180 Flatt Hills Road

Archie Skipp
CK# 2751
$150 cc
Plan

No. 01-18

THE COMMONWEALTH OF MASSACHUSETTS

BOARD OF HEALTH

Town OF Amherst

FEE

APPLICATION FOR DISPOSAL SYSTEM CONSTRUCTION PERMIT

Application for a Permit to Construct (X) Repair ( ) Upgrade ( ) Abandon ( ) - [X] Complete System [ ] Individual Components

180 Flat Hills Rd — Location	Layne Floyd — Owner's Name
	401 Old Farm Rd., Amherst, MA 01002 — Address
Map/Parcel #	(413) 253-4231 — Telephone #
Lot 1 — Lot #	Richard E. Costa PE — Designer's Name
Installer's Name	Amherst Civil Engineering
Address	P.O. Box 3312, Amherst, MA 01004-3312 — Address
Telephone #	(413) 256-3400 — Telephone #

Robt Stover

Type of Building: single family house — Lot Size 45,959 Sq. feet

Dwelling — No. of Bedrooms 4 — Garbage Grinder (no)

Other — Type of Building _____ No. of persons _____ Showers ( ), Cafeteria ( )

Other fixtures _____

Design Flow (min. required) 440 gpd — Calculated design flow 477 gpd — Design flow provided _____ gpd

Plan: Date 10/31/01 — Number of sheets 1 — Revision Date _____

Title "Site Plan for Single family House"

Description of Soil(s) Attached

Soil Evaluator Form No. _____ Name of Soil Evaluator Robert Stover Date of Evaluation 4/18/01

DESCRIPTION OF REPAIRS OR ALTERATIONS _____

The undersigned agrees to install the above described Individual Sewage Disposal System in accordance with the provisions of TITLE 5 and further agrees not to place the system in operation until a Certificate of Compliance has been issued by the Board of Health.

Signed Layne Floyd — Date 11/1/01

Inspections _____

FORM 1 - APPLICATION FOR DSCP **DEP APPROVED FORM 5/96**

No. 01-18

THE COMMONWEALTH OF MASSACHUSETTS

Amherst BOARD OF HEALTH

FEE _____

CERTIFICATE OF COMPLIANCE

Description of Work: [ ] **Individual Component(s)** [X] **Complete System**

The undersigned hereby certify that the Sewage Disposal System; Constructed (X), Repaired ( ), Upgraded ( ), Abandoned ( )

by: Layne Floyd

at Lot 1 Flat Hills Rd

has been installed in accordance with the provisions of 310 CMR 15.00 (Title 5) and the approved design plans/as-built plans relating to application No. 01-18 dated _____. Approved Design Flow _____ (gpd)

Installer Robt Stover

Designer: Robert W. Stover 12/28/01 Amherst Civil Eng. Inspector _____ Date 12/28/01

COMMONWEALTH OF MASSACHUSETTS — Richard E. Costa — Civil — No. 37419 — REGISTERED PROFESSIONAL ENGINEER

The issuance of this certificate shall not be construed as a guarantee that the system will function as designed.

FORM 3 - CERTIFICATE OF COMPLIANCE **DEP APPROVED FORM 5/96**

No. 01-18

THE COMMONWEALTH OF MASSACHUSETTS

Amherst BOARD OF HEALTH

FEE $150 cc Pd

Hand $75.00

DISPOSAL SYSTEM CONSTRUCTION PERMIT

Permission is hereby granted to Construct (X) Repair ( ) Upgrade ( ) Abandon ( ) an individual sewage disposal system at Lot 1, Flat Hills Rd as described in the application for Disposal System Construction Permit No. 01-18, dated 10/31/01.

Provided: Construction shall be completed within three years of the date of this permit. All local conditions must be met.

Date 11/2/01 — Board of Health _____

FORM 2 - DSCP **DEP APPROVED FORM 5/96**

FORM 1255 (REV 5/96) H&W HOBBS & WARREN™ PUBLISHERS - BOSTON

Hillair Russell

Ilona Prinsky

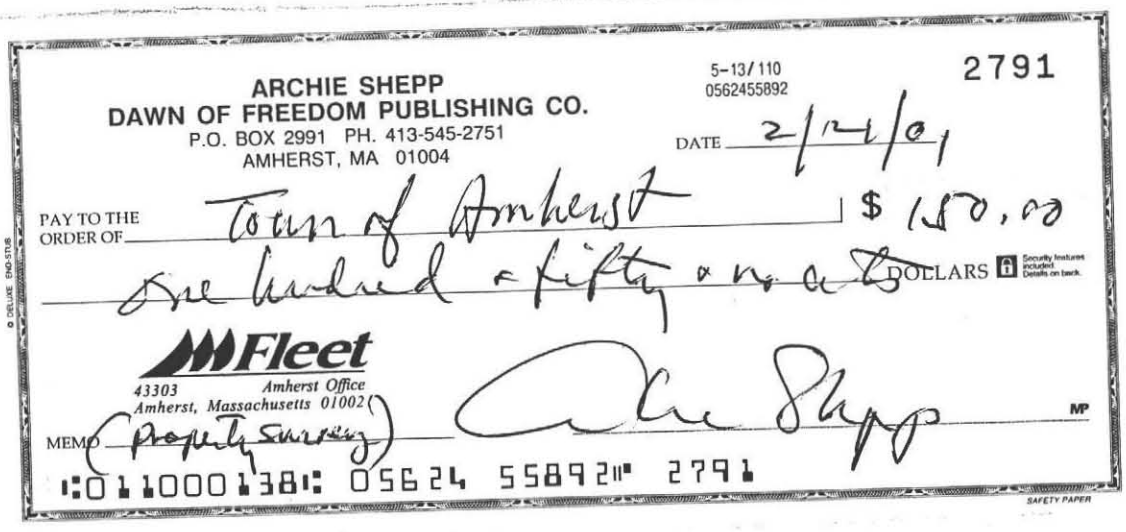
Wayne
Floyd

253-4248

180 Flat
Hills
Dr

a satisfactorily completed CORI or crimin
times, if the volunteer/staff would otherwi

6. For prospective staff whose permanent resi
must obtain a criminal history check or its
local authority in the country or state of ori
   a. Where the staff member has also liv
   has a permanent residence outside
   history check from the other jurisd
   b. The regulation requires that crimin
   practicable." Where practicable m
   jurisdiction notifies the camp in w
   recognized equivalent is available
   staff member, if s/he has complete
   430.090, is deemed to be in compl
   unsupervised contact with camper
   documents: (1) that s/he has timel
   the appropriate jurisdiction (proof
   requested authority failed to answ
   a minimum, all other requirements
   international staff screened by an
   thorough background check was c
   the staff person's local jurisdiction



ARCHIE SHEPP
DAWN OF FREEDOM PUBLISHING CO.
P.O. BOX 2991 PH. 413-545-2751
AMHERST, MA 01004

5-13/110
0562455892

2791

DATE 2/24/01

PAY TO THE ORDER OF Town of Amherst $ 150.00

One hundred + fifty + no cents DOLLARS

Security features included. Details on back.

Fleet
43303 Amherst Office
Amherst, Massachusetts 01002

MEMO (property survey)

Archie Shepp

MP

⑆011000138⑆ 0562455892⑈ 2791

DELUXE END-STUB

SAFETY PAPER

Pd 130 cc
FOR Rec
CH II
2791

FORM 11 - SOIL EVALUATOR FORM

No. _____ **Date:** 4/18/01

Commonwealth of Massachusetts
Amherst , **Massachusetts**

Soil Suitability Assessment for On-site Sewage Disposal

Performed By: Robert Stover **Date:**
Witnessed By: David Zarozinski

Location Address or Lot #	Owner's Name, Address, and Telephone #
Flat Hills Rd (next to 170 Flat Hills)	Archie Shopp c/o Bulkley, Richardson & Gelinas 1500 main St. Suite 2700 Springfield, MA 01115
New Construction ☒ Repair ☐	

Office Review

Published Soil Survey Available: No ☐ Yes ☒
Year Published 12/1981 Publication Scale 1:15840 Soil Map Unit GxB
Drainage Class A Soil Limitations poor filter - doesn't apply to this site - soil encountered was till.
Surficial Geologic Report Available: No ☐ Yes ☐
Year Published Publication Scale
Geologic Material (Map Unit)
Landform
Flood Insurance Rate Map:
Above 500 year flood boundary No ☐ Yes ☒
Within 500 year flood boundary No ☒ Yes ☐
Within 100 year flood boundary No ☒ Yes ☐
Wetland Area:
National Wetland Inventory Map (map unit)
Wetlands Conservancy Program Map (map unit)

Current Water Resource Conditions (USGS): Month March 2001
Range :Above Normal ☒ Normal ☐ Below Normal ☐
Other References Reviewed: _____

Location Address or Lot No. Sheppland on Flat Hills Rd. Amherst

On-site Review

Deep Hole Number 1 **Date:** 4/18/01 **Time:** 9:30 **Weather** 32°-overcast
Location (identify on site plan) see sketch
Land Use light woods **Slope (%)** 2 **Surface Stones** few - several boulders
Vegetation white pine, maple (red), hemlock
Landform Till Hill
Position on landscape (sketch on the back)
Distances from:

Open Water Body	150 feet ±	Drainage way	150 feet ±
Possible Wet Area	150 feet ±	Property Line	25 feet
Drinking Water Well	100 feet+	Other	

DEEP OBSERVATION HOLE LOG*

Depth from Surface (Inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	Other (Structure, Stones, Boulders, Consistency, % Gravel)
0-5"	A	FSL	7.5YR3/4	none	Friable
5-18"	Bw	FSL	10YR4/6	none	Friable/Massive
18"-112"	C	FSL	2.5Y5/3	7.5YR 5/8 around weathering stones	Firm many gravels

* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) Till **Depth to Bedrock:** >112"
Depth to Groundwater: **Standing Water in the Hole:** none **Weeping from Pit Face:** 41" (slight)
Estimated Seasonal High Ground Water: 41"

DEP

DEP APPROVED FORM - 12/07/95

This test pit did not meet the requirements of Amherst Health Regs.

FORM 11 - SOIL EVAL.

Location Address or Lot No. Flat Hills Rd.

On-site Review

Deep Hole Number 2 Date: 4/18/01 Time: 12:00 Weather 45° m c

Location (identify on site plan) see sketch

Land Use light woods Slope (%) 2 Surface Stones occasional

Vegetation white pine, popular 3 spicebush

Landform Till Hill

Position on landscape (sketch on the back)

Distances from:

Open Water Body 200 feet ± Drainage way 100 feet+

Possible Wet Area 200 feet ± Property Line 25' feet

Drinking Water Well 100 feet + Other

DEEP OBSERVATION HOLE LOG*

Depth from Surface (Inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	Other (Structure, Stones, Boulders, Consistency, Gravel)
0-8	A	FSL	10YR3/4	none	Friable
8-24	BW	FSL	7.5YR 4/6	none	Friable + massive
24-9'	C	FSL	2.5Y 5/4	5YR 3/3 @6'	Firm - gravelly

* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) Till Depth to Bedrock: >9'

Depth to Groundwater: Standing Water in the Hole: none Weeping from Pit Face: slight @ C

Estimated Seasonal High Ground Water: 6'

DEP

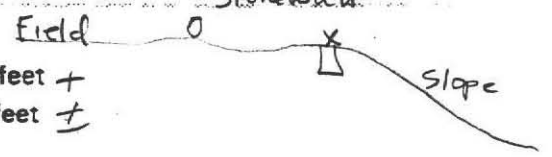
DEP APPROVED FORM - 12/07/95

This test pit did not meet the requirements of the Amherst Health regulations.

Location Address or Lot No. Land on Flat Hills Rd. Amherst
owned by Archie Shepp

On-site Review

Deep Hole Number 3 **Date:** 4/18/01 **Time:** 12:00 noon **Weather** 40° - partly cloudy
Location (identify on site plan) see sketch
Land Use light woods **Slope (%)** 4 **Surface Stones** occasional - stonewalls
Vegetation white pine, red maple, hemlock
Landform Till Hill
Position on landscape (sketch on the back)



Distances from:

Open Water Body	150 feet +	Drainage way	150 feet +
Possible Wet Area	150 feet +	Property Line	60 feet ±
Drinking Water Well	100 feet +	Other	

DEEP OBSERVATION HOLE LOG*

Depth from Surface (Inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	Other (Structure, Stones, Boulders, Consistency, % Gravel)
0-7	A	FSL	10YR3/4	none	Friable
5-18	Bw	FSL	7.5YR4/6	none	Friable / Massive
18-112	C	FSL	2.5Y5/4	none	Firm, many gravel small stones

* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) till **Depth to Bedrock:** >112"
Depth to Groundwater: **Standing Water in the Hole:** none **Weeping from Pit Face:** none
Estimated Seasonal High Ground Water: 112"

This Test pit meets Amherst Health regulations, as well as the State Septic Sys code.

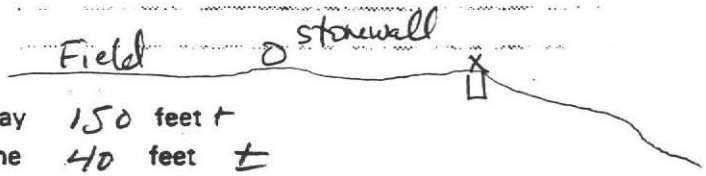
DEP

DEP APPROVED FORM - 12/07/95

Location Address or Lot No. land on Flat Hills Rd., Amherst
owned by Archie Shepp

On-site Review

Deep Hole Number 4 **Date:** 4/18/01 **Time:** 12:30 **Weather** 40° partly cloudy
Location (identify on site plan) see sketch
Land Use light woods **Slope (%)** 4 **Surface Stones** occasional - stonewalls
Vegetation white pine, red maple, hemlock
Landform till hill
Position on landscape (sketch on the back)



Distances from:

Open Water Body	150 feet +	Drainage way	150 feet +
Possible Wet Area	150 feet +	Property Line	40 feet ±
Drinking Water Well	100 feet +	Other	

DEEP OBSERVATION HOLE LOG*

Depth from Surface (Inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	Other (Structure, Stones, Boulders, Consistency, % Gravel)
0-5	A	FSL	10YR3/4	none	Friable,
5-24	Bw	FSL	7.5YR4/6	none	Friable; Massive
24-102	C	FSL	2.5Y5/4	none	Firm with gravel and stones

* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) till **Depth to Bedrock:** >102"
Depth to Groundwater: **Standing Water in the Hole:** none **Weeping from Pit Face:** none
Estimated Seasonal High Ground Water: 102"

This test meets Amherst Health regulations as well as the state septic sys. code.

DEP

DEP APPROVED FORM - 12/07/95

FORM 12 - PE

Location Address or Lot No. Flat Hills Rd

COMMONWEALTH OF MASSACHUSETTS

Amherst, Massachusetts

Percolation Test*

Date: 4/18/01 Time: 9:30 AM

Observation Hole #	1	2+4	3
Depth of Perc	42"	45"	40"
Start Pre-soak	9:30	10:51	11:23
End Pre-soak	9:45	11:16	11:38
Time at 12"	9:47	11:16	11:38
Time at 9"	10:20	11:46	11:57
Time at 6"	11:20	12:46	12:32
Time (9"-6")	60	60	35
Rate Min./Inch	20	20	12

* Minimum of 1 percolation test must be performed in both the primary area reserve area.

Site Passed ☒ Site Failed ☐

Performed By: Robert Stover

Witnessed By: David Zarozinski

Comments:

DEP

DEP APPROVED FORM - 12/07/96

FORM 11 - SOIL

Location Address or Lot No. Shepp Land at Flat Hills Rd. Amherst, MA

Determination for Seasonal High Water Table

Method Used:

	TP 3	TP 4
☒ Depth observed standing in observation hole	> 116 inches	> 102
☒ Depth weeping from side of observation hole	> 116 inches	> 102
☒ Depth to soil mottles	> 116 inches	> 102
☐ Ground water adjustment ..... feet		

Index Well Number ..... Reading Date ..... Index well level .....

Adjustment factor ..... Adjusted ground water level .....

Depth of Naturally Occurring Pervious Material

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

If not, what is the depth of naturally occurring pervious material? _____

Certification

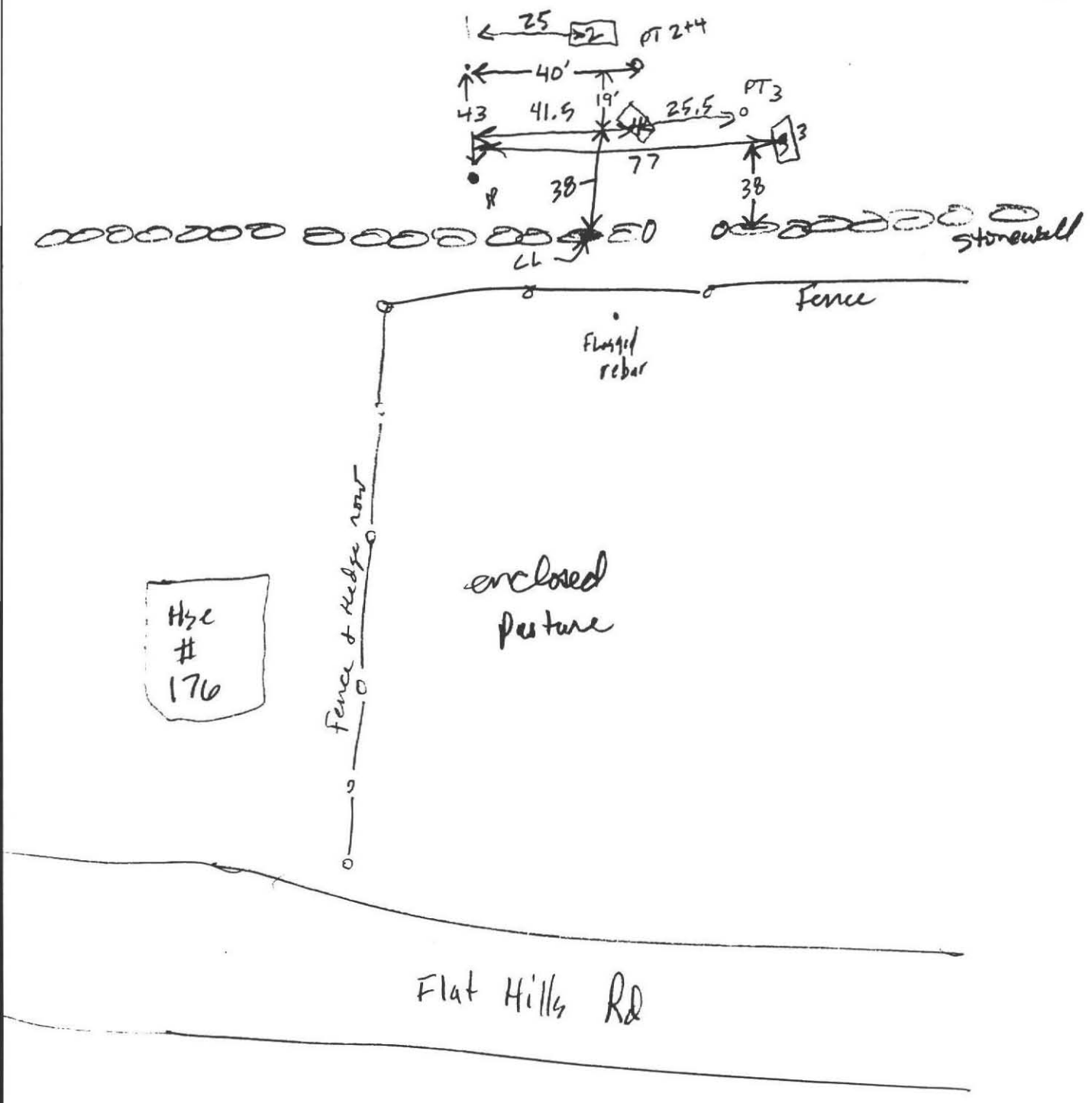
I certify that on 6/1993 (date) I have passed the soil evaluator examir approved by the Department of Environmental Protection and that the above an was performed by me consistent with the required training, expertise and expe described in 310 CMR 15.017.

Signature Robert W. Stover Date 4/18/01

DEP

1P •

67.0
41.5
25.5



3

SLOPE 6%

	HORIZON	TEXTURE	COLOR	MOTTLING	STRUCTURE
0–7"	A	FSL	10YR 3/4	NONE	FRIABLE
7–28"	BW	FSL	7.5YR 4/6	NONE	FRIABLE MASSIVE
28–116"	C	FSL	2.5YR 5/4	5YR 3/3 @ 6"	FIRM GRAVELLY

DRY AT 116"

#4

SLOPE 6%

	HORIZON	TEXTURE	COLOR
0–5"	A		
5–24"	BW	SAME AS #2	
24–102"	C		

DRY @ 102"

MOTTLING

STRUCTURE

On-Site Review

Deep Hole Number (1) Date: 4/18/01 Time 9:30
Weather 32°
Location (identify on site plan) _____
Land Use LIGHT WOODS Slope (%) 2
Surface Stone FEW SEVERAL BOULDERS
Vegetation: PINE, MAPLE, HEMLOCK

Landform: TILL HILL

Position on Landscape (sketch on back) _____
Distances from:

Open Water Body	150 feet ±	Drainageway	150 feet ±
Possible Wet Ares	150 feet ±	Property Line	25' feet
Drinking Water Well	100+ feet ±	Other	_____

DEEP OBSERVATION HOLE LOG

depth from surface (inches)	soil horizon	soil texture (USDA)	soil color (Munsel)	soil mottling	other (structure, stones, boulders) Consistency, % gravel
0-5"	A	FSL	7.5YR 3/4	NONE	FRIABLE
5"-18"	BW	FSL	10YR 4/6	NONE	FRIABLE MASSIVE
18"-112"	C	FSL	2.5Y 5/3	7.5YR 5/8	FIRM MANY GRAVEL

Parent Material (geologic) TILL
Depth to Bedrock 7'12"
Depth to Groundwater :
Standing Water in the Hole NONE
Weeping from Pit Face 41" SLIGHT
Estimated Seasonal High Water 41"

On-Site Review

Deep Hole Number (2) Date: 4/18/01 Time 12:00
Weather 45° MOSTLY CLEAR
Location (identify on site plan) _____
Land Use LIGHT WOODS Slope (%) 2
Surface Stone OCCASIONAL
Vegetation: WHITE PINE, POPLAR, 3 SPICE BUSH

Landform: TILL HILL

Position on Landscape (sketch on back) _____
Distances from:

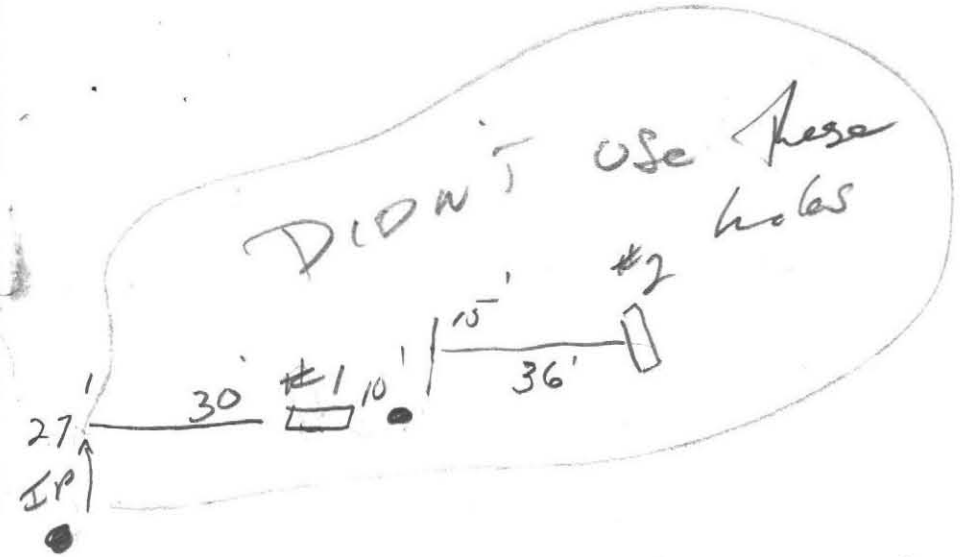
Open Water Body	200 feet ±	Drainageway	100 feet +
Possible Wet Ares	200 feet ±	Property Line	25 feet
Drinking Water Well	100 feet ±	Other	_____

DEEP OBSERVATION HOLE LOG

depth from surface (inches)	soil horizon	soil texture (USDA)	soil color (Munsel)	soil mottling	other (structure, stones, boulders) Consistency, % gravel
0-8"	A	FSL	10YR 3/4	NONE	FRIABLE
8"-24"	BW	FSL	7.5YR 4/6	NONE	FRIABLE + MASSIVE
24"-9'	C	FSL	2.5YR 5/4	5YR 3/3 @ 6'	FIRM GRAVELY

Parent Material (geologic) TILL
Depth to Bedrock >9'
Depth to Groundwater :
Standing Water in the Hole NONE
Weeping from Pit Face SLIGHT @ 6'
Estimated Seasonal High Water 6'

Perc Test Fee
150.00



FORM 12: Percolation Test
Location Adrress or Lot # FLAT Hills Road

Commonwealth of Massachusetts
Town of Amherst

PERCOLATION TEST * DATE: 4/18/01 TIME:				
Observation Hole #	(1)	(2) 4	(3)	4
Depth of Perc	42"	45"	40"	45"
Start Pre-soak	9:30	10:57	11:23	10:57
End Pre-soak	9:45	11:16	11:38	11:16
Time at 12"	9:47	11:16	11:38	11:16
Time at 9"	10:20	11:46	11:57	11:46
Time at 6"	11:20	12:46	12:32	12:46
Time (9"-6")	60 min	60 min	35 min	60 min
Rate Min./Inch	20	20	12	20

Minimum of one percolation test must be performed in both the primary area and reserve area.

Site Passed ☐ Site failed ☐

Performed by BOB STOVER

Witnessed by David Zarozinski

Comments:

FORM 11: Soil Evaluation Form NO: _____

Commonwealth of Massachusetts
Town of _____

Soil Suitability Assessment : On-Site Sewage Disposal

Performed By: Bob Stone Date: 4/18/01
Witnessed By: _____

Location Address of: Lot #	Owner's Name: Garth Shop Address of: Telephone:
New Construction ☑ Repair ☐	

Office Review

Published Soil Survey Available? No ☐ Yes ☐
Year Published _____ Publication Scale _____ Soil Map Unit _____
Drainage Class _____ Soil Limitations _____

Surficial Geologic Report Available? No ☐ Yes ☐
Year Published _____ Publication Scale _____
Geologic Material (map unit) _____
Landform _____

Flood Insurance Rate Map:
Above 500 year flood boundary? No ☐ Yes ☐
Within 500 year flood boundary? No ☐ Yes ☐
Within 100 year flood boundary? No ☐ Yes ☐

Wetland Area:
National Wetland Inventory Map (map unit) _____
Wetlands Conservancy Program Map (map unit) _____

Current Water Resource Conditions (USGS): month _____
Range: Above Normal ☐ Normal ☐ Below Normal ☐

Other Reference Reviewed:

Determination: Seasonal High Water Table

Methods Used:

☐ Depth observed standing in observation hole _____ inches
☐ Depth weeping from side of observation hole _____ inches
☐ Depth to soil mottles _____ inches
☐ Ground water adjustment _____ feet

Index Well No. _____ Reading Date _____ Index Well Level _____
Adjustment factor _____ Adjusted ground water level _____

Depth of Naturally Occurring Previous Material

Does at least four feed of naturally occurring previous materials exist in all areas observed throughout the area proposed for this soil absorption system? _____

If not, what is the depth of naturally occurring previous material?
_____

Certification

I certify that on _____ (date) 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 _____
Date _____

No. _____ Date: 4/18/01

Commonwealth of Massachusetts
Amherst , **Massachusetts**

Soil Suitability Assessment for On-site Sewage Disposal

Performed By: Robert Stover Date: 4/18/01
Witnessed By: David Zarozinski

Location Address or Lot # Flat Hills Rd (next to 170 Flat Hills) New Construction ☒ Repair ☐	Owner's Name, Address, and Telephone # Archie Shepp c/o Bulkley, Richardson & Gelinas 1500 main St. Suite 2700 Springfield, MA 01115

Office Review

Published Soil Survey Available: No ☐ Yes ☒
Year Published 12/1981 Publication Scale 1:15840 Soil Map Unit GxB
Drainage Class A Soil Limitations poor filter - doesn't apply to this site - soil encountered was till.
Surficial Geologic Report Available: No ☐ Yes ☐
Year Published Publication Scale
Geologic Material (Map Unit)
Landform
Flood Insurance Rate Map:
Above 500 year flood boundary No ☐ Yes ☒
Within 500 year flood boundary No ☒ Yes ☐
Within 100 year flood boundary No ☒ Yes ☐
Wetland Area:
National Wetland Inventory Map (map unit)
Wetlands Conservancy Program Map (map unit)

Current Water Resource Conditions (USGS): Month March 2001
Range :Above Normal ☒ Normal ☐ Below Normal ☐
Other References Reviewed: _____

Location Address or Lot No. Sklepp land on Flat Hills Rd. Amherst

On-site Review

Deep Hole Number 1 **Date:** 4/18/01 **Time:** 9:30 **Weather** 32°-overcast
Location (identify on site plan) see sketch
Land Use light woods **Slope (%)** 2 **Surface Stones** few - several boulders
Vegetation white pine, maple (red), hemlock
Landform Till Hill
Position on landscape (sketch on the back)
Distances from:

Open Water Body	150	feet ±	Drainage way	150'	feet ±
Possible Wet Area	150	feet ±	Property Line	25'	feet
Drinking Water Well	100	feet+	Other		

DEEP OBSERVATION HOLE LOG*

Depth from Surface (Inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	Other (Structure, Stones, Boulders, Consistency, % Gravel)
0-5"	A	FSL	7.5YR3/4	none	Friable
5-18"	Bw	FSL	10YR4/6	none	Friable/Massive
18"-112"	C	FSL	2.5Y5/3	7.5YR 5/8 around weathering stones	Firm many gravels

* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) Till **Depth to Bedrock:** >112"
Depth to Groundwater: **Standing Water in the Hole:** none **Weeping from Pit Face:** 41" (slight)
Estimated Seasonal High Ground Water: 41"

DEP

DEP APPROVED FORM - 12/07/95

This test pit did not meet the requirements of Amherst Health Regs.

FORM 11 - SOIL EVAL.

Location Address or Lot No. Flat Hills Rd.

On-site Review

Deep Hole Number 2 **Date:** 4/18/01 **Time:** 12:00 **Weather** 45° mc clr.
Location (identify on site plan) see sketch
Land Use light woods **Slope (%)** 2 **Surface Stones** occasional
Vegetation white pine, popular 3 spicebush
Landform Till Hill
Position on landscape (sketch on the back)
Distances from:

Open Water Body 200 feet ± Drainage way 100' feet+
Possible Wet Area 200 feet ± Property Line 25' feet
Drinking Water Well 100 feet + Other

DEEP OBSERVATION HOLE LOG*

Depth from Surface (Inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	Other (Structure, Stones, Boulders, Consistency, % Gravel)
0-8	A	FSL	10YR3/4	none	Friable
8-24	BW	FSL	7.5YR 4/6	none	Friable + massive
24-9'	C	FSL	2.5Y 5/4	5YR 3/3 @6'	Firm - gravelly

* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) Till **Depth to Bedrock:** >9'
Depth to Groundwater: **Standing Water in the Hole:** none **Weeping from Pit Face:** slight @ 6'
Estimated Seasonal High Ground Water: 6'

DEP

DEP APPROVED FORM - 12/07/95

This test pit did not meet the requirements of the Amherst Health regulations.

Location Address or Lot No. Land on Flat Hills Rd. Amherst
owned by Archie Shepp

On-site Review

Deep Hole Number 3 **Date:** 4/18/01 **Time:** 12:00 noon **Weather** 40° - partly cloudy
Location (identify on site plan) see sketch
Land Use light woods **Slope (%)** 4 **Surface Stones** occasional - stonewalls
Vegetation white pine, red maple, hemlock
Landform Till Hill
Position on landscape (sketch on the back)

Distances from:

Open Water Body	150 feet +	Drainage way	150 feet +
Possible Wet Area	150 feet +	Property Line	60 feet ±
Drinking Water Well	100 feet +	Other	

DEEP OBSERVATION HOLE LOG*

Depth from Surface (Inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	Other (Structure, Stones, Boulders, Consistency, % Gravel)
0-7	A	FSL	10YR3/4	none	Friable
5-18	Bw	FSL	7.5YR4/6	none	Friable / Massive
18-112	C	FSL	2.5Y5/4	none	Firm, many gravel small stones

* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

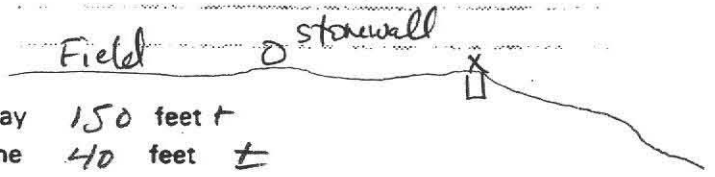
Parent Material (geologic) till **Depth to Bedrock:** >112"
Depth to Groundwater: **Standing Water in the Hole:** none **Weeping from Pit Face:** none
Estimated Seasonal High Ground Water: 112'

This Test pit meets Amherst Health regulations, as well as the State Septic Sys code.

Location Address or Lot No. land on Flat Hills Rd., Amherst
owned by Archie Shepp

On-site Review

Deep Hole Number 4 **Date:** 4/18/01 **Time:** 12:30 **Weather** 40° partly cloudy
Location (identify on site plan) see sketch
Land Use light woods **Slope (%)** 4 **Surface Stones** occasional - stonewalls
Vegetation white pine, red maple, hemlock
Landform till hill
Position on landscape (sketch on the back)



Distances from:

Open Water Body	150 feet+	Drainage way	150 feet +
Possible Wet Area	150 feet+	Property Line	40 feet ±
Drinking Water Well	100 feet +	Other	

DEEP OBSERVATION HOLE LOG*

Depth from Surface (Inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	Other (Structure, Stones, Boulders, Consistency, % Gravel)
0-5	A	FSL	10YR3/4	none	Friable,
5-24	Bw	FSL	7.5YR4/6	none	Friable; Massive
24-102	C	FSL	2.5Y5/4	none	Firm with gravel and stones

* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) till **Depth to Bedrock:** >102"
Depth to Groundwater: **Standing Water in the Hole:** none **Weeping from Pit Face:** none
Estimated Seasonal High Ground Water: 102"

This test meets Amherst Health regulations as well as the state septic sys. code.

DEP

DEP APPROVED FORM - 12/07/95

FORM 12 - PERCOLATION TEST

Location Address or Lot No. Flat Hills Rd

COMMONWEALTH OF MASSACHUSETTS

Amherst, Massachusetts

Percolation Test*			
Date: 4/18/01		Time: 9:30 AM	
Observation Hole #	1	2+4	3
Depth of Perc	42"	45"	40"
Start Pre-soak	9:30	10:57	11:23
End Pre-soak	9:45	11:16	11:38
Time at 12"	9:47	11:16	11:38
Time at 9"	10:20	11:46	11:57
Time at 6"	11:20	12:46	12:32
Time (9"-6")	60	60	35
Rate Min./Inch	20	20	12

* Minimum of 1 percolation test must be performed in both the primary area AND reserve area.

Site Passed ☒ Site Failed ☐

Performed By: Robert Stover

Witnessed By: David Zarozinski

Comments:

DEP

DEP APPROVED FORM - 12/07/96

Location Address or Lot No. Shepp Land at Flat Hills Rd. Amherst, MA

Determination for Seasonal High Water Table

Method Used:

	TP 3	TP 4
☒ Depth observed standing in observation hole	≥ 116 inches	> 102"
☒ Depth weeping from side of observation hole	≥ 116 inches	> 102"
☒ Depth to soil mottles	> 116 inches	> 102"
☐ Ground water adjustment ..... feet		

Index Well Number ..... Reading Date ..... Index well level .....

Adjustment factor ..... Adjusted ground water level .....

Depth of Naturally Occurring Pervious Material

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

If not, what is the depth of naturally occurring pervious material? _____

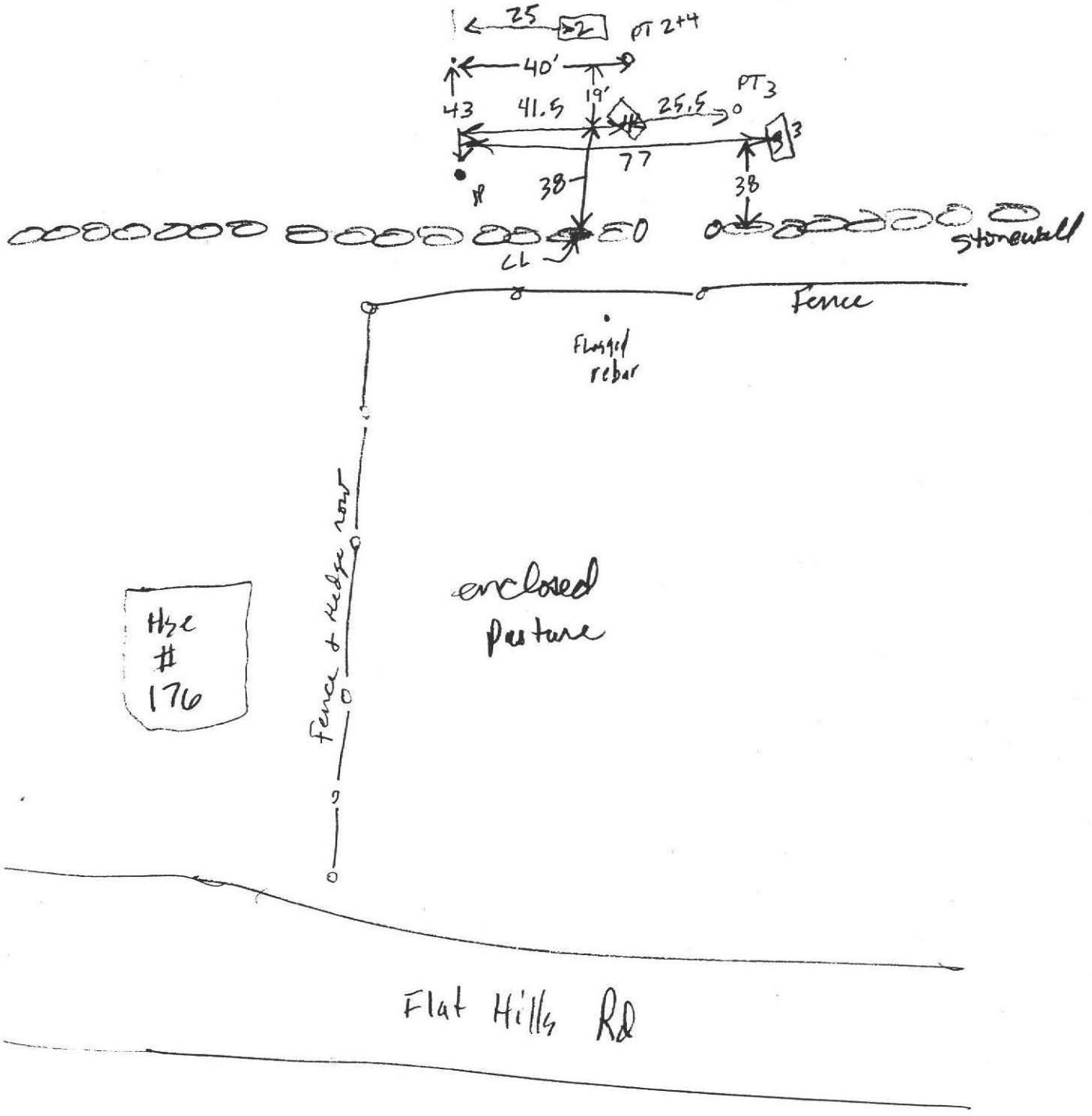
Certification

I certify that on 6/1993 (date) 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 Robert W. Stover Date 4/18/01

IP •

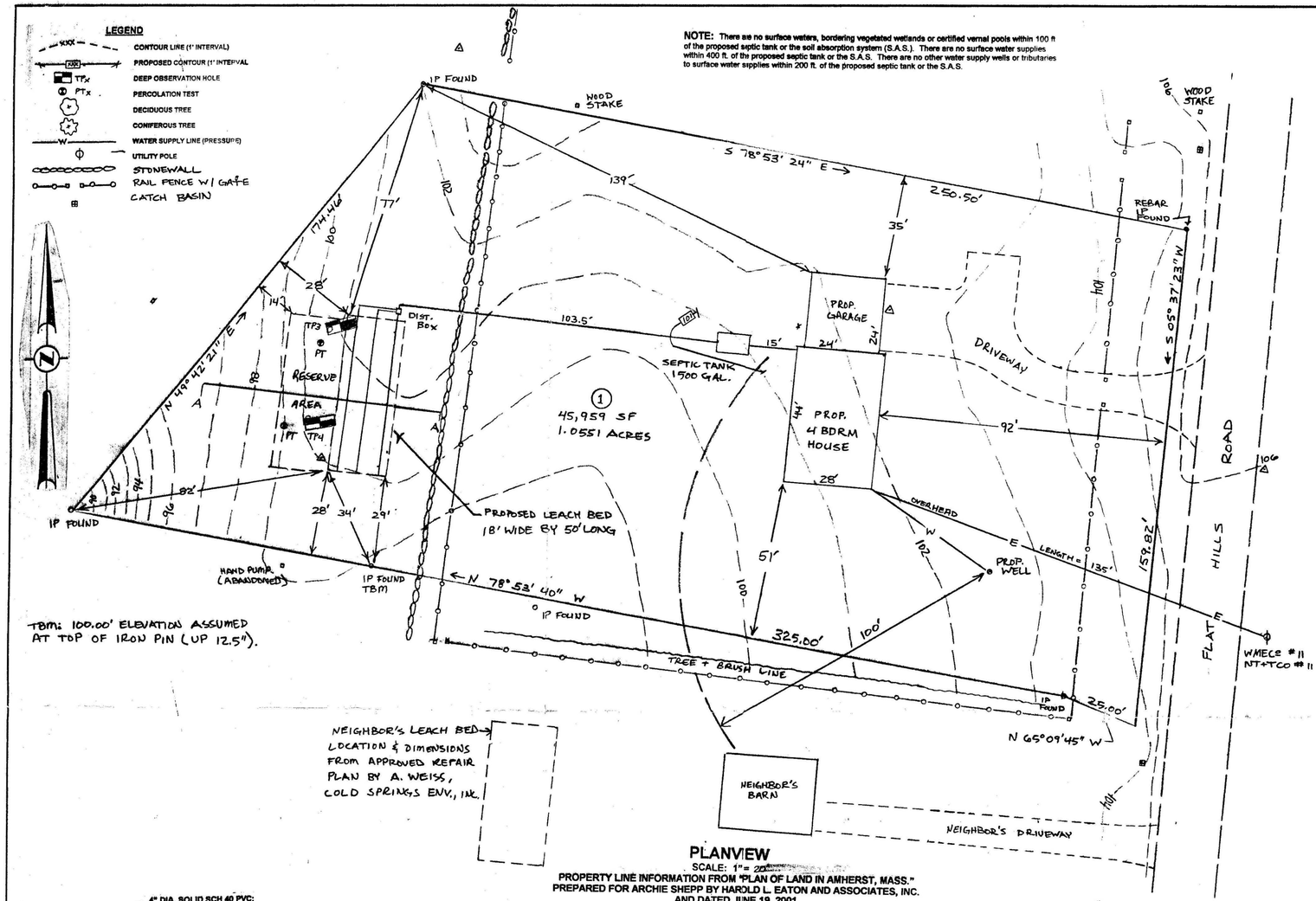
67.0
41.5
25.5



LEGEND

- CONTOUR LINE (1' INTERVAL)
- PROPOSED CONTOUR (1' INTERVAL)
- TPx — DEEP OBSERVATION HOLE
- PTx — PERCOLATION TEST
- DECIDUOUS TREE
- CONIFEROUS TREE
- W — WATER SUPPLY LINE (PRESSURE)
- UTILITY POLE
- STONEWALL
- RAIL FENCE W/ GATE
- CATCH BASIN

NOTE: There are no surface waters, bordering vegetated wetlands or certified vernal pools within 100 ft of the proposed septic tank or the soil absorption system (S.A.S.). There are no surface water supplies within 400 ft. of the proposed septic tank or the S.A.S. There are no other water supply wells or tributaries to surface water supplies within 200 ft. of the proposed septic tank or the S.A.S.



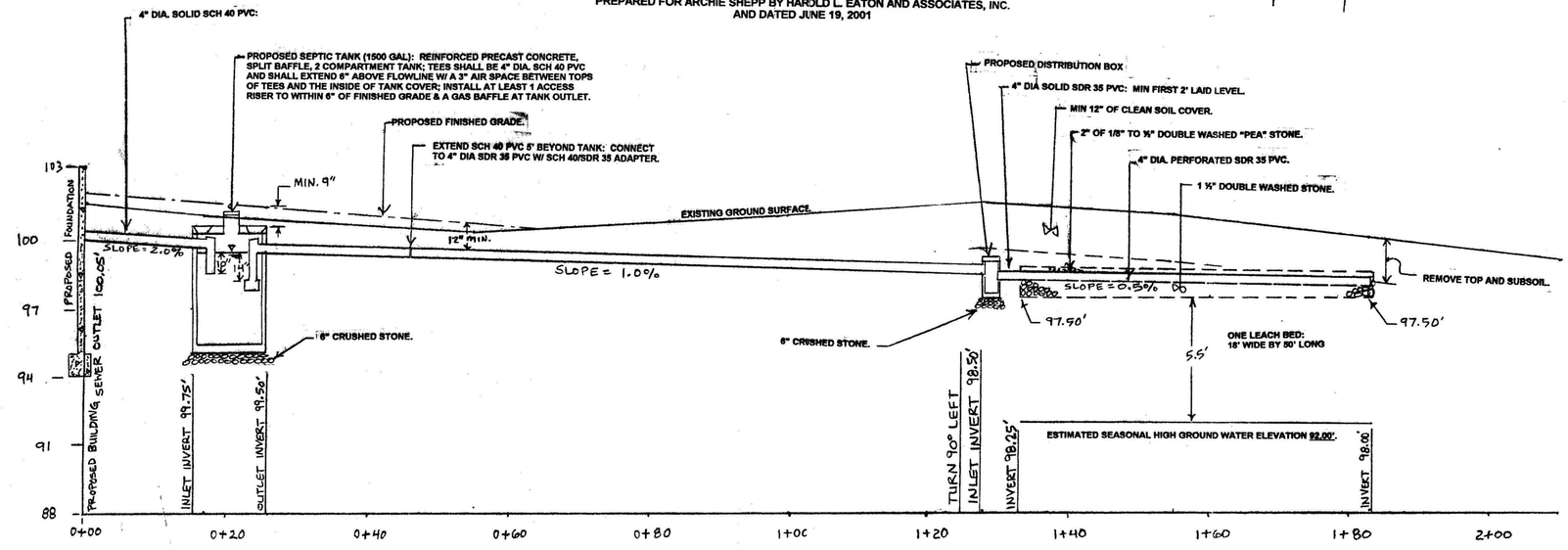
TBM: 100.00' ELEVATION ASSUMED AT TOP OF IRON PIN (UP 12.5").

NEIGHBOR'S LEACH BED LOCATION & DIMENSIONS FROM APPROVED REPAIR PLAN BY A. WEISS, COLD SPRINGS ENV., INC.

PLANVIEW

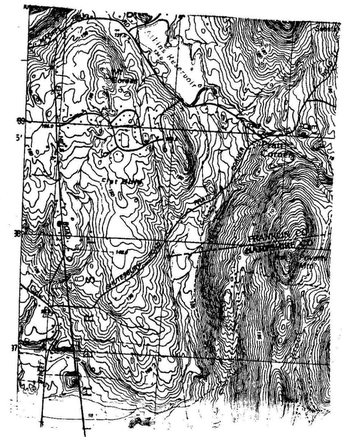
SCALE: 1"= 20'

PROPERTY LINE INFORMATION FROM "PLAN OF LAND IN AMHERST, MASS." PREPARED FOR ARCHIE SHEPP BY HAROLD L. EATON AND ASSOCIATES, INC. AND DATED JUNE 19, 2001



PROFILE OF SYSTEM

SCALE: H: 1" = 10' V: 1" = 3'



LOCUS
USGS SHUTESBURY, MASS QUAD
SCALE 1:25 000

SOIL INVESTIGATION

Test Pit 3 EL. 101.00'
Estimated Seasonal High Ground Water EL. 91.67'.
Bedrock EL. >91.67'.
Class II soils.

Test Pit 4 EL. 100.96'
Estimated Seasonal High Ground Water EL. 92.00'.
Bedrock EL. >92.14'.
Class II soils.

Water supply wells within 200 feet and wetland resource areas within 100 feet of the proposed soil absorption system are as shown on the planview. Deep observation hole log and percolation test results are in attached Soil Suitability Report. Soil investigation and percolation testing by Robert Stover, Certified Soil Evaluator, and witnessed for the Board of Health by David Zaczepinski on 4/18/01

DESIGN CRITERIA

Design flow is for a 4 bedroom house without a garbage grinder.
Proposed septic tank: 1500 gallons.

DESIGN CALCULATION

Required Flow: 110 gpd per bedroom.
Total required flow = 440 gpd.

Effluent Loading Rate: Percolation Rate = 20 minutes per inch.
Class II soils.
Effluent Loading Rate = 0.53 gpd/sf.

Proposed soil absorption system: one leach bed 18' W by 50' L

Bottom Area:	18' x 50'	= 900 sf
Sidewall Area:	not allowed	= 0 sf
Total Leaching Area:		= 900 sf

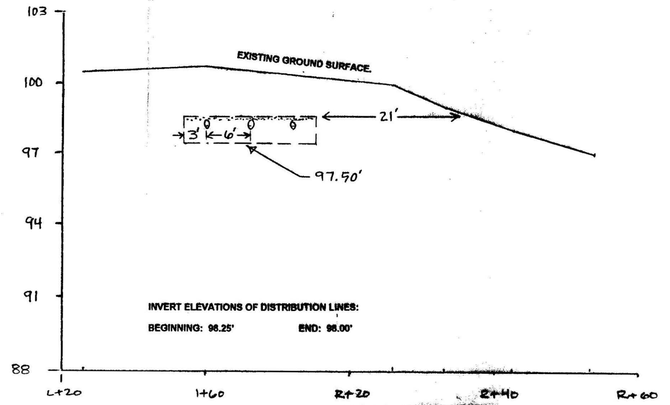
900 sf x 0.53 gpd/sf = 477 gpd
Total Required Capacity = 440 gpd

GENERAL CONDITIONS

1. This system design plan is prepared in accordance with Title 5, 310 CMR 15.00. Construction shall conform to these regulations.
2. The installer shall notify the designer of any unusual conditions and shall not modify the plan without the written consent of the designer.
3. All debris in the site area shall be removed and disposed of in accordance with the law.
4. There is no guarantee expressed or implied to any user of a system installed pursuant to this plan.
5. The installer shall notify the designer when the system excavation is ready for inspection and the designer and the Board of Health when the system installation is complete and prior to placement of the cover material for final inspection. Notification shall be 48 hours prior to the time of inspection.
6. The on-site sewage disposal system shall be pumped and inspected as necessary and at least once every 3 years.

CONSTRUCTION NOTES

1. Any topsoil, subsoil, stumps, stones, debris or other impervious materials encountered during excavation shall be removed from the area of the leaching trenches, from five feet around the trenches and from wherever fill is to be placed. Any fill placed in or adjacent to the trenches shall be a clean granular sand & conform to the specifications of Title 5, 310 CMR 15.255(3).
2. The finished grade above the soil absorption system shall have a minimum two percent slope to shed surface runoff away from the system.
3. Disturbed areas shall be loamed, seeded and mulched until stable vegetation is established.
4. The pipes exiting the distribution box shall have the same invert elevation and shall be level for a minimum of the first two feet.



SECTION AT "A-A": LEACH BED

SCALE: H: 1" = 10' V: 1" = 3'

COMMONWEALTH OF MASSACHUSETTS
Richard E. Costa
Civil
No. 37448
REGISTERED
PROFESSIONAL ENGINEER

RECEIVED 11/1/01

LAYNE FLOYD
401 OLD FARM ROAD, AMHERST, MA 01002

SITE PLAN FOR SINGLE FAMILY HOUSE
LAND ON FLAT HILLS ROAD, AMHERST, MASS

SCALE: as shown	APPROVED BY	DRAWN BY RNS
DATE: 10/31/01		

AMHERST CIVIL ENGINEERING
RICHARD COSTA, P.E. / ROBERT STOVER
P.O. BOX 3312, AMHERST, MA 01004-3312
(413)256-3400

DRAWING NUMBER