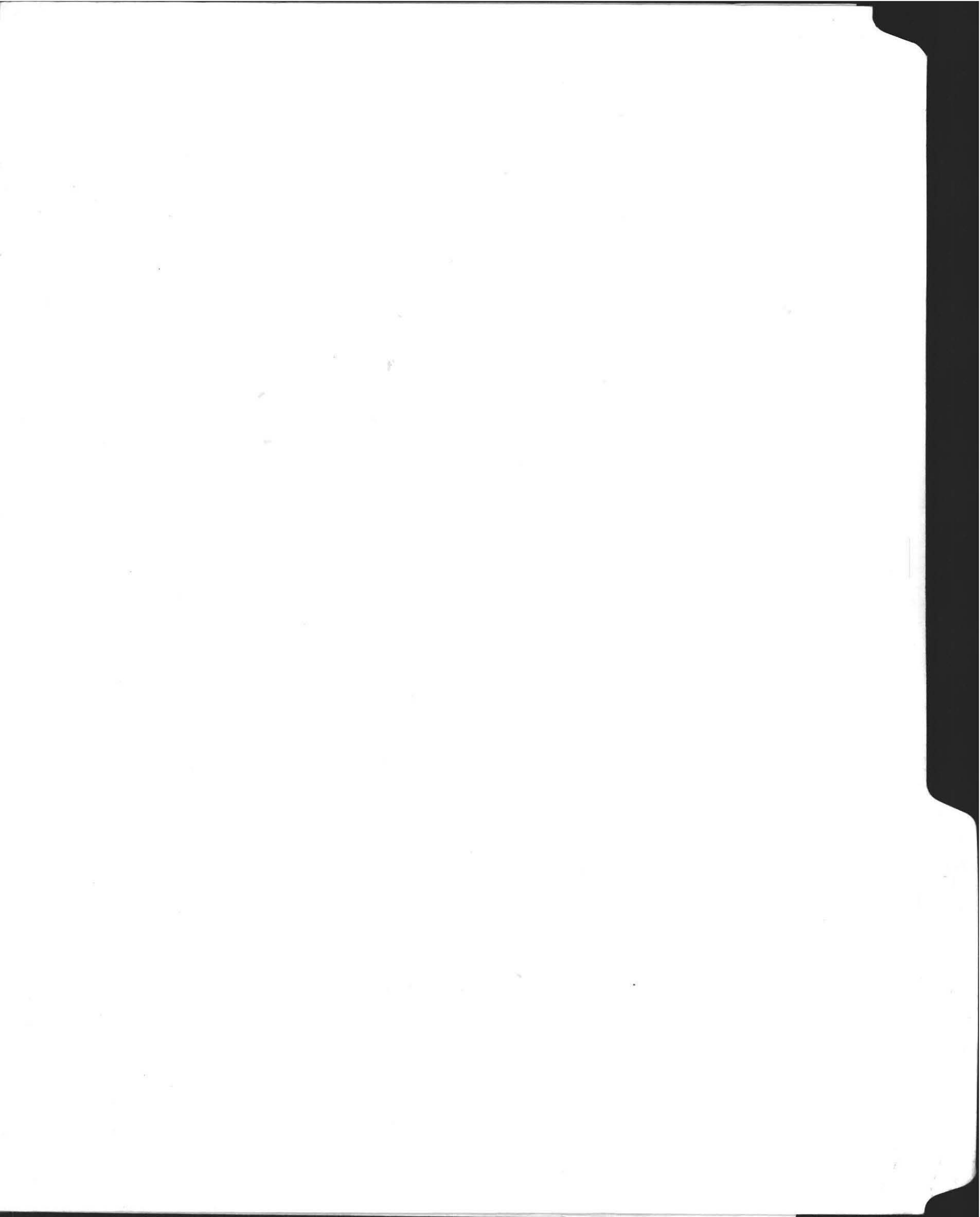


Benjamin O. Oke  
152 Wildflower Dr.



No. 02-10

THE COMMONWEALTH OF MASSACHUSETTS

FEE 75

BOARD OF HEALTH

Town Amherst OF

APPLICATION FOR DISPOSAL SYSTEM CONSTRUCTION PERMIT

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

Location <u>152 Wildflower Dr.</u>	Owner's Name <u>Benjamin O. Oke</u>
Map/Parcel #	Address <u>152 Wildflower Dr., Amherst, MA 01002</u>
Lot #	Telephone # <u>(413) 253-7896</u>
Installer's Name <u>W.W. Clark Excavating</u>	Designer's Name <u>Robert E. Costa PE</u>
Address <u>Pratt Corner Rd., Shutesbury, MA</u>	Address <u>Amherst Civil Engineering</u>
Telephone # <u>(413) 259-1411</u>	Address <u>P.O. Box 3312, Amherst, MA 01004</u>
	Telephone # <u>(413) 256-3400</u>

Type of Building: Single family house Lot Size 20,198.75 Sq. feet  
 Dwelling — No. of Bedrooms \_\_\_\_\_ Garbage Grinder ( NO )  
 Other — Type of Building \_\_\_\_\_ No. of persons \_\_\_\_\_ Showers ( ), Cafeteria ( )  
 Other fixtures \_\_\_\_\_

Design Flow (min. required) 440 gpd Calculated design flow 484 gpd Design flow provided \_\_\_\_\_ gpd  
 Plan: Date 7/31/02 Number of sheets \_\_\_\_\_ Revision Date 9/3/02  
 Title "Sewage Disposal Repair Plan"

Description of Soil(s) Attached  
 Soil Evaluator Form No. \_\_\_\_\_ Name of Soil Evaluator Robert E. Costa Date of Evaluation 7/26/02

DESCRIPTION OF REPAIRS OR ALTERATIONS enlarge replacement leach pit installed in 8/2002 for a 4th bedroom

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

Signed Robert E. Costa (for Ben Oke) Date 9/6/02

Inspections \_\_\_\_\_

FORM 1 - APPLICATION FOR DSCP DEP APPROVED FORM 5/96

No. 02-10 THE COMMONWEALTH OF MASSACHUSETTS  
Amherst BOARD OF HEALTH  
**CERTIFICATE OF COMPLIANCE**

Description of Work:  Individual Component(s)  Complete System

The undersigned hereby certify that the Sewage Disposal System; Constructed ( ), Repaired ( ), Upgraded ( )  
 by: Ben Oke

at 152 Wildflower Dr.  
 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. 02-10 dated 9/12/02. Approved Design Flow \_\_\_\_\_ (gpd)

Installer: W.W. Clark W.W. Clark  
 Designer: Robert E. Costa Inspector: David P. ... Date 9/12/02

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

FORM 3 - CERTIFICATE OF COMPLIANCE DEP APPROVED FORM 5/96



No. 02-10 THE COMMONWEALTH OF MASSACHUSETTS  
Amherst BOARD OF HEALTH

**DISPOSAL SYSTEM CONSTRUCTION PERMIT**

Permission is hereby granted to Construct ( ) Repair (X) Upgrade ( ) Abandon ( ) an individual sewage disposal system at 152 Wildflower Dr. as described in the application for Disposal System Construction Permit No. 02-10, dated 9/13/02.

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

Date 9/9/02 Board of Health David P. ...

FORM 2 - DSCP DEP APPROVED FORM 5/96

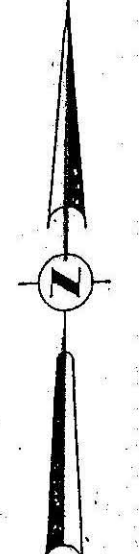
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Handwritten text at the bottom of the page, including a signature and possibly a date, though the text is mostly illegible.

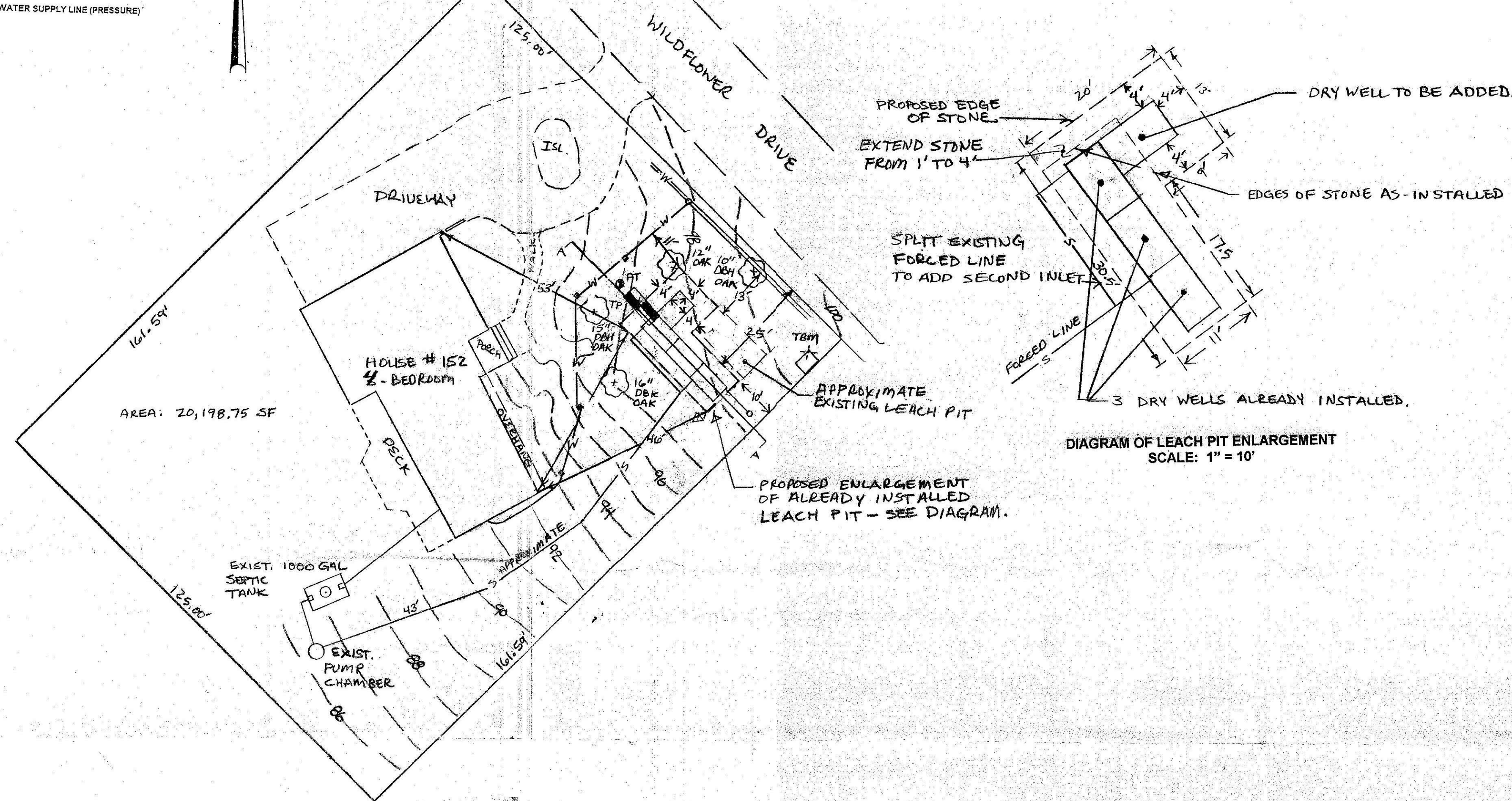
**LEGEND**

---XXX---	CONTOUR LINE (1' INTERVAL)
---XXX---	PROPOSED CONTOUR (1' INTERVAL)
□ TPx	DEEP OBSERVATION HOLE
○ PTx	PERCOLATION TEST
○	DECIDUOUS TREE
○	CONIFEROUS TREE
W	WATER SUPPLY LINE (PRESSURE)

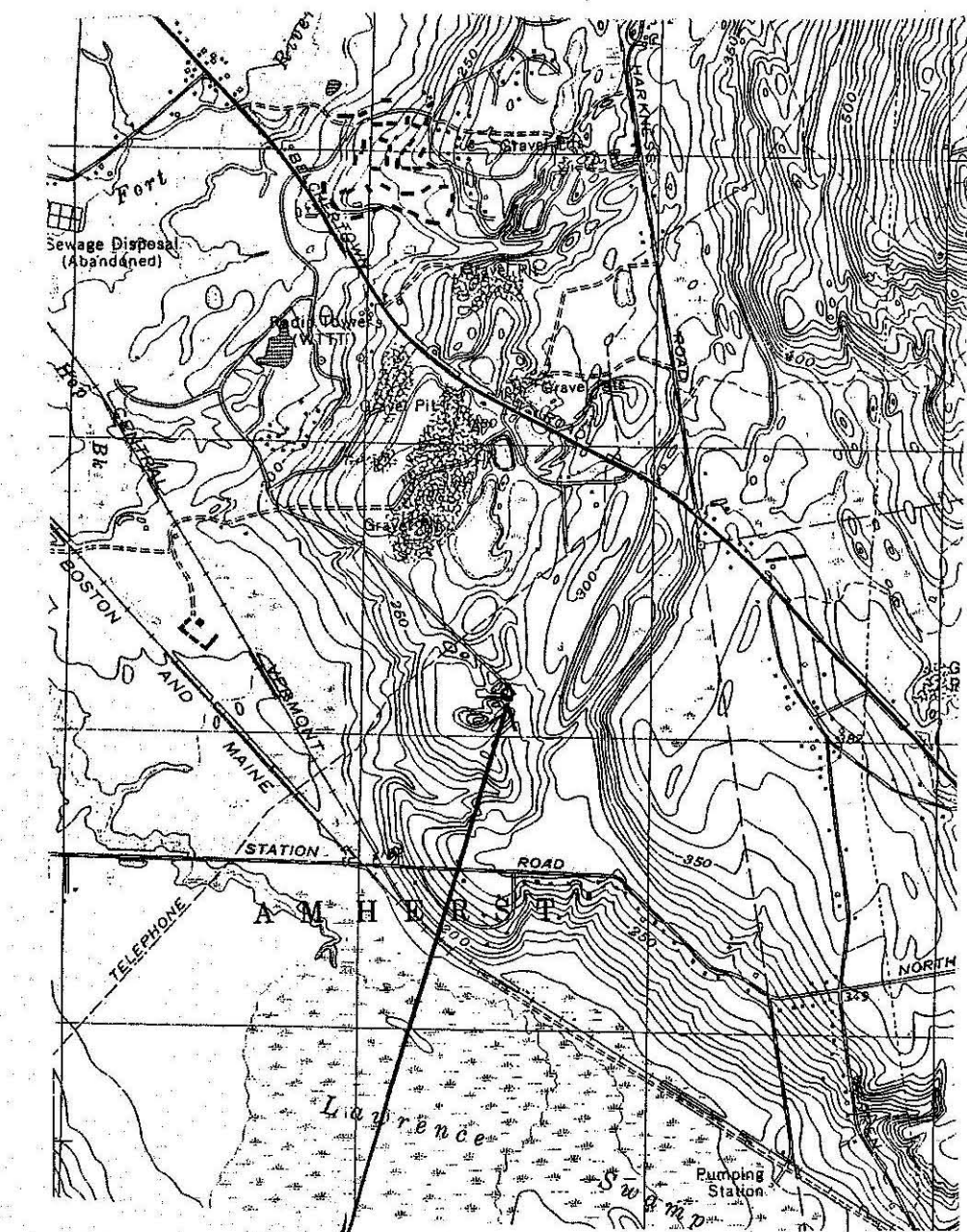


**NOTE:** There are no surface waters or certified vernal pools within 100 ft. of the proposed soil absorption system (S.A.S.). There are no surface water supplies within 400 ft. of the proposed S.A.S. There are no other water supply wells or tributaries to surface water supplies within 200 ft. of the proposed S.A.S.

TBM: 100.00' ELEVATION ASSUMED AT TOP OF NORTHWEST CORNER OF CONCRETE PAD FOR SUB. TRANSFORMER.



**PLANVIEW**  
SCALE: 1" = 20'



**LOCUS PLAN**  
USGS BELCHERTOWN, MASS QUADRANGLE  
SCALE: 1:25,000

**DEEP OBSERVATION HOLE LOG**

Soil Evaluator: Robert Stover  
BOH Representative: David Zaroczninski  
Date of Evaluation: 7/26/02

Ground surface elevation at test pit: 97.20'  
Estimated Seasonal High Ground Water Elevation: 86.20'  
Elevation of Bedrock: 86.20'

Depth	Soil Horizon	Soil Texture	Soil Color	Soil Moisture	Other
0-10"	Ap	FSL	10YR3/3	none	Consistence: friable to firm
10-30"	Bw	FLS	10YR6/8	none	Consistence: firm Structure: massive
30-132"	C	FS	10YR6/8	none	Consistence: loose single grain

Parent Material (Geologic): outwash  
Standing water in the hole: none  
Weeping from Hole Face: none

**DESIGN CRITERIA**

Design flow is for a four-bedroom house without a garbage grinder.

**DESIGN CALCULATION**

Design Flow Required: 4-bedroom house without garbage grinder: = 440 gpd.  
Retain septic tank: 1000 gallons.  
Effluent Loading Rate: Percolation Rate = 1.0 minutes per inch, Class 1 soils, Effluent Loading Rate = 0.74 gpd/sf.

Proposed enlargement of already installed leach pit (present dimensions: 27.5' long by 11.0' wide); increase aggregate along northeast end of leach pit from 1-ft. to 4-ft.; add a dry well surrounded by 4-ft. of aggregate as shown on planview. Enlarged leach pit will have 202 sq. ft. of sidewall and 482.5 sq. ft. of bottom area (see "Diagram Of Leach Pit Enlargement").

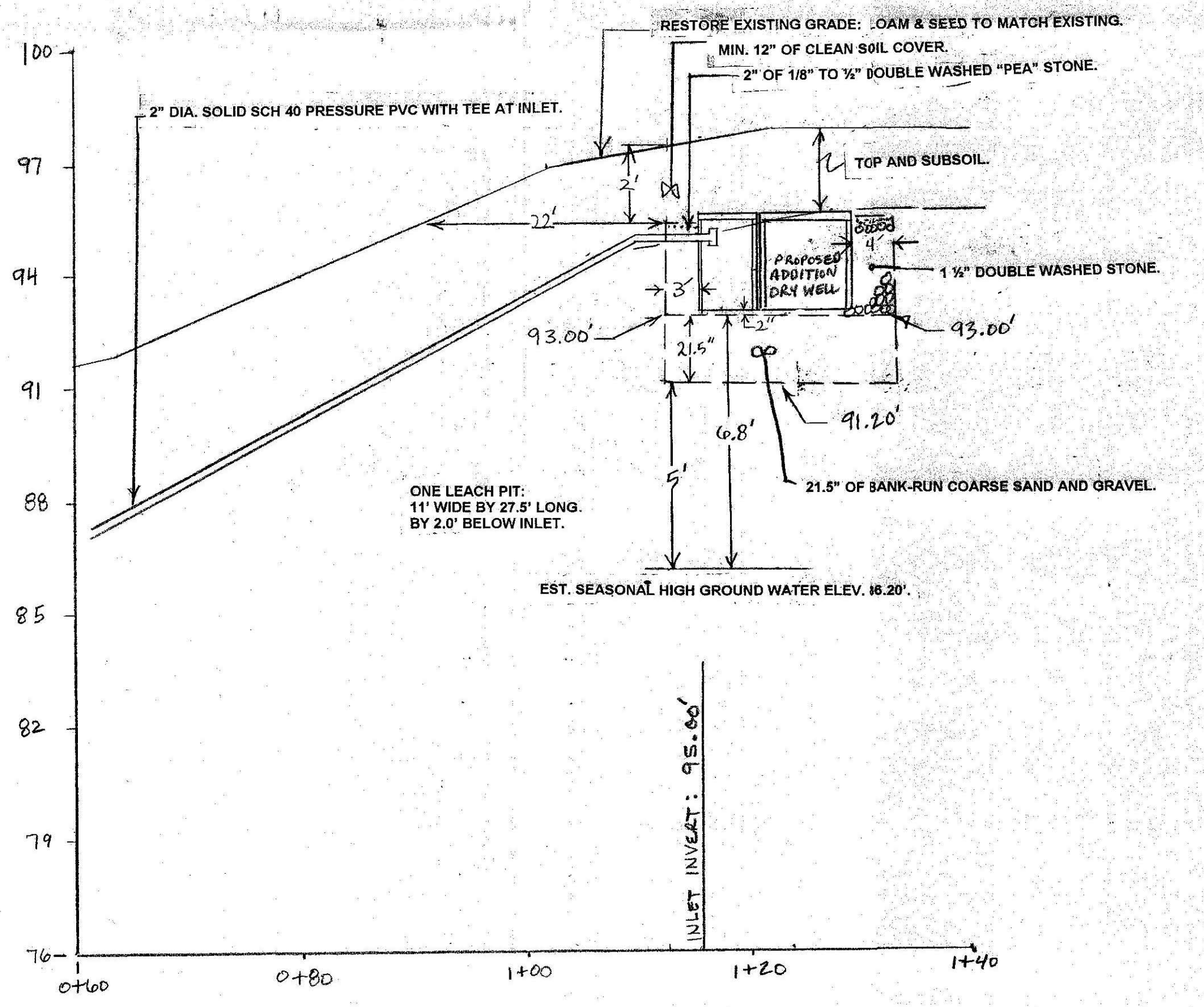
Bottom Area: (30.5' X 11.0') + (13' X 9') = 452.5 sf.  
Sidewall Area: 101' X 2' (effective depth): = 202.0 sf.  
Total Proposed Leaching Area = 654.5 sf.  
Calculated Design Flow: 654.5 sf X 0.74 gpd/sf = 484.33 gpd.  
Total Required Design Flow = 440.0 gpd (OK)

**GENERAL CONDITIONS**

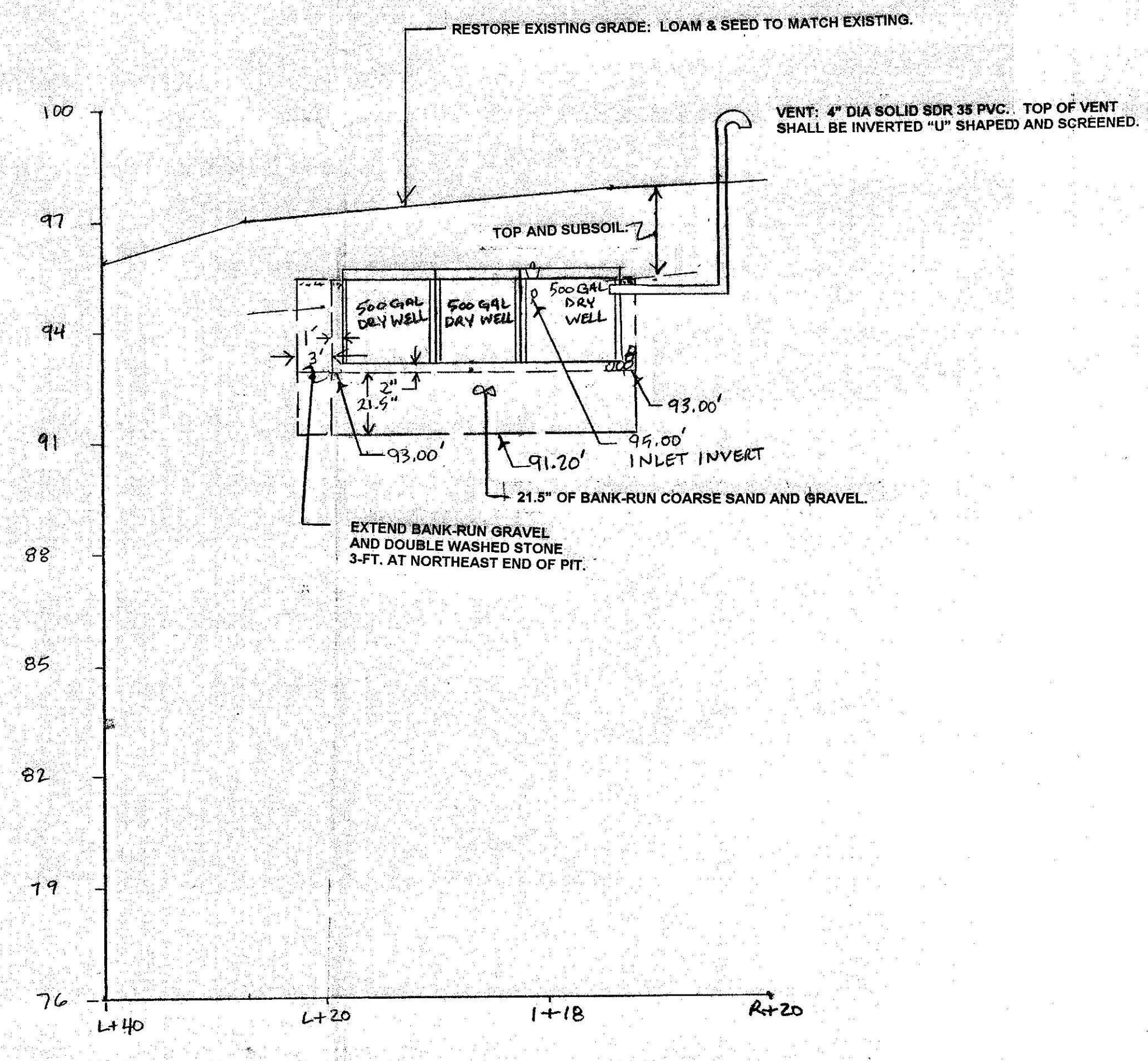
- This system repair plan is prepared in accordance with Title 5, 310 CMR 15.00. Construction shall conform to these regulations.
- The installer shall notify the designer of any unusual conditions and shall not modify the plan without the written consent of the designer.
- All debris in the site area shall be removed and disposed of in accordance with the law.
- There is no guarantee expressed or implied to any user of a system installed pursuant to this plan.
- The installer shall notify the designer and the Board of Health when the system installation is complete and prior to placement of the cover material for final inspection. Notification shall be 48 hours prior to the time of inspection.
- The on-site sewage disposal system shall be pumped and inspected as necessary and at least once every 3 years.

**CONSTRUCTION NOTES**

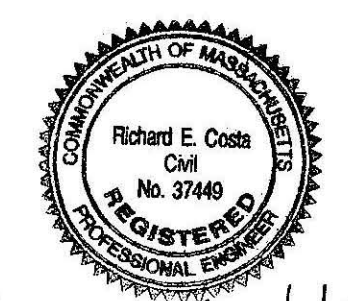
- Any topsoil, subsoil, stumps, stones, debris or other impervious materials encountered during excavation shall be removed from the area of the leaching trenches; from five feet around the trenches and from wherever fill is to be placed. Any fill placed in or adjacent to the trenches shall be a clean granular sand & conform to the specifications of Title 5, 310 CMR 15.255(3).
- The finished grade above the soil absorption system shall have a minimum two percent slope to shed surface runoff away from the system.
- Disturbed areas shall be loamed, seeded and mulched until stable vegetation is established.
- The pipes exiting the distribution box shall have the same invert elevation and shall be level for a minimum of the first two feet.
- Existing septic tank and its tees/baffles shall be inspected to ensure that they are structurally sound and functional.
- Any part of existing soil absorption system encountered during excavation shall be disposed of in accordance with the requirements of the Board of Health.



**PROFILE OF LEACH PIT**  
SCALE: H: 1" = 10' V: 1" = 3'



**SECTION OF LEACH PIT**  
SCALE: H: 1" = 10' V: 1" = 3'



**SEWAGE DISPOSAL REPAIR PLAN**  
152 WILDFLOWER DRIVE, AMHERST, MASS

**BENJAMIN O. OKE**  
152 WILDFLOWER DR., AMHERST, MA 01002-3372

SCALE: AS SHOWN APPROVED BY: RWS  
DATE: 7/31/02 REVISED 9/3/02 DRAWN BY: RWS

**AMHERST CIVIL ENGINEERING**  
RICHARD COSTA, P.E. / ROBERT STOVER

P.O. BOX 3312, AMHERST, MA 01004-3312 DRAWING NUMBER:  
(413)256-3400

9/3/02