MORRISON COUNTY
Septic System Management Plan Agreement

Property Owner BEN THOMA CKAHL Phone: [redacted] Date: 8-31-22

Site Address SPLIT OFF SF 04-0143-001 218-431-0221 Parcel #

System Designer DAVID PRZYBILLA Company Name License # 1750

This management plan agreement will identify the operating and management activities necessary to ensure the long-term performance of the septic system. This agreement must determine the responsibilities of the system owner and those of the system designer in conducting regular maintenance and monitoring of the septic system.

Identify the service intervals recommended by the system designer and Morrison County Planning and Zoning. The tank assessment for the system must be the shortest interval of these three intervals." Pumping and cleaning of tanks must be done by a licensed professional.

System Designer: check every 24 months
Morrison County P&Z: check every 36 months
State Requirement: check every 36 months

My tank needs to be checked every 24 months

Tank pumping and tank maintenance is contracted with HOHEISEL PUMPING

Management Tasks required seasonally or several times per year:

- ☐ *Leaks.* Check (listen, look) for leaks in toilets and dripping faucets. Repair leaks promptly.
- ☐ *Surfacing sewage.* Regularly check for wet or spongy soil around your treatment area. If surfacing sewage or strong odors are not corrected by pumping the tank or fixing broken caps, call your service professional. Untreated sewage may make humans and animals sick.
- ☐ *Alarms.* Alarms signal when there is a problem; contact your maintainer any time the alarm signals.
- ☐ *Lint filters.* If there is a lint filter, check for buildup and clean when necessary.
- ☐ *Effluent screen.* If there is an effluent screen, inspect and clean it twice a year or per manufacturer recommendations.

Management Tasks required annually and/or scheduled maintenance:

- ☐ *Inspection Caps.* Check to make sure they are properly capped. Replace caps that are damaged.
- ☐ *Pumps and controls.* Check to make sure the pump and controls are operating correctly and inspect wiring for corrosion and function.
- ☐ *Event counter or water meter.* Monitor the average daily water use (if applicable).
- ☐ *Septic tank integrity.* Scheduling of pumping and cleaning of tanks at the recommended interval is very important. This maintenance must be conducted through the manhole openings and include verification that tank and tank components are watertight and in good operating condition.

These management tasks are the responsibility of the septic system owner / septic designer (Circle one)

Property Owner Signature _____ Date: _____

Designer Signature David Przybilla Date: 8-31-22

Morrison County P&Z Signature Jeremy Bartkowicz Date: 9/12/2022

"I understand it is task manager's responsibility to properly operate and maintain the sewage treatment system on this property, utilizing the Management Plan. If requirements of the Management Plan are not met, I will promptly notify Morrison County Planning & Zoning 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."

Morrison County Planning & Zoning will not accept sewer designs unless accompanied by a signed Septic System Management Plan Agreement.

1600 gal 2 comp tank w/a 500 sq ft pressure bed.

University of Minnesota Site Evaluation

Onsite Sewage Treatment Program

Property Owner(s) BEN THOMA (CRAHL) Phone Number ~~218-393-4958~~ 218-431-0221

Address _____

P.I.D. 04-0143-001 Section ___ Township _____ N Range _____

Date 8/31/22 Time 9AM Weather conditions SUNNY

Location Information (check all that apply)

- ___ Shoreland
- ___ Protection area
- ✓ Dwelling
- ___ Other establishment
- ___ Replacement system
- ___ New home construction

Homeowner Information

No. of bedrooms *(if applicable)* 4 Bedrooms (include possible additions)

No. of residents in home ___ Adults ___ Children

Estimated flow 600 gpd

Well casing depth NO WELL feet

Water using devices *(check)*

- ___ Garbage disposal
- ___ Dishwasher
- ___ Large bathtub
- ___ Laundry/large tub on 2nd floor
- ___ Water softener
- ___ Sump pump
- ___ High eff. furnace
- ___ Jacuzzi/hottub

Discharge location if checked _____

Water use concerns *(check)*

- ___ toilet/faucet leaks
- ___ Max load laundry/day
- ___ Long term prescription medications
- ___ Home business
- ___ Lint screen
- ___ Antibact. soap
- ___ Frequent parties or out of town guests

Sell Data

Soil texture classification _____

Unnatural soil *(check)*	___ Yes	✓ No			
Type of observation *(check)*	___ Probe	✓ Pit	___ Boring		
Parent material *(check)*	___ Till	✓ Outwash	___ Loess	___ Bedrock	___ Alluvium
Vegetation type *(check)*	___ Wet	✓ Dry	✓ Unknown		
Slope form *(check)*	✓ Summit	___ Shoulder	✓ Back	___ Foot	___ Toe
Drainage *(check)*	✓ Good	✓ Fair	___ Poor	___ Ponding	___ Flooding
Located in floodplain *(check)*	___ Yes	✓ No			

Site Summary Data

Standing water: — inches

Bedrock: — inches

Saturated soil: 54" inches

Maximum depth of system: -18" inches

Max elevation at system bottom: -1.5 feet

Soil sizing factor (SSF): .83 gpd/ft²

Linear loading rate (LLR): 1.2 gpd/ft

Was a perc test done? ___ Yes _____ mpi

✓ No

SEE ATTACHED SOIL LOG

Soil Boring Data

Soil Boring Data				
Soil Horizons Depth (inches)	**Texture**	**Color**	**Structure**	**Consistence**

Soil Boring Data				
Soil Horizons Depth (inches)	**Texture**	**Color**	**Structure**	**Consistence**

Design Flow and Soil Worksheet -

ONSITE SEWAGE TREATME PROGRAM

1. AVERAGE DESIGN FLOW

A. *Estimated Flow (GPD):* _____

or Measured Flow (GPD): flow times safety factor _____ gpd X _____ = _____ gpd

Design Flow: 600 Gallons Per Day (GPD)

B. *Septic Tank capacity:* 1600 Gallon

Number of Septic Tanks or Compartments: 2

Effluent Screens for Alarm! NO ELEC. ALARM

* Note: If a garbage disposer unit or other appliance with garbage grinding abilities (i.e. dishwasher) is anticipated or installed, or if sewage is pumped to the septic tank, the septic tank capacity must be increased by 50% and multiple tanks or compartments must be used, plus an effluent screen with an alarm.

Table I – Design Flow (Gallons Per Day)

Number of Bedrooms	Classification of Dwelling			
	I	II	III	IV
2 or less	300	225	180	–
3	450	360	218	–
4	600	375	236	–
5	750	450	294	–
6	900	525	332	–

Table II – Septic Tank Capacity

Number of Bedrooms	Septic Tank Liquid Minimum Capacities (Gallons)	Capacity with Garbage Disposal and/or Sewage Pumped to Tank
2 & 3 & 4	1,000	1,500
5	1,500	2,250
6 or 7	2,000	3,000
8 or 9	3,500	3,500

* Flow for Classification IV dwellings are 60 percent of the values as determined for Classification I, II or III systems

2. SITE EVALUATION

A. *Depth to Limiting Layer:* 54 inches 4.5 ft.

B. *Maximum Depth of system:* 18 inches -1.5 ft.
(a negative number means a mound system is required)

C. *Type of Soil Treatment and Dispersal Area:* ROCK BED

D. *Type of Distribution:* PRESSURE

E. *Landscape Position:* 40% SLOPE

F. *Soil Texture Group Number:* 6

G. *Percent Land Slope:* 4 % Slope = Riser _____ ÷ Run _____ X 100 = _____

Table III

Treatment Levels of Soil	Acid (mg/L)
Level C	125
Level B	25
Level A	15

3. SOD LOADING RATES: Use either A. or B. below

A.

7080 Table IX DETAILED SOIL DESCRIPTIONS (SOIL RT REQUIRED)	
Texture	SANDY LOAM
Texture Group	6
Structure	BLOCKY
Grade	MEDIUM
Consistence	FIRM
Select Soil Loading Rate:	1.2

C. Design Loading Rate: 1.2

B.

7080 Table IXa PERCOLATION TEST SIZING	LOADING RATE (GRD/FT)
Faster than 0.1	0.00
0.1 to 5	1.20
0.1 to 5 (soil texture groups 3 & 5)	0.60
6 to 15	0.70
16 to 30	0.60
31 to 45	0.50
46 to 60	0.45
61-120	0.24
Slower than 120	0.00

*Rapidly permeable soils see 7080.2260

Slowest measured percolation rate: _____

Select Soil Loading Rate: _____

Texture Group

Soil Texture	Group
Course Sand	1
Medium Sand	2
Fine Sand	3
Course Loamy Sand	4
Medium Loamy Sand	4
Fine Loamy Sand	5
Very Fine Loamy Sand	5
Course Sandy Loam	6
Medium Sandy Loam	6
Fine Sandy Loam	7
Very Fine Sandy Loam	7
Loam	8
Silt Loam	9
Clay Loam	10
Silty Clay Loam	10
Sandy Clay Loam	10
Silty Clay	11
Sandy Clay	11
Clay	11

4. ORGANIC LOADING (if pretreatment is being used)

Organic Loading = Design Flow X Estimated Sod in mg/L in the effluent X 8.35 = 1,000 Sod (See Table)

_____ gpd X _____ mg/L X 8.35 ÷ 1,000,000 = _____ Lbs Sod

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

(Designer)	David Brayhill (Signature)	(License #)	(Date)

Pump Selection Design Worksheet

ONSITE SEWAGE TREATMENT PROGRAM

1. PUMP CAPACITY

1. Pumping to Gravity Distribution

   A. Minimum discharge is 10 GPM (15 GPM recommended) [ ] GPM

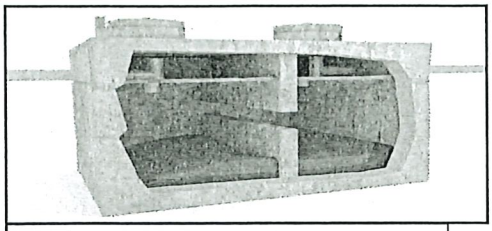
   B. Maximum discharge is 45 GPM.

2. Pressure Distribution - See Pressure Distribution Worksheet

   Required *Flow Rate* (Line 20 of Pressure Distribution Worksheet) [30] GPM

2. HEAD REQUIREMENTS

3. Elevation Difference between pump and point of discharge: [5] ft



Distribution Head Loss		
Gravity Distribution = 0 ft.		
Pressure Distribution based on Minimum Average Head Value on Pressure Distribution Worksheet:		
1 ft.	=	5 ft.
2 ft.	=	6 ft.
5 ft.	=	10 ft.

4. Distribution Head Loss: [5] ft

   Additional Head Loss: (due to special equipment, etc.) [ ] ft

Friction Loss

5. Supply Pipe Diameter: [2] inches

6. Based on Friction Loss in Plastic Pipe per 100 ft. from Table 1:

   Friction Loss = [1.55] ft. per 100 ft. of pipe

7. Determine *Equivalent Pipe Length* from pump discharge to soil dispersal area discharge point. Estimate by adding 25% to supply pipe length for fitting loss.
   Supply Pipe Length X 1.25 - *Equivalent Pipe Length*

   Supply Pipe Length: [20] ft X 1.25 = [25] ft

8. Calculate *Supply Friction Loss* by multiplying *Friction Loss Per 100 ft.* (Line 6) by the *Equivalent Pipe Length* (Line 7) and divide by 100.

   Supply Friction Loss =

   [1.55] ft per 100 ft. X [25] ft + 100 = [.38] ft

9. *Total Head* requirement is the sum of the *Elevation Difference* (Line 3), the Distribution Head Loss (Line 4), and the Supply Friction Loss (Line 8)

   [5] ft + [5] ft + [.38] ft

   Total Head Required: [11] ft

Table 1
Friction Loss in Plastic Pipe per 100 ft.

Flow Rate (GPM)	Nominal Pipe Diameter 1	1¼	1½	2	3
10	5.51	1.45	0.69	0.20	-
12	7.72	2.03	0.96	0.28	-
14	10.27	2.70	1.28	0.38	-
16	13.14	3.46	1.63	0.48	-
18	-	4.30	2.03	0.60	-
20	-	5.23	2.47	0.73	0.11
25	-	7.90	3.73	1.11	0.16
30	-	11.07	5.23	1.55	0.23
35	-	14.73	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

3. PUMP SELECTION

A pump must be selected to deliver at least [30] GPM (Line 1 or Line 2) with at least [11] feet of total head

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

(Designer) _____ (Signature) _____ (License #) _____ (Date) _____

PRESSURE DISTRIBUTION SYSTEM

All boxed rectangles must be entered, the rest will be calculated.

1. Select number of perforated laterals: [3.]

2. Select perforation spacing = [3] ft

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

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

[40] rock layer length - 2 ft = 38 ft

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

Perforation spacing = 38 ft / 3 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 3 laterals = 39 perforations

E-6: Perforation Discharge in gpm

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

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

B. Calculate the square footage per perforation.
Should be 6-10 sqft/perf. Does not apply to at-grades.
1. Rock bed area = rock width (ft) x rock length (ft)

[10] ft x 40 ft = 400 ft²

2. Square foot per perforation = Rock Bed Area / number of perfs (6)

400 ft² / 39 perfs = 10.2 ft²/ perf

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

39 perfs x [.74] gpm / perfs = 29 gpm

8. If laterals are connected to header pipe as shown in Figure E-1, to select minimum required lateral diameter, enter figure E-4 with perforation spacing (2) and number of perforations per lateral (5).

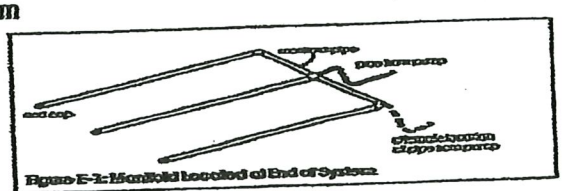
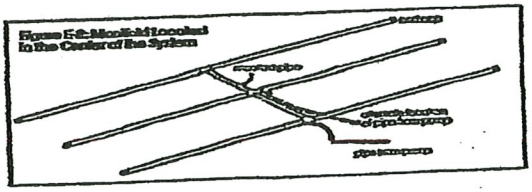


Figure E-1: Manifold located at End of System

Select minimum diameter for perforated laterals = [2.] inches

9. If perforated lateral system is attached to manifold pipe near the center, like Figure E-2, 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.



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

David Pryfogle (Signature) 1750 (license #) _____ (date)

Minnesota Pollution Control Agency

OSTP Bed Design Worksheet

University of Minnesota

v 04.06.2017

1. SYSTEM SIZING:

Project ID:

A. Design Flow (Design Sum.1A): 600 GPD

B. Code Maximum Depth*: 18 inches Designers Maximum Depth: _____ inches

C. Soil Loading Rate: 1.2 GPD/ft²

D. Required Bottom Area: Design Flow (1.A) ÷ Loading Rate (1.C) = Initial Required Bottom Area

600 GPD ÷ 1.2 GPD/ft² = 500 ft²

E. Select Distribution Method: ☑ Pressure ☐ Gravity

F. Select Dispersal Type: ☑ Rock ☐ Registered

G. If distribution media is installed in contact with sand or loamy sand or with a percolation rate of 0.1 to 5 mpi, indicate distribution or treatment method:

2. BED CONFIGURATION: (for sites with less than 6% slope)

A. Select size Multiplier: 1 1.0 = pressurized or 1.5 = gravity

B. Req'd Bottom Area = Bottom Area (1.D) X Size Multiplier =

500 ft² X 1 ft = 500 ft²

C. Designed Bottom Area: 500 ft *Optional upsizing of bed area*

D. Select Bed Width: 10 ft 10 X 50 BED

E. Calculate Bed Length: Designed Bottom Area ÷ Bed Width = Bed Length

500 ft² ÷ 10 ft = 50 ft

3. MATERIAL CALCULATION: ROCK

A. If drainfield rock is being used, select sidewall height

8.~~0~~ in .67 ft

B. Media Volume: (Media Depth + depth to cover pipe) X Designed Bottom Area = ft³

(.67 ft + 1.33 ft) . . . X 500 ft² = 500 ft³

C. Calculate Volume in cubic yards: Media volume in cubic feet ÷ 27 = cubic yards

500 ft³ ÷ 27 = 18.5 yd³ USE 22 YDS

4. MATERIAL CALCULATION: REGISTERED PRODUCTS - CHAMBERS AND EZFLOW

A. Registered Product: _____

B. Component Length: _____ ft

C. Component Width: _____ ft

D. Component depth (louver or depth of sidewall loading) _____ in

E. Number of Components per Row = Bed Length divided by Component Length (Round up)

_____ ft ÷ _____ ft = _____ components

F. Actual Bed Length = Number of Components X Component Length:

_____ components X _____ ft = _____ ft

G. Number of Rows = Bed Width divided by Component Width

_____ ft ÷ _____ ft = _____ rows *Adjust width so this is an whole number.*

H. Total Number of Components = Number of Components per Row X Number of Rows

_____ X _____ = _____ components

Soil Observation Log

Project ID: v 04.01.2020

Client: Kohl Location / Address: Corn field

Soil parent material(s): (Check all that apply) ☑ Outwash ☐ Lacustrine ☐ Loess ☐ Till ☐ Alluvium ☐ Bedrock ☐ Organic Matter

Landscape Position: (select one) Side	Slope %: 4	Slope shape: Convex	Elevation-relative to benchmark:
Vegetation: Corn field	Soil survey map units: 67B		Limiting Layer Elevation: 54"
Weather Conditions/Time of Day: Sunny 10:00 am			Date 8/31/22
Observation #/Location: Boring 4			Observation Type: Boring 4

Depth (in)	Texture	Rock Frag. %	Matrix Color(s)	Mottle Color(s)	Redox Kind(s)	Indicator(s)	Structure: Shape	Structure: Grade	Structure: Consistence
0-10	Sandy loam	<1%	10YR 3/2				Blocky	Moderate	Friable
10-36	Sandy loam	<10%	10YR 3/4				↓	↓	↓
36-54	Sandy loam	10%	10YR 5/6	7.5YR 4/6	C Concentrations	5)			
54- Redox		10%	10YR 5/6	7.5YR 4/6	CONCENTRATIONS				

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

DAVID PRZYBILLA (Designer/Inspector)	David Przybilla (Signature)	1750 (License #)	8-31-22 (Date)

Optional Verification: I hereby certify that this soil observation was verified according to Minn. R. 7082.0500 subp. 3 A. The signature below represents an infield verification of the periodically saturated soil or bedrock at the proposed soil treatment and dispersal site.

Darrin Wick (LGU Inspector)	(Signature)	C9362 (Cert. #)	8/31/22 (Date)

Soil Observation Log

Project ID:

v 04.01.2020

Client: Kahl

Location / Address: field

Soil parent material(s): (Check all that apply) ☒ Outwash ☐ Lacustrine ☐ Loess ☐ Till ☐ Alluvium ☐ Bedrock ☐ Organic Matter

Landscape Position: (select one) Convex	Slope %: 4/1	Slope shape: Convex	Elevation-relative to benchmark:
Vegetation: Corn field	Soil survey map units: 067B		Limiting Layer Elevation: 58"
Weather Conditions/Time of Day: Sunny 10:00 AM		Date 8/31/22	
Observation #/Location: 1		Observation Type: Boring 1	

Depth (in)	Texture	Rock Frag. %	Matrix Color(s)	Mottle Color(s)	Redox Kind(s)	Indicator(s)	Structure Shape	Structure Grade	Structure Consistence
0-10	Sandy loam	<10%	10YR 3/2				Blocky	Moderate	Friable
11-36	Sandy loam	<10%	10YR 4/4						
37-58	Sandy loam	<10%	10YR 5/6						
58"	~~Sandy~~ loamy Sand	<10%	10YR 5/6	Concentration 7.5 4/6		St	1	1	1

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

DAVID PRZYBILLA (Designer/Inspector)	David Przybilla (Signature)	1750 (License #)	8-31-22 (Date)

Optional Verification: I hereby certify that this soil observation was verified according to Minn. R. 7082.0500 subp. 3 A. The signature below represents an infield verification of the periodically saturated soil or bedrock at the proposed soil treatment and dispersal site.

Darin Welk (LGU Inspector)	(Signature)	C 9362 (Cert. #)	8/31/22 (Date)

University of Minnesota Onsite Sewage Treatment Program

Soil Observation Log

Project ID:

v 04.01.2020

Client: Kahl

Location / Address: field

Soil parent material(s): (Check all that apply) ☒ Outwash ☐ Lacustrine ☐ Loess ☐ Till ☐ Alluvium ☐ Bedrock ☐ Organic Matter

Landscape Position: (select one) (illegible)

Slope %: 4

Slope shape: Concave

Elevation-relative to benchmark:

Vegetation: Corn field

Soil survey map units: D673

Limiting Layer Elevation: 37" & 49"

Weather Conditions/Time of Day: Sunny 10 AM

Date 8/31/22

Observation #/Location: Boring 2 & 3

Observation Type: Boring 2

Depth (in)	Texture	Rock Frag. %	Matrix Color(s)	Mottle Color(s)	Redox Kind(s)	Indicator(s)	Structure: Shape	Structure: Grade	Structure: Consistence
0-10	Sandy loam	<10%	10YR 3/2				Blocky	Moderate	friable
10" - 36"	Sandy loam	<10%	10YR 4/4				↓	Moderate	friable
37"	Sandy loam	<10%	10YR 5/6	Concentrations 7.5 4/6		ST	↓	Moderate	friable
0-10	Sandy loam	<10%	10 YR 3/2				Blocky	Moderate	friable
10-36	Sandy loam	<10%	10 YR 4/4				↓	↓	↓
36-49	Sandy loam	<10%	10 YR 5/6	~~7.5 YR 4/6~~ Concentrations @ 49"			↓	↓	↓

Boring 2

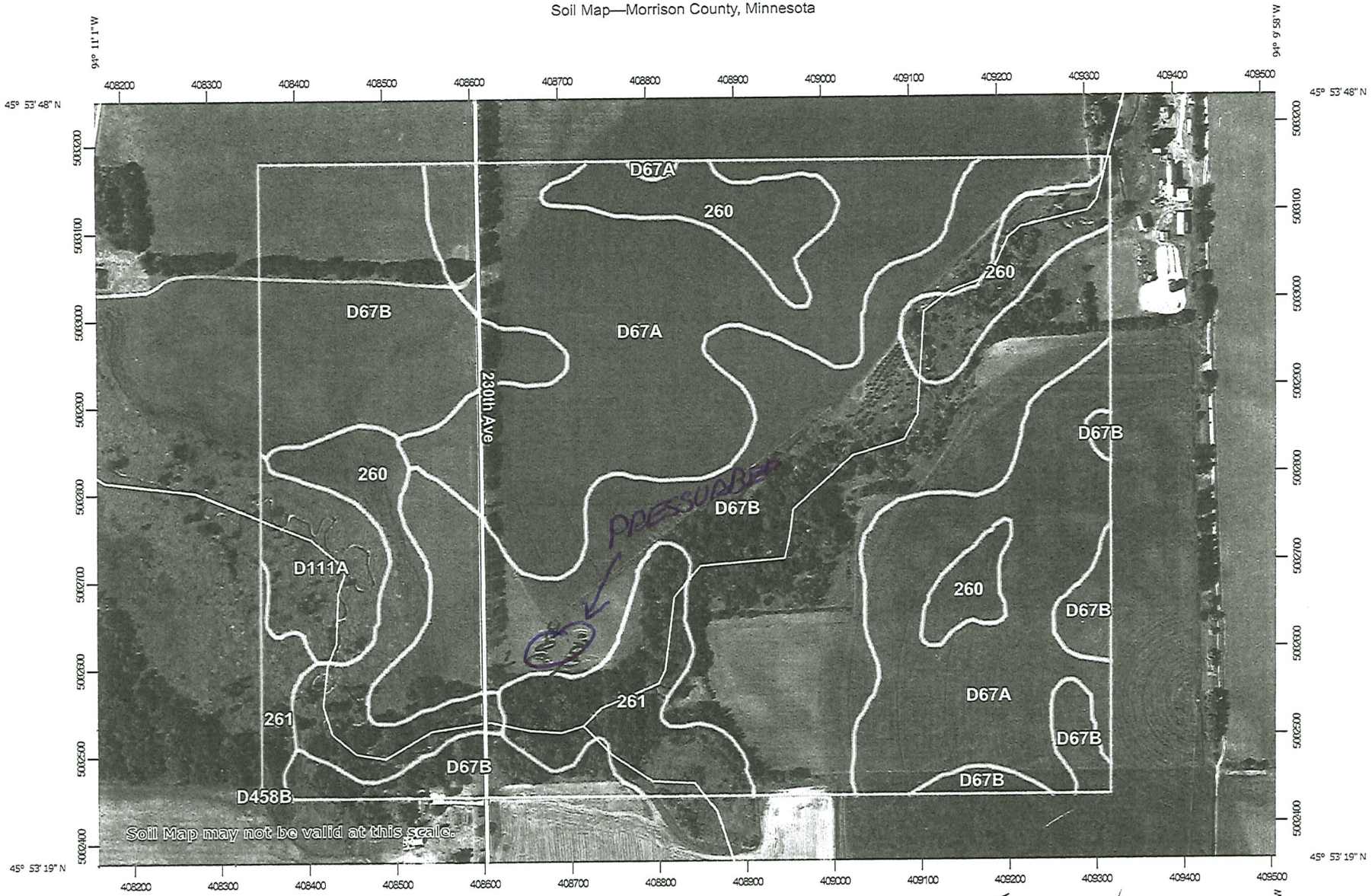
Boring 3

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

(Designer/Inspector)	(Signature)	(License #)	(Date)
DAVID PRZYBILLA	David Przybilla	1750	8-31-22

Optional Verification: I hereby certify that this soil observation was verified according to Minn. R. 7082.0500 subp. 3 A. The signature below represents an infield verification of the periodically saturated soil or bedrock at the proposed soil treatment and dispersal site.

(LGU Inspector)	(Signature)	(Cert. #)	(Date)
Dan Wen		C9362	8/31/22



Possible Flood plain

USDA Natural Resources Conservation Service

Web Soil Survey
National Cooperative Soil Survey

75' to River

UNIVERSITY OF MINNESOTA

OSTP Site Evaluation Map

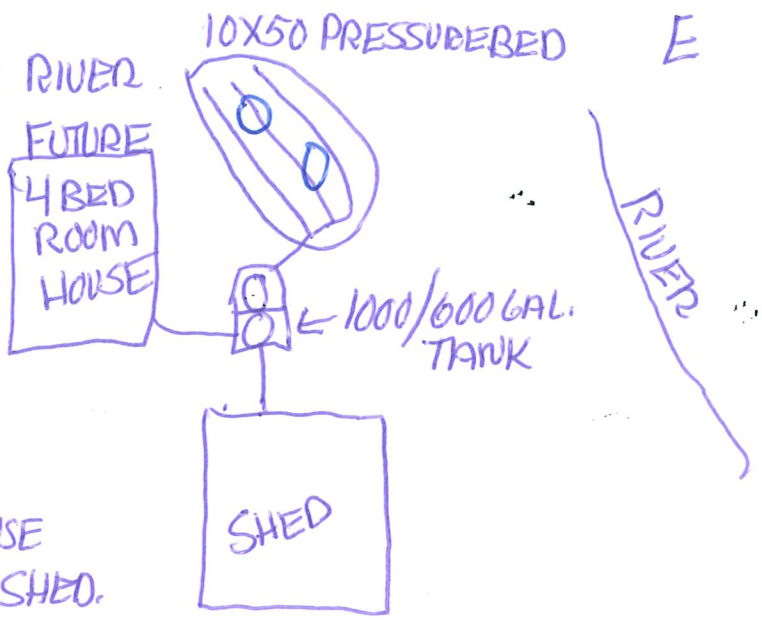
Contact Information	Project ID: Test 1	v 03.19.15

Property Owner/Client: BEN THOMA

Address:

CHECK SETBACKS FROM RIVER
NO WELL
NO PROP. LINES
WITHIN 50FT.

STARTING WITH A
2 BEDROOM SHED
THEN ~~GET~~ BUILDING
A FOUR BEDROOM HOUSE
AND NOT USING THE SHED.



List any construction issues: I WILL SET ELEVATIONS ONCE CONSTRUCTION BEGINS

Mapping Checklist

Map scale: _____ ___ indicate north ___ show slope _____ % direction ___

Locate

- ☐ Lot Dimensions/Property Lines
- ☐ Dwellings and Other Improvements
- ☐ Existing or Proposed System(s)
- ☐ Replacement Area
- ☐ Unsuitable Area(s)
- ☐ Public Water Supply Wells
- ☐ Pumping Access
- ☐ Inner Wellhead Zone

Easements

- ☐ Phone
- ☐ Electric
- ☐ Gas

Elevations

- ☐ Benchmark
- ☐ Borings
- ☐ Perc Tests
- ☐ Horizontal and Vertical Reference Points

Setbacks

- ☐ Building
- ☐ All water wells within 100 feet
- ☐ Lot Dimensions/Property Lines
- ☐ Lot Dimensions/Property Lines
- ☐ Lot Dimensions/Property Lines
- ☐ Lot Dimensions/Property Lines

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

_____	David Brynildson	1750	5-31-22
(Designer)	(Signature)	(License #)	(Date)

BEN THOMA

THE DRAINFIELD AND TANK ARE LOCATED IN THE FLOOD PLAIN. ALL COMPONENT (INSPECTION PIPES) MANHOLE COVERS AND CLEANOUTS MUST BE ABOVE THE FLOOD PLAIN ELEVATION. IS ONE THE 3RD TREE FROM THE DRIVEWAY, A NAIL WITH RIBBON. A BACK FLOW VALVE WILL HAVE TO BE INSTALLED BETWEEN HOUSE AND TANK. THE PUMP WILL HAVE TO BE UNPLUGGED IN CASE OF FLOODING. THE TANK WILL HAVE TO BE PUMPED UNTIL WATER RECEEDS.