

55 Chapel

Filios Enterprises, Inc.  
69 Pelham Rd.  
Amherst, MA 01002

27 August, 1992

Donald J. Southwick  
55 Chapel Rd.  
Amherst, MA 01002

This is to notify you that Filios Enterprises, Inc. has inspected the septic repair installed at the address above.

The purpose of the inspection was to determine whether the installed system complied with the plan prepared by this office and approved by the Amherst Health Department.

The inspection revealed that the elevations and layout of the as-built system varied from the approved plan to the extent shown in red on the copy of the plan profile and planview enclosed.

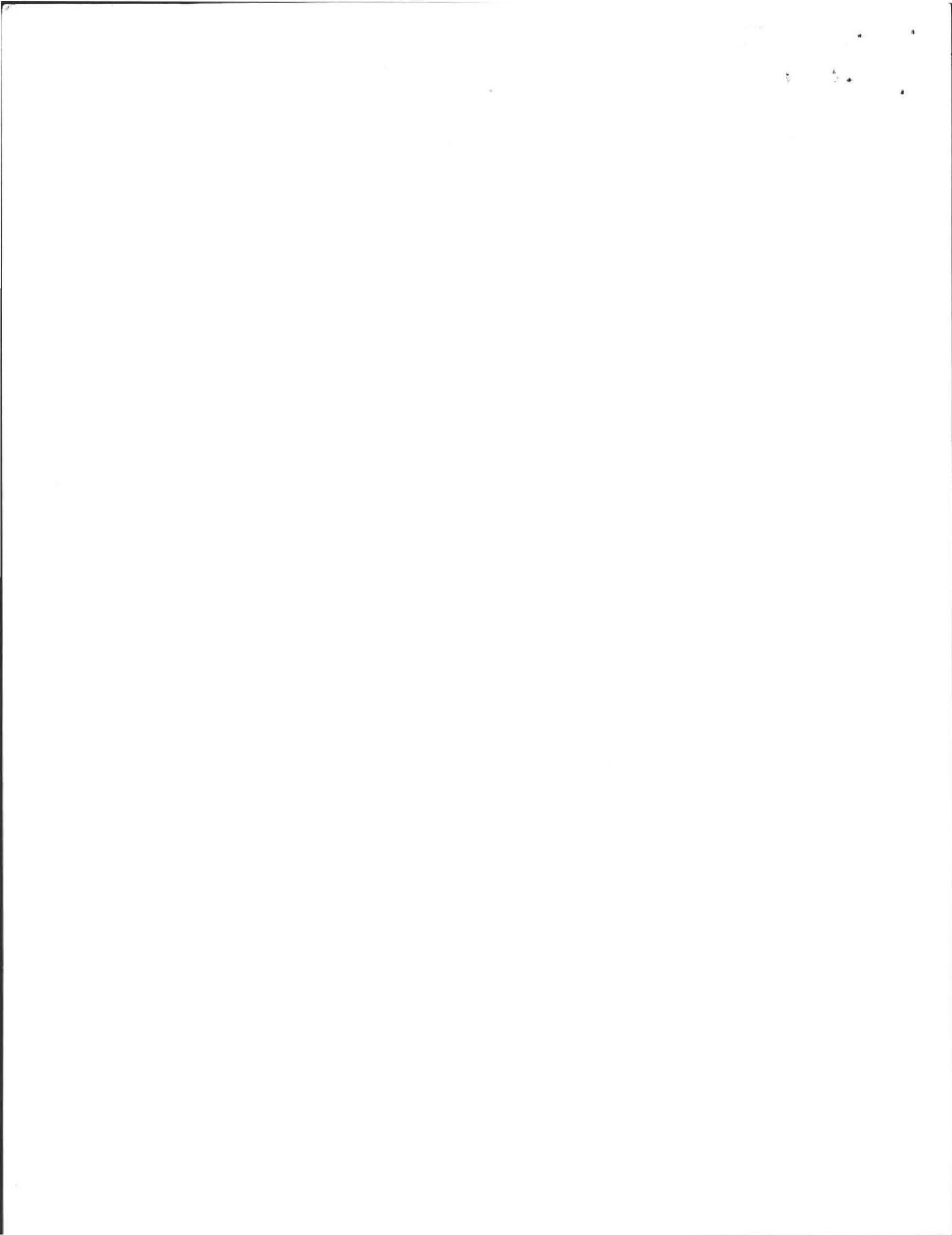
This variation from the plan does not represent a violation of either the regulations of the Amherst Health Dept. or the Mass. State Environmental Code, Title 5, and should not interfere with the proper functioning of the installed system.

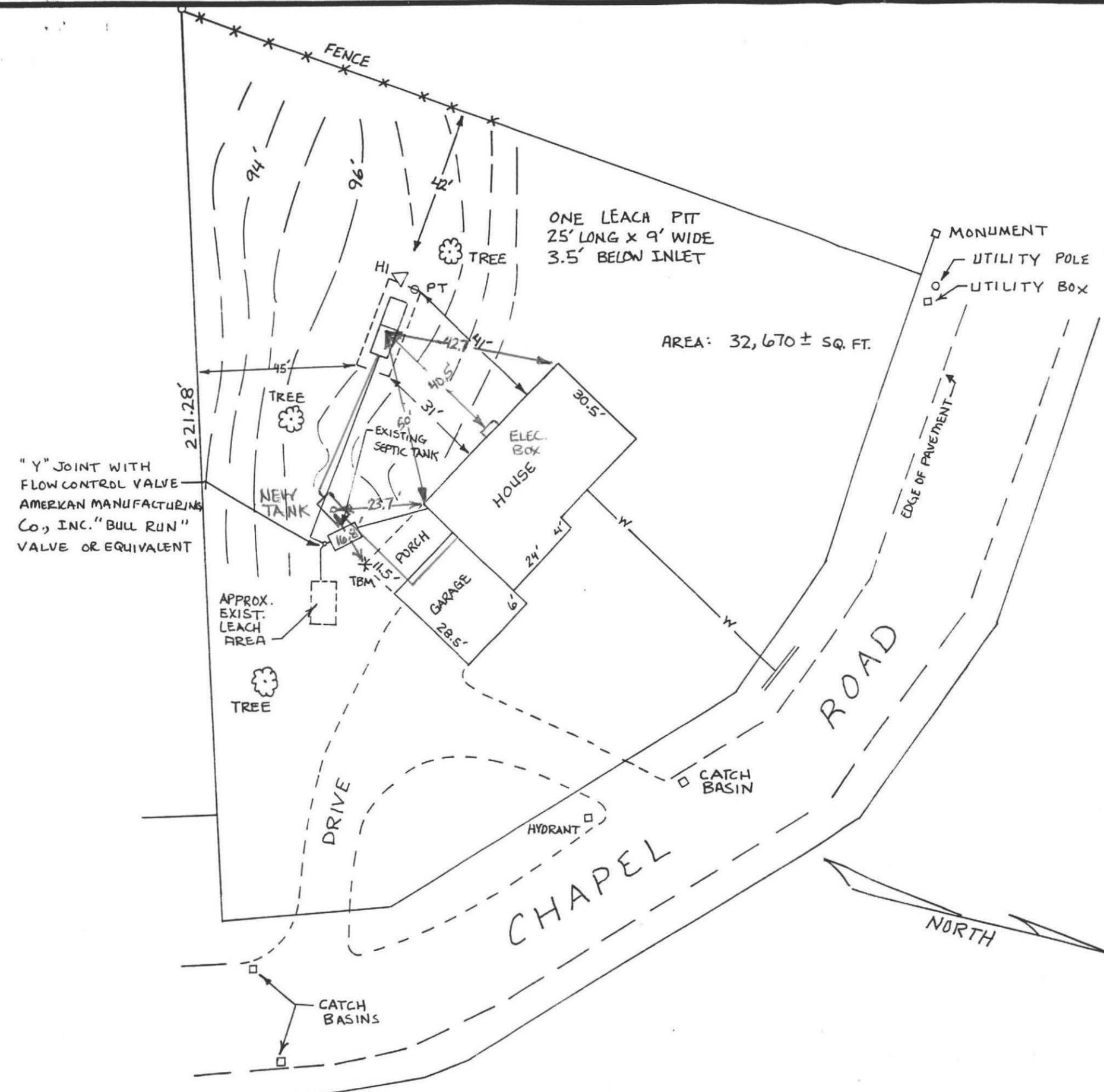
Sincerely Yours,



Frederick A. Filios  
President

C.C. to Amherst Health Dept.





ONE LEACH PIT  
25' LONG X 9' WIDE  
3.5' BELOW INLET

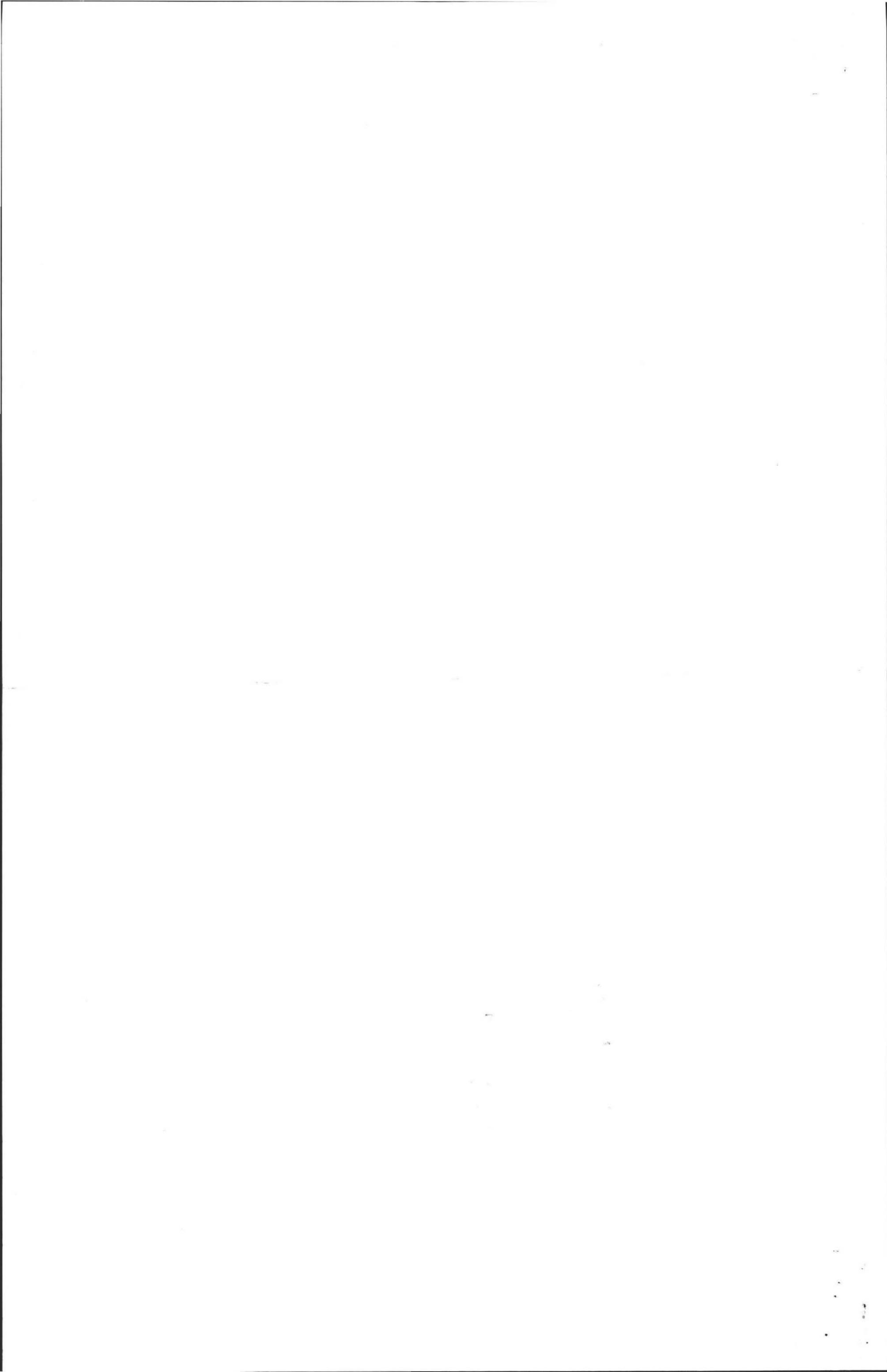
AREA: 32,670 ± SQ. FT.

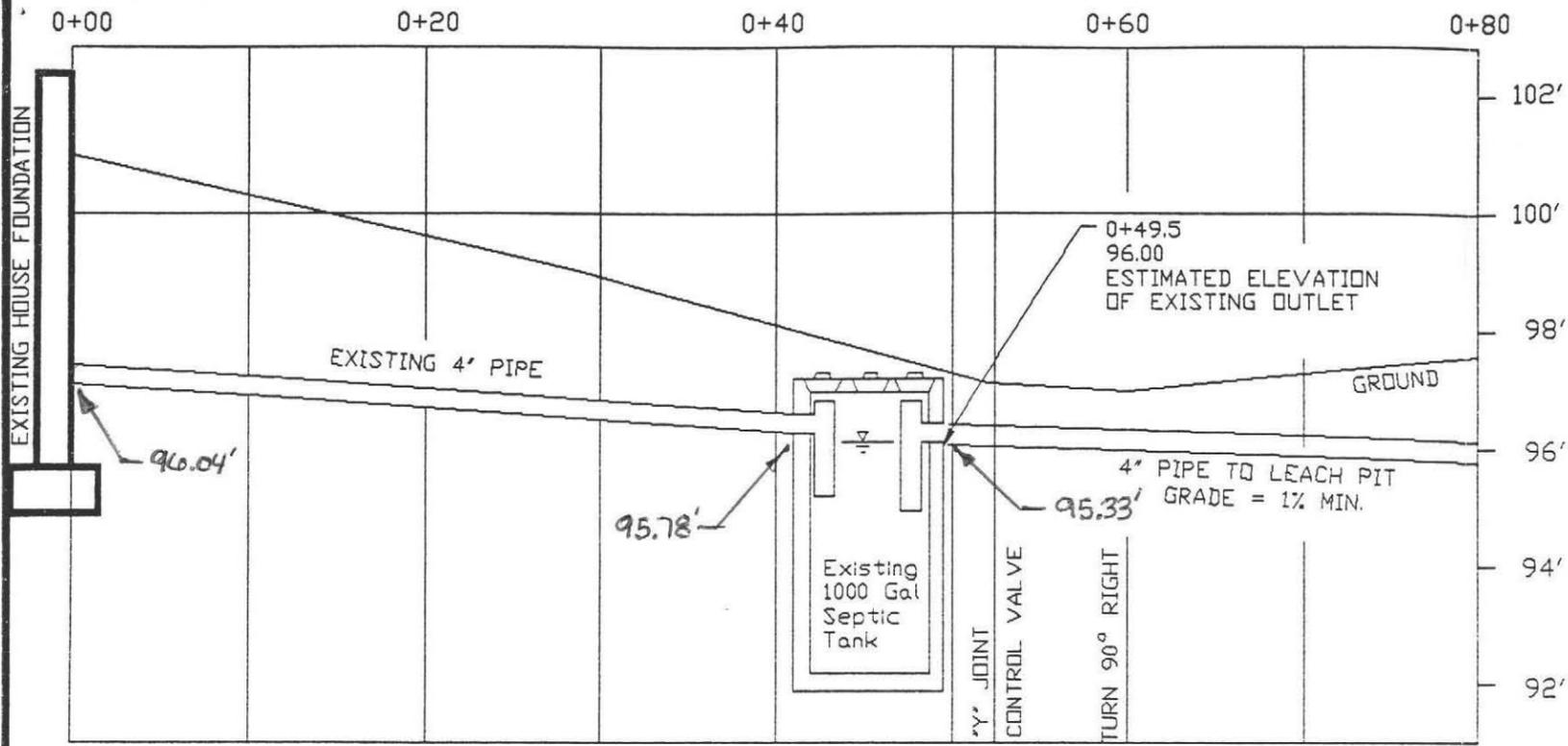
"Y" JOINT WITH  
FLOW CONTROL VALVE  
AMERKAN MANUFACTURING  
Co., INC. "BULL RUN"  
VALVE OR EQUIVALENT

LEGEND	
△ Hx	DEEP OBSERVATION HOLE
○ PT	PERCOLATION TEST
— — — 100'	EXISTING CONTOUR LINE 1 FOOT INTERVAL

NOTES	
1.	TBM IS CORNER OF PORCH FLOOR. 100' ELEVATION ASSUMED.
2.	AREA SERVED BY PUBLIC WATER SUPPLY NO WELLS WITHIN 200' OF THE LEACH AREA.

PLAN SHOWING SEWAGE DISPOSAL	
REPAIR AT 55 CHAPEL RD., AMHERST	
BY: FILIOS ENTERPRISES, INC. 69 PELHAM ROAD AMHERST, MA 01002	FOR: DONALD J. SOUTHWICK 55 CHAPEL RD. AMHERST, MA 01002
DRAWN BY F. FILIOS 10/17/91 SCALE: 1" = 30'00"	
REVISED BY R. STOVER 3/31/92 PAGE ONE OF THREE	





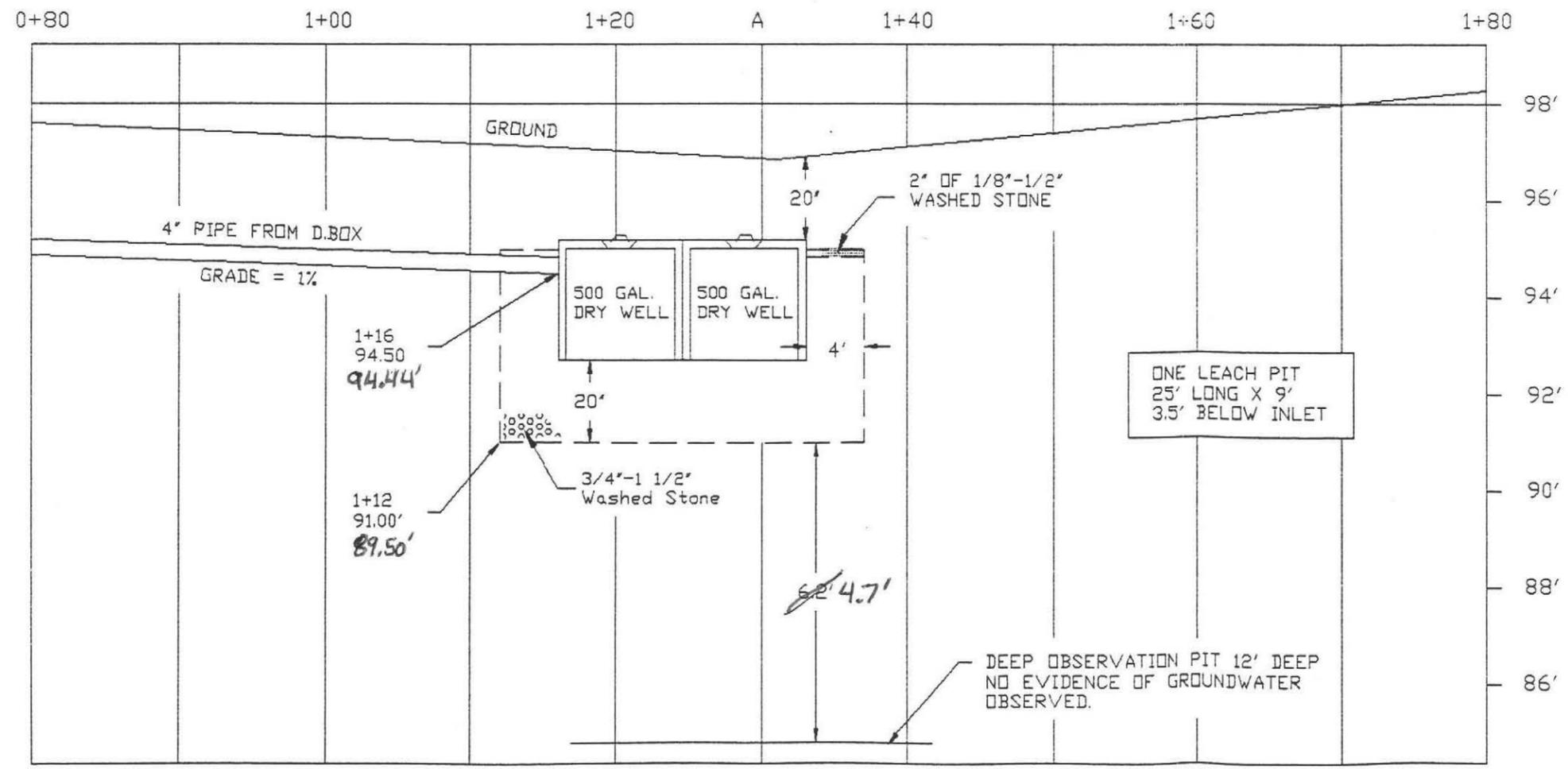
100' Elevation Assumed at TBM. TBM is corner of porch floor as shown on planview.

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



**Construction Notes**

1. Septic tank should be inspected and pumped annually.
2. Inspect septic tank when proposed leach pit is installed to ensure that tees and baffles are functional.



**CALCULATIONS**

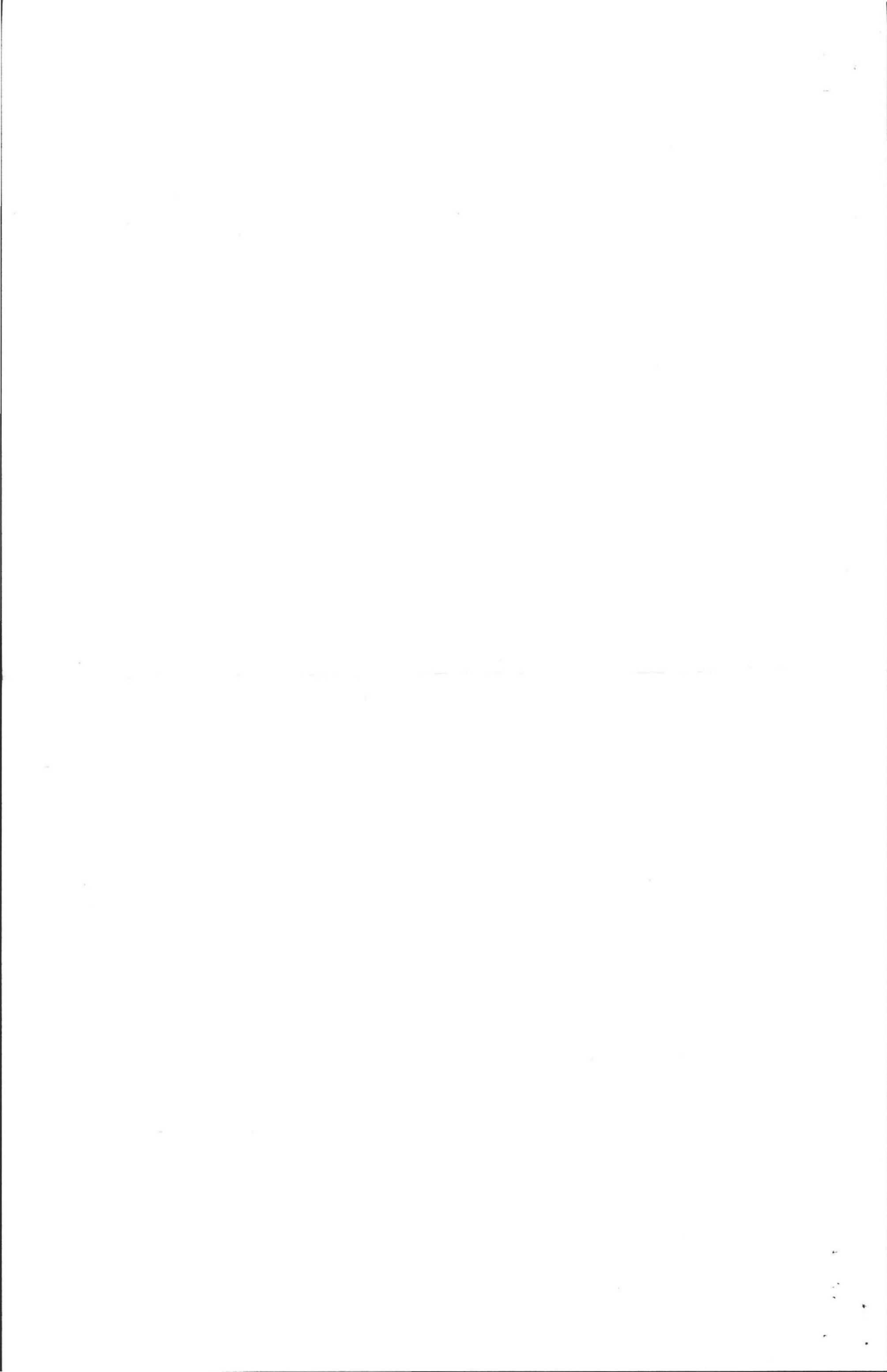
**REQUIRED:**  
 FOR A THREE BEDROOM HOUSE IN AMHERST, MA AT 110 GAL./BEDROOM/DAY X 1.25 (PER AMHERST HEALTH DEPT. REGULATIONS) = 412.5 GAL./DAY REQUIRED.

**DESIGNED:**  
 1 LEACH PIT: 25' LONG X 9' WIDE X 3.5' BELOW INLET (EFFECTIVE DEPTH). DESIGNED WITH A PERCOLATION RATE OF 4 MIN./INCH GIVING SIDEWALL AND BOTTOM AREA LOADING FACTORS OF 2.00 AND 0.83 GAL./SQ.FT./DAY RESPECTIVELY.

SIDEWALL:	2 SIDES (25' X 3.5')	2.00 GAL./SQ.FT./DAY	= 350 GAL./DAY
ENDWALL:	2 ENDS (9' X 3.5')	2.00 GAL./SQ.FT./DAY	= 126 GAL./DAY
BOTTOM:	(25' X 9')	0.83 GAL./SQ.FT./DAY	= 186 GAL./DAY
<b>TOTAL:</b>			<b>= 661 GAL./DAY</b>

**PROFILE OF SEWAGE DISPOSAL SYSTEM**  
**REPAIR AT 55 CHAPEL RD., AMHERST, MA**

BY: FILIOS ENTERPRISES, INC. 69 PELHAM RD. AMHERST MA 01002 (413)256-8008	FOR: DONALD J. SOUTHWICK 55 CHAPEL ROAD AMHERST, MA 01002
DRAWN BY R. STOVER	SCALE: 1" = 10' HOR. 3' VER.
REVISED: 31 MAR. 1992	PAGE TWO OF THREE



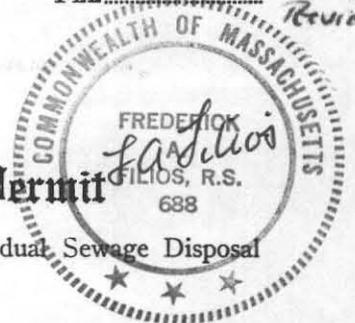
No. 92-3  
Revised

Need 30<sup>00</sup> from Filios - Plan Review  
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:

Location - Address 55 Chapel Rd or Lot No. None  
Donald J. Southwick 55 Chapel Rd, Amherst, MA 01002  
Owner L & C Construction Address  
Installer Address

Type of Building  
Dwelling — No. of Bedrooms 3 Expansion Attic ( ) Garbage Grinder (  )  
Other — Type of Building Single Family No. of persons..... Showers ( ) — Cafeteria ( )  
Other fixtures Garbage grinder shall be removed

Design Flow 5.5 x 1.25 gallons per person per day. Total daily flow 412.5 gallons.  
Septic Tank — Liquid capacity EXIST gallons Length..... Width..... Diameter..... Depth.....  
Disposal Trench — No..... Width..... Total Length..... Total leaching area 238 sq. ft.  
Seepage Pit No. 1 Diameter 25 x 9 Depth below inlet 3.5 Total leaching area 225 sq. ft.  
Other Distribution box ( ) Dosing tank ( )  
Percolation Test Results Performed by Filios Enterprises, Inc. Date Sept. 30, 1991  
Test Pit No. 1 4 minutes per inch Depth of Test Pit 12' Depth to ground water None  
Test Pit No. 2..... minutes per inch Depth of Test Pit..... Depth to ground water.....

Sidewalk Bottom Area

Description of Soil Attached

Nature of Repairs or Alterations — Answer when applicable leach pit proposed; retain existing septic tank with "x" joint + flow control valve to permit future use of old leach area as auxiliary capacity.  
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 Donald J. Southwick Date 4-24-92

Application Approved By David Ziegler for A. J. Dept Date 4/24/92

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

Permit No. 92-3 Issued ..... Date .....

THE COMMONWEALTH OF MASSACHUSETTS  
**BOARD OF HEALTH**

Town OF Amherst

**Certificate of Compliance**

Checked OK  
2/18/92  
FL Filios

*8/21/92*  
THIS IS TO CERTIFY, That the Individual Sewage Disposal System constructed ( ) or Repaired (  ) by 55 Chapel Road Installer

at 55 Chapel Road 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. 92-3 Revised dated .....

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

DATE 8/21/92 Inspector David Ziegler for A. J. Dept

THE COMMONWEALTH OF MASSACHUSETTS  
**BOARD OF HEALTH**

Town OF Amherst

**Disposal Works Construction Permit**

No. 92-3 FEE.....  
Revised

Permission is hereby granted.....  
to Construct ( ) or Repair ( ) an Individual Sewage Disposal System  
at No. 55 Chapel Rd

as shown on the application for Disposal Works Construction Permit No. 92-3R Dated.....  
David Ziegler for A. J. Dept Board of Health

DATE 4/24/92

CHECK OR FILL IN WHERE APPLICABLE



12 miles

92-3

TOWN OF AMHERST

9/30/91  
NOT PD.

PERC TEST DATA SHEET Southwick - 2/28/92 1787-160<sup>cc</sup>

DATE 9/30/91 LOCATION 55 Chapel Road LOT SIZE pd

OWNER Dan Southwick ADDRESS 55 Chapel Road TELE # 256-0522

P.E./RS Fred Filios FIRM Filios ENT. OBSERVED BY David Zarozinski

BACK HOE OPERATOR Karl's TELE \_\_\_\_\_ BENCH MARK \_\_\_\_\_

PERC DEPTH 59" PRE SOAK TIME 9:04 PERC DEPTH \_\_\_\_\_ PRE SOAK TIME \_\_\_\_\_

TEST	<u>9:19</u>	<u>12"</u>	<u>8"</u>	<u>9:27</u>	<u>45"</u>	_____	_____
	<u>9:20</u>	<u>11"</u>	<u>7"</u>	<u>9:30</u>	<u>40"</u>	_____	_____
	<u>9:23</u>	<u>10"</u>	<u>6"</u>	<u>9:34</u>	<u>20"</u>	_____	_____
	<u>9:25</u>	<u>9"</u>				_____	_____

RATE 4 RATE \_\_\_\_\_

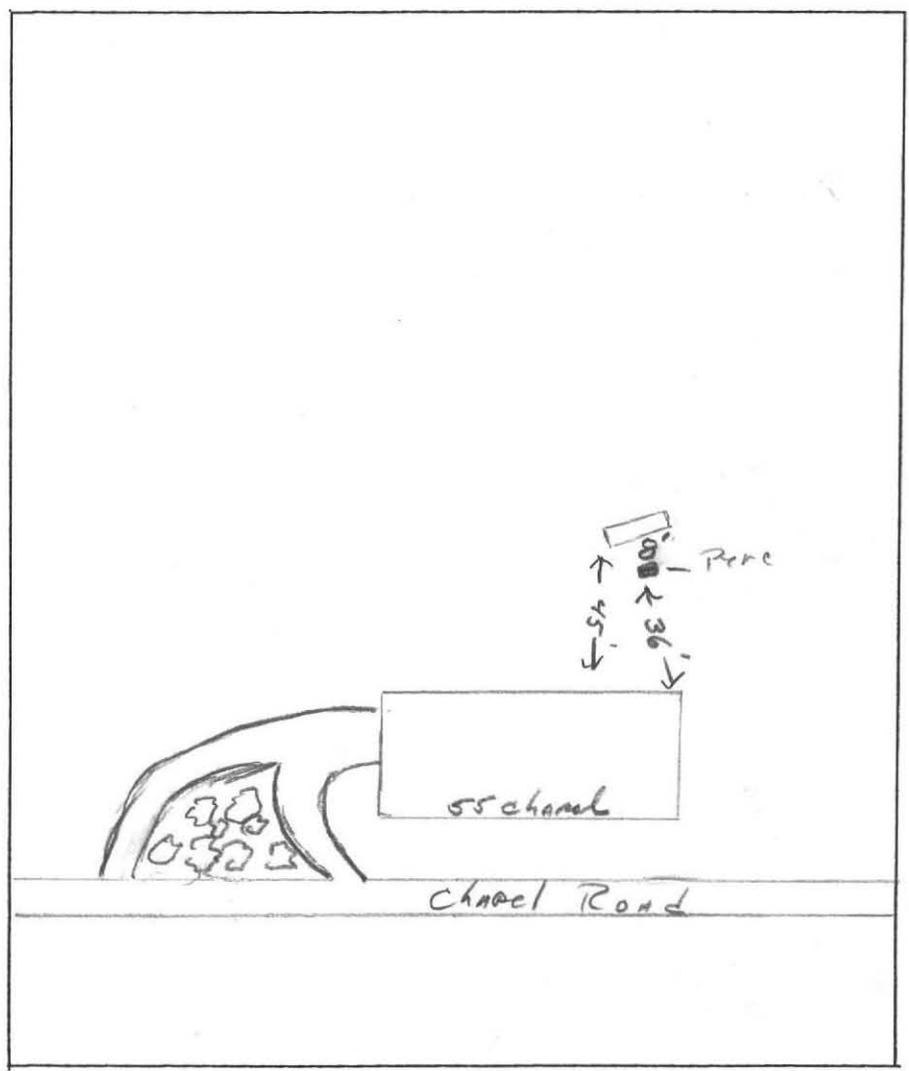
# 1

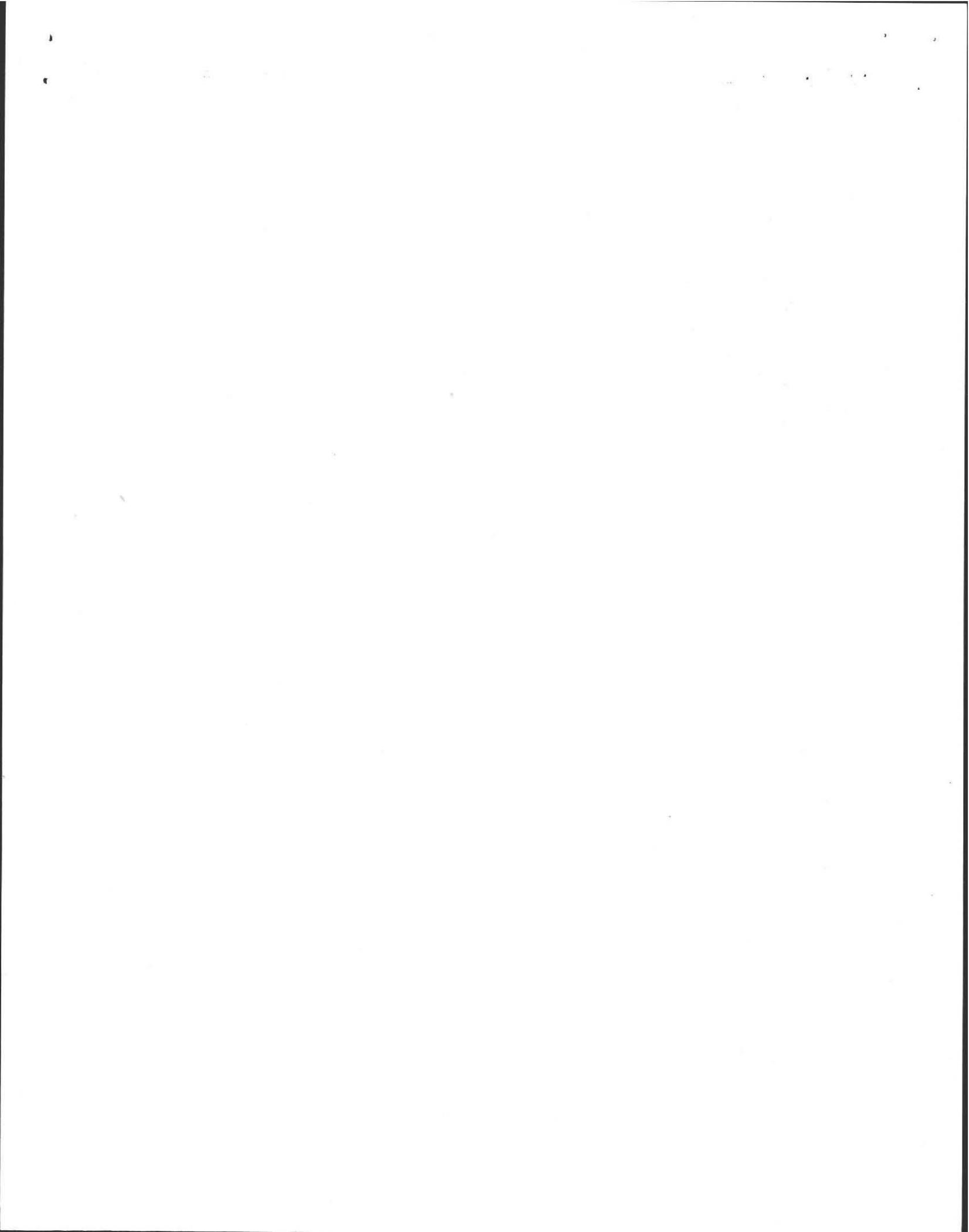
TOP <u>8"</u>	TOP
SUB <u>25"</u>	SUB
fine sand w/ silt <u>92"</u>	
comp sand	

Dry 12'

TOP	TOP
SUB	SUB

TOP	TOP
SUB	SUB







# Percolation Test Report and Deep Soil Log

## FILIOS ENTERPRISES

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

Owner: Donald J. Southwick  
Location: 55 Chapel Rd.  
Amherst, MA

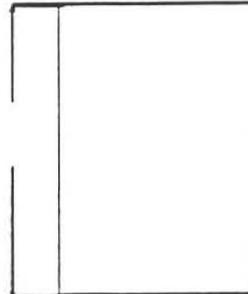
Date: 30 September 1991  
B. of H. David Zarozinski

### DEEP HOLE 1

12'	0"-8"	TOPSOIL
	8"-25"	SUBSOIL
	25"-92"	FINE SAND + SILT
	92"-12'	COARSE SAND

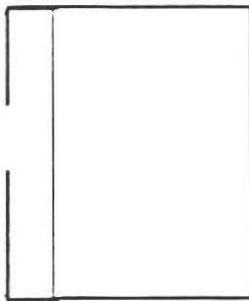
Ground Water None

### DEEP HOLE 2



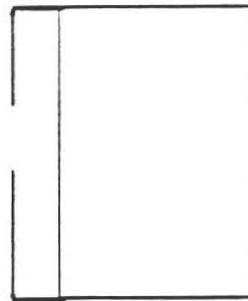
Ground Water \_\_\_\_\_

### DEEP HOLE 3



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

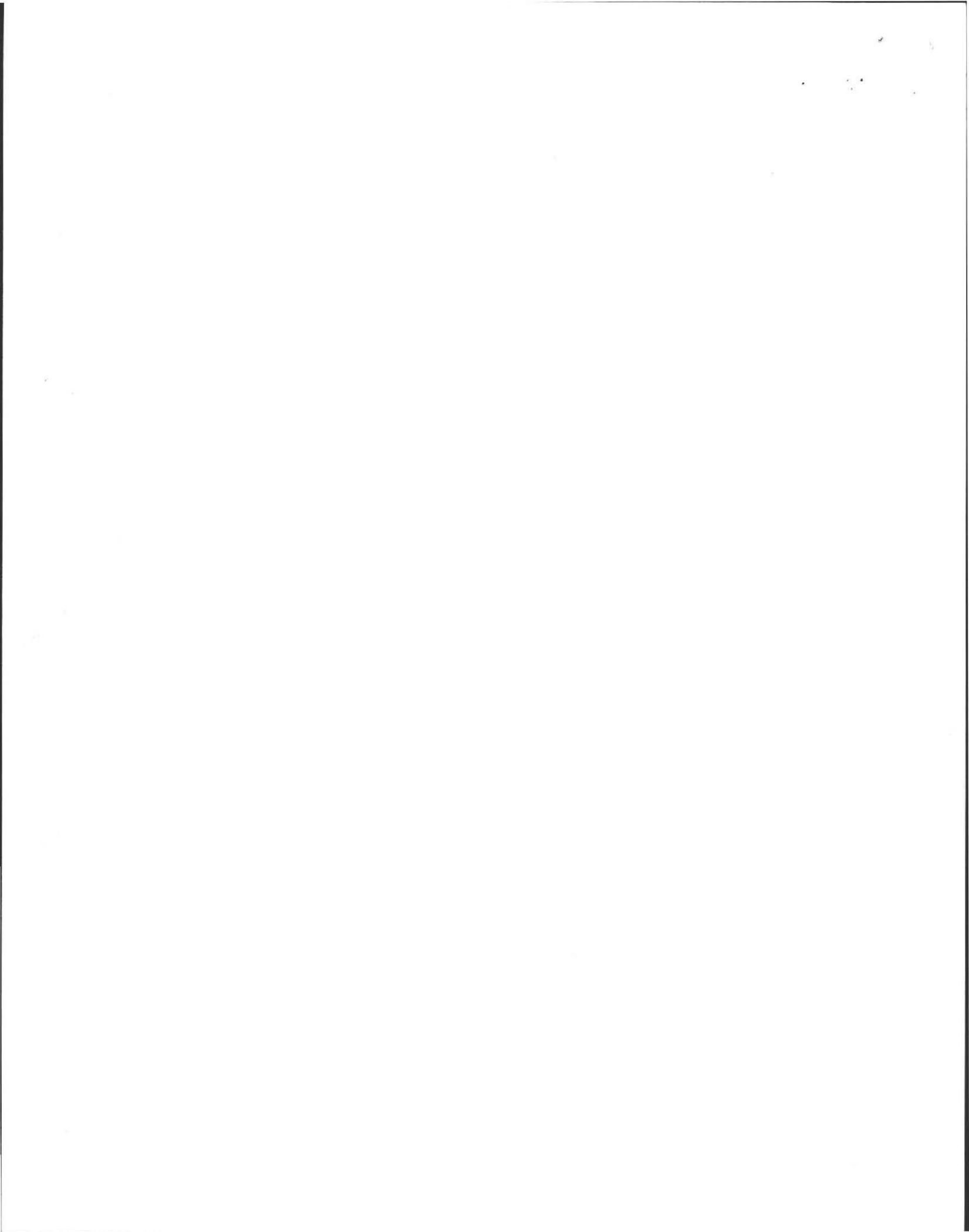
### DEEP HOLE 4



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

PERC TEST  
DEPTH OF PERC 59"  
PERC RATE: 4 MIN./IN.

COMENTS: Repair Perc  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

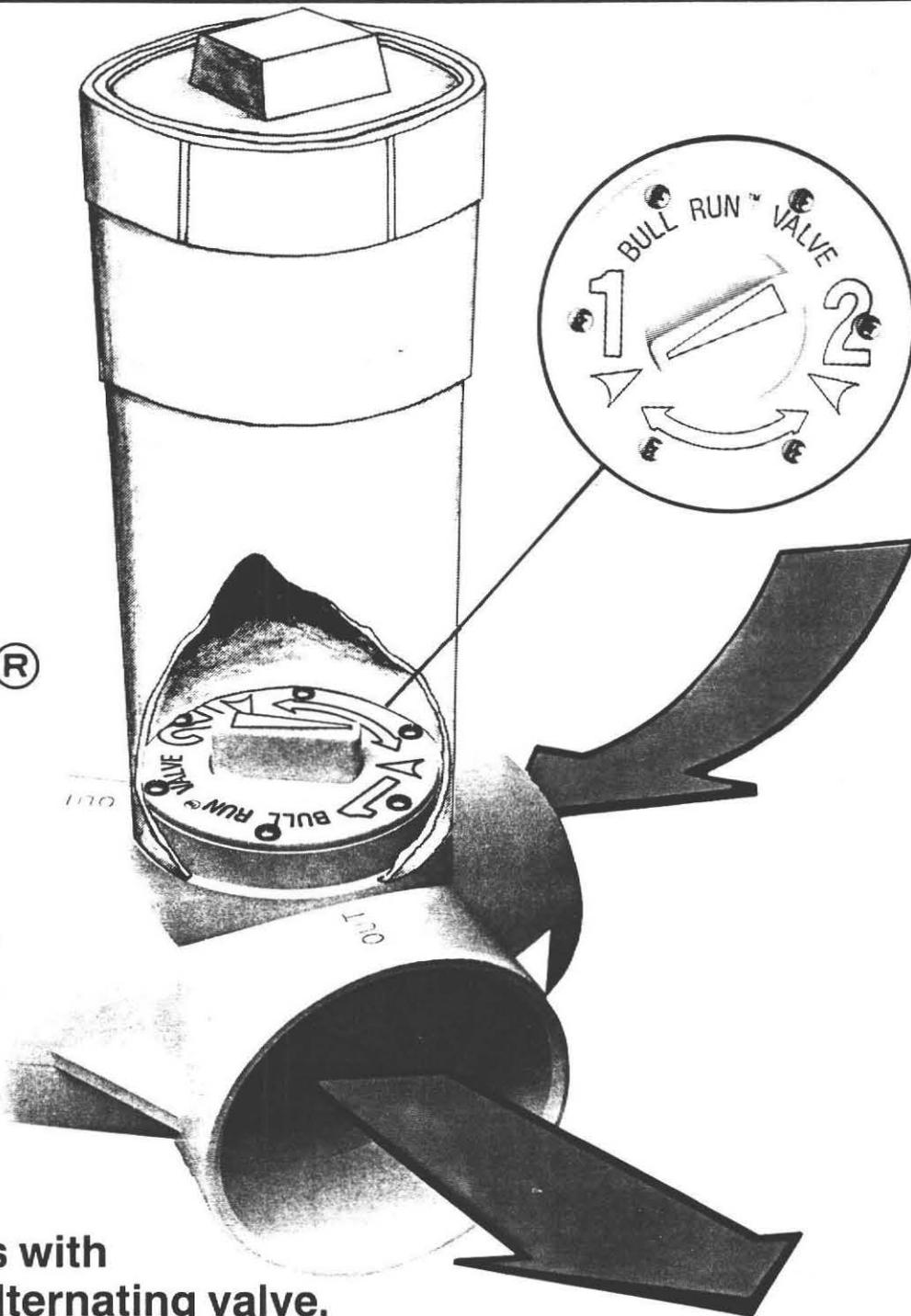


### Valve Kit Contains:

1. Bull Run-Valve Body
2. Valve Key
3. Riser Cap Adapter
4. Water-Tight Access Cap



# The Bull Run® Valve



## Lengthen the life of septic systems with Bull Run's PVC alternating valve.

The Bull Run Valve, a new patented PVC alternating valve for septic systems can prolong the effective life of drainage fields dramatically by allowing an alternating flow of effluent to two separate halves of the drainage field. Wastewater flow can be redirected quickly and easily, enabling unused portions of the drainage field to rest and regenerate optimum characteristics.

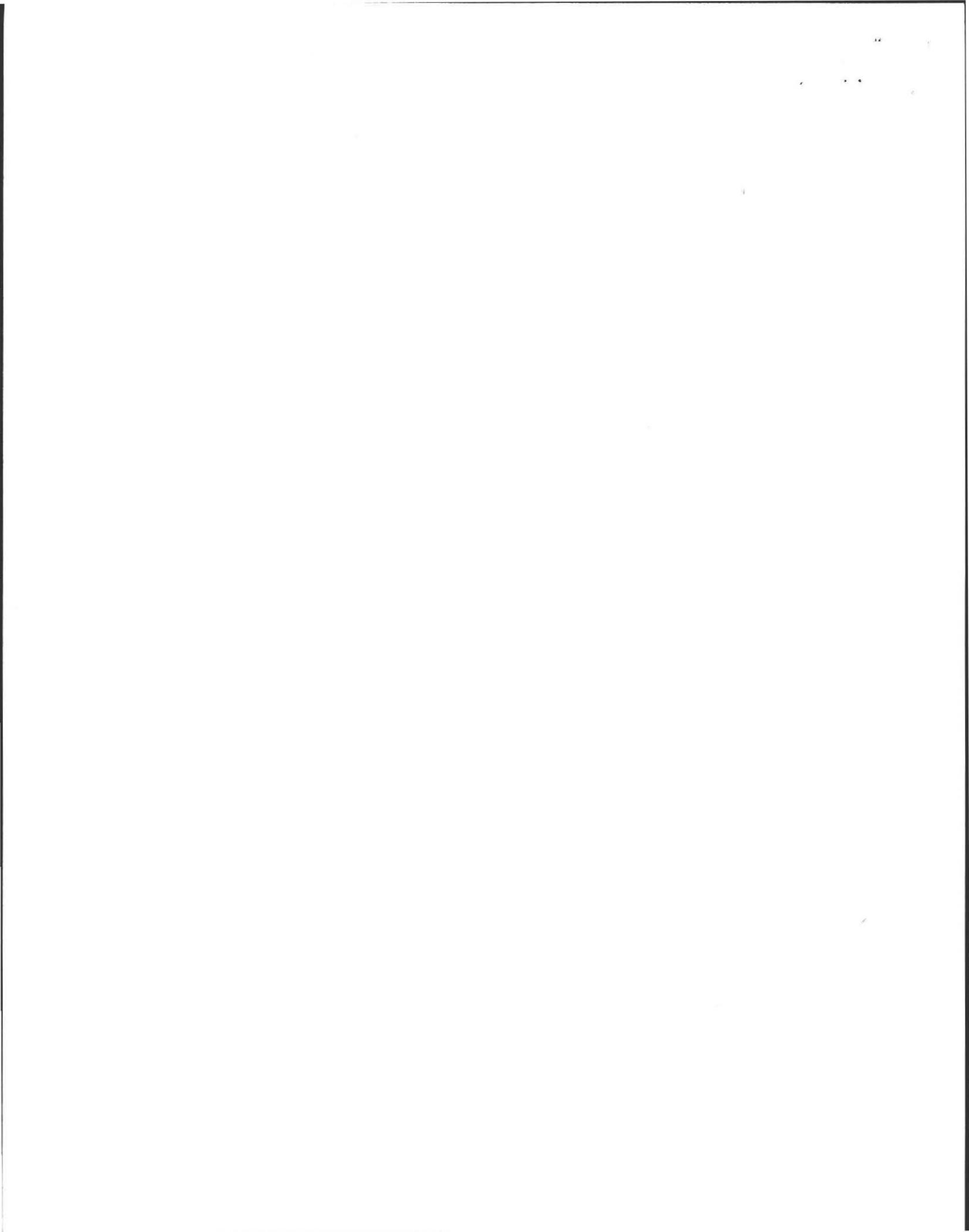
The Valve itself is jam-proof, leak-proof and extremely durable. Made from Polyvinyl Chloride, it is rugged and less expensive than a metal valve. It is not susceptible to corrosion despite the highly corrosive nature of the fluid it handles.

The Bull Run® Valve is designed to split effluent flow to distribution boxes. In addition to the advantages of longer life and easier installation, the valve is the most public health safe alternating device available for wastewater disposal applications. The user has absolutely no contact with wastewater due to the valve's leak-proof and external operating characteristics. The changeover from one drainage field to another can be accomplished in less than a minute by simply turning a valve without digging or contact with wastewater.

The Bull Run Valve is available in 4" and is suitable wherever septic tank disposal systems are used—in commercial, industrial, and residential applications.

PATENT NO. 4,217,933

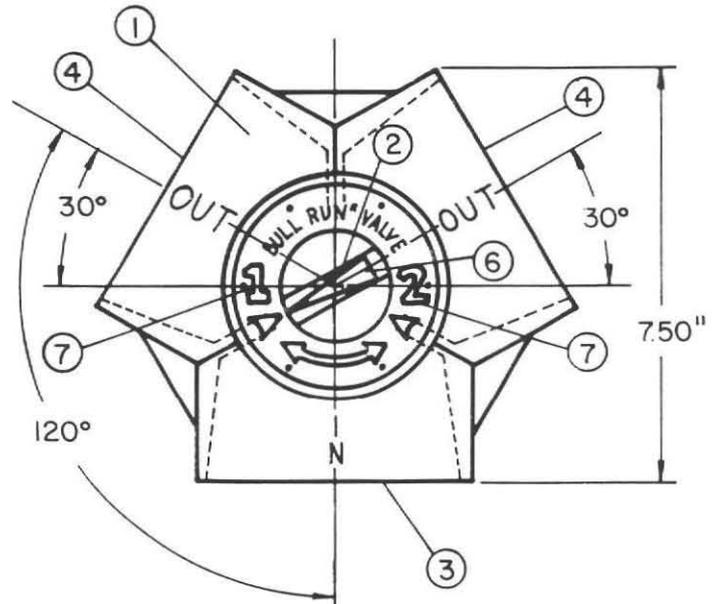
## American Manufacturing Co., Inc.



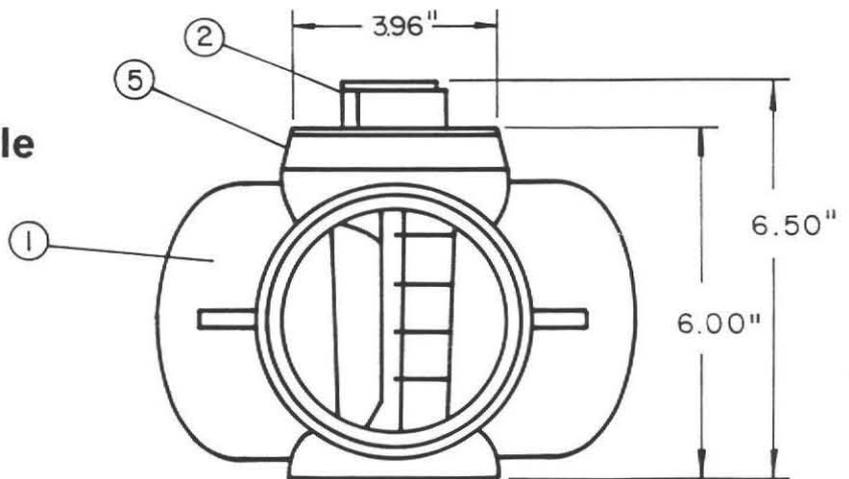
# Bull Run® Valve

## Specification Sheet

**SIZE: 4" Valve Ports**  
**MATERIAL: PVC**  
**WEIGHT: 2½ Pounds**  
**POSITIONER: Manual with Internal Stop**



- ① Valve Body
- ② Direction Control Handle
- ③ Valve "IN" Port
- ④ Valve "OUT" Port
- ⑤ Riser Tube Connection
- ⑥ Positioning Shape
- ⑦ Indicator Number



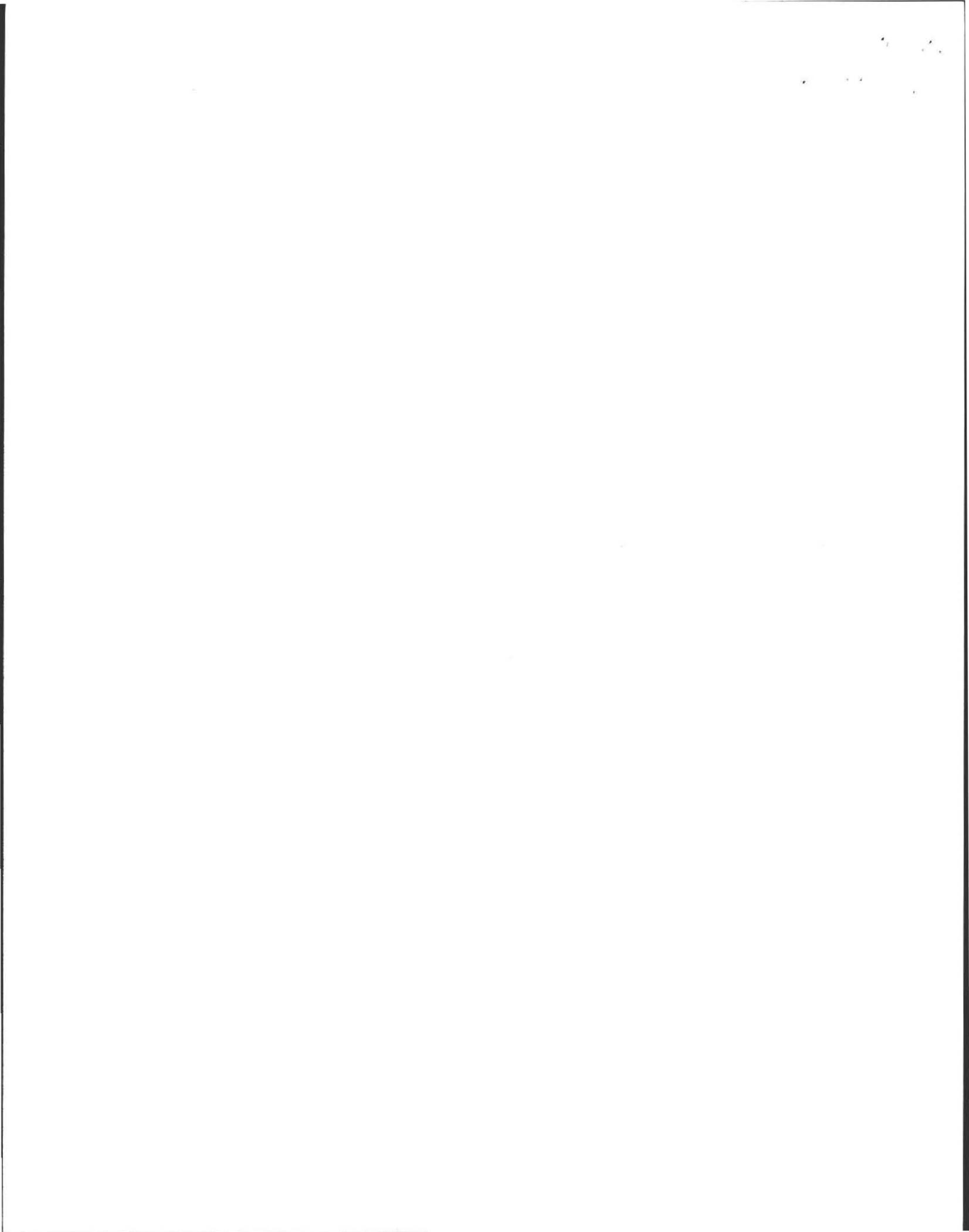
### OPERATION OF VALVE

The Direction Control Handle is turned using the valve key (a standard water meter key) provided so the Positioning Shape on the Direction Control Handle is perfectly in line with the corresponding Positioning Shape labeled as No. 1 or No. 2 on the valve body. The indicator number shows which side of the field is in use.

The internally tapered valve body and plug provide compression seating for operation. This design may cause minimal resistance to the turning operation which is perfectly normal.

PATENT NO. 4,217,933

**Bull Run Valve Co., Inc., P.O. Box 549, Manassas, VA 22110 (703) 369-2000**



NOTE: SEPTIC SYSTEM HAS NOT FAILED -  
 Home owner is removing U.S.T.  
 YARD will be torn up  
 therefore he wants to  
 change system - same time



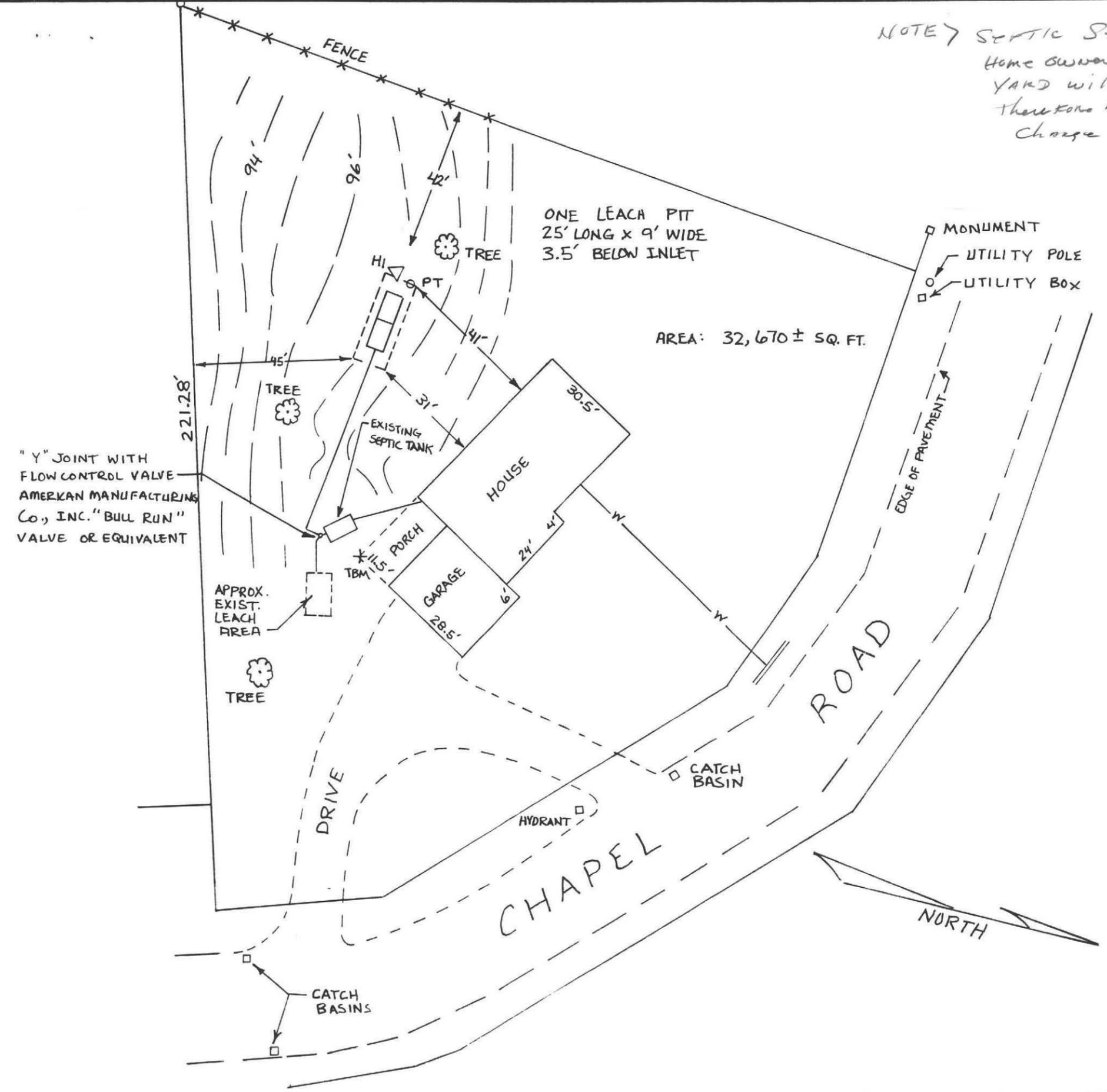
ONE LEACH PIT  
 25' LONG X 9' WIDE  
 3.5' BELOW INLET

AREA: 32,670 ± SQ. FT.

LEGEND	
△ Hx	DEEP OBSERVATION HOLE
○ PT	PERCOLATION TEST
--- 100' ---	EXISTING CONTOUR LINE 1 FOOT INTERVAL

NOTES	
1.	TBM IS CORNER OF PORCH FLOOR. 100' ELEVATION ASSUMED.
2.	AREA SERVED BY PUBLIC WATER SUPPLY NO WELLS WITHIN 200' OF THE LEACH AREA.

PLAN SHOWING SEWAGE DISPOSAL	
REPAIR AT 55 CHAPEL RD., AMHERST	
BY: FILIOS ENTERPRISES, INC. 69 PELHAM ROAD AMHERST, MA 01002	FOR: DONALD J. SOUTHWICK 55 CHAPEL RD. AMHERST, MA 01002
DRAWN BY F. FILIOS 10/17/91 SCALE: 1" = 30'00"	
REVISED BY R. STOVER 3/31/92 PAGE ONE OF THREE	



"Y" JOINT WITH  
 FLOW CONTROL VALVE  
 AMERKAN MANUFACTURING  
 Co., INC. "BULL RUN"  
 VALVE OR EQUIVALENT

APPROX.  
 EXIST.  
 LEACH  
 AREA

TREE

TREE

TREE

HYDRANT

CATCH  
 BASIN

CATCH  
 BASINS

NORTH

ROAD

CHAPEL

HOUSE

GARAGE

PORCH

EXISTING  
 SEPTIC TANK

DRIVE

221.28'

94'

96'

42'

41'

37'

30.5'

24'

6'

28.5'

45'

9' PT

HI

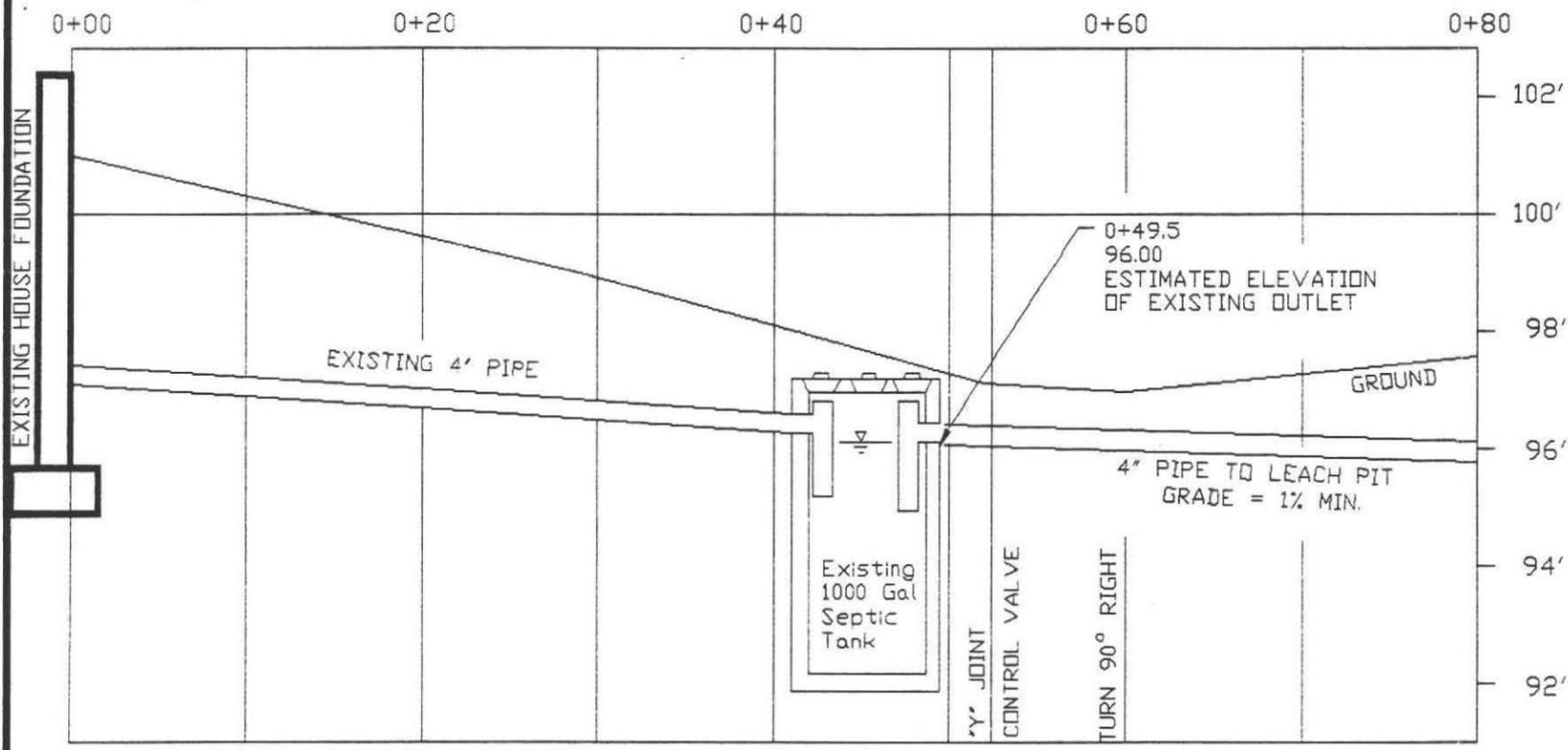
MONUMENT

UTILITY POLE

UTILITY BOX

EDGE OF PAVEMENT





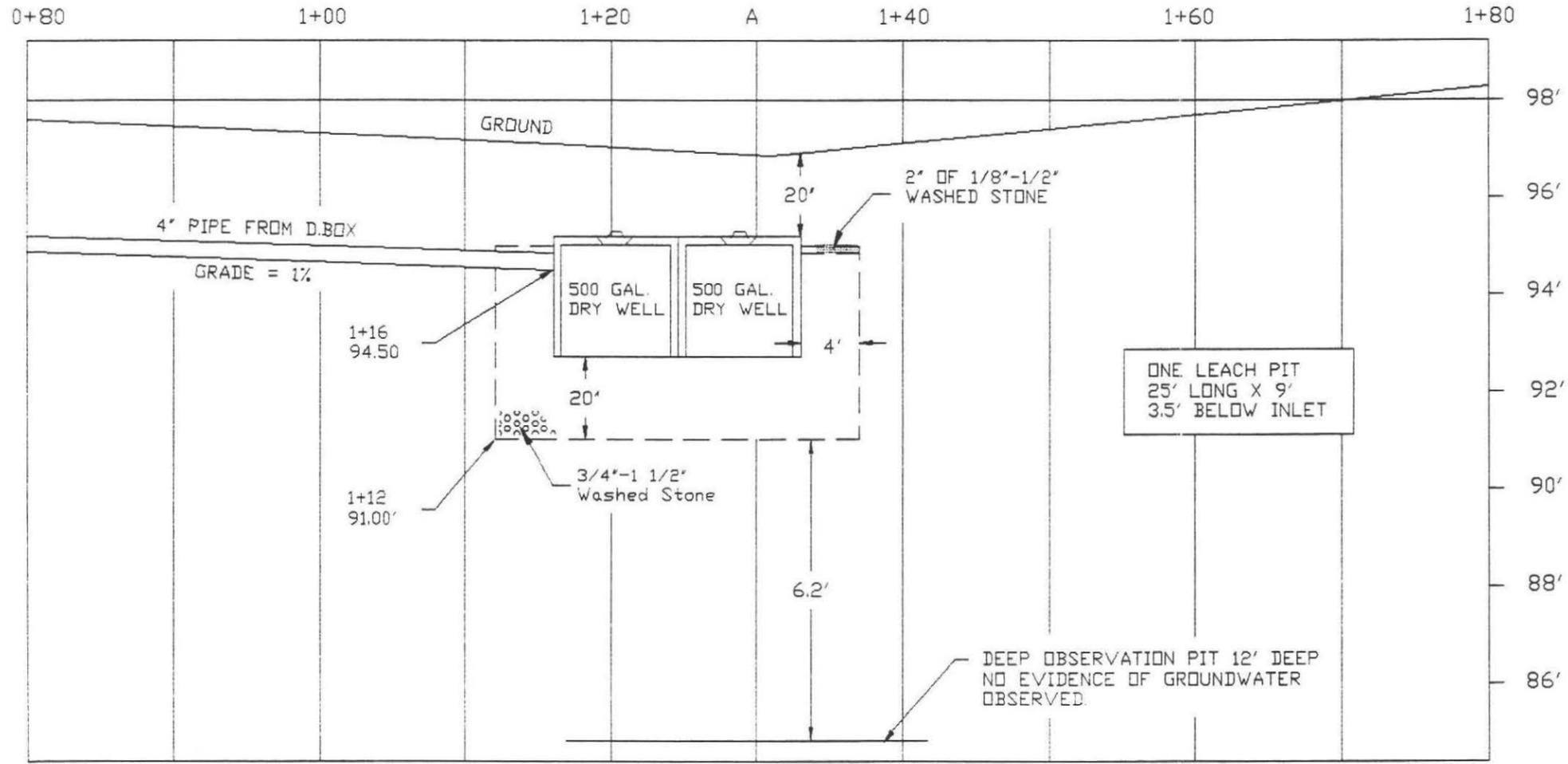
100' Elevation Assumed at TBM. TBM is corner of porch floor as shown on planview.

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



**Construction Notes**

1. Septic tank should be inspected and pumped annually.
2. Inspect septic tank when proposed leach pit is installed to ensure that tees and baffles are functional.



ONE LEACH PIT  
 25' LONG X 9'  
 3.5' BELOW INLET

**CALCULATIONS**

**REQUIRED:**  
 FOR A THREE BEDROOM HOUSE IN AMHERST, MA AT 110 GAL./BEDROOM/DAY X 1.25 (PER AMHERST HEALTH DEPT. REGULATIONS) = 412.5 GAL./DAY REQUIRED.

**DESIGNED:**  
 1 LEACH PIT: 25' LONG X 9' WIDE X 3.5' BELOW INLET (EFFECTIVE DEPTH). DESIGNED WITH A PERCOLATION RATE OF 4 MIN./INCH GIVING SIDEWALL AND BOTTOM AREA LOADING FACTORS OF 2.00 AND 0.83 GAL./SQ.FT./DAY RESPECTIVELY.

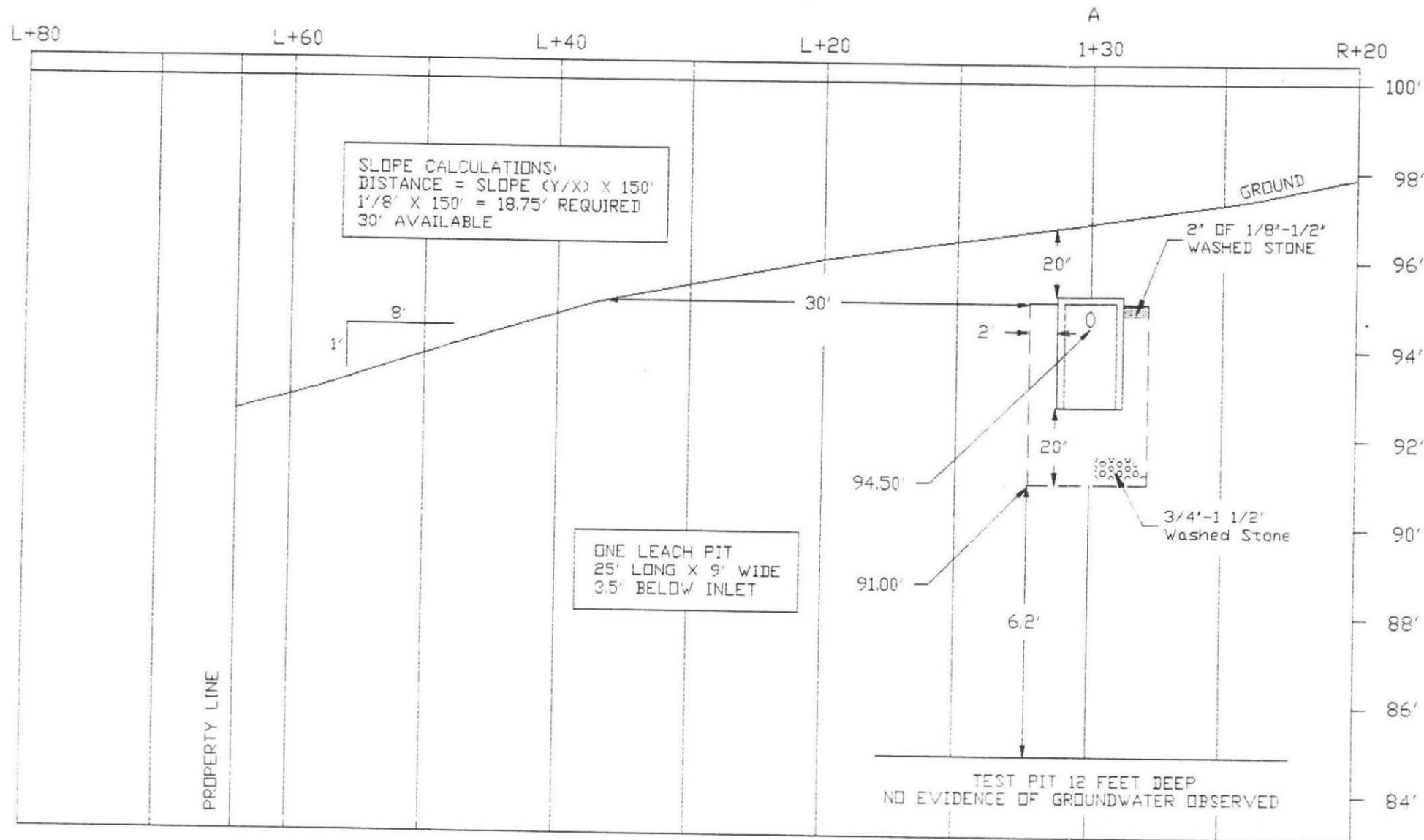
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BOTTOM:	(25' X 9')	0.83 GAL./SQ.FT./DAY	= 186 GAL./DAY
<b>TOTAL:</b>			<b>= 661 GAL./DAY</b>

**PROFILE OF SEWAGE DISPOSAL SYSTEM**  
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BY: FILIOS ENTERPRISES, INC. 69 PELHAM RD. AMHERST MA 01002 (413)256-8008	FOR: DONALD J. SOUTHWICK 55 CHAPEL ROAD AMHERST, MA 01002
DRAWN BY R. STOVER	SCALE: 1" = 10' HOR. 3' VER.
REVISED: 31 MAR. 1992	PAGE TWO OF THREE



CROSS-SECTION OF LEACH PIT AT A-A' (1+30)

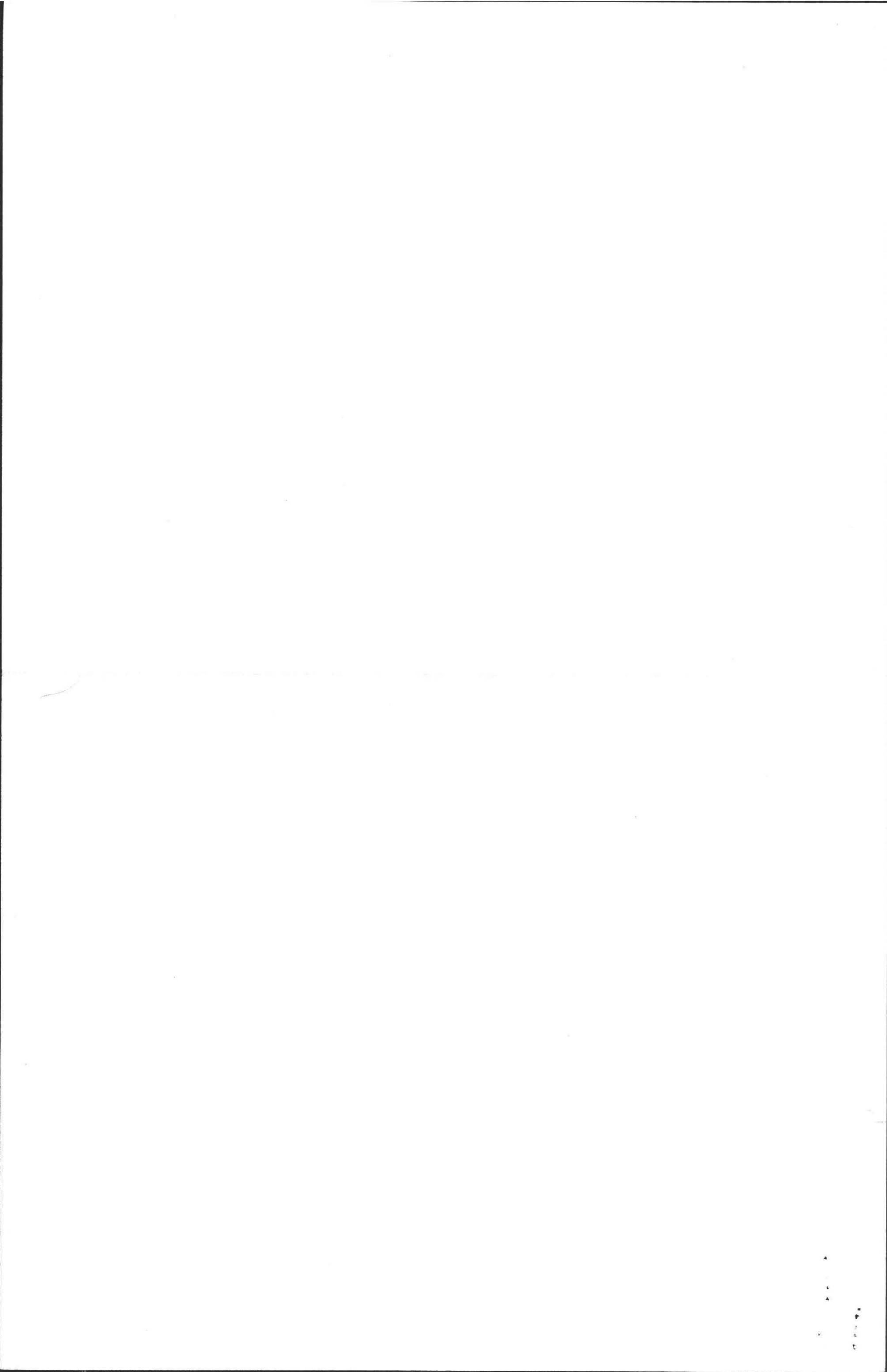


100' Elevation Assumed at TBM. TBM is corner of porch floor as shown on planview.

**SPECIFICATIONS**  
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PROFILE OF SEWAGE DISPOSAL SYSTEM	
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DRAWN BY R. STOVER	SCALE: 1" = 10' HOR. 3' VER.
17 OCTOBER 1991	PAGE THREE OF THREE



**BOARD OF HEALTH, AMHERST, MASSACHUSETTS**  
**APPLICATION FOR DISPOSAL WORKS CONSTRUCTION PERMIT**

No. 71-27 Date 10/28/71 Fee 3.00 Date Rec'd. 10-29-71 By [Signature]

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

Location—Address 55 CHAPEL ROAD or Lot No. 19

Owner JOHN L & JEAN F. McDERMOTT (AS OF 11/2/71) Address 61 EAST ST., HADLEY

Contractor SAME Address SAME

Type of Building RESIDENCE Dimensions 30' x 77' Size Lot \_\_\_\_\_

Dwelling—No. of Bedrooms 3 Expansion Attic (no) Garbage Grinder (✓)

Other DISHWASHER No. of persons 3 Showers (2)

Other fixtures TOTAL OF 3 1/2 BATHS

Town Water? YES Type of Well \_\_\_\_\_

Design Flow 300 gallons per person per day. Total daily flow 300 gallons

Septic Tank—Liquid capacity 1000 gallons Dimensions: L \_\_\_\_\_ W \_\_\_\_\_ D \_\_\_\_\_

Disposal Trench—No. 1 Width 12 Total Length 32 Total leaching area 384 sq. ft.

Disposal Bed—No. \_\_\_\_\_ Diameter \_\_\_\_\_ Depth below inlet \_\_\_\_\_ Total leaching area \_\_\_\_\_ sq. ft.

Dry Well—No. \_\_\_\_\_ Diameter \_\_\_\_\_ Depth below inlet \_\_\_\_\_ Dimensions: \_\_\_\_\_ x \_\_\_\_\_ x \_\_\_\_\_

Other: Distribution box ( ) No. \_\_\_\_\_ Dosing tank ( ) \_\_\_\_\_

(Depth of Soil Line Below finished grade at foundation \_\_\_\_\_)

Percolation Test Results Performed by Kendall G. Lund Date Oct. 29, 71

Test Pit No. 1 7 1/2 minutes per inch Design 10 Depth of Test Pit 3.5'

Test Pit No. 2 \_\_\_\_\_ minutes per inch \_\_\_\_\_ Depth of Test Pit \_\_\_\_\_

Description of Soil SW-SP, gravelly, f-c sand Depth to Ground Water Assumed 6.5 (perched)

Will disposal area be filled? no Cut down? no

(On reverse side or separate sheet, show plot plan with building. Include dimensions, distances from all boundaries. Show location of wells, streams, ledge, large trees, etc.)

AGREEMENT: The undersigned agrees to construct the aforescribed individual sewage disposal system in accordance with the provisions of Article XI of the Sanitary Code and regulations of the Amherst Board of Health. The undersigned further agrees not to place the system in operation until a Certificate of Compliance has been issued by this board of health.

Application Approved by [Signature] John L. McDermott Owner or builder 10/28/71 date  
10-29-71 date

Application Disapproved for the following reasons: Bottom of disposal trench must be 2.5' below natural ground

**BOARD OF HEALTH, AMHERST, MASSACHUSETTS**  
**CERTIFICATE OF COMPLIANCE**

THIS IS TO CERTIFY, That the individual Sewage Disposal System installed ( ) or repaired ( ) by \_\_\_\_\_ at \_\_\_\_\_ has been constructed in accordance with the provisions of

Article XI 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 satisfactorily.

DATE \_\_\_\_\_ Inspector \_\_\_\_\_

**BOARD OF HEALTH, AMHERST, MASSACHUSETTS**  
**DISPOSAL WORKS CONSTRUCTION PERMIT**

No. 71-27 Permission is hereby granted John McDermott to construct (X) or repair ( ) an Individual Sewage Disposal System at 55 CHAPEL RD

as shown on the application for Disposal Works Construction Permit No. 71-27

This permit is issued with the understanding that future alterations or additions will be made if necessary. This permit shall not be construed as permission to create or maintain any sewage nuisance and in the issuance of this permit the Board of Health assumes no responsibility for the future operation or maintenance of the system.

DATE 10-29-71 [Signature] Board of Health

