Aitkin County Holding Tank Design

Property Owner:

Jane Hill

Date:

8/1/2023

Cell: 612-998-6990

Mailing Address: 34301 299th Pl.

Site Address: 34335 299th Pl.

Home Phone #:

City: Aitkin

State:

MN Zip:

56431 Parcel Number:

15-0-058504

City: Aitkin

State:

MN

Zip:

56431

Driving Directions if no address issued:

Legal Description:

Sec: 34 Twp.: 47

Range: 25

Twp. Name: Kimberly

Lake / River:

Dam

Lake / River Classification:

RD

Estimated Flow in Gallons per Day (GPD)

FLOW DATA	Shed with Bathroom	Bedrooms	Class 1	Class II	Class III
Number of Bedrooms:	2	2	300	225	180
Dwelling Classification:		3	450	300	218
System Type:	11	4	600	375	256
Gallons per Day (GPD):	300	5	750	450	294
		6	900	525	332
WELLS		7	1050	600	370
Deep Well: Proposed	Deep	8	1200	675	408

Shallow Well:

None

Wells to be sealed (if Applicable)?

SETBACKS

Tank(s) to Well:

+501

Drainfield to Well:

NA

Sewer Line to Well:

Tank(s) to House:

+10'

Drainfield to House:

NA

Air Test

NO

Tank(s) to Property Line:

+10'

Drainfield to Property Line:

NA

Additional System Notes and Information:

Shed with bathroom, No wells on this lot. Proposed well must be +50 ft from tank.

Soils are type III, 4 soil borings around building.

Owner wants a holding tank.

Designer Name: Jeff Brummer

License Number:

L-1347

Address: 14650 Agate Ridge Road

City: Brainerd

State: MN

Zip Code:

56401

Home Phone #:

Cell: 218-821-0704

E-Mail Address: brummerseptic@gmail.com

Monno

Designer Signature:

Date:

8/1/2023

Page: 1 Of

Aitkin County Holding Tank Design Lake Lot

					- 0		
Property Own	er:	Jane Hill		Date:	8/1/2023	Designer's Init	tials: JB
Please record the depth of all horizons, redoximorphic features, restricting layers, and saturated soils.							
Include all Chr	oma and hue valu	es.					•
SB - 1 Pr	oposed Site				SB - 2 Al	ternate Site	
Depth (in.)	Texture	Color			Depth (in.)	Texture	Color
0 - 7	Top Soil	10YR 3/2			0-6	Top Soil	10YR 3/2
7 - 11	Loam	10YR 4/3			6 - 10	Loam	10YR 4/3
11"	Mottels	7.5YR5/4			10 "	Mottels	7.5YR5/4
							60 19 689 6 550
SB - 3 Pr	oposed Site				SB - 4 Al	ternate Site	
Depth (in.)	Texture	Color			Depth (in.)	Texture	Calor
0 - 7	Top Soil	10YR 3/2			0 - 6	Top Soil	10YR 3/2
7 - 11	Loam	10YR 4/3			6 - 11	Loam	10YR 4/3
11"	Mottels	7.5YR5/4			11"	Mottels	7.5YR5/4
Soil Sizing Factors / Hydraulic Loading Rates							
Perc. Ra	ite Texture	SSF	HLR	Perc. Rate	Texture	SSF	HLR
<0.1	Coarse Sand			16 to 30	Loam	1.67	0.60
0.1 to		0.83	1.20	31 to 45	Silt Loam	2.00	0.50
0.1 to		1.67	0.6	46 to 60	Clay Loam	2.20	.045
6 to 1	Sandy Loam	1.27	0.79	> 60	Clay Loam	***	0.24
		Descri	ation of So	il Treatmen	t Areas		
		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Proposed			Alternate Site	e
Disturbed Area ?		No			No		
Co	mpacted Area ?		No		No		
Floo	oding Potential?		No		No		
Ru	n On Potential ?		No			No	
		SB = 1		SB = 3	SB =	2 SB =	4
Limiting Layer Depth		11"		11"	1	LO"	11"
Slop	e % and Direction						
Lar	dscape Position						
Ve	egetation Types						
	Soil Texture						
Soil S	lizing Factor (SSF)		Select (One		Select O	ne

Comments: Owner wants holding tanks over type III Mound at present time.

Designer conducted 4 soil borings, all are type III soils.

Aitkin County { Design Notes }

Property Owner:

Jane Hill

Date: 8/1/2023

Designer's Initials:

JB

34335 299th PL. Aitkin I

Pin: 15-0-058504

Owner want a holding tank, Soils are type III on this lot.

No well on this lot. Closest well is + 70 ' to tank.

If Owner installs a well it must be +50 ft to the holding tank.

Install 1500 Jacobson Holding tank, + 10 ft from Shed and Property line.

Raise manhole to above finished grade (recommend 6" above finished grade for winter access).

Install electric alarm in tank at 75% of tanks capacity, 32 inches from bottom.

this will leave approx. 375 gallons of reserve capacity.

Tank will meet 50ft. Setback from well, and will meet 10 ft. setback to all property lines.

Tank will meet 10 ft. setback to buildings. Tanks will meet setback to lake 75'.

Home owner has a pumping agreement with local pumper on file.

Setbacks are

50 ft. from well

10 ft. from lot line

10 ft. from road easement

10 ft. from structure.

75 ft Dam Lake setback.

(Recommendations for holding tanks)

Electric Alarm in or near Shed

Insulate tank top

Water proof outside if installed in water if available

Raise manholes 6" or more above finished grade for winter access

Add extra soil on top of tanks for ballast

Owner should install protection around tank to keep traffic off tank.

Designer Name: Jeff Brummer

License Number:

L-1347

Address: 14650 Agate Ridge Road

E-Mail Address: brummerseptic@gmail.com

City: Brainerd

State: MN

Zip Code:

56401

Home Phone #:

Cell:

218-821-0704

Designer Signature:

Date:

8/1/2023

Property Owner:

One Inch = 40 ft.

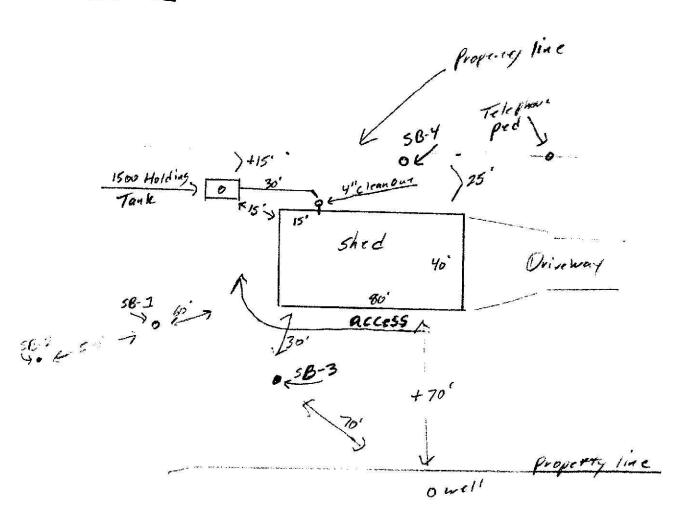
North

Jane Hill

Date: 8/1/23

Designer's Initials:

JB



Dam Lake Acrossed road from shed (+ 200 ')

Please show all that apply (Existing or Proposed):

Please Draw to Scale with North to Top or Left Side of Page:

Wells within 100ft. Of Drain field.

Water lines within 10 ft. of Drain field.

Drain field Areas:

Disturbed/Compacted Areas

Component Location

OHW ordinary high water

Lot Easements

Access Route for Tank Maintenance

Property Lines

Structures Setbacks

Elv.= 100' Nail on Maple Tree at NW corner of Shed

Existing Grade at NW corner of Shed Elv. = 99.1'

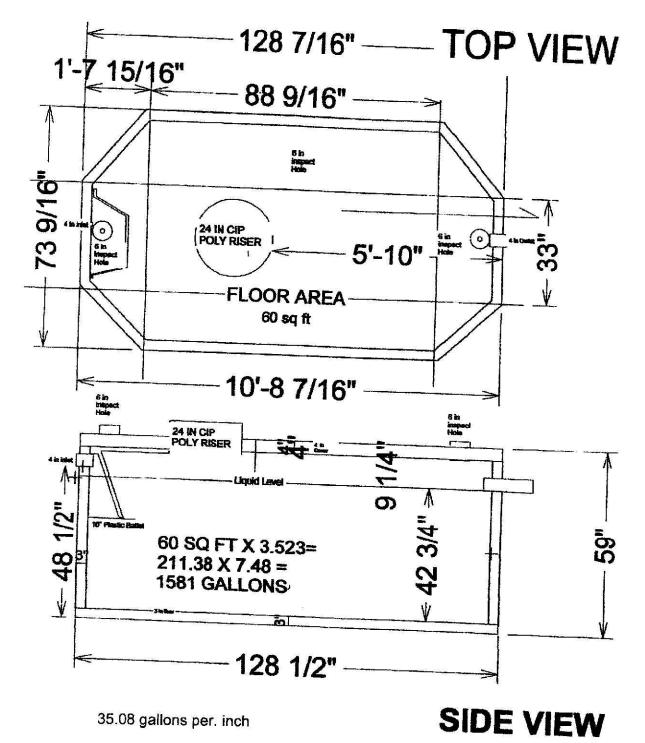
Top of Sewer pipe at house Elv.= 98.6'

Bottom of Tin on Shed Elv.= 100'

Elevations: Benchmark Elevation: Holding tank grade Elv.= 97.7'

Approx. tank inlet Elv.= 95.5' Grade at Maple Tree Elv.= 98.3'

1500H Holding Tank



Drawings Owned BY Jacobson Precast, LLC 36641 HWY 169, Aitkin, Mn 56431 Do not copy drawings without permission of the Owner

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HOLDING TANK PUMPING SERVICE AGREEMENT PID# 15-0-058504

Permit#	_Address34335 299th	Pl. Aitkin MN 56431
THIS AGREEMENT. entered imber Lakes Septic Service he nerementer referred to as "Hor	remarker referred to as "C	n County Registered Septic Tank Pumper, ontractor, and <u>Jane Hill</u>
WHEREAS, Homeowner desi services to protect the environ	res and is required to retain in ment and to obtain a certific	dividual sewage treatment system holding tank ate of compliance from Altkin County: and
WHEREAS, the Contractor de as necessary and in accordar	sires to provide sewage treat ace with the terms and condi	tment system pumping services to Homeowner tions outlined herein.
NOW THEREFORE, in considerations follows:	leration of the mutual promise	s contained herein, Parties do hereby agree as
System, unless earlier terming Agreement is intended to arrathe home pursuant to a certific Department upon execution of date, Homeowner shall have a County Subsurface Sewage Environmental Services Department of Aitkin of the international Services Department of the international Ser	nated as provided herein. Inge for the provision of pumples of compliance to be issue If this Agreement, Homeowie I permanent sawage treatment Treatment System Ordinal Internation of the provided in the province of th	to final installation of an innection to a Municipal Sewage Treatment. The parties understand and agree that this ping services so that Homeowner may occupy ed by the Aitkin County Environmental Services her further agrees that at the earliest possible introduce with the Aitkin nee and as approved by the Aitkin County pal Sewage Treatment System. Upon approval system or connection to a municipal sewer, or imended or different contract, this Agreement
be pumped in accordance with a size (gal.) = frequency of pure within 24 hours of functional alarm): Whichever is greated to provide	in any manner. Contractor ar th the following: / (number of househ mping: or findication by tank alarm of k ster	r agrees that he/she shall not allow the holding and Homeowner agree that the holding tank shall old occupants multiplied by 75 gallons per day) ack of capacity (applicable only if system has a to the regular pumping schedule or as needed nitractor as agreed by the parties for pumping
INSPECTION servicing for leaks below the through visual evidence of m	Openating depth and whether	pected by a licensed pumper at the time of er tank tops, riser joints, and connections leak
understand that failure to have from the holding tank, regard	es Department by Homeowr e holding tank pumped as he leas of fault, may result in the I the homeowner may be rec	r or Contractor shall be reported to the Aitkin ner or Contractor. Homeowner and Contractor brein specified or the discharge of any contents a suspension, cancellation or revocation of the quired to vacate the premises.
Contractor		Homeowner
Date 8/1/2023		Date
Timber Lakes Septic Service	(218) 927-6175	Jane Hill
1037 1st St. NW Aitkin	20 ME 04990 NO VI 92	34301 299th Pl. Aitkin Mn 56431
Timber Lake Septic Ser	35.00 = 00.00 = 0.00 w.c 0w.d	612-998-6990