

444 Old Montague Rd
Tenn



No. 01-04

Revised

CLERK
3969

FEE 225⁰⁰

COMMONWEALTH OF MASSACHUSETTS

Board of Health, Amherst, MA.

APPLICATION FOR DISPOSAL SYSTEM CONSTRUCTION PERMIT



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

Location	<u>444 OLD MONTAGUE RD</u>	Owner's Name	<u>ALAN MARRA</u>
Map/Parcel#	<u>2A/22</u>	Address	<u>444 OLD MONTAGUE ROAD</u>
Lot#	<u>#22</u>	Telephone#	<u>549-6910</u>
Installer's Name		Designer's Name	<u>Alan Weiss, R.S.</u>
Address		Address	<u>Belchertown, MA.</u>
Telephone#		Telephone#	<u>323-5157</u>

Type of Building RES MO 2 Lot Size 49,223 sq. ft.

Dwelling - No. of Bedrooms 3 Garbage grinder () * TO BE REMOVED

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

Other Fixtures _____

Design Flow (min. required) 330 gpd Calculated design flow 330 Design flow provided 391 gpd

Plan: Date 6/5/01 Number of sheets 4 Revision Date 3/1/02

Title REUSED SEPTIC SYSTEM REPAIR PLAN

Description of Soil(s) CLASS I SAND

Soil Evaluator Form No. _____ Name of Soil Evaluator A. Weiss Date of Evaluation 5/7/2001

DESCRIPTION OF REPAIRS OR ALTERATIONS NEW S. TANK + L. TANKS

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

Signed Alan G. Marra Date 3-13-02

Inspections _____

No. 01-04

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FEE 225⁰⁰

COMMONWEALTH OF MASSACHUSETTS

Board of Health, Amherst, MA.

CERTIFICATE OF COMPLIANCE

Description of Work: Individual Component(s) Complete System

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

by: _____
at 444 Old Montague 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. 01-04, dated _____ Approved Design Flow _____ (gpd)

Installer KARLS EXL

Designer: _____ Inspector: _____ Date: 7/16/02

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

No. 01-04

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FEE 225⁰⁰

COMMONWEALTH OF MASSACHUSETTS

Board of Health, Amherst, MA.

DISPOSAL SYSTEM CONSTRUCTION PERMIT

Permission is hereby granted to; Construct () Repair () Upgrade () Abandon () an individual sewage disposal system

at 444 Old Montague Road as described in the application for

Disposal System Construction Permit No. 01-04, dated 6/5/01 Res 3/14/02

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

Date 3/14/02 Board of Health _____

Rev Test 150.00
Plus 75.00
225.00

PAID CK # 3969

FORM 11 - SOIL EVALUATOR FORM

RECEIPT # 1672 Page 1 of 3

No. _____

Date: 5/7/01

Commonwealth of Massachusetts
Massachusetts

Soil Suitability Assessment for On-site Sewage Disposal

Performed By: AL Weiss Cold Spring town
Witnessed By: Tom Dion

Date: 5/7/01

Location Address or Lot # 444 Old Montague Rd	Owner's Name, Address, and Telephone # AL MARRA 444 Old Montague Rd 549-6910
New Construction <input type="checkbox"/> Repair <input checked="" type="checkbox"/>	

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: N/A

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 References Reviewed: _____



444 Old Montague

Location Address or Lot No. 444 Old Montague Rd

On-site Review

Deep Hole Number ① Date: 5/26/01 Time: 8:15 AM Weather: DRY Sunny

Location (identify on site plan) _____

Land Use Residential Slope (%) 1-2% Surface Stones FEW

Vegetation GRASS, TREES, SPURGE, BIRCH

Landform TERRACE

Position on landscape (sketch on the back) _____

Distances from:

Open Water Body 100+ feet Drainage way 100+ feet
 Possible Wet Area 100+ feet Property Line 100+ feet
 Drinking Water Well 100+ feet Other N/A

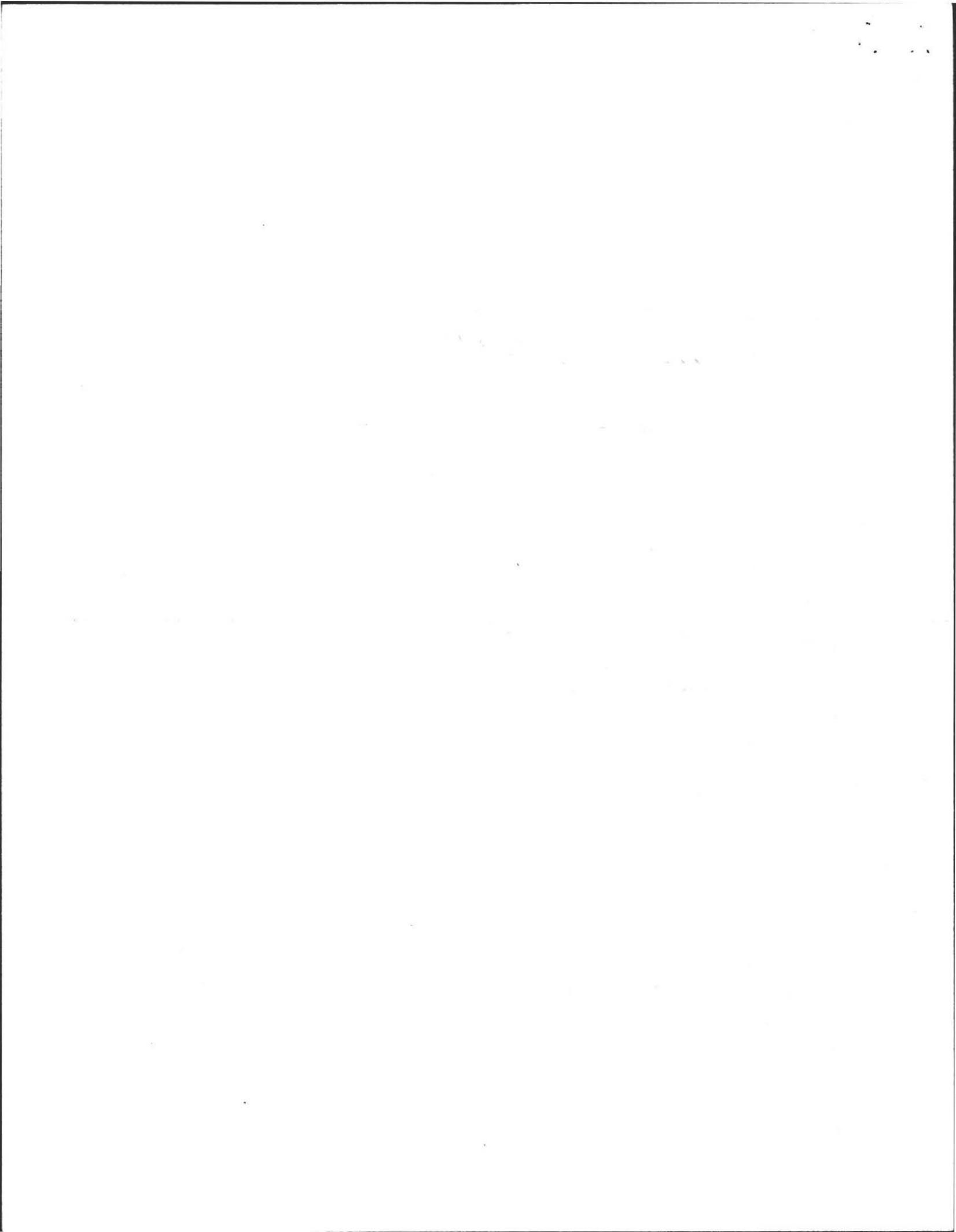
DEEP OBSERVATION HOLE LOG*

Depth from Surface (Inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	Other (Structure, Stones, Boulders, Consistency, % Gravel)
0-6"	A	FSL	2.5Y3/3	NO	FRIABLE
6"-18"	Bw	LS	2.5Y5/6	NO	FRIABLE
18"-120"	C	COARSE SAND, GRAVEL	2.5Y 4/4	NO	COARSE SAND AND GRAVEL 15% ROUNDED COBBLES 25-30% GRAVEL

* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) OUTWASH Depth to Bedrock: 120" +
 Depth to Groundwater: Standing Water in the Hole: MOIST AT 120" Weeping from Pit Face: MOIST @ 120"
 Estimated Seasonal High Ground Water: 108" 108"





FORM 12 - PERCOLATION TEST

Location Address or Lot No. 2144 Old Montague Rd

COMMONWEALTH OF MASSACHUSETTS

, Massachusetts

Percolation Test*		
Date:	<u>5/7/01</u>	Time: <u>8:30 AM</u>
Observation Hole #	<u>(1)</u>	
Depth of Perc	<u>45"</u>	
Start Pre-soak	<u>8:30 AM</u>	
End Pre-soak	<u>CAN'T HOLD WATER</u>	
Time at 12"	↓	
Time at 9"		
Time at 6"		
Time (9"-6")		
Rate Min./Inch		<u>< 2 min/inch</u>

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

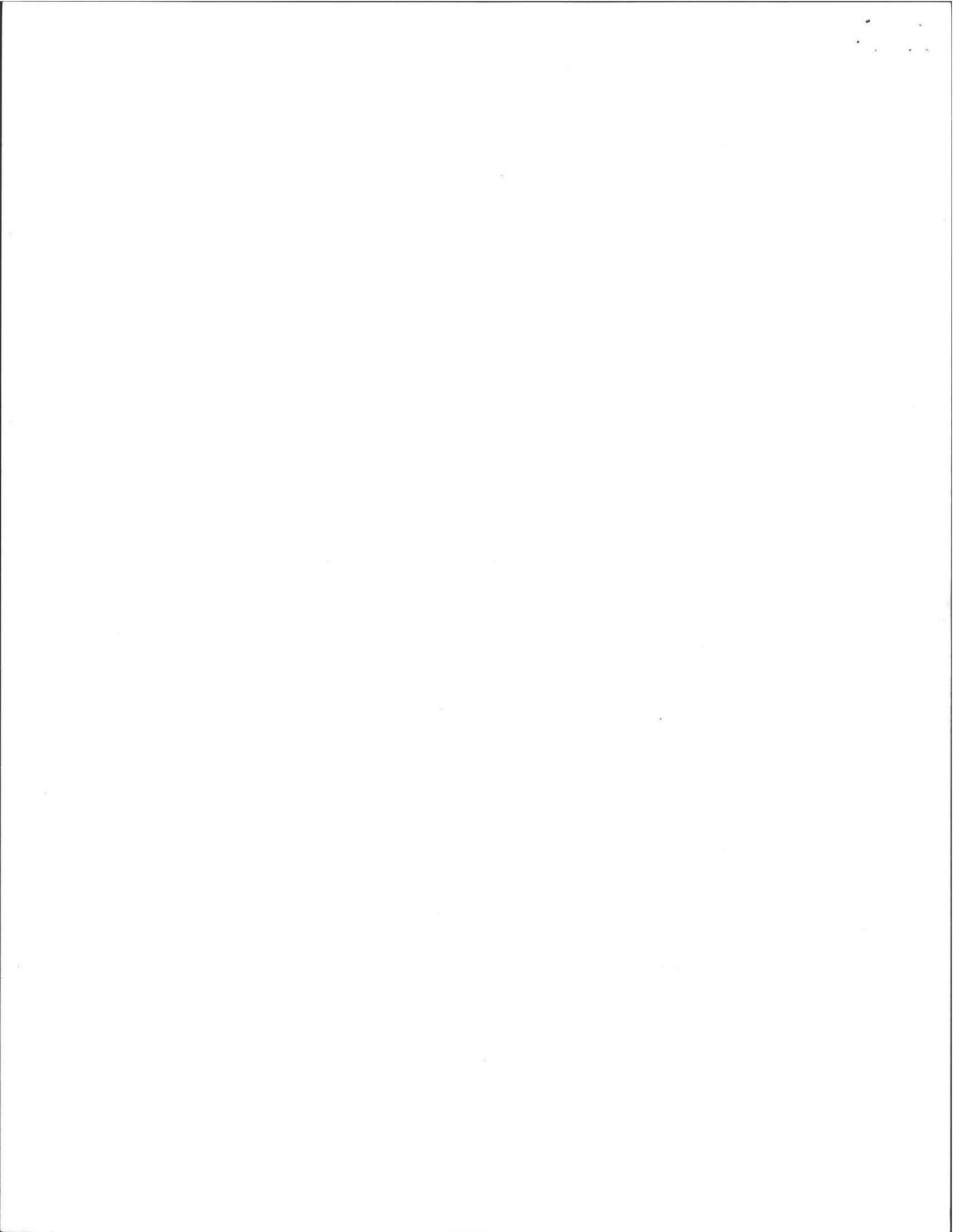
Site Passed Site Failed

Performed By: ALAN WEISS

Witnessed By: TOM DION

Comments: 5 FT. SEPARATION FROM GROUND WATER REQUIRED





Location Address or Lot No. _____

On-site Review

Deep Hole Number _____ Date: _____ Time: _____ Weather _____

Location (identify on site plan) _____

Land Use _____ Slope (%) _____ Surface Stones _____

Vegetation _____

Landform _____

Position on landscape (sketch on the back) _____

Distances from:

Open Water Body	feet	Drainage way	feet
Possible Wet Area	feet	Property Line	feet
Drinking Water Well	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)
hole 1					
hole 2					

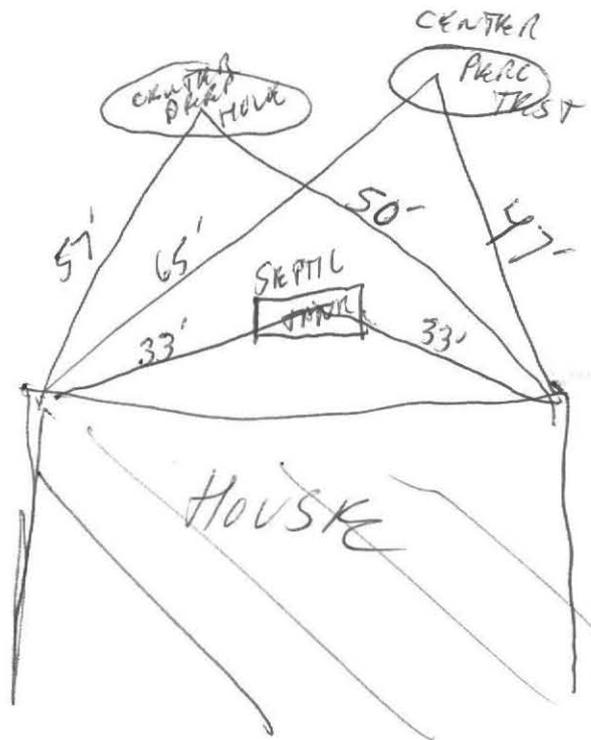
* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) _____ Depth to Bedrock: _____

Depth to Groundwater: Standing Water in the Hole: _____ Weeping from Pit Face: _____

Estimated Seasonal High Ground Water: _____







ALAN E. WEISS, M.S., L.S.P.

Licensed Site Professional
Registered Sanitarian
Hydrogeologist
President

- Subsurface Investigations
- 21E Site Investigations
- Pollution Remediation
- Percolation Tests and Septic Designs

350 Old Enfield Rd.
Belchertown, MA 01007
(413) 323-5957 & 323-4916 (FAX)

Date: 5/7/01

Commonwealth of Massachusetts
AMHERST, Massachusetts

Soil Suitability Assessment for On-site Sewage Disposal

Performed By: A. WEISS

Date: 5/7/01

Witnessed By: T. DIAN

Location Address or Lot # 444 BAY RD 444 OLD Montague Rd	Owner's Name, Address, and Telephone # MR. ALAN MARRA 444 BAY RD AMHERST, MA. 01002
New Construction <input type="checkbox"/> Repair <input checked="" type="checkbox"/>	

Office Review

Published Soil Survey Available: No Yes

Year Published 1981 Publication Scale 1:25,000

Soil Map Unit CRC

Drainage Class RAPID Soil Limitations N/A

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: NA

National Wetland Inventory Map (map unit)

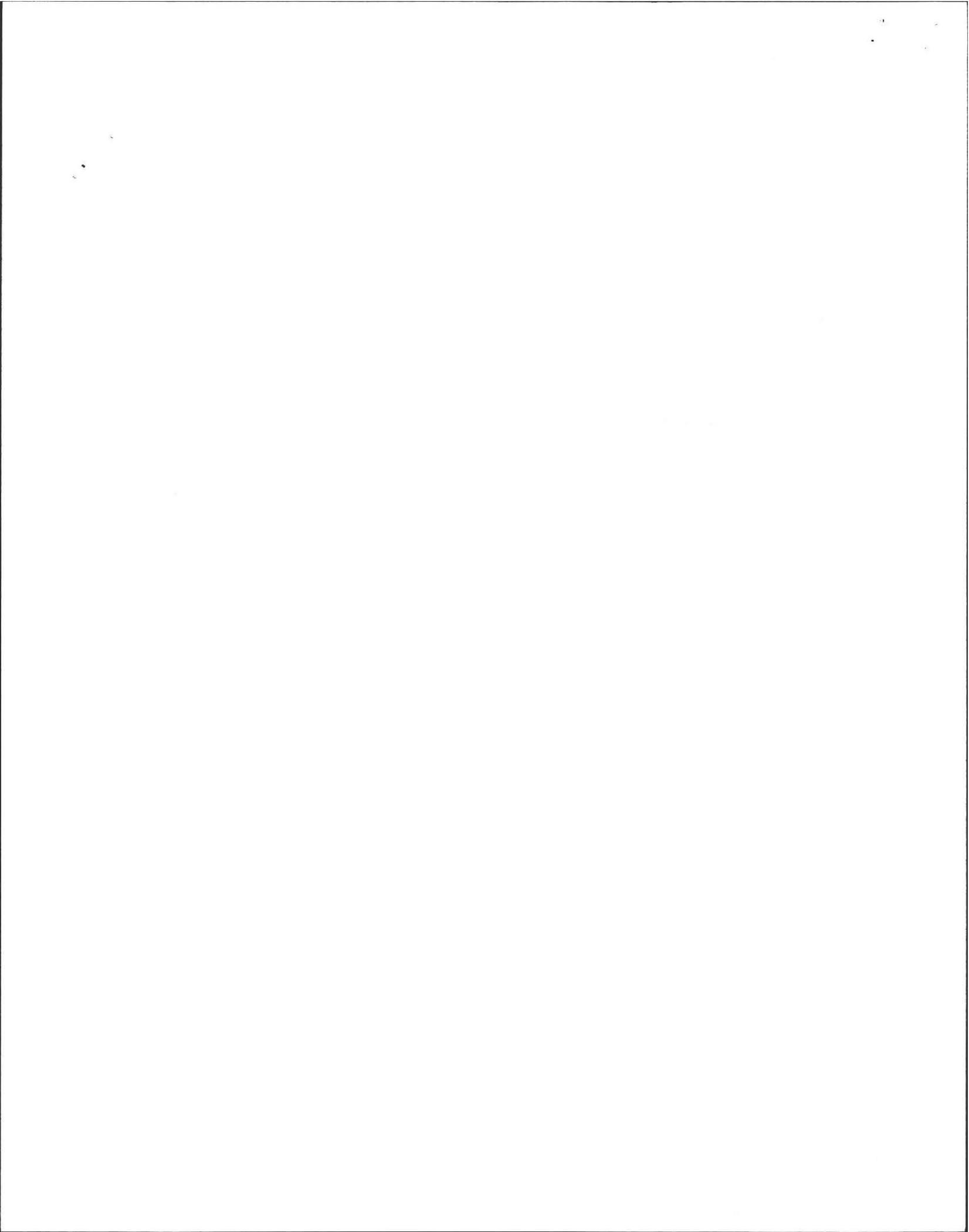
Wetlands Conservancy Program Map (map unit)

Current Water Resource Conditions (USGS): Month

Range : Above Normal Normal Below Normal

Other References Reviewed: _____





Location Address or Lot No. 444 Old Montague Road

On-site Review

Deep Hole Number #1 Date: 5/7/01 Time: 8:15 A.M. Weather Dry + Sunny 40°

Location (identify on site plan) _____

Land Use Residential Slope (%) 1-2 Surface Stones Few

Vegetation Grass Trees: Spruce Birch

Landform Kame Terrace

Position on landscape (sketch on the back) _____

Distances from:

Open Water Body 100⁺ feet Drainage way 100⁺ feet

Possible Wet Area 100⁺ feet Property Line 100⁺ feet

Drinking Water Well 100⁺ feet Other NA

DEEP OBSERVATION HOLE LOG*

Depth from Surface (Inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	Other (Structure, Stones, Boulders, Consistency, % Gravel)
<u>0"-6"</u>	<u>A</u>	<u>FSL</u>	<u>2 1/2 Y 3/3</u>	<u>NO</u>	<u>Friable - Loose</u>
<u>6"-18"</u>	<u>Bw</u>	<u>Loamy Sand</u>	<u>2.5 Y 5/6</u>	<u>NO</u>	<u>Friable - Loose</u>
<u>18"-120"</u>	<u>C₁</u>	<u>Coarse Sand + Gravel</u>	<u>2.5 Y 4/4</u>	<u>NO</u>	<u>Coarse sand + Gravel 15% Rounded Cobbles 25-30% gravel</u>

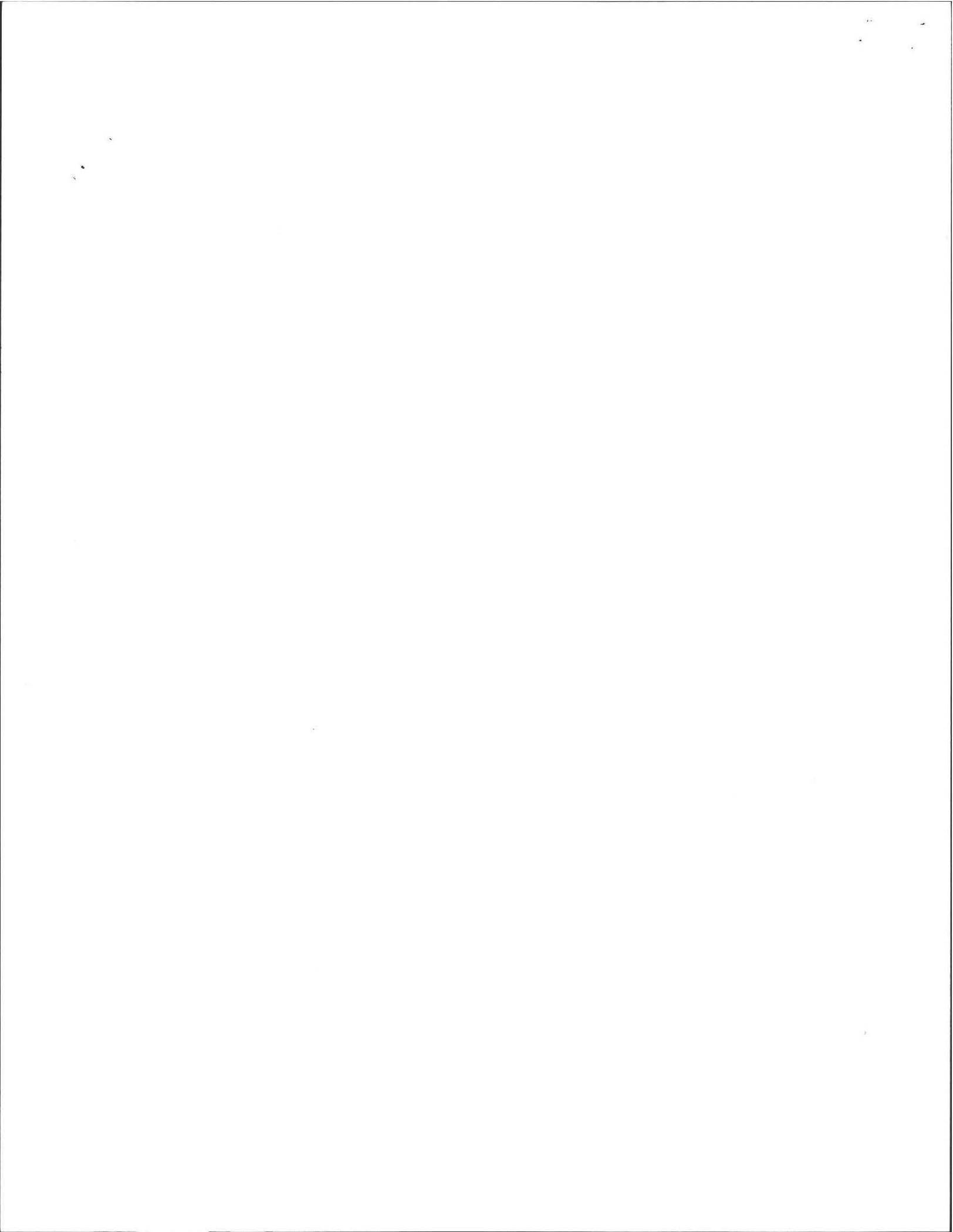
* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) outwash Depth to Bedrock: 120⁺

Depth to Groundwater: Standing Water in the Hole: Moist @ 120" Weeping from Pit Face: Moist @ 120"

Estimated Seasonal High Ground Water: 108"





FORM 12 - PERCOLATION TEST

Location Address or Lot No. 444 Old Montague Road

COMMONWEALTH OF MASSACHUSETTS

, Massachusetts

Percolation Test*		
Date: <u>5/7/01</u>		Time: <u>8:30 Am</u>
Observation Hole # <u>1</u>		
Depth of Perc	<u>45"</u>	
Start Pre-soak	<u>8:30 Am</u>	
End Pre-soak	<u>cant hlg water</u>	
Time at 12"	↓ WAIVED BY HEALTH AGENT (REPAIR)	
Time at 9"		
Time at 6"		
Time (9"-6")		
Rate Min./Inch		<u>< 2 min/inch</u>

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

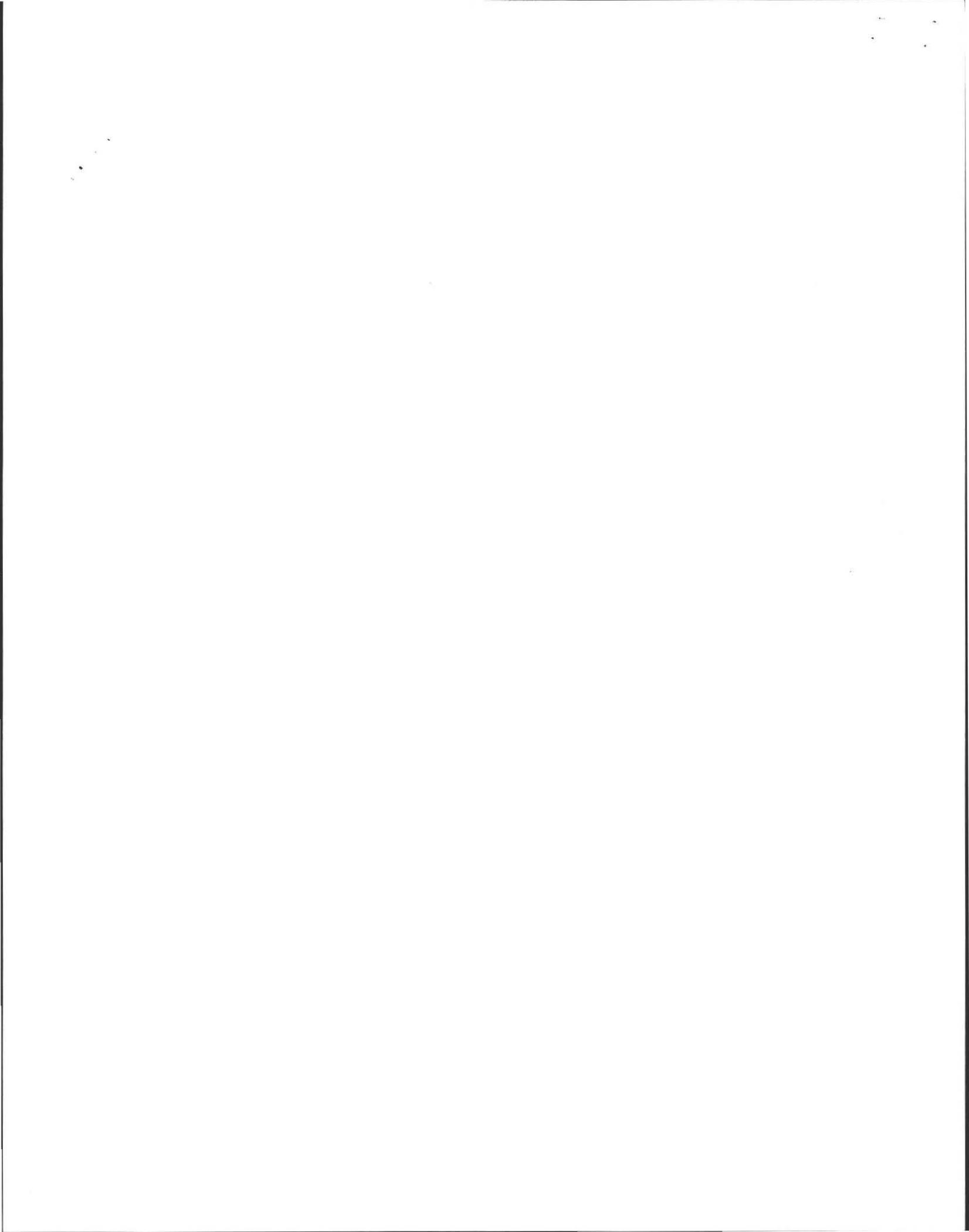
Site Passed Site Failed

Performed By: Alan Weiss

Witnessed By: Tom Dion

Comments: 5' separation from groundwater required





Location Address or Lot No. 444 Old Montague Road

Determination for Seasonal High Water Table

Method Used:

- Depth observed standing in observation hole inches
- Depth weeping from side of observation hole 108" inches
- Depth to soil mottles 108" inches
- Ground water adjustment feet

Index Well Number Reading Date Index well level
 Adjustment factor Adjusted ground water level

Depth of Naturally Occurring Pervious Material

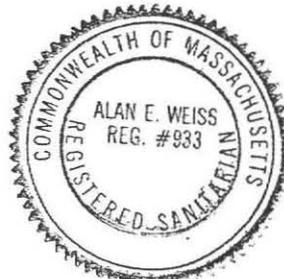
Does at least four feet of naturally occurring pervious material exist in all areas observed throughout the area proposed for the soil absorption system? YES

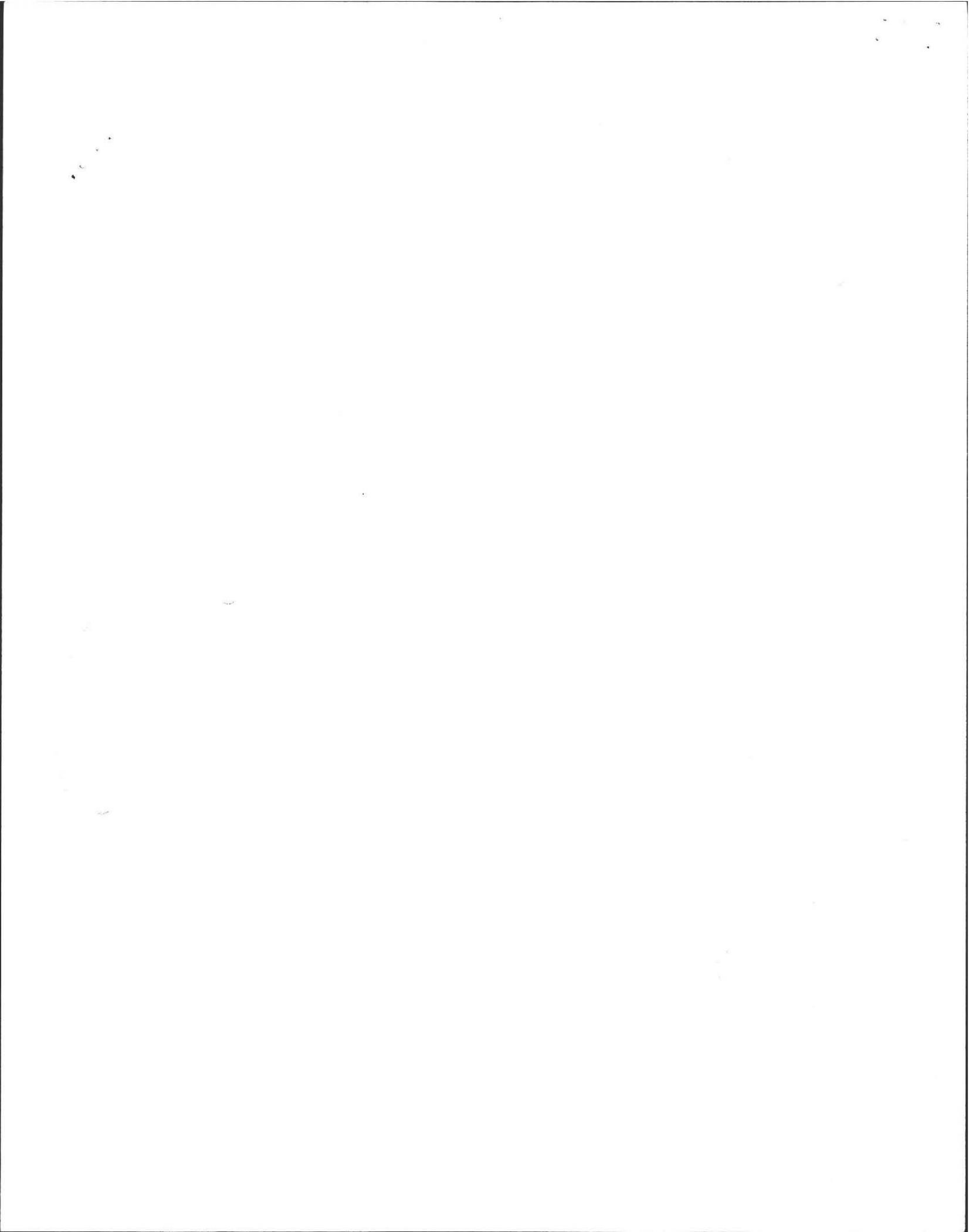
If not, what is the depth of naturally occurring pervious material? NA

Certification

I certify that on June 95 (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 Alu Date 5/7/01





444 Old Montague Road
Amherst MA 01002
October 15, 2001
Phone: 549-6910

David Zarozinski, Sanitarian
Amherst Health Department
Bangs Community Center
70 Boltwood Walk
Amherst MA 01002-2351

Re renovation of septic system

Dear Mr. Zarozinski,

Following his evaluation of the ground situation at our house, Mr. Alan Weis has designed a septic system to accommodate our outputs. The design calls for a drain field that I feel threatens the root system of the maple tree dominating our back yard.

The original dry well that served adequately for 35 years collapsed some time ago but continues to function because a deep vein of sand and gravel underlies this area. Perc tests conducted by Mr. Weis confirm the excellent drainage conditions existing here.

Replacing the dry well seems to me a suitable and simpler solution and therefore I respectfully request authorization to reinstall one.

Sincerely,


Alan A. Marra

323-4916

TOWN OF AMHERST
HEALTH PERMITS/INSPECTION SERVICES

No. 1672

Received of ALAN A. MARRA of 444^{OLD} MONTAGUE ROAD
Name Address

For Property Located at: 444^{OLD} MONTAGUE RD. AMHERST MA ALAN A. MARRA
Street Address Owner

- | | | | |
|---|-------------------------|--|------------------------|
| HEA009 Bakery
R6510 443508 | _____ | HEA015 Sanitary Code Booklets
R6510 432305 | _____ |
| HEA001 Bed & Breakfast
R6510 443516 | _____ | HEA016 Septic Tank Permit-Installers
R6510 443511 | _____ |
| HEA002 Catering License
R6510 443507 | _____ | HEA017 Septic Tank Permit-Private
R6510 443510 | <u>75⁰⁰</u> |
| HEA003 Food Handler
R6510 443515 | _____ | HEA018 Septic Tank Reinspection Fee
R6510 432301 | _____ |
| HEA004 Frozen Deserts
R6510 443501 | _____ | HEA019 Sub-Division Review Fee
R6510 432306 | _____ |
| HEA005 Health Dept. Housing Insp.
R6510 432302 | _____ | HEA012 Swimming Pool Permits
R6510 443512 | _____ |
| HEA006 Massage Therapy License
R6510 443504 | _____ | HEA020 Tanning License
R6510 443509 | _____ |
| HEA007 Milk & Cream License
R6510 443500 | _____ | HEA024 Funeral Director License
R6510 443502 | _____ |
| HEA008 Motel License
R6510 443506 | _____ | HEA034 Immunization Clinic
R6510 432307 | _____ |
| HEA010 Removal of Offal
R6510 443513 | _____ | HEA030 Car Seats
8407 258004 | _____ |
| HEA021 Removal of Rubbish
R6510 443520 | <u>750⁰⁰</u> | HEA026 Smoking & Tobacco Reg. Violations
R6510 443518 | _____ |
| HEA011 Percolation Test Fees
R6510 432300 | _____ | HEA023 TB Clinic
R6510 432303 | _____ |
| HEA013 Recreation Camp License
R6510 443503 | _____ | HEA022 Tobacco License
R6510 443505 | _____ |
| HEA014 Retail Store Permit
R6510 443514 | _____ | HEA | _____ |
| | | HEA | _____ |

TOTAL FEE: 225⁰⁰ Date 5/7/01

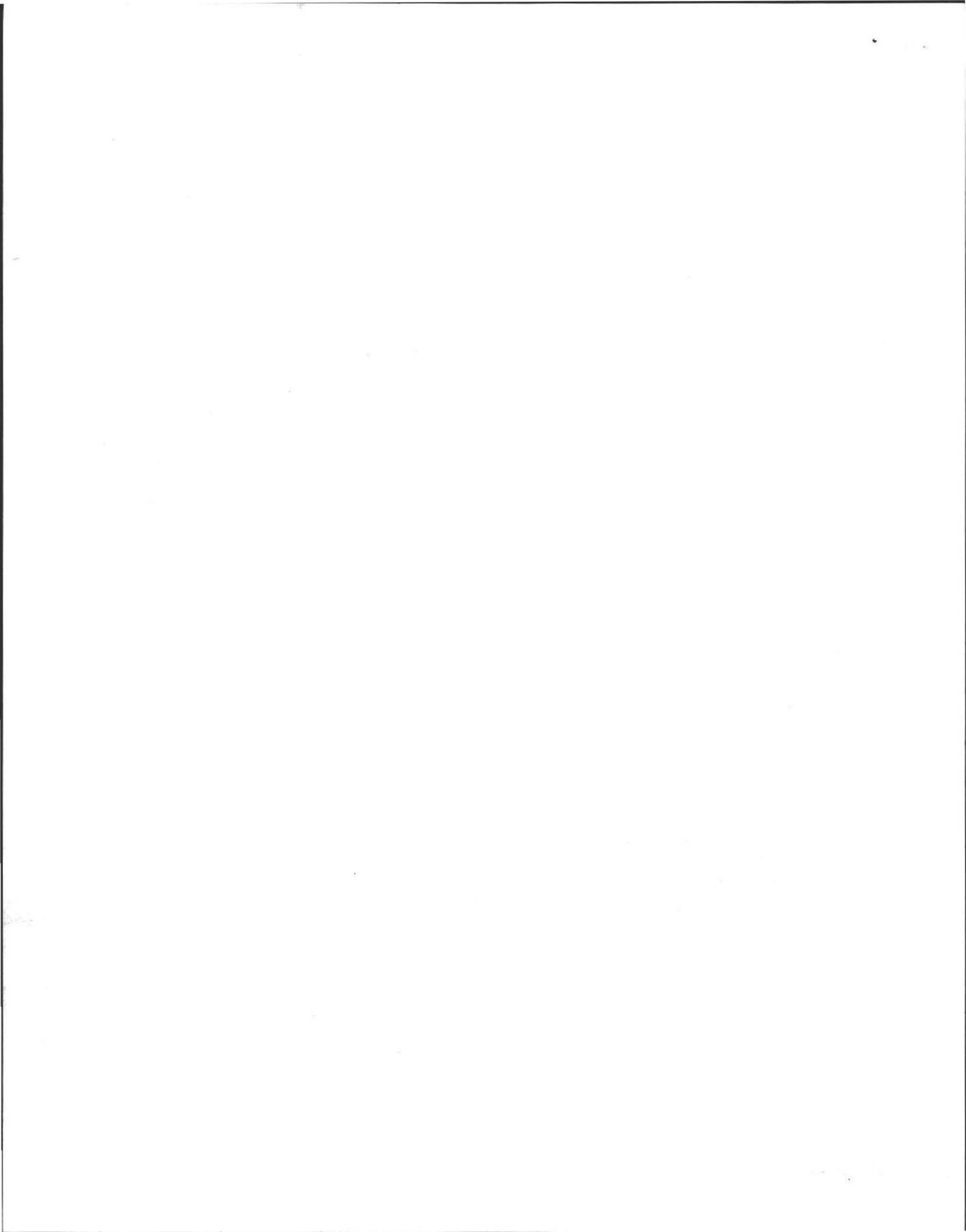
Sharon [Signature]
Inspection Services/Health Department

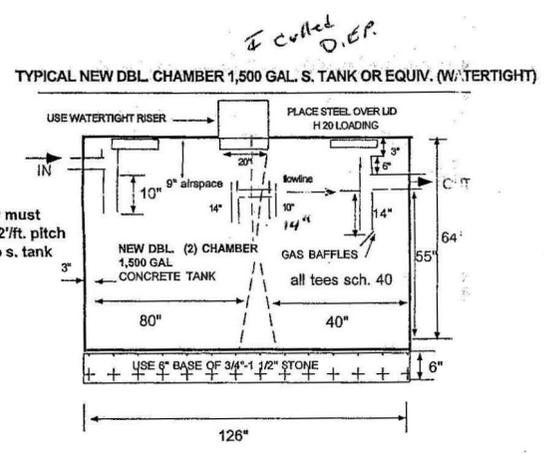
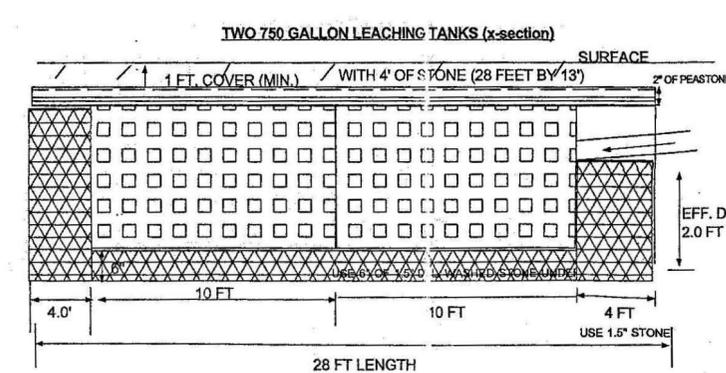
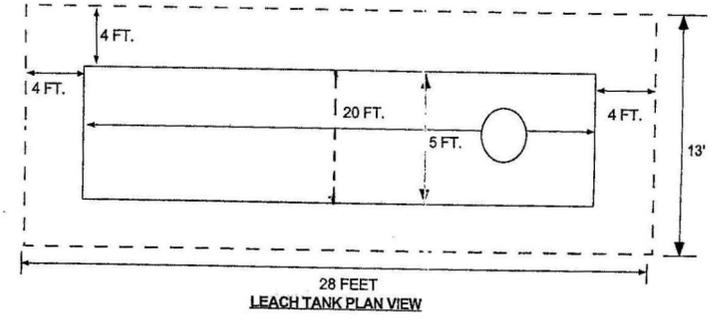
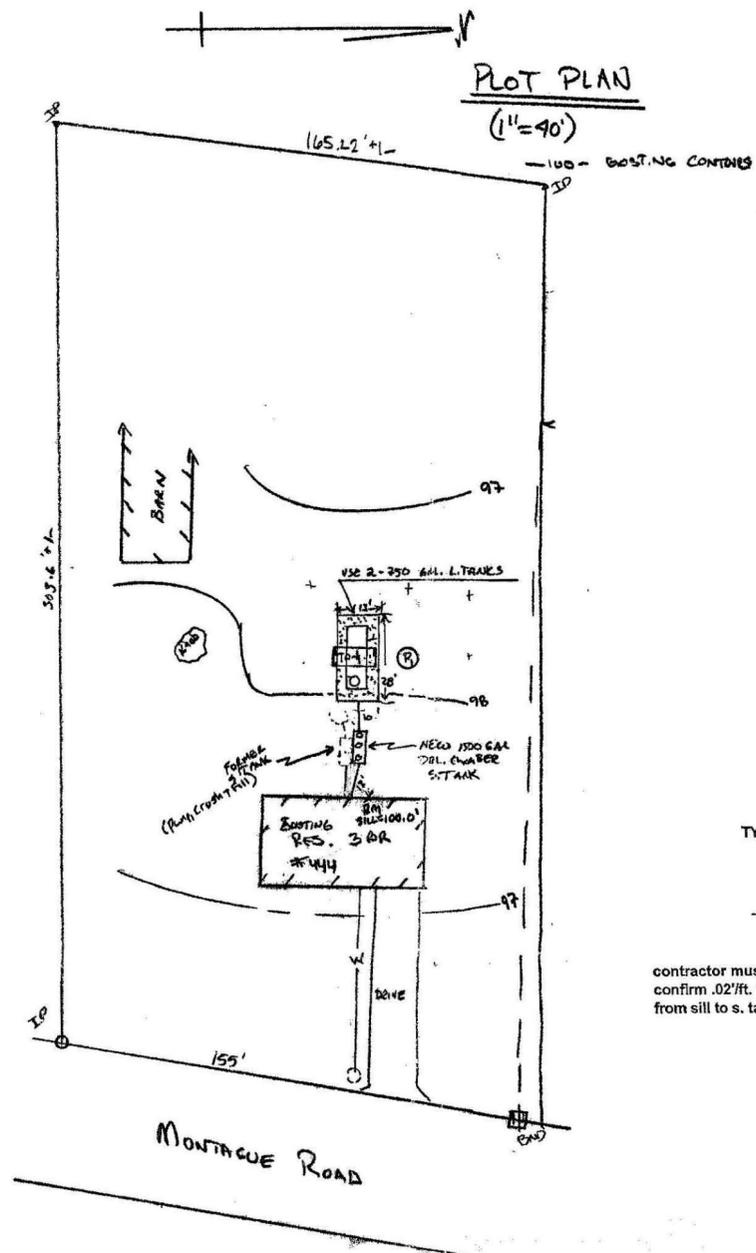
TOWN OF AMHERST
MISC CASH RECEIPTS
Date / Time : 05/07/01 13:57
Payment : \$73.00
Receipt # : 87748
Check/Credit Card #: REC #1672
Paid by : ALAN MARRA

not in plan

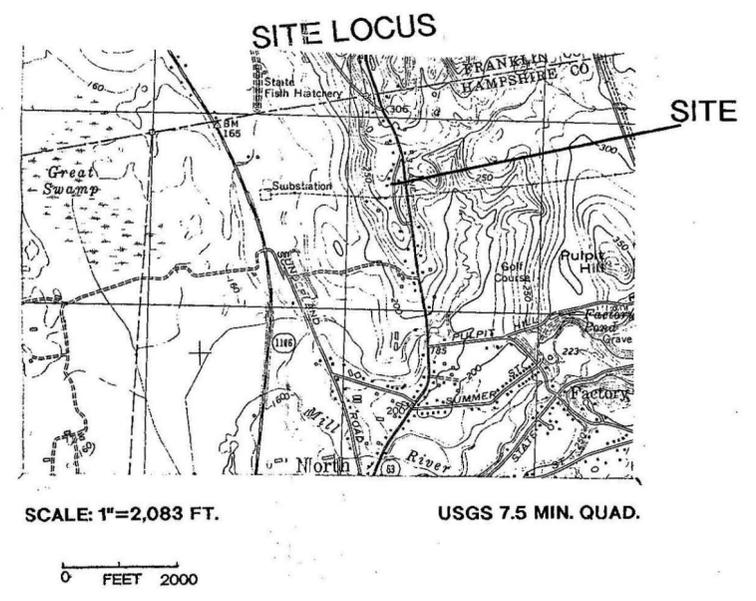
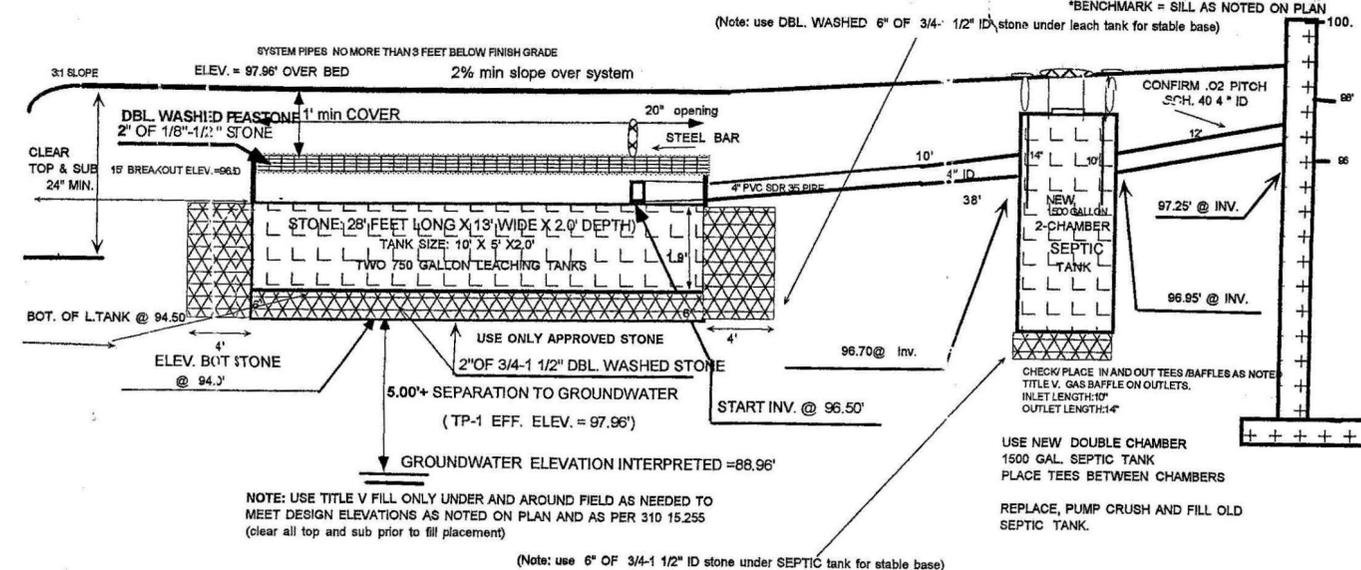
PAID 5/7/01
CHK # 3969
5789

Must be Validated by the Collector's Office to be considered paid





CROSS SECTION OF SEPTIC SYSTEM



TEST PIT LOG
TP-1 EFF. E.L. 97.96' (05/07/2001)

0-6"	A FINE SANDY LOAM, FRIABLE-LOOSE (2.5 Y 3/3)
6-18"	B FINE LOAMY SAND, FRIABLE (2.5 Y 5/6)
18-120"	C WELL SORTED COARSE SANDY OUTWASH (2.5 Y 4/4)

OXIDES @ 138"
ESHW: 108" = 88.96' FOR DESIGN (5' SEPARATION PROVIDED)

108" STANDING H2O
108" WEIRING FROM FACE
(120") BEDROCK

REPAIR DESIGN NOTES

- 3 Bedrooms x 110 gal/day = 330 gal./day
- Use TWO Leach Tanks w/ 4" stone around & 6" stone under
13' Eff. wide x 28' Eff. long x 4.00' stone on sides of Tanks.
Bot. Area: 13' wide x 28' long = 364 sf.
Side Area: 13' wide x 2.00' h x 2 SIDES = 52 sf.
Side Area: 28' wide x 2.0' h x 2 SIDES = 112 sf.
Tot. Area: 528 sf x 0.74 gal.sff. = 391 gal./day.
- NO GARBAGE DISPOSAL ALLOWED
- USE TWO 750 GAL LEACH TANKS (EACH 5' X 10') W/ 4" STONE.
- ALL WELLS WITHIN 150 FEET OF SYSTEM NOTED (town water).
- NO WETLANDS WITHIN 100 FEET OF SYSTEM NOTED.
- PRE & POST CONTOURS NOTED AS NECESSARY.
- RESERVE AREA NOT REQUIRED.
- SLOPE CALCS NOT APPLIC. CLEAR SUB TO 24" MIN.
- 2% MIN. SLOPE OVER SAS
- FINAL GRADE so RUNOFF, MAY NOT INTERFERE WITH SAS.
- BENCHMARK = 100.0' SILL a. HOUSE.
- USE NEW 1500 GAL. DBL CHAMBER S. TANK WITH PROPER TEE/BAFFLE AT OUTLET & INLET, PLACE 6" OF 3/4-1 1/2 DBL. WASHED STONE UNDER S. TANK & L. TANK
- UNDER LEACH TANK USE DBL. WASH 6" OF 3/4" STONE FOR STABLE BASE OF LEACH TANK. SUBGRADE INSPECTION REQUIRED.

SOIL EVALUATION BY A. Weiss ON 5/07/01, D. SAROZINSKI, BOH AGENT.
PERC1 AT 45" DEPTH = <2 MIN/IN, CLASS I SOIL, USE 5' SEPARATION

SEPTIC SYSTEM REPAIR PLAN FOR ALAN MARRA
444 OLD MONTAGUE RD. AMHERST, MA

SCALE: NOTED	APPROVED BY:	DRAWN BY: AW
DATE: 6/5/01		REVISED:
REVISED PLAN WITH LEACH TANKS AT REQUEST OF CLIENT REVISED 3/9/02		
COLD SPRING ENVIRONMENTAL, INC.		DRAWING NUMBER 101-1320-0507