



171061505-2023

**m MINNESOTA POLLUTION
CONTROL AGENCY**520 Lafayette Road North
St. Paul, MN 55155-4194**Compliance inspection report form
Existing Subsurface Sewage Treatment System (SSTS)**

Doc Type: Compliance and Enforcement

Instructions: Inspector must submit completed form to Local Governmental Unit (LGU) and system owner within 15 days of final determination of compliance or noncompliance. Instructions for filling out this form are located on the Minnesota Pollution Control Agency (MPCA) website at <https://www.pca.state.mn.us/sites/default/files/wq-wwists4-31a.pdf>.

Property information

Local tracking number:

Parcel ID# or Sec/Twp/Range: 171061505

Reason for Inspection

Property Sale

Local regulatory authority info: Becker County Zoning 218-846-7314

Property address: 13027 Red Elm Ridge

Owner/representative: Kevin Paulsrud

Owner's phone: 701-430-0965

Brief system description: Septic tank with gravity fed drainfield

System status

System status on date (mm/dd/yyyy): 6/5/2023

☐ **Compliant – Certificate of compliance***

(Valid for 3 years from report date unless evidence of an imminent threat to public health or safety requiring removal and abatement under section 145A.04, subdivision 8 is discovered or a shorter time frame exists in Local Ordinance.)

***Note: Compliance indicates conformance with Minn. R. 7080.1500 as of system status date above and does not guarantee future performance.**

☒ **Noncompliant – Notice of noncompliance**

Systems failing to protect ground water must be upgraded, replaced, or use discontinued within the time required by local ordinance.

An imminent threat to public health and safety (ITPHS) must be upgraded, replaced, or its use discontinued within ten months of receipt of this notice or within a shorter period if required by local ordinance or under section 145A.04 subdivision 8.

Reason(s) for noncompliance (check all applicable)

- ☐ Impact on public health (Compliance component #1) – *Imminent threat to public health and safety*
- ☐ Tank integrity (Compliance component #2) – *Failing to protect groundwater*
- ☐ Other Compliance Conditions (Compliance component #3) – *Imminent threat to public health and safety*
- ☐ Other Compliance Conditions (Compliance component #3) – *Failing to protect groundwater*
- ☐ System not abandoned according to Minn. R. 7080.2500 (Compliance component #3) – *Failing to protect groundwater*
- ☒ Soil separation (Compliance component #5) – *Failing to protect groundwater*
- ☐ Operating permit/monitoring plan requirements (Compliance component #4) – *Noncompliant - local ordinance applies*

Comments or recommendations**Certification**

I hereby certify that all the necessary information has been gathered to determine the compliance status of this system. No determination of future system performance has been nor can be made due to unknown conditions during system construction, possible abuse of the system, inadequate maintenance, or future water usage.

By typing my name below, I certify the above statements to be true and correct, to the best of my knowledge, and that this information can be used for the purpose of processing this form.

Business name: Ohm Excavating LLC

Certification number: 1929

Inspector signature: Olivia Ohm

License number: 4034

(This document has been electronically signed)

Phone: 218-234-1256

Necessary or locally required supporting documentation (must be attached)

- ☒ Soil observation logs ☐ System/As-Built ☒ Locally required forms ☐ Tank Integrity Assessment ☐ Operating Permit
- ☐ Other information (list):

Property Address: 13027 Red Elm Ridge

Business Name: Ohm Excavating LLC

Date: 6/5/2023

1. Impact on public health – Compliance component #1 of 5

Compliance criteria:

System discharges sewage to the ground surface

☐ Yes* ☒ No

System discharges sewage to drain tile or surface waters.

☐ Yes* ☒ No

System causes sewage backup into dwelling or establishment.

☐ Yes* ☒ No

Any "yes" answer above indicates the system is an imminent threat to public health and safety.

Describe verification methods and results:

Attached supporting documentation:

☐ Other: _____

☒ Not applicable

2. Tank integrity – Compliance component #2 of 5

Compliance criteria:

System consists of a seepage pit, cesspool, drywell, leaching pit, or other pit?

☐ Yes* ☒ No

Sewage tank(s) leak below their designed operating depth?

☐ Yes* ☒ No

If yes, which sewage tank(s) leaks:

Any "yes" answer above indicates the system is failing to protect groundwater.

Describe verification methods and results:

A camera was placed into the septic tank. No cracks or leaks seen. Tank appears to be watertight.

Septic tank is showing signs of deterioration on the walls and lid.

Attached supporting documentation:

☒ Empty tank(s) viewed by inspector

Name of maintenance business: Ohm

License number of maintenance business: 4034

Date of maintenance: 6/5/2023

☐ Existing tank integrity assessment (Attach)

Date of maintenance
(mm/dd/yyyy):

(must be within three years)

(See form instructions to ensure assessment complies with Minn. R. 7082.0700 subp. 4 B (1))

☐ Tank is Noncompliant (pumping not necessary – explain below)

☐ Other: _____

Property Address: 13027 Red Elm Ridge

Business Name: Ohm Excavating LLC

Date: 6/5/2023

3. Other compliance conditions – Compliance component #3 of 5

3a. Maintenance hole covers appear to be structurally unsound (damaged, cracked, etc.), or unsecured?

☐ Yes* ☒ No ☐ Unknown.

3b. Other issues (electrical hazards, etc.) to immediately and adversely impact public health or safety? ☐ Yes* ☒ No ☐ Unknown

**Yes to 3a or 3b - System is an imminent threat to public health and safety.*

3c. System is non-protective of ground water for other conditions as determined by inspector?

☐ Yes* ☒ No

3d. System not abandoned in accordance with Minn. R. 7080.2500?

☐ Yes* ☒ No

**Yes to 3c or 3d - System is failing to protect groundwater.*

Describe verification methods and results:

Attached supporting documentation: ☒ Not applicable ☐

4. Operating permit and nitrogen BMP* – Compliance component #4 of 5 ☒ Not applicable

Is the system operated under an Operating Permit?

☐ Yes ☐ No If "yes", A below is required

Is the system required to employ a Nitrogen BMP specified in the system design? ☐ Yes ☐ No If "yes", B below is required

BMP = Best Management Practice(s) specified in the system design

If the answer to both questions is "no", this section does not need to be completed.

Compliance criteria:

a. Have the operating permit requirements been met?

☐ Yes ☐ No

b. Is the required nitrogen BMP in place and properly functioning?

☐ Yes ☐ No

Any "no" answer indicates noncompliance.

Describe verification methods and results:

Attached supporting documentation: ☐ Operating permit (Attach) ☐

Property Address: 13027 Red Elm Ridge

Business Name: Ohm Excavating LLC

Date: 6/5/2023

5. Soil separation – Compliance component #5 of 5

Date of installation _____ ☒ Unknown
(mm/dd/yyyy)

Shoreland/Wellhead protection/Food beverage lodging? ☒ Yes ☐ No

Compliance criteria (select one):

5a. For systems built prior to April 1, 1996, and not located in Shoreland or Wellhead Protection Area or not serving a food, beverage or lodging establishment: ☐ Yes ☐ No*

Drainfield has at least a two-foot vertical separation distance from periodically saturated soil or bedrock.

5b. Non-performance systems built April 1, 1996, or later or for non-performance systems located in Shoreland or Wellhead Protection Areas or serving a food, beverage, or lodging establishment: ☐ Yes ☒ No*

Drainfield has a three-foot vertical separation distance from periodically saturated soil or bedrock.*

5c. "Experimental", "Other", or "Performance" systems built under pre-2008 Rules; Type IV or V systems built under 2008 Rules 7080.2350 or 7080.2400 (Intermediate Inspector License required ≤ 2,500 gallons per day; Advanced Inspector License required > 2,500 gallons per day) ☐ Yes ☐ No*

Drainfield meets the designed vertical separation distance from periodically saturated soil or bedrock.

*Any "no" answer above indicates the system is failing to protect groundwater.

Describe verification methods and results:

A 4" auger was used to check soils around the drainfield.

Sandy loam to clay loam.

Redox features found at 20"

Attached supporting documentation:

- ☒ Soil observation logs completed for the report
☐ Two previous verifications of required vertical separation
☐ Not applicable (No soil treatment area)
☐ _____

Indicate depths or elevations

A. Bottom of distribution media	20"
B. Periodically saturated soil/bedrock	20"
C. System separation	0"
D. Required compliance separation*	36"

*May be reduced up to 15 percent if allowed by Local Ordinance.

Upgrade requirements: (Minn. Stat. § 115.55) An imminent threat to public health and safety (ITPHS) must be upgraded, replaced, or its use discontinued within ten months of receipt of this notice or within a shorter period if required by local ordinance. If the system is failing to protect ground water, the system must be upgraded, replaced, or its use discontinued within the time required by local ordinance. If an existing system is not failing as defined in law, and has at least two feet of design soil separation, then the system need not be upgraded, repaired, replaced, or its use discontinued, notwithstanding any local ordinance that is more strict. This provision does not apply to systems in shoreland areas, Wellhead Protection Areas, or those used in connection with food, beverage, and lodging establishments as defined in law.



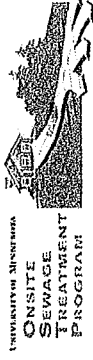
Soil Observation Log

Project ID: 171061505f v 04.01.2019

Client: Kevin Paulsrud				Location / Address: 13027 Red Elm Ridge					
Soil parent material(s): (Check all that apply)				☐ Outwash ☐ Lacustrine ☐ Loess ☒ Till ☐ Alluvium ☐ Bedrock ☐ Organic Matter					
Landscape Position: (check one)				Slope shape Linear, Linear					
☐ Summit ☐ Shoulder ☒ Back/Side Slope ☐ Foot Slope ☐ Toe Slope				Slope %:					
Vegetation: Lawn				Elevation:					
Weather Conditions/Time of Day: Sunny, morning				Date: 06/05/23					
Observation #/Location: Soil Boring #1				Observation Type: Auger					
Depth (in)	Texture	Rock Frag. %	Matrix Color(s)	Mottle Color(s)	Redox Kind(s)	Indicator(s)	Shape	Grade	Consistence
0-9	Sandy Loam	<35%	10YR 2/1				Granular	Weak	Friable
9-16	Gravelly sand	<35%	10YR 3/3				Single grain	Structureless	Loose
16-20	Clay loam	<35%	10YR 3/2				Blocky	Moderate	Friable
20+	Clay loam	<35%	10YR 3/2	10YR 5/8	Concentrations	S2	Blocky	Moderate	Friable
				10YR 6/2	Depletions	S1			
Comments									
I hereby certify that I have completed this work in accordance with all applicable ordinances, rules and laws.									
Olivia Ohm				C1929/ L4034				6/5/2023	
(Designer/Inspector)				(Signature)				(Date)	

Additional Soil Observation Logs

Project ID: 171061505f



Client: Kevin Paulsrud		Location / Address: 13027 Red Elm Ridge									
Soil parent material(s): (Check all that apply) ☐ Outwash ☐ Lacustrine ☐ Loess ☒ Till ☐ Alluvium ☐ Bedrock ☐ Organic Matter											
Landscape Position: (check one) ☐ Summit ☐ Shoulder ☒ Back/Side Slope ☐ Foot Slope ☐ Toe Slope Slope shape Linear, Linear											
Vegetation: Lawn		Soil survey map units:		Slope %:		Elevation:					
Weather Conditions/Time of Day:		Sunny, morning		Date:		06/05/23					
Observation #/Location:		Soil Boring #2 Observation Type: Auger									
Depth (in)	Texture	Rock Frag. %	Matrix Color(s)	Mottle Color(s)	Redox Kind(s)	Indicator(s)	Shape	Grade	Consistence		
0-6	Sandy loam	<35%	10YR 2/1				Granular	Weak	Friable		
6-20	Sandy loam	<35%	10YR 3/3				Granular	Weak	Friable		
20-26	Gravelly sand	<35%	10YR 4/3				Single grain	Structureless	Loose		
26-30	Clay loam	<35%	10YR 3/2				Blocky	Moderate	Friable		
30+	Clay loam	<35%	10YR 3/2	10YR 5/8	Concentrations	SZ	Blocky	Moderate	Friable		
Comments Soil boring #2 was 8" higher in elevation than soil boring #1											

Kevin Paulsrud

Ohm Excavating LLC #4034

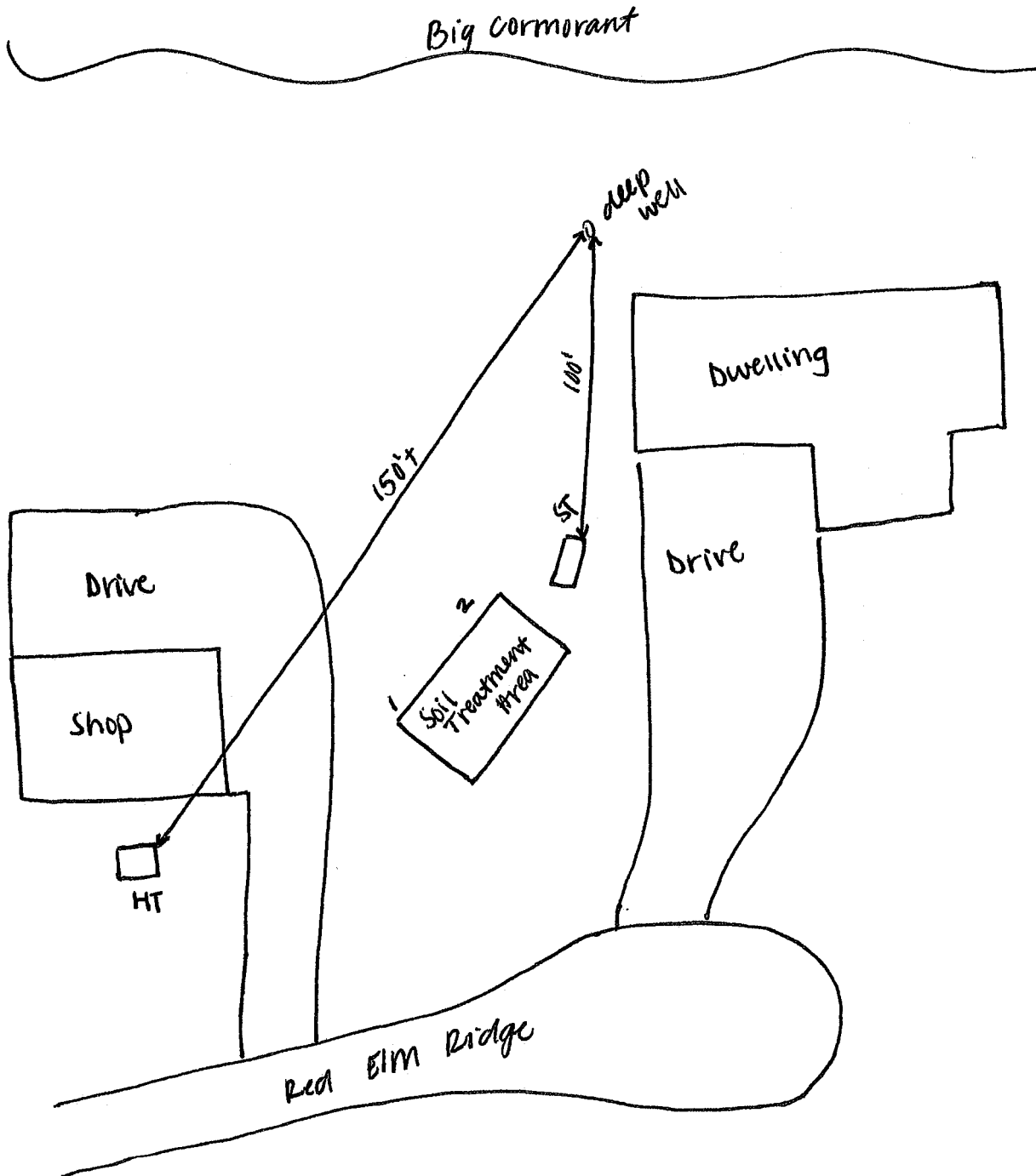
13027 Red Elm Ridge

171061505

6/5/2023

Oliver #1929

N →





171061505-2023



Becker County Planning & Zoning
915 Lake Ave
Detroit Lakes, MN 56501
(218) 846-7314
www.co.becker.mn.us

Certificate of Compliance

Inspection Report - Permit #: SS2023-1802

Owner & Property Information

Owner Name:	KATHLEEN MARIE MEAGHER TRUST	Site Address:	13027 RED ELM RIDGE
Mailing Address:	KATHLEEN MARIE MEAGHER TRUST 2103 44TH AVE S GRAND FORKS ND 58201	Township - Sec/Twp/Rng:	LAKE EUNICE - 18/138/042
Parcel #:	171061505	Legal Description:	Block 001 of RED ELM RIDGE 138 42 LOTS 4 & 5 REF: 17.1061.504
Secondary Parcel #:		Designer:	Ohm Excavating, L4032 (Chris Ohm)
		Installer:	Ohm Excavating LLC, L4034 (Chris Ohm)

Inspector Verified Specifications

Insp- Effluent Screen Installed:	No	Insp- Tank Nbr/Size:	4/Four 1500 gallon tanks
Insp- Alarm Required:	Yes	Insp- Drainfield Type:	No Drainfield
Insp- Lift Pump in System:	No	Insp- Drainfield Size:	
Insp- Number of Bedrooms:	5	Insp- Soil Verification:	#1:N/A #2:N/A #3:N/A

Inspector Verified Setbacks

Insp- Tank Dist to Road	75	Insp- Drainfield Dist to Road	
Insp- Tank Dist to Nearest Prop Line	50+	Insp- Drainfield Dist to Nearest Prop Line	
Insp- Tank Dist to Nearest Structure	75	Insp- Drainfield Dist to Nearest Structure	
Insp- Tank Dist to Well	120+	Insp- Drainfield Dist to Well	
Insp- Tank Dist to OHW	200+	Insp- Drainfield Dist to OHW	
Insp- Tank Dist to Pond/Wetland		Insp- Drainfield Dist to Pond/Wetland	
Insp- Tank Dist to Pressure Line		Insp- Drainfield Dist to Pressure Line	

Certificate of Compliance

(Yes) Certificate is hereby granted based upon the application, addendum from, plans, specifications and all other supporting data. With proper maintenance, this system can be expected to function satisfactory, however this is not a guarantee.

Certification Date: 08/16/2023

Zoning Office Signature:

Denise Gubrud - ISTS Inspector

* Certificate of Compliance is not valid unless signed by a Registered Qualified Employee *

Field Review Form

Permit # SS2023-1802

Property and Owner

Owner: KATHLEEN MARIE MEAGHER TRUST

Parcel Number: 171061505

Site Address: 13027 RED ELM RIDGE

Secondary Parcel:

Home Information

Does the structure contain any of the following elements?

Designer submitted

Inspector verified

Garbage disposal: No
Dishwasher:
Grinder pump:
Lift pump in bsmt:

Garbage disposal? Y ☒
Dishwasher? Y ☒
Grinder pump? Y ☒
Lift pump in basement? Y ☒

Number of bedrooms: 5

Review - Number of bedrooms:

Effluent screen

Effluent screen installed? Y ☒ N ☒ Mfr:

Alarm: Yes Type: Wi-Fi

Review - Alarm? Y ☒ N ☒ Type & Mfr: Wi-Fi

Lift pump in system: No

Review - Lift pump in system? Y ☒ N ☒ Mfr:

Component Information

Tank size: 1500 gls each - 4 Infiltrator Tanks - 6000 gallons total

Review - Tank nbr: 4 size: 1500 Mfr: Infiltrator

Drainfield type:

Review - Drainfield type:

Drainfield size: Full size -
Reduced/warr. size -

Review - Drainfield status: none installed / next spring
Review - Drainfield size:

Absorption area size:

Review - Absorption area size:

Chamber type/num:
Trench sqft/chamber -

Review - Chamber type:
Review - Trench sqft/chamber: Num:

Drainfield rock depth:

Review - Rock depth:

Soil Verification

Vertical separation verified

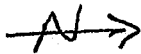
Boring #1:
Boring #2: Holding tanks
Boring #3:

Setback Verification

Distance to...	Designer submitted		Inspector verified	
	Tank	Drainfield	Tank	Drainfield
Road	75 ft	N/A	75	X
Nearest prop line	50 ft	N/A	50 ft	
Nearest structure	75 ft	N/A	75	
Well	130 ft	N/A	120 ft	
OHW	210 ft	N/A	200 ft	
Pond/Wetland	N/A	N/A		
Pressure line	N/A	N/A		

Date System Installed: 8/16/2023 Installer: Chris Chm

Inspector: Denise Gubrud



KATHLEEN MARIE MEASURA TRUST
13027 Red Elm Ridge

#171061505 1802

BIG CORMORANT LAKE

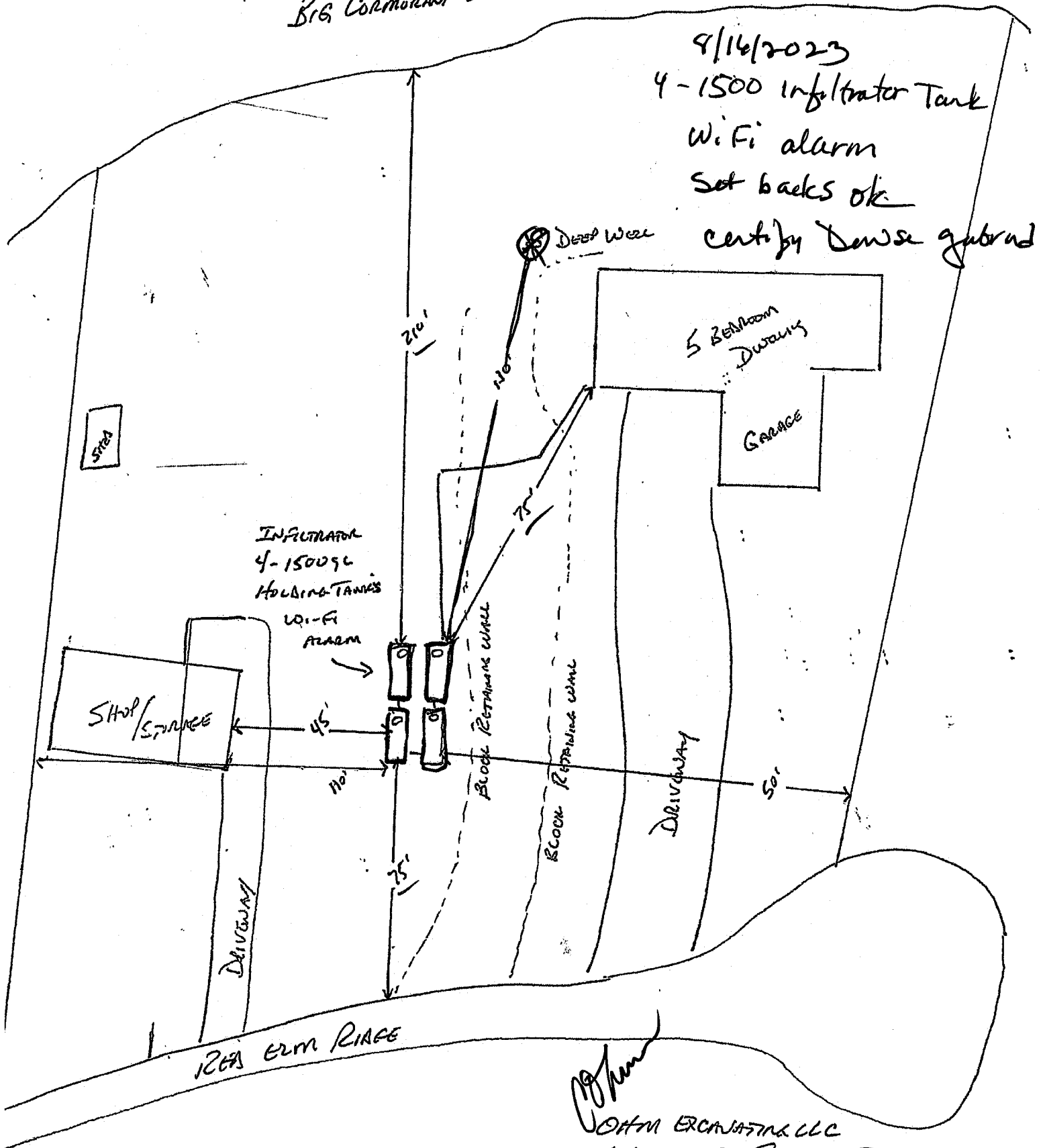
9/16/2023

4-1500 Infiltrator Tank

WiFi alarm

Set backs ok

cert by Denise gabard



OTM
OTM EXCAVATING LLC
#4034 Church



Design Summary Page

v 03.15.2023

1. PROJECT INFORMATION

Property Owner/Client: Kathleen Marie Meacher Trust

Project ID: 171061505

Site Address: 13027 Red Elm Ridge

Date: 08/03/23

Email Address: jerryeagher04@gmail.com

Phone: 701-610-1015

2. DESIGN FLOW & WASTE STRENGTH

Attach waste strength data/estimated strength for Other Establishments

Design Flow: 750 GPD

Anticipated Waste Type: Residential

BOD: 170 mg/L TSS: 60 mg/L Oil & Grease: 25 mg/L

Treatment Level: C Select Treatment Level C for residential septic tank effluent

3. HOLDING TANK SIZING

Minimum Capacity: Residential = 1000 gal or 400 gal/bedroom, Other Establishment = Design Flow x 5.0, Minimum size 1000 gallons

Code Minimum Holding Tank Capacity: 2000 Gallons with 1 Tanks or Compartments

Recommended Holding Tank Capacity: 6000 Gallons with 4 Tanks or Compartments

Type of High Level Alarm: Wi-Fi notification (Set @ 75% tank capacity)

Comments: Signals both homeowner and septic maintainer

4. SEPTIC TANK SIZING

A. Residential dwellings:

Number of Bedrooms (Residential): 5

Code Minimum Septic Tank Capacity: Gallons with Tanks or Compartments

Recommended Septic Tank Capacity: Gallons with Tanks or Compartments

Effluent Screen & Alarm (Y/N): Model/Type:

B. Other Establishments:

Waste received by: GPD x Days Hyd. Retention Time

Code Minimum Septic Tank Capacity: Gallons with Tanks or Compartments

Recommended Septic Tank Capacity: Gallons with Tanks or Compartments

Effluent Screen & Alarm (Y/N): Model/Type:

* Other Establishments Require Department of Labor and Industry Approval and Inspection for Building Sewer *

5. PUMP TANK SIZING

Soil Treatment Dosing Tank

Pump Tank Capacity (Minimum): Gal

Pump Tank Capacity (Recommended): Gal

Pump Req: GPM Total Head ft

Supply Pipe Dia. in Dose Vol: gal

Other Component Dosing Tank:

Pump Tank Capacity (Minimum): Gal

Pump Tank Capacity (Recommended): Gal

Pump Req: GPM Total Head ft

Supply Pipe Dia. in Dose Vol: Gal

* Flow measurement device must be incorporated for any system with a pump: Elapsed Time Meter and/or Event Counter *



Design Summary Page

6. SYSTEM AND DISTRIBUTION TYPE		Project ID: 171061505
Soil Treatment Type:	Distribution Type:	
Elevation Benchmark: ft	Benchmark Location:	
MPCA System Type:	Distribution Media:	
Type III/IV/V Details:		

7. SITE EVALUATION SUMMARY:		
Describe Limiting Condition:		
Layers with >35% Rock Fragments? (yes/no) If yes, describe below: % rock and layer thickness, amount of soil credit and any additional information for addressing the rock fragments in this design.		
Note:		
Limiting Condition: inches	Depth ft	Elevation of Limiting Condition ft <i>Critical for system compliance</i>
Minimum Req'd Separation: inches	Depth ft	Elevation ft <i>Distribution Elevation > Code Max Depth</i>
Code Max System Depth*: inches	Depth ft	Elevation ft
*This is the maximum depth to the bottom of the distribution media for required separation. Negative Depth (ft) requires a mound.		
Designed Distribution Elevation: ft	Minimum Sand Depth: inches	
A. Soil Texture: C. Soil Hyd. Loading Rate: GPD/ft² E. Contour Loading Rate: F. Measured Land Slope: % B. Organic Loading Rate (optional): lbs/sq.ft/day 0 D. Percolation Rate: MPI Note: Note: Comments:		

8. SOIL TREATMENT AREA DESIGN SUMMARY		
Trench:		
Dispersal Area sq.ft	Sidewall Depth in	Trench Width ft
Total Lineal Feet ft	No. of Trenches	Code Max. Trench Depth in
Contour Loading Rate ft	Minimum Length ft	Designed Trench Depth in
Bed:		
Dispersal Area sq.ft	Sidewall Depth in	Maximum Bed Depth in
Bed Width ft	Bed Length ft	Designed Bed Depth in
Mound:		
Dispersal Area sq.ft	Bed Length ft	Bed Width ft
Absorption Width ft	Clean Sand Lift ft	Berm Width (0-1%) ft
Upslope Berm Width ft	Downslope Berm ft	Endslope Berm Width ft
Total System Length ft	System Width ft	Contour Loading Rate gal/ft



Design Summary Page

Project ID: 171061505

At-Grade:

Dispersal Area sq.ft Bed Length ft Bed Width ft
Upslope Berm ft Downslope Berm ft Finished Height ft
System Length ft Endslope Berm ft System Width ft

Level & Equal Pressure Distribution Soil Treatment Area

No. of Laterals Lateral Diameter in Lateral Spacing ft
Perforation Spacing ft Perforation Diameter in Drainback Volume gal
Min Dose Volume gal Max Dose Volume gal Total Dosing Volume gal

Non-Level and Unequal Pressure Distribution Soil Treatment Area

	Elevation (ft)	Pipe Size (in)	Pipe Volume (gal/ft)	Pipe Length (ft)	Perf Size (in)	Spacing (ft)	Spacing (in)	Minimum Dose Volume gal
Lateral 1								
Lateral 2								
Lateral 3								
Lateral 4								
Lateral 5								
Lateral 6								
								Maximum Dose Volume gal
								Total Dosing Volume gal

9. Organic Loading and Additional Info for At-Risk, HSW or Type IV Design

Organic Loading to Soil Treatment

A. Starting BOD Concentration = Design Flow X 0.7 X Starting BOD (mg/L) X 8.35 ÷ 1,000,000
 gpd X mg/L X 8.35 ÷ 1,000,000 = lbs. BOD/day (Organic Loading Design)

B. Organic Loading to Soil Treatment Area: (enter loading value in 7B)
 mg/L X gpd X 0.7 X 8.35 ÷ 1,000,000 ÷ sq.ft = lbs./day/sqft

HSW Technology Strength Reduction

A. Starting BOD Concentration = Design Flow X Starting BOD (mg/L) X 8.35 ÷ 1,000,000
 gpd X mg/L X 8.35 ÷ 1,000,000 = lbs. BOD/day (HSW Technology Design)

B. Target BOD Concentration = Design Flow X Target BOD (mg/L) X 8.35 ÷ 1,000,000
 gpd X mg/L X 8.35 ÷ 1,000,000 = lbs. BOD/day (HSW Technology Design)

Lbs. BOD To Be Removed: lbs. BOD/day (HSW Technology Design)

Pretreatment Technology: *Must Meet or Exceed Target

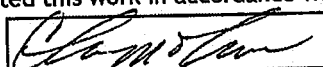
Disinfection Technology: *Required for Levels A & B

10. Comments/Special Design Considerations:

Infiltrator Tanks (1500 gallons each) total of 4 tanks to be installed

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

Ohm Excavating LLC / Chris Ohm
(Designer)


(Signature)

L4034/C1138
(License #)

8/3/2023
(Date)



Septic System Management Plan for Holding Tank Systems

The goal of a septic system is to protect human health and the environment by properly treating wastewater before returning it to the environment. Your holding tank system is designed to store your used water before it is recycled back into our lakes, streams and groundwater.

This **management plan** will identify the operation and maintenance activities necessary to ensure compliance with applicable rules and regulations. Some of these activities must be performed by you, the homeowner. Other tasks must be performed by a licensed septic maintainer. However, it is **YOUR** responsibility to make sure all tasks get accomplished in a timely manner.

The University of Minnesota's *Septic System Owner's Guide* contains additional tips and recommendations designed to extend the effective life of your system and save you money over time.

Proper septic system design, installation, operation and maintenance means safe and clean water!

Property Owner: Kathleen Marie Meagher Trust

Property Address: 13027 Red Elm Ridge

Property ID: 171061505

System Designer: Ohm Excavating LLC

License #: 4034

System Installer: Ohm Excavating LLC

License #: 4034

Service Provider/Maintainer: Ohm Excavating LLC

Phone: 218-439-6428

Permitting Authority: Becker County

Phone: 218-846-7314

Permit #:

Date Inspected:

Keep this Management Plan with your Septic System Owner's Guide. The Septic System Owner's Guide includes a folder to hold maintenance records including pumping, inspection and evaluation reports. Ask your septic professional to also:

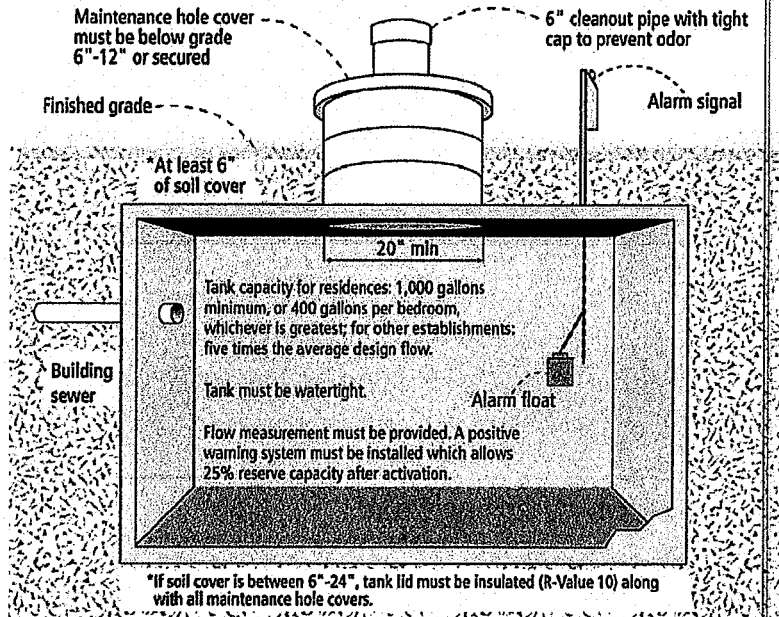
- Attach permit information, designer drawings and as-builts of your system, if they are available.
- Keep copies of all pumping records and other maintenance and repair invoices with this document.
- Review this document with your maintenance professional at each visit; discuss any changes in product use, activities, or water-use appliances.

For a copy of the *Septic System Owner's Guide*, call 1-800-876-8636 or go to <http://shop.extension.umn.edu/>

<http://septic.umn.edu>



Your Holding Tank



Dwelling Type	Well Construction
Number of bedrooms: <u>5</u>	Well depth (ft): <u>Deep</u>
System capacity/ design flow (gpd): <u>750</u>	☐ Cased well Casing depth: _____
Anticipated average daily flow (gpd): <u><750</u>	☐ Other (specify): _____
Comments _____	Distance from septic (ft): <u>130 ft</u>
In-home business? <u> </u> What type? <u> </u>	Is the well on the design drawing? ☒ Y ☐ N
Number of occupants _____	

Holding Tank	
☐ One tank: Tank volume: _____ gallons ☒ Two tanks: Tank volume: <u>6000</u> gallons ☐ Tank is constructed of <u>Infiltrator - Poly</u>	☐ Flow measurement device: _____ ☐ Location: _____ ☐ Alarm <u> </u> visual ☒ audible ☐ Reserve %: <u>50% of final tank</u>
☐ Service contract held by: _____ ☐ Service contract is attached to this management plan	

4 TANKS



Homeowner Management Tasks

These operation and maintenance activities are your responsibility. Use the chart on page 6 to track your activities.

Identify the service intervals recommended by your system designer and your local government. The tank assessment for your system will be the **shortest interval of these three intervals**. Your pumper/maintainer will determine if your tank needs to be pumped.

Tank capacity ÷ (# of occupants X 50 Gallons/day) = # of days between cleaning

OR

Within 24 hours of alarm signal

System Designer: check every 365 days

Local Government: check every 365 days

My tank needs to be emptied
every as needed days

Seasonally

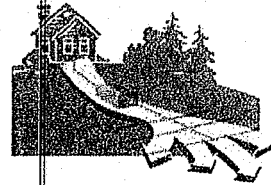
- ☐ Monitor alarm daily – make sure the alarm has not signaled. Alarms signal when your holding tank is nearly full; contact your maintainer.
- ☐ Measure and note your average daily water usage on page 5. Conserving water saves you money!
- ☐ Leaks. Check (listen, look) for leaks in toilets and dripping faucets. Repair leaks promptly.

Annually

- ☐ Establish a contract for tank cleaning services with a state licensed maintenance business.
- ☐ Caps. Make sure that all caps and lids are intact and in place. Inspect for damaged caps at least every fall. Fix or replace damaged caps before winter to help prevent freezing issues.
- ☐ Water conditioning devices. See Page 5 for a list of devices. When possible, discharge clear water sources to another location. Program the recharge frequency based on water demand (gallons) rather than time (days). Recharging too frequently will result in increased pumping costs.
- ☐ Review your water usage rate. Review the Water Use Appliance chart on Page 5. Discuss any major changes with your pumper/maintainer.

During each visit by a pumper/maintainer

- ☐ Ask if your pumper/maintainer is licensed in Minnesota.
- ☐ Make sure that your pumper/maintainer has clear access to the holding tank and completely empties the tank
- ☐ Ask your pumper/maintainer to accomplish the tasks listed on the Professional Tasks on Page 4.



Professional Management Tasks

These are the operation and maintenance activities that a pumper/maintainer performs to help ensure long-term performance of your system. Professionals should refer to the O/M Manual for detailed checklists for tanks, pumps, alarms and other components. Call 800-322-8642 for more details.

- ☐ Written record provided to homeowner after each visit.

Plumbing/Source of Wastewater

- ☐ Review the Water Use Appliance Chart on Page 5 with homeowner. Discuss any changes in water use and the impact those changes may have on the frequency of maintenance.
- ☐ Review and document water usage rates with homeowner.

Holding Tanks

- ☐ *Maintenance hole lid.* A riser is recommended if the lid is not accessible from the ground surface. Insulate the riser cover for frost protection.
- ☐ *Liquid level.* Check to make sure the tank is not leaking.
- ☐ *Inspection pipes.* Replace damaged caps.
- ☐ *Alarm.* Verify that the alarm works and that there is at least 25% reserve capacity.
- ☐ *End of year seasonal property pumping.* Remind homeowner of most frequent causes of tank and building sewer freeze-ups. Ensure that there are no "micro-sources" of water such as a high efficiency furnace or other dripping devices. Determine a logical winter water use plan that will not result in need for emergency visit(s).

All other components – inspect as listed here:

Wi-Fi Alarm System. 4 Infiltrator Tanks for a capacity of 6,000 gallons



Water-Use Appliances and Equipment in the Home

Appliance	Impacts on Holding Tank	Management Tips
Garbage disposal	• Uses water and increases pumping frequency and expense.	• Use of a garbage disposal is not recommended. • Minimize garbage disposal use. Compost instead.
Washing machine	• Uses water and increases pumping frequency and expense.	• Choose a front-loader or water-saving top-loader, these units use less water than older models. • Wash only full loads. • Do laundry off site.
Dishwasher	• Uses water and increases pumping frequency and expense.	• Wash only full loads.
Large bathtub (whirlpool)	• Uses water and increases pumping frequency and expense.	• Take short showers to conserve water.
Clear Water Uses	Impacts on Holding Tank	Management Tips
High-efficiency furnace	• Drip may result in frozen pipes during cold weather.	• Re-route water into a sump pump or directly out of the house. Do not route furnace recharge to your holding tank.
Water softener Iron filter Reverse osmosis	• Uses water and increases pumping frequency and expense.	• These sources produce water that is not sewage and should not go into your holding tank. • Reroute water from these sources to another outlet, such as a dry well, drain tile or old drainfield.
Surface drainage Footing drains	• Uses water and increases pumping frequency and expense.	• When replacing, consider using a demand-based recharge vs. a time-based recharge. • Check valves to ensure proper operation; have unit serviced per manufacturer directions

Maintenance Log

Track maintenance activities here for easy reference. See list of management tasks on pages 3 and 4.

Activity	Date accomplished/measured water usage									
<i>Check daily for a period of time and weekly once average use is determined:</i>										
Water usage rate (gallons per day)										
Leaks: check for plumbing leaks										
<i>Annually:</i>										
Establish and maintain contract for holding tank pumping services										
Water use appliances – review use										



Water Meter Reading and Tank Evacuation Schedule			
Date	Water Meter Reading (in gallons)	Tank Contents Removed?	Total Gallons Removed

Notes:

Mitigation/corrective action plan:

"As the owner of this SSTS, 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 this Management Plan are not met, I will promptly notify the permitting authority and take necessary corrective actions."

Property Owner Signature: And E. H. H. Date 8/3/2023

Management Plan Prepared By: CHRIS OTTM Certification # 1153

Permitting Authority: Becker County



Becker County Planning & Zoning
915 Lake Ave
Detroit Lakes, MN 56501
(218) 846-7314
www.co.becker.mn.us

8/16/2023
Ohm 11:00

Septic Permit

Permit #: SS2023-1802

Owner & Property Information

Owner Name:	KATHLEEN MARIE MEAGHER TRUST	Parcel #:	171061505
Mailing Address:	KATHLEEN MARIE MEAGHER TRUST 2103 44TH AVE S GRAND FORKS ND 58201	Secondary Parcel #:	
Phone #:	701-610-1015	Site Address:	13027 RED ELM RIDGE
Lake/River(1000 /300):	Yes	Township - Sec/Twp/Rng:	LAKE EUNICE - 18/138/042
Lake/River Name:	Big Cormorant (Lake Eunice & Cormorant) [RD]	Designer:	Ohm Excavating, L4032 (Chris Ohm)
Pond/Wetland(50):	No	Installer:	Ohm Excavating LLC, L4034 (Chris Ohm)

Specifications

Tank to be Installed:	Holding Tank	Type of Drainfield:	
Total # Tanks Installed:	4	Full Size of Drainfield:	
System Status:	Replacement System	Reduced/Warrantied Size:	
System Serves:	Full-Time Dwelling	Absorbition Area Size:	
Number of Bedrooms:	5	Rock Depth:	
Design Flow/GPD:	750	Chamber Type and Number:	
Garbage Disposal?	No	Chamber Trench SqFt/Chamber:	
Size of Lift Pump:		Is System Pressurized?	
Size of Lift Line:		Alarm?	Yes
Soil Sizing Factor:		Type of Alarm:	Wi-Fi

Setbacks

Road Type:	Public / Township	Right of Way Marked:	Yes
Tank Dist to Road:	75 ft	Drainfield Dist to Road:	N/A
Tank Dist to Closest Prop Line:	50 ft	Drainfield Dist to Closest Prop Line:	50 ft
Tank Dist to Nearest Structure:	75 ft	Drainfield Dist to Nearest Structure:	N/A
Tank Dist to Well:	130 ft	Drainfield Dist to Well:	N/A
Tank Dist to OHW:	210 ft	Drainfield Dist to OHW:	N/A
Tank Dist to Pond/Wetland:	N/A	Drainfield Dist to Pond/Wetland:	N/A
Tank Dist to Pressure Line:	N/A	Drainfield Dist to Pressure Line:	N/A

Other Information

Date Approved:	08/04/2023
Permit Fee:	\$225.00
Receipt Number:	253227322
Date Paid:	08/07/2023 6:09 AM CDT
Notes:	Install 4 - 1500 gallon holding tanks. WiFi alarm

Zoning Office Signature:

Denise Gubrud

PERMIT MUST BE POSTED AT JOB SITE. PERMIT EXPIRES ONE YEAR FROM DATE PAID.

**** Please schedule for inspection prior to installation! ****