Saira Gabler   Chris Nelson
FIELD EVALUATION SHEET
218-330-9530

PRELIMINARY EVALUATION DATE 10-4-24 , FIELD EVALUATION DATE 10-17-24
PROPERTY OWNER: ROBERT GABLER   PHONE _____
ADDRESS: 39826 314TH LN   CITY,STATE,ZIP: AITKIN MN 56431
LEGAL DESCRIPTION: PT (NW SW) LOT 3 LESS N 1180FT (TRACT A) DOC 357193
PIN# 24-0-036007   SEC 18 T 46 R 26 TWP NAME NORDLAND TWP
FIRE# _____ LAKE/RIVER RIPPLE LAKE   LAKE CLASS _____ OHWL ___ FT

DESCRIPTION OF SOIL TREATMENT AREAS

	AREA #1	AREA #2
DISTURBED AREAS	YES__ NO X	YES__ NO___
COMPACTED AREAS	YES__ NO X	YES__ NO___
FLOODING	YES__ NO X	YES__ NO___
RUN ON POTENTIAL	YES__ NO___	YES__ NO___
SLOPE %	6-8%	
DIRECTION OF SLOPE	N-E-S.	
LANDSCAPE POSITION	UPLAND KNOLL	
VEGETATION TYPES	LAWN + WOODED AREA	

REFERENCE BM ELEV. 100   F
REFERENCE BM DESCRIPTION
BOTTOM OF TREE SOUTH
OF CABIN

DEPTH TO STANDING WATER OR MOTTLED SOIL: BORING# 1 ___ , 1A 42" , 2 ___ ,2A ___

BOTTOM ELEVATION--FIRST TRENCH OR BOTTOM OF ROCK BED: #1 100 FT., #2 ___ FT.

SOIL SIZING FACTOR: SITE # 1 1.27 , SITE #2 _____

CONSTRUCTION RELATED ISSUES: INCREASING FROM 2 BEDROOM TO A
4 BEDROOM

LIC# 127   SITE EVALUATOR SIGNATURE: Larry Liljenquist

SITE EVALUATOR NAME: LARRY LILJENQUIST   TELEPHONE# 218 820 8886

LUG REVIEW _____ DATE _____

Comments: _____
_____
_____
_____

SOIL BORING LOGS ON REVERSE SIDE

Form des 2/20/98

SOILS CHARTS FOR BOTH PROPOSED AND ALTERNATE SITES

1 (PROPOSED) SOILS DATA

DEPTH (INCHES)	TEXTURE	MUNSELL COLOR
0-6	TOPSOIL	
6-42"	SAND LOOSE	10YR 4/4
42-48	LOAM	10YR 6/4

REDOX @ 42"

10-17-24

2 (PROPOSED) SOILS DATA

DEPTH (INCHES)	TEXTURE	MUNSELL COLOR

1 (ALTERNATE) SOILS DATA

DEPTH (INCHES)	TEXTURE	MUNSELL COLOR

2 (ALTERNATE) SOILS DATA

DEPTH (INCHES)	TEXTURE	MUNSELL COLOR

ADDITIONAL SOIL BORINGS MAY BE REQUIRED

DESIGN BORINGS

SOILS CHARTS FOR BOTH PROPOSED AND ALTERNATE SITES

1 (PROPOSED) SOILS DATA

DEPTH (INCHES)	TEXTURE	MUNSELL COLOR
0–7"	Topsoil	
7"–41"	Sand	10YR4/4
41"–54"	Loam/Clay	
	Loam	10YR6/4

(Mottled at 40")

2 (PROPOSED) SOILS DATA

DEPTH (INCHES)	TEXTURE	MUNSELL COLOR
0–6"	Topsoil	
6"–54"	Sand	10YR4/4

(Mottled at 44")

1 (ALTERNATE) SOILS DATA

DEPTH (INCHES)	TEXTURE	MUNSELL COLOR
0–7"	Topsoil	
7"–38"	Sand	10YR4/4
38"–42"	Loam/Clay	
	Loam	10YR6/4

(Mottled at 34")

2 (ALTERNATE) SOILS DATA

DEPTH (INCHES)	TEXTURE	MUNSELL COLOR
0–9"	Topsoil	
9"–40"	Sand	10YR4/4
40"–48"	Loam/Clay	
	Loam	10YR6/4

(Mottled at 36")

ADDITIONAL SOIL BORINGS MAY BE REQUIRED

SKETCH SHEET

MAP DRAWN TO SCALE OR DIMENSION WITH A NORTH ARROW

EL 93
WETLAND
EL 94

ALT. SITE

DRIVEWAY

6% SLOPE

SB1A

75'±   SB2A

SLOPE

EL 99.75   TANK   EL 99

PROPOSED DEEP WELL   EL 10.2
(MUST MEET SETBACKS)

PROPOSED
2 BDR. RES.

EL 99.5   11'

EL 100.33   38.1'
PRESSURE BED (10' x 38.1')

10'±
23'
EL 100.20   SB 2   6% SLOPE   76'

34'   EL 99.5

79'

N

BMK. EL. 100   10'±

NOTE: ALL PROPERTY LINE
SET BACKS ARE
GREATER THAN 100'

RIPPLE LAKE
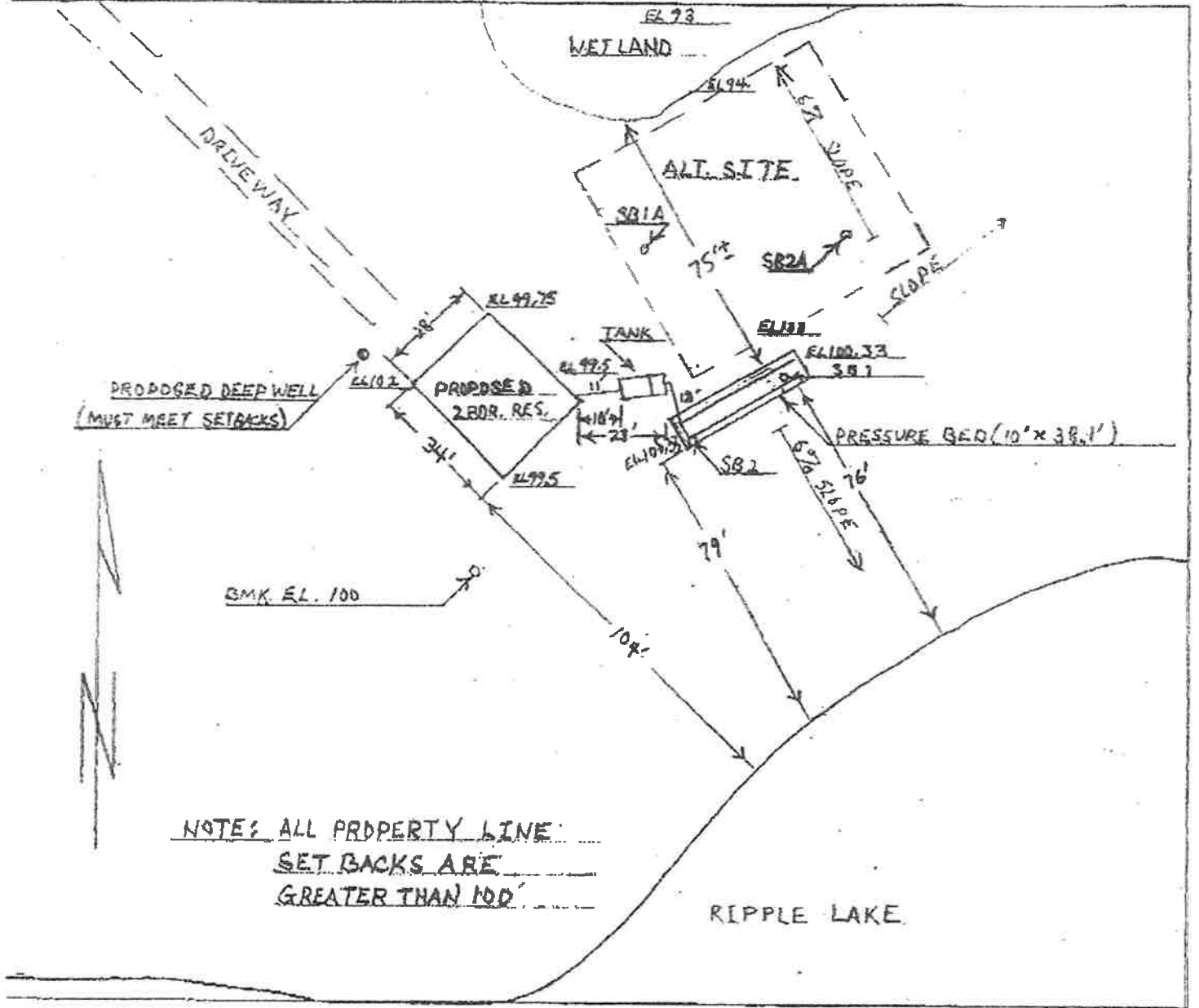
0-6" Topsoil 10YR 3/3   COMPLIANCE

6-39" Sand 10YR 7/4

39" mottling

AITKIN COUNTY
CERTIFICATE OF COMPLIANCE/NOTICE OF NONCOMPLIANCE

This certificate of compliance/notice of noncompliance has been issued this 8th
day of _____NOVEMBER_____ 19 99 to certify compliance\noncompliance with
Aitkin County's Individual Sewage Treatment System and Wastewater Ordinance No.
1. The premises covered by this certificate are legally described as: (NW SW)
Lot 3 Less N 1180'

Section ___18___ Township _46_ Range _26_, Lake _Ripple_
PERMIT NO. _25924_ Owner Name _Robert Nelson_
Address _Rt. 1 Box 115 Aitkin MN 56431_
Installer Name _M. Johnson_
Type of System Inspected _____PRESSURE BED_____
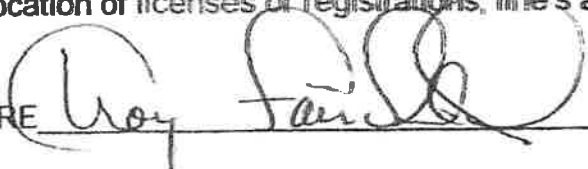
The certificate of compliance/notice of noncompliance was based on, No _1_ of the
following:

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

    2) Review of as-built plans submitted in accordance with Subdivision 4.21 C.
    Of Aitkin County's Individual Sewage Treatment System and Wastewater
    Ordinance No. 1.

If the above permitted individual sewage treatment system is in noncompliance with
Aitkin County's Individual Sewage Treatment System and Wastewater Ordinance No.
1, then the following shall serve as a Notice of Violation:
    1) Statement of the findings of fact through inspections or
    investigations:_____

_____

    2) List of specific violations of Ordinance:_____

_____

    3) Requirements for correction or removal of violations: _____

_____

    4) Time schedule for compliance: _____

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

INSPECTOR SIGNATURE _____

c:\wp61\terry.dir\certform.doc

Project Address __Rt. 1 Box 115__ Installer __MIKE JOHNSON__

City __Atkin MN__ Zip Code __56431__ New __X__ Repair _____

DIST. or DROP BOX & TYPE _____

SETBACKS:
Buildings to tank(s) __20'__
Buildings to drainfield __40'__
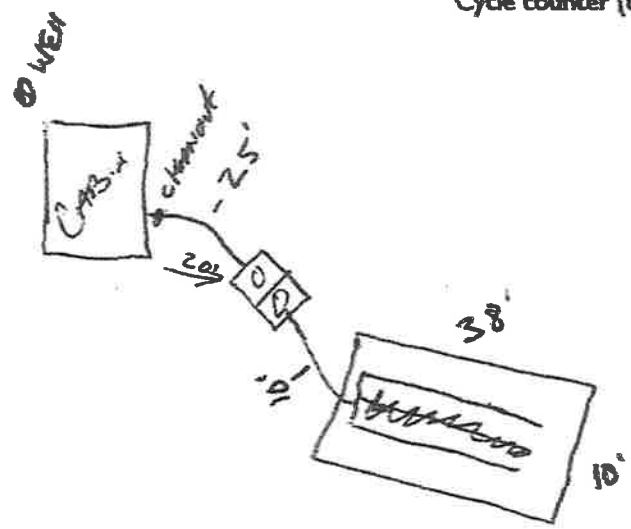Well(s) 50' or 100' __70'__
Lake/Creek/Wetland __75'__

SEPTIC TANKS:
Liquid capacity __1230__
Manufacturer & type __JAC PRE CAST__
Type of baffle __Plastic__
Inspection pipes __3-4"__
Manholes access __24"__
No. & height of risers __1 @ 12"__

MOUNDS:
Percent slope _____
Upslope dike width _____
Downslope dike width _____
Sideslope dike width _____
Drainfield rock below pipe _____
Depth of sand below rock _____
Perforation size & spacing __1/4" @ 36"__
Pipe size & spacing __1 1/2" @ 60" two lines__
Dimensions of rock bed _____
Dimensions of sand base _____
Final cover _____

TRENCHES, BEDS, OR GRAVELLESS LEACHFIELD:
Trench depth __12__
Trench length __38'__
Trench bottom width __10'__
Trench bottom level __OK.__
Trench spacing _____
Drainfield rock below pipe __9" total 12"__
Size of gravelless pipe __N/A__
Depth of backfill __6"__
Absorption area: square feet __380²__
lineal feet __38'__

PUMPS:
Tank capacity __630__
Tank manufacturer & type __JAC PRE CAST__
No. & height of risers __1 @ 18"__
Pump manufacturer & model# __HYDRO SP 40__
Horsepower & GPM __.4 HP Sp.__
Feet of head __11'__
Cycles per day __3 to 4__
Gallons per cycle __75__
Size of discharge line __2"__
Type of electrical hookup __WATER Proof Box__
Type & location of alarm __Level__
Cycle counter (commercial) _____

DRAWING OF SYSTEM

Inspector's Comments _____

1. AVERAGE DESIGN FLOW

A. Estimated **600** gpd *(see figure A-1)*
or measured ___ x **1.5** *(safety factor)* = ___ gpd
B. Septic tank capacity **1000** gal *(see figure C-1)*

A-1: Estimated Sewage Flows in Gallons per Day				
number of bedrooms	Class I	Class II	Class III	Class IV
2	300	225	180	80%
3	450	300	218	of the
4	600	375	256	values
5	750	450	294	in the
6	900	525	332	Class I
7	1050	600	370	II or III
8	1200	675	408	columns

2. SOILS *(Site evaluation data)*

C. Depth to restricting layer = **3½** ft
D. Max depth of system Item 2C - 3 ft = **3½** ft - 3 ft = **6'** ft
E. Texture **SAND** Percolation rate **6-15** MPI
F. Soil Sizing Factor (SSF) **1.27** sqft/gpd *(see figure D-15)*
G. % Land Slope **6** %

C-1: Septic Tank Capacities (in gallons)			
Number of Bedrooms	Minimum Liquid Capacity	Liquid capacity with garbage disposal	Liquid capacity with disposal & Fit inside
2 or less	750	1125	1500
3 or 4	1000	1500	2000
5 or 6	1500	2250	3000
7, 8 or 9	2000	3000	4000

3. TRENCH or BED BOTTOM AREA

H. For trenches with 6 inches of rock below the pipe:
A x F = _____ gpd x _____ sqft/gpd = _____ sqft
I. For trenches with 12 inches of rock below the pipe:
A x F x 0.8 = _____ gpd x _____ sqft/gpd x 0.8 = _____ sqft
J. For trenches with 18 inches of rock below the pipe:
A x F x 0.66 = _____ gpd x _____ sqft/gpd x 0.66 = _____ sqft
K. For trenches with 24 inches of rock below the pipe:
A x F x 0.6 = _____ gpd x _____ sqft/gpd x 0.6 = _____ sqft
L. For gravity beds with 6 or 12 inches of rock below the pipe;
1.5 x A x F = 1.5 x ___ gpd x ___ sqft/gpd = ___ sqft
For pressure beds with 6 or 12 inches of rock below the pipe;
A x F = **600** gpd x **1.27** sqft/gpd = **762** sqft

D-15: Soil Characteristics and Soil Sizing Factor (SSF) (> 3' separation)		
Percolation Rate minutes per inch (mpi)	Soil Texture	Soil Sizing Factor square feet/gallon per day (sqft/gpd)
faster than 0.1" 0.1 to 5",	Coarse sand Medium sand Loamy sand	0.83 0.83
0.1 to 5" 6 to 15 16 to 30 31 to 45	Fine sand Sandy loam Loam Silt loam Silt	1.67 1.27 1.67 2.00
46 to 60	Clay loam Sandy clay	2.20
over 61 to 120	Silty clay Clay Sandy clay Silty clay	4.20
slower than 120		

*Use systems for rapidly permeable soils; pressure distribution or serial distribution with no trench >25% of the total system.
**Soil having 50% or more fine sand plus very fine sand
***A mound must be used.
****An other or performance system must be used

4. DISTRIBUTION *(Check all that apply)*

____ Bed (< 6% slope)   ____ Drop boxes (any slope)   **** Rock
____ Trenches   ____ Distribution box (< 3%)   ____ Chamber
**** Pressure   ____ Gravity   ____ Gravelless

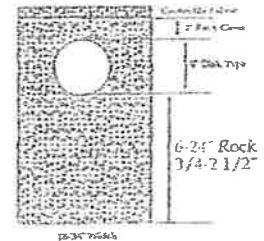## 5. SYSTEM WIDTH, LENGTH and VOLUME

M. Select trench width = **15** ft
N. If using rock, divide bottom area by width: (H, I, J,K or L) ÷ M =
762 sqft ÷ **15** ft = **51** lineal feet
Rock depth below distribution pipe plus 0.5 foot times bottom area:
Rock depth in feet + 0.5 feet x Area (H,I,J,K, or L)
(**.15** ft + 0.5 ft) x **762** sqft = **767** cuft
Volume in cubic yards = cuft ÷ 27
767 cuft ÷ 27 = **28.7** cuyds
Weight of rock in tons = cubic yds x 1.4
28.7 cuyds x 1.4 = **39.48** tons

D-9: Soil Characteristics and Soil sizing factors (SSF) for Gravelless Pipe		
percolation rate (minutes/inch)	soil texture	lineal feet / gallon/day
Faster than 0.1" 0.1 to 5	Coarse Sand Medium Sand Loamy Sand	—
0.1 to 5 6 to 15	Fine Sand**	0.28 0.6
16 to 30 31 to 45	Sandy Loam Loam Silt Loam Silt	0.62 0.56 0.67
46 to 60	Clay Loam (CL) Sandy CL Silty CL	0.73
slower than 60**	Clay Sandy Clay Silty Clay	—

*Soil too coarse for sewage treatment. Use systems for rapidly permeable soils.
**Soil having 50% or more fine sand + very fine sand.
***Soil with too high a percentage of clay for installation of a standard inground system.

O. If using 10" Gravelless Pipe, Flow (A) x Gravelless SSF *(see figure D-9)*
_____ gpd x _____ lineal feet/gpd = _____ lineal feet
P. If using Chambers, H,I,J, or K (based on height of chamber slats) ÷
width of chamber in feet (M)
_____ sqft ÷ _____ ft = _____ lineal ft

6. LAWN AREA

Q. Select trench spacing, center to center = _____ feet
R. Multiply trench spacing by lineal feet R x Q = sqft of lawn area
15 ft x **51** ft = **765** sqft
7. Include a drawing with scale (one inch = _____ ft). Show pertinent boundaries, right of way, easements, location of house, garage, driveway, all other improvements, existing or proposed soil treatment system, well and dimensions of all elevations, setbacks and separation distances.

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

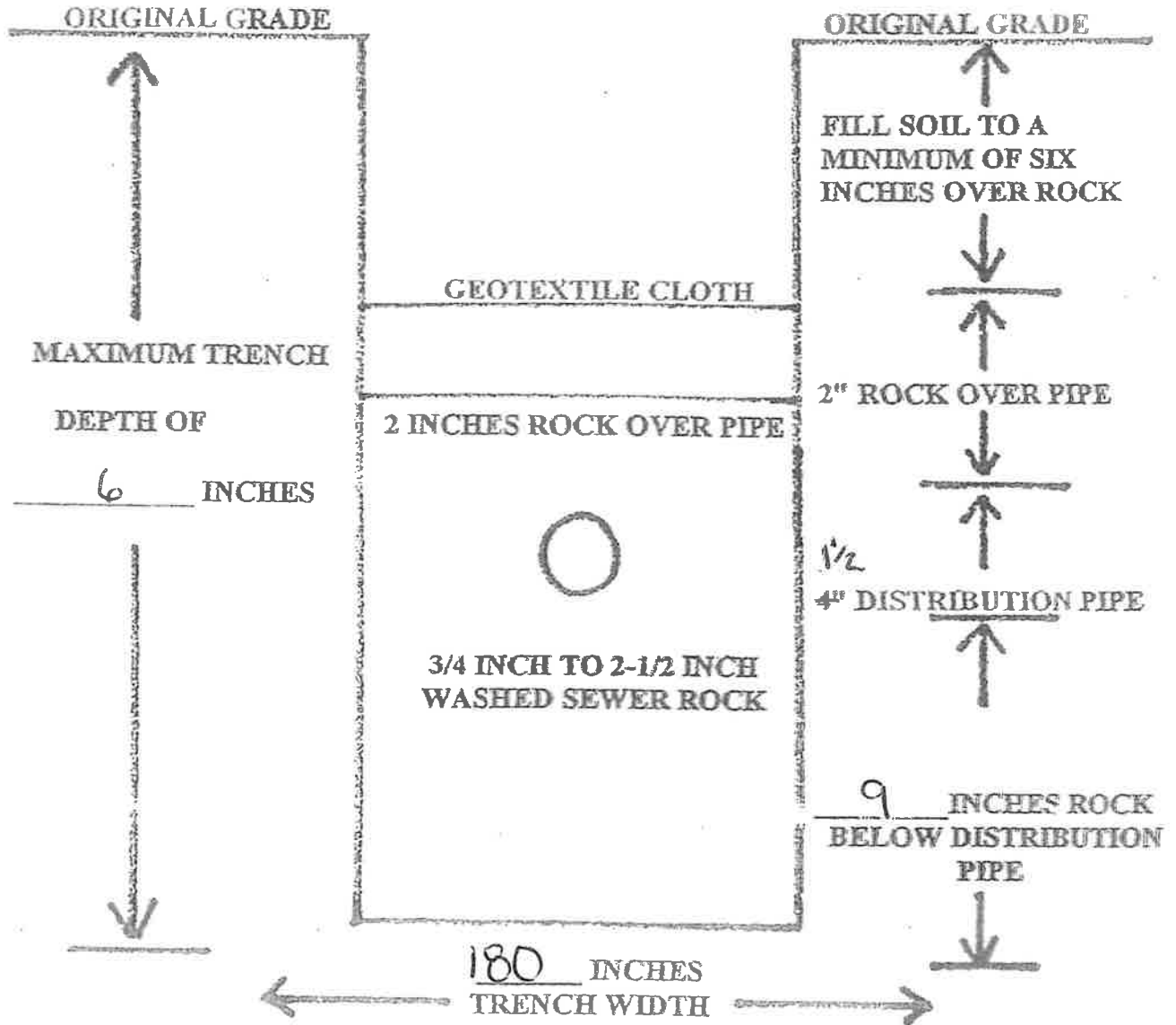*Larry Lymand* (signature)   **127** (license #)   **10-18-24** (date)

TRENCH CROSS-SECTION

FINISHED GRADE

_____ INCHES OF BACKFILL OVER ROCK

ORIGINAL GRADE

ORIGINAL GRADE

FILL SOIL TO A
MINIMUM OF SIX
INCHES OVER ROCK

MAXIMUM TRENCH

DEPTH OF

_____6_____ INCHES

GEOTEXTILE CLOTH

2 INCHES ROCK OVER PIPE

2" ROCK OVER PIPE

1½

4" DISTRIBUTION PIPE

3/4 INCH TO 2-1/2 INCH
WASHED SEWER ROCK

_____9_____ INCHES ROCK
BELOW DISTRIBUTION
PIPE

_____180_____ INCHES
TRENCH WIDTH

1. Select number of perforated laterals __4__

2. Select perforation spacing = __4__ ft

3. Since perforations should not be placed closer than 1 foot to the edge of the rock layer (see diagram), subtract 2 feet from the rock layer length.

    $\dfrac{\underline{51}}{\text{Rock layer length}}$ − 2 ft = __49__ ft

4. Determine the number of spaces between perforations. Divide the length (3) by perforation spacing (2) and <u>round down</u> to nearest whole number.

    Perforation spacing = __49__ ft ÷ __4__ ft = __12__ spaces

5. Number of perforations is equal to one plus the number of perforation spaces(4). *Check figure E-4 to assure the number of perforations per lateral guarantees <10% discharge variation.*

    __12__ spaces + 1 = __13__ perforations/lateral

6. A. Total number of perforations = perforations per lateral (5) times number of laterals (1)

    __13__ perfs/lat x __4__ lat = __52__ perforations

    B. Calculate the square footage per perforation.
    Should be 6-10 sqft/perf. *Does not apply to at-grades.*
    Rock bed area = rock width (ft) x rock length (ft)
    __15__ ft x __51__ ft = __765__ sqft
    Square foot per perforation = Rock bed area ÷ number of perfs (6)
    __765__ sqft ÷ __52__ perfs = __14.7__ sqft/perf

7. Determine required flow rate by multiplying the total number of perforations (6A) by flow per perforation (*see figure E-6*)

    __52__ perfs x __.56__ gpm/perfs = __29__ gpm

8. If laterals are connected to header pipe as shown on upper example, to select minimum required lateral diameter; enter figure E-4 with perforation spacing (2) and number of perforations per lateral (5) Select minimum diameter for perforated lateral = __1½__ inches.

9. If perforated lateral system is attached to manifold pipe near the center, lower diagram, perforated lateral length (3) and number of perforations per lateral (5) will be approximately one half of that in step 8. Using these values, select minimum diameter for perforated lateral = _____ inches.

Perf Sizing 3/16" – 1/4"
Perf Spacing 1.5'- 5'

E-4: Maximum allowable number of 1/4-inch perforations per lateral to guarantee <10% discharge variation
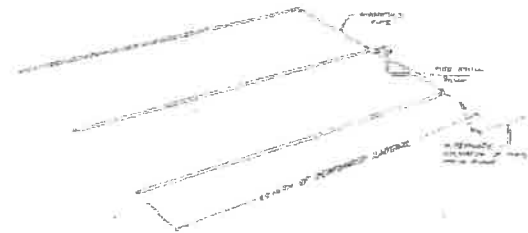
perforation spacing (feet)	1 inch	1.25 inch	1.5 inch	2.0 inch
2.5	8	14	18	28
3.0	8	13	17	26
3.3	7	12	16	25
4.0	7	11	15	23
5.0	6	10	14	22

E-6: Perforation Discharge in gpm

head (feet)	perforation diameter (inches)			
	1/8	3/16	7/32	1/4
1.0[a]	0.18	0.42	0.56	0.74
2.0[b]	0.26	0.59	0.80	1.04
5.0	0.41	0.94	1.26	1.65

[a] Use 1.0 foot for single-family homes.
[b] Use 2.0 feet for anything else.

MANIFOLD LOCATED AT END OF PRESSURE DISTRIBUTION SYSTEM

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

Larry Lynxxxx (signature) __127__ (license #) __10 - 18 - 24__ (date)

1. Determine pump capacity:

A. Gravity distribution

1. Minimum required discharge is 10 gpm

2. Maximum suggested discharge is 45 gpm. For other establishments at least 10% greater than the water supply rate, but no faster than the rate at which effluent will flow out of the distribution device.

B. Pressure distribution

See pressure distribution work sheet

From A or B Selected pump capacity: __29__ gpm

2. Determine pump head requirements:

A. Elevation difference between pump and point of discharge?
__6__ feet

B. Special head requirement? *(See Figure at right - Special Head Requirements)*
__5__ feet

C. Calculate Friction loss

1. Select pipe diameter __2__ in

2. Enter *Figure E-9* with gpm (1A or B) and pipe diameter (C1).
   Read friction loss in feet per 100 feet from Figure E-9
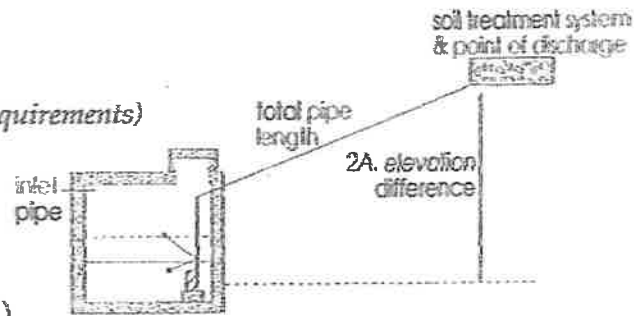   Friction Loss = __1.11__ ft/100ft of pipe

3. Determine total pipe length from pump discharge to soil treatment discharge point. Estimate by adding 25 percent to pipe length for fitting loss. Total pipe length times 1.25 = equivalent pipe length
   __18__ feet x 1.25 = __22.5__ feet

4. Calculate total friction loss by multiplying friction loss (C2)
   in ft/100 ft by the equivalent pipe length (C3) and divide by 100.
   = __1.11__ ft/100ft x __22.5__ ÷100 = __.25__ ft

D. Total head required is the sum of elevation difference (A), special head requirements (B), and total friction loss (C4)
   __6__ ft + __5__ ft + __.25__ ft =

Total head: __11.25__ feet

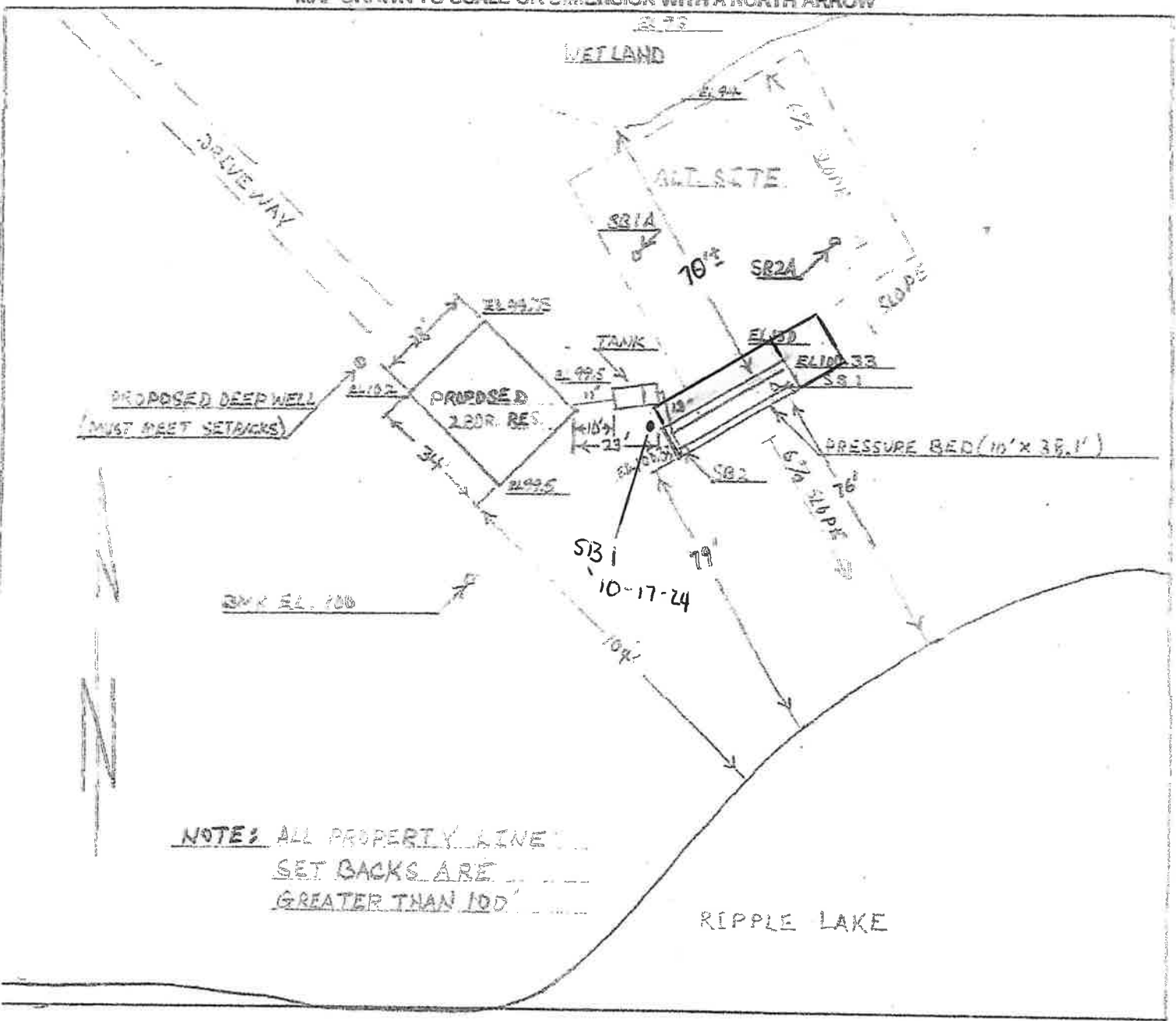### 3. Pump selection

A pump must be selected to deliver at least __29__ gpm
(1A or B) with at least __11.25__ feet of total head (2D)

soil treatment system & point of discharge

total pipe length

2A. elevation difference

inlet pipe

Special Head Requirements

Gravity Distribution	0 ft
Pressure Distribution	5 ft

E-9: Friction Loss in Plastic Pipe
Per 100 feet

flow rate gpm	nominal pipe diameter 1.5"	2"	3"
20	2.47	0.73	0.11
25	3.73	1.11	0.16
30	5.23	1.55	0.23
35	6.96	2.06	0.30
40	8.91	2.64	0.39
45	11.07	3.28	0.48
50	13.46	3.99	0.58
55		4.76	0.70
60		5.60	0.82
65		6.48	0.95
70		7.44	1.09

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

Larry Llyngvist (signature) __127__ (license #) __10-18-24__ (date)

CLIENT: ROBERT GABLER   DATE 10-17-24

MAP DRAWN TO SCALE OR DIMENSION WITH A NORTH ARROW

WET LAND

ALT. SITE

SB1A

SR2A

10"

PROPOSED DEEP WELL
(MUST MEET SETBACKS)

EL 99.75

PROPOSED
2 BDR. RES.

TANK

EL 100

EL 100.33

SB 1

PRESSURE BED (10' x 38.1')

SB2

SB1
10-17-24

BM EL. 100

NOTE: ALL PROPERTY LINE
SET BACKS ARE
GREATER THAN 100'

RIPPLE LAKE

CHECK OFF LIST--HAVE ALL OF THE FOLLOWING BEEN DRAWN ON THE MAP??

SHOW EXISTING OR PROPOSED
- WATER WELLS WITHIN 100 FT OF TREATMENT AREAS
- PRESSURE WATER LINES WITHIN 10 FT OF TREATMENT AREAS
- STRUCTURES   ☐ LOT IMPROVEMENTS
- ALL SOIL TREATMENT AREAS   ☐ ALL ISTS COMPONENTS
- HORIZONTAL AND VERTICAL REFERENCE
- POINT OF SOIL BORINGS   ☑ DIRECTION OF SLOPE
- LOT EASEMENTS   ☐ ALL LOT DIMENSIONS
- DISTURBED/ COMPACTED AREAS
- SITE PROTECTION--LATHE AND RIBBON EVERY 15 FT
- ACCESS ROUTE FOR TANK MAINTENANCE
REQUIRED SETBACKS
- STRUCTURES   ☐ PROPERTY LINES
- OHWL
COMMENTS:

INDICATE ELEVATIONS

BENCHMARK	100
ELEVATION OF SEWER LINE @ HOUSE	98.5
ELEVATION @ TANK INLET	98.4
ELEVATION @ BOTTOM OF ROCK LAYER	100
ELEVATION @ BOTTOM OF BORING OR RESTRICTIVE LAYER	97
ELEVATION OF PUMP	94.75
ELEVATION OF DISTRIBUTION DEVICE	100.75

DESIGNER SIGNATURE Larry Lymard

LICENSE# 127

DATE 10-17-24

Subsurface Sewage Treatment System Management Plan

Property Owner: ROBERT GABLER   Phone: _____   Date: 10-17-24

Mailing Address: 2190 LAKEBROOK DR   City: NEW BRIGHTON   Zip: 55112

Site Address: 39826 314TH LN   City: AITKIN   Zip: 56431

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 **36** 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 _36_ 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.
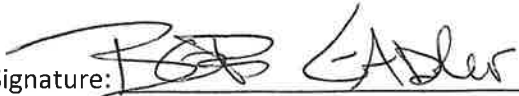
Event counter or water meter – Record your water use.

    -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: _Bob Gabler_   Date: 10-19-24

Designer Signature: _____   Date: 10-17-24

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:_____

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LILJENQUIST SEWER AND EXCAVATING

30477 STATE HWY 47

AITKIN, MN 56431   DATE : 10/19/24

320-684-2692 OFFICE

218-820-8886 LARRY

Septic System Information

- Existing system is designed for a 2 bedroom
- System is in compliance and has had 2 or more borings
- Current pressure bed is 10' x 38' (381 sq ft)
- With an additional 2 bedrooms added 762 sq ft is needed
- Design is to widen bed to 15' and lengthen to 51'
- By adding the additional 13' on the length it will throw the bed off contour slightly
- Setbacks can not be achieved if trying to stay on contour (**due to lake setback**)
- Installer will have to add 6"-7" of clean sand on the NE corner of the bed
- Approx. 50 sq ft
- Recommended that installer put a heavier loamy clay material on the north and east sides of bed.
- *Tank will need an inspection and compliance at the time of installation*
- If tank found non-compliant a new tank will need to be installed

Liljenquist Sewer and Excavating License #127 _____. Larry Liljenquist

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: 24-0-036007   Reason for Inspection ADDITION

Local regulatory authority info: A.C.P.Z.

Property address: 39826 314TH LN AITKIN

Owner/representative: ROBERT BABIER   Owner's phone:

Brief system description:

System status

System status on date (mm/dd/yyyy): _____

☒ **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: LILJENQUIST SEWER + EXC.   Certification number: 287

Inspector signature: *Larry Llynquil*   License number: 127

(This document has been electronically signed)   Phone:

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: 39826 314TH LN
Business Name: LILJENQVIST SEWER + EXC.   Date: 10-17-24

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.

Attached supporting documentation:

☐ Empty tank(s) viewed by inspector

Name of maintenance business: _____

License number of maintenance business: _____

Date of maintenance: _____

☐ 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: _____

Describe verification methods and results:

TANK WILL BE INSPECTED AND CERTIFIED AT THE TIME OF NEW ADDITION TO DRAINFIELD

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: 39826 314TH LN
Business Name: LILJENQUIST SEWER + EXC.   Date: 10-17-24

5. Soil separation – Compliance component #5 of 5

Date of installation 11-8-99   ☐ Unknown
(mm/dd/yyyy)

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

Attached supporting documentation:

☒ Soil observation logs completed for the report

☒ Two previous verifications of required vertical separation

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: Drainfield has at least a two-foot vertical separation distance from periodically saturated soil or bedrock.	☐ Yes ☐ No*	☐ Not applicable (No soil treatment area) ☐ IN NEW DESIGN
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: Drainfield has a three-foot vertical separation distance from periodically saturated soil or bedrock.*	☒ Yes ☐ No*	**Indicate depths or elevations**
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) Drainfield meets the designed vertical separation distance from periodically saturated soil or bedrock.	☐ Yes ☐ No*	

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.

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

Describe verification methods and results:

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.*