

TRADEWELL SOIL TESTING
18330 Dahlia Street NW
Cedar, MN 55011
(763) 286- 9095

Contractor/Owner: Josh Hunt
Address/Lot/Block: XXXX Green Valley Road NW
City: Ramsey **County:** Anoka

This On-Site Sewage Treatment System is designed for a Type 1, 4 bedroom home in accordance with the Minnesota Pollution Control Agency Chapter 7080 and local ordinance.

A seasonally high water table or saturated soil layer was located at 28" to 76", (mottled soil). The bottom of the rock bed must be located at least 3' above the seasonally high water table or saturated soil.

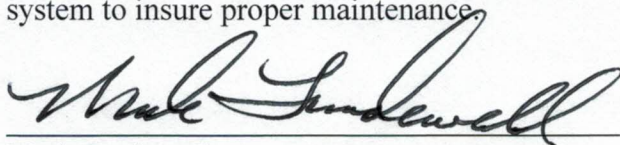
The soils at a depth of 18" have a percolation rate averaging .10 – 5.0 MPI.

All neighboring wells are located greater than 50' away from the proposed treatment area.

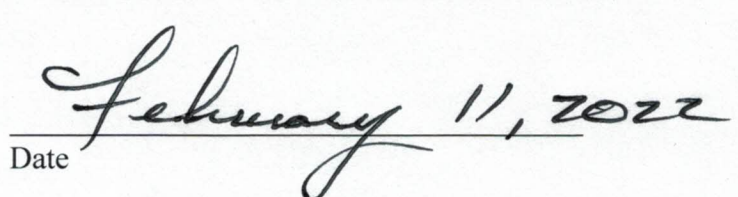
Keep all heavy equipment off of the proposed treatment area before and after construction. The treatment area should be marked off before construction. This design is not valid and the system will need to be relocated if failure to protect the areas proposed for On-Site Sewage Treatment occurs.

With proper installation and maintenance, this system should have no problem in treating septic effluent effectively.

Nothing other than gray water, (laundry, showers, etc.) human waste and toilet tissue should be disposed of into the septic tanks. Garbage disposals are not recommended. Smaller amounts of laundry soaps, dish soaps, cleaning agents, etc. are better for the system. Antibacterial soaps and chlorine agents may kill the bacteria needed to treat septic effluent properly. Additives are not recommended, they may cause harmful damage to your system. Recommend to pump and clean your tanks by a certified pumper every other year if you have 1 tank and every 2-3 years if you have a 2-tank system to insure proper maintenance.



Mark Tradewell
MPCA #307



Date

****Septic design is subject to test pit soil verification by local unit of government at time of installation.**

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Date: February 11th, 2022

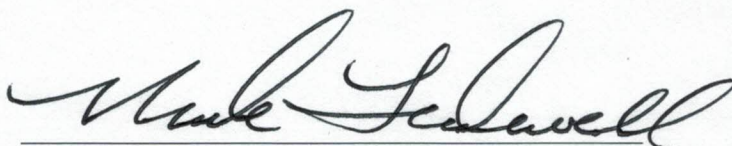
Name: Josh Hunt

Address: XXXX Green Valley Road NW, Ramsey, MN

SOIL BORING TEST REPORT

Boring #1	Boring #2	Boring #3	Boring #4
0" – 8" Topsoil Loamy Sand 10YR 3/2	0" – 8" Topsoil Loamy Sand 10YR 3/2	0" – 6" Topsoil Loamy Sand 10YR 3/2	0" – 6" Topsoil Loamy Sand 10YR 3/2
8" – 28" Medium Coarse Sand 10YR 3/4 4/4	8" – 38" Medium Coarse Sand 10YR 3/4 4/4	6" – 38" Medium Coarse Sand 10YR 3/4 4/4	6" – 24" Medium Sand 10YR 3/4 4/4
28" – 36" Silty Clay Loam 2.5Y 4/4 4/3	38" – 52" Coarse Sand 10YR 4/3 3/3	38" – 50" Coarse Sand 10YR 4/3 5/3 with Loamy Bands 7.5YR 3/4	24" – 52" Medium Sand 10YR 4/6 3/6
			52" – 77" Coarse Sand 10YR 5/4 with Loamy Bands 7.5YR 3/4
Mottles @ 28" Dry Hole	Mottles @ 38" Dry Hole	Mottles @ 38" Dry Hole	No Mottles Found Dry Hole

4 Bedroom, Type 1 Home (600 GPD Flow)
 Perc Rate - .10 – 5.0 MPI 1.67 SSF .60 Soil Loading
 1500 gallon 2 – compartment septic tank
 1000 gallon pump tank
 1000 square feet of drainfield with 6" of rock below the pipe
 31 cubic yards or 44 ton of clean rock
 Maintain 36" between mottled soil and bottom of rock treatment area


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SOIL BORING TEST REPORT

Boring #5	Boring #6	Boring #7	Boring #8
0" – 6" Topsoil Loamy Sand 10YR 3/2	0" – 8" Topsoil Loamy Sand 10YR 3/2	0" – 8" Topsoil Loamy Sand 10YR 3/2	0" – 10" Topsoil Loamy Sand 10YR 3/2
6" – 14" Clay Loam 7.5YR 4/4 4/6	8" – 22" Medium Fine Sand 10YR 3/4 4/4	8" – 26" Medium Sand 10YR 3/4 4/4	10" – 20" Medium Sand 10YR 3/4 4/4
14" – 36" Medium Sand 7.5YR 4/4 4/6	22" – 32" Fine Sandy Loam 7.5YR 4/4	26" – 36" Coarse Loamy Sand & Gravel 10YR 3/4 3/6	20" – 32" Coarse Loamy Sand & Gravel 7.5YR 4/4 4/6
36" – 48" Medium Coarse Sand 10YR 4/3 4/4 4/6	32" – 62" Coarse Sand & Gravel 10YR 4/6 4/4 4/3	36" – 68" Coarse Sand & Gravel 10YR 4/4 4/3 5/3	32" – 52" Coarse Sand & Gravel 10YR 4/4 4/3
	62" – 76" Medium Fine Sand 10YR 5/4 5/3	**Hit Large Root	52" – 66" Coarse Loamy Sand & Gravel 10YR 3/3 3/4
Mottles @ 44" Dry Hole	No Mottles Found Dry Hole	No Mottles @ 68" Dry Hole	Faint Mottles @ 52" Dry Hole



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SOIL BORING TEST REPORT

SOIL BORING TEST REPORT			
Boring #9 (House)			
0" – 14" Topsoil Loamy Sand 10YR 3/3			
14" – 20" Fine Sandy Loam 10YR 2/1			
20" – 30" Silty Clay Loam (Mottled Gray)			
Mottles @ 14" Dry Hole			



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OSTP Bed Design Worksheet



1. SYSTEM SIZING: Project ID: 22052 v 04.06.2017

- A. Design Flow (Design Sum.1A): GPD
- B. Code Maximum Depth*: inches Designers Maximum Depth: inches
- C. Soil Loading Rate: GPD/ft²
- D. Required Bottom Area: Design Flow (1.A) ÷ Loading Rate (1.C) = Initial Required Bottom Area
 GPD ÷ GPD/ft² = ft²
- E. Select Distribution Method: Pressure Gravity
- F. Select Dispersal Type: Rock Registered
- G. If distribution media is installed in contact with sandy or loamy sand or with a percolation rate of 0.1 to 5 mpi indicate distribution or treatment method:

2. BED CONFIGURATION: (for sites with less than 6% slope)

- A. Select size Multiplier: 1.0 = pressurized or 1.5 = gravity
- B. Req'd Bottom Area = Bottom Area (1.D) X Size Multiplier =
 ft² X ft = ft²
- C. Designed Bottom Area: ft *Optional upsizing of bed area*
- D. Select Bed Width: ft
- E. Calculate Bed Length: Designed Bottom Area ÷ Bed Width = Bed Length
 ft² ÷ ft = ft

3. MATERIAL CALCULATION: ROCK

- A. If drainfield rock is being used, select sidewall height
 ft
- B. Media Volume: (Media Depth + depth to cover pipe) X Designed Bottom Area = ft³
 ft + ft X ft² = ft³
- C. Calculate Volume in cubic yards: Media volume in cubic feet ÷ 27 = cubic yards
 ft³ ÷ 27 = yd³

4. MATERIAL CALCULATION: REGISTERED PRODUCTS - CHAMBERS AND EZFLOW

- A. Registered Product:
- B. Component Length: ft
- C. Component Width: ft
- D. Component depth (louver or depth of sidewall loading) in
- E. Number of Components per Row = Bed Length divided by Component Length (Round up)
 ft ÷ ft = components
- F. Actual Bed Length = Number of Components X Component Length:
 components X ft = ft
- G. Number of Rows = Bed Width divided by Component Width
 ft ÷ ft = rows *Adjust width so this is a whole number.*
- H. Total Number of Components = Number of Components per Row X Number of Rows
 X = components

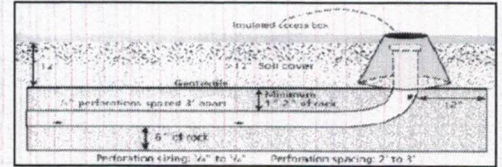
OSTP Pressure Distribution Design Worksheet



Project ID: 22052

v 04.06.2017

- Media Bed Width: ft
- Minimum Number of Laterals in system/zone = Rounded up number of $[(\text{Media Bed Width} - 4) \div 3] + 1$.
 $[(\text{ } - 4) \div 3] + 1 = \text{ } \text{ laterals}$ *Does not apply to at-grades*
- Designer Selected Number of Laterals: laterals
Cannot be less than line 2 (accept in at-grades)
- Select Perforation Spacing: ft
- Select Perforation Diameter Size: in
- Length of Laterals = Media Bed Length - 2 Feet.



- 2ft = ft *Perforation can not be closer than 1 foot from edge.*

- Determine the Number of Perforation Spaces. Divide the Length of Laterals by the Perforation Spacing and round down to the nearest whole number.

Number of Perforation Spaces = ft \div ft = Spaces

- Number of Perforations per Lateral is equal to 1.0 plus the Number of Perforation Spaces. Check table below to verify the number of perforations per lateral guarantees less than a 10% discharge variation. The value is double with a center manifold.

Perforations Per Lateral = Spaces + 1 = Perfs. Per Lateral

Maximum Number of Perforations Per Lateral to Guarantee <10% Discharge Variation											
Perforation Spacing (Feet)	1/4 Inch Perforations					Perforation Spacing (Feet)	7/32 Inch Perforations				
	Pipe Diameter (Inches)						Pipe Diameter (Inches)				
	1	1 1/4	1 1/2	2	3		1	1 1/4	1 1/2	2	3
2	10	13	18	30	60	2	11	16	21	34	68
2 1/2	8	12	16	28	54	2 1/2	10	14	20	32	64
3	8	12	16	25	52	3	9	14	19	30	60
Perforation Spacing (Feet)	3/16 Inch Perforations					Perforation Spacing (Feet)	1/8 Inch Perforations				
	Pipe Diameter (Inches)						Pipe Diameter (Inches)				
	1	1 1/4	1 1/2	2	3		1	1 1/4	1 1/2	2	3
2	12	18	26	46	87	2	21	33	44	74	149
2 1/2	12	17	24	40	80	2 1/2	20	30	41	69	135
3	12	16	22	37	75	3	20	29	38	64	128

- Total Number of Perforations equals the Number of Perforations per Lateral multiplied by the Number of Perforated Laterals.

Perf. Per Lat. X Number of Perf. Lat. = Total Number of Perf.

- Select Type of Manifold Connection (End or Center):

- Select Lateral Diameter (See Table): in



OSTP Pressure Distribution Design Worksheet



12. Calculate the *Square Feet per Perforation*. Recommended value is 4-11 ft² per perforation.

Does not apply to At-Grades

a. *Bed Area* = Bed Width (ft) X Bed Length (ft)

16 ft X 63 ft = 1008 ft²

b. *Square Foot per Perforation* = *Bed Area* divided by the *Total Number of Perforations*.

1008 ft² ÷ 105 perforations = 9.6 ft²/perforations

13. Select *Minimum Average Head*: 1.0 ft

14. Select *Perforation Discharge* (GPM) based on Table: 0.41 GPM per Perforation

15. Determine required *Flow Rate* by multiplying the *Total Number of Perfs.* by the *Perforation Discharge*.

105 Perfs X 0.41 GPM per Perforation = 44 GPM

16. *Volume of Liquid Per Foot of Distribution Piping* (Table II): 0.110 Gallons/ft

17. *Volume of Distribution Piping* =

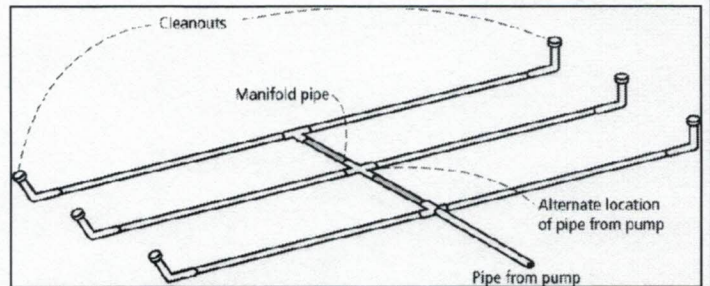
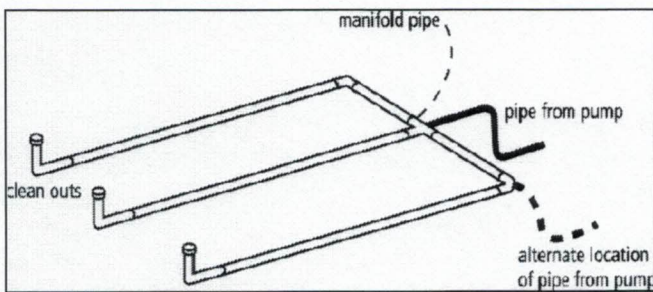
= [Number of Perforated Laterals X Length of Laterals X (Volume of Liquid Per Foot of Distribution Piping)]

5 X 61 ft X 0.110 gal/ft = 33.6 Gallons

18. *Minimum Delivered Volume* = *Volume of Distribution Piping* X 4

33.6 gals X 4 = 134.2 Gallons

Pipe Diameter (inches)	Liquid Per Foot (Gallons)
1	0.045
1.25	0.078
1.5	0.110
2	0.170
3	0.380
4	0.661



Comments/Special Design Considerations:

Blank area for comments and special design considerations.



1. PUMP CAPACITY

Project ID: 22052

v 04.06.2017

Pumping to Gravity or Pressure Distribution:

Pressure

1. If pumping to gravity enter the gallon per minute of the pump: GPM (10 - 45 gpm)

2. If pumping to a pressurized distribution system: GPM

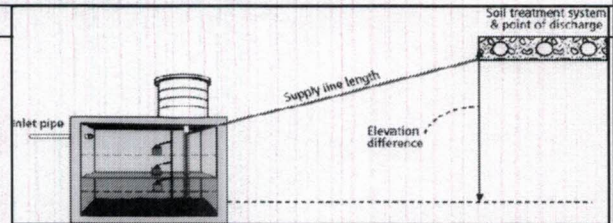
3. Enter pump description:

2. HEAD REQUIREMENTS

A. Elevation Difference ft between pump and point of discharge:

B. Distribution Head Loss: ft

C. Additional Head Loss: ft (due to special equipment, etc.)



Distribution Head Loss	
Gravity Distribution = 0ft	
Pressure Distribution based on Minimum Average Head Value on Pressure Distribution Worksheet:	
Minimum Average Head	Distribution Head Loss
1ft	5ft
2ft	6ft
5ft	10ft

Table I. Friction Loss in Plastic Pipe per 100ft

Flow Rate (GPM)	Pipe Diameter (inches)			
	1	1.25	1.5	2
10	9.1	3.1	1.3	0.3
12	12.8	4.3	1.8	0.4
14	17.0	5.7	2.4	0.6
16	21.8	7.3	3.0	0.7
18		9.1	3.8	0.9
20		11.1	4.6	1.1
25		16.8	6.9	1.7
30		23.5	9.7	2.4
35			12.9	3.2
40			16.5	4.1
45			20.5	5.0
50				6.1
55				7.3
60				8.6
65				10.0
70				11.4
75				13.0
85				16.4
95				20.1

D. 1. Supply Pipe Diameter: in

2. Supply Pipe Length: ft

E. Friction Loss in Plastic Pipe per 100ft from Table I:

Friction Loss = ft per 100ft of pipe

F. Determine *Equivalent Pipe Length* from pump discharge to soil dispersal area discharge point. Estimate by adding 25% to supply pipe length for fitting loss. $Supply\ Pipe\ Length\ (D.2) \times 1.25 = Equivalent\ Pipe\ Length$

ft X 1.25 = ft

G. Calculate *Supply Friction Loss* by multiplying *Friction Loss Per 100ft* (Line E) by the *Equivalent Pipe Length* (Line F) and divide by 100.

Supply Friction Loss =

ft per 100ft X ft ÷ 100 = ft

H. *Total Head* requirement is the sum of the *Elevation Difference* (Line A), the *Distribution Head Loss* (Line B), *Additional Head Loss* (Line C), and the *Supply Friction Loss* (Line G)

ft + ft + ft + ft = ft

3. PUMP SELECTION

A pump must be selected to deliver at least **44.0** GPM (Line 1 or Line 2) with at least **20.8** feet of total head.

Comments:



DETERMINE TANK CAPACITY AND DIMENSIONS

Project ID: 22052

v 04.06.2017

1. A. Design Flow (Design Sum. 1A): GPD

B. Min. required pump tank capacity: Gal C. Recommended pump tank capacity: Gal

2. A. Tank Manufacturer: B. Tank Model:

C. Capacity from manufacturer: Gallons

D. Gallons per inch from manufacturer: Gallons per inch

E. Liquid depth of tank from manufacturer: inches

Note: Design calculations are based on this specific tank. Substituting a different tank model will change the pump float or timer settings. Contact designer if changes are necessary.

DETERMINE DOSING VOLUME

3 Calculate Volume to Cover Pump (The inlet of the pump must be at least 4-inches from the bottom of the pump tank & 2 inches of water covering the pump is recommended)

(Pump and block height + 2 inches) X Gallons Per Inch (2C or 3E)

(in + 2 inches) X Gallons Per Inch = Gallons

4 Minimum Delivered Volume = 4 X Volume of Distribution Piping:

- Line 17 of the Pressure Distribution or Line 11 of Non-level Gallons (minimum dose)

5 Calculate Maximum Pumpout Volume (25% of Design Flow)

Design Flow: GPD X 0.25 = Gallons (maximum dose)

6 Select a pumpout volume that meets both Minimum and Maximum: Gallons

7 Calculate Doses Per Day = Design Flow ÷ Delivered Volume

gpd ÷ gal = Doses

8 Calculate Drainback:

A. Diameter of Supply Pipe = inches

B. Length of Supply Pipe = feet

C. Volume of Liquid Per Lineal Foot of Pipe = Gallons/ft

D. Drainback = Length of Supply Pipe X Volume of Liquid Per Lineal Foot of Pipe

ft X gal/ft = Gallons

9. Total Dosing Volume = Delivered Volume plus Drainback

gal + gal = Gallons

10. Minimum Alarm Volume = Depth of alarm (2 or 3 inches) X gallons per inch of tank

in X gal/in = Gallons

Volume of Liquid in Pipe	
Pipe Diameter (inches)	Liquid Per Foot (Gallons)
1	0.045
1.25	0.078
1.5	0.110
2	0.170
3	0.380
4	0.661

DEMAND DOSE FLOAT SETTINGS

11. Calculate Float Separation Distance using Dosing Volume .

Total Dosing Volume /Gallons Per Inch

gal ÷ gal/in = Inches

12. Measuring from bottom of tank:

A. Distance to set Pump Off Float = Pump + block height + 2 inches

in + in = Inches

B. Distance to set Pump On Float=Distance to Set Pump-Off Float + Float Separation Distance

in + in = Inches

C. Distance to set Alarm Float = Distance to set Pump-On Float + Alarm Depth (2-3 inches)

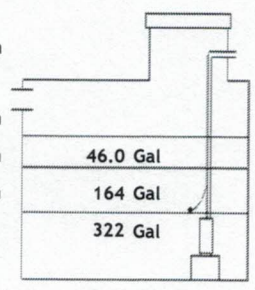
in + in = Inches

Inches for Dose: in

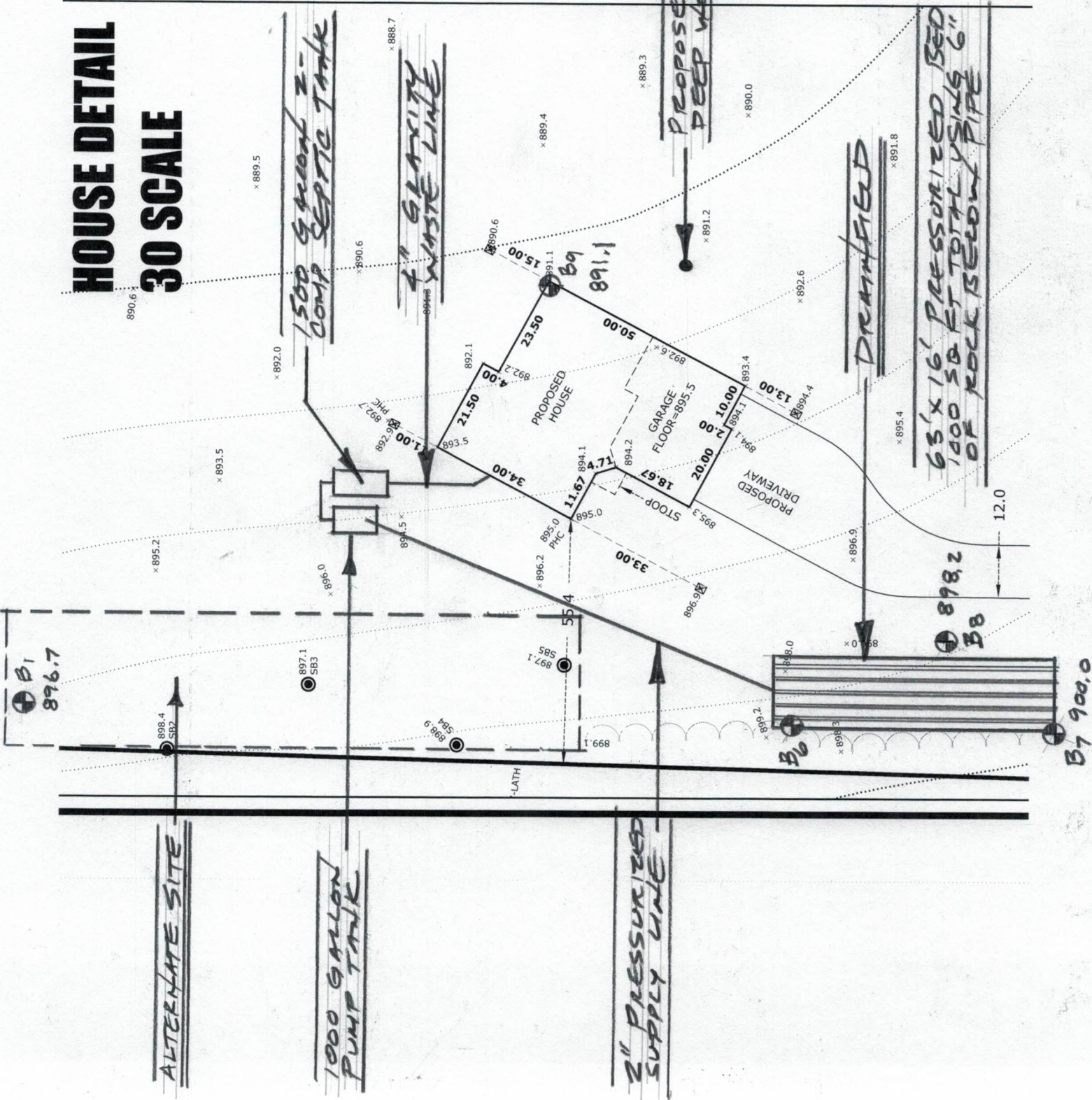
Alarm Depth in

Pump On in

Pump Off in



HOUSE DETAIL 30 SCALE





Property Owner/Client:

Site Address:

Email Address:

Project ID: v 04.06.2017

Date:

Phone Number:

1. DESIGN FLOW, STRENGTH OF WASTE, AND TANKS

A. Design Flow: Gallons Per Day (GPD) Number of Bedrooms (Residential):

Type of Wastewater: Treatment Level: *Select Treatment Level C for residential septic tank effluent*

Other Est. flow (select method and provide data): Measured Flow: GPD Estimated Flow: GPD

Other Est. waste strength (attach data or estimate basis): BOD: mg/L TSS: mg/L Oil&Grease: mg/L

B. Septic Tank Sizing

1. Residential dwellings

Min Code Required Septic Tank Capacity: Gallons, in Tanks or Compartments

Recommended Septic Tank Capacity: Gallons, in Tanks or Compartments

2. Other Establishments

Waste received by:

Min Code Required Septic Tank Capacity: GPD X = Gallons, in Tanks or Compartments

Designer Recommended Septic Tank Capacity: Gallons, in Tanks or Compartments

3. Effluent Screen & Alarm (Y/N):

 Manufacturer/Model:

C. Holding Tanks Only:

Minimum Capacity: Residential =400 gal/bedroom, Other Establishment = Design Flow x 5.0, Minimum size 1000 gallons

Minimum Code Required Capacity: Gallons, in Tanks Type of High Level Alarm:

Designer Recommended Capacity: Gallons, in Tanks

D. Pump Tank 1 Capacity (Code Minimum):

Gallons Pump Tank 2 Capacity (Code Minimum): Gallons

Pump Tank 1 Capacity (Designer Rec): Gallons Pump Tank 2 Capacity (Designer Rec): Gallons

Pump 1 GPM Total Head ft Pump 2 GPM Total Head ft

Supply Pipe Dia. in Dose Volume: gal Supply Pipe Dia. in Dose Volume: gal

2. SYSTEM AND DISTRIBUTION TYPE

Soil Treatment Area Type: Distribution Type:

Benchmark Reference Elevation: ft Benchmark Location:

MPCA System Type: Type of Distribution Media: Drainfield Rock Registered Treatment Media:

Type III/IV Details:

3. SITE EVALUATION SUMMARY:

A. Depth to Limiting Layer: in ft G. Soil Texture:

B. Elevation of Limiting Layer:

C. Loc. of Restrictive Elevation: H. Soil Hyd. Loading Rate: GPD/ft²

D. Minimum Required Separation: in ft I. Perc Rate: MPI

E. Code Maximum Depth of System: in

F. Measured Land Slope: % J. Soil with >35% Rock Fragments Present? Yes No

If yes describe below: % rock and layer thickness, amount of soil credit and any additional information for addressing the rock fragments in this design.

Comments:



4. SOIL TREATMENT AREA DESIGN SUMMARY

Trench Design Summary

Dispersal Area ft² Sidewall Depth in Trench Width ft
 Total Lineal Feet ft Number of Trenches Code Maximum Trench Depth in
 Contour Loading Rate ft Min Trench Length ft Designer's Max Trench Depth in

Bed Design Summary

Absorption Area ft² Depth of sidewall in Code Maximum Bed Depth in
 Bed Width ft Bed Length ft Designer's Max Bed Depth in

Mound Design Summary

Absorption Bed Area ft² Bed Length ft Bed Width ft
 Absorption Width ft Clean Sand Lift ft Berm Width (0-1%) ft
 Upslope Berm Width ft Downslope Berm Width ft Endslope Berm Width ft
 Total System Length ft Total System Width ft Contour Loading Rate gal/ft

At-Grade Design Summary

Absorption Bed Width ft Absorption Bed Length ft System Finished Height ft
 Contour Loading Rate gal/ft Upslope Berm Width ft Downslope Berm Width ft
 Endslope Berm Width ft System Length ft System Width ft

Level & Equal Pressure Distribution Summary

No. of Perforated Laterals Perforation Spacing ft Perforation Diameter in
 Lateral Diameter in Min. Delivered Volume gal Maximum Delivered Volume gal

Non-Level and Unequal Pressure Distribution Summary

	Elevation (ft)	Pipe Size (in)	Pipe Volume (gal/ft)	Pipe Length (ft)	Perforation Size (in)	Spacing (ft)	Spacing (in)
Lateral 1							
Lateral 2							
Lateral 3							
Lateral 4							
Lateral 5							
Lateral 6							

Minimum Delivered Volume
 gal

Maximum Delivered Volume
 gal

5. Additional Info for At-Risk, HSW or Type IV Design

A. Calculate the organic loading

1. Organic Loading to Pretreatment Unit = Design Flow X Estimated BOD in mg/L in the effluent X 8.35 ÷ 1,000,000

gpd X mg/L X 8.35 ÷ 1,000,000 = lbs. BOD/day

2. Type of Pretreatment Unit Being Installed:

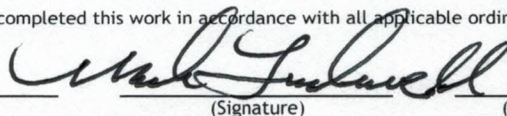
3. Calculate Soil Treatment System Organic Loading: BOD concentration after pretreatment ÷ Bottom Area = lbs./day/ft²

mg/L X 8.35 ÷ 1,000,000 ÷ ft² = lbs./day/ft²

Comments/Special Design Considerations:

I hereby certify that I have completed this work in accordance with all applicable ordinances, rules and laws.

Mark Tradewell
(Designer)


(Signature)

307
(License #)

02/11/22
(Date)



Septic System Management Plan for Below Grade Systems

The goal of a septic system is to protect human health and the environment by properly treating wastewater before returning it to the environment. Your septic system is designed to kill harmful organisms and remove pollutants before the water is recycled back into our lakes, streams and groundwater.

This **management plan** will identify the operation and maintenance activities necessary to ensure long-term performance of your septic system. Some of these activities must be performed by you, the homeowner. Other tasks must be performed by a licensed septic maintainer or service provider. However, it is **YOUR** responsibility to make sure all tasks get accomplished in a timely manner.

The University of Minnesota's *Septic System Owner's Guide* contains additional tips and recommendations designed to extend the effective life of your system and save you money over time.

Proper septic system design, installation, operation and maintenance means safe and clean water!

Property Owner	Josh Hunt	Email
Property Address	XXXX Green Valley Road NW	Property ID
System Designer	Mark Tradewell	Contact Info (763) 286-9095
System Installer		Contact Info
Service Provider/Maintainer		Contact Info
Permitting Authority	City of Ramsey	Contact Info (763) 433-9850
Permit #		Date Inspected

Keep this Management Plan with your Septic System Owner's Guide. The Septic System Owner's Guide includes a folder to hold maintenance records including pumping, inspection and evaluation reports. Ask your septic professional to also:

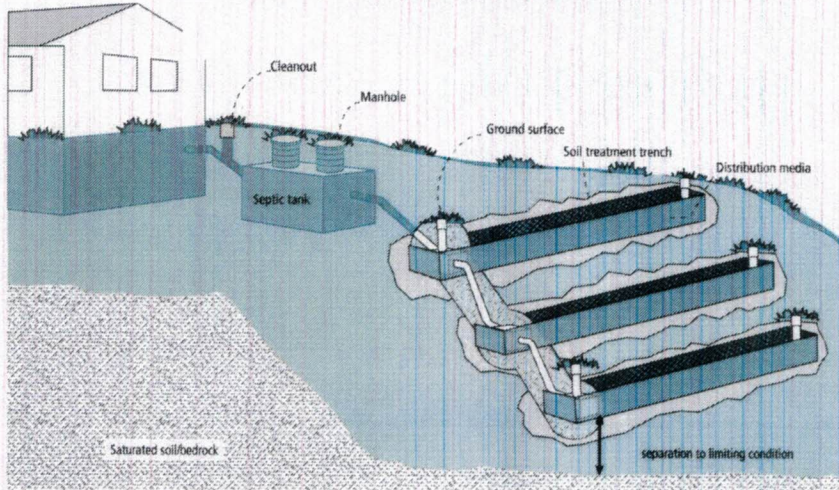
- Attach permit information, designer drawings and as-built of your system, if they are available.
- Keep copies of all pumping records and other maintenance and repair invoices with this document.
- Review this document with your maintenance professional at each visit; discuss any changes in product use, activities, or water-use appliances.

For a copy of the *Septic System Owner's Guide*, visit www.bookstores.umn.edu and search for the word "septic" or call 800-322-8642.

For more information see <http://septic.umn.edu>



Your Septic System



Septic System Specifics	
System Type: <input checked="" type="radio"/> I <input type="radio"/> II <input type="radio"/> III <input type="radio"/> IV* <input type="radio"/> V* (Based on MN Rules Chapter 7080.2200 – 2400) *Additional Management Plan required	<input type="checkbox"/> System is subject to operating permit* <input type="checkbox"/> System uses UV disinfection unit* Type of advanced treatment unit _____

Dwelling Type	Well Construction
Number of bedrooms: <u>4</u> System capacity/ design flow (gpd): <u>600</u> Average daily flow (gpd): <u>360</u> Comments _____ Business? <input type="radio"/> Y <input checked="" type="radio"/> N What type? _____	Well depth (ft): _____ <input type="checkbox"/> Cased well Casing depth: ?? <input type="checkbox"/> Other (specify): _____ Distance from septic (ft): <u>50'+</u> Is the well on the design drawing? <input checked="" type="radio"/> Y <input type="radio"/> N

Septic Tank	
<input type="checkbox"/> First tank Tank volume: <u>1500</u> gallons Does tank have two compartments? <input checked="" type="radio"/> Y <input type="radio"/> N <input type="checkbox"/> Second tank Tank volume: _____ gallons <input type="checkbox"/> Tank is constructed of <u>Precast Concrete</u> <input type="checkbox"/> Effluent screen: <input type="radio"/> Y <input checked="" type="radio"/> N Alarm <input type="radio"/> Y <input checked="" type="radio"/> N	<input type="checkbox"/> Pump tank (if one) <u>1000</u> gallons <input type="checkbox"/> Effluent pump make/model: <u>Gould PE51</u> Pump capacity <u>44</u> GPM TDH <u>21</u> Feet of head <input type="checkbox"/> Alarm <input checked="" type="radio"/> Y <input type="radio"/> N Location <u>Post</u>

Soil Treatment Area (STA)	
Trenches: _____ total lineal feet Number of trenches: _____ at _____ feet each STA size (width x length): <u>63</u> ft x <u>16</u> ft Location of additional STA: <u>Adjacent</u> Type of distribution media: <u>Rock</u>	<input type="checkbox"/> Gravity distribution <input checked="" type="checkbox"/> Pressure distribution <input type="checkbox"/> Inspection ports <input type="checkbox"/> Cleanouts <input type="checkbox"/> Additional STA not available <input type="checkbox"/> Surface water diversions