88-14

#98

No. 88-14

Fee 90.00

COMMONWEALTH OF MASSACHUSETTS
WILLIAM JOHN SIERUTA
CIVIL
No. 30148
REGISTERED PROFESSIONAL ENGINEER

THE COMMONWEALTH OF MASSACHUSETTS

BOARD OF HEALTH

Town of Amherst, Mass

HEALTH DEPARTMENT
APR 5 1988
APR 05 1988

Application for Disposal Works Construction Permit

(98)

Application is hereby made for a Permit to Construct (X) or Repair ( ) an Individual Sewage Disposal System at:

96 Leverett Rd Lot #1 Amherst Mass
Location - Address or Lot No.

Albert & Olga Terault — Owner
39 Log Town Rd Amherst MA 01002 — Address

Installer — Address

Type of Building — Size Lot 3.023 Acres Sq. feet

Dwelling — No. of Bedrooms 4 bedrms — Expansion Attic (—) — Garbage Grinder (—)

Other — Type of Building Residential — No. of persons 5 people — Showers (3) — Cafeteria (—)

Other fixtures 2½ bathrooms Full Bmt

Design Flow 110 gallons per ~~person~~ bedrm per day, Total daily flow 440 x 1.25 gallons. 550

Septic Tank — Liquid capacity 1500 gallons Length 12'0" Width 5'0" Diameter Depth 5'0"

Disposal Trench — No. 3 Width 36" Total Length 38' Total leaching area 3180 276.5 sq. ft. bottom 342 FT2

Seepage Pit No. Diameter Depth below inlet Total leaching area sq. ft.

Other Distribution box (1) Dosing tank ( )

Percolation Test Results Performed by William Sieruta Date 4/1/88

Test Pit No. 1 8.0 minutes per inch Depth of Test Pit 51" Depth to ground water 96"

Test Pit No. 2 minutes per inch Depth of Test Pit Depth to ground water

Description of Soil TP1-1 0-10" loam cts 10"-115" gravel till H2O @ 96"
TP1-2 0-8" loam 8"-20" silty sand sub 20"-83" gravel sand till 83-130" gravel till > 4 clay H2O @ 93"

Nature of Repairs or Alterations — Answer when applicable

Agreement:

The undersigned agrees to install the aforedescribed Individual Sewage Disposal System in accordance with the provisions of TITLE 5 of the State Sanitary Code — The undersigned further agrees not to place the system in operation until a Certificate of Compliance has been issued by the board of health.

Signed Albert R. Terault

Application Approved By Dennis A. Pinski — Date April 5, 1988

Application Disapproved *for the following reasons:* — Date

Permit No. 88-14 Issued — Date

CHECK OR FILL IN WHERE APPLICABLE

6/21/88 Checked system. Hold for letter of cert.

THE COMMONWEALTH OF MASSACHUSETTS

BOARD OF HEALTH

OF

Certificate of Compliance

THIS IS TO CERTIFY, That the Individual Sewage Disposal System constructed ( ) or Repaired ( ) by — Installer

at

has been installed in accordance with the provisions of TITLE 5 of The State Sanitary Code as described in the application for Disposal Works Construction Permit No. 88-14 dated

THE ISSUANCE OF THIS CERTIFICATE SHALL NOT BE CONSTRUED AS A GUARANTEE THAT THE SYSTEM WILL FUNCTION SATISFACTORY.

DATE Inspector

Designer to certify installation of sewage disposal system in accordance with plan dated April 4, 1988 and received by Health Dept. April 5, 1988 (Title V, reg. 15.02(8))

THE COMMONWEALTH OF MASSACHUSETTS

BOARD OF HEALTH

No. 88-14 Town of Amherst Fee #90.00

Disposal Works Construction Permit

Permission is hereby granted

to Construct (X) or Repair ( ) an Individual Sewage Disposal System

at No. Albert & Olga Terault 96 Leverett Road, Lot #1 — Street

as shown on the application for Disposal Works Construction Permit No. 88-14 Dated April 5, 1988

for Health Dept. Dennis A. Pinski C.H.O., R.S. — Board of Health

DATE April 5, 1988

FORM 1255 A. M. SULKIN, INC., BOSTON

No.....

Fee.....

THE COMMONWEALTH OF MASSACHUSETTS

BOARD OF HEALTH

TOWN OF AMHERST

Application for Disposal Works Construction Permit

Application is hereby made for a Permit to Construct (✓) or Repair ( ) an Individual Sewage Disposal System at:

LEVERETT ROAD
Location - Address

ALBERT TERAULT
Owner

34 LOGTOWN ROAD AMHERST, MA.
or Lot No. Address

Installer

Address

Type of Building

Size Lot 3.023± Acres ~~Sq. feet~~

Dwelling — No. of Bedrooms 4 Expansion Attic ( ) Garbage Grinder (NO)

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

Other fixtures .....

Design Flow 55 gallons per person per day. Total daily flow 440 X 1.25 = 550 gallons.

Septic Tank — Liquid capacity 1500 gallons Length 10.5' Width 5' Diameter..... Depth 5'

Disposal Trench — No. 4 Width 3' Total Length 220' Total leaching area 440 sq. ft. Sides

Seepage Pit No..... Diameter..... Depth below inlet 1' Total leaching area 660 sq. ft. Bottom

Other Distribution box ( ) Dosing tank ( )

Percolation Test Results Performed by Filios Enterprises, Inc. Date 3/1/88

Test Pit No. 1 12 minutes per inch Depth of Test Pit 11' Depth to ground water 74"

Test Pit No. 2 minutes per inch Depth of Test Pit 10' Depth to ground water 67"

No 3 10' 66"

Description of Soil No. 4 9' 72"

Enclosed

Nature of Repairs or Alterations — Answer when applicable.....

Agreement:

The undersigned agrees to install the aforedescribed Individual Sewage Disposal System in accordance with the provisions of TITLE 5 of the State Sanitary Code — The undersigned further agrees not to place the system in operation until a Certificate of Compliance has been issued by the board of health.

Signed..... Date

Application Approved By..... Date

Application Disapproved *for the following reasons:*.....

Date

Permit No..... Issued..... Date

THE COMMONWEALTH OF MASSACHUSETTS

BOARD OF HEALTH

TOWN OF AMHERST

Certificate of Compliance

THIS IS TO CERTIFY, That the Individual Sewage Disposal System constructed (✓) or Repaired ( )

by..... Installer

at LEVERETT ROAD

has been installed in accordance with the provisions of TITLE 5 of The State Sanitary Code as described in the application for Disposal Works Construction Permit No..... dated.....

THE ISSUANCE OF THIS CERTIFICATE SHALL NOT BE CONSTRUED AS A GUARANTEE THAT THE SYSTEM WILL FUNCTION SATISFACTORY.

DATE..... Inspector.....

CHECK OR FILL IN WHERE APPLICABLE

DEEP SOIL LOGS

OWNER ALBERT TERAULT

DATE MARCH 1, 1988

LOCATION LEVERETT ROAD
AMHERST, MA.

OBSERVER Filios Enterprises Inc.

B of H D. PINSKI

0-10"	Topsoil
10-21"	Subsoil
21-69"	Coarse sand and gravel.
69"-11'	Sandy till with cobbles.

11'

GROUND WATER 74"

0-12"	Topsoil
12-23"	Subsoil
23"-5½'	Sand and gravel
5½'-10'	Sandy till with cobbles.

10'

GROUND WATER 66"

0-9"	Topsoil
9-23"	Subsoil
23-50"	Coarse sand with some gravel and cobbles.
50"-10'	Sandy till with cobbles.

10'

GROUND WATER 67"

0-13"	Topsoil
13-24"	Subsoil
24-56"	Sand and gravel
56"-9'	Sandy till with cobbles.

9'

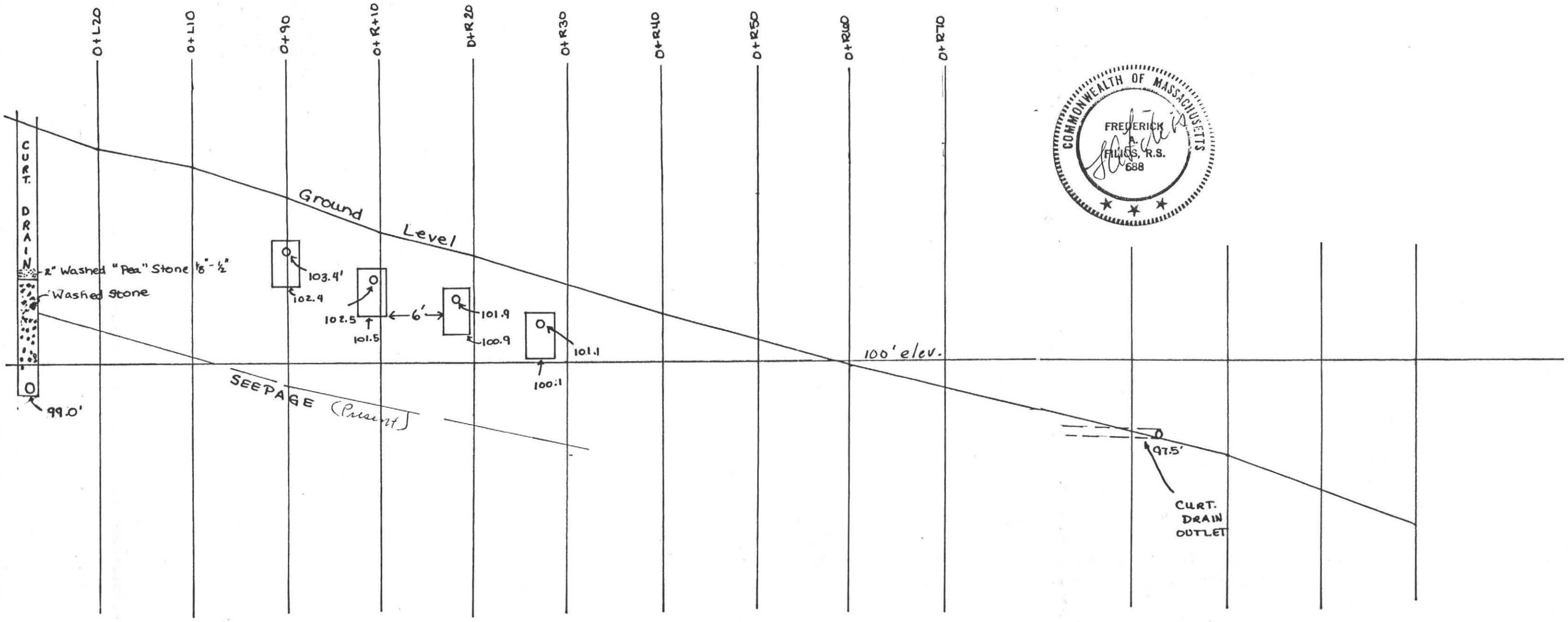
GROUND WATER 72"

COMMONWEALTH OF MASSACHUSETTS
FREDERICK A. FILIOS, R.S.
688

PERCOLATION RATE AT 4':

12 min./inch

CROSS SECTION AT A-A' (0+90)



COMMONWEALTH OF MASSACHUSETTS
FREDERICK A. FILLIOS, R.S.
688

PLAN SHOWING SEWAGE DISPOSAL SYSTEM

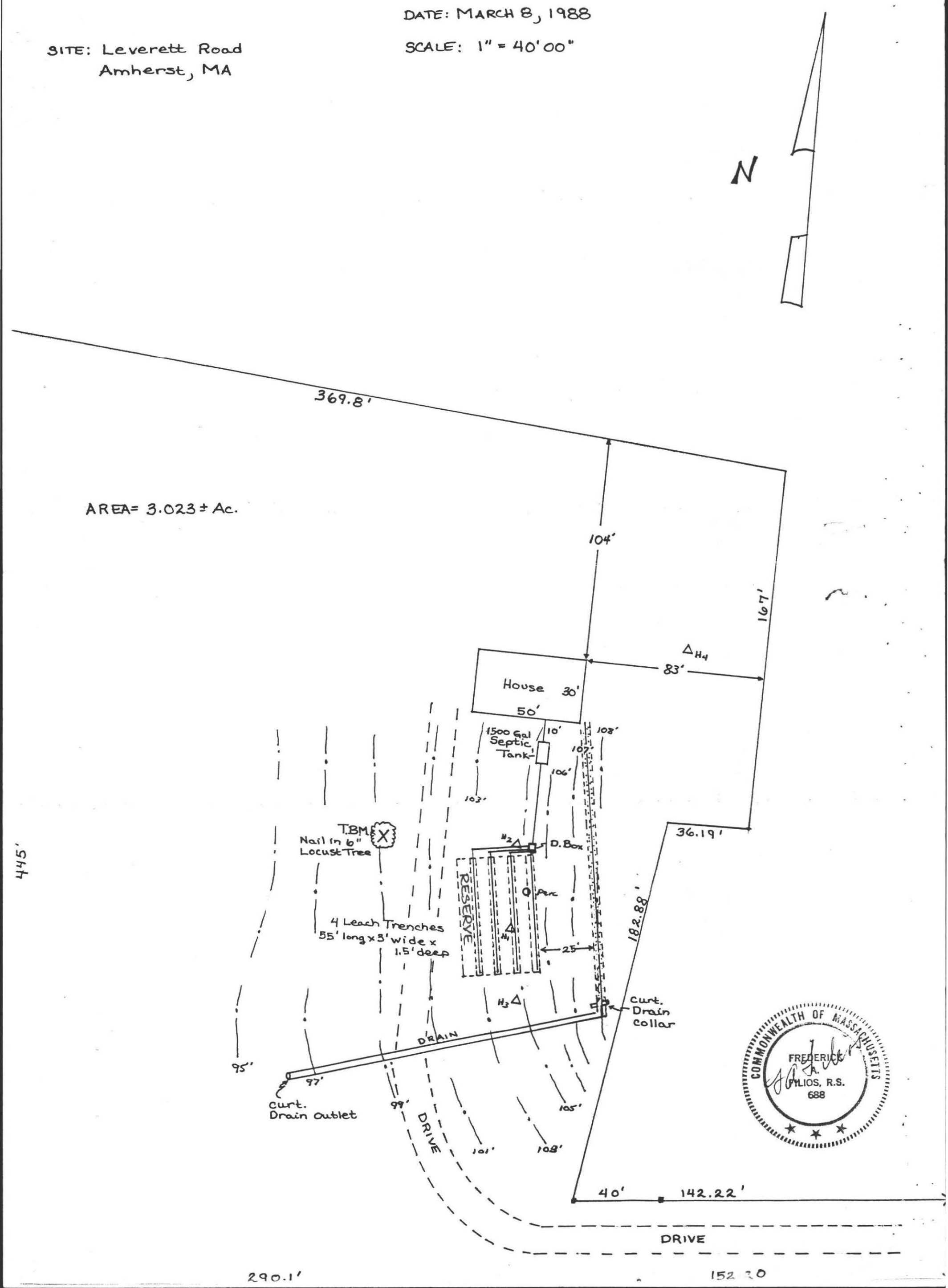
FOR: Albert Terault
34 Logtown Road
Amherst, MA

BY: FILIOS ENTERPRISES, INC.
69 Pelham Road
Amherst, MA 01002

DATE: MARCH 8, 1988

SITE: Leverett Road
Amherst, MA

SCALE: 1" = 40'00"

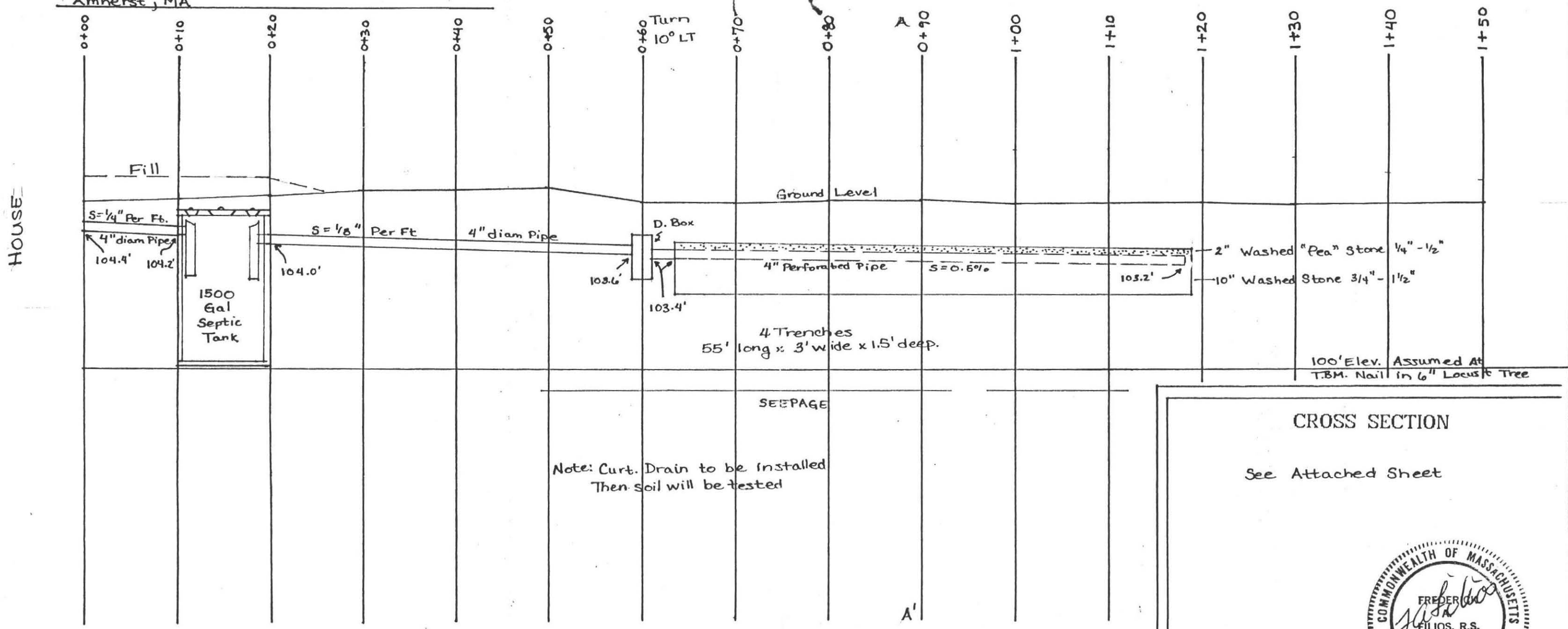


PROFILE OF SEPTIC SYSTEM

FOR: Albert Terault
34 Logtown Road Amherst, MA
SITE: Leverett Road
Amherst, MA

BY: FILIOS ENTERPRISES INC.
69 PELHAM RD.
AMHERST MA 01002 W.T.

DATE: March 8, 1988
SCALE: Horizontal 1" = 10'
Vertical 1" = 3'



Note: Curt. Drain to be Installed
Then soil will be tested

CROSS SECTION

See Attached Sheet

COMMONWEALTH OF MASSACHUSETTS
FREDERICK A. FILIOS, R.S.
688

SPECIFICATIONS

All materials and construction will be in accordance with Commonwealth of MA D. E. Q. E. State Environmental Code Title 5.

CALCULATIONS

4 bdm x 110 Gal/Day bdm = 440 Gal Required /day
440 Gal x 1.25 (Amherst Reg.) = 550 Gal/day
Perc. Rate = 15 min /inch
Sides = 0.66 Gal/S.F. : Bottom = 0.43 Gal/S.F.
4 Trenches 55' long x 3' wide x 1.5' deep
Sides: 4 x 55' x 2 x 1' = 440 S.F. x 0.63 Gal/S.F. = 290.4 Gals.
Bottom: 4 x 55' x 3' = 660 S.F x 0.43 Gal/S.F = 283.8 Gals.
Total Available = 574.2 Gal/day

Town of

AMHERST Massachusetts

AMHERST HEALTH DEPARTMENT
(413) 253-7077

March 17, 1988

#98
Leverett Rd

To: Albert Terault

From: Dennis Pinski

Re: Lot on Leverett Road

As a follow-up to our telephone conversation earlier today, I have reviewed specifications for the proposed subsurface drain for your lot on Leverett Road.

Please contact me (253-7077) after the drain is installed so that we can arrange to take new groundwater elevation readings at this site.

NOTE: New groundwater determinations made and new percolation tests conducted on April 1, 1988. Hold for new plan.
Drain installed by William Sierota P.E.; he will also be designing new plan.

PERCOLATION TEST TABULATION:

	Perc test # 1 depth 51"	Perc test # 2 depth 54"	#	#
START PRESOAK	9 54 am	10 08 am		
END PRESOAK	10 09 am	10 23 am		
TIME @ 12"	10 09 (15")	10 23 (14")		
TIME @ 9"	10 23 (12")	10 48 (11")		
TIME @ 6"	10 43" (9")	11 32 (4")		
ELAPSED TIME 9"-6"	20 min.	44 min / 4 3/4 inches		
RATE (MIN/IN)	7 min./inch	~ 10 min./inch		

BREAKDOWN BY INCH: (optional)

12"				
11"				
10"				
9"				
8"				
7"				
6"				

Wells or Septic Systems Nearby: _____

House Style: _____ Desired Orientation: _____

House Dimensions: _____ # Bedrooms: _____

Excavation By: _____

Copies Sent: Board of Health _____ Client _____ _____ _____

Measurements of test pits were taken off property pins ("A", "B", "C") and front property line.

	A	B	C
Perc Test 1	35'	52'	
Perc Test 2	80'	87'	
Test Pit 1	53'	68'	
Test Pit 2	X	~~X~~	72'

X - 42' from front p.L.

SOIL EXAMINATIONS / PERCOLATION TESTS

JOB #

LOCATION OF PROP.: Albert Terault
Leverett Road
Amherst, MA

LOT NO.:

DATE PERFORMED: April 1, 1988 (Initial testing March 1, 1988 with Fred Filios)

PERFORMED BY: Wm. Sieruta P.E.

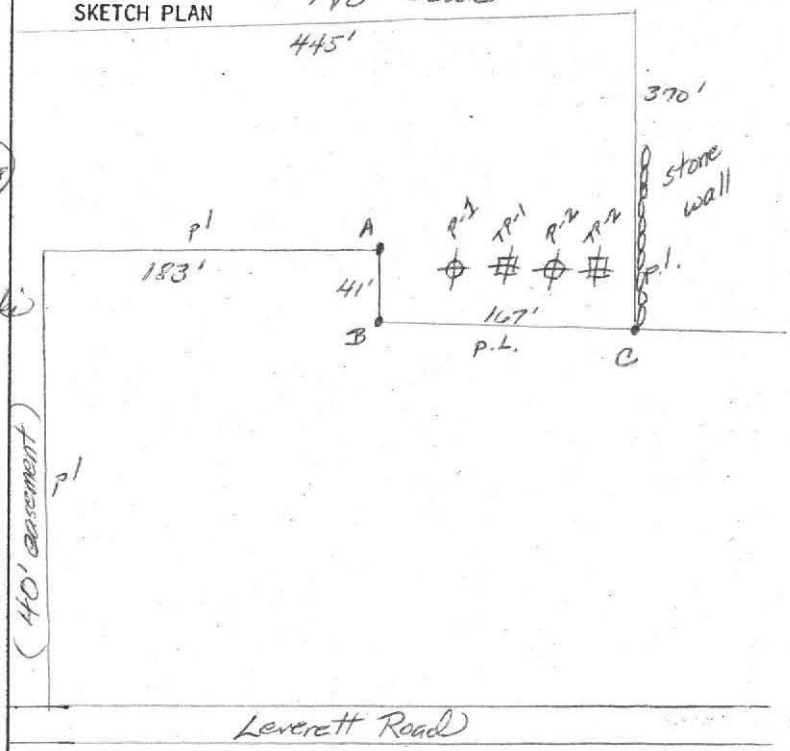
WITNESSED BY: for Amherst Health Dept.: D. Pinski

PERK TEST RESULTS: (tabulation on back)

1. see back page
2.
3.
4.

COMMENTS: Initial testing conducted 3/1/88. Subsurface drain installed to lower groundwater. New engineer asked for retest of lot in an area where he felt septic system could be more appropriately located. Area tested 4/1/88 appears to be suitable for the location of a leaching system. Hold for new plan.

SKETCH PLAN No Scale

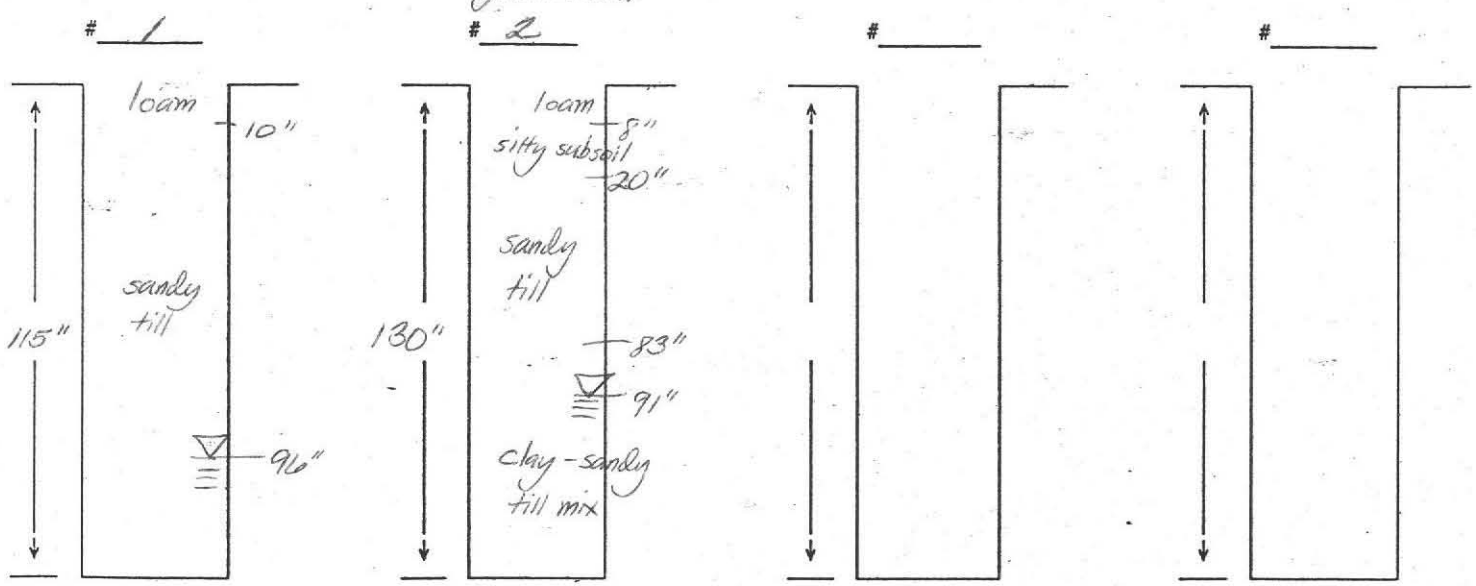


INDICATES OBSERVATION HOLES

INDICATES PERK TEST LOCATION

▽ denotes groundwater

OBSERVATION HOLES



Note – testing conducted in location of test pit #7 (3/1/88).

AMHERST HEALTH DEPARTMENT
BANGS COMMUNITY CENTER
70 BOLTWOOD WALK
AMHERST, MA 01002

March 2, 1988

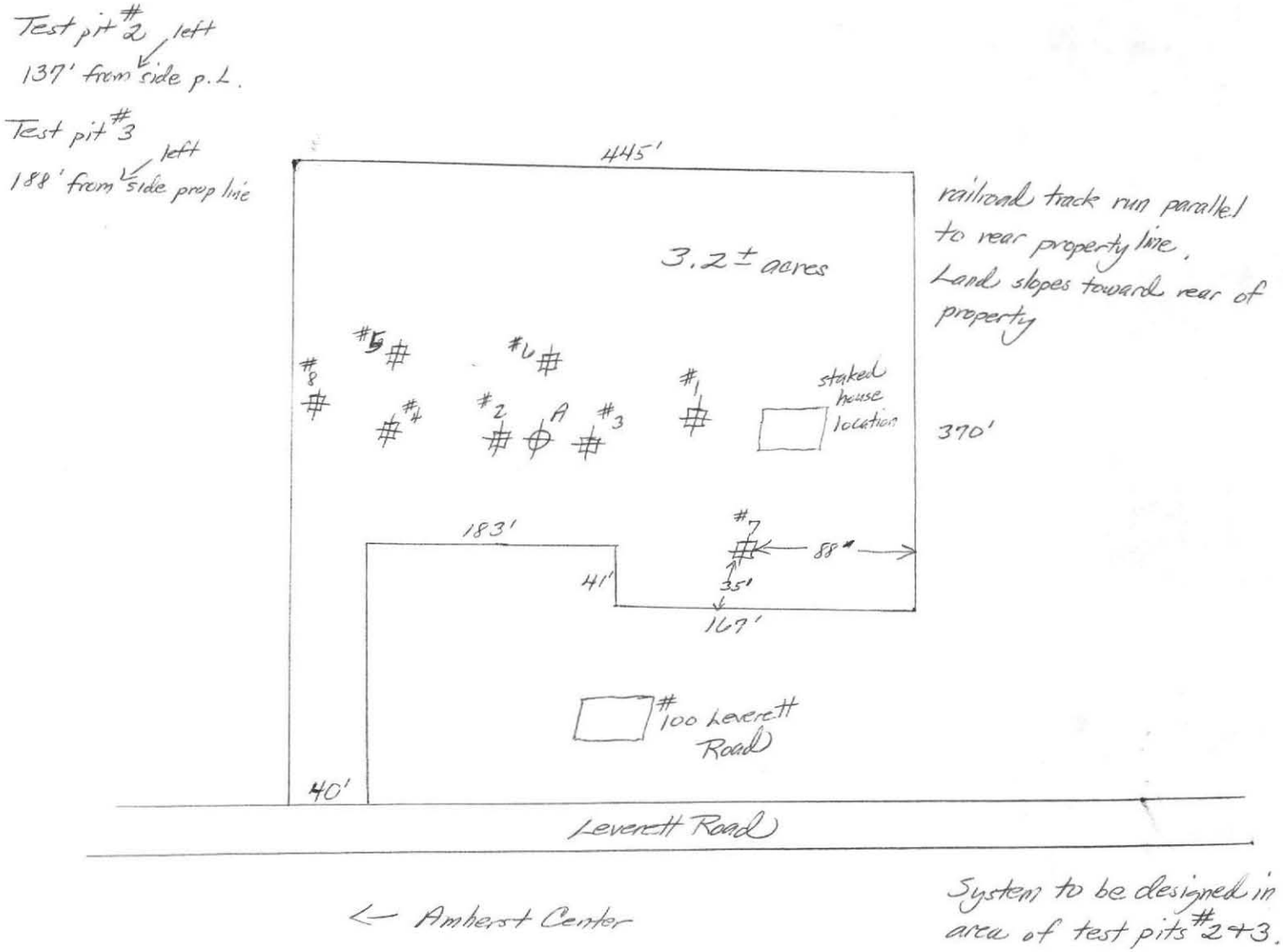
To: Bettye Anderson Frederic

From: Dennis Pinski

Re: Lot inspection for Albert Tetrault

New lot inspection was conducted on March 1, 1988 for Mr. Albert Tetrault for property located behind 100 Leverett Road (lot adjacent to Leverett Rd - Pulpit Hill Road intersection).

Enclosed is a rough sketch of the site and a copy of the soil log and percolation test information.



SOIL EXAMINATIONS / PERCOLATION TESTS

~~JOB #~~

LOCATION OF PROP.: Albert Tetreault
Leverett Rd
Amherst, MA

LOT NO.:

DATE PERFORMED: March 1, 1988

PERFORMED BY: Fred Filios

WITNESSED BY: Dennis Pinski for Amherst Health Dept.

PERK TEST RESULTS: (tabulation on back)

~~1.~~ A Soak 10^{16} to 10^{33}

2. 12" 10^{34}
9" 10^{56}
3. 6" 11^{32} > Test Rate - 12 min./inch

4.

COMMENTS:

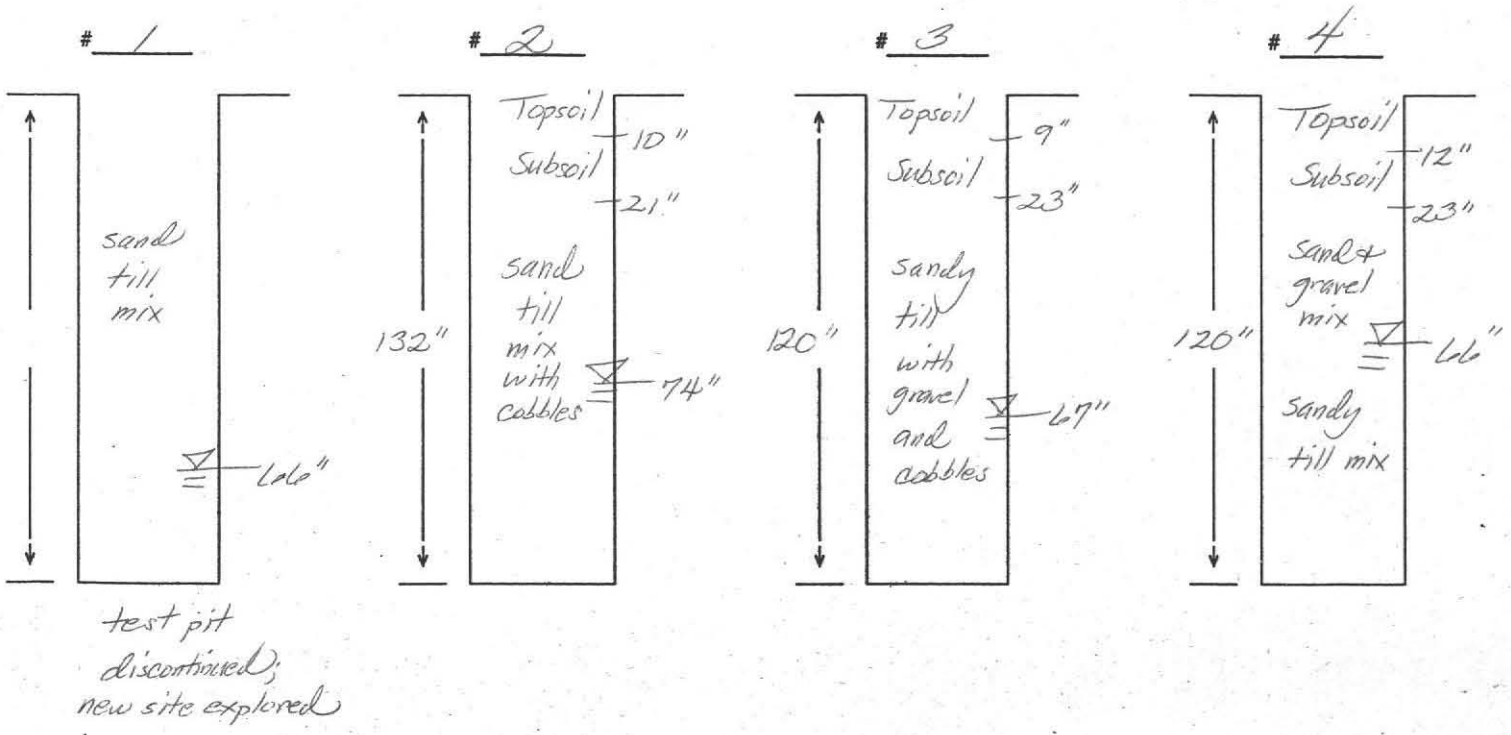
SKETCH PLAN

INDICATES OBSERVATION HOLES

INDICATES PERK TEST LOCATION

▽ denotes groundwater

OBSERVATION HOLES



SOIL EXAMINATIONS / PERCOLATION TESTS

~~JOB #~~

LOCATION OF PROP.: Albert Tetrault
Leverett Rd.
Amherst, MA

LOT NO.:

DATE PERFORMED: March 1, 1988

PERFORMED BY: Fred Filios

WITNESSED BY: for Health Dept.: Dennis Rinaldi

PERK TEST RESULTS: (tabulation on back)

1.

2.

3.

4.

COMMENTS:

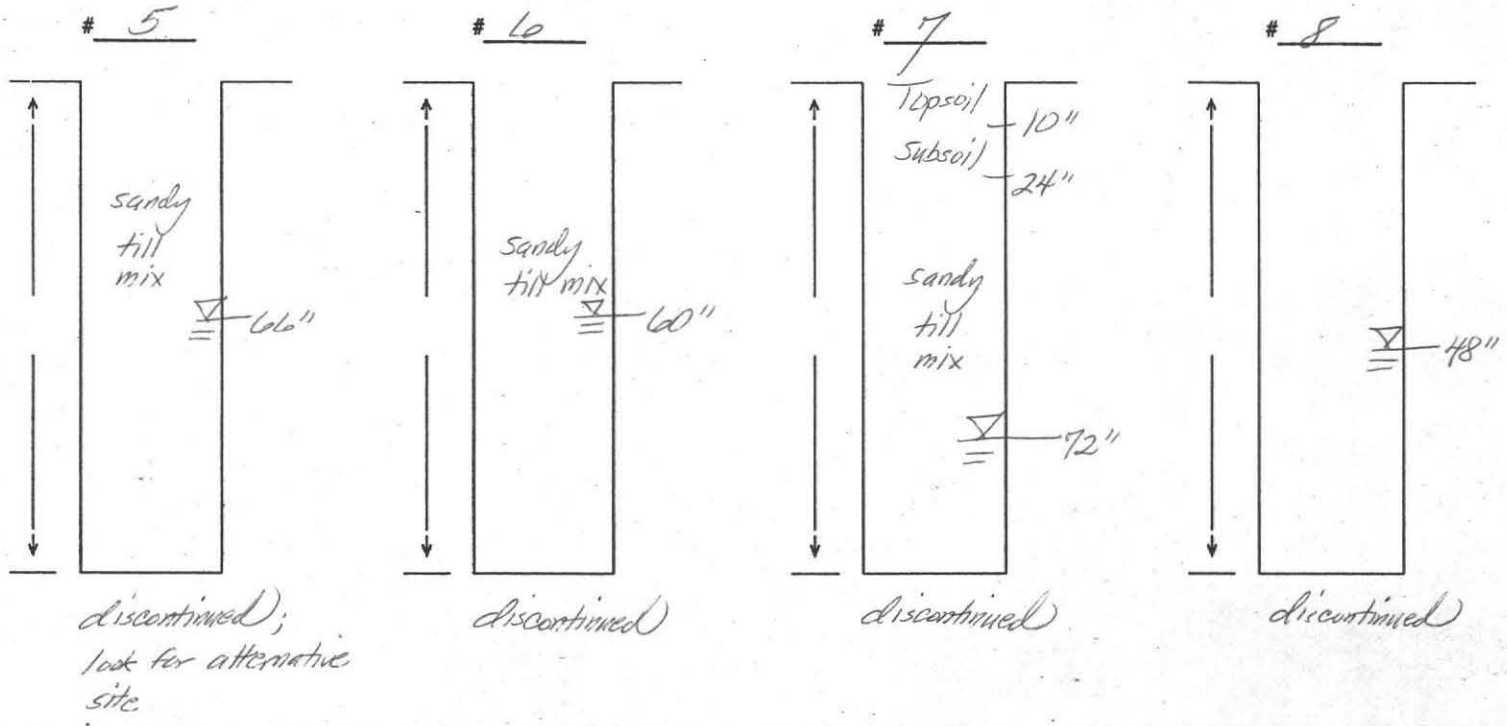
SKETCH PLAN

INDICATES OBSERVATION HOLES

INDICATES PERK TEST LOCATION

▽ denotes groundwater

OBSERVATION HOLES



Betty McRuddin
Director of Business Affairs

JUL 21 1988

William J. Sieruta
46 Upland Road
Holyoke, MA. 01040

June 25, 1988

AmherstBoard of Health
Attention: Denis Pinski
Boltwood Walk
Amherst, MA. 01002

Mr. Pinski:

This letter is to certify that the septic system at 96 Cushman Road (Cushman Village) Amherst has been installed in compliance with 310 CMR 15 (Title 5) and the local Board of Health regulations.

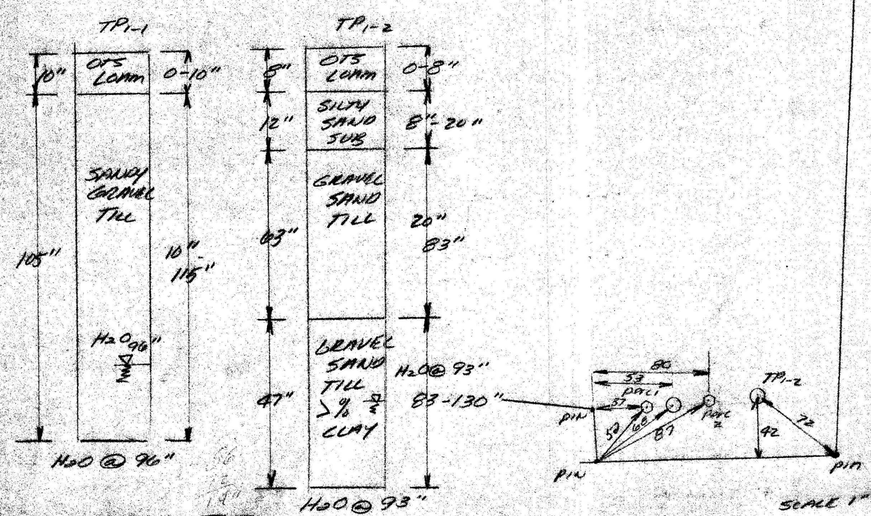
The system as built is in accordance with the approved plan. The only variance is a s follows:

The location of the building is approximately 20 ft. south of the preliminary plan. This is parallel with the septic system. The system is in the location as shown on the plan.

Very truly yours,

William J. Sieruta

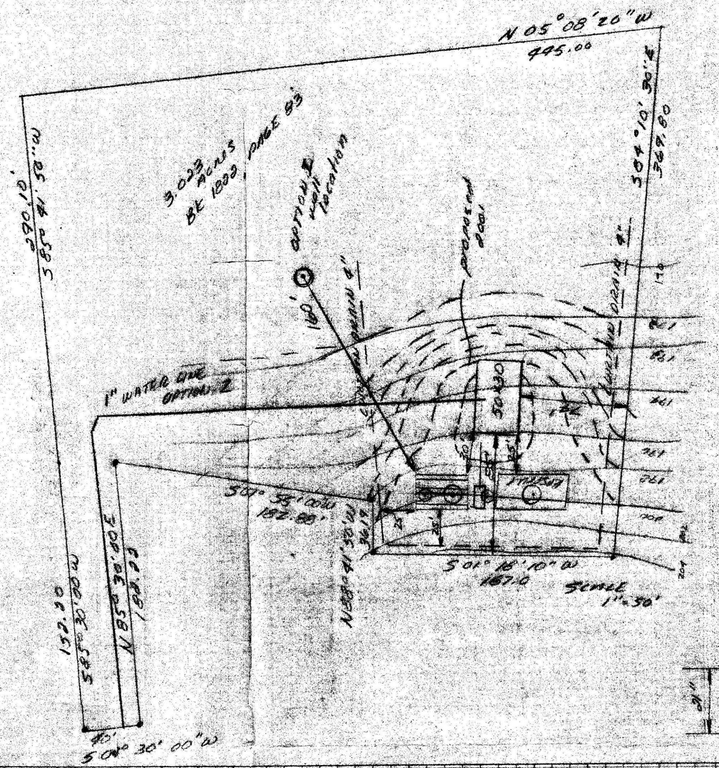
PERCOLATION TEST INFORATION

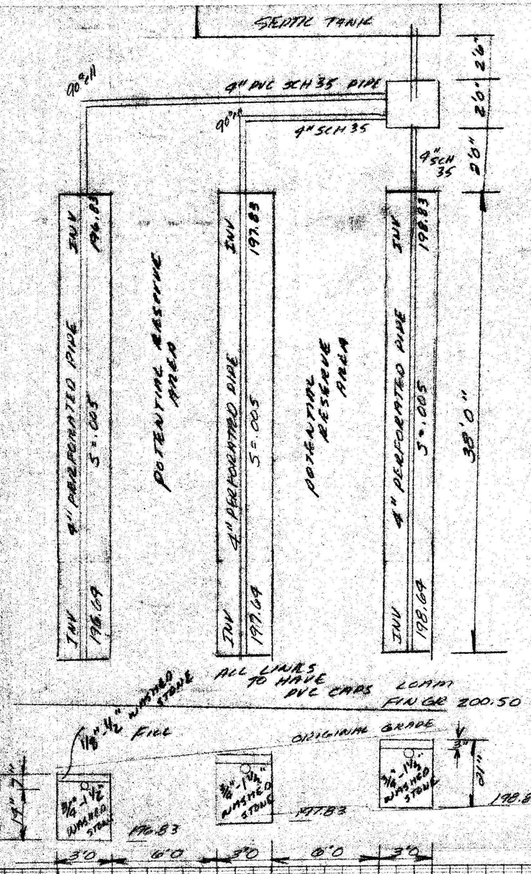


PERCOLATION TEST
DEPTH 51" (18" hole)
DATE APRIL 1 1988
EVER W.J. SIERUTA PE
WITNESS D. PINSKI

PERC TEST 1
ACTUAL RATE 6.66 min/inch
DESIGN RATE 8.0 min/inch
DEPTH 51"

PERC TEST 2
ACTUAL RATE 9.26
DESIGN RATE 10.0 min/inch
DEPTH 51"





DESIGN NOTES

ALL CONSTRUCTION TO BE IN ACCORDANCE WITH 310 CMR 15 TITLE 5 AND LOCAL BOARD OF HEALTH REQUIREMENTS

FINISH CONTOURS TO BE ALTERED ELEVATION AT TEST PITS AND PERC SITES TO REMAIN 200
FILL TO FOUNDATION TO BE ADDED

DESIGN CRITERIA

USE SINGLE FAMILY RESIDENTIAL DWELLING
4 BEDROOMS 2½ BATHROOMS, FULL BMT
NO DISPOSAL

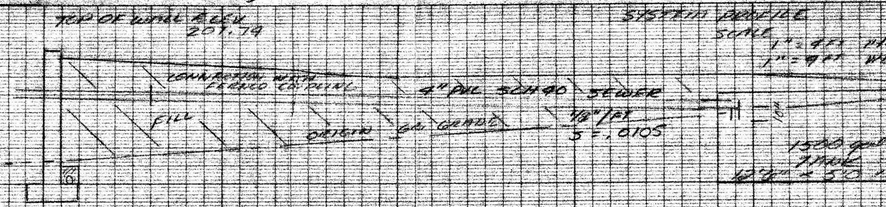
DESIGN FLOW 310 CMR 15.02 and Health Regulation
110 gal/bedroom × 4 bedrooms × 1.25
550 gals/day

SEPTIC TANK 310 CMR 15.00
550 gal/day × 150% = 825 gals
USE 1500 gal tank PER OWNERS request

LEACHING SYSTEM DESIGN
DUE TO SOIL CONDITIONS AND DEPTH TO WATER THREE LEACHING TRENCHES ARE TO BE USED

EFFECTIVE DEPTH 14"
EFFECTIVE WIDTH 36"
EFFECTIVE LENGTH 38' 3 TRENCHES 114 FT BETWEEN TRENCHES
310 CMR 15.14

AREA USE 3 TRENCHES
SIDEWALL (3 × 14" × 38' × 2) + (14" × 38' × 3) = 275.5 FT²
BOTTOM (36" × 3 × 38') = 342 FT²
PERMEABILITY
342 × .69 + 275.5 × 1.25 = 559.9 gals/day
OK FOR design



INSTALLATION NOTES

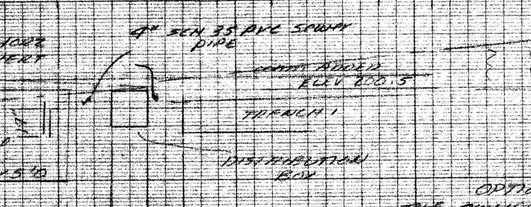
1. SEPTIC TANK TO HAVE INLET AND OUTLET TEES INSTALLED IN ACCORDANCE WITH 310 CMR 15.06 SEC 6, 7
2. TANK AND DISTRIBUTION BOX TO BE INSTALLED LEVEL ON COMPACTED MATERIAL
3. ALL PIPE JOINTS WITH TANK & DIST BOX TO BE MORTAR SEALED
4. ALL DISTURBED AREAS TO BE LOAMED AND SEEDED

SCOPE OFFSET CALCULATION
DUE TO FILL BEING ADDED TO GRADE AROUND BUILDING
310 CMR 15

SCOPE 2 FT/100 ORIGINAL LENGTH PROFILE
AT ELEVATION TRENCH #1
199.41

132 × 2'/25 = 15' REQUIRED

AVAILABLE AFTER RECONTOURING COMPLETED
25' AVAILABLE
OK FOR SCOPE OFFSET



OPTIONAL WATER SUPPLIES
THE OWNER HAS TWO OPTIONS FOR A WATER SUPPLY
ONE IS PUBLIC WATER
THE SECOND IS A DEEP WELL
PLANNED LOCATIONS ARE NOTED

THE RESERVE AREA FOR THE SEPTIC SYSTEM CAN BE MET BY TWO LOCATION

RESERVE AREA LOCATED BETWEEN TRENCHES 310 CMR 15.19
OR
A RESERVE AREA LOCATED UNDER PERC 2 TP1-2 LOCATION AS SHOWN

ALBERT R TERHUNE & OLGA L TERHUNE
96 LEVERETT RD
AMHERST, MASS
LOT 1
SEPTIC SYSTEM PLANS

EDGE W.J. SIERUTA PE.
DATE: APRIL 4 1988

HEALTH DEPARTMENT
APR 05 1988