

No. 02-06

CHK PD
4232 FEE 375
6/17/02

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>100 Leverett Road</u>	Owner's Name <u>EDNA McAVENEY</u>
Map/Parcel#	Address <u>100 Leverett Road, Amherst</u>
Lot#	Telephone# <u>549-7633 (u) 5366 162</u>
Installer's Name <u>JL Construction</u>	Designer's Name <u>Alan Weiss</u>
Address <u>Northampton, MA.</u>	Address <u>Belchertown, MA. 01007</u>
Telephone# <u>527-5232</u>	Telephone# <u>413-323-5957</u>

Type of Building Residence Lot Size 37,230 sq. ft.
 Dwelling - No. of Bedrooms 3 (4 BR DESIGN) Garbage grinder
 Other - Type of Building _____ No. of persons _____ Showers (), Cafeteria ()
 Other Fixtures _____
 Design Flow (min. required) 110 gpd Calculated design flow 330 Design flow provided 474 gpd
 Plan: Date 5/14/02 Number of sheets 4 Revision Date _____
 Title Septic System Repair Plan
 Description of Soil(s) CLASS I: Sand
 Soil Evaluator Form No. _____ Name of Soil Evaluator A. Weiss Date of Evaluation 6/30/02

DESCRIPTION OF REPAIRS OR ALTERATIONS New Septic Tank + Leach Field.

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 Edna McAvaney Date 6/14/02

Inspections _____

No. 02-06

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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 100 Leverett Road

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. 02-06, dated _____, Approved Design Flow _____ (gpd)

Installer JL Construction Designer: Alan Weiss Inspector: Alan Weiss Date: 7/9/02

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

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COMMONWEALTH OF MASSACHUSETTS

Board of Health, Amherst, MA.

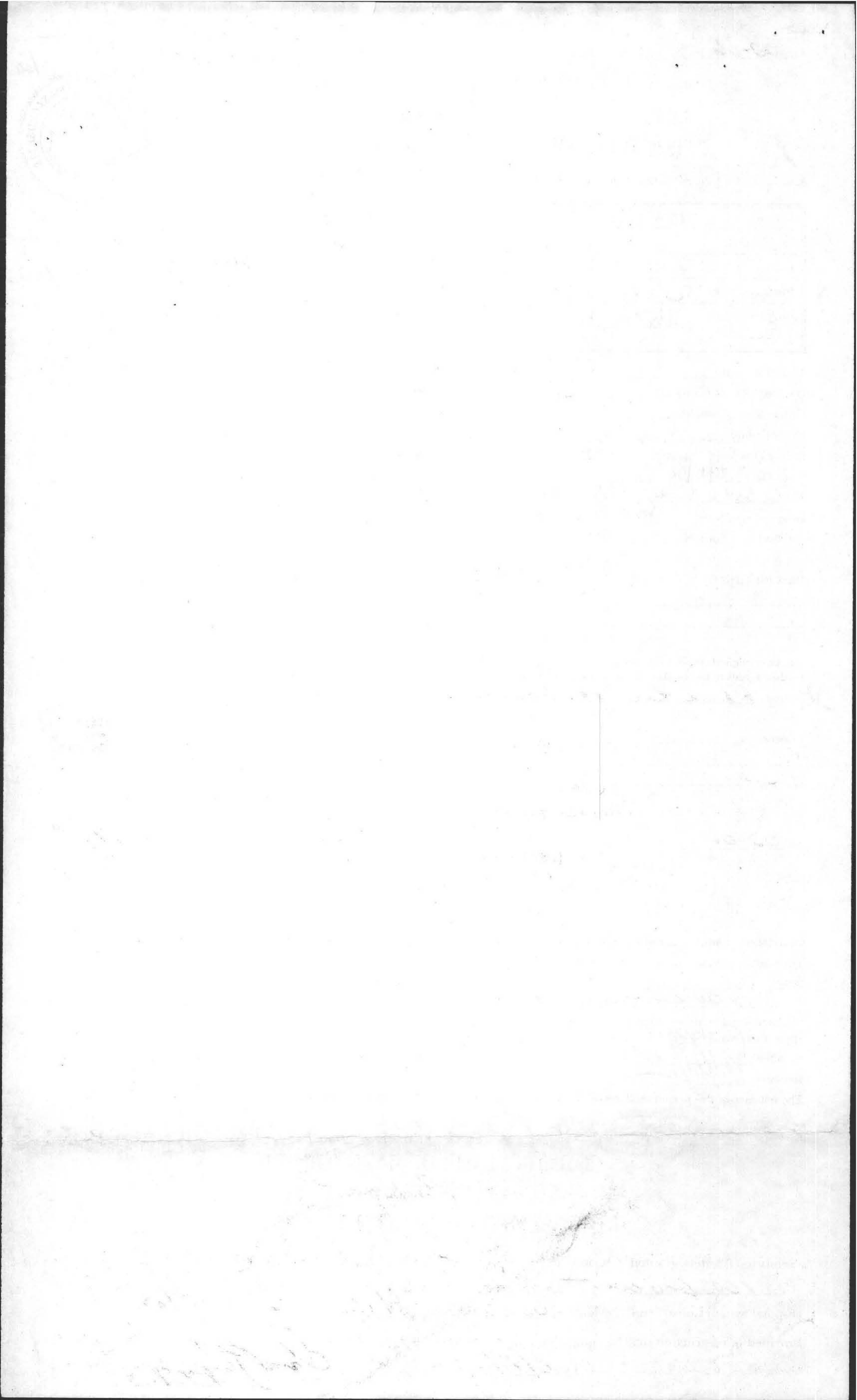
DISPOSAL SYSTEM CONSTRUCTION PERMIT

Permission is hereby granted to; Construct () Repair () Upgrade () Abandon () an individual sewage disposal system at 100 Leverett Road as described in the application for

Disposal System Construction Permit No. 02-06, dated 5/15/02 Rec 6/14/02

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

Date 6/14/02 Board of Health Alan Weiss



No. _____

Date: 4/30/02

Commonwealth of Massachusetts
Amherst, Massachusetts
Soil Suitability Assessment for On-site Sewage Disposal

Performed By: A. Weiss

Date: 4/30/02

Witnessed By: D. Zarecki

Location Address or Lot # <u>100 LEVERETT ROAD</u> <u>Amherst, MA.</u>	EDNA Owner's Name, Address, and Telephone # <u>McAveney</u> <u>100 LEVERETT RD., Amherst.</u> <u>01002</u> <u>549-7633</u>
New Construction <input type="checkbox"/> Repair <input checked="" type="checkbox"/>	

Office Review

Published Soil Survey Available: No Yes

Year Published 1978 Publication Scale 1:15,840 Soil Map Unit Gxc

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:

National Wetland Inventory Map (map unit) _____

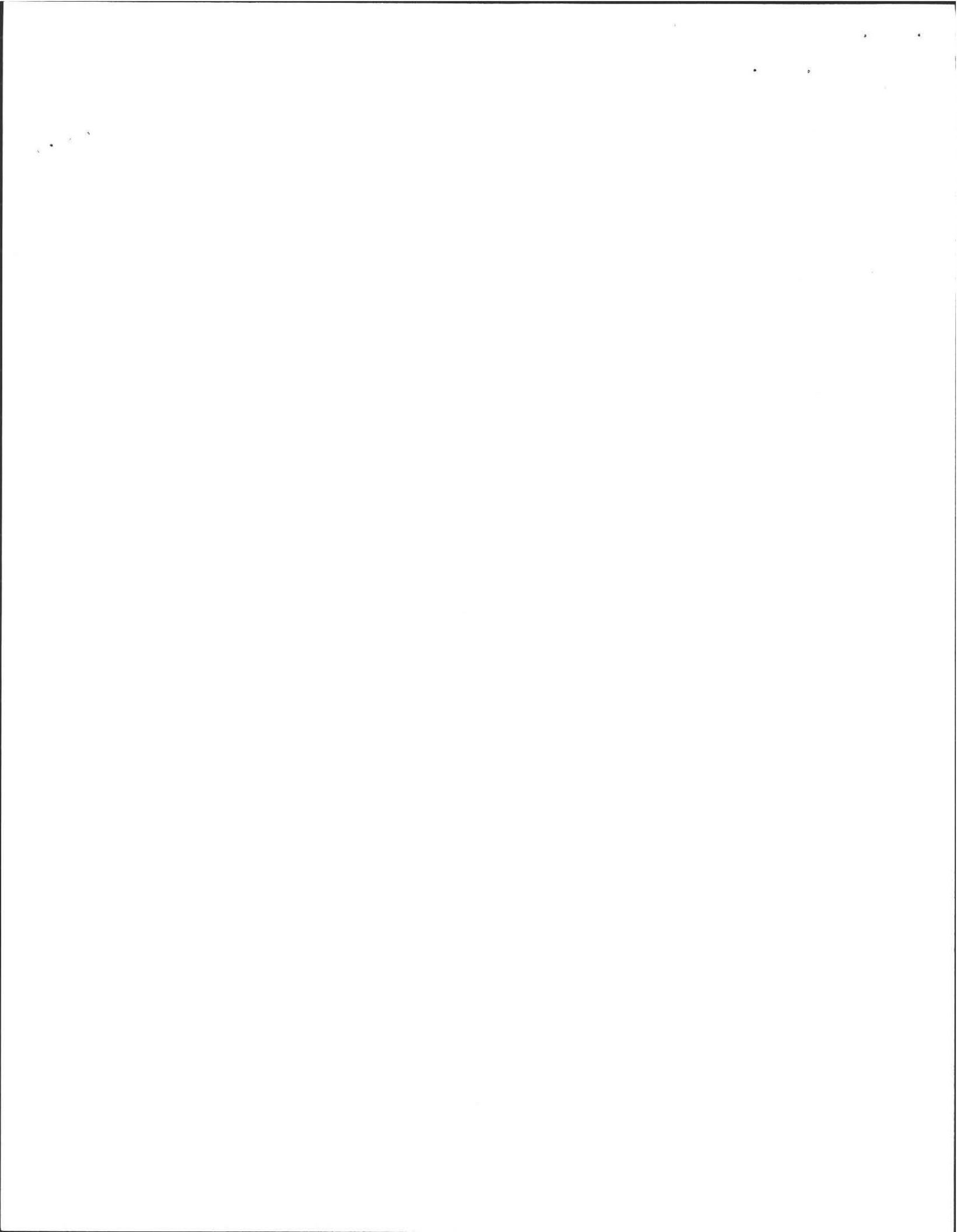
Wetlands Conservancy Program Map (map unit) _____

Current Water Resource Conditions (USGS): Month _____

Range : Above Normal Normal Below Normal

Other References Reviewed: _____





Location Address or Lot No. 100 Leavett RD., Amherst

COMMONWEALTH OF MASSACHUSETTS

Amherst, Massachusetts

Percolation Test*		
Date:	<u>4/30/02</u>	Time: <u>10:00AM</u>
Observation Hole #	<u>P₁</u>	
Depth of Perc	<u>42"</u>	
Start Pre-soak	<u>10:20</u>	<u>REPAIR</u>
End Pre-soak	<u>10:36</u>	↓
Time at 12"	<u>10:36</u>	
Time at 9"	<u>10:45'</u>	
Time at 6"	<u>11:00</u>	
Time (9"-6")	<u>15</u>	
Rate Min./Inch	<u>5</u>	

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

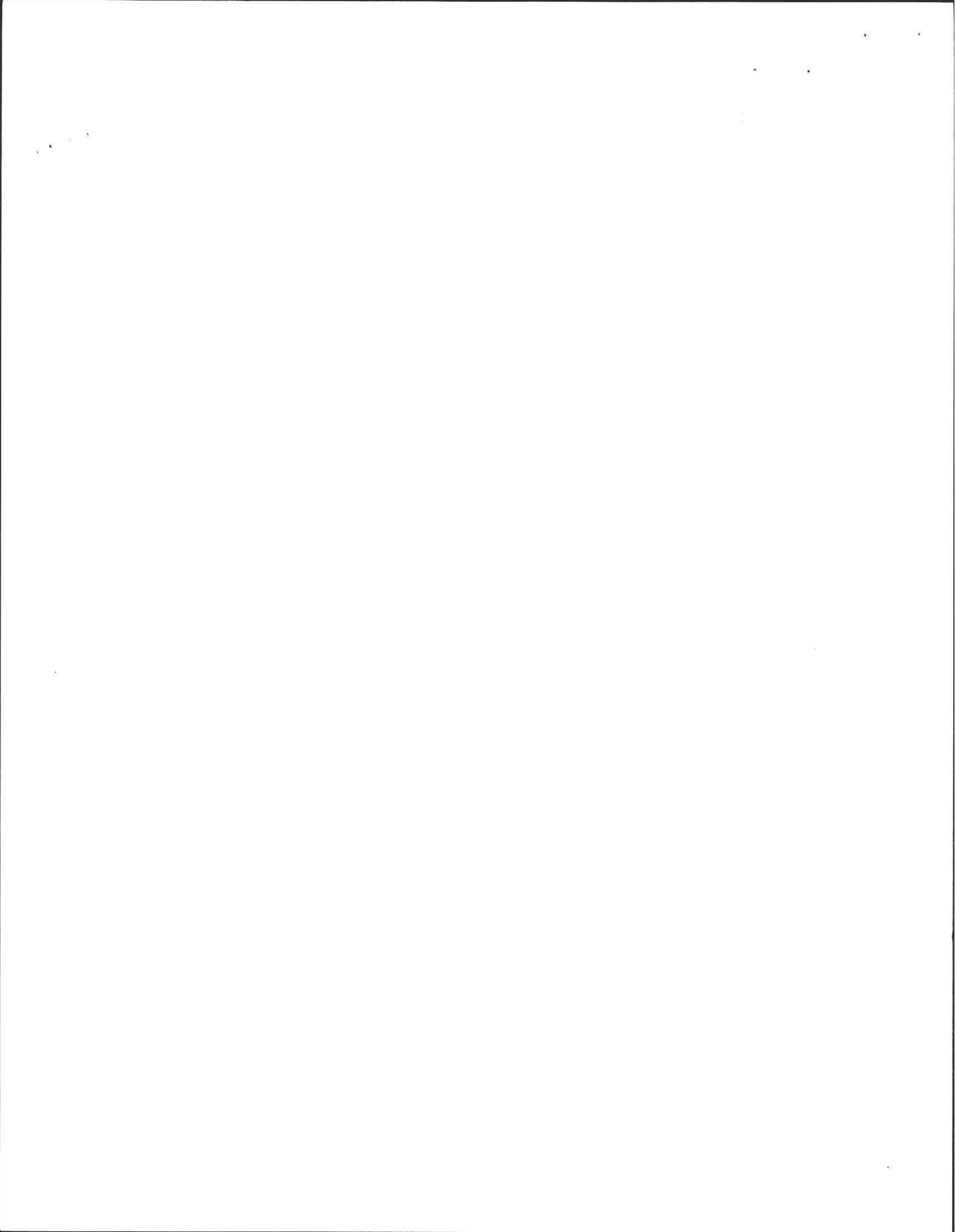
Site Passed Site Failed

Performed By: A. WEISS.

Witnessed By: D. ZAROZINSKI

Comments: _____





Location Address or Lot No. 100 Lennett Road

On-site Review

Deep Hole Number TP-1 Date: 4/30/02 Time: 10:00 AM Weather SN 70°F

Location (identify on site plan) _____

Land Use Rural Res. Slope (%) 3 Surface Stones Few

Vegetation grasses

Landform Terraced

Position on landscape (sketch on the back) _____

Distances from:

Open Water Body 100'± feet Drainage way _____ feet
 Possible Wet Area 100'± 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)
0-14"	A ₀	FSL	10YR 3/2		
14"-24"	BC	FSL	2.5Y 6/8	52"-54"	
24"→98"	C ₁	S	7.5YR 4/6	54"	Sand + gravel, 15% Rounded Cobble

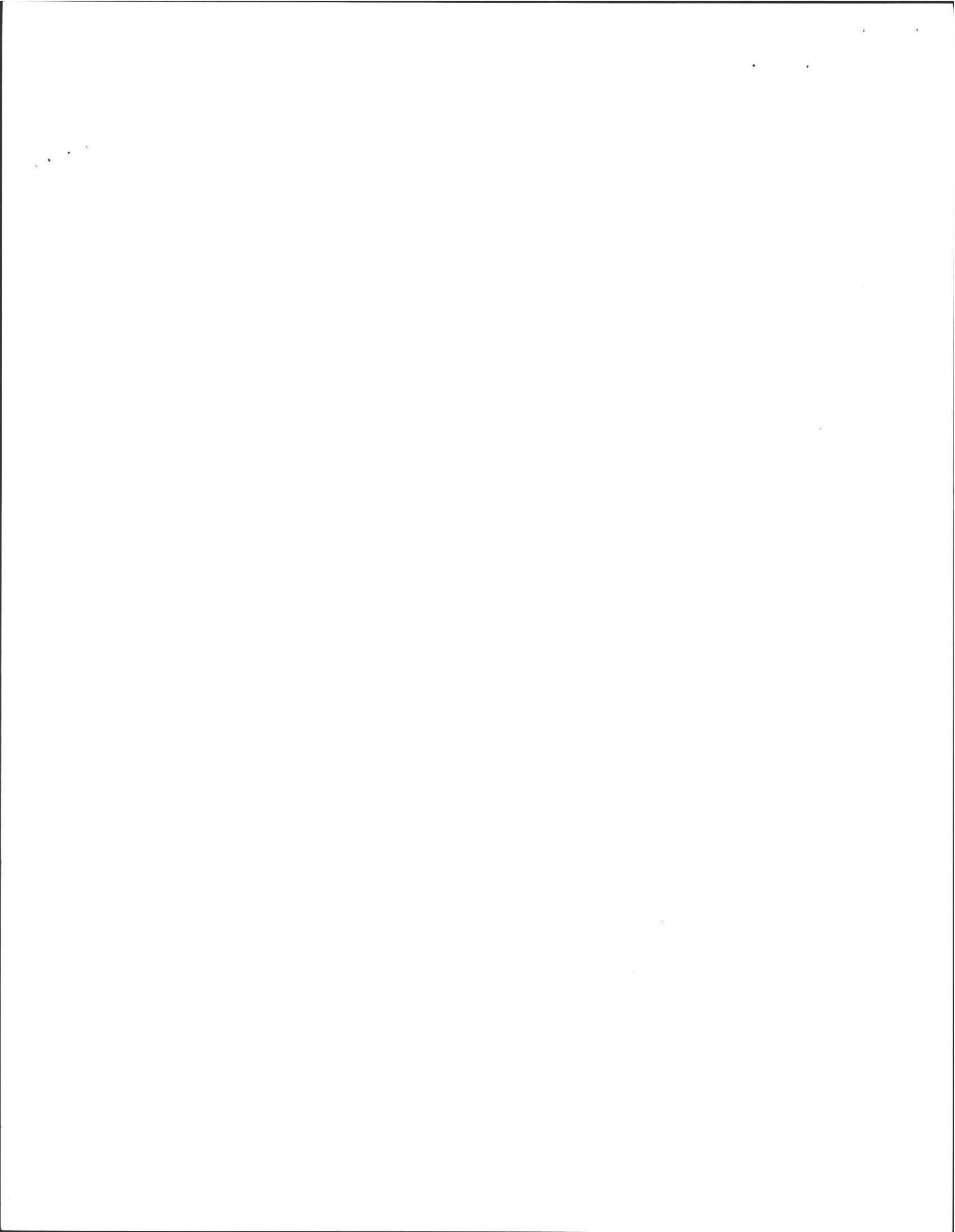
* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) outwash Depth to Bedrock: 98"±

Depth to Groundwater: Standing Water in the Hole: 70" Weeping from Pit Face: 70"

Estimated Seasonal High Ground Water: 52"-54"





Location Address or Lot No. 100 Leverett Row

Determination for Seasonal High Water Table

Method Used:

- Depth observed standing in observation hole inches
- Depth weeping from side of observation hole inches
- Depth to soil mottles ^{52"} 57" 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

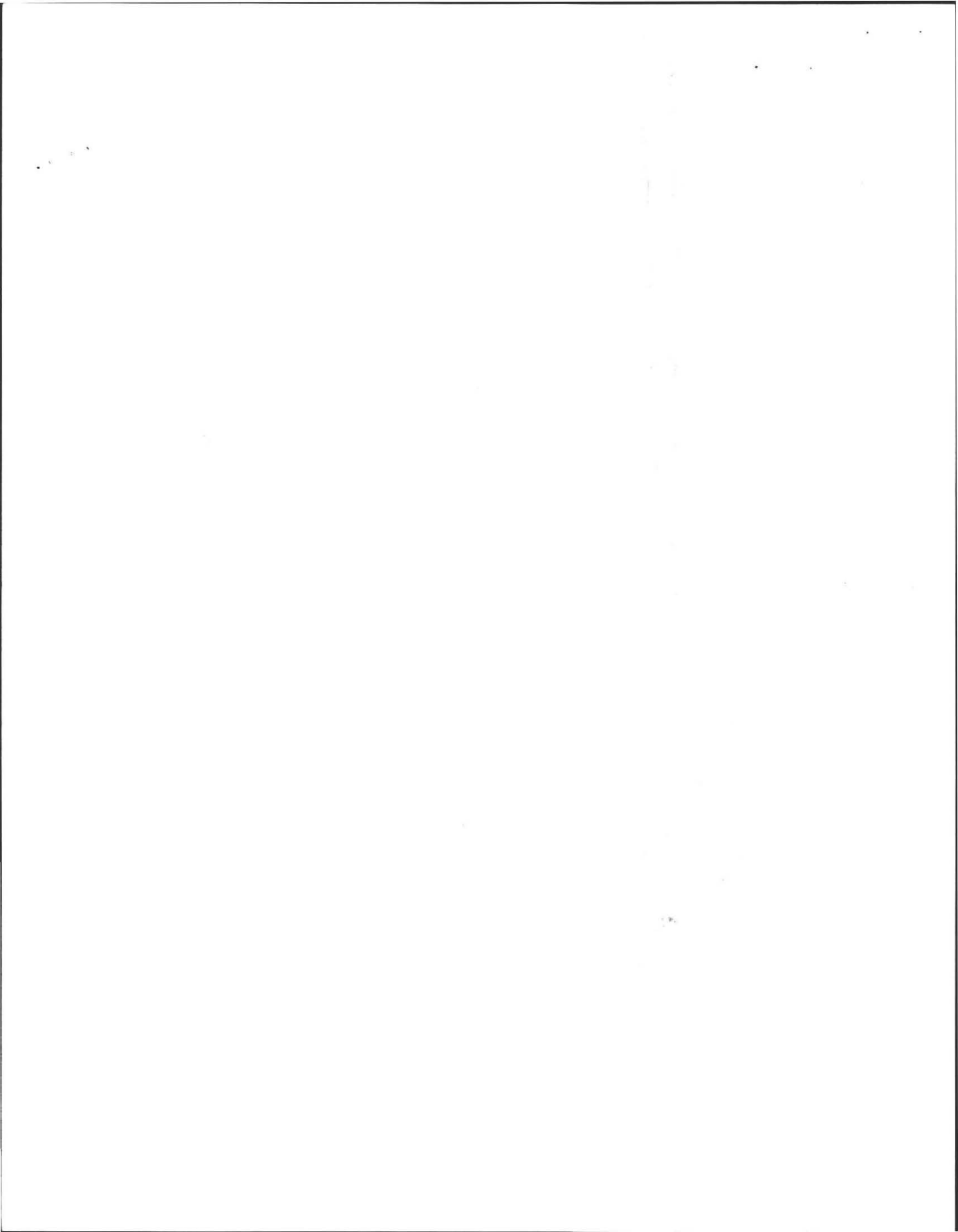
If not, what is the depth of naturally occurring pervious material? _____

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 Al Date 4/30/02





Perce 175⁰⁰
Plans 100
Entire 275
Not PD

No. _____

Date: 4/30/02

Commonwealth of Massachusetts
Massachusetts
Soil Suitability Assessment for On-site Sewage Disposal

Performed By: AL Weiss Cold Spring
Witnessed By: David Zarozinski

Date: 4/30/02

Location Address or Lot # <u>Same</u>	Owner's Name, Address, and Telephone # <u>EDNA MCAUENEY</u> <u>100 LEVENETT RD</u> <u>549-7633</u>
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:

National Wetland Inventory Map (map unit) _____

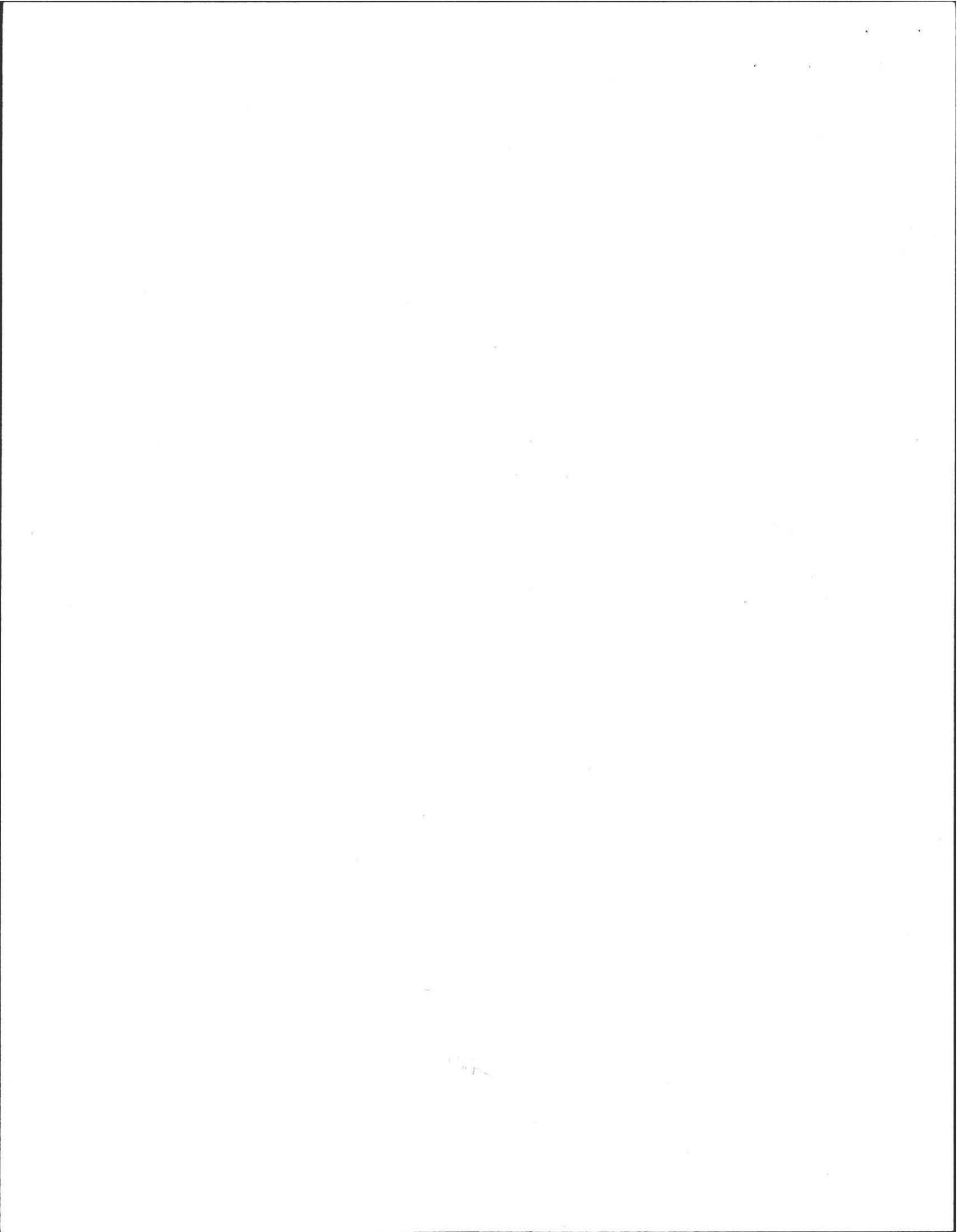
Wetlands Conservancy Program Map (map unit) _____

Current Water Resource Conditions (USGS): Month _____

Range :Above Normal Normal Below Normal

Other References Reviewed: _____





Location Address or Lot No. 100 Lovett Road

On-site Review

Deep Hole Number ① Date: 4/30/02 Time: _____ Weather Sunny 60°

Location (identify on site plan) _____

Land Use Residential 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)
<u>124</u>	<u>Ap</u>	<u>10YR 7/2</u>	<u>F8L</u>		
<u>24</u>	<u>Bc</u>	<u>FS</u>	<u>2.5Y 6/8</u>	<u>54"</u>	
<u>98"</u>	<u>C</u>	<u>Sh + Gravel</u>	<u>7.5Y 10/6</u>		<u>15% Rounded cobbles</u>

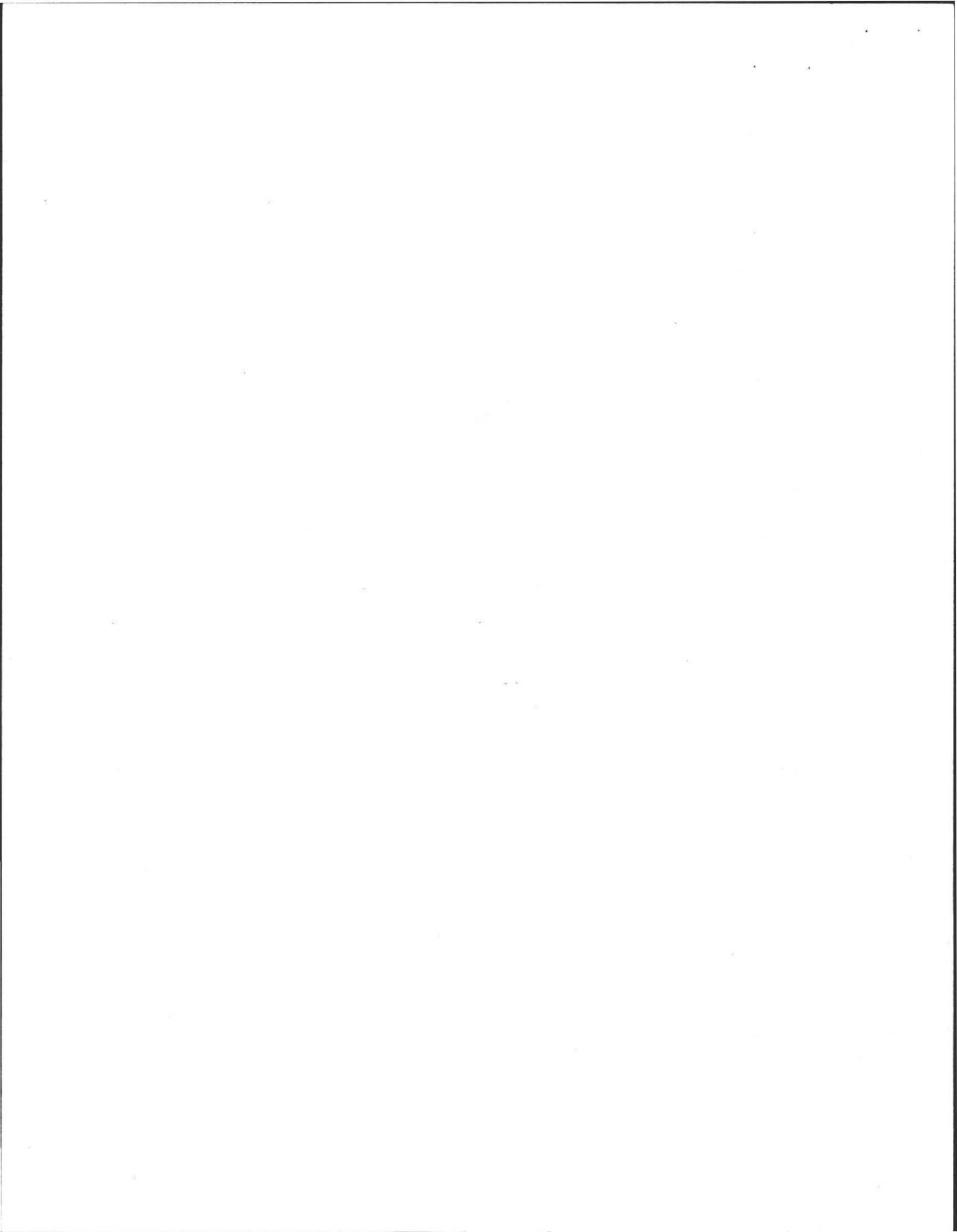
* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) _____ Depth to Bedrock: _____

Depth to Groundwater: Standing Water in the Hole: _____ Weeping from Pit Face: 70

Estimated Seasonal High Ground Water: 52'





FORM 12: Percolation Test

Location Address or Lot # 100 Leavitt Road

Commonwealth of Massachusetts

Town of Amherst

PERCOLATION TEST *

DATE: 4/30/02 TIME:

Observation Hole #	<u>①</u>	
Depth of Perc	<u>42"</u>	
Start Pre-soak	<u>10:20</u>	
End Pre-soak	<u>10:36</u>	
Time at 12"	<u>10:36</u>	
Time at 9"	<u>10:45</u>	
Time at 6"	<u>11:00</u>	
Time (9"-6")	<u>15</u>	
Rate Min./Inch	<u>⑤</u>	

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

Site Passed Site failed

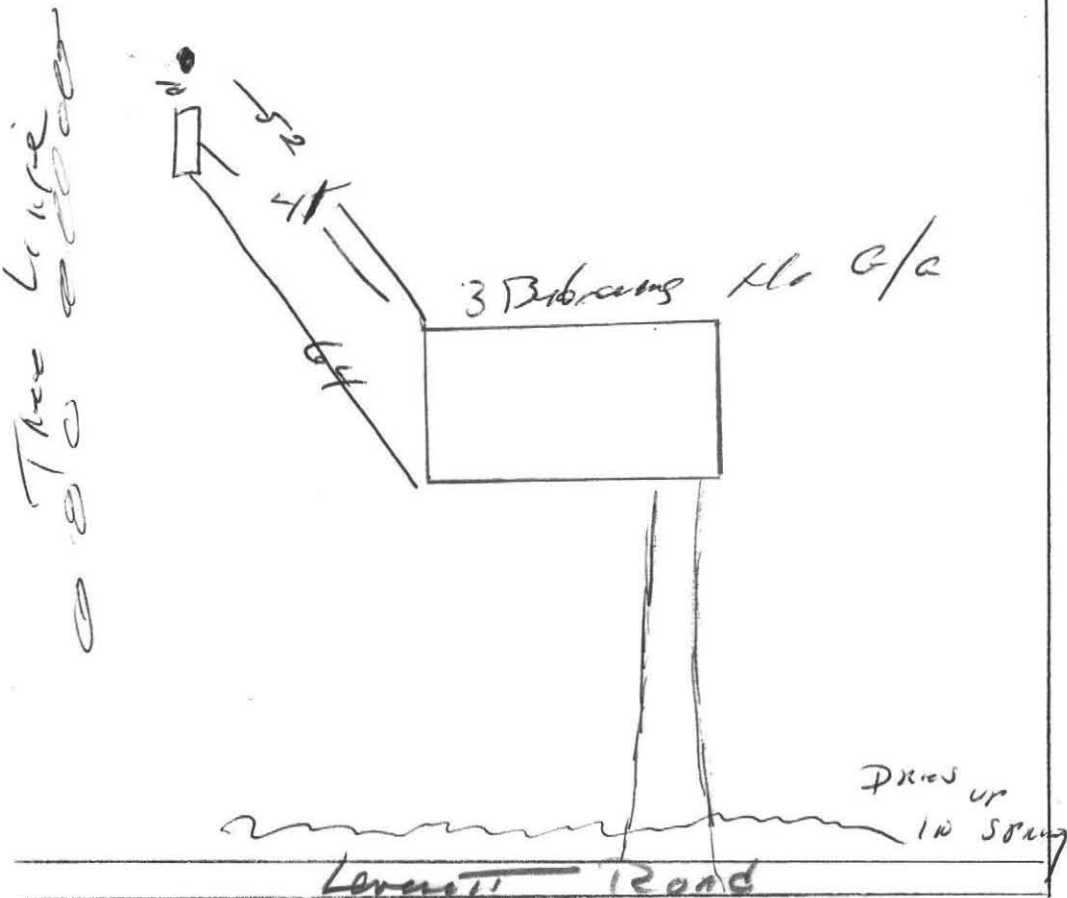
Performed by

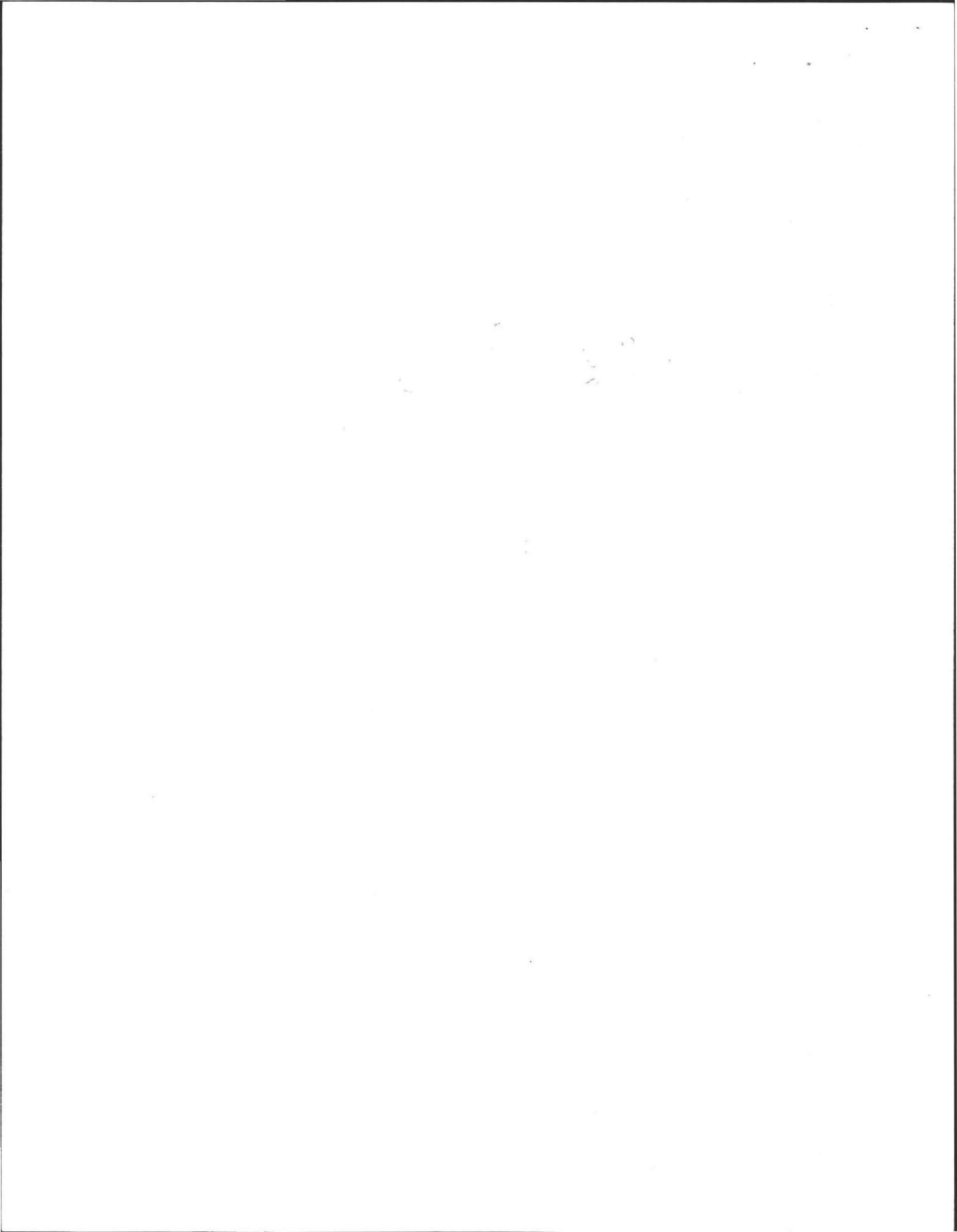
AL Weiss Cold Spring ENCL.

Witnessed by

DAVID ZAROZINSKI

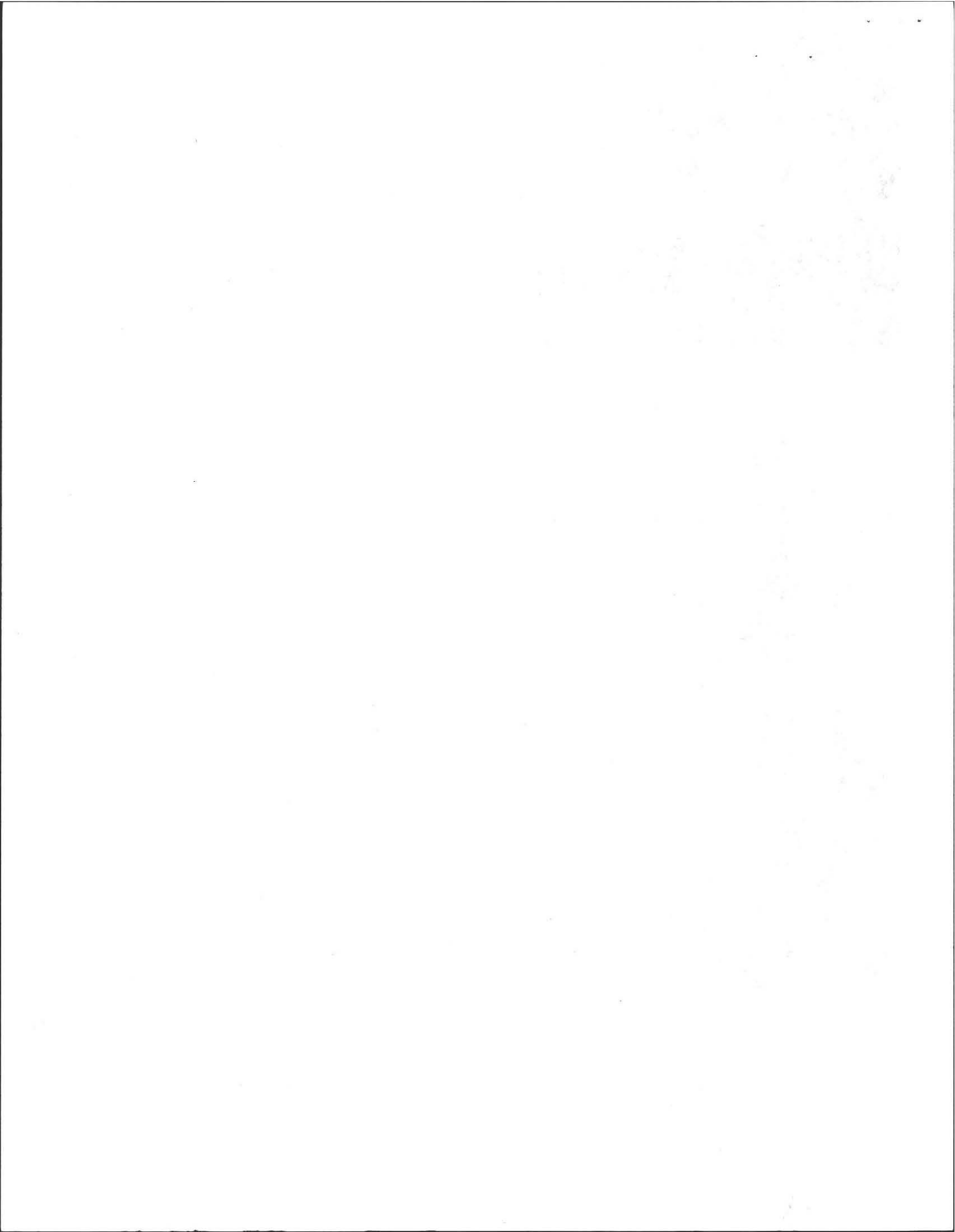
Comments:



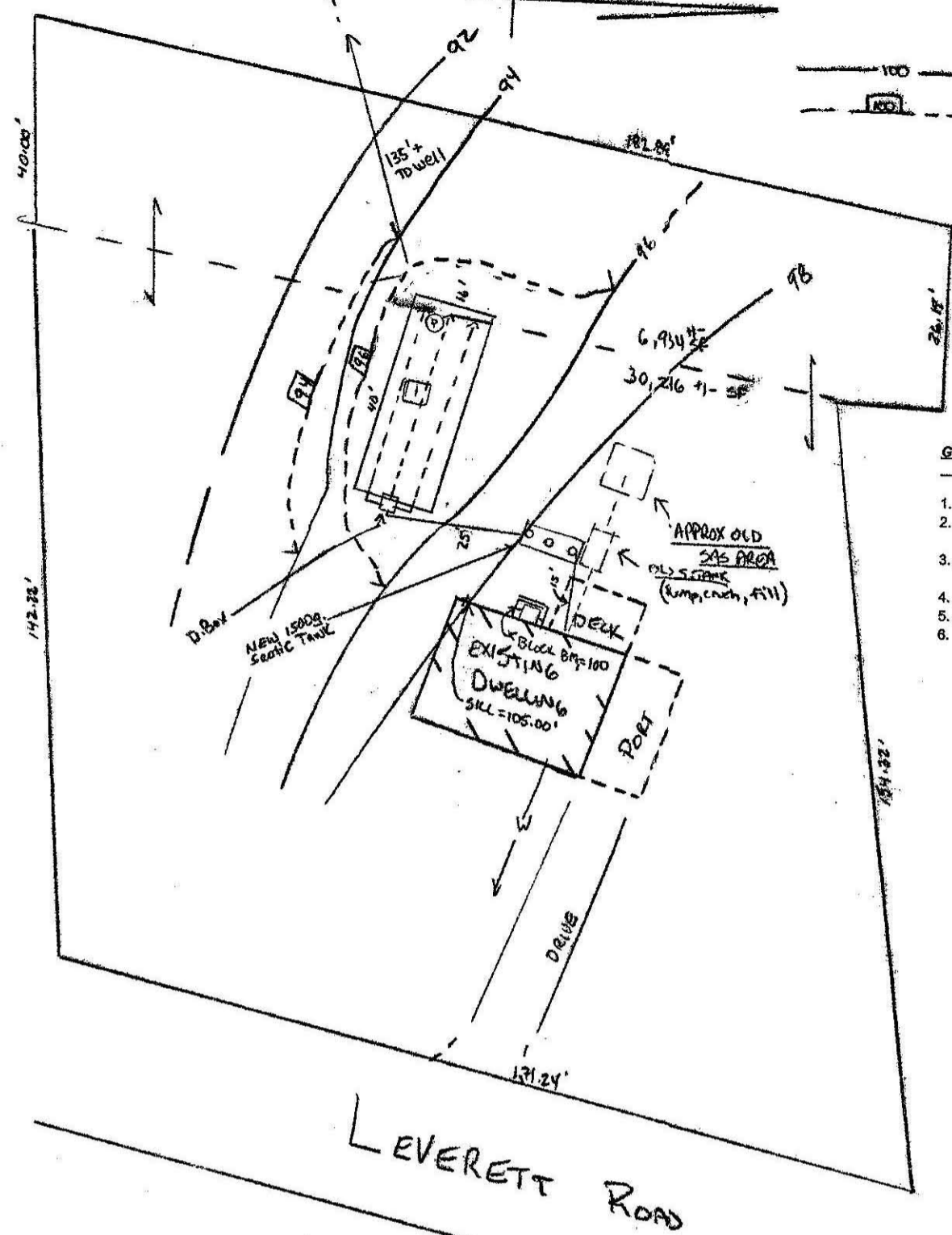




100 Leverett Road Perc Test 4/29/02 Engineer Alan Weiss
Owner: Edna Mcauehey



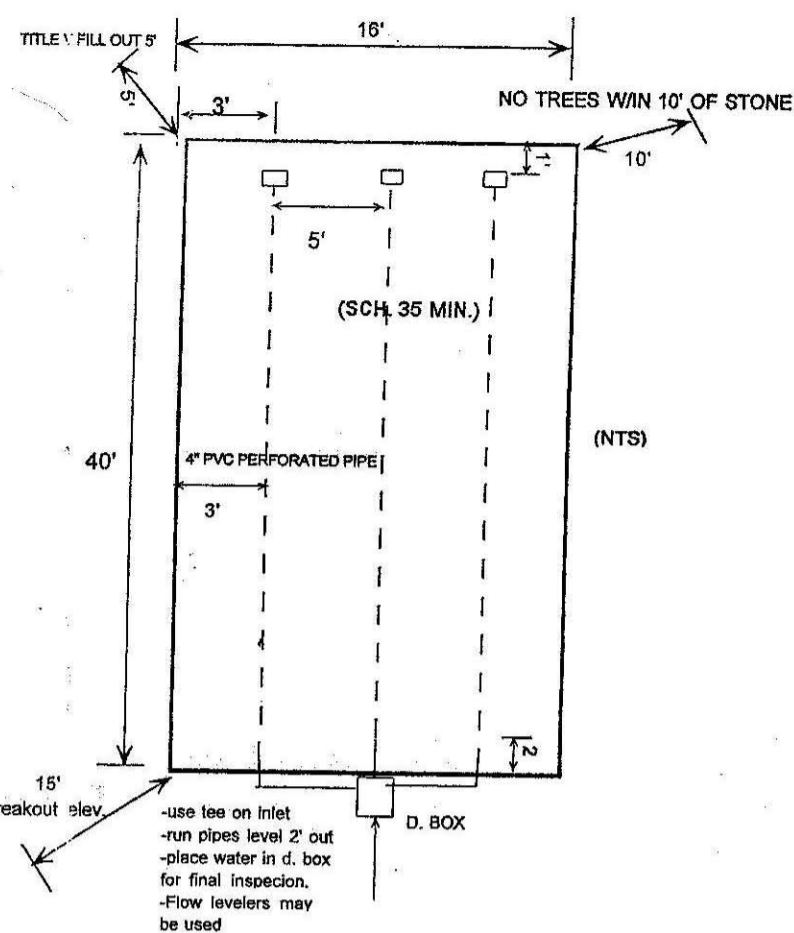
PLOT PLAN (1"=30') (FROM H. BROWN, ELS 10/1/87)



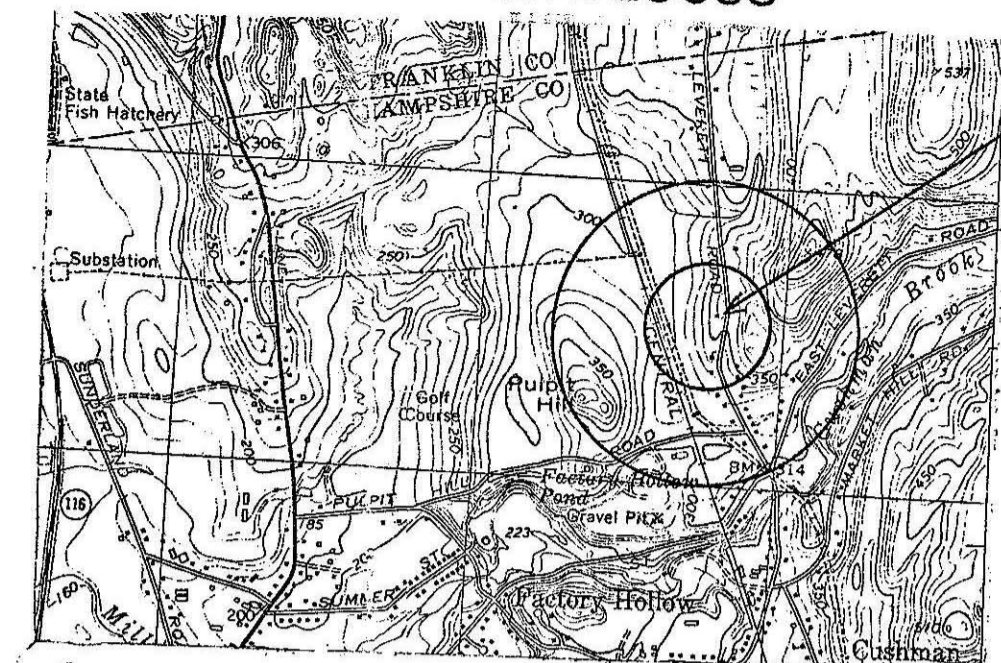
GRAVITY SEPTIC SYSTEM OPERATION AND MAINTENANCE NOTES FOR HOMEOWNER:

- HAVE SEPTIC TANK PUMPED EVERY SECOND (2) YEARS.
- MAINTAIN AREA OVER SEPTIC AS GRASSY OR SIMILAR GROUND COVER ATTEMPTING TO MAXIMIZE SUNLIGHT TO AREA.
- DO NOT PLANT ANY TREES OR DEEP ROOTING SHRUBS WITHIN 5 FEET OF LEACHFIELD.
- USE ONLY LIQUID DETERGENTS IN WASHER OR DISHWASHER.
- CONSERVE WATER WHEREVER POSSIBLE TO LENGTHEN LIFE OF SYSTEM.
- KEEP ALL RUNOFF DRAINS SUCH AS GUTTERS OR CURTAIN DRAINS AT LEAST 25 FEET FROM LEACHING FIELD.

LEACH FIELD DIAGRAM



SITE LOCUS



SCALE: 1"=2,083 FT.

USGS 7.5 MIN. QUAD.

0 FEET 2000

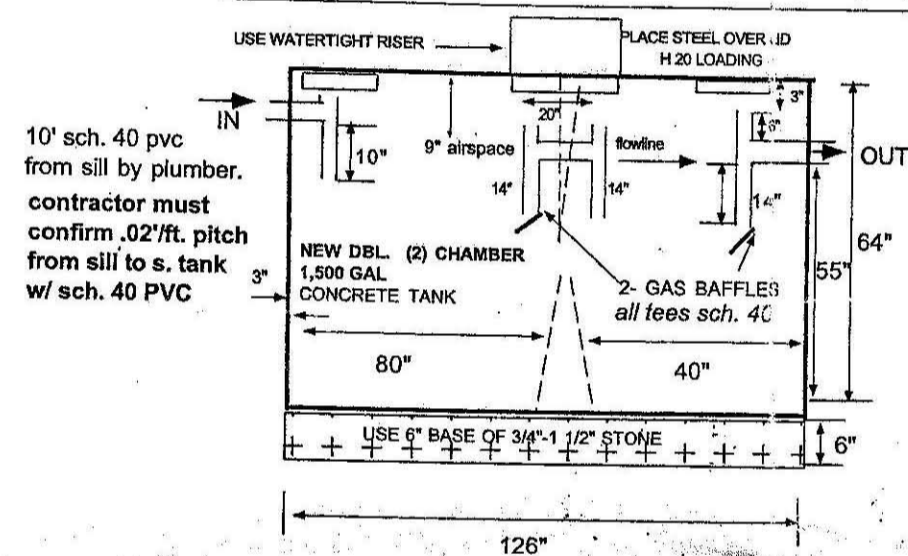
TEST PIT LOG

TP-1 EFF. EL. 95.30' (effective for design)	
0-14"	AP: FINE SANDY LOAM, FRIABLE-LOOSE (10 YR 3/2)
14-24"	BC: FINE SANDY LOAM, FRIABLE-LOOSE (2.5 Y 6/8)
24-98"	C1 COARSE SAND AND GRAVEL (SAND), 15% ANG. COBBLES & BOULDERS (7.5 YR 4/6)
OXIDES @ 54' 5 Y 4/2 & 10 YR 5/8 OXIDES: "	
ESHWT: 54' EFF.=90.97' @ TP-1 FOR DESIGN (4" SEPARATION REQUIRED)	
70"	STANDING H2O
70" (98"+)	WEEPING FROM FACE BEDROCK

DESIGN NOTES:

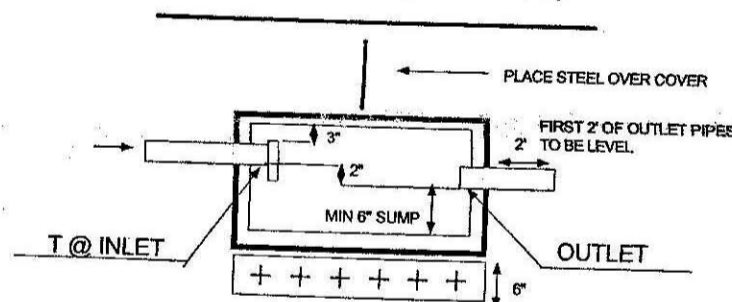
- 3 BR X 110 GAL/PERSONS/DAY = 330 GAL/DAY (4 bedroom design)
-Use ONE Leachfield 16' wide x 40' LONG W/6" of .5" of DBL washed stone below in vert.
Bot. Area: 16' wide x 40' long = 640sf.
Side Area: N.A.
Tot. Area: 640 sf x 0.74 gal/sf. = 474 GAL/day.
- GARBAGE DISPOSAL NOT ALLOWED
- ALL D. BOX OUTLET PIPES LEVEL FOR 2'
- NO PRIVATE WELLS WITHIN 100 FEET OF SAS, (water line) see PLAN
- NO WETLANDS WITHIN 100 FEET OF SAS.
- PRE & POST CONTOURS NOTED AS NECESSARY.
- RESERVE AREA NOTED
- (NEW S. TANK MAINTAIN 0.02 PITCH FROM SILL TO S. TANK,
- SLOPE CALCS (SEE CONTOURS). SUBGRADE INSP. REQ'D.
- 2% MIN. SLOPE OVER SAS, CLEAR TOP AND SUB TO 30" MIN. AS NEEDED.
CLEAR BEYOND BASE OF 1" (MIN. 30") UNDER BED PRIOR TO TITLE V SAND PLACEMENT.
- SOIL EVALUATION BY A. WEISS, RS & R. GAULEY 04/30/2002.
- DEPTH OF PERCS. 42" BY A. WEISS 04/30/2002
- PERC RATE = 5 MIN/IN, CLASS I SOIL (SAND)
- INSTALL/INSPECT TEES (SCH 40, 10" INLET, 14" OUTLET) ON 1,500 GAL. S. TANK.
- USE NEW, 2 CHAMBER 1,500 GAL. S. TANK WITH PROPER TEES IN PLACE (& gas baffles).
- USE APPROVED (1 1/2") DBL. WASHED STONE UNDER BED & D. BOX FOR 6".
CONFIRM STONE PROPERLY WASHED (WITH BUCKET /H2O TEST) PRIOR TO PLACEMENT.
- NO TREES WITHIN 10 FT. OF NEW LEACH FIELD.
- ENGINEER TO INSPECT SUBGRADE.
- T.B.M #1. 100.00 AT TOP OF BLOCK STEP. ALSO T.B.M. #2=105.00 TOP OF SILL.
- GRADE MULCH AND SEED OVER LEACHFIELD @ 2% GRADE AS NOTED.
- USE SILT FENCE TO CONTROL EROSION UNTIL REVEGETATION COMPLETE AS NEEDED.
- USE LEACHING BED INSTEAD OF TRENCHES DUE TO TOPOGRAPHY AND HIG.
WATER WITH RESPECT TO LOCATION AND ELEVATION OF RESIDENCE (310 CMR 15.240).
- NOTE: HI OXIDES/SEASONAL HI GROUNDWATER, PROPERLY DRAIN FROM RESIDENCE

TYPICAL NEW DBL CHAMBER 1,500 GAL. S. TANK OR EQUIV. (WATERTIGHT)



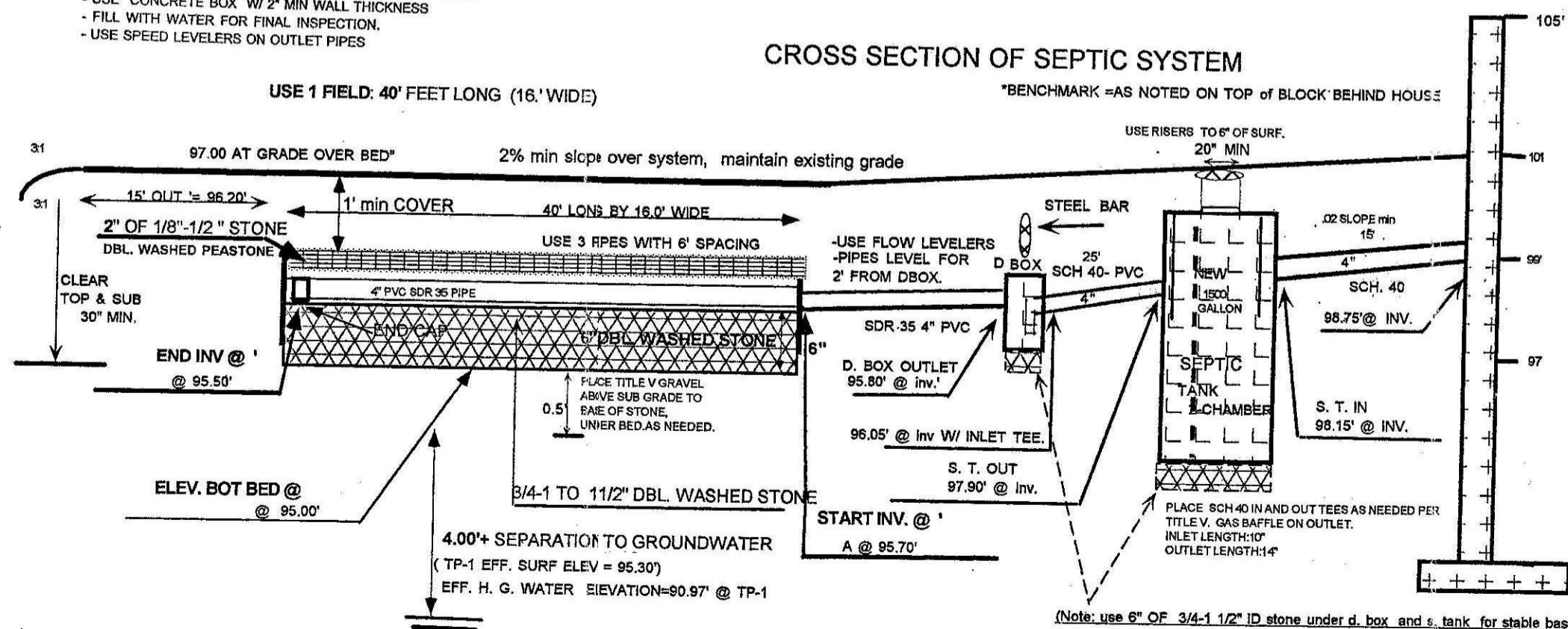
NOTE: CONTRACTOR MUST ALSO PIPE MIDDLE TEE WITH SCH 40 PVC AS SHOWN, USE TANK WITH 4" ID knock OUT HOLE BETWEEN CHAMBERS FOR TEES.

TYPICAL D. BOX (WATERTIGHT)



- PLACE ON STABLE BASE OF 6" 3/4"-1 1/2" CRUSHED STONE
- USE CONCRETE BOX W/ 2" MIN WALL THICKNESS
- FILL WITH WATER FOR FINAL INSPECTION.
- USE SPEED LEVELERS ON OUTLET PIPES

CROSS SECTION OF SEPTIC SYSTEM



NOTE: USE TITLE V FILL ONLY UNDER AND AROUND FIELD TO MEET DESIGN ELEVATIONS AS NEEDED ON PLAN AND AS PER 310 15.255 (clear all top and sub prior to fill placement)



SEPTIC SYSTEM REPAIR PLAN FOR EDNA McAVENEY
100 LEVERETT ROAD, AMHERST, MA

SCALE: NOTED	APPROVED BY	DRAWN BY: LAW
DATE: 5/15/02		
DRAWING NUMBER		102-1526-0430
COLD SPRING ENVIRONMENTAL, INC.		