Preliminary & Field Evaluation Form

www.SepticResource.com vers 12.4

Owner Information

Date	6/11/2020	Sec / Twp / Rng	S.25 T. 46 R.22
Parcel ID	04-0-038900	LUG (county, city, township)	Aitkin County
Property Owner:	Ronald Anick	Owners address (if different)	
Property Address:	10061 State Hwy. 27		
City / State / Zip:	Sturgeon Lake, MN. 55783		

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	>50'
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: Existing tank was inspected by designer.

Soil Information

Evidence of site:

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

Original soils ☑ Yes ☐ No

Soil logs completed and attached ☑ Yes ☐ No

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

Soil loading rate (gpd/ft^2) 0.78

Percolation rate (if applicable) _____

Depth/elev to SHWT 6.00

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

Depth to system bottom maximum (or elev minimum) -30.00

Flood elevation (if applicable) _____

Depth/elev to standing water (if applicable) _____

Elevation of ordinary high water level (if applicable) _____

Depth/elev to bedrock (if applicable) _____

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

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

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

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

Roger Hurd

Designer Signature

R.H. Inspection & Design

Company

3847

License #

2011 purple code

Mound Design - Aitkin county

www.SepticResource.com (vers 15.2)

Property Owner: Ronald Anick **Date:** 6/11/2020

Site Address: 10061 State Hwy. 27 **PID:** 04-0-038900

Comments:

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

5) [1.2] GPD/ft^2 mound sand loading rate contour loading rate of [12] req's a min [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 = [16], line #8 must be less --> OK

10) [4.0] doses per day (4 minimum)

11) [113] gallons per dose (treatment volume)

2.00 5x

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

2.00 3x

13) [140] feet of [2.0] inch supply line leads to [24] gallons of drainback volume
(Tip: "top feed" manifold to control the drainback)

14) [137] gallons TOTAL pump out volume (treatment + drainback)

15) [12] feet vertical lift from pump to mound laterals, leads to a:

16) [27] GPM @ [21] feet of head, Pump requirement (note: >50gpm may require an extra 3-6' of head)

17) [500] gal Dose tank (code minimum) [500] gal Dose tank (design size / LUG req'd) at [12.00] gpi
leads to a

18) [11.4] inch swing on Demand float, or timed dosing of [5.1] 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) [23] inches from bottom of tank to "Pump ON" float, or [12] inches to "Timer ON" float if time dosed

21) [26] inches from bottom of tank to "Hi Level" float, or [36] inches to "Hi Level" float if time dosed

22) [188] gallons reserve capacity (after High Level Alarm is activated)

23) 0.78 gpd/ft² Absorption area Soil Loading Rate, (this must match the soil boring log) which gives a mound ratio of 1.5 (minimum)
desired mound ratio 1.5

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

25) 6 inches, or 0.5 ft. to Redox or other limiting condition (need at least 12" to be a Type I)
Treatment zone contains 0 inches of 0% soil credit, and 0 inches of 50% soil credit. Giving a:

26) 30 inch, or 2.5 ft. Sand Lift Mound **CRITICAL FOR FUTURE CERTIFICATIONS!!!**

27) 15.0 ft. base absorption width (with sand beyond rockbed as follows:)

39.0 greater of: absorption width OR sand slope

28) 0.0 ft. upslope and sideslope sand upslope 13.0
5.0 ft. Downslope sand down slope 16.1

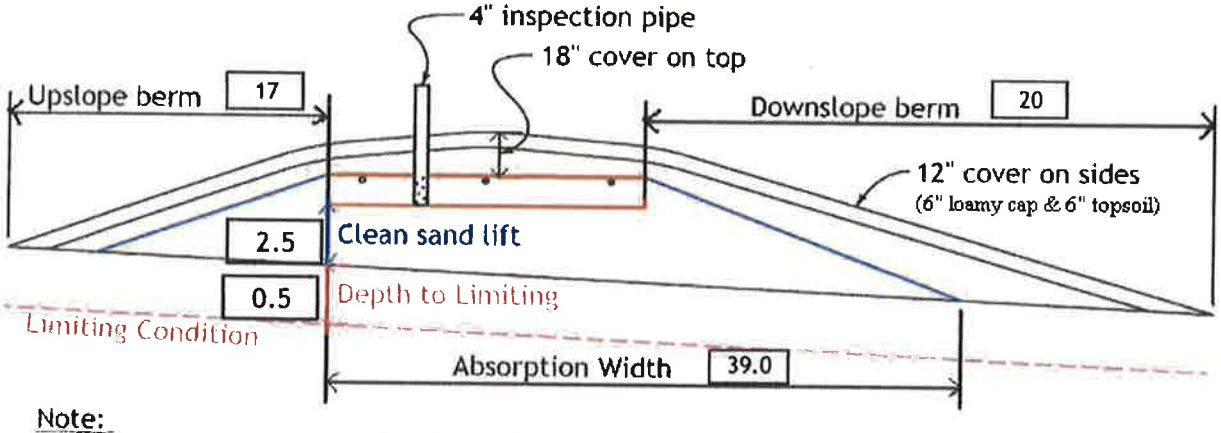
Individual slope ratios give BERM widths (topsoil beyond rockbed) of:

29) 4:1 upslope ratio 17 ft. upslope berm

30) 4:1 sideslope 19 ft. sideslope berms

31) 4:1 downslope 20 ft. downslope berm

32) Overall Dimensions: 10.0 ft. wide by 37.5 ft. long Rock bed
47 ft. wide by 76 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)
56.7 up + 74.4 downslope + 20.3 ends + 36.1 under rock = 225 yd³ or *1.4= 315 ton
plus 20%

35) Loamy Cap:
43 ft. by 72 ft. 6" deep, plus 20% gives 69 yd³ or *1.4= 97 ton

36) Topsoil:
47 ft. by 76 ft. 6" deep, plus 20% gives 79 yd³ or *1.4= 111 ton

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

Designer Signature	Company	License#	Date
	R.H. Inspection & Design	3847	6/11/2020

Installer Summary

1000 gallon Septic tank (minimum) Tank options: none

500 gallon Dose tank (minimum) at 12.00 gpi

27 GPM @ 21 ft. of head, Pump required

11.4 inch swing on Demand float which translates to roughly 6.7 inches of float tether length

if time dosing is required --> 5.1 minutes ON time & 9 hours OFF time

23 inches from bottom of tank to "pump ON" float, or 12 inches to "timer ON" float

26 inches from bottom of tank to "Hi Level Alarm" or 36 inches to "Hi level alarm" if time dosed

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

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

30 inch, or 2.5 ft. Sand Lift Mound

10.0 ft. wide by 37.5 ft. long Rock bed

3 laterals 1.50 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

39.0 ft.Total sand ABSORPTION width (minimum)

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

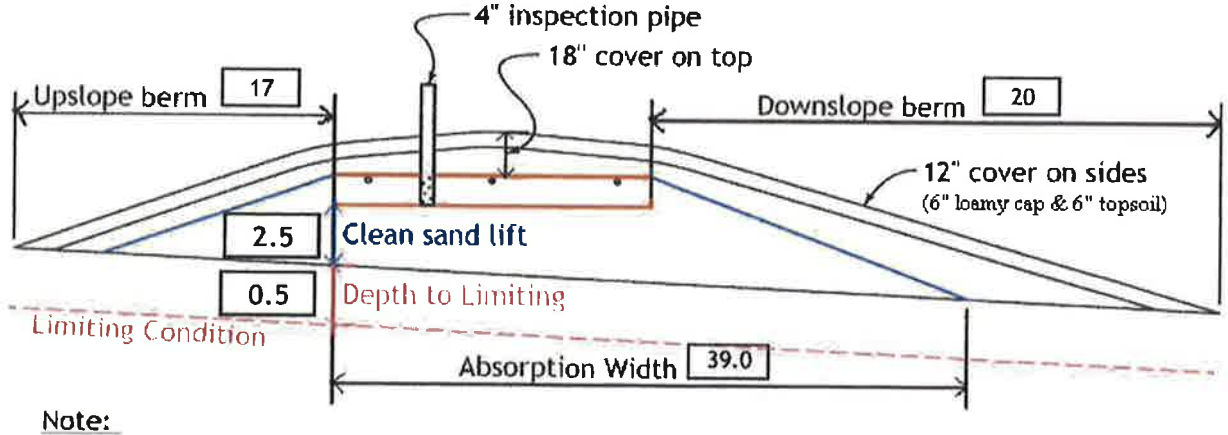
16.1 ft. Downslope (sand beyond rockbed, minimum)

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

4:1 upslope ratio 17 ft. upslope berm

4:1 sideslope 19 ft. sideslope berms

4:1 downslope 20 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
Mound Sand:	225	yd^3 or *1.4=	315	ton
Loamy Cap:	69	yd^3 or *1.4=	97	ton
Topsoil:	79	yd^3 or *1.4=	111	ton

6 inches under pipe

calculation based on 3:1/4:1 slope from top of rockbe

6" deep

6" deep

INSPECTOR CHECKLIST - mound

10061 State Hwy. 27

☐ WELL setbacks: 20' to pressure tested sewer line (5 psi for 15 min)
50' to everything 100' to dispersal area with shallow well

☐ PROPERTY LINES setback: 10' to everything

☐ Road setback: platted: 10' prop line. Metes & bounds: out of road easement, or outer ditch.

☐ LAKE / BLUFF setback: 20' for bluff. Lakes: GD ___, RD ___, NE ____. Protected wetland ___.

☐ Building setbacks: 10' for everything, 20' for dispersal area.

☐ WATER LINE under pressure se 10' to bed,tank & sewer line. (else sewer line > 12" below, else ok w/pvc)

☐ Sewer line & baffle connection (no 90's, 3' between 45's, slope min 1" in 8', max 2" in 8')
(no depth req's, clean out every 100', Sch 40 pipe)

☐ Septic tank and risers (water tight, insulated, proper depth, existing verified by pumping)
mfg_____ 1000 gallons none

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

☐ No effluent filter & alarm

☐ Dose tank risers and piping (water tight, insulated, proper depth, drainback)
mfg_____ 500 gallons

☐ dose pump _____ 27 gpm 21 head VERIFY PUMP CURVE 5.1 min ON 9 hr OFF

☐ float setting drop 11.4 inches at 12.0 gpi "DESIGNED" 6.7 inches approx float tether length
137.0 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 37.5

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

☐ Absorption Sand beyond rock 13.0 upslope 16.1 downslope

☐ Bermed topsoil beyond rockbed 17 upslope 19 sideslope 20 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

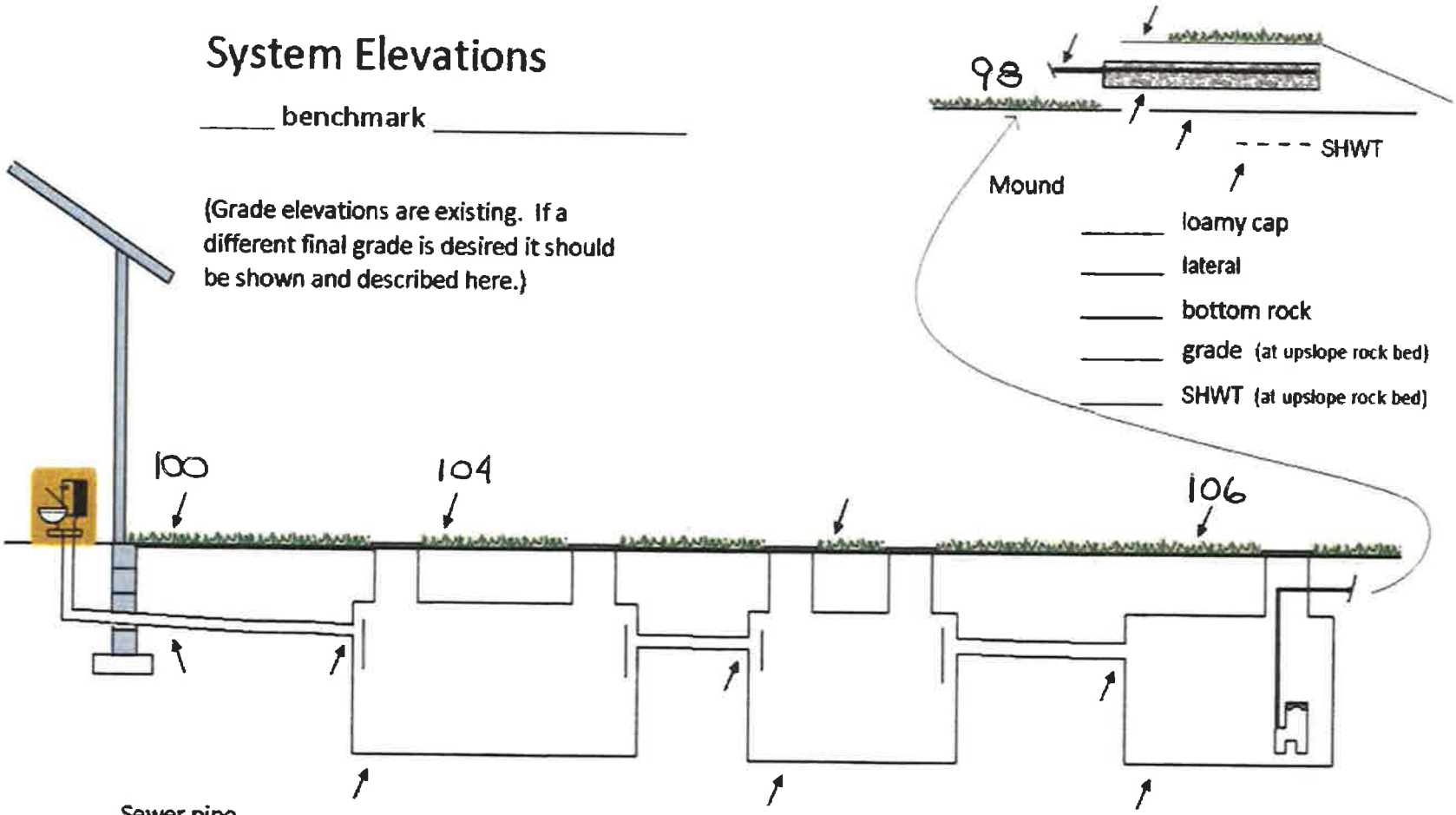
☐ monitoring plan and type _____

☐ well abandonment form - if necessary

System Elevations

_____ benchmark _____

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



_____ loamy cap

_____ lateral

_____ bottom rock

_____ grade (at upslope rock bed)

_____ SHWT (at upslope rock bed)

Sewer pipe exiting house	Septic Tank	Septic Tank (if applicable)	Pump Tank
_____ Grade	_____ Grade	_____ Grade	_____ Grade
_____ Pipe	_____ inlet	_____ inlet	_____ inlet
	_____ Tank bottom	_____ Tank bottom	_____ Tank bottom

Soil Observation Log

www.SepticResource.com vers 12.4

Owner Information

Property Owner / project: Ronald Anick Date 6/11/2020

Property Address / PID: 10061 State Hwy. 27

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: _____ slope 2 % direction- downhill

Soil Log #1

☑ Boring ☐ Pit Elevation _____ Depth to SHWT 6"

Depth (in)	Texture	fragment %	matrix color	redox color	consistence	grade	shape
0-6	Topsoil	<35	5YR3/3		Friable	Weak	Blocky
6+	Sandy Loam	<35	10YR4/4	2.5YR4/8	Friable	Weak	Granular
		<35 35 - 50 >50			loose friable firm rigid	loose weak moderate strong	single grain granular blocky prismatic platy massive
		<35 35 - 50 >50			loose friable firm rigid	loose weak moderate strong	single grain granular blocky prismatic platy massive
		<35 35 - 50 >50			loose friable firm rigid	loose weak moderate strong	single grain granular blocky prismatic platy massive

Comments: Mottles at 6"

10061 State Hwy. 27 **Soil Log #2**

☑ Boring ☐ Pit Elevation _____ Depth to SHWT 6"

Depth (in)	Texture	fragment %	matrix color	redox color	consistence	grade	shape
0-6	Topsoil	<35	5YR3/3		Friable	Weak	Blocky
6+	Sandy Loam	<35	10YR4/4	2.5YR4/8	Friable	Weak	Granular
		<35 35 - 50 >50			loose friable firm rigid	loose weak moderate strong	single grain granular blocky prismatic platy massive
		<35 35 - 50 >50			loose friable firm rigid	loose weak moderate strong	single grain granular blocky prismatic platy massive
		<35 35 - 50 >50			loose friable firm rigid	loose weak moderate strong	single grain granular blocky prismatic platy massive

10061 State Hwy. 27 **Soil Log #3**

☑ Boring ☐ Pit Elevation _____ Depth to SHWT 6"

Depth (in)	Texture	fragment %	matrix color	redox color	consistence	grade	shape
0-6	Topsoil	<35	5YR3/3		Friable	Weak	Blocky
6+	Sandy Loam	<35	10YR4/4	2.5YR4/8	Friable	Weak	Granular
		<35 35 - 50 >50			loose friable firm rigid	loose weak moderate strong	single grain granular blocky prismatic platy massive
		<35 35 - 50 >50			loose friable firm rigid	loose weak moderate strong	single grain granular blocky prismatic platy massive
		<35 35 - 50 >50			loose friable firm rigid	loose weak moderate strong	single grain granular blocky prismatic platy massive

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

Roger Hurd

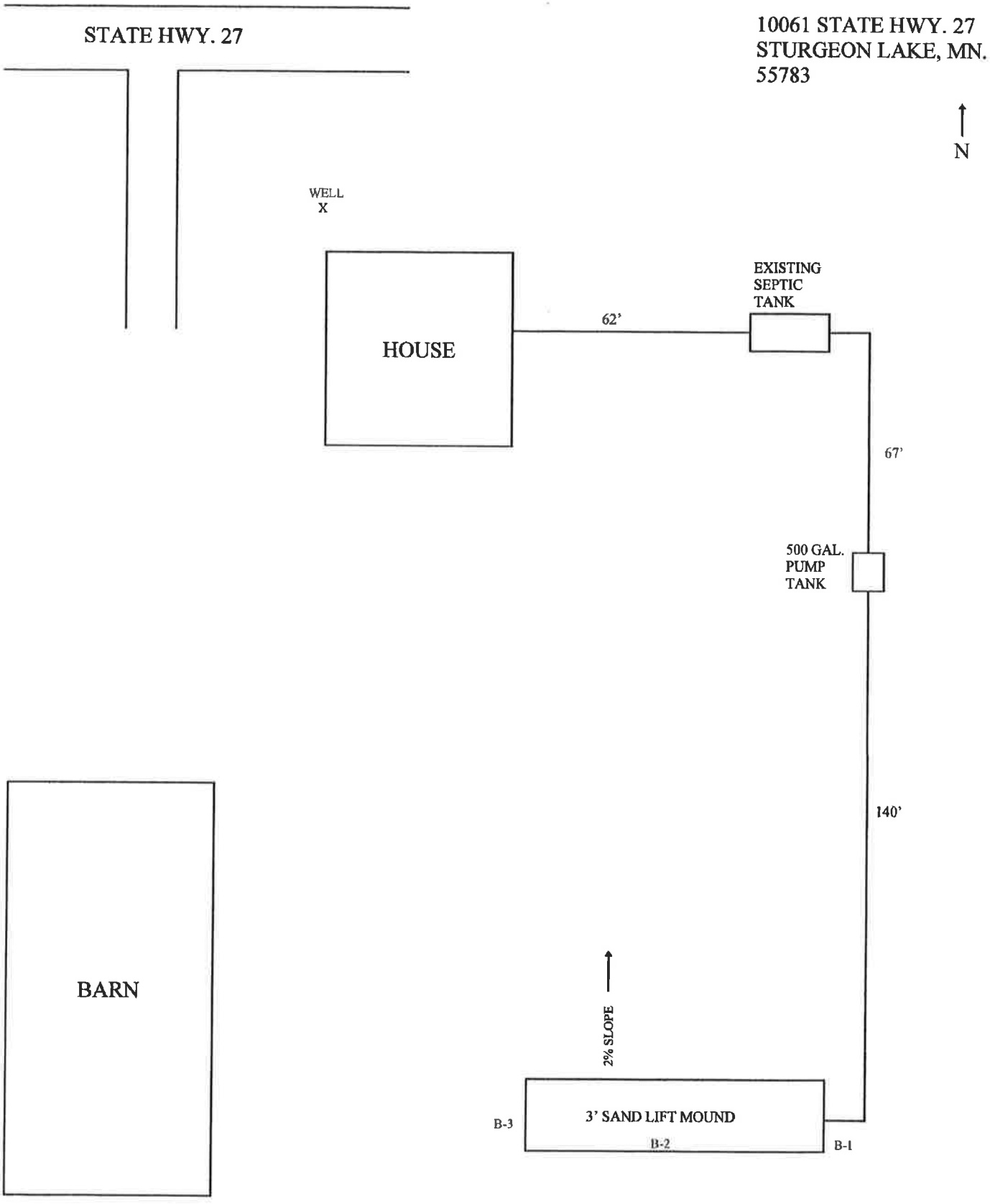
Designer Signature

R.H. Inspection & Design

Company

3847

License #


STATE HWY. 27
10061 STATE HWY. 27
STURGEON LAKE, MN.
55783
N
WELL
X
HOUSE
62'
EXISTING
SEPTIC
TANK
67'
500 GAL.
PUMP
TANK
140'
BARN
2% SLOPE
B-3
3' SAND LIFT MOUND
B-2
B-1

Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, MN 55155-4194

Compliance Inspection Form

Existing Subsurface Sewage Treatment Systems (SSTS)

Doc Type: Compliance and Enforcement

Inspection results based on Minnesota Pollution Control Agency (MPCA) requirements and attached forms – additional local requirements may also apply.

Submit completed form to Local Unit of Government (LUG) and system owner within 15 days

For local tracking purposes:

System Status

System status on date (mm/dd/yyyy): 8/17/2020

☒ **Compliant – Certificate of Compliance**
(Valid for 3 years from report date, unless shorter time frame outlined in Local Ordinance.)

☐ **Noncompliant – Notice of Noncompliance**
(See Upgrade Requirements on page 3.)

Reason(s) for noncompliance *(check all applicable)*

- ☐ Impact on Public Health *(Compliance Component #1) – Imminent threat to public health and safety*
- ☐ Other Compliance Conditions *(Compliance Component #3) – Imminent threat to public health and safety*
- ☐ Tank Integrity *(Compliance Component #2) – Failing to protect groundwater*
- ☐ Other Compliance Conditions *(Compliance Component #3) – Failing to protect groundwater*
- ☐ Soil Separation *(Compliance Component #4) – Failing to protect groundwater*
- ☐ Operating permit/monitoring plan requirements *(Compliance Component #5) – Noncompliant*

Property Information

Parcel ID# or Sec/Twp/Range: 04-0-038900

Property address: 10061 State Hwy. 27 Sturgeon Lake, MN. 55783

Reason for inspection: Permit

Property owner: Ronald Anick

Owner's phone: 218-839-7345

or

Owner's representative:

Representative phone:

Local regulatory authority: Aitkin County

Regulatory authority phone: 218-927-7342

Brief system description: Combo tank.

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.

Inspector name: Roger Hurd

Certification number: 9573

Business name: Roger Hurd Inspection & Design

License number: 3847

Inspector signature: Roger Hurd

Phone number: 218-391-0510

Necessary or Locally Required Attachments

☐ Soil boring logs ☐ System/As-built drawing ☐ Forms per local ordinance

☐ Other information (list):

Property address: 10061 State Hwy. 27 Sturgeon Lake, MN. 55783 Inspector initials/Date: R.H. | 8/17/2020 *(mm/dd/yyyy)*

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.

Comments/Explanation:

Verification method(s):

- ☒ Searched for surface outlet
- ☒ Searched for seeping in yard/backup in home
- ☐ Excessive ponding in soil system/D-boxes
- ☐ Homeowner testimony *(See Comments/Explanation)*
- ☐ "Black soil" above soil dispersal system
- ☐ System requires "emergency" pumping
- ☐ Performed dye test
- ☐ Unable to verify *(See Comments/Explanation)*
- ☐ Other methods not listed *(See Comments/Explanation)*

2. Tank Integrity – Compliance component #2 of 5

Compliance criteria:	
System consists of a seepage pit, cesspool, drywell, or leaching pit. *Seepage pits meeting 7080.2550 may be compliant if allowed in local ordinance.*	☐ Yes ☒ No
Sewage tank(s) leak below their designed operating depth. If yes, which sewage tank(s) leaks:	☐ Yes ☒ No

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

Comments/Explanation:

Tank is ok to use with new septic system.

Verification method(s):

- ☒ Probed tank(s) bottom
- ☐ Examined construction records
- ☐ Examined Tank Integrity Form *(Attach)*
- ☐ Observed liquid level below operating depth
- ☒ Examined empty (pumped) tanks(s)
- ☐ Probed outside tank(s) for "black soil"
- ☐ Unable to verify *(See Comments/Explanation)*
- ☐ Other methods not listed *(See Comments/Explanation)*

3. Other Compliance Conditions – Compliance component #3 of 5

a. Maintenance hole covers are damaged, cracked, unsecured, or appear to be structurally unsound. ☐ Yes* ☒ No ☐ Unknown

b. Other issues *(electrical hazards, etc.)* to immediately and adversely impact public health or safety. ☐ Yes* ☒ No ☐ Unknown
***System is an imminent threat to public health and safety.**

Explain:

c. System is non-protective of ground water for other conditions as determined by inspector . ☐ Yes* ☒ No
***System is failing to protect groundwater.**

Explain:

4. Soil Separation – Compliance component #4 of 5

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

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

Compliance criteria:

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: Drainfield has at least a two-foot vertical separation distance from periodically saturated soil or bedrock.	☐ Yes ☐ No
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: Drainfield has a three-foot vertical separation distance from periodically saturated soil or bedrock.*	☐ Yes ☐ No
"Experimental", "Other", or "Performance" systems built under pre-2008 Rules; Type IV or V systems built under 2008 Rules (7080. 2350 or 7080.2400 (Advanced Inspector License required) Drainfield meets the designed vertical separation distance from periodically saturated soil or bedrock.	☐ Yes ☐ No

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

Verification method(s):

Soil observation does not expire. Previous soil observations by two independent parties are sufficient, unless site conditions have been altered or local requirements differ.

☐ Conducted soil observation(s) *(Attach boring logs)*
☐ Two previous verifications (*Attach boring logs)*
☒ Not applicable *(Holding tank(s), no drainfield)*
☐ Unable to verify *(See Comments/Explanation)*
☐ Other *(See Comments/Explanation)*

Comments/Explanation:

Indicate depths or elevations

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

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

5. Operating Permit and Nitrogen BMP* – Compliance component #5 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? ☐ 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. Operating Permit number: _____ 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.

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.*

AITKIN COUNTY ENVIRONMENTAL SERVICES

APPLICATION for an OPERATING PERMIT FOR WASTEWATER TREATMENT AND DISPERSAL

PERMITTEE Ronald Anick PARCEL NUMBER 04-0-038900

ADDRESS 10061 State Hwy. 27 Sturgeon Lake, MN. 55783

LEGAL DESCRIPTION T. 46 S. 25 R. 22

TELEPHONE # 218-839-7345 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)

Mottles in soil @ 6" – Treatment with 3' sand lift. Mound.

B. MONITORING PLAN AND REPORTING FREQUENCY:

PARAMETER	COMPLIANCE LIMIT	SAMPLE LOCATION	SAMPLE FREQUENCY	SAMPLE TYPE	REPORTING FREQUENCY
FLOW	450 GPD	EVENT COUNTER	MONTHLY		ANNUALLY TO COUNTY
5-DAY BOD					
TOTAL NITROGEN					
TOTAL PHOSPHORUS					
TSS					
FATS, OILS AND GREASE					
FECAL COLIFORM					
SEPARATION DISTANCE	3'	MOUND	YEARLY	BORING	ANNUALLY TO COUNTY

Homeowner Records Event Counter Monthly and Reports to County.

Homeowner will perform the monitoring of this septic system.

C. MAINTENANCE PLANS

PARAMETER	LOCATION	FREQUENCY
450 GPD	EVENT COUNTER AT PUMP TANK	MONTHLY

D. MITIGATION PLAN:

INSPECT SYSTEM 1 YEAR AFTER INSTALL.

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.

Roger Hurd — **Signature**

3847 — **License Number**

17 AUG 20 — **Date**

ROGER HURD — **Name (please print)**

2169 SCHLINDER RD. CARLTON, MN. 55718 — **Address**

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