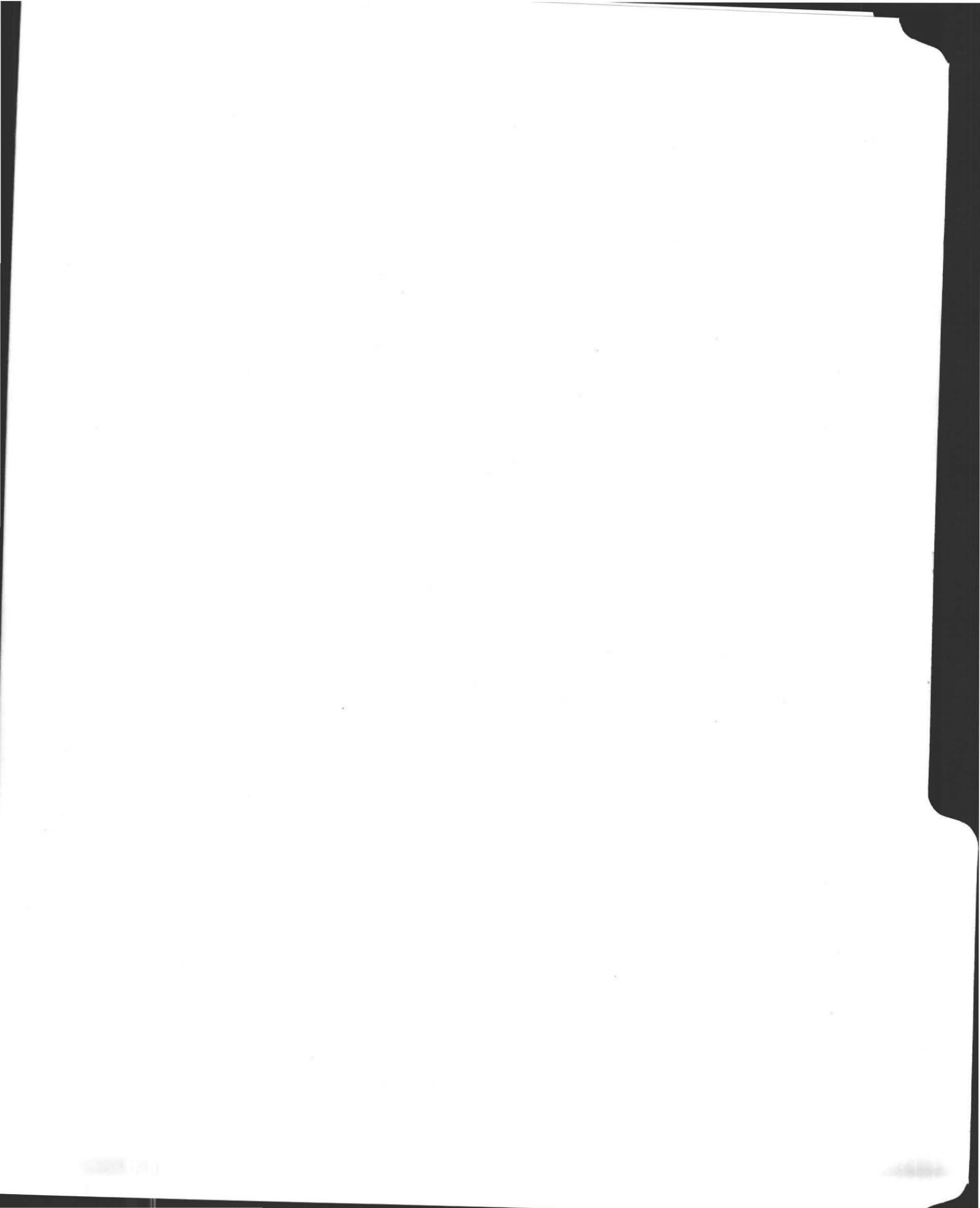


1040 Bay Rd.

1



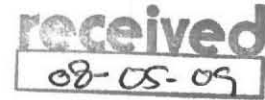


- 2IE Site Investigations
- Subsurface Investigations
- Pollution Remediation
- LSP on Staff
- Forensic Septic Investigations

- Septic Design
- Regulatory Compliance
- Recycling and Solid Waste
- Second Opinions

July 23, 2009

Amherst Conservation Commission
Town Hall
Amherst, MA 01002



**RE:(Map 30A , Lot 24) # 1040 Bay Road, Septic Repair,
Request for Determination, CSEC Proj., No. 109-3198-0715**

Dear Sir/Madam

Enclosed please find the **Septic Repair Plan** for the *Repair of the subsurface Disposal System* for the above mentioned property. The existing system is to be replaced. **The no work line (50 feet)** is delineated from the BVW using properly buried (6"), staked silt fence with *straw bale* backing (Or equivalent). All above noted locations are referenced on the Figure 1: Site Locus Map and Figure 2: Site Construction Plan, attached.

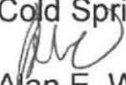
The Health Department has been contacted for proper septic permits. Wetland delineation was based on our own observation of typical hydrophytic species, topography and hydrology observed in the field and in the presence of the agent for the Board of Health. The plan intention is to utilize the best part of the property with the least disturbance of the resource area.

Mitigative measures include a silt fence that establishes a no work zone (50') as well as follow-up mulching and seeding of wetland buffer & frontyard margins. The septic meets the minimum (310 CMR 15.00) setback of >50 feet (54+ feet noted). The work area in the buffer zone would be limited to less than 1,200 square feet. **No fill** and regrading and resultant covering, seeding and mulching will occur in the buffer zone as noted.

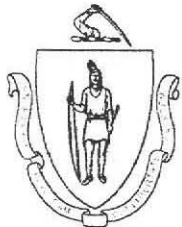
Please note that because of the "limited impact" near this area, our experience with most similar situations is that this type of repair work can be properly completed as shown with the noted mitigative measures followed as contingencies. The attached plan and form has been filed with the WRO-DEP. Please notify us at your earliest convenience of your next hearing date and time with sufficient time for abutter notices and a legal add as needed.

Sincerely,

Cold Spring Environmental Consultants, Inc.


Alan E. Weiss, M.S.
Principal Hydrogeologist
Registered Sanitarian Lic. #933

100



WPA Form 1- Request for Determination of Applicability
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

A. General Information

Important:

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



1. Applicant:

Beverly "Lee" Barstow	Leebarstow@gmail.com	
Name	E-Mail Address (if applicable)	
1040 Bay Road		
Mailing Address		
Amherst	MA	01002
City/Town	State	Zip Code
413-427-1278		
Phone Number	Fax Number (if applicable)	

2. Representative (if any):

Cold Spring Environmental, Inc.		
Firm		
Alan E. Weiss, M.S.	aweiss@charter.net	
Contact Name	E-Mail Address (if applicable)	
350 Old Enfield Road		
Mailing Address		
Belchertown	MA	01007
City/Town	State	Zip Code
413-323-5957	413-323-4916	
Phone Number	Fax Number (if applicable)	

B. Determinations

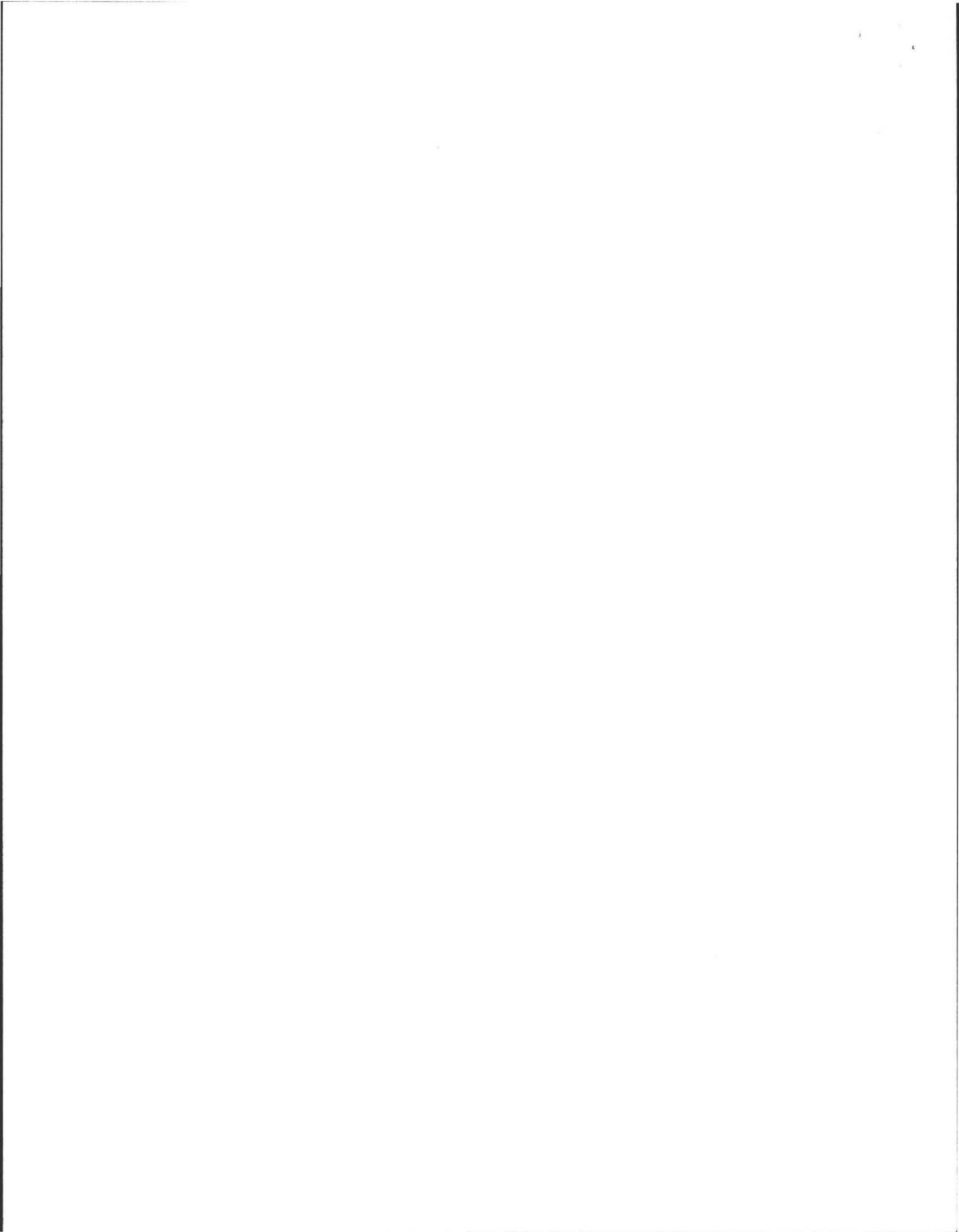
1. I request the Amherst make the following determination(s). Check any that apply:
Conservation Commission

- a. whether the **area** depicted on plan(s) and/or map(s) referenced below is an area subject to jurisdiction of the Wetlands Protection Act.
- b. whether the **boundaries** of resource area(s) depicted on plan(s) and/or map(s) referenced below are accurately delineated.
- c. whether the **work** depicted on plan(s) referenced below is subject to the Wetlands Protection Act.
- d. whether the area and/or work depicted on plan(s) referenced below is subject to the jurisdiction of any **municipal wetlands ordinance or bylaw** of:

Amherst
Name of Municipality

- e. whether the following **scope of alternatives** is adequate for work in the Riverfront Area as depicted on referenced plan(s).

N/A (Septic Repair)





WPA Form 1- Request for Determination of Applicability
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

C. Project Description

1. a. Project Location (use maps and plans to identify the location of the area subject to this request):

1040 Bay Road

Amherst

Street Address

City/Town

30A

24

Assessors Map/Plat Number

Parcel/Lot Number

b. Area Description (use additional paper, if necessary):

The area consists of work conducted for the repair of a septic system at an existing dwelling. A portion of work is less than 100', but greater than 50' (within Buffer Zone of the BVW). The total area in the Buffer is <1200 SF, There is no change in grade. The plan follows the attached plan also submitted to the Board of Health.

c. Plan and/or Map Reference(s):

Septic System Repair Plan.

7/21/08

Title

Date

2. a. Work Description (use additional paper and/or provide plan(s) of work, if necessary):

No regrading or change in elevation is required by Title 5 as noted. No other changes in the Buffer zone. No tree cutting is required for the work area. Work areas will be completed with seeding and mulching. The limit of work/silt fence is noted as 50+ foot at its closest.

b. Identify provisions of the Wetlands Protection Act or regulations which may exempt the applicant from having to file a Notice of Intent for all or part of the described work (use additional paper, if necessary).

See above.



WPA Form 1- Request for Determination of Applicability
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

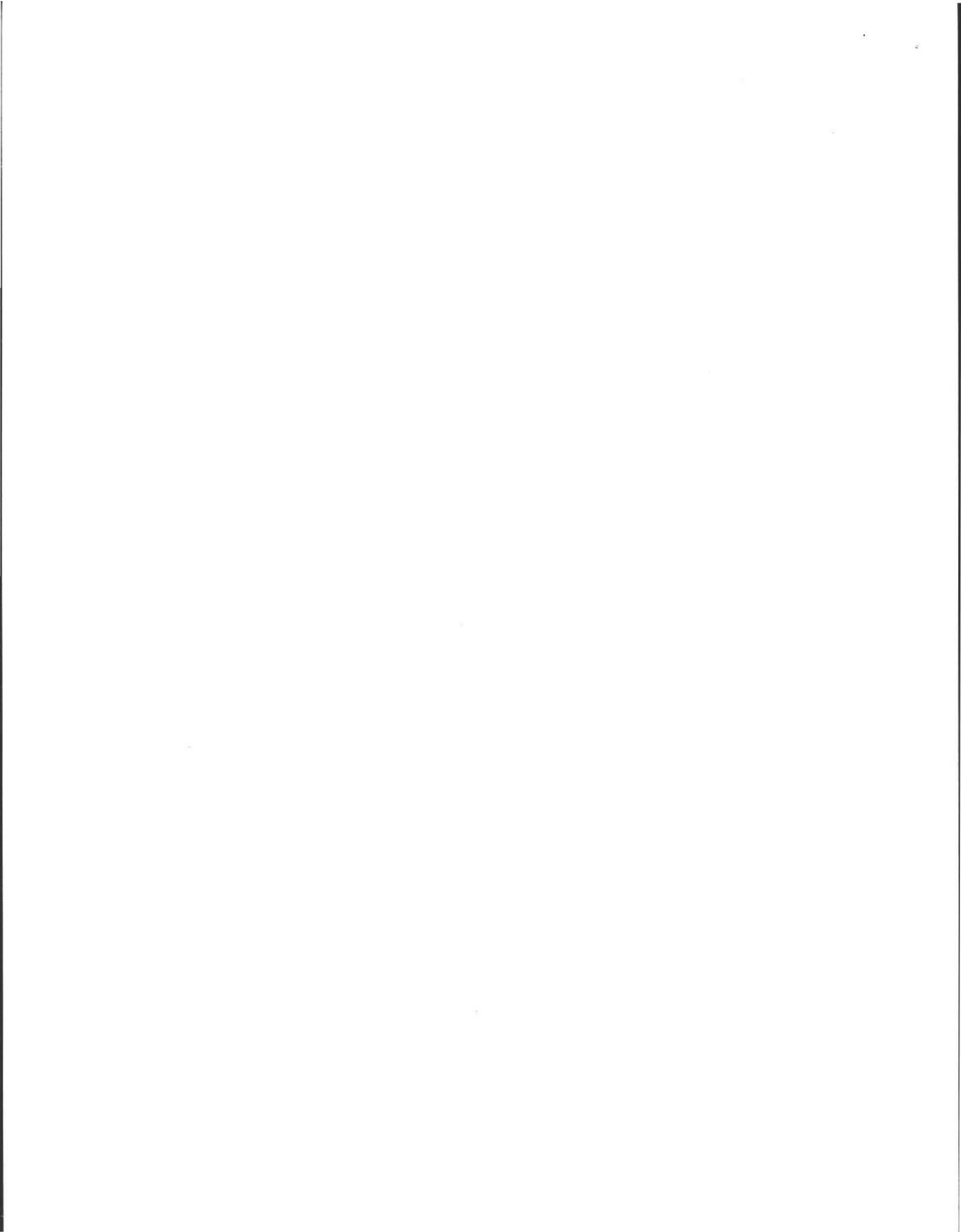
C. Project Description (cont.)

3. a. If this application is a Request for Determination of Scope of Alternatives for work in the Riverfront Area, indicate the one classification below that best describes the project.

- Single family house on a lot recorded on or before 8/1/96
- Single family house on a lot recorded after 8/1/96
- Expansion of an existing structure on a lot recorded after 8/1/96
- Project, other than a single family house or public project, where the applicant owned the lot before 8/7/96
- New agriculture or aquaculture project
- Public project where funds were appropriated prior to 8/7/96
- Project on a lot shown on an approved, definitive subdivision plan where there is a recorded deed restriction limiting total alteration of the Riverfront Area for the entire subdivision
- Residential subdivision; institutional, industrial, or commercial project
- Municipal project
- District, county, state, or federal government project
- Project required to evaluate off-site alternatives in more than one municipality in an Environmental Impact Report under MEPA or in an alternatives analysis pursuant to an application for a 404 permit from the U.S. Army Corps of Engineers or 401 Water Quality Certification from the Department of Environmental Protection.

b. Provide evidence (e.g., record of date subdivision lot was recorded) supporting the classification above (use additional paper and/or attach appropriate documents, if necessary.)

N/A





WPA Form 1- Request for Determination of Applicability
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

D. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Request for Determination of Applicability and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge.

I further certify that the property owner, if different from the applicant, and the appropriate DEP Regional Office (see Appendix A) were sent a complete copy of this Request (including all appropriate documentation) simultaneously with the submittal of this Request to the Conservation Commission.

Failure by the applicant to send copies in a timely manner may result in dismissal of the Request for Determination of Applicability.

Name and address of the property owner:

Beverly "Lee" Barstow

Name

1040 Bay Road

Mailing Address

Amherst

City/Town

MA

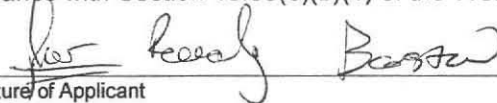
State

01002

Zip Code

Signatures:

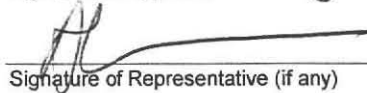
I also understand that notification of this Request will be placed in a local newspaper at my expense in accordance with Section 10.05(3)(b)(1) of the Wetlands Protection Act regulations.



Signature of Applicant

7.30.2009

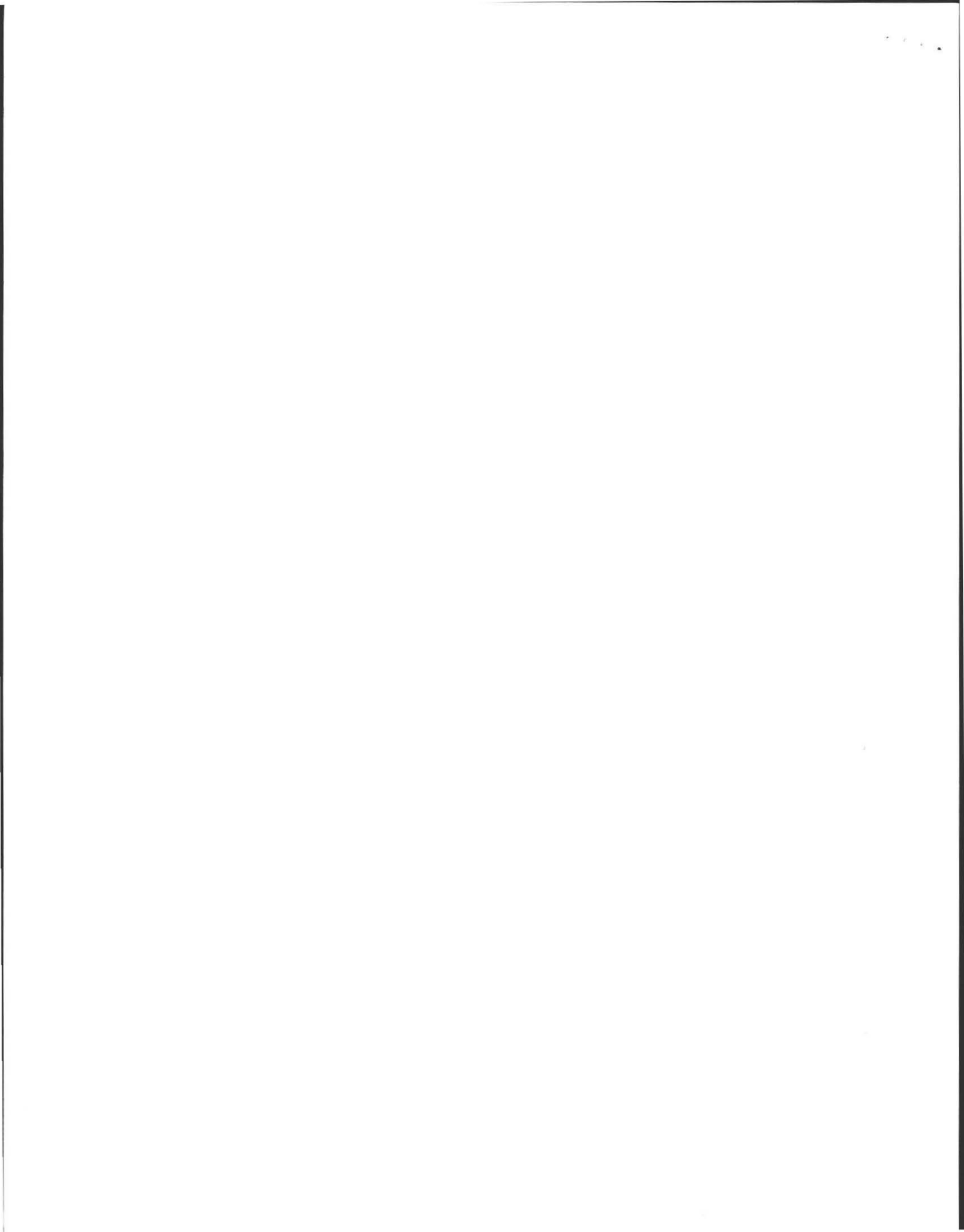
Date

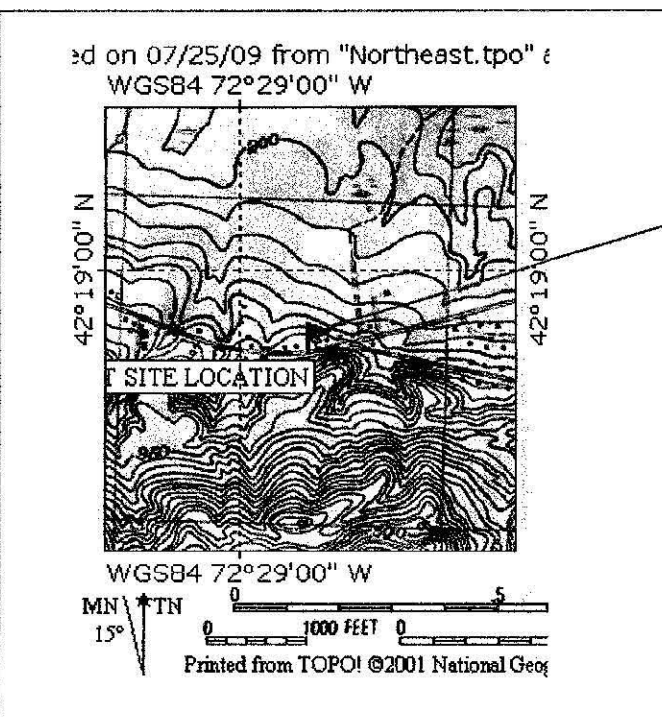
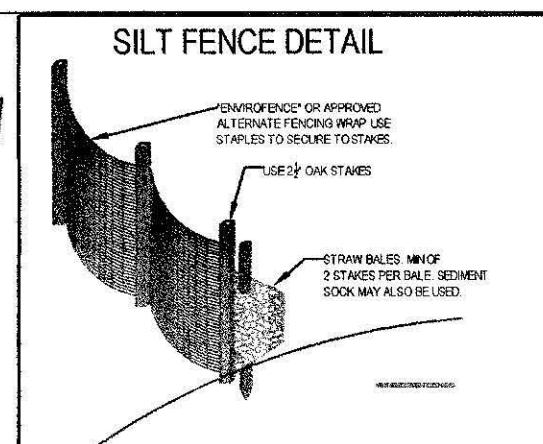
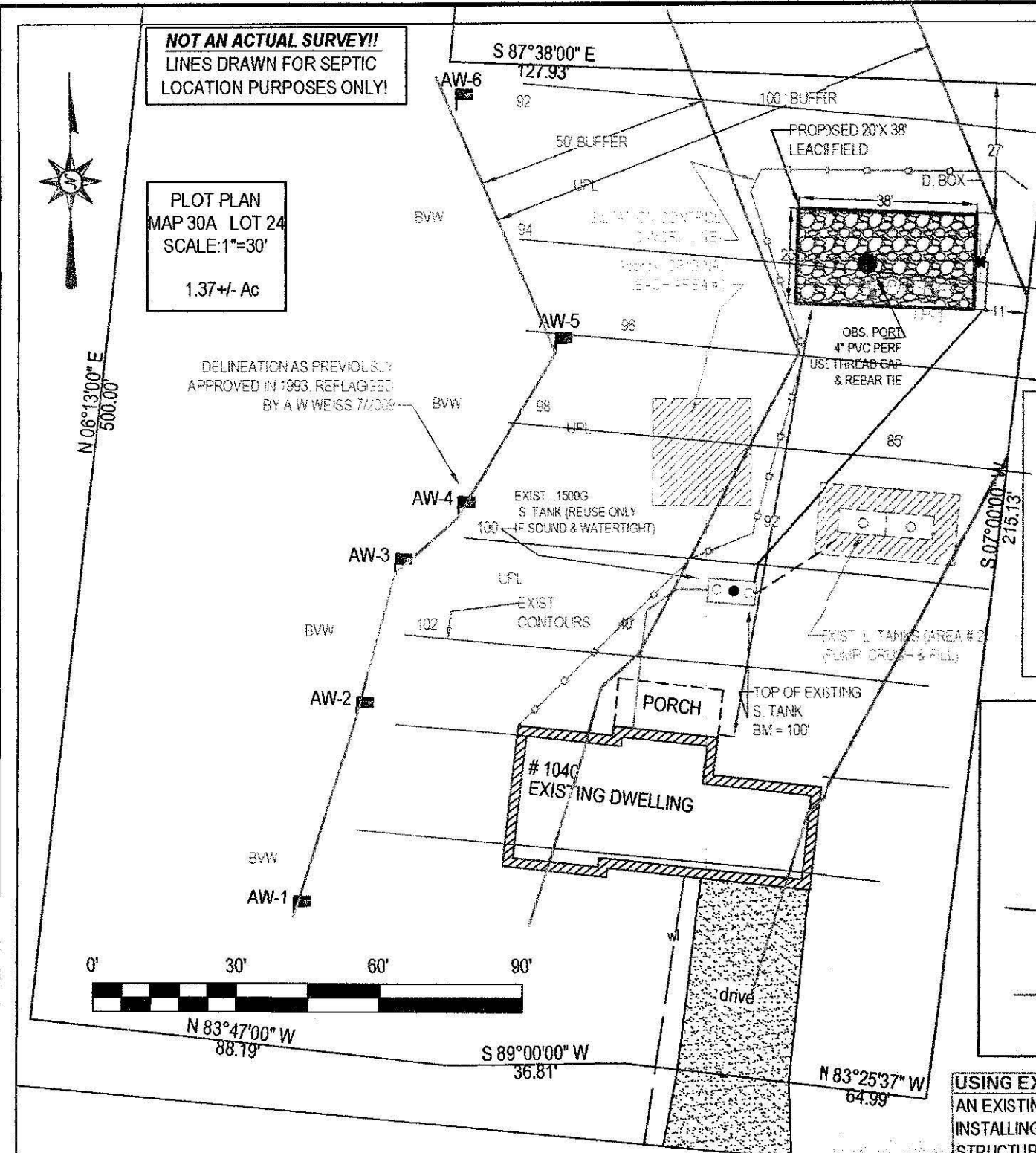


Signature of Representative (if any)

7.30.2009

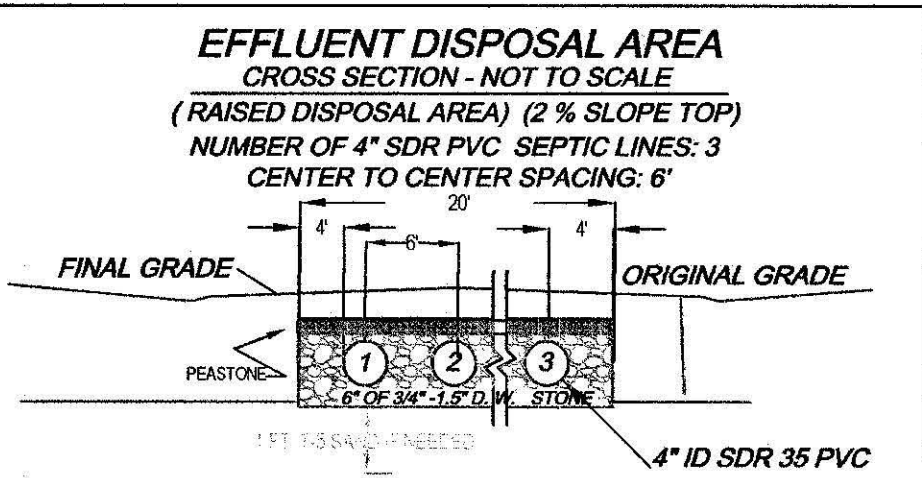
Date





GRAVITY SLOPE SEPTIC SYSTEM OPERATION AND MAINTENANCE NOTES FOR HOMEOWNER.

- 1.) HAVE TANK PUMPED EVERY 2 YEARS.
- 2.) MAINTAIN AREA OVER SEPTIC SYSTEM AS GRASSY OR SIMILAR GROUND COVER.
- 3.) DO NOT PLANT ANY TREES OR DEEP ROOTING SHRUBS WITHIN 10 FEET OF SYSTEM.
- 4.) USE ONLY LIQUID DETERGENTS & LOW FLOW WASHERS.
- 5.) WIPE ALL OIL AND GREASE FROM COOKWARE AND DISPOSE IN TRASH NOT SEPTIC.
- 6.) All Toilets and Faucets must be confirmed to not be leaking, because one leaking fixture can fail a septic system in ONE DAY.



WETLAND DELINEATION AND SEDIMENT CONTROL NOTES:

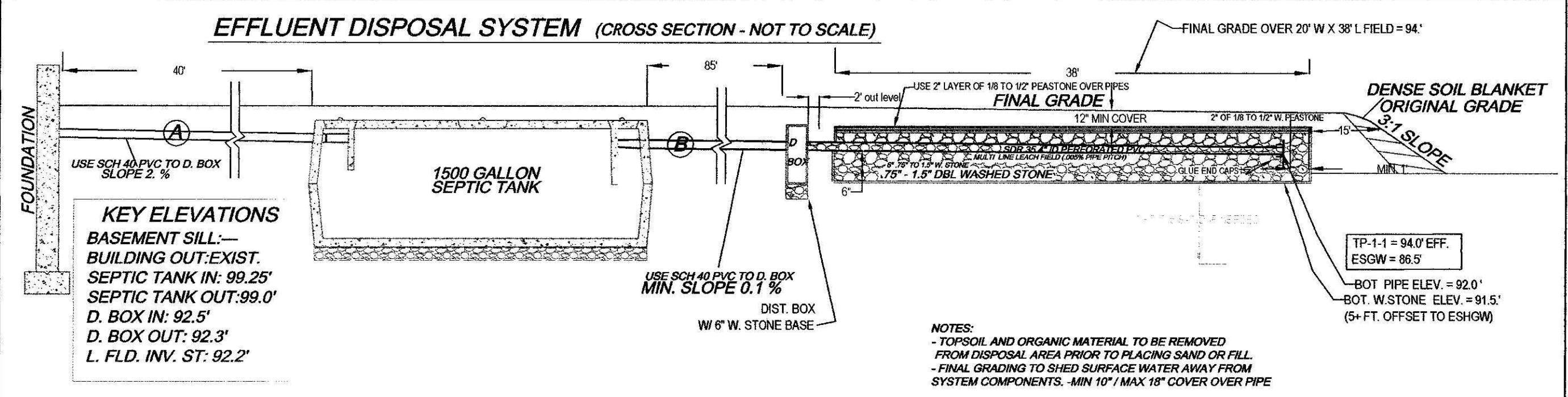
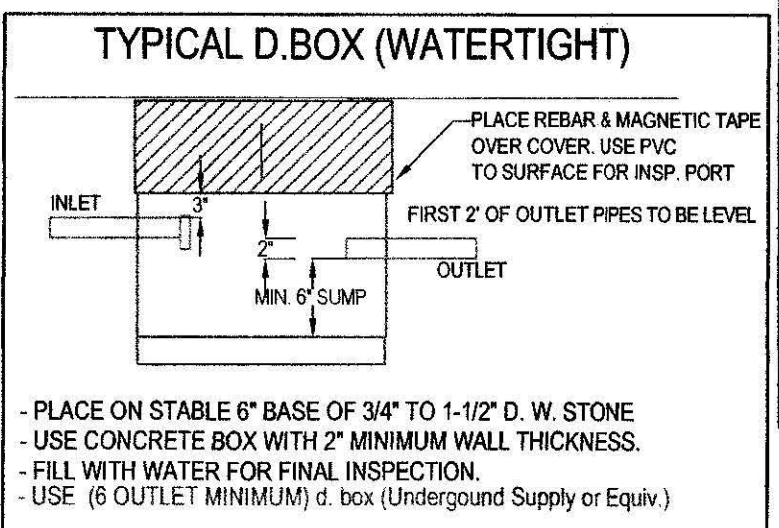
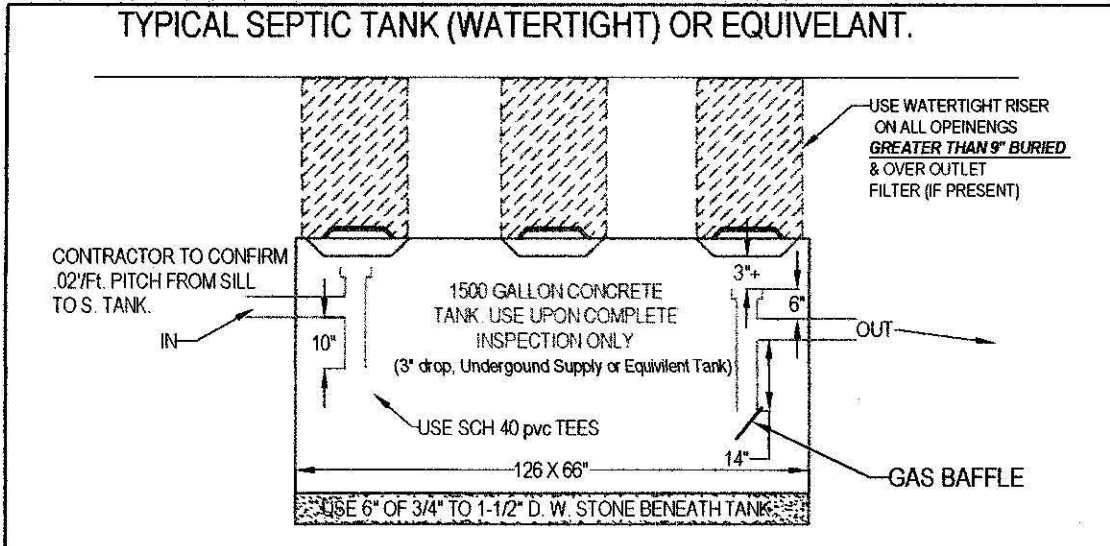
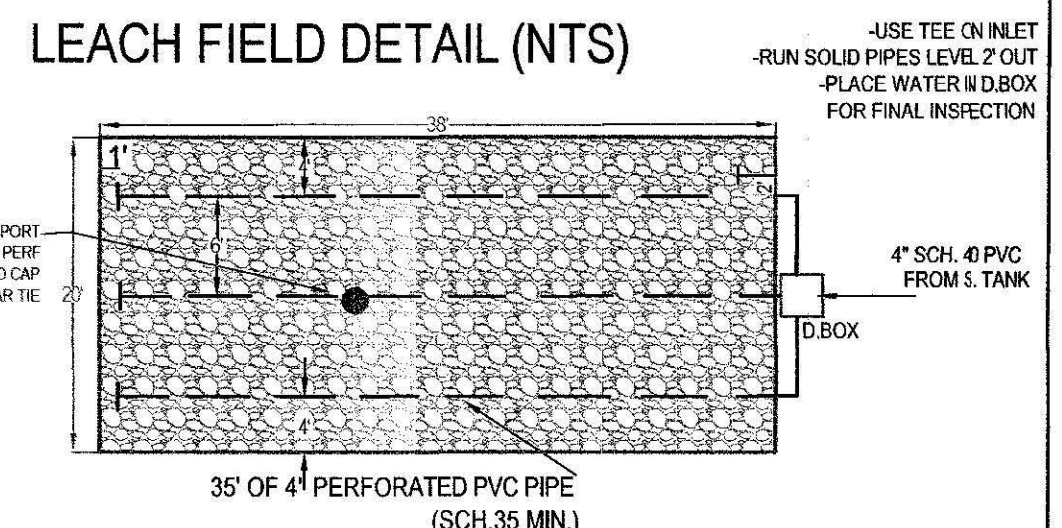
NOTE: All fabric silt fence to be backed with Double Staked HAY/Straw Bales (free of seeds IF POSS.) in order to prevent fugitive re-seeding in Resource Area.

1. NO ALTERATION OF SEDIMENT, STOCKPILING, FILLING OR CUTTING VEGETATION ON THE DOWNGRADIENT SIDE OF THE SEDIMENTATION BARRIER (SILT FENCE).
2. SEDIMENTATION BARRIER TO BE ERECTED IN A STABLE AND LASTING MANNER AS SHOWN ON THE PLAN.
3. NOTIFY CONSERVATION ADMINISTRATOR AT LEAST 72 HOURS (IF REQ'D) PRIOR TO THE START OF ON-SITE WORK, AFTER COMPLETE ON SILT FENCE INSTALLATION.
4. AS SOON AS IS POSSIBLE WORK AREA SHALL BE SEEDED, REVEGETATED WITH GRASS OR SIMILAR GROUND COVER AND MULCHED UPON COMPLETION OF SITE WORK.
5. SILT FENCE TO REMAIN STANDING UNTIL REGROWTH IS SUFFICIENT TO CONTROL FUGITIVE SEDIMENT RUNOFF.
6. REGRADE WORK AREA AS NOTED TO PREVENT CHANGE IN SLOPE OR RUNOFF PATTERNS.

USING EXISTING SEPTIC TANKS:
 AN EXISTING 1,000 or 1,500 GALLON SEPTIC TANK CAN BE USED IF UPON INSPECTION BY THE INSTALLING CONTRACTOR, IF THE TANK IS INSPECTED AND PUMPED AND FOUND TO BE STRUCTURALLY SOUND AT THE TIME OF THE SUBGRADE INSPECTION. IF BAFFLES ARE NOT BUILT IN, THAN SCH 40 PVC TEES MUST BE ADDED. IF TANK IS NOT SOUND THAN, NOTIFY ENGINEER IMMEDIATELY IN ORDER TO ACCOMMODATE A NEW 1,500 GALLON (MIN.) SEPTIC TANK.

DESIGN NOTES AND CALCULATIONS:

- 1.) 5 (BEDROOM HOME) X 110 GPD/BR = 550+ GPD. REQUIRED.
- Use ONE FIELD: 20' WIDE X 38' LONG WITH 6" OF 3/4" TO 1 1/2" DBL WASHED STONE BELOW INVERT
 - BOTTOM AREA: 20' W X 38' L = 760 SF.
 - SIDE AREA: 0 SF.
 - TOTAL AREA: 764 SF X .74 GAL/SF = 562 GPD
3. GARBAGE DISPOSAL NOT ALLOWED, ...
4. NO OTHER PRIVATE WELLS WITHIN 150 FEET OF SAS.
5. WETLANDS WITHIN 100 FEET OF SAS FILE Request for Determination of Applicability with Conservation Comm.
6. USE EXISTING 1,500 GAL S. TANK AS NOTED (IF SOUND) & MAINTAIN 0.02 PITCH FROM SILL TO S. TANK
 - INSTALL & INSPECT SCH. 40 TEES / BAFFLES (10" INLET, 14" OUTLET).
- NOTE:
 - ALL COMPONENTS OF NEW SYSTEM MUST BE MARKED WITH MAGNETIC TAPE. BE SURE TO MAINTAIN 3" CLEARANCE FROM TOP OF TEES TO BOTTOM OF TANK COVERS & BOXES.
7. USE LARGE STYLE (6 OUTLET) D.BOX ONLY.
- 7A. ALL D. BOX OUTLET PIPES LEVEL FOR FIRST 2'. BOXES MUST HAVE 2"+ CONC. WALLS
 - NOTE:
 - D. BOXES WITH MORE THAN 9" OF COVER SOIL MUST HAVE RISERS TO 6" OF SURFACE.
8. USE APPROVED (.75"-1 1/2") DBL. WASHED STONE UNDER TANK & D. BOX FOR 6".
 - CONFIRM STONE PROPERLY DOUBLE WASHED PRIOR TO PLACEMENT.
9. USE PROPER SCH. 40 PVC TEES AS SHOWN.
10. PRE & POST CONTOURS NOTED AS NECESSARY, RESERVE AS NOTED (not required for repairs).
11. SLOPE CALCS (SEE: CONTOURS). SUBGRADE INSP. REQ'D.
13. USE FIELD DUE TO TOPOGRAPHY AND SPACE OF LOT WITH RESPECT TO LOCATION AND ELEVATION OF RESIDENCE (310 CMR 15.240)
14. USE 2% MIN. SLOPE OVER SAS
 - CLEAR TOP AND SUB TO 24" MIN. AS NEEDED (INSPECTION REQUIRED).
 - CLEAR PAST BASE OF B (MIN. 24") & SCARIFY UNDER BED PRIOR TO TITLE V SAND/STONE PLACEMENT.
 - EXCAVATE EXISTING LOAM, SUB AND ANY EXISTING DEBRIS, DIRTY FILL OR PRIOR SYSTEM IF PRESENT.
15. SOIL EVALUATION BY A. WEISS, RS. (E. BOKINA, BOH AGENT, 07.15.2009).
 - DEPTH OF PERC. 46"
 - PERC RATE = <2 MIN / IN,
 - CLASS 1 SOIL RATING
16. NO TREES WITHIN 110 FT. OF NEW LEACH FIELD.
17. ENGINEER & TOWN TO INSPECT SUBGRADE, TOWN AND ENGINEER INSPECT AT FINAL.
18. BM=100.00 @ (WALK OUT DOOR SILL, as noted), CONFIRM PROPER PIPE SLOPES
 - USE/INSPECT SCH. 40 PIPE FOR PIPE FROM HOUSE TO NEW OR EXISTING TANK
19. GRADE MULCH AND SEED OVER SAS AS NOTED.
20. INSTALLATION IN LOW GROUNDWATER SEASON RECOMMENDED.
21. USE OBSERVATION PORT NEAR CENTER OF STONE BED HAVE 4" PERFORATED, PVC INSPECTION PORTALS TO BOTTOM OF STONE BED, WITH RISER TO 3" OF SURFACE & THREADED CAP & MARK WITH RE-BAR.



TEST PIT LOG:				SOIL EVALUATOR:	DATE OF EVALUATION:		
TP-1 EFF. ELEV. 94.0' EFF.				A. WEISS, RS	07.15.2009		
DEPTH:	HORIZ.	TEXTURE (MUNSELL)	MATERIAL	DEPTH:	HORIZ.	TEXTURE (MUNSELL)	MATERIAL
0-8"	A	FSL	10 YR 3.3	0-8"	A	FSL	10 YR 3.3
7-22"	Bw	LS	10 YR 4.6	7-22"	Bw	LS	2.5Y 5.6
22-120"	C1	S	10 YR 5.6	22-68"	C1	S	2.5Y 6.2
			5% COBBLES				MED. SAND
OXIDES: 90"				OBSERVED 7.5 YR 5.8		OXIDES:	
EHW1: 90" = 86.50'						EHW1:	
STANDING H2O: NOT OBSERVED						STANDING H2O: NOT OBSERVED	
WEEPING: NOT OBSERVED						WEEPING: NOT OBSERVED	
BEDROCK: 120'+						BEDROCK: 120' -126'+	

SEPTIC SYSTEM REPAIR PLAN FOR LEE BARSTOW
 1040 BAY ROAD
 AMHERST, MA

Cold Spring Environmental Consultants Inc.
 350 Old Enfield Road
 Belchertown, MA 01007

PHONE: (413) 323-5957
 FAX: (413) 323-4916
 e-Mail: A.Weiss@charter.net

ATTENTION INSTALLER!!
 CALL DIG SAFE BEFORE YOU DIG!! MASSACHUSETTS STATE LAW CHAPTER 82 SECTIONS 40 - 40E REQUIRE THAT PREMARKING OF GAS, ELECTRIC, WATER, TELEPHONE AND CABLE T.V. UTILITY LINES BE MADE A MINIMUM OF 72 HOURS PRIOR TO GROUND BREAK FOR ANY EXCAVATION.

NOTE: INSTALLER MUST CONTACT ENGINEER/BD OF HEALTH 48 HOURS PRIOR TO SUBGRADE INSPECTION. INSTALLER MUST HAVE ALL BREAK OUT FILL ON SITE AND IN PLACE PRIOR TO SIGN OFF BY ENGINEER AT TIME OF FINAL INSPECTION OR APPROVAL WILL NOT BE GIVEN TO BACKFILL.

DATE: 07.23.2009
 SCALE: 1"=30'
 DRAWN BY: ALAN WEISS
 REVISIONS:
 DRAWING NUMBER: 109-3198-0715

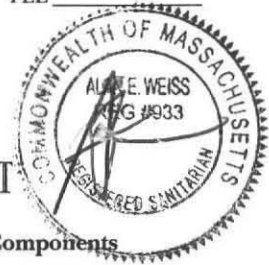
No. _____

FEE _____

COMMONWEALTH OF MASSACHUSETTS

Board of Health, Amherst, MA, MA.

APPLICATION FOR DISPOSAL SYSTEM CONSTRUCTION PERMIT



Application for a Permit to Construct() Repair(✓) Upgrade() Abandon() - Complete System Individual Components

Location <u>1040 Bay Rd.</u>	Owner's Name <u>Lee Barstow</u>
Map/Parcel# <u>30A - 24</u>	Address <u>1040 Bay Rd.</u>
Lot# <u># 24</u>	Telephone# <u>427-1278</u>
Installer's Name <u>Rob Adclair</u>	Designer's Name <u>Alvin Weiss</u>
Address <u>Amherst, MA.</u>	Address <u>132 Echo Avenue, MA.</u>
Telephone# <u>531-7921</u>	Telephone# <u>323-5957</u>

Type of Building Residence Lot Size _____ sq. ft.
 Dwelling - No. of Bedrooms 5 Bedroom. (per Assessor) Garbage grinder (No)
 Other - Type of Building _____ No. of persons _____ Showers (), Cafeteria ()
 Other Fixtures _____
 Design Flow (min. required) 110 gpd Calculated design flow 550 Design flow provided 562 gpd
 Plan: Date 7/23/09 Number of sheets 1 Revision Date _____
 Title Sepic System Repair Plan
 Description of Soil(s) Class 1: F-Mrd. Sand.
 Soil Evaluator Form No. _____ Name of Soil Evaluator A. Weiss Date of Evaluation 7/15/09
E. Bokor

DESCRIPTION OF REPAIRS OR ALTERATIONS New L. Field.

The undersigned agrees to install the above described Individual Sewage Disposal System in accordance with the provisions of TITLE 5 and further agrees to not to place the system in operation until a Certificate of Compliance has been issued by the Board of Health.

✓ Signed _____ Date _____

Inspections _____

No. _____

FEE _____

COMMONWEALTH OF MASSACHUSETTS

Board of Health, _____, MA.

CERTIFICATE OF COMPLIANCE

Description of Work: Individual Component(s) Complete System

The undersigned hereby certify that the Sewage Disposal System; Constructed (), Repaired (), Upgraded (), Abandoned ()
 by: _____
 at _____
 has been installed in accordance with the provisions of 310 CMR 15.00 (Title 5) and the approved design plans/as-built plans relating to
 application No. _____, dated _____. Approved Design Flow _____(gpd)
 Installer _____
 Designer: _____ Inspector: _____ Date: _____
The issuance of this permit shall not be construed as a guarantee that the system will function as designed.

No. _____

FEE _____

COMMONWEALTH OF MASSACHUSETTS

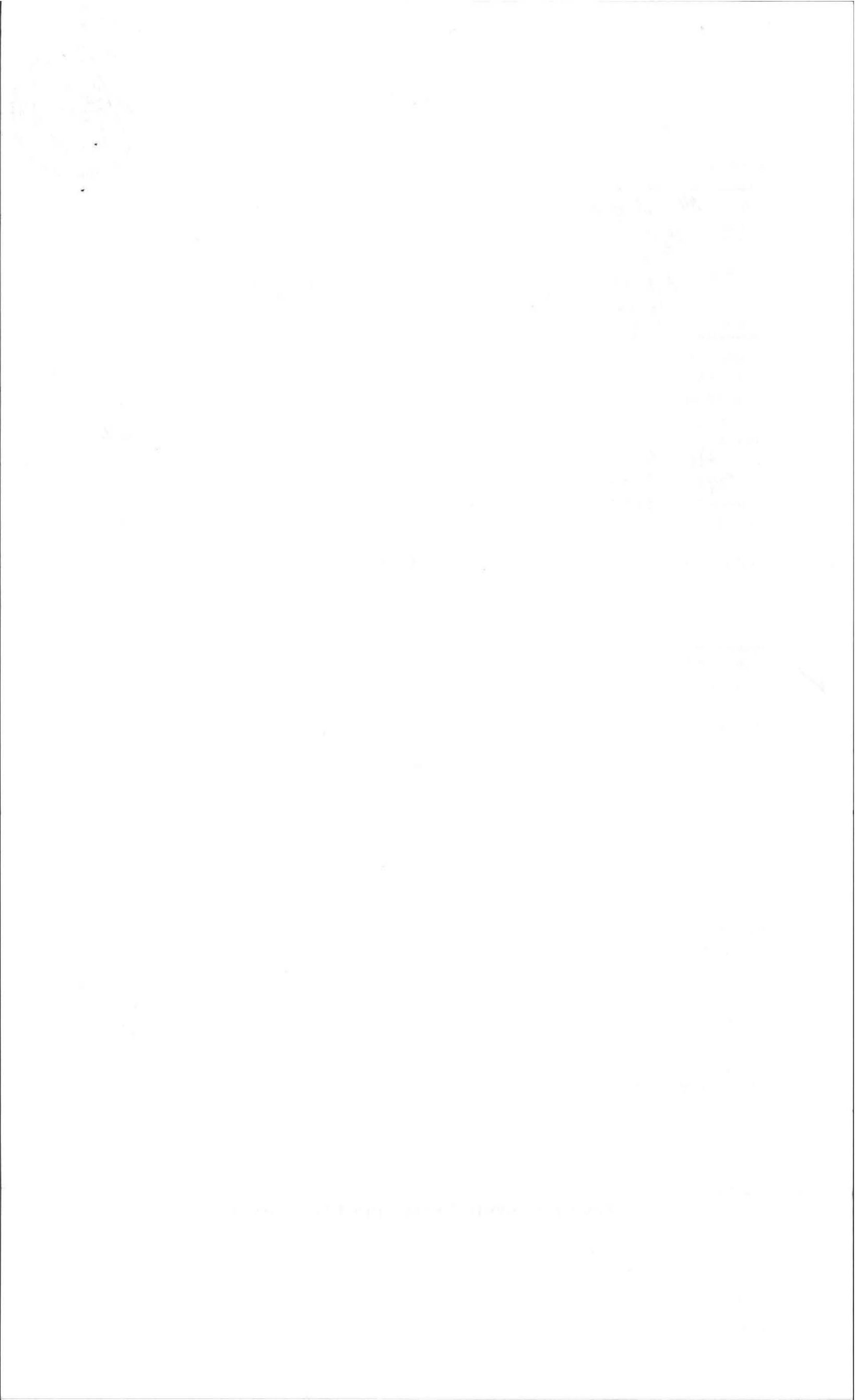
Board of Health, _____, MA.

DISPOSAL SYSTEM CONSTRUCTION PERMIT

Permission is hereby granted to; Construct() Repair() Upgrade() Abandon() an individual sewage disposal system
 at _____ as described in the application for
 Disposal System Construction Permit No. _____, dated _____.

Provided: Construction shall be completed within three years of the date of this permit. All local conditions must be met.

Form 1255 Rev. 5/96 A.M. Sulkin Co. Charlestown, MA Date _____ Board of Health _____





**COLD SPRING ENVIRONMENTAL
CONSULTANTS INC.**

- 21E Site Investigations
- Subsurface Investigations
- Pollution Remediation
- LSP on Staff
- Forensic Septic Investigations

- Percolation Tests
- Septic Designs
- Regulatory Compliance
- Recycling and Solid Waste
- Second Opinions

July 23, 2009

Amherst Conservation Commission
Town Hall
Amherst, MA 01002

**RE:(Map 30A , Lot 24) # 1040 Bay Road, Septic Repair,
Request for Determination, CSEC Proj., No. 109-3198-0715**

Dear Sir/Madam

Enclosed please find the **Septic Repair Plan** for the *Repair of the subsurface Disposal System* for the above mentioned property. The existing system is to be replaced. **The no work line (50 feet)** is delineated from the BVW using properly buried (6"), staked silt fence with *straw bale* backing (Or equivalent). All above noted locations are referenced on the Figure 1: Site Locus Map and Figure 2: Site Construction Plan, attached.

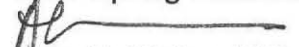
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Mitigative measures include a silt fence that establishes a no work zone (50') as well as follow-up mulching and seeding of wetland buffer & frontyard margins. The septic meets the minimum (310 CMR 15.00) setback of >50 feet (54+ feet noted). The work area in the buffer zone would be limited to less than 1,200 square feet. **No fill** and regrading and resultant covering, seeding and mulching will occur in the buffer zone as noted.

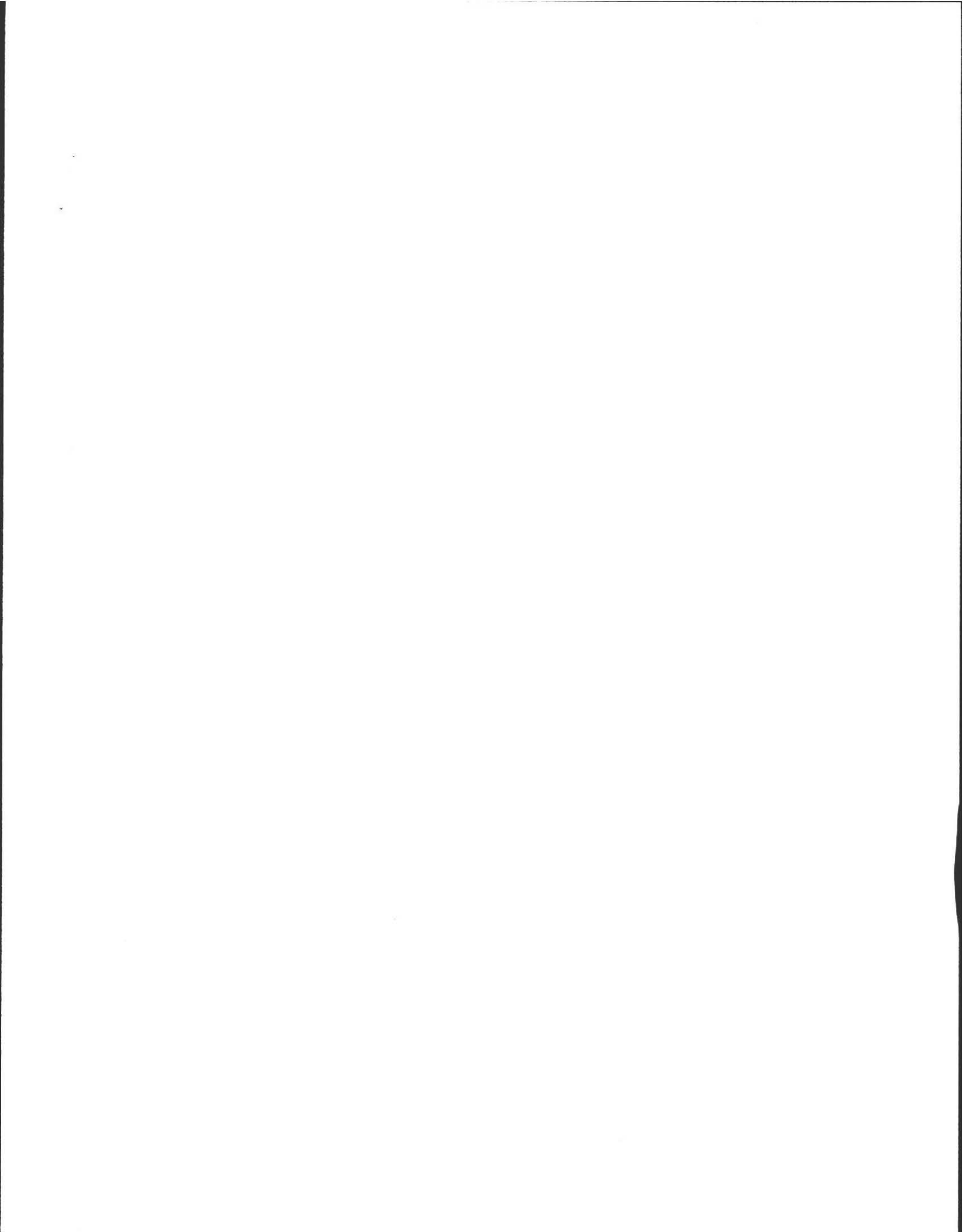
Please note that because of the "limited impact" near this area, our experience with most similar situations is that this type of repair work can be properly completed as shown with the noted mitigative measures followed as contingencies. The attached plan and form has been filed with the WRO-DEP. Please notify us at your earliest convenience of your next hearing date and time with sufficient time for abutter notices and a legal add as needed.

Sincerely,

Cold Spring Environmental Consultants, Inc.


Alan E. Weiss, M.S.

Principal Hydrogeologist
Registered Sanitarian Lic. #933





ALAN E. WEISS, M.S., L.S.P.

Licensed Site Professional
Registered Sanitarian
Hydrogeologist
President

- Subsurface Investigations
- 2IE Site Investigations
- Pollution Remediation
- Percolation Tests and Septic Designs

350 Old Enfield Rd.
Belchertown, MA 01007
(413) 323-5957 & 323-4916 (FAX)

Date: 7-15-09

Commonwealth of Massachusetts

Amherst, Massachusetts

Soil Suitability Assessment for On-site Sewage Disposal

Performed By: A. Weiss
Witnessed By: E. Bokina

Date: 7/15/09

Location Address or Lot # 1040 Bay Rd.	Owner's Name, Address, and Telephone # Lee Barstow 1040 BAY RD.
New Construction <input type="checkbox"/> Repair <input checked="" type="checkbox"/>	

Office Review

Published Soil Survey Available: No Yes

Year Published _____ Publication Scale _____ Soil Map Unit _____

Drainage Class _____ Soil Limitations _____

Surficial Geologic Report Available: No Yes

Year Published _____ Publication Scale _____

Geologic Material (Map Unit) _____

Landform _____

Flood Insurance Rate Map:

Above 500 year flood boundary No Yes

Within 500 year flood boundary No Yes

Within 100 year flood boundary No Yes

Wetland Area:

National Wetland Inventory Map (map unit)

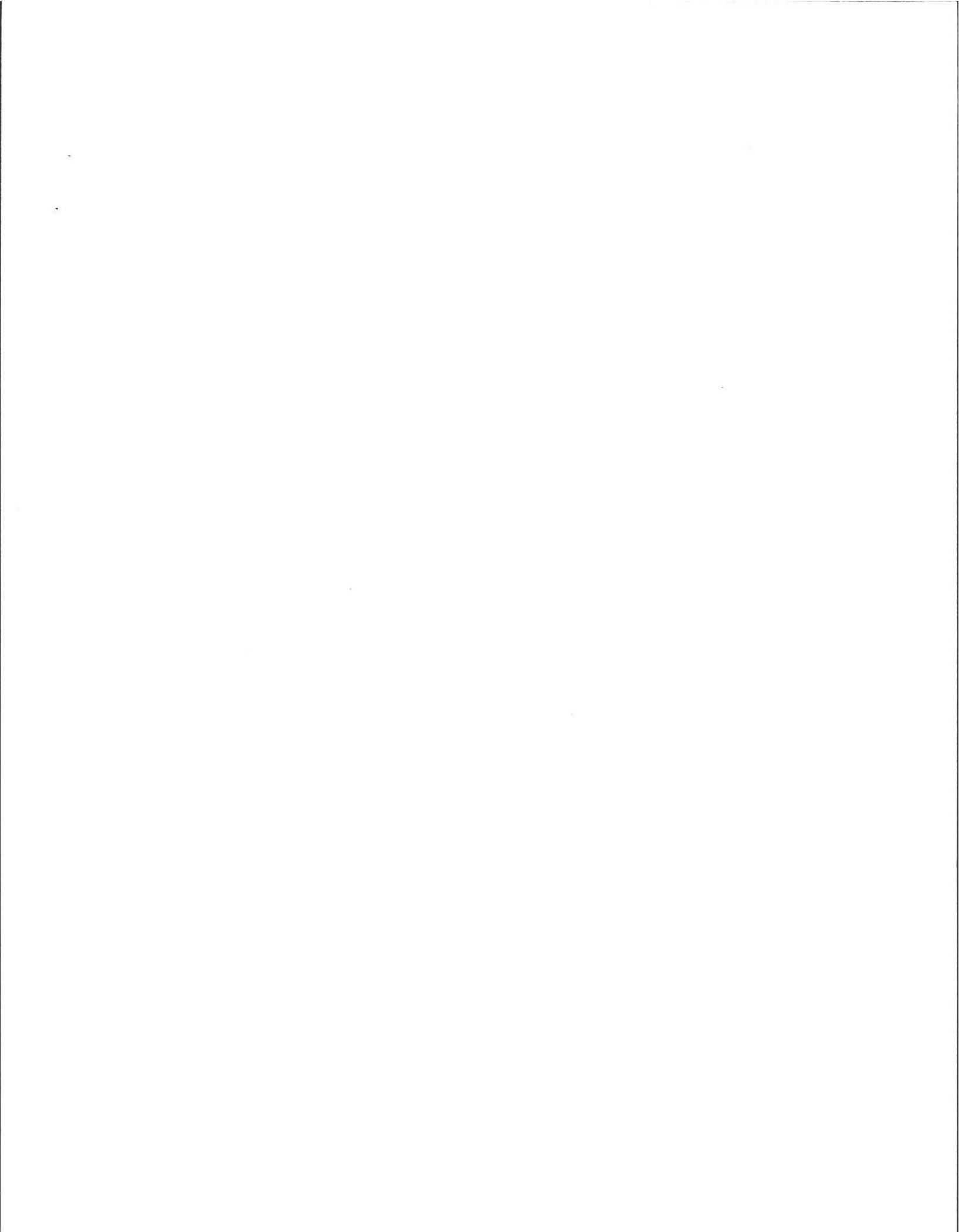
Wetlands Conservancy Program Map (map unit)

Current Water Resource Conditions (USGS): Month

Range : Above Normal Normal Below Normal

Other References Reviewed: _____





Location Address or Lot No. 1040 Bay Rd.

COMMONWEALTH OF MASSACHUSETTS

Amherst, Massachusetts

Percolation Test*		
Date: <u>7/15/09</u>		Time: _____
Observation Hole #	<u>#6 P1</u>	See 1993 Per on file
Depth of Perc	<u>46"</u>	
Start Pre-soak	<u>9:15</u>	
End Pre-soak	<u>9:30</u>	
Time at 12"	<u>9:30</u>	
Time at 9"	<u>9:31</u>	
Time at 6"	<u>9:32</u>	
Time (9"-6")	<u>22</u>	
Rate Min./Inch	<u>22</u>	

* Minimum of 1 percolation test must be performed in both the primary area AND reserve area.

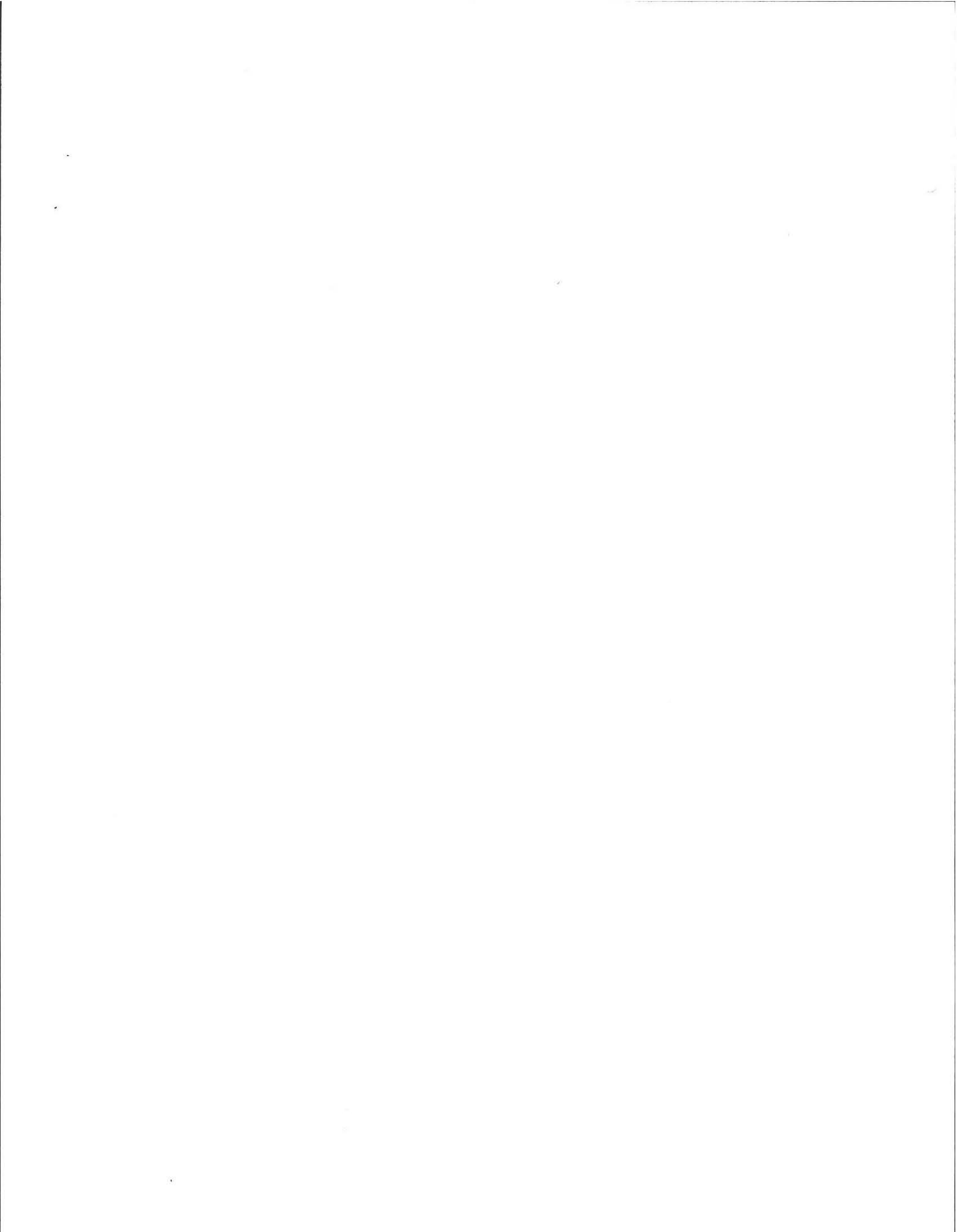
Site Passed Site Failed

Performed By: A. Weiss

Witnessed By: E. Boyer

Comments: _____





Location Address or Lot No. # 1040 Bay St, Amherst

On-site Review

Deep Hole Number 1 + 2 ^{Open} Date: 7/15/09 Time: 7:00 Weather Sun 70°F

Location (identify on site plan) _____

Land Use res. Slope (%) 2 Surface Stones Not

Vegetation grass

Landform Terraced

Position on landscape (sketch on the back) _____

Distances from:

Open Water Body 100' feet Drainage way 50' feet
 Possible Wet Area 100' feet Property Line 25' feet
 Drinking Water Well 100' feet Other _____

DEEP OBSERVATION HOLE LOG*

Depth from Surface (Inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	Other (Structure, Stones, Boulders, Consistency, % Gravel)
0-8"	A	Fsc	10YR 3/2		- Friable
8-22"	Bw	LS	10YR 4/6	90"	- Fine Sand
22"-120"	C	S	10YR 5/4	7.5YR 5/8	- Med. Sand, some coarse, 5% cobbles, loose.
0-8"	A	Fsc	↓		- Friable
8-22"	B	LS			- Fine Sand
22" → 60"	C	S			- Med - coarse Sand

e
per.

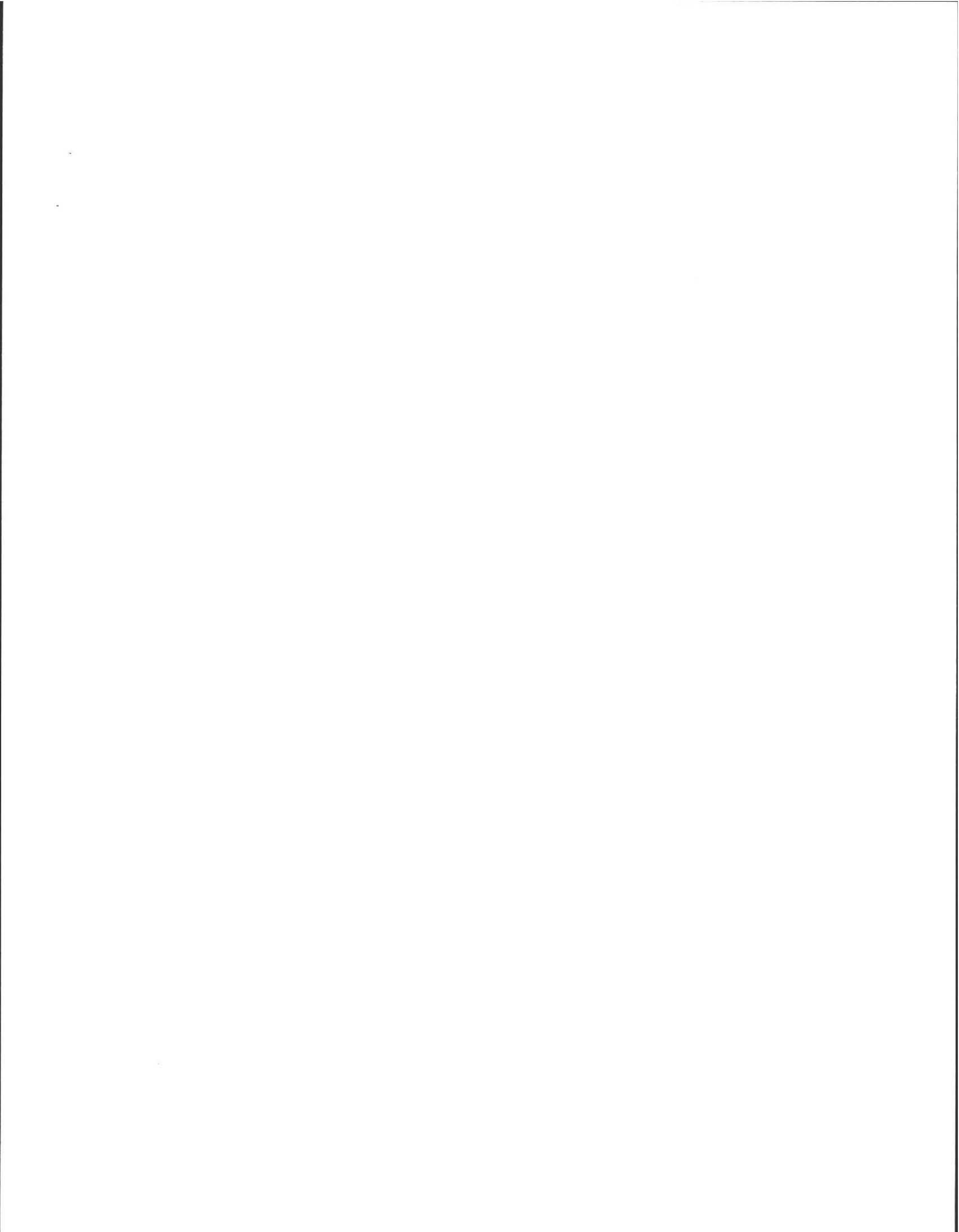
* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) outwash Depth to Bedrock: 120"

Depth to Groundwater: Standing Water in the Hole: NOT Weeping from Pit Face: NOT

Estimated Seasonal High Ground Water: 90"





Location Address or Lot No. 1040 Bay Rd.

Determination for Seasonal High Water Table

Method Used:

- Depth observed standing in observation hole inches
- Depth weeping from side of observation hole inches
- Depth to soil mottles 90" inches
- Ground water adjustment feet

Index Well Number Reading Date Index well level

Adjustment factor Adjusted ground water level

Depth of Naturally Occurring Pervious Material

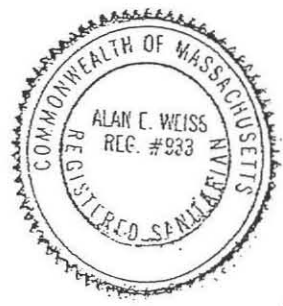
Does at least four feet of naturally occurring pervious material exist in all areas observed throughout the area proposed for the soil absorption system? Yes

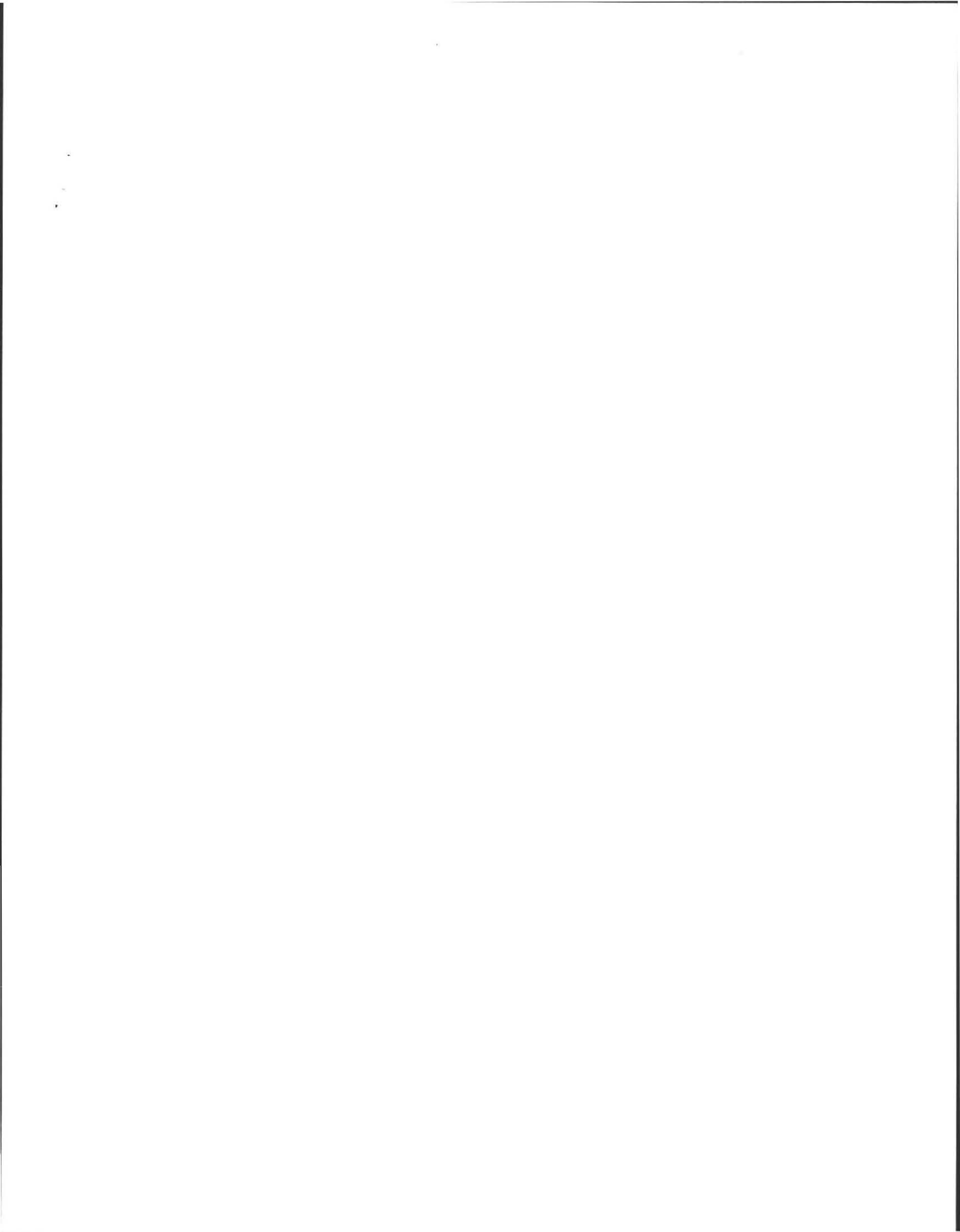
If not, what is the depth of naturally occurring pervious material? _____

Certification

I certify that on 6/95 (date) I have passed the soil evaluator examination approved by the Department of Environmental Protection and that the above analysis was performed by me consistent with the required training, expertise and experience described in 310 CMR 15.017.

Signature [Signature] Date 7/15/09





1.14 miles

TOWN OF AMHERST

CH # 29
P.D. WALTER
Denny
160
8/19/93

PERC TEST DATA SHEET

DATE 8/19/93 LOCATION 1040 BAY ROAD LOT SIZE _____

OWNER WALTER DENNY ADDRESS 1040 BAY ROAD TELE # 253-5260

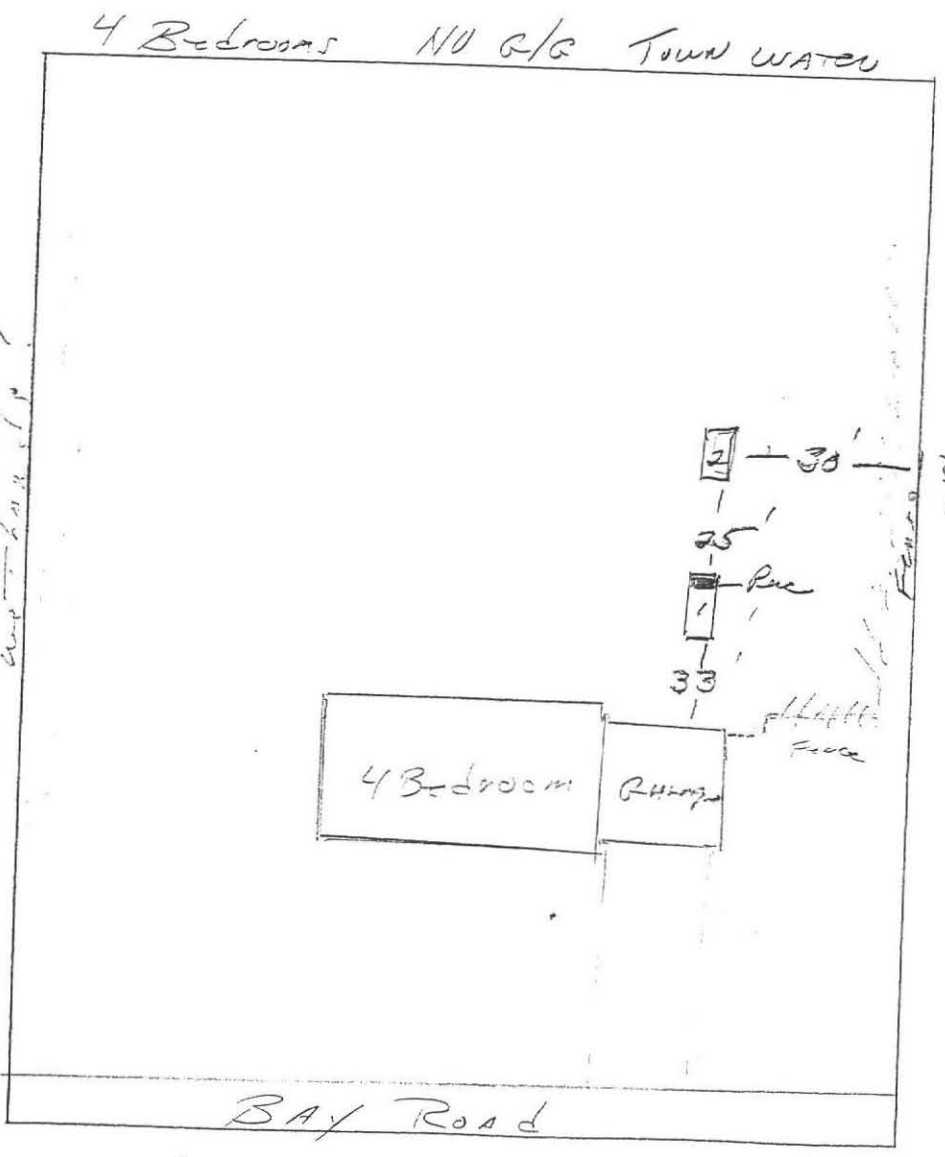
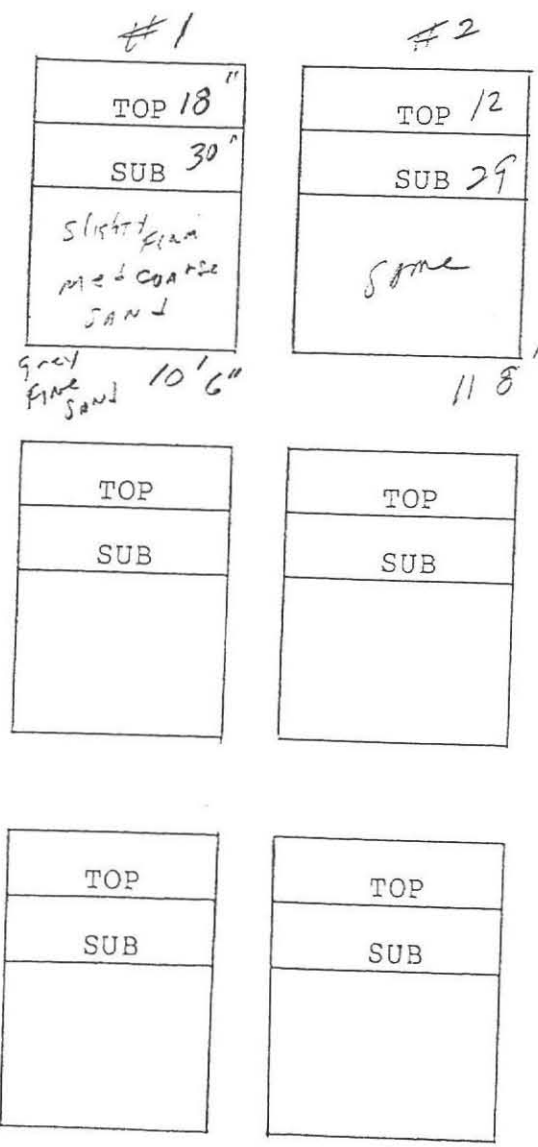
P.E./RS Fred Filios FIRM Filios Enterprises OBSERVED BY David Zarnowski

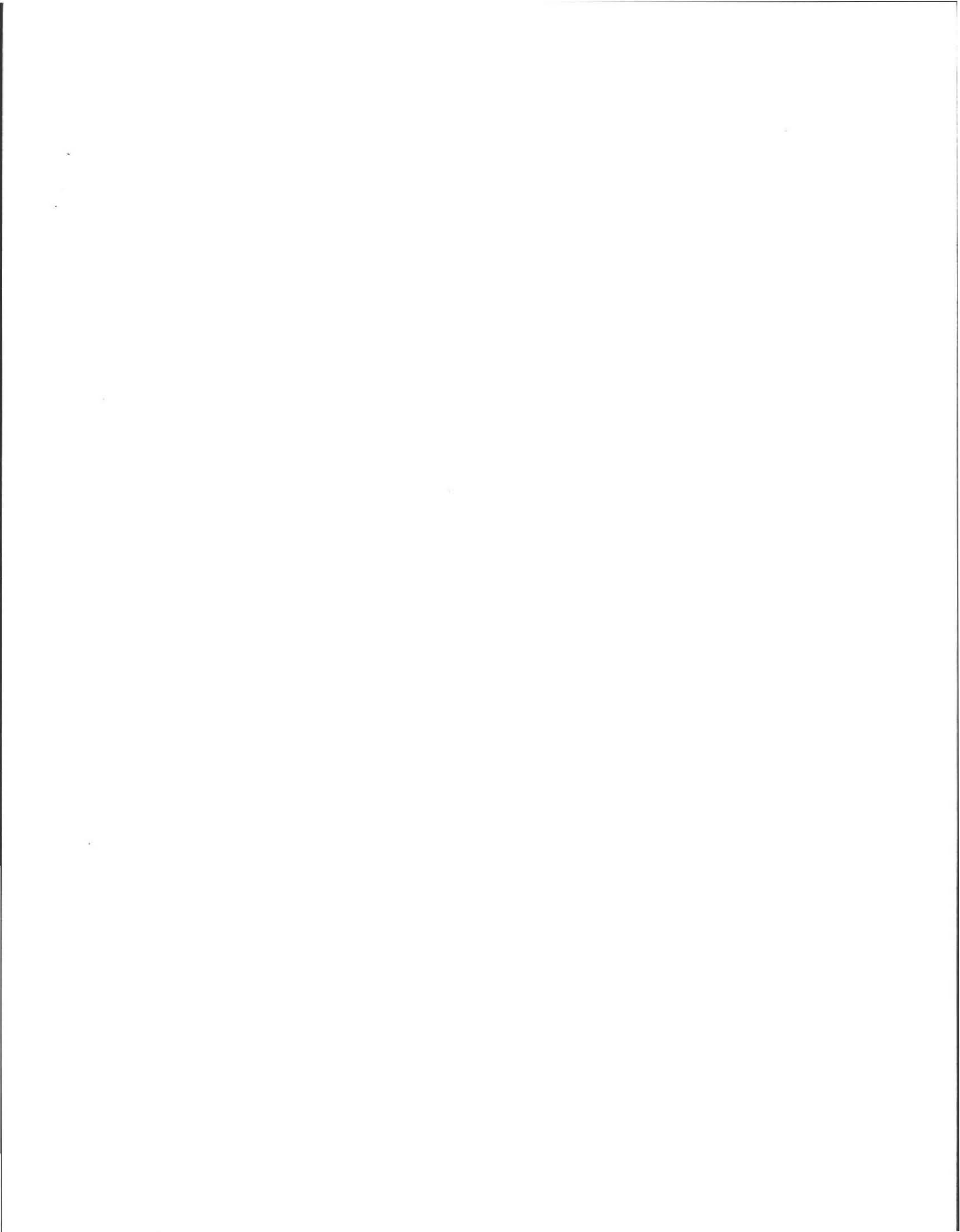
BACK HOE OPERATOR _____ BENCH MARK _____

PERC DEPTH 59" PRE SOAK TIME _____ PERC DEPTH _____ PRE SOAK TIME _____

TEST _____
_____ CAM 1 1/2 _____
_____ _____
_____ _____

RATE (2) RATE _____







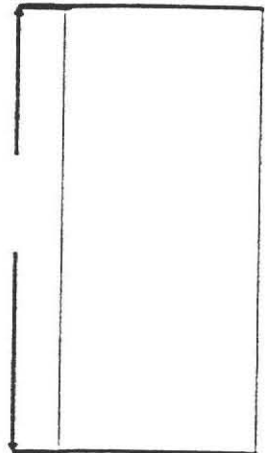
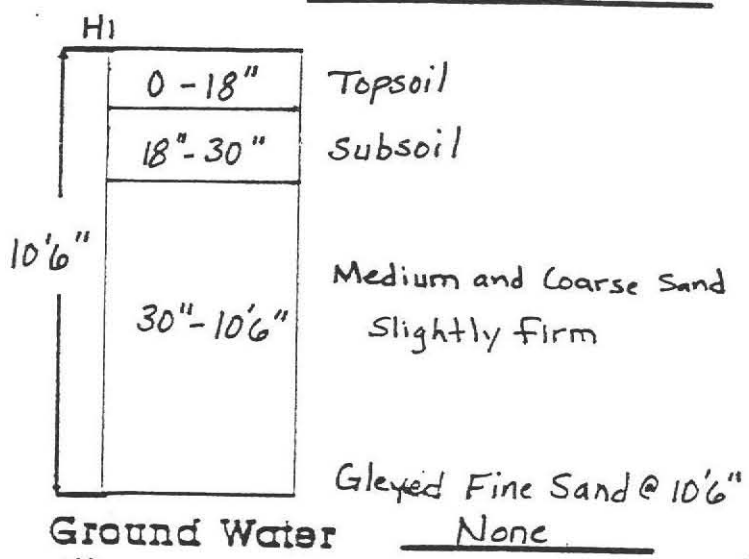
Deep Soil Logs

Filios Enterprises, Inc.

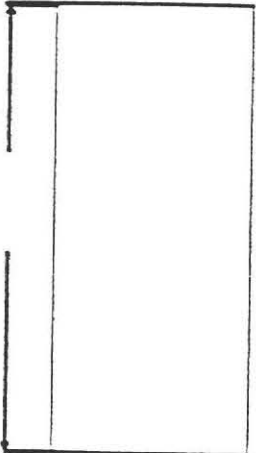
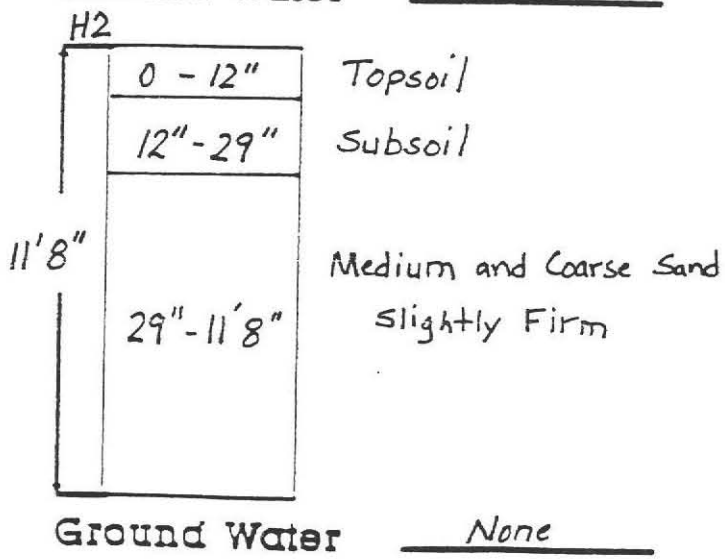
69 Pelham Rd., Amherst MA 01002. (413) 256-8008

Owner: Walter Denny
 Location: 1040 Bay Rd.
Amherst, MA

Date: August 19, 1993
 B. of H. David Zarozinski

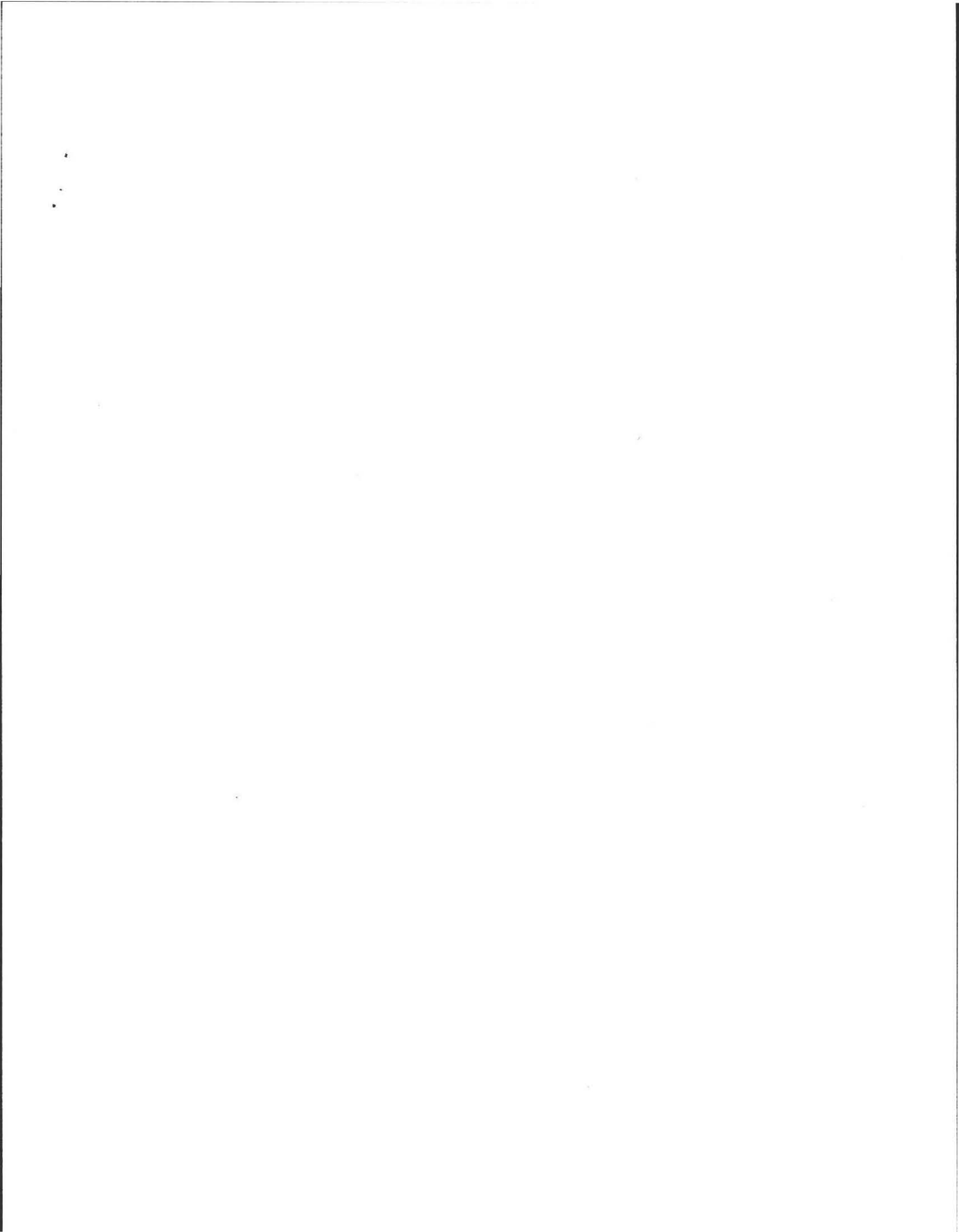


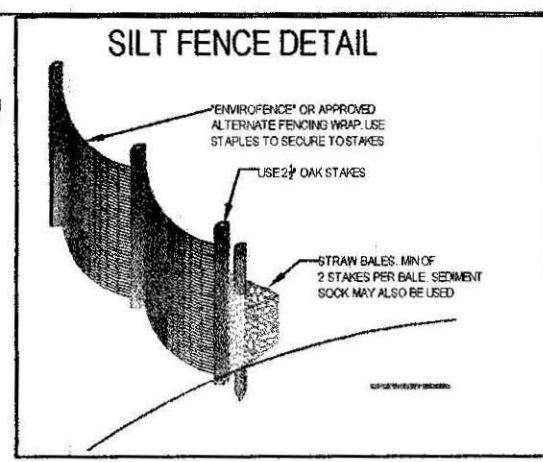
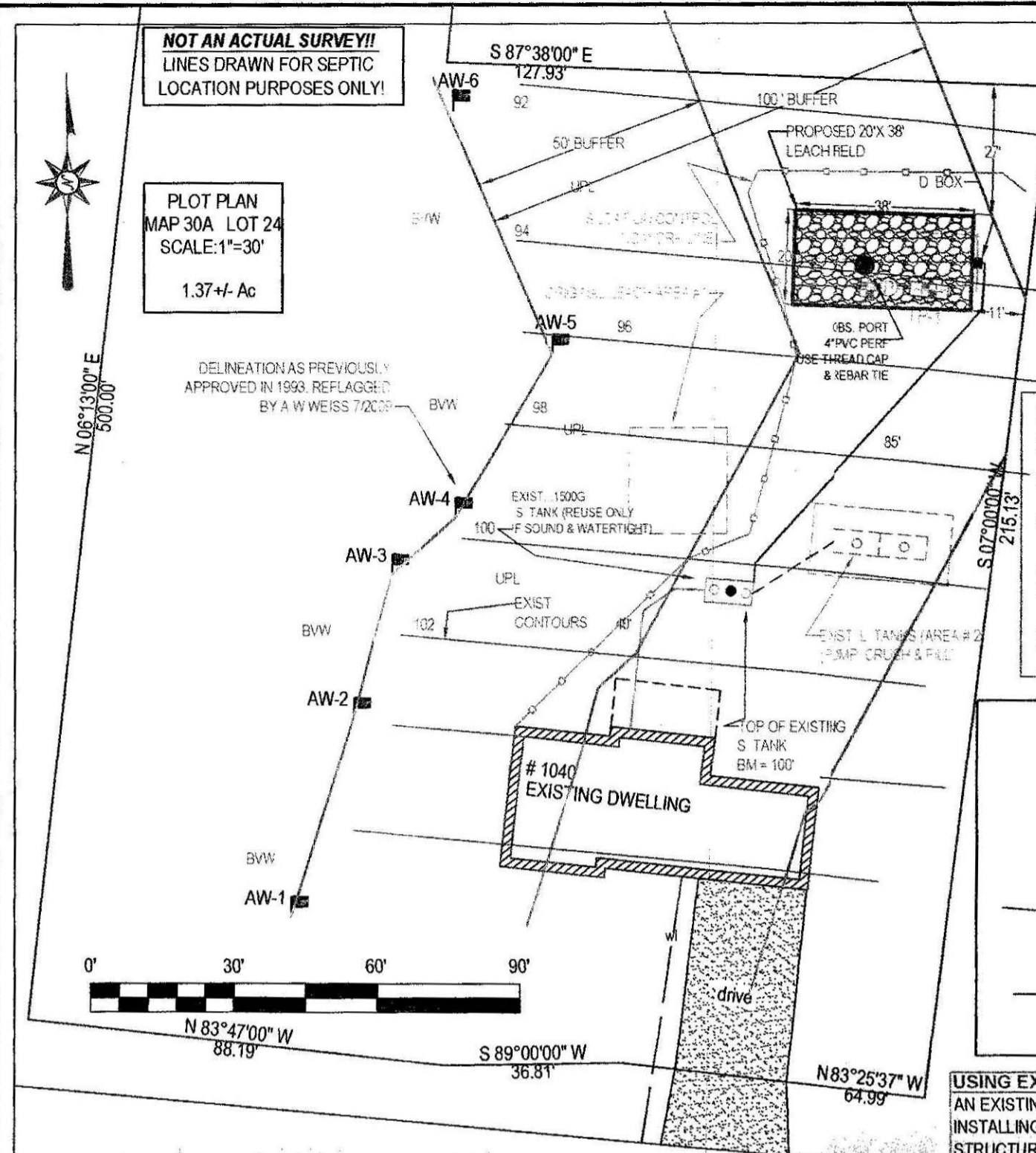
Ground Water _____



Ground Water _____

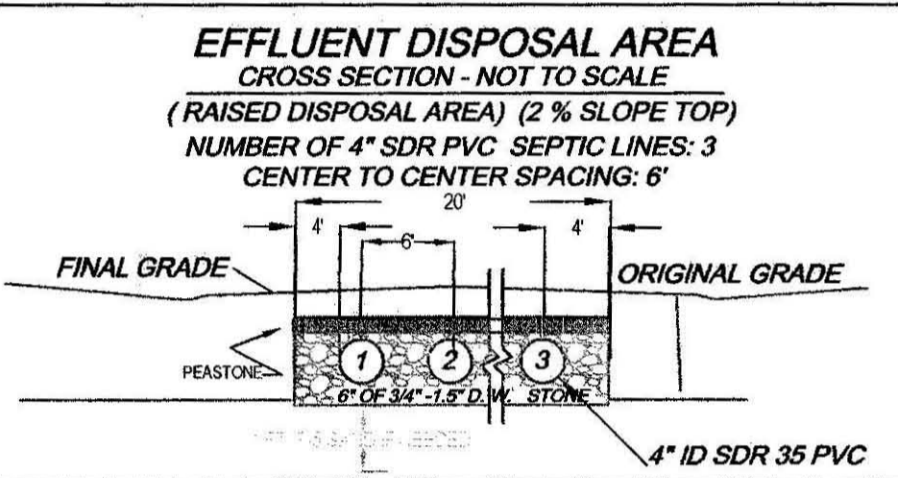
Percolation Rate at: 59"
< 2 min./inch





GRAVITY SLOPE SEPTIC SYSTEM OPERATION AND MAINTENANCE NOTES FOR HOMEOWNER.

- 1.) HAVE TANK PUMPED EVERY 2 YEARS.
- 2.) MAINTAIN AREA OVER SEPTIC SYSTEM AS GRASSY OR SIMILAR GROUND COVER.
- 3.) DO NOT PLANT ANY TREES OR DEEP ROOTING SHRUBS WITHIN 10 FEET OF SYSTEM.
- 4.) USE ONLY LIQUID DETERGENTS & LOW FLOW WASHERS.
- 5.) WIPE ALL OIL AND GREASE FROM COOKWARE AND DISPOSE IN TRASH NOT SEPTIC.
- 6.) All Toilets and Faucets must be confirmed to not be leaking, because one leaking fixture can fail a septic system in ONE DAY.

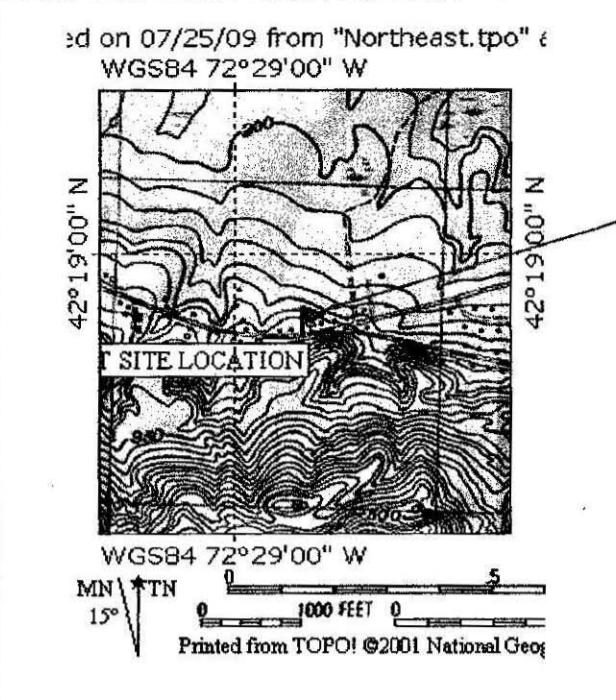


USING EXISTING SEPTIC TANKS:
 AN EXISTING 1,000 or 1,500 GALLON SEPTIC TANK CAN BE USED IF UPON INSPECTION BY THE INSTALLING CONTRACTOR, IF THE TANK IS INSPECTED AND PUMPED AND FOUND TO BE STRUCTURALLY SOUND AT THE TIME OF THE SUBGRADE INSPECTION. IF BAFFLES ARE NOT BUILT IN, THAN SCH 40 PVC TEES MUST BE ADDED. IF TANK IS NOT SOUND THAN, NOTIFY ENGINEER IMMEDIATELY IN ORDER TO ACCOMMODATE A NEW 1,500 GALLON (MIN.) SEPTIC TANK.

WETLAND DELINEATION AND SEDIMENT CONTROL NOTES:

NOTE: All fabric silt fence to be backed with Double Staked HAY/Straw Bales (free of seeds IF POSS.) in order to prevent fugitive re-seeding in Resource Area.

1. NO ALTERATION OF SEDIMENT, STOCKPILING, FILLING OR CUTTING VEGETATION ON THE DOWNGRADIENT SIDE OF THE SEDIMENTATION BARRIER (SILT FENCE).
2. SEDIMENTATION BARRIER TO BE ERECTED IN A STABLE AND LASTING MANNER AS SHOWN ON THE PLAN.
3. NOTIFY CONSERVATION ADMINISTRATOR AT LEAST 72 HOURS (IF REQ'D) PRIOR TO THE START OF ON-SITE WORK, AFTER COMPLETE ON SILT FENCE INSTALLATION.
4. AS SOON AS IS POSSIBLE WORK AREA SHALL BE SEEDED, REVEGETATED WITH GRASS OR SIMILAR GROUND COVER AND MULCHED UPON COMPLETION OF SITE WORK.
5. SILT FENCE TO REMAIN STANDING UNTIL REGROWTH IS SUFFICIENT TO CONTROL FUGITIVE SEDIMENT RUNOFF.
6. REGRADE WORK AREA AS NOTED TO PREVENT CHANGE IN SLOPE OR RUNOFF PATTERNS.



DESIGN NOTES AND CALCULATIONS:

1.) 5 (BEDROOM HOME) X 110 GPD / BR = 550+ GPD. REQUIRED,

-Use ONE FIELD: 20' WIDE X 38' LONG WITH 6" OF 3/4- TO 1-1/2" DBL WASHED STONE BELOW INVERT

- BOTTOM AREA: 20' W X 38' L = 760 SF.
- SIDE AREA: 0 SF.
- TOTAL AREA: 764 SF X .74 GAL/SF = 562 GPD

3. GARBAGE DISPOSAL NOT ALLOWED, ...
4. NO OTHER PRIVATE WELLS WITHIN 150 FEET OF SAS.
5. WETLANDS WITHIN 100 FEET OF SAS. FILE Request for Determination of Applicability with Conservation Comm
6. USE EXISTING 1,500 GAL S. TANK AS NOTED (IF SOUND) & MAINTAIN 0.02 PITCH FROM SILL TO S. TANK
 - INSTALL & INSPECT SCH. 40 TEES / BAFFLES (10" INLET, 14" OUTLET),

NOTE:

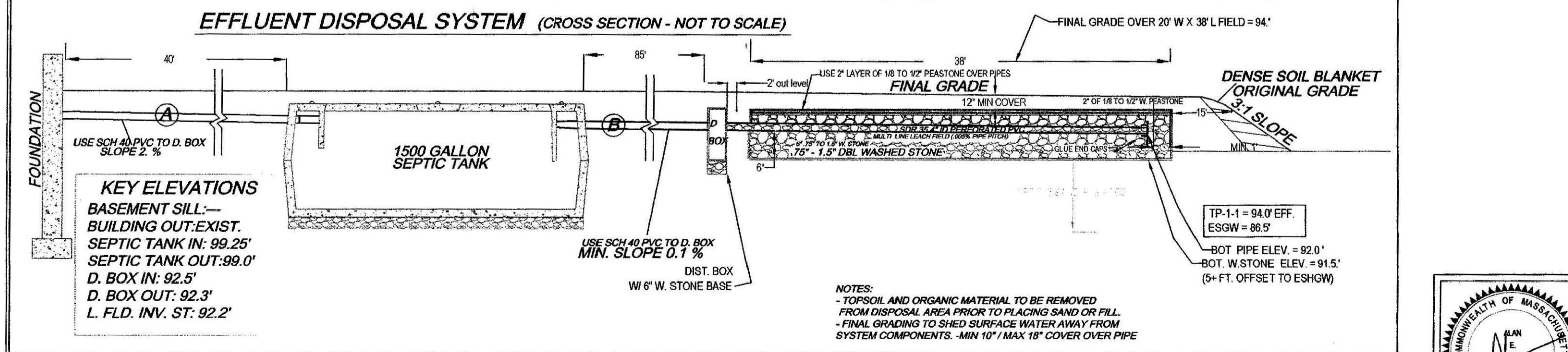
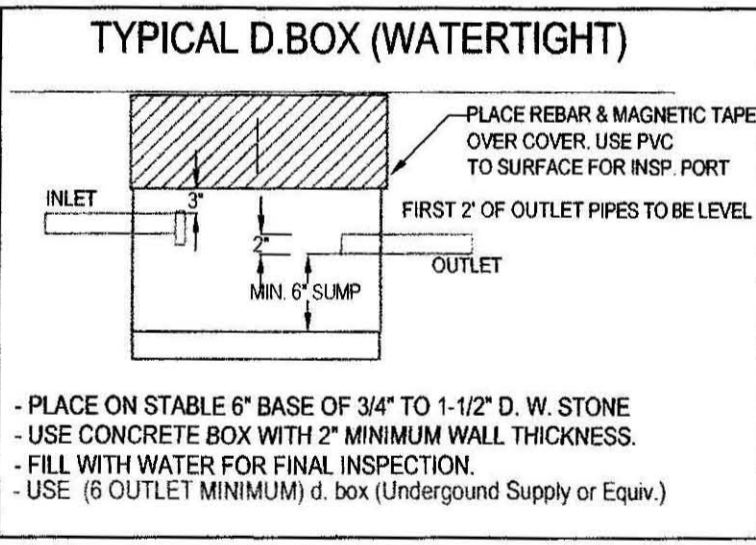
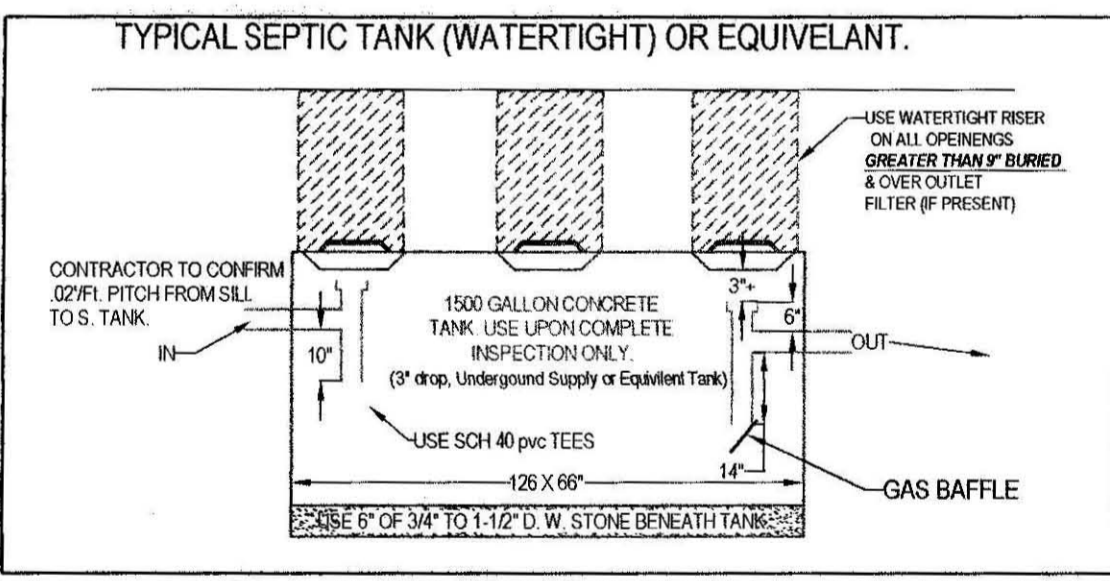
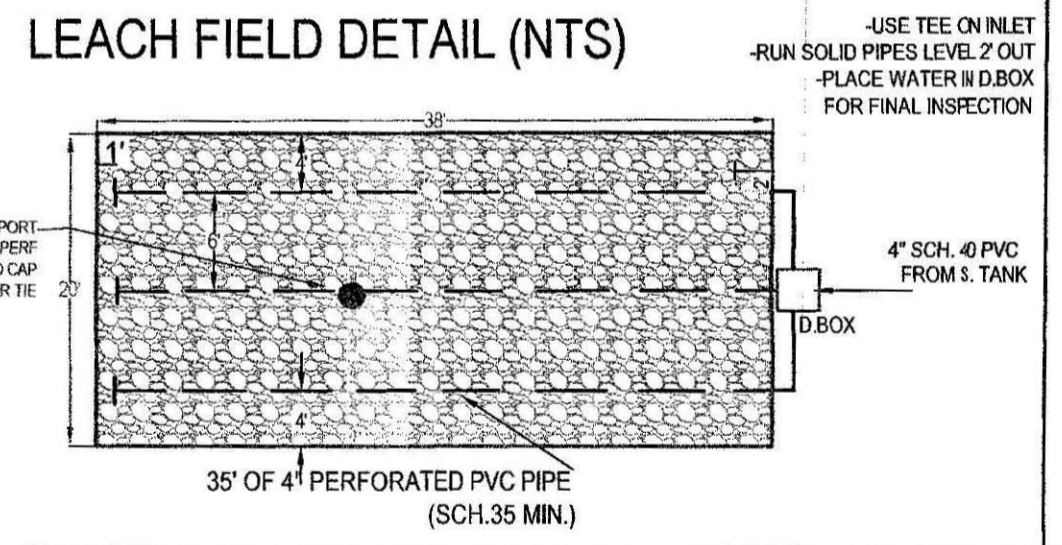
- ALL COMPONENTS OF NEW SYSTEM MUST BE MARKED WITH MAGNETIC TAPE. BE SURE TO MAINTAIN 3" CLEARANCE FROM TOP OF TEES TO BOTTOM OF TANK COVERS & BOXES.

7. USE LARGE STYLE (6" OUTLET) D.BOX ONLY.
- 7A ALL D. BOX OUTLET PIPES LEVEL FOR FIRST 2'. BOXES MUST HAVE 2"+ CONC. WALLS

NOTE:

- D. BOXES WITH MOIRE THAN 9" OF COVER SOIL MUST HAVE RISERS TO 6" OF SURFACE.

8. USE APPROVED (.75"-1 1/2") DBL. WASHED STONE UNDER TANK & D. BOX FOR 6".
- CONFIRM STONE PROPERLY DOUBLE WASHED PRIOR TO PLACEMENT.
9. USE PROPER SCH. 40 PVC TEES AS SHOWN.
10. PRE & POST CONTOURS NOTED AS NECESSARY, RESERVE AS NOTED (not required for repairs).
11. SLOPE CALCS (SEE CONTOURS). SUBGRADE INSP. REQ'D.
13. USE FIELD DUE TO TOPOGRAPHY AND SPACE OF LOT WITH RESPECT TO LOCATION AND ELEVATION OF RESIDENCE (310 CMR 15.240)
14. USE 2% MIN. SLOPE OVER SAS
 - CLEAR TOP AND SUB TO 24" MIN. AS NEEDED (INSPECTION REQUIRED).
 - CLEAR PAST BASE OF B (MIN. 24") & SCARIFY UNDER BED PRIOR TO TITL V SAND/STONE PLACEMENT.
 - EXCAVATE EXISTING LOAM, SUB AND ANY EXISTING DEBRIS, DIRTY FILL OR PRIOR SYSTEM IF PRESENT.
15. SOIL EVALUATION BY A. WEISS, RS. (E. BOKINA, BOH AGENT, 07.15.2009).
 - DEPTH OF PERC. 416"
 - PERC RATE = <2 MIN / IN,
 - CLASS 1 SOIL RATING
16. NO TREES WITHIN 110 FT. OF NEW LEACH FIELD.
17. ENGINEER & TOWN TO INSPECT SUBGRADE, TOWN AND ENGINEER INSPECT AT FINAL.
18. BM=100.00 @ (WALK: OUT DOOR SILL, as noted), CONFIRM PROPER PIPE SLOPES
 - USE/INSPECT SCH. 40 PIPE FOR PIPE FROM HOUSE TO NEW OR EXISTING TANK
19. GRADE MULCH AND/ SEED OVER SAS AS NOTED.
20. INSTALLATION IN LOW GROUNDWATER SEASON RECOMMENDED.
21. USE OBSERVATION PORT NEAR CENTER OF STONE BED HAVE 4" PERFORATED, PVC INSPECTION PORTALS TO BOTTOM OF STONE BED, WITH RISER TO 3" OF SURFACE & THREADED CAP & MARK WITH RE-BAR.



TEST PIT LOG:

TP-1 EFF. ELEV. 94.0' EFF.				SOIL EVALUATOR: A. WEISS, RS				DATE OF EVALUATION: 07.15.2009				
DEPTH	HORIZ.	TEXTURE (MONSIELL)	COOR (MONSIELL)	MATERIAL	DEPTH	HORIZ.	TEXTURE (MONSIELL)	COOR (MONSIELL)	MATERIAL			
0-8"	A	FSL	10 YR 3.3	FRIABLE	0-8"	A	FSL	10 YR 3.3	FRIABLE			
7-22"	Bw	LS	10 Yr 4.6	F. SAND	7-22"	Bw	LS	2.5Y 5.6	HARD MASSIVE			
22-120"	C1	S	10 YR 5.6	MED. SAND, SOME COARSE	22-68"	C1	S	2.5Y 6.2	MED. SAND			
				5% COBBLES								
OXIDES:				90"	OBSERVED 7.5 YR 5.6				OXIDES:			
EHWT:				90" = 86.50'					EHWT:			
STANDING H2O:				NOT OBSERVED					STANDING H2O:			
WEEPING:				NOT OBSERVED					WEEPING:			
BEDROCK:				120"+					BEDROCK:			

SEPTIC SYSTEM REPAIR PLAN FOR LEE BARSTOW
 1040 BAY ROAD
 AMHERST, MA

Cold Spring Environmental Consultants Inc.
 350 Old Enfield Road
 Belchertown, MA 01007

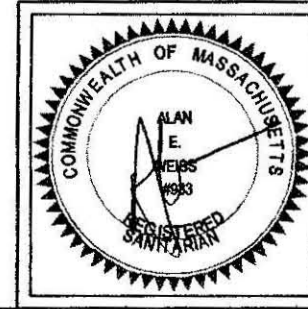
PHONE: (413) 323-5957
 FAX: (413) 323-4916
 E-Mail: ALWEISS@charter.net

DATE: 07.23.2009
 DRAWN BY: ALAN WEISS
 REVISIONS:

SCALE: 1"=30'
 DRAWING NUMBER: 109-3198-0715

ATTENTION INSTALLER!!
 CALL DIG SAFE BEFORE YOU DIG! MASSACHUSETTS STATE LAW CHAPTER 82 SECTIONS 40 - 40E REQUIRE THAT REMARKING OF GAS, ELECTRIC, WATER, TELEPHONE AND CABLE T.V. UTILITY LINES BE MADE A MINIMUM OF 72 HOURS PRIOR TO GROUND BREAK FOR ANY EXCAVATION.

NOTE: INSTALLER MUST CONTACT ENGINEER/BD OF HEALTH 48 HOURS PRIOR TO SUBGRADE INSPECTION. INSTALLER MUST HAVE ALL BREAK OUT FILL ON SITE AND IN PLACE PRIOR TO SIGN OFF BY ENGINEER AT TIME OF FINAL INSPECTION OR APPROVAL WILL NOT BE GIVEN TO BACKFILL.



On-Site Review

Deep Hole Number: # _____ Date: 7-15-09 Time: 9:00 Weather: Sunny
 Location (identify on site plan): _____
 Land Use: _____ Vegetation: _____ Slope (%): _____
 Land Form: _____ Position of Landscape: _____ Surface Stones: _____
 Distance From: _____
 Open Water Body _____ Feet _____ Drainage way _____ Feet
 Possible Wet Area _____ Feet _____ Property Line _____ Feet
 Drinking Water Well _____ Feet _____ Other _____ Feet

TP <u>(1)</u> DEEP OBSERVATION HOLE LOG					
Depth From Surface (INCHES)	Soil Horizon	Soil Texture (USDA)	Soil Color (MUNSELL)	Soil Mottling	Other: Structure, Stones, Boulders, Consistency, % Gravel
0-8	FSL	Friable	10YR 3/2		
8-22"	LS	Fine sand	10YR 4/6		
22-120'	S	Med sand	10YR 9/6		5% Cobbles

Parent Material (geologic) 7.5XR5/8
 Depth to Groundwater: 90" Standing Water in the Hole: NO Depth to Bedrock: _____
 Estimated Seasonal High Ground Water: 90" Moist Weeping from Pit Face: Moist

TP _____ DEEP OBSERVATION HOLE LOG					
Depth From Surface (INCHES)	Soil Horizon	Soil Texture (USDA)	Soil Color (MUNSELL)	Soil Mottling	Other: Structure, Stones, Boulders, Consistency, % Gravel

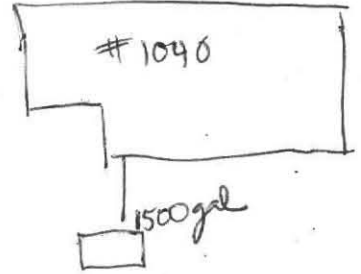
Parent Material (geologic) _____
 Depth to Groundwater: _____ Standing Water in the Hole: _____ Depth to Bedrock: _____
 Estimated Seasonal High Ground Water: _____ Weeping from Pit Face: _____

Certification: I certify that in _____, I passed the soil evaluator examination approved by the Department of Environmental Protection and that the above analysis was performed by me consistent with the required training, expertise and experience described in 310 CMR 15.017. SE Certification # _____

Signature:  Date: 7-15-09

Bay Rd Not pd

AMHERST PUBLIC HEALTH DEPARTMENT
70 Boltwood Walk, Amherst MA 01002
Telephone: 413-259-3077



Site Suitability for On-Site Sewage Disposal

Project Number:
Performed By: Alan Weiss
Health Inspector: Bokina

Date: 7-15-09
Equipment Operator: Adair

Site Address

1040 Bay Rd
Amherst, MA 01002

Client Name & Address

Mr. Beverly (Lee) Barstow
Same cell# 413 927-1278
lee.barstow@gmail.com

New Construction • Repair •

OFFICE REVIEW

Published Soil Survey Available: NO • YES •
Year Published Publication Scale Soil Map Unit Drainage Class Soil Limitations
Surficial Geologic Report Available: NO • YES •
Year Published Publication Scale Geographic Material (Map Unit) Landform
Flood Insurance Rate Map:
Above 500 year flood Boundary • Within 500 year flood Boundary • Within 100 year flood Boundary •
Wetland Area:
National Wetland Inventory Map (Map Unit) Wetlands Conservancy Program Map (Map Unit)
Current Water Resource Conditions (USGS): Month
Range: Above Normal • Normal • Below Normal •
Other References Reviewed:

TP# 1

Percolation Test Results

	Time	Measurement		Time	Measurement
Begin Saturation		46"	Begin Saturation		
End Saturation	9:30		End Saturation		
9" depth Measurement	9:31		9" depth Measurement		
6" depth Measurement	9:32		6" depth Measurement		
Elapsed Time 9" to 6"			Elapsed Time 9" to 6"		

Percolation Rate: Bottom of Percolation Test Hole: 46"

Determination for Seasonal High Water Table

Method Used

- Depth observed standing on observation hole _____ inches
- Depth to soil mottles _____ inches
- Depth weeping from side of observation hole _____ inches
- Ground water adjustment _____ inches

Index Well Number _____ Reading Date _____ Index Well Level _____
Adjustment Factor _____ Adjusted ground water level _____

Depth of Naturally Occurring Pervious Material

Does at least four feet of naturally occurring pervious material exist in all areas observed throughout the area proposed for the soil absorption system? _____

If yes, what is the depth of naturally occurring pervious material? TP# _____ : _____ , TP# _____ : _____
If not, what is the depth of naturally occurring pervious material? TP# _____ : _____ , TP# _____ : _____

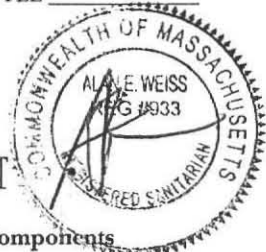
No. _____

FEE _____

COMMONWEALTH OF MASSACHUSETTS

Board of Health, Amherst, MA, MA.

APPLICATION FOR DISPOSAL SYSTEM CONSTRUCTION PERMIT



Application for a Permit to Construct () Repair (✓) Upgrade () Abandon () - Complete System Individual Components

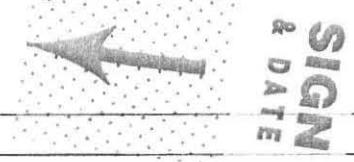
Location <u>1040 Bay Rd.</u>	Owner's Name <u>Lee Berstew</u>
Map/Parcel# <u>30A - 24</u>	Address <u>1040 Bay Rd.</u>
Lot# <u># 24</u>	Telephone# <u>427-1278</u>
Installer's Name <u>Rob Adclair</u>	Designer's Name <u>Alva Weiss</u>
Address <u>Amherst, MA.</u>	Address <u>323 Adams, MA.</u>
Telephone# <u>531-7921</u>	Telephone# <u>323-5957</u>

Type of Building Residence Lot Size _____ sq. ft.
 Dwelling - No. of Bedrooms 5 Bedroom. (per Assessors) Garbage grinder (No)
 Other - Type of Building _____ No. of persons _____ Showers (), Cafeteria ()
 Other Fixtures _____
 Design Flow (min. required) 110 gpd Calculated design flow 550 Design flow provided 562 gpd
 Plan: Date 7/23/09 Number of sheets 1 Revision Date _____
 Title Septic System Repair Plan
 Description of Soil(s) Class 1: F-Mrd. Sand.
 Soil Evaluator Form No. _____ Name of Soil Evaluator A. Weiss Date of Evaluation 7/15/09
E. Bokina

DESCRIPTION OF REPAIRS OR ALTERATIONS New L. Field.

The undersigned agrees to install the above described Individual Sewage Disposal System in accordance with the provisions of TITLE 5 and further agrees to not to place the system in operation until a Certificate of Compliance has been issued by the Board of Health.

Signed _____ Date _____



Inspections _____

No. _____

FEE _____

COMMONWEALTH OF MASSACHUSETTS

Board of Health, _____, MA.

CERTIFICATE OF COMPLIANCE

Description of Work: Individual Component(s) Complete System

The undersigned hereby certify that the Sewage Disposal System; Constructed (), Repaired (), Upgraded (), Abandoned ()

by: _____
at _____

has been installed in accordance with the provisions of 310 CMR 15.00 (Title 5) and the approved design plans/as-built plans relating to application No. _____, dated _____. Approved Design Flow _____ (gpd)

Installer _____

Designer: _____ Inspector: _____ Date: _____

The issuance of this permit shall not be construed as a guarantee that the system will function as designed.

No. _____

FEE _____

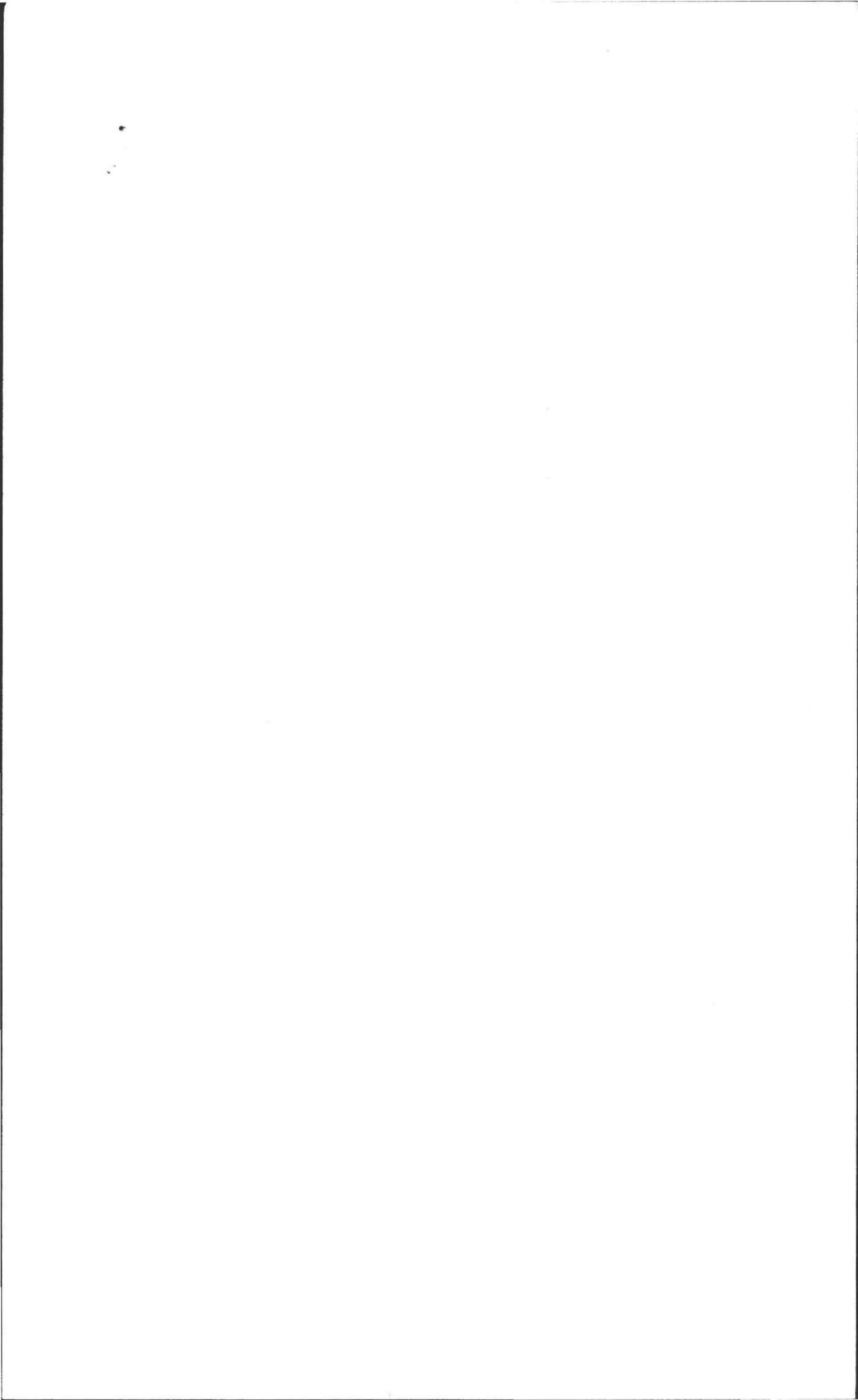
COMMONWEALTH OF MASSACHUSETTS

Board of Health, _____, MA.

DISPOSAL SYSTEM CONSTRUCTION PERMIT

Permission is hereby granted to; Construct () Repair () Upgrade () Abandon () an individual sewage disposal system at _____ as described in the application for Disposal System Construction Permit No. _____, dated _____.

Provided: Construction shall be completed within three years of the date of this permit. All local conditions must be met.





**COLD SPRING ENVIRONMENTAL
CONSULTANTS INC.**

- 2IE Site Investigations
- Subsurface Investigations
- Pollution Remediation
- LSP on Staff
- Forensic Septic Investigations

- Percolation Tests
- Septic Designs
- Regulatory Compliance
- Recycling and Solid Waste
- Second Opinions

July 23, 2009

Amherst Conservation Commission
Town Hall
Amherst, MA 01002

**RE:(Map 30A , Lot 24) # 1040 Bay Road, Septic Repair,
Request for Determination, CSEC Proj., No. 109-3198-0715**

Dear Sir/Madam

Enclosed please find the **Septic Repair Plan** for the *Repair of the subsurface Disposal System* for the above mentioned property. The existing system is to be replaced. **The no work line (50 feet)** is delineated from the BVW using properly buried (6"), staked silt fence with *straw* bale backing (Or equivalent). All above noted locations are referenced on the Figure 1: Site Locus Map and Figure 2: Site Construction Plan, attached.

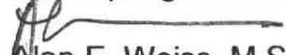
The Health Department has been contacted for proper septic permits. Wetland delineation was based on our own observation of typical hydrophytic species, topography and hydrology observed in the field and in the presence of the agent for the Board of Health. The plan intention is to utilize the best part of the property with the least disturbance of the resource area.

Mitigative measures include a silt fence that establishes a no work zone (50') as well as follow-up mulching and seeding of wetland buffer & frontyard margins. The septic meets the minimum (310 CMR 15.00) setback of >50 feet (54+ feet noted). The work area in the buffer zone would be limited to less than 1,200 square feet. **No fill** and regrading and resultant covering, seeding and mulching will occur in the buffer zone as noted.

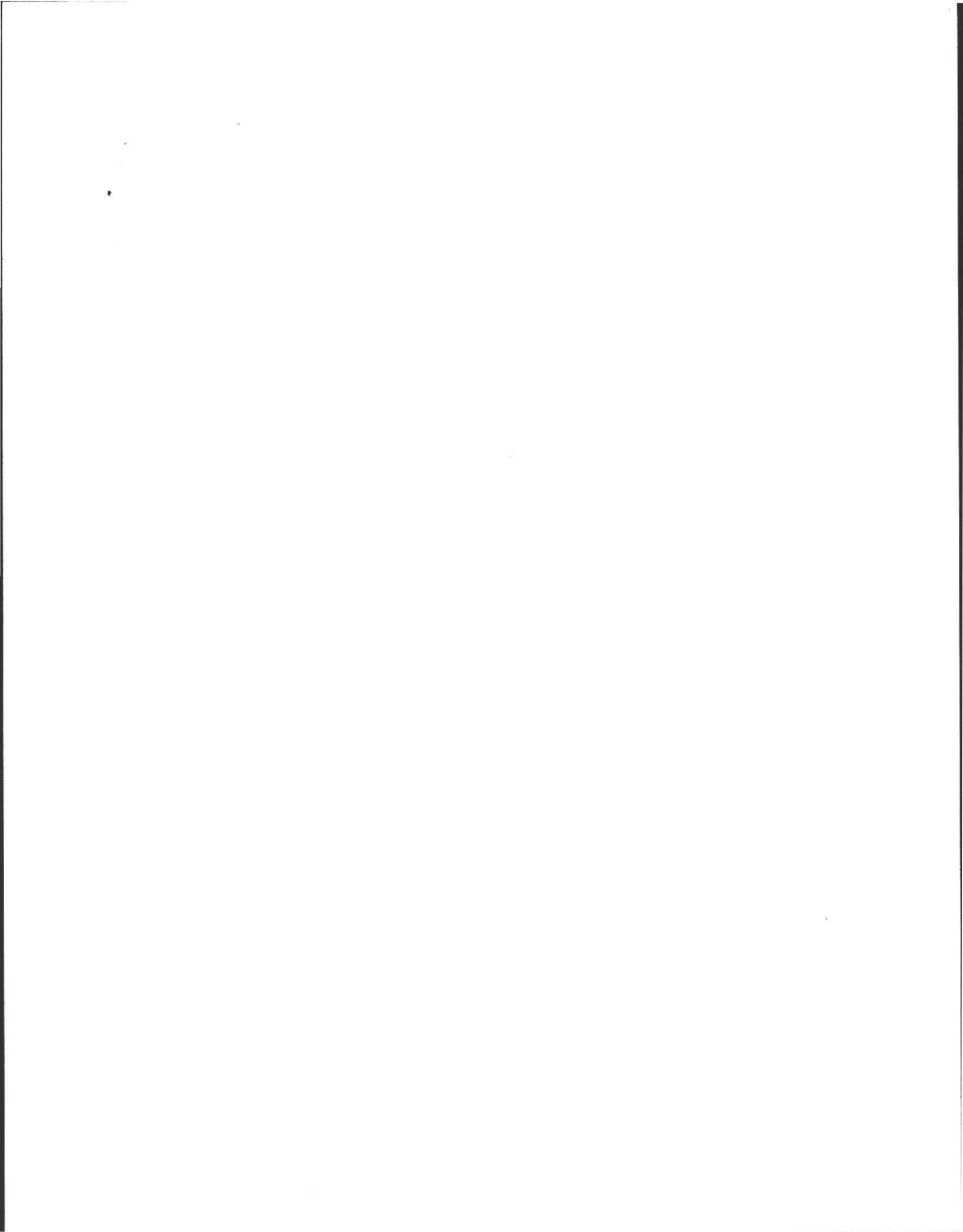
Please note that because of the "limited impact" near this area, our experience with most similar situations is that this type of repair work can be properly completed as shown with the noted mitigative measures followed as contingencies. The attached plan and form has been filed with the WRO-DEP. Please notify us at your earliest convenience of your next hearing date and time with sufficient time for abutter notices and a legal add as needed.

Sincerely,

Cold Spring Environmental Consultants, Inc.


Alan E. Weiss, M.S.

Principal Hydrogeologist
Registered Sanitarian Lic. #933





ALAN E. WEISS, M.S., L.S.P.

Licensed Site Professional

Registered Sanitarian

Hydrogeologist

President

•Subsurface Investigations

•21E Site Investigations

•Pollution Remediation

•Percolation Tests and

Septic Designs

350 Old Enfield Rd.

Belchertown, MA 01007

(413) 323-5957 & 323-4916 (FAX)

Date: 7-15-09

Commonwealth of Massachusetts

Amherst, Massachusetts

Soil Suitability Assessment for On-site Sewage Disposal

Performed By: A. Weiss

Date: 7/15/09

Witnessed By: E. Bokina

Location Address or Lot # <u>1040 Bay Rd.</u>	Owner's Name, Address, and Telephone # <u>Lee Barstow</u> <u>1040 BAY RD.</u>
New Construction <input type="checkbox"/> Repair <input checked="" type="checkbox"/>	

Office Review

Published Soil Survey Available: No Yes

Year Published

Publication Scale

Soil Map Unit

Drainage Class

Soil Limitations

Surficial Geologic Report Available: No Yes

Year Published

Publication Scale

Geologic Material (Map Unit)

Landform

Flood Insurance Rate Map:

Above 500 year flood boundary No Yes

Within 500 year flood boundary No Yes

Within 100 year flood boundary No Yes

Wetland Area:

National Wetland Inventory Map (map unit)

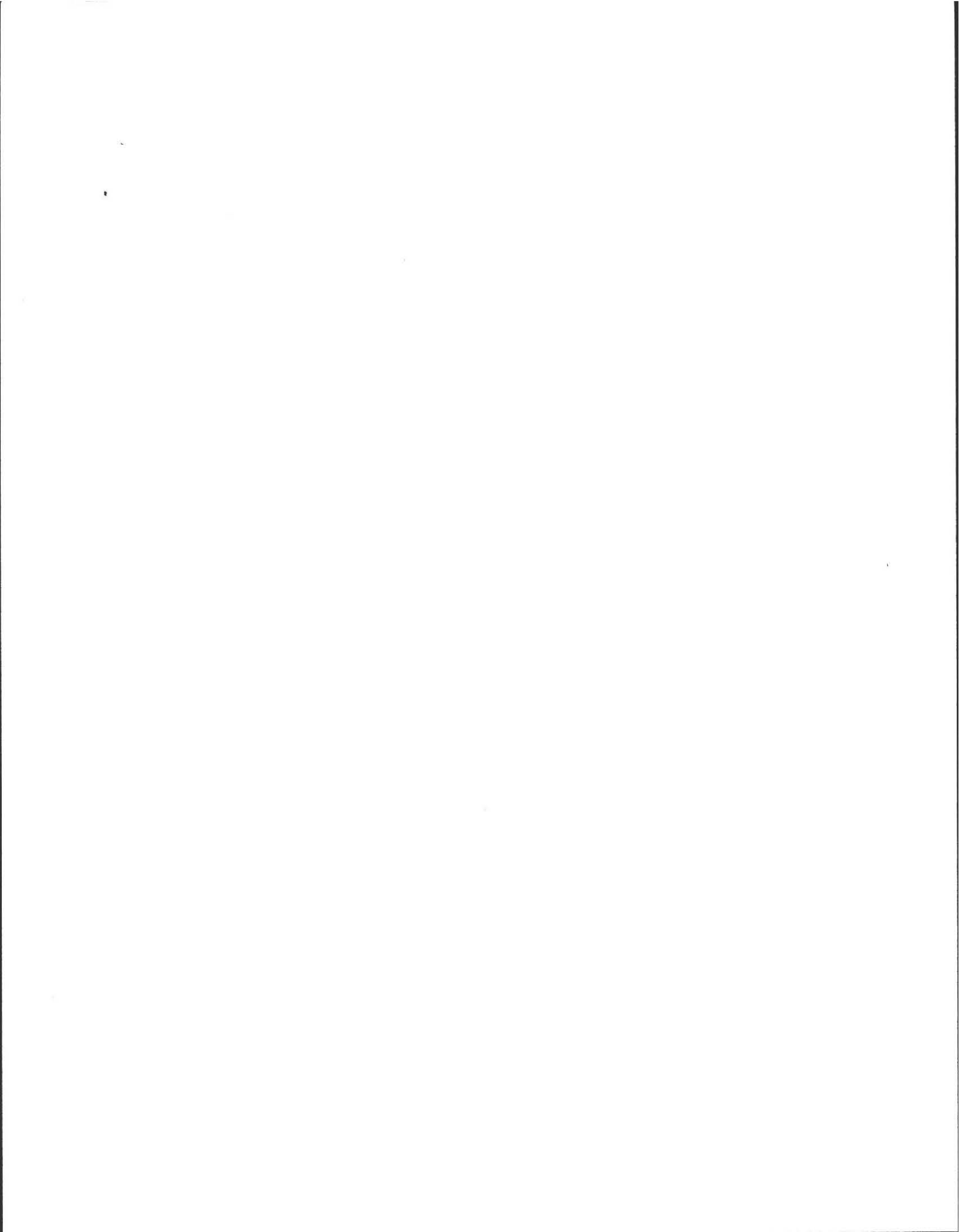
Wetlands Conservancy Program Map (map unit)

Current Water Resource Conditions (USGS): Month

Range : Above Normal Normal Below Normal

Other References Reviewed: _____





Location Address or Lot No. 1040 Bay Rd.

COMMONWEALTH OF MASSACHUSETTS

Amherst, Massachusetts

Percolation Test*		
Date:	<u>7/15/09</u>	Time:
Observation Hole #	<u>#6 P,</u>	
Depth of Perc	<u>46"</u>	
Start Pre-soak	<u>9:15</u>	
End Pre-soak	<u>9:30</u>	
Time at 12"	<u>9:30</u>	
Time at 9"	<u>9:31</u>	
Time at 6"	<u>9:32</u>	
Time (9"-6")	<u>< 2</u>	
Rate Min./Inch	<u>< 2</u>	

See 1993 Perc on file

* Minimum of 1 percolation test must be performed in both the primary area AND reserve area.

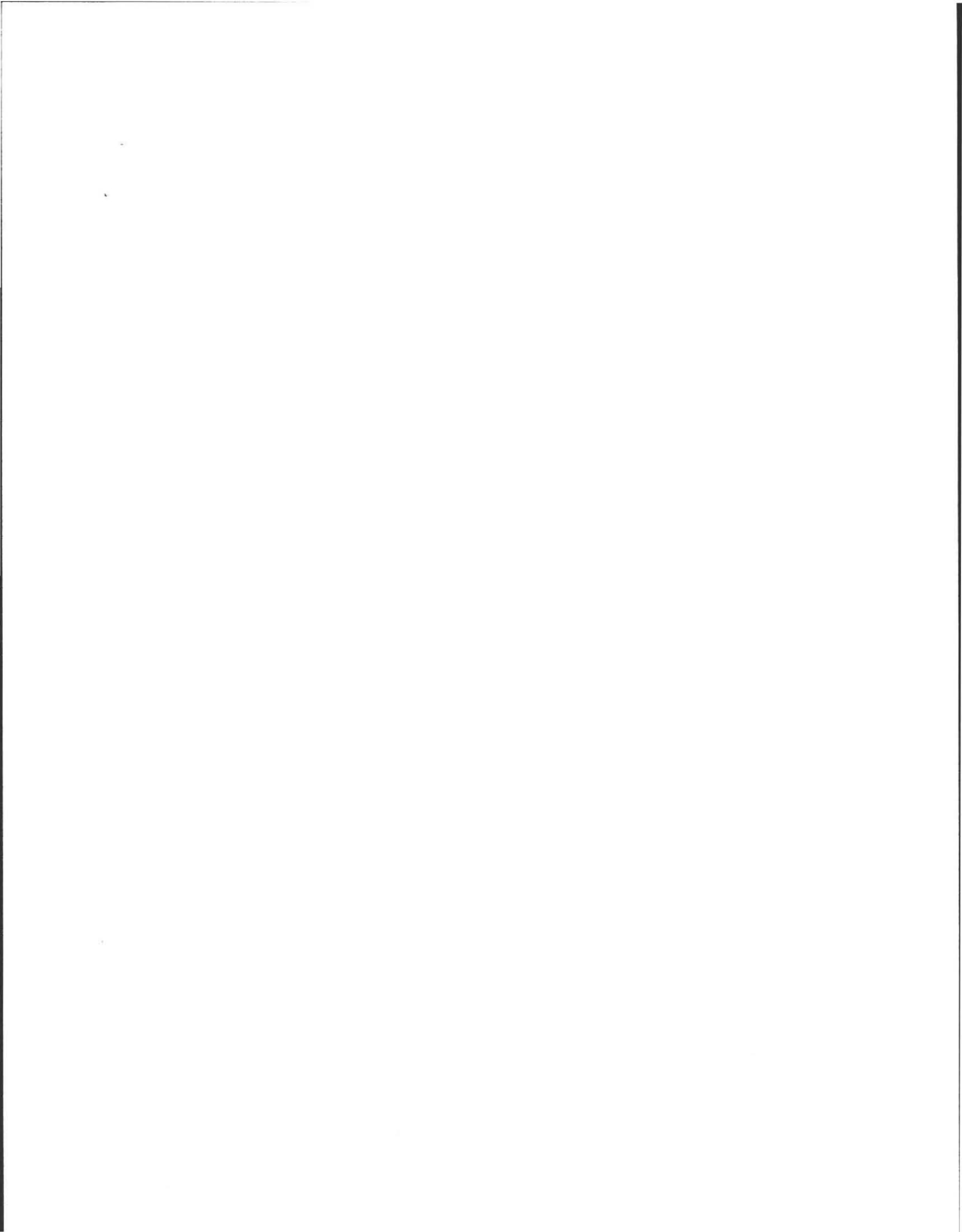
Site Passed Site Failed

Performed By: A. Weiss

Witnessed By: E. Bokwa

Comments: _____





Location Address or Lot No. # 1040 Bay Pk, Amherst

On-site Review

Deep Hole Number 1 + 2 ^{open} Date: 7/15/09 Time: 9:00 Weather Sun 70°F

Location (identify on site plan) _____

Land Use res. Slope (%) 2 Surface Stones Not

Vegetation grass

Landform Terraced

Position on landscape (sketch on the back) _____

Distances from:

Open Water Body 100' feet Drainage way 50' feet
 Possible Wet Area 100' feet Property Line 25' feet
 Drinking Water Well 100' feet Other _____

DEEP OBSERVATION HOLE LOG*

Depth from Surface (Inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	Other (Structure, Stones, Boulders, Consistency, % Gravel)
0-8"	A	Fsc	10YR 3/2		- Frangible
8-22"	Bw	LS	10YR 4/6	90"	- Fine Sand
22"-120"	C	S	10YR 3/4	7.5YR 5/8	- Med. Sand, Some coarse, 5% cobbles, Loam.
0-8"	A	Fsc	↓		- Frangible
8-22"	B	LS			- Fine Sand
22" → 60"	C	S			- Med - coarse Sand

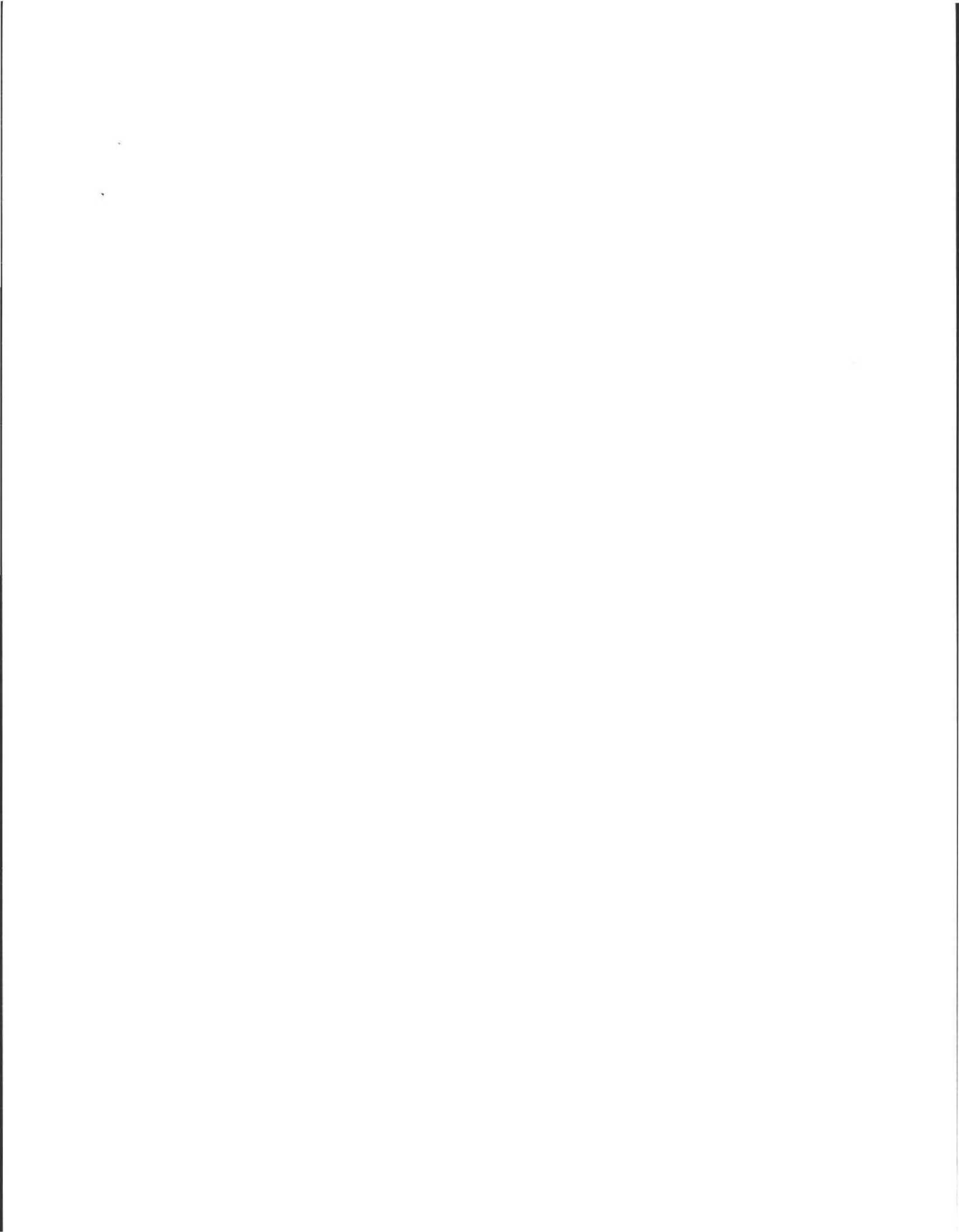
* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) outwash Depth to Bedrock: 120'

Depth to Groundwater: Standing Water in the Hole: NOT Weeping from Pit Face: NOT

Estimated Seasonal High Ground Water: 90"





Location Address or Lot No. 1040 Bay Rd.

Determination for Seasonal High Water Table

Method Used:

- Depth observed standing in observation hole inches
 Depth weeping from side of observation hole inches
 Depth to soil mottles 90" inches
 Ground water adjustment feet

Index Well Number Reading Date Index well level

Adjustment factor Adjusted ground water level

Depth of Naturally Occurring Pervious Material

Does at least four feet of naturally occurring pervious material exist in all areas observed throughout the area proposed for the soil absorption system? yes

If not, what is the depth of naturally occurring pervious material? _____

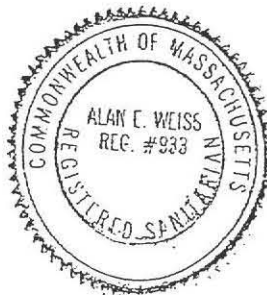
Certification

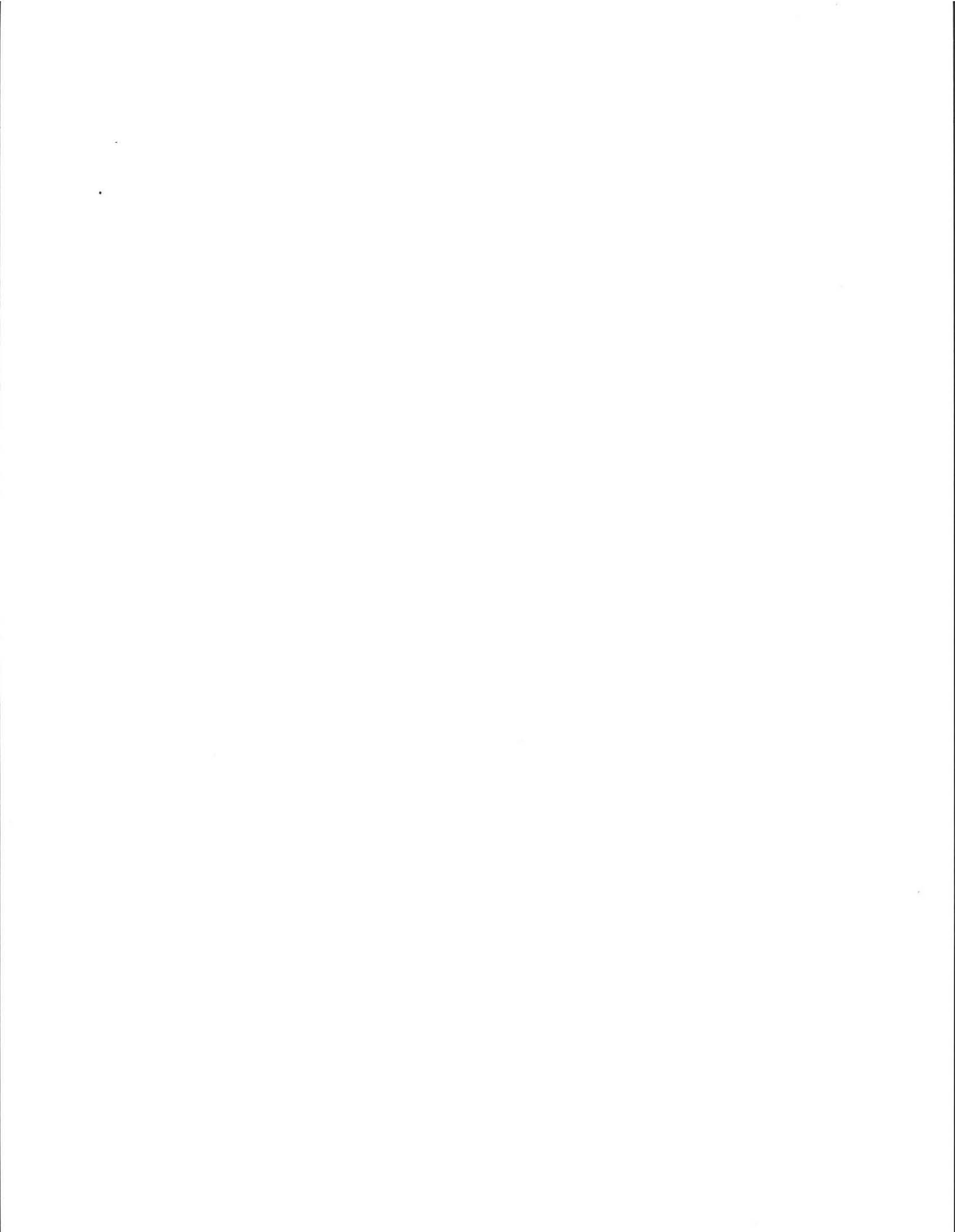
I certify that on 6/95 (date) I have passed the soil evaluator examination approved by the Department of Environmental Protection and that the above analysis was performed by me consistent with the required training, expertise and experience described in 310 CMR 15.017.

Signature AE Date 7/15/09



DEP APPROVED FORM - 12/07/95





147 miles

TOWN OF AMHERST

PERC TEST DATA SHEET

CH # 529
P.D. WALTER
Denny
160
8/19/93

DATE 8/19/93 LOCATION 1040 Bay Road LOT SIZE _____

OWNER WALTER Denny ADDRESS 1040 Bay Road TELE # 253-5261

P.E./RS Fred Filios FIRM Filios Enterprises OBSERVED BY David Zarnowski

BACK HOE OPERATOR _____ BENCH MARK _____

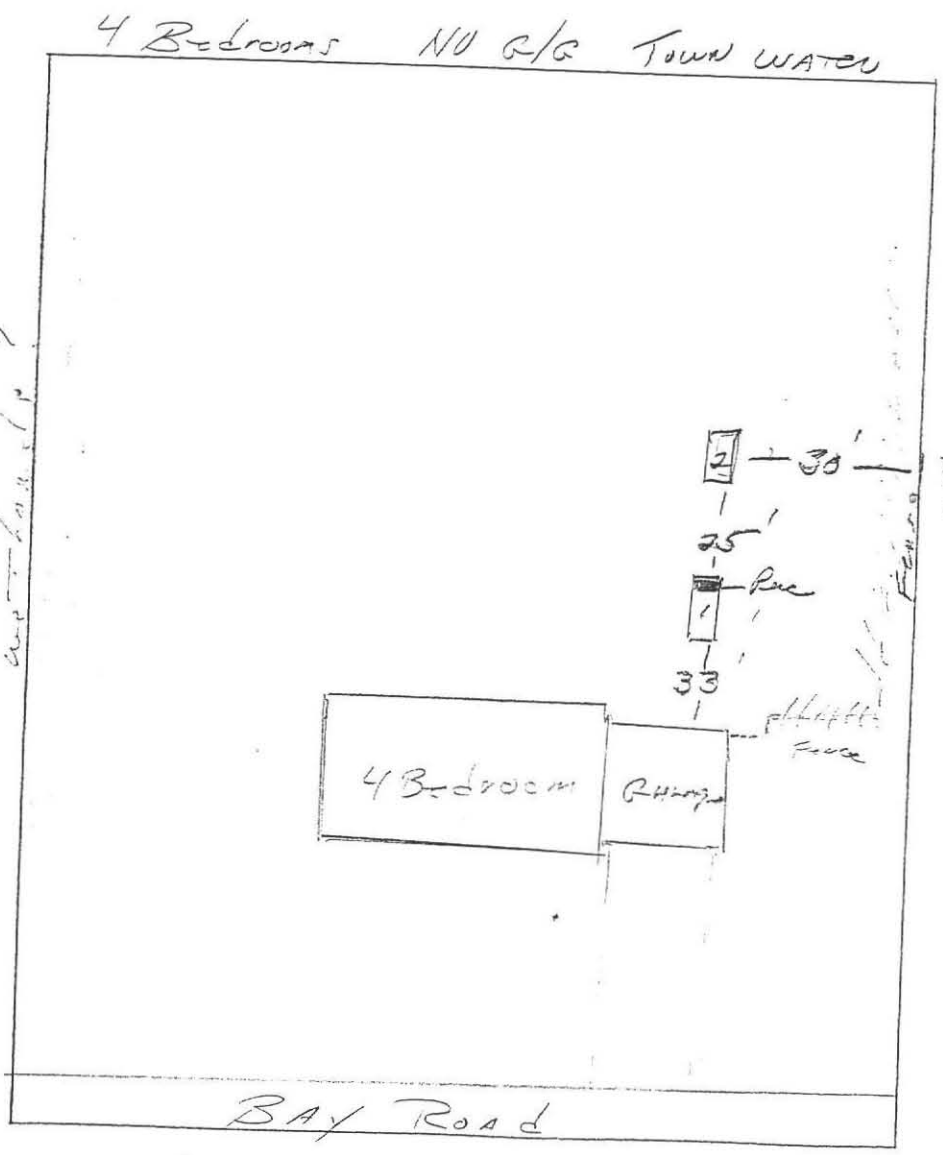
PERC DEPTH 59" PRE SOAK TIME _____ PERC DEPTH _____ PRE SOAK TIME _____

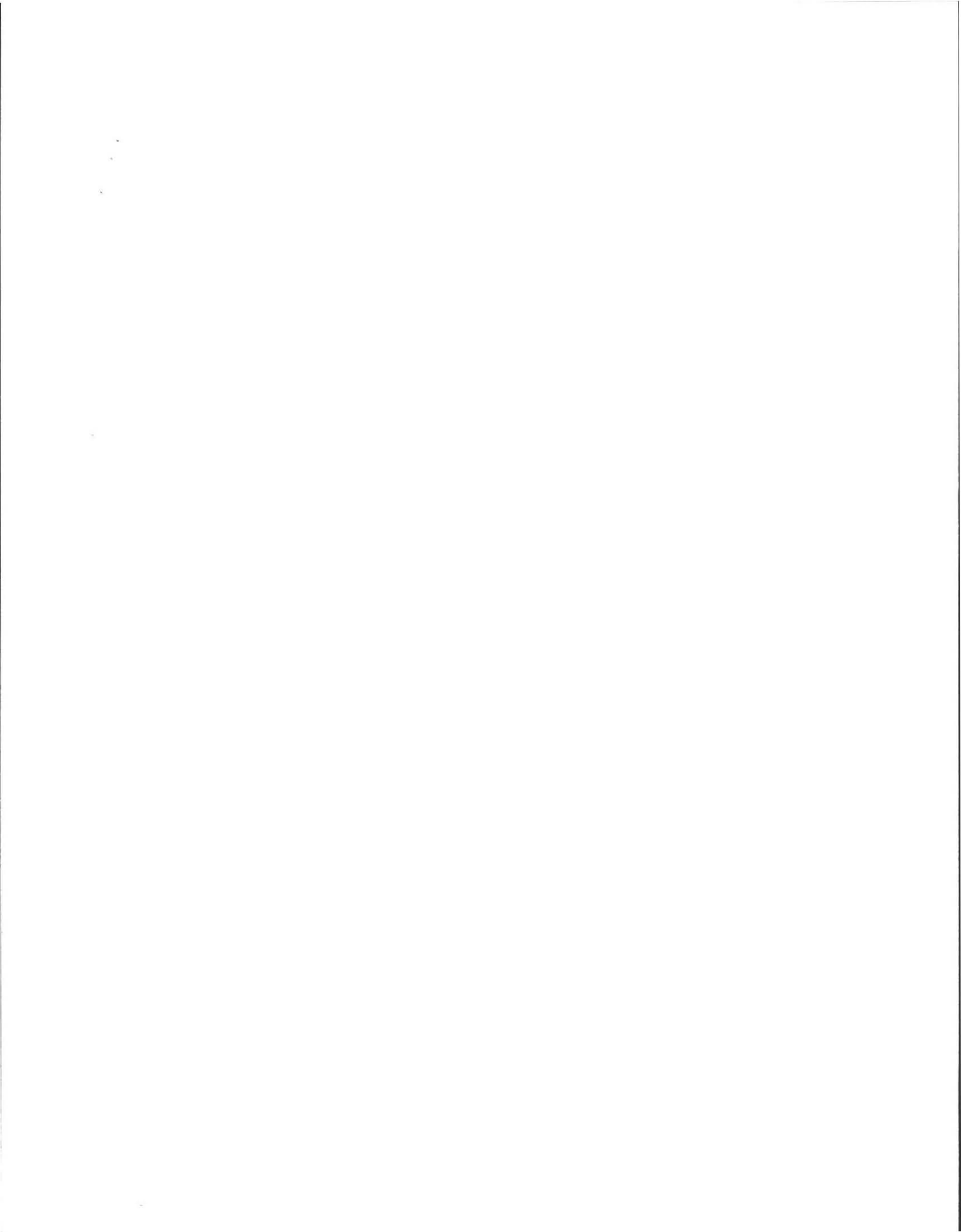
TEST

CAM 1 1/2" 1d

RATE (2) RATE _____

#1	#2
TOP 18"	TOP 12
SUB 30"	SUB 29
Slight fine med coarse SAND	same
gray fine sand 10'6"	11'8"
TOP	TOP
SUB	SUB
TOP	TOP
SUB	SUB





Deep Soil Logs

Filios Enterprises, Inc.

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



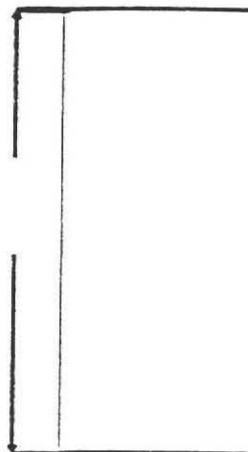
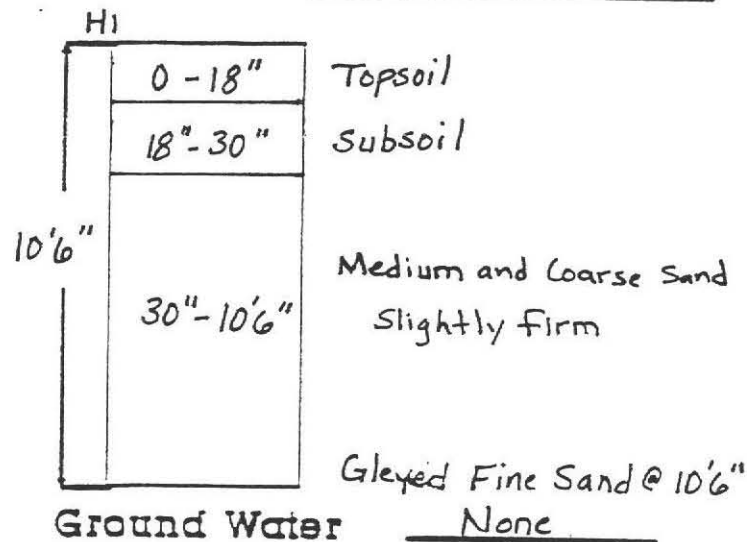
Owner: Walter Denny

Date: August 19, 1993

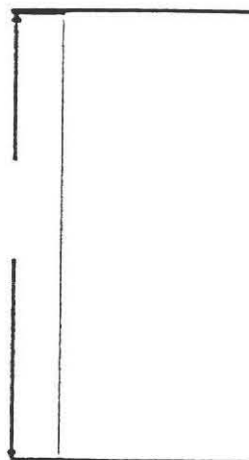
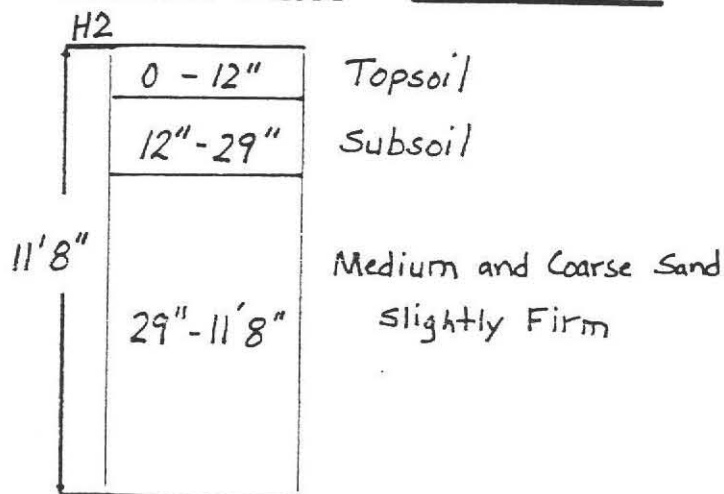
Location: 1040 Bay Rd.

B. of H. David Zarozinski

Amherst, MA



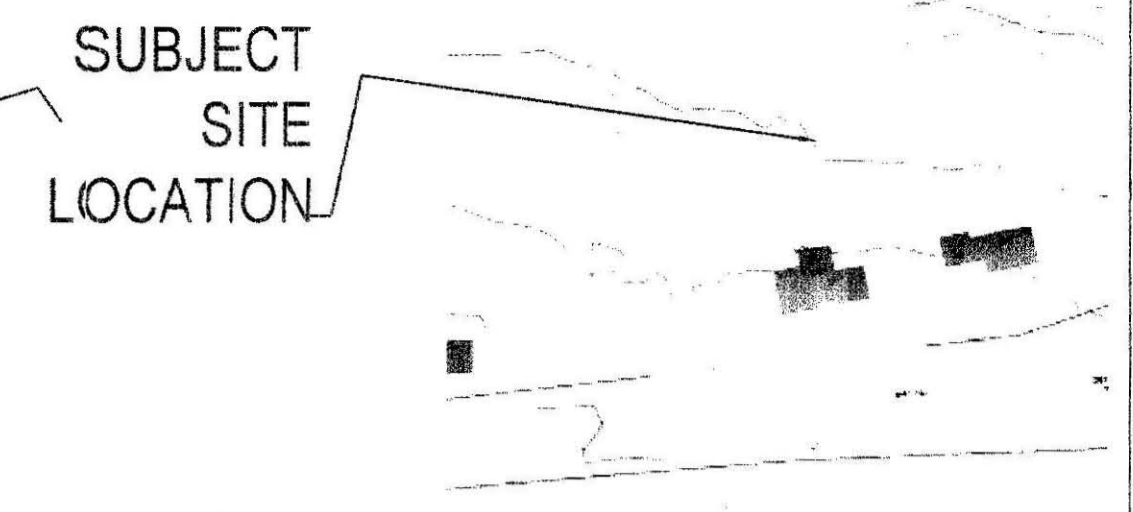
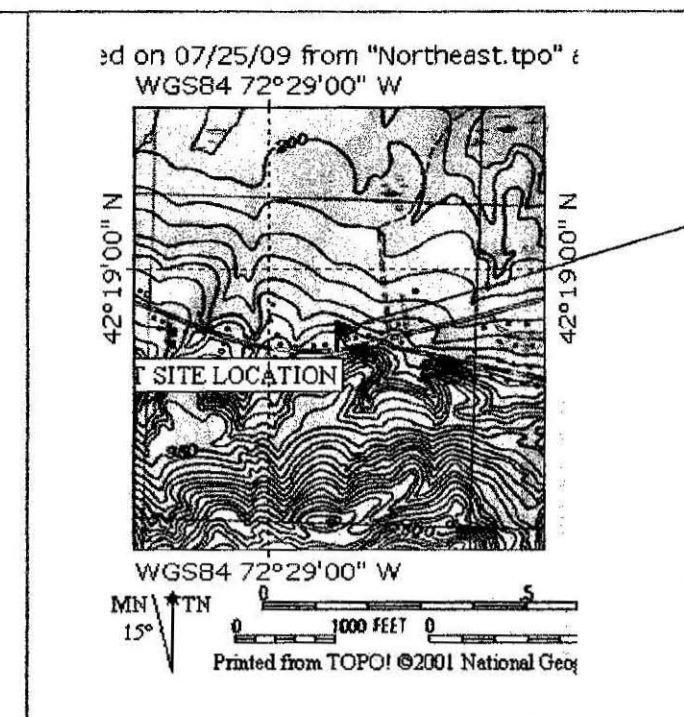
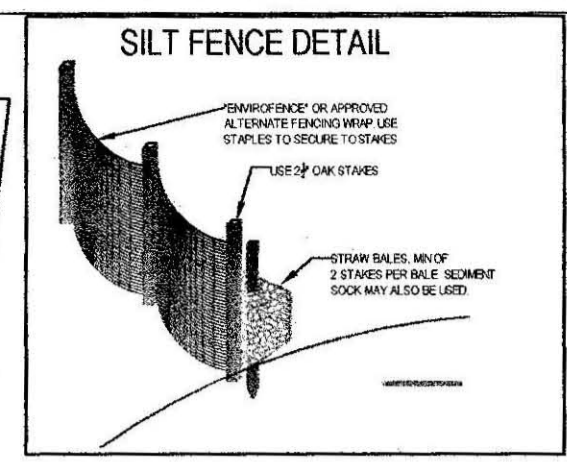
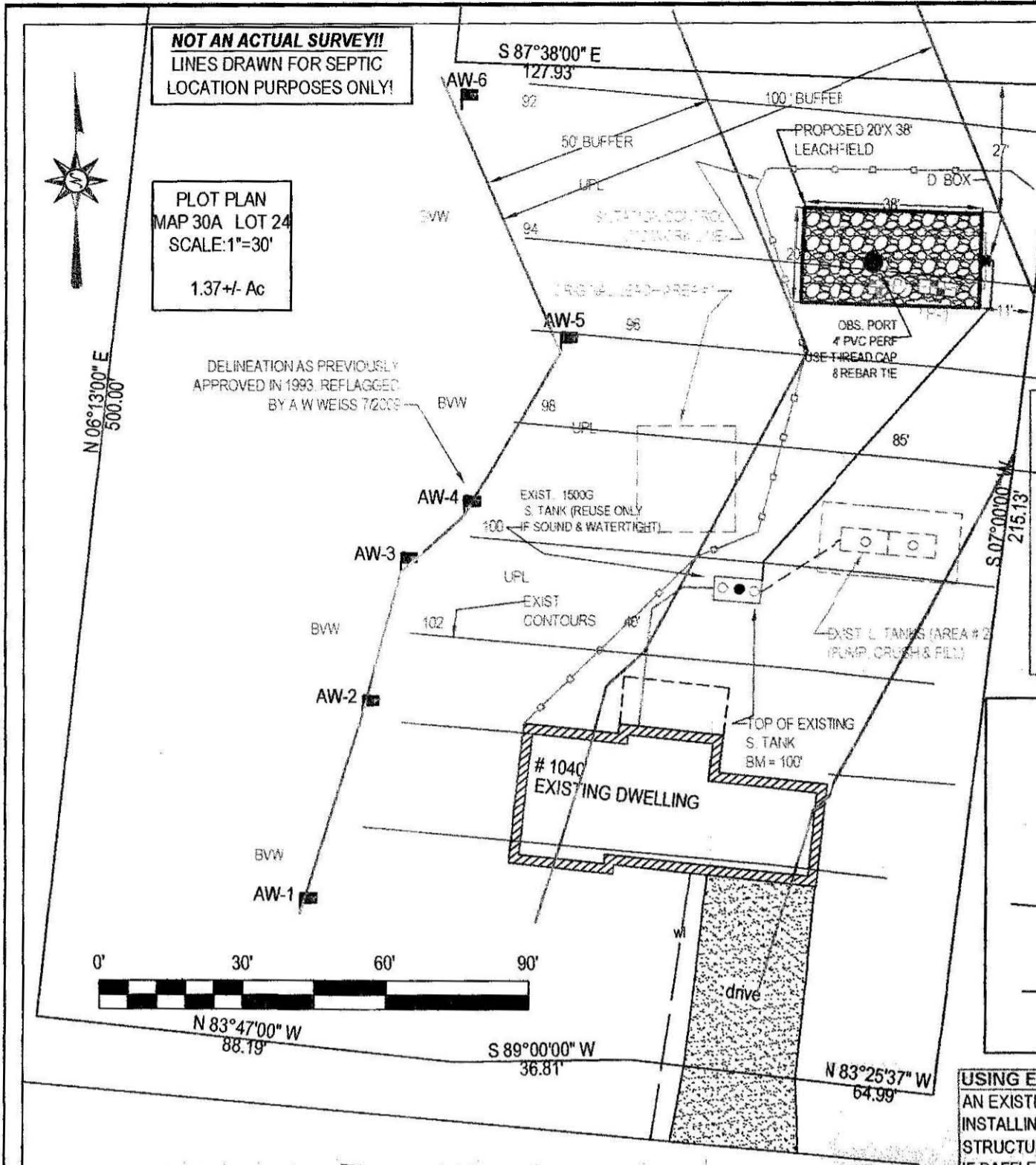
Ground Water _____



Ground Water None

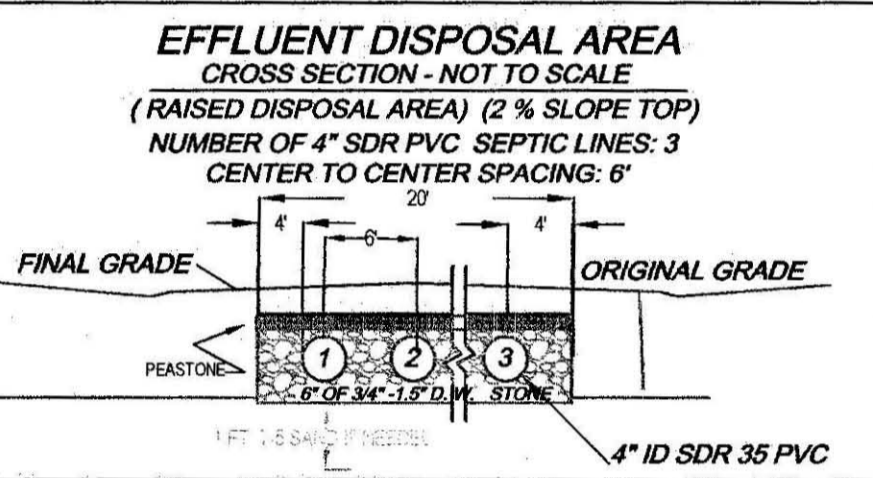
Ground Water _____

Percolation Rate at: 59"
< 2 min./inch



GRAVITY SLOPE SEPTIC SYSTEM OPERATION AND MAINTENANCE NOTES FOR HOMEOWNER.

- 1.) HAVE TANK PUMPED EVERY 2 YEARS.
- 2.) MAINTAIN AREA OVER SEPTIC SYSTEM AS GRASSY OR SIMILAR GROUND COVER.
- 3.) DO NOT PLANT ANY TREES OR DEEP ROOTING SHRUBS WITHIN 10 FEET OF SYSTEM.
- 4.) USE ONLY LIQUID DETERGENTS & LOW FLOW WASHERS.
- 5.) WIPE ALL OIL AND GREASE FROM COOKWARE AND DISPOSE IN TRASH NOT SEPTIC.
- 6.) All Toilets and Faucets must be confirmed to not be leaking, because one leaking fixture can fail a septic system in ONE DAY



WETLAND DELINEATION AND SEDIMENT CONTROL NOTES:

NOTE: All fabric silt fence to be backed with Double Staked HAY/Straw Bales (free of seeds IF POSS.) in order to prevent fugitive re-seeding in Resource Area.

1. NO ALTERATION OF SEDIMENT, STOCKPILING, FILLING OR CUTTING VEGETATION ON THE DOWNGRADIENT SIDE OF THE SEDIMENTATION BARRIER (SILT FENCE).
2. SEDIMENTATION BARRIER TO BE ERRECTED IN A STABLE AND LASTING MANNER AS SHOWN ON THE PLAN.
3. NOTIFY CONSERVATION ADMINISTRATOR AT LEAST 72 HOURS (IF REQ'D) PRIOR TO THE START OF ON-SITE WORK, AFTER COMPLETE ON SILT FENCE INSTALLATION.
4. AS SOON AS IS POSSIBLE WORK AREA SHALL BE SEEDED, REVEGETATED WITH GRASS OR SIMILAR GROUND COVER AND MULCHED UPON COMPLETION OF SITE WORK.
5. SILT FENCE TO REMAIN STANDING UNTIL REGROWTH IS SUFFICIENT TO CONTROL FUGITIVE SEDIMENT RUNOFF.
6. REGRADE WORK AREA AS NOTED TO PREVENT CHANGE IN SLOPE OR RUNOFF PATTERNS.

USING EXISTING SEPTIC TANKS:
AN EXISTING 1,000 or 1,500 GALLON SEPTIC TANK CAN BE USED IF UPON INSPECTION BY THE INSTALLING CONTRACTOR, IF THE TANK IS INSPECTED AND PUMPED AND FOUND TO BE STRUCTURALLY SOUND AT THE TIME OF THE SUBGRADE INSPECTION. IF BAFFLES ARE NOT BUILT IN, THAN SCH 40 PVC TEES MUST BE ADDED. IF TANK IS NOT SOUND THAN, NOTIFY ENGINEER IMMEDIATELY IN ORDER TO ACCOMMODATE A NEW 1,500 GALLON (MIN.) SEPTIC TANK.

DESIGN NOTES AND CALCULATIONS:

1.) 5 (BEDROOM HOME) X 110 GPD/BR = 550+ GPD. REQUIRED.

**-Use ONE FIELD: 20' WIDE X 38' LONG WITH 6\"/>

3. GARBAGE DISPOSAL NOT ALLOWED, ...
4. NO OTHER PRIVATE: WELLS WITHIN 150 FEET OF SAS.
5. WETLANDS WITHIN 100 FEET OF SAS. FILE Request for Determination of Applicability with Conservation Comm.
6. USE EXISTING 1,500 (GAL S. TANK AS NOTED (IF SOUND) & MAINTAIN 0.02 PITCH FROM SILL TO S. TANK
- INSTALL & INSPECT SCH. 40 TEES / BAFFLES (10\"/>

NOTE:
- ALL COMPONENTS OF NEW SYSTEM MUST BE MARKED WITH MAGNETIC TAPE. BE SURE TO MAINTAIN 3\"/>
- 7. USE LARGE STYLE ((6 OUTLET) D. BOX ONLY.
- 7A. ALL D. BOX OUTLET PIPES LEVEL FOR FIRST 2'. BOXES MUST HAVE 2\"/>

NOTE:
- D. BOXES WITH MORE THAN 9\"/>
- 8. USE APPROVED (.75\"/>

- CONFIRM STONE PROPERLY DOUBLE WASHED PRIOR TO PLACEMENT.

- 9. USE PROPER SCH. 40 PVC TEES AS SHOWN.
- 10. PRE & POST CONTOURS NOTED AS NECESSARY. RESERVE AS NOTED (not required for repairs).
- 11. SLOPE CALCS (SEE: CONTOURS), SUBGRADE INSP. REQ'D.
- 13. USE FIELD DUE TO TOPOGRAPHY AND SPACE OF LOT WITH RESPECT TO LOCATION AND ELEVATION OF RESIDENCE (310 CMR 15.240)
- 14. USE 2% MIN. SLOPE OVER SAS
- CLEAR TOP AND SUB TO 24\"/>

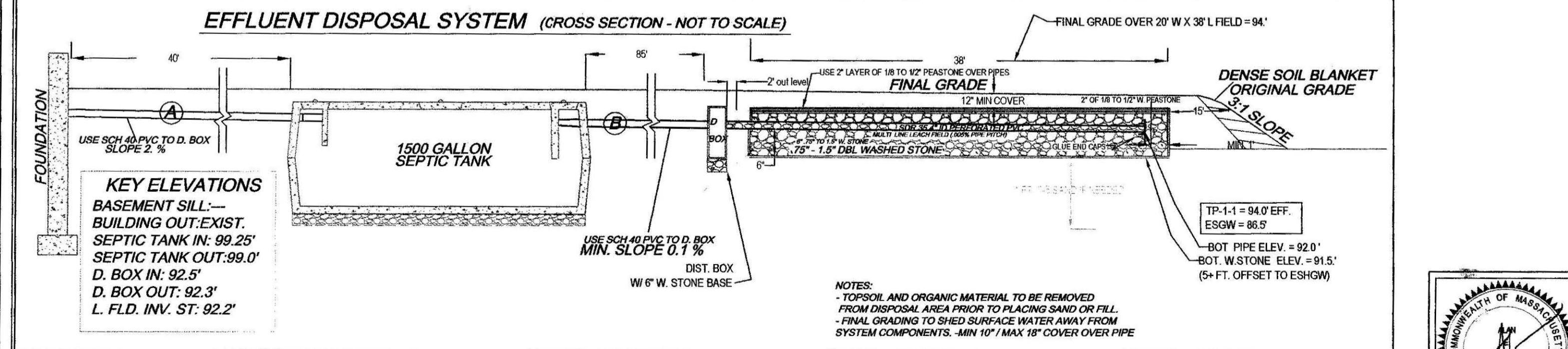
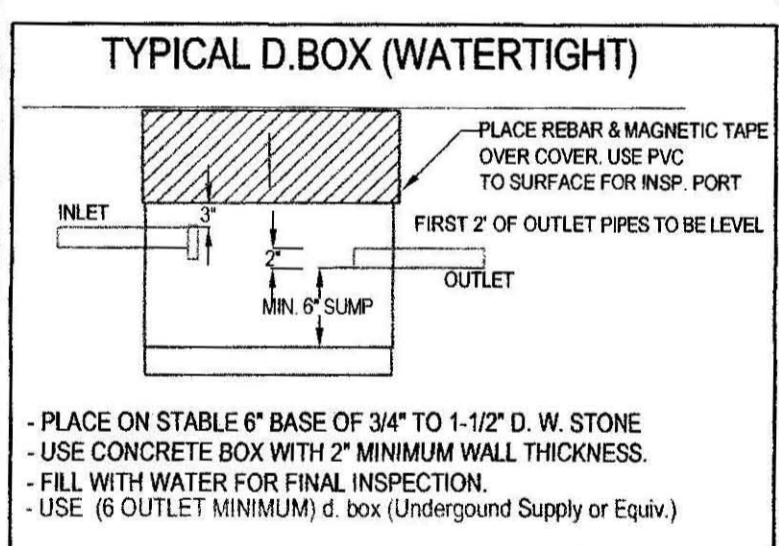
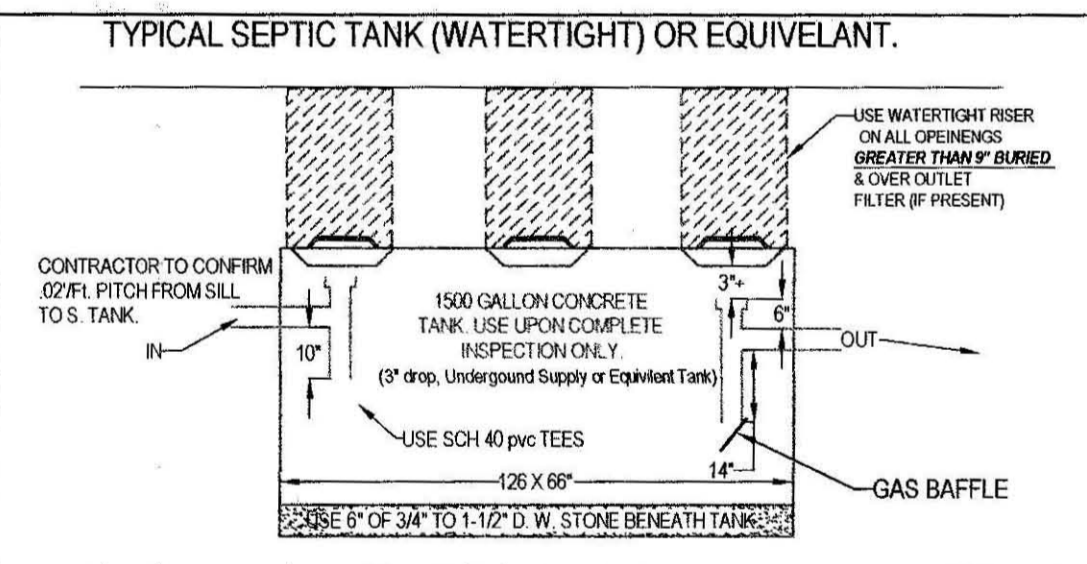
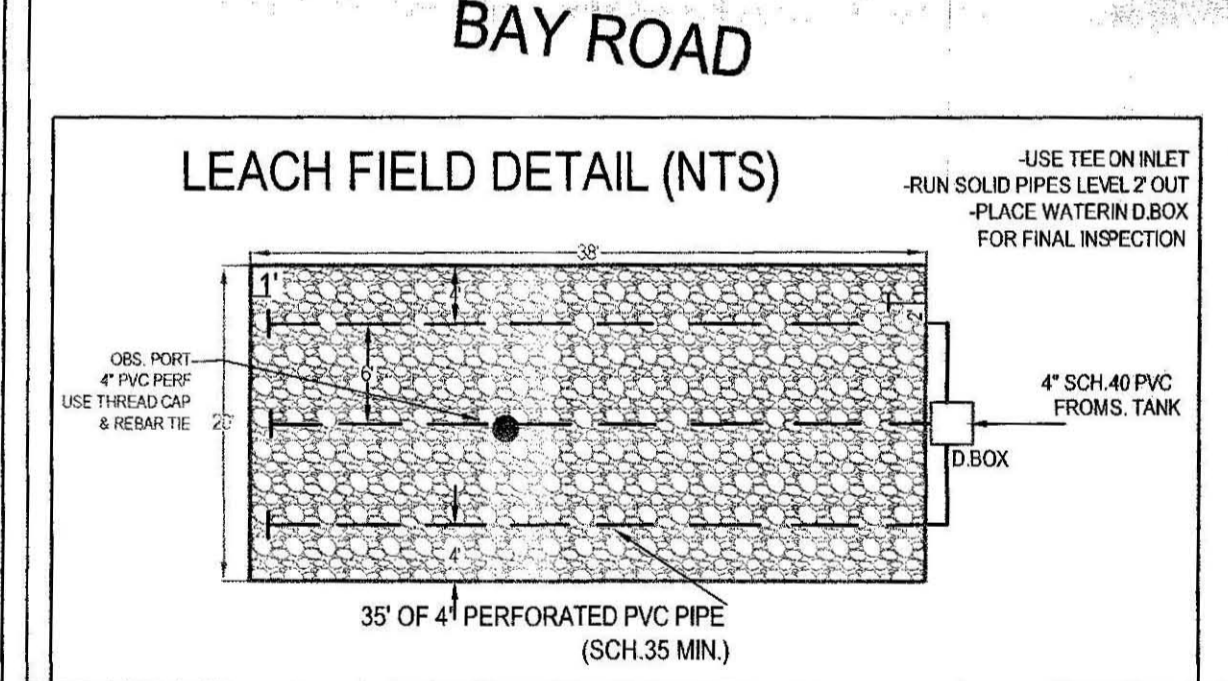
- CLEAR PAST BASE OF B (MIN. 24\") & SCARIFY UNDER BED PRIOR TO TITLE V SAND/STONE PLACEMENT.
- EXCAVATE EXISTING LOAM, SUB AND ANY EXISTING DEBRIS, DIRTY FILL OR PRIOR SYSTEM IF PRESENT.

- 15. SOIL EVALUATION BY A. WEISS, RS. (E. BOKINA, BOH AGENT, 07.15.2009).
- DEPTH OF PERC. .46\"/>

- PERC RATE = < 2 MIN / IN,
- CLASS 1 SOIL RATING

- 16. NO TREES WITHIN 10 FT. OF NEW LEACH FIELD.
- 17. ENGINEER & TOWN TO INSPECT SUBGRADE, TOWN AND ENGINEER INSPECT AT FINAL.
- 18. BM=100.00 @ (WALIK OUT DOOR SILL, as noted), CONFIRM PROPER PIPE SLOPES
- USE/INSPECT SCH. 40 PIPE FOR PIPE FROM HOUSE TO NEW OR EXISTING TANK
- 19. GRADE MULCH AND SEED OVER SAS AS NOTED.
- 20. INSTALLATION IN LOW GROUNDWATER SEASON RECOMMENDED.
- 21. USE OBSERVATION PORT NEAR CENTER OF STONE BED HAVE 4\"/>

TO BOTTOM OF STONE BED, WITH RISER TO 3\"/>**



TEST PIT LOG:

TP-1 EFF. ELEV. 94.0' EFF.				TP-2 @ PERC			
DEPTH	HORIZ.	TEXTURE (MUNSELL)	MATERIAL	DEPTH	HORIZ.	TEXTURE (MUNSELL)	MATERIAL
0-8"	A	FSL	10 YR 3.3	0-8"	A	FSL	10 YR 3.3
7-22"	Bw	LS	10 yr 4.6	7-22"	Bw	LS	2.5Y 5.6
22-120"	C1	S	10 YR 5.6	22-68"	C1	S	2.5Y 6.2
			5% COBBLES				MED. SAND
OXIDES: 90'				OBSERVED 7.5 YR 5.8			
EHWT: 90" = 86.50'				EHWT:			
STANDING H2O: NOT OBSERVED				STANDING H2O: NOT OBSERVED			
WEEPING: NOT OBSERVED				WEEPING: NOT OBSERVED			
BEDROCK: 120'+				BEDROCK: 120' -126'+			

SEPTIC SYSTEM REPAIR PLAN FOR LEE BARSTOW
1040 BAY ROAD
AMHERST, MA

Cold Spring Environmental Consultants Inc.
350 Old Enfield Road
Belchertown, MA 01007

PHONE: (413) 323-5957
FAX: (413) 323-4916
E-Mail: ACEWES@charter.net

DATE: 07.23.2009
DRAWN BY: ALAN WEISS
SCALE: 1"=30'

REVISED:
DRAWING NUMBER: 109-3198-0715

ATTENTION INSTALLER!!
CALL DIG SAFE BEFORE YOU DIG!! MASSACHUSETTS STATE LAW CHAPTER 82 SECTIONS 40 - 40E REQUIRE THAT PREMARKING OF GAS, ELECTRIC, WATER, TELEPHONE AND CABLE T.V. UTILITY LINES BE MADE A MINIMUM OF 72 HOURS PRIOR TO GROUND BREAK FOR ANY EXCAVATION.

NOTE: INSTALLER MUST CONTACT ENGINEER/BD OF HEALTH 48 HOURS PRIOR TO SUBGRADE INSPECTION. INSTALLER MUST HAVE ALL BREAK OUT FILL ON SITE AND IN PLACE PRIOR TO SIGN OFF BY ENGINEER AT TIME OF FINAL INSPECTION OR APPROVAL WILL NOT BE GIVEN TO BACKFILL.

