (Time)	3/21/2005 (Date)	1041 am (Time)
Observation Hole #	32105-A		32105-B	
Depth of Perc	48"		47"	
Start Pre-Soak	8:38		10:41	
End Pre-Soak	Unable to Saturate		Unable to Saturate	
Time at 12"	Added 25 Gallons in		Added 25 Gallons in	
Time at 9"	less than 15 minutes		less than 15 minutes	
Time at 6"				
Time (9"-6")				
Rate (Min./Inch)	<2 mpi		<2 mpi	
	Test Passed: ☒ Test Failed: ☐		Test Passed: ☒ Test Failed: ☐	

Brent L. Reagor, R.S., Town of Acton Health Department
Test Performed By:

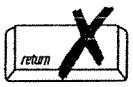
Margo Webber, PE, MADEP-CERO
Witnessed By:

Comments:

Commonwealth of Massachusetts
City/Town of
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

Town of Acton
Owner Name

43 Wetherbee Street
Street Address or Lot #

Acton	MA	01720
City/Town	State	Zip Code

	978-264-9634
Contact Person (if different from Owner)	Telephone Number

B. Test Results

	3/21/2005 Date	1102 am Time	Date	Time
Observation Hole #	32105-C			
Depth of Perc	50"			
Start Pre-Soak	1111			
End Pre-Soak	1126			
Time at 12"	1126			
Time at 9"	1131			
Time at 6"	1138			
Time (9"-6")	7			
Rate (Min./Inch)	3 mpi			
	Test Passed: ☒ Test Failed: ☐		Test Passed: ☐ Test Failed: ☐	

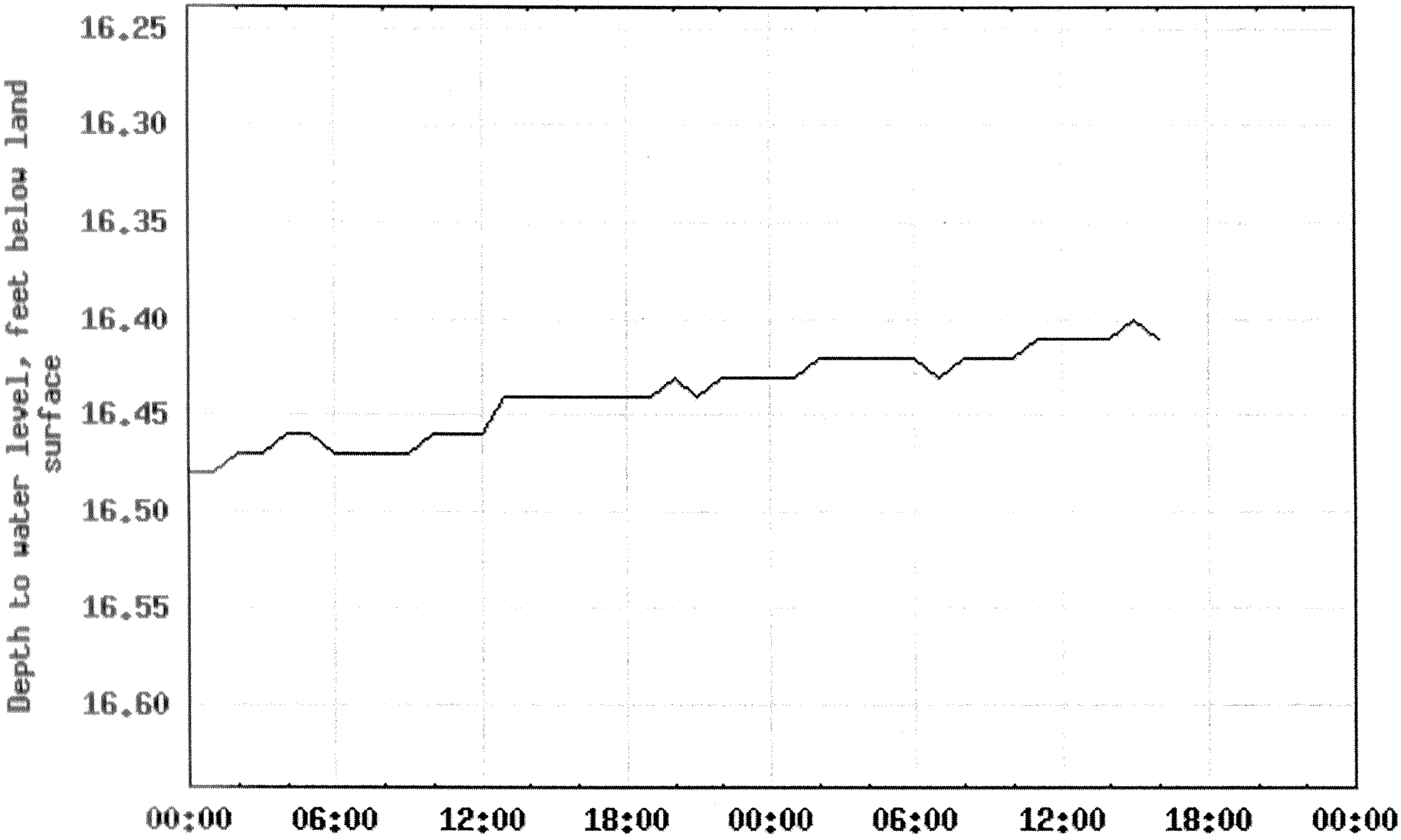
Brent L. Reagor, R.S., Town of Acton Health Department
Test Performed By:

Margo Webber, PE, MADEP-CERO
Witnessed By:

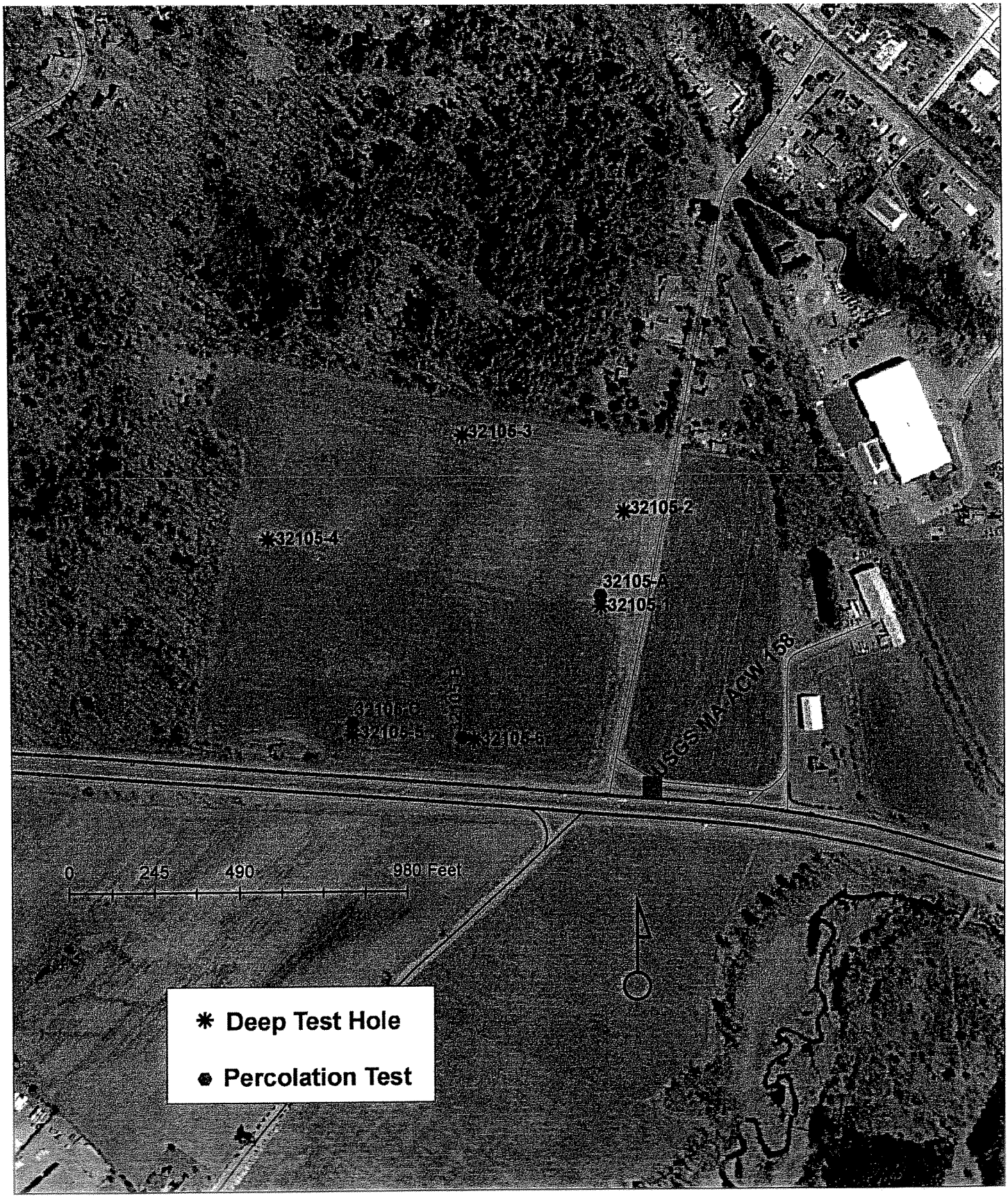
Comments:

USGS

USGS 422812071244401 MA-ACW 158 ACTON, MA



Provisional Data Subject to Revision



Deep Test Hole Percolation Test Locations

Town of Acton Wetherbee Street 3/21/2005

Commonwealth of Massachusetts
City/Town of
Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

DEP has provided this form for use by on-site professionals and local Boards of Health. Other forms may be used, but the information must be substantially the same as provided here. Before using this form, check with your local Board of Health to determine the form they use.

A. Facility Information

1. Facility Information

Town of Acton
Owner Name

End of Quarry Road — Map/Lot B5 30-1
Street Address

Acton — MA — 01720
City/Town — State — Zip Code

B. Site Information

1. (Check one) New Construction ☐ Upgrade ☐ Repair ☐ --Future Wastewater Disposal

2. Published Soil Survey available? Yes ☑ No ☐ If yes: 1995 (Year Published) 1:25,000 (Publication Scale) 35B (Soil Map Unit)

Hinckley Loamy Sand (Soil Name) — no major (Soil limitations)

3. Surficial Geological Report available? Yes ☐ No ☑ If yes: _____ (Year Published) _____ (Publication Scale) _____ (Map Unit)

_____ (Geologic Material) — _____ (Landform)

4. Flood Rate Insurance Map:

Above the 500 year flood boundary? Yes ☑ No ☐ Within the 100 year flood boundary? Yes ☐ No ☑

Within the 500 year flood boundary? Yes ☐ No ☑ Within a Velocity Zone? Yes ☐ No ☑

5. Wetland Area: National Wetland Inventory Map _____ (Map Unit) _____ (Name)

Wetlands Conservancy Program Map _____ (Map Unit) _____ (Name)

6. Current Water Resource Conditions (USGS) ____3/2005____ Range: Above Normal ☐ Normal ☑ Below Normal ☐
Month/Year

7. Other references reviewed: _____

_____

C. On-Site Review

(minimum of two holes required at every proposed disposal area)

Deep Observation Hole Number: _32305-1 ____3/23/2005___ _____1030am_____ ____Cloudy_____
Date Time Weather

1. Location

Ground Elevation at Surface of Hole _____

Location (Identify on Plan) _____32305-1_____

2. Land Use: _____DPW Materials Storage_____ _____none_____ __3-5%_____
(e.g. woodland, agricultural field, vacant lot, etc.) Surface Stones Slope (%)

_____NONE_____ _____ _____SHOULDER_____
Vegetation Landform Position on landscape (attach sheet)

3. Distances from: Open Water Body _300__ Drainage Way _300 Possible Wet Area __300
feet feet feet

Property Line _20___ Drinking Water Well _1100 Other _____
feet feet

4. Parent Material: ___Outwash_____ 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: Depth Weeping from Pit _____ Depth Standing Water in Hole _____

Estimated Depth to High Groundwater: ___132_____ _____
inches elevation

Commonwealth of Massachusetts
City/Town of

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

Deep Observation Hole Number: 32305-1

Depth (In.)	Soil Horizon/ Layer	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features (mottles)			Soil Texture (USDA)	Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
			Depth	Color	Percent		Gravel	Cobbles & Stones			
6	A	10 YR 3/3				LS	10	5	SBK	VFR	
32	B	10 Y/R 5/8				LS	20	20	SBK	VFR	
96	C1	2.5 Y 5/4				CS	30	20	SG	L	
132	C2	2.5 Y 6/2				LS	10	0	M	FR	

Additional Notes C2 IS COMPACT IN HOLE BUT LOOSE OUT OF HOLE, IS ALSO DAMP TO TOUCH

Commonwealth of Massachusetts
City/Town of

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

C. On-Site Review (Cont.)

Deep Observation Hole Number: 32305-2 ___3/23/05___ (Date) ____1100AM____ (Time) ___CLOUDY_____ (Weather)

1. Location

   Ground Elevation at Surface of Hole _____

   Location (Identify on Plan) _____32305-2_____

2. Land Use: _____DPW MATERIAL STORAGE AREA_____ (e.g. woodland, agricultural field, vacant lot, etc.) _____NONE_____ (Surface Stones) ___3-5%_____ (Slope (%))

   _____NONE_____ (Vegetation) _____ (Landform) _____ (Position on landscape (attach sheet))

3. Distances from: Open Water Body _300___ feet Drainage Way __300__ feet Possible Wet Area __300_ feet

   Property Line __20___ feet Drinking Water Well _1100__ feet Other _____

4. Parent Material: _____OUTWASH_____ 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: Depth Weeping from Pit _____ Depth Standing Water in Hole _____

   Estimated Depth to High Groundwater: ___96_____ inches _____ elevation

Commonwealth of Massachusetts
City/Town of
Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

Deep Observation Hole Number:____32305-2___

Depth (In.)	Soil Horizon/ Layer	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features (mottles)			Soil Texture (USDA)	Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
			Depth	Color	Percent		Gravel	Cobbles & Stones			
96	C	2.5 Y 5/3				CS	30	40	SG	L	BOULDERS

Additional Notes _____REFUSAL AT 8'_____

_____NO WATER_____

Commonwealth of Massachusetts
City/Town of

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

D. Determination of High Groundwater Elevation

1. Method used:
   - ☐ Depth observed standing water in observation hole — A. _____ inches B. _____ inches
   - ☐ Depth weeping from side of observation hole — A. _____ inches B. _____ inches
   - ☐ Depth to soil redoximorphic features (mottles) — A. _____ inches B. _____ inches
   - ☐ Groundwater adjustment (USGS methodology) — A. _____ inches B. _____ inches

2. Index Well Number _____ Reading Date _____ Index Well Level _____

   Adjustment Factor _____ Adjusted Groundwater Level _____

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: 32/0 inches Lower boundary: 132/96 inches

F. Certification

I certify that I have passed the soil evaluator examination* approved by the Department of Environmental Protection and that the abov analysis was performed by me consistent with the required training, expertise and experience described in 310 CMR 15.017.

Signature of Soil Evaluator — Date: 3/29/05

Typed or Printed Name of Soil Evaluator: BRENT L. REALOR — *Date of Soil Evaluator Exam: 11/13/03

Name of Board of Health Witness: MARGO WEBBER — Board of Health: MADEP

Note: This form must be submitted to the approving authority with Percolation Test Form 12

Commonwealth of Massachusetts
City/Town of

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

DEP has provided this form for use by on-site professionals and local Boards of Health. Other forms may be used, but the information must be substantially the same as provided here. Before using this form, check with your local Board of Health to determine the form they use.

A. Facility Information

1. Facility Information

Town of Acton
Owner Name

End of Quarry Road Map/Lot B5 30-1
Street Address

Acton MA 01720
City/Town State Zip Code

B. Site Information

1. (Check one) New Construction ☐ Upgrade ☐ Repair ☐ --Future Wastewater Disposal

2. Published Soil Survey available? Yes ☑ No ☐ If yes: 1995 (Year Published) 1:25,000 (Publication Scale) 35B (Soil Map Unit)

Hinckley Loamy Sand (Soil Name) no major (Soil limitations)

3. Surficial Geological Report available? Yes ☐ No ☑ If yes: _____ (Year Published) _____ (Publication Scale) _____ (Map Unit)

_____ (Geologic Material) _____ (Landform)

4. Flood Rate Insurance Map:

Above the 500 year flood boundary? Yes ☑ No ☐ Within the 100 year flood boundary? Yes ☐ No ☑

Within the 500 year flood boundary? Yes ☐ No ☑ Within a Velocity Zone? Yes ☐ No ☑

5. Wetland Area: National Wetland Inventory Map _____ (Map Unit) _____ (Name)

Wetlands Conservancy Program Map _____ (Map Unit) _____ (Name)

Commonwealth of Massachusetts
City/Town of
Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

6. Current Water Resource Conditions (USGS) ___3/2005___ (Month/Year) Range: Above Normal ☐ Normal ☑ Below Normal ☐

7. Other references reviewed: _____

_____

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

Deep Observation Hole Number: _32305-3 ___3/23/2005___ (Date) _____1030am_____ (Time) ____Cloudy_____ (Weather)

1. Location

Ground Elevation at Surface of Hole _____

Location (Identify on Plan) _____32305-3_____

2. Land Use: _____DPW Materials Storage_____ (e.g. woodland, agricultural field, vacant lot, etc.) _____none_____ (Surface Stones) __3-5%_____ (Slope (%))

_____NONE_____ (Vegetation) _____ (Landform) _____SHOULDER_____ (Position on landscape (attach sheet))

3. Distances from: Open Water Body _300__ feet Drainage Way _300__ feet Possible Wet Area __300 feet

Property Line _20___ feet Drinking Water Well _1200 feet Other _____

4. Parent Material: ___Outwash_____ 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: Depth Weeping from Pit ___62"_____ Depth Standing Water in Hole __62"_____

Estimated Depth to High Groundwater: ___62_____ (inches) _____ (elevation)

Commonwealth of Massachusetts
City/Town of

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

Deep Observation Hole Number: 32305-3

Depth (In.)	Soil Horizon/ Layer	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features (mottles)			Soil Texture (USDA)	Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
			Depth	Color	Percent		Gravel	Cobbles & Stones			
8	A	10 YR 3/3				SL	5	0	SBK	VFR	
16	B	10 Y/R 5/6				LS	5	5	SBK	VFR	
42	C1	2.5 Y 6/3				LS	5	10	M	FR	
84	C2	2.5 Y 5/4				MS	20	10	SG	L	

Additional Notes WEEPING AT 62"

STANDING WATER AT 62"

Commonwealth of Massachusetts
City/Town of

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

D. Determination of High Groundwater Elevation

1. Method used:

☑	Depth observed standing water in observation hole	A. 62 inches	B. _____ inches
☑	Depth weeping from side of observation hole	A. 62 inches	B. _____ inches
☐	Depth to soil redoximorphic features (mottles)	A. _____ inches	B. _____ inches
☐	Groundwater adjustment (USGS methodology)	A. _____ inches	B. _____ inches

2. Index Well Number _____ Reading Date _____ Index Well Level _____

Adjustment Factor _____ Adjusted Groundwater Level _____

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: 16 inches Lower boundary: 84 inches

F. Certification

I certify that I have passed the soil evaluator examination* approved by the Department of Environmental Protection and that the abov analysis was performed by me consistent with the required training, expertise and experience described in 310 CMR 15.017.

Signature of Soil Evaluator — Date: 3/29/05

Typed or Printed Name of Soil Evaluator: BRENT L. REAGOR — *Date of Soil Evaluator Exam: 11/13/03

Name of Board of Health Witness: MARGO WEBBER — Board of Health: MADEP

Note: This form must be submitted to the approving authority with Percolation Test Form 12

Deep Test Hole Locations

0 100 200 400 Feet

Quarry Road
3/23/2005
Acton, MA

Deep Test Hole Locations

0 100 200 400 Feet

Quarry Road
3/23/2005
Acton, MA