Preliminary & Field Evaluation Form

www.SepticResource.com vers 12.4

Owner Information

Date	9/8/2023	Sec / Twp / Rng	S-29, T-48, R-25
Parcel ID	08-1-089500	LUG (county, city, township)	Aitkin Co.
Property Owner:	Jackie Dilley	Owners address (if different)	
Property Address:	32936 418th Ln. Aitkin MN 56431		32936 418th Ln
City / State / Zip:			Aitkin MN 56431

Flow Information and Waste Type / Strength

Estimated Design flow: 300

Comments: Existing system is Failing
Designer could not find sewer pipe at house
Estimated sewer pipe at House Elv.= 90'

Anticipated Waste strength	☐ Hi Strength	☑ Domestic
Any Non-Domestic Waste	☐ Yes (class V)	☑ No
Sewage ejector/grinder pump	☐ Yes	☑ No
Water softener	☐ Yes	☑ No
Garbage Disposal	☐ Yes	☑ No
Daycare / In home business	☐ Yes	☑ No

Site Information

Existing & proposed lot improvements located (see site map)	☐ Yes	☑ No	Well casing depth	Deep Well Owner stated Deep well in yard
Easements on lot located (see site map)	☐ Yes	☑ No	Drainfield w/in 100' of residential well	☐ Yes ☑ No
Property lines determined (see site map)	☑ Yes By Owner	☐ No	Site w/in 200' of transient noncommunity water supply (TNCWS)	☐ Yes ☑ No
Req'd setbacks determined (see site map)	☑ Yes	☐ No	Site w/in an inner wellhead mgmt zone (CWS/NTNCWS)	☐ Yes ☑ No
Utilities located & identified (gopher state one call)	☐ Yes	☑ No	Buried water supply pipe w/in 50' of system	☐ Yes ☑ No
Access for system maintenance (shown on site map)	☑ Yes	☐ No	Site located in Shoreland (w/in 1000' of lake, 300' of river)	☑ Yes ☐ No
Soil treatment area protected	☑ Yes	☐ No	Site map prepared with previous items included	☑ Yes ☐ No

Construction related issues: 2 existing tanks to pump, collapse, fill or remove

Watch Lake setback (150 ') watch well setback to tank (50')

Soil Information

Evidence of site:

Cut	☐ Yes	☑ No
Filled	☐ Yes	☑ No
Compacted	☐ Yes	☑ No
Disturbed	☐ Yes	☑ No

Original soils ☑ Yes ☐ No

Soil logs completed and attached ☑ Yes ☐ No

Perk test completed and attached (if applicable) ☐ Yes ☑ No

Soil loading rate (gpd/ft^2) 0.60

Percolation rate (if applicable) _____

Depth/elev to SHWT 20"

Flooding or run-on potential (comments) ☐ Yes ☑ No

Depth to system bottom maximum (or elev minimum) (+ 18")

Flood elevation (if applicable) _____

Depth/elev to standing water (if applicable) _____

Elevation of ordinary high water level (if applicable) 1211.6

House is at approx. 1240'

Depth/elev to bedrock (if applicable) _____

Floodplain designation and elev - 100 yr/10 yr (if applicable) _____

Soil Survey information determined (see attachment) ☑ Yes ☐ No

Differences between soil survey and field evaluation (if applicable) _____

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 #)

Soil Observation Log

www.SepticResource.com vers 12.4

Owner Information

Property Owner / project: Jackie Dilley Date 9/8/2023

Property Address / PID: 32936 418th Ln. Aitkin MN 56431

Soil Survey Information

☐ refer to attached soil survey

Parent matl's: ☐ Till ☑ Outwash ☐ Lacustrine ☐ Alluvium ☐ Organic ☐ Bedrock

landscape position: ☐ Summit ☐ Shoulder ☑ Side slope ☐ Toe slope

soil survey map units: 454C slope 6 % direction- South

Soil Log #1

☑ Boring ☐ Pit Elevation 98.2' Depth to SHWT 20"

Depth (in)	Texture	fragment %	matrix color	redox color	consistence	grade	shape
0 - 6	Topsoil Loam	<35	10YR3/2		Loose	Loose	Granular
6 - 17	Loam	<35	10YR5/3 E Horizon		Loose	Loose	Granular
17 - 20	Loam & Clay Loam Blending	<35	10YR5/3 & 10yr4/4		Friable	Loose	Blocky
20 - 26	Loam & Clay Loam Blending	<35	10YR5/3 & 10yr4/4	Mottles at 20" 7.5YR5/6	Friable	Loose	Blocky

Comments:

32936 418th Ln. Aitkin MN 56431		**Soil Log #2**					
		☑ Boring ☐ Pit	Elevation 98'		Depth to SHWT 23"		
Depth (in)	Texture	fragment %	matrix color	redox color	consistence	grade	shape
0 - 6	Topsoil Loam	<35	10YR3/2		Loose	Loose	Granular
6 - 19	Loam	<35	10YR5/3 E Horizon		Loose	Loose	Granular
19 - 23	Loam & Clay Loam Blending	<35	10YR5/3 & 10yr4/4		Friable	Loose	Blocky
23 - 26	Loam & Clay Loam Blending	<35	10YR5/3 & 10yr4/4	Mottles at 20" 7.5YR5/6	Friable	Loose	Blocky

32936 418th Ln. Aitkin MN 56431		**Soil Log #3**					
		☐ Boring ☐ 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.

______________________	Brummer Septic LLC.	L-1347
Designer Signature	Company	License #

2011 purple code

Mound Design - Aitkin county

www.SepticResource.com (vers 15.2)

Property Owner: Jackie Dilley **Date:** 9/8/2023

Site Address: 32936 418th Ln. Aitkin MN 56431 **PID:** 08-1-089500

Comments: Existing system is failing, 2 old block tanks

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

1) [2] bedroom Type [I] [Residential] System

2) [300] GPD design flow

3) [No] Garbage disposal or pumped to septic

4) [1000] Gal Septic tank (code minimum) [1000] Gal Septic tank (design size / LUG req'd)
Tank options: [none]

5) [1.2] GPD/ft^2 mound sand loading rate contour loading rate of [12] req's a min [25] ft. long rockbed

6) [10.0] ft rockbed width [25.0] 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 [23.0] feet long [8.0] perfs / lateral [24] 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) [43] gallons per dose (treatment volume)

1.50 5x

12) [1.50] inch diameter laterals must be used to meet "4x pipe volume" requirement

2.00 3x

13) [145] feet of [2.0] inch supply line leads to [25] gallons of drainback volume
(Tip: "top feed" manifold to control the drainback)

14) [68] gallons TOTAL pump out volume (treatment + drainback)

15) [18] feet vertical lift from pump to mound laterals, leads to a:

16) [18] GPM @ [25] 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) [5.4] inch swing on Demand float, or timed dosing of [3.8] 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) [17] inches from bottom of tank to "Pump ON" float, or [12] inches to "Timer ON" float if time dosed

21) [20] inches from bottom of tank to "Hi Level" float, or [30] inches to "Hi Level" float if time dosed

22) [279] gallons reserve capacity (after High Level Alarm is activated)

23) 0.60 gpd/ft² Absorption area Soil Loading Rate, (this must match the soil boring log) which gives a mound ratio of 2 (minimum) desired mound ratio 2.0

24) 6 percent site slope (0-20% range) 6 (% downslope site slope, if different than upslope)

25) 18 inches, or 1.5 ft. to Redox or other limiting condition (need at least 12" to be a Type I)
Treatment zone contains 0 inches of 0% soil credit, and 0 inches of 50% soil credit. Giving a:

26) 18 inch, or 1.5 ft. Sand Lift Mound **CRITICAL FOR FUTURE CERTIFICATIONS!!!**

27) 20.0 ft. base absorption width (with sand beyond rockbed as follows:)
34.4 greater of: absorption width OR sand slope

28) 0.0 ft. upslope and sideslope sand upslope 8.1
10.0 ft. Downslope sand down slope 16.3

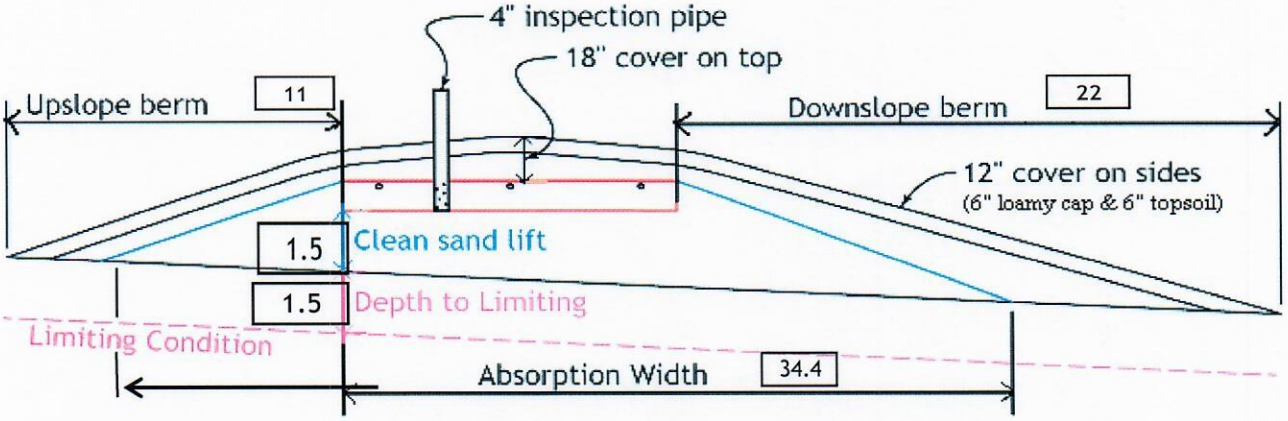
Individual slope ratios give BERM widths (topsoil beyond rockbed) of:

29) 4:1 upslope ratio 11 ft. upslope berm

30) 4:1 sideslope 15 ft. sideslope berms

31) 4:1 downslope 22 ft. downslope berm

32) Overall Dimensions: 10.0 ft. wide by 25.0 ft. long Rock bed
43 ft. wide by 55 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:
10.0 ft. by 25.0 ft. by 9 inches under pipe, plus 20% gives 12 yd³ or *1.4= 17 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)
17.6 up + 44.0 downslope + 14.2 ends + 16.7 under rock = 111 yd³ or *1.4= 155 ton
plus 20%

35) Loamy Cap:
39 ft. by 51 ft. 6" deep, plus 20% gives 45 yd³ or *1.4= 63 ton

36) Topsoil:
43 ft. by 55 ft. 6" deep, plus 20% gives 53 yd³ or *1.4= 74 ton

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

Designer Signature	Company	License#	Date
	Brummer Septic LLC.	L-1347	9/8/2023

Installer Summary

1000 gallon Septic tank (minimum) Tank options: none

533 gallon Dose tank (minimum) at 12.69 gpi

18 GPM @ 25 ft. of head, Pump required
5.4 inch swing on Demand float which translates to roughly 3.7 inches of float tether length
if time dosing is required --> 3.8 minutes ON time & 5.1 hours OFF time
17 inches from bottom of tank to "pump ON" float, or 12 inches to "timer ON" float
20 inches from bottom of tank to "Hi Level Alarm" or 30 inches to "Hi level alarm" if time dosed

145 ft. of 2.0 inch supply line with end feed manifold connection
(Tip: "top feed" manifold to control drainback)

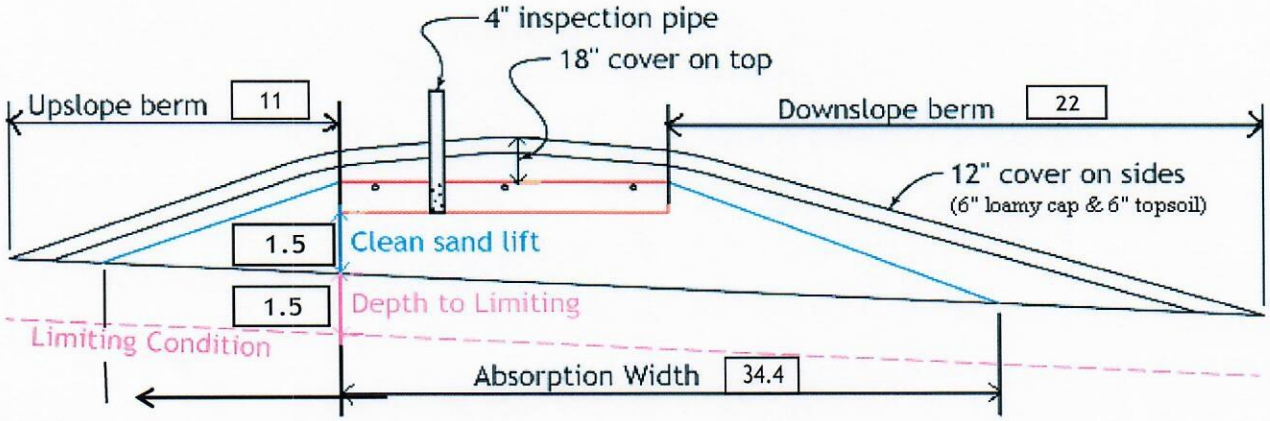
18 inch, or 1.5 ft. Sand Lift Mound
10.0 ft. wide by 25.0 ft. long Rock bed
3 laterals 1.50 inch diameter 23.0 ft. long 3.0 ft. lateral spacing
1/4" inch perfs 3.0 ft. perforation spacing

No Effluent filter & alarm
3 clean out & valve box assemblies

34.4 ft.Total sand ABSORPTION width (minimum)
8.1 ft. upslope and sideslope (sand beyond rockbed, minimum)
16.3 ft. Downslope (sand beyond rockbed, minimum)

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

4:1 upslope ratio 11 ft. upslope berm
4:1 sideslope 15 ft. sideslope berms
4:1 downslope 22 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:	111	yd^3 or *1.4=	155	ton	
Loamy Cap:	45	yd^3 or *1.4=	63	ton	6" deep
Topsoil:	53	yd^3 or *1.4=	74	ton	6" deep

INSPECTOR CHECKLIST - mound

32936 418th Ln. 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 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 none

☐ Riser over outlet, riser over inlet or center, and 6"+ inspection pipe over any remaining baffles.

☐ No effluent filter & alarm

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

☐ dose pump _____ 18 gpm 25 head VERIFY PUMP CURVE 3.8 min ON 5.1 hr OFF

☐ float setting drop 5.4 inches at ☐ 12.7 gpi "DESIGNED" 3.7 inches approx float tether length
68.0 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 18 inches. (Jar test : 2" sand leaves < 1/8" silt after 30 min)

☐ Absorption Sand beyond rock 8.1 upslope 16.3 downslope

☐ Bermed topsoil beyond rockbed 11 upslope 15 sideslope 22 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

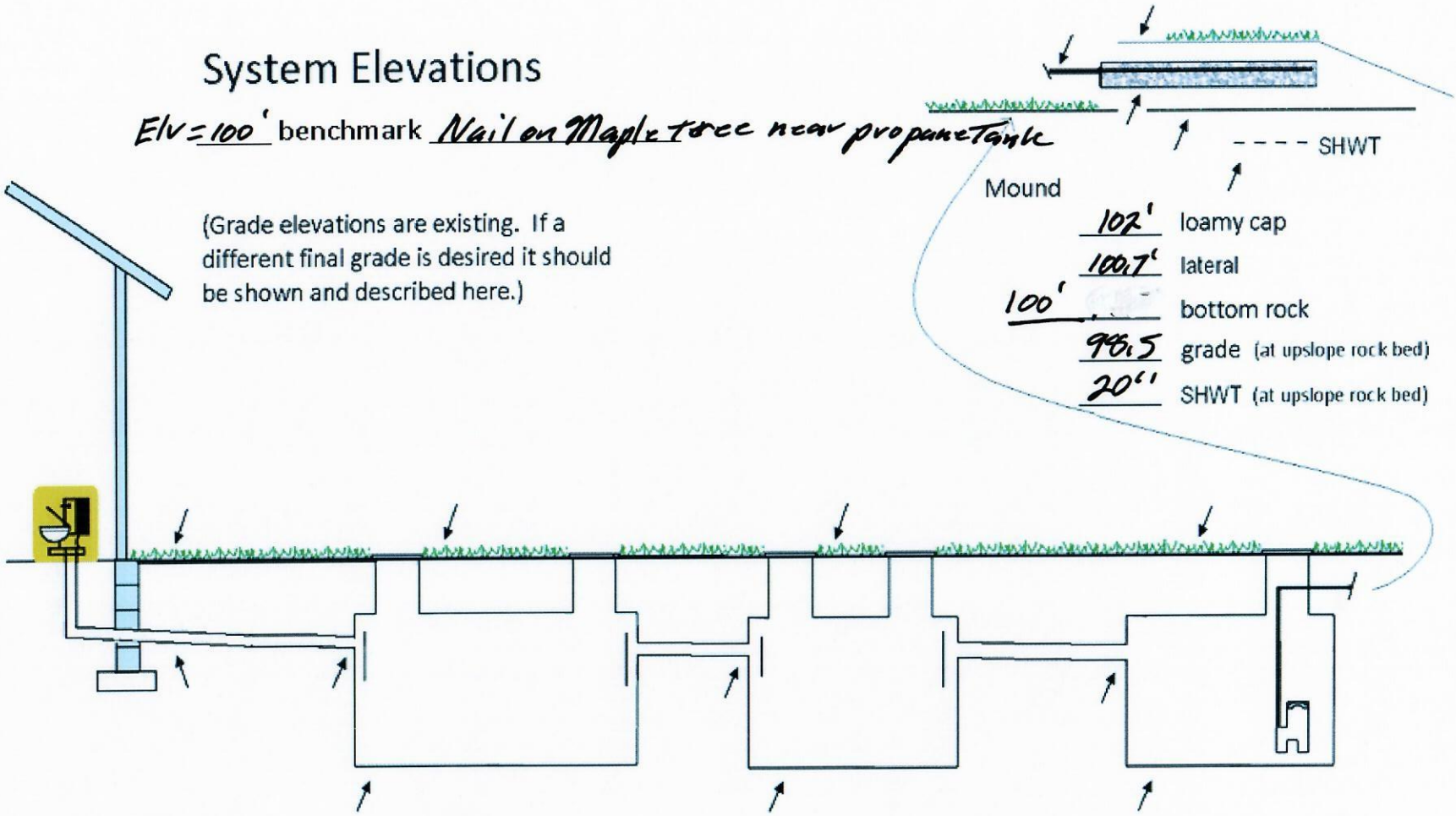
☐ monitoring plan and type _____

☐ well abandonment form - if necessary

System Elevations

Elv = 100' benchmark Nail on Maple tree near propane tank

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



Mound

102' loamy cap

100.7' lateral

100' bottom rock

98.5 grade (at upslope rock bed)

20" SHWT (at upslope rock bed)

SHWT

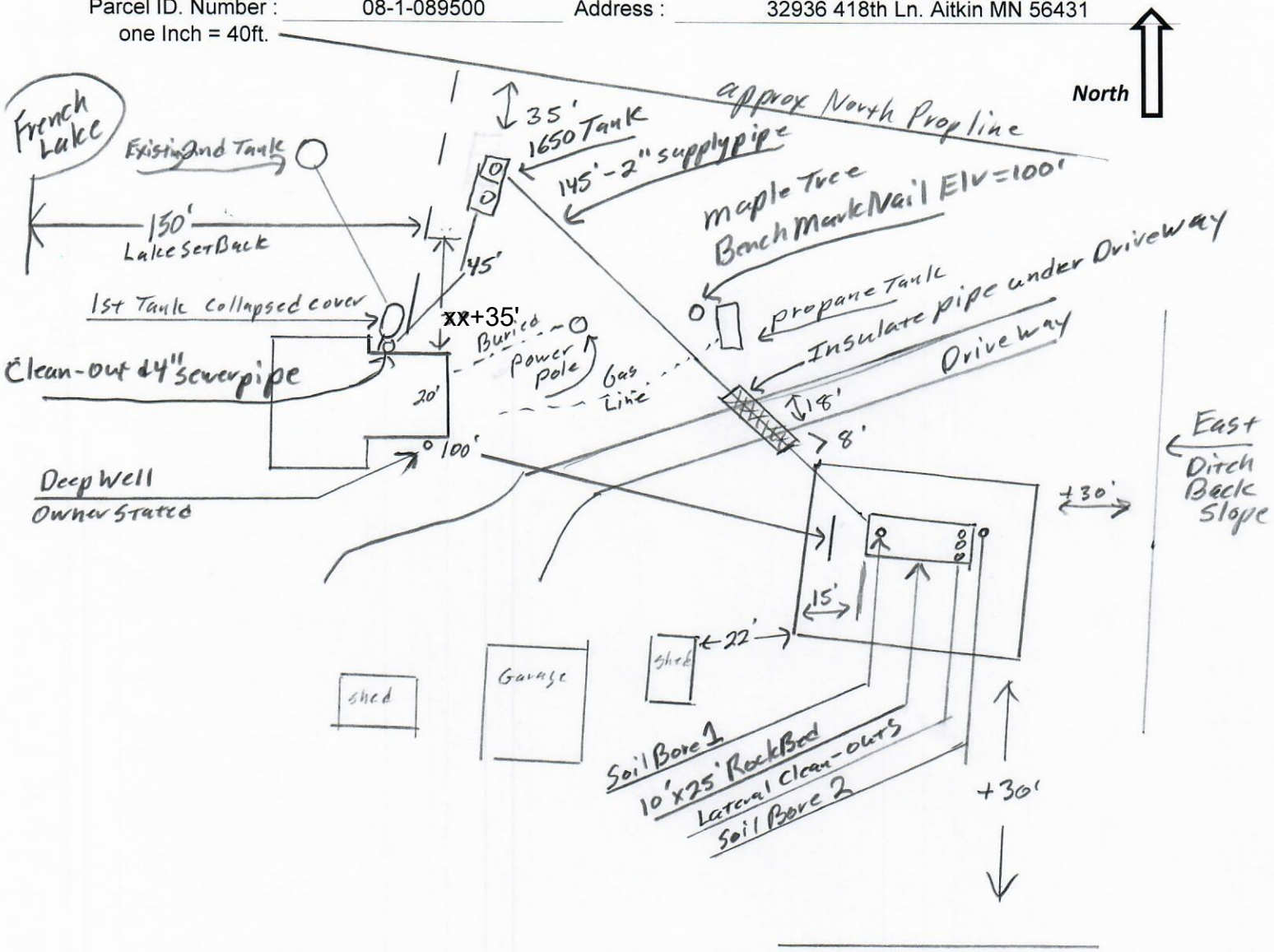
Sewer pipe exiting house	New Septic Tank	Septic Tank (if applicable)	Pump Tank
92.2' Grade	90.4 Grade	_____ Grade	90.4 Grade
Estimated 90' Pipe	88' inlet	_____ inlet	87.8' inlet
	84' Tank bottom	_____ Tank bottom	84' Tank bottom

{ Design Drawing }

Property Owner: Jackie Dilley Date: 9/8/23 Designer's Initials : JB

Parcel ID. Number : 08-1-089500 Address : 32936 418th Ln. Aitkin MN 56431

one Inch = 40ft.



Driveway Near Propane Tank Elv.= 98.2'

	Surface/ SHWT	*Nail on Maple Tree = Bench Mark 100'*			Existing Grade
Soil Bore 1	98.2' / 20"	Bench Mark	100'		Upslope Edge of Rockbed Elv.= 98.5'
Soil Bore 2	98' / 23"	Ground Elv. BM	98.1'		Bottom of Rockbed Elv.= 100'
Soil Bore 3		Ground Elv. Tank	90.4'		Top of Washed Sand Elv.= 100'
	Ground at	Existing house	92.2'	North side	Aprrox. Sewer pipe at House Elv.= 90'

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	Access Route for Tank Maintenance
Component Location	Property Lines
OHW ordinary high water	Structures
Lot Easements	Setbacks

Mound Design Notes - Aitkin county

Property Owner: Jackie Dilley **Date:** 9/8/23

Site Address: 32936 418th Ln. Aitkin MN 56431 **PID:** 08-1-089500

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

1 This is a type I mound for a 2 bedroom House. Existing deep well location is under SE window of house.
Owner Stated Deep Well buried in yard near house. Tank will be +32 north of house (+50' from well)
Mound Rockbed will be Approx. 108 ft from well. Pressure Test 4" sewer pipe from house to new tank .

2 Because the Existing tank is close to house and cover has collapsed into tank, designer could not locate sewer pipe at house. Installer may have to have new stub out pipe from house?
Owner has plywood over tank, designer stacked and flagged area with Orange and pink flagging tape.
Install will pump both existing tanks, collapse, fill or remove.

3 French lake is a NE Lake (150 ft SSTS setback).

4 Bench Mark Elevation Elv.= 100' is a nail on a Maple tree near propane tank.

5 Install Jacobson 1650 2/Compartment Septic / Pump tank for gravity flow from house.
Install clean-out near house. Pressure test sewer pipe from house to tank.

6 Elevation contour of rock bed upslope edge is 98.5'.
The area size of the rock bed is 10' x 25' . Absorption area is 25' x 34.4'.
Sand absorption area is 8.1 ft. up slope + 10 ft. rockbed + 16.3 downslope = approx. 34.4 ft. wide sand base.
Berms are 11ft. Upslope, 22ft. Down slope, 10ft. Rock bed = approx. 43ft. Wide.
Overall mound size is approx. 43' wide x 55' long and approx. 3.5' high. End Berms are 15' wide.

7 The bench mark is the nail on the Maple tree NW of 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.

8 The top of the washed sand and bottom of rock bed is Elv. 100'.
It is important that the soils do not get compacted, and that clean washed sand is used.

9 The Jacobson 1650 2/Compartment tank will be gravity flow from dwelling. Install the pump for 7 demand doses per day. approx. 68 gallons per dose, 5.4 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, insulate top of tank.
Insulate 2" supply pipe under driveway. Recommend raising manholes 4" above finished grade.

10 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)

11 **Drill 1/4" holes for Perf sizing, 36" on centers.**
Install 4" inspection pipe to bottom of rock bed, secure in rock bed and raise to above final grade.
Recommend Installing an Effluent filter and Alarm on septic tank outlet.
MPCA Recommends installing an event counter on all systems with a pump.

Designed to Aitkin Co. and MPCA recommendations and requirements.

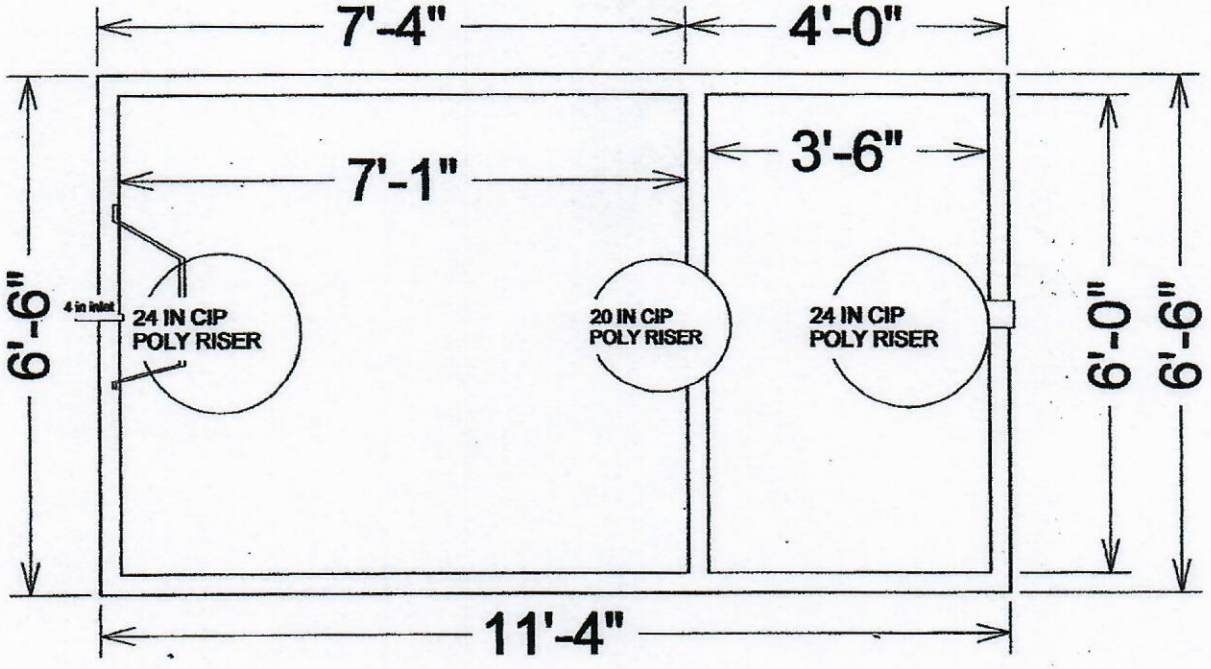
Designer Signature

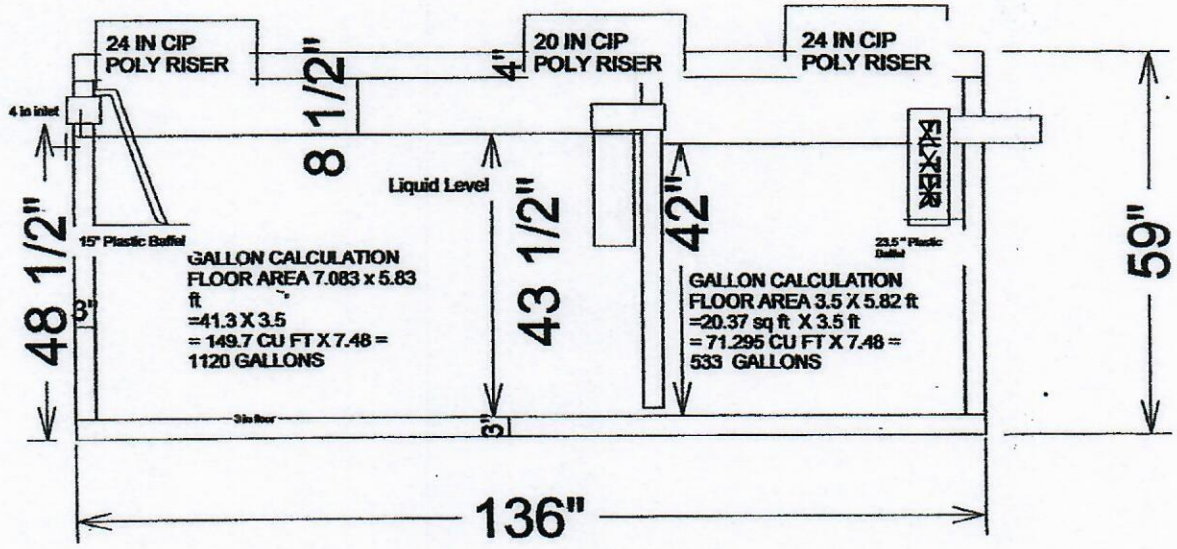
Brummer Septic LLC.
Design Company

L-1347
License#

1650 Gallon 2 Compartment Septic Tank

TOP VIEW





SIDE VIEW

533 / 42" = 12.69 GPI

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

Aitkin County

Detailed Parcel Report

Parcel Number: 08-1-089500

General Information

Township/City:	FLEMING TWP		
Taxpayer Name:	DILLEY, JAMES P ETAL		
Taxpayer Address:	32936 418TH LN AITKIN MN 56431		
Property Address:	32936 418TH LN		
Township:	48	**Lake Number:**	1010400
Range:	25	**Lake Name:**	FRENCH LAKE (FLEMING TWP) NE
Section:	29	**Acres:**	0.00
Green Acres:	No	**School District:**	1.00
Plat:	FRENCH LAKE WOODED ACRES		
Brief Legal Description:	LOT 7 BLK 1		

OHW - 1211.6

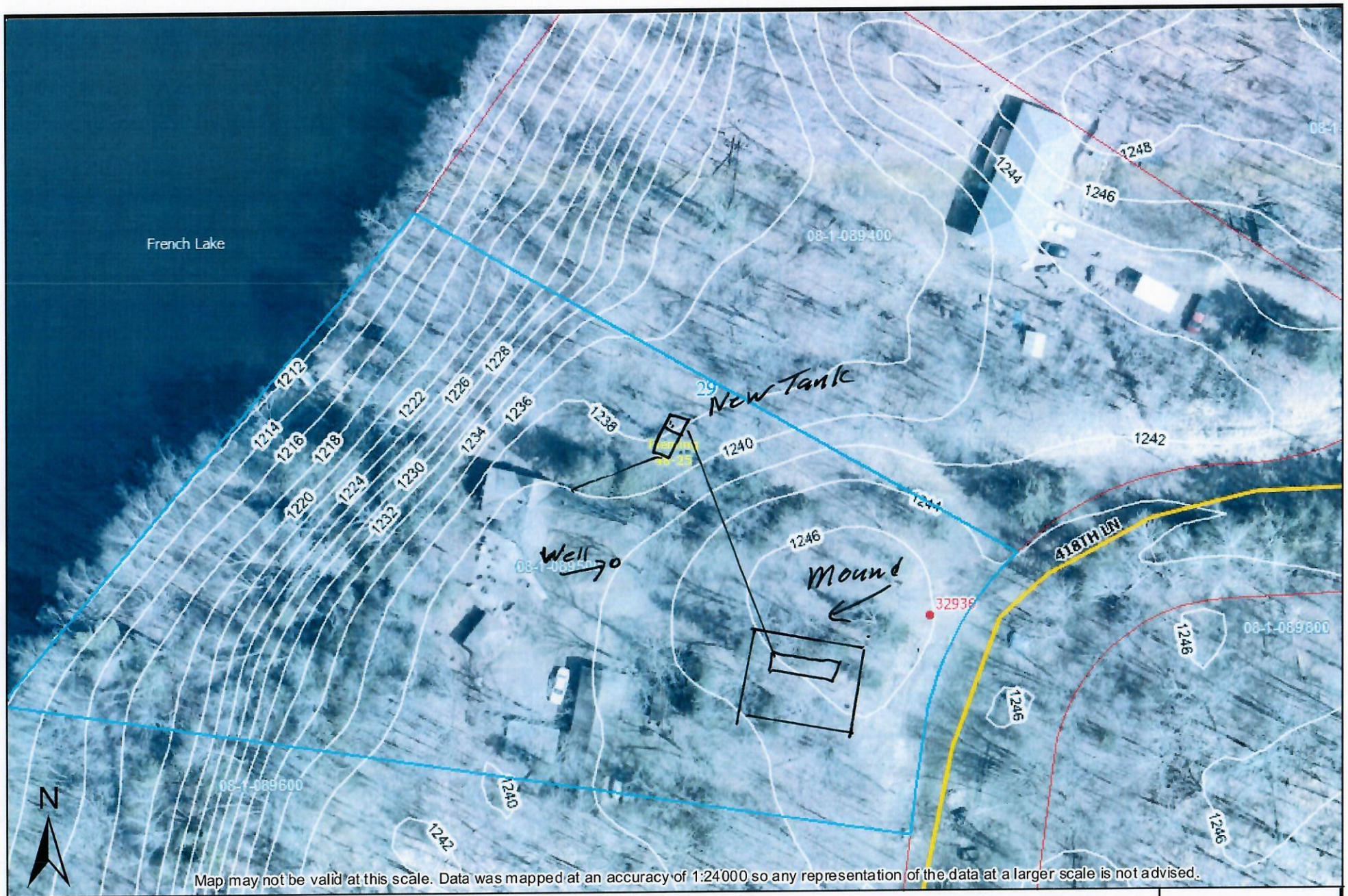
Tax Information

Class Code 1:	Residential 1 unit
Class Code 2:	Unclassified
Class Code 3:	Unclassified
Homestead:	Owner Homestead
Assessment Year:	2023

Estimated Land Value:	$94,400.00
Estimated Building Value:	$169,000.00
Estimated Total Value:	$263,400.00
Prior Year Total Taxable Value:	$217,396.00
Current Year Net Tax (Specials Not Included):	$1,016.00
Total Special Assessments:	$0.00
****Current Year Balance Not Including Penalty:**	$0.00
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.**



Map may not be valid at this scale. Data was mapped at an accuracy of 1:24000 so any representation of the data at a larger scale is not advised.

These data are provided on an "AS-IS" basis, without warranty of any type, expressed or implied, including but not limited to any warranty as to their performance, merchantability, or fitness for any particular purpose.

Dilley

1:1,128 | 0 0.005 0.01 mi | 1 inch = 94 feet | Web AppBuilder for ArcGIS

Aitkin County

Date: 9/4/2023

FRENCH LAKE WOODED ACRES

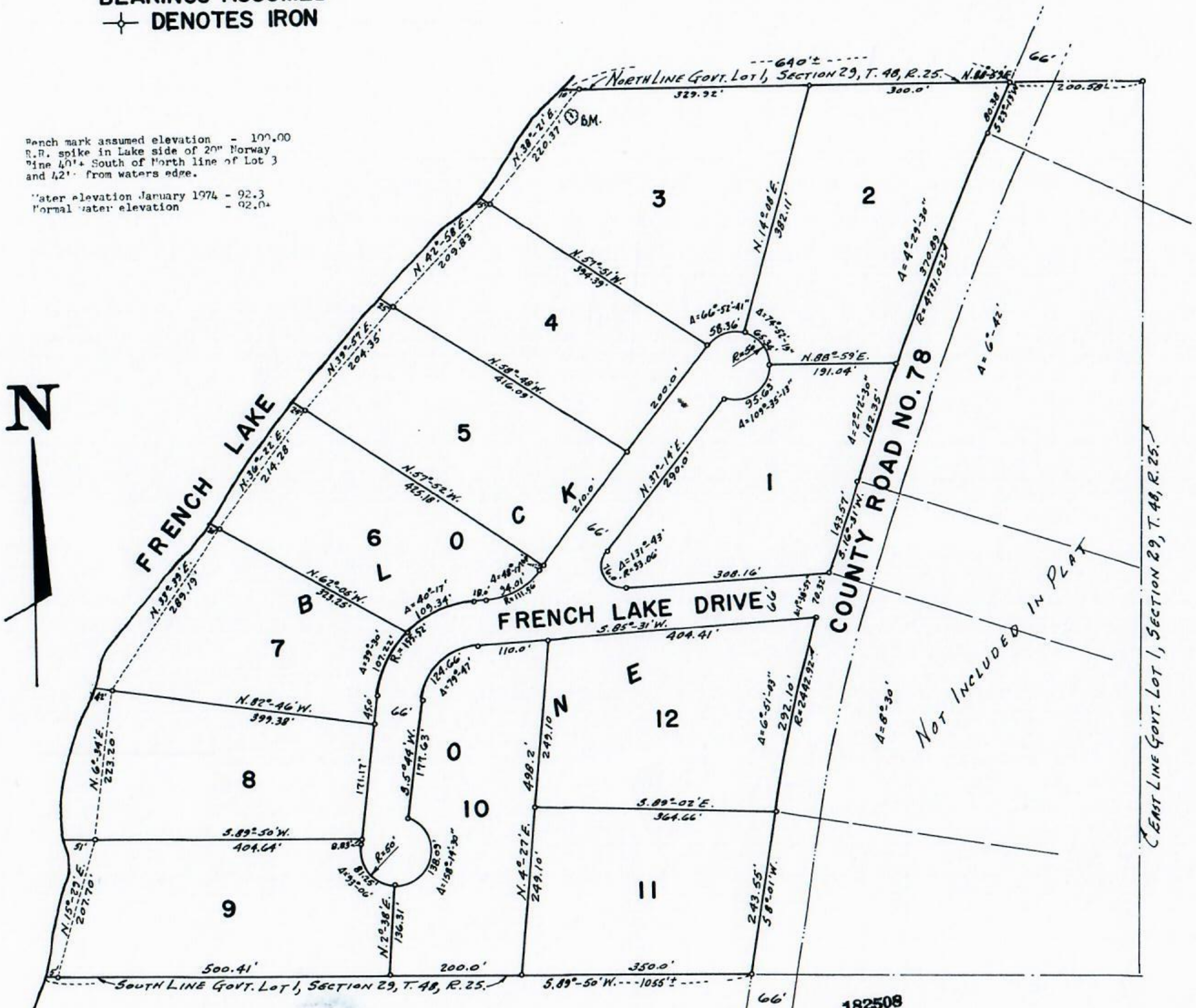
AITKIN COUNTY, MINNESOTA

W.L.VOIGT, SURVEYOR
AITKIN, MINNESOTA

SCALE 1"= 100'
BEARINGS ASSUMED
—+— DENOTES IRON

Bench mark assumed elevation - 100.00
R.R. spike in Lake side of 20" Norway Pine 40'± South of North line of Lot 3 and 42'± from waters edge.

Water elevation January 1974 - 92.3
Normal water elevation - 92.0±



KNOW ALL MEN BY THESE PRESENTS: That ALBERT A. CHRISTENSEN and MARIAN CHRISTENSEN, his wife, and EUGENE L. PAULSEN and MURIEL PAULSEN, his wife, fee owners, and the FIRST NATIONAL BANK OF AITKIN, a United States corporation, mortagee of the following described property situated in the County of Aitkin, State of Minnesota to wit: That part of Government Lot 1, Section 29, Township 48, Range 25, lying Westerly of County Road No. 78. Containing 28 Acres, more or less. Have caused the same to be surveyed and platted as FRENCH LAKE WOODED ACRES and do hereby donate and dedicate to the public for public use forever French Lake Drive as shown on the annexed plat.

In witness whereof said ALBERT A. CHRISTENSEN and MARIAN CHRISTENSEN, his wife, and EUGENE L. PAULSON and MURIEL PAULSEN, his wife, have hereunto set their hands and seals this 19 day of Feb 1974 A.D.

In witness whereof said FIRST NATIONAL BANK OF AITKIN has caused these presents to be signed by its proper officers and its corporate seal to be hereunto affixed this 19 day of Feb 1974 A.D.

In presence of: [signatures] as to — Signed: [signatures]
Albert A. Christensen
Marian Christensen
Eugene L. Paulsen
Muriel Paulsen

FIRST NATIONAL BANK OF AITKIN

[signatures] as to [signatures]

State of Minnesota
County of Aitkin s.s.

On this 19 day of Feb 1974 A.D., before me, a Notary Public, within and for said County and State, personally appeared ALBERT A. CHRISTENSEN and MARIAN CHRISTENSEN, his wife and EUGENE L. PAULSEN and MURIEL PAULSEN, his wife, to me known to be the persons described in and who executed the foregoing instrument and they acknowledged that they executed the same as their own free act and deed.

JOAN L. TOKLE NOTARY PUBLIC - MINNESOTA AITKIN COUNTY

[signature]
Notary Public
My commission expires 9/16/76

State of Minnesota
County of Aitkin s.s.

On this 19 day of Feb 1974 A.D., before me, a Notary Public, within and for said County and State, personally appeared M.M. Welshons and Charles Schoepf who being by me each duly sworn did say that they are respectively the President and Vice President of the FIRST NATIONAL BANK OF AITKIN the corporation named in the foregoing instrument, that the corporate seal affixed to said instrument is the corporate seal of said corporation, and that said instrument was signed and sealed in behalf of said corporation by authority of its Board of Directors, and said M.M. Welshons and Charles Schoepf acknowledge said instrument to be the free act and deed of said corporation.

NOTARY PUBLIC - MINNESOTA AITKIN COUNTY

[signature]
Notary Public
My commission expires 9/16/76.

I, Wm. L. Voigt, do hereby certify that I have surveyed and platted the property described on this plat as FRENCH LAKE WOODED ACRES and have placed iron monuments in the ground for guidance of future surveys and the same are correct as shown, that all distances are correctly shown in feet and decimals of a foot, that the outside boundary lines are correctly designated and that there are no wet lands, easements, public highways or roads laid out or travelled except as shown.

[signature]
Registered Land Surveyor
Minnesota Registration No. 5522

State of Minnesota
County of Aitkin s.s.

On this 19 day of Feb 1974 A.D., before me, a Notary Public, within and for said County and State, personally appeared Wm. L. Voigt, to me well known and acknowledged that he executed the foregoing certificate as his own free act and deed.

JOAN L. TOKLE NOTARY PUBLIC - MINNESOTA AITKIN COUNTY

[signature]
Notary Public
My commission expires 9/16/76

This is to certify that the adjoining plat has been accepted and approved by the Board of County Commissioners at a regular meeting held this 6th day of August 1974 A.D..

[signature]
Chairman
[signature]
Auditor

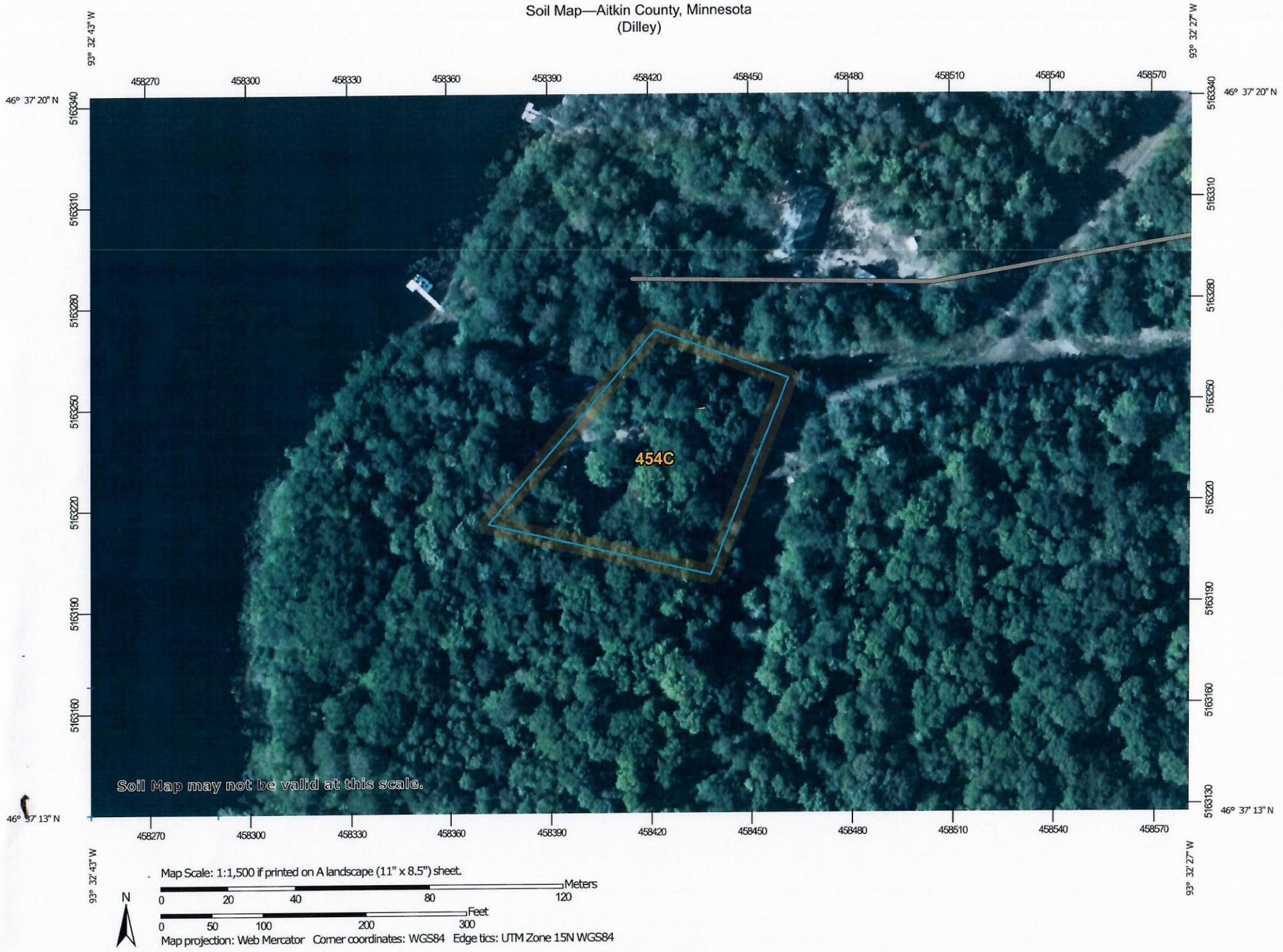
6th August 74 Franklin O. Draper

182508
STATE OF MINNESOTA } SS
COUNTY OF AITKIN
I HEREBY CERTIFY THAT THE WITHIN INSTRUMENT WAS FILED IN MY OFFICE ON Aug 12, 1974 AT 9 O'CLOCK A.M.
[signature]
REGISTER OF DEEDS

I HEREBY CERTIFY THAT TAXES PAYABLE IN THE YEAR 1974 ON THE LANDS DESCRIBED WITHIN ARE PAID.
Vernon Nelson
County Treasurer

56

Soil Map—Aitkin County, Minnesota
(Dilley)



Map Scale: 1:1,500 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 20 40 80 120

Feet: 0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 15N WGS84

Aitkin County, Minnesota

454C—Mahtomedi loamy coarse sand, 6 to 12 percent slopes

Map Unit Setting

National map unit symbol: gjgx
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

Mahtomedi and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Mahtomedi

Setting

Landform: Outwash plains
Landform position (two-dimensional): Backslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sandy and gravelly outwash

Typical profile

A - 0 to 4 inches: loamy coarse sand
E - 4 to 17 inches: gravelly coarse sand
Bw - 17 to 38 inches: gravelly sand
C - 38 to 60 inches: gravelly sand

Properties and qualities

Slope: 6 to 12 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: 15 percent
Available water supply, 0 to 60 inches: Low (about 4.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: A
Ecological site: F090AY019WI - Dry Sandy Uplands
Forage suitability group: Sandy (G090AN022MN)

Other vegetative classification: Sandy (G090AN022MN)
Hydric soil rating: No

Minor Components

Leafriver and similar soils
Percent of map unit: 2 percent
Landform: Depressions
Hydric soil rating: Yes

Meehan and similar soils
Percent of map unit: 2 percent
Hydric soil rating: No

Newson and similar soils
Percent of map unit: 2 percent
Landform: Swales
Hydric soil rating: Yes

Soils with less gravel
Percent of map unit: 2 percent
Hydric soil rating: No

Soils with more gravel
Percent of map unit: 2 percent
Hydric soil rating: No

Data Source Information

Soil Survey Area: Aitkin County, Minnesota
Survey Area Data: Version 23, Sep 6, 2022