2022-009428

AITKIN COUNTY ZONING

PERMIT NUMBER 47300

PARCEL NUMBER 39-1-066600

Location 8 (Lot) ____ (Block) ____ (Gov't. Lot) 1 (Section) 49 (Twp.) 24 (Rge.)

Issued SEPTEMBER 12, 2022 To TROY PITCHFORD

Nature of Authorization 2070 SQ FT RESIDENCE & 2 BEDROOM TYPE III MOUND SEPTIC W/ OPERATING PERMIT # 800

New Construction X Alteration ____

Sewer Installation X

Flood Plain and Lowest Floor Elev. ____

This permit expires one year from date of issuance
NOT TRANSFERABLE

NOTE:
This permit must be posted in a conspicuous place on premises on which work is to be done and remain until work has been completed and inspected.

K. BURTON
ZONING ADMINISTRATOR

No Portion of any Sewage Disposal System shall be Covered Prior to Inspection.

2. Zoning/Land Use Permit Applications Land Use Application Permit # 2022-8223, App. # App-2022-009428, UID # 206229
App. Status: Approved

Aitkin County Planning & Zoning / Environmental Services
307 Second St. NW Room 219
Aitkin, MN 56431
Phone: 218-927-7342
Fax: 218-927-4372
Email: aitkinpz@co.aitkin.mn.us

Project Location Search

Property:

Property Location			Property Address	Legal Description	Property Attributes		Owner Information	Tax Payer Information
Parcel Number	**Section-Township-Range**	**Township or City Name**	**Property Address**	**Legal Description**	**Lake Number**	**Lake Name**	**Owner Name(s)**	**Taxpayer Name(s)**
39-1-066600	S:1 T:49 R:24	WORKMAN TWP	51260 221st Pl MCGREGOR, MN 55760	LOT 8 VIEW POINT	1,006,200	BIG SANDY LAKE	PITCHFORD, TROY M & TRICIA N	PITCHFORD, TROY M & TRICIA N

Project Location

1.) Is the property zoned Shoreland? (If you're unsure, you can verify the Zoning district by clicking the GIS map link below.)	Yes
2.) Enter driving directions to the property from Aitkin: (Poor driving directions could result in a delayed or denied permit.)	Take hwy 65 north to Wotring road go to the T and go left to address # 51260 -221st Wortring rd Look for stakes and trees marked on property
3.) Is there an existing septic system on the property?	Yes
4.) Are you applying to install a new septic system with this application?	Yes

Existing Septic Status

Do you have a Certificate of Compliance, Certificate of Installation, Design for a new system, or does your project fall under Exemption A or B above?	Yes

Designer/Installer

Designer Name:	Jeff Brummer Septic LLC
Installer:	Licensed Septic Professional
Installer Name:	Jerry Farley Sewer System
Installer License # :	L 1919

Proposed Septic Type

Select the type of septic you are applying for:	Residential Other/Performance Sewer (Type III, IV, V) Residential Operating Permit (Type III, IV, V)

Attach Septic Forms

Attach Septic Design & Management Plan:	File 1: Scan0428.pdf
Attach Operating Permit Application and Maintenance Contract:	File 1: Scan0429.pdf

Project Description

Please describe your proposed project:	this will be for 1 new house 2,070 sq ft Height is 21 ft legnth is 55ft Width is 56 ft see attached survey
What is the height of your structure?	21 Feet

Project Type

Select Item 1:	New Residence incl. attached decks/porches/garages
Size of Item 1:	2070 ft^2

Planning Checklist

Will this structure be used for commercial purposes?	No
Are there any wetlands or lowlands on or near the project site?	No

Shoreland Data for Land Use Permits

1.) Will the proposed structure be less than 35 foot maximum structure height allowed in Shoreland?	Yes
2.) Are you constructing a walkout basement?	No
3.) Will there be any vegetation removal, earth moving, or fill placed in the Shore Impact Zone, Bluff Impact Zone or on a Steep Slope of a lake or river?	No
	File 1: Scan0429.pdf
4.) If you are building an accessory structure, will there will be a loft or second story?	No

Natural Landscape Protection Plan

1.) Setback from Ordinary High Water Level to the proposed construction? (closest proposed structure to OHWL)	87 Feet
2.) How many cubic yards of fill or excavation will be done on the property?	800 CuYd
3.) How close to the property line will any fill be placed or any excavation be done?	22 Feet
4.) What percent slope of the land currently exists on the construction site?	0.5 % slope
5.) How will erosion be controlled during construction?	Silt fence
6.) What will be done after construction to control erosion?	Grass and shrubs

Attach Site Plan

1.) Attach a copy of your site plan(s):	File 1: Scan0429.pdf
2.) Is the project staked and ready for inspection?	Yes

Terms

Land Use/Septic Terms & Conditions

Zoning permits and Subsurface Sewage Treatment System permits are valid for one (1) year (unless the sewage permit is to upgrade an Imminent Threat to Public Health or Safety system, which is then valid for ten (10) months).
All corners of the proposed structure(s) need to be staked with visible flags, ribbon, or lathes prior to onsite inspection by Aitkin County.
If property lines are not clearly marked and visible, then they need to be staked with visible flags, ribbon, or lathes prior to onsite inspection by Aitkin County.
It shall be a violation of the Aitkin County Zoning Ordinance to commence construction before the permit application is approved by Aitkin County.
Permit fees are non-refundable after a permit has been approved.
The landowner or authorized agent may make application for a zoning permit agreeing to do such work in accordance with all Aitkin County Ordinances. The landowner or authorized agent agrees that the application, site plan, and all other attachments submitted herewith are true and accurate and shall become a part of the permit. The landowner or authorized agent agrees that, in making application for a zoning permit, the landowner grants permission to Aitkin County, at reasonable times, to enter the property to determine compliance of the application with applicable Local, County or State Ordinances or Statutes. It is the applicants sole responsibility to contact other Local, County or State agencies to ensure the applicant has complied with all relevant Local, County or State Ordinances or Statutes.
After a complete application is submitted and reviewed, an on-site inspection may be conducted; a permit may be issued describing the proposed construction that may take place on the property. Changes to a project may require a permit application to be resubmitted.
The septic installer shall notify Aitkin County Environmental Services a minimum of twenty-four (24) hours before the covering of any portion of the septic installation. Changes from the approved septic design will require approval by the County prior to construction.
Applicants are responsible for getting all applicable entrance permits from the appropriate road authority.
Applicants acknowledge that they are in compliance with MN Contractor Licensing laws per MN Statute 326B.85.
Applicants acknowledge that they are in compliance with MN Statute 326.121 subd 1 which states "The State Building Code is the standard that applies statewide for the construction, reconstruction, alteration, repair, use of buildings and other structures of the type governed by the code."
All appropriate permit fees must be paid in full prior to any necessary review(s) of application.

Defining and staking the property lines, road right-of-ways, septic sites, and wells are the responsibility of the property owner. In some cases, a registered survey may be required to verify setbacks before granting a permit.

I acknowledge that by submitting this application, the application and its attachments are public information.

Invoice #55991 (08/25/2022) Expected Payment Method: Value Payment Systems - Credit Card

Charge	Cost	Quantity	Total
Item 1 Dwelling Greater Than 2001 added 08/25/2022 1:05 PM $550 Flat Fee	$550.00	x 1	$550.00
Residential Operating Permit added 08/25/2022 1:34 PM $150 Flat Fee	$150.00	x 1	$150.00
Residential Other/Performance Sewer (Type III, IV, V) added 08/25/2022 1:05 PM $400 Flat Fee	$400.00	x 1	$400.00
Grand Total			
		Total	**$1,100.00**
		Payment 08/25/2022	**$1,100.00**
		Due	**$0.00**

Results (Go to top)
Signature accepted
Status Changed
Change logged
Sent Your Land Use/Septic Application has been Approved. notification to: enderle@frontiernet.net; tpcowboy2002@yahoo.com
Failed to send NOT SET notification to:

Approvals

Approval	Signature
Applicant	Matt j. enderle - 08/25/2022 1:06 PM ffd2ffbe1874c5daacddfb72a7f5ef5a c7deea87901e3a1820e53ba254d0b126
#1 Adminstrative Approval Group	Connor Plagge - 09/12/2022 11:43 AM c9caf0fcbba31b2718deb465c00aede3 9f39d8b8df32f43791881fefde6a1c4c
#2 Inspector Group	Shannon Wiebusch - 09/12/2022 2:29 PM 1462b9861861faad92e7f58f9df072b0 e906931f5c1970ce65b1f79f5f249731
#3 Level Three Final Action	Kim Burton - 09/12/2022 3:42 PM 1cc500b7c90cda89937a11f0f791384a 7d1c3d6a2f3973e20627942721389174

Public Notes

Text: Permit #47300. Approved for a 2070 sq ft New Residence incl. attached decks/porches/garages and a 2 bdrm Type III mound septic with operating permit #800

File(s):
File 1: 2927_001.pdf
2927_001.pdf
File 2: OP_800.pdf
OP_800.pdf

Admin Checklist

Date application was complete: 08/25/2022

This review has been started by: Connor Plagge

Zoning District of project location: Shoreland

Required OWHL setback distance for this project: 75 ft.

"Other" OHWL setback distance is:

Project located in the floodplain?

Base Flood Elevation:

Lowest Floor Elevation:

Is an after construction

elevation certificate required?

Property line setbacks appear to be met?

Road R-O-W setbacks appear to be met?

Bluff setbacks appear to be met?

Septic Tank setback appears to be met with/without an engineer's report?

Septic Drainfield setback appears to be met with/without an engineer's report?

Is the parcel a Lot of Record before 1-21-92 or have alternate sites been identified? Yes

Is this an After-The-Fact application? No

Inspector Checklist

Zoning Inspector: Connor Plagge

Attach necessary inspection forms/photos: File 1: PitchfordProperty.pdf

PitchfordProperty.pdf

Notes: Talked with Troy 9/12/22. Confirmed that garage is not used for living quarters and is being used to store furniture from the house that will be removed. Bunkhouse/boathouse is also not used as a residence and is used mostly as a game room. CP

Appears to meet all setbacks.

Was an onsite conducted for this application? Yes

Septic Design Approver Checklist

Zoning Inspector:	Kevin Turnock
SSTS Type:	Type III
SSTS Design:	"Other"/Performance System (III, IV, V)
New or Replacement SSTS:	Replacement SSTS
gpd:	1-2,499 gpd
# of bedrooms:	2
Does this system require an Operating Permit?	Yes
Operating Permit #:	800
Attach appropriate inspection forms.:	
Does this system belong to an other establishment?	No
Is this a Cluster System?	No

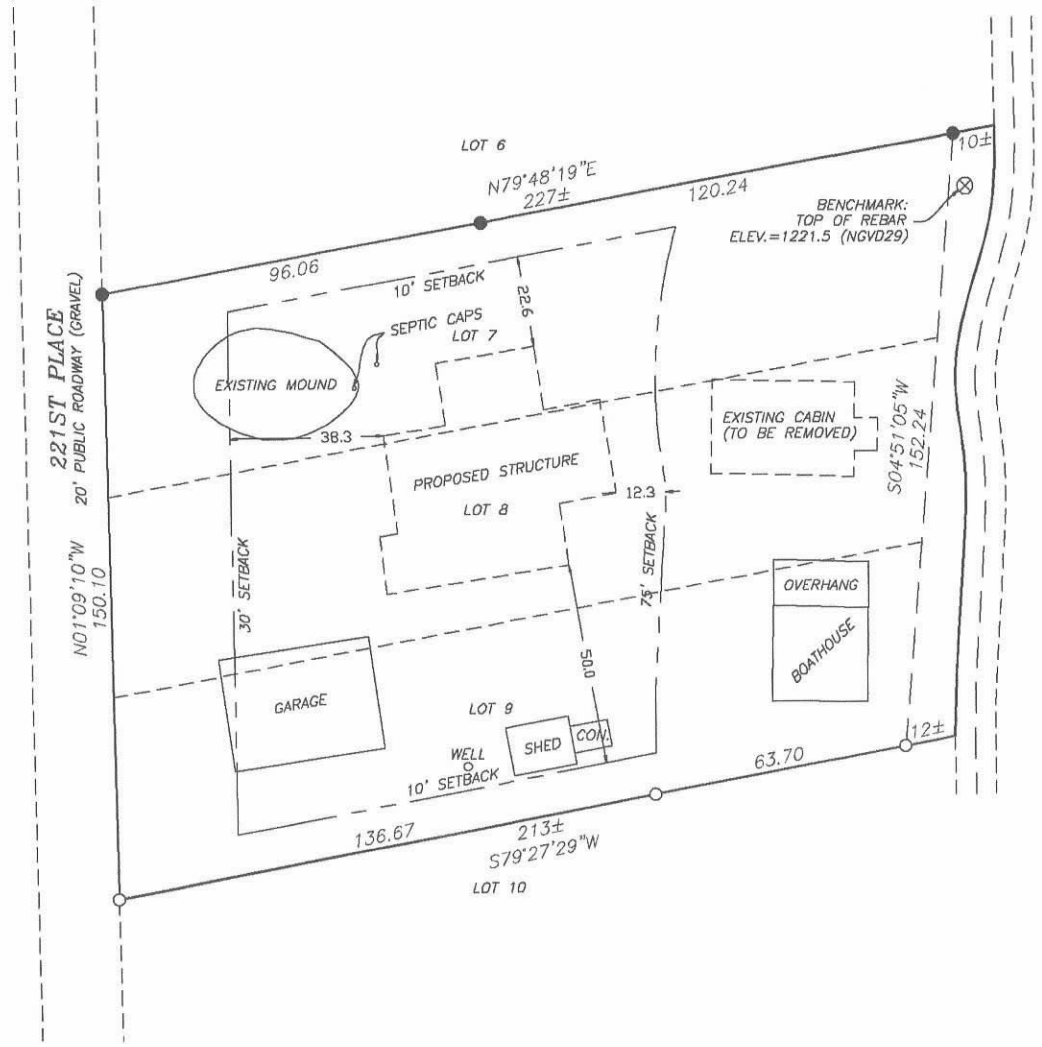
Numbers

	Current Number		Next from Sequence
UID #	206229		*not applicable*
App. #	App-2022-009428	««	App-2022-009513
Permit #	2022-8223	««	2022-8224

Print View

CERTIFICATE OF SURVEY

LOTS 7, 8, AND 9, VIEW POINT
AITKIN COUNTY, MINNESOTA



SCALE
1"= 30'

30 0 30 60

BEARINGS ARE BASED ON NAD83(2011)
AITKIN COUNTY COORDINATE SYSTEM

● DENOTES FOUND IRON MONUMENT

○ SET 1/2" IRON REBAR WITH RLS CAP STAMPED "STANG 52591"

Northwestern Surveying and Engineering, Inc. prepared this survey without the benefit of current title work. The property shown is based on a legal description provided by you the client or a general request at the appropriate County Recorder's office. Easements, site restrictions or adjoining deed conflicts may exist which affect subject property and are not shown by this survey. We reserve the right to revise the survey upon receipt of a current title commitment or title opinion.

NORTHWESTERN
SURVEYING & ENGINEERING, INC.
P.O. Box 3067 ~ Bemidji Minnesota ~ 56619

TROY PITCHFORD
51260 221ST PL.
MCGREGOR, MN

JOB#: 22302 DRAWN BY: TJB
FILENAME: 22302 TROY PITCHFORD

REV#	DESCRIPTION	DATE
1	ADD STRUCTURES	08/23/22

I HEREBY CERTIFY THAT THIS SURVEY, PLAN OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MINNESOTA.

MICHAEL A. STANG (LIC. NO. 52591)

8/23/2022
DATE:

Brummer Septic LLC.

Site Evaluations, Septic Designs, Inspections

Designer I - Lic. #1347

Jeff Brummer (218) 821-0704

brummerseptic@gmail.com

Billing Statement

Invoice Number : 22-169 Troy Pitchford

Job Location : 51620 221st Pl. McGregor Mn 55760

Parcel Number : 39-1-066600

Service of : Septic design (2 bedroom Type III mound)	$400.00
Extra Trip	$75.00

All Passed due bills will be charged $10.00 per mouth extra until paid.

Amount Due : $475.00 Date of billing : 8/22/2022

Billing Information Payment Due : 9/22/2022

Troy Pitchford 763-257-9065

22 Alcott Court

North Oak Mn 55127 (bigsandy4me@gmail.com)

Make Payment to:

Brummer Septic LLC.

14650 Agate Ridge Rd

Brainerd MN. 56401

Thank you, Jeff Brummer

Subsurface Sewage Treatment System Management Plan

Property Owner: Troy Pitchford | Phone: 763-257-9065 | Date: 8/22/2022

Mailing Address: 22 Alcott Court | City: North Oaks MN | Zip: 55127

Site Address: 51260 221st Pl. | City: McGregor MN 55760 | Zip: _____

This management plan will identify the operation and maintenance activities necessary to ensure long-term performance of your septic system. Some of these activities must be performed by you, the homeowner. Other tasks must be performed by a licensed septic service provider.

System Designer: check every 12 months.
Local Government: check every 12 months.
State Requirement: check every 36 months.

(State requirements are based on MN Rules Chapter 7080.2450, Subp. 2 & 3)

My System needs to be checked every 12 months.

Homeowner Management Tasks

Leaks – Check (look, listen) for leaks in toilets and dripping faucets. Repair leaks promptly.

Surfacing sewage – Regularly check for wet or spongy soil around your soil treatment area.

Owner ----> *Effluent filter – Inspect and clean twice a year or more.*

Owner ----> *Alarms* – Alarm signals when there is a problem. Contact a service provider any time an alarm signals.

Owner ----> *Event counter or water meter* – Record your water use.

-recommend meter readings be conducted (*circle one:* DAILY WEEKLY MONTHLY)

Professional Management Tasks

- ☑ Check to make sure tank is not leaking
- ☐ Check and clean the in-tank effluent filter
- ☑ Check the sludge/scum layer levels in all septic tanks
- ☑ Recommend if tank should be pumped
- ☑ Check inlet and outlet baffles
- ☑ Check the drainfield effluent levels in the rock layer
- ☑ Check the pump and alarm system functions
- ☑ Check wiring for corrosion and function
- ☐ Check dissolved oxygen and effluent temperature in tank
- ☑ Provide homeowner with list of results and any action to be taken
- ☐ Flush and clean laterals if cleanouts exist

"I understand it is my responsibility to properly operate and maintain the sewage treatment system on this property, utilizing the Management Plan. If requirements in the Management Plan are not met, I will promptly notify the permitting authority and take necessary corrective actions. If I have a new system, I agree to adequately protect the reserve area for future use as a soil treatment system."

Property Owner Signature: _____ Date: _____

Designer Signature: Jeff Brummer Date: 8/22/2022

See Reverse Side for Management Log

Maintenance Log

Activity	Date Accomplished									
Check frequently:										
Leaks: check for plumbing leaks										
Soil treatment area check for surfacing										
Lint filter: check, clean if needed										
Effluent screen: if owner-maintained										
Water usage rate (monitor frequency _____)										
Check annually:										
Caps: inspect, replace if needed										
Sludge & Scum/Pump										
Inlet & Outlet baffles										
Drainfield effluent leaks										
Pump, alarm, wiring										
Flush & clean laterals if cleanouts exists										
Other:_____										
Other:_____										

Notes: Aitkin Co Operating Permit Required Follow Aitkin Co. Operating permit requirments.

Check alarm at least once a year. Pump Tanks at least once every 3 years.

Mow Mound Area at least once a year to keep brush and trees from growing

No Traffic on mound area, No Snowmobiles, No ATV's, No Parking.

Mitigation/corrective action plan:_____

AITKIN COUNTY ENVIRONMENTAL SERVICES

APPLICATION for an
OPERATING PERMIT FOR WASTEWATER TREATMENT AND DISPERSAL

PERMITTEE Troy Pitchford **PARCEL NUMBER** 39-1-066600

ADDRESS 51260 221st Pl. McGregor MN 55760

LEGAL DESCRIPTION Lots 7,8,9 of Veiw Point Add.

TELEPHONE # 763-257-9065 **GIS LOCATION**

A. DESCRIPTION OF WASTEWATER TREATMENT AND DISPERSAL SYSTEM: (Attach ISTS site evaluation and design; estimated cost of system construction, operation, monitoring, service, component replacement, and management; anticipated system life, hydraulic and organic loading rates)

Type III Because soils have less than 12" to mottles (10")
Type III because installed on disturbed or Fill soils

Type III 2 Bedroom Mound 36" washed sand under Rockbed.

B. MONITORING PLAN AND REPORTING FREQUENCY:

PARAMETER	COMPLIANCE LIMIT	SAMPLE LOCATION	SAMPLE FREQUENCY	SAMPLE TYPE	REPORTING FREQUENCY
FLOW	300 GPD	Event counter	Once a Month or when present		Send Report to Aitkin Co. Once a year
5-DAY BOD					
TOTAL NITROGEN					
TOTAL PHOSPHORUS					
TSS					
FATS,OILS AND GREASE					
FECAL COLIFORM					
SEPARATION DISTANCE					

Owner will read event counter once a month or when present. Owner will send monthly readings report to Aitkin co. or the inspector ONCE A YEAR.

_____ will perform the monitoring of this septic system.

C. MAINTENANCE PLANS

PARAMETER	LOCATION	FREQUENCY
300 GPD	Read Event Counter	Once a month or when present
Calibrate pump out gallons	Measure pump tank and calculate gallons pumped out per event	Calibrate system when installed and in operation. Check calibration number at 1st year inspection and every one after
Report monthly readings to Aitkin Co. Or inspector	Keep records of monthly readings	Once a year submitt report to Aitkin Co.

D. MITIGATION PLAN:

Have system Inspected

I hereby certify with my signature as the designer, that all data for the operating permit application is true and correct to the best of my knowledge. I agree to indemnify and hold Aitkin County harmless from loses, damages, costs and charges that may be incurred by the County because of the information submitted with this application.

Jeff Brummer — **Signature**

L-1347 — **License Number**

8/22/2022 — **Date**

Jeff Brummer — **Name (please print)**

14650 Agate Ridge Rd Brainerd MN 56401 — **Address**

(218) 821-0704 — **Telephone #**

c:operatpermit.doc

MAINTENANCE SERVICE, MONITORING AND INSPECTION CONTRACT
FOR INDIVIDUAL SEWAGE TREATMENT SYSTEM

It is hereby agreed this ____ day of _____, _____ by and between _____ (Inspector) and __Troy Pitchford____(client)

(Client) Name & Address
Troy Pitchford 22 Alcott Court North Oaks MN 55127

Street Address Site 51260 221st Pl.

City, State, Zip McGregor MN 55760

That in consideration of the payments provided herein, the Inspector shall provide services to perform Preventative Maintenance, Monitoring and Inspection of the Individual Sewage Treatment System (ISTS) located at the property described in the Aitkin County Operating Permit.

Each inspection includes an examination of the ISTS followed by a written report to the client. This inspection report shall contain recommendations for operation and maintenance for failure-preventative measures, if any are deemed appropriate by the inspector and a list of recommended corrective measures or replacement parts. The Inspector is authorized to submit a copy of the report to the Aitkin County Environmental Services Department.

This contract does not assume any responsibilities or obligations, which are normally the responsibilities of the Client, as related to parts or labor and does not extend to cover any costs that may be associated with any recommendations made under this contract.

The Inspector can only contract or subcontract for parts or labor after authorization. Billings for service calls shall be made on a case by case basis. This contract only covers maintenance, monitoring and inspection services per current Aitkin County Operating Permit and does not cover alarm calls of any kind.

The Inspector shall be provided access to the site and the system in order to perform the following services:

SEPTIC TANK AND LIFT STATIONS INSPECTION

(check the boxes needed to fill the requirements of the Operating Permit)

__✓__ Check septic tank and compartments for solids buildup and general appearance. If necessary, have tanks pumped (cost of pumping is the responsibility of the client).

Owner ----> __X__ Check effluent filter for buildup and clean, if applicable.

✓ Check pumping system, including control panel and floats.

Owner ----> X Record and date the readings of the elapsed time meter and cycle counter(s), if applicable. Owner is respondsible for monthly event counter readings

✓ Check dosing settings (in the control panel, if applicable).

____ Other: _____

_____

**If the septic tank or lift stations need pumping to be in compliance with the operating permit the cost of the pumping is the responsibility of the Client.

TREATMENT DEVICE

____ Inspect pretreatment unit (aerobic tank, sand filter, etc.) per manufacturer's recommendations, if applicable.

____ Inspect and clean any parts per manufacturer's recommendations.

____ Inspect and clean laterals, if applicable.

____ Inspect the appearance of the wastewater inside the unit for color, turbidity and examination of odors.

____ Sample effluent per Operating Permit monitoring requirements.

(Cost of sampling and analysis is the responsibility of the Client)

____ Other: _____

_____

DISPERSAL FIELD

✓ Inspect for visible signs of failure (surface discharge, soggy ground, wet spots, settling, etc.)

✓ If liquid level monitors are installed, levels will be observed and recorded.

____ Flush filters and clean cartridges, if applicable.

____ Check field control unit solenoid operations or manual control, if applicable.

____ Other: _____

_____

In no event shall the Inspector be responsible for special or consequential damages, including but not limited to, loss of time, injury to personal property or any other consequential damages or incidental or economic loss due to equipment failure or for any other reason. This contract does not assume any responsibilities or obligations, which are normally, the responsibility of the Client or as, related to parts or labor and does not extend to cover any costs that may be associated with any recommendations made under this contract.

This contract shall be effective: Beginning 8-23, 2022

and Ending 8-23, 2028

Cost for Maintenance Service, Monitoring and Inspection Contract is:

$ 150.00 **/yr. For** 5 **years totaling $** 750.00

The Inspector agrees to provide inspection, monitoring and routine maintenance service only under this contract. The Client remedies for breach of this contract shall be limited to refund of any of the amounts paid in advance for service. This contract may be renewed 30 days from the ending date.

Payment for all services shall be paid yearly.

Client:	**Inspector:** Jerry Farley
Sign: _____	Sign: Jerry Farley
Print: Troy Pitchford	Print: Jerry Farley
Date: _____	Date: 8-23-2022

{ Type III Design Notes for Owner and Installer }

Property Owner: Troy Pitchford Date: Installer's Initials :

PIN : 39-1-066600 Site Address: 51260 221st Pl. McGregor MN 55760

This is a TYPE III Septic System, Operating Permit Required of Owner. Permit #

Reason for Type III Type III because installed on disturbed or Fill soils

Type III Because Mottled soils at 10"

Description of System Type III 2 Bedroom Mound 36" washed sand under Rockbed.

1st Tank Gal. 1st compartment gal. 2nd Comp 3rd

2nd Tank Gal. 1st compartment gal. 2nd Comp 3rd

3rd Tank Gal. 1st compartment gal. 2nd Comp 3rd

1st Pump tank Gal. 1st Pump Brand and model #

1st Pump GPM 1st Pump Ft. of Head 1st Pump Gal. per Dose

1st Pump tank Gal. per inch. 1st Pump Inches per Dose 1st Pump Doses per Day

1st Pump Design GPD 1st Pump Measured dose per day Timed or demand Dose

Time Settings: Minutes ON Minutes OFF Inches Pumped after drainback

Notes :

2nd Pump tank Gal. 2nd Pump Brand and model #

2nd Pump GPM 2nd Pump Ft. of Head 2nd Pump Gal. per Dose

2nd Pump tank Gal. per inch. 2nd Pump Inches per Dose 2nd Pump Doses per Day

2nd Pump Design GPD 2nd Pump Measured dose per day Timed or demand Dose

Time Settings: Minutes ON Minutes OFF inches Pumped after drainback

Notes :

1st Alarm: Tank Reason:

2nd Alarm: Tank Reason:

3rd Alarm: Tank Reason:

Water Meter Installed on house hold water: Where is it located :

Event counter installed on pump: Which Pump: Gal. Per Event

Where is Event Counter Located:

Requirement of Operating Permit

Owner to UNDERSTAND System Operation: Required to do monthly readings of water meter or event counter.

Owner to record readings every month that system is being used, should know calculations for Gal. per day.

Owner to REPORT to Aitkin Co. once a year with log of monthly readings and annual Inspection Report

Owner to Hire an Inspector for a Once a year Inspection of the system's, Operation, Mechanical functions, and Compliance with Operating Permit.

Preliminary & Field Evaluation Form

Type III Mound

www.SepticResource.com vers 12.4

Owner Information

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

Flow Information and Waste Type / Strength

Estimated Design flow: 300

Comments: Type III 10" to mottles
Remove existing mound and repalce with 36" washed sand under rockbed mound.

Aitkin Co Operating Permit Required

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	Existing deep well	
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	☐ 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: Remove existing mound to good soils, replace with at least 36" of washed sand.

Soil Information

Original soils ☐ Yes ☑ No

Soil logs completed and attached ☑ Yes ☐ No

Soil loading rate (gpd/ft^2) 0.60

Depth/elev to SHWT 10"

Depth to system bottom maximum (or elev minimum) (+ 36")

Depth/elev to standing water (if applicable) _____

Depth/elev to bedrock (if applicable) _____

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

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

Evidence of site:

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

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

Percolation rate (if applicable) _____

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

Flood elevation (if applicable) 1223.9'

Elevation of ordinary high water level (if applicable) _____

Floodplain designation and elev - 100 yr/10 yr (if applicable) 1223.9'
Elv.= 1223.9' same as Septic Design Elv. = 100'
Top of Deep well Cap Elv. = 1224' or 100.1'

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: Troy Pitchford Date 8/22/2022

Property Address / PID: 51260 221st Pl. McGregor MN 5576(

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 Flat Yard

soil survey map units: D458B slope 0 % direction-

Soil Log #1

☑ Boring ☐ Pit Elevation 97' Depth to SHWT 10"

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**			
		☑ Boring ☐ Pit	Elevation 96.9'		Depth to SHWT 14"		
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**			
		☐ 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.

Designer Signature: [signature] — Brummer Septic LLC. (Company) — L-1347 (License #)

2011 purple code

Mound Design - Aitkin county

www.SepticResource.com (vers 15.2)

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) [2] bedroom Type [III] Residential System

2) [300] GPD design flow

3) [No] Garbage disposal or pumped to septic Install 1650 Jacobson 2/Compartment tank

4) [1000] Gal Septic tank (code minimum) [1000] Gal Septic tank (design size / LUG req'd)
Tank options: Effluent filter & alarm req'd

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) [35] feet of [2.0] inch supply line leads to [6] gallons of drainback volume
(Tip: "top feed" manifold to control the drainback)

14) [49] gallons TOTAL pump out volume (treatment + drainback)

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

16) [18] GPM @ [21] 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) [3.9] 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) [16] inches from bottom of tank to "Pump ON" float, or [12] inches to "Timer ON" float if time dosed

21) [19] inches from bottom of tank to "Hi Level" float, or [29] inches to "Hi Level" float if time dosed

22) [292] 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) 0 percent site slope (0-20% range) 0 (% downslope site slope, if different than upslope)

25) 0 inches, or 0.0 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) 36 inch, or 3.0 ft. Sand Lift Mound **CRITICAL FOR FUTURE CERTIFICATIONS!!!**

27) 20.0 ft. base absorption width (with sand beyond rockbed as follows:) Use 10 ft.

~~34.0~~ 30' greater of: absorption width OR sand slope

28) 5.0 ft. upslope and sideslope sand upslope ~~12.0~~ use 10 ft

5.0 ft. Downslope sand down slope ~~12.0~~ use 10 ft.

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

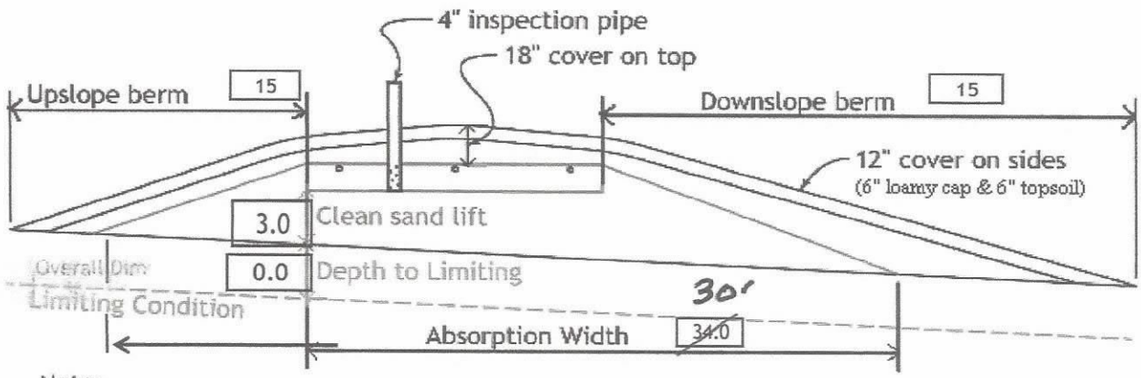
29) 3:1 upslope ratio 15 ft. upslope berm

30) 3:1 sideslope 15 ft. sideslope berms

31) 3:1 downslope 15 ft. downslope berm

32) Overall Dimensions: 10.0 ft. wide by 25.0 ft. long Rock bed

40 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)

43.6 up + 43.6 downslope + 17.8 ends + 27.8 under rock = plus 20% 159 yd³ or *1.4= 223 ton

35) Loamy Cap:

36 ft. by 51 ft. 6" deep, plus 20% gives 41 yd³ or *1.4= 57 ton

36) Topsoil:

40 ft. by 55 ft. 6" deep, plus 20% gives 49 yd³ or *1.4= 69 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	8/22/2022

Aitkin Co Operating Permit Required Follow Aitkin Co. Operating permit requirments.

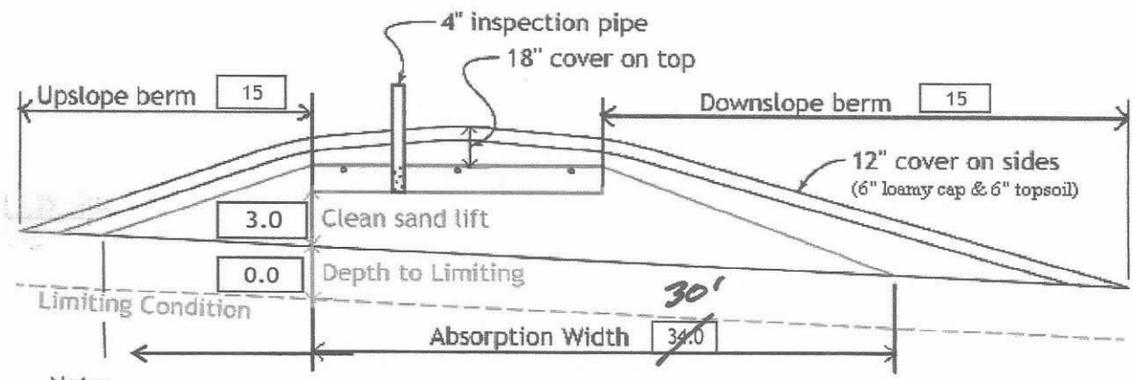
There will be 2 Electric alarms on system, one for Effluent filter , one for pump tank.

Installer Summary

1000	gallon Septic tank (minimum)			Tank options: Effluent filter & alarm req'd	
				Install 1650 Jacobson 2/Compartment tank	
533	gallon Dose tank (minimum)			at 12.69	gpi
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	
			if time dosing is required --> 2.7	minutes ON time & 5.1	hours OFF time
16	inches from bottom of tank to "pump ON" float, or		12	inches to "timer ON" float	
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				
~~34.0~~ 30'	ft. Total sand ABSORPTION width (minimum)				
		~~12.0~~ USE 10'	ft. upslope and sideslope (sand beyond rockbed, minimum)		
35		~~12.0~~ USE 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 55760

☐ 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

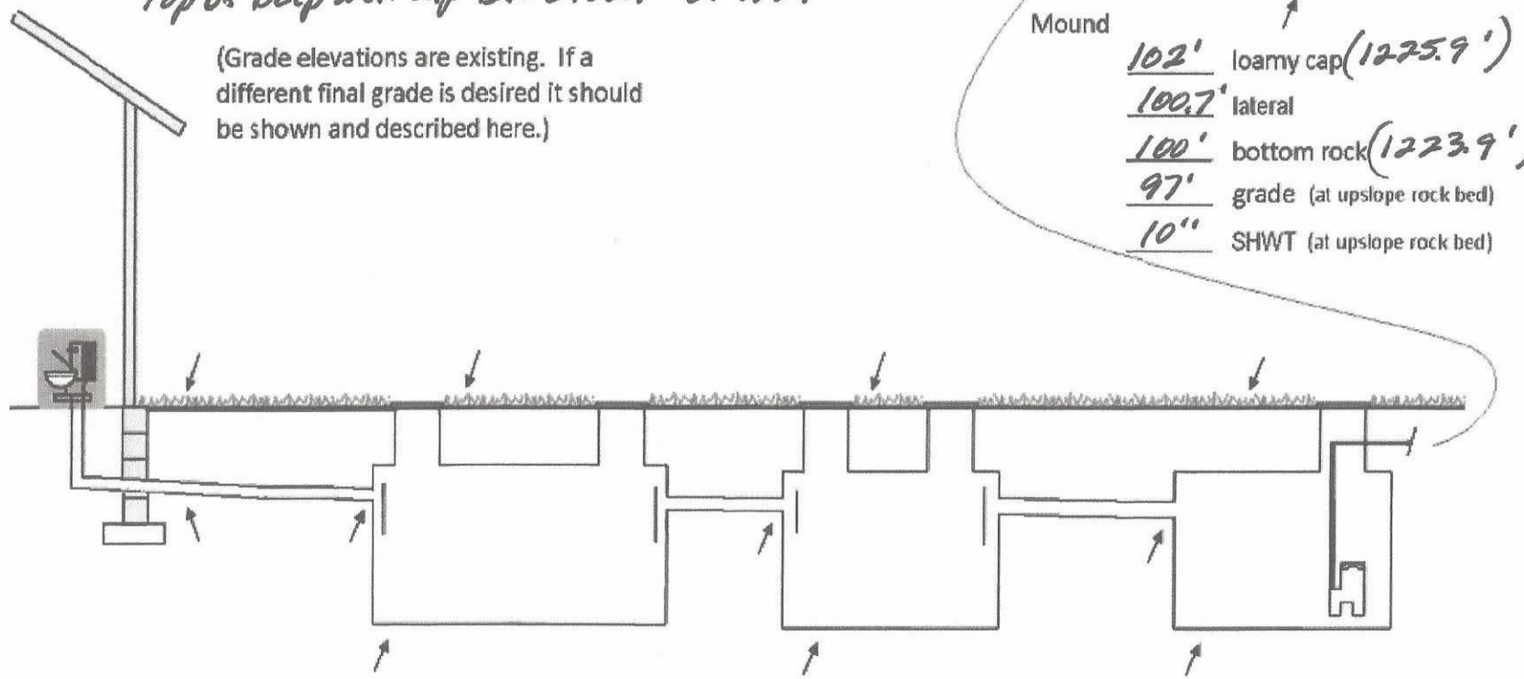
☐ monitoring plan and type _____

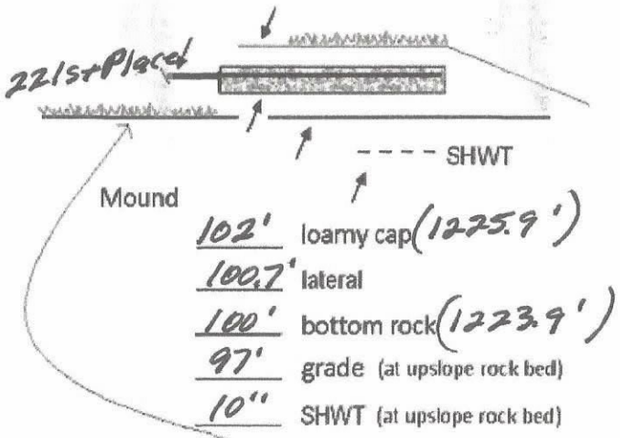
☐ well abandonment form - if necessary

System Elevations

Elv=100' benchmark Nail on Power Pole across 221st Placed
Top of Deep well cap Elv=100.1' or 1224'

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





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

Septic Tank
97' Grade Existing
95.4' inlet
91.4' Tank bottom

Septic Tank (if applicable)
____ Grade
____ inlet
____ Tank bottom

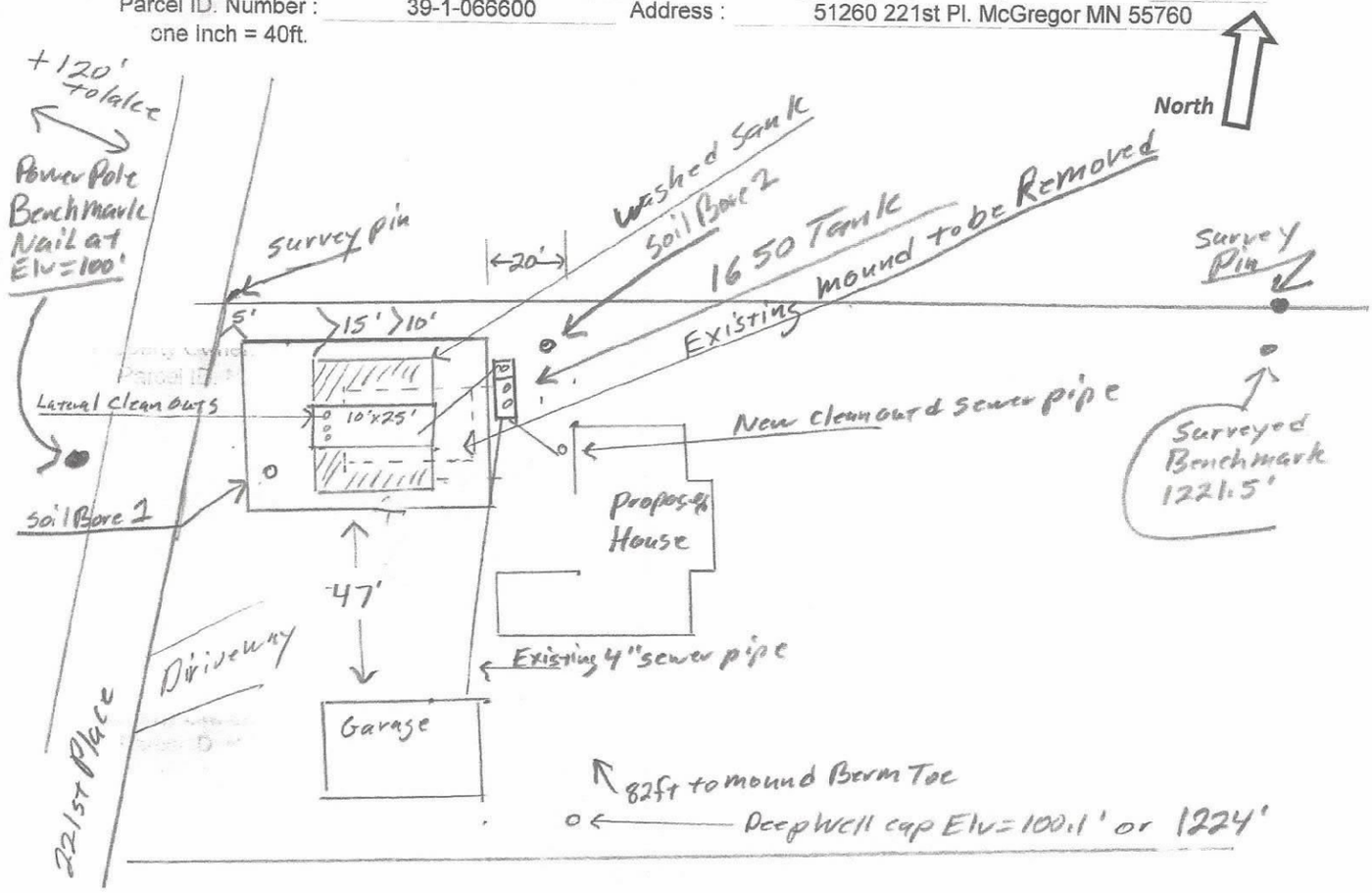
Pump Tank
97' Grade Existing
95.2' inlet
91.4' Tank bottom

{ 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' Benck 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.

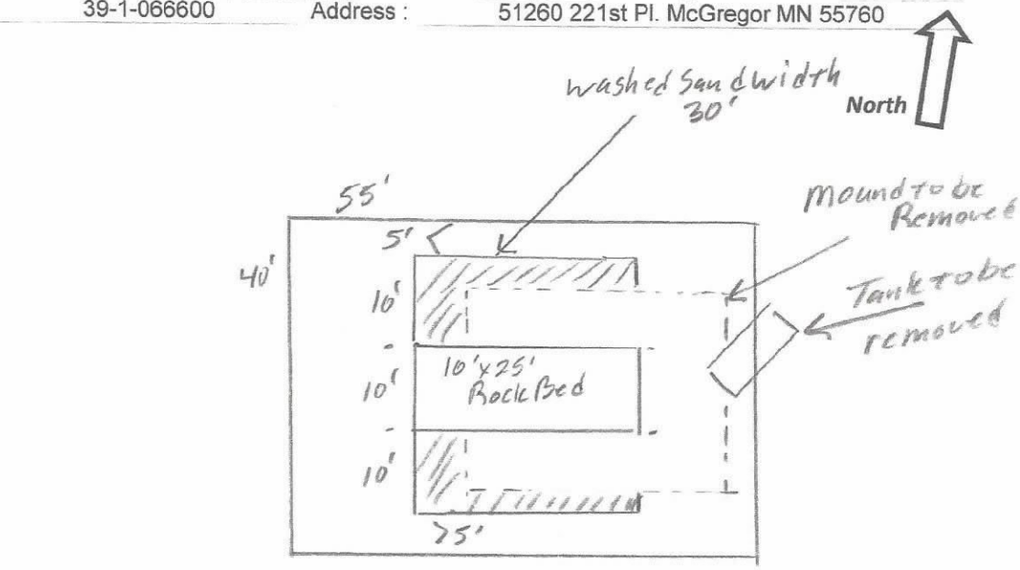
Drain field Areas:

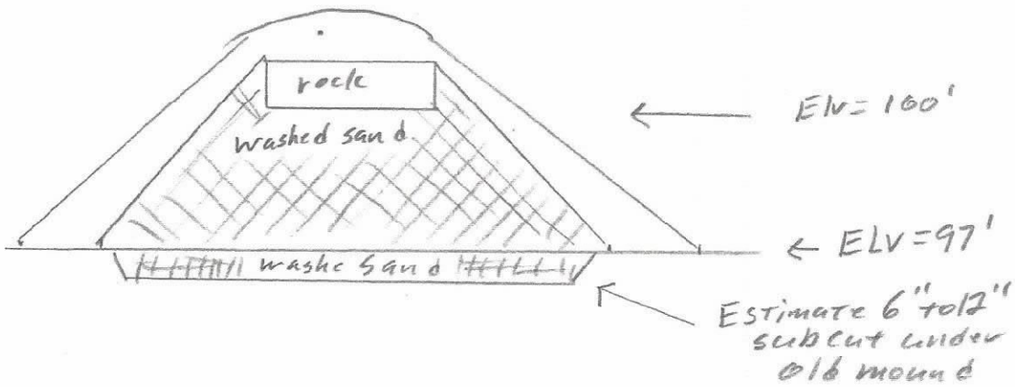
Please Draw to Scale with North to Top or Left Side of Page:

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

{ 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.





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Big Sandy Lake Elv.= 92.6' Benck 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:

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: 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'.

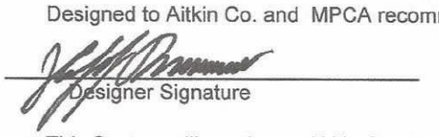
9 It is important that the soils do not get compacted, and that clean Washed Sand is used.

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.

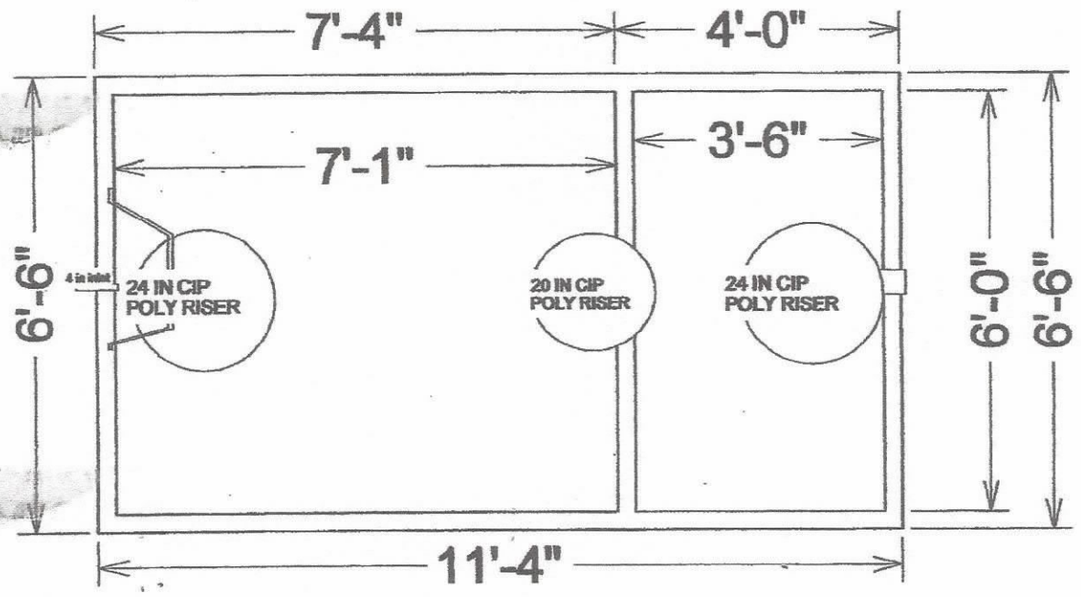


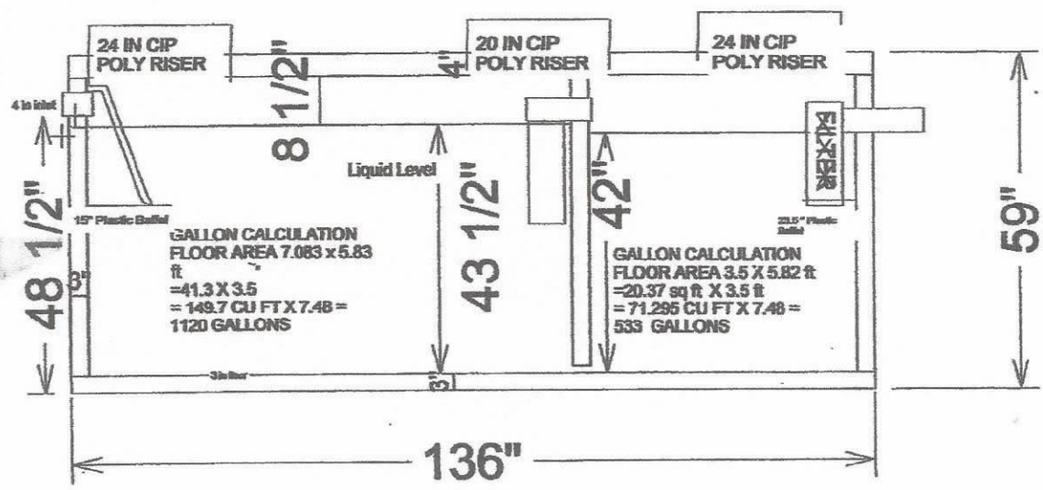
Designer Signature | Brummer Septic LLC. (Design Company) | L-1347 (License#)

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





SIDE VIEW

533 / 42" = 12.69 GPI

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 artes. 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

Aitkin County

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:	$183,200.00
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.**

Aitkin County

Detailed Parcel Report

Parcel Number: 39-1-066700

General Information

South

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:	$199,800.00
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

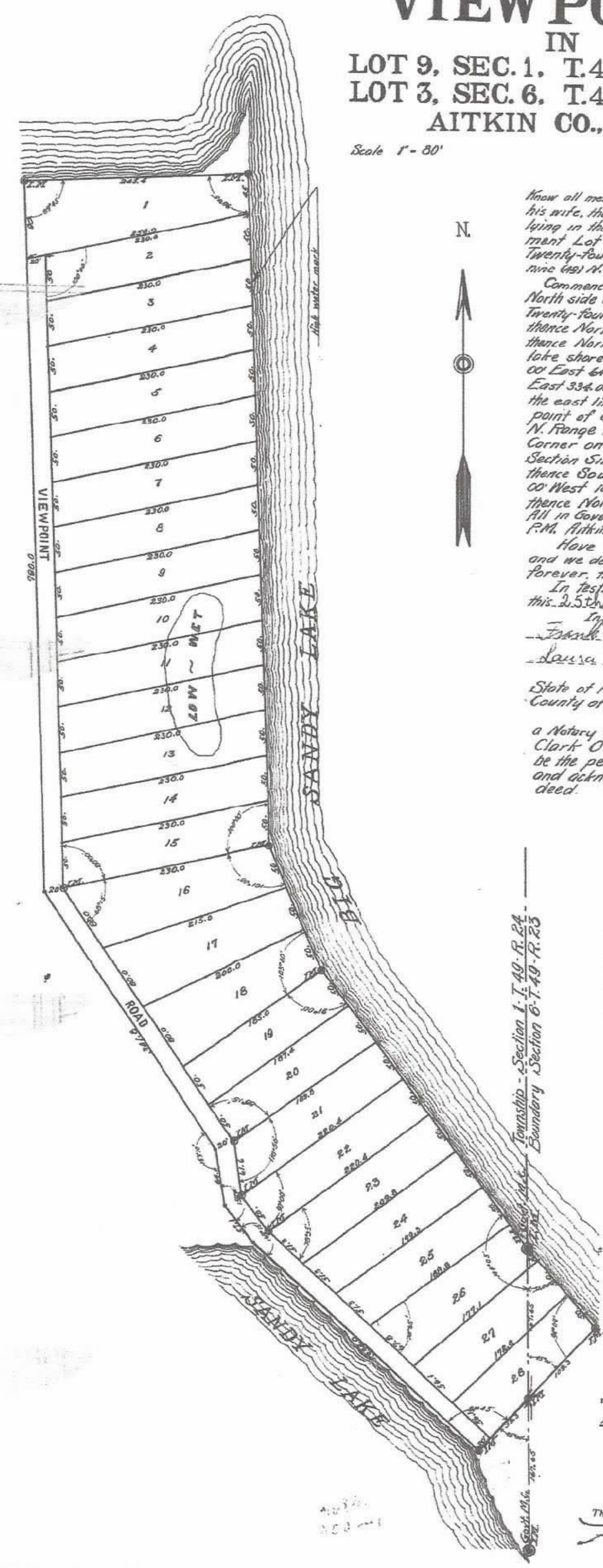
*** For more information on delinquent taxes, please call the Aitkin County Treasurer's Office at 218-927-7325.**

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

VIEWPOINT
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. Heuer. C.E.



Know all men by these presents, that we, Clark O. Wotring and Mabel M. Wotring, 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 745.00 feet, thence North 88°50' West 245.40 feet, thence South 00°55' East, parallel to lake shore 790.00 feet, thence South 32°50' East 341.80 feet, thence South 06° 00' East 64.10 feet, thence South 36°00' East 57.00 feet, thence South 46°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°51' East along lake shore 116.85 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 platted as "VIEWPOINT" 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. ~~1924~~ 1926

In presence of

Frank W. Fay

Laura Fay

Clark O. Wotring — Seal

Mabel M. Wotring — Seal

State of Minnesota }
County of Aitkin } ss

On this 25th day of May A.D. 1926 before me a Notary Public within and for said County personally appeared Clark O. Wotring and Mabel M. Wotring, 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. T. Mahany

Notary Public, Aitkin Co., Minn.

My Commission expires January 14, 1933

L. T. MAHANY
Notary Public, Aitkin County, Minn.
My Commission Expires Jan. 14, 1933.

State of Minnesota }
County of Aitkin } ss

I hereby certify that I have surveyed and platted the land described on this plat as "VIEWPOINT" 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 guidance 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.

Fred H. Heuer

Surveyor.

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

M. C. Beecher

County Auditor, Aitkin Co. Minn.

The above plat of "VIEWPOINT" was accepted and approved by the County Commissioners of Aitkin County at a meeting held this 1st day of June A.D. 1926

Attest

County Auditor

Wm. Gausewitz

Chairman, Board of County Commissioners.

State of Minnesota }
County of Aitkin } ss **78698**

I hereby certify that the within plat was filed for record in this office this 11th day of August A.D. 1926, at 2 o'clock P. M.

Register of Deeds, Aitkin Co. Minn.

I hereby certify that taxes for the year 1925 on the lands described within are paid.

Carl H. Holmgren

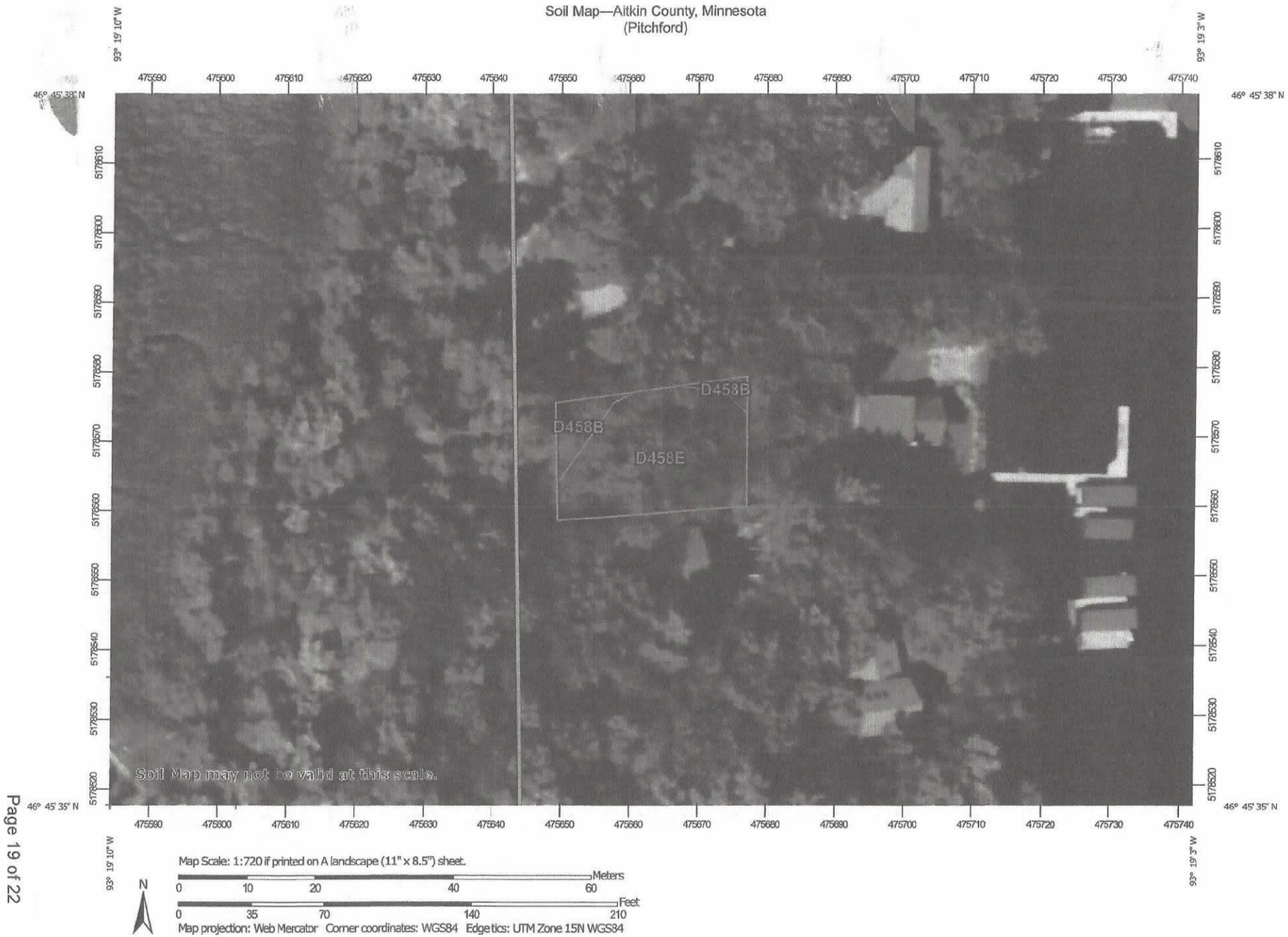
County Treasurer

TAXES PAID AND TRANSFER ENTERED

This 2 day of Aug 1926

COUNTY AUDITOR

Soil Map—Aitkin County, Minnesota
(Pitchford)



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

All setbacks appear to be met.

- 70 feet to ROW
- 88 feet to OHWL
- Minimum of 23 feet to property line.

Garage used for storage. No living quarters

23 feet to proposed septic drainfield
from proposed house.
17 feet to proposed tank.

Bunkhouse/Boathouse

No living quarters inside.

Rip Rap on the shoreline. They have a beach area for lake access.

Permitted shed 12’x16’9”

AITKIN COUNTY ENVIRONMENTAL SERVICES-PLANNING & ZONING
307 Second Street NW, Room 219
Aitkin, Minnesota 56431
PH: (218) 927-7342
FX: (218) 927-4372
aitkinpz@co.aitkin.mn.us

9/12/2022

Troy & Tricia Pitchford
22 Alcott Court
North Oaks, MN 55127

Re: Operating Permit #800
Zoning Permit # 2022-9428
Parcel # 39-1-066600

Dear Permittee:

Enclosed is the Operating Permit for an "Other" Septic System (formerly Experimental, Performance, Etc.) that you are petitioning Aitkin County to allow to be installed on your property instead of a standard system. Please review this permit thoroughly and become acquainted with all of the conditions, then sign the operating permit and return it to the address above.

One provision that is often overlooked by homeowners is the State of Minnesota requirement that a water meter or other flow measuring device be installed and the results recorded by the homeowner on a REGULAR basis.

You will receive an annual reminder notice on how to renew your operating permit before the renewal expiration deadline. This reminder notice will ask that you provide:

1) Recorded water meter readings
2) Annual Compliance Inspection report
3) Renewal application and fee

The Service Provider/Qualified Individual is privately hired by you, the landowner. The Service Provider/Qualified Individual must review the septic system on an annual basis. This annual review would be a great opportunity to review the conditions of the Operating Permit.

Should you have any questions, please contact our office.

Thank you,
Aitkin County Planning & Zoning

Enclosure: Operating Permit App

AITKIN COUNTY ENVIRONMENTAL SERVICES

OPERATING PERMIT FOR WASTEWATER TREATMENT AND DISPERSAL

OPERATING PERMIT #: 800
ZONING PERMIT #: 2022-9428
PARCEL #: 39-1-066600
PERMITTEE: Troy & Tricia Pitchford
MAILING ADDRESS: 22 Alcott Court
North Oaks, MN 55127

ORIGINAL DATE ISSUED: 9 /12/2022
RENEWAL PERIOD: ANNUALLY
EXPIRATION: 9 /30/2025

PROPERTY ADDRESS:
51260 221st Pl
McGregor, MN 55760

TELEPHONE: (763) 257-9065
LEGAL: LOT 8 VIEW POINT
FEE PAID: 150 **DATE PAID:** 8 /25/2022 **INVOICE #** 55991 **CK #:** card

Aitkin County Environmental Services authorizes the Permittee to operate a wastewater treatment and dispersal system located on the above described property in accordance with the requirements of this permit.

This permit is effective on the issuance date identified above. This permit and the authorization to treat and disperse from the above system shall expire on the above expiration date. The Permittee is not authorized to discharge after the above date of expiration. The Permittee shall submit such monitoring information as required by Aitkin County Environmental Services no later than thirty (30) days prior to the expiration date. When the required information is submitted and approved by Aitkin County Environmental Services, the permit may be renewed. This permit is not transferable from owner to owner.

I hereby certify with my signature as the Permittee that I understand the provisions of this operating permit including maintenance and monitoring requirements. I agree to indemnify and hold Aitkin County harmless from all loss, damages, costs and charges that may be incurred by use of this system and if I fail to comply with the provisions of this Operating Permit. If I sell this property during the life of the permit, I will inform the new owner(s) of the permit requirements and the need to renew the operating permit.

SIGN HERE

Signature of Permittee **Date** 9/22/22

Shannon W.
Signature of Permitting Authority

9-28-22
Date

If you have any questions regarding this permit, including the specific permit requirements, permit reporting or permit compliance status, please contact Aitkin County Environmental Services at 218-927-7342.

A. DESCRIPTION OF WASTEWATER TREATMENT AND DISPERSAL SYSTEM

2 Bedroom Type III "other" mound septic with 36" washed sand under rockbed. Type III because soils have less than 12" to mottles (10"). Type III because installed on disturbed or fill soils.

B. PERFORMANCE STANDARD REQUIREMENTS:

During the period beginning on the effective date (issuance date) of this permit and lasting until this permit's expiration date, the Permittee is authorized to discharge from the wastewater treatment unit to subsurface dispersal. No surface discharge is permitted. The following parameters must be monitored and the results must be found within the compliance limits.

PARAMETER	COMPLIANCE LIMIT	SAMPLE LOCATION	SAMPLE FREQUENCY	SAMPLE TYPE	REPORTING FREQUENCY
Flow	300 Gal/Day	Event Counter	Monthly by Owner	Record on a Log Sheet	Annually to Aitkin Co.

C. MAINTENANCE REQUIREMENTS:

PARAMETER	LOCATION	FREQUENCY
300 GPD Flow	Event Counter	Record Monthly, Report Annually
Calibrate pump out gallons	Pump Chamber	Annually
Check dosing settings	Control Panel at tank	ANNUALLY
Inspect Effluent Filters	Septic tank(s)	ANNUALLY
Inspect for surfacing/leaking	Dispersal System	ANNUALLY
observe liquid level monitors	Dispersal System	ANNUALLY
Pumps, Floats & Alarms	Pump Chamber	ANNUALLY
Solids build up/general appearance	Septic tank(s)	ANNUALLY

D. MONITORING AND REPORTING REQUIREMENTS:

Monitoring results obtained during each calendar year shall be submitted no later than September 30th of that year to:

Aitkin County Environmental Services
307 2nd Street NW, Room 219
Aitkin, MN 56431

The monitoring reports shall be signed by the Permittee. Copies are to be retained by the Permittee. Any sampling and laboratory testing procedures shall be performed in accordance with Standard Methods at a Minnesota Department of Health approved laboratory. All sampling and testing costs shall be the responsibility of the Permitte. Monitoring plans may be modified as necessary and reapproved by Aitkin County Environmental Services.

The Permittee shall ntoify Aitkin County Environmental Services within thirty (30) days when monitoring results do not meet the monitoring plan requirements of this permit.

The owner has secured the services of **Jerry Farley** as the Service Provider or qualified individual for this system. The Service Provider or qualifed individual is hereby authorized to report the required monitoring data and routine maintenance service records to Aitkin County Environmental Services.

E. MITIGATION PLAN:

Have system inspected.

AITKIN COUNTY

CERTIFICATE OF INSTALLATION/~~NOTICE OF NONCOMPLIANCE~~

This certificate of installation/~~notice of noncompliance~~ has been issued this 25th day of June, 2023 to certify compliance\~~noncompliance~~ with Aitkin County's Subsurface Sewage Treatment System Ordinance.
The premises covered by this certificate are legally described as:
Lot 8 View Point

Section 1 Township 49 Range 24 Lake Big Sandy Lake
PERMIT NO. 47300 Owner Name Troy & Tricia Pitchford
Address 51260 221st Pl, McGregor, MN 55760
Installer Name Bob Bartel
Type of System Inspected Type 3 2BR Mound
Parcel Number 39-1-066600

The certificate of installation/~~notice of noncompliance~~ was based on No 1 of the following:

1) Inspection of the installation or construction as in accordance with the above referenced permit and application design.

2) Review of as-built plans submitted in accordance with Subdivision 9.2 D of Aitkin County's Subsurface Sewage Treatment System Ordinance.

If the above permitted subsurface sewage treatment system is in noncompliance with Aitkin County's Subsurface Sewage Treatment System Ordinance, then the following shall serve as a Notice of Violation:

1) Statement of the findings of fact through inspections or investigations:

2) List of specific violations of Ordinance:

3) Requirements for correction or removal of violations:

4) Time schedule for compliance:

Failure to correct or remove the above violation(s) will result in this matter being turned over to the Aitkin County Attorney's Office for further legal action, which may result in revocation of licenses or registrations, fines and/or imprisonment.

INSPECTOR SIGNATURE Bryan Hargrave

SUBSURFACE SEWAGE TREATMENT SYSTEM INSPECTION FORM
AITKIN COUNTY, MINNESOTA

2022-9428

Township Workman Date of Inspection 6/22/2023 F 6/7/2023 I App. Number 47300

Owner Troy + Tricia Pitchford Parcel Number 39-1-066600

Project Address 51260 221ST Pl. Installer Bob Bartell / Greg Rono

City McGregor Zip Code 55760 T3 ZBR Mound

New ✓ Repair ☐

DIST. or DROP BOX & TYPE —

SETBACKS:

Buildings to tank(s) 10'+

Buildings to drainfield 25'

Well(s) 50' or 100' DW; 82'

Lake/Creek/Wetland Big Sandy; 100'+

SEPTIC TANKS: New ✓ Existing ____

Number of tanks installed (1) 1650 Tac. combo

Liquid capacity and type 1120 part combo

Type of baffle Plastic

Inspection pipes —

Manholes size 24"

Manhole to grade Yes ✓ No ____

PUMPS: New ✓ Existing ____

Tank capacity and type 533 part combo

Pump manufacturer & model # Liberty 283

Horsepower & GPM 1/2HP 18GPM

Feet of head 21'

Gallons per cycle 41 GPC

Size of discharge line 2"

Type & location of alarm Elec. on tank

Water meter Event Counter

TRENCHES, BEDS, OR GRAVELLESS LEACHFIELD:

Trench/Bed depth ____

Trench/Bed length ____

Trench/Bed bottom width ____

Trench spacing ____

Drainfield rock below pipe ____

Size of gravelless pipe ____

Depth of backfill ____

Absorption area: square feet ____

lineal feet ____

MOUNDS:

Percent slope 0 %

Upslope sand width 10'

Downslope sand width 10'

Sideslope sand width 10'

Drainfield rock below pipe 9"

Depth of sand below rock 36"

Perforation size & spacing 0.25"/36" sp.

Pipe size & spacing 1.5"/36" sp.

Dimensions of rock bed 10'x25'

Dimensions of sand base 30'x45'

Final cover 12" cover over rb; 4" TS

DRAWING OF SYSTEM: (include soils)

Inspector's Comments: ____

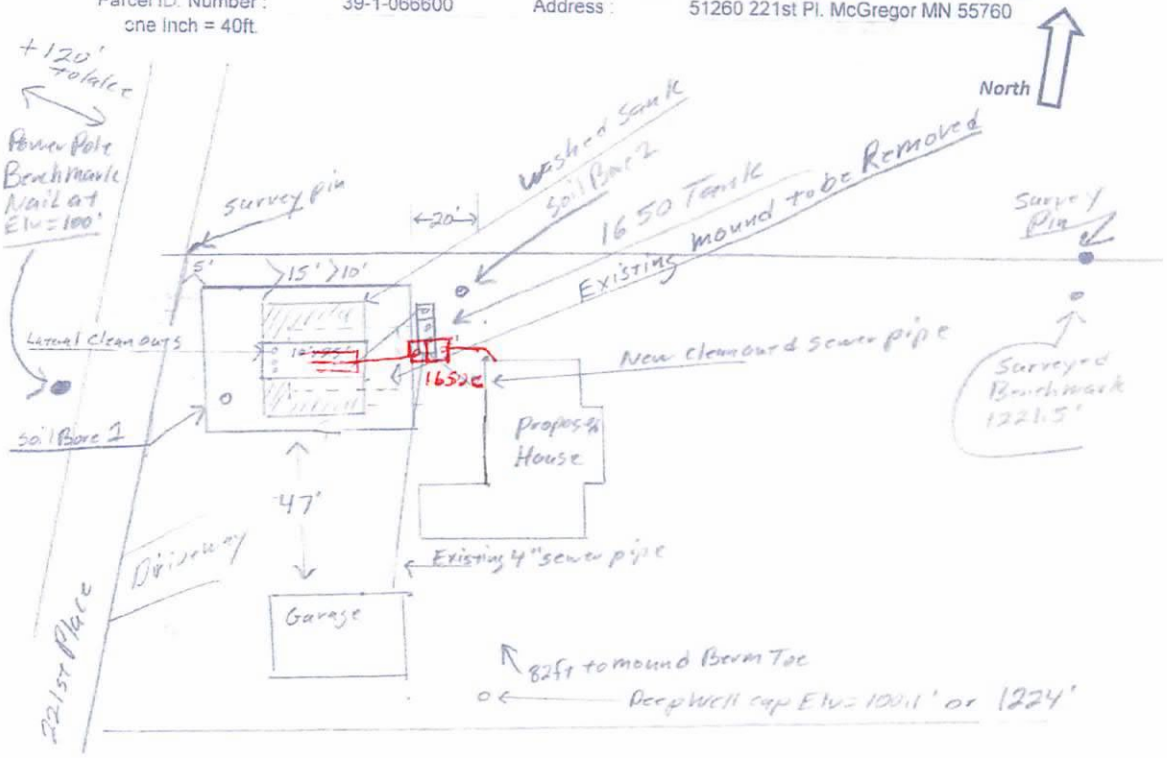
Inspector's Signature Bryan Haugrud Installer's Signature Bob Bartell

Rev:1/13 White – County Yellow – Applicant Pink - Installer

Greg Rono

{ 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' Benck 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:

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

R & R Landscaping
6-5-23

39-1-066600
Rod Kern
51260 221st Pl, McG

JACOBSON PRECAST CONCRETE, LLC

TANK INSTALLATION INSTRUCTIONS

Model # 1650 Date Built: 4-27-23 #14 Gallons: 1650 Bury Depth_____

Model #_____ Date Built:_____ Gallons:_____ Bury Depth_____

SITE CONDITION:

The site must be accessible to large, heavy trucks. Free of items like trees, stumps, overhead wires, etc. That could interfere with delivery or installation and allows trucks to within 3 to 5 ft of placement excavation.

EXCAVATION:

Excavation should be approximately 12" minimum larger than tank size to allow for adequate back fill. This may vary with soil conditions. Excavation shall have a level bottom so the weight bears on the outside walls of the tank.

BEDDING:

Each tank should be placed on about 6" of proper bedding material leveled, and should be compacted to minimum 95% compaction if tested, to ensure the life of the tank structure. Bedding must be capable of bearing the weight of the tank. Bedding material shall have the ability of 100% to pass through a ½" screen.

WATER TABLE:

When tanks are being placed where water levels can potentially be higher than the elevation of the tank cover, an alternate location should be considered. If water table is high installer must also consider the tank my float, if this is a possibility tank must be tied down before backfilling.

BACKFILL MATERIAL:

Sidewall of tanks require dry backfill materials that have the ability of 100% to be able to pass through a 2" screen and a minimum of 12" on all sides from the bottom to top of tank. Backfill material shall be placed to avoid impact loads on sidewall of the tank.

COVER MATERIAL:

Cover material shall be dry soil, material that has the ability of 100% to be able to pass through a 2' screen. Cover material shall be mounded over tank and around risers to direct run-off away from both.

INLET & OUTLET:

Pipe not to exceed 1" past the interior wall of tank where a baffle is used.

BURIAL DEPTH: Tanks to be installed according to model's maximum bury recommendations .