

336 STATION ROAD



#336

8/11/93 P6 600  
FAR Plan 15

No. 93-13

SEP 01 1993

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:

"Farm Hill" Station Road  
Location - Address  
Robert L. Kivard (253-3316)  
Owner  
Lot # 5  
34 Tamarack Dr. Amherst MA 01012  
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 1.5 x 1.25 gallons per person per day. Total daily flow 82.5 gallons.  
Septic Tank - Liquid capacity 1500 gallons Length 10.5' Width 5.0' Diameter 5.3' Depth 5.3'  
Disposal Trench - No. Width Total Length Total leaching area 240.5 sq. ft. Sidewall Bottom  
Seepage Pit No. 1 Diameter 28.0' x 9.1' Depth below inlet 3.25' Total leaching area 253.0 sq. ft.

Percolation Test Results Performed by Filios Enterprises, Inc. Date March 4, 1993  
Test Pit No. 1 5.2 minutes per inch Depth of Test Pit 13' Depth to ground water NONE  
Test Pit No. 2 5.2 minutes per inch Depth of Test Pit 13' Depth to ground water NONE

Description of Soil Attached

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 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 Robert Kivard 8/18/93  
Application Approved By David Zagutski for G. W. Dept 9/1/93  
Application Disapproved for the following reasons:

Permit No. 93-13 Issued Date

Edward Stone

THE COMMONWEALTH OF MASSACHUSETTS  
BOARD OF HEALTH

Town OF Amherst

Certificate of Compliance

Checked OK  
10/6/93  
JA Filios

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

at Lot # 5 "Farm Hill" Station Rd. Amherst MA  
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. 93-13 dated

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

DATE 10/6/93 Inspector J Zagutski

THE COMMONWEALTH OF MASSACHUSETTS  
BOARD OF HEALTH

No. 93-13 Town OF Amherst

P6-8/18/93  
FEE 60.00

Disposal Works Construction Permit

Permission is hereby granted Robert L. Kivard  
to Construct (✓) or Repair ( ) an Individual Sewage Disposal System  
at No. Lot # 5 "Farm Hill" Station Rd. Amherst MA

as shown on the application for Disposal Works Construction Permit No. 93-13 Dated 9/1/93

DATE 9/1/93 Board of Health

CHECK OR FILL IN WHERE APPLICABLE

8/15/73

Robert R. ...

NEW YORK PUBLIC LIBRARY

THE UNIVERSITY OF THE STATE OF NEW YORK

DATE

DATE

TOWN OF AMHERST

PERC TEST DATA SHEET

DATE 3/4/93 LOCATION STATION ROAD LOT SIZE \_\_\_\_\_

OWNER Robert Rivard ADDRESS 34 TAMARACK DR TELE # 253-3316

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

BACK HOE OPERATOR Harold's BENCH MARK \_\_\_\_\_

PERC DEPTH 42" PRE SOAK TIME \_\_\_\_\_ PERC DEPTH 70" PRE SOAK TIME \_\_\_\_\_

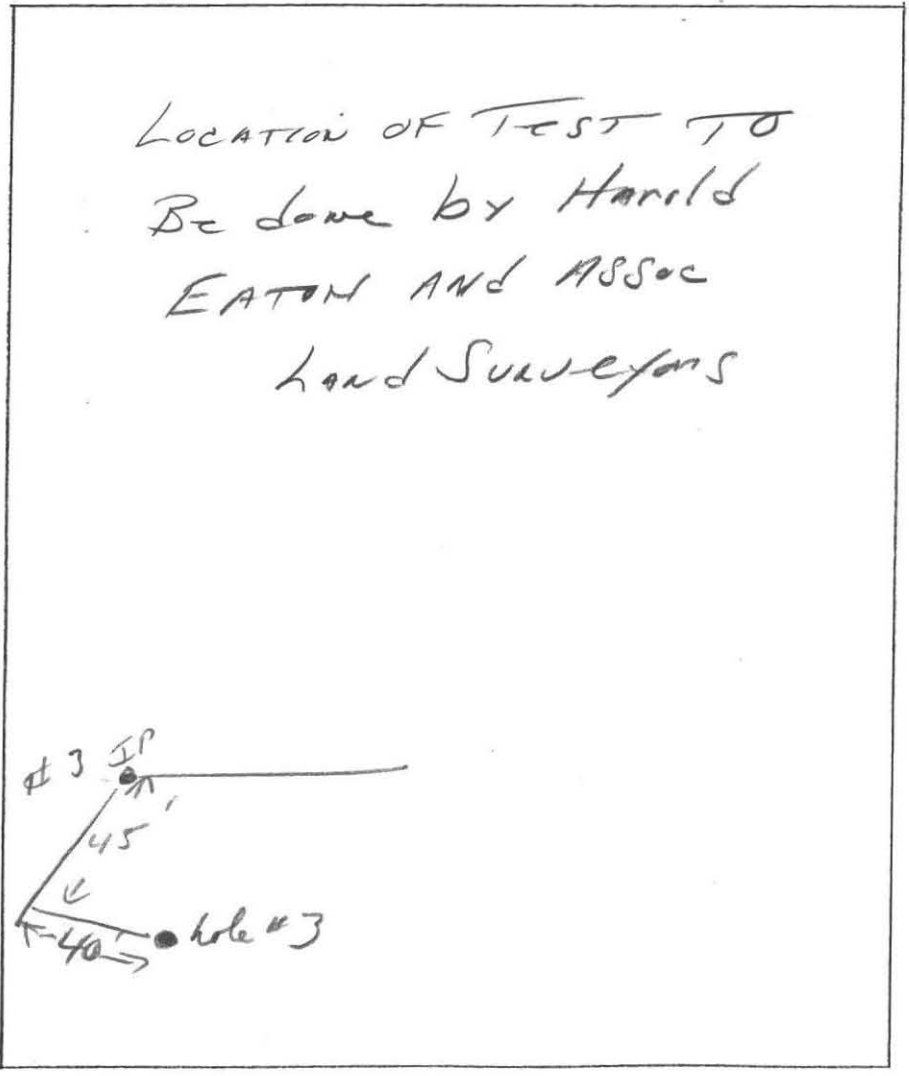
TEST 12" 2:23<sup>45</sup> \_\_\_\_\_  
9" 2:25 \_\_\_\_\_  
6" 2:27<sup>15</sup> \_\_\_\_\_

*Can hold*

RATE (2) RATE (2)

#1  
 TOP 7"  
 SUB 21"  
 coarse sand fine med gravel  
 STRATAKAL  
 13'

#2  
 TOP 11  
 SUB 22  
 coarse sand some gravel  
 13'

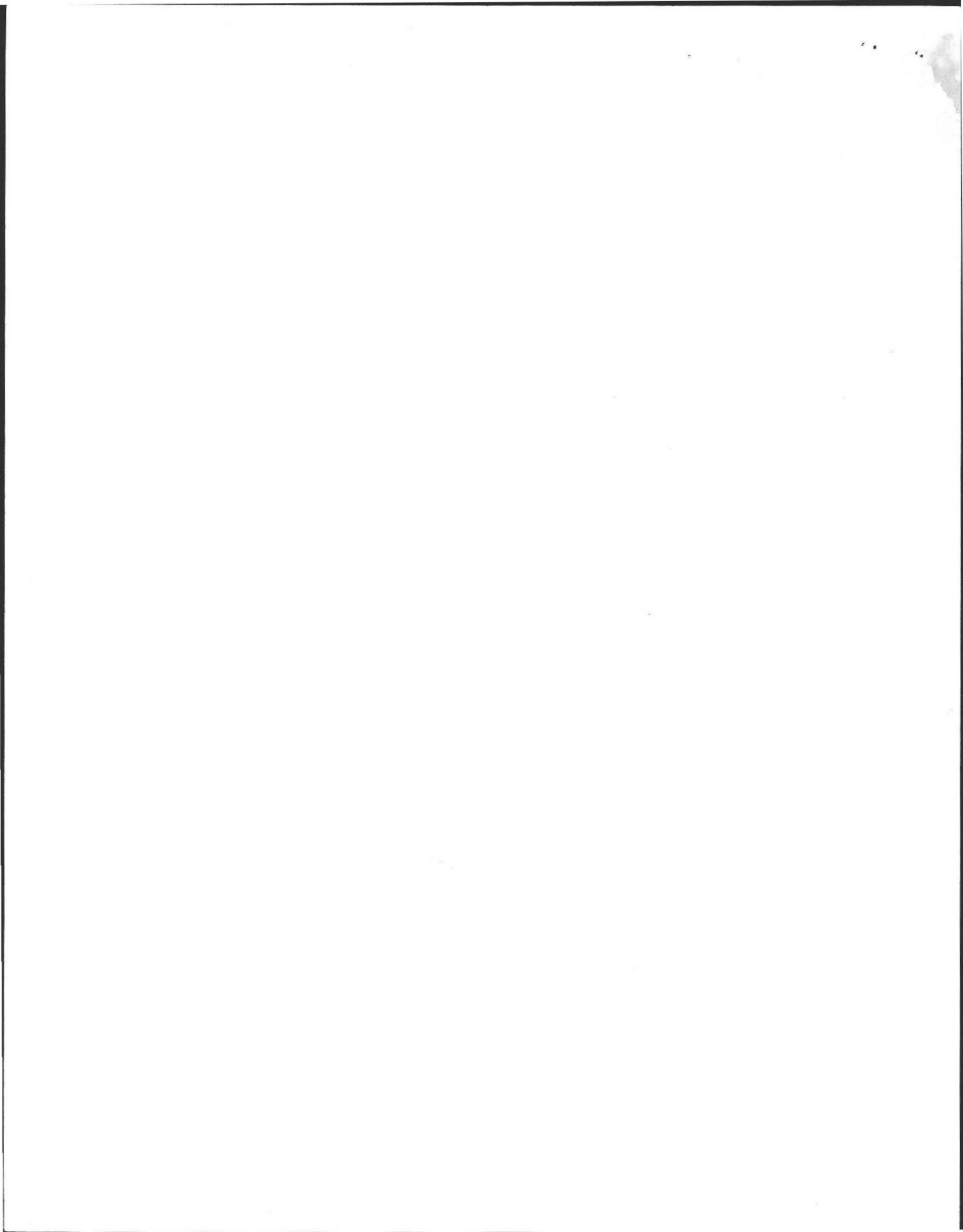


TOP  
 SUB

TOP  
 SUB

#3  
 TOP 6  
 SUB 22  
 STRATAKAL coarse sand + gravel  
 14'

TOP  
 SUB





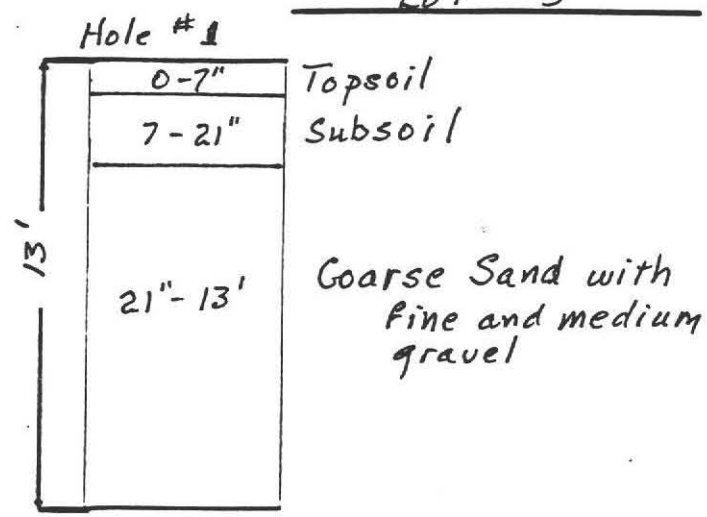
# Deep Soil Logs

## Filios Enterprises, Inc.

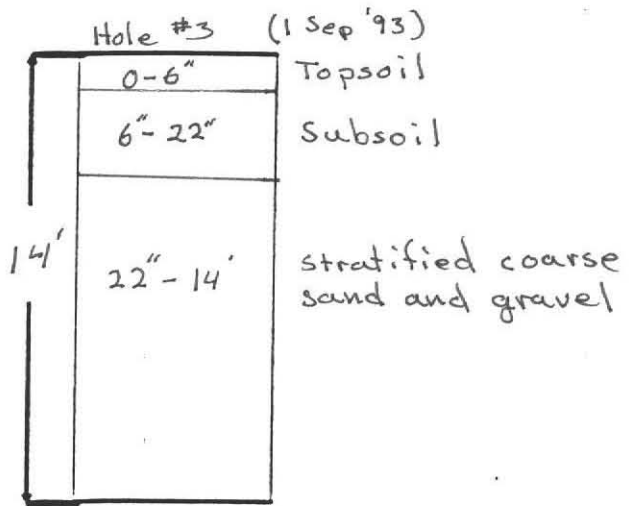
69 Pelham Rd., Amherst MA 01002. (413) 256-8008

Owner: Robert Rivard  
 Location: Station Road  
Amherst Mass.  
Lot # 5

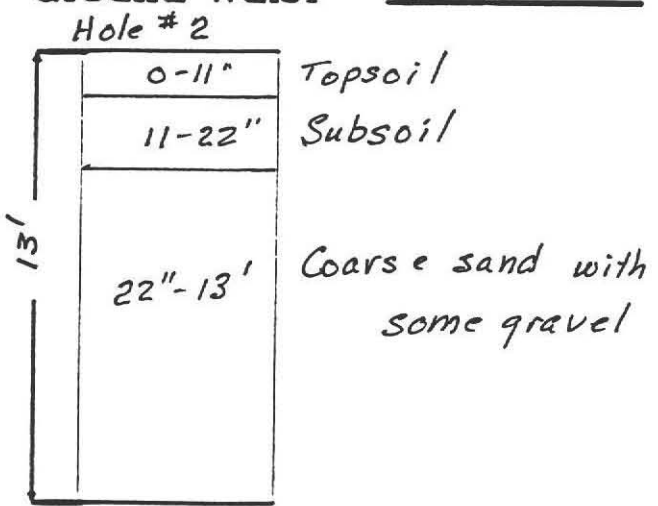
Date: Mar. 4, 1993  
 B. of H. David Zarozinski



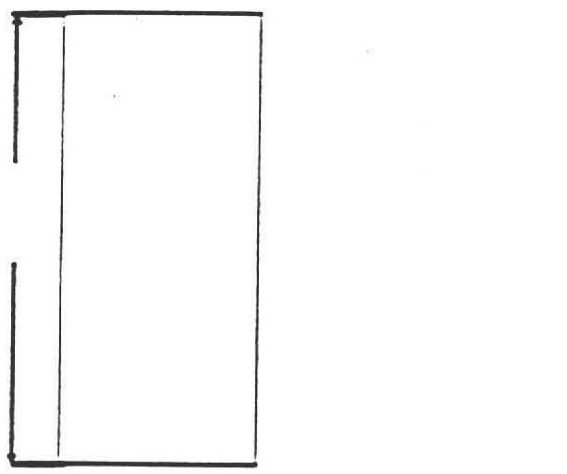
Ground Water none



Ground Water None



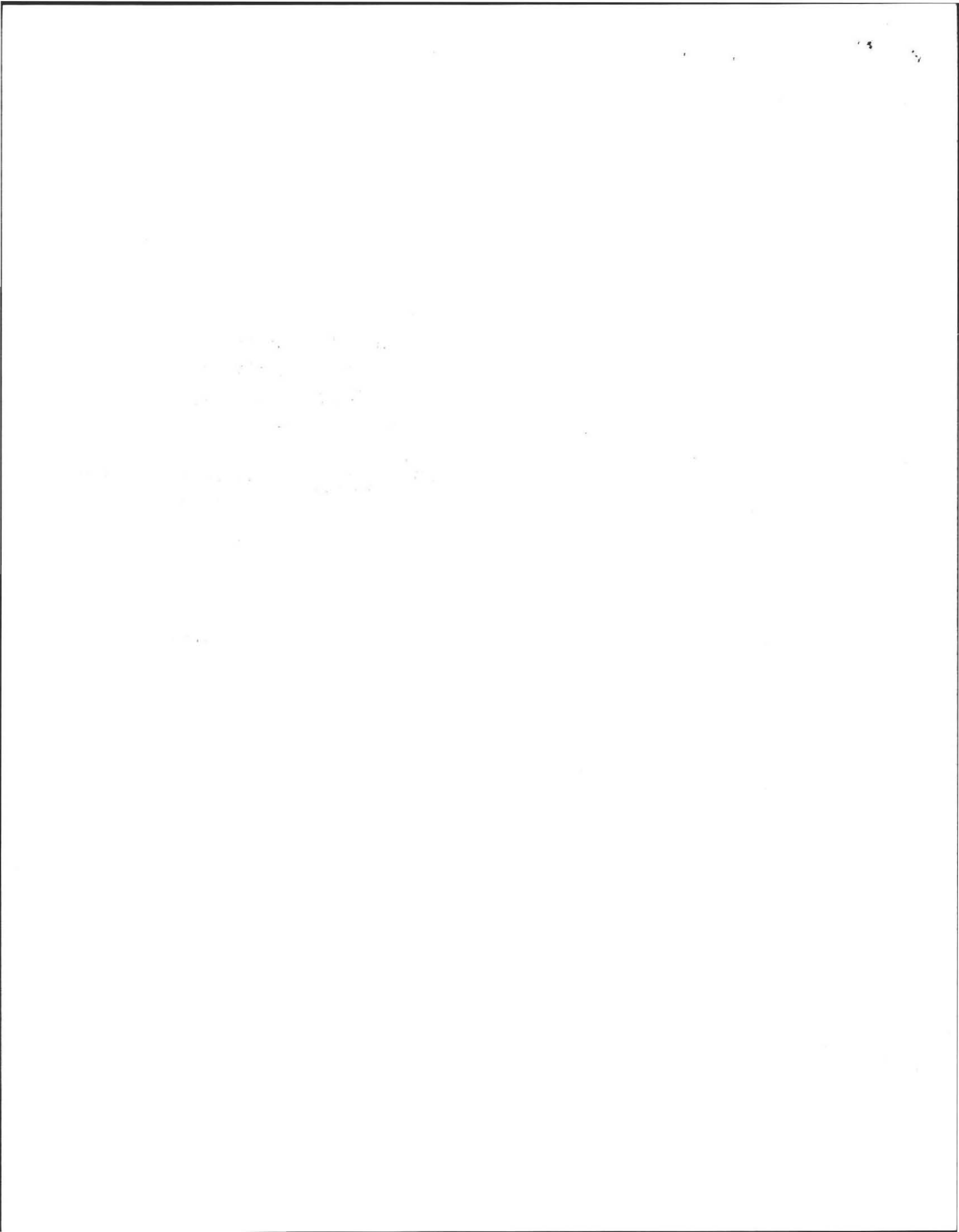
Ground Water none



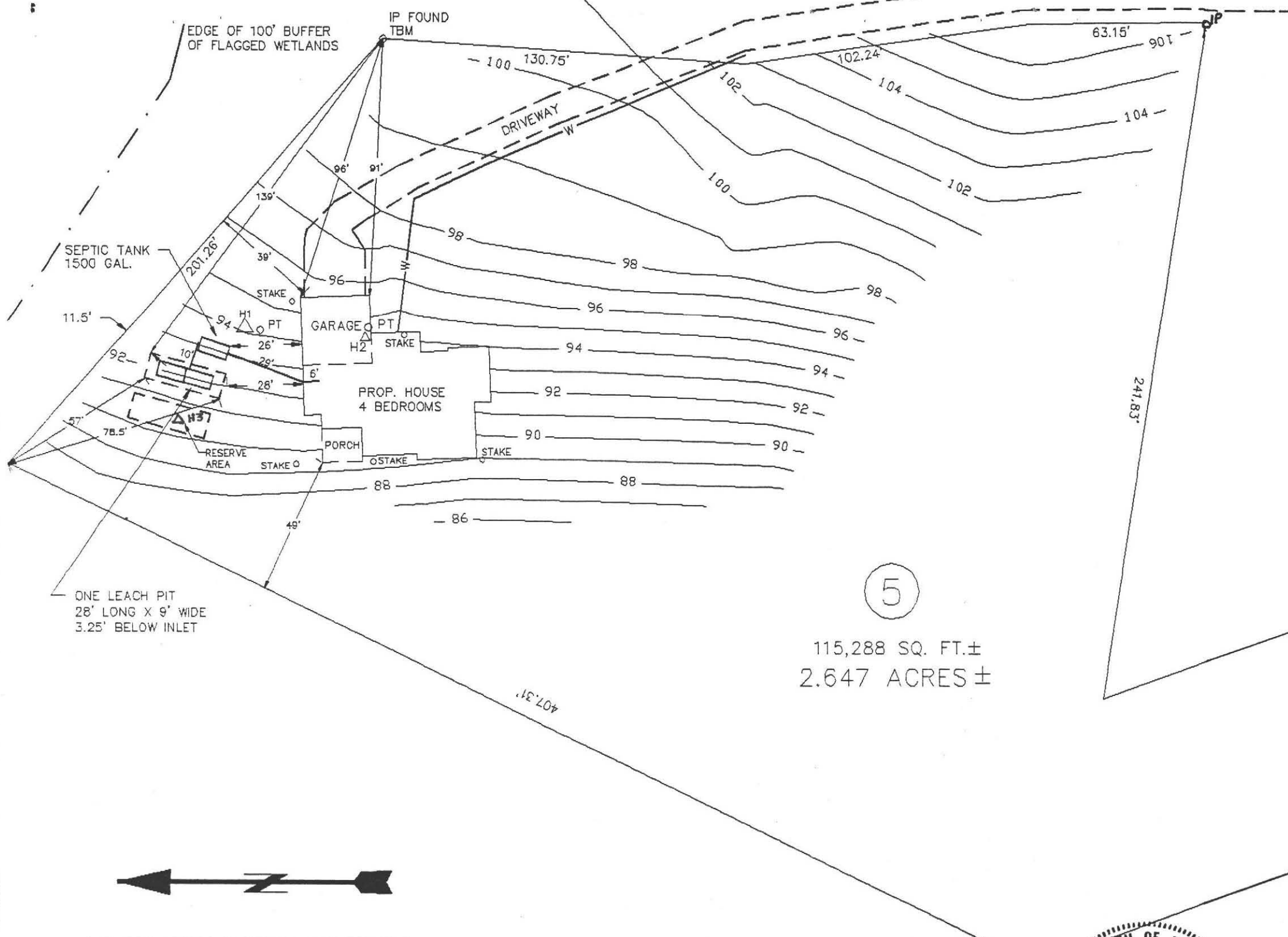
Ground Water \_\_\_\_\_

Percolation Rate at: 42"  
< 2 min./inch

at: 70" < 2 min/inch







NOTES:  
 1. TBM IS TOP OF IRON PIN.  
 2. TOWN WATER AVAILABLE - NO WELLS WITHIN 200' OF LEACH AREA AT THE TIME OF SURVEY.

5  
 115,288 SQ. FT. ±  
 2.647 ACRES ±

*Rec*  
 SEP 01 1993

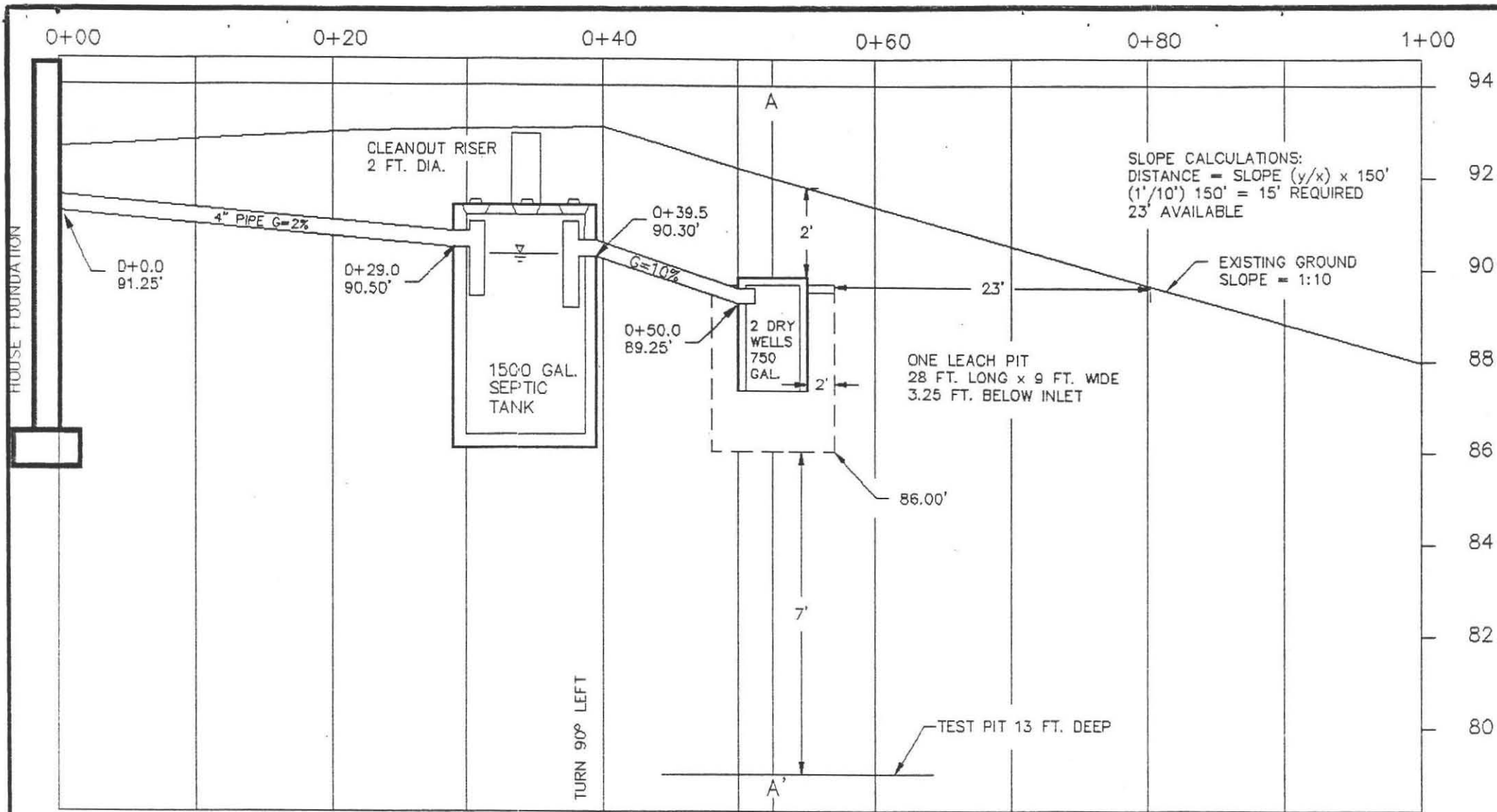


LEGEND	
○	PT PERCOLATION TEST
△	Hx DEEP TEST PIT
—	CONTOUR LINES (1' INTERVAL)



PLAN OF SEWAGE DISPOSAL SYSTEM	
LOT 5, "FARM HILLS," STATION RD., AMHERST	
BY: FILIOS ENTERPRISES, INC. 69 PELHAM RD. AMHERST MA 01002 (413)256-8008	FOR: ROBERT L. RIVARD 34 TAMARACK DRIVE AMHERST, MA 01002
R. STOVER	SCALE: 1" = 40'
JULY 9, 1993	PAGE ONE OF TWO
REV. #1 AUGUST 31, 1993	





100' Elevation Assumed at TBM. TBM is top of iron property pin as shown on the 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. Inlet and outlet tees must extend 10" and 14" below the flowline respectively.

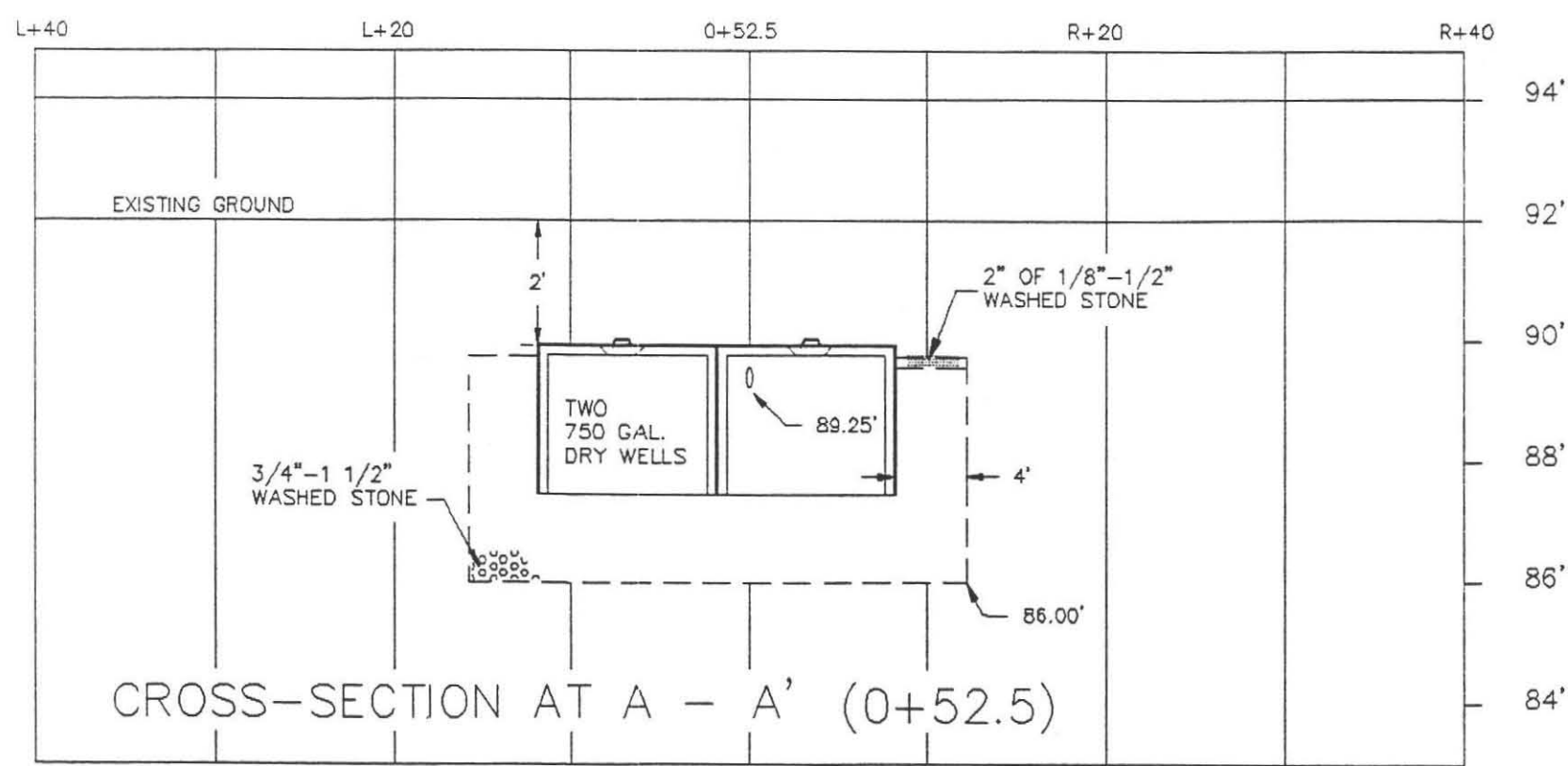
**CALCULATIONS**

REQUIRED: For a 4 bedroom house with a garbage grinder a capacity of 440 gal/day x 1.5 x 1.25 (town safety factor) = 825 gal/day

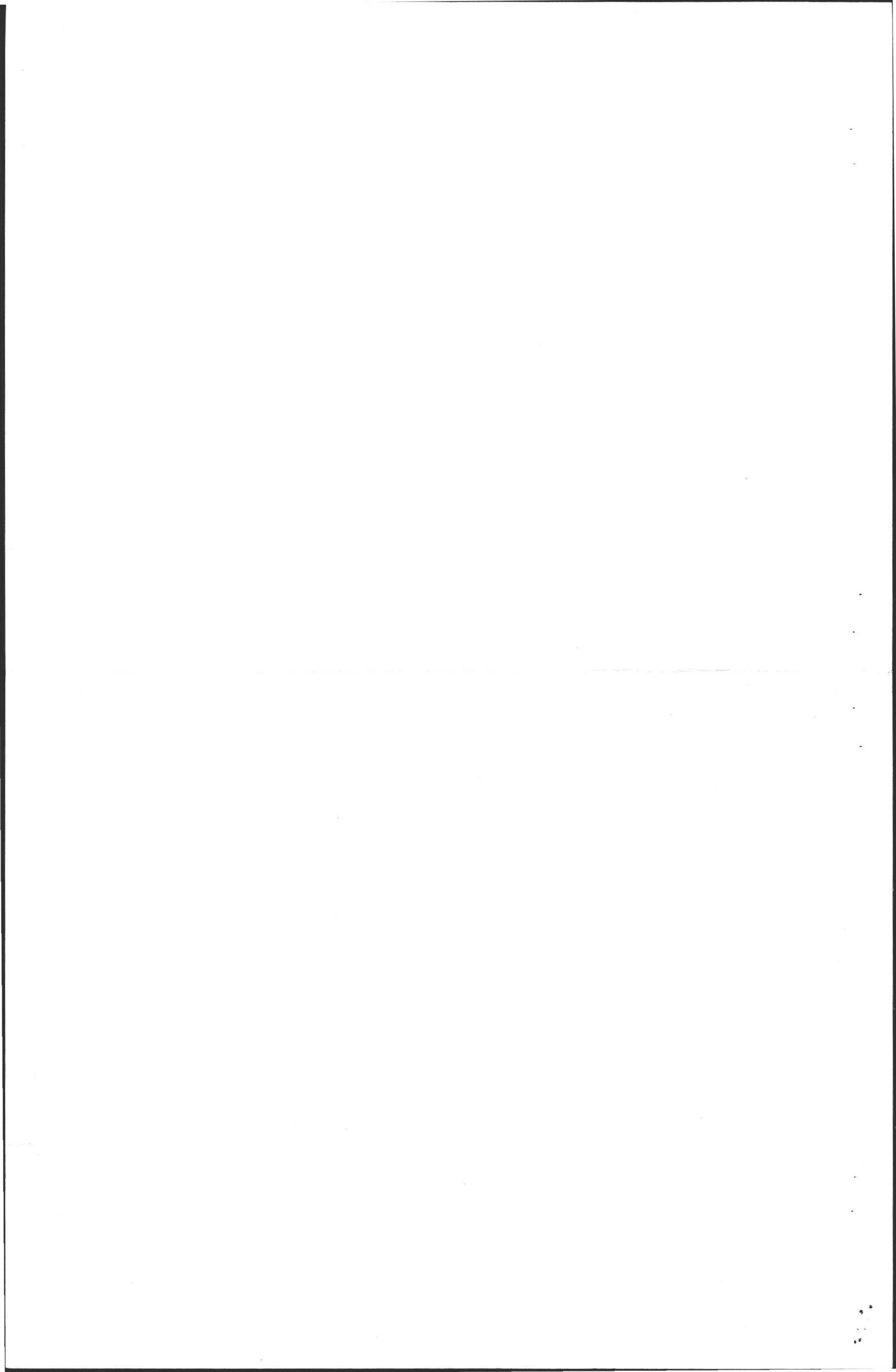
DESIGNED: 1 leach pit 28.0'L x 9.0'W x 3.25' below inlet (effective depth), for a perc rate of 2 min./in., yielding side and bottom loading factors of 2.50 and 1.00 gal./sq.ft. respectively.

SIDEWALL: (28.0' + 9.0')2 x 3.25' x 2.50 Gal./Sq.Ft. = 601.3 Gal.  
 BOTTOM: (28.0' x 9.0')1.00 Gal./Sq.ft. = 252.0 Gal.  
 TOTAL 853.3 Gal.

SEP 01 1993  
SEP 01 1993



PROFILE OF SEWAGE DISPOSAL SYSTEM	
LOT 5, "FARM HILLS," STATION RD., AMHERST, MA	
BY: FILIOS ENTERPRISES, INC. 69 PELHAM RD. AMHERST MA 01002 (413)256-8008	FOR: ROBERT L. RIVARD 34 TAMARACK DRIVE AMHERST, MA 01002
ROBERT STOVER	SCALE: 1" = 10' HOR. 3' VER.
JULY 20, 1993	PAGE TWO OF TWO
REV. #1 AUGUST 31, 1993	



FILIOS ENTERPRISES, INC.  
69 Pelham Rd.  
Amherst, MA 01002

Date: *Oct 8 1993*

Name: *Robert Rivard*  
Address: *34 Tamarack Drive*  
*Amherst, MA.*  
*At. Station Road - Lot 5*

Dear

This is to notify you that Filios Enterprises, Inc. has inspected the septic system installed

AT: *Station Road*  
*Lot 5*

Unless exceptions are noted below, the system complied with the approved design and elevations.

Exceptions: *Installation meets all requirements of State Environmental Code Title 5. The "As Built" installation differs from the approved plan as shown in red on the plan view and profile views enclosed.*

Sincerely,

*Frederick A. Filios*

(Frederick A. Filios)

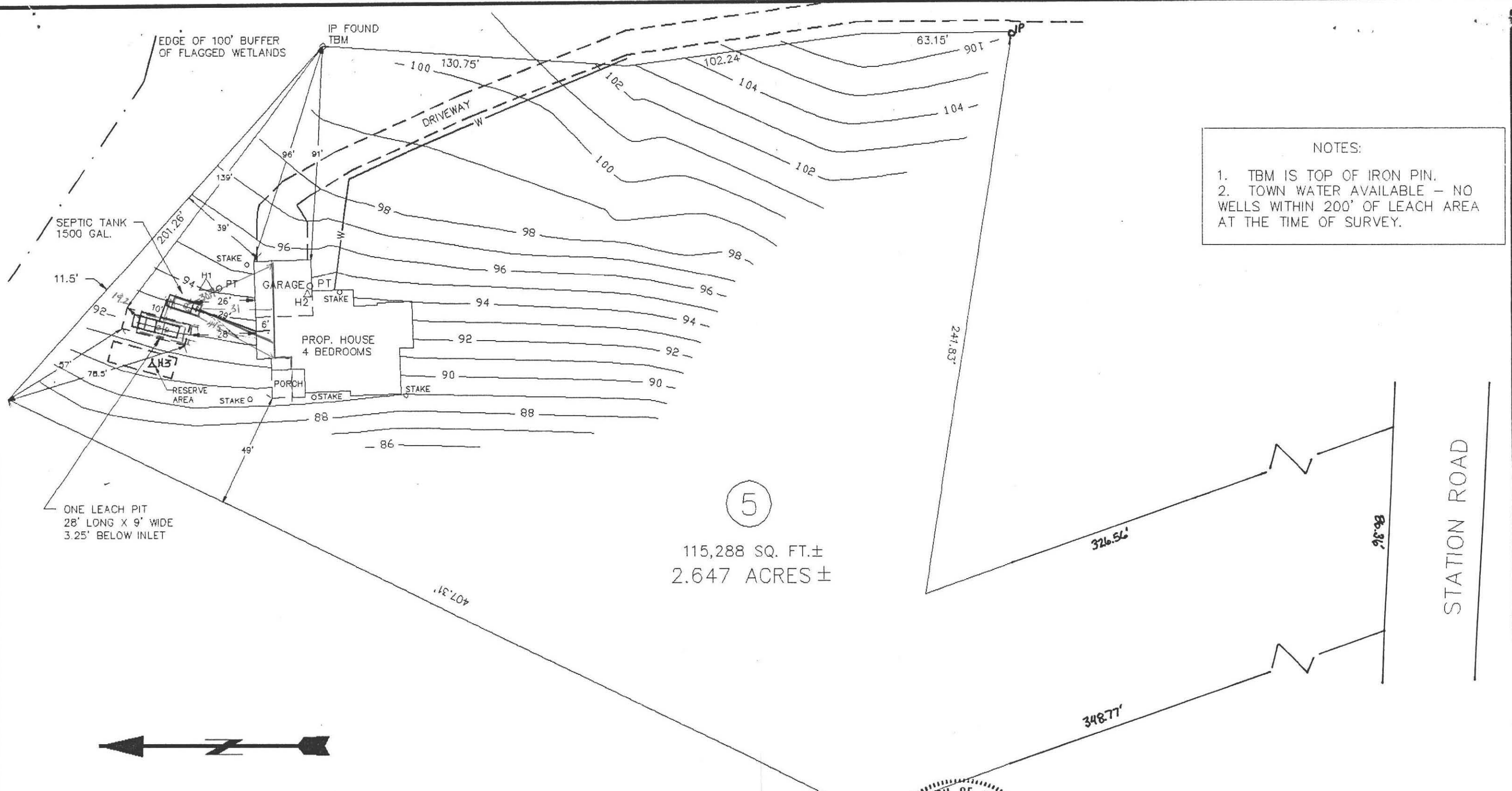
C.C. to Board of Health

1877

Received of  
the Treasurer of the  
County of ...  
the sum of ...

for ...

...  
...  
...  
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...



NOTES:  
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 2. TOWN WATER AVAILABLE - NO WELLS WITHIN 200' OF LEACH AREA AT THE TIME OF SURVEY.

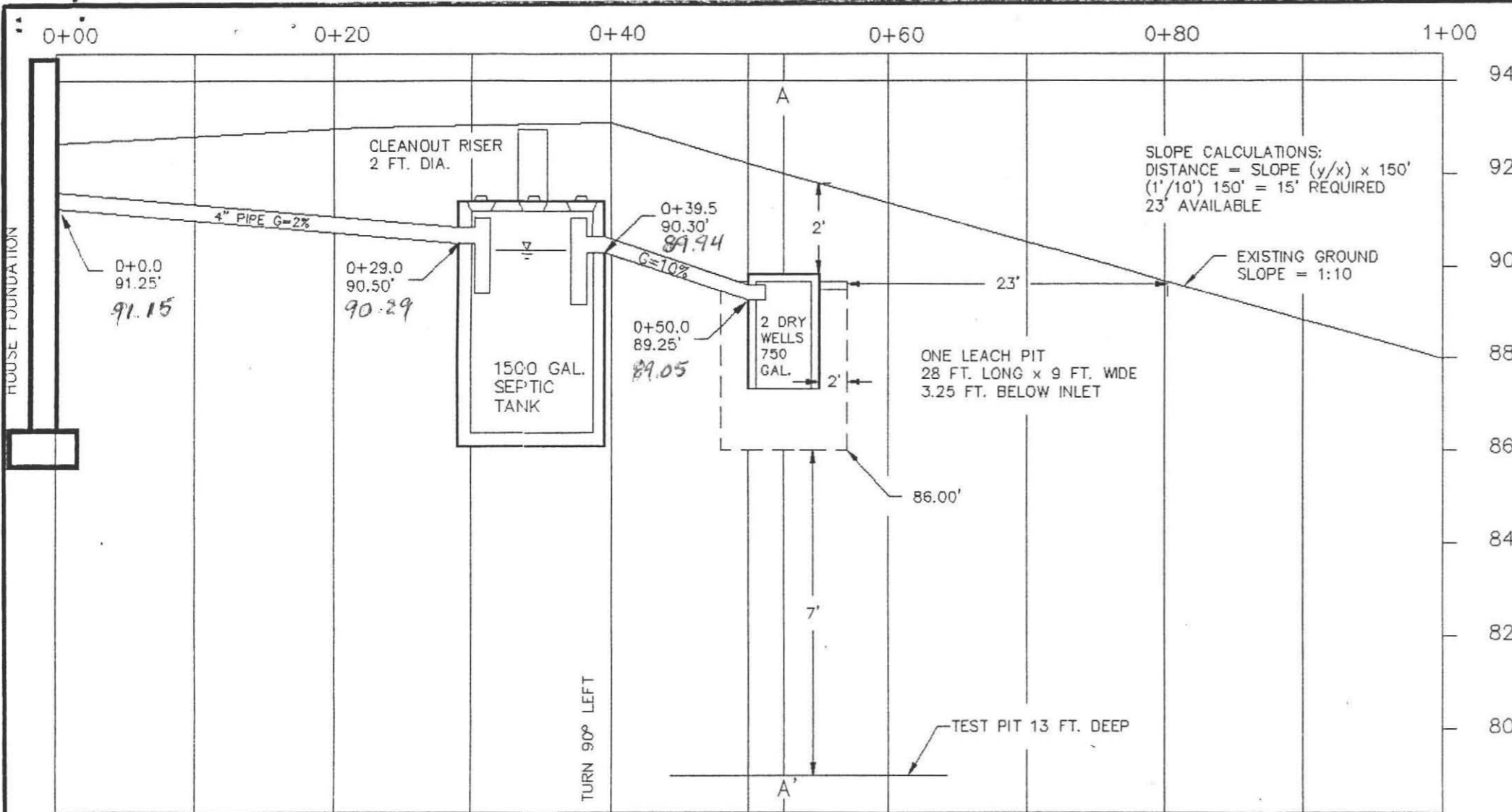
LEGEND	
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△	Hx DEEP TEST PIT
—	CONTOUR LINES (1' INTERVAL)



PLAN OF SEWAGE DISPOSAL SYSTEM	
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BY: FILIOS ENTERPRISES, INC. 69 PELHAM RD. AMHERST MA 01002 (413)256-8008	FOR: ROBERT L. RIVARD 34 TAMARACK DRIVE AMHERST, MA 01002
R. STOVER JULY 9, 1993	SCALE: 1" = 40' PAGE ONE OF TWO
REV. #1 AUGUST 31, 1993	







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**SPECIFICATIONS**  
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**Construction Notes**

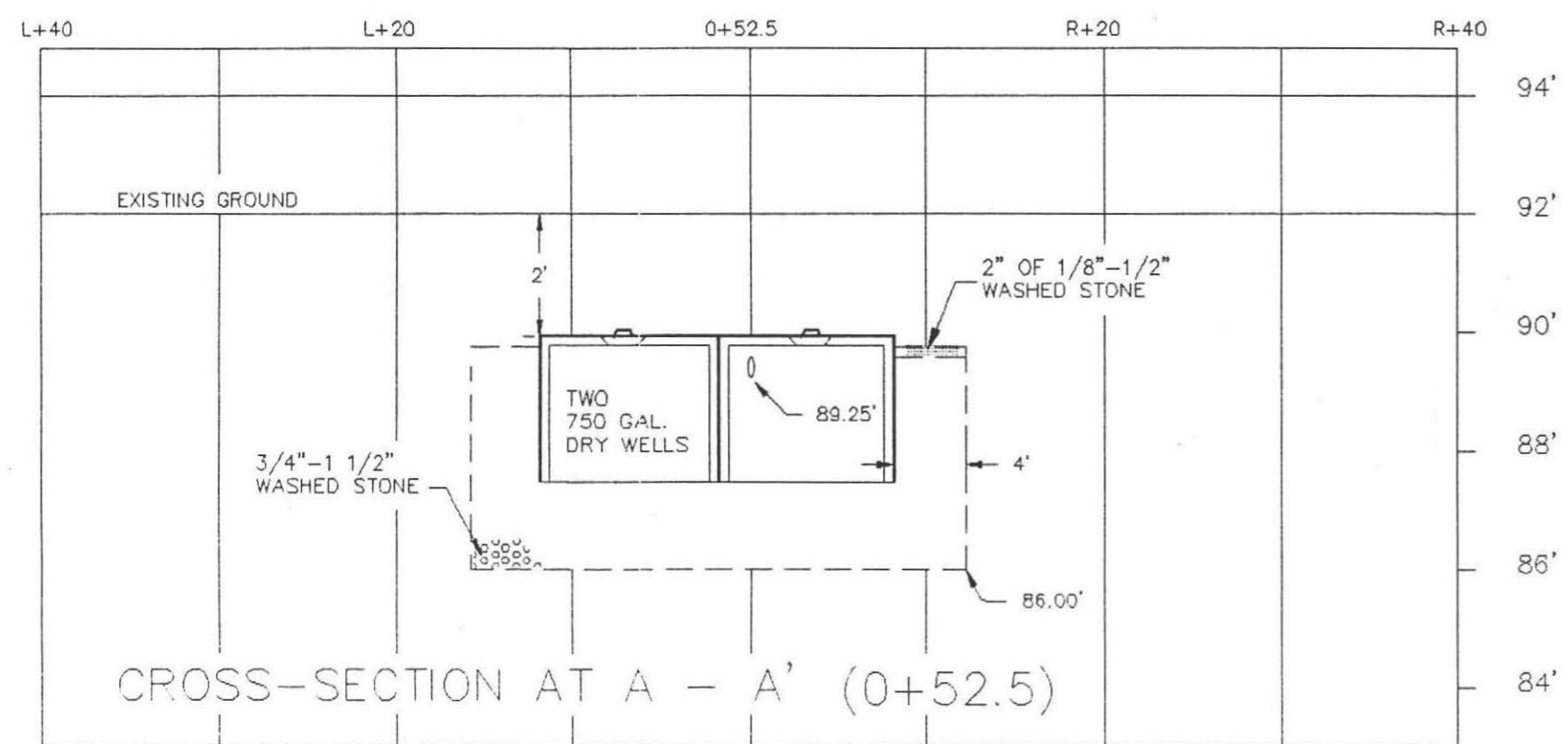
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2. Inlet and outlet tees must extend 10" and 14" below the flowline respectively.

**CALCULATIONS**

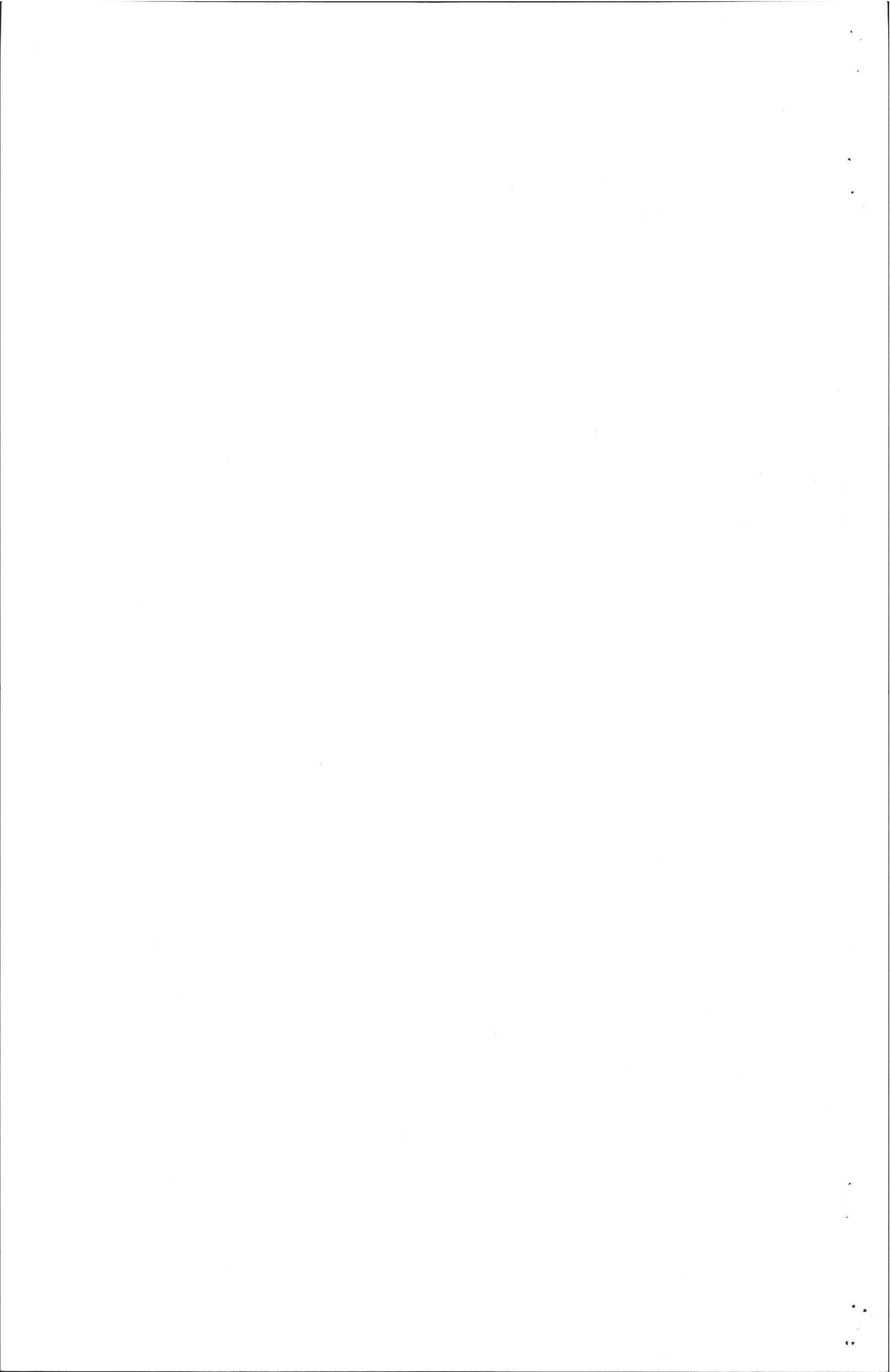
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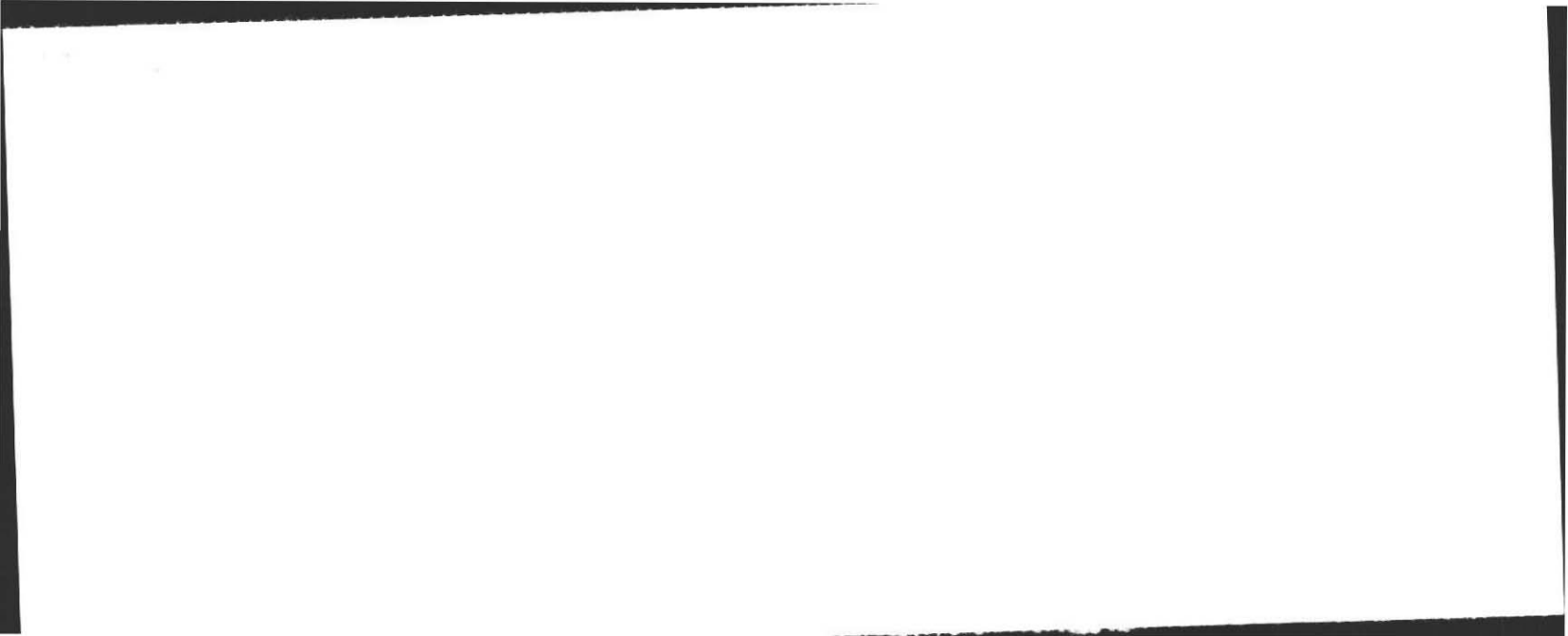
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BY: FILIOS ENTERPRISES, INC. 69 PELHAM RD. AMHERST MA 01002 (413)256-8008	FOR: ROBERT L. RIVARD 34 TAMARACK DRIVE AMHERST, MA 01002
ROBERT STOVER	SCALE: 1" = 10' HOR. 3' VER.
JULY 20, 1993	PAGE TWO OF TWO
REV. #1 AUGUST 31, 1993	



Invoice Number	Date	Voucher	Amount	Discounts	Previous Pay	Net Amount
Well Permit 091611	09/16/11	221378	50.00	0.00	0.00	50.00
Town of Amherst, MA 10010000      1	AMHE003	Totals	50.00	0.00	0.00	50.00

GEOTHERMIC WELL PERMIT  
33,6 STATION ROAD

BATCH 1314



PERMITS/INSP PAYMENT RECPT#: 12027788  
\*\*\*TOWN OF AMHERST\*\*\*  
TOWN HALL  
4 BOLTWOOD AVENUE  
AMHERST MA 01002

DATE: 10/04/11 TIME: 13:14  
CLERK: smithe DEPT:

PAID BY:  
PAYMENT METH: CHECK 145281

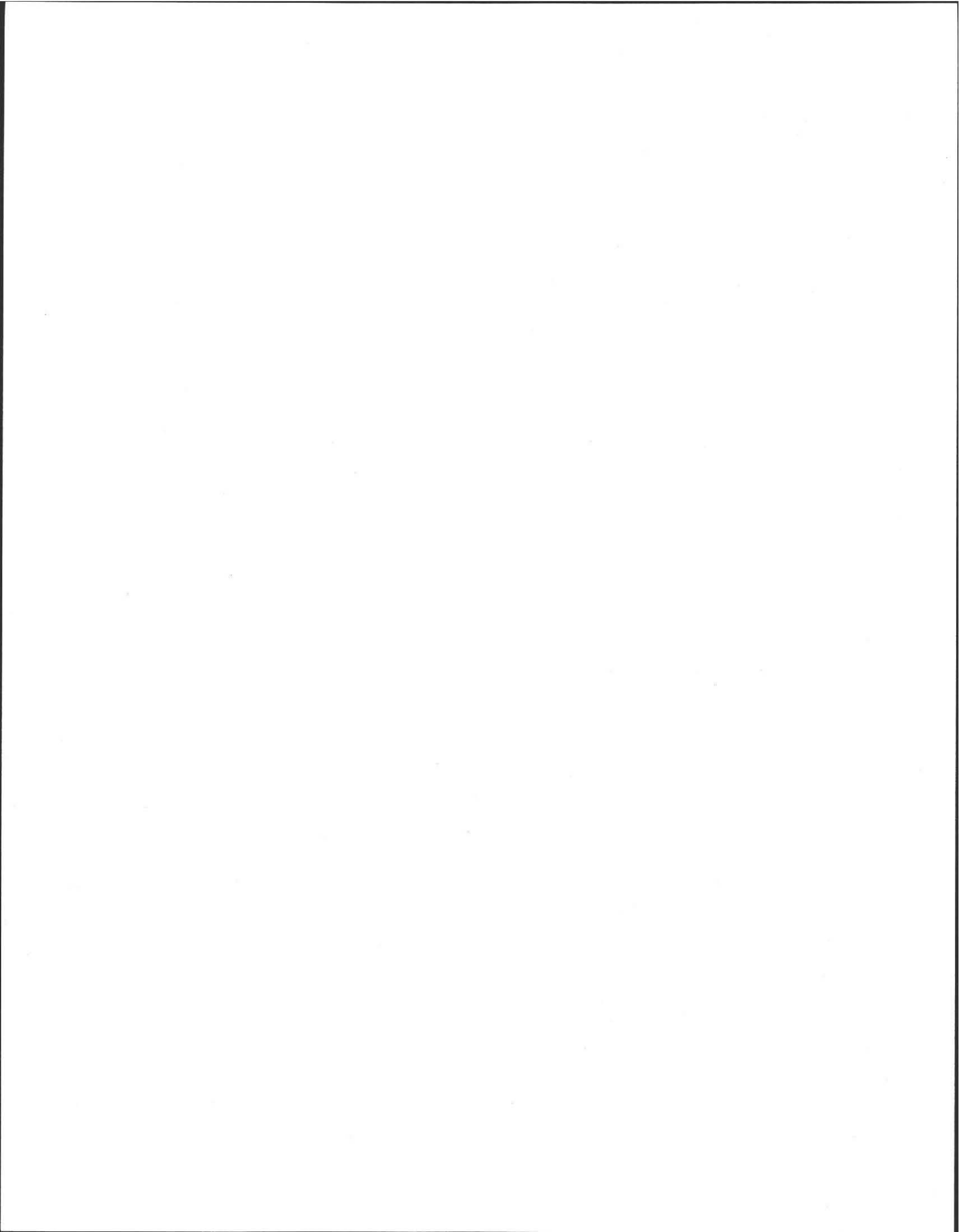
REFERENCE:

AMT TENDERED: 50.00  
AMT APPLIED: 50.00  
CHANGE: .00

SITE ADDRESS: 336 STATION ROAD

FEE:  
HEA059 50.00

TOTAL PAID: 50.00



Town of



AMHERST

Massachusetts

AMHERST HEALTH DEPARTMENT, 70 BOLTWOOD WALK, AMHERST, MA 01002  
(413) 259-3077 (413) 259-2404 - FAX Environmental Health Division (413) 259-3078

**APPLICATION FOR A WELL CONTRUCTION PERMIT**

I hereby petition the Board of Health of the Town of Amherst for a Well Construction Permit (WCP) to install a private well in the Town of Amherst.

**ATTACHED IS A PLAN SHOWING THE PROPOSED LOCATION OF THE WELL (WITH ORIGINAL DATE, STAMP AND SIGNATURE OF AN ENGINEER REGISTERED SANITARIAN, OR REGISTERED LAND SURVEYOR) MEETING ALL THE REQUIREMENTS OF AMHERST RULES AND REGULATIONS FOR PRIVATE WELLS.**

1. Address of Property: 336 Station Road
2. Assessor of Parcel Number: 21C/32
3. Name of Owner: Carol D Silver, Trustee Telephone Number: 413-253-5073  
Address of Owner: 336 Station Road
4. Name of Well Driller: Thomas Mahan, Jr. Ct Wells, Inc. MA Reg # 722  
(Must be registered with Massachusetts Water Resources Commission)
5. Purpose of Well: \*Drinking ( ) Agricultural Only ( ) Geothermal ( X )

The undersigned acknowledges that he must, before commencing construction or use of the system which is the matter of this application, secure any and all other permits which may be required by the laws of the Town of Amherst and the Commonwealth of Massachusetts, and agree to abide by all regulations of the Town of Amherst and the Commonwealth of Massachusetts concerning private wells.

- The undersigned also understands that if a private well is to be used for drinking purposes, a **BUILDING PERMIT** affecting the structure the well is to serves **WILL NOT BE ISSUED UNTIL** A Water Supply Certificate has been granted by the Amherst Board of Health.

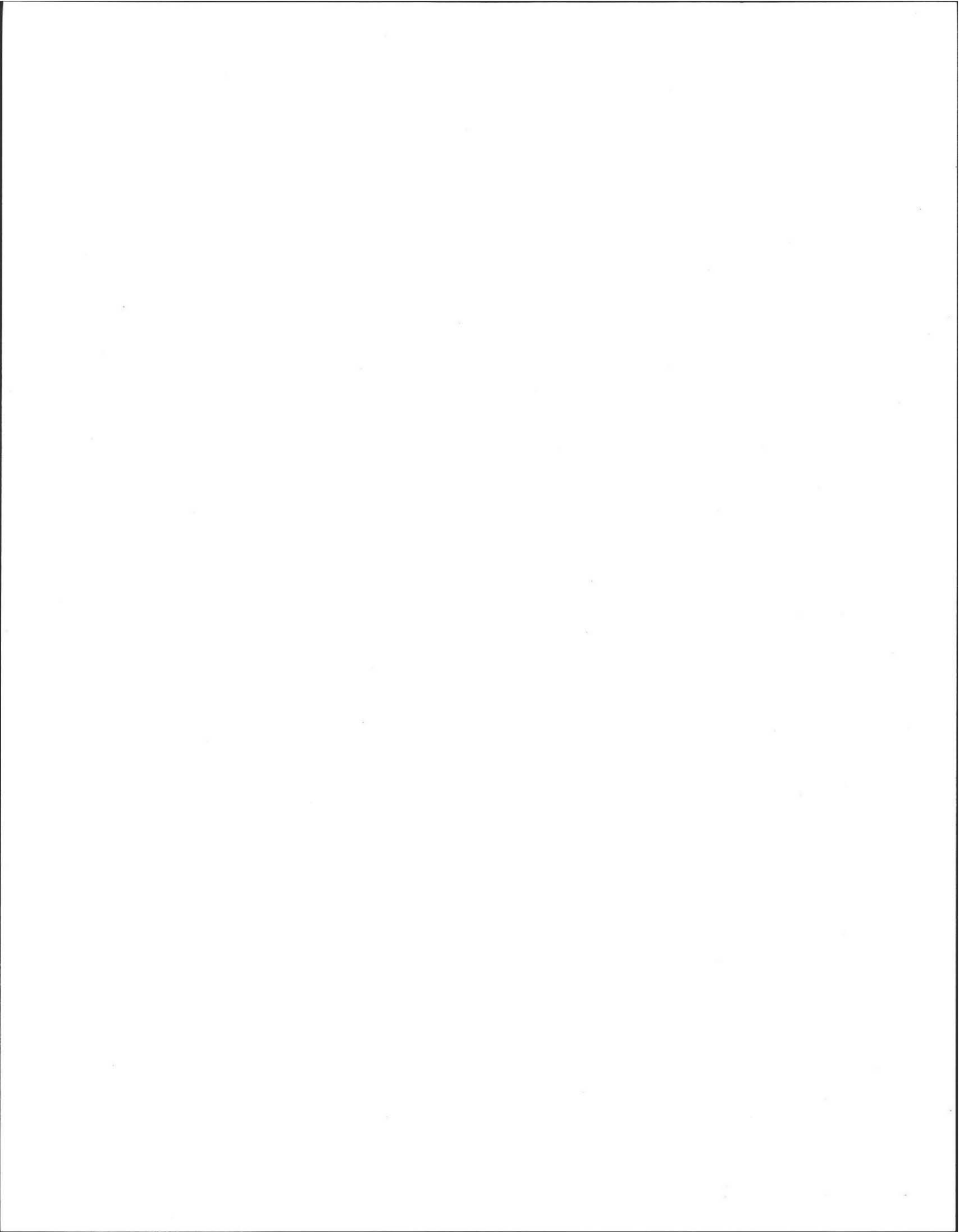
Name of Applicant: Terraclime Geothermal Fee: \$100.00

Signature: [Handwritten Signature] for Terraclime Date: 9-13-11

WELL PERMIT # \_\_\_\_\_

MAKE SMOKING HISTORY

*original from Javicia*







Massachusetts Department of Environmental Protection  
Bureau of Resource Protection - Drinking Water Program

# UIC Registration Application for Closed-Loop Ground Source Heat Pump Well

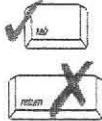
## Registration Category

Registration of Underground Discharges to Injection Well(s)   
Modification to an Existing UIC Registration

## UIC Registration Fee - Exempt

## For Modifications to an Existing UIC Registration

**Important:** When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



Check all that apply:  Change of owner  Change in # of discharge wells (+/-)

Enter UIC Registration Number issued by MassDEP for the initial UIC Registration (required for modifications): MAS11A008207-5CL  
UIC Registration #

## A. Site Information

Private Residence  
Property name (enter "Private Residence" if unnamed)  
336 Station Road Amherst  
Property Street Address City/Town  
MA 01002  
State Zip Code

## B. Owner Information

Marc and Carol Silver 336 Station Road  
Name of Owner Street Address  
Amherst MA 01002  
City/Town State Zip Code  
413-253-5073  
Telephone Number Email (optional)

## C. Registered Well Driller

Thomas Mahan, Jr. 722  
Well Driller's Name MassDEP Well Driller Certification Number  
Connecticut Wells, Inc. 800-344-7989  
Name of Company Telephone Number

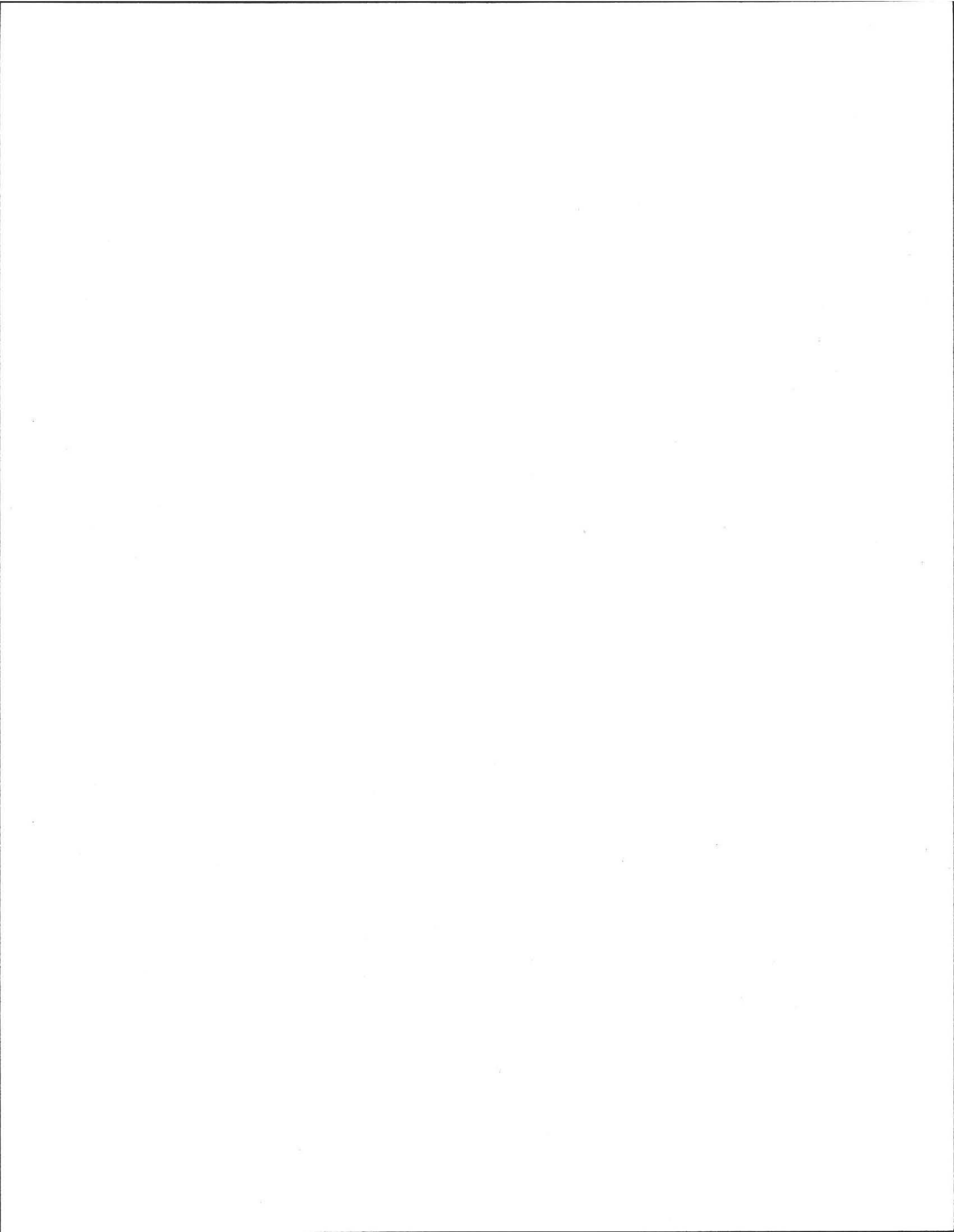
## D. Injection Well Information

2 bores, each at 450' deep  
Total Number of Wells (existing plus proposed)  
Type of Discharge:  Direct Exchange Heat Pump  Closed Loop Heat Pump

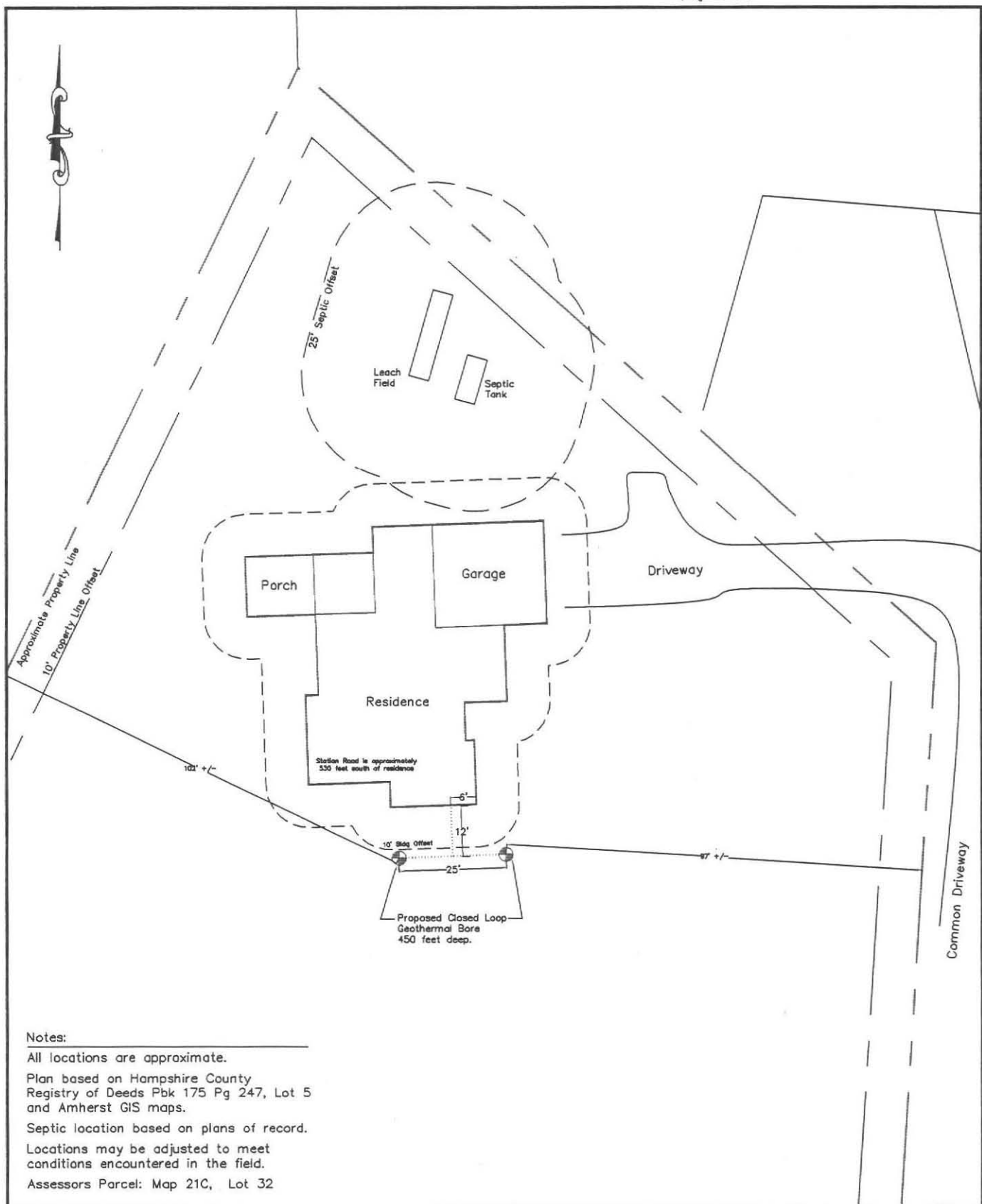
## E. Preparer

Mike Simonelli 9/15/11  
Printed Name Date  
413-519-3079 Project Manager  
Telephone Number Position/Title  
msimonelli@terraclimegeo.com  
Email (optional)

Send a duplicate copy of this form to the local board of health.



New



**Notes:**

All locations are approximate.  
 Plan based on Hampshire County Registry of Deeds Pbk 175 Pg 247, Lot 5 and Amherst GIS maps.  
 Septic location based on plans of record.  
 Locations may be adjusted to meet conditions encountered in the field.  
 Assessors Parcel: Map 21C, Lot 32

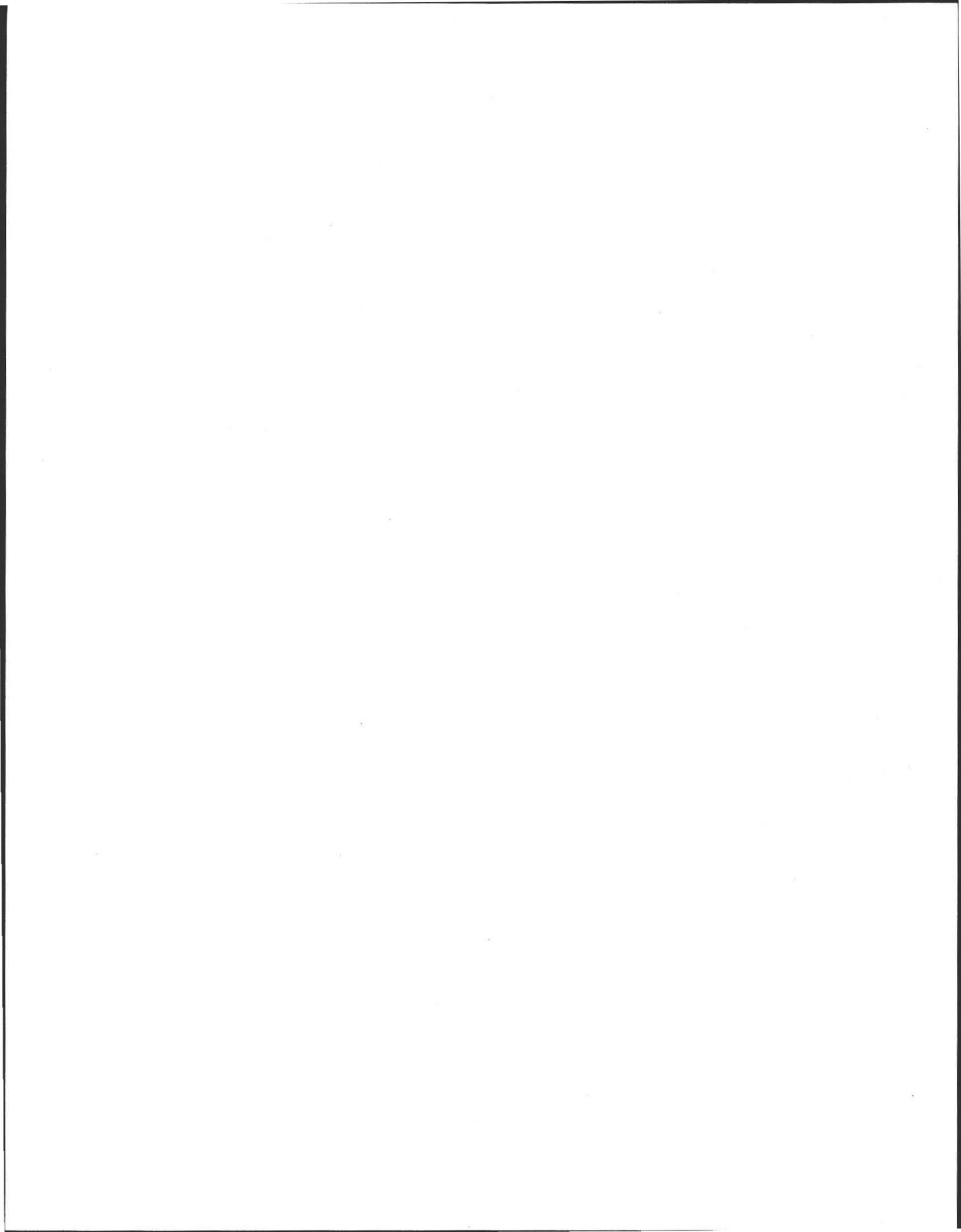


Phone: 1-877-378-8236 • terraclimegeo.com

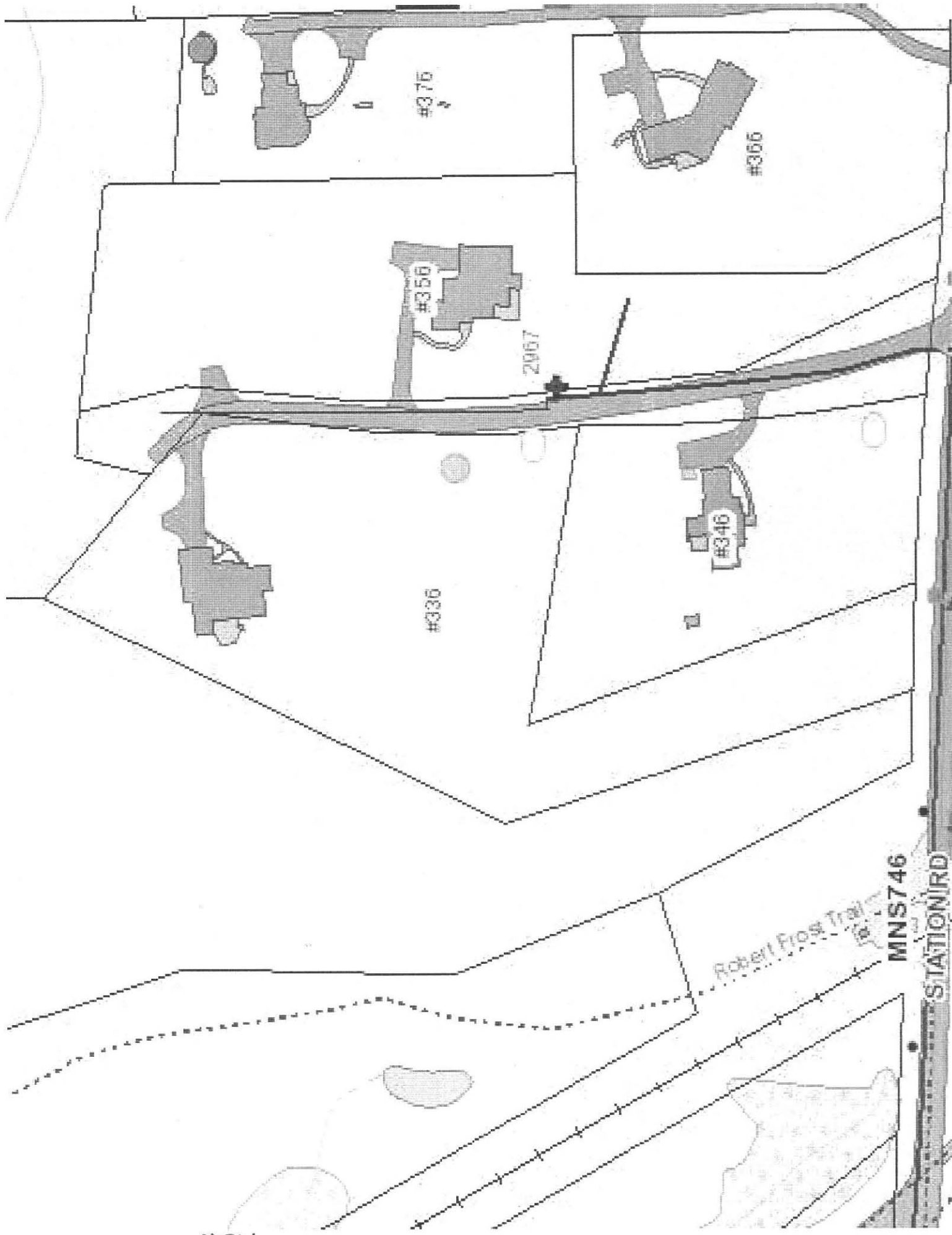
PROJECT:  
**Silver Residence**  
 336 Station Road  
 Amherst, Massachusetts

TITLE:  
**Proposed Closed Loop Bore Locations**

COMPUTER CADFILE : 216464e.dwg			
DRAWN BY:	DESIGNED BY:	CHECKED BY:	APPROVED BY:
RAS/MS	MS	MS	MS
SCALE:	DATE:	JOB NO.:	FIGURE NO.:
1" = 30'	9/15/11	216464	1



New



#375

#356

#356

2967

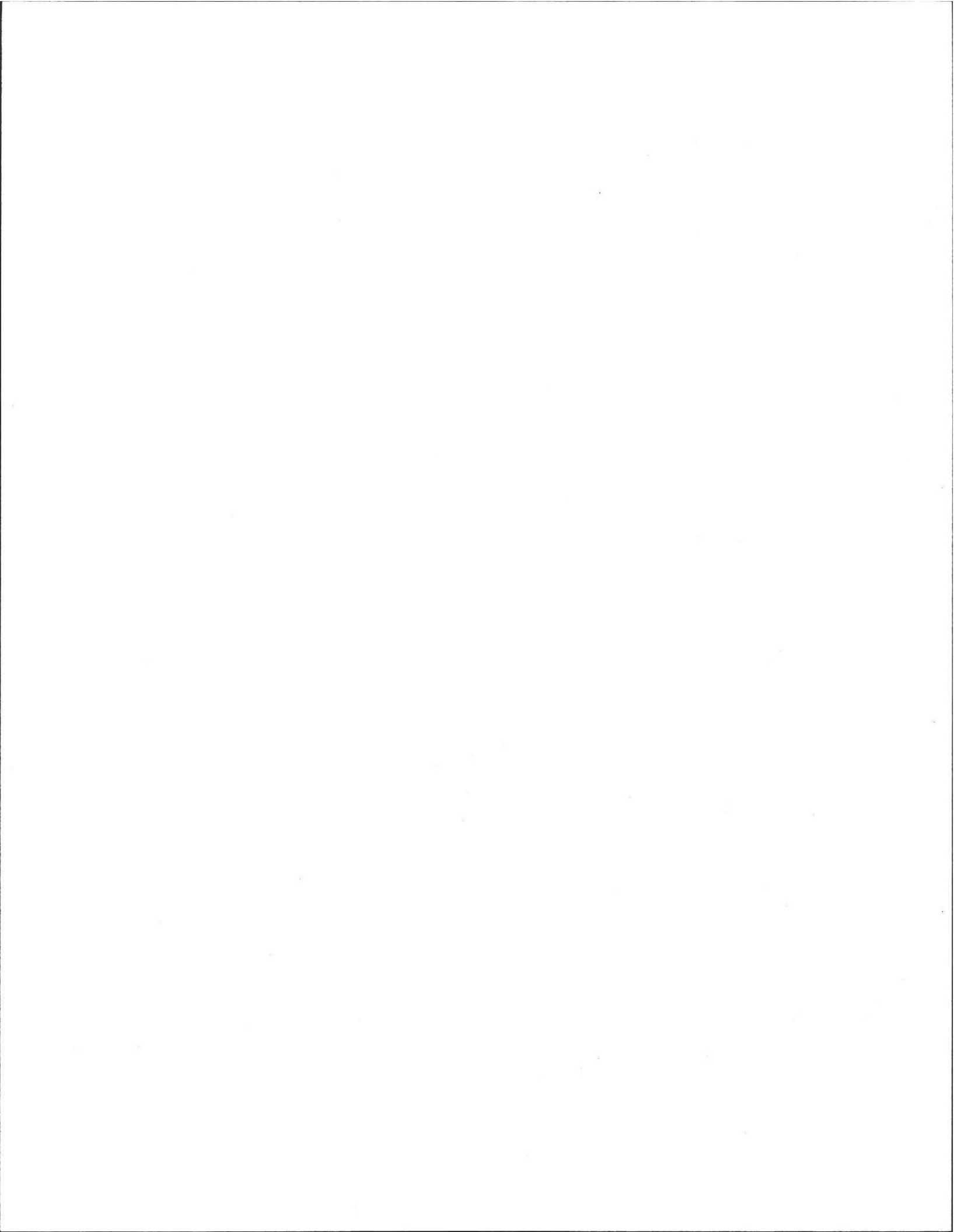
#336

#346

Robert Frost Trail

MNS746

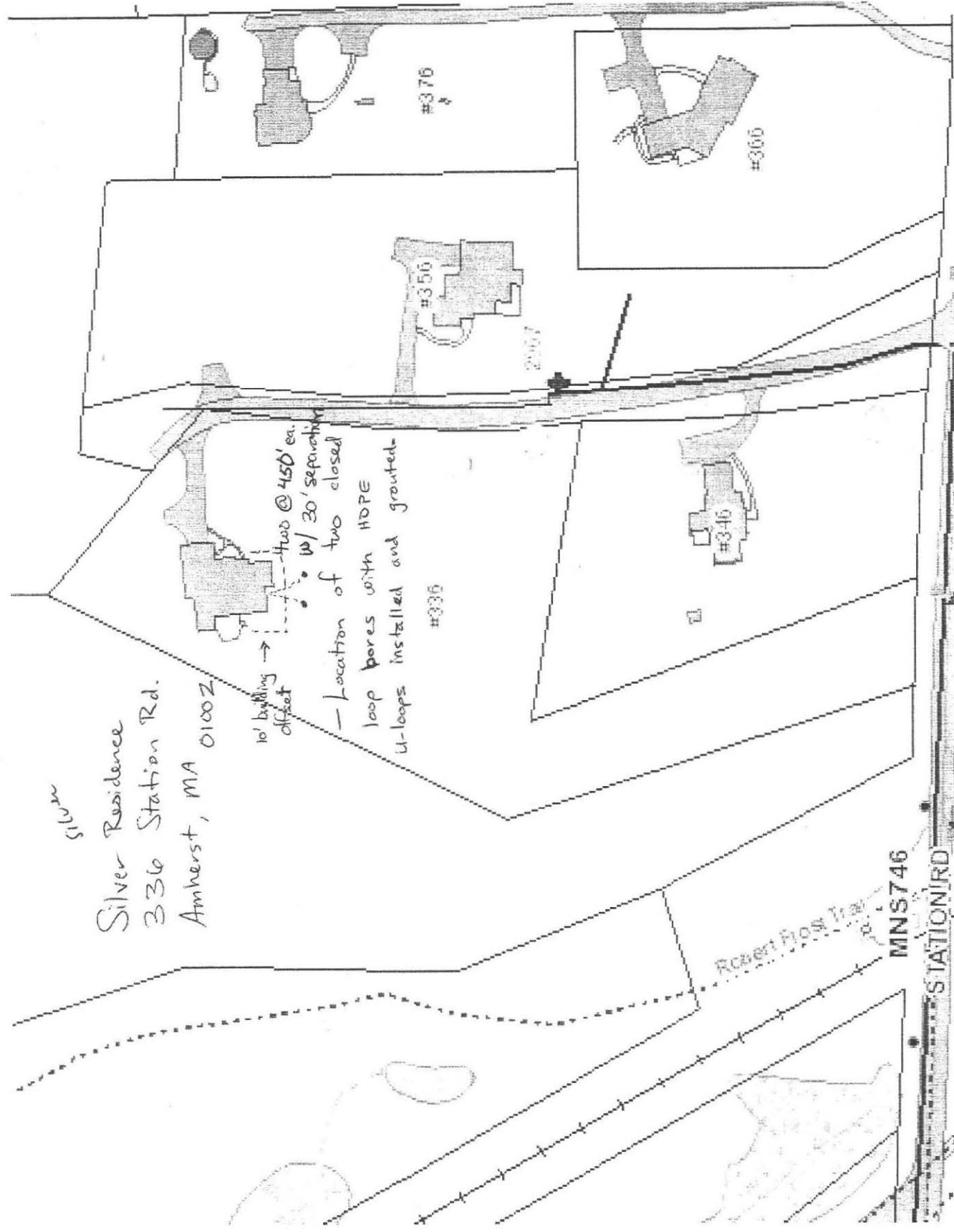
STATION RD

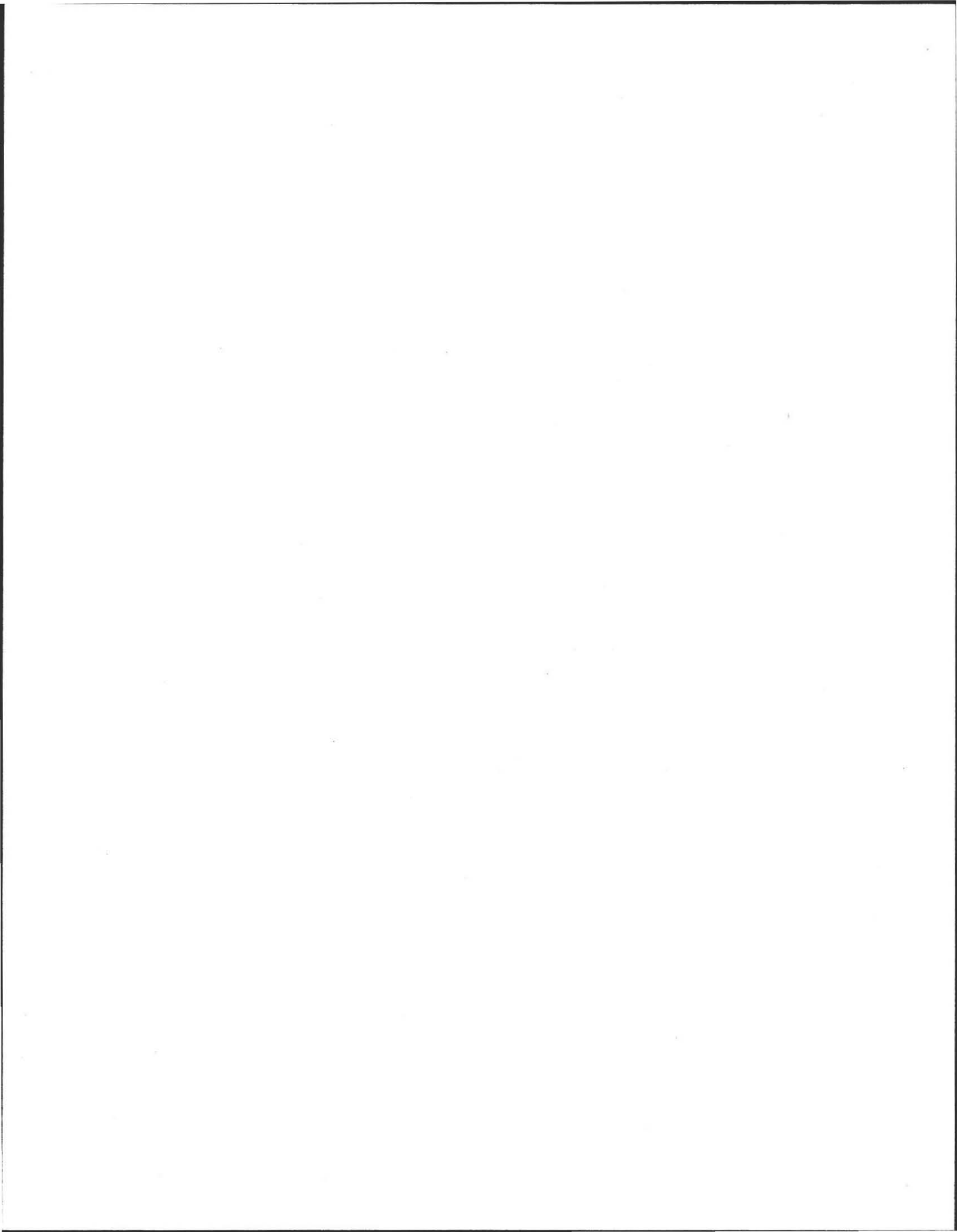


Silver

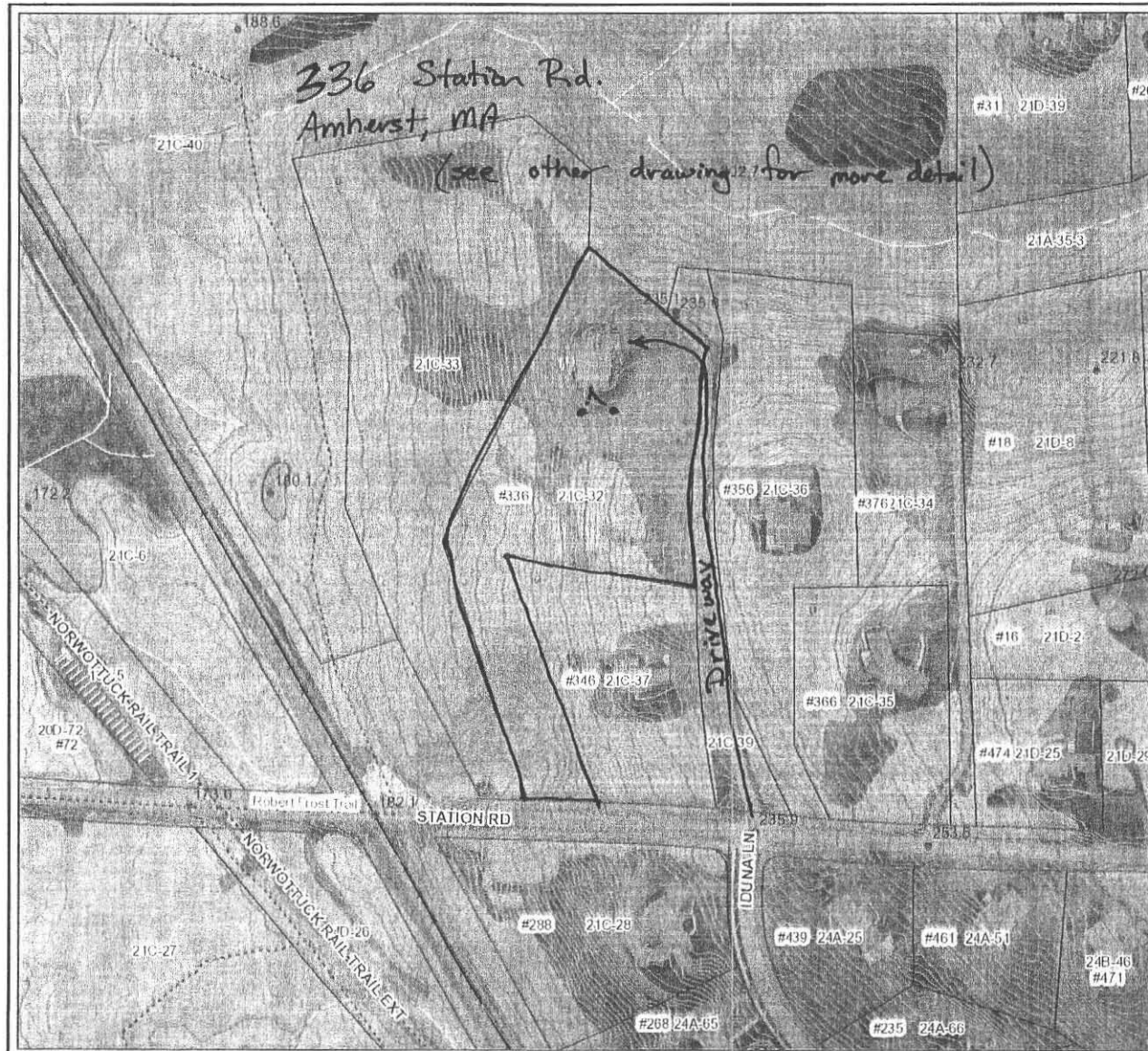
Silver Residence  
336 Station Rd.  
Amherst, MA 01002

10' building offset →  
• two @ 450' ea.  
• w/ 30' separation  
— Location of two closed loop bores with HDPE U-loops installed and grouted.









- |                      |                           |
|----------------------|---------------------------|
| <b>Property Map</b>  | <b>Structures</b>         |
| Property Lines       | Building                  |
| Property Line        | Foundation or in constr   |
| Hydrographic Propert | Outbuilding or Miscell    |
| Right of Way Line    | Deck, Porch, Stairs or    |
| Town Boundary        | Mobile home, Trailer      |
| Other Property Lines | Swimming Pool             |
| Former Property Line | Building Ruins            |
| Subdivision Lot Line | Water storage tank        |
| <b>Easements</b>     | <b>Rivers and Streams</b> |
| Surrounding Communi  | Streams                   |
| <b>Topography</b>    | Major Culverts            |
| Elevations           | Hydro Connector           |
| Elevation Contours   | Headwalls, Floodwalls     |
| Intermediate         | <b>Landcover</b>          |
| Index                | Brush and scrub vege      |
| <b>Basemap</b>       | Tree and forest vege      |
| Trails               | Cultivated field          |
| Rail Lines           | Gravel pile               |
| Fences               | Quarry                    |
| Guardrail along road | Misc Impervious Surfa     |
| Hedge                | <b>Parking</b>            |
| <b>Walls</b>         | Parking Paved             |
| Retaining wall       | Parking Unpaved           |
| Sitting Wall         | Driveways                 |
| Stone wall           | Driveway Paved            |
| Wall                 | Driveway Unpaved          |
|                      | <b>Transportation</b>     |
|                      | Paved street polygons     |
|                      | Unpaved street polyg      |
|                      | <b>Bridges</b>            |
|                      | Bridge decking and str    |
|                      | Foot Bridge               |
|                      | Rail Bridge               |

Horizontal Datum: MA Stateplane Coordinate System, Zone 4151, Datum NAD83, Feet  
 Vertical Datum: NAVD83, Feet

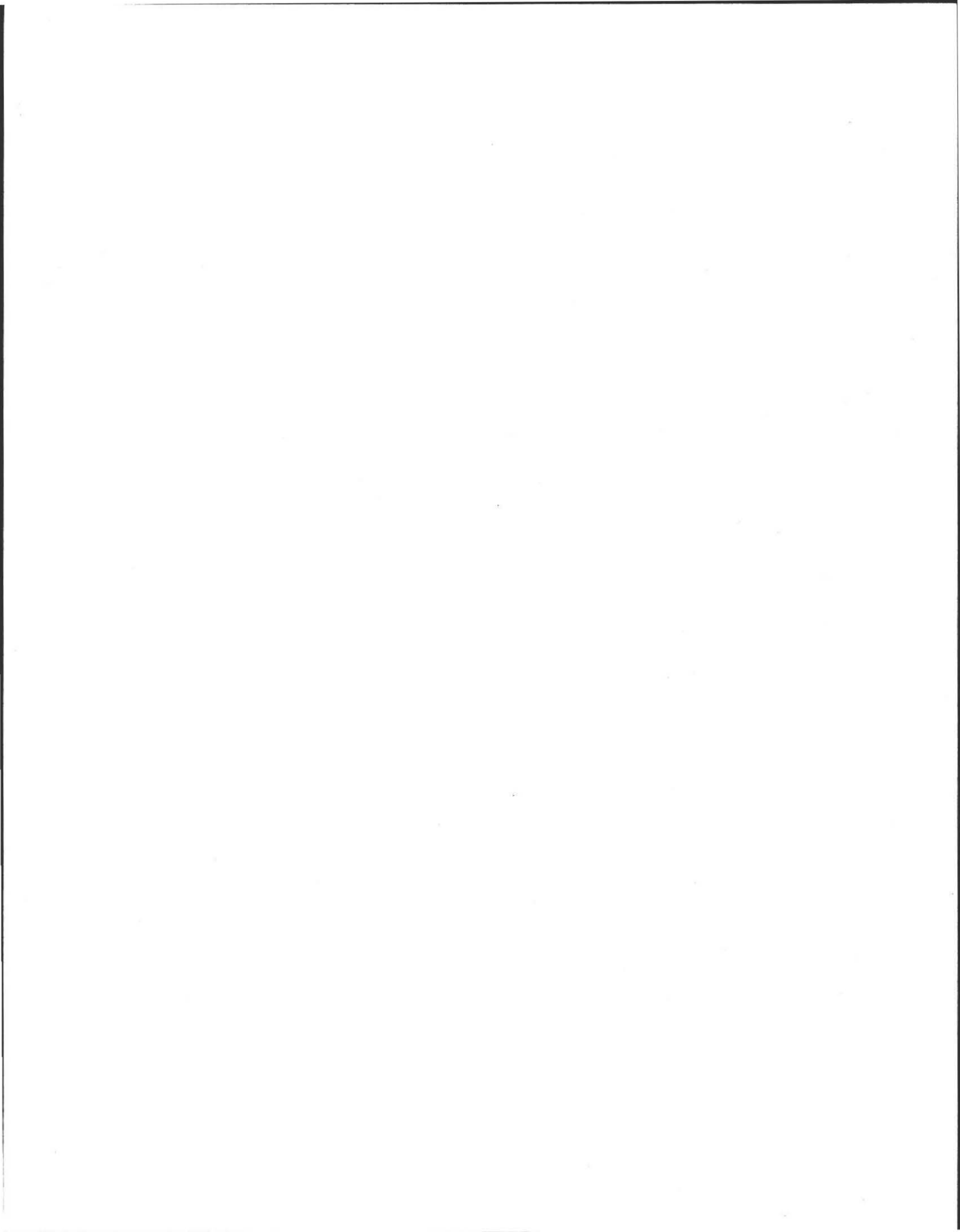
Planimetric & topographic basemap features compiled at 1"=40' scale from April, 2009 Aerial Photography. Parcels compiled to match the basemap; revisions are ongoing.

The information depicted on this map is for planning purposes only. It may not be adequate for legal boundary definition, regulatory interpretation, or property conveyance purposes. Utility structures and underground utility locations are approximate and require field verification.

THE TOWN OF AMHERST MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, CONCERNING THE ACCURACY, COMPLETENESS, RELIABILITY, OR SUITABILITY OF THESE DATA. THE TOWN OF AMHERST DOES NOT ASSUME ANY LIABILITY ASSOCIATED WITH THE USE OR MISUSE OF THIS INFORMATION.

1" = 175 ft

Amherst GIS Viewer August 16, 2011



Town of



AMHERST

*Massachusetts*

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AMHERST HEALTH DEPARTMENT, 70 BOLTWOOD WALK, AMHERST, MA 01002  
(413) 259-3077 (413) 259-2404 - FAX Environmental Health Division (413) 259-3078

September 22, 2011

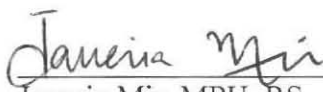
**RE: 336 Station Road, Geothermal Well**

Dear Amherst Board of Health:

I have reviewed the plan for installation of a geothermal well at 336 Station Road, currently owned by Marc and Carol Silver. In my opinion the proposed well plan design meets the requirements of the Amherst Board of Health Regulations for Private Wells as adopted on October 30, 2008, amended regulations effective March 15, 2011.

Mr. Michael Simonelli of Terraclime Geothermal has been invited to attend the 09/22/2011 BOH meeting to discuss and review the geothermal well site, and address any concerns or questions you may have.

Respectfully submitted by,



Javeria Mir, MPH, RS  
Sanitarian

