

TITLE 5
OFFICIAL INSPECTION FOR - NOT FOR VOLUNTARY ASSESSMENTS
SUBSURFACE SEWAGE DISPOSAL SYSTEM FORM
PART A
CERTIFICATION

Property Address: 44 Stagecoach Road, Amherst, MA

Owner's Name: Noel Ryan
Owner's Address: 44 Stagecoach Road
Amherst, MA 01002

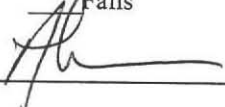
Date of Inspection: December 5, 2002

Name of Inspector: Alan E. Weiss, R.S # 933
Company Name: Cold Spring Environmental Inc.
Mailing Address: 350 Old Enfield Road
Belchertown, Massachusetts 01007
Telephone Number: (413) 323-5957 fax: 413-323-4916

CERTIFICATION STATEMENT

I certify that I have personally inspected the sewage disposal system at this address and that the information reported below is true, accurate and complete as of the time of the inspection. The inspection was performed based on my training and experience in the proper function and maintenance of on site sewage disposal systems. I am a DEP approved system inspector pursuant to Section 15.340 of Title 5 (310 CMR 15.000). The system:

☒ XX Passes
☐ Conditionally Passes
☐ Needs Further Evaluation by the Local Approving Authority
☐ Fails

Inspector's Signature:  Date: **December 5, 2002**

The system inspector shall submit a copy of this inspection report to the Approving Authority (Board of Health or DEP) within 30 days of completing this inspection. If the system is a shared system or has a design flow of 10,000 gpd or greater, the inspector and the system owner shall submit the report to the appropriate regional office of the DEP. The original should be sent to the system owner and copies sent to the buyer, if applicable, and the approving authority.

Notes and Comments:

Septic Tank & leaching area was in good condition upon inspection. D. box liquid levels were level and not above any outlet inverts. S. Tank was pumped after inspection. Inspections found, all levels/stains were ok.

****This report only describes conditions at the time of inspection and under the conditions of use at that time. This inspection does not address how the system will perform in the future under the same different conditions of use.

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**PART A
CERTIFICATION (continued)**

Property Address: 44 Stagecoach Road

Owner: Ryan

Date of Inspection: December 5, 2002

Inspection Summary: Check A,B,C,D or E / ALWAYS complete all of Section D

A. System Passes:

YES I have not found any information which indicates that any of the failure criteria described in 310 CMR 15.303 or in 310 CMR 15.304 exist. Any failure criteria not evaluated are indicated below.

Comments: No signs of failure

B. System Conditionally Passes:

NO One or more system components as described in the "Conditional Pass" section need to be replaced or repaired. The system, upon completion of the replacement or repair, as approved by the Board of Health, will pass.

Answer yes, no or not determined (Y,N,ND) in the ____ for the following statements. If "not determined" please explain.

____ The septic tank is metal and over 20 years old* or the septic tank (whether metal or not) is structurally unsound, exhibits substantial infiltration or exfiltration or tank failure is imminent. System will pass inspection if the existing tank is replaced with a complying septic tank as approved by the Board of Health.

*A metal septic tank will pass inspection if it is structurally sound, not leaking and if a Certificate of Compliance indicating that the tank is less than 20 years old is available.

ND explain:

____ observation of sewage backup or break out or high static water level in the distribution box due to broken or obstructed pipe(s) or due to a broken, settled or uneven distribution box. System will pass inspection if (with approval of Board of Health):

- ____ broken pipe(s) are replaced
- ____ obstruction is removed
- ____ distribution box is leveled or replaced

ND explain:

____ The system required pumping more than 4 times a year due to broken or obstructed pipe(s). The system will pass inspection if (with approval of the Board of Health):

- ____ broken pipe(s) are replaced
- ____ obstruction is removed

ND explain:

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PART A
CERTIFICATION (continued)

Property Address: 44 Stagecoach Road

Owner: Ryan

Date of Inspection: December 5, 2002

C. Further Evaluation is Required by the Board of Health:

NO Conditions exist which require further evaluation by the Board of Health in order to determine if the system is failing to protect public health, safety or the environment.

1. System will pass unless Board of Health determines in accordance with 310 CMR 15.303(1)(b) that the system is not functioning in a manner which will protect public health, safety and the environment:

- ☐ Cesspool or privy is within 50 feet of a surface water
☐ Cesspool or privy is within 50 feet of a bordering vegetated wetland or a salt marsh

2. System will fail unless the Board of Health (and Public Water Supplier, if any) determines that the system is functioning in a manner that protects the public health, safety and environment:

☐ The system has a septic tank and soil absorption system (SAS) and the SAS is within 100 feet of a surface water supply or tributary to a surface water supply.

☐ The system has a septic tank and SAS and the SAS is within a Zone 1 of a public water supply.

☐ The system has a septic tank and SAS and the SAS is within 50 feet of a private water supply well.

☐ The system has a septic tank and SAS and the SAS is less than 100 feet but 50 feet or more from a private water supply well**. Method used to determine distance _____

**This system passes if the well water analysis, performed at a DEP certified laboratory, for coliform bacteria and volatile organic compounds indicates that the well is free from pollution from that facility and the presence of ammonia nitrogen and nitrate nitrogen is equal to or less than 5 ppm, provided that no other failure criteria are triggered. A copy of the analysis must be attached to this form.

3. Other:

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**PART A
CERTIFICATION (continued)**

Property Address: 44 Stagecoach Road

Owner: Ryan

Date of Inspection: December 5, 2002

D. System Failure Criteria applicable to all systems:

You must indicate "yes" or "no" to each of the following for all inspections:

- | Yes | No | |
|--------------------------|-------------------------------------|---|
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Backup of sewage into facility or system component due to overloaded or clogged SAS or cesspool |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Discharge or ponding of effluent to the surface of the ground or surface waters due to an overloaded or clogged SAS or cesspool |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Static liquid level in the distribution box above outlet invert due to an overloaded or clogged SAS or cesspool |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Liquid depth in cesspool is less than 6" below invert or available volume is less than 1/2 day flow |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Required pumping more than 4 times in the last year <u>NOT</u> due to clogged or obstructed pipe(s). Number of times pumped <u> </u> . |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Any portion of the SAS, cesspool or privy is below high ground water elevation. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Any portion of cesspool or privy is within 100 feet of a surface water supply or tributary to a surface water supply. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Any portion of a cesspool or privy is within a Zone 1 of a public well. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Any portion of a cesspool or privy is within 50 feet of a private water supply well. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Any portion of a cesspool or privy is less than 100 feet but greater than 50 feet from a private water supply well with no acceptable water quality analysis. [This system passes if the well water analysis, performed at a DEP certified laboratory, for coliform bacteria and volatile organic compounds indicates that the well is free from pollution from that facility and the presence of ammonia nitrogen and nitrate nitrogen is equal to or less than 5 ppm, provided that no other failure criteria are triggered. A copy of the analysis must be attached to this form.] |

NO (Yes/No) **The system fails.** I have determined that one or more of the above failure criteria exist as described in 310 CMR 15.303, therefore the system fails. The system owner should contact the Board of Health to determine what will be necessary to correct the failure.

E. Large Systems:

To be considered a large system the system must serve a facility with a design flow of 10,000 gpd to 15,000 gpd.

You must indicate either "yes" or "no" to each of the following:

(The following criteria apply to large systems in addition to the criteria above)

- | yes | no | |
|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | the system is within 400 feet of a surface drinking water supply |
| <input type="checkbox"/> | <input type="checkbox"/> | the system is within 200 feet of a tributary to a surface drinking water supply |
| <input type="checkbox"/> | <input type="checkbox"/> | the system is located in a nitrogen sensitive area (Interim Wellhead Protection Area - IWPA) or a mapped Zone II of a public water supply well |

If you have answered "yes" to any question in Section E the system is considered a significant threat, or answered "yes" in Section D above the large system has failed. The owner or operator of any large system considered a significant threat under Section E or failed under Section D shall upgrade the system in accordance with 310 CMR 15.304. The system owner should contact the appropriate regional office of the Department.

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PART B
CHECKLIST

Property Address: 44 Stagecoach Road
Owner: Ryan
Date of Inspection: December 5, 2002

Check if the following have been done. You **must** indicate "yes" or "no" as to each of the following:

Yes No

Yes ___ Pumping information was provided by the owner, occupant, or Board of Health

___ No ___ Were any of the system components pumped out in the previous two weeks ?

yes ___ Has the system received normal flows in the previous two week period ?

___ NO ___ Have large volumes of water been introduced to the system recently or as part of this inspection ?

yes ___ Were as built plans of the system obtained and examined? (If they were not available note as N/A)

yes ___ Was the facility or dwelling inspected for signs of sewage back up ?

yes ___ Was the site inspected for signs of break out ?

yes ___ Were all system components, excluding the SAS, located on site ?

yes ___ Were the septic tank manholes uncovered, opened, and the interior of the tank inspected for the condition of the baffles or tees, material of construction, dimensions, depth of liquid, depth of sludge and depth of scum ?

yes ___ Was the facility owner (and occupants if different from owner) provided with information on the proper maintenance of subsurface sewage disposal systems ?

The **size and location of the Soil Absorption System (SAS)** on the site has been determined based on:

Yes no

yes ___ Existing information. For example, a plan at the Board of Health.

yes ___ Determined in the field (if any of the failure criteria related to Part C is at issue approximation of distance is unacceptable) [310 CMR 15.302(3)(b)]

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PART C
SYSTEM INFORMATION

Property Address: 44 Stagecoach Road

Owner: Ryan

Date of Inspection: December 5, 2002

FLOW CONDITIONS

RESIDENTIAL

Number of bedrooms (design): 4? Number of bedrooms (actual): 4

DESIGN flow based on 310 CMR 15.203 (for example: 110 gpd x # of bedrooms): 480?

Number of current residents: 2

Does residence have a garbage grinder (yes or no): no (**GRINDERS ARE NOT RECOMMENDED*)

Is laundry on a separate sewage system (yes or no): *no [if yes separate inspection required]

Laundry system inspected (yes or no): n/a

Seasonal use: (yes or no): NO

Water meter readings, if available (last 2 years usage (gpd)): N/a

Sump pump (yes or no): YES

Last date of occupancy: current

COMMERCIAL/INDUSTRIAL

Type of establishment: N/A

Design flow (based on 310 CMR 15.203): _____ gpd

Basis of design flow (seats/persons/sqft, etc.): _____

Grease trap present (yes or no): _____

Industrial waste holding tank present (yes or no): _____

Non-sanitary waste discharged to the Title 5 system (yes or NO):

Water meter readings, if available: _____

Last date of occupancy/use: _____

OTHER (describe) _____

GENERAL INFORMATION

Pumping Records

Source of information: 15 months ago

Was system pumped as part of the inspection (**YES** or no): Yes

If yes, volume pumped: 1,500 gallons -- How was quantity pumped determined? Measured

Reason for pumping: Request

TYPE OF SYSTEM

x Septic tank, distribution box, soil absorption system

___ Single cesspool

___ Overflow cesspool

___ Privy

___ Shared system (yes or no) (if yes, attach previous inspection records, if any)

___ Innovative/Alternative technology. Attach a copy of the current operation and maintenance contract (to be obtained from system owner)

___ Tight tank ___ Attach a copy of the DEP approval

___ Other (describe): _____

Approximate age of all components, date installed (if known) and source of information: 5 years+/-

Were sewage odors detected when arriving at the site (yes or no): NO

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PART C
SYSTEM INFORMATION (continued)

Property Address: 44 Stagecoach Road

Owner: Ryan

Date of Inspection: December 12, 2002

BUILDING SEWER (locate on site plan)

Depth below grade: 18"

Materials of construction: cast iron ☒ 40 PVC other (explain): _____

Distance from private water supply well or suction line: 10'+

Comments (on condition of joints, venting, evidence of leakage, etc.): _____

SEPTIC TANK: Yes (locate on site plan)

Depth below grade: 24"

Material of construction: ☒ concrete metal fiberglass polyethylene
other (explain) _____

If tank is metal list age: _____ Is age confirmed by a Certificate of Compliance (yes or no): _____ (attach a copy of certificate)

Dimensions: 5.0'w x 10.5'l x 4.5'd

Sludge depth: 6"

Distance from top of sludge to bottom of outlet tee or baffle: 34"

Scum thickness: 6"

Distance from top of scum to top of outlet tee or baffle: 6"

Distance from bottom of scum to bottom of outlet tee or baffle: 12"

How were dimensions determined: MEASURED

Comments (on pumping recommendations, inlet and outlet tee or baffle condition, structural integrity, liquid levels as related to outlet invert, evidence of leakage, etc.): TANK CONDITION OK

Tank has concrete baffle inlet and PVC tee outlet.

GREASE TRAP: N/A (locate on site plan)

Depth below grade: _____

Material of construction: concrete metal fiberglass polyethylene other
(explain): _____

Dimensions: _____

Scum thickness: _____

Distance from top of scum to top of outlet tee or baffle: _____

Distance from bottom of scum to bottom of outlet tee or baffle: _____

Date of last pumping: _____

Comments (on pumping recommendations, inlet and outlet tee or baffle condition, structural integrity, liquid levels as related to outlet invert, evidence of leakage, etc.): _____

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PART C

SYSTEM INFORMATION (continued)

Property Address: 44 Stagecoach Road

Owner: Ryan

Date of Inspection: December 5, 2002

TIGHT or HOLDING TANK: _____ (tank must be pumped at time of inspection)(locate on site plan)

Depth below grade: _____

Material of construction: _____concrete _____metal _____fiberglass _____polyethylene _____other(explain): _____

Dimensions: _____

Capacity: _____gallons

Design Flow: _____gallons/day

Alarm present (yes or no): _____

Alarm level: _____Alarm in working order (yes or no): _____

Date of last pumping: _____

Comments (condition of alarm and float switches, etc.): _____

DISTRIBUTION BOX: YES (if present must be opened)(locate on site plan)

Depth of liquid level above outlet invert: @ Invert

Comments (note if box is level and distribution to outlets equal, any evidence of solids carryover, any evidence of leakage into or out of box, etc.): Good D. box, level with good distribution
24" deep

PUMP CHAMBER: NO (locate on site plan)

Pumps in working order (yes or no): _____

Alarms in working order (yes or no): _____

Comments (note condition of pump chamber, condition of pumps and appurtenances, etc.): _____

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PART C

SYSTEM INFORMATION (continued)

Property Address: 44 Stagecoach Road

Owner: Ryan

Date of Inspection: December 5, 2002

SOIL ABSORPTION SYSTEM (SAS): YES (locate on site plan, excavation not required)

If SAS not located explain why:

Type

_____ leaching pits, number: _____

_____ leaching chambers, number: _____

_____ leaching galleries, number: _____

_____ leaching trenches, number, length: _____

1 leaching fields, number, dimensions: 50' x 16'+/-

_____ overflow cesspool, number: _____

_____ innovative/alternative system Type/name of technology: _____

Comments (note condition of soil, signs of hydraulic failure, level of ponding, damp soil, condition of vegetation, etc.): No signs of failure, no Groundwater observed,

CESSPOOLS: N/A (cesspool must be pumped as part of inspection)(locate on site plan)

Number and configuration: _____

Depth - top of liquid to inlet invert: _____

Depth of solids layer: _____

Depth of scum layer: _____

Dimensions of cesspool: _____

Materials of construction: _____

Indication of groundwater inflow (yes or no): _____

Comments (note condition of soil, signs of hydraulic failure, level of ponding, condition of vegetation, etc.):

PRIVY: N/A (locate on site plan)

Materials of construction: _____

Dimensions: _____

Depth of solids: _____

Comments (note condition of soil, signs of hydraulic failure, level of ponding, condition of vegetation, etc.): _____

OFFICIAL INSPECTION FORM - NOT FOR VOLUNTARY ASSESSMENTS
SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM

PART C
SYSTEM INFORMATION (continued)

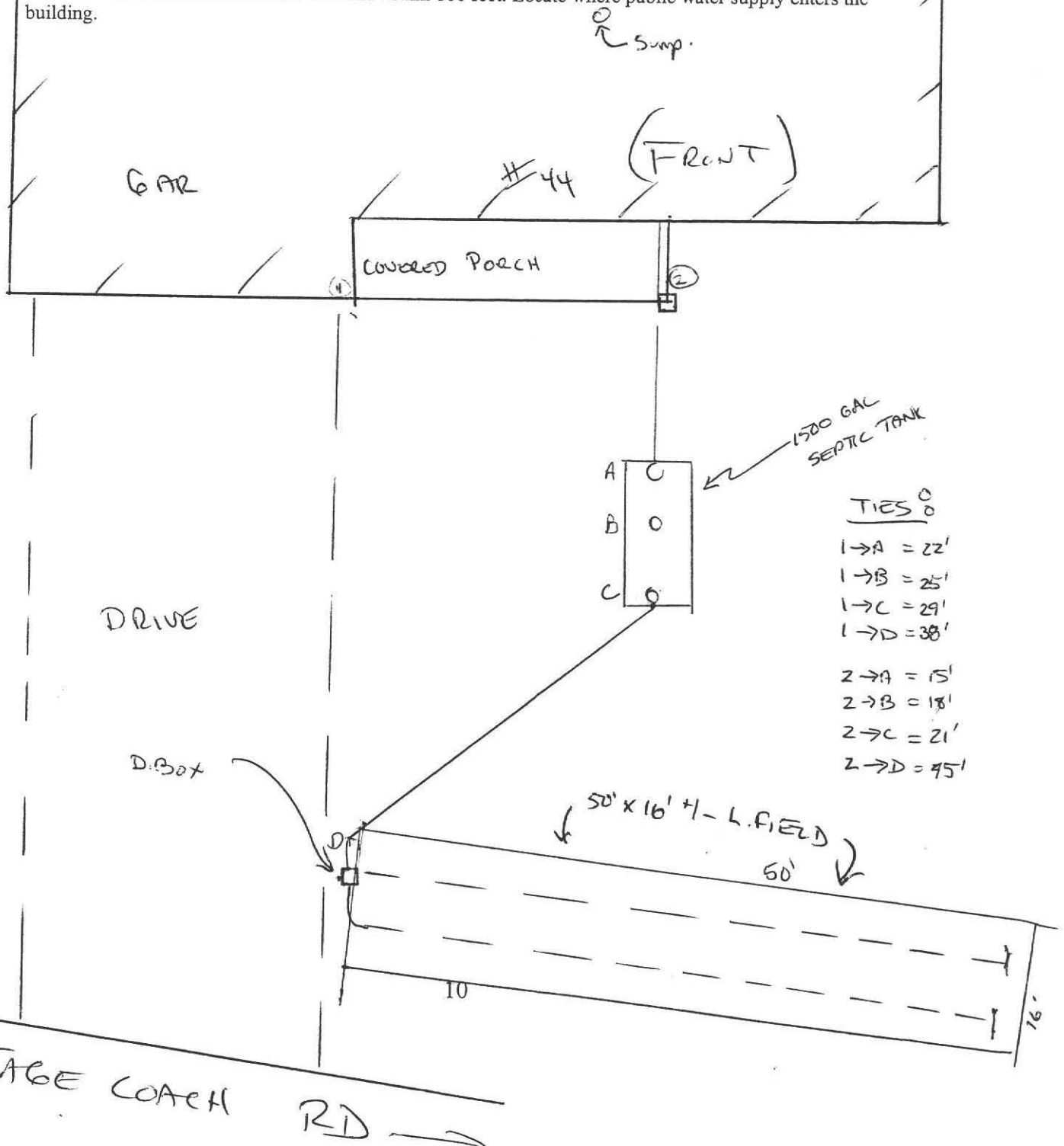
Property Address: 44 Stagecoach Road

Owner: Ryan

Date of Inspection: December 5, 2002

SKETCH OF SEWAGE DISPOSAL SYSTEM

Provide a sketch of the sewage disposal system including ties to at least two permanent reference landmarks or benchmarks. Locate all wells within 100 feet. Locate where public water supply enters the building.



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SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM

PART C

SYSTEM INFORMATION (continued)

Property Address: 44 Stagecoach Road

Owner: Ryan

Date of Inspection: December 5, 2002

SITE EXAM

Slope YES

Surface water

Check cellar YES

Shallow wells _____

Estimated depth to ground water 6'+ feet

Please indicate (check) all methods used to determine the high ground water elevation:

☒ Obtained from system design plans on record - If checked, date of design plan reviewed: 9/97

☒ Observed site (abutting property/observation hole within 150 feet of SAS)

_____ Checked with local Board of Health-explain: _____

_____ Checked with local excavators, installers- (attach documentation)

_____ Accessed USGS database-explain: _____

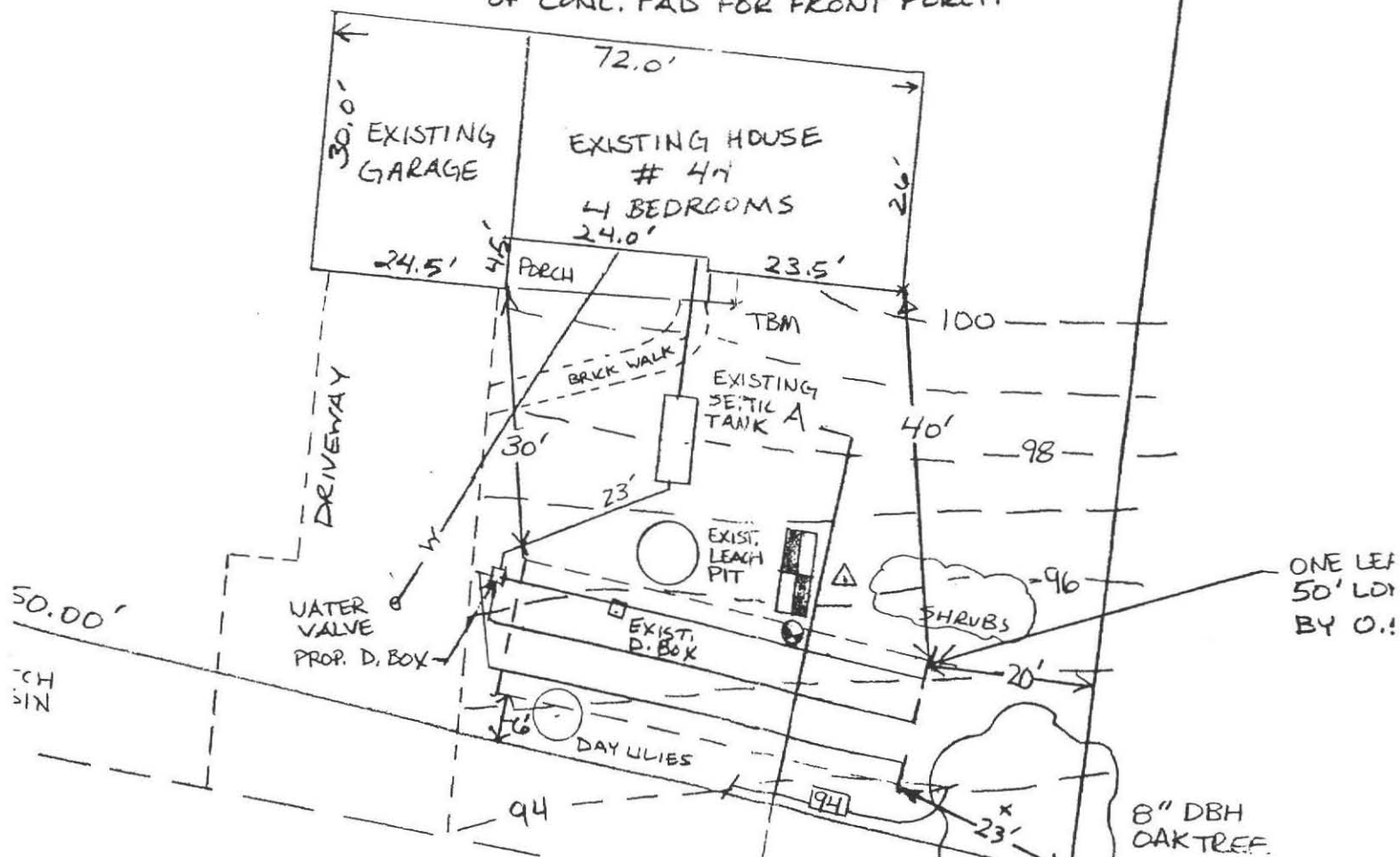
You must describe how you established the high ground water elevation:

Water level based on on-site data & from topography & vegetation Hole dug at D. box to 3' and 1997 record indicated 78"±.

32,210 SQ. FT
0.739 ACRE

223.50'

TBM: 100.00' ELEVATION ASSUMED
AT TOP OF RIGHT FRONT CORNER
OF CONC. PAD FOR FRONT PORCH



SOIL INVESTIGATION

Test Pit No. 1

Estimated Seasonal High Ground Water at 78"

Bedrock is deeper than 112"

Class II soils.

This area is served by public water supply – no wells within 200 ft. of the proposed soil absorption system. There are no wetland resource areas within 100 feet of the proposed soil absorption system. Deep observation hole log and percolation test results are attached. Soil Investigation and percolation testing by Robert Stover, Certified Soil Evaluator, and witnessed by David Zarozinski, Certified Soil Evaluator on August 8, 1997.

DESIGN CRITERIA

Four bedroom house, garbage grinder shall be removed.
Retain existing septic tank: 1500 Gal.

DESIGN CALCULATION

Design Flow:

Design for 440 GPD

Effluent loading rate:

perc rate = 6.0 minutes per inch, Class II soils.
effluent loading rate = 0.6 gpd/sq.ft.

Proposed soil absorption system: 1 leach bed 50 ft. long by 16 ft. wide by 0.5 ft. below the distribution lines.

Bottom area: $50' \times 16' = 800 \text{ sq.ft.} \times 0.6 \text{ gpd/sq.ft.} = 480.0 \text{ gpd}$

Side wall area: Not allowed.

Total $= 480.0 \text{ gpd}$

Required design flow: $= 440.0 \text{ gpd}$

Calculated design flow: $= 480.0 \text{ gpd OK}$

GENERAL CONDITIONS

1. This system repair plan is prepared in accordance with Title 5, 310 CMR 15.00. Construction shall conform to the same.
2. 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.
3. There is no guarantee expressed or implied to any user of a system installed pursuant to this plan.
4. Inspection: the installer shall notify the designer when the excavation for the leach trenches is ready for inspection and 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.
5. The on-site sewage disposal system shall be pumped and inspected as necessary and at least once every 3 years.

5. The existing leach pit shall be pumped; crushed and filled with sand.

Installer
Inspector
Baffles



[Signature] 9/22/97

ON-SITE SEWAGE DISPOSAL SYSTEM REPAIR
44 STAGECOACH RD., AMHERST, MA

WILLIAM ZUMBRUSKI
44 STAGECOACH RD., AMHERST, MA 01002

SCALE: *AS SHOWN*

APPROVED BY

DRAWN BY *RWS*

DATE: 9/22/97

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

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

DRAWING NUMBER

