

OK

(P.227 D&F)

(This is where VBA starts)

Gallons per Minute (GPM)

16.5 p: H_{elevation}

4.9 psi H_{pipe}

0.1 psi H_{bend}

Inches⁶

Feet

Width (in)

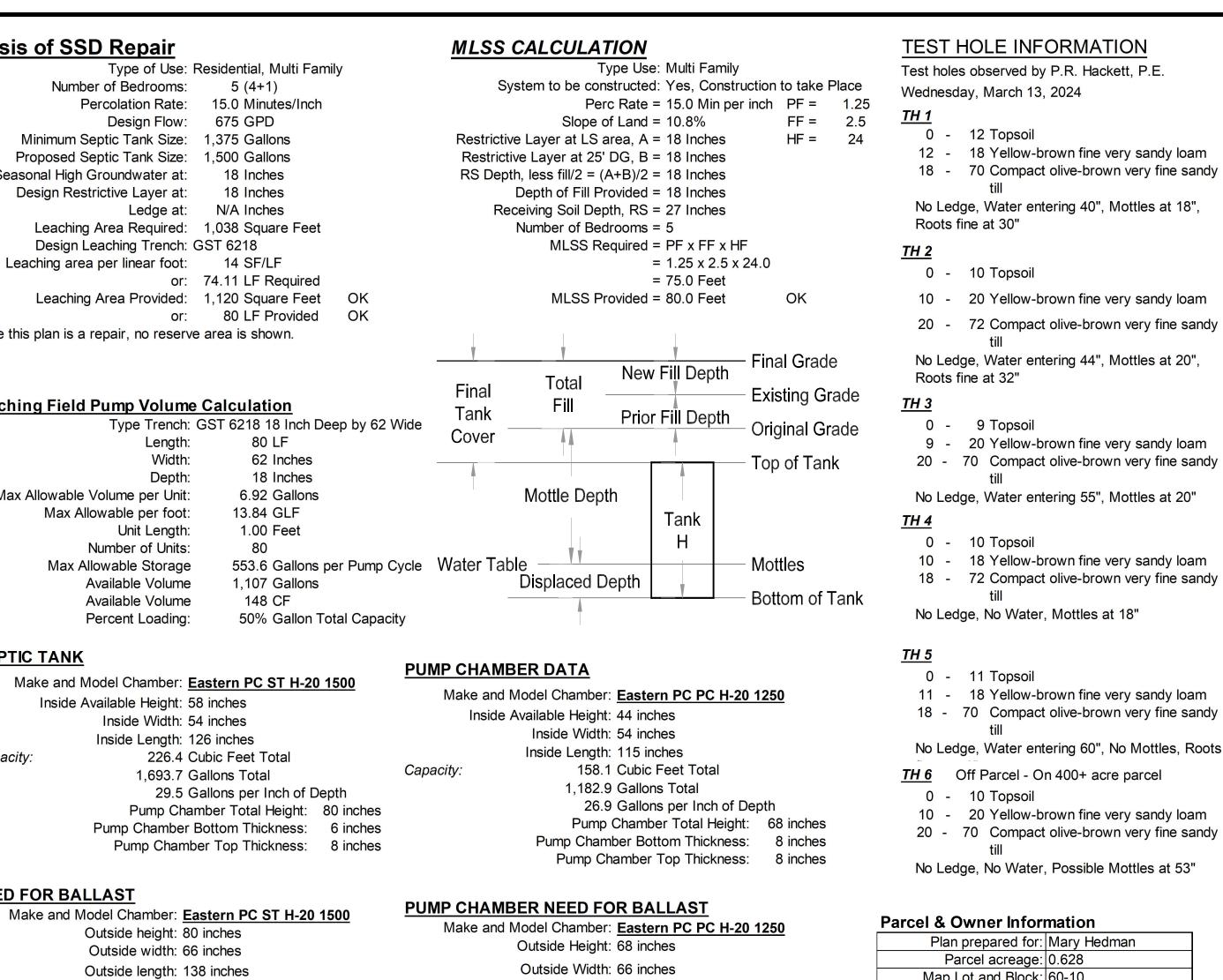
62

Depth (in)

Length

245

18.0



4" Pipe

Invert

179.8

178.9

178.4

Top

Stone

Low End

178.7

179.2 2.2%

214.7 -14.8%

Parcel & Owner Information Plan prepared for: Mary Hedman Parcel acreage: 0.628 Map Lot and Block: 60-10 Outside Length: 127 inches Project Address: 116 South Shore Road Chamber Footprint: 58.2 SF Town and State: Salisbury, Connecticut Actual Chamber Weight: 21,800 Pounds Depth of Cover over tank: 43 inches Depth of SHWG: 24 inches Magnetic tracing warning tape Tank height under water: 87 inches (NEMA 3R or 4X) $\neg \nearrow$ Junction Box Locarions Weight of Water Tank Displaces: 20,582 Pounds Assumed Density of Cover: 110 PCF Min Depth Over Tank: No Ballast Required Depth Provided: 43 inches

Elevation Location

Finished floor main ho

Avg Ground at Septic 7

Grade at founda

Invert out of ho

Invert in septic

Invert out septic

Invert In Baffle D-

Bottom of GST 6

Invert GST 6

Top of GST 6

Invert In Pump Cham

Invert out Pump Cham

SF/LF		Prov'd		Req'd	 	
	14	1.0	1120 sf		1038 sf	
		Elev	ation			
1	ouse	18	4.0			
	lation	18	2.0			
1	ouse	17	9.8			
	Tank	18	3.0			
	tank	17	9.2			
	tank	17	8.9			
l	mber	17	8.7			
l	mber	17	8.4			
)-Box	21	4.7			
	6218	21	4.5			
	6218	21	4.5	EI	OATEM	ITC
	6218	21	3.0	<u>rl</u>	OAT SW	
	Sand	21	2.5			

0 - 12 Topsoil

0 - 10 Topsoil

9 Topsoil

10 Topsoil

11 Topsoil

0 - 10 Topsoil

12 - 18 Yellow-brown fine very sandy loam

10 - 20 Yellow-brown fine very sandy loam

9 - 20 Yellow-brown fine very sandy loam

10 - 18 Yellow-brown fine very sandy loam

18 - 72 Compact olive-brown very fine sandy

11 - 18 Yellow-brown fine very sandy loam

Off Parcel - On 400+ acre parcel

10 - 20 Yellow-brown fine very sandy loam

18 - 70 Compact olive-brown very fine sandy

18 - 70 Compact olive-brown very fine sandy

				Minimu	m Botto
	Pump Curv	e for a G WE0		85 3/4իր)
70					
60	0,63				
50 -	31.2, 49.3		.45		
HEAD (ft)		72,	52,40		
H 30				67,30 74,25	
20 -				80, 18	3
10					89,7
0			1		
C) 20	40 FLOW	60 / (gpm)	80	100

| Bottom | Min Elev |

214.5 | 214.5 | 213.0 | 212.5 | 13' | 80.0

Sand

Stone

Proposed

Slope (%)

6.7%

Pump Off	notes for sizir	ng)			
Length —					
TYPICAL PUMP CHAMBER DETAIL					
Not to Scale					
FLOAT SWITCH SETTINGS					
Measured from the inside botton	n of the cl	namber			
Turn Off: 6.0 inches	equals	161.3 Gallons			
Minimum Turn On: 15.0 inches	equals	403.3 Gallons			
Maximum Turn On: 16.0 inches	equals	430.2 Gallons			
Alarm Height: 17.0 inches	equals	457.0 Gallons			
Length of Pump Line: 245 Feet					
Flow Back: 1.5 inches	equals	40.0 Gallons			
Lost at Bottom: 7.5 inches					
or: 201.3 Gallons					
Pump Volume Minimum: 242.0 Gallons	Actual:	202.0 Gallons			
Pump Volume Maximum: 268.8 Gallons	Actual:	228.9 Gallons			
After Alarm Volume: 725.9 Gallons					
FLOAT SWITCH SETTINGS					

Secure floats— for rigidity access, and free

Reserve Capacity

Pump On — C

non-entry removal

Pump Volume Maximum: 268.8 Gallons After Alarm Volume: 725.9 Gallons DAT SWITCH SETTINGS Measured from the outside top of the chamber Turn Off: 54.0 inches equals 161.3 Gallons Minimum Turn On: 45.0 inches equals 403.3 Gallons Maximum Turn On: 44.0 inches equals 430.2 Gallons Alarm Height: 43.0 inches equals 457.0 Gallons Length of Pump Line: 245 Feet		201.3 Gallons		
After Alarm Volume: 725.9 Gallons Measured from the outside top of the chamber Turn Off: 54.0 inches equals 161.3 Gallons Minimum Turn On: 45.0 inches equals 403.3 Gallons Maximum Turn On: 44.0 inches equals 430.2 Gallons Alarm Height: 43.0 inches equals 457.0 Gallons Length of Pump Line: 245 Feet Flow Back: 1.5 inches equals 40.0 Gallons Lost at Bottom: 7.5 inches or: 201.3 Gallons Pump Volume Minimum: 242.0 Gallons Actual: 202.0 Gallons Pump Volume Maximum: 268.8 Gallons Actual: 228.9 Gallons	Pump Volume Minimum:	242.0 Gallons	Actual:	202.0 Gallons
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Turn Off: 54.0 inches equals 161.3 Gallons Minimum Turn On: 45.0 inches equals 403.3 Gallons Maximum Turn On: 44.0 inches equals 430.2 Gallons Alarm Height: 43.0 inches equals 457.0 Gallons Length of Pump Line: 245 Feet Flow Back: 1.5 inches equals 40.0 Gallons Lost at Bottom: 7.5 inches or: 201.3 Gallons Pump Volume Minimum: 242.0 Gallons Pump Volume Maximum: 268.8 Gallons Actual: 228.9 Gallons	OAT SWITCH SETTINGS			
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Maximum Turn On: 44.0 inches equals 430.2 Gallons Alarm Height: 43.0 inches equals 457.0 Gallons Length of Pump Line: 245 Feet Flow Back: 1.5 inches equals 40.0 Gallons Lost at Bottom: 7.5 inches or: 201.3 Gallons Pump Volume Minimum: 242.0 Gallons Pump Volume Maximum: 268.8 Gallons Actual: 228.9 Gallons	Turn Off:	54.0 inches	equals	161.3 Gallons
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After Alarm Volume: 725.9 Gallons	Pump Volume Maximum:	268.8 Gallons	Actual:	228.9 Gallons
	After Alarm Volume:	725.9 Gallons		

PERCOLATION TEST INFORMATION B100a Notes - 71 B/T the Lakes Rd

By P.R. Hackett, P.E. Owner: Kenneth Page et al Trustees, M-L 20-04. Date: 03/17/2024 Engineer: Patrick R. Hackett, 16 East Street, Lakeville, Presoak dry before test Connecticut, (203) 788-9959, prh@prhackett.com Total Depth: 18 inches Datum Depth: 18 inches Parcel Area: 441± acres. The B100a is to demonstrate there is an area for a repair

(min/in)

1.6

1.9

		Perc
<u>Time</u>	Depth	Rate
0:00:00	9	(min/in)
0:11:15	10 1/2	7.5
0:20:01	11 3/4	7.0
0:30:28	12 5/8	11.9
0:40:53	13 3/8	13.9
0:50:16	14	15.0
1:00:15	14 1/2	20.0

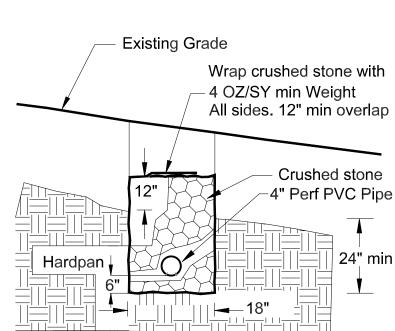
20 - 72 Compact olive-brown very fine sandy Max rate = 20.0 minutes per inch No Ledge, Water entering 44", Mottles at 20",

P-B	Date:	03/17/2024
Presoak dry before te	st	
Total Depth:	19 inches	
Datum Depth:	19 inches	
		Perc
<u>Time</u>	Depth	Rate

0:25:30 Max rate = 1.9 minutes per inch

0:05:09

0:15:40



13 3/4

CURTAIN DRAIN SECTION Not to Scale

30" access cover

2" PVC tubing to d-box

(see pump notes)

1/8" diam. hole -/

100% Capacity -

location for non-access

-Secure pump to chain or

rails for non-entry removal

pump removal

Place union in accessible

(manhole to grade)

Mandatory secondary

interior safety lid required

SSD NOTES

Owner Information: See table - Sheet

apart (MLSS provided - 100LF)

This design is a compliant repair area.

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

system to be installed. There are many locations systems

shown are 2 - 50' GST 6218 trenched spaced greater than 50'

· In the event there is a need to repair/replace a system, a detail

design will be required to be submitted to TAHD for permitting.

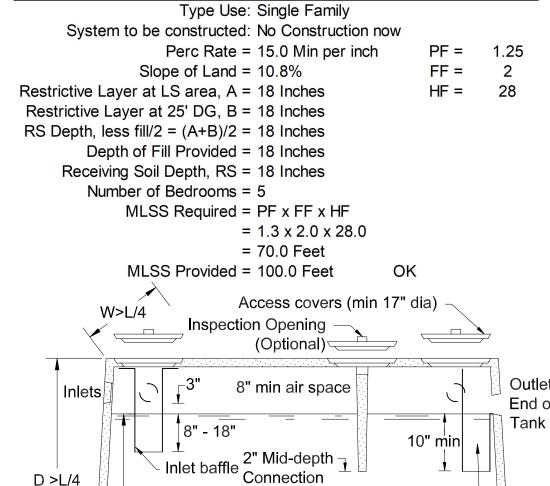
could be located on the 441 acre parcel. Leaching fields

- https://portal.ct.gov/-/media/departments-and-agencies /dph/dph/environmental health/environmental engineering /ts-2024-documents/2024-technical-standardsfinal-01012024.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
- Test holes and percolation tests performed by P.R. Hackett
- It is recommended that the house and septic system be staked out by a qualified engineer or land surveyor.
- No kitchen garbage grinder or tub with a capacity over 100 gallons shall be connected to this system. A water softener must have it's own separate leaching area and a kitchen
- grinder or large tub requires at a minumum 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.
- 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 be 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 leaching pipe shall be level throughout. Maximum allowable deviation shall be no greater than 1 inch vertical in 50 feet horizontal
- A layer of non-woven filter fabric having a minimum weight of 4.0 OZ/SY (per ASTM D 5261), a minimum permittivity of 1.0 (sec-1)(per ASTM D 4491), and a minimum trapezoid tear of 15 lbs (per ASTM D 4533). Note the minimum weight called out above is more stringent than the minimum allowed in the Health Code (1.5 SY/OZ).
- Septic fill material shall be meet requirements of Section VIII A. of the Technical Standards, Select Fill Material. Fill material shall extend a minimum of 5 feet beyond all trench perimeter. There shall be no more than 5% by weight of calcium
- carbonate in any select sand material used. The trench sand interface is ASTM-C33 and may prove easier to use all ASTM C33 sand.
- 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.
- All erosion and sediment control measures shall be in place prior to start of work and shall be maintained for the duration of the project and removed after all disturbed area have stable vegetative cover.

Basis of B100a - 71 Between the Lakes Road Engineer Type of Use: Residential, Single Family Patrick R. Hackett. P.E. Number of Bedrooms: Percolation Rate: 15.0 Minutes/Inch

Design Flow: 525 GPD Minimum Septic Tank Size: 1,125 Gallons Proposed Septic Tank Size: 1,250 Gallons Seasonal High Groundwater at: 18 Inches 18 Inches Design Restrictive Layer at: N/A Inches Ledge at: 788 Square Feet Leaching Area Required: Design Leaching Trench: GST 6218 Leaching area per linear foot: 14 SF/LF or: 56.25 LF Required Leaching Area Provided: 1,400 Square Feet OK

or: 100 LF Provided MLSS CALCULATION - 71 Between the Lakes Road



SEPTIC TANK DETAIL **PUMP NOTES**

D >L/4

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

L < 4W or 4D -

Not to Scale

First Compartment 2/3

Total Capacity

The pumps shall be a as selected on the PUMP CALCULATION table. Minimum capacity shall be 900 gallons per hour at 25 feet of head. Discharge rate for a 2" pump lines using the selected pump 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 and 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 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 used 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 listed from both the inside top and inside bottom and can be found in the Float Switch Settings table. They are based on the spec'd dimensions 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 withing 50' of a well or 50' of an open watercourse or surface water

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.

End of SIDENCE ORE ROAD INECTICUT SO ШІ 0 MAN J N

HE 116

Effluent Filter

Device See

of Technical

Standards

Appendix B-

16 East Street

Date: April 20, 2024

2 Notes June 7, 2024

Revisions: 1 notes 2024-05-24

AIR

REP/

STEM

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ISPOS,

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CE

SURF/

Lakeville, Connecticut 06039

SSD 2 of 2

