

~~80-48~~  
FLAT HILLS ROAD  
381 (Pending)



256-8815 - Owner  
CH # 163  
10/29/93  
FEE 60.00 PLANS

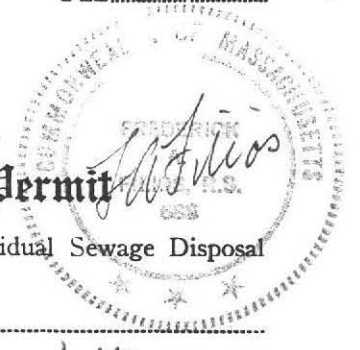
No. 90-6  
Revised

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 (X) an Individual Sewage Disposal System at:

381 Flat Hill Rd  
Location - Address  
Edward and Alexis Connolly  
Owner  
381 Flat Hills Rd, Amherst MA 01002  
or Lot No.  
Address

Type of Building  
Dwelling - No. of Bedrooms 5 (2 additional) 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 550 x 1.25 = 687.5 gallons.  
Septic Tank - Liquid capacity 1500 gallons Length 10.5 Width 5.0 Diameter Depth 4.0  
Disposal Trench - No. 3 (H) Width 3.0 Total Length 21.0 Total leaching area 657 sq. ft. side  
Seepage Pit No. Diameter Depth below inlet Total leaching area 630 sq. ft. bottom  
Other Distribution box (X) Dosing tank ( )  
Percolation Test Results Performed by Ernest Mathiew Date 5/5/90  
Test Pit No. 1 15 minutes per inch Depth of Test Pit 128 Depth to ground water 117  
Test Pit No. 2 minutes per inch Depth of Test Pit 111 Depth to ground water dry

Description of Soil attached

Nature of Repairs or Alterations - Answer when applicable add third leach trench to accommodate 2 bedroom addition

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 [Signature] Date 10/29/93  
Application Approved By [Signature] Date 11/31/93  
Application Disapproved for the following reasons:

Permit No. 90-6 Revised 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 (X) by \* Installer

at 381 Flat Hills Rd  
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. 90-6 Rev. 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 Edward and Alexis Connolly  
to Construct ( ) or Repair (X) an Individual Sewage Disposal System  
at No. 381 Flat Hills Rd.

as shown on the application for Disposal Works Construction Permit No. 90-6 Rev. Dated 11/31/93  
[Signature] Board of Health

DATE 11/31/93

CHECK OR FILL IN WHERE APPLICABLE

UNIVERSITY OF MICHIGAN LIBRARY

THE UNIVERSITY OF MICHIGAN  
LIBRARY  
ANN ARBOR, MICHIGAN  
48106-1000

UNIVERSITY OF MICHIGAN  
LIBRARY  
ANN ARBOR, MICHIGAN  
48106-1000

THE COMMONWEALTH OF MASSACHUSETTS

BOARD OF HEALTH

CH # 163

No. 90-6 Per Town Amherst OF Amherst

FEE 60<sup>00</sup>

Disposal Works Construction Permit

Permission is hereby granted Edward and Alexis Connolly

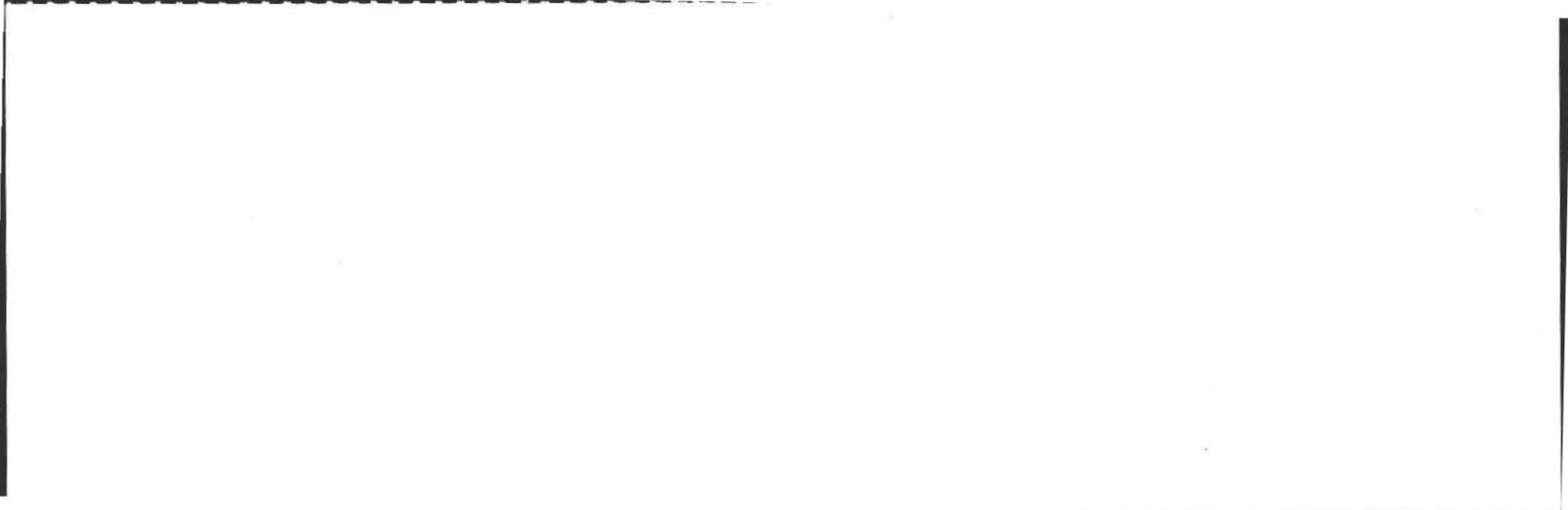
to Construct ( ) or Repair (X) an Individual Sewage Disposal System

at No. 381 Flat Hills Rd.

as shown on the application for Disposal Works Construction Permit No. 90-6 B Street Amherst Dated 11/3/93

DATE 11/3/93

[Signature]  
Board of Health



TOWN OF AMHERST  
Health Department

Pd 60<sup>00</sup> APR  
Plan Sick # 163  
10/29/93  
ED/ALEXIS  
CON HOLLY

_____ Bakery	01-0-501-4433-00	_____ Offal/Garbage	01-0-501-4472-00
_____ Bed & Breakfast	01-0-501-4474-01	_____ Perc Test	01-0-501-4344-00
_____ Burial Permit	01-0-501-4475-00	_____ Retail Permit	01-0-501-4473-00
_____ Car Seat Rental	89-0-000-2557-00	_____ Sanitary Code Booklet	01-0-501-4380-00
_____ Catering	01-0-501-4429-00	_____ Septic Installers Permit	01-0-501-4470-01
_____ Food Handler	01-0-501-4474-00	✓ _____ Septic Private Applications	01-0-501-4470-00
_____ Housing Inspection	01-0-501-4348-00	_____ Septic - Reinspection	01-0-501-4345-00
_____ Massage	01-0-501-4425-00	_____ Sub-Division Rev.	01-0-501-4460-00
_____ Motel License	01-0-501-4428-00	_____ T.B. Clinic	01-0-501-4379-00
_____ Miscellaneous	01-0-501-_____	_____ Twenty-one D Tickets	01-0-501-4879-00

TOTAL FEE

60<sup>00</sup>

Norma J Lynch  
Treasurer/Collector

Date

Dana Giacinti 11/3/93  
Health Department

Date

**Must have Collector's "PAID STAMP" on receipt to be valid.**

White: Applicant

Yellow: Collector

Pink: Accountant

Gold: Health Dept.





PROPERTY LINE

STONE WALL



EXISTING RIDING ARENA AND BARN

2 EXISTING LEACH TRENCHES  
70' LONG BY 3' WIDE BY 1.5' BELOW INLET  
INSTALLED IN 1990

PROPOSED THIRD TRENCH  
70' LONG BY 3.0' WIDE BY 1.5' BELOW INLET  
INSTALLED AT SAME DEPTH AS PREVIOUS TWO

DRIVE

PROPOSED  
2 BEDROOM  
ADDITION

EXISTING  
3 BEDROOM  
HOUSE

DECK

EXISTING  
D BOX

EXISTING 1500 GAL. SEPTIC TANK

TRENCH LOCATION:

INSTALLER TO IDENTIFY START AND END OF EXISTING  
EASTERN TRENCH AND EXCAVATE FOR NEW TRENCH A  
DISTANCE OF 6' FURTHER TO THE EAST AND PARRALEL  
TO THE EXISTING TRENCHES.

NOTES:

1. TBM IS NAIL IN 1' HICKORY.
2. NO OTHER WELLS WITHIN  
200' OF THE LEACH AREA AT  
THE TIME OF SURVEY.

LEGEND

○ PT PERCOLATION TEST

△ Hx DEEP TEST PIT

~ CONTOUR LINES  
(1' INTERVAL)

PLAN OF SEWAGE DISPOSAL SYSTEM

AT: 381 FLAT HILLS RD., AMHERST, MA

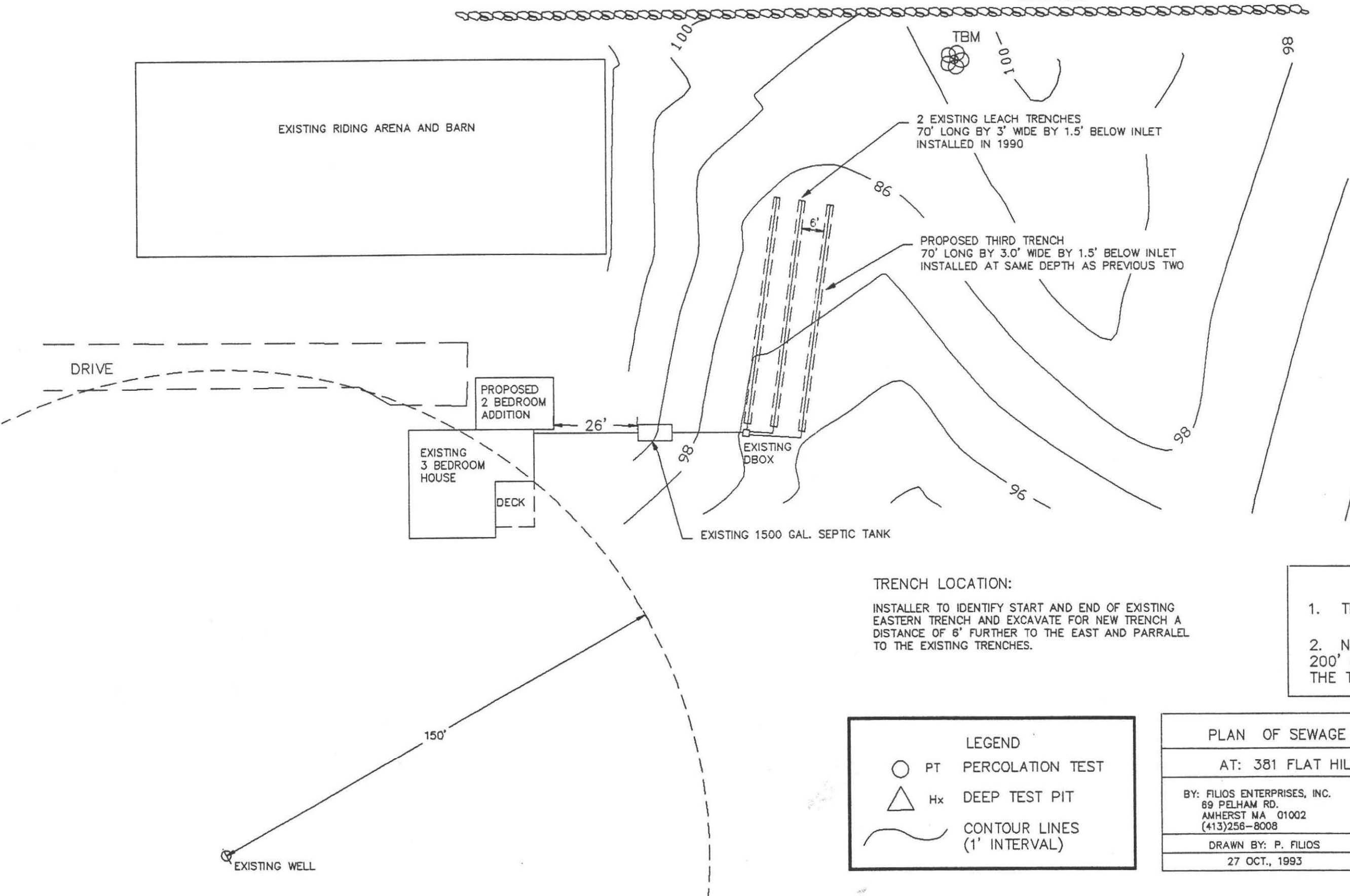
BY: FILIOS ENTERPRISES, INC.  
89 PELHAM RD.  
AMHERST MA 01002  
(413)256-8008

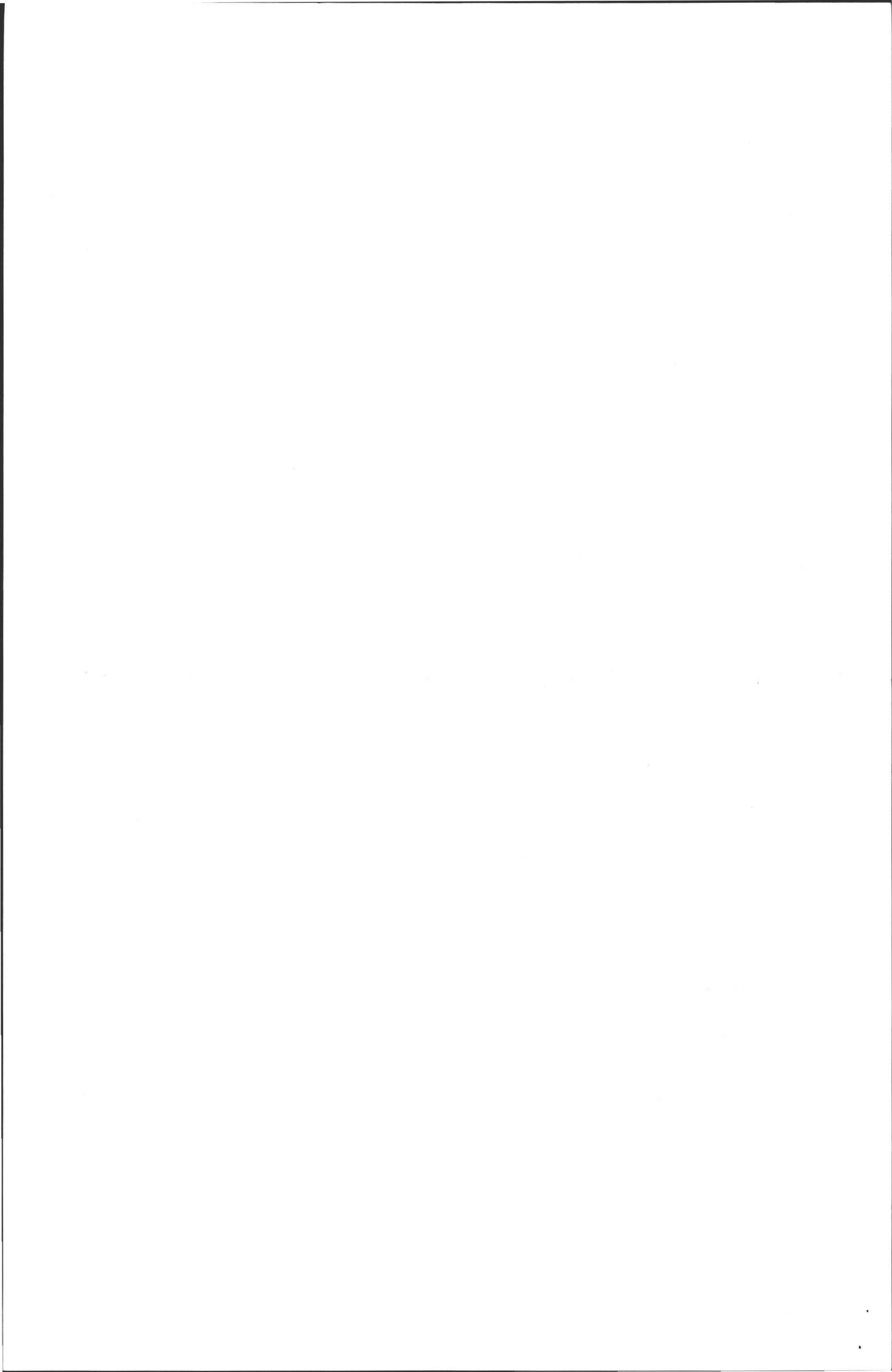
FOR: ED AND ALEXIS CONNOLLY  
381 FLAT HILLS RD.  
AMHERST, MA 01002

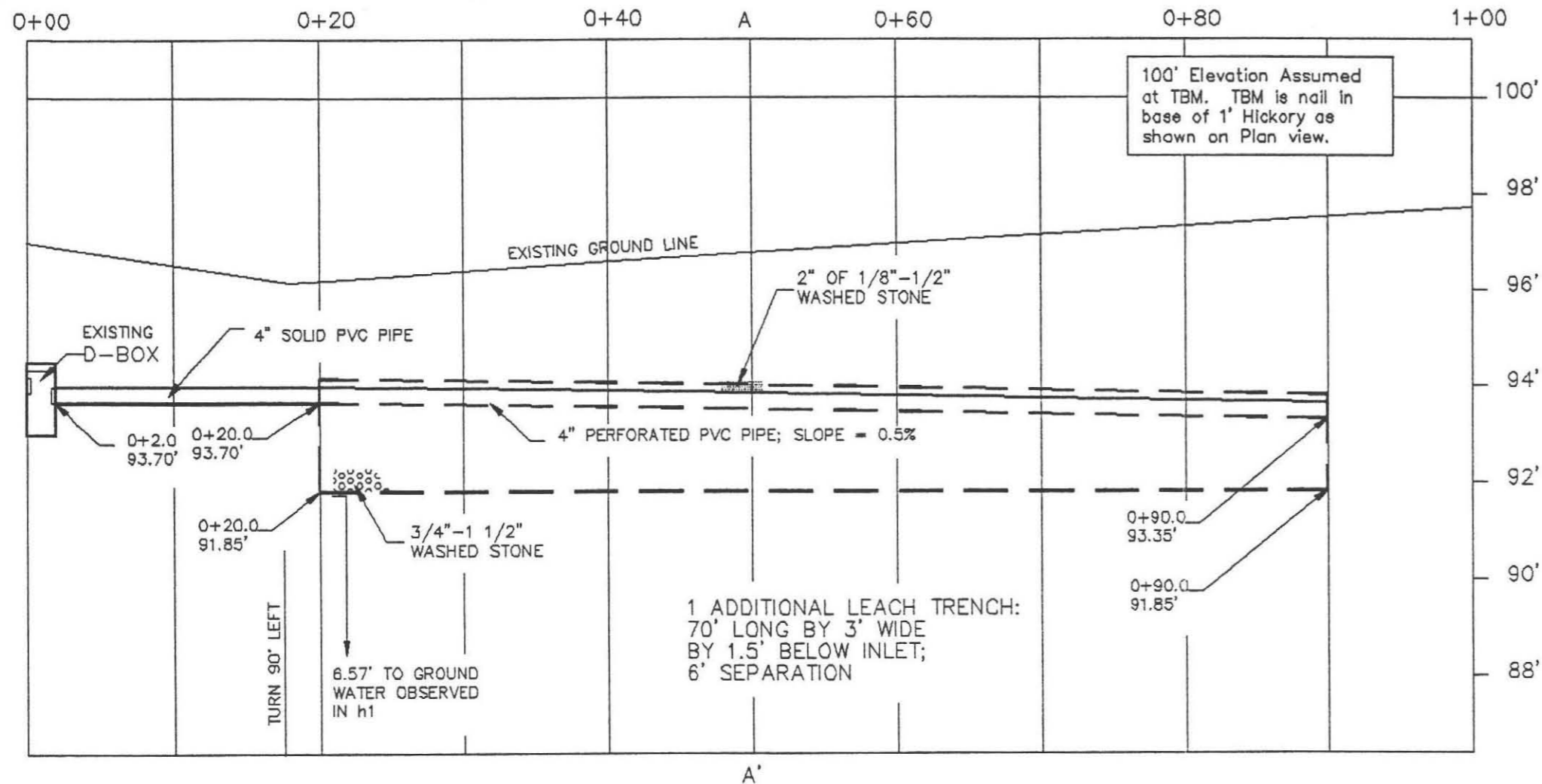
DRAWN BY: P. FILIOS  
27 OCT., 1993

SCALE: 1" = 30'  
PAGE 1 OF 2

EXISTING WELL





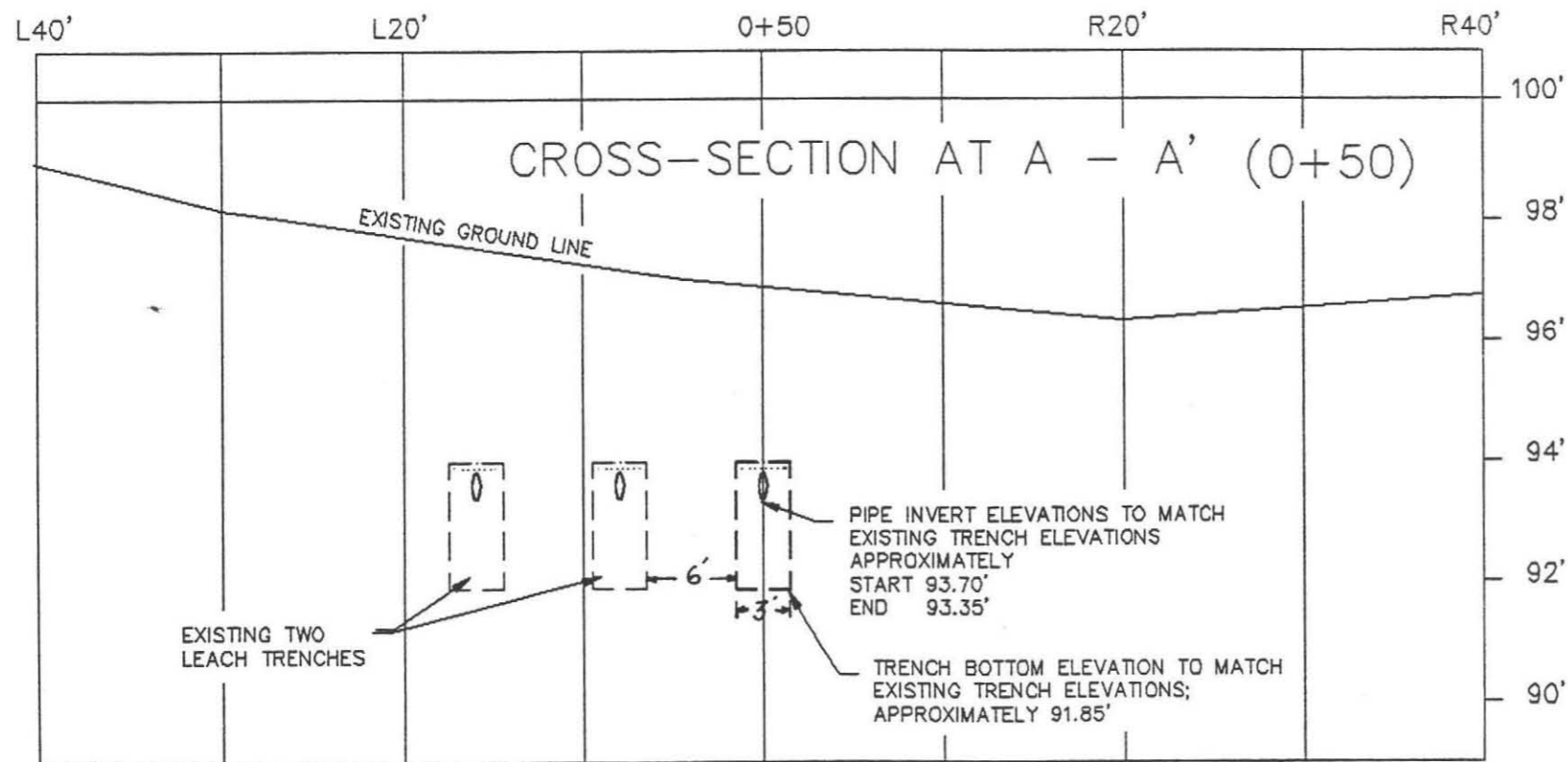


**SPECIFICATIONS**

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. Inlet and outlet tees must extend 14" and 24" below the flow line respectively.
3. Third trench to be installed at same elevations as existing trenches. Original TBM has been destroyed. New TBM is approximately 2' lower than original TBM. Therefore all elevations shown equate to original elevations 2' less.



**CALCULATIONS**

REQUIRED: For a 5 bedroom house without a garbage grinder a capacity of 550 gal./day X 1.25 (Safety Factor) = 687.50 gal./day.

DESIGNED: 3 leach trenches 70.0'L X 3.0'W X 1.50' below inlet (effective depth), for a perc rate of 15 min./in., yielding side and bottom loading factors of 0.66 and 0.43 gal./sq.ft. respectively.

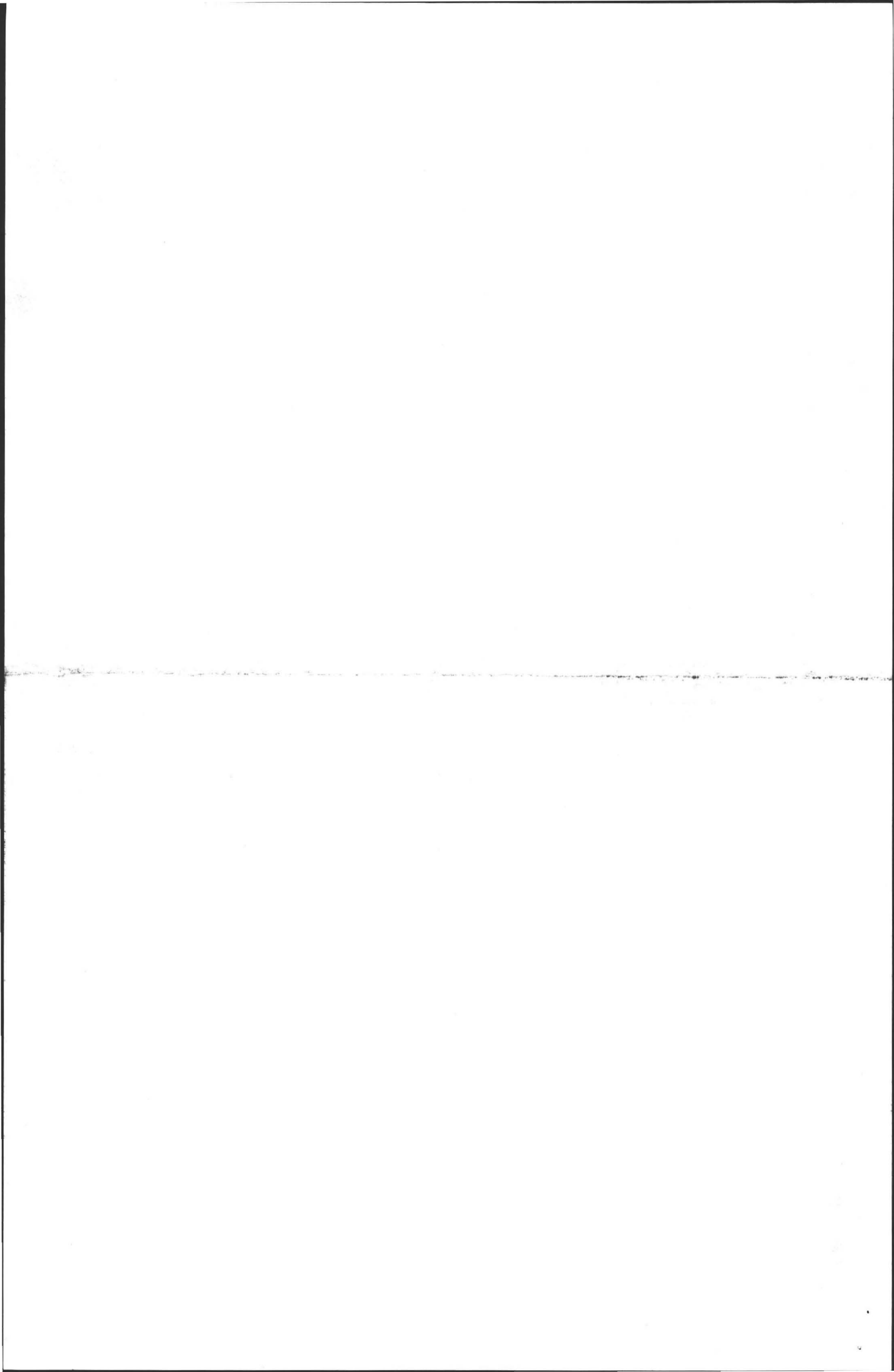
SIDEWALL: 6 Sides (73.0' X 1.5') 0.66 Gal./Sq.Ft. = 433.6 Gal.

BOTTOM: 3 Trenches (70.0' X 3.0') 0.43 Gal./Sq.Ft. = 270.9 GAL.

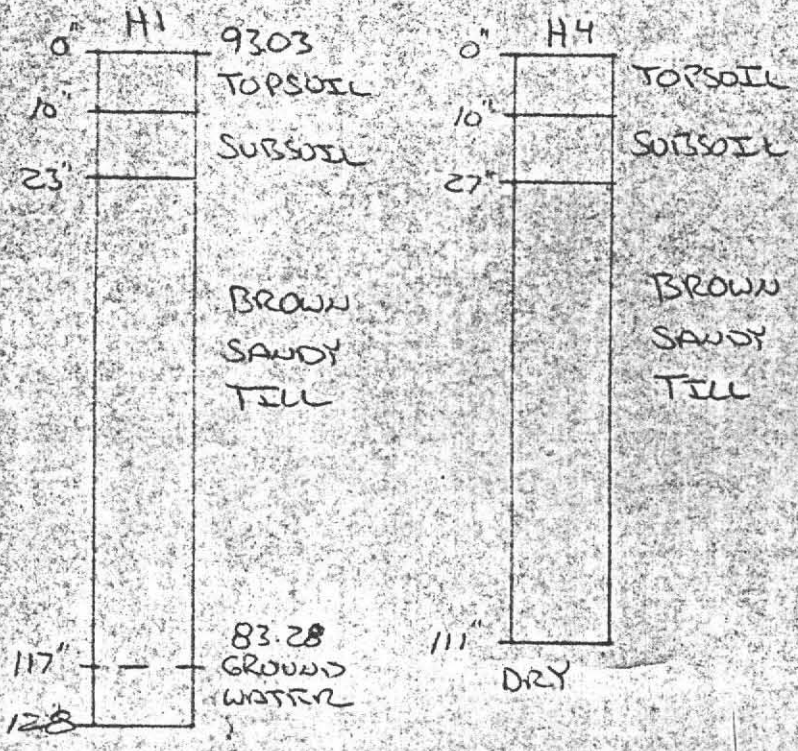
TOTAL = 704.5 Gal.



PROFILE OF SEWAGE DISPOSAL SYSTEM	
AT: 381 FLAT HILLS RD.	
BY: FILIOS ENTERPRISES, INC. 69 PELHAM RD. AMHERST MA 01002 (413)258-8008	FOR: EDWARD AND ALEXIS CONNOLLY 381 FLAT HILLS RD. AMHERST, MA 01002
DRAWN BY: P. FILIOS	SCALE: 1" = 10' HOR. 3" VER.
28 OCT., 1993	PAGE 2 OF 2



# SOIL LOG



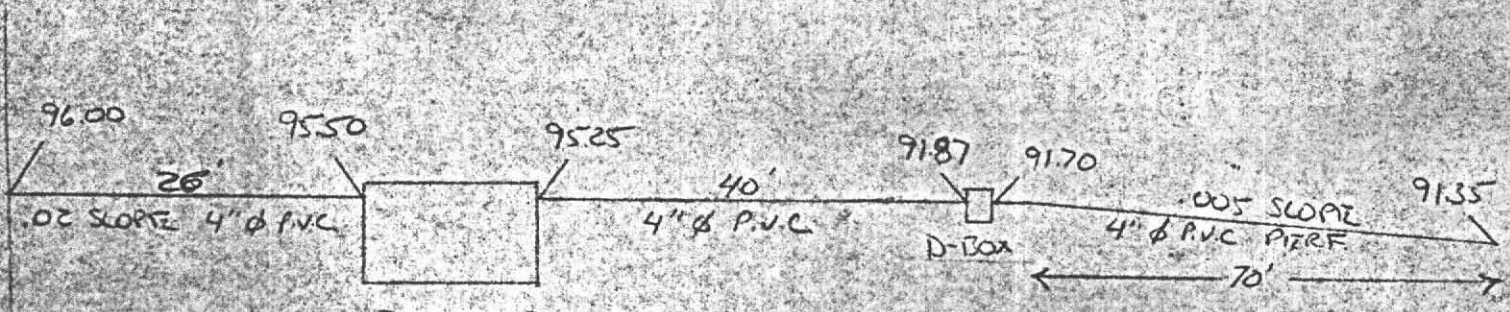
## DESIGN CALCULATIONS

3 BEDROOMS, NO GARBAGE GRINDER  
 1500 GALLON SEPTIC TANK, D.O.P. H1=62", H4=48"  
 PERC RATE H1 + H4 = 15 MIN/INCH  
 (3 BEDROOMS x 110 GALLONS) x 1.25 = 412.5 GALLONS DAILY FLOW

SIDE  $1.5 \times 4 \times 70' \times .66 \text{ GAL/FT}^2 = 277.2 \text{ GALLONS}$   
 BOTTOM  $3 \times 2 \times 70' \times .43 \text{ GAL/FT}^2 = 180.6 \text{ GALLONS}$   
 TOTAL = 840 FT<sup>2</sup>, TOTAL = 457.8 GALLONS

AMHERST REGULATIONS USED FOR CALCULATIONS

BOTTOM OF TRENCHES TO BE LAID FLAT  
 ENDS OF PIPES MUST BE CAPPED



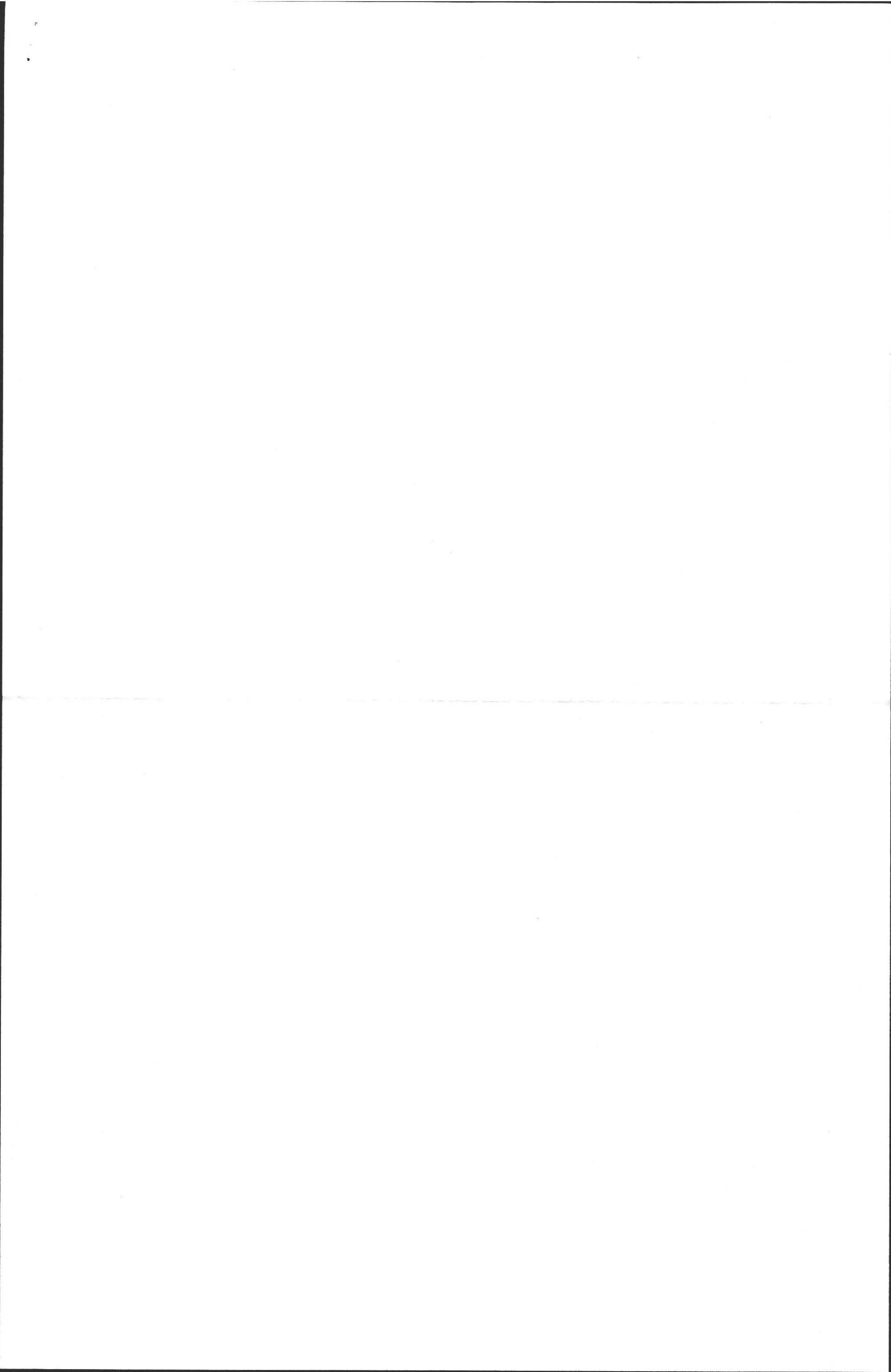
INVERT ELEVATIONS  
 NO SCALE

REVISED LOCATION



PLAN OF SUBSURFACE SEWAGE DISPOSAL SYSTEM		
371 FLAT HILLS ROAD AMHERST, MASS		
SCALE:	APPROVED BY: SUBMITTED TO	DRAWN BY:
DATE:	BOARD OF HEALTH MAY 29 1990	REVISED:
SEPTIC DESIGN FOR MR/MRS EDWARD CONNOLLY, REAR OF 371 FLAT HILLS RD AMHERST MASS		
		DRAWING NUMBER
		90136 PDN

REVISED LOCATION



No. 90-6  
Revised

FEE \_\_\_\_\_

THE COMMONWEALTH OF MASSACHUSETTS

BOARD OF HEALTH

Town Amherst OF Amherst

Application for Disposal Works Construction Permit



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

381 Flat Hill Rd  
Location - Address  
Edward and Alexis Connolly  
Owner  
381 Flat Hills Rd, Amherst MA 01002  
or Lot No. Address

Type of Building  
Dwelling — No. of Bedrooms 5 (2 additional) 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 550 x 1.25 = 687.5 gallons.  
Septic Tank — Liquid capacity 1500 gallons Length 10.5 Width 5.0 Diameter \_\_\_\_\_ Depth 4.0  
Disposal Trench — No. 3 (H) Width 3.0 Total Length 21.0 Total leaching area 657 sq. ft. side  
Seepage Pit No. \_\_\_\_\_ Diameter \_\_\_\_\_ Depth below inlet \_\_\_\_\_ Total leaching area 630 sq. ft. bottom

Other Distribution box (X) Dosing tank ( )  
Percolation Test Results Performed by Ernest Mathiew Date 5/5/90  
Test Pit No. 1 15 minutes per inch Depth of Test Pit 128 Depth to ground water 11.7  
Test Pit No. 2 \_\_\_\_\_ minutes per inch Depth of Test Pit 11.1 Depth to ground water Dry

Description of Soil attached

Nature of Repairs or Alterations — Answer when applicable add third leach trench to accomodate 2 bedroom addition

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 \_\_\_\_\_

THE COMMONWEALTH OF MASSACHUSETTS

BOARD OF HEALTH

Town Amherst OF Amherst

Certificate of Compliance

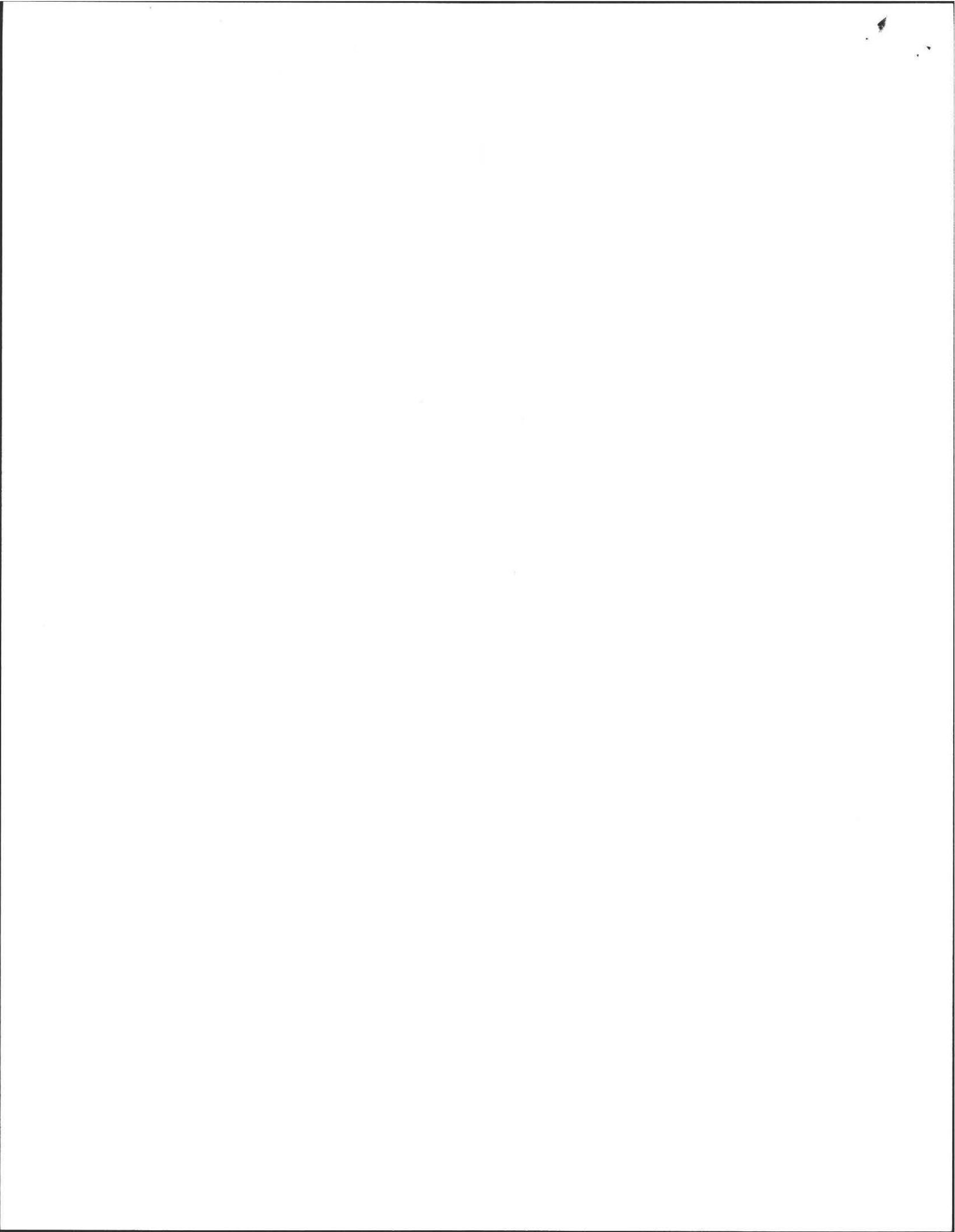
THIS IS TO CERTIFY, That the Individual Sewage Disposal System constructed ( ) or Repaired (X) by \_\_\_\_\_ Installer

at 381 Flat Hills Rd  
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 \_\_\_\_\_

CHECK OR FILL IN WHERE APPLICABLE





PROPERTY LINE

STONE WALL



EXISTING RIDING ARENA AND BARN

2 EXISTING LEACH TRENCHES  
70' LONG BY 3' WIDE BY 1.5' BELOW INLET  
INSTALLED IN 1990

PROPOSED THIRD TRENCH  
70' LONG BY 3.0' WIDE BY 1.5' BELOW INLET  
INSTALLED AT SAME DEPTH AS PREVIOUS TWO

DRIVE

PROPOSED  
2 BEDROOM  
ADDITION

EXISTING  
3 BEDROOM  
HOUSE

DECK

EXISTING  
D BOX

EXISTING 1500 GAL. SEPTIC TANK

TRENCH LOCATION:

INSTALLER TO IDENTIFY START AND END OF EXISTING  
EASTERN TRENCH AND EXCAVATE FOR NEW TRENCH A  
DISTANCE OF 6' FURTHER TO THE EAST AND PARRALEL  
TO THE EXISTING TRENCHES.

NOTES:

1. TBM IS NAIL IN 1' HICKORY.
2. NO OTHER WELLS WITHIN 200' OF THE LEACH AREA AT THE TIME OF SURVEY.

LEGEND

○ PT PERCOLATION TEST

△ Hx DEEP TEST PIT

~ CONTOUR LINES  
(1' INTERVAL)

PLAN OF SEWAGE DISPOSAL SYSTEM

AT: 381 FLAT HILLS RD., AMHERST, MA

BY: FILIOS ENTERPRISES, INC.  
69 PELHAM RD.  
AMHERST MA 01002  
(413)256-8008

FOR: ED AND ALEXIS CONNOLLY  
381 FLAT HILLS RD.  
AMHERST, MA 01002

DRAWN BY: P. FILIOS  
27 OCT., 1993

SCALE: 1" = 30'  
PAGE 1 OF 2

EXISTING WELL

150'

26'

98

6'

86

96

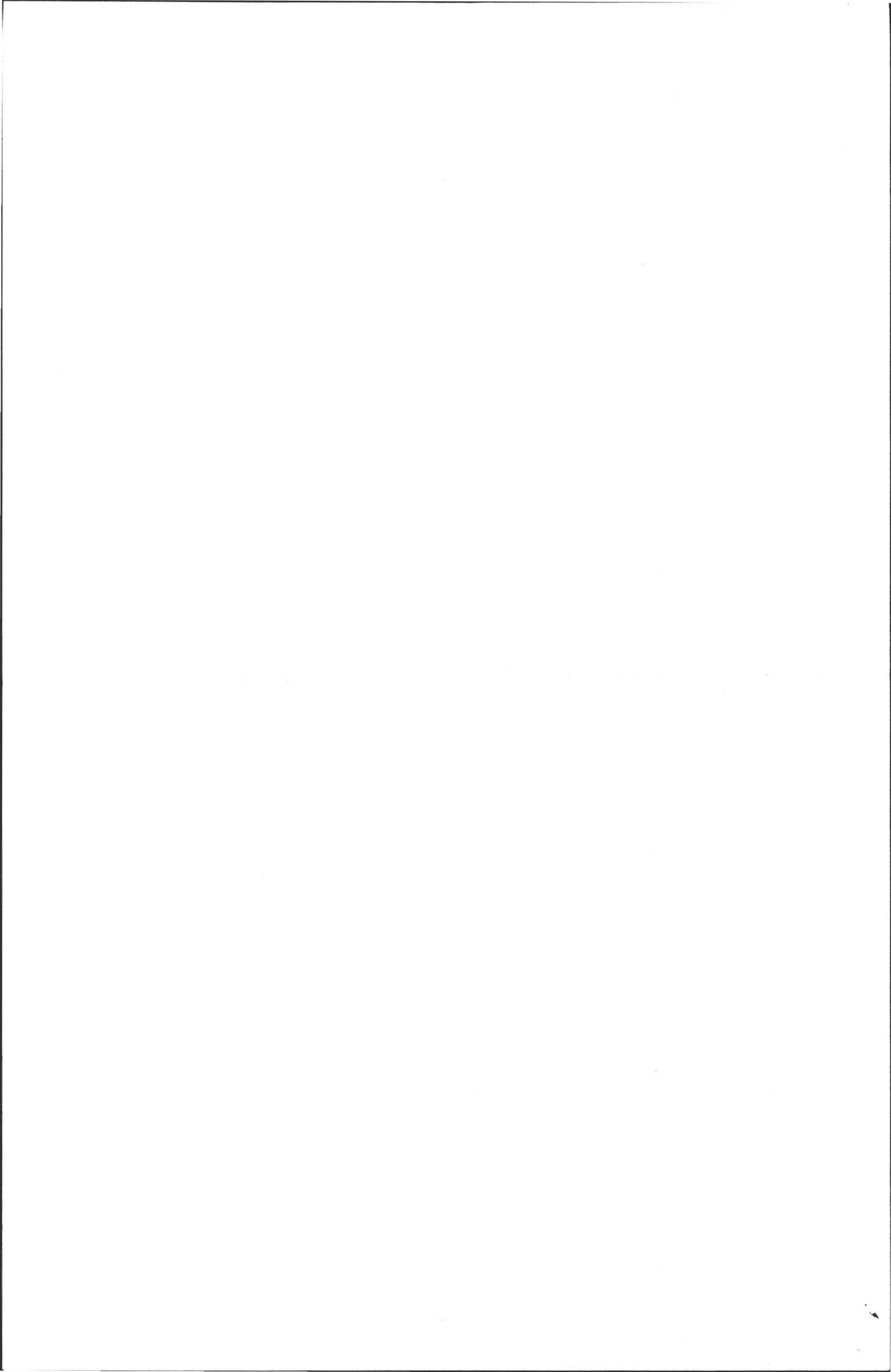
98

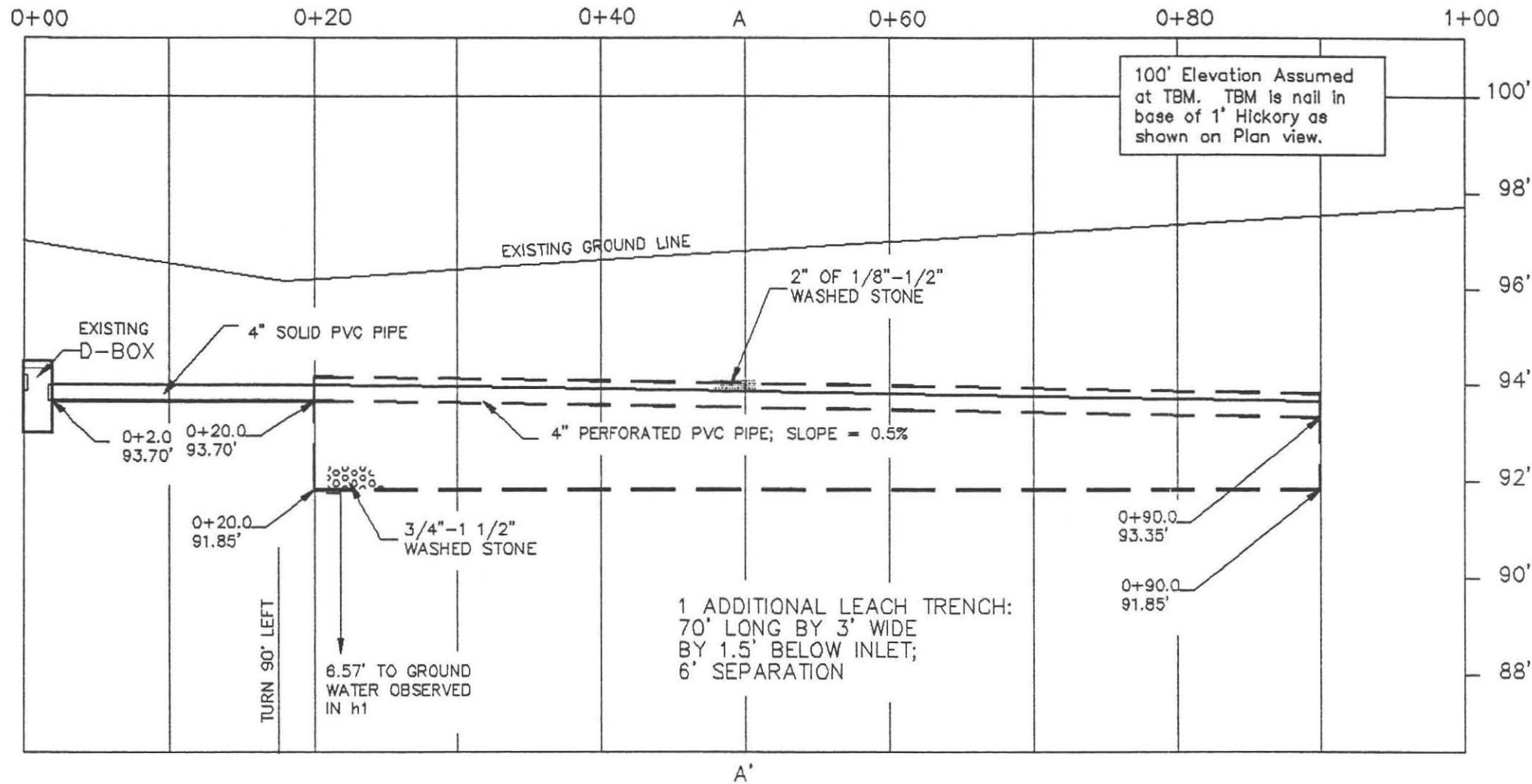
98

100

100

TBM



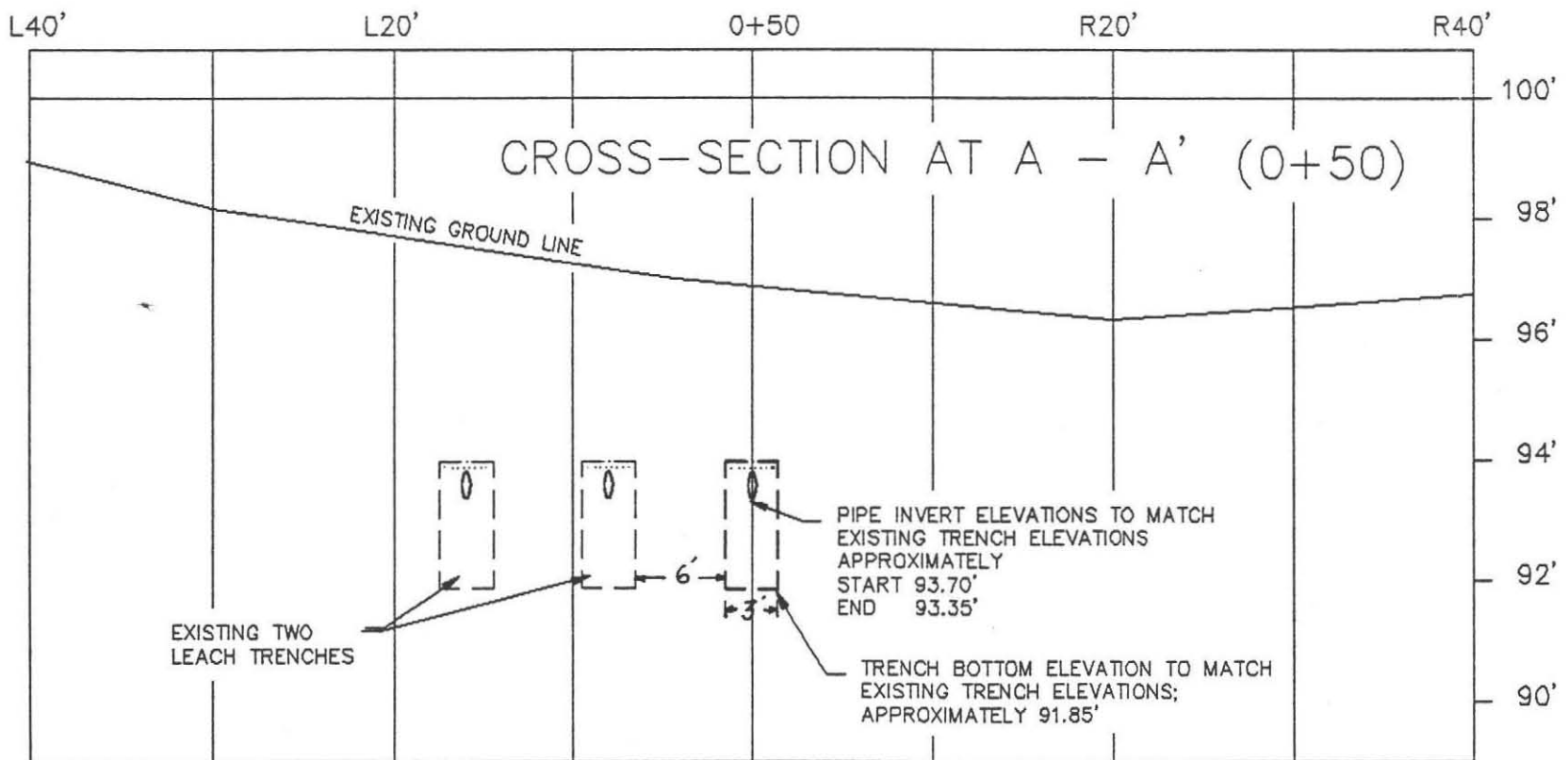


**SPECIFICATIONS**

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. Inlet and outlet tees must extend 14" and 24" below the flow line respectively.
3. Third trench to be installed at same elevations as existing trenches. Original TBM has been destroyed. New TBM is approximately 2' lower than original TBM. Therefore all elevations shown equate to original elevations 2' less.



**CALCULATIONS**

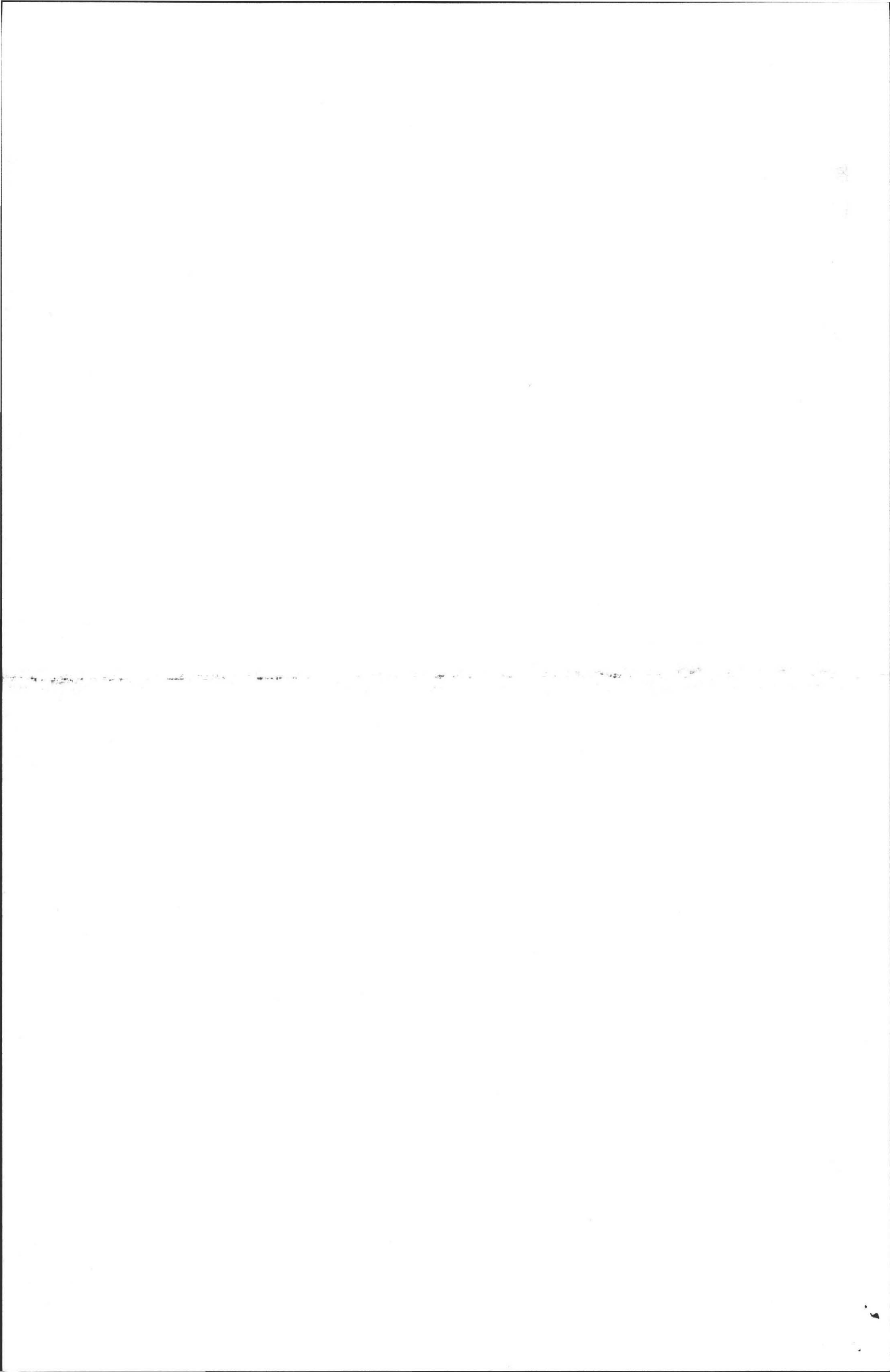
REQUIRED: For a 5 bedroom house without a garbage grinder a capacity of 550 gal./day X 1.25 (Safety Factor) = 687.50 gal./day.

DESIGNED: 3 leach trenches 70.0'L X 3.0'W X 1.50' below inlet (effective depth), for a perc rate of 15 min./in., yielding side and bottom loading factors of 0.66 and 0.43 gal./sq.ft. respectively.

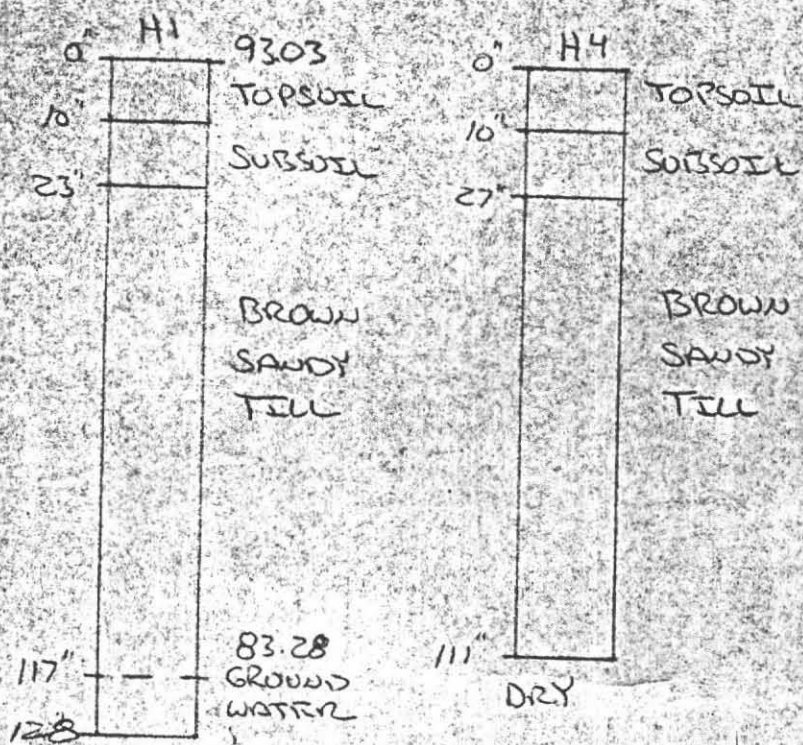
SIDEWALL: 6 Sides(73.0' X 1.5')0.66 Gal./Sq.Ft.	= 433.6 Gal.
BOTTOM: 3 Trenches (70.0' X 3.0')0.43 Gal./Sq.Ft.	= 270.9 Gal.
<b>TOTAL</b>	<b>704.5 Gal.</b>



PROFILE OF SEWAGE DISPOSAL SYSTEM	
AT: 381 FLAT HILLS RD.	
BY: FILIOS ENTERPRISES, INC. 69 PELHAM RD. AMHERST MA 01002 (413)256-8008	FOR: EDWARD AND ALEXIS CONNOLLY 381 FLAT HILLS RD. AMHERST, MA 01002
DRAWN BY: P. FILIOS	SCALE: 1" = 10' HOR. 3" VER.
28 OCT., 1993	PAGE 2 OF 2



# SOIL LOG



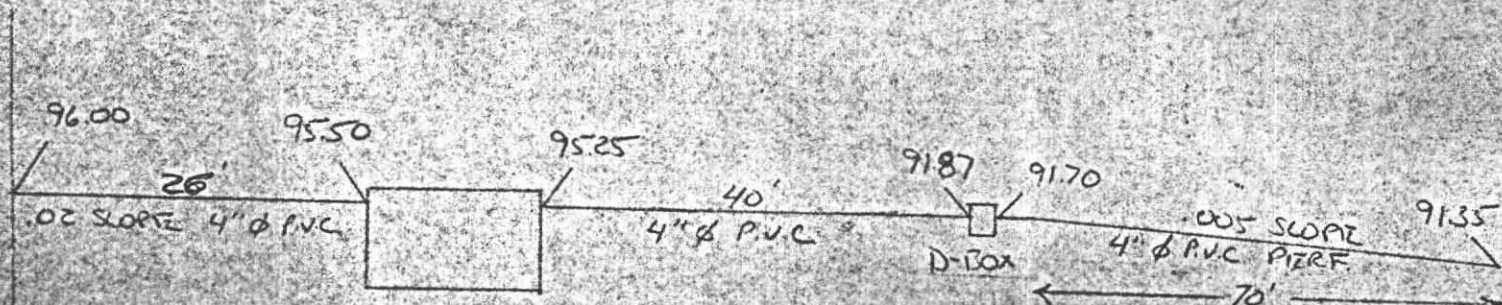
## DESIGN CALCULATIONS

3 BEDROOMS, NO GARBAGE GRINDER  
 1500 GALLON SEPTIC TANK, D.O.P. H1=62', H4=48"  
 PERC RATE H1 + H4 = 15 MIN/INCH  
 (3 BEDROOMS x 110 GALLONS) x 1.25 = 412.5 GALLONS DAILY FLOW

SIDE  $1.5 \times 4 \times 70' \times .66 \text{ GAL/FT}^2 = 277.2 \text{ GALLONS}$   
 BOTTOM  $3 \times 2 \times 70' \times .43 \text{ GAL/FT}^2 = 180.6 \text{ GALLONS}$   
 TOTAL = 840 FT<sup>2</sup>, TOTAL = 457.8 GALLONS

AMHERST REGULATIONS USED FOR CALCULATIONS

BOTTOM OF TRENCHES TO BE LAID FLAT  
 ENDS OF PIPES MUST BE CARPED



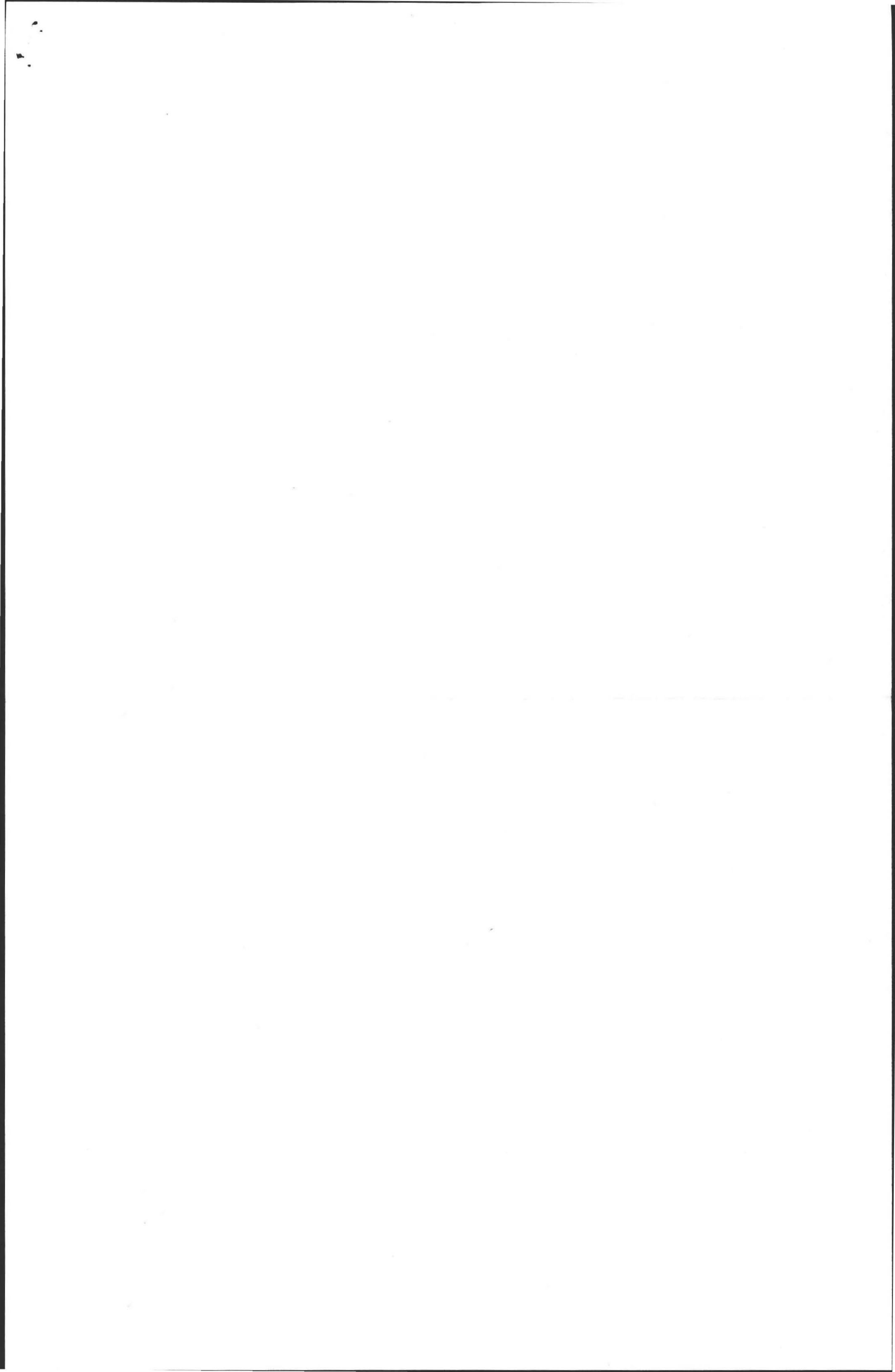
INVERT ELEVATIONS  
 NO SCALE

REVISED LOCATION



PLAN OF SUBSURFACE SEWAGE DISPOSAL SYSTEM  
 371 FLAT HILLS ROAD AMHERST, MASS.

SCALE:	APPROVED BY: SUBMITTED TO	DRAWN BY:
DATE:	BOARD OF HEALTH MAY 29 1990	REVISED:
SEPTIC DESIGN FOR MR/MRS EDWARD CONNOLLY, REAR OF 371 FLAT HILLS RD AMHERST MASS		
		DRAWING NUMBER 90/36 PDN



No. 90-6  
*Revised*

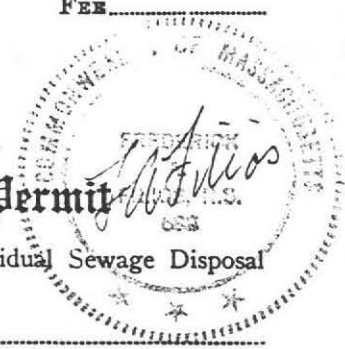
FEE \_\_\_\_\_

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 (X) an Individual Sewage Disposal System at:

381 Flat Hill Rd  
Location - Address  
Edward and Alexis Connolly Owner  
381 Flat Hills Rd, Amherst MA 01002 or Lot No. Address

Type of Building  
Dwelling — No. of Bedrooms 5 (2 additional) Expansion Attic ( )  
Other — Type of Building \_\_\_\_\_ No. of persons \_\_\_\_\_ Showers ( ) — Cafeteria ( )  
Other fixtures \_\_\_\_\_

Design Flow 55 gallons per person per day. Total daily flow 550 x 1.25 = 687.5 gallons.  
Septic Tank — Liquid capacity 1500 gallons Length 10.5 Width 5.0 Diameter \_\_\_\_\_ Depth 4.0  
Disposal Trench — No. 3 (#1) Width 3.0 Total Length 2.10 Total leaching area 6.57 sq. ft. *side*  
Seepage Pit No. \_\_\_\_\_ Diameter \_\_\_\_\_ Depth below inlet \_\_\_\_\_ Total leaching area 6.30 sq. ft. *bottom*

Other Distribution box (X) Dosing tank ( )  
Percolation Test Results Performed by Ernest Mathiew Date 5/5/90  
Test Pit No. 1 15 minutes per inch Depth of Test Pit 1.28 Depth to ground water 11.7  
Test Pit No. 2 \_\_\_\_\_ minutes per inch Depth of Test Pit 11.1 Depth to ground water dry

Description of Soil attached

Nature of Repairs or Alterations — Answer when applicable add third leach trench to accomodate 2 bedroom addition

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 \_\_\_\_\_

CHECK OR FILL IN WHERE APPLICABLE

THE COMMONWEALTH OF MASSACHUSETTS

BOARD OF HEALTH

Town of Amherst

Certificate of Compliance

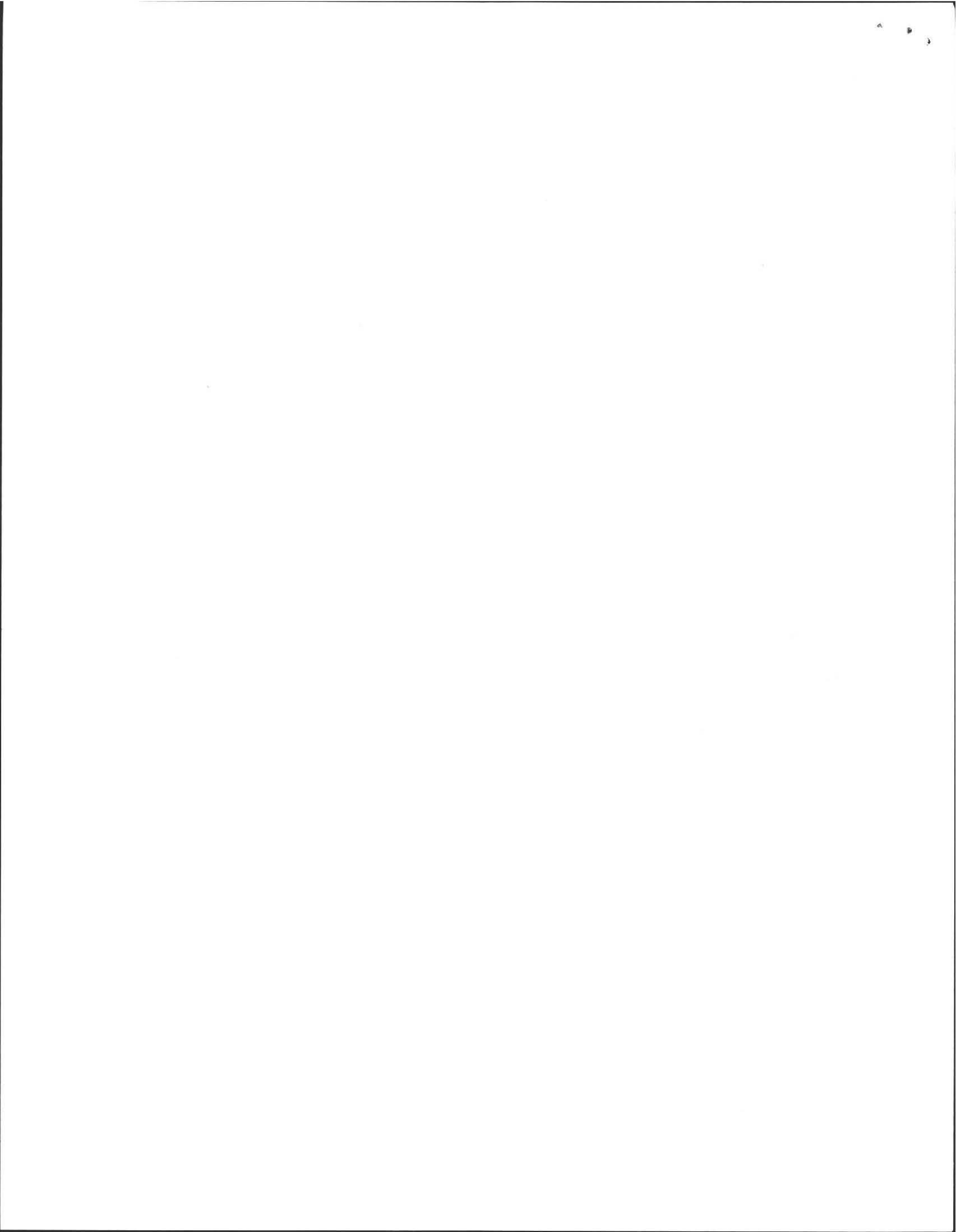
THIS IS TO CERTIFY, That the Individual Sewage Disposal System constructed ( ) or Repaired (X) by \_\_\_\_\_

at 381 Flat Hills Rd Installer

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.

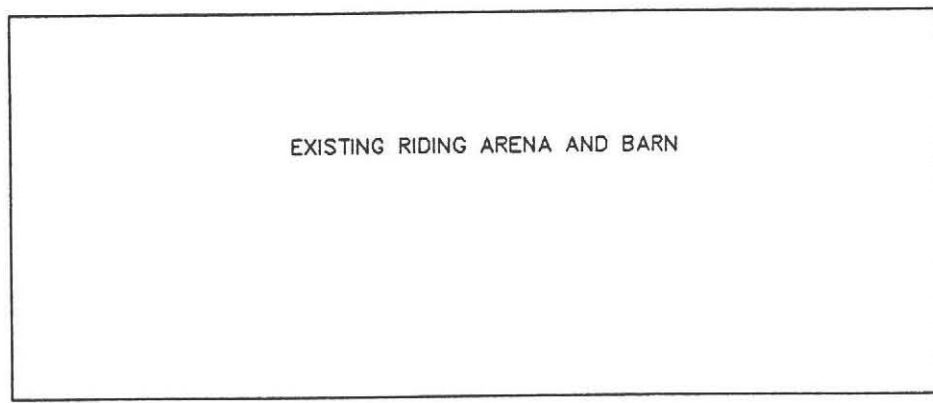
DATE \_\_\_\_\_ Inspector \_\_\_\_\_





PROPERTY LINE

STONE WALL



EXISTING RIDING ARENA AND BARN



2 EXISTING LEACH TRENCHES  
70' LONG BY 3' WIDE BY 1.5' BELOW INLET  
INSTALLED IN 1990

PROPOSED THIRD TRENCH  
70' LONG BY 3.0' WIDE BY 1.5' BELOW INLET  
INSTALLED AT SAME DEPTH AS PREVIOUS TWO

DRIVE

PROPOSED  
2 BEDROOM  
ADDITION

EXISTING  
3 BEDROOM  
HOUSE

DECK

EXISTING  
D BOX

EXISTING 1500 GAL. SEPTIC TANK



TRENCH LOCATION:

INSTALLER TO IDENTIFY START AND END OF EXISTING  
EASTERN TRENCH AND EXCAVATE FOR NEW TRENCH A  
DISTANCE OF 6' FURTHER TO THE EAST AND PARRALEL  
TO THE EXISTING TRENCHES.

NOTES:

1. TBM IS NAIL IN 1' HICKORY.
2. NO OTHER WELLS WITHIN 200' OF THE LEACH AREA AT THE TIME OF SURVEY.

LEGEND

- PT PERCOLATION TEST
- Hx DEEP TEST PIT
- CONTOUR LINES (1' INTERVAL)

PLAN OF SEWAGE DISPOSAL SYSTEM

AT: 381 FLAT HILLS RD., AMHERST, MA

BY: FILIOS ENTERPRISES, INC.  
69 PELHAM RD.  
AMHERST MA 01002  
(413)256-8008

FOR: ED AND ALEXIS CONNOLLY  
381 FLAT HILLS RD.  
AMHERST, MA 01002

DRAWN BY: P. FILIOS  
27 OCT., 1993

SCALE: 1" = 30'  
PAGE 1 OF 2

EXISTING WELL

150'

26'

98

100

86

6'

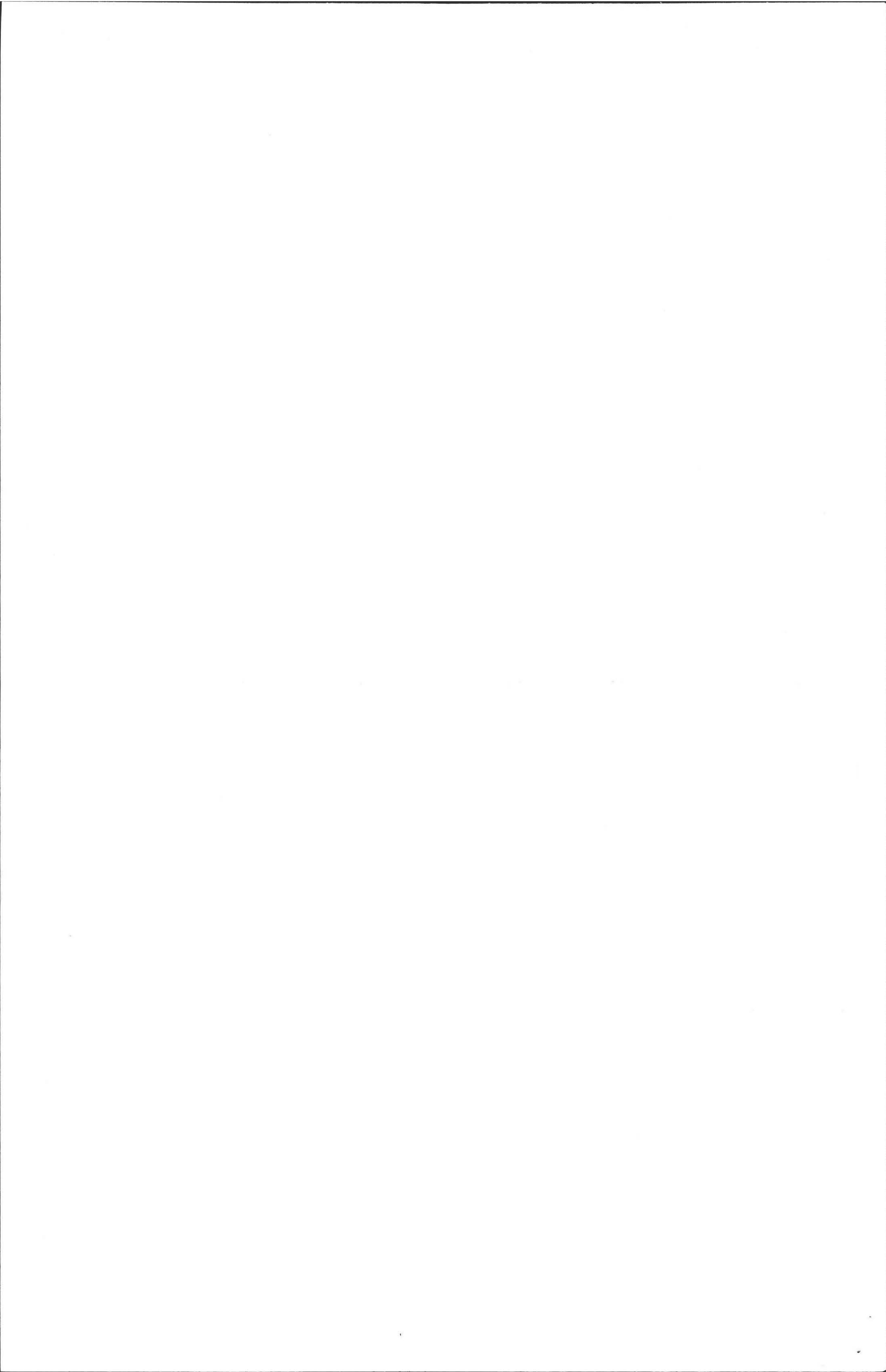
96

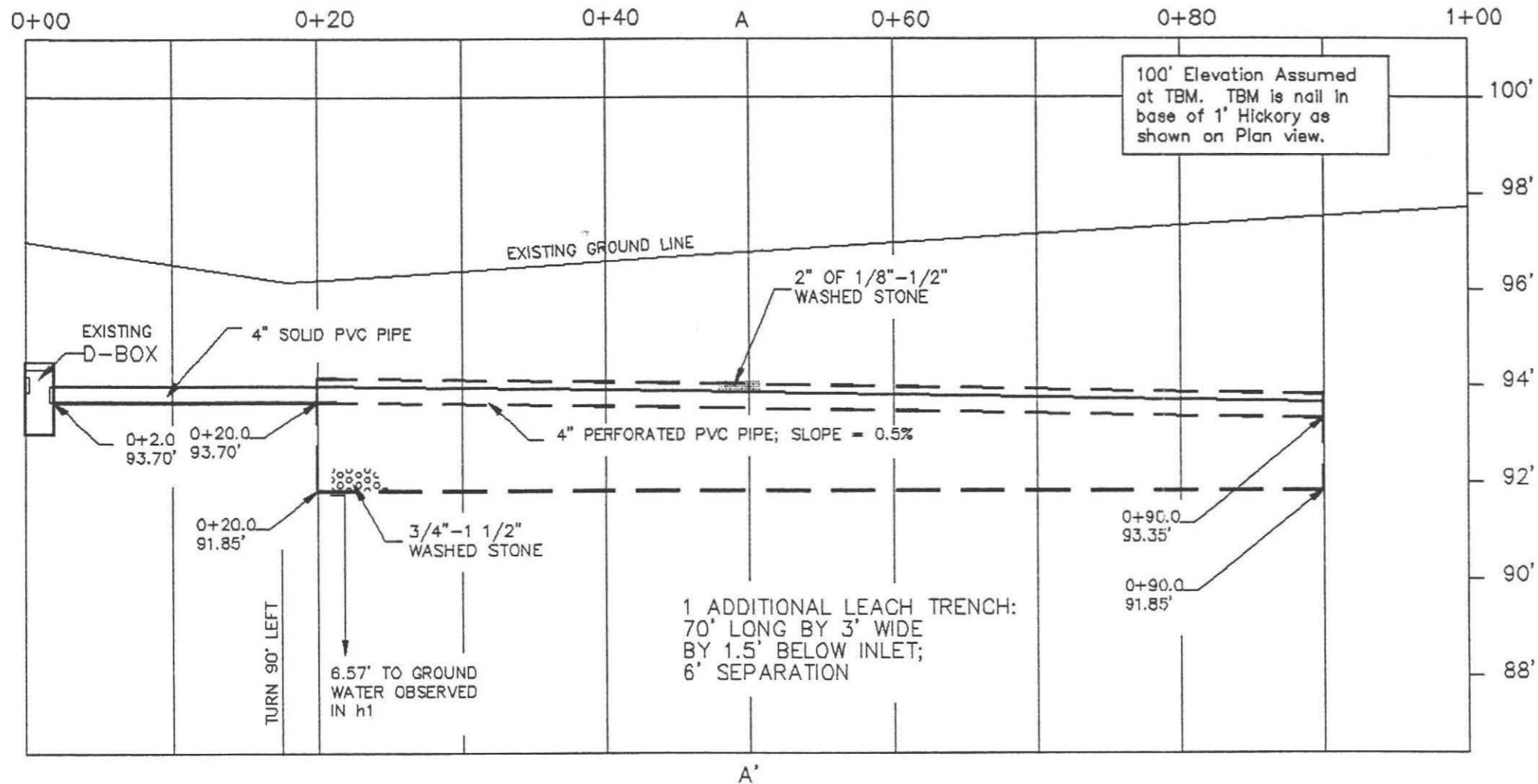
98

86

96



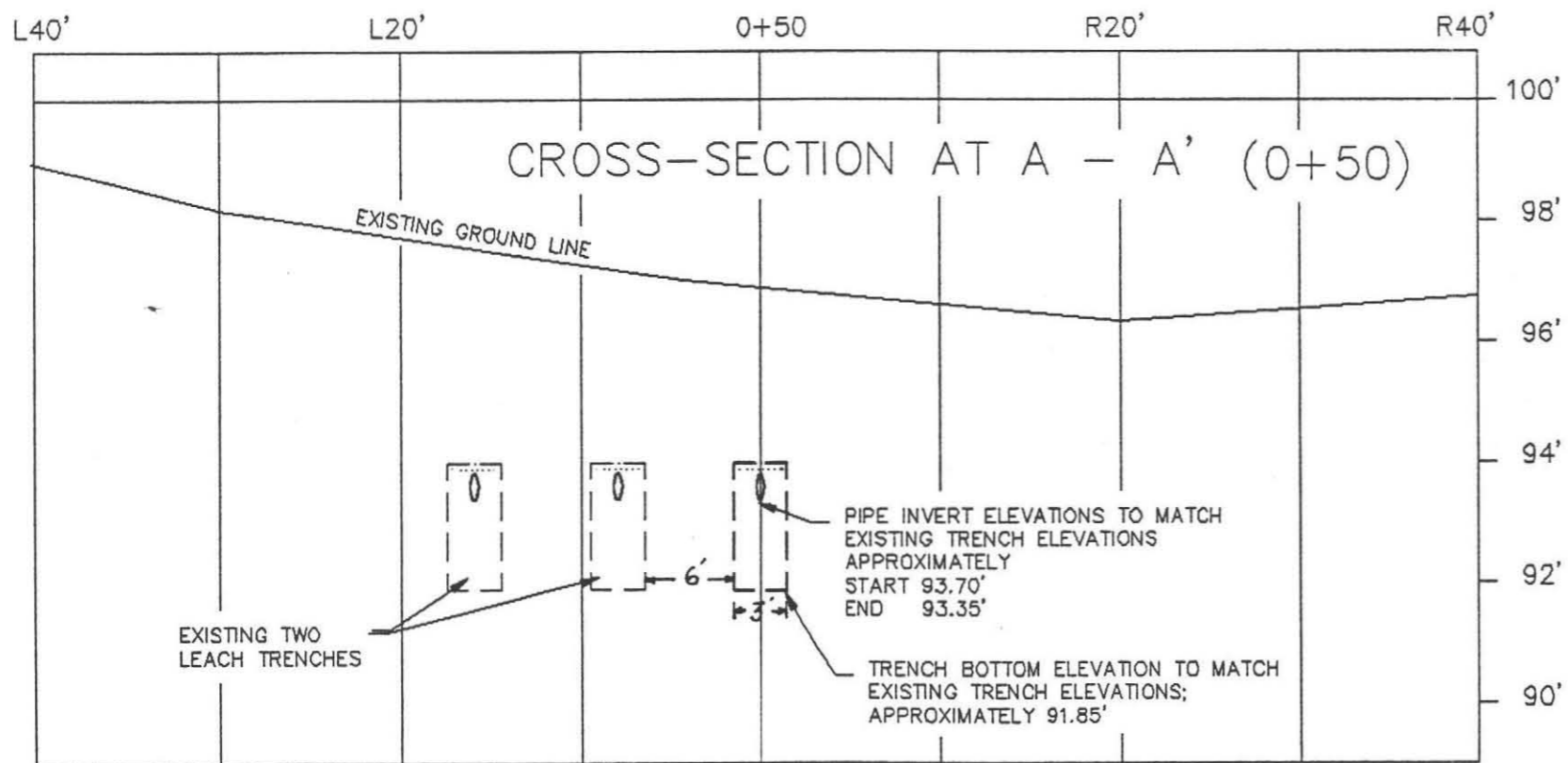




**SPECIFICATIONS**  
 ALL MATERIALS AND CONSTRUCTION MUST BE IN ACCORDANCE WITH COMMONWEALTH OF MASSACHUSETTS DEPT. OF ENVIRONMENTAL PROTECTION STATE ENVIRONMENTAL CODE TITLE 5.

**Construction Notes**

1. Septic tank should be inspected and pumped annually.
2. Inlet and outlet tees must extend 14" and 24" below the flow line respectively.
3. Third trench to be installed at same elevations as existing trenches. Original TBM has been destroyed. New TBM is approximately 2' lower than original TBM. Therefore all elevations shown equate to original elevations 2' less.



**CALCULATIONS**

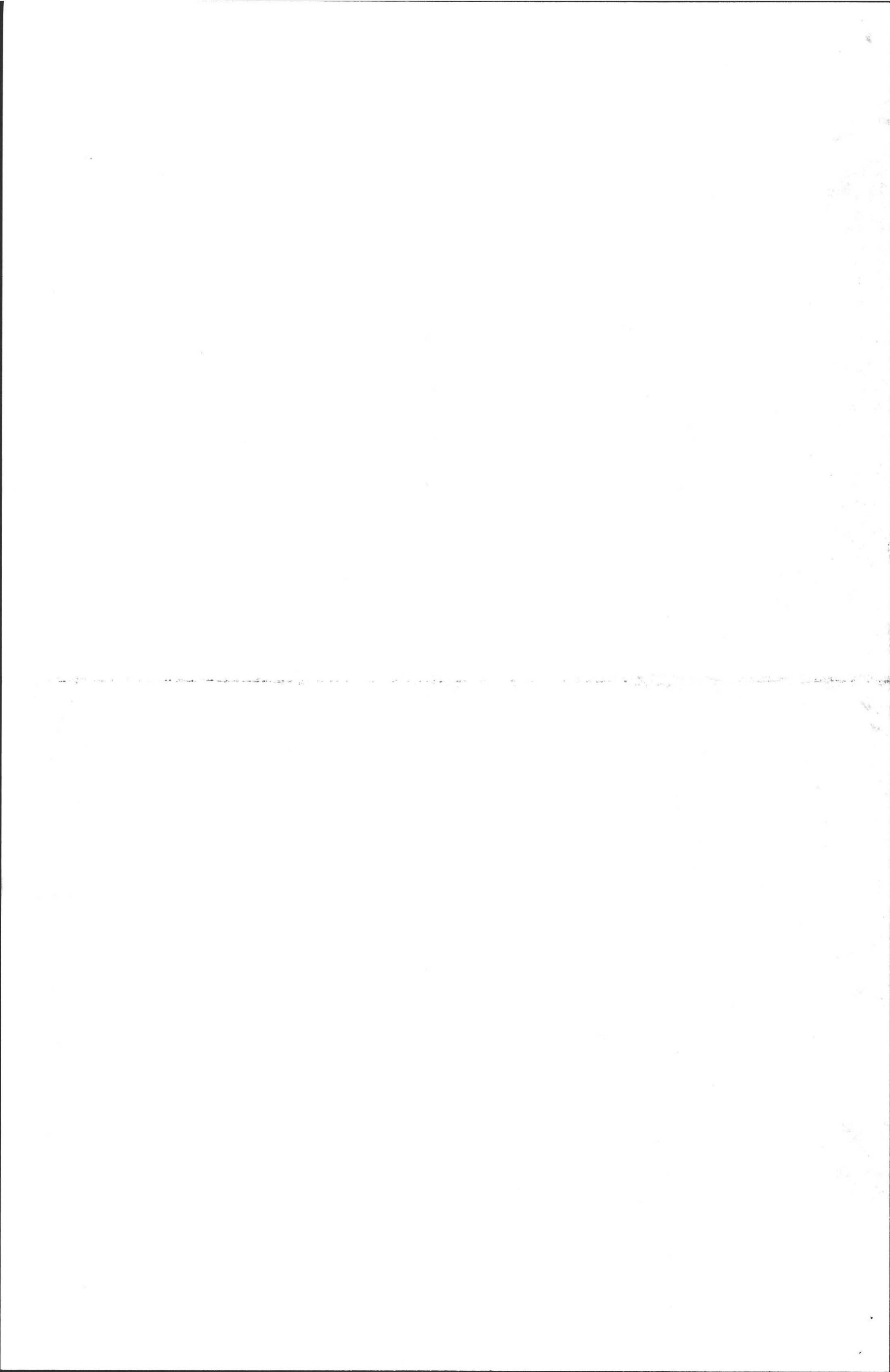
REQUIRED: For a 5 bedroom house without a garbage grinder a capacity of 550 gal./day X 1.25 (Safety Factor) = 687.50 gal./day.

DESIGNED: 3 leach trenches 70.0'L X 3.0'W X 1.50' below inlet (effective depth), for a perc rate of 15 min./in., yielding side and bottom loading factors of 0.66 and 0.43 gal./sq.ft. respectively.

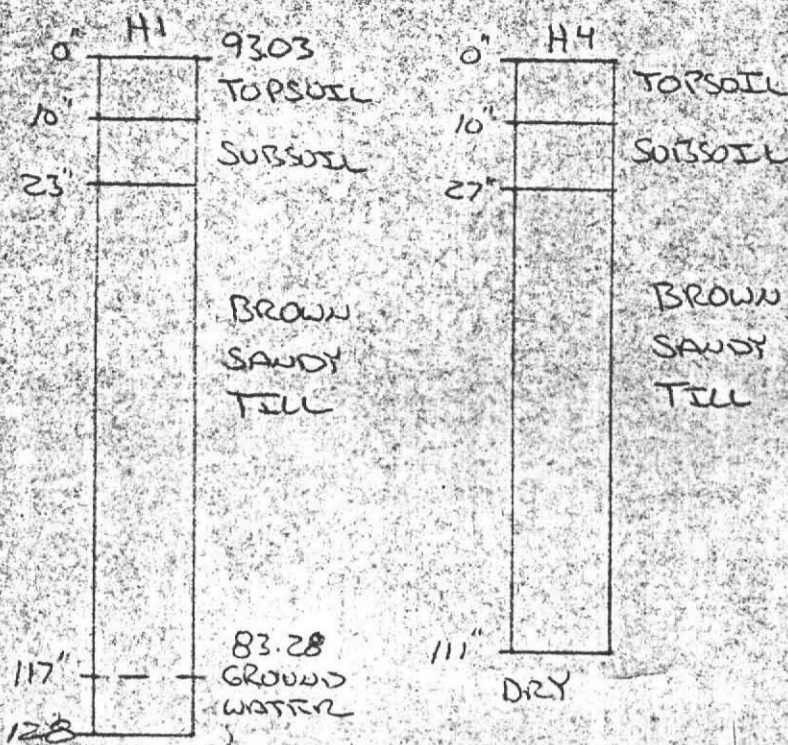
SIDEWALL: 6 Sides (73.0' X 1.5')	0.66 Gal./Sq.Ft.	= 433.6 Gal.
BOTTOM: 3 Trenches (70.0' X 3.0')	0.43 Gal./Sq.Ft.	= 270.9 GAL.
<b>TOTAL</b>		<b>704.5 Gal.</b>



PROFILE OF SEWAGE DISPOSAL SYSTEM	
AT: 381 FLAT HILLS RD.	
BY: FILIOS ENTERPRISES, INC. 69 PELHAM RD. AMHERST MA 01002 (413)256-8008	FOR: EDWARD AND ALEXIS CONNOLLY 381 FLAT HILLS RD. AMHERST, MA 01002
DRAWN BY: P. FILIOS	SCALE: 1" = 10' HOR. 3" VER.
28 OCT., 1993	PAGE 2 OF 2



# SOIL LOG



## DESIGN CALCULATIONS

3 BEDROOMS, NO GARBAGE GRINDER  
 1500 GALLON SEPTIC TANK, D.O.P. H1 = 62", H4 = 48"  
 PERC RATE H1 + H4 = 15 MIN/INCH  
 (3 BEDROOMS x 110 GALLONS) x 1.25 = 412.5 GALLONS DAILY FLOW

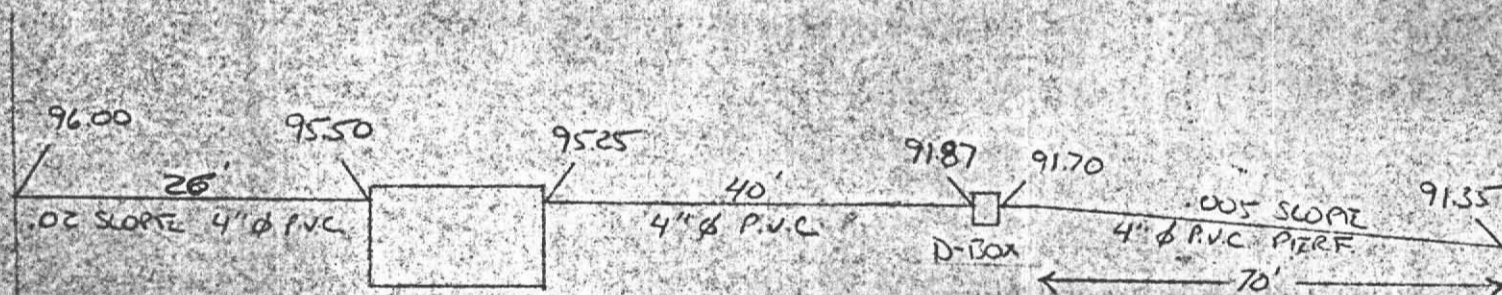
SIDE  $1.5 \times 4 \times 70' \times .66 \text{ GAL/FT}^2 = 277.2 \text{ GALLONS}$   
 BOTTOM  $3 \times 2 \times 70' \times .43 \text{ GAL/FT}^2 = 180.6 \text{ GALLONS}$   
 TOTAL = 840 FT<sup>2</sup>, TOTAL = 457.8 GALLONS

AMHERST REGULATIONS USED FOR CALCULATIONS

BOTTOM OF TRENCHES TO BE LAID FLAT  
 ENDS OF PIPES MUST BE CARPED

LOCATION PLOT  
 TEST  
 TAG CONTOUR

PROPOSED  
 BED ROOM  
 WELLS

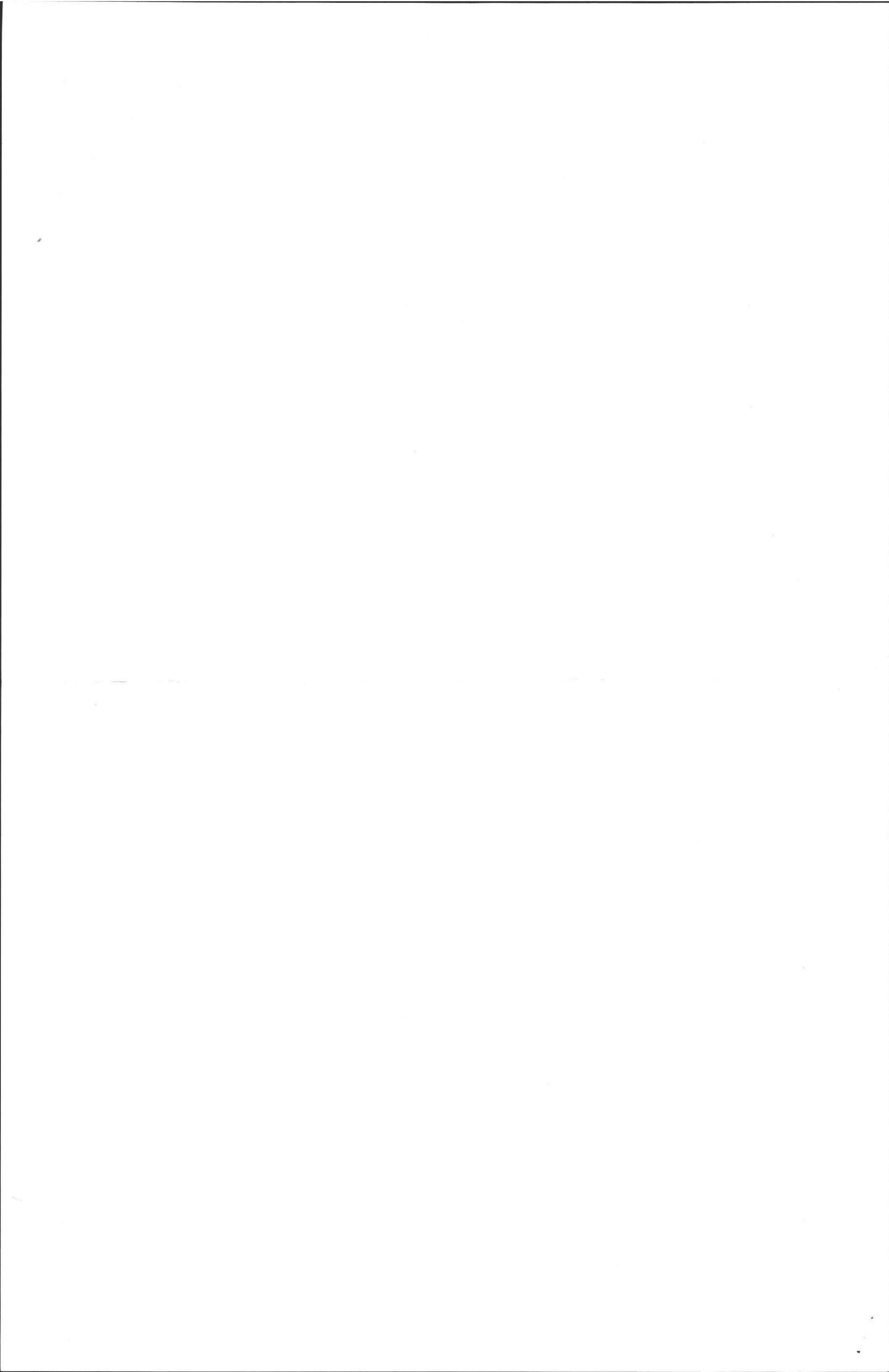


INVERT ELEVATIONS  
 NO SCALE

REVISED LOCATION



PLAN OF SUBSURFACE SEWAGE DISPOSAL SYSTEM 371 FLAT HILLS ROAD AMHERST, MASS.		
SCALE:	APPROVED BY: SUBMITTED TO	DRAWN BY:
DATE:	BOARD OF HEALTH MAY 29 1990	REVISED:
SEPTIC DESIGN FOR MR/MRS EDWARD CONNOLLY, REAR OF 371 FLAT HILLS RD AMHERST MASS		
		DRAWING NUMBER 90136 PDN



No. 90-6  
Revised

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 (X) an Individual Sewage Disposal System at:

381 Flat Hill Rd  
Location - Address  
Edward and Alex's Connolly Owner  
381 Flat Hills Rd, Amherst MA 01002 or Lot No. Address

Type of Building  
Dwelling — No. of Bedrooms 5 (2 additional) Expansion Attic ( )  
Other — Type of Building \_\_\_\_\_ No. of persons \_\_\_\_\_ Showers ( ) — Cafeteria ( )  
Other fixtures \_\_\_\_\_

Design Flow 55 gallons per person per day. Total daily flow 550 x 1.25 = 687.5 gallons.  
Septic Tank — Liquid capacity 1500 gallons Length 10.5 Width 5.0 Diameter \_\_\_\_\_ Depth 4.0  
Disposal Trench — No. 3 (4) Width 3.0 Total Length 2.10 Total leaching area 6.57 sq. ft. side  
Seepage Pit No. \_\_\_\_\_ Diameter \_\_\_\_\_ Depth below inlet \_\_\_\_\_ Total leaching area 6.30 sq. ft. bottom

Other Distribution box (X) Dosing tank ( )  
Percolation Test Results Performed by Ernest Mathiew Date 5/5/90  
Test Pit No. 1 15 minutes per inch Depth of Test Pit 1.28 Depth to ground water 11.7  
Test Pit No. 2 \_\_\_\_\_ minutes per inch Depth of Test Pit 11.1 Depth to ground water dry

Description of Soil attached

Nature of Repairs or Alterations — Answer when applicable add third leach trench to accomodate 2 bedroom addition

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 \_\_\_\_\_

THE COMMONWEALTH OF MASSACHUSETTS

BOARD OF HEALTH

Town of Amherst

Certificate of Compliance

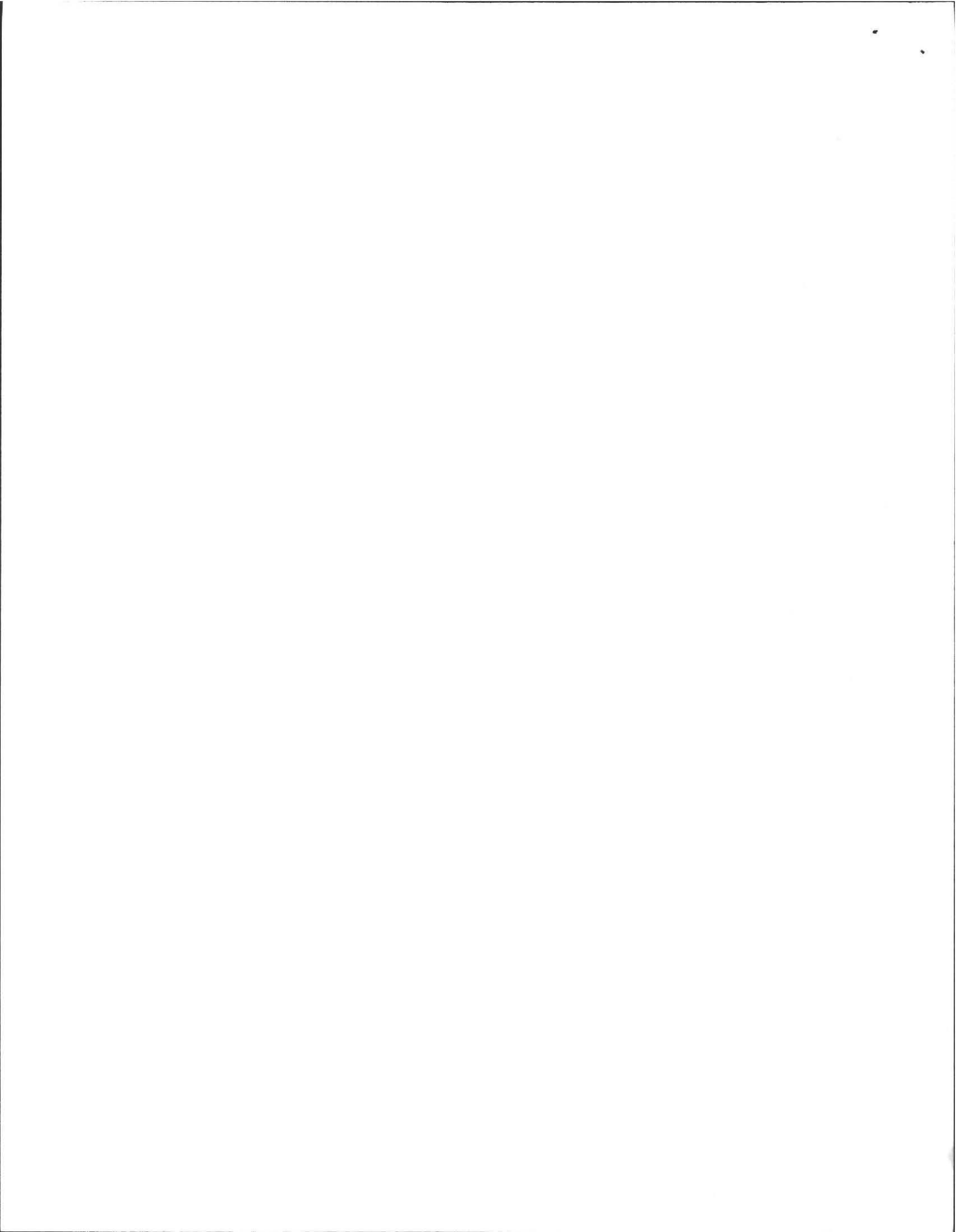
THIS IS TO CERTIFY, That the Individual Sewage Disposal System constructed ( ) or Repaired (X) by \_\_\_\_\_ Installer

at 381 Flat Hills Rd  
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 \_\_\_\_\_

CHECK OR FILL IN WHERE APPLICABLE





PROPERTY LINE

STONE WALL



EXISTING RIDING ARENA AND BARN



2 EXISTING LEACH TRENCHES  
70' LONG BY 3' WIDE BY 1.5' BELOW INLET  
INSTALLED IN 1990

PROPOSED THIRD TRENCH  
70' LONG BY 3.0' WIDE BY 1.5' BELOW INLET  
INSTALLED AT SAME DEPTH AS PREVIOUS TWO

DRIVE

PROPOSED  
2 BEDROOM  
ADDITION

EXISTING  
3 BEDROOM  
HOUSE

DECK

EXISTING  
D BOX

EXISTING 1500 GAL. SEPTIC TANK



TRENCH LOCATION:

INSTALLER TO IDENTIFY START AND END OF EXISTING  
EASTERN TRENCH AND EXCAVATE FOR NEW TRENCH A  
DISTANCE OF 6' FURTHER TO THE EAST AND PARRALEL  
TO THE EXISTING TRENCHES.

NOTES:

1. TBM IS NAIL IN 1' HICKORY.
2. NO OTHER WELLS WITHIN  
200' OF THE LEACH AREA AT  
THE TIME OF SURVEY.

LEGEND

- PT PERCOLATION TEST
- Hx DEEP TEST PIT
- CONTOUR LINES (1' INTERVAL)

PLAN OF SEWAGE DISPOSAL SYSTEM

AT: 381 FLAT HILLS RD., AMHERST, MA

BY: FILIOS ENTERPRISES, INC.  
69 PELHAM RD.  
AMHERST MA 01002  
(413)256-8008

FOR: ED AND ALEXIS CONNOLLY  
381 FLAT HILLS RD.  
AMHERST, MA 01002

DRAWN BY: P. FILIOS  
27 OCT., 1993

SCALE: 1" = 30'  
PAGE 1 OF 2

EXISTING WELL

150'

26'

98

98

86

6'

96

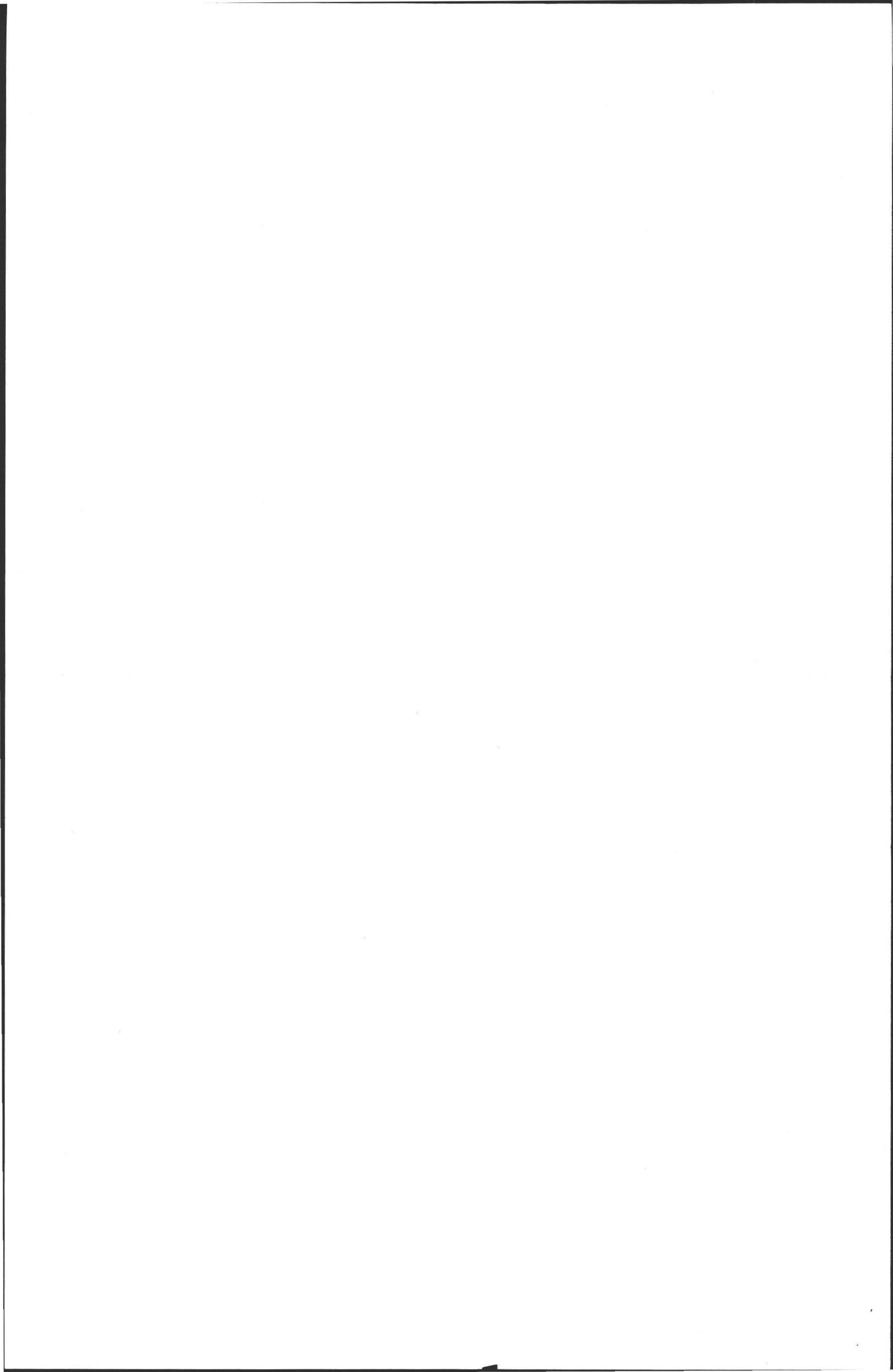
98

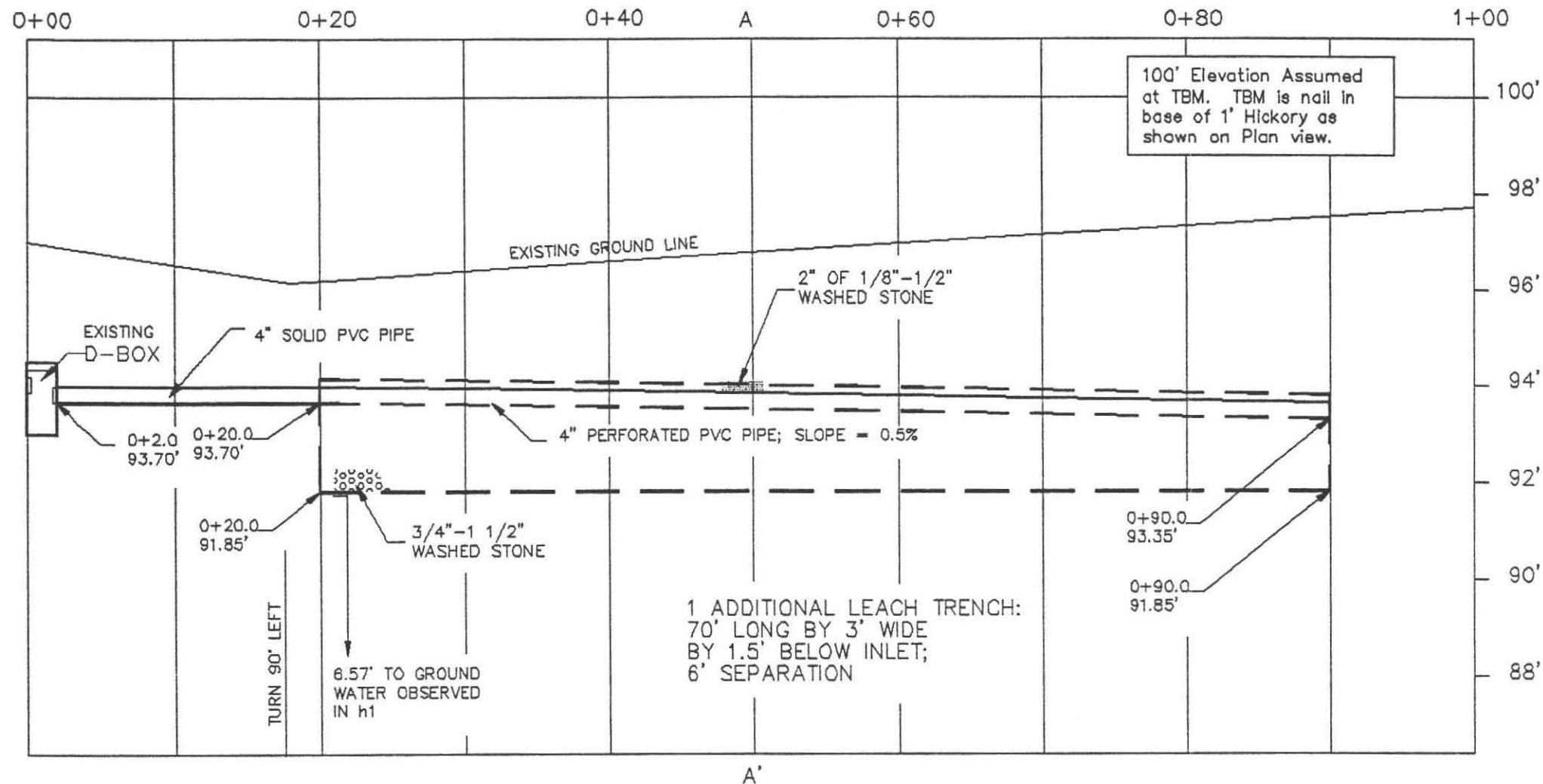
98

96

100

100

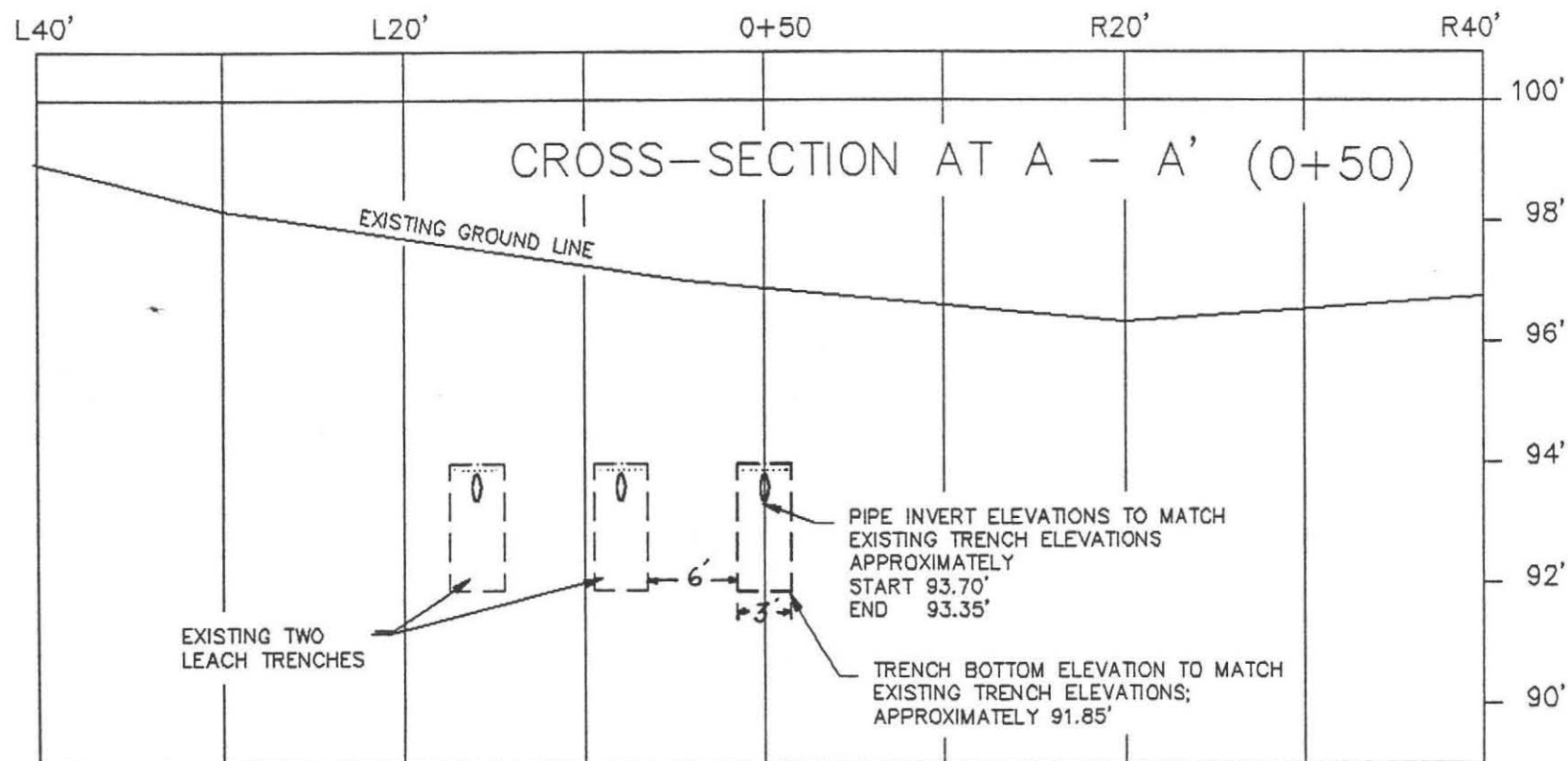




**SPECIFICATIONS**  
 ALL MATERIALS AND CONSTRUCTION MUST BE IN ACCORDANCE WITH COMMONWEALTH OF MASSACHUSETTS DEPT. OF ENVIRONMENTAL PROTECTION STATE ENVIRONMENTAL CODE TITLE 5.

**Construction Notes**

1. Septic tank should be inspected and pumped annually.
2. Inlet and outlet tees must extend 14" and 24" below the flow line respectively.
3. Third trench to be installed at same elevations as existing trenches. Original TBM has been destroyed. New TBM is approximately 2' lower than original TBM. Therefore all elevations shown equate to original elevations 2' less.



**CALCULATIONS**

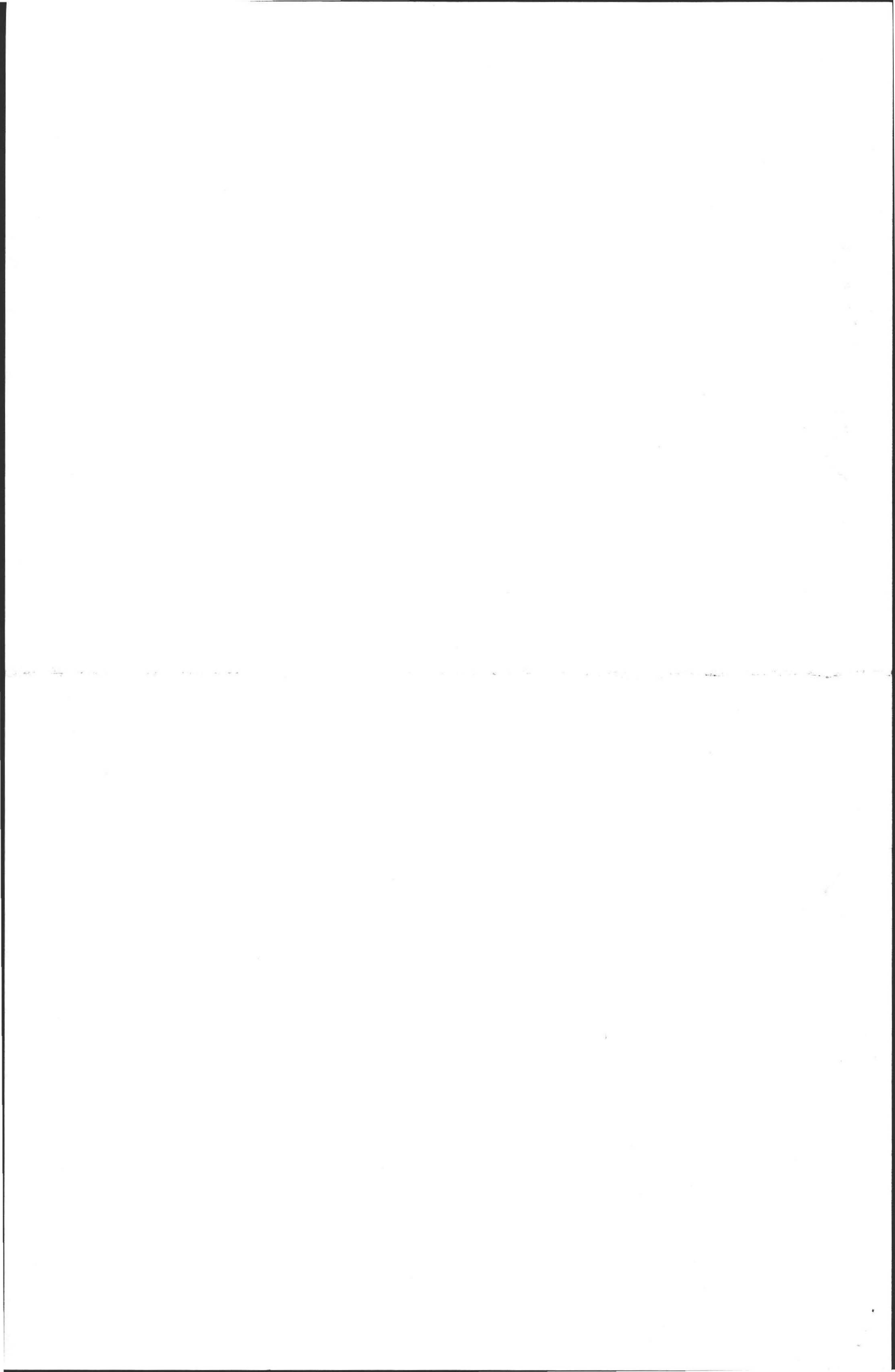
REQUIRED: For a 5 bedroom house without a garbage grinder a capacity of 550 gal./day X 1.25 (Safety Factor) = 687.50 gal./day.

DESIGNED: 3 leach trenches 70.0'L X 3.0'W X 1.50' below inlet (effective depth), for a perc rate of 15 min./in., yielding side and bottom loading factors of 0.66 and 0.43 gal./sq.ft. respectively.

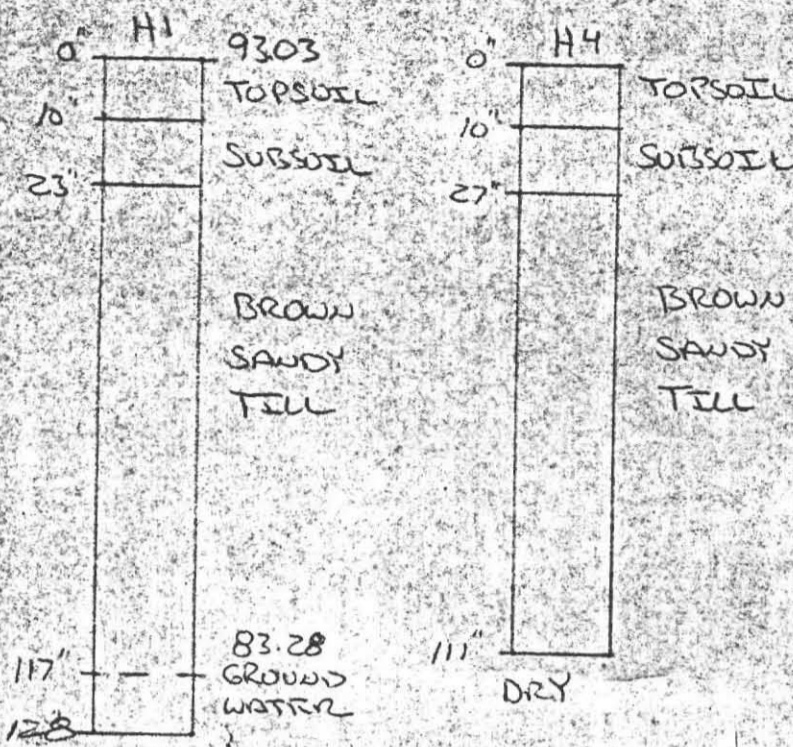
SIDEWALL: 6 Sides(73.0' X 1.5')0.66 Gal./Sq.Ft. = 433.6 Gal.  
 BOTTOM: 3 Trenches (70.0' X 3.0')0.43 Gal./Sq.Ft. = 270.9 GAL.  
 TOTAL = 704.5 Gal.



PROFILE OF SEWAGE DISPOSAL SYSTEM	
AT: 381 FLAT HILLS RD.	
BY: FILIOS ENTERPRISES, INC. 69 PELHAM RD. AMHERST MA 01002 (413)256-8008	FOR: EDWARD AND ALEXIS CONNOLLY 381 FLAT HILLS RD. AMHERST, MA 01002
DRAWN BY: P. FILIOS 28 OCT., 1993	SCALE: 1" = 10' HOR. 3" VER. PAGE 2 OF 2



# SOIL LOG



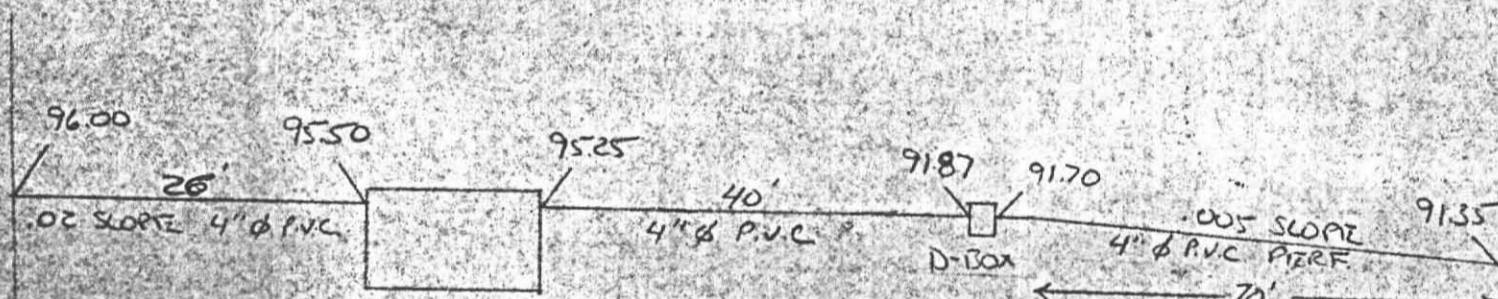
## DESIGN CALCULATIONS

3 BEDROOMS, NO GARBAGE GRINDER  
 1500 GALLON SEPTIC TANK, D.O.P. H1 = 62", H4 = 48"  
 PERC RATE H1 + H4 = 15 MIN/INCH  
 (3 BEDROOMS x 110 GALLONS) x 1.25 = 412.5 GALLONS DAILY FLOW

SIDE  $1.5 \times 4 \times 70' \times .66 \text{ GAL/FT}^2 = 277.2 \text{ GALLONS}$   
 BOTTOM  $3 \times 2 \times 70' \times .43 \text{ GAL/FT}^2 = 180.6 \text{ GALLONS}$   
 TOTAL = 840 FT<sup>2</sup>, TOTAL = 457.8 GALLONS

AMHERST REGULATIONS USED FOR CALCULATIONS

BOTTOM OF TRENCHES TO BE LAID FLAT  
 ENDS OF PIPES MUST BE CARPED



INVERT ELEVATIONS

NO SCALE

REVISED LOCATION



PLAN OF SUBSURFACE SEWAGE DISPOSAL SYSTEM  
 371 FLAT HILLS ROAD AMHERST, MASS.

SCALE: APPROVED BY: SUBMITTED TO: DRAWN BY:  
 DATE: BOARD OF HEALTH MAY 29 1990 REVISED:

SEPTIC DESIGN FOR MR/MRS EDWARD CONNOLLY, REAR  
 OF 371 FLAT HILLS RD AMHERST MASS

DRAWING NUMBER  
 90136 PDN

