

623 STATION Rd.
STANLEY WARNER





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

April 27, 2010

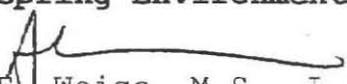
Amherst, Bd. Of Health

**RE: L. Field and S. Tank (Repair)
Installation Inspection
623 station Rd**

On this date, the writer inspected the installation of a new **(Septic System)**. The writer found the installation to be complete (except for completion of cover material) and in compliance with our plans and 310 CMR 15.000. The installer representative **(Addairs Septic.)** and our inspection noted that the system was built & installed properly, in accordance with the state/local regulations and our plans. The contractor was requested to have sufficient soil on site and properly cover the system according to our plans and may backfill the system after review by local Health Department representatives.

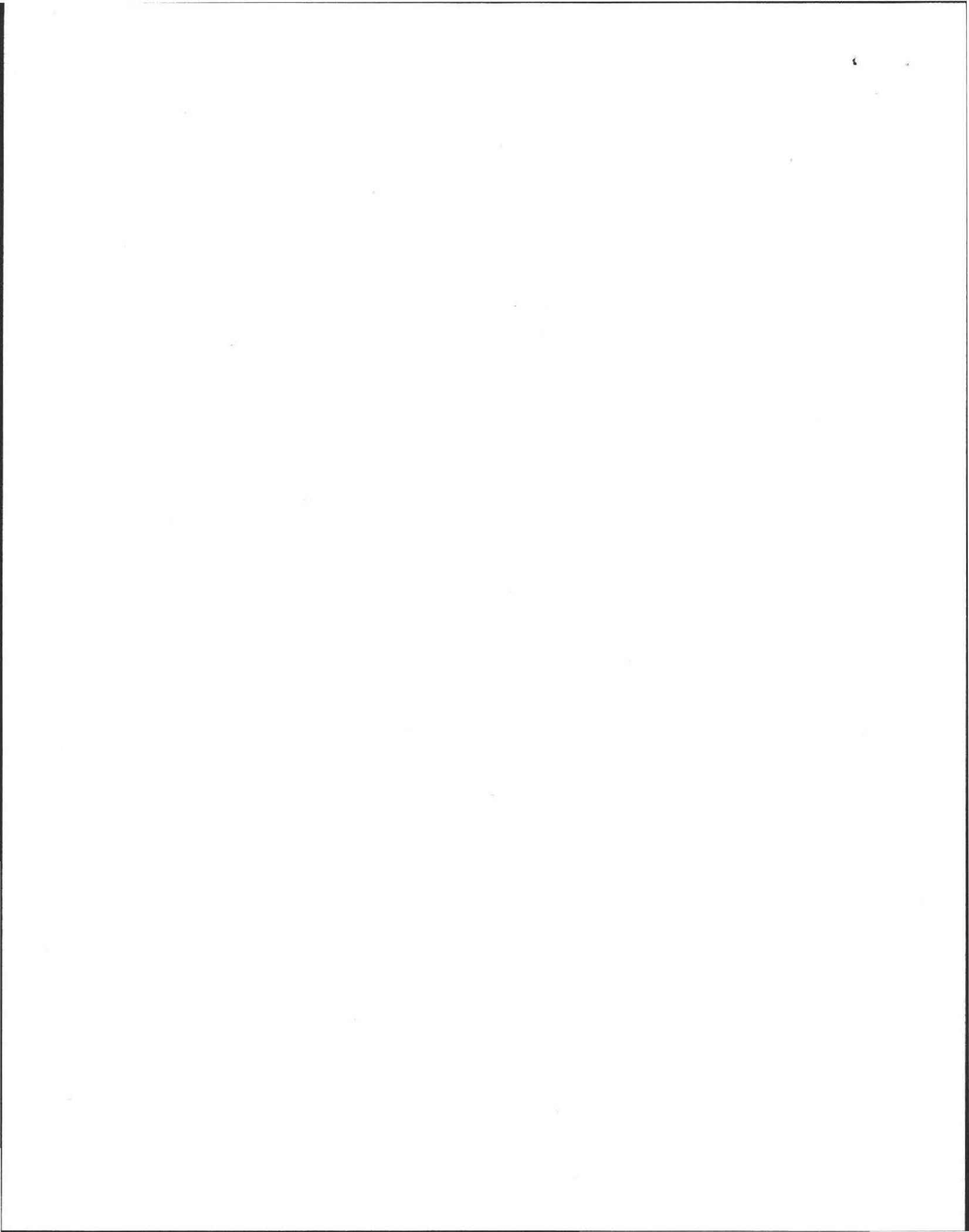
Sincerely,

Cold Spring Environmental Consultants, Inc.


 Alan E. Weiss, M.S., L.S.P.
 President
 Principal Hydrogeologist
 Licensed Site Professional #6442
 Registered Sanitarian #933

Cold Spring Environmental
350 Old Enfield Road
Belchertown, Ma. 01007

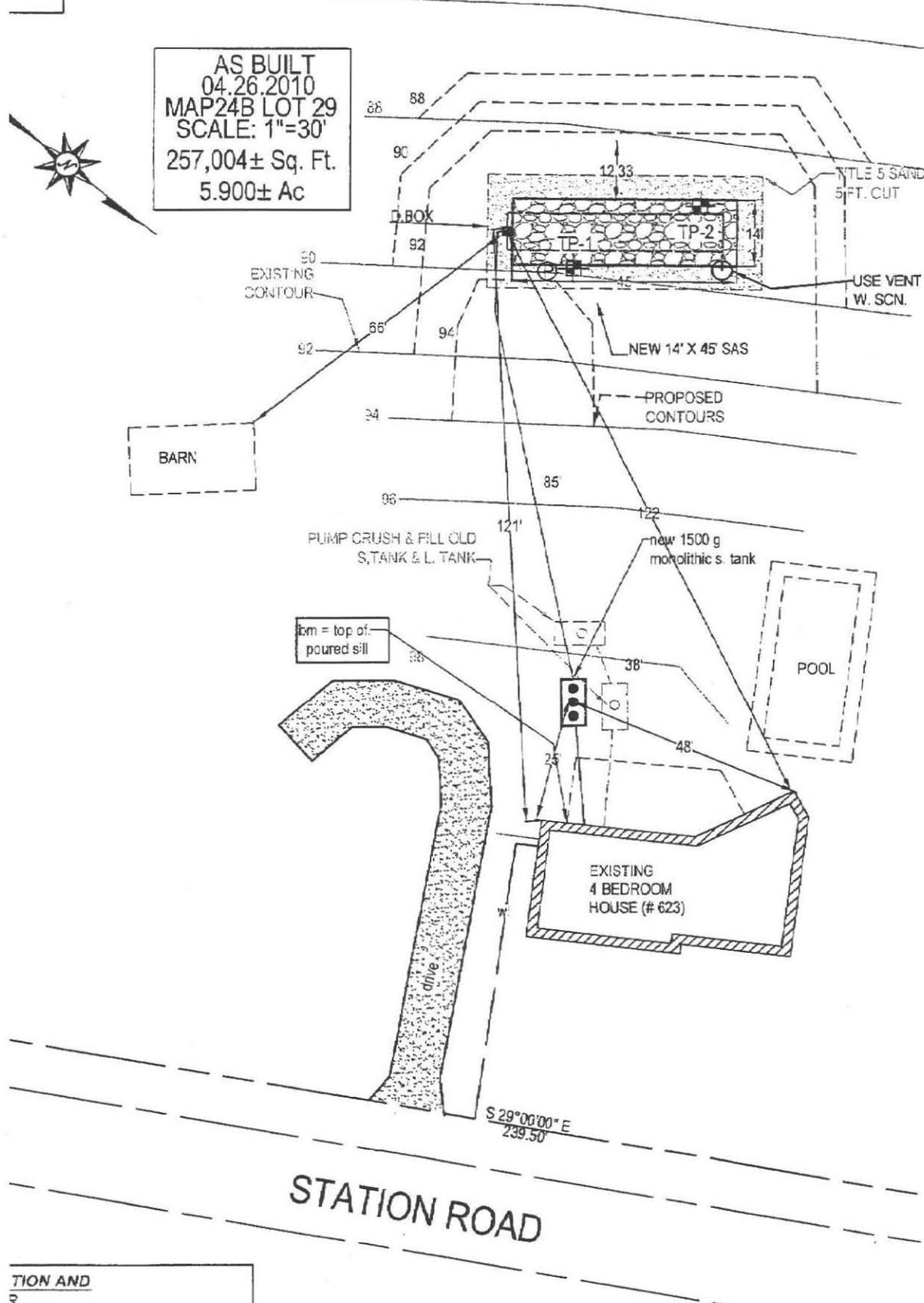
413-323-5957, phone
413-323-4916, fax



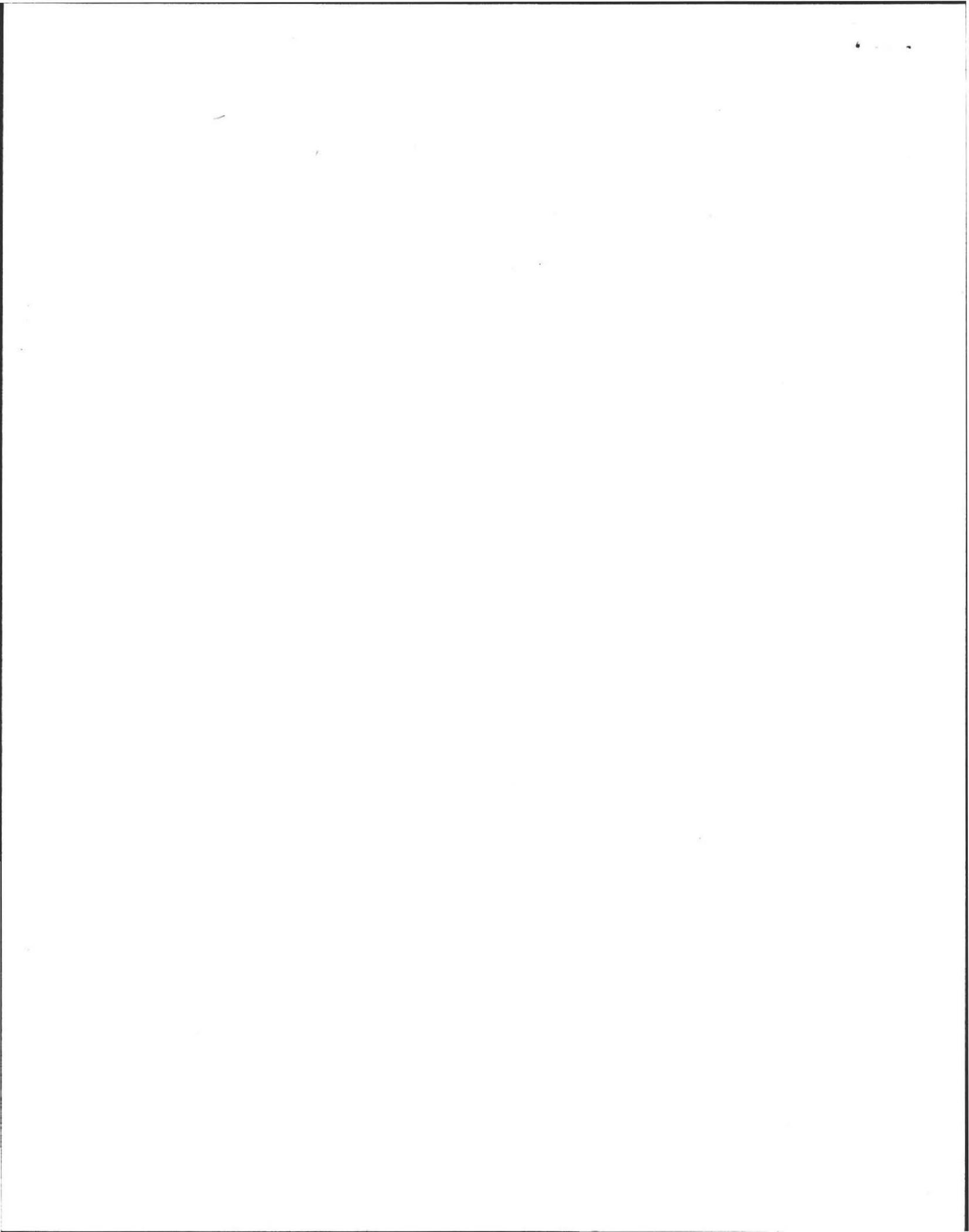
SEWER
SYSTEM

NOT AN ACTUAL SURVEY!!
LINES DRAWN FOR SEPTIC
LOCATION PURPOSES ONLY!

AS BUILT
04.26.2010
MAP24B LOT 29
SCALE: 1"=30'
257,004± Sq. Ft.
5.900± Ac



NOTION AND
R.



No. 1004

FEE

COMMONWEALTH OF MASSACHUSETTS

Board of Health, Amherst, MA.

APPLICATION FOR DISPOSAL SYSTEM CONSTRUCTION PERMIT

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



Location	<u>623 Station Rd.</u>	Owner's Name	<u>STANLEY WARNER</u>
Map/Parcel#	<u>24B/29</u>	Address	<u>623 Station Rd.</u>
Lot#	<u>29</u>	Telephone#	<u>253-9848</u>
Installer's Name	<u>Adair Septic</u>	Designer's Name	<u>Alan Weiss</u>
Address	<u>Amherst, MA.</u>	Address	<u>Belchertown, MA.</u>
Telephone#	<u>531-7921</u>	Telephone#	<u>323-5957</u>

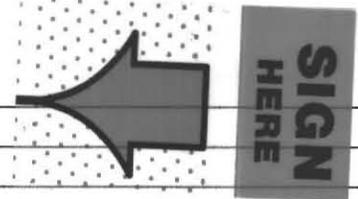
Type of Building Residence Lot Size 5.9 Act sq. ft.
 Dwelling - No. of Bedrooms 4 Bedroom Garbage grinder ()
 Other - Type of Building _____ No. of persons _____ Showers (), Cafeteria ()
 Other Fixtures _____
 Design Flow (min. required) 10 gpd Calculated design flow 440 Design flow provided 466 gpd
 Plan: Date 3/30/2010 Number of sheets 1 Revision Date _____
 Title Septic System Repair Plan
 Description of Soil(s) CLASS I, CS
 Soil Evaluator Form No. _____ Name of Soil Evaluator A. Weiss Date of Evaluation 3-25-2010

DESCRIPTION OF REPAIRS OR ALTERATIONS New S. tank + 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 Stanley Warner Date 4/6/10

Inspections _____



No. _____

FEE _____

COMMONWEALTH OF MASSACHUSETTS

Board of Health, Amherst, 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: ADAIR CONSTRUCTION
at 623 STATION

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. 1004, dated _____, Approved Design Flow 466 (gpd)

Installer ADAIR, MITT HAWY Inspector: Doug Quatman Date: 4/26/10

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

No. 1004

FEE 150⁰⁰

COMMONWEALTH OF MASSACHUSETTS

Board of Health, Amherst, MA.

DISPOSAL SYSTEM CONSTRUCTION PERMIT

Permission is hereby granted to; Construct () Repair () Upgrade () Abandon () an individual sewage disposal system at 623 STATION as described in the application for

Disposal System Construction Permit No. 1004, dated 4/6/10

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

Date 4/6/10 Board of Health Doug Quatman





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: 3/25/2010

Commonwealth of Massachusetts

AMHERST, Massachusetts

Soil Suitability Assessment for On-site Sewage Disposal

Performed By: A. Weiss
Witnessed By: G. Court Macche

Date: 3/25/2010

Location Address or Lot # <u>623 STATION RD.</u>	Owner's Name, Address, and Telephone # <u>STANLEY WARNER 623 STATION RD</u>
New Construction <input type="checkbox"/> Repair <input checked="" type="checkbox"/>	

253-9848

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: _____



x

2

.

✓

Location Address or Lot No. 623 State RD

On-site Review

Deep Hole Number H2 Date: 3/25/2010 Time: 1:30 Weather CLOUDS 50°

Location (identify on site plan) _____

Land Use Res. Slope (%) 2 Surface Stones yes

Vegetation Deciduous

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 50' feet
 Drinking Water Well _____ 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)
#1 0-16" 16-22" 22"-96"	A	FSL	10YR 3/3	26" 10YR 4/8 2.4/1	-friable.
	Bw	LS	10YR 4/6		-friable, Loose
	C1	LS	10YR 6/8		F-C. SAND, 10% Cobbles
#2 0-16" 16"-24" 24"-86"	A	FSL	10YR 3/3	26"	-friable.
	Bw	LS	10YR 4/6		-friable, Loose
	C1	LS	10YR 6/8		F-C. SAND + GRAVEL 10% Cobbles.

* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) Outwash Depth to Bedrock: 96"
 Depth to Groundwater: Standing Water in the Hole: 70" Weeping from Pit Face: 36"
 Estimated Seasonal High Ground Water: 26"



1
2
3

Location Address or Lot No. 623 Station

COMMONWEALTH OF MASSACHUSETTS

, Massachusetts

Percolation Test*		
Date: <u>3/25/2010</u>		Time: <u>1:00</u>
Observation Hole #	<u>P₁</u>	
Depth of Perc	<u>38"</u>	<u>Repair</u>
Start Pre-soak	<u>12:55</u>	
End Pre-soak	<u>1:05</u>	
Time at 12"	<u>1:05</u>	
Time at 9"	<u>1:15</u>	
Time at 6"	<u>1:30</u>	
Time (9"-6")	<u>15</u>	
Rate Min./Inch	<u>5</u>	

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

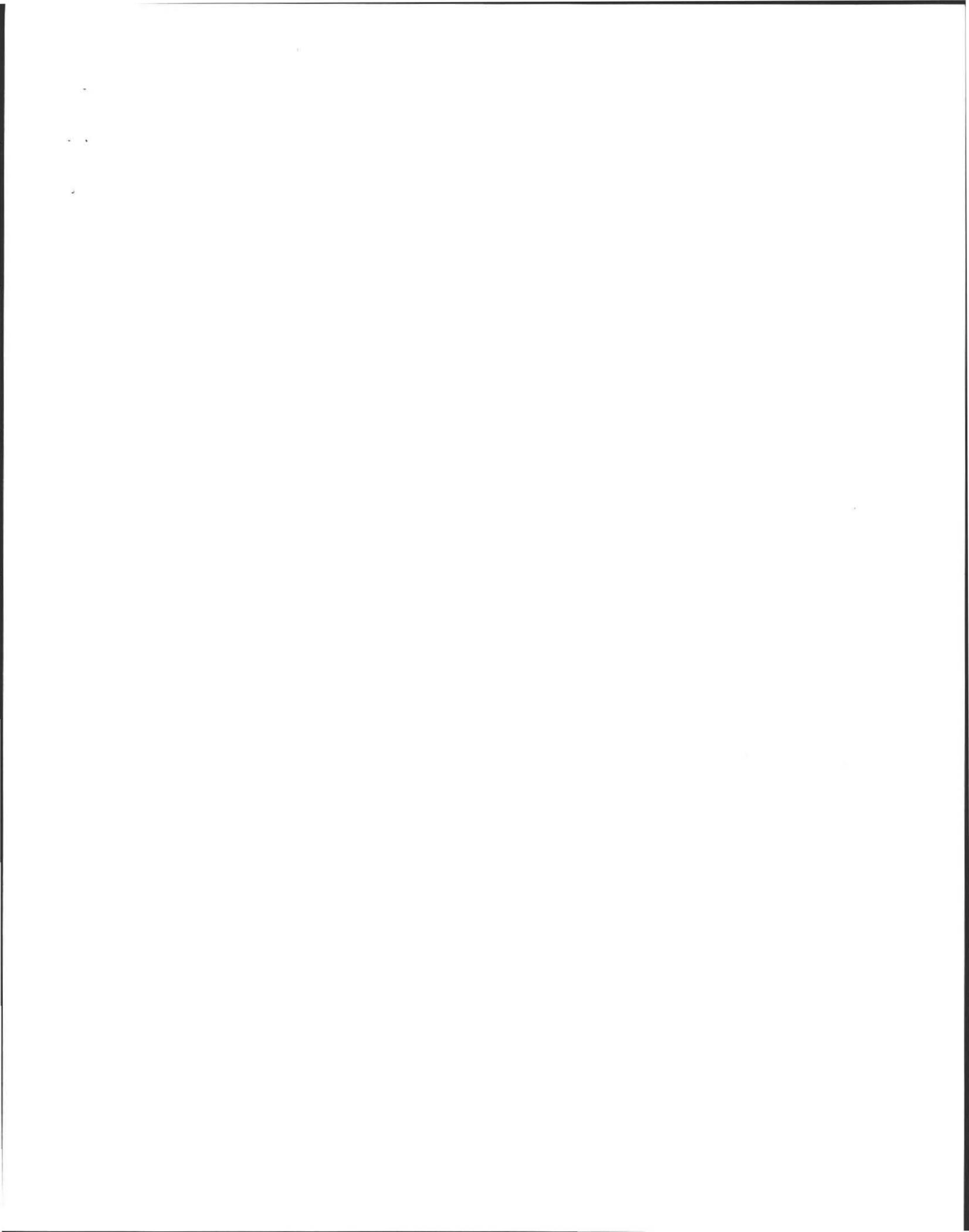
Site Passed Site Failed

Performed By: A. WEISS

Witnessed By: G Courtmanche

Comments: _____





Location Address or Lot No. 673 Station 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 26 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 6/19/95 (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 Al Date 3/25/2010



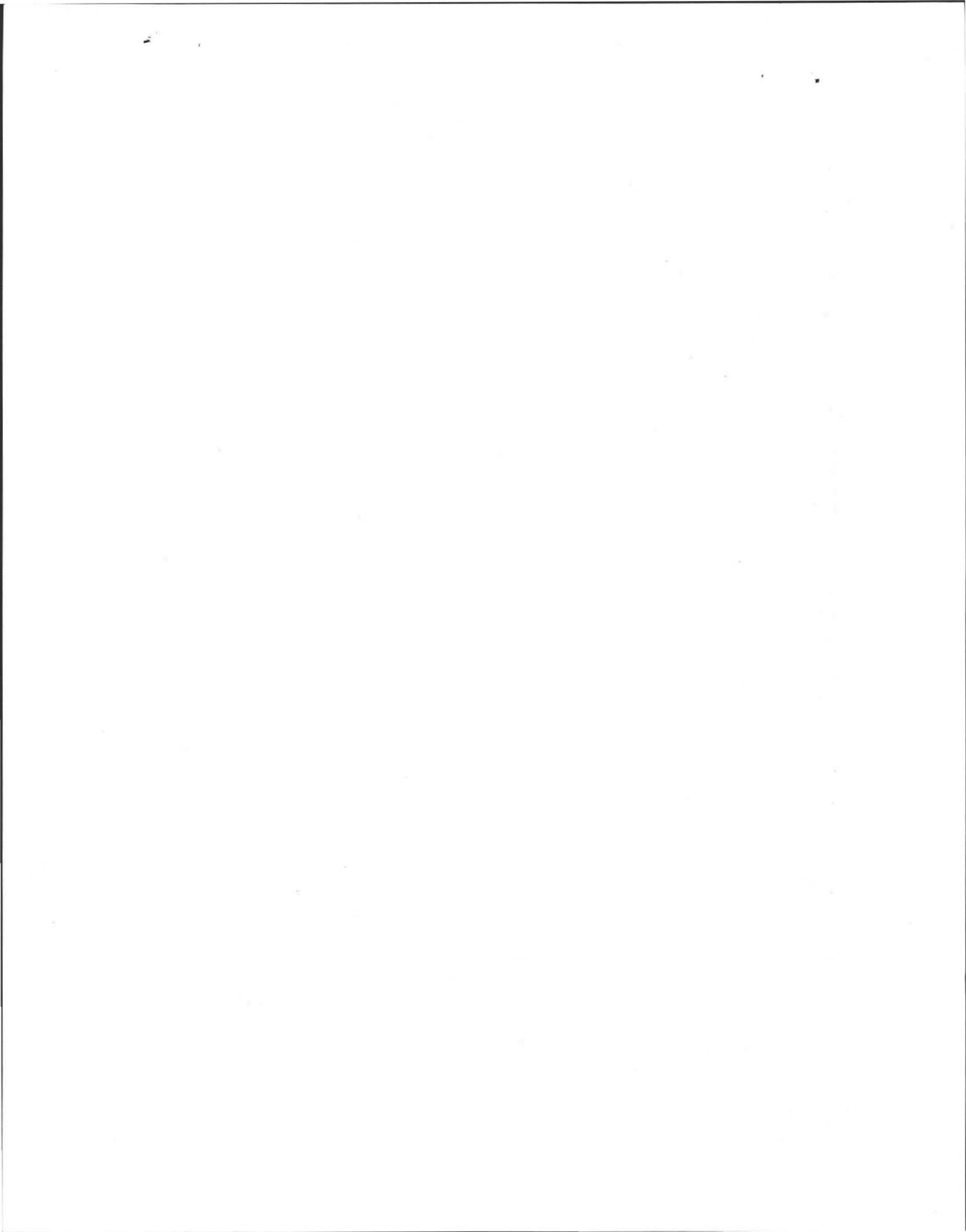
1
2
3

Plan: 1004

Designed by: Alan Weigand
CHECK LIST FOR SEPTIC PLANS

- Application page attached to plan
- PE or RS stamp, date, signature
- Variances to property line setback distances must have Surveyor Stamp 15220 (3) (NA)
- Legal boundaries noted
- Easements noted
- Dwellings and buildings existing or proposed noted
- Location of driveway or parking areas, other impervious areas
- Location and dimensions of reserve area (new) CMR 15.248(1), 15.104(4) Repair N/A
- System design calculations
- Garbage grinder Y or N
- Benchmark not disturbed during construction, within 75 feet of facility CMR 15.220 (4)(q)
- North arrow CMR 15.200 (4) (g)
- Contours
- Deep hole location and data
- Perc hole location and data
- Elevations
- Names of approving authority and soil evaluator CMR 15.211 p. 49
- Location of every water supply, public and private CMR 15.220(k):
 - Within 400 feet of system in case of surface water and gravel packed public water supply
 - Within 250 feet of system in case of tubular public water supply
 - Within 150 feet of private supply wells 100' septic sys. ; 50' tank
- Well statement if applicable
- Location of any surface waters, rivers, vegetated wetlands
- Location of water lines and other subsurface utilities
- Observed and adjusted ground water elevation in the vicinity of system 15.220 (4)(n)
- Profile of system
- Locus plan to show location of facility, including nearest street
- Materials of construction and specs for system
- Gas Baffle 15227.4
- Pipe in center line of tank 310 CMR 15.227, 15.06(8)
- Double washed stone
- Schedule 40 PVC for trafficked areas, house to tank 35'
- Distances noted from house to tank, etc.
- If dosing is proposed, design and specs of dosing system (NA)
- When alternative technology is required, complete plan and specs, including hydraulic profile (NA)
- Trenches preferred over beds CMR 15.240 (6) FIDDIS
- Buoyancy calculations for tanks or components partly below H2O table 15.221(8) p. 56 (NA)
- 3 to 1 slope outside of mound, toe ending 5 feet from property line
- Local upgrade requests on the plan NA
- Local upgrade forms attached to application NA
- Note on plan listing all variances sought in conjunction with the plan N/A

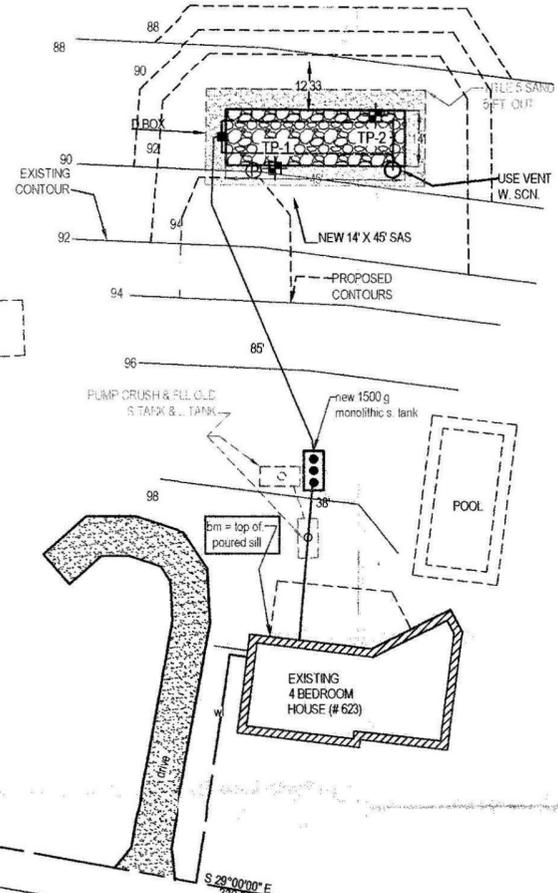
NOTES: approved on 4/6/10 [Signature]



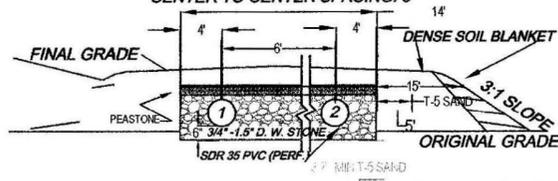
NOTE TO INSTALLER: A PLUMBER MUST INSPECT INSIDE PLUMBING AND FIX ANY LEAKING FAUCETS OR TOILETS IF FOUND TO BE LEAKING OR FLOWING IMPROPERLY INTO SEPTIC SYSTEM PRIOR TO FINAL INSPECTION

NOT AN ACTUAL SURVEY!
LINES DRAWN FOR SEPTIC LOCATION PURPOSES ONLY!

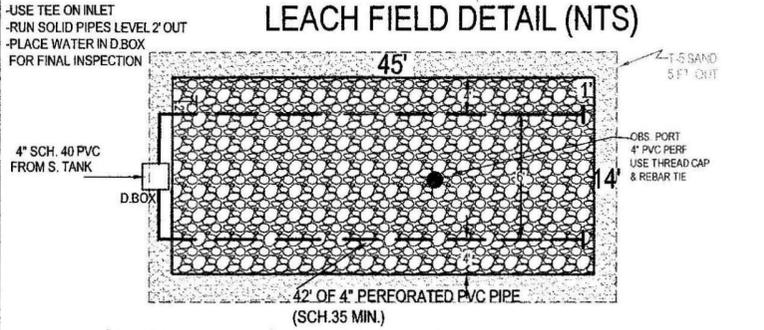
PLOT PLAN
MAP24B LOT 29
SCALE: 1"=30'
257,004± Sq. Ft.
5.900± Ac



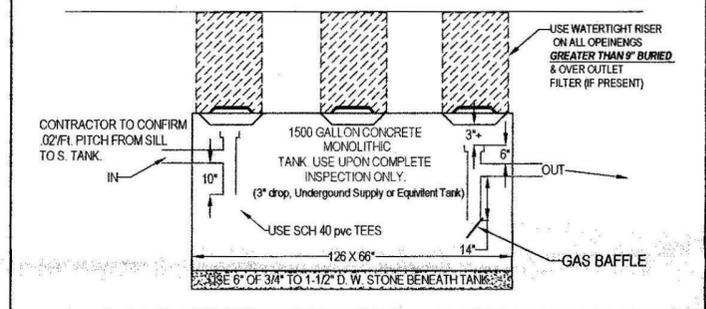
EFFLUENT DISPOSAL AREA
CROSS SECTION - NOT TO SCALE
(RAISED DISPOSAL AREA) (2% SLOPE TOP)
NUMBER OF 4" SDR PVC SEPTIC LINES: 2
CENTER TO CENTER SPACING: 6'



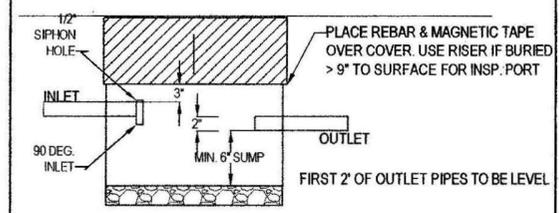
LEACH FIELD DETAIL (NTS)



TYPICAL NEW SEPTIC TANK (WATERTIGHT) OR EQUIVELANT.

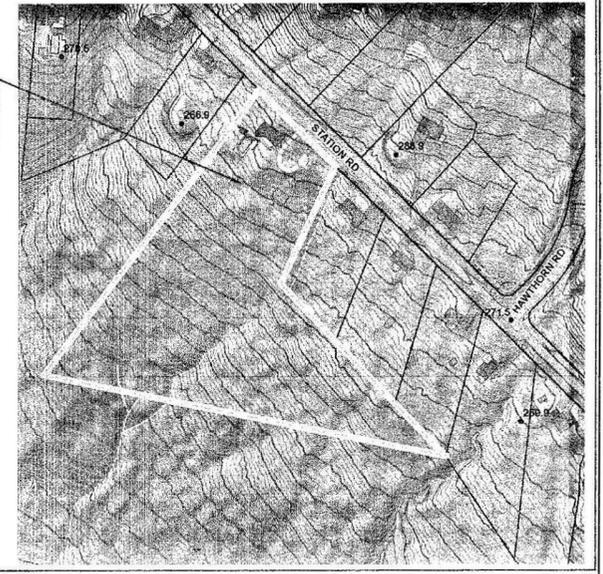


TYPICAL D.BOX (WATERTIGHT)



- PLACE ON STABLE 6" BASE OF 3/4" TO 1-1/2" D.W. STONE
- USE CONCRETE BOX WITH 2" MINIMUM WALL THICKNESS.
- FILL WITH WATER FOR FINAL INSPECTION.
- USE LARGE STYLE D.BOX 6 outlet (Underground Supply)

SUBJECT SITE LOCATION



DESIGN NOTES AND CALCULATIONS:

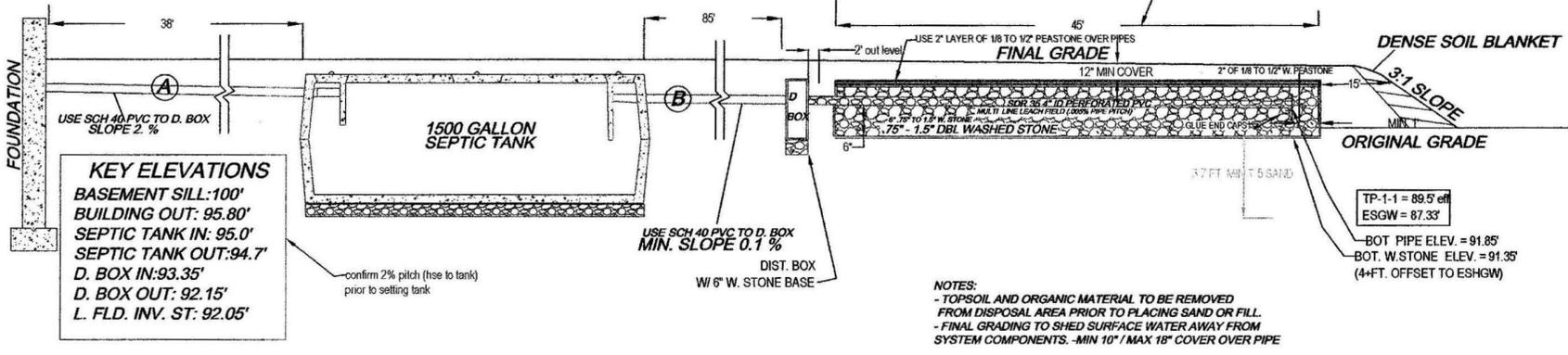
- 1.) 4 BEDROOM HOME X 110 GPD/BR = 440 GPD. REQUIRED.
 - **USE ONE FIELD: 14' WIDE X 45' LONG WITH 6" OF 3/4" TO 1-1/2" DBL WASHED STONE BELOW INVERT**
 - BOTTOM AREA: 14' W X 45' L = 630 SF.
 - SIDE AREA: 0 SF.
 - TOTAL AREA: 630 SF X 0.74 GAL/SF = 466 GPD
3. GARBAGE DISPOSAL NOT ALLOWED, ...
4. NO OTHER PRIVATE WELLS WITHIN 100 FEET OF SAS.
5. NO OTHER WETLANDS WITHIN 100 FEET OF SAS
6. USE NEW 1,500 GAL S. TANK AS NOTED & 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. REQD.
 - 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. ON 3/25/10 (G. COURTMANCHE, BOH AGENT)
 - DEPTH OF PERC. 36"
 - PERC RATE = 5 MIN./IN.
 - CLASS 1 SOIL RATING
 - 16. NO TREES WITHIN 10 FT. OF NEW LEACH FIELD.
 - 17. ENGINEER & TOWN (IF REQUIRED) TO INSPECT SUBGRADE, TOWN AND ENGINEER INSPECT AT FINAL.
 - 18. BM-100.00 @ (POURED 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.

GRAVITY SLOPE SEPTIC SYSTEM OPERATION AND MAINTENANCE NOTES FOR HOMEOWNER.

- 1.) HAVE TANK PUMPED EVERY 2 YEARS.
- 2.) MAINTAIN AREA OVER SEPTIC SYSTEMS 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.

NOTE TO HOMEOWNER: MOUNDS, WHERE USED, ARE REQUIRED BY STATE CODE TO MAXIMIZE THE DISTANCE FROM THE BOTTOM OF THE LEACHING FIELD TO THE TOP OF THE ESTIMATED HIGH GROUNDWATER. THIS "SEPARATION" FROM HIGH GROUNDWATER (3, 4, OR 5 FEET), IS NOT THE SAME AS THE HEIGHT OF THE FINISHED MOUND SURFACE. THE ACTUAL FINISHED MOUND IS TYPICALLY HIGHER THAN THE "SEPARATION". BY SIGNING PERMIT YOU ACKNOWLEDGE THAT COLD SPRING ENVIRONMENTAL CONSULTANTS INC. IS NOT RESPONSIBLE FOR THE AESTHETICS OF FILLED OR WOUNDED SYSTEMS.

EFFLUENT DISPOSAL SYSTEM (CROSS SECTION - NOT TO SCALE)

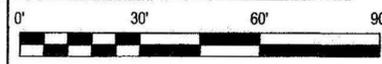


KEY ELEVATIONS
BASEMENT SILL: 100'
BUILDING OUT: 95.80'
SEPTIC TANK IN: 95.0'
SEPTIC TANK OUT: 94.7'
D. BOX IN: 93.35'
D. BOX OUT: 92.15'
L. FLD. INV. ST: 92.05'

- NOTES:**
- TOPSOIL AND ORGANIC MATERIAL TO BE REMOVED FROM DISPOSAL AREA PRIOR TO PLACING SAND OR FILL.
 - FINAL GRADING TO SHED SURFACE WATER AWAY FROM SYSTEM COMPONENTS. MIN 10" / MAX 18" COVER OVER PIPE

ATTENTION INSTALLER!!
CALL DIG SAFE BEFORE YOU DIG!! MASSACHUSETTS STATE LAW CHAPTER 82 SECTIONS 40 - 40E REQUIRE THAT MARKING 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.



TEST PIT LOG:				SOIL EVALUATOR: A. WEISS, RS				DATE OF EVALUATION: 3/25/10	
TP-1 EFF. ELEV: 89.70				TP-2 EFF. ELEV: 89.5 eff.					
DEPTH	HORIZ.	TEXTURE:	MATERIAL:	DEPTH	HORIZ.	TEXTURE:	MATERIAL:		
0-16	A	FSL	10 YR 3/3	0-16	A	FSL	10 YR 3/3		
16-22	Bw	LS	10 YR 4/6	16-24	Bw	LS	10 YR 4/6		
22-96	C1	LS	10 YR 6/8	24-86	C1	LS	10 YR 6/8		
OXIDES: 2.5 Y 4/1 10 YR 6/8 OBSERVED @ 26"				OXIDES: 2.5 Y 4/1 10 YR 6/8 OBSERVED @ 26"					
EHWT: 26"				EHWT: 26" = 87.33'					
STANDING H2O: 70"				STANDING H2O: 70"					
WEEPING: 36"				WEEPING: 36"					
BEDROCK: 96"+				BEDROCK: 86"+					

SEPTIC SYSTEM REPAIR PLAN FOR STANLEY WARNER
623 STATION ROAD
AMHERST, MA.

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

PROJECT: (413) 323-5957
DATE: 3/30/10
SCALE: 1"=30'

DRAWN BY: ARS
CHECKED BY: AEW

REVISED:
DRAWING NUMBER: 110-3327-0325

e-Mail: AEW@CSCEC.com