

Preliminary & Field Evaluation Form

Type III Mound

www.SepticResource.com vers 12.4

Owner Information			
Date	<u>8/22/2022</u>	Sec / Twp / Rng	<u>S-1, Y-49, R-24</u>
Parcel ID	<u>39-1-066600</u>	LUG (county, city, township)	<u>Aitkin Co.</u>
Property Owner:	<u>Troy Pitchford</u>	Owners address (if different)	
Property Address:	<u>51260 221st Pl. McGregor MN 55760</u>	<u>22 Alcott Court</u>	
City / State / Zip:	<u></u>	<u>North Oaks MN 55127</u>	

Flow Information and Waste Type / Strength			
Estimated Design flow	<u>300</u>	Anticipated Waste strength	<input type="checkbox"/> Hi Strength <input checked="" type="checkbox"/> Domestic
Comments: Type III 10" to mottles Remove existing mound and repalce with 36" washed sand under rockbed mound. Aitkin Co Operating Permit Required		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 type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Well casing depth	Existing deep well	
Easements on lot located (see site map)	<input type="checkbox"/> Yes	<input checked="" 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	<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	<u>Remove existing mound to good soils, replace with at least 36" of washed sand.</u>				

Soil Information

		Evidence of site:	
		Cut	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
		Filled	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
		Compacted	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
		Disturbed	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Original soils	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Soil logs completed and attached	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Perk test completed and attached (if applicable)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Soil loading rate (gpd/ft ²)	<u>0.60</u>	Percolation rate (if applicable)	_____
Depth/elev to SHWT	<u>10"</u>	Flooding or run-on potential	<input type="checkbox"/> Yes <input type="checkbox"/> No
Depth to system bottom maximum (or elev minimum)	<u>(+ 36")</u>	(comments)	
Depth/elev to standing water (if applicable)	_____	Flood elevation (if applicable)	<u>1223.9'</u>
Depth/elev to bedrock (if applicable)	_____	Elevation of ordinary high water level (if applicable)	_____
Soil Survey information determined (see attachment)	<input type="checkbox"/> Yes <input type="checkbox"/> No	Floodplain designation and elev - 100 yr/10 yr (if applicable)	<u>1223.9'</u>
		Elv.= 1223.9' same as Septic Design Elv. = 100'	
		Top of Deep well Cap Elv. = 1224' or 100.1'	
Differences between soil survey and field evaluation (if applicable)	_____		

Depth/elev to Bedrock

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



 Designer Signature

Brummer Septic LLC.

 Company

L-1347

 License #

Depth/elev to Bedrock

Soil Observation Log

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Owner Information	
Property Owner / project: <u>Troy Pitchford</u>	Date <u>8/22/2022</u>
Property Address / PID: <u>51260 221st Pl. McGregor MN 55761</u>	

Soil Survey Information	
<input type="checkbox"/> refer to attached soil survey	
Parent matl's:	<input 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 type="checkbox"/> Side slope <input type="checkbox"/> Toe slope Flat Yard
soil survey map units:	<u>D458B</u> slope <u>0</u> % direction- _____

Soil Log #1							
	<input checked="" type="checkbox"/> Boring <input type="checkbox"/> Pit	Elevation <u>97'</u>	Depth to SHWT <u>10"</u>				
Depth (in)	Texture	fragment %	matrix color	redox color	consistence	grade	shape
0 - 5	Topsoil Sandy Loam	<35	10YR3/2		Loose	Loose	Granular
5 - 10	Loam	<35	10YR4/4		Loose	Loose	Granular
10 - 16	Loam	<35	10YR5/3	7.5YR5/6 & 10YR6/2	Loose	Loose	Granular
Comments: _____							

51260 221st Pl. McGregor MN 55760

Soil Log #2

		<input checked="" type="checkbox"/> Boring	<input type="checkbox"/> Pit	Elevation <u>96.9'</u>	Depth to SHWT <u>14"</u>		
Depth (in)	Texture	fragment %	matrix color	redox color	consistence	grade	shape
0 - 7	Topsoil Sandy Loam	<35	10YR3/2		Loose	Loose	Granular
7 - 14	Sandy Loam	<35	10YR4/3		Loose	Loose	Granular
14 - 18	Sandy Loam	<35	10YR4/3	7.5YR5/6 & 10YR6/2	Loose	Loose	Granular

51260 221st Pl. McGregor MN 55760

Soil Log #3

		<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 I.I.C.
Company

L-1347
License #

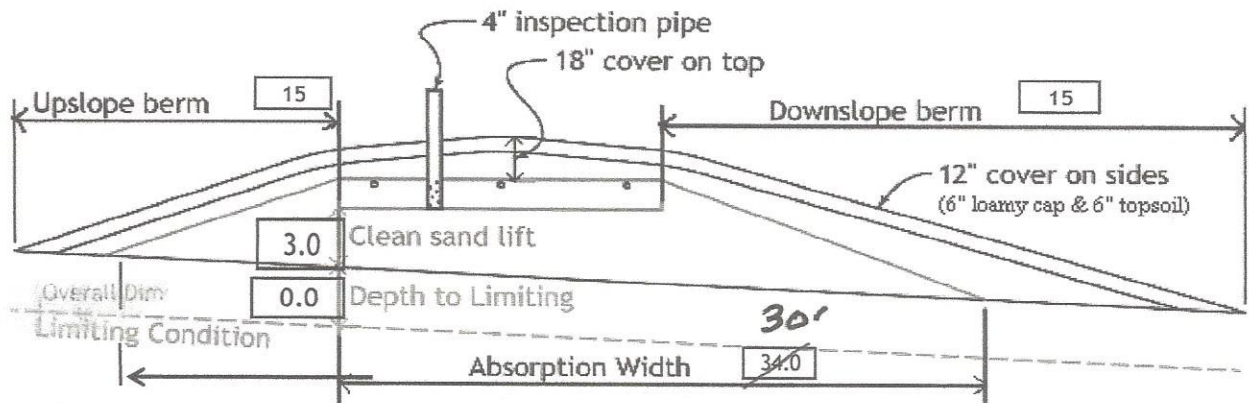
Mound Design - Aitkin county

Property Owner: Troy Pitchford Date: 8/22/2022
 Site Address: 51260 221st Pl. McGregor MN 55760 PID: 39-1-066600
 Comments: Type III 10' to Mottles, Placing on Distrubed soil.

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

- 1) bedroom Type Residential System
- 2) GPD design flow
- 3) Garbage disposal or pumped to septic Install 1650 Jacobson 2/Compartment tank
- 4) Gal Septic tank (code minimum) Gal Septic tank (design size / LUG req'd)
 Tank options: Effluent filter & alarm req'd
- 5) GPD/ft² mound sand loading rate contour loading rate of req's a min ft. long rockbed
- 6) ft rockbed width ft rockbed length
- 7) ft lateral spacing ft perforation spacing (maximum of 3 for both)
 end feed manifold connection
- 8) laterals feet long perfs / lateral perfs total
 (1/2 a perf means the first perf starts at the middle feed manifold)
- 9) inch perfs at feet residual head gives gpm flow rate per perforation
 for this perf size & spacing, & pipe size on line 12, max perfs/lateral = , line #8 must be less --> OK
- 10) doses per day (4 minimum)
- 11) gallons per dose (treatment volume) 1.50 5x
- 12) inch diameter laterals must be used to meet "4x pipe volume" requirement 2.00 3x
- 13) feet of inch supply line leads to gallons of drainback volume
 (Tip: "top feed" manifold to control the drainback)
- 14) gallons TOTAL pump out volume (treatment + drainback)
- 15) feet vertical lift from pump to mound laterals, leads to a:
- 16) GPM @ feet of head, Pump requirement (note: >50gpm may require an extra 3-6' of head)
- 17) gal Dose tank (code minimum) gal Dose tank (design size / LUG req'd) at gpi
 leads to a
- 18) inch swing on Demand float, or timed dosing of min ON (confirm pump rate with drawdown
 (this delivers Average flow, =70% of Peak design flow) hrs OFF test and adjust as necessary)
- 19) inches from bottom of tank to "Pump OFF" float
- 20) inches from bottom of tank to "Pump ON" float, or inches to "Timer ON" float if time dosed
- 21) inches from bottom of tank to "Hi Level" float, or inches to "Hi Level" float if time dosed
- 22) gallons reserve capacity (after High Level Alarm is activated)

- 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:) Use 10 ft.
 greater of: absorption width OR sand slope
- 28) ft. upslope and sideslope sand upslope *use 10 ft*
 ft. Downslope sand down slope *use 10 ft*
- Individual slope ratios give BERM widths (topsoil beyond rockbed) of:
- 29) upslope ratio ft. upslope berm
- 30) sideslope ft. sideslope berms
- 31) downslope ft. downslope berm
- 32) Overall Dimensions: ft. wide by ft. long Rock bed
 ft. wide by 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:
 ft. by ft. by inches under pipe, plus 20% gives yd³ or *1.4= 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)
 up + downslope + ends + under rock = yd³ or *1.4= ton
 plus 20%
- 35) Loamy Cap:
 ft. by ft. 6" deep, plus 20% gives yd³ or *1.4= ton
- 36) Topsoil:
 ft. by ft. 6" deep, plus 20% gives yd³ or *1.4= ton

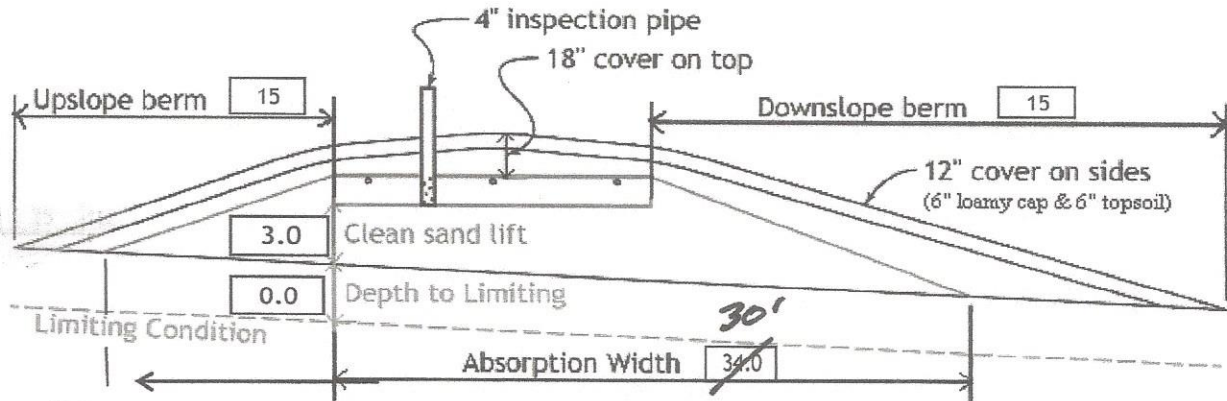
I hereby certify that I have completed this work in accordance with all applicable ordinances, rules and laws.

Designer Signature: *[Signature]* Company: Brummer Septic LLC. License#: L-1347 Date: 8/22/2022

Aitkin Co Operating Permit Required Follow Aitkin Co. Operating permit requirements.
 There will be 2 Electric alarms on system, one for Effluent filter , one for pump tank.

Installer Summary

- 1000 gallon Septic tank (minimum) Tank options: Effluent filter & alarm req'd
- 533 gallon Dose tank (minimum) Install 1650 Jacobson 2/Compartment tank
- 18 GPM @ 21 ft. of head, Pump required
- 3.9 inch swing on Demand float which translates to roughly 3.0 inches of float tether length
- 16 inches from bottom of tank to "pump ON" float, or 2.7 minutes ON time & 5.1 hours OFF time
- 19 inches from bottom of tank to "Hi Level Alarm" or 29 inches to "Hi level alarm" if time dosed
- 35 ft. of 2.0 inch supply line with end feed manifold connection
(Tip: "top feed" manifold to control drainback)
- 36 inch, or 3.0 ft. Sand Lift Mound
- 10.0 ft. wide by 25.0 ft. long Rock bed
- 3 laterals 1.50 inch diameter 23.0 ft. long 3.0 ft. lateral spacing
- 1/4" inch perfs 3.0 ft. perforation spacing
- Yes Effluent filter & alarm
- 3 clean out & valve box assemblies
- ~~24.0~~ ^{30'} ft. Total sand ABSORPTION width (minimum)
- ~~12.0~~ ^{4.5 x 10'} ft. upslope and sideslope (sand beyond rockbed, minimum)
- ~~12.0~~ ^{4.5 x 10'} ft. Downslope (sand beyond rockbed, minimum)
- Specific slope ratios give BERM widths (topsoil beyond rockbed) of:
- 3:1 upslope ratio 15 ft. upslope berm
- 3:1 sideslope 15 ft. sideslope berms
- 3:1 downslope 15 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:	12.0 yd ³ or *1.4=	17 ton	9 inches under pipe
Mound Sand:	159 yd ³ or *1.4=	223 ton	
Loamy Cap:	41 yd ³ or *1.4=	57 ton	6" deep
Topsoil:	49 yd ³ or *1.4=	69 ton	6" deep

INSPECTOR CHECKLIST - mound

51260 221st Pl. McGregor MN 55/60

- 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 se 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 _____ 1000 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 _____ 18 gpm 21 head VERIFY PUMP CURVE 2.7 min ON 5.1 hr OFF

- float setting drop 3.9 inches at 12.7 gpi "DESIGNED" 3.0 inches approx float tether length
49.0 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 25.0
Sand lift depth 36 inches. (Jar test : 2" sand leaves < 1/8" silt after 30 min)

- Absorption Sand beyond rock 12.0 upslope 12.0 downslope

- Bermed topsoil beyond rockbed 15 upslope 15 sideslope 15 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

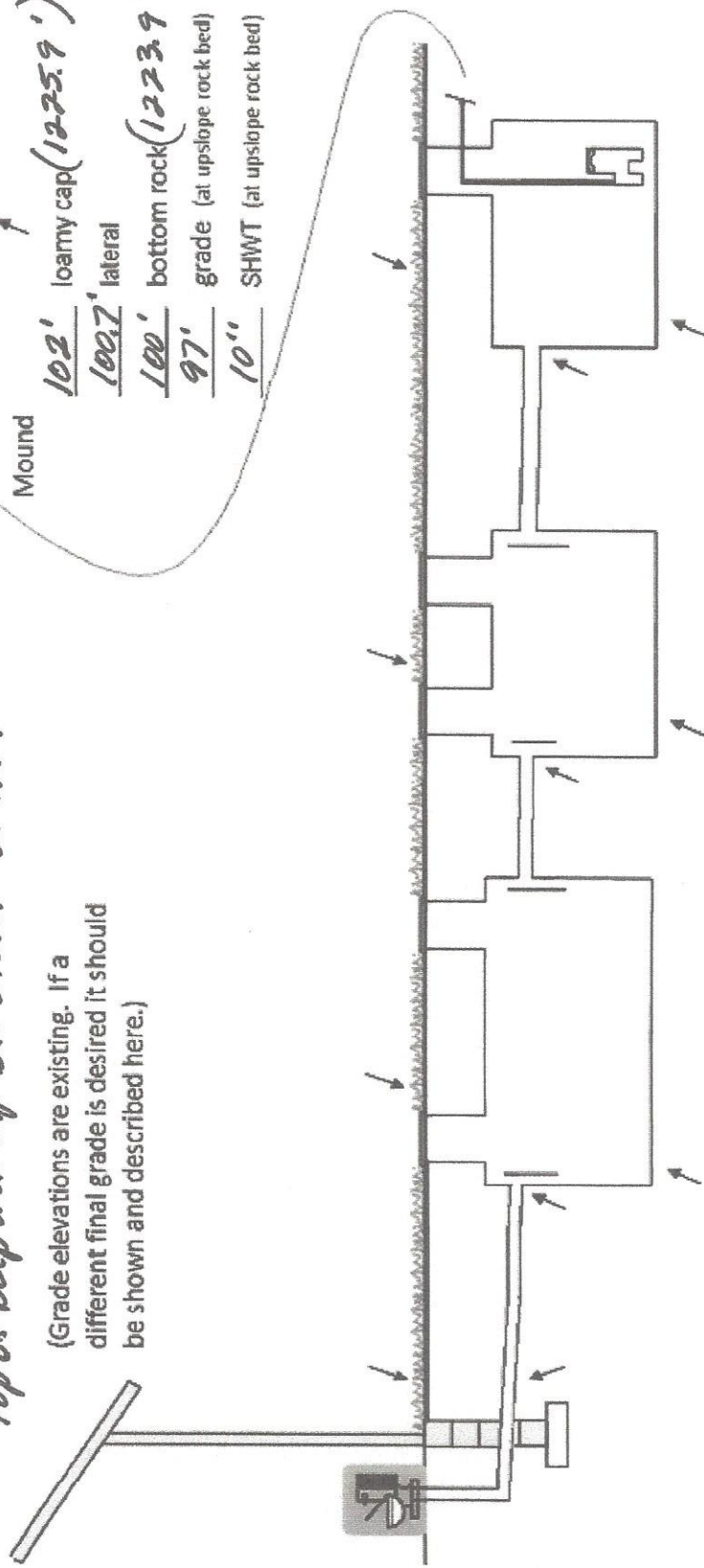
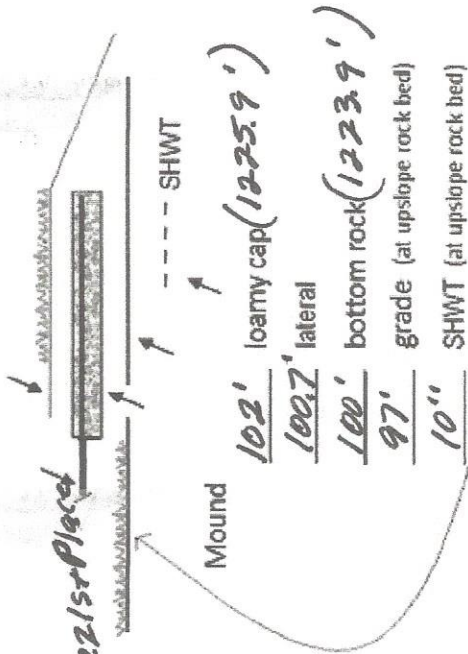
- Air inlet at end of laterals, and at top feed manifold if necessary. VERIFY
clean outs (no hard 90's)
 4" inspection pipe to bottom of rock, anchored VERIFY

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

System Elevations

Elv = 100' benchmark Nail on Power Pole across 221st St
Top of Deep well cap Elv = 100.1' or 1234'

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

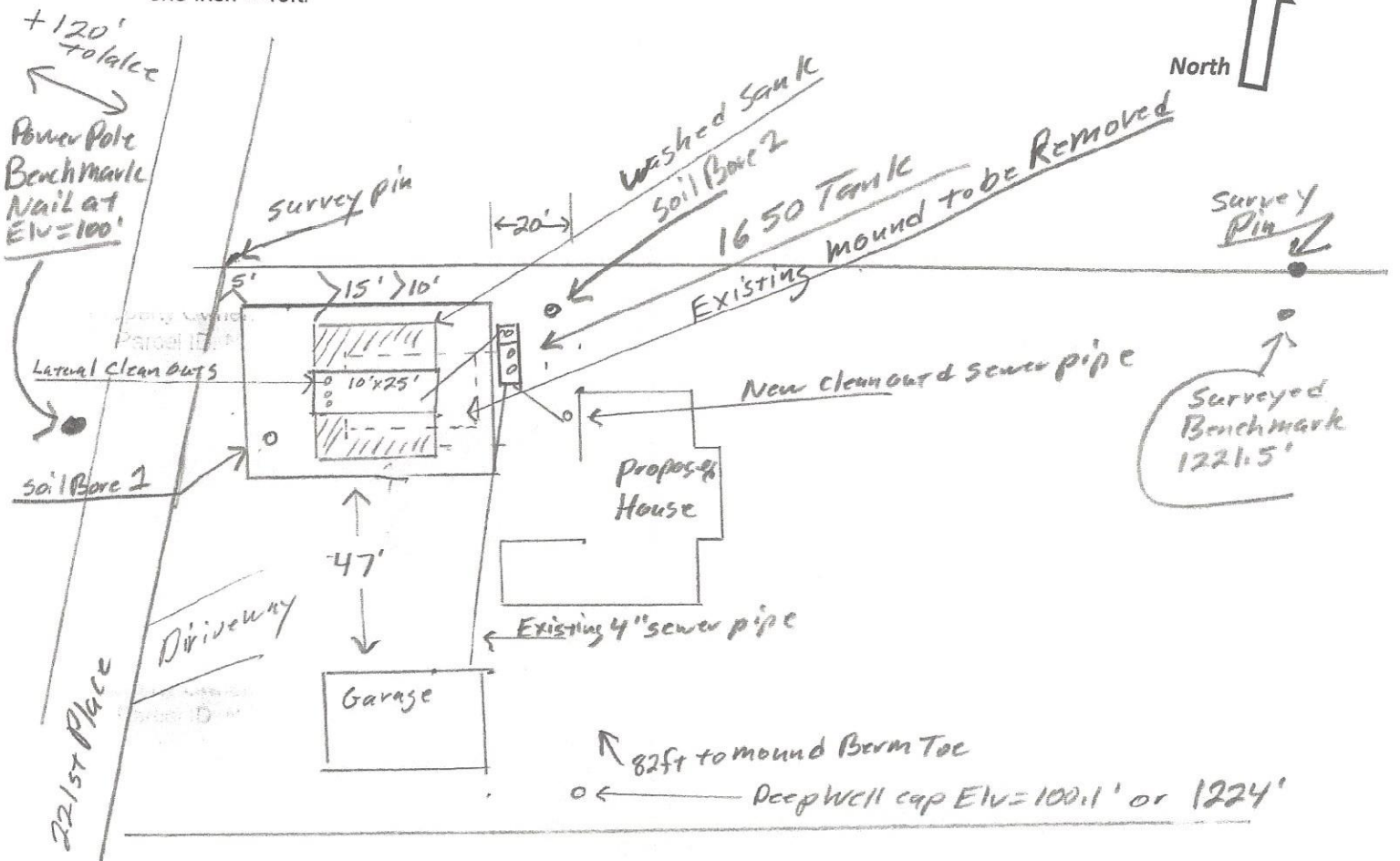


Sewer pipe exiting house
 Proposed 99' Grade
 Estimated 96' Pipe

Septic Tank	Septic Tank (if applicable)	Pump Tank
<u>97'</u> Grade Existing	Grade	<u>97'</u> Grade Existing
<u>95.4'</u> inlet	inlet	<u>95.2'</u> inlet
<u>91.4'</u> Tank bottom	Tank bottom	<u>91.4'</u> Tank bottom

{ Design Drawing }

Property Owner: Troy Pitchford Date: 8/22/22 Designer's Initials: JB
 Parcel ID: Number : 39-1-066600 Address : 51260 221st Pl. McGregor MN 55760
 one inch = 40ft.



Deep Well Grade Elv. = 98.3' Top of Well Cap Elv. = 100.1' or 1224'

Survey benchmark rod 1221.5' Elv. = 97.6'

Big Sandy Lake Elv. = 92.6'

Bench Mark Nail on Power pole Elv. = 100' or 1223.9'

	Surface/ SHWT	Nail on Power pole = Bench Mark 100'		Existing Grade	
Soil Bore 1	97' / 10"	Bench Mark	100'	Upslope Edge of Rockbed Elv. = 97'	
Soil Bore 2	96.9' / 14"	Ground Elv. BM	97.3'	Bottom of Rockbed Elv. = 100'	
Soil Bore 3		Ground Elv. Tank	97'	Top of Washed Sand Elv. = 100'	
	Top of Pad for	Proposed house	99'	Estimated	Existing Septic Tank Inlet Elv. = 95.4'

Please show all that apply (Existing)

Wells within 100ft. Of Drain field.

Water lines within 10 ft. of Drain field.

Drain field Areas:

Deep Well Grad

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

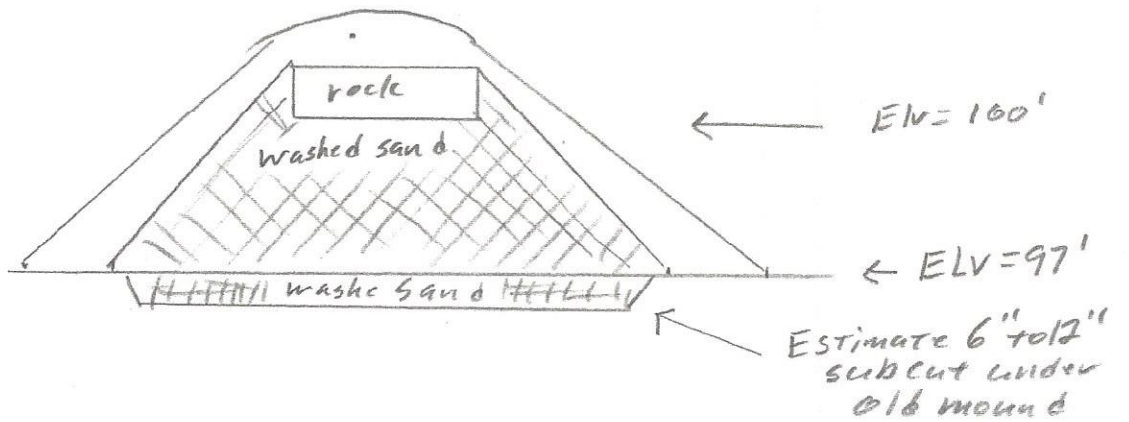
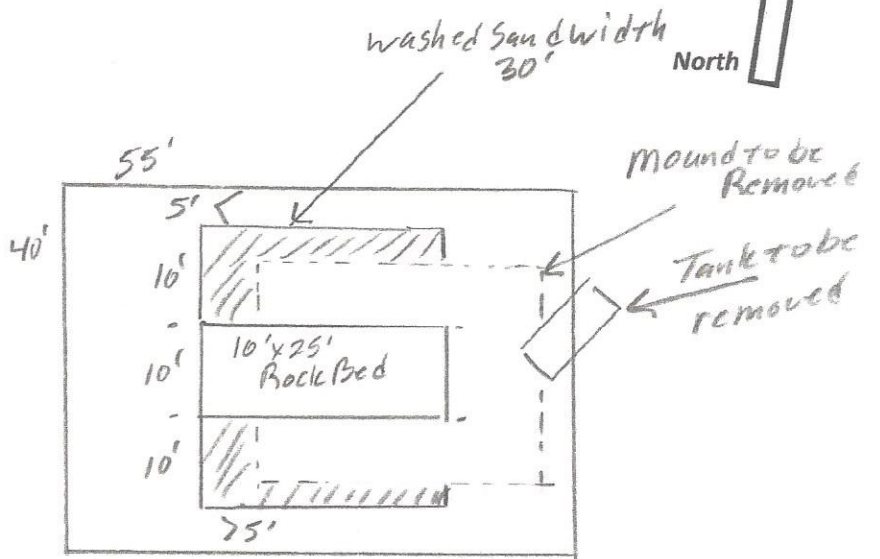
Property Lines

Structures

Setbacks

{ Design Drawing }

Property Owner: Troy Pitchford Date: 8/22/22 Designer's Initials: JB
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Soil Bore 2 96.9' / 14"	Ground Elv. BM	97.3'	Bottom of Rockbed Elv. = 100'	
Soil Bore 3	Ground Elv. Tank	97'	Top of Washed Sand Elv. = 100'	
Top of Pad for	Proposed house	99'	Estimated	Existing Septic Tank Inlet Elv. = 95.4'

Please show all that apply (Existing)

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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: Troy Pitchford Date: 8/22/22
Site Address: 51260 221st Pl. McGregor MN 55760 PID: 39-1-066600

Comments: Mound design may not follow Aitkin co. Auto fill form for mound design.

- 1 This is a type III mound , (Soil Separation 10") sized for a 2 bedroom system.
Big Sandy 100 yr. flood Elv. = 1223.9' same as Septic design Elv. = 100' top of Washed Sand.
Estimated top FEMA of Pad for house Elv. = 99' with lowest floor at Elv. = 101' (not set at time of Design)
Existing garage has a bathroom that gravity flows into existing tank with inlet Elv. = 95.4'
- 2 Existing Deep well location is on the SE corner of Garage + 80 ft to mound
- 3 Existing tank to be pumped collapsed, removed. Existing mound to be removed to good original soils.
Remove mound to at least Elv. = 97' or below . Fill excavation in absorption area with washed sand (30' x 25')
- 4 The Proposed house is gravity flow from West side of house, install clean-out near house.
Install should order 1650 tank with an end inlet and a side inlet if possible.
If the installer connects the house and the garage sewer pipes install clean at connection.
- 5 Lot is Flat, install 1650 Jacobson compartment tank for gravity flow from house.
Install tank low enough for drainback from mound to pump tank.
Install effluent filter in septic tank outlet. Install alarm on Effluent filter. Insulate tank tops.
- 6 The berm slopes are at 3:1. Use 10 ft. of washed sand width on each side of rockbed. (Total sand width 30 ft.)
NW corner of mound toe is 10 ft off north property line and 5 ft off West RW line, Absorption width is 15 ft from lines.
- 7 Elevation contour of rock bed upslope edge is 97' .
The area size of the rock bed is 10' x 25' . Absorption area is 25' x 30'.
Washed Sand absorption area is 10 ft. up slope + 10 ft. rockbed + 10 downslope = 30 ft. wide sand base.
Berms are 15ft. Upslope, 15ft. Down slope, 10ft. Rock bed = approx. 40ft. Wide.
Overall mound size is approx. 40' wide x 55' long and approx. 5' high. End berms are 15ft. Wide.
- 8 The bench mark is the nail on the power pole across 221st Place near mound area, 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 Washed 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. 49 gallons per dose, 3.9 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 Elv. = 100'
Recommend raising manholes at least 4" above finished 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 Lateral clean-outs at far end of laterals. Recommended)
Drill 1/4" perf holes spaced 3 ft. on center.
Install 4" inspection pipe to bottom of rock bed, secure in rock bed and raise to above final grade.
- 11 Install septic system pump on a separate circuit breaker that can be shut off if system is flooded
- 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

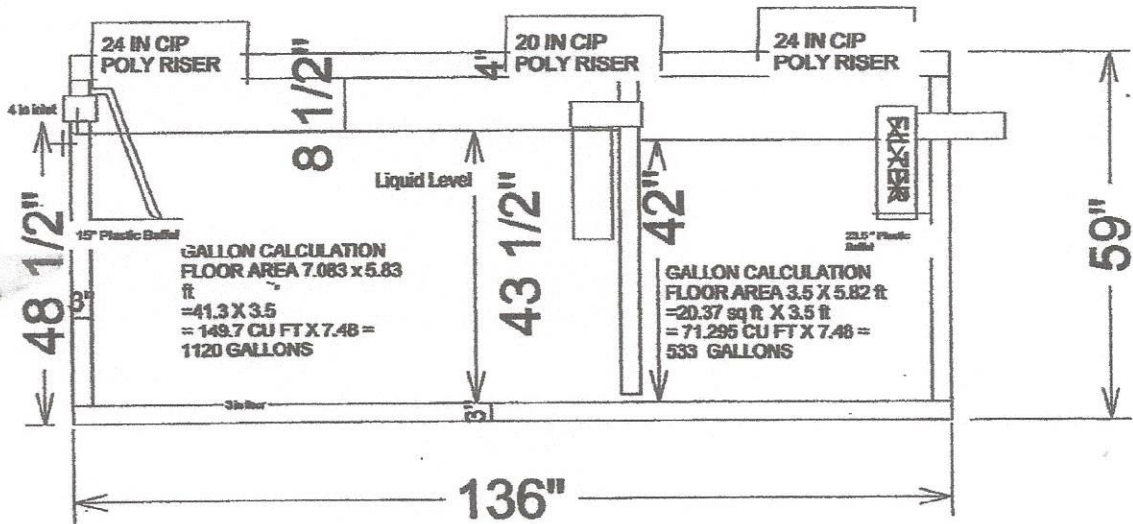
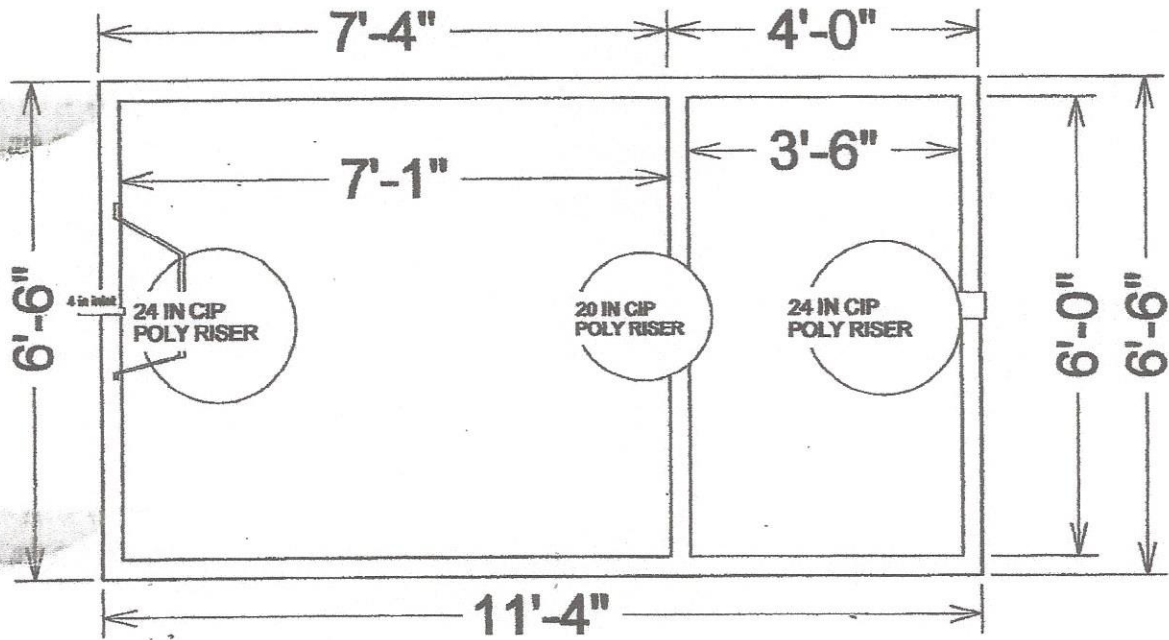
Brummer Septic LLC.
Design Company

L-1347
License#

This System will require an Aitkin Co. Operator permit, annual inspection
There will be 2 alarms on this system one on the Effluent filter, one on the pump tank.
Owner and installer are responsible for owner knowing how system is maintained.
Owner should clean Effluent filter at least twice a year and check alarms and pump.

1650 Gallon 2 Compartment Septic Tank

TOP VIEW



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

SIDE VIEW

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



Minnesota
Department of
Health

Minnesota Well Index

General Information

Unique Well ID:	756977	Well Name:	PITCHFORD, TROY	County:	Aitkin	Aquifer:	Quat. buried artesian aquifer
Well Elevation (msl in feet):	1222	Drilled Depth (ft):	84	Well Completed (ft):	84	Date Drilled:	09/11/2007
Township:	49	Range:	24	Dir:	W	Section:	1
Subsection:	DAABAB	Use:	domestic	Well Status:	Active	Depth To Bedrock:	
Driller:	Hasskamp Bros. Well Drilling	Entry Date:		Update Date:	12/04/2017		

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
SAND	0	10	BROWN	MEDIUM	SAND		sand-brown
SAND & CLAY	10	35	GRAY	MEDIUM	SAND		clay+sand-gray
SAND	35	60	GRAY	MEDIUM	SAND		sand-gray
CLAY	60	75	GRAY	HARD	CLAY		clay-gray
SAND	75	84	BROWN	MEDIUM	SAND		sand-brown



Detailed Parcel Report

Parcel Number: 39-1-066600

General Information middle

Township/City:	WORKMAN TWP		
Taxpayer Name:	PITCHFORD, TROY M & TRICIA N		
Taxpayer Address:	22 ALCOTT COURT NORTH OAKS MN 55127		
Property Address:	51260 221st Pl		
Township:	49	Lake Number:	1006200
Range:	24	Lake Name:	BIG SANDY LAKE
Section:	1	Acres:	0.00
Green Acres:	No	School District:	4.00
Plat:	VIEW POINT		
Brief Legal Description:	LOT 8		

Tax Information

Class Code 1:	Non-Comm Seasonal Residential Recreational
Class Code 2:	Unclassified
Class Code 3:	Unclassified
Homestead:	Non Homestead
Assessment Year:	2022

Estimated Land Value:	\$126,900.00
Estimated Building Value:	\$56,300.00
Estimated Total Value:	<u>\$183,200.00</u>

Prior Year Total Taxable Value: \$142,600.00

Current Year Net Tax (Specials Not Included):	\$1,214.00
Total Special Assessments:	\$0.00
**Current Year Balance Not Including Penalty:	\$607.00
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.**



Detailed Parcel Report

Parcel Number: 39-1-066700

General Information Sandy

Township/City: WORKMAN TWP
 Taxpayer Name: PITCHFORD, TROY M & TRICIA N
 Taxpayer Address: 22 ALCOTT COURT
 NORTH OAKS MN 55127
 Property Address:
 Township: 49 Lake Number: 1006200
 Range: 24 Lake Name: BIG SANDY LAKE
 Section: 1 Acres: 0.00
 Green Acres: No School District: 4.00
 Plat: VIEW POINT
 Brief Legal Description: LOT 9

Tax Information

Class Code 1: Non-Comm Seasonal Residential Recreational
 Class Code 2: Unclassified
 Class Code 3: Unclassified
 Homestead: Non Homestead
 Assessment Year: 2022

Estimated Land Value:	\$106,900.00
Estimated Building Value:	\$92,900.00
Estimated Total Value:	<u>\$199,800.00</u>
Prior Year Total Taxable Value:	\$157,900.00
Current Year Net Tax (Specials Not Included):	\$1,352.00
Total Special Assessments:	\$0.00
**Current Year Balance Not Including Penalty:	\$676.00
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.



Detailed Parcel Report

Parcel Number: 39-1-066500

General Information

North

Township/City: WORKMAN TWP
Taxpayer Name: PITCHFORD, TROY M & TRICIA N
Taxpayer Address: 22 ALCOTT COURT
NORTH OAKS MN 55127
Property Address:
Township: 49 Lake Number: 1006200
Range: 24 Lake Name: BIG SANDY LAKE
Section: 1 Acres: 0.00
Green Acres: No School District: 4.00
Plat: VIEW POINT
Brief Legal Description: LOT 7

Tax Information

Class Code 1: Non-Comm Seasonal Residential Recreational
Class Code 2: Unclassified
Class Code 3: Unclassified
Homestead: Non Homestead
Assessment Year: 2022

Estimated Land Value: \$106,900.00
Estimated Building Value: \$0.00
Estimated Total Value: \$106,900.00
Prior Year Total Taxable Value: \$80,800.00
Current Year Net Tax (Specials Not Included): \$656.00
Total Special Assessments: \$0.00
**Current Year Balance Not Including Penalty: \$328.00
Delinquent Taxes: No

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

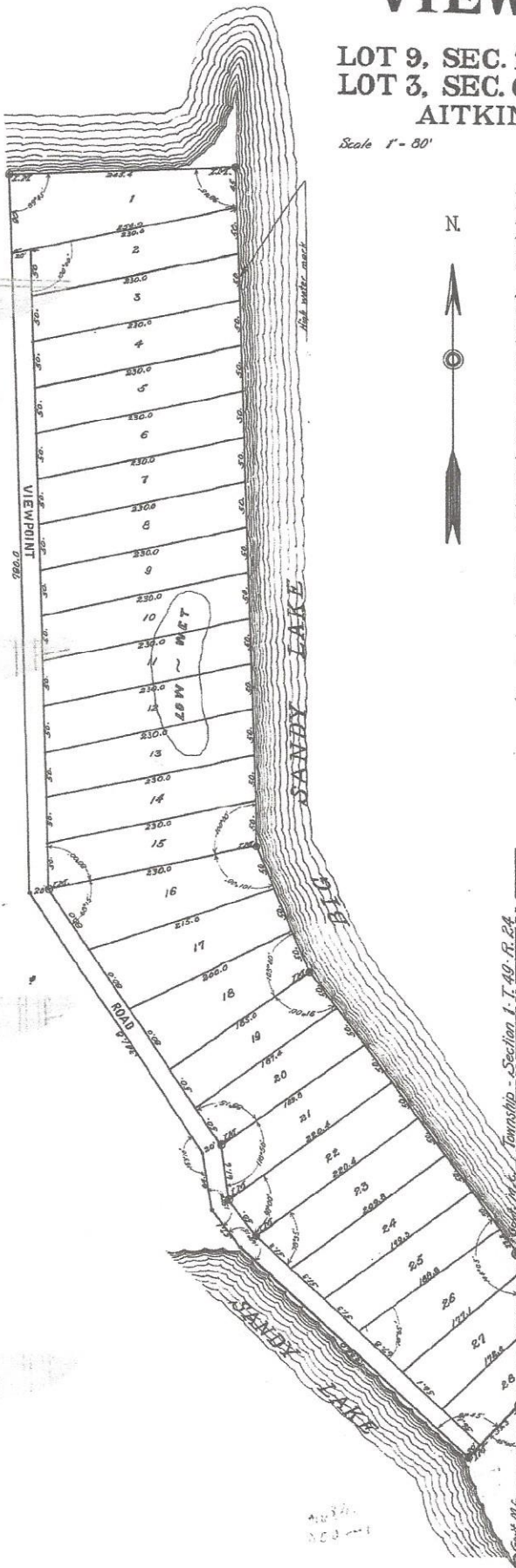
**** Balance Due on a parcel does not include late payment penalties.**

VIEW POINT

IN
 LOT 9, SEC. 1, T. 49, N., R. 24, W.
 LOT 3, SEC. 6, T. 49, N., R. 23, W.
 AITKIN CO., MINN.

Scale 1" = 80'

F.H. Hever, C.E.



Know all men by these presents, that we, Clark O. Watring and Mabel M. Watring, his wife, the owners and proprietors of the following described property, lying in the County of Aitkin, State of Minnesota, to-wit: All that part of Government Lot Nine (9) of Section One (1), Township Forty-nine (49) N., Range Twenty-four (24) W., and Government Lot Three (3), Section Six (6), Township Forty-nine (49) N., Range Twenty-three (23) W. of the 4th P.M. as hereinafter described: Commencing at the Government Meander Corner on the Township Line on the North side of Lot Nine (9) Section One (1), Township Forty-nine (49) N., Range Twenty-four (24) W., thence along lake shore, North 35° 55' West 383.15 feet, thence North 21° 55' West 150.00 feet, thence North 00° 55' West 785.00 feet, thence North 28° 50' West 245.40 feet, thence North 00° 55' West 785.00 feet, thence North 21° 55' West 150.00 feet, thence South 32° 50' East 341.80 feet, thence South 06° 00' East 64.10 feet, thence South 34° 00' East 57.00 feet, thence South 22° 45' East 334.00 feet, thence North 43° 15' East 79.30 feet, to Township line, the east line of Lot 9, thence North along Township line 167.65 feet to point of commencement, all in Government Lot 9, Section 1, Township 49, N., Range 24, W. of the 4th P.M. Again commencing at the Government Meander Corner on the Township line on the North side of Government Lot Three (3) Section Six (6), Township Forty-nine (49) N., Range Twenty-three (23) W., thence South 40° 31' East along lake shore 116.95 feet, thence South 45° 00' West 109.30 feet to Township line, the West line of Government Lot 3, thence North along Township line 167.65 feet to point of commencement, all in Government Lot 3, Section 6, Township 49, N., Range 23, W. of the 4th P.M. Aitkin County, Minnesota.

Have caused the same to be surveyed and plotted as 'VIEW POINT' and we do hereby donate and dedicate to the public for public use forever, the Viewpoint Road as shown on the annexed plat.

In testimony whereof we have hereunto set our hands and seals this 25th day of May, A.D. 1926.

Presence of
 Clark O. Watring
 Mabel M. Watring

State of Minnesota } ss
 County of Aitkin }
 On this 25th day of May, A.D. 1926 before me a Notary Public within and for said County personally appeared Clark O. Watring and Mabel M. Watring, his wife, to me known to be the persons described in and who executed the foregoing instrument and acknowledged that they executed the same as their free act and deed.

L. F. Mahoney
 Notary Public, Aitkin Co., Minn.
 My Commission expires January 14, 1933.

State of Minnesota } ss
 County of Aitkin }
 I hereby certify that I have surveyed and plotted the land described on this plat as 'VIEW POINT' that this plat is a correct representation of said survey, that all distances are correctly shown on the plat in feet and decimals of a foot, that the monuments for the purposes of future surveys have been correctly placed in the ground as shown on the plat, that the outside boundary lines are correctly designated on said plat, and that there are no wet lands or public highways to be designated on said plat other than shown thereon.

Edw. H. Hever
 Surveyor

The above certificate subscribed and sworn to before me this 25th day of May, A.D. 1926

W. C. Kausewitz
 County Auditor, Aitkin Co., Minn.
 Chairman, Board of County Commissioners

The above plat of 'VIEW POINT' was accepted and approved by the County Commissioners of Aitkin County at a meeting held this 25th day of May, A.D. 1926.

State of Minnesota } ss 78698
 County of Aitkin }
 I hereby certify that the within plat was filed for record in this office this 25th day of August, A.D. 1926, at 2 o'clock P.M.

Carl N. Ahmanson
 County Treasurer

TAXES PAID AND
 TRANSFERRED
 This 25th day of August 1926
 Mabel M. Watring
 COUNTY AUDITOR

Soil Map—Aitkin County, Minnesota
(Pitchoford)



93° 19' 10" W

46° 45' 33" N

475580

475600

475610

475620

475630

475640

475650

475660

475670

475680

475690

475700

475710

475720

475730

475740

93° 19' 3" W

5178520

5178530

5178540

5178550

5178560

5178570

5178580

5178590

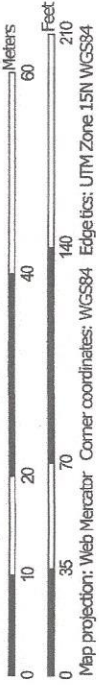
5178600

5178610

46° 45' 38" N

Soil Map may not be valid at this scale.

Map Scale: 1:720 if printed on A landscape (11" x 8.5") sheet.



Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

Aitkin County, Minnesota

D458B—Menahga loamy sand, 1 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2t4t1
Elevation: 590 to 2,030 feet
Mean annual precipitation: 23 to 33 inches
Mean annual air temperature: 36 to 48 degrees F
Frost-free period: 90 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition

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

Description of Menahga

Setting

Landform: Hillslopes
Landform position (two-dimensional): Summit, shoulder
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Sandy outwash

Typical profile

A - 0 to 3 inches: loamy sand
Bw - 3 to 17 inches: loamy sand
C - 17 to 79 inches: sand

Properties and qualities

Slope: 1 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 3.7 inches)

Interpretive groups

Land capability classification (irrigated): 4s
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: A

Ecological site: F057XY023MN - Dry Sandy Upland Coniferous Forest

Forage suitability group: Sandy (G057XN022MN)

Other vegetative classification: Sandy (G057XN022MN)

Hydric soil rating: No

Minor Components

Eagleview

Percent of map unit: 8 percent

Landform: Hillslopes

Landform position (two-dimensional): Summit, shoulder

Landform position (three-dimensional): Side slope

Down-slope shape: Convex

Across-slope shape: Convex

Other vegetative classification: Sandy (G057XN022MN)

Hydric soil rating: No

Roscommon

Percent of map unit: 2 percent

Landform: Swales

Down-slope shape: Concave

Across-slope shape: Linear

Other vegetative classification: Level Swale, Low AWC, Acid (G057XN007MN)

Hydric soil rating: Yes

Meehan

Percent of map unit: 2 percent

Landform: Swales

Down-slope shape: Concave

Across-slope shape: Linear

Other vegetative classification: Level Swale, Low AWC, Acid (G057XN007MN)

Hydric soil rating: No

Wurtsmith

Percent of map unit: 1 percent

Landform: Flats

Landform position (three-dimensional): Rise

Down-slope shape: Linear

Across-slope shape: Linear

Other vegetative classification: Sloping Upland, Low AWC, Acid (G057XN008MN)

Hydric soil rating: No

Andrusia

Percent of map unit: 1 percent

Landform: Hillslopes

Landform position (two-dimensional): Summit, shoulder

Landform position (three-dimensional): Side slope

Down-slope shape: Convex

Across-slope shape: Convex

Other vegetative classification: Sloping Upland, Low AWC, Acid (G057XN008MN)
Hydric soil rating: No

Leafriver, frequently ponded

Percent of map unit: 1 percent
Landform: Depressions
Down-slope shape: Concave
Across-slope shape: Concave
Other vegetative classification: Organic (G057XN014MN)
Hydric soil rating: Yes

Data Source Information

Soil Survey Area: Aitkin County, Minnesota
Survey Area Data: Version 22, Sep 10, 2021