

73 FLAT HILLS



73 Flat Hills Rd

**ENVIRONMENTAL FIELD SERVICES, INC.**  
**P.O. BOX 518**  
**LEEDS, MA 01053**  
**1-413-586-7200**

December 15, 1997

John Loeb  
73 Flat Hills Road  
Amherst, MA 01002

re: Septic System Inspection at 73 Flat Hills Road, Amherst, MA

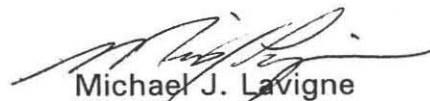
Dear John:

Enclosed please find a copy of my report for the referenced inspection. I have forwarded a copy of the report to the Amherst Board of Health per the requirements of 310 CMR 15.300, and to Lynn Reynolds per your request.

Based on the results of my inspection in accordance with 310 CMR 15.300, I have concluded that the system does not meet any of the failure criteria specified at 310 CMR 15.303.

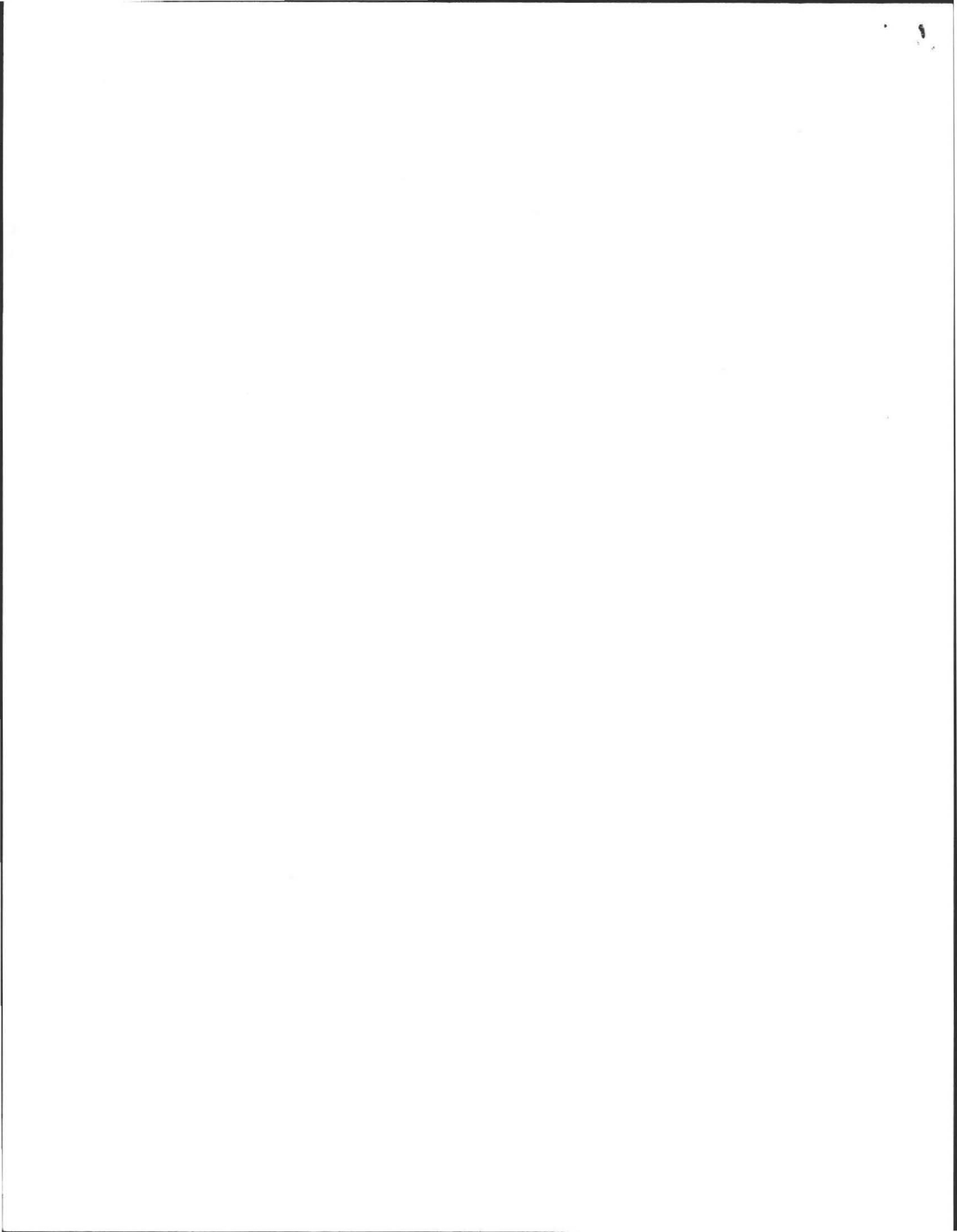
Please call if you have any questions, and thank you for this opportunity to be of service.

Sincerely yours,



Michael J. Lavigne  
Environmental Engineer  
Certified System Inspector

Rec 2/5/98



SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM  
PART A  
CERTIFICATION (continued)

Property Address:  
Owner:  
Date of Inspection:

**B) SYSTEM CONDITIONALLY PASSES (continued)**

- Sewage backup or breakout or high static water level observed in the distribution box is due to broken or obstructed pipe(s) or due to a broken, settled or uneven distribution box. The system will pass inspection if (with approval of the Board of Health). Describe observations:
  - broken pipe(s) are replaced
  - obstruction is removed
  - distribution box is levelled or replaced
  
- The system required pumping more than four times a year due to broken or obstructed pipe(s). The system will pass inspection if (with approval of the Board of Health):
  - broken pipe(s) are replaced
  - obstruction is removed

**C) FURTHER EVALUATION IS REQUIRED BY THE BOARD OF HEALTH:**

- Conditions exist which require further evaluation by the Board of Health in order to determine if the system is failing to protect the public health, safety and the environment.
  - 1) **SYSTEM WILL PASS UNLESS BOARD OF HEALTH DETERMINES THAT THE SYSTEM IS NOT FUNCTIONING IN A MANNER WHICH WILL PROTECT THE PUBLIC HEALTH AND SAFETY AND THE ENVIRONMENT:**
    - Cesspool or privy is within 50 feet of a surface water
    - Cesspool or privy is within 50 feet of a bordering vegetated wetland or a salt marsh.
  
  - 2) **SYSTEM WILL FAIL UNLESS THE BOARD OF HEALTH (AND PUBLIC WATER SUPPLIER, IF APPROPRIATE) DETERMINES THAT THE SYSTEM IS FUNCTIONING IN A MANNER THAT PROTECTS THE PUBLIC HEALTH AND SAFETY AND THE ENVIRONMENT:**
    - The system has a septic tank and soil absorption system (SAS) and the SAS is within 100 feet to a surface water supply or tributary to a surface water supply.
    - The system has a septic tank and soil absorption system and the SAS is within a Zone I of a public water supply well.
    - The system has a septic tank and soil absorption system and the SAS is within 50 feet of a private water supply well.
    - The system has a septic tank and soil absorption system and the SAS is less than 100 feet but 50 feet or more from a private water supply well, unless a well water analysis for coliform bacteria and volatile organic compounds indicates that the well is free from pollution from that facility and the presence of ammonia nitrogen and nitrate nitrogen is equal to or less than 5 ppm. Method used to determine distance \_\_\_\_\_ (approximation not valid).

**3) OTHER**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



COMMONWEALTH OF MASSACHUSETTS  
 EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS  
 DEPARTMENT OF ENVIRONMENTAL PROTECTION  
 ONE WINTER STREET, BOSTON, MA 02108 617-292-5500

WILLIAM F. WELD  
 Governor

TRUDY COXE  
 Secretary

ARGEO PAUL CELLUCCI  
 Lt. Governor

DAVID B. STRUHS  
 Commissioner

SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM  
 PART A  
 CERTIFICATION

Property Address: 73 Flat Hills Road, Amherst  
 Date of Inspection: 12-10-97  
 Name of Inspector: Mike Lavigne

Address of Owner:  
 (If different)

John Loeb  
73 Flat Hills Rd  
Amherst, MA 01002

I am a DEP approved system inspector pursuant to Section 15.340 of Title 5 (310 CMR 15.000)

Company Name: E.F.S.  
 Mailing Address: 01053-0518  
 Telephone Number: 586-7200

CERTIFICATION STATEMENT

I certify that I have personally inspected the sewage disposal system at this address and that the information reported below is true, accurate and complete as of the time of inspection. The inspection was performed based on my training and experience in the proper function and maintenance of on-site sewage disposal systems. The system:

- Passes
- Conditionally Passes
- Needs Further Evaluation By the Local Approving Authority
- Fails

Inspector's Signature: [Signature]

Date: 12/14/97

The System Inspector shall submit a copy of this inspection report to the Approving Authority within thirty (30) days of completing this inspection. If the system is a shared system or has a design flow of 10,000 gpd or greater, the inspector and the system owner shall submit the report to the appropriate regional office of the Department of Environmental Protection. The original should be sent to the system owner and copies sent to the buyer, if applicable, and the approving authority.

INSPECTION SUMMARY: Check *A, B, C, or D*:

**A) SYSTEM PASSES:**

I have not found any information which indicates that the system violates any of the failure criteria as defined in 310 CMR 15.303. Any failure criteria not evaluated are indicated below.

COMMENTS: \_\_\_\_\_

**B) SYSTEM CONDITIONALLY PASSES:**

\_\_\_\_\_ One or more system components as described in the "Conditional Pass" section need to be replaced or repaired. The system, upon completion of the replacement or repair, as approved by the Board of Health, will pass.

Indicate yes, no, or not determined (Y, N, or ND). Describe basis of determination in all instances. If "not determined", explain why not.

\_\_\_\_\_ The septic tank is metal, unless the owner or operator has provided the system inspector with a copy of a Certificate of Compliance (attached) indicating that the tank was installed within twenty (20) years prior to the date of the inspection; or the septic tank, whether or not metal, is cracked, structurally unsound, shows substantial infiltration or exfiltration, or tank failure is imminent. The system will pass inspection if the existing septic tank is replaced with a conforming septic tank as approved by the Board of Health.

SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM  
PART B  
CHECKLIST

Property Address:  
Owner:  
Date of Inspection:

Check if the following have been done: You must indicate either "Yes" or "No" as to each of the following:

- | Yes                                 | No                       |   |
|-------------------------------------|--------------------------|---|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Pumping information was provided by the owner, occupant, or Board of Health.  |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | None of the system components have been pumped for at least two weeks and the system has been receiving normal flow rates during that period. Large volumes of water have not been introduced into the system recently or as part of this inspection. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | As built plans have been obtained and examined. Note if they are not available with N/A.  |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | The facility or dwelling was inspected for signs of sewage back-up.   |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | The system does not receive non-sanitary or industrial waste flow.  |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | The site was inspected for signs of breakout.   |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | All system components, excluding the Soil Absorption System, have been located on the site.   |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | The septic tank manholes were uncovered, opened, and the interior of the septic tank was inspected for condition of baffles or tees, material of construction, dimensions, depth of liquid, depth of sludge, depth of scum.                           |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | The size and location of the Soil Absorption System on the site has been determined based on:<br>The facility owner (and occupants, if different from owner) were provided with information on the proper maintenance of Sub-Surface Disposal System. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Existing information. Ex. Plan at B.O.H.  |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Determined in the field (if any of the failure criteria related to Part C is at issue, approximation of distance is unacceptable) [15.302(3)(b)]  |

**SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM  
PART A  
CERTIFICATION (continued)**

Property Address:  
Owner:  
Date of Inspection:

**D) SYSTEM FAILS:**

You must indicate either "Yes" or "No" as to each of the following:

\_\_\_\_\_ I have determined that the system violates one or more of the following failure criteria as defined in 310 CMR 15.303. The basis for this determination is identified below. The Board of Health should be contacted to determine what will be necessary to correct the failure.

- | Yes | No  |  |
|-----|-----|--|
| ___ | ___ | Backup of sewage into facility or system component due to an overloaded or clogged SAS or cesspool.  |
| ___ | ___ | Discharge or ponding of effluent to the surface of the ground or surface waters due to an overloaded or clogged SAS or cesspool.   |
| ___ | ___ | Static liquid level in the distribution box above outlet invert due to an overloaded or clogged SAS or cesspool.   |
| ___ | ___ | Liquid depth in cesspool is less than 6" below invert or available volume is less than 1/2 day flow.   |
| ___ | ___ | Required pumping more than 4 times in the last year <u>NOT</u> due to clogged or obstructed pipe(s).<br>Number of times pumped ___.  |
| ___ | ___ | Any portion of the Soil Absorption System, cesspool or privy is below the high groundwater elevation.  |
| ___ | ___ | Any portion of a cesspool or privy is within 100 feet of a surface water supply or tributary to a surface water supply.  |
| ___ | ___ | Any portion of a cesspool or privy is within a Zone I of a public well.  |
| ___ | ___ | Any portion of a cesspool or privy is within 50 feet of a private water supply well.   |
| ___ | ___ | Any portion of a cesspool or privy is less than 100 feet but greater than 50 feet from a private water supply well with no acceptable water quality analysis. If the well has been analyzed to be acceptable, attach copy of well water analysis for coliform bacteria, volatile organic compounds, ammonia nitrogen and nitrate nitrogen. |

**E) LARGE SYSTEM FAILS:**

You must indicate either "Yes" or "No" as to each of the following:

The following criteria apply to large systems in addition to the criteria above:

\_\_\_\_\_ The system serves a facility with a design flow of 10,000 gpd or greater (Large System) and the system is a significant threat to public health and safety and the environment because one or more of the following conditions exist:

- | Yes | No  |   |
|-----|-----|---|
| ___ | ___ | the system is within 400 feet of a surface drinking water supply  |
| ___ | ___ | the system is within 200 feet of a tributary to a surface drinking water supply   |
| ___ | ___ | the system is located in a nitrogen sensitive area (Interim Wellhead Protection Area - IWPA) or a mapped Zone II of a public water supply well) |

The owner or operator of any such system shall bring the system and facility into full compliance with the groundwater treatment program requirements of 314 CMR 5.00 and 6.00. Please consult the local regional office of the Department for further information.



SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM  
PART C  
SYSTEM INFORMATION (continued)

Property Address:  
Owner:  
Date of Inspection:

**BUILDING SEWER:**  
(Locate on site plan)

Depth below grade: 0.5'  
Material of construction: \_\_\_ cast iron  40 PVC \_\_\_ other (explain)

Distance from private water supply well or suction line 75'±  
Diameter 4"

Comments: (condition of joints, venting, evidence of leakage, etc.)  
No problems noted, primary sewer exit lines exist sub-slab and are not visible.

**SEPTIC TANK:**   
(locate on site plan)

Depth below grade: 32"  
Material of construction:  concrete \_\_\_ metal \_\_\_ Fiberglass \_\_\_ Polyethylene \_\_\_ other(explain)

If tank is metal, list age \_\_\_ Is age confirmed by Certificate of Compliance \_\_\_ (Yes/No)

Dimensions: 1500 gal. 126" x 68" x 64"  
Sludge depth: 6"-8"  
Distance from top of sludge to bottom of outlet tee or baffle: 20"  
Scum thickness: 6"  
Distance from top of scum to top of outlet tee or baffle: 4"  
Distance from bottom of scum to bottom of outlet tee or baffle: 14"  
How dimensions were determined: measured

Comments:  
(recommendation for pumping, condition of inlet and outlet tees or baffles, depth of liquid level in relation to outlet invert, structural integrity, evidence of leakage, etc.) Inlet tee plugged with powdered detergent, some backup into pipe, cleaned and flushed. Owner informed about effects of powdered detergent. Otherwise no problems noted.

**GREASE TRAP:** N/A  
(locate on site plan)

Depth below grade: \_\_\_  
Material of construction: \_\_\_ concrete \_\_\_ metal \_\_\_ Fiberglass \_\_\_ Polyethylene \_\_\_ other(explain)

Dimensions: \_\_\_\_\_  
Scum thickness: \_\_\_\_\_  
Distance from top of scum to top of outlet tee or baffle: \_\_\_\_\_  
Distance from bottom of scum to bottom of outlet tee or baffle: \_\_\_\_\_  
Date of last pumping: \_\_\_\_\_

Comments:  
(recommendation for pumping, condition of inlet and outlet tees or baffles, depth of liquid level in relation to outlet invert, structural integrity, evidence of leakage, etc.) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM  
PART C  
SYSTEM INFORMATION

Property Address:  
Owner:  
Date of Inspection:

FLOW CONDITIONS

**RESIDENTIAL:**

Design flow: 550 g.p.d./bedroom for S.A.S.  
Number of bedrooms: 4  
Number of current residents: 4  
Garbage grinder (yes or no): yes  
Laundry connected to system (yes or no): yes  
Seasonal use (yes or no): no  
Water meter readings, if available (last two (2) year usage (gpd): N/A  
Sump Pump (yes or no): no

Last date of occupancy: current

**COMMERCIAL/INDUSTRIAL:**

Type of establishment: \_\_\_\_\_  
Design flow: \_\_\_\_\_ gallons/day  
Grease trap present: (yes or no) \_\_\_\_\_  
Industrial Waste Holding Tank present: (yes or no) \_\_\_\_\_  
Non-sanitary waste discharged to the Title 5 system: (yes or no) \_\_\_\_\_  
Water meter readings, if available: \_\_\_\_\_

Last date of occupancy: \_\_\_\_\_

OTHER: (Describe) \_\_\_\_\_

Last date of occupancy: \_\_\_\_\_

GENERAL INFORMATION

**PUMPING RECORDS** and source of information:

1986 new system - never pumped, 1992 new 1500 gal. tank - never pumped,  
System pumped as part of inspection: (yes or no) yes per owner.  
If yes, volume pumped: 1500 gallons  
Reason for pumping: To inspect tank interior, never pumped before

**TYPE OF SYSTEM**

- Septic tank/distribution box/soil absorption system  
 Single cesspool  
 Overflow cesspool  
 Privy  
 Shared system (yes or no) (if yes, attach previous inspection records, if any)  
 I/A Technology etc. Copy of up to date contract?  
Other \_\_\_\_\_

**APPROXIMATE AGE** of all components, date installed (if known) and source of information: New 1986, new tank 1992  
per owner. DWCP attached.

Sewage odors detected when arriving at the site: (yes or no) no

SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM  
PART C  
SYSTEM INFORMATION (continued)

Property Address:  
Owner:  
Date of Inspection:

SOIL ABSORPTION SYSTEM (SAS):   
(locate on site plan, if possible; excavation not required, but may be approximated by non-intrusive methods)

If not determined to be present, explain:

Examined from D-box

Type:

leaching pits, number: \_\_\_\_\_  
leaching chambers, number: \_\_\_\_\_  
leaching galleries, number: \_\_\_\_\_  
leaching trenches, number, length: 2, 45' (L) x 3' (W) x 1.5' (D) - per DWCP.  
leaching fields, number, dimensions: \_\_\_\_\_  
overflow cesspool, number: \_\_\_\_\_  
Alternative system: \_\_\_\_\_  
Name of Technology: \_\_\_\_\_

Comments:

(note condition of soil, signs of hydraulic failure, level of ponding, condition of vegetation, etc.)

No problems noted.

CESSPOOLS: N/A  
(locate on site plan)

Number and configuration: \_\_\_\_\_  
Depth-top of liquid to inlet invert: \_\_\_\_\_  
Depth of solids layer: \_\_\_\_\_  
Depth of scum layer: \_\_\_\_\_  
Dimensions of cesspool: \_\_\_\_\_  
Materials of construction: \_\_\_\_\_  
Indication of groundwater: \_\_\_\_\_  
inflow (cesspool must be pumped as part of inspection) \_\_\_\_\_

Comments:

(note condition of soil, signs of hydraulic failure, level of ponding, condition of vegetation, etc.)

PRIVY: N/A  
(locate on site plan)

Materials of construction: \_\_\_\_\_ Dimensions: \_\_\_\_\_  
Depth of solids: \_\_\_\_\_  
Comments:  
(note condition of soil, signs of hydraulic failure, level of ponding, condition of vegetation, etc.)

SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM  
PART C  
SYSTEM INFORMATION (continued)

Property Address:  
Owner:  
Date of Inspection:

TIGHT OR HOLDING TANK: N/A (Tank must be pumped prior to, or at time, of inspection)  
(locate on site plan)

Depth below grade: \_\_\_\_\_  
Material of construction:  concrete  metal  Fiberglass  Polyethylene  other(explain) \_\_\_\_\_  
\_\_\_\_\_

Dimensions: \_\_\_\_\_  
Capacity: \_\_\_\_\_ gallons  
Design flow: \_\_\_\_\_ gallons/day  
Alarm level: \_\_\_\_\_ Alarm in working order  Yes;  No  
Date of previous pumping: \_\_\_\_\_  
Comments:  
(condition of inlet tee, condition of alarm and float switches, etc.)  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

DISTRIBUTION BOX:   
(locate on site plan)

Depth of liquid level above outlet invert: 0"

Comments:  
(note if level and distribution is equal, evidence of solids carryover, evidence of leakage into or out of box, etc.)  
No problems noted.  
\_\_\_\_\_  
\_\_\_\_\_

PUMP CHAMBER: N/A  
(locate on site plan)

Pumps in working order: (Yes or No) \_\_\_\_\_  
Alarms in working order (Yes or No) \_\_\_\_\_  
Comments:  
(note condition of pump chamber, condition of pumps and appurtenances, etc.) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM  
PART C  
SYSTEM INFORMATION (continued)

Property Address:  
Owner:  
Date of Inspection:

Depth to Groundwater ~~21~~<sup>21"</sup> Feet

Please indicate all the methods used to determine High Groundwater Elevation:

- Obtained from Design Plans on record
- Observation of Site (Abutting property, observation hole, basement sump etc.)
- Determine it from local conditions
- Check with local Board of health
- Check FEMA Maps
- Check pumping records
- Check local excavators, installers
- Use USGS Data

Describe in your own words how you established the High Groundwater Elevation. (Must be completed)

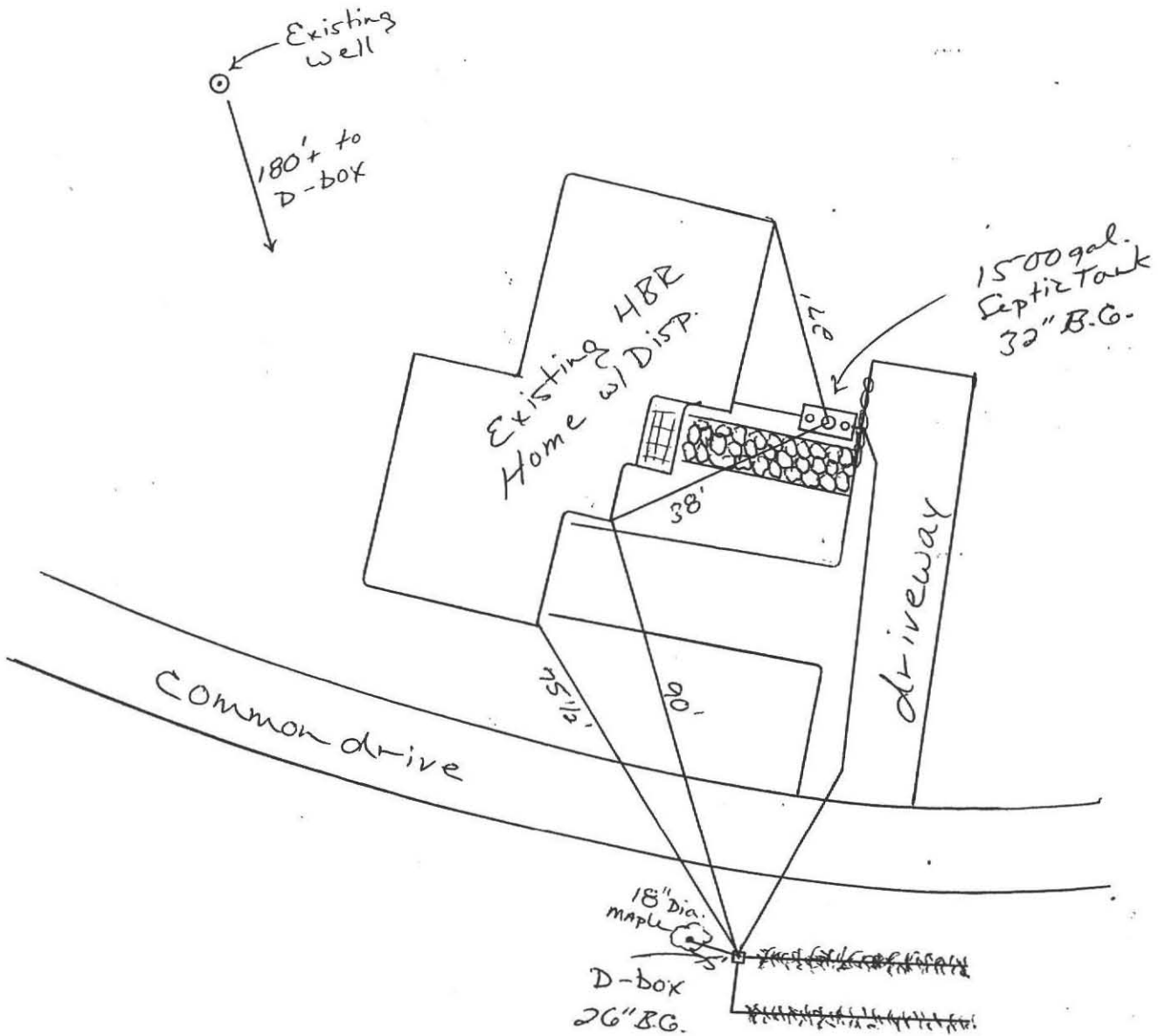
DWCP, 9/30/92 Filios Ent., attached.

SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM  
PART C  
SYSTEM INFORMATION (continued)

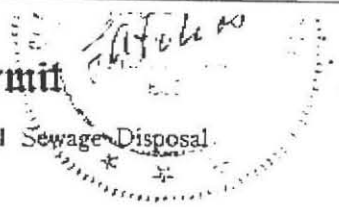
Property Address:  
Owner:  
Date of Inspection:

SKETCH OF SEWAGE DISPOSAL SYSTEM:

include ties to at least two permanent references landmarks or benchmarks  
locate all wells within 100' (Locate where public water supply comes into house)



# Application for Disposal Works Construction Permit



P.01

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

Location - Address: 73 Flat Hills Rd. # 2  
 Owner: John + Karen Loeb Address: 73 Flat Hills Rd., Amherst, MA 01002  
 Installer: \_\_\_\_\_ Address: \_\_\_\_\_

Type of Building \_\_\_\_\_ Size Lot: 128, 265 Sq. feet ±  
 Dwelling — No. of Bedrooms: 4 Expansion Attic ( ) Garbage Grinder (✓)  
 Other — Type of Building \_\_\_\_\_ No. of persons \_\_\_\_\_ Showers ( ) — Cafeteria ( )  
 Other fixtures \_\_\_\_\_

Design Flow: 55 X 125 gallons per person per day. Total daily flow: 550 gallons.

Septic Tank — Liquid capacity 1500 gallons Length: 10.5 Width: 5.0 Diameter: \_\_\_\_\_ Depth: 5.3

Disposal Trench — No. 2 Existing Width: 3.0 Total Length: 90.0 Total leaching area: 270 sq. ft. *Sidewall*

Seepage Pit No. \_\_\_\_\_ Diameter: \_\_\_\_\_ Depth below inlet: 1.50 Total leaching area: 270 sq. ft. *Bottom Area*

Other Distribution box (✓) Dosing tank ( )

Percolation Test Results Performed by: Filios Enterprises, Inc. Date: 30 Sept, 1992

Test Pit No. 1: 6 minutes per inch Depth of Test Pit: 7.1 Depth to ground water: None

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

Description of Soil: Attached

Nature of Repairs or Alterations — Answer when applicable: Replace Septic Tank for addition to house. Plan shows 2 proposed leach trenches for possible future use under separate permit.

Agreement:

The undersigned agrees to install the aforescribed Individual Sewage Disposal System in accordance with the provisions of TITLE 5 of the State Environmental 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 \_\_\_\_\_

DEC-03-1997 18:33

THE COMMONWEALTH OF MASSACHUSETTS

BOARD OF HEALTH

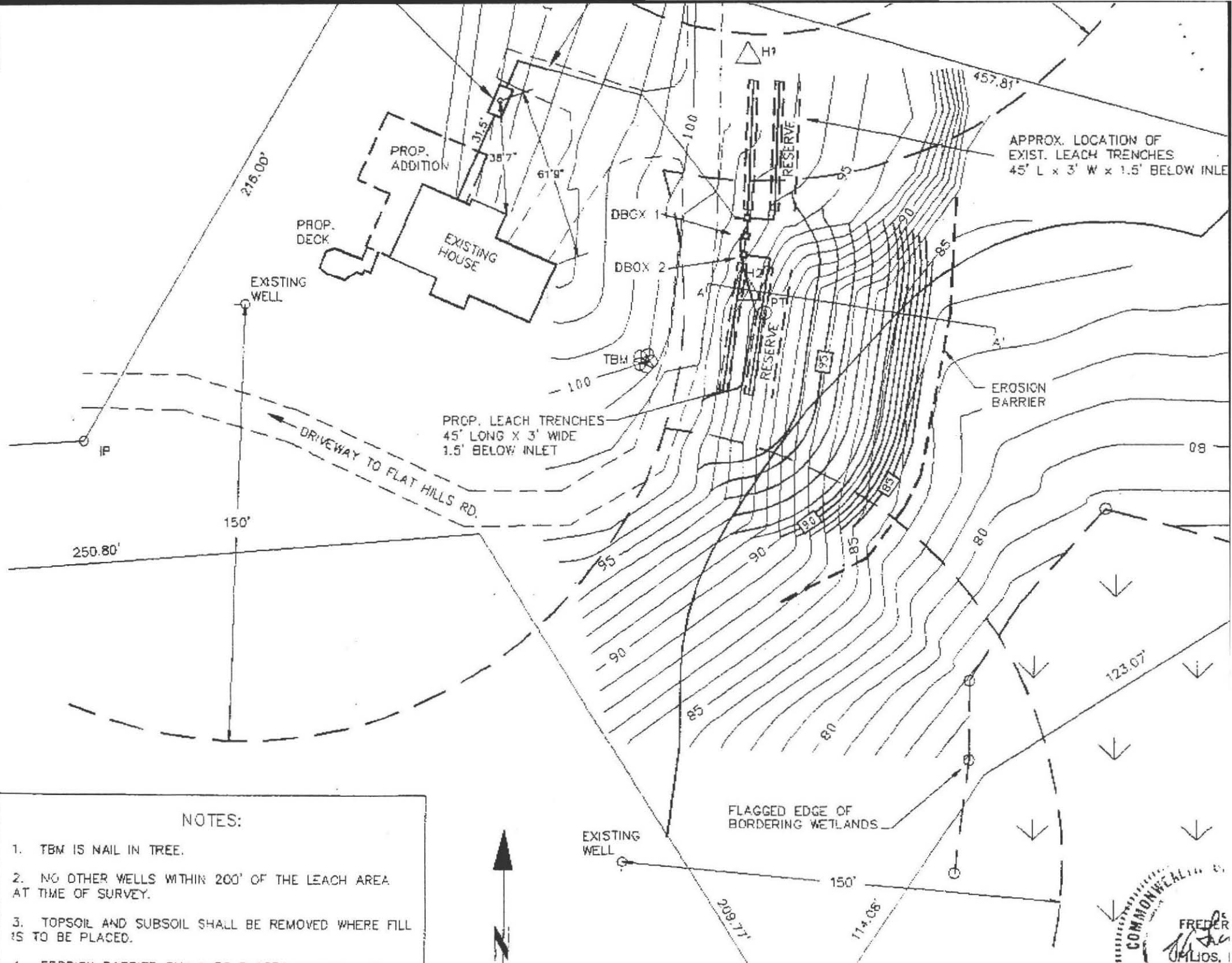
OF

## Certificate of Compliance

THIS IS TO CERTIFY. That the Individual Sewage Disposal System constructed ( ) or Repaired ( ) by \_\_\_\_\_ Installer \_\_\_\_\_



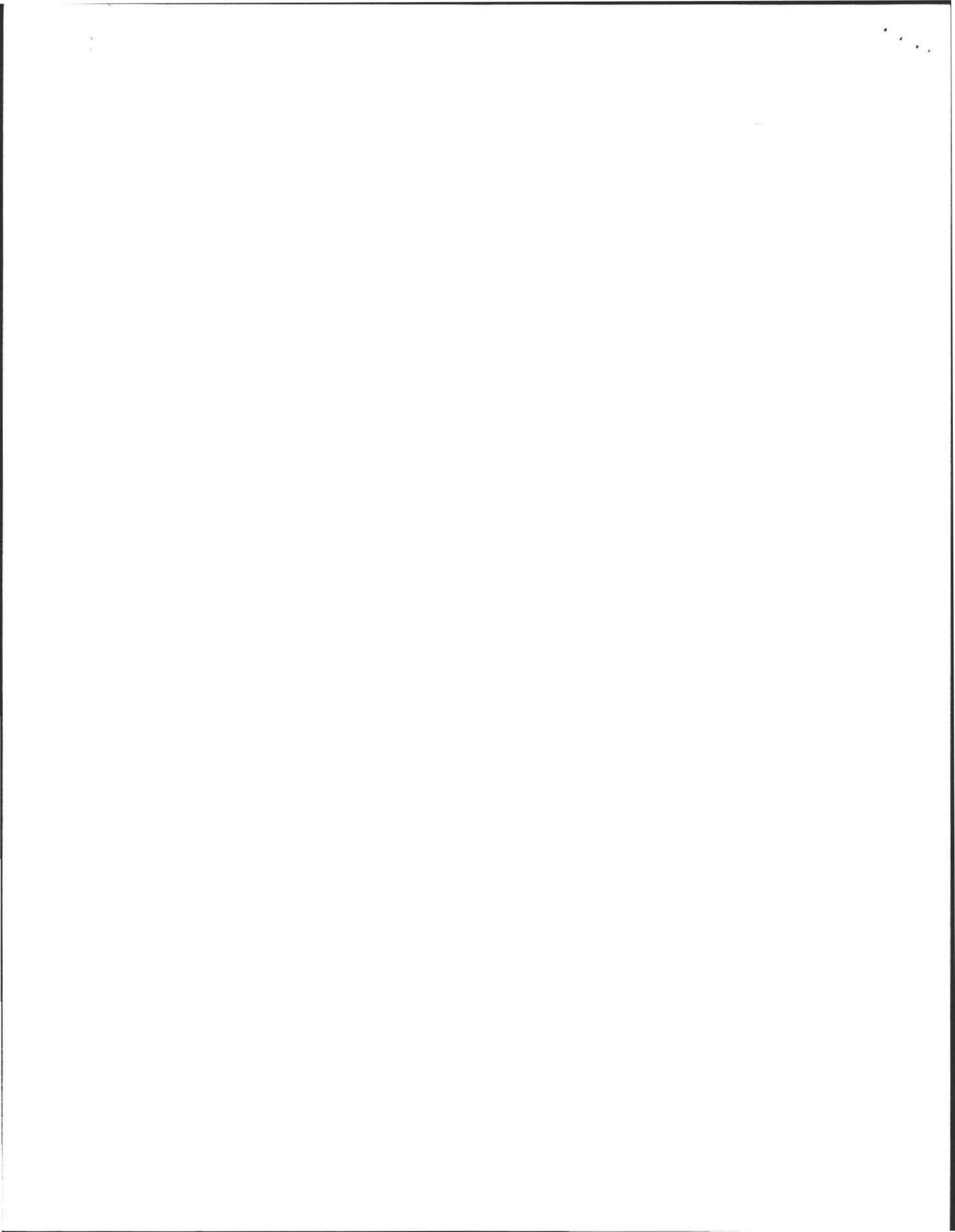




NOTES:

1. TBM IS NAIL IN TREE.
2. NO OTHER WELLS WITHIN 200' OF THE LEACH AREA AT TIME OF SURVEY.
3. TOPSOIL AND SUBSOIL SHALL BE REMOVED WHERE FILL IS TO BE PLACED.

COMMONWEALTH OF MASSACHUSETTS  
 FREDERICK S. [Signature]  
 CONSULTING ENGINEER  
 LICENSE NO. [Number]



No. ....

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:

73 Flat Hills Rd. # 2
Location - Address or Lot No.
John + Karen Loeb 73 Flat Hills Rd., Amherst, MA 01002
Owner Address

Type of Building
Dwelling - No. of Bedrooms 4 Expansion Attic ( ) Garbage Grinder (✓)
Other - Type of Building No. of persons Showers ( ) - Cafeteria ( )
Other fixtures

Design Flow 55 x 1.25 gallons per person per day. Total daily flow 550 gallons.
Septic Tank - Liquid capacity 1500 gallons Length 10.5 Width 5.0 Diameter Depth 5.3
Disposal Trench - No. 2 Existing Width 3.0 Total Length 90.0 Total leaching area 270 sq. ft.
Seepage Pit No. Diameter Depth below inlet 1.50 Total leaching area 270 sq. ft.
Other Distribution box (✓) Dosing tank ( )
Percolation Test Results Performed by Filios Enterprises, Inc. Date 30 Sept, 1992
Test Pit No. 1 6 minutes per inch Depth of Test Pit 7.1 Depth to ground water None
Test Pit No. 2 minutes per inch Depth of Test Pit Depth to ground water

Description of Soil Attached

Nature of Repairs or Alterations - Answer when applicable Replace Septic Tank for addition to house.
Plan shows 2 proposed leach trenches for possible future use under separate permit.

Agreement:
The undersigned agrees to install the aforescribed Individual Sewage Disposal System in accordance with the provisions of TITLE 5 of the State Environmental 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
Application Approved By
Application Disapproved for the following reasons:
Permit No. Issued Date

THE COMMONWEALTH OF MASSACHUSETTS

BOARD OF HEALTH

Certificate of Compliance

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

at
has been installed in accordance with the provisions of TITLE 5 of The State Environmental 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

THE COMMONWEALTH OF MASSACHUSETTS

BOARD OF HEALTH

No. OF FEE

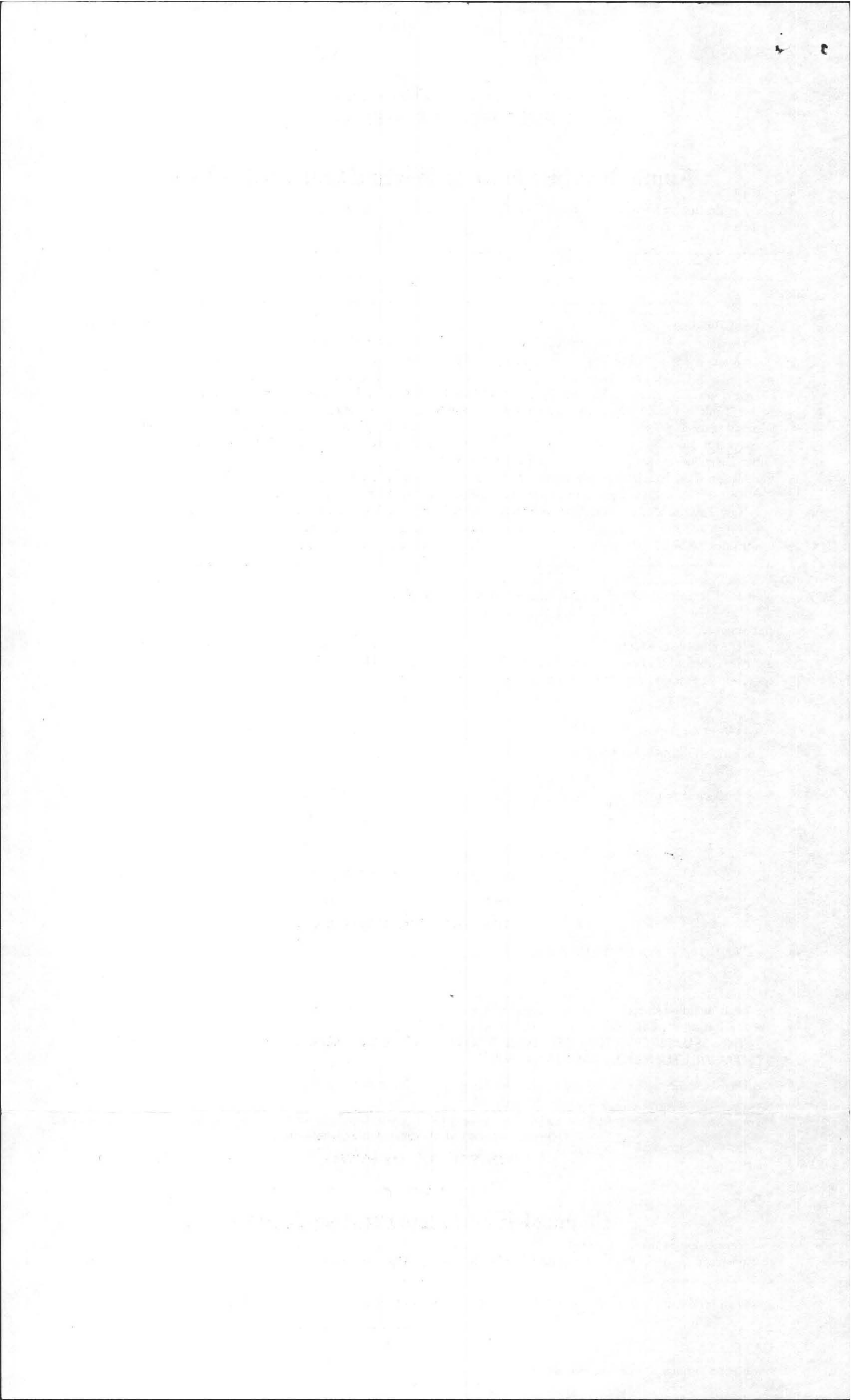
Disposal Works Construction Permit

Permission is hereby granted
to Construct ( ) or Repair ( ) an Individual Sewage Disposal System
at No.

as shown on the application for Disposal Works Construction Permit No. Dated

DATE Board of Health

CHECK OR FILL IN WHERE APPLICABLE





# Deep Soil Logs

## Filios Enterprises, Inc.

69 Pelham Rd., Amherst MA 01002. (413) 256-8008

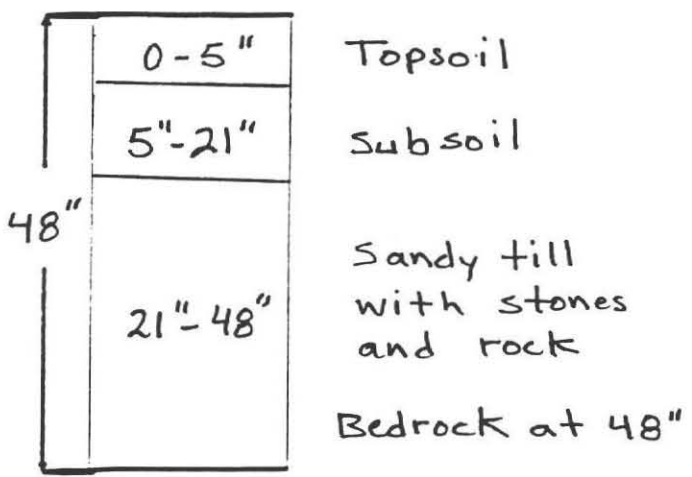
Owner: John + Karen Loeb

Date: 30 September, 1992

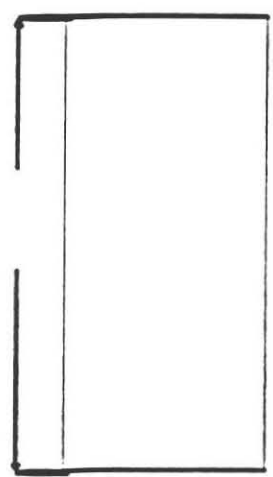
Location: 73 Flat Hills Rd.  
Amherst, MA

B. of H. David Zarozinski

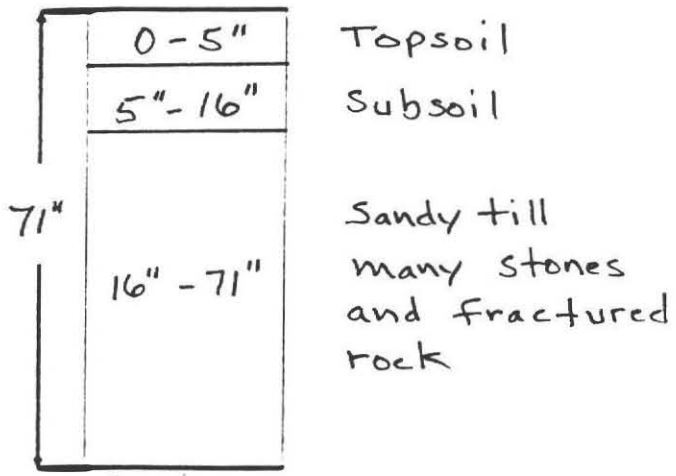
H<sub>1</sub>



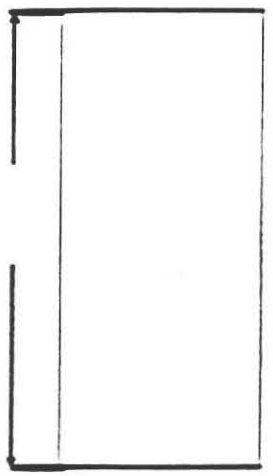
Ground Water None



Ground Water \_\_\_\_\_

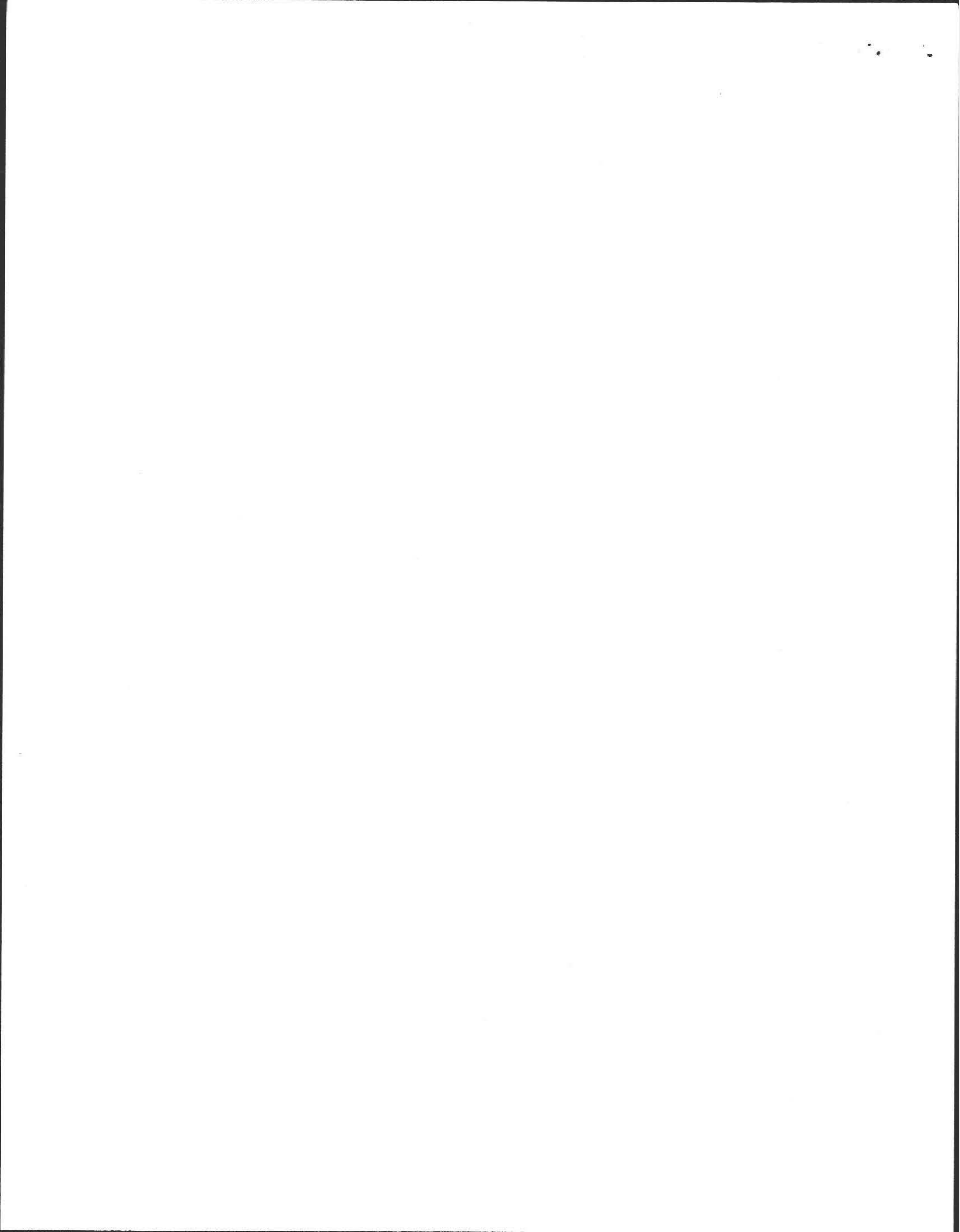


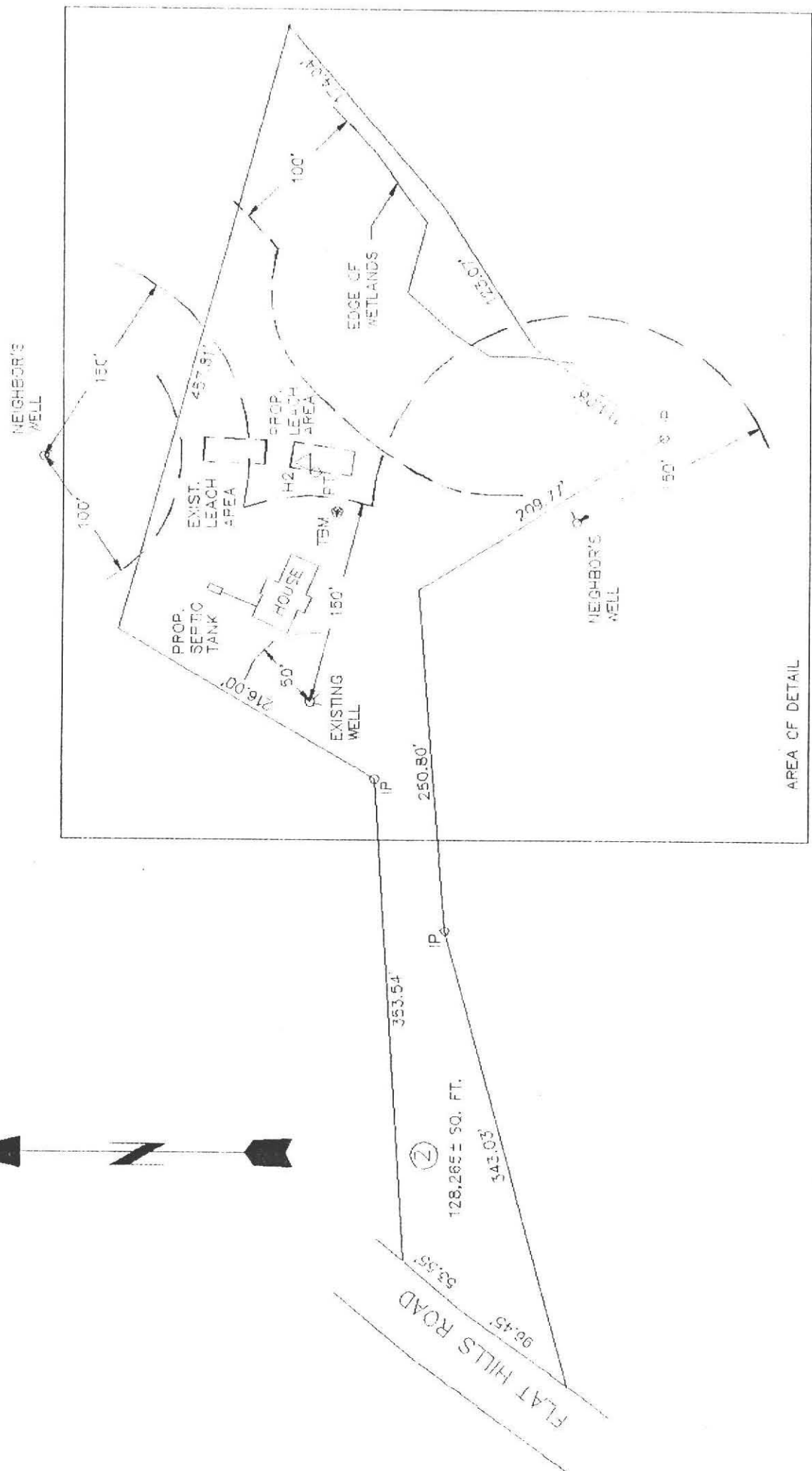
Ground Water None



Ground Water \_\_\_\_\_

Percolation Rate at: 34"  
6 min./inch

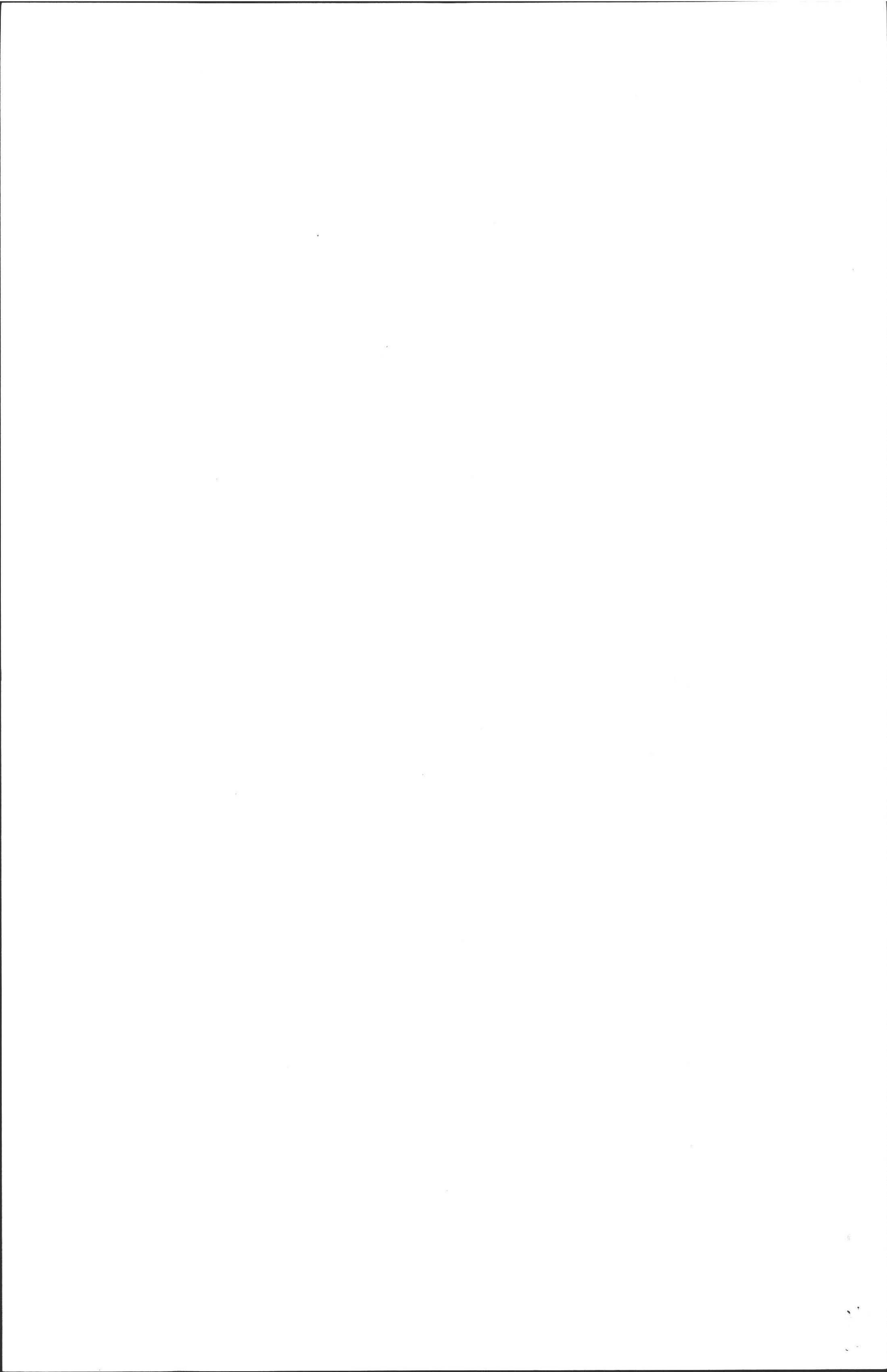




ADDITION TO HOUSE  
 NEW TANK FINISHED  
 BY L & F CONSTRUCTION



LOCUS OF SEWAGE DISPOSAL SYSTEM	
REPAIR AT 73 FLAT HILLS RD., AMHERST, MA	
BY: FILIOS ENTERPRISES, INC. 59 PELHAM RD. AMHERST, MA 01002 (413)256-8008	FOR: JOHN AND KAREN LOEB 73 FLAT HILLS RD. AMHERST, MA 01002
DRAWN BY R. STOVER	SCALE: 1" = 100'00"
29 OCTOBER, 1992	PAGE ONE OF FOUR

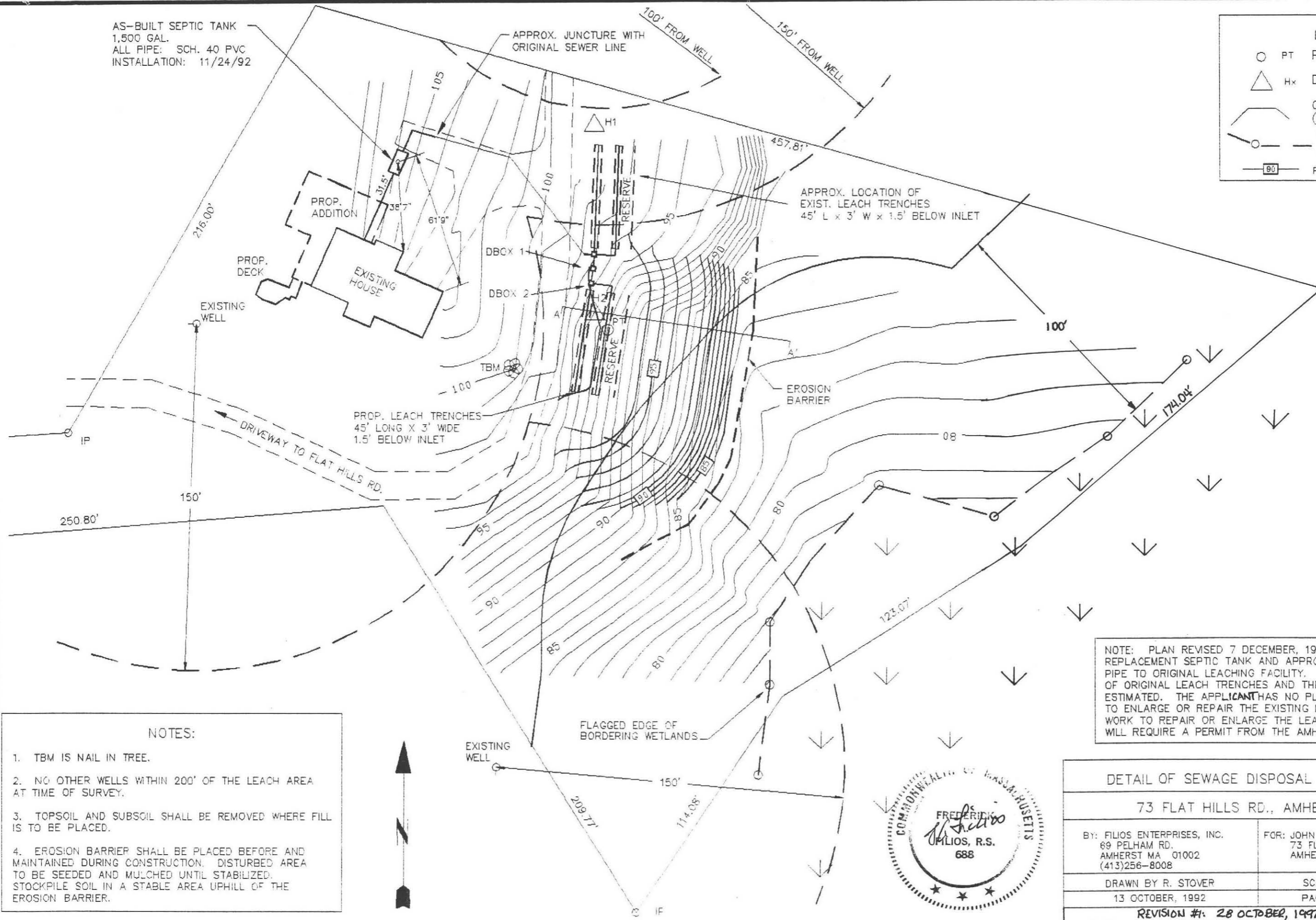




AS-BUILT SEPTIC TANK  
1,500 GAL.  
ALL PIPE: SCH. 40 PVC  
INSTALLATION: 11/24/92

**LEGEND**

- PT PERCOLATION TEST
- △ Hx DEEP TEST PIT
- CONTOUR LINES (1' INTERVAL)
- WETLAND EDGE AND FLAG
- ▭ 90 PROPOSED CONTOUR LINE



**NOTES:**

1. TBM IS NAIL IN TREE.
2. NO OTHER WELLS WITHIN 200' OF THE LEACH AREA AT TIME OF SURVEY.
3. TOPSOIL AND SUBSOIL SHALL BE REMOVED WHERE FILL IS TO BE PLACED.
4. EROSION BARRIER SHALL BE PLACED BEFORE AND MAINTAINED DURING CONSTRUCTION. DISTURBED AREA TO BE SEEDED AND MULCHED UNTIL STABILIZED. STOCKPILE SOIL IN A STABLE AREA UPHILL OF THE EROSION BARRIER.

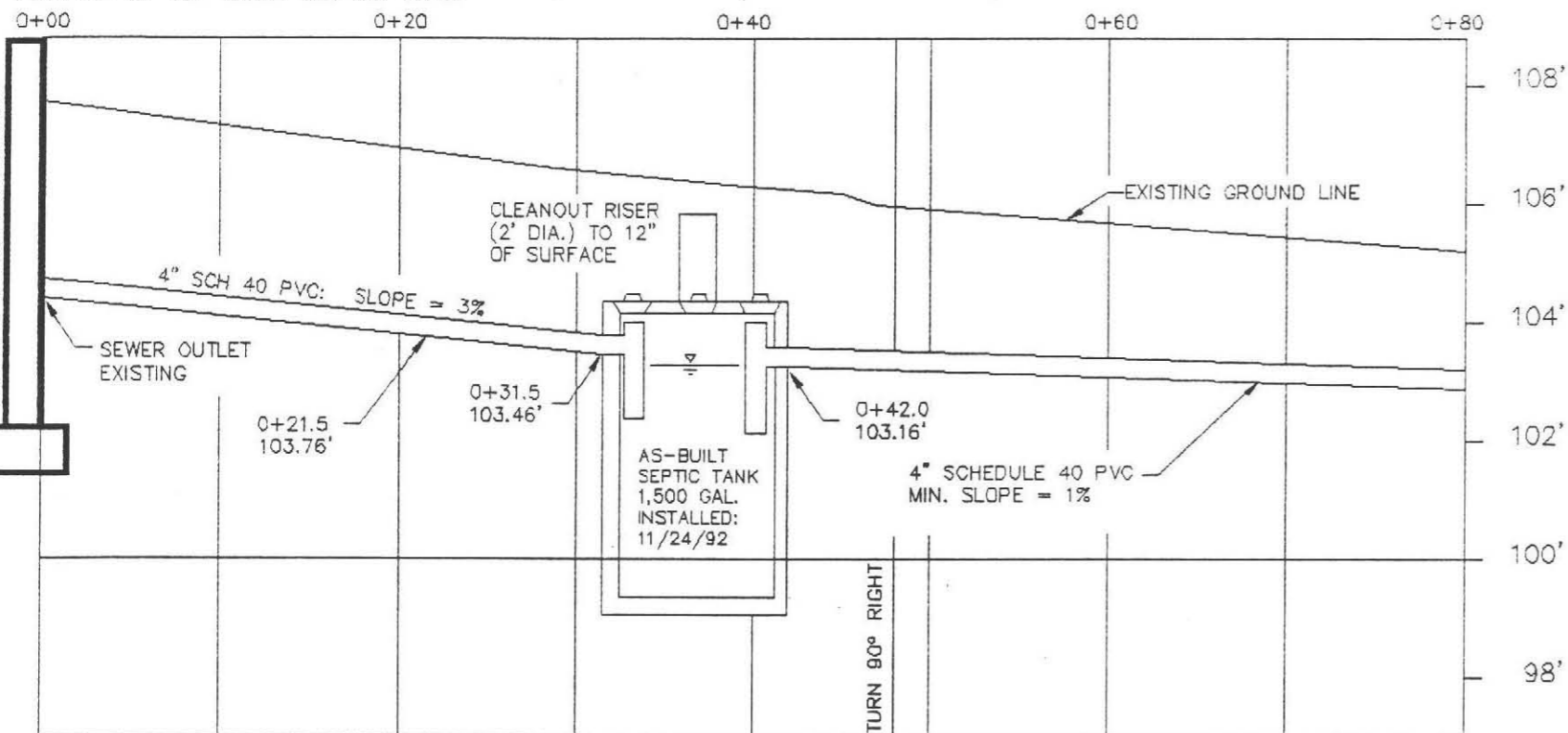
NOTE: PLAN REVISED 7 DECEMBER, 1992 TO SHOW AS-BUILT REPLACEMENT SEPTIC TANK AND APPROXIMATE JUNCTURE WITH PIPE TO ORIGINAL LEACHING FACILITY. THE LOCATION SHOWN OF ORIGINAL LEACH TRENCHES AND THE PIPE TO THEM WAS ESTIMATED. THE APPLICANT HAS NO PLANS AT PRESENT TO ENLARGE OR REPAIR THE EXISTING LEACH FACILITY. ANY WORK TO REPAIR OR ENLARGE THE LEACHING FACILITY WILL REQUIRE A PERMIT FROM THE AMHERST HEALTH DEPT.



<b>DETAIL OF SEWAGE DISPOSAL SYSTEM</b>	
73 FLAT HILLS RD., AMHERST, MA	
BY: FILIOS ENTERPRISES, INC. 69 PELHAM RD. AMHERST MA 01002 (413)256-8008	FOR: JOHN AND KAREN LOEB 73 FLAT HILLS RD. AMHERST, MA 01002
DRAWN BY R. STOVER 13 OCTOBER, 1992	SCALE: 1" = 40'00" PAGE TWO OF TWO
REVISION #1: 28 OCTOBER, 1992 (RWS)	



PROFILE OF AS-BUILT SEPTIC TANK



**SPECIFICATIONS**  
 ALL MATERIALS AND CONSTRUCTION MUST BE IN ACCORDANCE WITH COMMONWEALTH OF MASSACHUSETTS DEPT. OF ENVIRONMENTAL PROTECTION STATE ENVIRONMENTAL CODE TITLE 5.

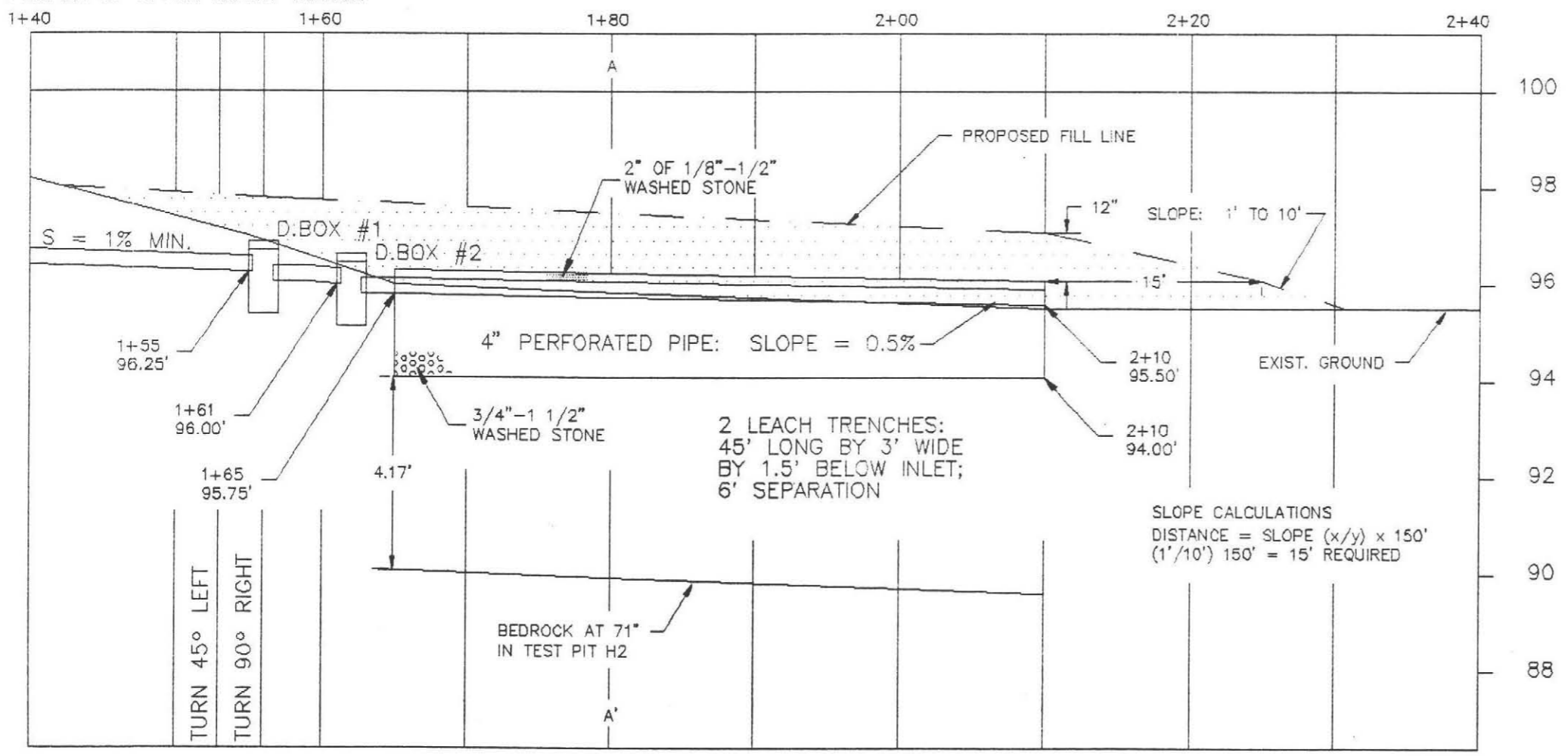
100' Elevation Assumed at TBM. TBM is nail in base of a tree as shown on the planview.



**Construction Notes**

1. Septic tank should be inspected and pumped annually.
2. Inlet and outlet tees must extend 10" and 14" below the flow line respectively.

PROFILE OF UPPER LEACH TRENCH



**CALCULATIONS**

REQUIRED: For a 4 bedroom house without a garbage grinder a capacity of 440.0 gal./day. = 550.00gal./day.

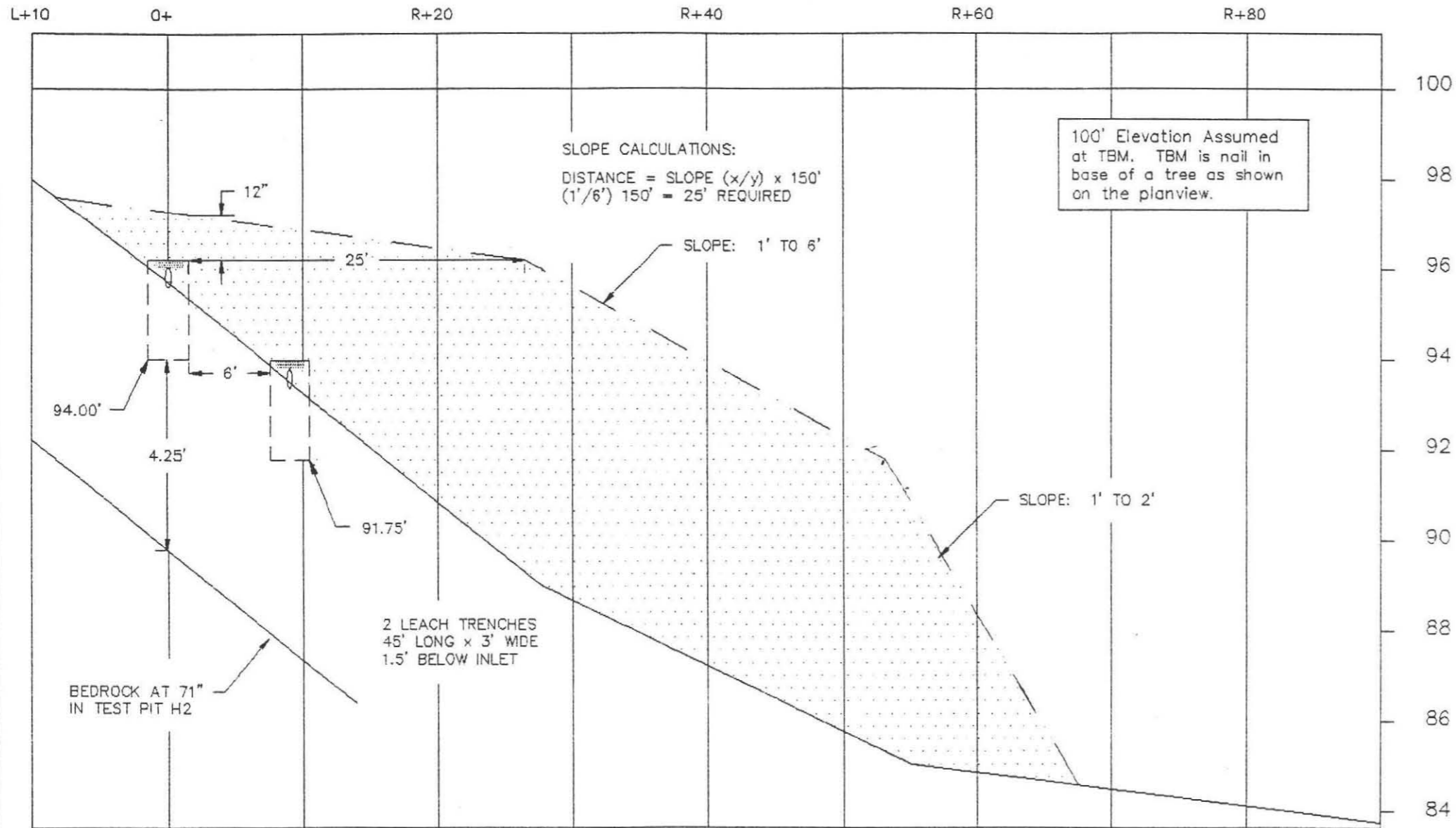
DESIGNED: 4 leach trenches 45.0'L X 3.0'W X 1.50' below inlet (effective depth), for a perc rate of 6 min./in., yielding side and bottom loading factors of 1.66 and 0.71 gal./sq.ft. respectively.

SIDEWALL: 8 Sides(45.0' X 1.5')1.66 Gal./Sq.Ft. = 896.4 Gal.  
 BOTTOM: 4 Trenches(45.0' X 3.0')0.71 Gal./Sq.Ft. = 383.4 Gal.  
 TOTAL 1279.8 Gal.

PROFILE OF SEWAGE DISPOSAL SYSTEM	
73 FLAT HILLS RD., AMHERST, MA	
BY: FILIOS ENTERPRISES, INC. 69 PELHAM RD. AMHERST MA 01002 (413)256-8008	FOR: JOHN AND KAREN LOEB 73 FLAT HILLS RD. AMHERST, MA 01002
DRAWN BY R. STOVER 23 OCTOBER, 1992	SCALE: 1" = 10' HOR. 3' VER. PAGE TWO OF THREE
REVISED: 7 DECEMBER, 1992 FOR AS-BUILT SEPTIC TANK (RWS)	



CROSS-SECTION OF LEACH TRENCHES AT A-A'



CROSS-SECTION OF LEACH TRENCHES	
73 FLAT HILLS RD., AMHERST, MA	
BY: FILIOS ENTERPRISES, INC. 69 PELHAM RD. AMHERST MA 01002 (413)256-8008	FOR: JOHN AND KAREN LOEB 73 FLAT HILLS RD. AMHERST, MA 01002
DRAWN BY R. STOVER	SCALE: 1" = 10' HOR. 3' VER.
23 OCTOBER, 1992	PAGE THREE OF THREE



BOARD OF HEALTH  
TOWN OF AMHERST, MASSACHUSETTS

Important Information Regarding Your Private Sewage Disposal System

DISPLAY THIS DOCUMENT IN A PROMINENT PLACE

Owner John O + MAREN LOEB Address 73 FLAT HILLS Rd.

Installer Harry Leclair Address \_\_\_\_\_

Date Installation Inspected and Approved 11/25/92 New TANK (ONLY)

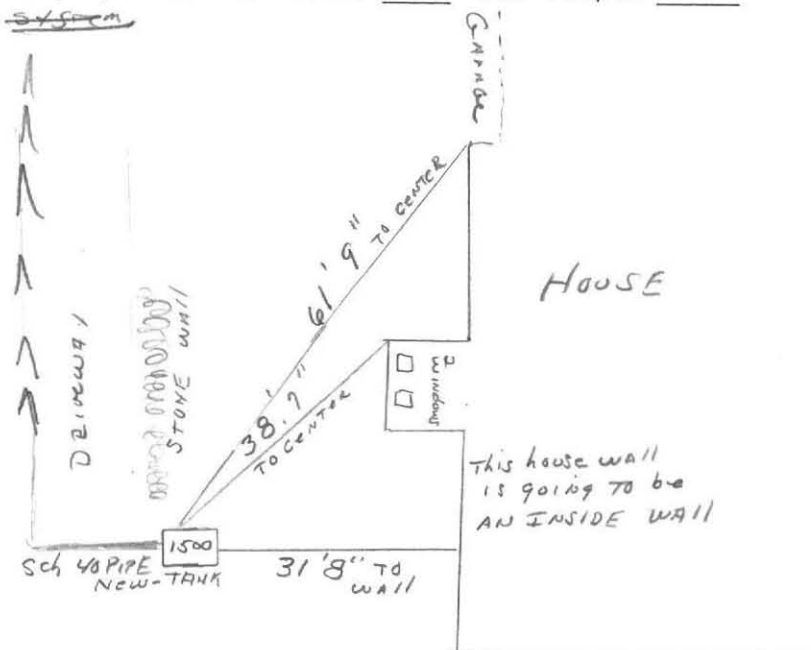
Description of System: Tank Capacity: 1500

Leach Field ( ) Bed ( ) Seepage Pit ( ) Square Feet: \_\_\_\_\_

Garbage Grinder Yes ( ) No ( ) No. Bedrooms: \_\_\_\_\_ No. People \_\_\_\_\_

Remove

**AS - BUILT PLAN:**



**PROPER MAINTENANCE OF YOUR PRIVATE SEWAGE DISPOSAL SYSTEM**

1. This system must be inspect periodically and the tank pumped out at an interval not to exceed \_\_\_\_\_ years.
2. For your protection sanitary pumpers are licensed by the Amherst Board of Health.
3. Regular pumping is crucial to avoid early failure and costly repairs of the system.
4. DO NOT dispose into the system such items as rags, string, sanitary napkins, coffee grounds as they can cause it to clog and fail.
5. Further information can be obtained by contacting your Health Department at 253-7077.





GRAWSHOW CORP 14383 - 100<sup>00</sup>  
 14382 - 60<sup>00</sup>

TOWN OF AMHERST

#92-27

PERC TEST DATA SHEET

DATE 9/30/92 LOCATION 73 FLAT HILLS ROAD LOT SIZE 2.9 AC

OWNER John Karen Loeb ADDRESS 73 FLAT HILLS ROAD TELE # 256-8759

P.E./RS FRED/PAUL FILIOS FIRM FILIOS ENT OBSERVED BY DAVID ZAROZINSKI

BACK HOE OPERATOR KARL'S BENCH MARK \_\_\_\_\_

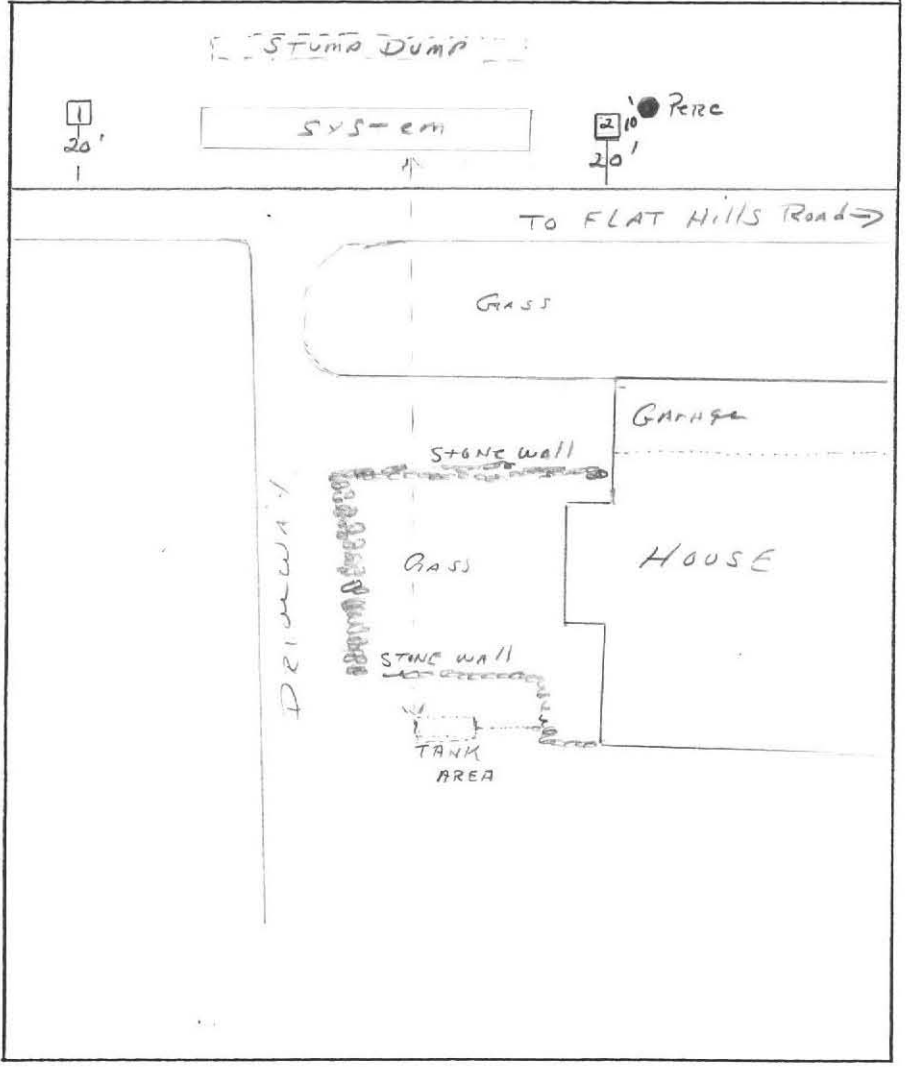
PERC DEPTH 34" PRE SOAK TIME 11:57 PERC DEPTH \_\_\_\_\_ PRE SOAK TIME \_\_\_\_\_

TEST	<u>12" 12:13</u>	<u>8" 12:21</u>	_____	_____
	<u>11" 12:14<sup>25</sup></u>	<u>7" 12:25</u>	_____	_____
	<u>10" 12:15<sup>48</sup></u>	<u>6" 12:31<sup>30</sup></u>	_____	_____
	<u>9" 12:17<sup>30</sup></u>	_____	_____	_____

RATE (6) RATE \_\_\_\_\_

#1	#2
TOP 5"	TOP 5"
SUB 21"	SUB 16"
SANDY TILL STONES ROCKS REFUSAL 48" Ledge?? DRY	SANDY TILL Ledge 71" DRY
TOP	TOP
SUB	SUB
TOP	TOP
SUB	SUB

SYSTEM HAS G/LG W 1000 GAL TANK  
 MUST BE REMOVED





No. 86-14

ck\* 3

FEE \$90  
120  
.71

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 (X) or Repair ( ) an Individual Sewage Disposal System at:

FLAT HILLS RD

LOT # 2

JOHN LOCIA

WESTMORELAND NH.

L + F CONST

HEVERETT M.

Type of Building

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 gallons.

Septic Tank - Liquid capacity 1000 gallons Length 8 Width 4 Diameter Depth 4.5

Disposal Trench - No. 2 Width 3 Total Length 90 Total leaching area 270 sq. ft.

Seepage Pit No. Diameter Depth below inlet Total leaching area 180 sq. ft. Bottom

Other Distribution box (X) Dosing tank ( )

Percolation Test Results Performed by F.A. FICUS Date 3-28-86

Test Pit No. 1 5.6 minutes per inch Depth of Test Pit 7 Depth to ground water NONE

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

Description of Soil Silty Fine Gravel - with Gravel + Sand

Nature of Repairs or Alterations - Answer when applicable

Agreement:

The undersigned agrees to install the aforescribed 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 [Signature]

Application Approved By [Signature] Date 3-28-86

Application Disapproved for the following reasons:

Permit No. 86-14 Issued 3-28-86 Date

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. dated

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

DATE Inspector

THE COMMONWEALTH OF MASSACHUSETTS

BOARD OF HEALTH

TOWN OF AMHERST

No. 86-14

FEE \$90

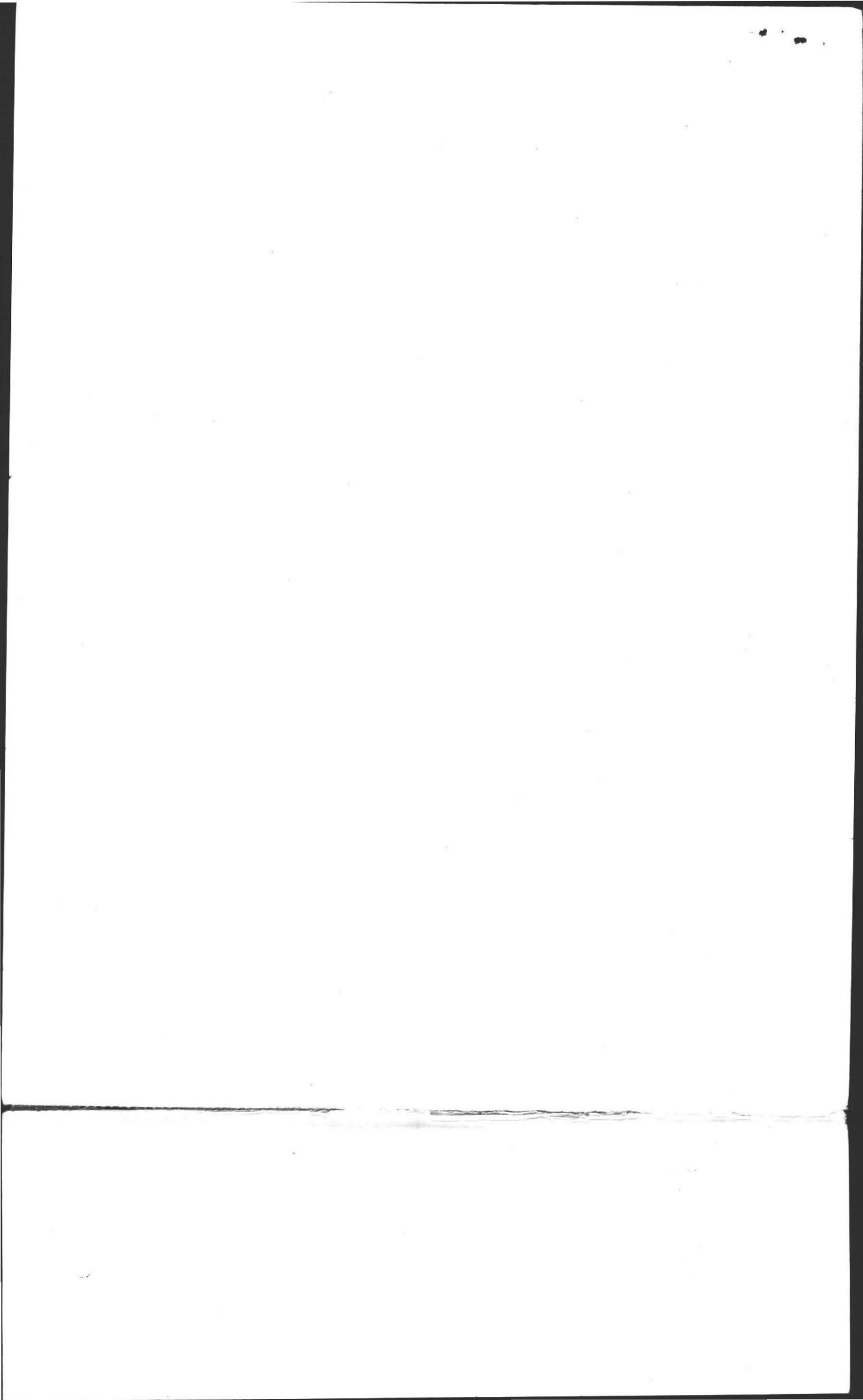
Disposal Works Construction Permit

Permission is hereby granted to Construct (X) or Repair ( ) an Individual Sewage Disposal System at No. LOT # 2 FLAT HILLS

as shown on the application for Disposal Works Construction Permit No. 86-14 Dated 3-28-86

DATE 3-28-86 [Signature] Board of Health

CHECK OR FILL IN WHERE APPLICABLE



No. ....

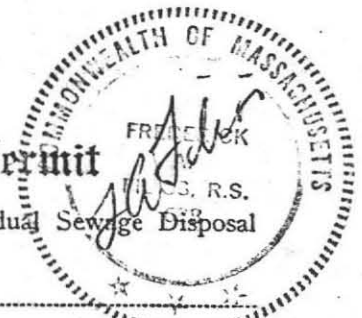
FEB .....

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 (v) or Repair ( ) an Individual Sewage Disposal System at:

FLAT HILLS ROAD LOT # 2
AMHERST BUILDING CO. P.O. Box 396, No. AMHERST

Type of Building Dwelling - No. of Bedrooms 3 Expansion Attic ( ) Garbage Grinder (no)
Other - Type of Building No. of persons Showers ( ) - Cafeteria ( )

Design Flow 55 gallons per person per day. Total daily flow 330 gallons.
Septic Tank - Liquid capacity 1000 gallons Length 8.5' Width 5' Diameter Depth 5' 70
Disposal Trench - No. 2 Width 2' Total Length 80' Total leaching area 160 sq. ft. BTM
Percolation Test Result Performed by F.A. FILIOS Date 12/3/1983

Description of Soil ENCLOSED

Nature of Repairs or Alterations - Answer when applicable

Agreement: The undersigned agrees to install the aforescribed 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

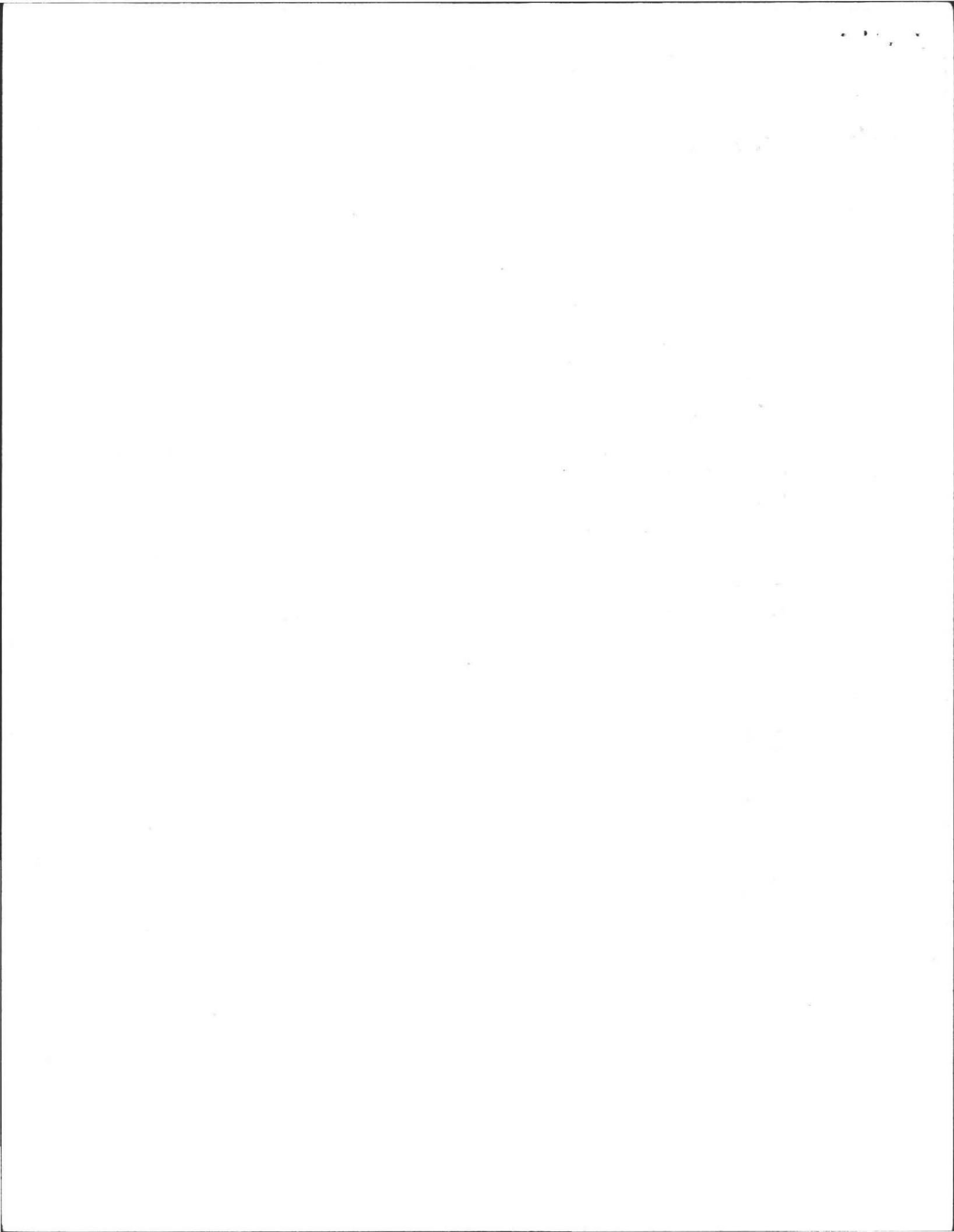
Certificate of Compliance

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. \_\_\_\_\_ 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 Amherst Building Co

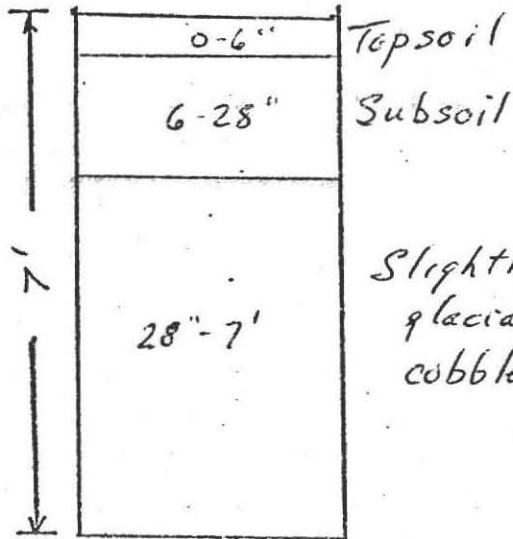
Date Dec 3 1983

LOCATION Flat Hills Road

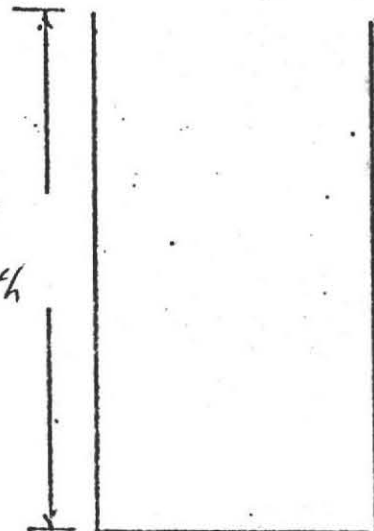
OBSERVER F.A. Filios

Soil

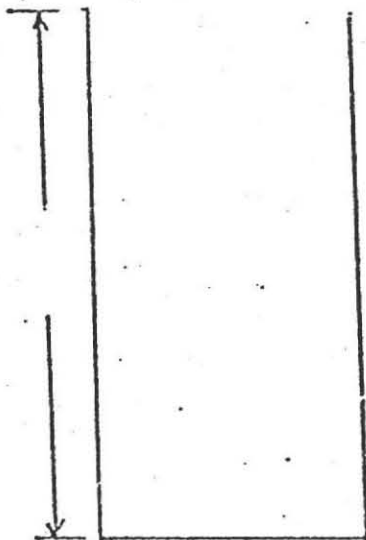
Lot # 2



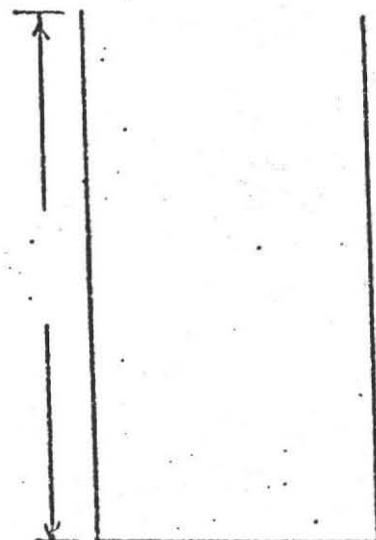
Ground Water none



Ground Water \_\_\_\_\_



Ground Water \_\_\_\_\_



Ground Water \_\_\_\_\_

Percolation Rate at 36"

5.66 minutes/inch





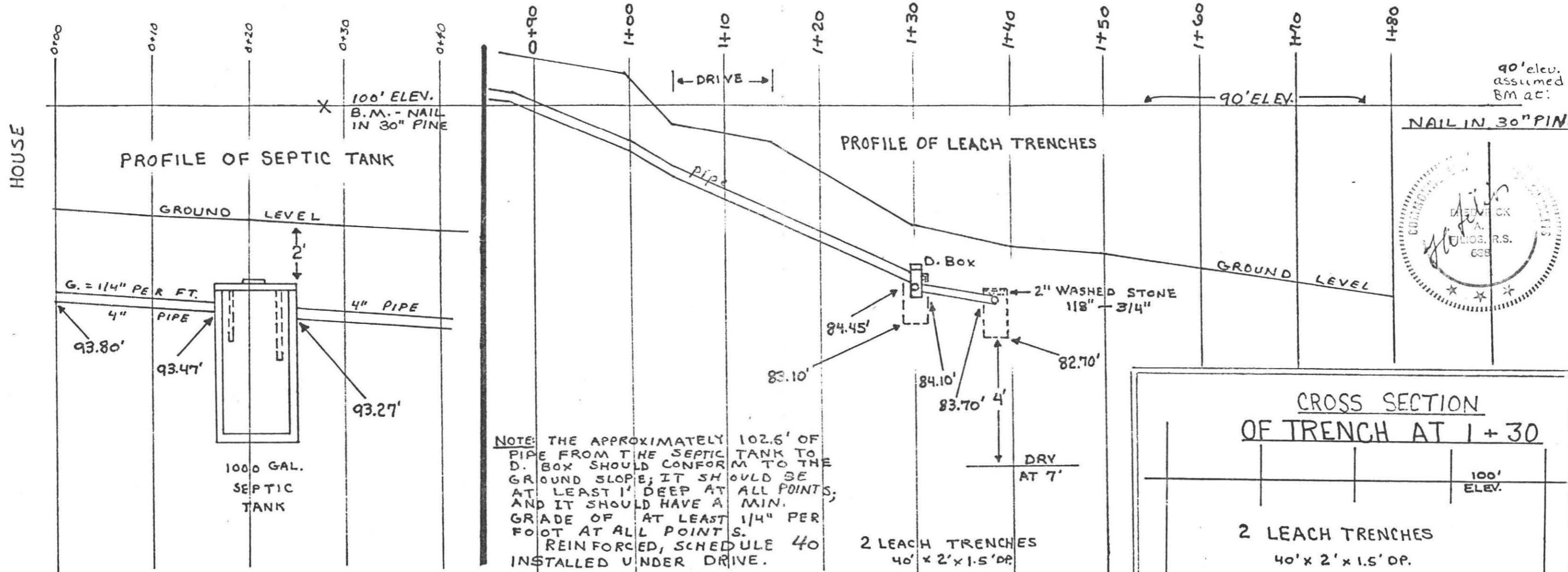


# PROFILE OF SEPTIC SYSTEM

OR: AMHERST BUILDING COMPANY  
P.O. Box 396, NORTH AMHERST, MASS.  
 SITE: LOT # 2, FLAT HILLS ROAD  
AMHERST, MASS.

BY: Frederick A. Filios  
 69 Pelham Road  
 Amherst, MA  
 01002

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

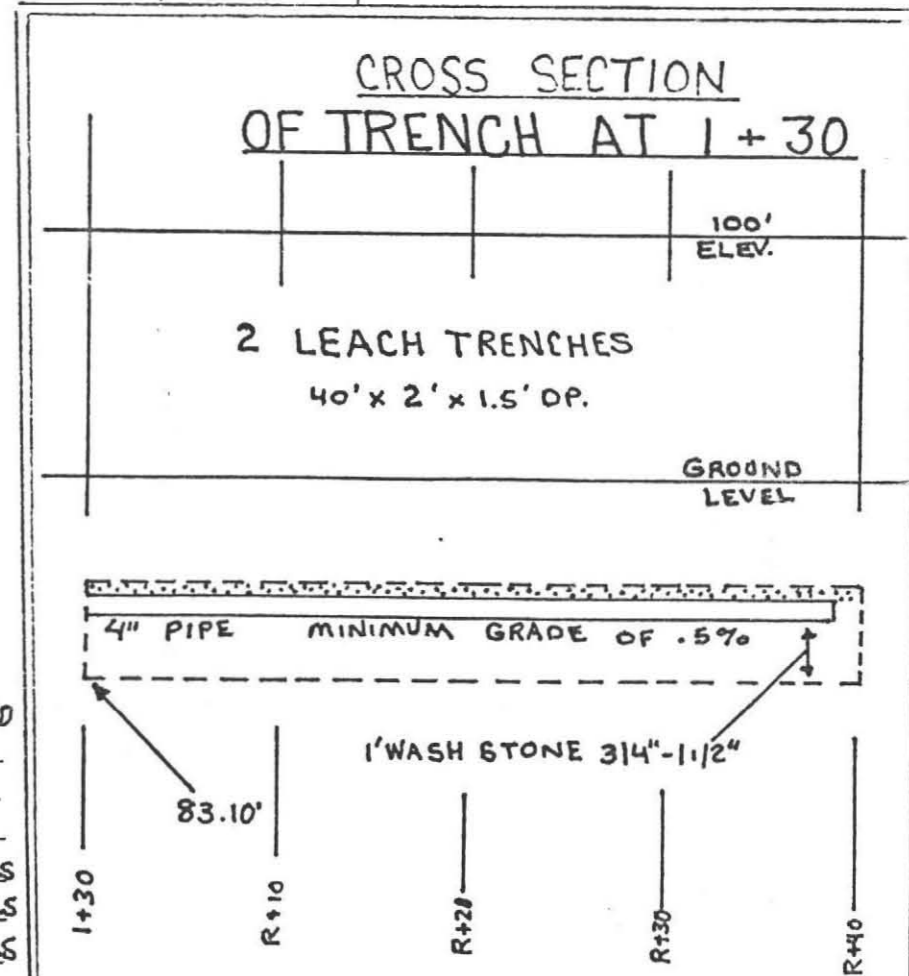


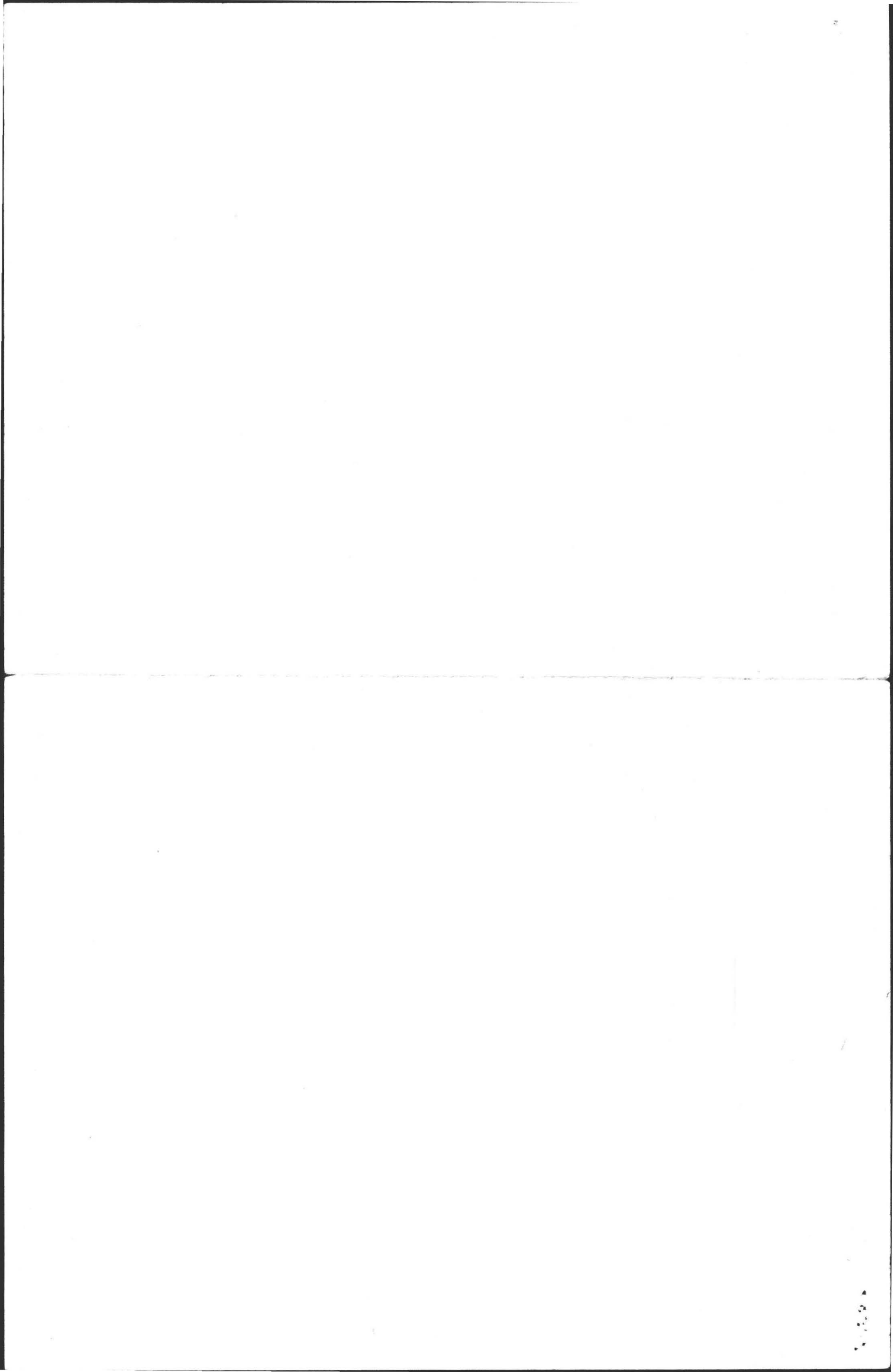
## SPECIFICATIONS

ALL MATERIALS AND CONSTRUCTION WILL BE IN ACCORDANCE WITH COMM. OF MASS. DE.Q.E. STATE ENVIRONMENTAL CODE TITLE 5.

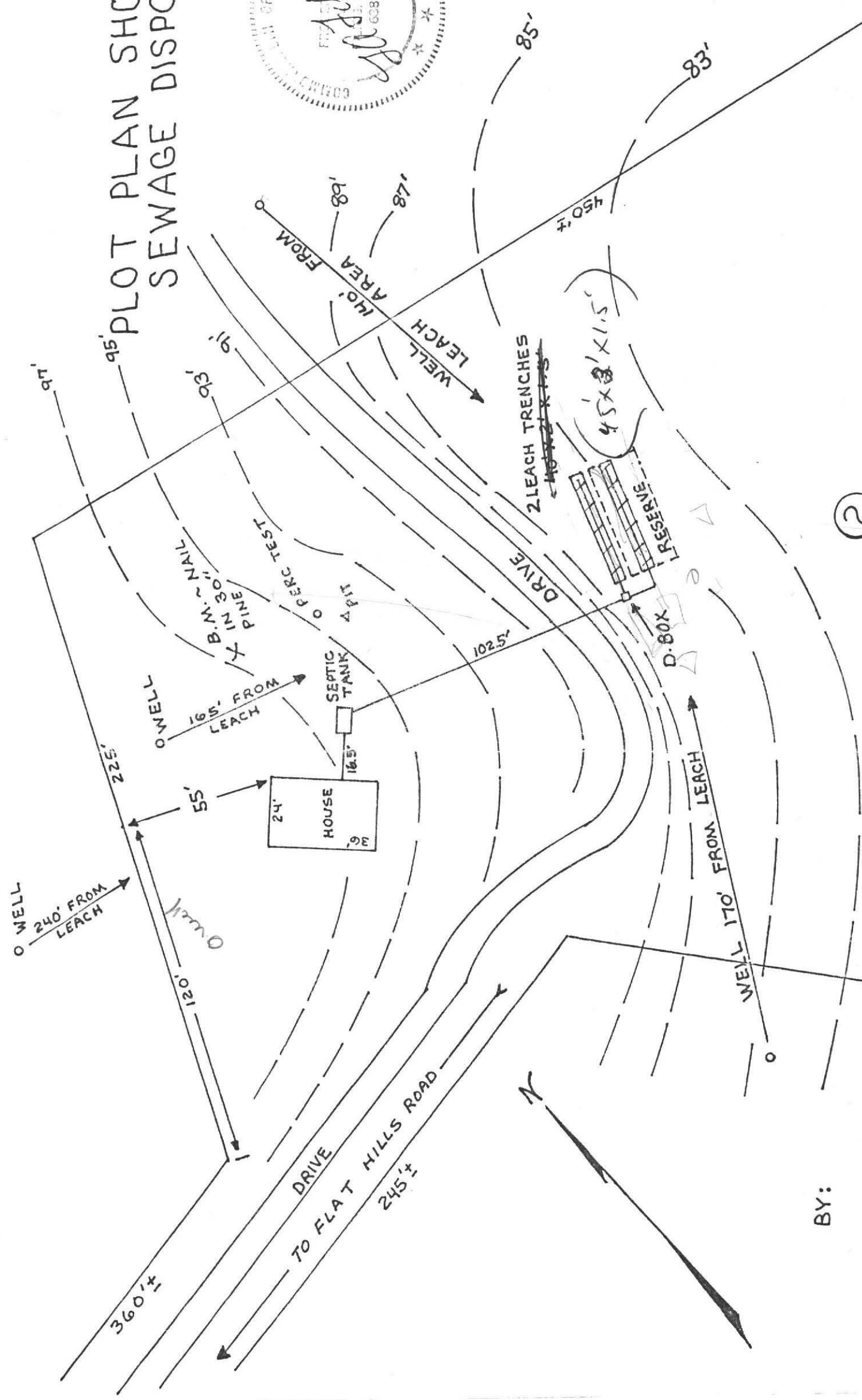
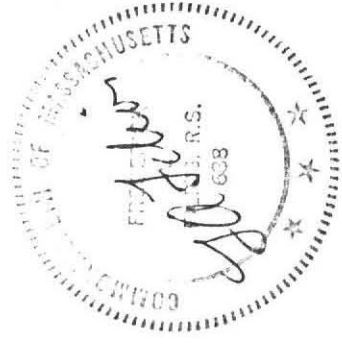
## CALCULATIONS

3 BEDROOMS AT 110 GALS EACH = 330 GALS REQUIRED  
 PERC RATE @ 5.6 MIN./IN. SIDES: 1.66 GALS PER S.F.  
 BOTTOM AREA: 0.71 GAL. PER S.F.  
 2 LEACH TRENCHES: 40' x 2' x 1.5' DEEP  
 SIDES: 40' x 1' = 40 S.F. x 4 (SIDES) = 160 S.F. x 1.66 = 265 GALS  
 BOTTOM: 40' x 2' = 80 S.F. x 2 (TR.S) = 160 S.F. x .71 = 113 GALS  
 TOTAL DAILY CAPACITY OF SYSTEM: 378 GALS





PLOT PLAN SHOWING  
SEWAGE DISPOSAL



(2)  
2.9 ACRES

BY:  
FREDERICK FILIOS  
DECEMBER 10, 1985  
SCALE: 1" = 40'  
R.S.

FOR:  
AMHERST BUILDING Co.  
P.O. BOX 396  
No. AMHERST, MASS.

