

Preliminary & Field Evaluation Form

www.SepticResource.com vers 12.4

Owner Information			
Date	9/4/2019	Sec / Twp / Rng	S-31, T-47, R-27
Parcel ID	01-1-168700	LUG (county, city, township)	Aitkin Co.
Property Owner:	Sandy Blackledge	Owners address (if different)	
Property Address:	34908 455th PL. Aitkin Mn 56431		
City / State / Zip:			

Flow Information and Waste Type / Strength			
Estimated Design flow	450	Anticipated Waste strength	<input type="checkbox"/> Hi Strength <input checked="" type="checkbox"/> Domestic
Comments: Type III mound Will Require Aitkin Co Operating Permit		Any Non-Domestic Waste	<input type="checkbox"/> Yes (class V) <input checked="" type="checkbox"/> No
		Sewage ejector/grinder pump	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
		Water softener	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
		Garbage Disposal	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
		Daycare / In home business	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Site Information					
Existing & proposed lot improvements located (see site map)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Well casing depth	Existing deep well	
Easements on lot located (see site map)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Drainfield w/in 100' of residential well	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Property lines determined (see site map)	<input checked="" type="checkbox"/> Yes By Others	<input type="checkbox"/> No	Site w/in 200' of transient noncommunity water supply (TNCWS)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Req'd setbacks determined (see site map)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Site w/in an inner wellhead mgmt zone (CWS/NTNCWS)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Utilities located & identified (gopher state one call)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Buried water supply pipe w/in 50' of system	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Access for system maintenance (shown on site map)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Site located in Shoreland (w/in 1000' of lake, 300' of river)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Soil treatment area protected	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Site map prepared with previous items included	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Construction related issues	Remove existing mound, construct new bigger mound in approx. same location				

Soil Information

I hereby certify this evaluation was completed in accordance with MN 7080 and any local reg's.

Designer Signature

Brummer Septic LLC.

Company

L-1347

License #

Soil Observation Log

www.SepticResource.com vers 12.4

Owner Information	
Property Owner / project:	Sandy Blackledge
Property Address / PID:	34908 455th PL. Aitkin Mn 56431

Soil Survey Information						<input type="checkbox"/> refer to attached soil survey
Parent matl's:	<input checked="" type="checkbox"/> Till	<input checked="" type="checkbox"/> Outwash	<input type="checkbox"/> Lacustrine	<input type="checkbox"/> Alluvium	<input type="checkbox"/> Organic	<input type="checkbox"/> Bedrock
landscape position:	<input type="checkbox"/> Summit	<input type="checkbox"/> Shoulder	<input checked="" type="checkbox"/> Side slope	<input type="checkbox"/> Toe slope		
soil survey map units:	<u>1353B & 625</u>			slope <u>2</u> %	direction- <u>North</u>	

Soil Log #1									
Depth (in)	Texture	<input checked="" type="checkbox"/> Boring fragment %	<input type="checkbox"/> Pit	Elevation <u>98.5</u>	redox color	Depth to SHWT <u>18"</u> Elv.= <u>97'</u>	consistence	grade	shape
0 - 6	Topsoil Sandy Loam	<35		10YR3/2			Loose	Loose	Granular
6 - 18	Sandy Loam	<35		10YR5/4			Friable	Loose	Granular
18 - 20	Sandy Loam	<35		10YR5/4	7.5YR5/6		Friable	Loose	Granular
		<35					Loose	Loose	Granular
		<35					Loose	Loose	Granular
Comments:									

34908 455th PL. Aitkin Mn 56431 **Soil Log #2 West End of Existing Mound**

		<input checked="" type="checkbox"/> Boring <input type="checkbox"/> Pit		Elevation 98.2'		Depth to SHWT 18" Elv.=96.7"		
Depth (in)	Texture	fragment %		matrix color	redox color	consistence	grade	shape
0 - 3	Topsoil Sandy Loam	<35		10YR3/2		Loose	Loose	Granular
3 - 10	Sandy Loam	<35		10YR4/4		Loose	Loose	Granular
10 - 12	Topsoil Sandy Loam	<35		10YR3/2		Loose	Loose	Granular
12 - 18	Sandy Loam	<35		10YR4/3		Friable	Loose	Granular
18	Sandy Loam	<35		10YR4/3	7.5YR5/6	Friable	Loose	Granular

34908 455th PL. Aitkin Mn 56431

Soil Log #3

		<input checked="" type="checkbox"/> Boring <input type="checkbox"/> Pit		Elevation 97.1'		Depth to SHWT 11" Elv=96.2		
Depth (in)	Texture	fragment %		matrix color	redox color	consistence	grade	shape
0 - 6	Topsoil Sandy Loam	<35		10YR3/2		Loose	Loose	Granular
6 - 11	Sandy Loam	<35		10YR4/3		Friable	Loose	Granular
11 - 13	Sandy Loam	<35		10YR4/4	7.5YR5/6	Friable	Loose	Granular
		<35 35 - 50 >50				loose friable firm rigid	loose weak moderate strong	single grain granular blocky prismatic platy massive
		<35 35 - 50 >50				loose friable firm rigid	loose weak moderate strong	single grain granular blocky prismatic platy massive

I hereby certify this work was completed in accordance with MN 7080 and any local req's.



Designer's Signature

Brummer Septic LLC.

Company

L-1347

License #

34908 455th PL. Aitkin Mn 56431

Soil Log #4

		<input checked="" type="checkbox"/> Boring	<input type="checkbox"/> Pit	Elevation <u>97.2'</u>	Depth to SHWT	10" Elv.= 96.4'		
Depth (in)	Texture	fragment %	matrix color	redox color	consistence	grade	shape	
0 - 8	Topsoil Loam	<35	10YR3/2		Loose	Loose	Granular	
8 - 10	Loam	<35	10YR5/4		Friable	Loose	Granular	
10 - 14	Loam	<35	10YR5/4	7.5YR5/6	Friable	Loose	Granular	
		<35 35 - 50 >50			loose friable firm rigid	loose weak moderate strong	single grain granular blocky prismatic platy massive	
		<35 35 - 50 >50			loose friable firm rigid	loose weak moderate strong	single grain granular blocky prismatic platy massive	

34908 455th PL. Aitkin Mn 56431

Soil Log #5

		<input type="checkbox"/> Boring	<input type="checkbox"/> Pit	Elevation	Depth to SHWT			
Depth (in)	Texture	fragment %	matrix color	redox color	consistence	grade	shape	
		<35 35 - 50 >50			loose friable firm rigid	loose weak moderate strong	single grain granular blocky prismatic platy massive	
		<35 35 - 50 >50			loose friable firm rigid	loose weak moderate strong	single grain granular blocky prismatic platy massive	
		<35 35 - 50 >50			loose friable firm rigid	loose weak moderate strong	single grain granular blocky prismatic platy massive	
		<35 35 - 50 >50			loose friable firm rigid	loose weak moderate strong	single grain granular blocky prismatic platy massive	
		<35 35 - 50 >50			loose friable firm rigid	loose weak moderate strong	single grain granular blocky prismatic platy massive	

I hereby certify this work was completed in accordance with MN 7080 and any local req's.



Designer Signature

Brummer Septic LLC.

Company

L-1347

License #

Mound Design - Aitkin county

Property Owner: Sandy Blackledge Date: 9/4/2019
 Site Address: 34908 455th PL. Aitkin Mn 56431 PID: 01-1-168700
 Comments: Type III mound Remove Existing and construct bigger one in same place

instructions: = enter data = adjust if desired = computer calculated - DO NOT CHANGE!

1) 3 bedroom Type III Residential System
 2) 450 GPD design flow
 3) No Garbage disposal or pumped to septic Install Jacobson 1650 2/comaprtment tank
 4) 1000 Gal Septic tank (code minimum) 1120 Gal Septic tank (design size / LUG req'd)
 Tank options: Effluent filter & alarm req'd
 5) 1.2 GPD/ft² mound sand loading rate contour loading rate of 12 req's a min 37.5 ft. long rockbed
 6) 10.0 ft rockbed width 37.5 ft rockbed length
 7) 3.0 ft lateral spacing 3.0 ft perforation spacing (maximum of 3 for both)
 end feed manifold connection
 8) 3 laterals 35.5 feet long 12.0 perfs / lateral 36 perfs total
 (1/2 a perf means the first perf starts at the middle feed manifold)
 9) 1/4" inch perfs at 1 feet residual head gives 0.74 gpm flow rate per perforation
 for this perf size & spacing, & pipe size on line 12, max perfs/lateral = 16, line #8 must be less --> OK
 10) 7.0 doses per day (4 minimum)
 11) 64 gallons per dose (treatment volume)
 12) 1.50 inch diameter laterals must be used to meet "4x pipe volume" requirement 1.50 5x
 13) 50 feet of 2.0 inch supply line leads to 9 gallons of drainback volume
 (Tip: "top feed" manifold to control the drainback)
 14) 73 gallons TOTAL pump out volume (treatment + drainback)
 15) 12 feet vertical lift from pump to mound laterals, leads to a:
 16) 27 GPM @ 19 feet of head, Pump requirement (note: >50gpm may require an extra 3-6' of head)
 17) 500 gal Dose tank (code minimum) 533 gal Dose tank (design size / LUG req'd) at 12.69 gpi
 leads to a
 18) 5.8 inch swing on Demand float, or timed dosing of 2.7 min ON (confirm pump rate with drawdown
 (this delivers Average flow, =70% of Peak design flow) 5.1 hrs OFF test and adjust as necessary)
 19) 12 inches from bottom of tank to "Pump OFF" float
 20) 18 inches from bottom of tank to "Pump ON" float, or 12 inches to "Timer ON" float if time dosed
 21) 21 inches from bottom of tank to "Hi Level" float, or 31 inches to "Hi Level" float if time dosed
 22) 267 gallons reserve capacity (after High Level Alarm is activated)

System will have 2 alarms: 1 for pump and 1 for Effluent filter

System will require an Event counter on the pump control.

23) gpd/ft² Absorption area Soil Loading Rate, which gives a mound ratio of (minimum)
(this must match the soil boring log) desired mound ratio

24) percent site slope (0-20% range) (% downslope site slope, if different than upslope)

25) inches, or ft. to Redox or other limiting condition (need at least 12" to be a Type I)
Treatment zone contains inches of 0% soil credit, and inches of 50% soil credit. Giving a:

26) inch, or ft. Sand Lift Mound **CRITICAL FOR FUTURE CERTIFICATIONS!!!**

27) ft. base absorption width (with sand beyond rockbed as follows):

28) greater of: absorption width OR sand slope

<input type="text" value="0.0"/> ft. upslope and sideslope	sand upslope <input type="text" value="9.9"/>
<input type="text" value="10.0"/> ft. Downslope	sand down slope <input type="text" value="16.1"/>

Individual slope ratios give BERM widths (topsoil beyond rockbed) of:

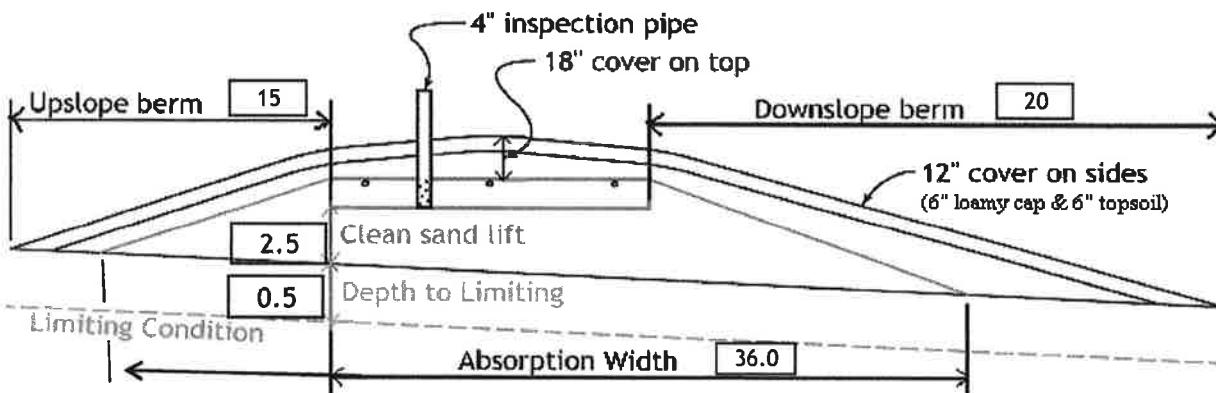
29) upslope ratio ft. upslope berm Use 3.5: 1 Upslope Ratio 15 Ft.

30) sideslope ft. sideslope berms

31) downslope ft. downslope berm

32) Overall Dimensions:

<input type="text" value="10.0"/> ft. wide by <input type="text" value="37.5"/> ft. long Rock bed
<input type="text" value="45"/> ft. wide by <input type="text" value="76"/> ft. long Mound footprint



Note:

For 0 to 1% slopes, *Absorption Width* is measured from the *Bed* equally in both directions.
For slopes >1%, *Absorption Width* is measured downhill from the *upslope edge of the Bed*.

33) Rock Bed:

<input type="text" value="10.0"/> ft. by <input type="text" value="37.5"/> ft. by <input type="text" value="9"/> inches under pipe, plus 20% gives	<input type="text" value="17"/> yd ³ or *1.4= <input type="text" value="24"/> ton
--	--

34) Mound Sand: (note: volume is based on 3:1/4:1 slope from top of rockbed, Exchange sand for loamy cap if desired)

<input type="text" value="44.6"/> up + <input type="text" value="74.4"/> downslope + <input type="text" value="20.3"/> ends + <input type="text" value="36.1"/> under rock =	<input type="text" value="211"/> yd ³ or *1.4= <input type="text" value="295"/> ton
plus 20%	

35) Loamy Cap:

<input type="text" value="41"/> ft. by <input type="text" value="72"/> ft. 6" deep, plus 20% gives	<input type="text" value="66"/> yd ³ or *1.4= <input type="text" value="92"/> ton
--	--

36) Topsoil:

<input type="text" value="45"/> ft. by <input type="text" value="76"/> ft. 6" deep, plus 20% gives	<input type="text" value="76"/> yd ³ or *1.4= <input type="text" value="106"/> ton
--	---

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

John Brummer
Designer/Signature

Brummer Septic LLC.
Company

L-1347
License#

9/4/2019
Date

Installer Summary

1120 gallon Septic tank (minimum)

Tank options: Effluent filter & alarm req'd

533 gallon Dose tank (minimum)

Install Jacobson 1650 2/comaprtment tank

at 12.69 gpi

27 GPM @ 19 ft. of head, Pump required

5.8 inch swing on Demand float which translates to roughly 3.9 inches of float tether length

if time dosing is required --> 2.7 minutes ON time & 5.1 hours OFF time

18 inches from bottom of tank to "pump ON" float, or 12 inches to "timer ON" float

21 inches from bottom of tank to "Hi Level Alarm" or 31 inches to "Hi level alarm" if time dosed

50 ft. of

2.0 inch supply line with end feed

manifold connection

(Tip: "top feed" manifold to control drainback)

30 inch, or

2.5 ft. Sand Lift Mound

10.0 ft. wide by

37.5 ft. long Rock bed

3 laterals

1.50 inch diameter

1/4" inch perfs

3.0 ft. perforation spacing

35.5 ft. long

3.0 ft. lateral spacing

Yes Effluent filter & alarm

3 clean out & valve box assemblies

36.0 ft. Total sand ABSORPTION width (minimum)

9.9 ft. upslope and sideslope (sand beyond rockbed, minimum)

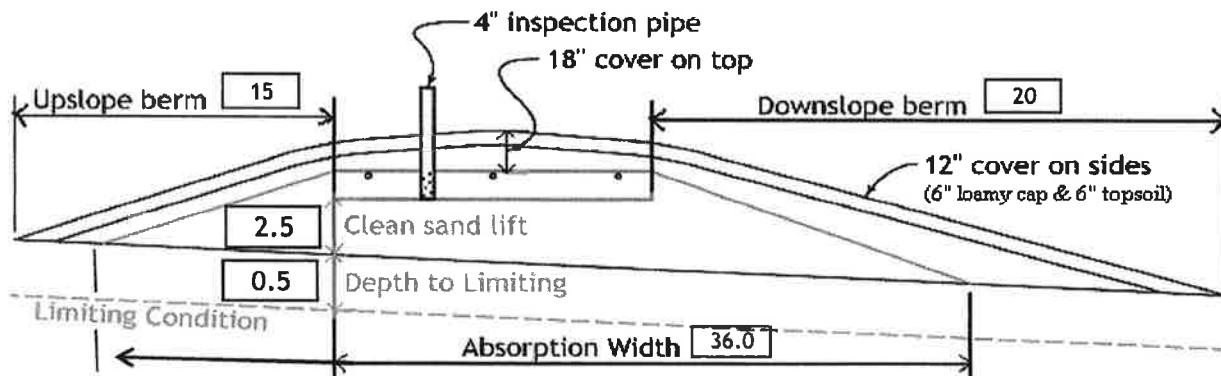
16.1 ft. Downslope (sand beyond rockbed, minimum)

Specific slope ratios give BERM widths (topsoil beyond rockbed) of:

3:1 upslope ratio 15 ft. upslope berm

4:1 sideslope 19 ft. sideslope berms

4:1 downslope 20 ft. downslope berm



Note:

For 0 to 1% slopes, *Absorption Width* is measured from the *Bed* equally in both directions.

For slopes >1%, *Absorption Width* is measured downhill from the upslope edge of the *Bed*.

Rock Bed:

17.0 yd³ or *1.4=

24 ton

9 inches under pipe

Mound Sand:

211 yd³ or *1.4=

295 ton

calculation based on 3:1/4:1 slope from top of rockbe

Loamy Cap:

66 yd³ or *1.4=

92 ton

6" deep

Topsoil:

76 yd³ or *1.4=

106 ton

6" deep

System will have 2 alarms: 1 for pump and 1 for Effluent filter

System will require an Event counter on the pump control.

INSPECTOR CHECKLIST - mound

34908 455th PL. Aitkin Mn 56431

WELL setbacks: 20' to pressure tested sewer line (5 psi for 15 min)
 50' to everything 100' to dispersal area with shallow well

PROPERTY LINES setback: 10' to everything

Road setback: platted: 10' prop line. Metes & bounds: out of road easement, or outer ditch.

LAKE / BLUFF setback: 20' for bluff. Lakes: GD ___, RD ___, NE ___. Protected wetland ___.

Building setbacks: 10' for everything, 20' for dispersal area.

WATER LINE under pressure ≤ 10' to bed, tank & sewer line. (else sewer line > 12" below, else ok w/pvc)

Sewer line & baffle connection (no 90's, 3' between 45's, slope min 1" in 8', max 2" in 8')
 (no depth req's, clean out every 100', Sch 40 pipe)

Septic tank and risers (water tight, insulated, proper depth, existing verified by pumping)
 mfg _____ 1120 gallons Effluent filter & alarm req'd

Riser over outlet, riser over inlet or center, and 6"+ inspection pipe over any remaining baffles.
 Yes effluent filter & alarm

Dose tank risers and piping (water tight, insulated, proper depth, drainback)
 mfg _____ 533 gallons

dose pump _____ 27 gpm 19 head VERIFY PUMP CURVE 2.7 min ON 5.1 hr OFF

float setting drop 5.8 inches at 12.7 gpi "DESIGNED" 3.9 inches approx float tether length
 73.0 gal dose divided by _____ gpi "INSTALLED" = _____ inches float drop (field corrected)

LABEL pump requirements and drawdown on riser or panel

Cam lock reachable from grade - 30" max. J-hook weep hole. Supply line access (no hard 90's)
 2.0 inch supply pipe: Sch40, sloped 1/8"+, supported by 4" sch40 sleeve or compacted, and buried 6"+.

splice box / control panel / electrical connections

flow measurement: CT, ETM, time dosed, home water meter

mound absorption area rough up

mound rock dimensions 10.0 X 37.5

Sand lift depth 30 inches. (Jar test : 2" sand leaves < 1/8" silt after 30 min)

Absorption Sand beyond rock 9.9 upslope 16.1 downslope

Bermed topsoil beyond rockbed 15 upslope 19 sideslope 20 downslope

cover depth of 12-18"+ VERIFY
 3 laterals (1-2' from edge of rock)
 1.50 inch pipe size (Sch40 pipe & fittings)
 3.0 ft lateral spacing

1/4" inch perforations
 3.0 ft perforation spacing

Air inlet at end of laterals, and at top feed manifold if necessary. VERIFY
 clean outs (no hard 90's)

4" inspection pipe to bottom of rock, anchored VERIFY

Abandon existing system - if necessary Re-use existing tank certification
 monitoring plan and type _____
 well abandonment form - if necessary _____

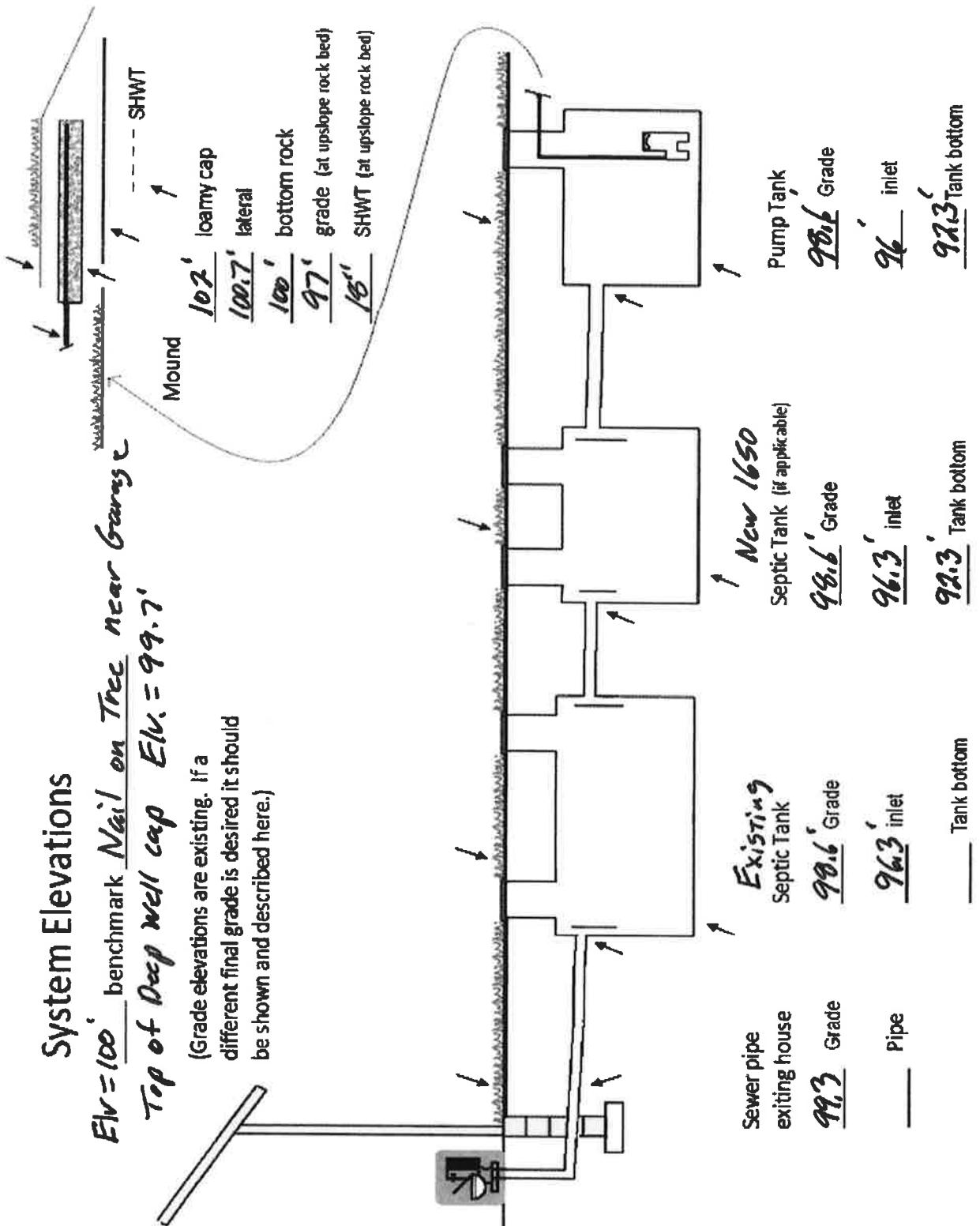
System will have 2 alarms: 1 for pump and 1 for Effluent filter

System will require an Event counter on the pump control.

System Elevations

Elv = 100' benchmark Nail on Tree near Garage
Top of Deep well cap Elv. = 99.7'

(Grade elevations are existing. If a
 different final grade is desired it should
 be shown and described here.)



{ Design Drawing }

Property Owner:

Sandy Blackledge

Date: 9/4/19

Designer's Initials: JB

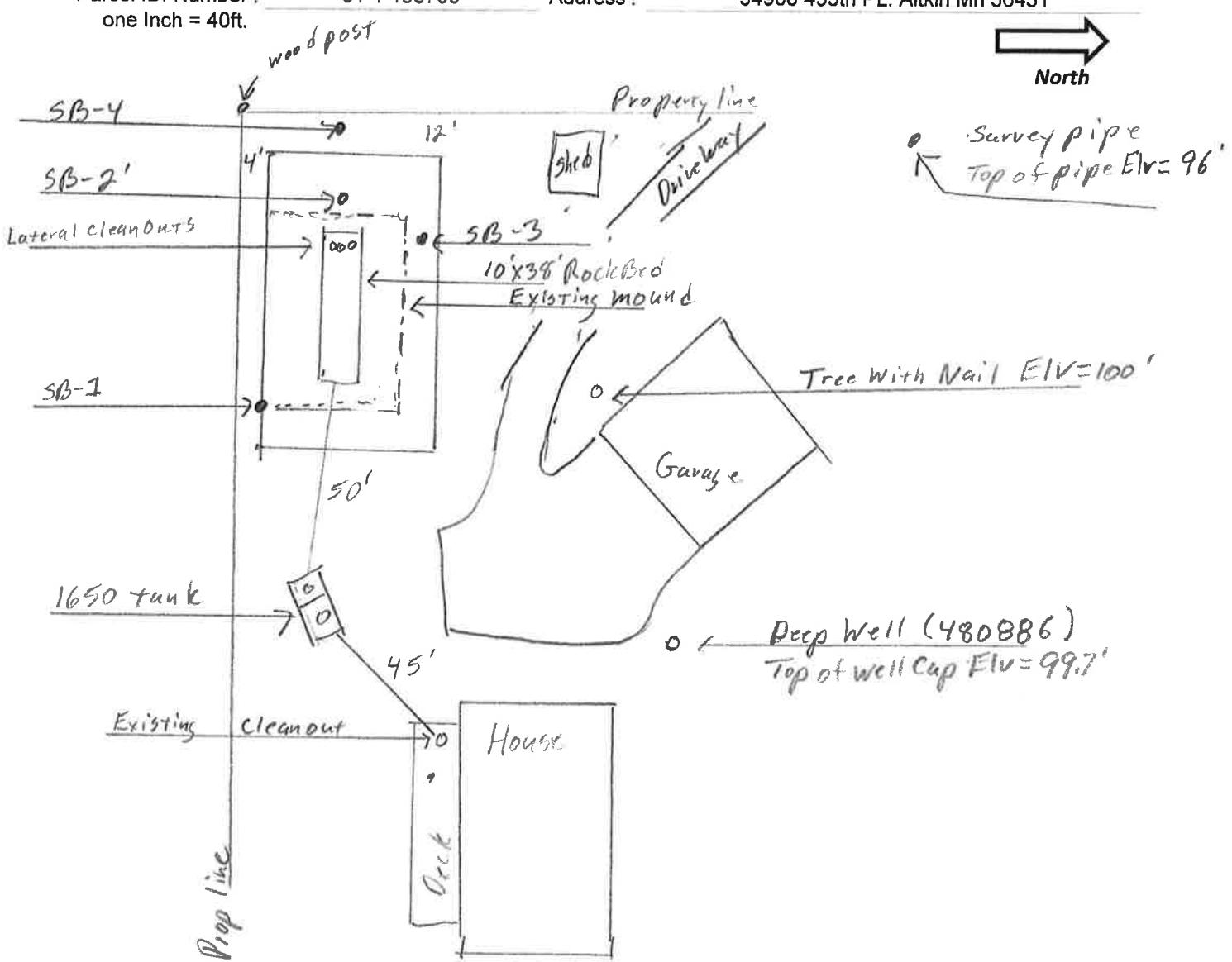
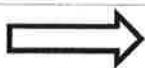
Parcel ID. Number:

01-1-168700

one Inch = 40ft.

Address:

34908 455th PL. Aitkin Mn 56431



	Surface/ SHWT	Nail on Tree = Bench Mark 100'		Grade
Soil Bore 1	98.5'/97'	Bench Mark	100'	
Soil Bore 2	98.2'/96.7'	Top of deep well Cap Elv. =	99.7'	Bottom of Rock 100'
Soil Bore 3	97.1'/96.2'	Ground Elv. Tank	98.6'	Top of Washed Sand Elv.=100'
Soil Bore 3	97.2'/96.4'	SW house	99.3'	Existing tank inlet Elv.= 96.3'

Please show all that apply (Existing)

Wells within 100ft. Of Drain field.

Water lines within 10 ft. of Drain field.

Drain field Areas:

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

Disturbed/Compacted Areas

Component Location

OHW ordinary high water

Lot Easements

Access Route for Tank Maintenance

Property Lines

Structures

Setbacks

Mound Design Notes - Aitkin county

Property Owner: Sandy Blackledge Date: 9/4/19
Site Address: 34908 455th PL. Aitkin Mn 56431 PID: 01-1-168700
Comments: Mound design may not follow Aitkin co. Auto fill form for mound design.

- 1 This is a type III mound , (Constructed on fill) sized for a 3 bedroom system.
This system will require an Aitkin Co. Operating permit, event counter, effluent filter, 2 electric alarms.
- 2 Existing deep well location is +80ft. From septic tank and mound.
- 3 Existing tank to be pumped, collapsed, filled or removed. Install new tank close to same location.
Existing mound to be removed and construct a new bigger, higher mound in approx. same location.
- 4 Designer did 4 soil borings around and through existing mound to come up with elevation of the rockbed.
Based on SB-1 mottles at Elv.= 97' or 18" of sand, But based on the Elv. Off the West end of the mound
it will take approx. 30" of sand. Designer use 30" for the Berm Calculations.
The mound is designed with a 3.5:1 ratio upslope (15ft.), and 4:1 down and end slopes.
- 5 Install 1650 Jacobson compartment tank low enough for drainback from mound and tie into existing pipe.
- 6 Install effluent filter in septic tank outlet. Install alarm on Effluent filter. Insulate tank tops.
- 7 Elevation contour of rock bed upslope edge is 97' . South berm will be approx. 4 ft. from property line.
The area size of the rock bed is 10' x 38' . Absorption area is 38' x 36'.
Sand absorption area is 9.9 ft. up slope + 10 ft. rockbed + 16.1 downslope = approx. 36 ft. wide sand base.
Berms are 15ft. Upslope, 20ft. Down slope, 10ft. Rock bed = approx. 45ft. Wide.
Overall mound size is approx. 45' wide x 76' long and approx. 4.5' high. End Berms are 19 ft.
- 8 The bench mark is the nail on the tree near garage, BM = Elv. 100'.
Installer to double check bench mark. Installer should confirm bench mark and sand height Elv. with inspector.
Installer should record bench mark Elv. and sand height on installation inspection form.
The top of the sand and bottom of rock bed is Elv. 100'.
- 9 It is important that the soils do not get compacted, and that clean Washed sand is used.
- 10 The Jacobson 1650 tank will be gravity flow from dwelling. Install the pump for 7 demand doses
per day. approx. 73 gallons per dose, 5.8 inches of tank level. Install alarm at 3 inches from pump on level.
Install all manholes, inspection pipes and clean-outs to grade or above. (Recommend min. 4" above grade)
Install a 2" supply pipe from tank to end manifold in rock bed, install so pipe drains back to tank.
Install 1.5" laterals with 9" of rock under them. Install clean-outs at far end of laterals.
Drill 1/4" perf holes spaced 3 ft. on center.
Install inspection pipe to bottom of rock bed, secure in rock bed and raise to above final grade.
- 11 Installer will pressure test and squirt height laterals when finished.
- 12 **Install Event counter on Effluent pump, calibrate pump and give gallons per event to Owner.**
- 13 Designer does not guarantee or warranty any Type III systems.

Designed to Aitkin Co. and MPCA recommendations and requirements.



Designer Signature

Brummer Septic LLC.
Design Company

L-1347
License#

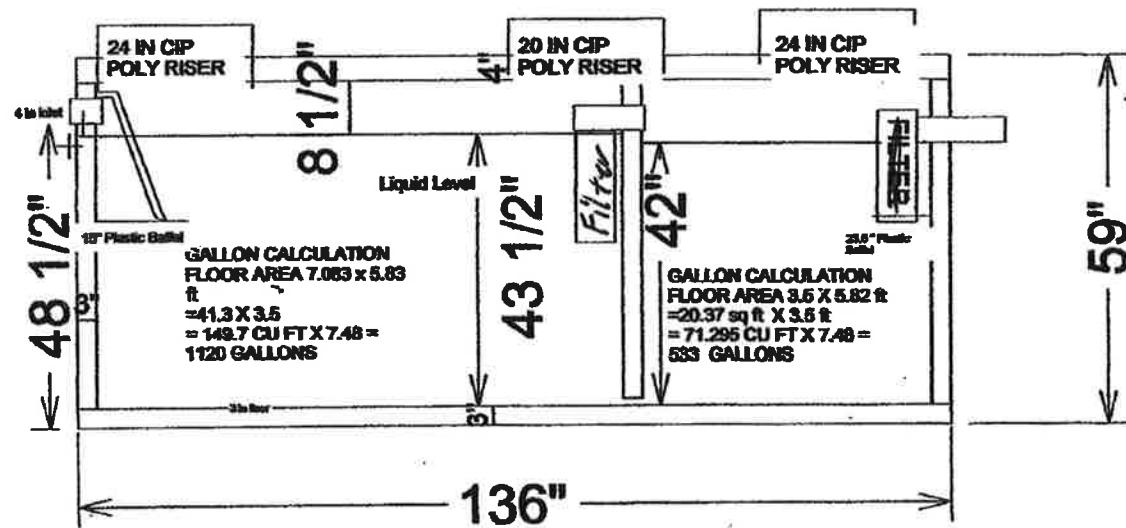
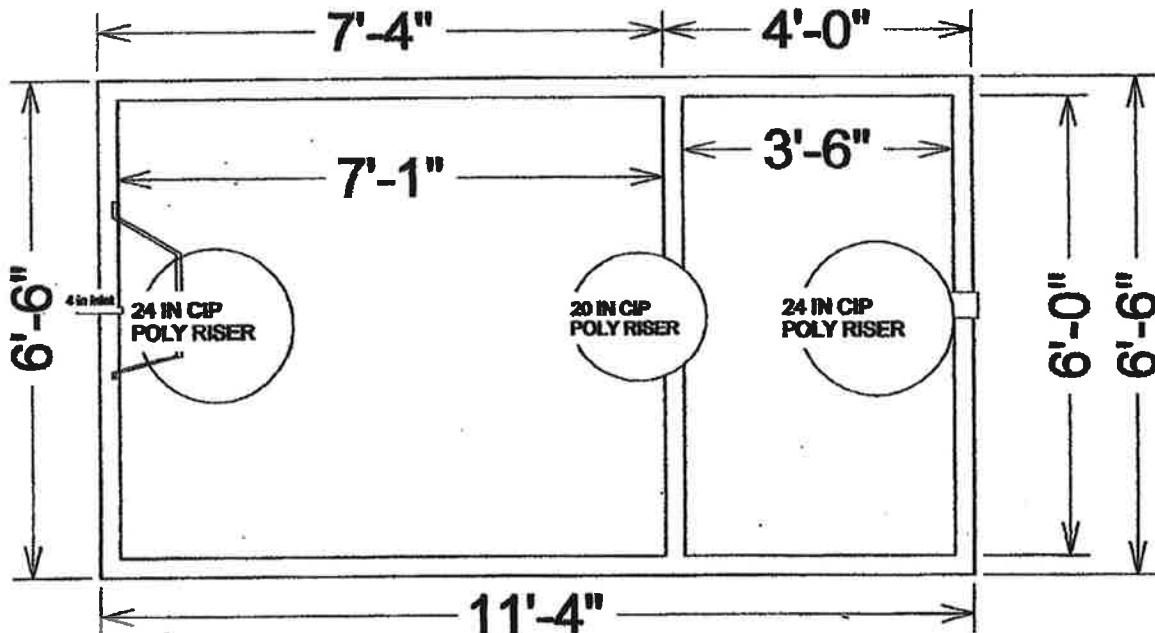
System will have 2 alarms: 1 for pump and 1 for Effluent filter

System will require an Event counter on the pump control.

System will Require Aitkin Co. Operator Permit

1650 Gallon 2 Compartment Septic Tank

TOP VIEW



SIDE VIEW

$$533 / 42" = 12.69 \text{ GPI}$$

Drawings Owned BY Jacobson Precast, Inc.
36641 HWY 169, Aitkin, Mn 56431



Minnesota Well Index

General Information

Unique Well ID:	480886	Well Name:	BLACKLEDGE, JERRY	County:	Altair	Aquifer:	Quat. buried artes. aquiifer
Well Elevation (msl in feet):	1229	Drilled Depth (ft):	110	Well Completed (ft):	110	Date Drilled:	04/28/1992
Township:	47	Range:	27	Dir.:	W	Section:	31
Subsection:	ABCDDB	Use:	domestic	Well Status:	Active	Depth To Bedrock:	
Driller:	Hasskamp Bros. Well	Entry Date:	03/05/1993	Update Date:	10/06/2017		

Related Resources:

[Go to MN Well Index Map](#) [Well Log Report](#) [Scanned Record\(s\)](#) [Stratigraphy Report](#)

More Details	Stratigraphy	Address	Chemical Data	Construction	Pump Test	Static Water	Comments
Location Changes	Overview Map						

Description	From(ft)	To(ft)	Color	Hardness	Lith Primary	Lith Secondary	Interpretation
SANDY LOAM	0	7	RED	MEDIUM	LOAM		clay/snd/silt-no peb.-red
CLAY	7	38	BROWN	HARD	CLAY		clay-brown
SAND	38	47	BROWN	MEDIUM	SAND		sand-brown
CLAY & ROCKS	47	66	GRAY	HARD	CLAY		pebbly sand/silt/clay-gray
SAND	66	88	RED	MEDIUM	SAND		sand-red
ROCKS & CLAY	88	102	RED	HARD	COBL		pebbly sand/silt/clay-red
SAND	102	110	BROWN	MEDIUM	SAND		sand-brown



Detailed Parcel Report

Parcel Number: 01-1-168700

General Information

Tax Information

Class Code 1: Residential 1-3 units Previously SRR
Class Code 2: Unclassified
Class Code 3: Unclassified
Homestead: Owner Homestead
Assessment Year: 2019

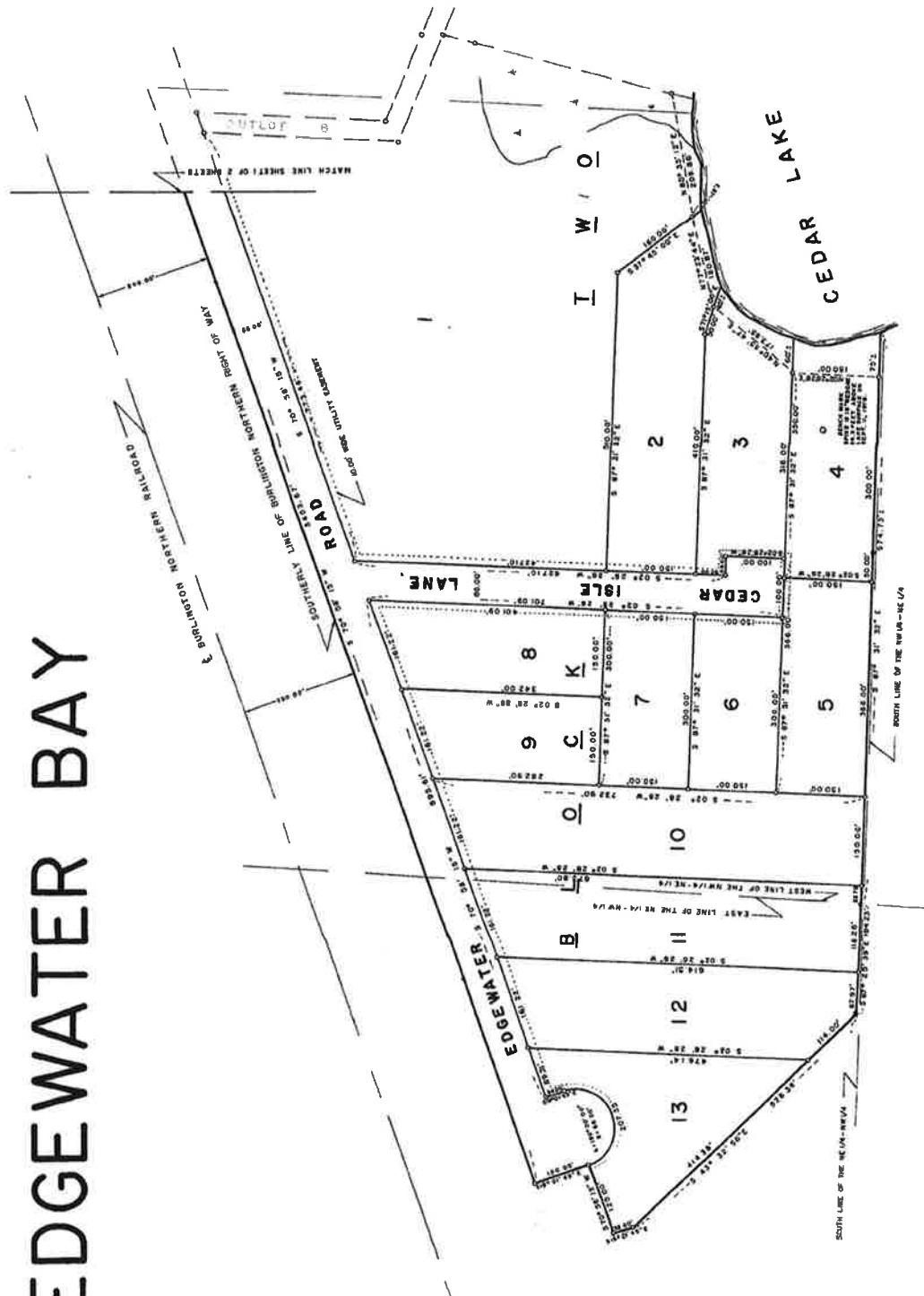
Estimated Land Value:	\$153,800.00
Estimated Building Value:	\$222,500.00
Estimated Total Value:	<hr/> \$376,300.00
Prior Year Total Taxable Value:	\$37,000.00
Current Year Net Tax (Specials Not Included):	\$130.00
Total Special Assessments:	\$0.00
**Current Year Balance Not Including Penalty:	\$65.00
Delinquent Taxes:	No

*** For more information on delinquent taxes, please call the Aitkin County Treasurer's Office at 218-927-7325**

**** Balance Due on a parcel does not include late payment penalties.**

EDGEWATER BAY

ORIGINAL



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Search | Soil Report | Map Legend | Map Unit Legend | Scale | (not to scale) ▾

Aitkin County, Minnesota (MN001)
Aitkin County, Minnesota (MN001)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
504E	Duluth fine sandy loam, 12 to 25 percent slopes	0.1	17.5%
625	Sandwick loamy sand	0.1	24.2%
1353B	Cutaway loamy fine sand, 1 to 6 percent slopes	0.2	58.3%
Totals for Area of Interest		0.3	100.0%

Warning: Soil Map may not be valid at this scale.
 You have zoomed in beyond the scale at which the soil map for this area is intended to be used. Mapping of soils is done at a particular scale. The soil surveys that comprise your AOI were mapped at 1:20,000. The design of map units and the level of detail shown in the resulting soil map are dependent on that map scale. Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Aitkin County, Minnesota

1353B—Cutaway loamy fine sand, 1 to 6 percent slopes

Map Unit Setting

*National map unit symbol: gjd4
Elevation: 980 to 1,310 feet
Mean annual precipitation: 20 to 27 inches
Mean annual air temperature: 37 to 41 degrees F
Frost-free period: 95 to 105 days
Farmland classification: Farmland of statewide importance*

Map Unit Composition

*Cutaway and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of
the map unit.*

Description of Cutaway

Setting

*Landform: Moraines
Landform position (two-dimensional): Backslope, summit
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sandy outwash over loamy till*

Typical profile

*A - 0 to 2 inches: loamy fine sand
E,Bw,E' - 2 to 26 inches: loamy sand
2E/B,2B/E - 26 to 49 inches: loam
2C - 49 to 60 inches: loam*

Properties and qualities

*Slope: 1 to 6 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat):
Moderately high to high (0.20 to 2.00 in/hr)
Depth to water table: About 41 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 20 percent
Available water storage in profile: Moderate (about 7.8 inches)*

Interpretive groups

*Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3s
Hydrologic Soil Group: B
Forage suitability group: Sloping Upland, Acid (G088XN006MN)
Hydric soil rating: No*

Minor Components

Northwood and similar soils

Percent of map unit: 6 percent
Landform: Depressions
Hydric soil rating: Yes

Sandwick and similar soils

Percent of map unit: 6 percent
Landform: Swales
Hydric soil rating: Yes

Dusler and similar soils

Percent of map unit: 3 percent
Hydric soil rating: No

Data Source Information

Soil Survey Area: Aitkin County, Minnesota
Survey Area Data: Version 19, Sep 12, 2018

Aitkin County, Minnesota

625—Sandwick loamy sand

Map Unit Setting

National map unit symbol: gjj4
Elevation: 980 to 1,310 feet
Mean annual precipitation: 20 to 27 inches
Mean annual air temperature: 37 to 41 degrees F
Frost-free period: 95 to 105 days
Farmland classification: Not prime farmland

Map Unit Composition

Sandwick and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the map unit.

Description of Sandwick

Setting

Landform: Swales on moraines
Down-slope shape: Linear
Across-slope shape: Concave
Parent material: Sandy outwash over loamy till

Typical profile

E - 0 to 6 inches: loamy sand
Bw,E' - 6 to 34 inches: sand
2E/B,2Btg - 34 to 55 inches: loam
2Cg - 55 to 60 inches: loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat):
Moderately high (0.20 to 0.60 in/hr)
Depth to water table: About 6 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 20 percent
Available water storage in profile: Low (about 5.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: C/D
Forage suitability group: Level Swale, Low AWC, Acid (G088XN007MN)
Hydric soil rating: Yes



Minor Components

Alstad and similar soils

Percent of map unit: 3 percent
Hydric soil rating: No

Cutaway and similar soils

Percent of map unit: 3 percent
Hydric soil rating: No

Dusler and similar soils

Percent of map unit: 3 percent
Hydric soil rating: No

Northwood and similar soils

Percent of map unit: 3 percent
Landform: Depressions
Hydric soil rating: Yes

Stuntz and similar soils

Percent of map unit: 3 percent
Hydric soil rating: No

Data Source Information

Soil Survey Area: Aitkin County, Minnesota
Survey Area Data: Version 19, Sep 12, 2018



Aitkin County, Minnesota

504E—Duluth fine sandy loam, 12 to 25 percent slopes

Map Unit Setting

*National map unit symbol: gjh9
Elevation: 980 to 1,640 feet
Mean annual precipitation: 25 to 30 inches
Mean annual air temperature: 39 to 45 degrees F
Frost-free period: 120 to 140 days
Farmland classification: Not prime farmland*

Map Unit Composition

*Duluth and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of
the mapunit.*

Description of Duluth

Setting

*Landform: Moraines
Landform position (two-dimensional): Shoulder, backslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Loamy till*

Typical profile

*A - 0 to 3 inches: fine sandy loam
E,Bw.2BE,2Bt - 3 to 37 inches: clay loam
2C - 37 to 60 inches: loam*

Properties and qualities

*Slope: 12 to 25 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat):
Moderately low to moderately high (0.06 to 0.60 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 5 percent
Available water storage in profile: High (about 10.2 inches)*

Interpretive groups

*Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: C
Forage suitability group: Steep; Fine Texture (G090AN017MN)
Hydric soil rating: No*



Minor Components

Blackhoof and similar soils

Percent of map unit: 3 percent
Landform: Depressions
Hydric soil rating: Yes

Mahtowa and similar soils

Percent of map unit: 3 percent
Landform: Depressions
Hydric soil rating: Yes

Rifle and similar soils

Percent of map unit: 3 percent
Landform: Bogs
Hydric soil rating: Yes

Cromwell and similar soils

Percent of map unit: 2 percent
Hydric soil rating: No

Dusler and similar soils

Percent of map unit: 2 percent
Hydric soil rating: No

Cutaway and similar soils

Percent of map unit: 2 percent
Hydric soil rating: No

Data Source Information

Soil Survey Area: Aitkin County, Minnesota
Survey Area Data: Version 19, Sep 12, 2018

