



TOWN OF SALISBURY
CONNECTICUT

P.O. Box 548
Salisbury, Connecticut 06068

Conservation Commission

Town of Salisbury, Conservation Commission, Application for Regulated Activity Permit

- 1) Applicants name: **Pat Hackett**
 - 2) Applicants home address: **16 East Street Lakeville, CT 06039**
 - 3) Applicants business address: **same**
 - 4) Applicants Home Phone #: **203 788-9959** Business Phone #: **same**
 - 5) Owner of property: Name: **Noelle G Becker, Trustee**
Address: **29 Vassar Place, Lynbrook, NY 11563**
Phone #: **516 382-0161**
- Signature of property owner consenting to this application:

-
- 6) Applicants interest in the land: **Owner's engineer**
 - 7) Geographical location of property: **South shore of East Twin Lake**
Description of the land: **Lakefront**
Computation of wetland area or watercourse disturbance:
 - 8) Purpose and description of the proposed activity: **Install new septic system**
 - 9) Alternatives considered by applicant: **None**
Why this proposal to alter wetlands was chosen: **N/A - in upland area**
 - 10) Site plan showing existing and proposed conditions in relation to wetlands and watercourses:
(Attach map and plans to application) **see plan**
 - 11) Names and addresses of adjacent property owners:
North: **East Twin Lake**
South:
East:
West: **Scott & Alice Macchi**

- 12) Certification that the applicant is familiar with all the information provided in the application and is aware of the penalties for obtaining a permit through inaccurate or misleading information:
 Signature: _____
- 13) Authorization for the commissioners and agents of the Commission to inspect the property, at reasonable times, both before and after a final decision has been issued:
 Signature: _____
- 14) DEEP Reporting Form 22A-39-14 provided by applicant (Rev. 3/2013)
- 15) Any other information the Commission deems necessary to the understanding of what the applicant is proposing:
- 16) Section 7.6 Requirements, if stipulated by agent
- 17) Filing Fee: As defined in current Regulations
- 18) For activities involving a significant activity as determined by the Commission and defined in Section 2 of the regulations the provisions of Article 7.6 must be submitted with the application. (Attach documents).
- 19) If the affected property is within 500 feet of an adjacent municipality the applicant is responsible for providing documentation that the provisions of 8.9 of the regulations have been satisfied: (Attach documents).

DATE FILED: _____

DATE RECEIVED BY COMMISSION: _____

ACTION: a) INSIGNIFICANT ACTIVITY

CONDITIONS:

DATE OF APPROVAL:

b) SIGNIFICANT ACTIVITY

PUBLIC HEARING DATE:

PUBLIC HEARING DATE + 65 DAYS:

CHECK LIST:

A. PUBLIC NOTICE:

DATES PUBLISHED:

B. PROOF THAT APPLICANT HAS MAILED COPIES OF PUBLIC NOTICE TO ABUTTING PROPERTY OWNERS:

C. PROOF OF PROVISIONS OF SECTION 8.2 (IF APPLICABLE):



Statewide Inland Wetlands & Watercourses Activity Reporting Form

Please complete and mail this form in accordance with the instructions on pages 2 and 3 to:

DEEP Land & Water Resources Division, Inland Wetlands Management Program, 79 Elm Street, 3rd Floor, Hartford, CT 06106

Incomplete or incomprehensible forms will be mailed back to the inland wetlands agency.

PART I: Must Be Completed By The Inland Wetlands Agency

- DATE ACTION WAS TAKEN: year: _____ month: _____
- ACTION TAKEN (see instructions, only use one code): _____
- WAS A PUBLIC HEARING HELD (check one)? yes no
- NAME OF AGENCY OFFICIAL VERIFYING AND COMPLETING THIS FORM:
(print name) _____ (signature) _____

PART II: To Be Completed By The Inland Wetlands Agency Or The Applicant

- TOWN IN WHICH THE ACTION IS OCCURRING (print name): Salisbury
does this project cross municipal boundaries (check one)? yes no
if yes, list the other town(s) in which the action is occurring (print name(s)): _____
- LOCATION (see instructions for information): USGS quad name: BashBish or number: 001
subregional drainage basin number: 6002
- NAME OF APPLICANT, VIOLATOR OR PETITIONER (print name): Noelle Becker
- NAME & ADDRESS / LOCATION OF PROJECT SITE (print information): 26 South Shore Road
briefly describe the action/project/activity (check and print information): temporary permanent description: _____
- ACTIVITY PURPOSE CODE (see instructions, only use one code): A
- ACTIVITY TYPE CODE(S) (see instructions for codes): 1, 2, 12
- WETLAND / WATERCOURSE AREA ALTERED (must provide acres or linear feet):
wetlands: 0.0 acres open water body: 0.0 acres stream: 0.0 linear feet
- UPLAND AREA ALTERED (must provide acres): 0.27 acres
- AREA OF WETLANDS / WATERCOURSES RESTORED, ENHANCED OR CREATED (must provide acres): 0.0 acres

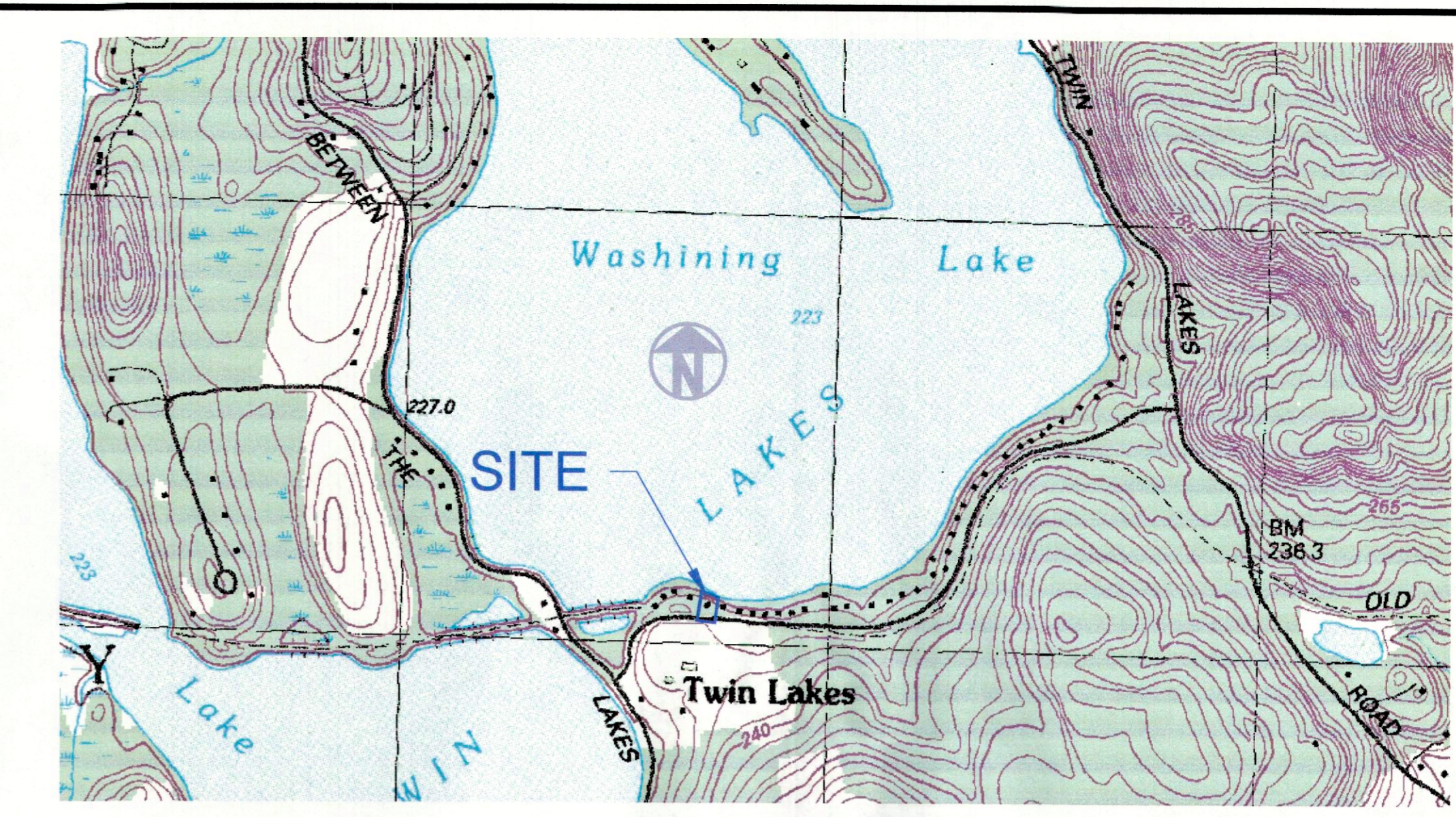
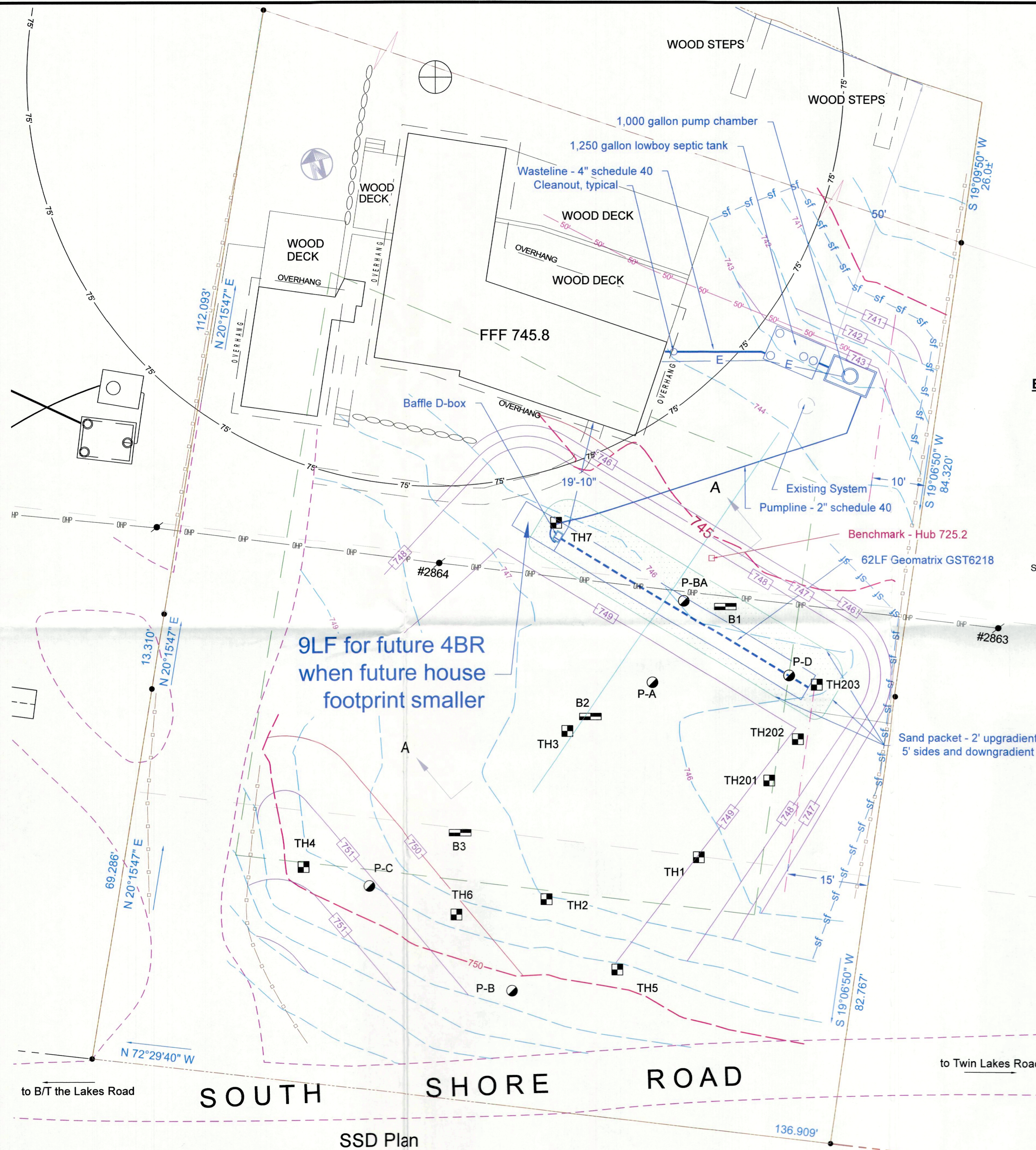
DATE RECEIVED:

PART III: To Be Completed By The DEEP

DATE RETURNED TO DEEP:

FORM COMPLETED: YES NO

FORM CORRECTED / COMPLETED: YES NO



LOCATION MAP SCALE: 1" = 1,000'

Basis of SSD Repair
Type of Use: Residential, Single Family
Number of Bedrooms: 3
Percolation Rate: 11.5 Minutes/Inch
Design Flow: 450 GPD
Minimum Septic Tank Size: 1,000 Gallons
Proposed Septic Tank Size: 1,250 Gallons
Seasonal High Groundwater at: 18 Inches
Design Restrictive Layer at: 30.5 Inches
Leaching Area Required: 675 Square Feet
Leaching Area Provided: 868 Square Feet

MLSS CALCULATION
Type Use: Single Family
System to be constructed: Yes, Construction to take Place
Perc Rate = 11.5 Min per inch PF = 1.25
Slope of Land = 5.3% FF = 1.5
Restrictive at leaching system (LS) = 18.0 Inches HF = 28
Depth of Fill Provided = 22.0 Inches
Restrictive Layer at LS area, A = 40.0 Inches
Restrictive Layer at 25' DG, B = 21.0 Inches
Receiving Soil Depth, RS = (A+B)/2 = 30.5 Inches
Number of Bedrooms = 3
MLSS Required = PF x FF x HF = 1.3 x 1.5 x 28.0 = 52.5 Feet
MLSS Provided = 53.0 Feet

GEOMATRIX GST6218 LEACHING SYSTEM NOT TO SCALE

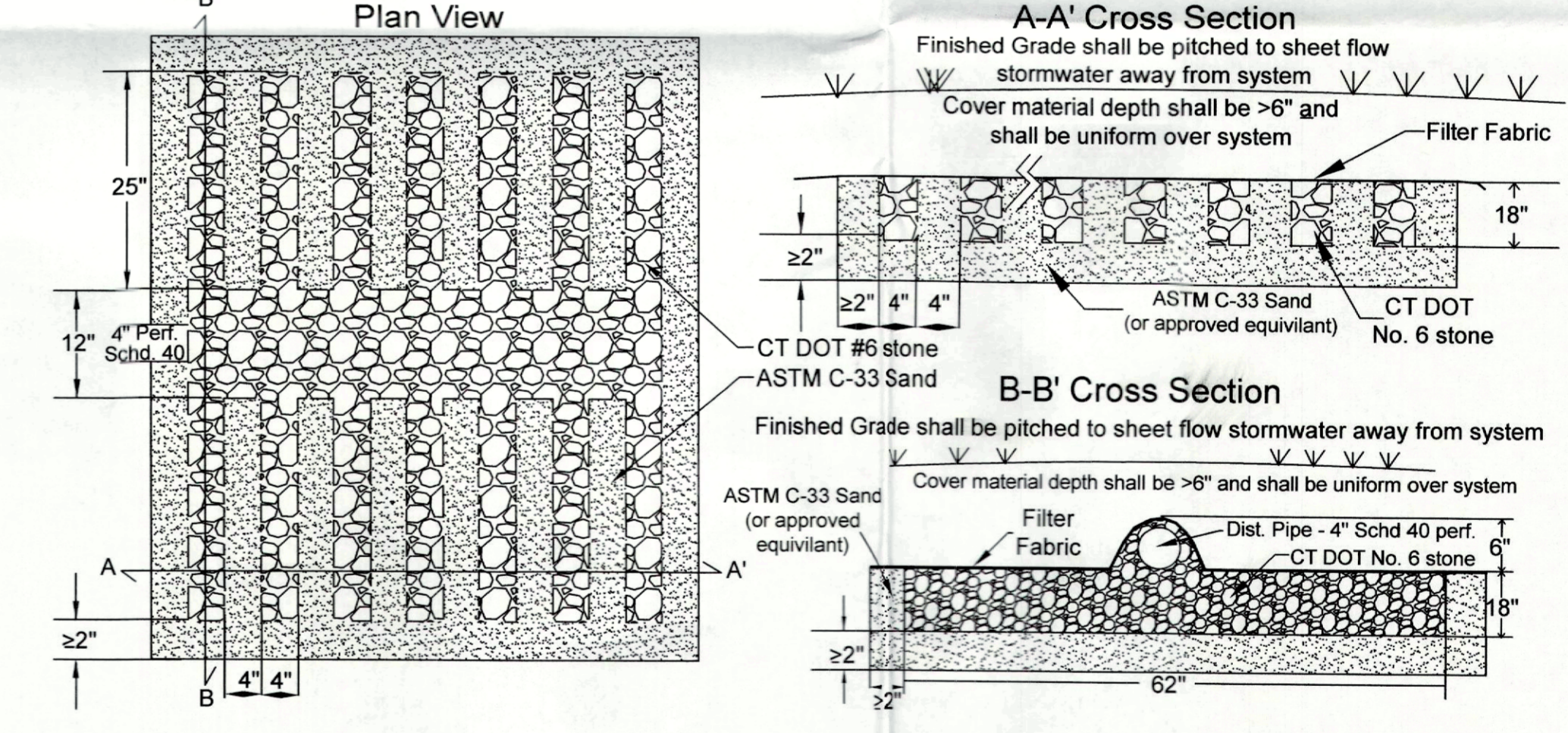
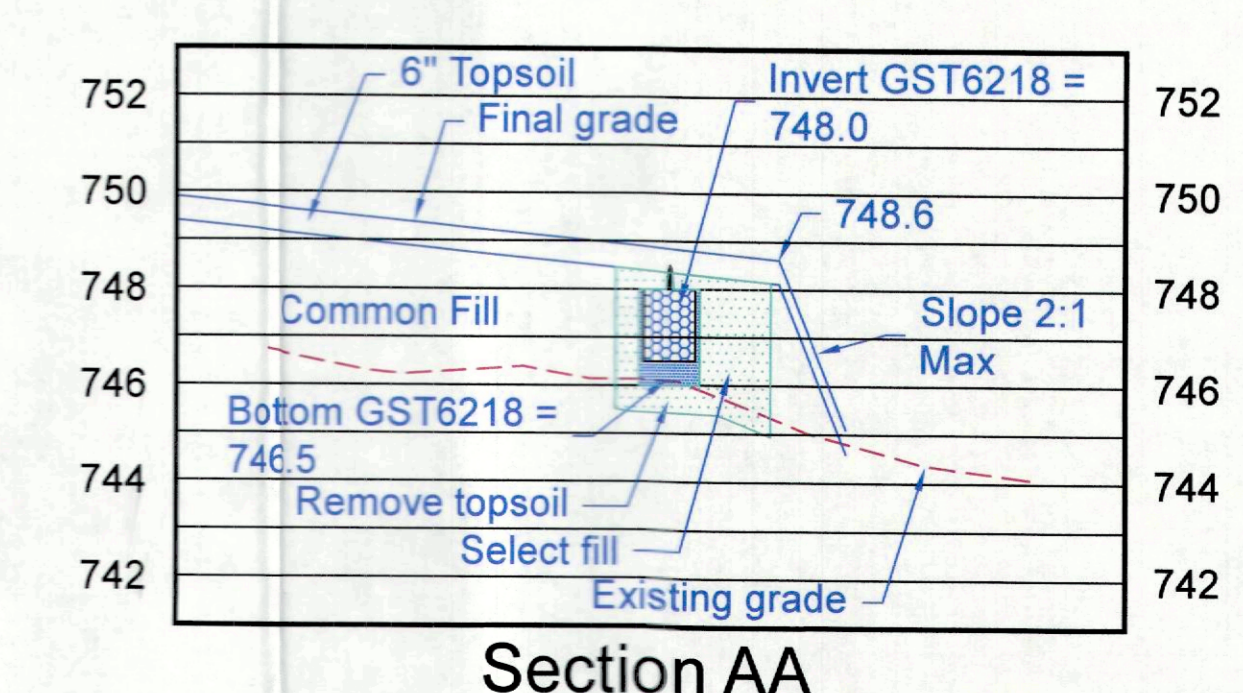


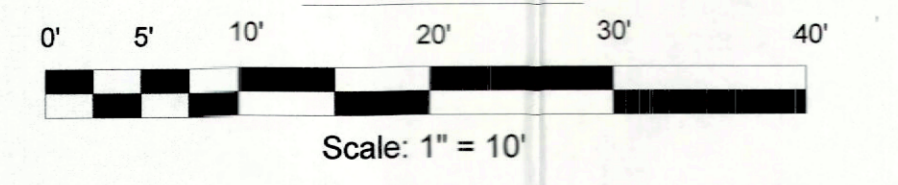
Table with 5 columns: Pipe Runs, Length (ft), High End, Low End, Proposed Slope (%). Rows include pipe lengths from house to septic tank, septic tank to pump chamber, and pump chamber to baffle D-box.

Elevation Location table with 2 columns: Elevation Location and Elevation. Lists elevations for finished first floor house, ex grade at foundation, invert out of house, avg ground at septic tank, invert in septic tank, invert out septic tank, invert in pump chamber, invert out pump chamber, invert in baffle D-Box, invert GST 6218, top of GST 6218, bottom of GST 6218, and minimum bottom sand.



Section AA Scale: 1" = 20' horizontal, 1" = 4' vertical

Parcel Information table with 4 rows: Plan prepared for: Hillary & GERALYN BECKER, Parcel acreage: 0.67, Map Lot and Block: 59/1 09/1, Project Address: 36 South Shore Road, Town and State: Salisbury, Connecticut



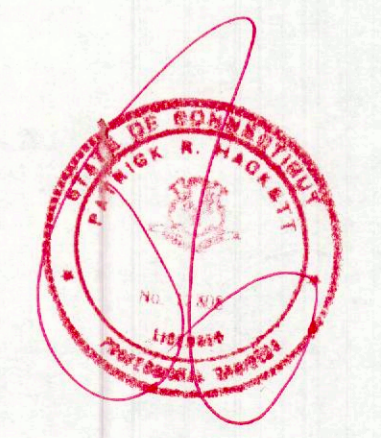
There are no wells within 75' of the proposed septic system

Trench Table with 10 columns: Trench Table, Width (in), Depth (in), 4" Pipe Invert, Top Stone, Bottom Stone, Min Elev Sand, Min C-C, Length (ft), SF/LF, Prov'd, Req'd. Row: GST 6218 18 Inch Deep by 62 Wide, 62, 18.0, 748.0, 748.0, 746.5, 746.0, 13', 53.0, 14.0, 742 sf, 675 sf

Engineer: Patrick R. Hackett, P.E. 16 East Street Lakeville, Connecticut 06039
Date: August 12, 2024
Revisions: Nov17/2024- TH & PH Jan 8, 2025 - well note Feb 26, 2025 - 3BR

BECKER RESIDENCE
36 SOUTH SHORE ROAD
SALISBURY, CONNECTICUT
SUBSURFACE SEWAGE DISPOSAL SYSTEM REPAIR

SSD Repair Sheet 1 of 2



Patrick R. Hackett, P.E. 12808 16 East Street, Lakeville, Conn. 06039 prh@prhackett.com 203.788.9959

PUMP CALCULATIONS

Selected Pump: GOULD 3885 1/3hp WE03L
High Elevation: 748.30
Low Elevation: 736.50
Type Pipe: PVC ASTM D 1785 / ASTM D 2665
Manning's n: 0.012
K Value Elbow: 0.9 (P.227 D&F)
Number of Bends: 1
Pipe Diameter: 2 Inches
Xsec Area: 3.1 Inches²
Length of Pipe: 68 Feet
Volume in Pipe: 11.1 Gallons

Start GPM 0 (This is where VBA starts)
Minimum Flow: 15 Gallons per Minute (GPM)
Estimated Flow: 41.85 GPM
Velocity: 4.3 FPS
H_s = 0.28 Feet
Static Head: 11.8 FT. OR 5.2 psi H_{levation}
Pipe Friction: 5.6 FT. OR 2.5 psi H_{pipe}
Elbow Loss: 0.3 FT. OR 0.2 psi H_{bend}
MIN TDH = 17.6 FT. @ 41.8 GPM

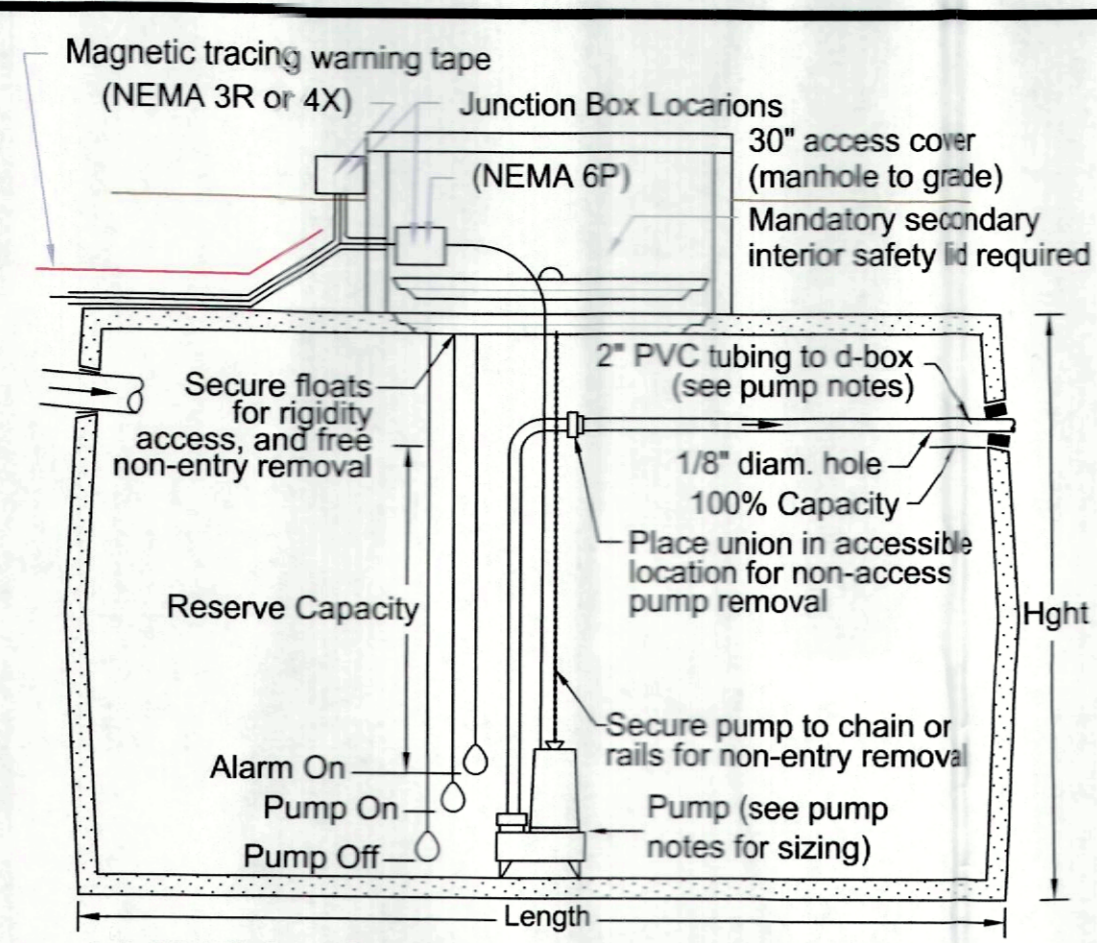
(SEE P.327 Daugherty & Franzini (D&F), P6-15 Brater & King (B&K))
ROUGHNESS FACTOR, f = [8g/n²]/(1.486*R^{1/3}) = 185n²/D^{4/3}
PIPE HEAD LOSS = f*LD⁵/Hv = 2.87n²LV²/D^{4/3}(4/3) = DARCY-WEISBACH FORMULA

FLOAT SWITCH SETTINGS

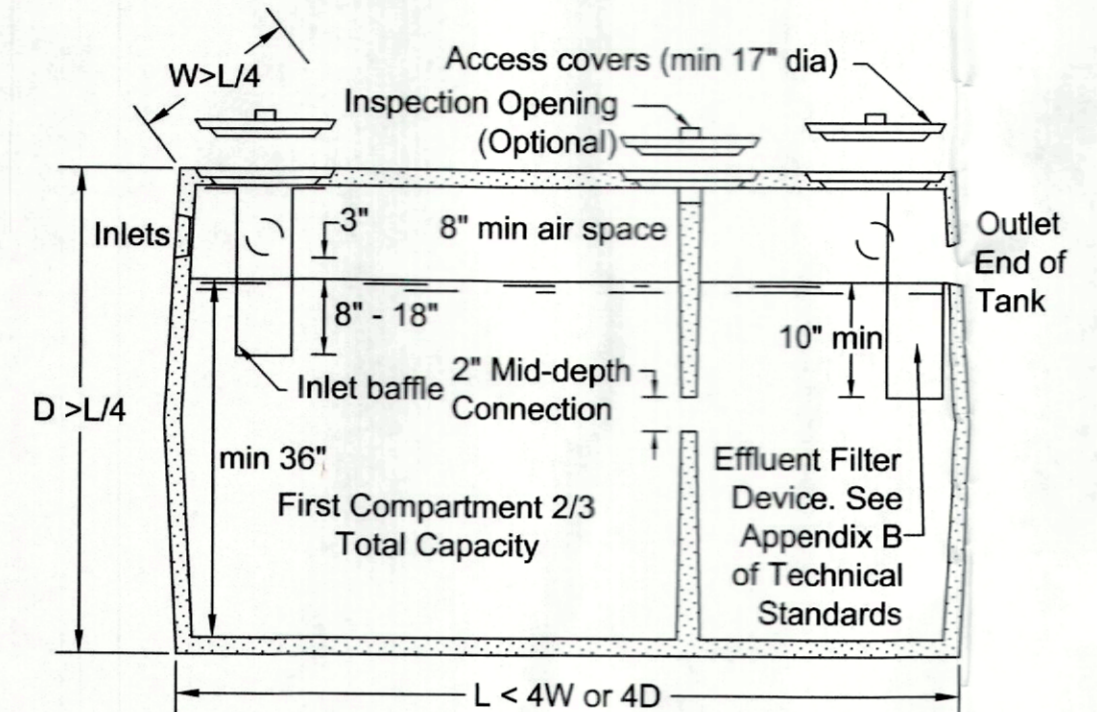
Measured from the inside bottom of the chamber
Turn Off: 12.0 inches equals 279.3 Gallons
Minimum Turn On: 14.0 inches equals 325.8 Gallons
Maximum Turn On: 16.0 inches equals 372.4 Gallons
Alarm Height: 20.0 inches equals 465.5 Gallons
Length of Pump Line: 68 Feet
Flow Back: 0.5 inches equals 11.1 Gallons
Lost at Bottom: 12.5 inches or: 290.4 Gallons
Pump Volume Minimum: 46.5 Gallons
Pump Volume Maximum: 93.1 Gallons
After Alarm Volume: 628.4 Gallons

FLOAT SWITCH SETTINGS

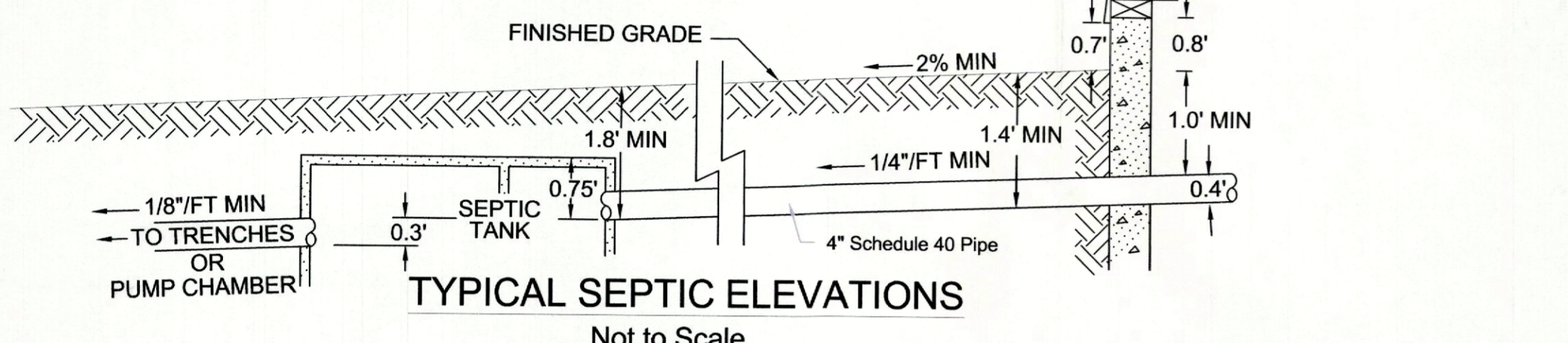
Measured from the outside top of the chamber
Turn Off: 49.0 inches equals 279.3 Gallons
Minimum Turn On: 47.0 inches equals 325.8 Gallons
Maximum Turn On: 45.0 inches equals 372.4 Gallons
Alarm Height: 41.0 inches equals 465.5 Gallons
Length of Pump Line: 68 Feet
Flow Back: 0.5 inches equals 11.1 Gallons
Lost at Bottom: 12.5 inches or: 290.4 Gallons
Pump Volume Minimum: 46.5 Gallons
Pump Volume Maximum: 93.1 Gallons
After Alarm Volume: 628.4 Gallons



TYPICAL PUMP CHAMBER DETAIL Not to Scale



SEPTIC TANK DETAIL Not to Scale



TYPICAL SEPTIC ELEVATIONS Not to Scale

Parcel Information table with fields for Plan prepared for, Parcel acreage, Map Lot and Block, Project Address, and Town and State.

TEST HOLE INFORMATION table listing test holes TH1, TH2, TH3, TH4, TH5, TH6 with dates and observations.

PERCOLATION TEST INFORMATION

Percolation test data table with columns for Time, Depth, and Perc Rate.

TEST HOLE INFORMATION

Test hole data table listing TH 201, TH 202, TH 203 with fill types and observations.

PERCOLATION TEST INFORMATION

Percolation test data table with columns for Time, Depth, and Perc Rate.

TEST HOLE INFORMATION

Test hole data table listing TH 4, TH 5, TH 6 with fill types and observations.

PERCOLATION TEST INFORMATION

Percolation test data table with columns for Time, Depth, and Perc Rate.

TEST HOLE INFORMATION

Test hole data table listing TH 201, TH 202, TH 203 with fill types and observations.

PERCOLATION TEST INFORMATION

Percolation test data table with columns for Time, Depth, and Perc Rate.

TEST HOLE INFORMATION

Test hole data table listing TH 6, TH 7 with fill types and observations.

TEST HOLE INFORMATION

Test hole data table listing DH# 1, DH# 2, DH# 3 with fill types and observations.

SEPTIC TANK

Make and Model Chamber: Richards ST LB 1250
Full Height: 51 inches
Outlet to bottom: 39 inches
Inside Available Height: 36 inches
Inside Width: 72 inches
Inside Length: 111 inches
Capacity: 166.5 Cubic Feet Total

SEPTIC TANK - NEED FOR BALLAST

Make and Model Chamber: Richards ST LB 1250
Outside height: 51 inches
Outside width: 78 inches
Outside length: 117 inches
Tank footprint: 63.4 SF
Actual tank weight: 10,500 Pounds

PUMP NOTES

The engineer shall be notified of any changes that deviate from this plan. No different equipment/tanks shall be used from what is listed until the design values have been checked by the engineer and approved.

The pump(s) shall be as selected on the PUMP CALCULATION (PC) table. Minimum capacity shall be 900 gallons per hour at 25 feet of head. Discharge rate for a 2" pump line using the selected pump is at the bottom of the PC table. See Total Dynamic Head graph for the pump on plan. Pumps shall be chained as shown on detail and have a union/quick disconnect for non-access pump removal, or provide slide rail removal system. Provide a secondary interior safety lid on riser.

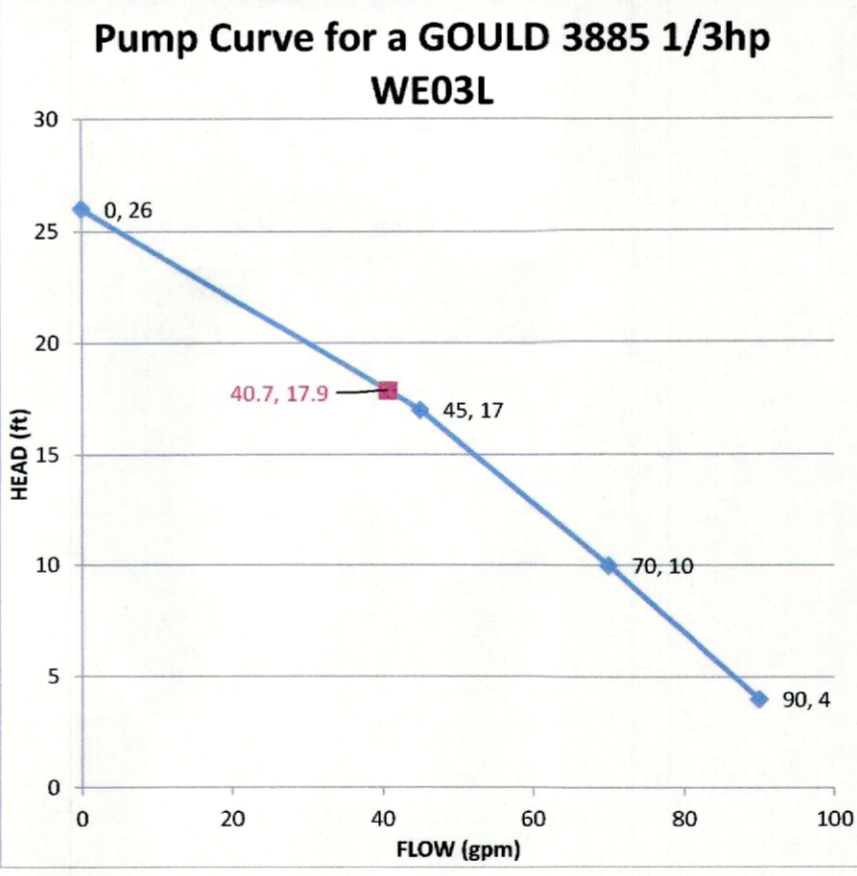
Pump turn-on and turn-off level to be adjusted by the contractor to match the float elevations shown in the FLOAT SWITCH SETTINGS (FSS) table. Pumps shall be wired so the alarm is on a separate circuit. All electrical wiring of the pump station, alarm, and feed, shall meet the National Electrical Code, latest edition. The control panel and alarm shall be located in an audible location.

The utility vault shown is noted in the Pump Chamber Data (PCD) table and must be watertight with joints sealed with asphalt cement or equal. Inside dimensions are as noted on the PCD table. Float level elevations are listed from both the inside bottom and outside top of the chamber and can be found in the Float Switch Settings table. They are based on the spec'd dimensions in the PCD table and must be re-figured for a different tank.

Acceptable pipe for the pump line shall be 2" PVC plastic pressure pipe ASTM D2241, SDR21, SDR 17, or SDR 13.5 or AWWA C-900 (PC 200 PSI min) with bell and spigot with rubber compression gaskets, 2" PVC ASTM D 1785 / ASTM D 2665 Schedule 40 with solvent welded, threaded joints or gasketed couplings, or 2" polyethylene plastic flexible pressure pipe, 200 p.s.i. rated with no joints within 50' of a well or 50' of an open watercourse or surface water drain.

An 1/8" diameter hole shall be into the discharge pipe facing downward to allow effluent to flow back into the pump chamber when the pump cycle ends.

See Float Switch Settings table for flow back volume to the pump chamber. Flow back is based on the length of pump line and pipe diameter. Float level are set to account for flowback.



PUMP CHAMBER DATA

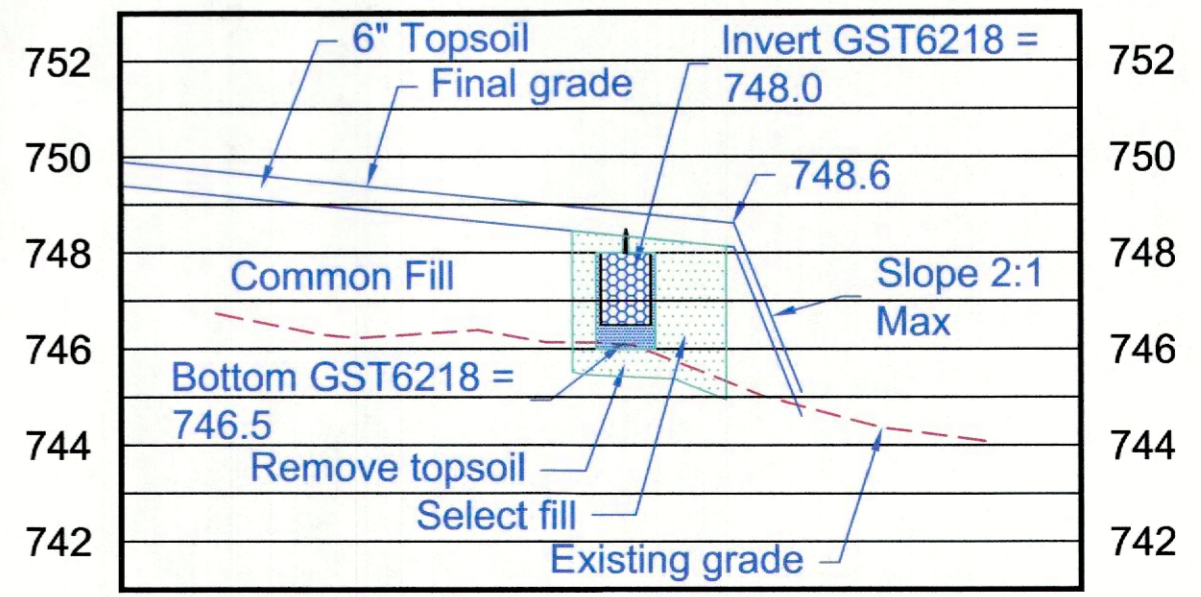
Make and Model Chamber: Richards PC 1000
Full Height: 64 inches
Outlet to bottom: 50 inches
Inside Available Height: 47 inches
Inside Width: 56 inches
Inside Length: 96 inches
Capacity: 146.2 Cubic Feet Total

PUMP CHAMBER NEED FOR BALLAST

Make and Model Chamber: Richards PC 1000
Outside Height: 64 inches
Outside Width: 62 inches
Outside Length: 102 inches
Chamber Footprint: 43.9 SF
Actual Chamber Weight: 8,300 Pounds

SSD NOTES

- Parcel information found in the Parcel Information Table
- The engineer shall be notified of any additions, deletions, and/or changes to this plan - Patrick R. Hackett, 16 East Street, Lakeville, Connecticut (203) 788-9959, prh@prhackett.com
- The Connecticut Public Health Code - Regulations and Technical Standards for Subsurface Sewage Disposal Systems, January 1, 2023, as amended or corrected, is considered part of this plan. A copy of the 2023 code can be found at: https://portal.ct.gov/-/media/Departments-and-Agencies/DPH/dph/environmental_health/environmental_engineering/2023-uploads/TS-Master-2023-1242023.pdf (no spaces)
- This map is compiled from other maps, deed dimensions or other sources of information and is not to be construed as an accurate boundary survey and is to be used solely for the construction of the proposed subsurface sewage disposal design and site plan as shown here-in.
- It is recommended that the house and septic system be staked out by a qualified engineer or land surveyor.
- The invert of the 4" waste line at the house may be raised but not lowered without the consent of the engineer. A minimum of 12" of cover at this location shall be provided over the top of the pipe.
- No water softener, kitchen garbage grinder or tub with a capacity over 100 gallons shall be connected to this system. A water softener must have its own separate leaching area and a kitchen grinder or large tub requires at a minimum a larger septic tank.
- In the event an ejector sump pumping 25% or more of the daily discharge, the septic tank size shall have 50% more capacity than the minimum required size.
- The contractor shall verify and check elevations PRIOR to actual septic system installation.
- The septic tank shall be sized as noted on the plan. All parts of the septic tank shall conform to Section V of the Technical Standards for dimensions, compartments, outlet filters, access, configuration, marking, testing and construction. Manholes shall extend to grade when there is more than 12" of cover. Secondary safety lids shall be placed at any opening where the tank cover is removed (primarily pump chambers but may be septic tank risers).
- Pipe between the house and septic tank shall be 4 inch PVC Schedule 40 ASTM D1785 solvent weld coupling/fittings using proper two-step PVC solvent solution procedure or as allowed in Table 2 of Section III, Piping. Any cumulative change in pipe direction of more than 45 degrees shall not be allowed unless a 36 inch sweep is used.
- All solid pipe after the septic tank may be 4 inch PVC Schedule 40 ASTM D1785 solvent weld coupling/fittings using proper two-step PVC solvent solution procedure or as a minimum as allowed in Table 2-A of Section III, Piping, Approved Effluent Distribution Pipe.
- The bottom of the trench and trench leaching pipe shall be level throughout. Maximum allowable deviation shall be no greater than 1 inch vertical in 50 feet horizontal.
- Leaching trench type, size, dimensions, length shall be as noted in the Trench Table. See Basis of Design Table for design flow, and leaching area required and provided. See the MLSS table for minimum leaching system spread required and spread provided.
- Septic fill material shall meet the requirements of Section VIII A, of the Technical Standards, Select Fill Material, or as noted on the plan. Fill material shall extend a minimum of 5 feet beyond all sides and downhill trench perimeter and a minimum of 2' on the uphill side. There shall be no more than 5% by weight of calcium carbonate in any select sand material used.
- Fill material beyond the last trench shall not be lower than the last trench invert 10 feet beyond the last trench.
- Any large stones or stumps encountered during the trench excavation shall be removed and replaced with septic fill meeting Section VIII A, of the Technical Standards, Select Fill Material.
- The distribution box shall be placed on a six inch (6") compacted gravel base to prevent heaving or settling.
- All inlets and outlets to the septic tank and d-boxes shall be mortared after pipes are installed.
- In the event a heating oil tank is buried outside, it must be a minimum of 75' from any well.



Section AA Scale: 1" = 20' horizontal, 1" = 4' vertical

Engineer: Patrick R. Hackett, P.E. 16 East Street Lakeville, Connecticut 06039

Date: August 12, 2024
Revisions: Nov17/2024- TH & PH
Feb 26, 2025 - 3BR

BECKER RESIDENCE
36 SOUTH SHORE ROAD
SALISBURY, CONNECTICUT
SUBSURFACE SEWAGE DISPOSAL SYSTEM REPAIR

SSD Repair Sheet 2 of 2

