ENVIRONMENTAL SYSTEMS LLC.

2358 HWY# 23
MORA MN. 55051
Ph. 320-241-7036

EXISTING SITE DESIGN (LIMITED SPACE)

07/26/2024

LOCATION: 20749 363rd Lane McGregor MN
PID: 30-0-062300 & 30-0-62400
OWNER: MILLE LACS BAND OF OJIBWE

SYSTEM TYPE: TYPE III MOUND

DESIGN FLOW: BEDROOM DESIGNED @ GPD

TREATMENT AREA: 380 SQ.FT.

SLOPE: 2 %

SEPTIC TANK: 2500 GAL. SPLIT/COMBO

PUMP TANK: BROWN -WILBERT 1000 GAL.

PUMP: GOULDS WE 511H

FLOW METER: SJE RHOMBUS
MODEL# EZP11W6COH1JV8G10EP17A22C

KEVIN HERWIG M.P.C.A. 3945

MOUND SYSTEM
Type III
ON EXISTING SITE

The existing mound is to be totally removed and disposed of offsite.

Estimated elevation of existing rough up is 97.90 on the South side and 97.70 on the North side of where the new rock bed will be.
A thin layer of sand should be left on top of the old rough up to protect it during the drying period.
Care needs to be taken during removal to protect existing rough up under existing mound.

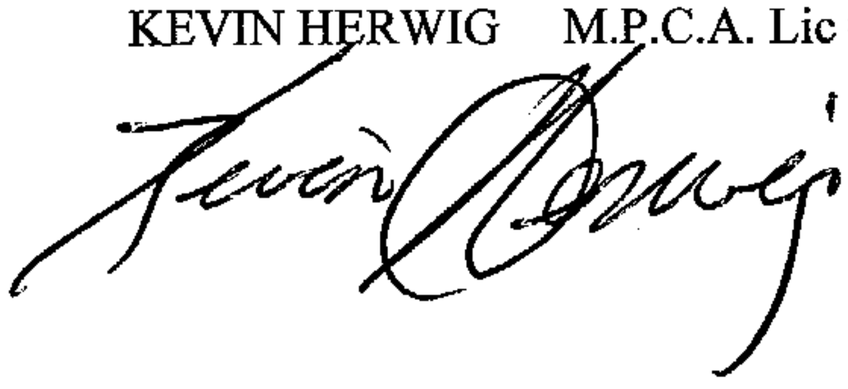
Elevations may vary a minimum of 3' of washed sand is required above the highest elevation in the rock bed area.
New washed sand will be added to achieve a minimum of 3' on upslope side of rock bed.

It is crucial that the removable area be allowed to dry before any construction commences!

The existing septic tank is to be used as a holding tank during the construction and drying process.

The holding tank must be maintained and pumped for the entire time of the mound construction.

KEVIN HERWIG M.P.C.A. Lic # 3945



ENVIRONMENTAL SYSTEMS LLC.

DESIGN-INSPECTION

2358 HYY#23 MORA MN. 55051

07/26/2024

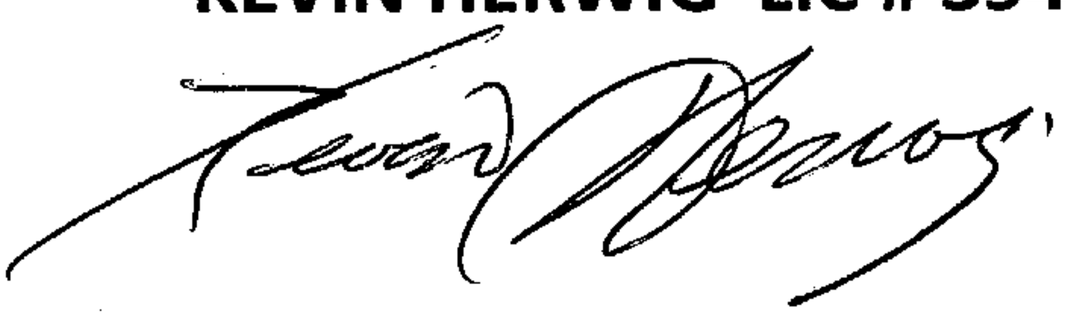
Ph. 320-679-4031

CONSTRUCTION NOTES

PRODUCT BRAND & MODEL LISTED IN DESIGN MUST BE USED: BROWN-WILBERT 2500 SPLIT SEPTIC TANK
BROWN-WILBERT 1000 PUMP TANK
*****PUMP CHAMBER AND PUMP SETTINGS WILL NOT BE CORRECT IF OTHER PRODUCTS ARE USED.**
GOULDS WE511 PUMP, EFFLUENT FILTER POLYLOK PL-122 W/ALARM A TWO-WAY CLEANOUT IS TO BE INSTALLED 1 FOOT OUTSIDE HOME
FLOW CONTROL, METER, AND ALARM: SJE RHOMBUS EZP11W6COH1JV8G10EP17A22C

IT IS THE DESIGNER'S DISCRETION TO APPROVE OR DISAPPROVE SUBSTITUTIONS.THE INSTALLER WILL BE RESPONSIBLE FOR DESIGN CHANGE FEE

KEVIN HERWIG LIC # 3945



Preliminary & Field Evaluation Form

Owner Information

Date	7/26/2024	Sec / Twp / Rng	20-47-23
Parcel ID	30-0-062300 & 30-0-062400	LUG (county, city, township)	AITKIN COUNTY
Property Owner:	Mille Lacs Band of Ojibwe	Owners address (if different)	
Property Address:	20749 363rd McGREGOR MN.		
City / State / Zip:	McGREGOR MN.		

Flow Information and Waste Type / Strength

Estimated Design flow: 450

Comments:

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

Site Information

Existing & proposed lot improvements located (see site map)	☑ Yes	☐ No	Well casing depth	>55'
Easements on lot located (see site map)	☐ Yes	☑ No	Drainfield w/in 100' of residential well	☐ Yes ☑ No
Property lines determined (see site map)	☑ Yes	☐ No	Site w/in 200' of transient noncommunity water supply (TNCWS)	☐ Yes ☑ No
Req'd setbacks determined (see site map)	☑ Yes	☐ No	Site w/in an inner wellhead mgmt zone (CWS/NTNCWS)	☐ Yes ☑ No
Utilities located & identified (gopher state one call)	☐ Yes	☑ No	Buried water supply pipe w/in 50' of system	☐ Yes ☑ No
Access for system maintenance (shown on site map)	☑ Yes	☐ No	Site located in Shoreland (w/in 1000' of lake, 300' of river)	☐ Yes ☑ No
Soil treatment area protected	☑ Yes	☐ No	Site map prepared with previous items included	☑ Yes ☐ No

Construction related issues

Soil Information

Original soils ☐ Yes ☐ No

Soil logs completed and attached ☐ Yes ☐ No

Soil loading rate (gpd/ft^2) 0.60

Depth/elev to SHWT 0.00

Depth to system bottom maximum (or elev minimum) -36.00

Depth/elev to standing water (if applicable) _____

Depth/elev to bedrock (if applicable) _____

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

Differences between soil survey and field evaluation (if applicable) VERY CLOSE

Evidence of site:

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

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

Percolation rate (if applicable) _____

Flooding or run-on potential ☑ Yes ☐ No
NEXT TO ROAD DITCH

Flood elevation (if applicable) _____

Elevation of ordinary high water level (if applicable) _____

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

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

Designer Signature

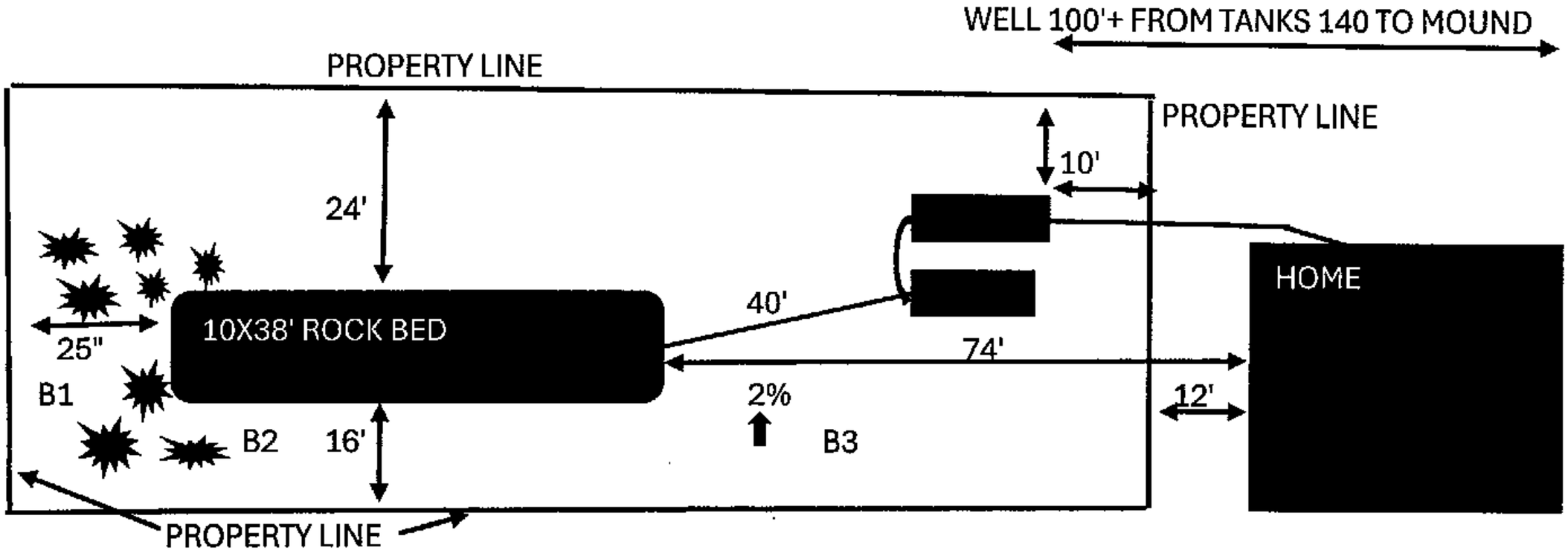
ENVIRONMENTAL SYSTEMS
Company

3945
License #

NORTH

NOT TO SCALE

**** EXISTING MOUND TO BE REMOVED EXISTING TANK TO BE REMOVED



EG=DGE OF BERM:
ON UPSLOPE WILL BE 2' OFF PROPERTY LINE
ON DOWNSLOPE WILL BE 2' OFF PROPERTY LINE
ON WEST ENDSLOPE WILL BE 10' OFF PROPERTY LINE
ON EAST ENDSLOPE WILL BE 47' OFF PROPERTY LINE

ROCK BED:

NW 97.70
SW 97.90
NE 97.70 (MOUND REMOVAL AREA GRADE TO 97.70
SE 97.90 (MOUND REMOVAL AREA GRADE TO 97.90

TREES SEVERAL TREES TO REMOVE

CONSTRUCTION NOTES

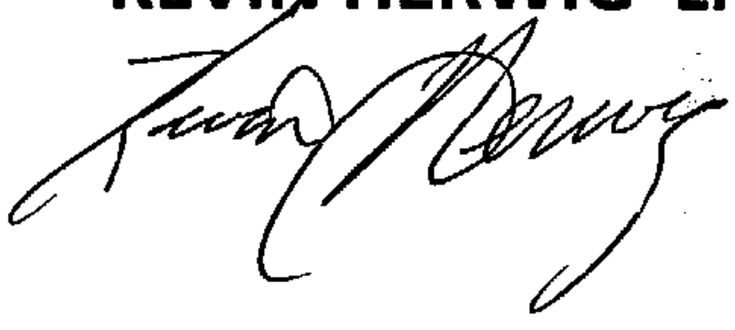
PRODUCT BRAND & MODEL LISTED IN DESIGN MUST BE USED. BROWN-WILBERT TANKS – SEPTIC 2500 GAL. COMBO WITH POLYLOK PL-122 FILTER AND ALARM, PUMP TANK 1000 GAL. BROWN-WIFLBERT PUMP – GOULDS WE511H ** PUMP CHAMBER AND PUMP SETTINGS WILL NOT BE CORRECT IF OTHER PRODUCTS ARE USED. 2-WAY CLEANOUTS ARE TO BE INSTALLED 1 FOOT OUTSIDE THE HOME

SJE RHOMBUS EZPIIW6COHIJV8GI0EP17A22C CONTROL

IT IS THE DESIGNER'S DISCRETION TO APPROVE OR DISAPPROVE SUBSTITUTIONS.THE INSTALLER WILL BE RESPONSIBLE FOR DESIGN CHANGE FEE.

ALL PRODUCTS AND CONSTRUCTION PRACTICES ARE TO MEET M.P.C.A. 7080 RULE AND MILLE LACS BAND SPECIFICATION FOR SEWAGE TREATMENT SYSTEMS

KEVIN HERWIG LIC # 3945



2011 purple code

Mound Design - Aitkin county

www.SepticResource.com (vers 22.2)

Property Owner: Mille Lacs Band of Ojibwe **Date:** 7/26/2024

Site Address: 20749 363rd McGREGOR MN. **PID:** 30-0-062300 & 30-0-(

Comments: BUILDING ON THE OLD MOUND SITE (LACK OF SPACE)

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

1) 3 bedroom Type III Residential System

2) 450 GPD design flow

3) No Garbage disposal or pumped to septic

4) 1000 Gal Septic tank (code minimum) 2500 Gal Septic tank (design size / LUG req'd)
Tank options: none

5) 1.2 GPD/ft^2 mound sand loading rate contour loading rate of 12 req's a min 37.5 ft. long rockbed

6) 10.0 ft rockbed width 37.5 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 35.5 feet long 12.0 perfs / lateral 36 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 = 25 , line #8 must be less --> OK

10) 4.0 doses per day (4 minimum)

11) 113 gallons per dose (treatment volume)

12) 2.00 inch diameter laterals must be used to meet "4x pipe volume" requirement

13) 40 feet of 2.0 inch supply line leads to 7 gallons of drainback volume
(Tip: "top feed" manifold to control the drainback)

14) 120 gallons TOTAL pump out volume (treatment + drainback)

15) 14 feet vertical lift from pump to mound laterals, leads to a:

16) 27 GPM @ 20 feet of head, Pump requirement (note: >50gpm may require an extra 3-6' of head)

17) 500 gal Dose tank (code minimum) 1000 gal Dose tank (design size / LUG req'd) at 24.50 gpi
leads to a: Optional Time dosing of:

18) 4.9 inch swing on Demand float, (this delivers Average flow, =70% of Peak design flow)

4.4 min ON

19) 12 inches from bottom of tank to "Pump OFF" float

8.5 hrs OFF

20) 17 inches from bottom of tank to "Pump ON" float

12 inches to "Timer ON" float

21) 20 inches from bottom of tank to "Hi Level" float

30 inches to "Hi Level" float

22) 510 gallons reserve capacity (after High Level Alarm is activated-demand dosed)

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

24) 2 percent site slope (0-20% range) 2 (% downslope site slope, if different than upslope)

25) 0 inches, or 0.0 ft. to Redox or other limiting condition (need at least 12" to be a Type I)

Treatment zone contains 0 inches of 0% soil credit, and 0 inches of 50% soil credit. Giving a:

26) 36 inch, or 3.0 ft. Sand Lift Mound **CRITICAL FOR FUTURE CERTIFICATIONS!!!**

27) 20.0 ft.Total ABSORPTION width (with sand beyond rockbed as follows:)

28) 0.0 ft. upslope and sideslope
10.0 ft. Downslope

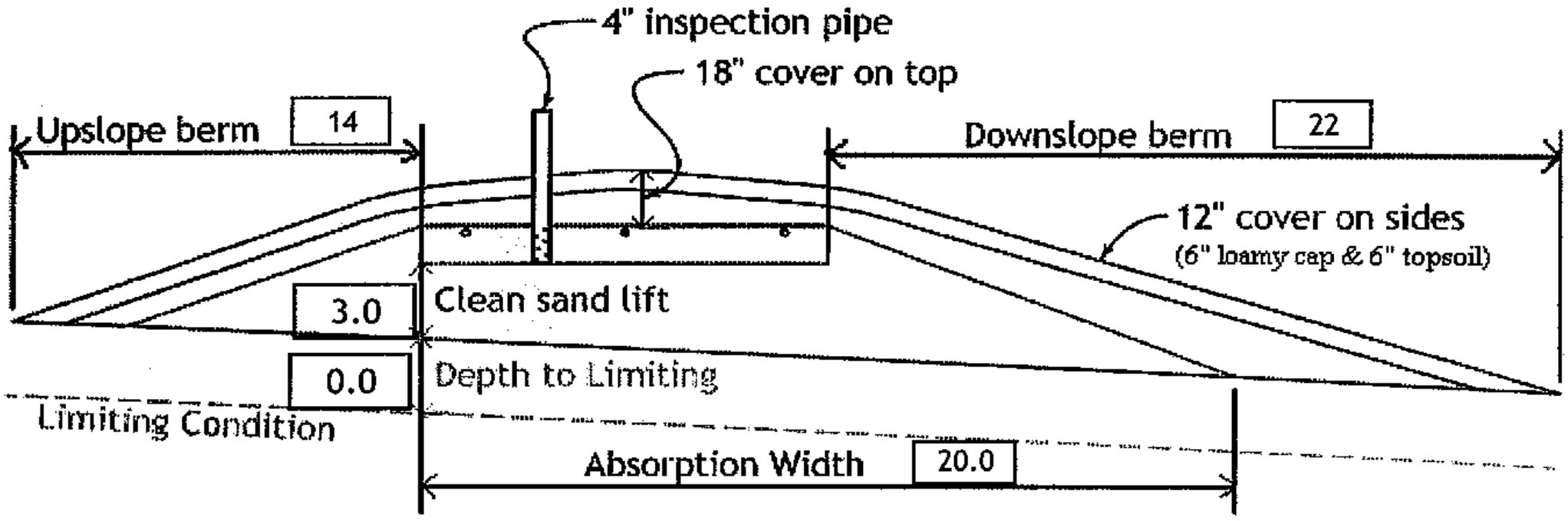
Individual slope ratios give BERM widths (topsoil beyond rockbed) of:

29) 3:1 upslope ratio 14 ft. upslope berm

30) 3:1 sideslope 15 ft. sideslope berms

31) 4:1 downslope 22 ft. downslope berm

32) Overall Dimensions: 10.0 ft. wide by 37.5 ft. long Rock bed
46 ft. wide by 68 ft. long Mound footprint



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

33) Rock Bed:
10.0 ft. by 37.5 ft. by 6 inches under pipe, plus 20% gives 13 yd³ or *1.4= 18 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)
51.6 up + 84.5 downslope + 19.6 ends + 43.1 under rock = 239 yd³ or *1.4= 334 ton
plus 20%

35) Loamy Cap:
42 ft. by 64 ft. 6" deep, plus 20% gives 60 yd³ or *1.4= 84 ton

36) Topsoil:
46 ft. by 68 ft. 6" deep, plus 20% gives 69 yd³ or *1.4= 97 ton

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

ENVIRONMENTAL SYSTEMS | 3945 | 7/26/2024

Designer Signature | Company | License# | Date

Installer Summary

2500 gallon Septic tank (minimum) Tank options: none

1000 gallon Dose tank (minimum) at 24.50 gpi

27 GPM @ 20 ft. of head, Pump required

4.9 inch swing on Demand float which translates to roughly 3.5 inches of float tether length

Optional Time dosing of:

4.4 minutes ON

8.5 hours OFF

12 inches to "timer ON" float

30 inches to "Hi level" float

17 inches from bottom of tank to "pump ON" float, or

20 inches from bottom of tank to "Hi Level Alarm" or

40 ft. of 2.0 inch supply line with end feed manifold connection

(Tip: "top feed" manifold to control drainback)

36 inch, or 3.0 ft. Sand Lift Mound

10.0 ft. wide by 37.5 ft. long Rock bed

3 laterals 2.00 inch diameter 35.5 ft. long 3.0 ft. lateral spacing

1/4" inch perfs 3.0 ft. perforation spacing

No Effluent filter & alarm

3 clean out & valve box assemblies

20.0 ft.Total sand ABSORPTION width (minimum)

0.0 ft. upslope and sideslope (sand beyond rockbed, minimum)

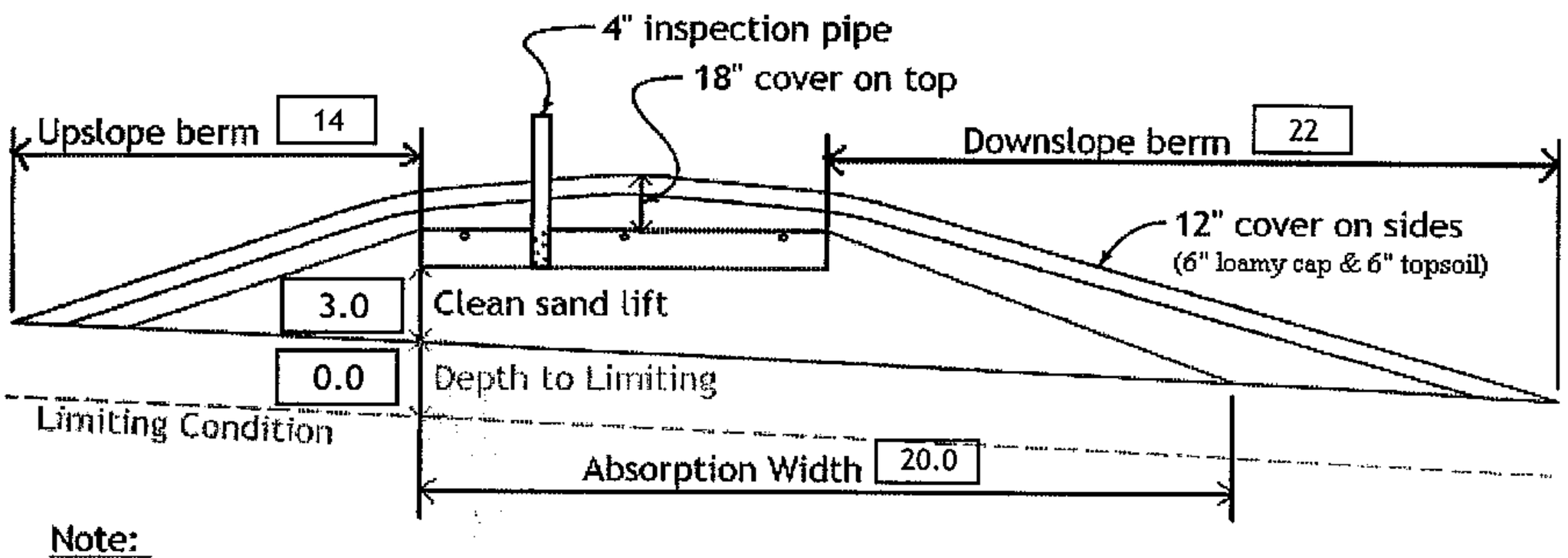
10.0 ft. Downslope (sand beyond rockbed, minimum)

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

3:1 upslope ratio 14 ft. upslope berm

3:1 sideslope 15 ft. sideslope berms

4:1 downslope 22 ft. downslope berm



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

Rock Bed:	13.0	yd^3 or *1.4=	18	ton	6 inches under pipe
Mound Sand:	239	yd^3 or *1.4=	334	ton	calculation based on 3:1/4:1 slope from top of rockbec
Loamy Cap:	60	yd^3 or *1.4=	84	ton	6" deep

Topsoil: [69] yd^3 or *1.4= [97] ton 6" deep

INSPECTOR CHECKLIST - mound

20749 363rd MCGREGOR MN.

☐ WELL setbacks: 20'- 50' to sewer line req's MDH pressure test form (5 psi for 15 min)
50' to everything 100' to drainfield 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 10' to bed,tank & sewer line. (else sewer line > 12" below)

☐ Sewer line & tank connection (no hard 90's, long sweep 90 or 2-45's, slope minimum 1" in 8' = 1%)
(no depth req's, clean out every 100', Sch 40 pipe)

☐ Septic tank and risers (water tight risers, baffles, insulated, proper depth, existing verified by pumping)
mfg_____ 2500 gallons none

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

☐ No effluent filter & alarm

☐ Dose tank, risers and piping (water tight risers, insulated, proper depth, drainback)
mfg_____ 1000 gallons

☐ dose pump _____ 27 gpm 20 head VERIFY PUMP CURVE

Optional Time dosing of:
4.4 min ON 8.5 hr OFF

☐ verify that installed "vertical lift from pump to laterals" is no more than design value of 14 feet

☐ float setting drop 4.9 inches at [24.5] gpi "DESIGNED" 3.5 inches approx float tether length
120.0 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 / Hi Level Alarm

☐ flow measurement: CT, ETM, time dosed, home water meter

☐ mound absorption area rough up

☐ mound rock dimensions 10.0 X 37.5

☐ Sand lift depth 36 inches. (Jar test : 2" sand leaves < 1/8" silt after 30 min)

☐ Absorption Sand beyond rock 0.0 upslope 10.0 downslope

☐ Bermed topsoil beyond rockbed 14 upslope 15 sideslope 22 downslope

☐ cover depth of 12-18"+ VERIFY

☐ 3 laterals (1-2' from edge of rock)

☐ 2.00 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

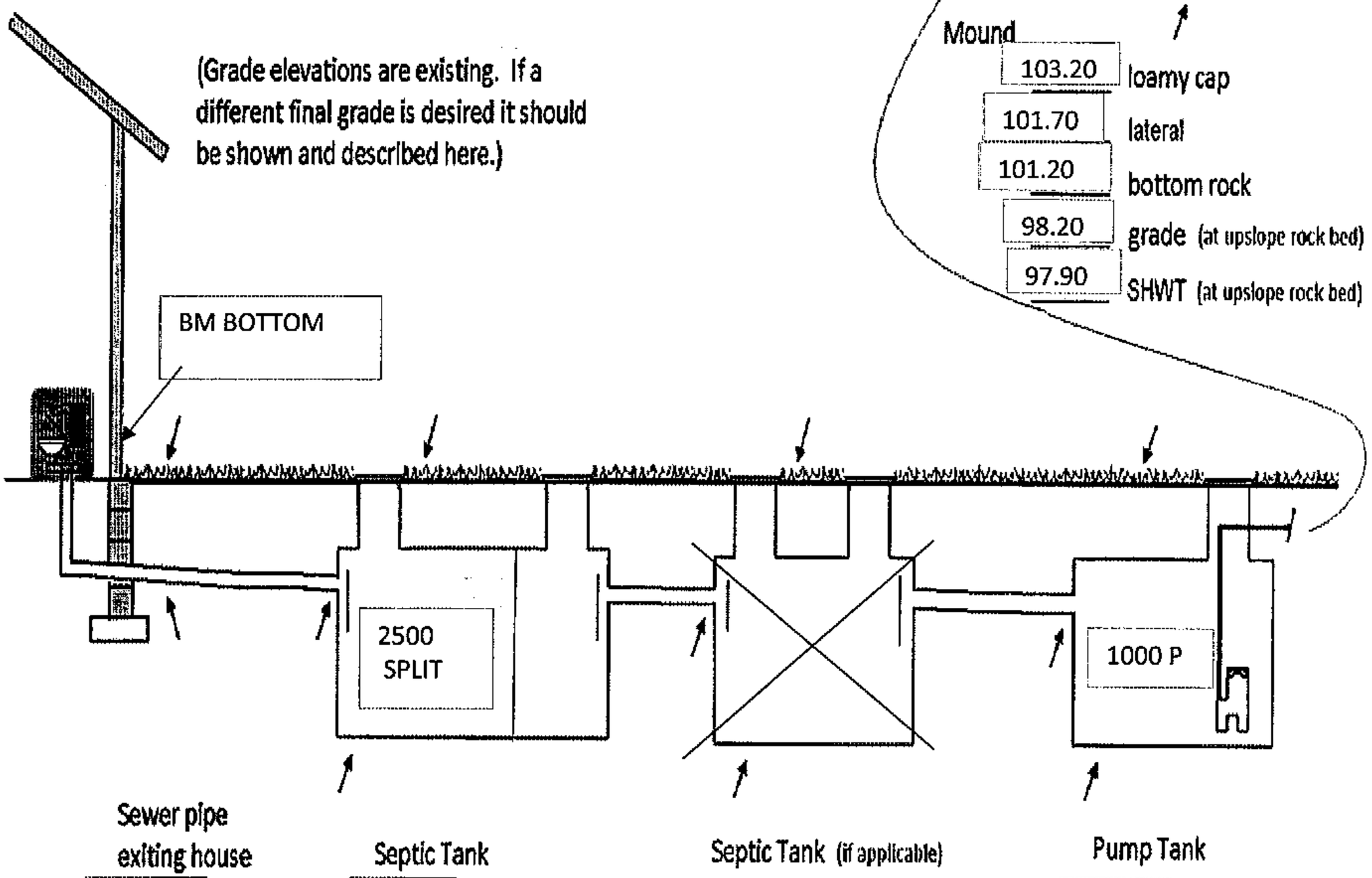
☐ monitoring plan and type _____

☐ well abandonment form - if necessary

System Elevations

100.00 benchmark BOTTOM OF SIDING

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



103.20 loamy cap

101.70 lateral

101.20 bottom rock

98.20 grade (at upslope rock bed)

97.90 SHWT (at upslope rock bed)

Sewer pipe exiting house	Septic Tank	Septic Tank (if applicable)	Pump Tank
99.10 Grade	97.60 Grade	_____ Grade	97.70 Grade
95.70 Pipe	94.10 Inlet	_____ Inlet	93.60 Inlet
	88.90 Tank bottom	_____ Tank bottom	89.59 Tank bottom

Soil Observation Log

Owner Information

Property Owner / project: Mille Lacs Band of Ojibwe Date 7/26/2024

Property Address / PID: 20749 363rd McGREGOR MN.

Soil Survey Information

☐ refer to attached soil survey

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

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

soil survey map units: 243 slope 2 % direction- downhill

Soil Log #1

☐ Boring ☑ Pit Elevation 97.7 Depth to SHWT 97.5

Depth (in)	Texture	fragment %	matrix color	redox color	consistence	grade	shape
1-3	Silt Loam	<35	10YR3/1		Friable	Weak	Granular
3-6	Sandy Loam	<35	10YR3/1	10YR5/6	Friable	Weak	Platy
6-11	Sandy Loam	<35	2.5YR5/4	10YR5/6 7.5YR4/6	Friable	Weak	Platy
11-15	Sandy Loam	<35	2.5YR5/2	10YR5/6	Friable	Weak	Platy
		<35 35 - 50 >50			loose friable firm rigid	loose weak moderate strong	single grain granular blocky prismatic platy massive

Comments:

20749 363rd McGREGOR MN. — Soil Log #2

☑ Boring ☐ Pit — Elevation 98.4 — Depth to SHWT 98.1

Depth (in)	Texture	fragment %	matrix color	redox color	consistence	grade	shape
1-2	Silt Loam	<35	10YR3/1		Friable	Weak	Granular
2-6	Sandy Loam	<35	10YR3/1	10YR5/6	Friable	Weak	Platy
6-11	Sandy Loam	<35	2.5YR5/4	10YR5/6 7.5YR4/6	Friable	Weak	Platy
11-15	Sandy Loam	<35	2.5YR5/2	10YR5/6	Friable	Weak	Platy
		<35 35 - 50 >50			loose friable firm rigid	loose weak moderate strong	single grain granular blocky prismatic platy massive

20749 363rd McGREGOR MN. — Soil Log #3

☐ Boring ☑ Pit — Elevation 98.9 — Depth to SHWT 98.2

Depth (in)	Texture	fragment %	matrix color	redox color	consistence	grade	shape
0-4	Fill	<35	10YR3/2		Friable	Weak	Granular
4-8	Loamy Sand	<35	10YR4/3		Friable	loose weak moderate strong	Granular
8-14	Sandy Loam	<35	10YR3/1	10YR5/6	Friable	Weak	Platy
14-20	Silt Loam	<35	2.5YR5/2	10YR5/6	Friable	Weak	Platy
		<35 35 - 50 >50			loose friable firm rigid	loose weak moderate strong	single grain granular blocky prismatic platy massive

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

ENVIRONMENTAL SYSTEI — 3945

Subsurface Sewage Treatment System
Operating Permit Application

Use this form to apply for an operating permit.
** Indicates required field*

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

Facility Information:

*Permittee name:	MILLE LACS BAND of OJIBWE						
*Mailing address:	43408 OoDENA DR	*City:	ONAMIA	*State:	MN	*Zip:	56359
*Email:				*Phone:			
*Parcel ID:	30-0-062300 30-0-062400						
Property address:	20749 363rd McGregor Mn.						
*System type:	TYPE III MOUND			*Treatment level:	C		
*System design flow (gpd):	450			*Residential/Commercial:	RESIDENTIAL		
*System components:	2500 SPLIT TANK, 1000 PUMP TANK, 3' SAND MOUND 10'X38' ROCK BED						

Service Provider:

*Name:		*Signed Contract:	☐ Yes ☐ No

Monitoring Requirements:

Parameter	Effluent limits	Frequency	Location
*Design flow (gpd)	450	MONTHLY	EVENT COUNTER
Average flow (gpd)			
*Ponding/Surfacing in soil treatment	NONE ALLOWED	ANNUALY	MOUNDh
$CBOD_5$ (mg/L)			
TSS (mg/L)			
FO&G (mg/L)			
Fecal Coliform bacteria (#/100mL)			
Total Nitrogen, Total Phosphorus (mg/L)			
Operational Field Tests, may include: Temperature, Dissolved Oxygen and pH			

Monitoring Requirements Comment Field:

Maintenance Requirements:

Maintenance requirements shall be performed as specified in the Management Plan as prepared by the system's Designer.

System component	Maintenance	Frequency
External grease interceptor		
*Septic tank/Trash tank	Check component functions and settings	Annually
*Pump tank and controls		
Effluent screen	Check and clean	Every three months and when pumped
Advanced treatment product		
UV light disinfection device		
*Soil treatment and dispersal		

Monitoring Protocol

Any sampling and laboratory testing procedures shall be performed in accordance with the proprietary treatment product's protocol, Standard Methods, and at a Minnesota Department of Health approved laboratory. Results shall be submitted to the permitting authority at: Aitkin County Environmental Services, 307 2nd St NW, Room 219, Aitkin, MN 56431 no later than the expiration date listed.

Contingency Plan

In the event the wastewater treatment system does not meet required performance requirements as contained in this operating permit, the owner shall notify Aitkin County Environmental Services within thirty (30) days of receiving non-compliant information. The owner is responsible to obtain the services of a Minnesota Pollution Control Agency (MPCA) licensed Service Provider or other qualified practitioner to complete the required corrective measures.

Authorization

Aitkin County Environmental Services authorizes the Permittee to operate a wastewater treatment and dispersal system at the address named above in accordance with the requirements of this operating permit, attached Management Plan and contract with the Service Provider/Inspector.

This permit is effective on the issuance date and term identified above. This permit and the authorization to treat and disperse wastewater shall expire on the expiration date identified above. The Permittee is not authorized to discharge after the above date of expiration. The Permittee shall submit monitoring and maintenance information on forms as required by Aitkin County Environmental Services prior to the above date of expiration for operating permit renewal. If not renewed within ninety (90) calendar days of the expiration date, it may be required that the system be abandoned in accordance with MN Rule 7080.2500. This permit is not transferable as to person or place.

The owner is required to obtain the services of a Minnesota Pollution Control Agency (MPCA) licensed and trained: 1) Service Provider or Inspector to provide ongoing system operation, maintenance, and monitoring and 2) Maintainer to pump the system's sewage tanks and components. The owner is responsible to provide the name of the Service Provider or Inspector business prior to the issuance of this operating permit. **The owner has secured the services of (named above) as the Service Provider or Inspector for this system through a signed contract.** The Service Provider or Inspector is hereby authorized to provide the required monitoring data and routine maintenance service records to both Aitkin County Environmental Services.

[For systems that generate high strength wastewater, the following items should be added to the operating permit: "If there is a change of use within the facility (i.e., change in menu, increase in food capacity, change in water use fixtures, etc.), the permittee is required to notify Aitkin County Environmental Services and the Service Provider before any changes occurs. Changes to the facility that could potentially impact performance of the wastewater treatment and dispersal system shall not take place until appropriate evaluation has been completed."]

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

*Permittee Name: (Print):			
*Title:		*Date:	
*Permittee Signature:			

Owners Septic System Management Plan

Date: 7/26/2024

Property Address: 20749 363rd McGREGOR MN.

Septic Systems can be an expensive investment, good maintenance will ensure they last a lifetime. The purpose of a septic system is to properly "decompose" the pollutants before the water is recycled back into the groundwater. If you're not taking this seriously, ask yourself where your well water comes from.

Your septic design lists all the components of your system and their location. Keep the design, this management plan and the UofM "Septic System Owners Guide" in a safe place for future reference. For a copy of the Owners guide call the University of MN at 1-800-876-8636.

Some of the following tasks you can do yourself, some require a professional, but is it YOUR responsibility to see that it gets done.

Homeowner Tasks

- Do your best to conserve water. Don't overload your septic with multiple large water uses at the same time or on the same day.
- Fix household leaks promptly (leaky toilet, dripping faucets).
- Limit bleach and anti-bacterial products. Use Biodegradable dishwasher detergent.
- Consider a lint filter on your clothes washer.
- Regularly check for wet or spongy soil around your drainfield.
- Have a septic professional check your tanks every 3 years to determine if they need pumping.
- If you have a septic tank filter (effluent filter) clean it on a regular basis (or have a professional do it).
- If a septic alarm goes off, call your septic professional to diagnose the problem.
- Notify the County/City/Township when this management plan is not being met.
- Be aware of and protect your secondary drainfield site.

Professional Tasks

- Disclose the location of the secondary drainfield (if applicable).
- Respond to alarms and diagnose problems as needed.
- Review water use with the owner, check for a "soggy" drainfield.
- Pump the septic tanks as needed and ensure they are in proper working order.
- Verify the pump, dose amount, HI Level Alarm & drainback are all working properly.

"As the owner, I understand it is my responsibility to properly operate and maintain this septic system".

Property Owner Signature: _____ **Date** _____

MONITORING AND MITIGATION

SEPTIC SYSTEM CLASSIFIED AS TYPE III

Should the system fail a new site for the septic system may be considered or the owner agrees to repair the septic system if it is possible. If the septic system is not repairable the homeowner agrees to disconnect the septic tanks from the septic system and use and maintain the septic tanks as holding tanks.

MILLE LACS BAND OF OJIBWE and AITKIN COUNTY are to be notified as soon as possible about any operational problems. If a failure occurs the septic pump must be disconnected immediately and remain disconnected until all repairs are completed. A pumping contract will need to be set up with a septic maintenance contractor. A copy of all documents must be submitted to the county.

The system must be monitored for a minimum of three years. The mound system is to be inspected by the homeowner for leaks or saturated areas. Inspections are to be done every month for 36 months. Any leaks or failures in the system must be reported to the county within 24 hours.

All expenses for repair or replacement are the homeowner's responsibility.

Type III systems are not warranted by the Inspector, Designer, or Installer

I property owner of 20749 363rd McGregor Mn.

Hereby agree that as long as I am the owner of the property, to accept all legal and financial responsibility for future system repair and/or replacement expense in the event that failure of the system on the above referenced property occurs.

_____

Owner

_____

Date

Subsurface Sewage Treatment System Management Plan

Property Owner: Mille Lacs Band of Ojibwe Phone: _____ Date: 07/26/2024

Mailing Address: 43408 Oodena Drv City: Onamia Mn Zip: 56359

Site Address: 20749 363rd City: McGregor Mn. 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 or maintenance provider.

System Designer: Recommends SSTS check every _____ months.
Local Government: Recommends SSTS check every _____ months.
State Requirement: Requires SSTS check every 36 months.
(State requirements are based on MN Rules Chapter 7080.2450, Subp. 2 & 3)

My System needs to be checked every 1 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.

Effluent filter – Inspect and clean twice a year or more.

Alarms – Alarm signals when there is a problem. Contact a service or maintenance provider any time an alarm signals.

Event counter or water meter – Record your water use.

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

Licensed septic service provider or maintenance provider (Check all that apply):

- ☐ Check to make sure tank is not leaking
- ☐ Check and clean the in-tank effluent filter (if exists)
- ☐ 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: ENVIRONMENTAL SYSTEMS Date: 07/26/2024

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:_____