

#369

TIMOTHY E. MAGINNIS BS, RS  
Environmental Consultant • Registered Sanitarian  
70 Montague Road  
Westhampton, MA 01027  
(413) 527-5291

Mr. David Zarozinski, Agent  
Board of Health  
Town Hall  
Amherst, MA.  
01002

Re: Amherst - Sewage Disposal  
System - Final Inspection  
Middle Street

November 6, 1989

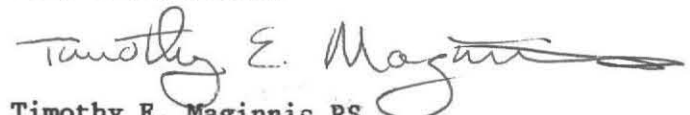
Dear Mr. Zarozinski:

On November 6, 1989, I conducted the final inspection for an individual subsurface sewage disposal system for the Keenan Properties Inc. located at Lot-A on Middle Street in Amherst, Ma.

Based on this inspection, it appears as though this subsurface sewage disposal system has been installed in accordance with the State Sanitary Code Title-V and the approved plans submitted to your Board.

If you have any questions please do not hesitate to contact me.

Very truly yours;

  
Timothy E. Maginnis RS

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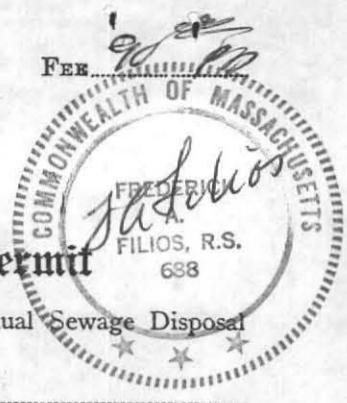
No. 88-47

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:

369 Middle Street

Lot A

Location - Address Keenan Properties, Inc. S. Pleasant Street, Amherst

Owner Ken Hislop Installer Randy Baker

Type of Building Dwelling - No. of Bedrooms 4 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 440 (550) gallons.

Septic Tank - Liquid capacity 1000 gallons Length 8 1/2' Width 5' Diameter \_\_\_\_\_ Depth 5'

Disposal Trench - No. 3 Width 3' Total Length 135' Total leaching area 270 sq. ft. Side

Seepage Pit No. \_\_\_\_\_ Diameter \_\_\_\_\_ Depth below inlet 0.5' Total leaching area 405 sq. ft. Bottom

Other Distribution box (✓) Dosing tank ( )

Percolation Test Results Performed by William J. Sierata Date 3/17/88

Test Pit No. 5 minutes per inch Depth of Test Pit 130" Depth to ground water 107"

Test Pit No. 4 minutes per inch Depth of Test Pit 125" Depth to ground water 62"

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 David Baginski for Board of Health Date 12/20/88

Application Disapproved for the following reasons: \_\_\_\_\_ Date \_\_\_\_\_

Permit No. 88-47

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 Ken Hislop Installer

at Lot A Middle Street

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. 88-47 dated \_\_\_\_\_

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

DATE Nov 21 1988 Inspector David Baginski

THE COMMONWEALTH OF MASSACHUSETTS

BOARD OF HEALTH

Town of Amherst

No. 88-47

FEE 90.00

Disposal Works Construction Permit

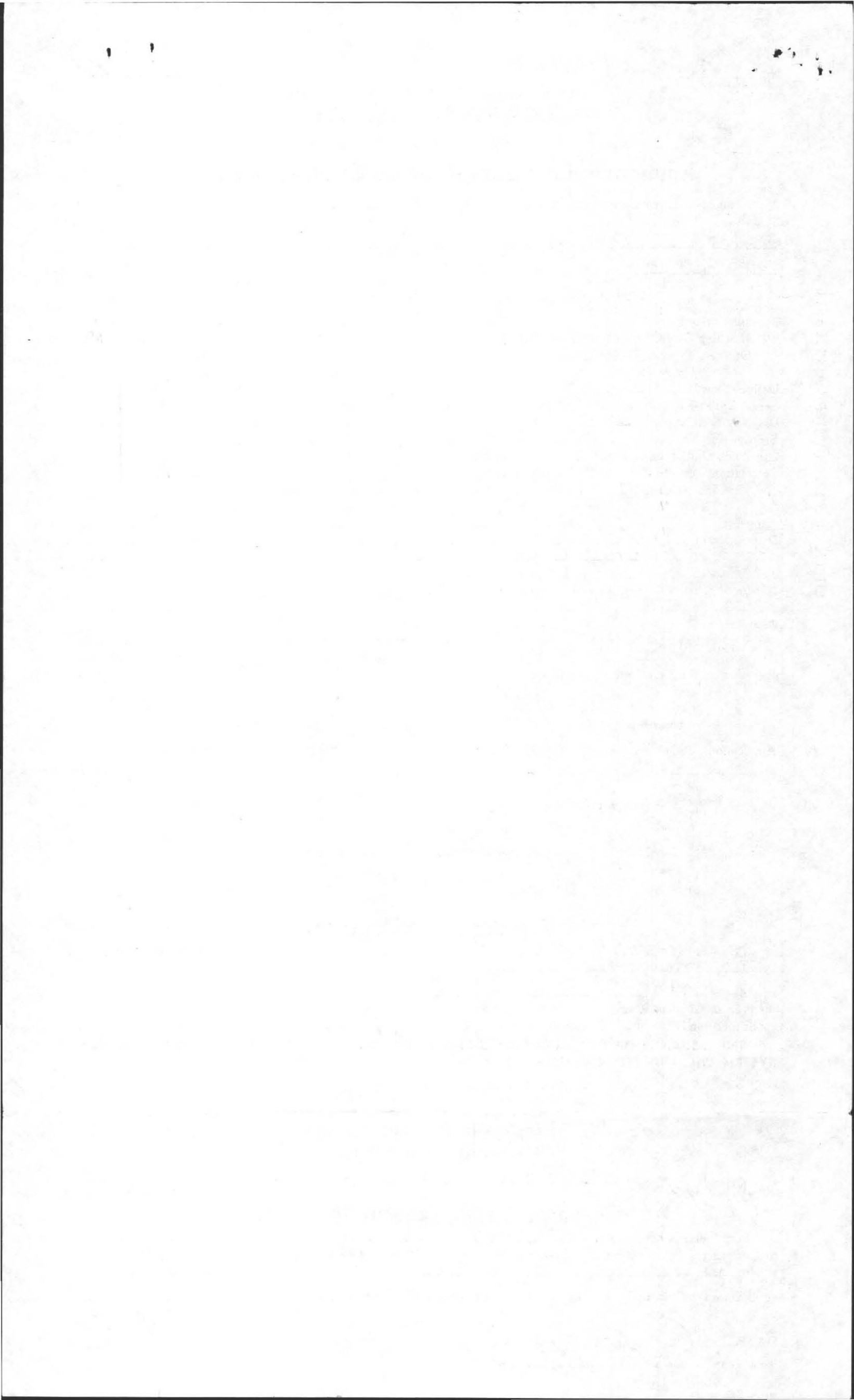
Permission is hereby granted Keenan Properties to Construct (✓) or Repair ( ) an Individual Sewage Disposal System

at No. Lot A Middle Street Street

as shown on the application for Disposal Works Construction Permit No. 88-47 dated \_\_\_\_\_

DATE Dec 20, 1988 Board of Health David Baginski

CHECK OR FILL IN WHERE APPLICABLE



Test No \_\_\_\_\_ (If required);  
 Reading \_\_\_\_\_ Time \_\_\_\_\_  
 Saturation(15min) \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Perc. Rate \_\_\_\_\_ Min/inch  
 Ground Elev. \_\_\_\_\_  
 Depth of Hole \_\_\_\_\_

Perc. Rate \_\_\_\_\_ Min/inch  
 Ground Elev. \_\_\_\_\_  
 Depth of Hole \_\_\_\_\_

DEEP TEST PIT/S

Test Pit - TP1-3

Depth	Soil Description
0-10"	OTS LOAM
10"-64"	med SAND
64"-120"	GRAVEL WITH STONE
STOPPED N.G.	

Groundwater Depth 44" Elev. \_\_\_\_\_  
 Bedrock Depth \_\_\_\_\_ Elev. \_\_\_\_\_  
 Ground Elevation \_\_\_\_\_

S.C.S. Soil Designation \_\_\_\_\_ Seasonal High Water Table? \_\_\_\_\_  
 Bench Mark: Elev. \_\_\_\_\_ Description \_\_\_\_\_

Test Pit - TP1-4

Depth	Soil Description
0-10"	SANDY TOP
10"-74"	SAND
76-84"	COARSE GRAVEL
84-125"	GRAVEL
OXIDE 76"	

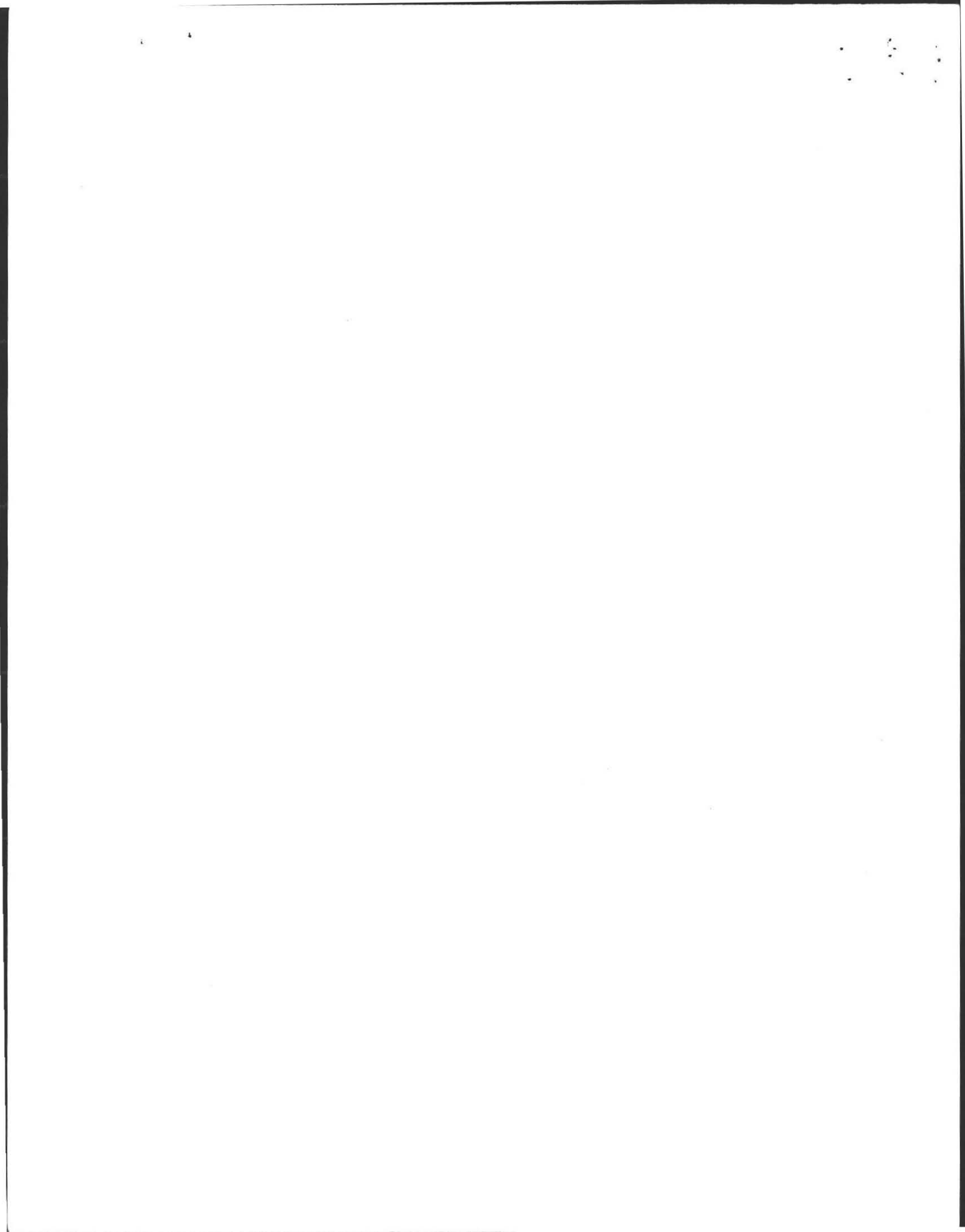
Groundwater Depth 62" Elev. \_\_\_\_\_  
 Bedrock Depth \_\_\_\_\_ Elev. \_\_\_\_\_  
 Ground Elevation \_\_\_\_\_

COMMENTS:

KEEMAN PROP INC  
 MAREK OFFICE BLDG  
 50 PLEASANT ST  
 AMHERST, MASS

Parcel @  
 357 MIDDLE ST  
 50 Amherst MA





Time	Reading	Time
(15min) 15 MIN SOAK		
17 1/2	10:52	ACTUAL
11 1/2	11:04	9 MIN
8	11:13	3.5"

Test No	Reading	Time
(15min) 15 MIN SOAK		
18 1/2	11:15	
14 1/2	11:20	5/3
11 1/2	11:25	
		1.66
		mil
		INC.

DESIGN RATE  
 Perc. Rate 4.0 Min/inch  
 Ground Elev. \_\_\_\_\_  
 Depth of Hole 46"

DESIGN RATE  
 Perc. Rate 2.0 Min/inch  
 Ground Elev. \_\_\_\_\_  
 Depth of Hole 52"

DEEP TEST PIT/S

Test Pit - TP1-5

Depth	Soil Description
0-10"	SAND TOP
10"-107"	MED SAND
107-130	COARSE GRAVEL

Test Pit - TP1-6

Depth	Soil Description
0-10"	SAND TOP SOIL
10"-108"	MED SAND
108-130"	COARSE GRAVEL AND SAND

Oxide @ 107"  
 Groundwater Depth 107" Elev. \_\_\_\_\_  
 Bedrock Depth DNA Elev. \_\_\_\_\_  
 Ground Elevation \_\_\_\_\_

Groundwater Depth 108" Elev. \_\_\_\_\_  
 Bedrock Depth DNA Elev. \_\_\_\_\_  
 Ground Elevation \_\_\_\_\_

S.C.S. Soil Designation SAND Seasonal High Water Table? \_\_\_\_\_

Bench Mark: Elev. \_\_\_\_\_ Description \_\_\_\_\_

ELEV TO BE SET AT PERL SITES.

COMMENTS:

TP1-5 and TP1-6  
 VERY GOOD SOIL CONDITIONS  
 WITH DEEP GROUND WATER  
 PERL TESTS AT THIS SITE.



Parcel @  
 357 MIDDLE ST  
 50 AMHERST, MASS

KEENAN PROP INC  
 MARK OFFICE BLDG  
 50 N...

7



DEEP SOIL LOGS

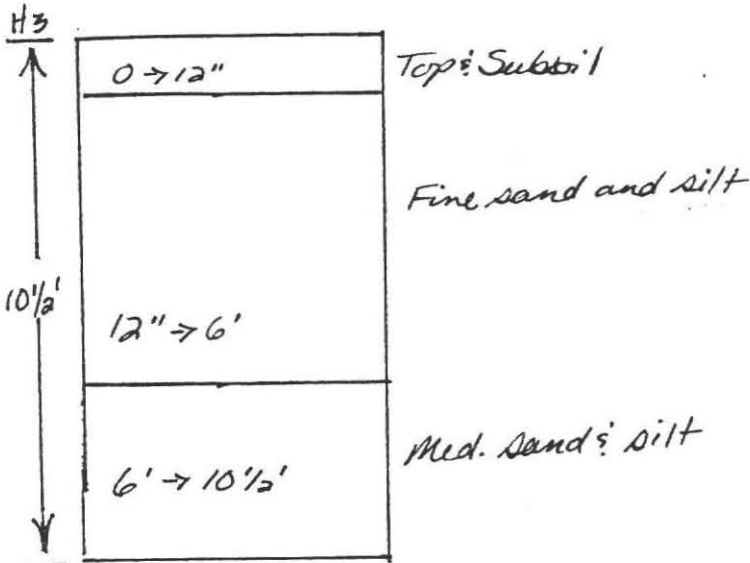
OWNER David Keenan

DATE Dec. 13, 1988

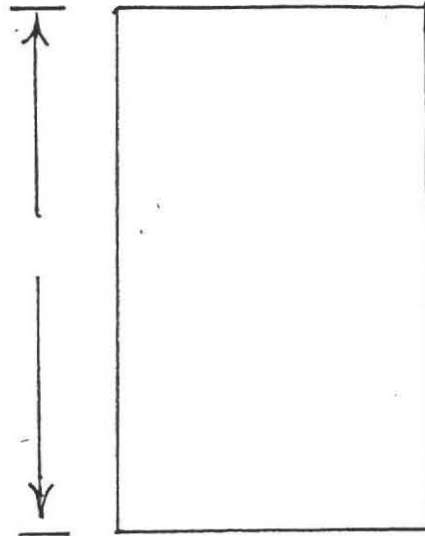
LOCATION Lot A  
Middle Street  
Amherst, Ma

OBSERVER Filios Enterprises, Inc.

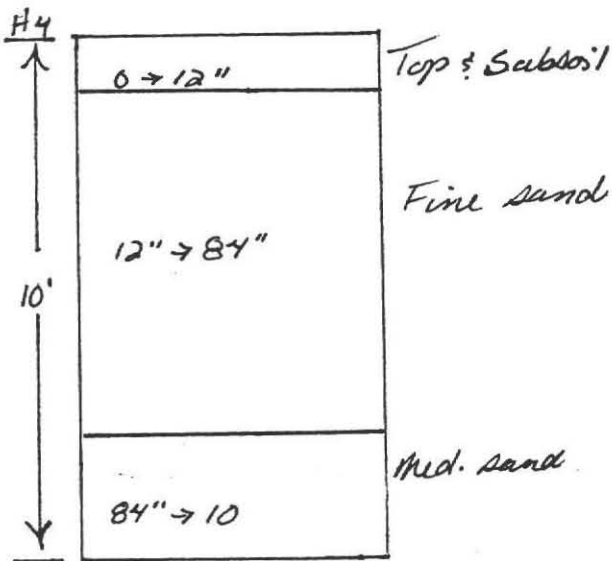
B. of H. D. Jarozinski



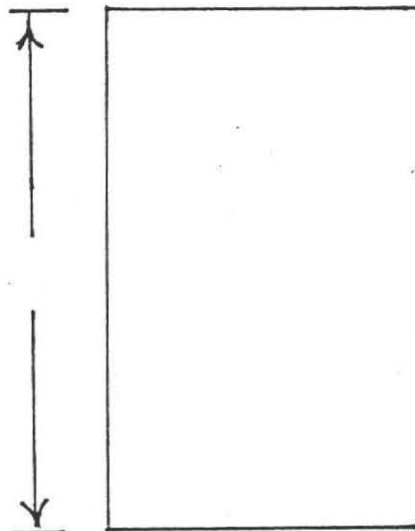
GROUND WATER 9 1/2 ~ water



GROUND WATER \_\_\_\_\_



GROUND WATER 84" ~ Seepage

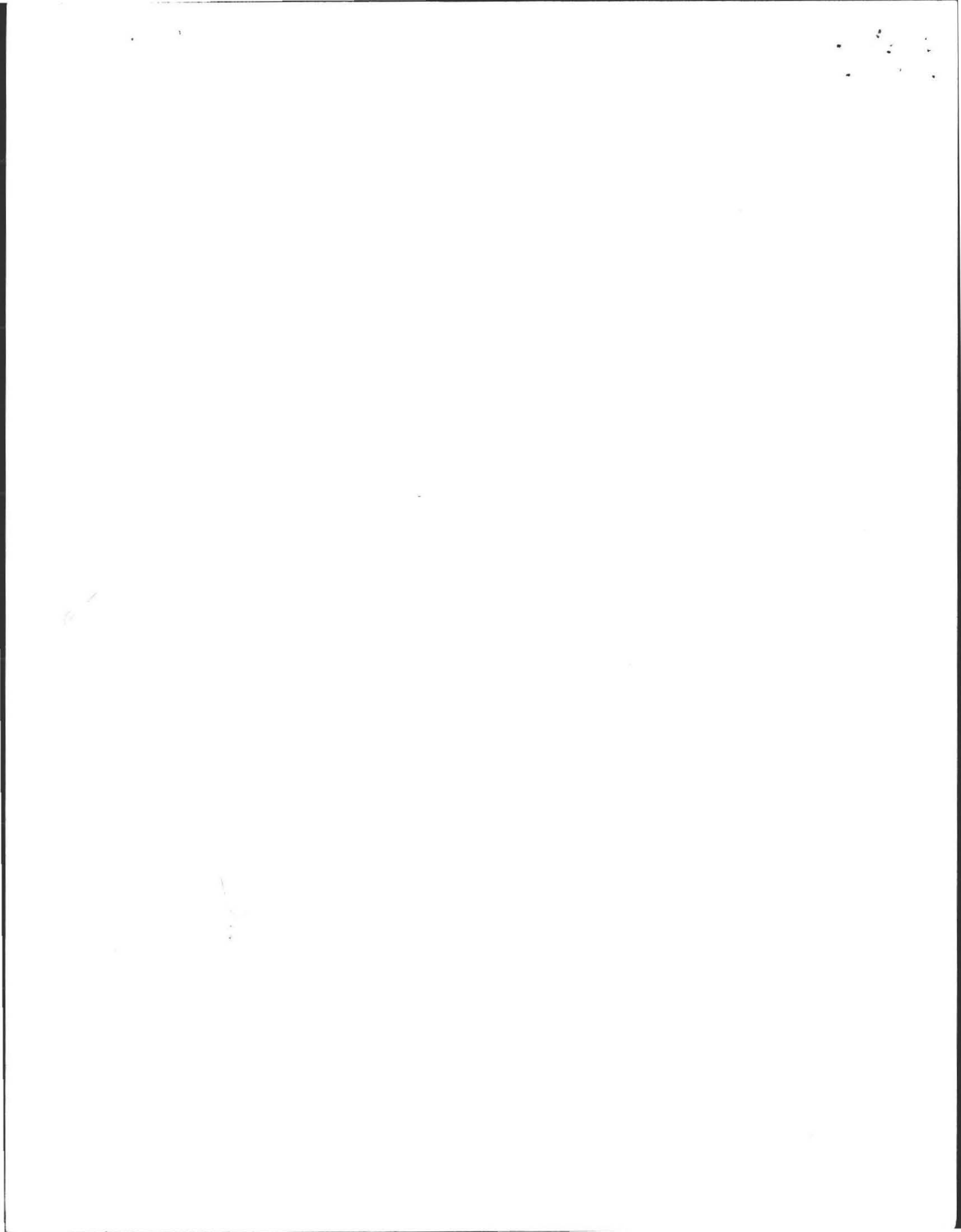


GROUND WATER \_\_\_\_\_

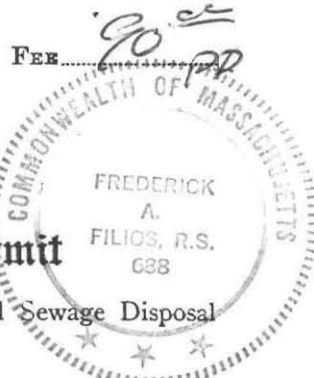
PERCOLATION RATE AT \_\_\_\_\_:

\_\_\_\_\_ min./inch





No. 88-47



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:

Middle Street Lot A  
Location - Address  
Keenan Properties, Inc. S. Pleasant Street  
Owner Address  
Kew Huslip Installer

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 (550) gallons.  
Septic Tank — Liquid capacity 1000 gallons Length 8 1/2 Width 5 Diameter \_\_\_\_\_ Depth 5  
Disposal Trench — No. 2 Width 2 Total Length 100 Total leaching area 200 sq. ft. Sides  
Seepage Pit No. \_\_\_\_\_ Diameter \_\_\_\_\_ Depth below inlet 1 Total leaching area 200 sq. ft. Bottom

Other Distribution box (✓) Dosing tank ( )  
Percolation Test Results Performed by William J. Siemata Date 9/17/88  
Test Pit No. 5 4 minutes per inch Depth of Test Pit 130" Depth to ground water 107"  
Test Pit No. 4 H3 H4 minutes per inch Depth of Test Pit 125" Depth to ground water 62"  
10 1/2' 9 1/2' } 12/13/88  
10' } By

Description of Soil Enclosed Filtw Ent.

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. 88-47 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 Kew Huslip Installer at Lot A Middle Street 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. 88-47 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

Disposal Works Construction Permit

Permission is hereby granted Keenan Properties to Construct (✓) or Repair ( ) an Individual Sewage Disposal System at No. Lot A Middle Street Street as shown on the application for Disposal Works Construction Permit No. 88-47 Dated \_\_\_\_\_

DATE \_\_\_\_\_ Board of Health

CHECK OR FILL IN WHERE APPLICABLE

10-11-77

# APPROXIMATE

Approximate  
10-11-77

Approximate  
10-11-77

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Approximate  
10-11-77

APPROXIMATE

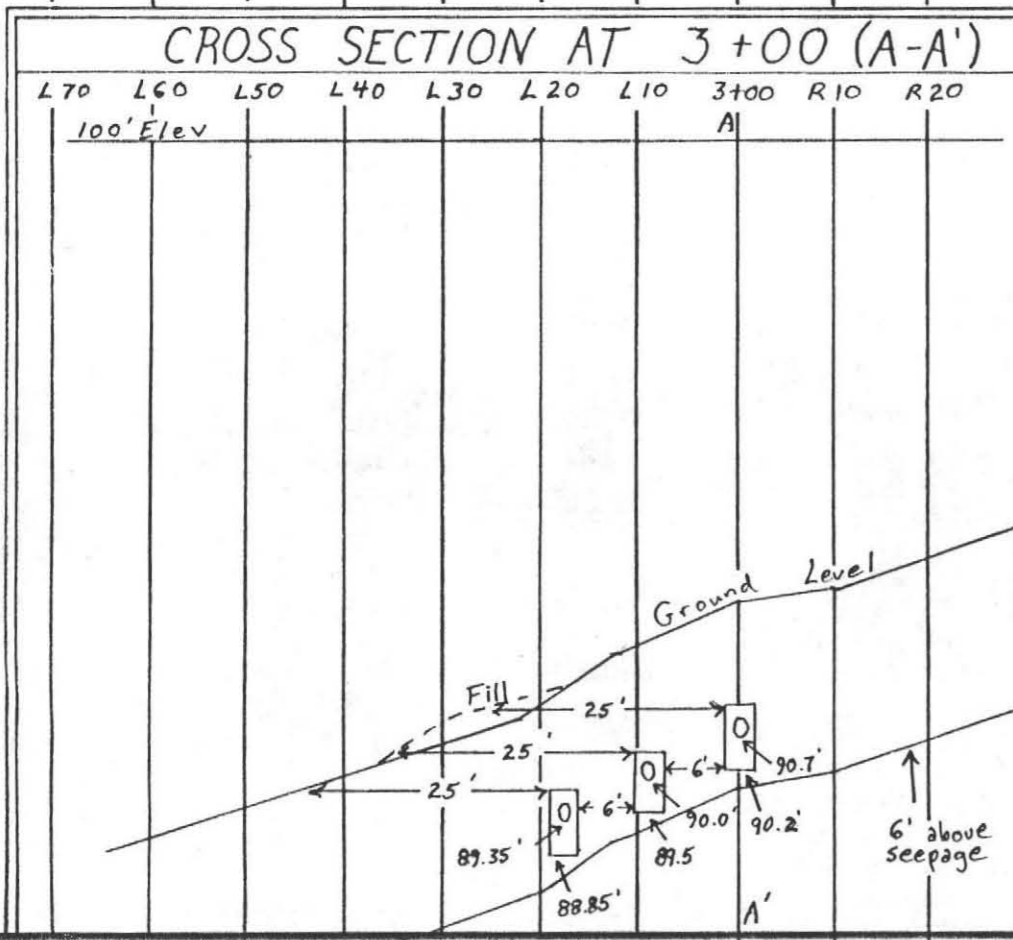
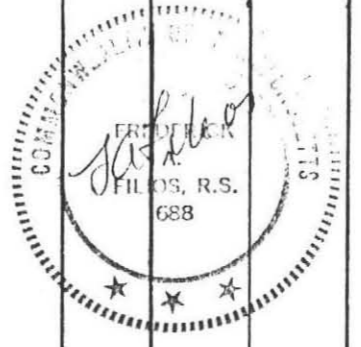
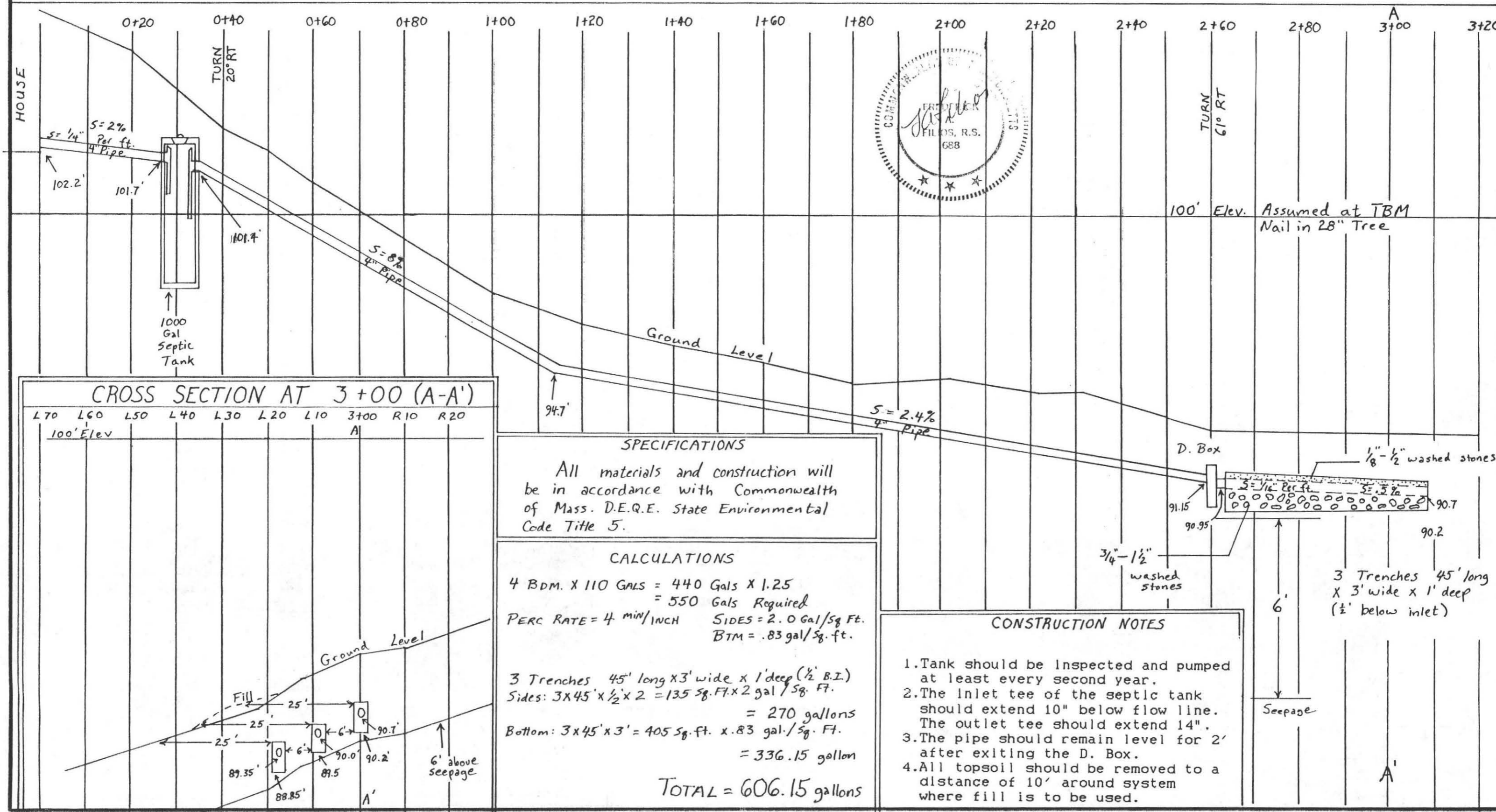
# PLAN SHOWING PROFILE OF SEPTIC SYSTEM

FOR: DAVID KEENAN  
KEENAN PROPERTIES, INC.  
SOUTH PLEASANT ST.  
AMHERST, MA

AT: LOT A  
MIDDLE STREET  
AMHERST, MA  
01002

BY: FILIOS ENTERPRISES, INC.  
69 PELHAM ROAD  
AMHERST, MA 01002  
PHONE: 256-8008

SCALE:  
HORIZONTAL: 1" = 20'  
VERTICAL: 1" = 3'  
DATE: DEC. 19, 1988



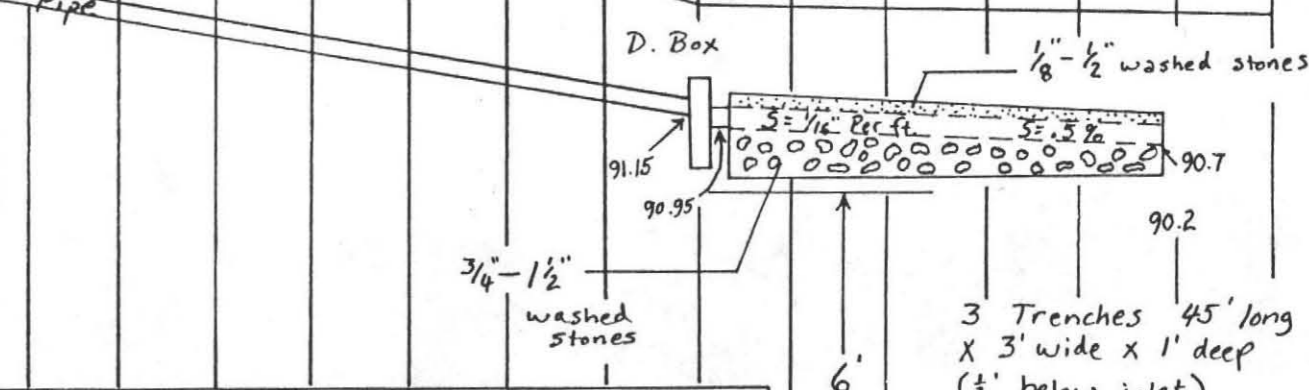
#### SPECIFICATIONS

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

#### CALCULATIONS

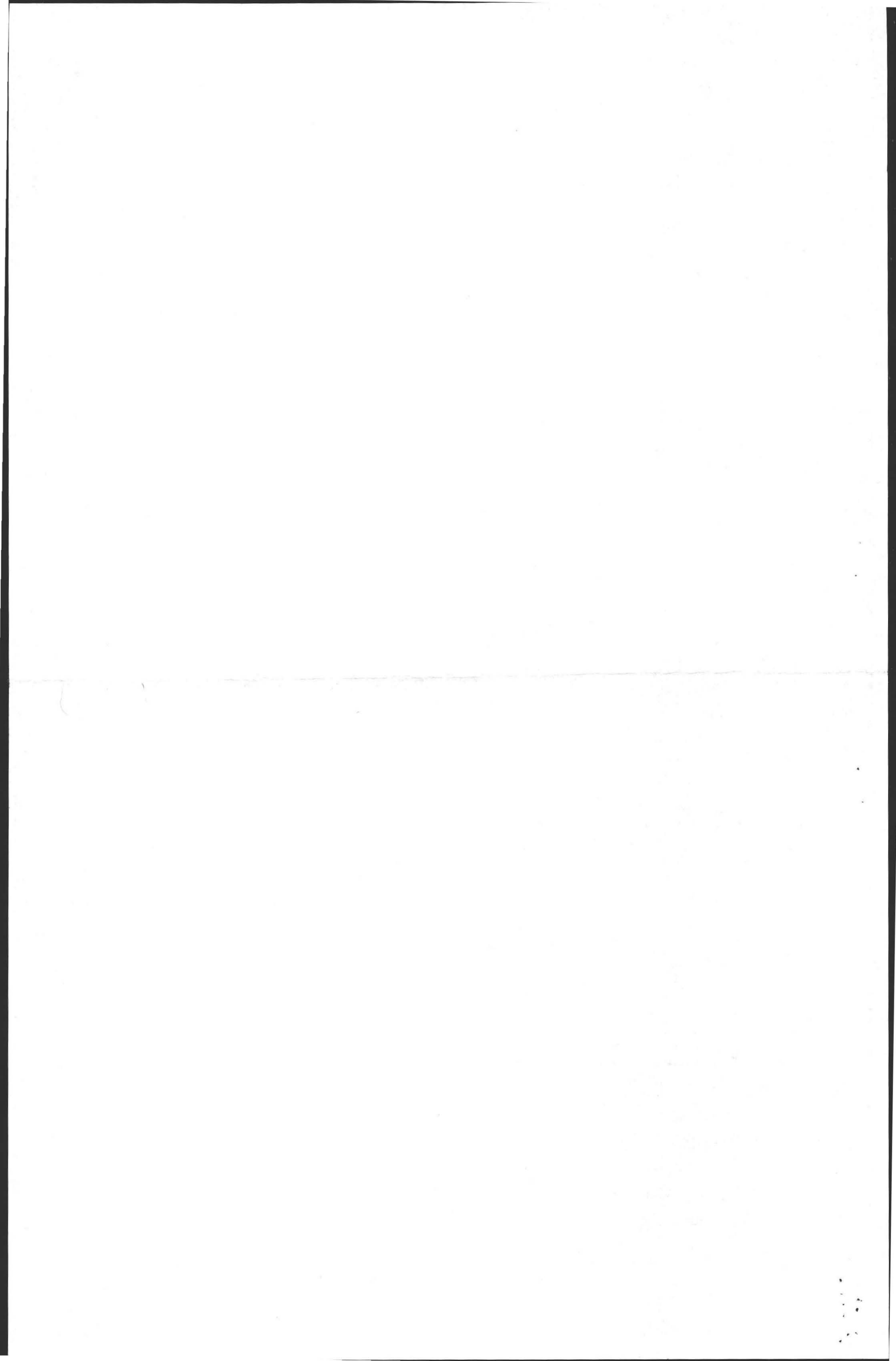
4 BDM. X 110 GALS = 440 Gals X 1.25  
= 550 Gals Required  
PERC RATE = 4 min/INCH SIDES = 2.0 gal/Sq Ft.  
BTM = .83 gal/Sq. Ft.

3 Trenches 45' long X 3' wide X 1' deep (1/2 B.I.)  
Sides: 3 X 45' X 1/2' X 2 = 135 Sq. Ft. X 2 gal/Sq. Ft.  
= 270 gallons  
Bottom: 3 X 45' X 3' = 405 Sq. Ft. X .83 gal/Sq. Ft.  
= 336.15 gallon  
**TOTAL = 606.15 gallons**



#### CONSTRUCTION NOTES

1. Tank should be inspected and pumped at least every second year.
2. The inlet tee of the septic tank should extend 10" below flow line. The outlet tee should extend 14".
3. The pipe should remain level for 2' after exiting the D. Box.
4. All topsoil should be removed to a distance of 10' around system where fill is to be used.



PLAN SHOWING SEWAGE DISPOSAL SYSTEM

FOR: DAVID KEENAN  
 KEENAN PROPERTIES, INC.  
 MAREK OFFICE BLDG.  
 5. PLEASANT ST.  
 AMHERST, MA.

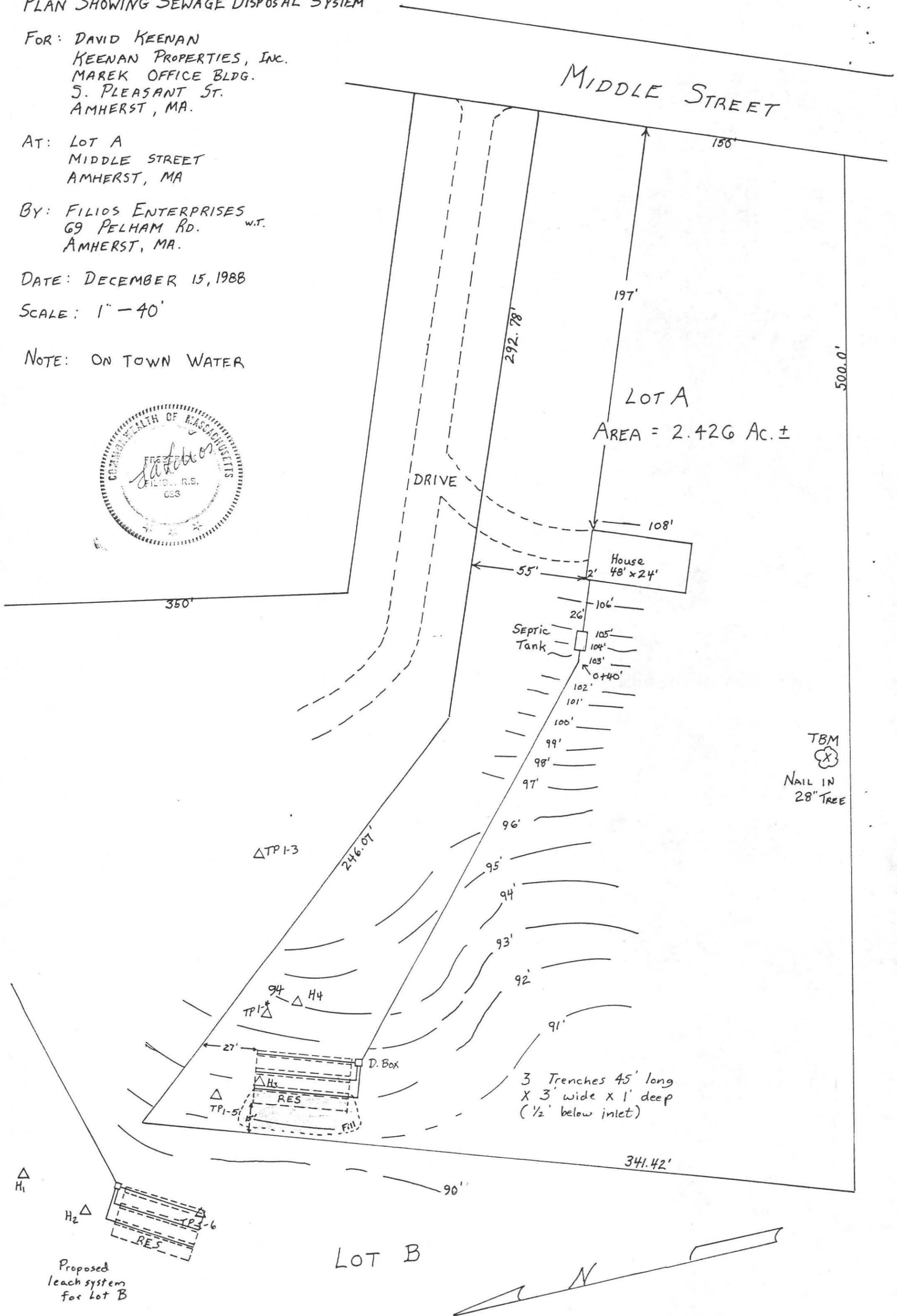
AT: LOT A  
 MIDDLE STREET  
 AMHERST, MA

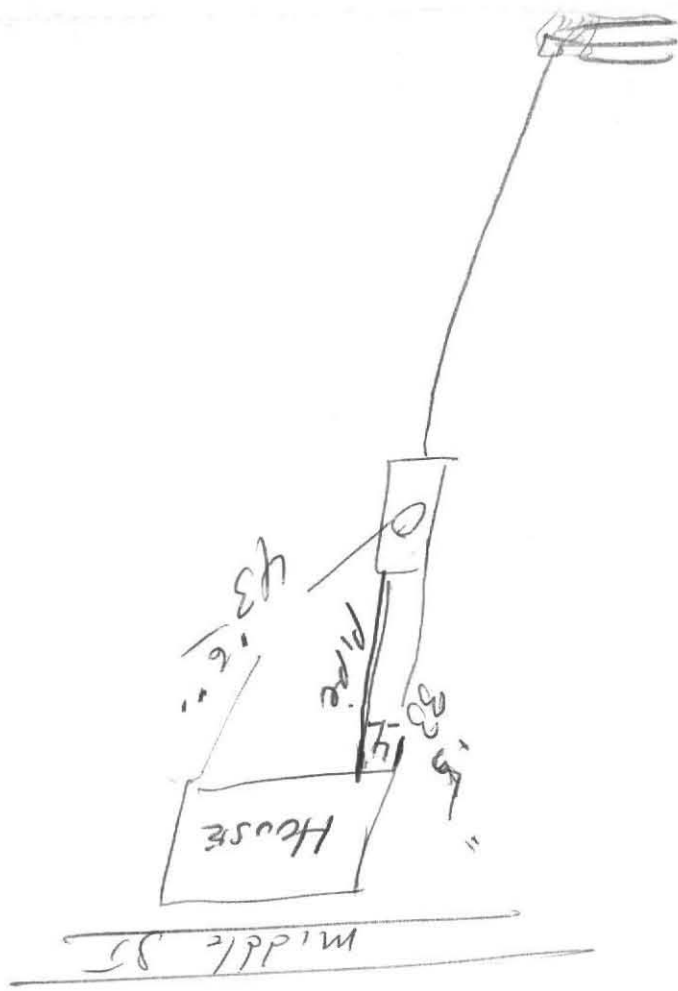
BY: FILIOS ENTERPRISES  
 69 PELHAM RD. w.t.  
 AMHERST, MA.

DATE: DECEMBER 15, 1988

SCALE: 1" = 40'

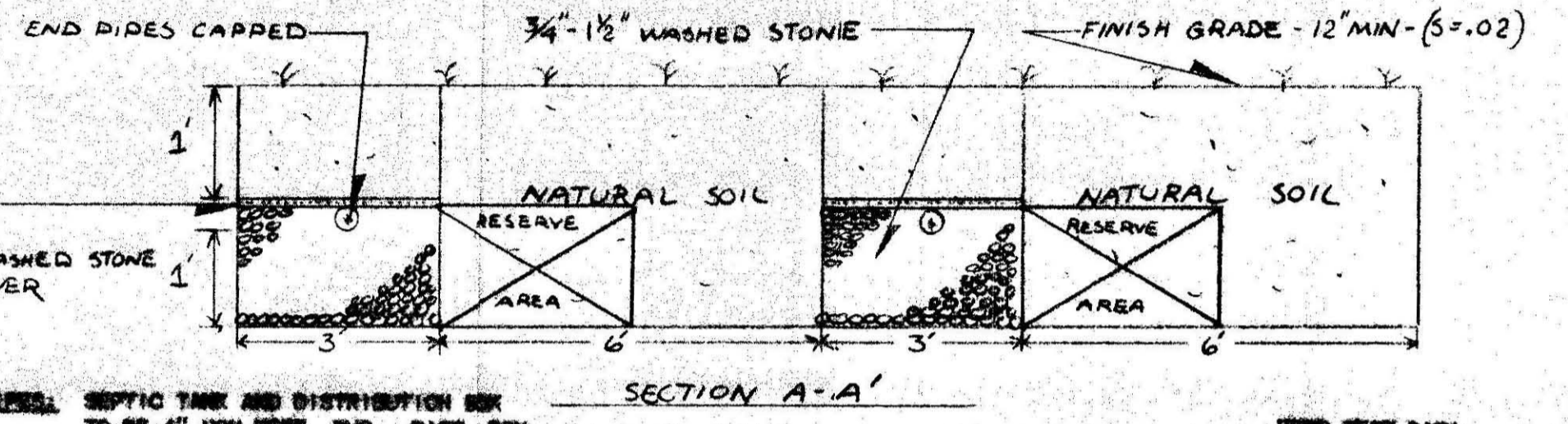
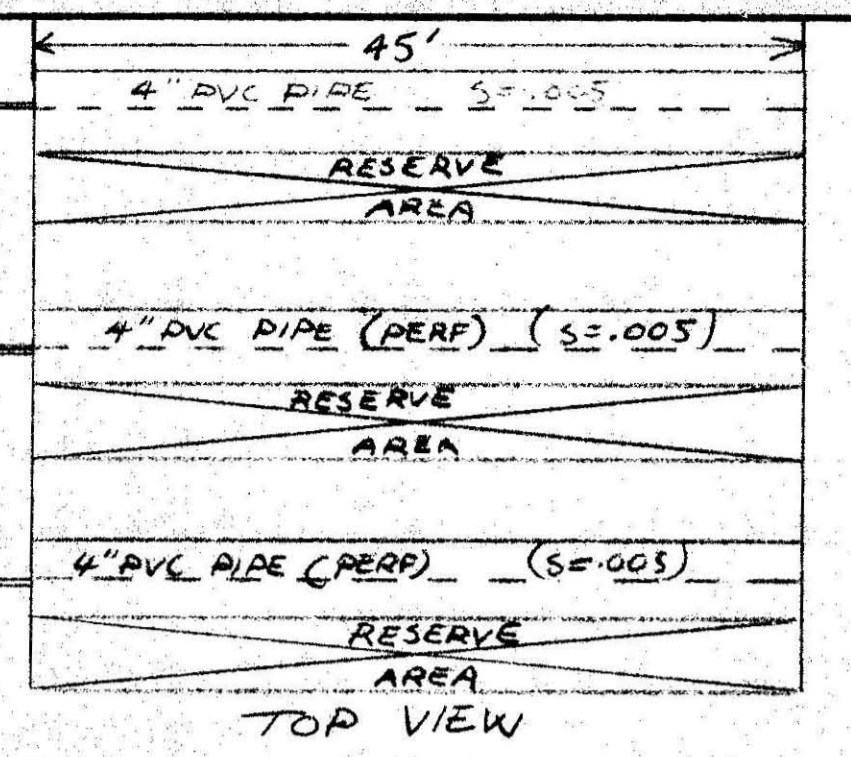
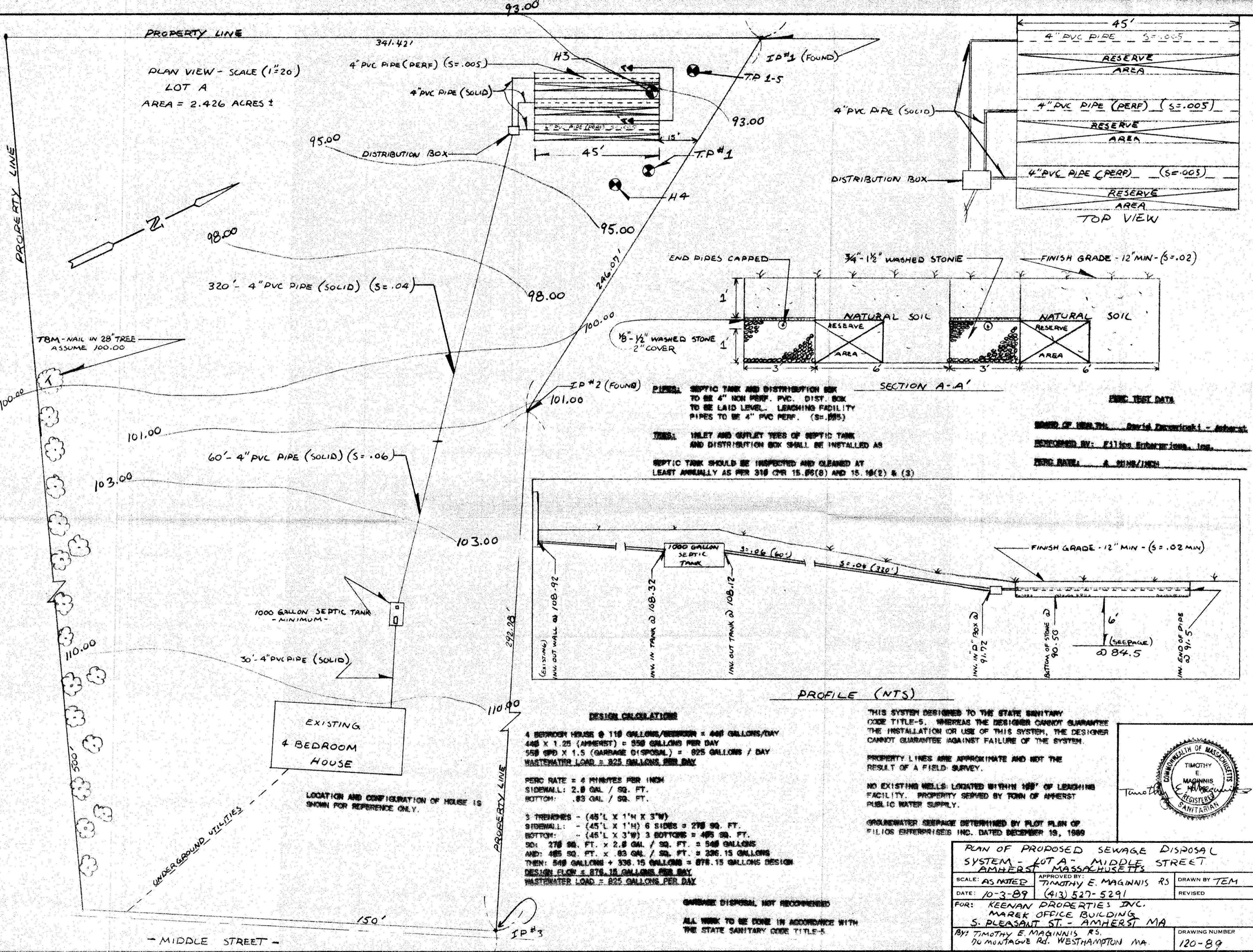
NOTE: ON TOWN WATER







PROPERTY LINE  
 PLAN VIEW - SCALE (1"=20')  
 LOT A  
 AREA = 2.426 ACRES ±



**PIPES:** SEPTIC TANK AND DISTRIBUTION BOX TO BE 4" NON PERF. PVC. DIST. BOX TO BE LAID LEVEL. LEACHING FACILITY PIPES TO BE 4" PVC PERF. (S=.005)

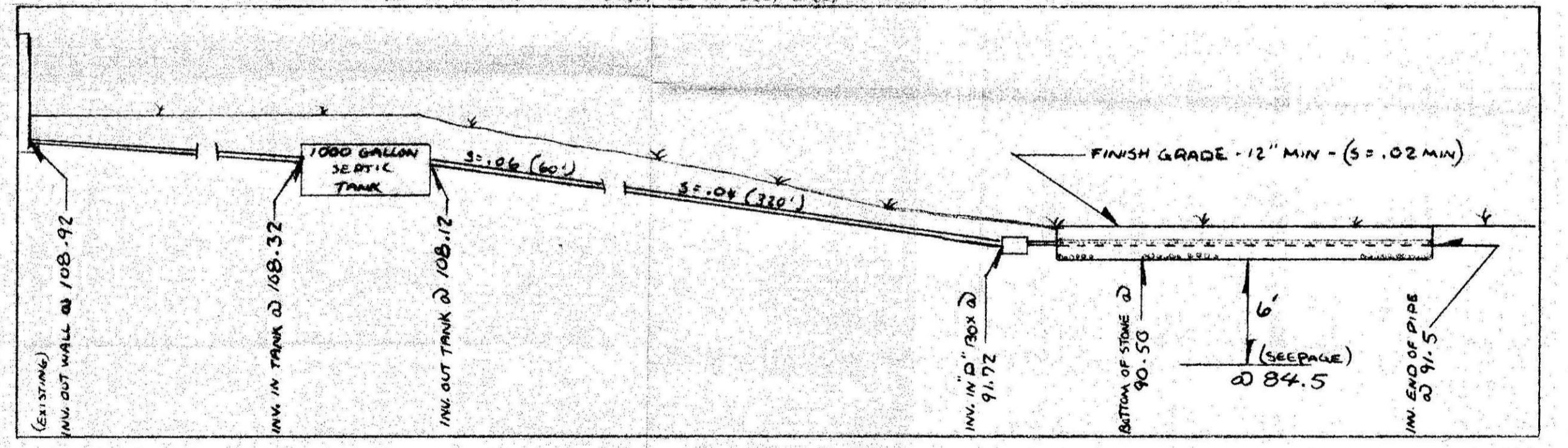
**TRENCHES:** INLET AND OUTLET TRENCHES OF SEPTIC TANK AND DISTRIBUTION BOX SHALL BE INSTALLED AS SEPTIC TANK SHOULD BE INSPECTED AND CLEANED AT LEAST ANNUALLY AS PER 310 CMR 15.00(8) AND 15.10(2) & (3)

**FIELD TEST DATA**

NAME OF FIELD TEST: David Dzwinski - Amherst

PERFORMED BY: Filios Enterprises, Inc.

PERF. RATE: 1.5 MIN/INCH



**DESIGN CALCULATIONS**

4 BEDROOM HOUSE @ 110 GALLONS/BEDROOM = 440 GALLONS/DAY  
 440 X 1.25 (AMHERST) = 550 GALLONS PER DAY  
 550 GPD X 1.5 (GARBAGE DISPOSAL) = 825 GALLONS / DAY  
 WASTEWATER LOAD = 825 GALLONS PER DAY

PERF. RATE = 4 MINUTES PER INCH  
 SIDEWALL: 2.8 GAL / SQ. FT.  
 BOTTOM: .83 GAL / SQ. FT.

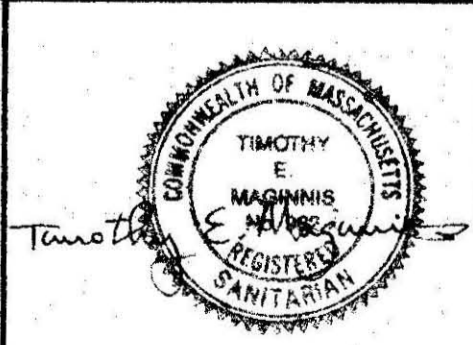
3 TRENCHES - (45' L X 1' H X 3' W)  
 SIDEWALL: - (45' L X 1' H) 6 SIDES = 270 SQ. FT.  
 BOTTOM: - (45' L X 3' W) 3 BOTTOMS = 405 SQ. FT.  
 SD: 270 SQ. FT. X 2.8 GAL / SQ. FT. = 540 GALLONS  
 AND: 405 SQ. FT. X .83 GAL / SQ. FT. = 336.15 GALLONS  
 THEN: 540 GALLONS + 336.15 GALLONS = 876.15 GALLONS DESIGN  
 DESIGN FLOW = 876.15 GALLONS PER DAY  
 WASTEWATER LOAD = 825 GALLONS PER DAY

THIS SYSTEM DESIGNED TO THE STATE SANITARY CODE TITLE-5. WHEREAS THE DESIGNER CANNOT GUARANTEE THE INSTALLATION OR USE OF THIS SYSTEM, THE DESIGNER CANNOT GUARANTEE AGAINST FAILURE OF THE SYSTEM.

PROPERTY LINES ARE APPROXIMATE AND NOT THE RESULT OF A FIELD SURVEY.

NO EXISTING WELLS LOCATED WITHIN 100' OF LEACHING FACILITY. PROPERTY SERVED BY TOWN OF AMHERST PUBLIC WATER SUPPLY.

GROUNDWATER SEEPAGE DETERMINED BY PLOT PLAN OF FILIOS ENTERPRISES INC. DATED DECEMBER 19, 1989



PLAN OF PROPOSED SEWAGE DISPOSAL SYSTEM - LOT A - MIDDLE STREET AMHERST MASSACHUSETTS		
SCALE: AS NOTED	APPROVED BY: TIMOTHY E. MAGINNIS RS (413) 527-5291	DRAWN BY: TEM
DATE: 10-3-89		REVISED:
FOR: KEENAN PROPERTIES INC. MAREK OFFICE BUILDING 5. PLEASANT ST. - AMHERST MA		
BY: TIMOTHY E. MAGINNIS RS. 70 MONTAGUE RD. WESTHAMPTON MA.		DRAWING NUMBER: 120-89

GARBAGE DISPOSAL NOT RECOMMENDED

ALL WORK TO BE DONE IN ACCORDANCE WITH THE STATE SANITARY CODE TITLE-5