

AGENDA

THE **BOARD OF ADJUSTMENT** WILL ASSEMBLE FOR A HEARING OF APPEALS FROM THE AITKIN COUNTY ZONING ORDINANCE ON March 6, 2024 **AT 4:00 P.M.** IN THE **AITKIN COUNTY GOVERNMENT CENTER BOARD ROOM, 307 SECOND STREET NW, AITKIN, MN 56431**. THE FOLLOWING APPLICATIONS WILL BE REVIEWED.

1. Call the meeting to order.
2. Roll call.
3. Approve the agenda for the March 6, 2024 Board of Adjustment meeting.

Old Business:

4. SUSAN WARD, 14232 TAMARACK ST NW, ANDOVER, MN 55304, is requesting a variance from the required 75 foot ordinary high water level setback on a general development lake (Minnewawa) to a setback distance of 70 feet to construct a 1344 square foot residence, in an area zoned shoreland. W 100 FT OF LOT 3 LESS S1410 IN C. T. #1088, Section Twenty-eight (28), Township Forty-nine (49), Range Twenty-three (23), Aitkin County, MN.

APP-2023-000499

5. KRISTINE BOEDIGHEIMER TRUST, 9985 FREDERICK PLACE, EDEN PRAIRIE, MN 55347, is requesting a variance from the required 30 foot township road right-of-way setback to a setback distance of 11 feet to construct a 38 foot by 30 foot two-story accessory building, in an area zoned shoreland. LOT 3 LESS PT IN DOC 376887. Section Thirty-three (33), Township Fifty (50), Range Twenty-three (23), Aitkin County, MN.

APP-2023-001180

New Business:

6. PHILLIP & LORI SCHARMANN, 17891 DUCK LAKE TRAIL, EDEN PRAIRIE, MN 55346, are requesting a variance from the required 100 foot ordinary high water level setback on a recreational development lake (Farm Island) to a setback distance of 48 feet to construct a 1392 square foot residence, which is in the shore impact zone; and a variance from the required 15 foot road right-of-way setback to a setback distance of 5 feet to install a mound septic.. PART OF LOT 3 FORM LOT 19 BIRCH VIEW BEACH & N35 FT OF LOT 20. Section Four (4), Township Forty-five (45), Range Twenty-seven (27), Aitkin County, MN.

APP-2024-000121

7. Approval of minutes, February 7, 2024.
8. Adjourn.

AITKIN COUNTY ZONING

Property Location

Property:	Property Location			Legal Description			Property Attributes		Owner Information	Tax Payer Information
	Parcel Number	Property Address	Township or City Name	Legal Description	Plat Name	Section-Township-Range	Lake Class	Lake Name	Owner Name(s)	Taxpayer Name(s)
	11-0-012700	27309 435th Ave AITKIN, MN 56431	HAZELTON TWP	PART OF LOT 3 FORM LOT 19 BIRCH VIEW BEACH & N35 FT OF LOT 20		S:4 T:45 R:27	RD	FARM ISLAND LAKE	SCHARMANN, PHILLIP & LORI	SCHARMANN, PHILLIP & LORI
Driving directions to the proposed project from Aitkin:	south on 169 to 77w to 435th ave on the right yellow cabin									
Is the above parcel located in the Shoreland Zoning District?	<u>Yes</u>									

Detailed Narrative

Enter a Detailed Narrative (If you have a prepared narrative please state "See attached" and attach the document below):	Demo all existing non conforming structures and rebuild a new 2 story cabin with an attached garage per the proposed foot print of 1392 sf on the attached Proposed Survey Certificate 48 feet back from the OHW conforming to side yard setbacks and being 30'-0" from the road right of way setback.And allowing a 0 setback for the septic tank to the road right of way setback.
Provide the Ordinance(s) and the Section(s) of the Ordinance(s) from which you are requesting a variance:	5.21 B4 6.0 A.B
Are you requesting a variance to a road right-of-way setback in one of these Townships? Fleming, Glen, Lakeside, Pliny, Shamrock, Wagner	<u>No</u>

Supplemental Data

Attach completed form here:	File 1: 0322_240122163423_001.pdf
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A Scaled Drawing or Survey

Scaled Drawing or Survey Checklist:	<p><u>Location and dimensions for all lot lines.</u></p> <p><u>Location and dimensions of all existing and proposed structures/additions.</u></p> <p><u>Location and depth of all existing and proposed wells within 100 feet of the property.</u></p> <p><u>Location and dimensions of all existing and proposed septic system components (septic tank, septic drainfield).</u></p> <p><u>Location and dimensions of all existing and proposed driveways, road right-of-ways, and easements.</u></p> <p><u>If topography is unusual, show elevations and location of bluffs, steep slopes, wetlands, etc.</u></p> <p><u>Indicate all setback distances for items listed above: ordinary high water level of lakes or rivers, lot lines, road right-of-ways, etc.</u></p>
Attach a Scaled Drawing or Survey:	<p>File 1: 📄 23-203B_Grandt_Builders_Cert_12-28-23.pdf</p>

Certificate of Septic Compliance

<p>Please attach a copy of one of the following:</p> <ul style="list-style-type: none"> - A current compliance inspection on the existing septic system. - A design for a new/replacement septic system. 	<p>File 1: 📄 0323_240122163450_001.pdf</p> <p>File 2: 📄 24-017_Phillip_Scharmann_Aitkin_Co._SSTS_Management_Plan.pdf</p> <p>File 3: 📄 24-017_Phillip_Scharmann_Operating_Permit_Application_Aitkin_Co..pdf</p> <p>File 4: 📄 24-017_Phillip_Scharmann_Type_III_Mound_Design_Aitkin_Co..pdf</p>
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Shoreland Performance Worksheet

Complete the Shoreland Performance Worksheet and attach here:	<p>File 1: 📄 0325_240122174218_001.pdf</p>
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Standard Erosion Control Plan

Attach the completed
Standard Erosion Control
Plan here:

File 1: [23-203B_Grandt_Builders_Cert_12-28-23.pdf](#)

Property Deed

Attach the property deed(s):

File 1: [0563_001.pdf](#)

Terms**General Terms**

The landowner or authorized agent hereby certifies that to the best of their knowledge the application and supporting documents are a factual representation of the proposed project. The landowner or authorized agent agrees that, in making application, 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 applicant's 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.

Submittal of the above materials does not always constitute a complete application. Other information may be necessary to complete the application based on the type of request and onsite inspection.

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

Invoice #59245 (01/22/2024) Expected Payment Method: Pay Online - Card or ECheck

Charge	Cost	Quantity	Total
Recording Fee added 01/22/2024 4:11 PM \$46 Flat Fee	\$46.00	x 1	\$46.00
Variance added 01/22/2024 4:11 PM \$650 Flat Fee	\$650.00	x 1	\$650.00
Grand Total			
			Total
			\$696.00
			Payment 01/22/2024
			\$696.00
			Due
			\$0.00

Results ([Go to top](#))
 Signature accepted
 Failed to send [Variance Ready for Action](#) notification to:

Approvals

Approval	Signature
Applicant	online submittal - 02/08/2024 10:09 AM - witnessed by Kim Burton 605950af9bb701f5ac1ba2e3dae7495a 88bd7cc1f180e8da27c0199b10407503
#1 Admin	Kim Burton - 02/12/2024 9:51 AM 8c3d0f51b06f4192dcefbe679d921739 40b62b98a7b48ad1728da816c1712bac
#2 Board of Adjustment	

Public Notes

Text:	<div style="border: 1px solid gray; height: 300px;"></div>
File(s):	<div style="border: 1px dashed gray; height: 30px;"></div>

Admin Checklist

This review has been started by:	<input type="text" value="Please select"/>
Zoning District of project location:	<input type="text" value="*Please Select"/>
Project located in the floodplain?	<input type="text" value="v"/>
Is the parcel a Lot of Record before 1-21-92 or have alternate sites been identified?	<input type="text" value="v"/>
Is this an after-the-fact application?	<input type="text" value="v"/>

Numbers

	Current Number	Next from Sequence
UID #	209664	<i>not applicable</i>
App. #	<input type="text" value="App-2024-000121"/>	<input type="button" value="««"/> App-2024-000397
Permit #	<input type="text"/>	<input type="button" value="««"/> 2024-0058

Print View

PART I: SUPPLEMENTAL DATA TO VARIANCE APPLICATION

Aitkin County Environmental Services
307 Second St. NW, Room 219, Aitkin, MN 56431
Phone: 218.927.7342 Fax: 218.927.4372
www.co.aitkin.mn.us

Note: Place an "X" by each item below that applies to your variance request. Then, fill out **only** the applicable following section(s) that apply, as directed. **If a section does not apply to your request, leave it blank.**

What is the reason(s) for applying for the variance? Place an "X" by each applicable item.

- Setback issues for a proposed new structure: **Complete Section 1**
- Setback issues for an alteration to an existing nonconforming structure: **Complete Section 2**
- Setback issues for a septic system: **Complete Section 3**
- Land alteration: **Complete Section 4**
- Creating a lot not in conformance with the minimum Ordinance standards: **Complete Section 5**
- Other: attach separate sheet explaining variance request

Section 1 – New Structure(s)

Check all that apply and fill in requested information:

- Basement
 - Crawlspace
 - Walk-out Basement
 - One Story Level
 - Story-and-a-Half Level
 - 2nd Story Level
- Proposed # of Bedrooms 3 Proposed Structure Height 27 ft.
Existing Total Building Coverage 13.6% Proposed Total Building Coverage 14.8%
Existing Total Impervious Surface Coverage 21.9% Proposed Total Impervious Surface Coverage 23.1%

"Building Coverage" means the ground surface covered by any building or appurtenance, including, but not limited to, decks, platforms, overhangs and projections therefrom, outdoor furnaces, fishhouses, sheds, carports, lean-to's, or any similar building. –as per the Aitkin County Shoreland Management Ordinance.

"Impervious surface coverage" means any structure, facility or surface that sheds water including structures and facilities, sewage treatment system absorption areas (equal to 190 sq.ft./bedroom), retaining walls, and roadway surfaces and parking areas. Impervious surface does not include eaves of two feet and less. – Per the Aitkin Count Shoreland Management Ordinance.

Itemized square footage of proposed structure(s):

Dwelling	1392 SF		
Patio	47 SF	=	Fire Pit
Septic Tanks	±60 SF		
Driveway	660 SF		

Check the item(s) from which you are requesting a variance and fill in the proposed setback distance. * Setbacks are measured to the nearest point on a structure which can be the eave overhang or an attached deck/platform.

Proposed Structure Type (indicate with or without living quarters) _____

- Ordinary High Water Level (OHWL)
- Property Line
- Road Right-of way __ Twp Co. __ State
- Bluff
- Other: _____

- Proposed Setback 48 ~~30~~ ft.
- Proposed Setback _____ ft.
- Proposed Setback 30 ft.
- Proposed Setback _____ ft.
- Proposed Setback _____ ft.

Section 2 – Alteration(s) to Existing Nonconforming Structure(s)

Check all that apply and fill in requested information:

Existing Structure

- Basement
- Crawlspace
- Walk-out Basement
- One Story Level
- Story-and-a-Half Level
- 2nd Story Level

Proposed Addition(s)

- Basement
- Crawlspace
- Walk-out Basement
- One Story Level
- Story-and-a-Half Level
- 2nd Story Level

Existing Structure Height _____ ft.

Proposed Addition(s) Height _____ ft.

Existing # of Bedrooms _____

Final # of bedrooms after remodel _____

Existing Building Coverage _____%

Proposed Building Coverage _____%

Existing Total Impervious Surface Coverage _____%

Proposed Total Impervious Surface Coverage _____%

“Building Coverage” means the ground surface covered by any building or appurtenance, including, but not limited to, decks, platforms, overhangs and projections therefrom, outdoor furnaces, fishhouses, sheds, carports, lean-to’s, or any similar building. –as per the Aitkin County Shoreland Management Ordinance.

“Impervious surface coverage” means any structure, facility or surface that sheds water including structures and facilities, sewage treatment system absorption areas (equal to 190 sq.ft./bedroom), retaining walls, and roadway surfaces and parking areas. Impervious surface does not include eaves of two feet and less. – Per the Aitkin Count Shoreland Management Ordinance.

Itemized square footage of proposed structure(s):

Check the item(s) from which you are requesting a variance and fill in the proposed setback distance. * Setbacks are measured to the nearest point on a structure which can be the eave overhang or an attached deck/platform.

Proposed Alteration Type _____

_____ Ordinary High Water Level (OHWL)	Existing Setback _____ ft.	Proposed Setback _____ ft.
_____ Property Line	Existing Setback _____ ft.	Proposed Setback _____ ft.
_____ Road Right-of way __ Twp __ Co. __ State	Existing Setback _____ ft.	Proposed Setback _____ ft.
_____ Bluff	Existing Setback _____ ft.	Proposed Setback _____ ft.
_____ Other: _____	Existing Setback _____ ft.	Proposed Setback _____ ft.

Section 3 – Septic System

Check the item(s) from which you are requesting a variance and fill in the proposed setback distance.

_____ Ordinary High Water Level (OHWL)	Proposed Setback _____ ft.
_____ Property Line	Proposed Setback _____ ft.
<input checked="" type="checkbox"/> Road Right-of way __ Twp <input checked="" type="checkbox"/> Co. __ State	Proposed Setback <u>0</u> ft.
_____ Bluff	Proposed Setback _____ ft.
_____ Other: _____	Proposed Setback _____ ft.

Section 4 – Land Alteration

What is your land alteration? Check all categories that apply and indicate the total amount of excavation or placement of fill.

_____ More than 10 cubic yards on steep slopes and shore and bluff impact zones.	Total Cubic Yds. _____
_____ Other: _____	Total Cubic Yds. _____

Section 5 – Creating Nonconforming Lot(s)

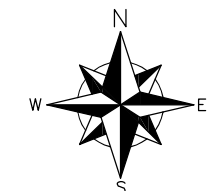
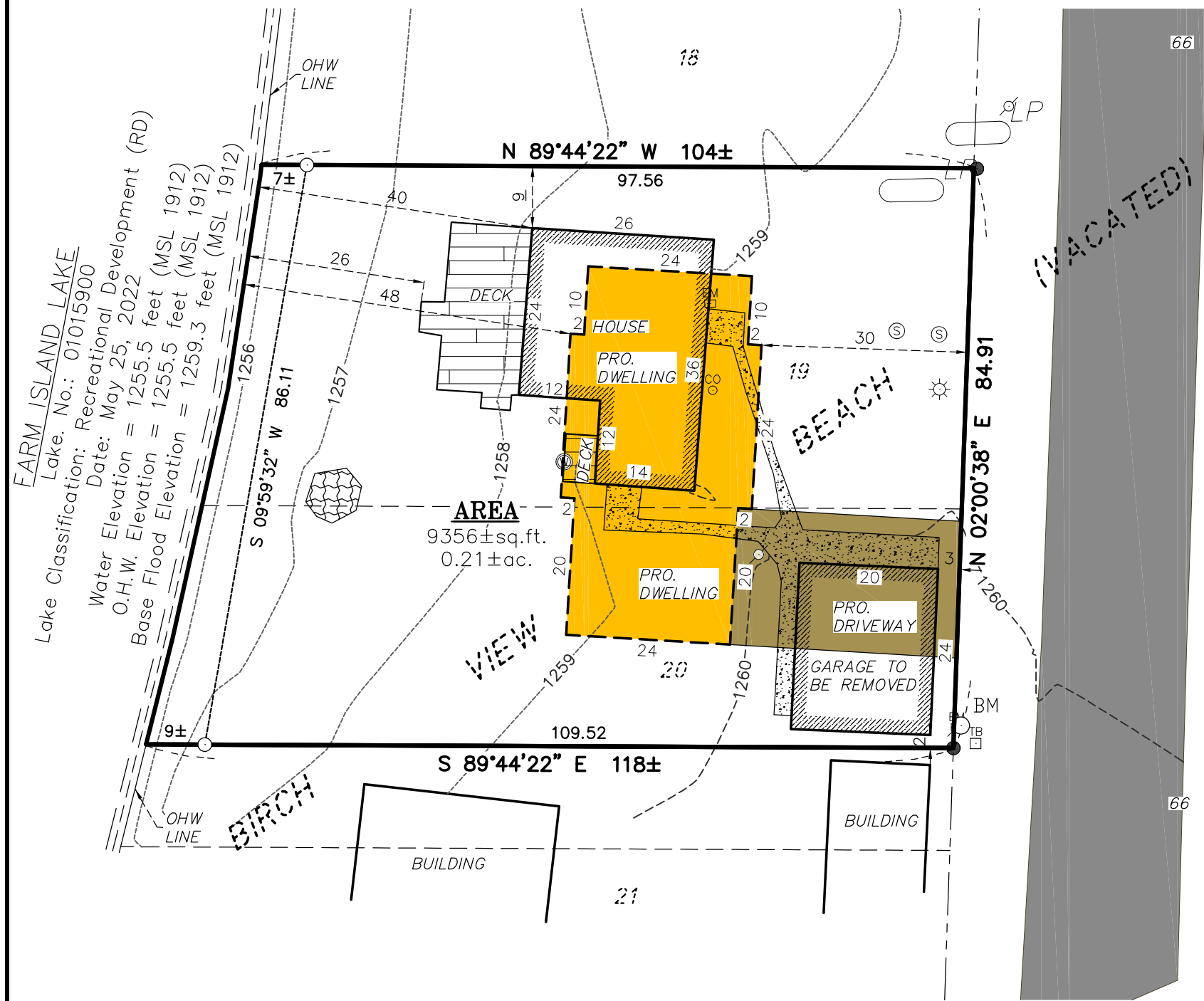
Check the item(s) from which you are requesting a variance and fill in the proposed dimensions.

_____ Property Width	Proposed Property Width _____
_____ Property Area	Proposed Property Area _____
_____ (2) Standard Septic Sites	
_____ Legal Access	

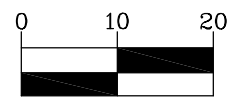
CERTIFICATE OF SURVEY

DESCRIPTION - (Parcel No.: 11-0-012700)

That portion of Government Lot 3 of Section 4, Township 45, Range 27, formerly known as Lot 19 and the North 35 feet of Lot 20 of the Plat of "Birch View Beach", the plat of which is now vacated. Aitkin County, Minnesota



GRAPHIC SCALE



(IN FEET)
1 inch = 20 ft.

- LEGEND**
- DENOTES 1/2 INCH IRON PIPE SET AND MARKED WITH RLS 59285 CAP.
 - DENOTES FOUND SURVEY MONUMENT
 - DENOTES TELEPHONE PEDESTAL
 - EM DENOTES ELECTRIC METER
 - ⊙ DENOTES UTILITY POLE
 - ☼ DENOTES ELECTRIC LIGHT POLE
 - ⊕ DENOTES WELL
 - ⊙ DENOTES SEPTIC MANHOLE
 - ⊙⊙ DENOTES SEPTIC CLEANOUT
 - ⊕^{LP} DENOTES L.P. TANK
 - DENOTES BITUMINOUS SURFACE
 - ▨ DENOTES CONCRETE SURFACE
 - - - - 1258 - - - - DENOTES 1 FOOT CONTOURS (MSL1912)

<u>IMPERVIOUS SURFACE:</u>	
<p><u>EXISTING</u> Parcel Area = 9356 sq ft</p> <p>House = 792 sq ft Garage = 480 sq ft Decks = 352 sq ft Concrete Surface = 317 sq ft Patio Block Surface = 47 sq ft Septic Tanks = 60± sq ft Total Impervious Surface = 2048 sq ft</p> <p>2048/9356 = 0.219 Existing Impervious Surface = 21.9%</p>	<p><u>PROPOSED</u> Parcel Area = 9356 sq ft</p> <p>Dwelling = 1392 sq ft Patio Block Surface = 47 sq ft Septic Tanks = 60± sq ft Driveway = 660 sq ft Total Impervious Surface = 2159 sq ft</p> <p>2159/9356 = 0.231 Proposed Impervious Surface = 23.1%</p>

SURVEYOR'S NOTES:

1. Bearing Orientation: The east line of Lot 19 of Birch View Beach is assumed to have a bearing of North 02 degrees 00 minutes 38 seconds East.
2. Benchmark: Set double spike in the northerly face of a power pole. Elevation = 1261.68 feet (MSL1912)
3. The field survey was completed on 5/26/2022.
4. Arro Land Surveying of Brainerd, INC. has made no investigation or independent search for easements of record, encumbrances, restrictive covenants, ownership title evidence, or any other facts that an accurate and current title search may disclose.
5. Wetlands may exist on subject property but were not identified in the preparation of this survey.
6. The utilities as shown on this survey were developed from the visible utilities across your property and is not implied nor intended to be the complete inventory of utilities in this area. It is the client's responsibility to verify the location of all utilities prior to construction or improving your property.
7. Property Zoning: Shoreland
8. Setback Requirements:
OHV (RD) = 100 feet R-O-W = 30 feet Property Line = 10 feet
9. There is no apparent building envelope on subject property.

DRAWN BY: JAS CHECKED BY: EEL
APPROVED BY: JAS JOB NUMBER: 23-203B

NO.	DATE	BY	REVISION DESCRIPTION

CLIENT:
Grandt Builders
Property Address:
27309 435th Ave
Aitkin, MN 56431

BOUNDARY SURVEY
Lot 19 & N. 35 of Lot 20,
BIRCH VIEW BEACH,
Aitkin, County, MN



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.

Dated this 28th day of December, 2023

By: Jared A. Spaid
Jared A. Spaid, Minnesota License No. 59285

Subsurface Sewage Treatment System Management Plan

Property Owner: Phillip Scharmann Phone: 612-597-9774 Date: 2/6/2024
 Mailing Address: 17891 Duck Lake Trail City: Eden Prairie MN 55346 Zip: _____
 Site Address: 27309 435th Ave, Aitkin MN 56431 City: _____ 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: 2/4/2024

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

Timed Dosed at 210 GPD, Owner should Know how system operates, who to call for repairs

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

Mitigation/corrective action plan: _____

AITKIN COUNTY ENVIRONMENTAL SERVICES

APPLICATION for an OPERATING PERMIT FOR WASTEWATER TREATMENT AND DISPERSAL

PERMITTEE Phillip Scharmann PARCEL NUMBER 11-0-012700

ADDRESS 27309 435th Ave, Aitkin MN 56431

LEGAL DESCRIPTION Part of lot 3

TELEPHONE # 612-597-9774 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 mound bcause on fill soils, distrurbed soils, timed dose.
 Mound size is 2 bedroom (300 GPD) Timed dose at 70% = 210 GPD

B. MONITORING PLAN AND REPORTING FREQUENCY:

PARAMETER	COMPLIANCE LIMIT	SAMPLE LOCATION	SAMPLE FREQUENCY	SAMPLE TYPE	REPORTING FREQUENCY
FLOW	210 GPD	Timed Dose 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
210 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

2/4/2024
Date

Jeff Brummer
Name (please print)

14650 Agate Ridge Rd Brainerd MN 56401
Address

(218) 821-0704
Telephone #

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

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

(Client) Name & Address

Phillip Scharmann 27309 435th Ave, Aitkin MN 56431

Street Address Mailing Address 17891 Duck Lake Trail

City, State, Zip Eden Prairie MN 55346

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).

Check effluent filter for buildup and clean, if applicable.

Check pumping system, including control panel and floats.

Owner ----> Record and date the readings of the elapsed time meter and cycle counter(s), if applicable. Owner is responsible 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 _____, _____
and Ending _____, _____

Cost for Maintenance Service, Monitoring and Inspection Contract is:

\$ _____ /yr. For _____ years totaling \$ _____

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 _____.

Client:

Inspector:

Sign: _____

Sign: _____

Print: Phillip Scharmann _____

Print: _____

Date: _____

Date: _____

{ Type III Design Notes for Owner and Installer }

Property Owner: Phillip Scharmann Date: _____ Installer's Initials : _____
 PIN : 11-0-012700 Site Address: 27309 435th Ave, Aitkin MN 56431

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

Reason for Type III Constructed on distrubed Soils, Fill soils, timed dose

Description of System 2 bedroom mound (10' x 25 " rockbed) with 36" of 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

24-017

Timed Dose at 210 GPD

www.SepticResource.com vers 12.4

Owner Information			
Date	<u>2/2/2024</u>	Sec / Twp / Rng	<u>S-2, T-45, R-27</u>
Parcel ID	<u>11-0-012700</u>	LUG (county, city, township)	<u>Aitkin Co.</u>
Property Owner:	<u>Phillip Scharmann</u>	Owners address (if different)	
Property Address:	<u>27309 435th Ave. Aitkin MN 56431</u>		<u>17891 Duck Lake Trl</u>
City / State / Zip:			<u>Eden Prairie MN 55346</u>

Flow Information and Waste Type / Strength			
Estimated Design flow	<u>450</u>	Anticipated Waste strength	<input type="checkbox"/> Hi Strength <input checked="" type="checkbox"/> Domestic
	Timed Dose at 210 GPD	Any Non-Domestic Waste	<input type="checkbox"/> Yes (class V) <input checked="" type="checkbox"/> No
Comments: Small Lot Area for Mound Type III on fill		Sewage ejector/grinder pump	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Largest mound area is 300 GPD (2 bedroom)		Water softener	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Timed dose at 210 GPD (300 GPD x 70% = 210 GPD)		Garbage Disposal	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Remove and Replace new mound on part of existing mound area		Daycare / In home business	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Aitkin Co. Operating Permit Required on all Type III systems			
Variance needed for mound Absorption area Less than			
15 ft to road right of way / property line. (5 ft from Prop Line)			
SE Mound Corner Absorption area 8 ft from prop line			

Site Information					
Existing & proposed lot improvements located (see site map)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Well casing depth	Proposed deep well	
Easements on lot located (see site map)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Drainfield w/in 100' of residential well	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Property lines determined (see site map)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Site w/in 200' of transient noncommunity water supply (TNCWS)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Req'd setbacks determined (see site map)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Site w/in an inner wellhead mgmt zone (CWS/NTNCWS)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Utilities located & identified (gopher state one call)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Buried water supply pipe w/in 50' of system	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Access for system maintenance (shown on site map)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Site located in Shoreland (w/in 1000' of lake, 300' of river)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Soil treatment area protected	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Site map prepared with previous items included	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Construction related issues	<u>Installer will try to reuse existing septic supply pipe under road.</u>				
	<u>Owner will need a variance from the road setback and SE mound Corner</u>				

Soil Information

Because of Frozen Ground
The Designer used Past 2 Soils verification

Evidence of site:

Cut	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Filled	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Compacted	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Disturbed	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

Original soils Yes No

Soil logs completed and attached Yes No
Frozen ground / Compliance soils state on fill

Perk test completed and attached (if applicable) Yes No

Soil loading rate (gpd/ft²) 0.60

Percolation rate (if applicable) _____

Depth/elev to SHWT _____

Flooding or run-on potential Yes No
(comments)

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

Flood elevation (if applicable) _____

Depth/elev to standing water (if applicable) _____

Elevation of ordinary high water level (if applicable) 1255.5

Depth/elev to bedrock (if applicable) _____

Floodplain designation and elev - 100 yr/10 yr (if applicable) 1257.5
Approx. Grade at Mound Location is 1259.7'

Soil Survey information determined (see attachment) Yes No

Differences between soil survey and field evaluation (if applicable) Old Mound is on fill sand.

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

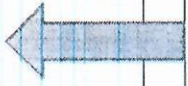


Designer Signature

Brummer Septic LLC.
Company

L-1347
License #

SKETCH SHEET AND SOIL BORING LOG



North

INSPECTOR: Tim Woodrow	Equipment: Bucket Auger
DATE: 5/11/2022	Elevation of Limiting Layer: 97.2'
PID#: 11-0-012700	Vegetation: Mowed Grass
SITE ADDRESS: 27309 435 th Ave., Aitkin, MN 56431	Weather: Sunny & Clear
Benchmark (EL = 100'): Bottom of Rock in STA	

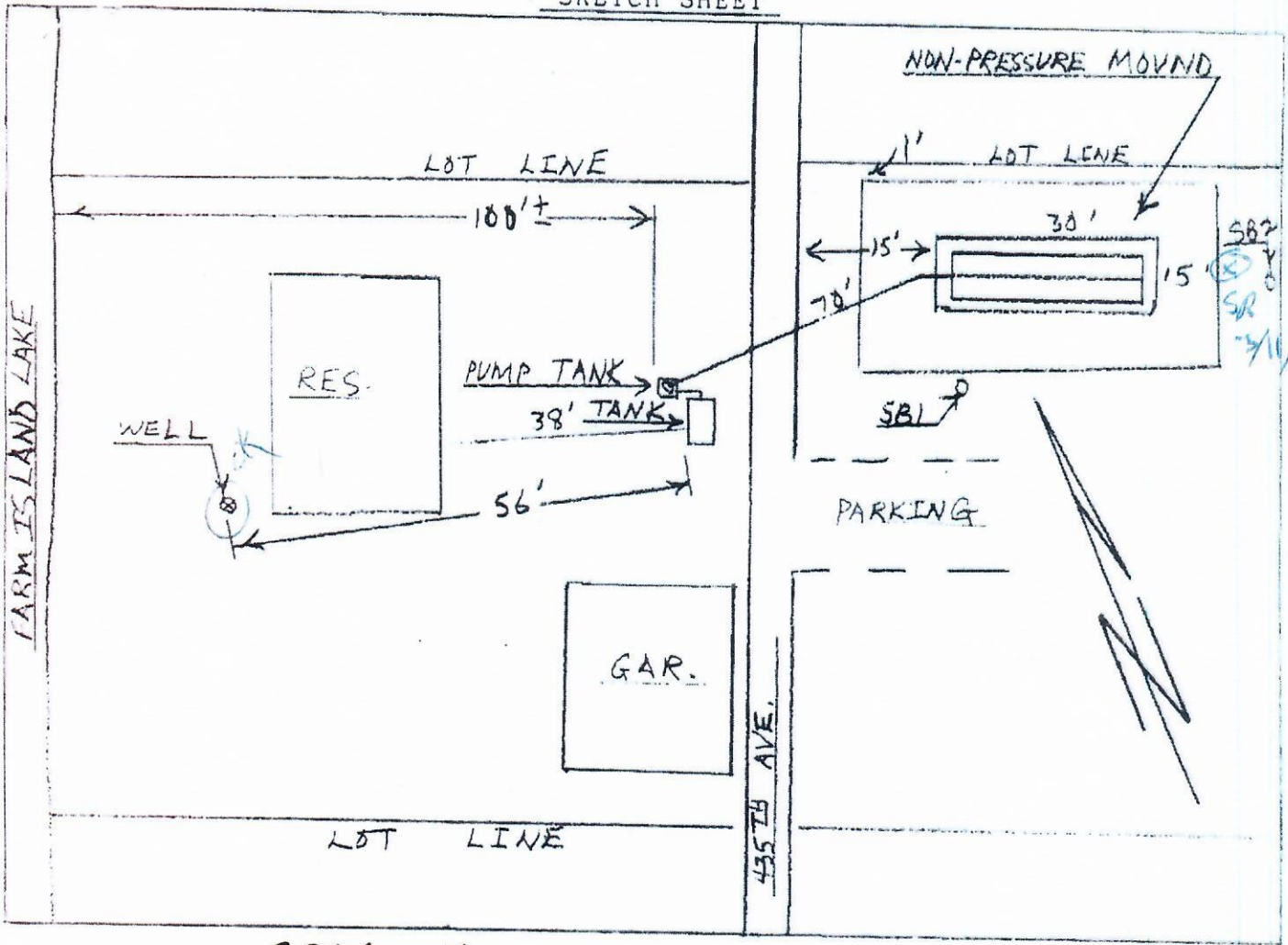
- See attached drawing from 2006 -
- still valid -

2022 soils.

> Fill

SOIL BORING #1 EL: 99.2'		
DEPTH	TEXTURE	COLOR
0 - 3"	Top Soil - Fill	10 YR 3/2
3" - 24"	Sand - Fill	10 YR 5/4
24" - 28"	Original Top Soil	10 YR 3/2
	Redox in Top Soil @ 24"	5YR5/6
	Water at 24" EL: 97.2'	

SKETCH SHEET



2006 soils

SOIL BORING LOG

Soil Boring # 1	Soil Boring # 2
0-3" Topsoil (fill)	0-4" Topsoil (fill)
3"-24" Sand (fill) 10YR5/4	4"-24" Sand (fill) 10YR5/4
24"-28" Topsoil	24"-30" Topsoil
Mottling @ 24"	Mottling @ 24"

Fill

TANK INFORMATION

Tank size: 1000 Gals.
 Pump Tank size: 100 Gals.
 Tank(s) defects: NONE

DATE OF INSPECTION: 6/22/06

OWNER: Luverne & Sharon Anderson

PERSON REQUESTING INSPECTION: owner

COMMENTS:

SIGNATURE: Charles J. Virginia

Charles J. Virginia MPCA Lic. #1392

Mound Design - Aitkin county

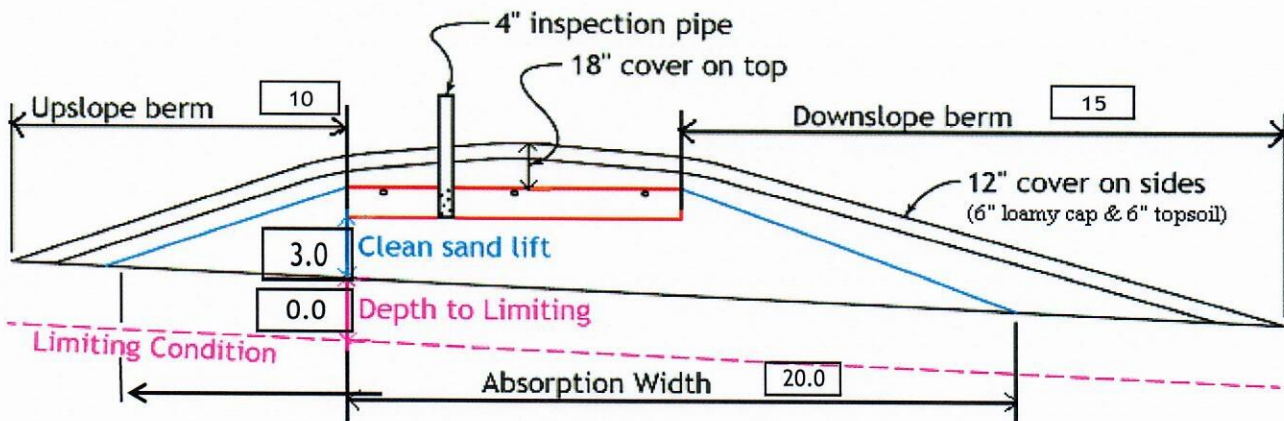
Property Owner: Phillip Scharmann Date: 2/2/2024
 Site Address: 27309 435th Ave. Aitkin MN 56431 PID: 11-0-012700
 Comments: Type III (Remove and replace mound), timed dosed 2 bedroom mound 3 bedroom house

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

- 1) 2 bedroom Type III Residential System 3 Bedroom House
- 2) 300 GPD design flow Timed Dose At 70% = (300 x .70 = 210 GPD)
- 3) No Garbage disposal or pumped to septic Install 1600 Wipler Heavy Tank 1000 septic /600 pump
- 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/ft² 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) 4.0 doses per day (4 minimum)
- 11) 53 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) 90 feet of 2.0 inch supply line leads to 15 gallons of drainback volume
 (Tip: "top feed" manifold to control the drainback)
- 14) 68 gallons TOTAL pump out volume (treatment + drainback)
- 15) 15 feet vertical lift from pump to mound laterals, leads to a:
- 16) 18 GPM @ 22 feet of head, Pump requirement (note: >50gpm may require an extra 3-6' of head)
- 17) 500 gal Dose tank (code minimum) 600 gal Dose tank (design size / LUG req'd) at 20.00 gpi
 leads to a
- 18) 3.4 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) 9 hrs OFF test and adjust as necessary)
- 19) 12 inches from bottom of tank to "Pump OFF" float
- 20) 15 inches from bottom of tank to "Pump ON" float, or 12 inches to "Timer ON" float if time dosed
- 21) 18 inches from bottom of tank to "Hi Level" float, or 28 inches to "Hi Level" float if time dosed
- 22) 240 gallons reserve capacity (after High Level Alarm is activated)

This Design will need a Variance on Absorption width setback to property lines

- 23) gpd/ft² Absorption area Soil Loading Rate, which gives a mound ratio of (minimum)
 (this must match the soil boring log) desired mound ratio
- 24) percent site slope (0-20% range) (% downslope site slope, if different than upslope)
- 25) inches, or ft. to Redox or other limiting condition (need at least 12" to be a Type I)
 Treatment zone contains inches of 0% soil credit, and inches of 50% soil credit. Giving a:
- 26) inch, or ft. Sand Lift Mound **CRITICAL FOR FUTURE CERTIFICATIONS!!!**
- 27) ft. base absorption width (with sand beyond rockbed as follows):
 greater of: absorption width OR sand slope
- 28) ft. upslope and sideslope sand upslope
 ft. Downslope sand down slope
- Individual slope ratios give BERM widths (topsoil beyond rockbed) of:
- 29) upslope ratio ft. upslope berm Use 10 ft = Install retaining wall at 10 ft from rockbed
- 30) sideslope ft. sideslope berms
- 31) downslope ft. downslope berm
- 32) Overall Dimensions: ft. wide by ft. long Rock bed
 ft. wide by ft. long Mound footprint



Note:

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

- 33) Rock Bed:
 ft. by ft. by inches under pipe, plus 20% gives yd³ or *1.4= ton
- 34) Mound Sand: (note: volume is based on 3:1/4:1 slope from top of rockbed, Exchange sand for loamy cap if desired)
 up + downslope + ends + under rock = yd³ or *1.4= ton
 plus 20%
- 35) Loamy Cap:
 ft. by ft. 6" deep, plus 20% gives yd³ or *1.4= ton
- 36) Topsoil:
 ft. by ft. 6" deep, plus 20% gives yd³ or *1.4= ton

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


 Designer Signature

Brummer Septic LLC.
 Company

L-1347
 License#

2/2/2024
 Date

Type III Mound (Timed Dose at 210 GPD) will require an Aitkin Co Operating Permit
 Event Counter and Alarm on Pump controller (Aitkin Co. Operating Permit)

INSPECTOR CHECKLIST - mound

27309 435th Ave. 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 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 _____ 600 gallons

- dose pump _____ 18 gpm 22 head VERIFY PUMP CURVE 3.8 min ON 9 hr OFF

- float setting drop 3.4 inches at 20.0 gpi "DESIGNED" 2.7 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 36 inches. (Jar test : 2" sand leaves < 1/8" silt after 30 min)

- Absorption Sand beyond rock 5.0 upslope 5.0 downslope

- Bermed topsoil beyond rockbed 10 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

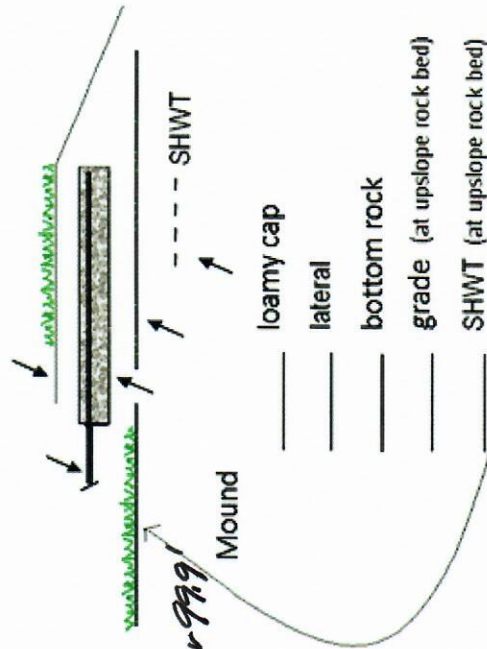
- Air inlet at end of laterals, and at top feed manifold if necessary. VERIFY
- clean outs (no hard 90's)
- 4" inspection pipe to bottom of rock, anchored VERIFY

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

System Elevations

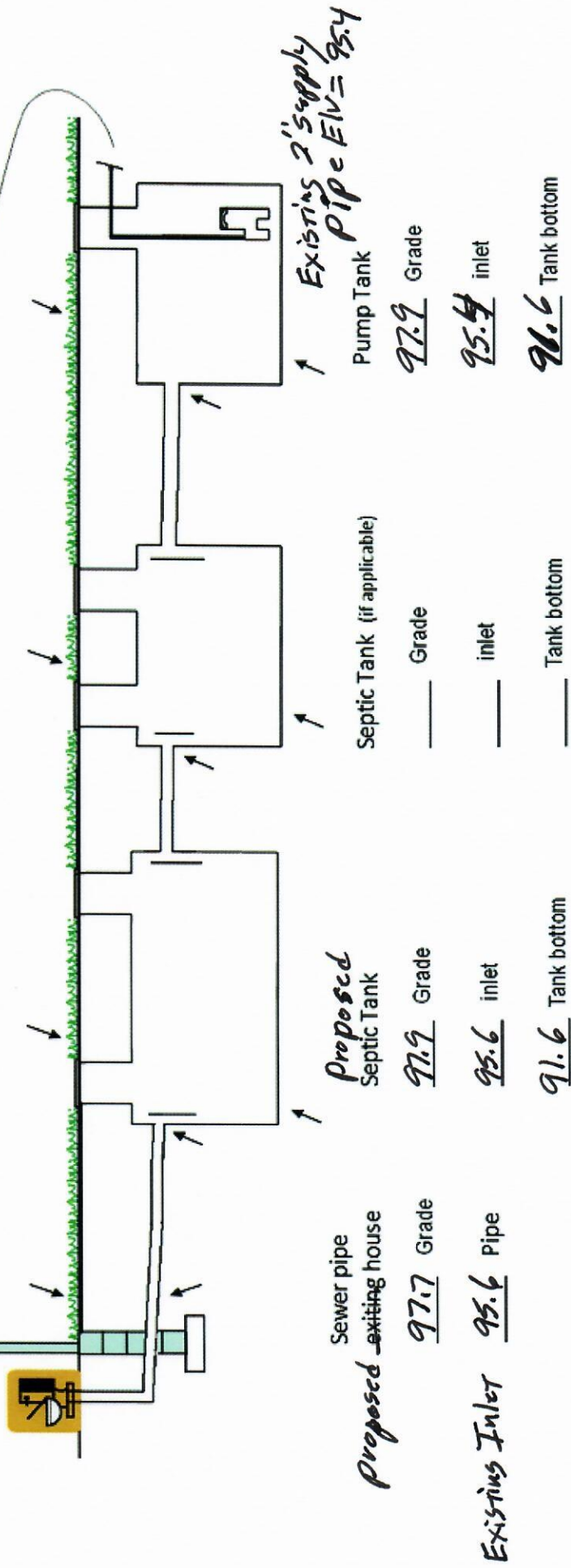
Elv = 100' benchmark Nail on North Power pole.
 Survivor's Benchmark Double Nail Elv = 1261.88 or 99.9'

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



Mound

- loamy cap
- lateral
- bottom rock
- grade (at upslope rock bed)
- SHWT (at upslope rock bed)



Proposed Sewer pipe exiting house

97.7 Grade

Existing Inlet 95.6 Pipe

Proposed Septic Tank

97.9 Grade

95.6 inlet

91.6 Tank bottom

Septic Tank (if applicable)

Grade

inlet

Tank bottom

Pump Tank

97.9 Grade

95.4 inlet

96.6 Tank bottom

Existing 2' Supply Pipe Elv = 95.4

Mound Design Notes - Aitkin county

Property Owner: Phillip Scharmann Date: 2/2/24
Site Address: 27309 435th Ave. Aitkin MN 56431 PID: 11-0-012700
Comments: Mound design may not follow Aitkin co. Auto fill form for mound design.

- 1 This is a type III mound , (On fill soil), Timed Dosed at 210 GPD, 2 bedroom mound on 3 bedroom house.
- 2 Existing Shallow well (to be sealed), is on the SW corner of house. Proposed deep well will be SW of House + 50' to tank.
- 3 Existing tank to be pumped collapsed, removed. Existing Mound to be removed.

Proposed mound will have part of it where existing mound is. New mound will be 2 bedroom (10' x 25') rockbed.

Timed Dose is calculated at 70% of mound capacity, (300 GPD x 70% = 210 GPD)

Installer will try to reuse existing supply pipe buried under road from existing tank to existing mound.

- 4 The Proposed house is gravity flow from East side of house, install clean-out near house.
- 5 Lot is Flat, install 1600 Wippler Heavy 2/compartment tank for gravity flow from house. Maybe in some water.
Install 1600 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 mound will be across county road 435th Ave. This lot is shaped as a triangle, and very small.
A variance for the mound absorption area setbacks, to the road (5 ft) and to the East property line (8 ft.).
Installer will install a retaining wall (approx. 2.5' tall), at the West property line/road right of way. Inside retaining wall install water proof membrane/ barrier. Install Heavy soil from inside retaining wall approx. 3 ft wide between wall and washed sand. Washed sand will be 5 ft. west of rockbed. The rockbed will be 10 ft. from the retaining wall.
This construction plan will place the absorption area approx. 5 ft from RW , West property line.
- 7 The SE mound corner will have berms built 15 ft. wide to the East and to the South (3:1).
The SE property line will be 15 ft east of SE rockbed corner. The SE property line will be approx. 13 ft from SE rockbed corner at 45 degree angle. Installer will cut the SE mound Corner to stay on this lot.
The SE absorption area At the Corner will be Approx. 8 ft from property line
- 8 The Mound berm slopes are Based on a 3:1 slope.
Elevation contour of rock bed upslope edge is 97' . The North end of the rockbed will be approx. 15ft. from North property line.
The area size of the rock bed is 10' x 25' . Absorption area is 25' x 20'.
Sand absorption area is 5 ft. up slope(West) + 10 ft. rockbed + 5 downslope (East) = approx. 20ft. wide sand base.
Berms are 10ft. West to the retaining wall, 15ft. Down slope(East), 10ft. Rock bed = approx. 35ft. Wide.
Overall mound size is approx. 35' wide x 55' long and approx. 5' high. End berms are 15ft. Wide.
- 9 The bench mark is the nail on the Power Pole North property line across the road, BM = Elv. 100'.
Installer to double check bench mark. Installer should confirm bench mark and sand height Elv. with inspector.
Installer should record bench mark Elv. and sand height on installation inspection form.
The top of the sand and bottom of rock bed is Elv. 100'.
It is important that the soils do not get compacted, and that clean Washed sand is used.
- 10 The Wippler 1600 tank will be gravity flow from dwelling. Install the pump for 4 timed doses per day. Based on 210 GPD.
approx. 68 gallons per dose, 3.4 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. (Recommend min. 4" above grade)
Install a 2" supply pipe from tank to end manifold in rock bed, install so pipe drains back to tank.
Install 1.5" laterals with 9" of rock under them. (Install Lateral clean-outs at far end of laterals. Recommended)
- 11 **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.
- 12 Install Event counter on Effluent pump, calibrate pump and give gallons per event to Owner.
Install Pump Control panel capable of time dose and event counting.
- 13 Designer does not guarantee or warranty any Type III systems.
Designed to Aitkin Co. and MPCA recommendations and requirements.



Designer Signature

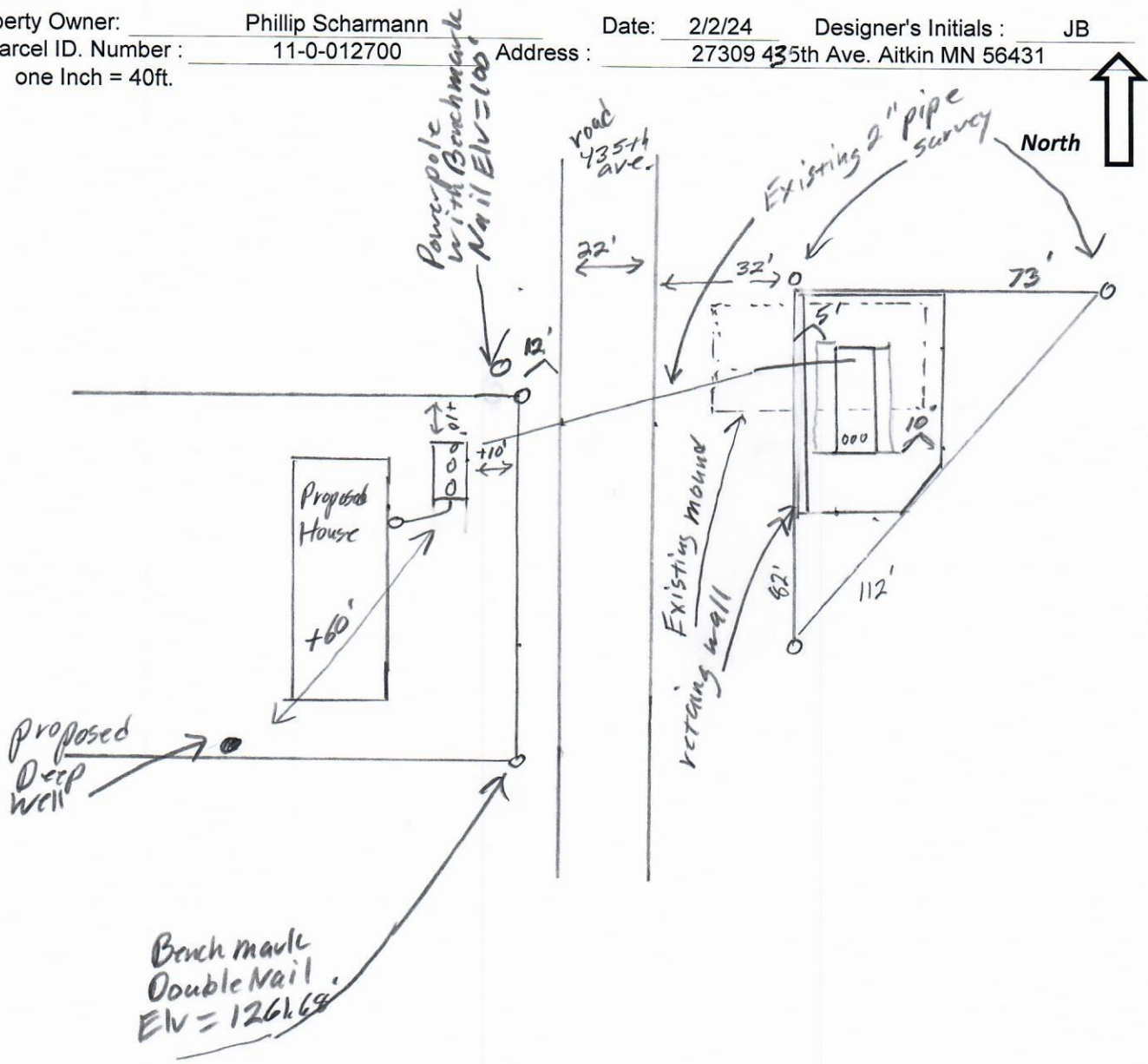
Brummer Septic LLC.
Design Company

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.

{ Design Drawing }

Property Owner: Phillip Scharmann Date: 2/2/24 Designer's Initials: JB
 Parcel ID. Number: 11-0-012700 Address: 27309 435th Ave. Aitkin MN 56431
 one Inch = 40ft.



Existing 2" supply pipe at Existing Pump tank Elv.= 95.4'
 Surveyor's Double Nail Benchmark Elv.= 99.9' or Elv.= 1261.68'
 Farm Island Lake Ice Elv = 93.6' Or 1255.4' on 2/1/2024 Shore Elv. = 95.3'

Surface/ SHWT	Nail on Power Pole= Bench Mark 100'		Existing Grade	
Soil Bore 1	Bench Mark	100'		Upslope Edge of Rockbed Elv.= 97'
Soil Bore 2	Ground Elv. BM	98.2'		Bottom of Rockbed Elv.= 100'
Soil Bore 3	Ground Elv. Tank	97.9'		Top of Washed Sand Elv.= 100'
	Ground at Proposed house	97.7'	East side	Existing Septic tank Inlet Elv.=

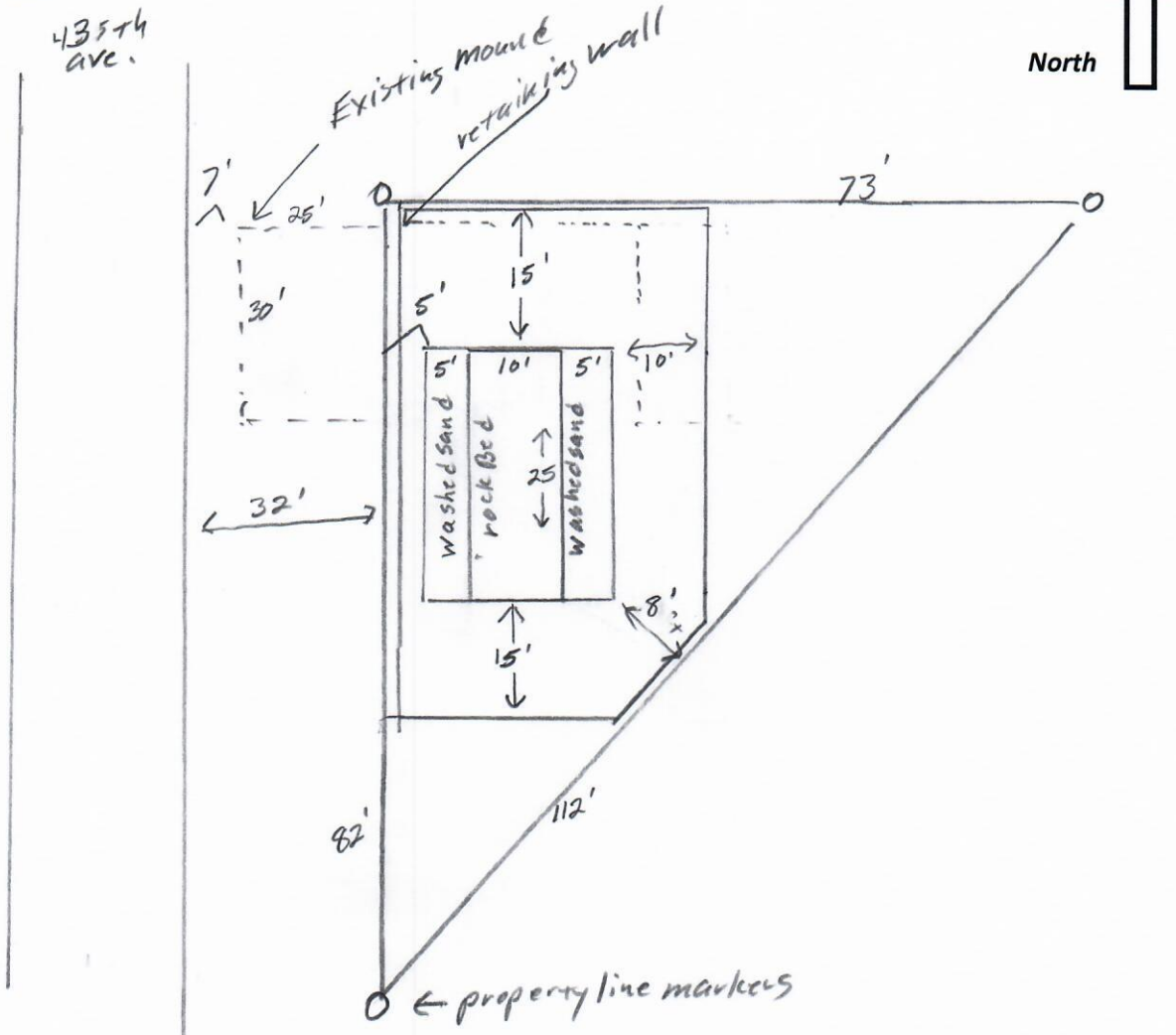
Please show all that apply (Existing)
 Wells within 100ft. Of Drain field.
 Water lines within 10 ft. of Drain field.
 Drain field Areas:

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: Phillip Scharmann Date: 2/2/24 Designer's Initials: JB
 Parcel ID. Number: 11-0-012700 Address: 27309 45th Ave. Aitkin MN 56431
 one Inch = 40ft.



Existing 2" supply pipe at Existing Pump tank Elv.= 95.4'
 Surveyor's Double Nail Benchmark Elv.= 99.9' or Elv.= 1261.68'
 Farm Island Lake Ice Elv = 93.6' Or 1255.4' on 2/1/2024 Shore Elv. = 95.3'

Surface/ SHWT	Nail on Power Pole= Bench Mark 100'		Existing Grade	
Soil Bore 1	Bench Mark	100'	Upslope Edge of Rockbed Elv.= 97'	
Soil Bore 2	Ground Elv. BM	98.2'	Bottom of Rockbed Elv.= 100'	
Soil Bore 3	Ground Elv. Tank	97.9'	Top of Washed Sand Elv.= 100'	
	Ground at Proposed house	97.7'	East side	Existing Septic tank Inlet Elv.=

Please show all that apply (Existing)

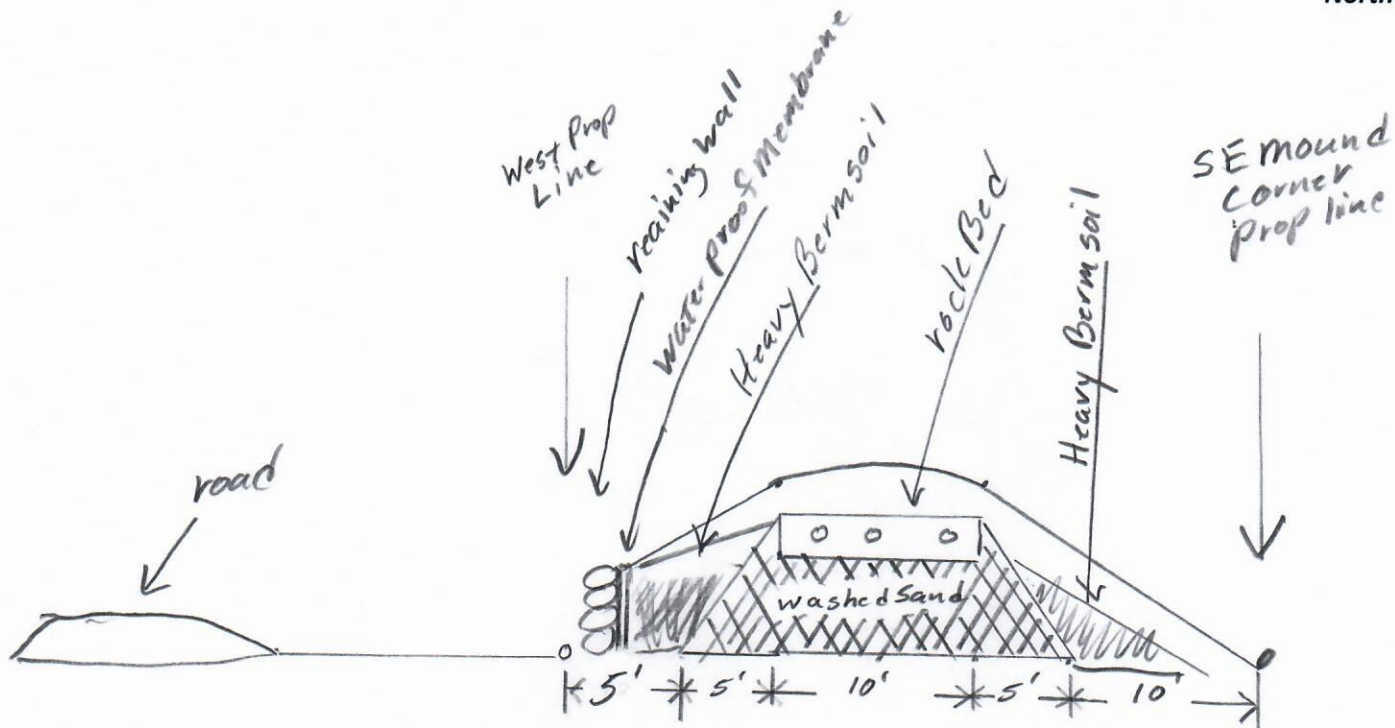
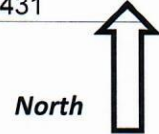
- Wells within 100ft. Of Drain field.
- Water lines within 10 ft. of Drain field.
- Drain field Areas:

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: Phillip Scharmann Date: 2/2/24 Designer's Initials: JB
 Parcel ID. Number: 11-0-012700 Address: 27309 4.5th Ave. Aitkin MN 56431
 one Inch = 40ft.



Existing 2" supply pipe at Existing Pump tank Elv.= 95.4'
 Surveyor's Double Nail Benchmark Elv.= 99.9' or Elv.= 1261.68'
 Farm Island Lake Ice Elv = 93.6' Or 1255.4' on 2/1/2024 Shore Elv. = 95.3'

	Surface/ SHWT	Nail on Power Pole= Bench Mark 100'		Existing Grade	
Soil Bore 1		Bench Mark	100'	Upslope Edge of Rockbed Elv.= 97'	
Soil Bore 2		Ground Elv. BM	98.2'	Bottom of Rockbed Elv.= 100'	
Soil Bore 3		Ground Elv. Tank	97.9'	Top of Washed Sand Elv.= 100'	
	Ground at	Proposed house	97.7'	East side	Existing Septic tank Inlet Elv.=

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 |

2022 PRICE LIST
WIPPLER PRECAST

PO Box 93 Pine River, MN 56474

Cell: 218-820-8598

Prices Subject to Change

Delivery Charge After 60 Miles - \$5.00/Mile (Loaded)

85 GAL GRINDER / P	(2 GPI)	X\$485
500 GAL P	(11.9 GPI)	X\$585
650 GAL P	(15.5 GPI)	\$1,065
1000 GAL SS, H, P	(23.9 GPI)	\$1,300
1500 GAL SS, H, P	(37.6 GPI)	\$1,525
2250 GAL SS, H, P	(56.7 GPI)	\$2,450
3198 GAL SS, H, P (3198 GAL)	(56.7 GPI)	\$3,520
1500 GAL 2 CP or 2 CG	(24.1 / 12 GPI)	\$1,650
1650 GAL 2 CP or 2 CG	(24.1 / 15.6 GPI)	\$1,815
2250 GAL 2 CP or 2 CG	(37.6 / 17.8 GPI)	\$2,820
2250 GAL 3 CP	(37.6 / 17.8 GPI)	\$2,655
600 GAL LO-PROFILE PUMP	(20 GPI)	X\$1,300
1000 GAL LO-PROFILE	(33.3 GPI)	X\$1,750
1600 2cP or 2cPG LO-PRO Heavy Tank 1000/600	(33.3 / 20 GPI)	\$2,000

ACCESSORIES:

POLYLOK PL-122 FILTER	\$55
FILTERS AVAILABLE UP TO 10,000 G.P.D.	Price on Request
PLASTIC DROP BOX	\$26
24" DIA PLASTIC RISER	\$31 / LIN FT
20' ROLL BLACK MASTIC SEALANT	\$13
24" CONCRETE MANHOLE COVER	\$35.00
24" DIA PLASTIC MANHOLE COVER	\$42 AND \$50

KEY: P = PUMP SS = SINGLE SEPTIC H = HOLDING
 CP = COMPARTMENT PUMP CG = COMPARTMENT GRAVITY

TANK DIMENSIONS

MOST TANK INLETS ARE 48" & LIQUID LEVELS ARE 42"

LO-PROFILES – INLET 38" & LIQUID LEVEL 31"

3198 GALLON – INLET 64" & LIQUID LEVEL 58"

		<u>D.O.B.</u>	<u>W</u>	<u>L</u>	<u>H</u>
85	GAL	8'	32" Dia	42" Sq	5'
500	GAL	8'	4'	80"	5'7"
650	GAL	7'	5'	80"	5'7"
1000	GAL	7'	80"	8'	5'7"
1500	GAL	7'	80"	11'	5'7"
1650	GAL	6'	80"	12'	5'7"
2250	GAL	6'	80"	16'	5'7"
3198	GAL	6'	80"	16'	6'3"
600	GAL _{Lo-Pro}	4'	7'	97"	4'7"
1000	GAL _{Lo-Pro}	4'	97"	8'6"	4'7"
1600	GAL _{Lo-Pro}	4'	97"	12'6"	4'7"

S = SINGLE COMPARTMENT

SP-PUMP SS-SINGLE SEPTIC SH-HOLDING

CP - COMPARTMENT PUMP CG - COMPARTMENT GRAVITY

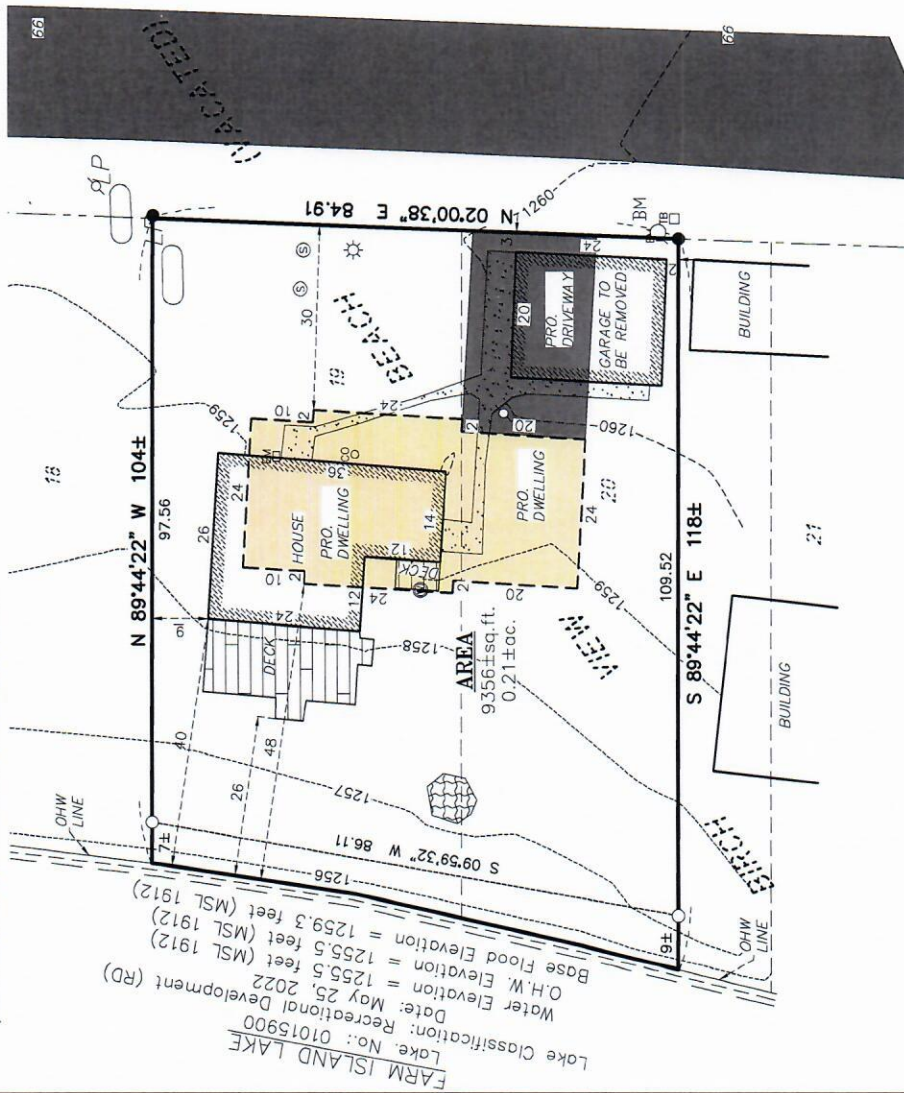
GPI = GALLONS PER INCH D.O.B. = DEPTH OF BURIAL

HEIGHT IS FROM BOTTOM OF TANK TO TOP OF MANHOLE COVER

CERTIFICATE OF SURVEY

DESCRIPTION - (Parcel No.: 11-0-012700)

That portion of Government Lot 3 of Section 4, Township 45, Range 27, formerly known as Lot 19 and the North 35 feet of Lot 20 of the Plat of "Birch View Beach", the plat of which is now vacated. Aitkin County, Minnesota



Lake No.: 01015900
 Lake Classification: Recreational Development (RD)
 Date: May 25, 2022
 Water Elevation = 1255.5 feet (MSL 1912)
 O.H.W. Elevation = 1255.5 feet (MSL 1912)
 Base Flood Elevation = 1259.3 feet (MSL 1912)

LEGEND

- DENOTES 1/2 INCH IRON PIPE SET AND MARKED WITH RLS 59285 CAP.
- DENOTES FOUND SURVEY MONUMENT
- ⊠ DENOTES TELEPHONE PEDESTAL
- ⊡ DENOTES ELECTRIC METER
- ⊙ DENOTES UTILITY POLE
- ⊛ DENOTES ELECTRIC LIGHT POLE
- ⊜ DENOTES WELL
- ⊝ DENOTES SEPTIC MANHOLE
- ⊞ DENOTES SEPTIC CLEANOUT
- ⊟ DENOTES L.P. TANK
- ⊠ DENOTES BITUMINOUS SURFACE
- ⊡ DENOTES CONCRETE SURFACE
- ⊛ DENOTES 1 FOOT CONTOURS (MSL1912)



GRAPHIC SCALE
 0 10 20
 (IN FEET)
 1 inch = 20 ft.

IMPERVIOUS SURFACE:

EXISTING
 Parcel Area = 9356 sq ft
 House = 792 sq ft
 Garage = 480 sq ft
 Decks = 352 sq ft
 Concrete Surface = 317 sq ft
 Patio Block Surface = 47 sq ft
 Septic Tanks = 60± sq ft
 Driveway = 660 sq ft
 Total Impervious Surface = 2048 sq ft

PROPOSED
 Parcel Area = 9356 sq ft
 Dwelling = 1392 sq ft
 Patio Block Surface = 47 sq ft
 Septic Tanks = 60± sq ft
 Driveway = 660 sq ft
 Total Impervious Surface = 2159 sq ft

2048/9356 = 0.219
 Existing Impervious Surface = 21.9%

2159/9356 = 0.231
 Proposed Impervious Surface = 23.1%

SURVEYOR'S NOTES:

- Bearing Orientation: The east line of Lot 19 of Birch View Beach is assumed to have a bearing of North 02 degrees 00 minutes 38 seconds East.
- Benchmark: Set double spike in the northerly face of a power pole. Elevation = 1261.68 feet (MSL1912)
- The field survey was completed on 5/26/2022.
- Arro Land Surveying of Brainerd, INC. has made no investigation or independent search for easements of record, encumbrances, restrictive covenants, ownership title evidence, or any other facts that an accurate and current title search may disclose.
- Wetlands may exist on subject property but were not identified in the preparation of this survey.
- The utilities as shown on this survey were developed from the visible utilities across your property and is not implied nor intended to be the complete inventory of utilities in this area. It is the client's responsibility to verify the location of all utilities prior to construction or improving your property.
- Property Zoning: Shoreland
- Setback Requirements:
 - R-O-W = 100 feet
 - R-O-W = 30 feet
 - Property Line = 10 feet
- There is no apparent building envelope on subject property.

2025 (Rev. 04/2024)
 Minnesota, Inc.
 (Professional Seal)



BOUNDARY SURVEY

Lot 19 & N. 35 of Lot 20,
 BIRCH VIEW BEACH,
 Aitkin, County, MN

CLIENT: Grandt Builders
 Property Address:
 27309 435th Ave
 Aitkin, MN 56431

DRAWN BY: JAS.	CHECKED BY: JEL		
APPROVED BY: JAS.	JOB NUMBER: 23-203B		
NO.	DATE	BY	REVISION DESCRIPTION

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.

Dated this 28th day of December, 2023

By: Jared A. Spaul, Minnesota License No. 59285



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.

Schermann



Date: 1/31/2024

Web AppBuilder for ArcGIS

0 0.003 0.006 mi 1 inch = 47 feet

1:564



Detailed Parcel Report

Parcel Number: 11-0-012700

General Information

Lake lot.

Township/City: HAZELTON TWP
 Taxpayer Name: SCHARMANN, PHILLIP & LORI
 Taxpayer Address: 17891 DUCK LAKE TRL
 EDEN PRAIRIE MN 55346
 Property Address: 27309 435th Ave
 Township: 45 Lake Number: 1015900
 Range: 27 Lake Name: FARM ISLAND LAKE *RD*
 Section: 4 Acres: 0.41
 Green Acres: No School District: 1.00
 Plat:
 Brief Legal Description: PART OF LOT 3 FORM LOT 19 BIRCH VIEW BEACH & N35 FT OF LOT 20

Tax Information

Class Code 1: Non-Comm Seasonal Residential Recreational *OHW - 1255.5*
 Class Code 2: Unclassified *100 yr - 1257.5*
 Class Code 3: Unclassified
 Homestead: Non Homestead
 Assessment Year: 2023

Estimated Land Value: \$341,300.00
 Estimated Building Value: \$109,600.00
 Estimated Total Value: \$450,900.00
 Prior Year Total Taxable Value: \$350,000.00
 Current Year Net Tax (Specials Not Included): \$2,064.00
 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.



Detailed Parcel Report

Parcel Number: 11-0-013001

General Information

Back lot.

Township/City: HAZELTON TWP
 Taxpayer Name: SCHARMANN, PHILLIP & LORI
 Taxpayer Address: 17891 DUCK LAKE TRL
 EDEN PRAIRIE MN 55346
 Property Address:
 Township: 45 Lake Number: 1915900
 Range: 27 Lake Name: FARM ISLAND - BACK LOT
 Section: 4 Acres: 0.06
 Green Acres: No School District: 1.00
 Plat:
 Brief Legal Description: PART OF LOT 3 FORM LOT 25 OF BIRCH VIEW BCH DOC 162558

Tax Information

Class Code 1: Rural Vacant Land
 Class Code 2: Unclassified
 Class Code 3: Unclassified
 Homestead: Non Homestead
 Assessment Year: 2023

Estimated Land Value: \$600.00
 Estimated Building Value: \$0.00
 Estimated Total Value: \$600.00

Prior Year Total Taxable Value: \$500.00
 Current Year Net Tax (Specials Not Included): \$2.00
 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.**

AITKIN COUNTY SHORELAND PERFORMANCE

(Structure Placement Guidance)

A property should obtain a score of 100 or more to meet performance standard requirements. A conforming lot is assigned a score of 100. A lot is deemed conforming when the structure meets the required setbacks to the protected water as specified in the Aitkin County Shoreland Management Ordinance (SMO). A structure that fails to meet this definition is considered non-conforming.

To determine the level of non-conformance and score (See Reference Table):

- 1) Determine the DNR classification of the protected water on the lot (SMO-4.13 & 4.14) 1: 48
- 2) Determine the required "Structure Setback" to that classification of water (SMO 5.2) 2: 48
- 3) Determine the "Actual Setback" of the structure by measuring the closest part of the structure to the protected water, bluff, right-of-way, property line, etc. for which a variance is sought..... 3: 48
- 4) Enter the corresponding 'Score Multiplier' 4: 1
- 5) Pre-mitigation 'Lot Score': Determine the percentage of the encroachment as it relates to the standard setback by multiplying the Actual Setback with the 'Score Multiplier' (Note: round to the nearest whole number) 5: 48

Reference Table: Performance Multipliers for structures, septics, bluff, and sidelots in Aitkin County.

Protected Waters Type (DNR Classification; SMO 4.13-4.14)	Required Structure Setback	Score Multiplier Structures	Required Septic Setback	Score Multiplier Septic	Score Multiplier Bluff	Score Multiplier Sidelot
General Development Lake	75'	1.333	75'	1.333	(30' setback) 3.33	(10' setback) 10.000
Recreational Development Lake	100'	1.000	75'	1.333		
Natural Environment Lake	150'	0.667	150'	0.667		
Mississippi River	150'	0.667	125'	0.800		
Tributary Stream	100'	1.000	75'	1.333		
Forested Stream	150'	0.667	100'	1.000		
Remote Stream	200'	0.500	150'	0.667		

Mitigation: To bring a non-conforming structure to a score of 100 the landowner conducts and maintains one or more of the below listed mitigating activities:

- A) Zone A(1): Plant and/or maintain a 12.5' wide natural vegetated buffer zone adjacent to the OHW and record deed restrictions to maintain vegetation in its natural state, prohibit mowing or vegetation removal.* Water access as defined in the Shoreland Management Ordinance is allowed (Section 5.31.B.2.c)..... **15 points**
- Zone A(2): Plant and/or maintain a 25' wide natural vegetated buffer zone adjacent to the OHW and record deed restrictions to maintain vegetation in its natural state, prohibit mowing or vegetation removal.* Water access as defined in the Shoreland Management Ordinance is allowed (Section 5.31.B.2.c)..... **30 points**
- B) Zone B: Plant and/or maintain an additional 12.5' wide natural vegetated buffer zone between Zone A landward. Record deed restrictions to maintain vegetation in its natural state, prohibit mowing or vegetation removal.* A ten-foot (10') access path is allowed. **20 points**
- C) Zone C: Plant and/or maintain an additional 12.5' wide natural vegetated buffer zone between Zone B landward. Record deed restrictions to maintain vegetation in its natural state, prohibit mowing or vegetation removal.* A ten-foot (10') access path is allowed. **10 points**
- D) Construction of rain garden(s) to Wisconsin DNR Manual specifications..... **20 points**
- E) Removal of all other structures that do not meet the standard building setbacks, including water oriented structures..... **20 points**
- F) Removal of impervious surfaces to at least half ordinance limits (SMO 5.52.A)..... **10 points**
- G) Removal of fill all placed in historic wetlands and guarantee of no future wetland fill recorded on deed..... **10 points**
- H) Re-vegetate bluff or steep slopes* and provide screening of structures from the lake. **10 points**
- I) Diversion of all water runoff from impervious surfaces away from the lake into retention ponds, subsurface drains, wetlands, etc. with no outlet to the lake or tributary **10 points**
- J) Existing conditions may apply on the property that warrant credit..... **10 points**

Final Score = Pre-mitigation Lot Score (Line 5) 48 + Mitigation Totals (Lines A-I) _____ = 48 To be determined by P&Z

*Note: Plant materials for vegetative buffers shall be native to northern Minnesota. For every 5,000 square feet of buffer area, there shall be a minimum of four types of trees, six types of shrubs, seven forbs, and three grasses planted to achieve a one plant per square foot minimum coverage. Survival of all plants must be guaranteed for a minimum of 5 years

Board of Adjustment Chairperson


Applicant

WARRANTY DEED

Individual(s) to Joint Tenants

384954

FILED NOV 26 '07 AT 9:11 AM

Diane M. Lafferty, County Recorder

No delinquent taxes and transfer entered: Certificate of Real Estate Value () filed () not required Certificate of Real Estate Value No. 37725

Nov 26, 2007
(Date)

Kirk Poyser
County Auditor
by Elyshita Harmon
Deputy

DEED TAX DUE: \$ 1089.00

Date: November 1, 2007

FOR VALUABLE CONSIDERATION, Luverne C. Anderson and Sharon D. Anderson, husband and wife
Grantor(s), hereby conveys and warrants to Phillip J. Scharmman and Lori L. Scharmman
Grantees as Joint Tenants, real property in Aitkin County, Minnesota, legally described as follows:

→ The South Eighty-two (82) feet of that portion of Government Lot Three (3) of Section Four (4), Township Forty-five (45), Range Twenty-seven (27), formerly known as Lot 25 of the Plat of "Birch View Beach", now vacated, as is recorded in Warranty Deed to Chestine H. Vanderhorst and Nellie P. Vanderhorst, in Book "81" of Deeds, page 286

AND

→ That portion of Government Lot 3 of Section 4, Township 45, Range 27, formerly known as Lot 19 and the North 35 feet of Lot 20 of the Plat of "Birch View Beach", the plat of which is now vacated

Aitkin County, Minnesota

Together with all hereditaments and appurtenances belonging thereto, subject to the following exceptions:

restrictions, covenants, conditions, and easements of record, if any.

Check Box if applicable:

- The Seller certifies that the seller does not know of any wells on the described real property.
- A well disclosure certificate accompanies this document.
- I am familiar with the property described in this instrument and I certify that the status and number of wells on the described property have not changed since the last previously filed well disclosure certificate.

Affix Deed Tax Stamp Here:

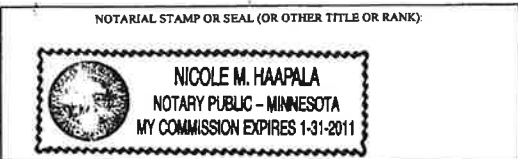
AITKIN COUNTY DEED TAX
 No 96 Date 11/26/07
1089.00 Dollars Paid
Lori Grams
 County Treasurer
 By [Signature] Deputy

[Signature]
Luverne C. Anderson

[Signature]
Sharon D. Anderson

STATE OF MINNESOTA }
COUNTY OF HENNEPIN } ss.

This instrument was acknowledged before me on November 1, 2007
by Luverne C. Anderson and Sharon D. Anderson, husband and wife, Grantor(s).



[Signature]
SIGNATURE OF NOTARY PUBLIC OR OTHER OFFICIAL

Check here if part or all of the land is Registered (Torrens)

Tax Statements for the real property described in this instrument should be sent to (include name and address of Grantee):

THIS INSTRUMENT WAS DRAFTED AND PREPARED BY (NAME AND ADDRESS):
TITLE ONE, INC.
1401 American Blvd E
Suite 4
Bloomington MN 55425
File No.: 0704629

PHILLIP J. SCHARMANN AND LORI L. SCHARMANN
27309 435TH AVENUE
AITKIN MN 56431

*see page 8
11-26-9*

RECORDED
TRACT INDEX
GRANOR
GRANTEE
COMPARED

TITLE ONE, INC.
Production Office
1401 American Blvd East
Suite 4
Bloomington, MN 55425
070 4629



OFFICE OF COUNTY RECORDER
ADAMS COUNTY, MINNESOTA
[X] WELL CERTIFICATE RECEIVED
[] WELL CERTIFICATE NOT REQUIRED

COUNTY RECORDER
ADAMS COUNTY, MINNESOTA
FILED

NOV 26 2007 9A M

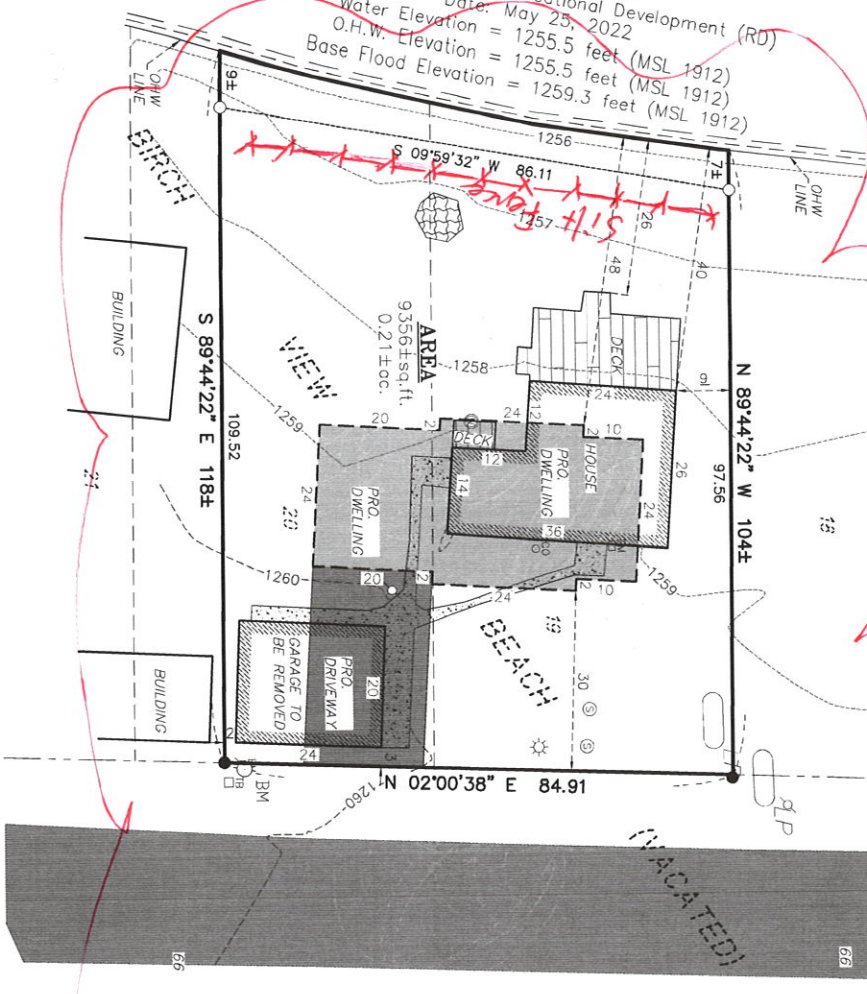
Blaine & Jeffrey
As Dec. No.

384954

CERTIFICATE OF SURVEY

DESCRIPTION - (Parcel No.: 11-0-012700)
 That portion of Government Lot 3 of Section 4, Township 45, Range 27, formerly known as Lot 19 and the North 35 feet of Lot 20 of the Plot of Birch View Beach, the plot of which is now vacated Atkin County, Minnesota

FARM ISLAND LAKE
 Lake No.: 01015900
 Lake Classification: Recreational Development (RD)
 Date: May 25, 2022
 Water Elevation = 1255.5 feet (MSL 1912)
 O.H.W. Elevation = 1255.5 feet (MSL 1912)
 Base Flood Elevation = 1259.3 feet (MSL 1912)



EROSION CONTROL

NO.	DATE	BY	REVISION DESCRIPTION

CLIENT:
Grandt Builders
 Property Address:
 27309 435th Ave
 Atkin, MN 56431

BOUNDARY SURVEY
 Lot 19 & N. 35 of Lot 20,
 BIRCH VIEW BEACH,
 Atkin, County, MN



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.
 Dated this 28th day of December, 2023
 By: *[Signature]*
 Jared A. Spind, Minnesota License No. 97983

- LEGEND**
- DENOTES 1/2 INCH IRON PIPE SET AND MARKED WITH R/S 59285 CAP.
 - DENOTES FOUND SURVEY MONUMENT
 - DENOTES TELEPHONE PEDESTAL
 - ⊕ DENOTES ELECTRIC METER
 - ⊙ DENOTES UTILITY POLE
 - ⊛ DENOTES ELECTRIC LIGHT POLE
 - ⊙ DENOTES WELL
 - ⊙ DENOTES SEPTIC MANHOLE
 - ⊙ DENOTES SEPTIC CLEANOUT
 - ⊙ DENOTES L.P. TANK
 - ⊙ DENOTES BITUMINOUS SURFACE
 - ⊙ DENOTES CONCRETE SURFACE
 - ⊙ DENOTES 1 FOOT CONTOURS (MSL1912)

IMPERVIOUS SURFACE:	
EXISTING	PROPOSED
Parcel Area = 9356 sq ft	Parcel Area = 9356 sq ft
House = 792 sq ft	Dwelling = 1392 sq ft
Garage = 480 sq ft	Porch Block Surface = 47 sq ft
Decks = 352 sq ft	Septic Tanks = 604 sq ft
Concrete Surface = 317 sq ft	Dripline = 680 sq ft
Patio Block Surface = 47 sq ft	Total Impervious Surface = 2159 sq ft
Septic Tanks = 604 sq ft	Existing Impervious Surface = 21.9%
Total Impervious Surface = 2048 sq ft	Proposed Impervious Surface = 23.1%
2048/9356 = 0.219	

SURVEYOR'S NOTES:

- Bearing Orientation: The east line of Lot 19 of Birch View Beach is assumed to have a bearing of North 02 degrees 00 minutes 38 seconds East.
- Benchmark: Set double spike in the northerly face of a power pole. Elevation = 1261.58 feet (MSL1912)
- The field survey was completed on 5/28/2022
- Arro Land Surveying of Bromard, Inc. has made no investigation or independent search for easements of record, encumbrances, restrictive covenants, ownership title evidence, or any other facts that an accurate and current title search may disclose.
- Wellheads may exist on subject property but were not identified in the preparation of this survey.
- The utilities as shown on this survey were developed from the visible utilities across your property and is not implied nor intended to be the complete inventory of utilities in this area. It is the client's responsibility to verify the location of all utilities prior to construction or improving your property.
- Property Zoning: Shoreland
- Setback Requirements: Shoreland
- R-O-W = 100 feet
- Property Line = 30 feet
- OHW (RD) = 100 feet
- There is no apparent building envelope on subject property.