280159000-2021

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

Certificate of Compliance
Inspection Report - Permit #: SS2021-958

Owner & Property Information

Owner Name:	KURT JANKOWSKI
Mailing Address:	KURT JANKOWSKI 1523 14 1/2 ST S FARGO ND 58103
Parcel #:	280159000
Secondary Parcel #:	

Site Address:	23309 BASS LAKE RD
Township - Sec/Twp/Rng:	SHELL LAKE - 25/140/038
Legal Description:	25-140-38 PT GOVT LOT 6, PT SE1/4 SW1/4: BEG NW COR LOT 12 BLK 1 THE TIMBERS, S 221.47', SE 64.93', SW 24.41' TO CTR RD, N AL CTR RD 408.2' NE 69.20', ELY 315.80' TO BASS LK, SL AL LK 98.86', W 248. TO POB.
Designer:	JenCo Services, LLC, L4041 (James Piper)
Installer:	Jason Niemi, L3225 (Jason Niemi)

Inspector Verified Specifications

Insp- Effluent Screen Installed:	No
Insp- Alarm Required:	Yes
Insp- Lift Pump in System:	No
Insp- Number of Bedrooms:	2

Insp- Tank Nbr/Size:	1/1500/2
Insp- Drainfield Type:	No Drainfield
Insp- Drainfield Size:	
Insp- Soil Verification:	#1:N/A #2:N/A #3:N/A

Inspector Verified Setbacks

Insp- Tank Dist to Road	50+
Insp- Tank Dist to Nearest Prop Line	20+
Insp- Tank Dist to Nearest Structure	20
Insp- Tank Dist to Well	50+
Insp- Tank Dist to OHW	200+
Insp- Tank Dist to Pond/Wetland	
Insp- Tank Dist to Pressure Line	

Insp- Drainfield Dist to Road
Insp- Drainfield Dist to Nearest Prop Line
Insp- Drainfield Dist to Nearest Structure
Insp- Drainfield Dist to Well
Insp- Drainfield Dist to OHW
Insp- Drainfield Dist to Pond/Wetland
Insp- Drainfield Dist to Pressure Line

Certificate of Compliance

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

Certification Date: 6/25/2021

Zoning Office Signature:

Denise Gubrud

Denise Gubrud - ISTS Inspector

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

Field Review Form

Permit # SS2021-958

Property and Owner

Owner: **KURT JANKOWSKI**	Parcel Number: **280159000**
Site Address: **23309 BASS LAKE RD**	Secondary Parcel:

Home Information

Does the structure contain any of the following elements?	Designer submitted	Inspector verified
	Garbage disposal: No Dishwasher: Invalid Field Grinder pump: Invalid Field Lift pump in bsmt: Invalid Field	Garbage disposal? Y (N) Dishwasher? Y (N) Grinder pump? Y (N) Lift pump in basement? Y (N)
Number of bedrooms: **2**	Review - Number of bedrooms: 2	
Effluent screen	Effluent screen installed? Y (N) Mfr:	
Alarm: **Yes** Type: **VISUAL**	Review - Alarm? (Y) N Type & Mfr: manual float	
Lift pump in system: **No**	Review - Lift pump in system? Y (N) Mfr:	

Component Information

Tank size: **2000**	Review - Tank nbr: 1 size: 1500/2 Mfr: Brown
Drainfield type:	Review - Drainfield type:
Drainfield size: Full size - Reduced/warr. size -	Review - Drainfield status: ~~none~~ / installed / next spring Review - Drainfield size:
Absorption area size:	Review - Absorption area size:
Chamber type/num: Trench sqft/chamber -	Review - Chamber type: Num: Review - Trench sqft/chamber:
Drainfield rock depth:	Review - Rock depth:

Soil Verification

Vertical separation verified	Boring #1: Boring #2: Holding Tank Boring #3:

Setback Verification

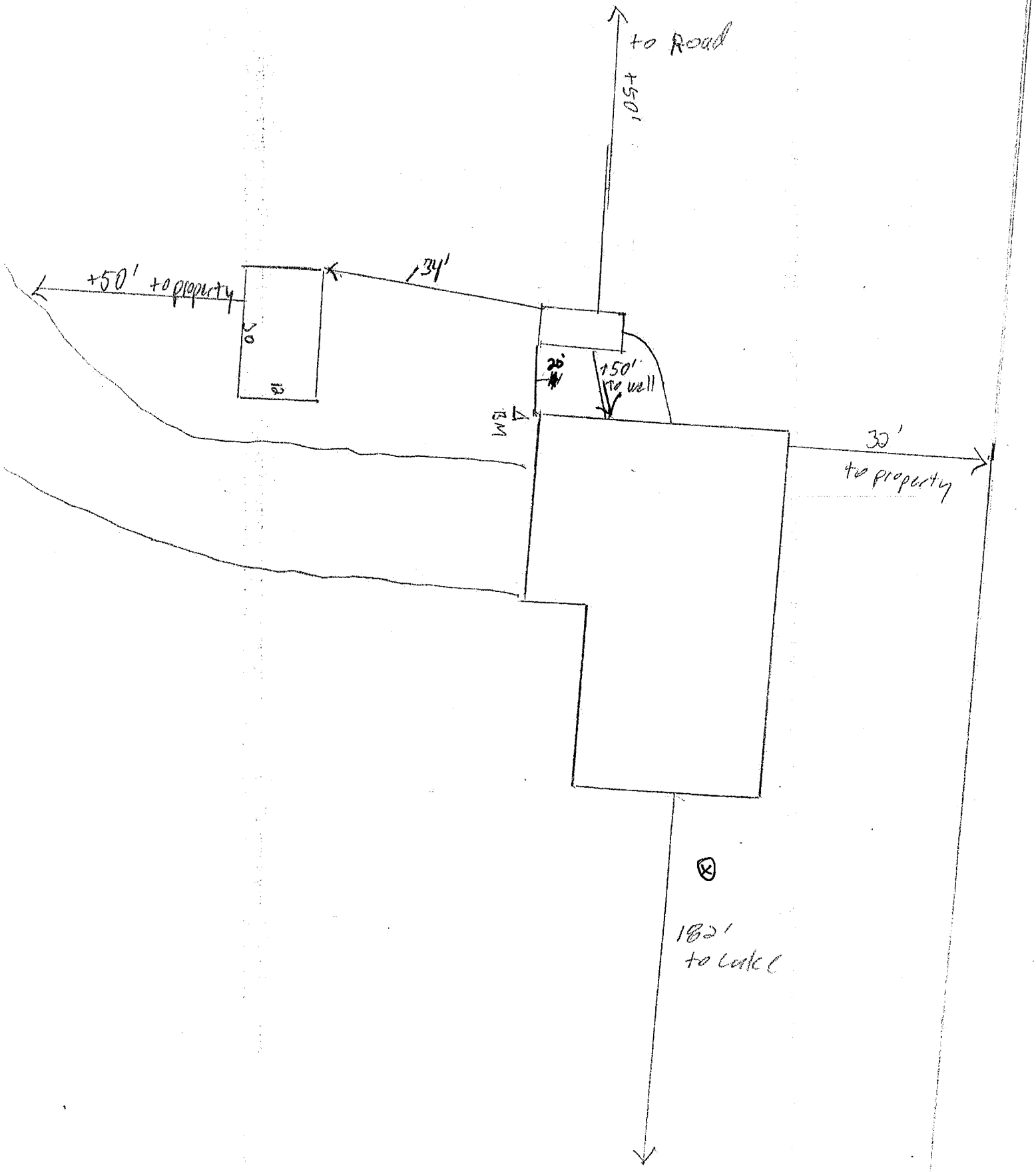
	Designer submitted		Inspector verified	
Distance to...	Tank	Drainfield	Tank	Drainfield
Road	+50'		50+	
Nearest prop line	+20'		20+	
Nearest structure	11'		20	
Well	+50'	N/A	50+	
OHW	+100'	NA	200+	
Pond/Wetland				
Pressure line	+20'			

Date System Installed: 6/25/2021 Installer: Jason Niemi Inspector: Denise Gutorud

Tank = 97.5'

1" = 20'

958



Onsite Sewage Treatment Program

Preliminary Evaluation Worksheet

MINNESOTA POLLUTION CONTROL AGENCY

1. Contact Information

v 04.01.2020

Property Owner/Client:	KURT JANKOWSKI & ANNETTE JANKOWSKI	Date Completed:	5/24/2021
Site Address:	23309 BASS LAKE RD, OSAGE, MN	Project ID:	
Email:	kjankowski@unitedautotech.com	Phone:	
Mailing Address:	1523 14 1/2 ST S, FARGO, ND 58103		
Legal Description:	25-140-38 PT GOVT LOT 6		

Parcel ID:	280159000	SEC:	25	TWP:	140	RNG:	038

2. Flow and General System Information

A. Client-Provided Information

Project Type: ☑ New Construction ☐ Replacement ☐ Expansion ☐ Repair

Project Use: ☑ Residential ☐ Other Establishment:

Residential use: # Bedrooms:	2	Dwelling Sq.ft.:	728	Unfinished Sq. Ft.:	
# Adults:	2	# Children:		# Teenagers:	
In-home business (Y/N):	No	If yes, describe:			

Water-using devices: *(check all that apply)*

☐ Garbage Disposal/Grinder	☐ Dishwasher	☐ Hot Tub*
☐ Sewage pump in basement	☑ Water Softener*	☐ Sump Pump*
☐ Large Bathtub >40 gallons	☐ Iron Filter*	☐ Self-Cleaning Humidifier*
☐ Clothes Washing Machine	☐ High Eff. Furnace*	☐ Other:

* Clear water source - should not go into system

Additional current or future uses: NONE

Anticipated non-domestic waste: NONE

The above is complete & accurate: _____

Client signature & date

B. Designer-determined flow Information

Attach additional information as necessary.

Design Flow:	300	GPD		Anticipated Waste Type:	Residential		
BOD:	<170	mg/L	TSS	<60	mg/L	Oil & Grease	<25	mg/L

3. Preliminary Site Information

A. Water Supply Wells

#	Description	Mn. ID#	Well Depth (ft.)	Casing Depth (ft.)	Confining Layer	STA Setback	Source
1	deep well		>50				OWNER
2							
3							
4							

Additional Well Information:

ONSITE SEWAGE TREATMENT PROGRAM

Preliminary Evaluation Worksheet

MINNESOTA POLLUTION CONTROL AGENCY

Site within 200' of noncommunity transient well (Y/N)	No	Yes, source:	
Site within a drinking water supply management area (Y/N)	No	Yes, source:	
Site in Well Head Protection inner wellhead management zone (Y/N)	No	Yes, source:	
Buried water supply pipes within 50 ft of proposed system (Y/N)	No		
B. Site located in a shoreland district/area?	Yes	Yes, name:	BASS LAKE
Elevation of ordinary high water level:	1542 ft	Source:	GIS
Classification: Lake- Recreational	Tank Setback: 75 ft.	STA Setbk:	75 ft.
C. Site located in a floodplain?	No	Yes, Type(s):	N/A
Floodplain designation/elevation (10 Year):	N/A ft	Source:	N/A
Floodplain designation/elevation (100 Year):	N/A ft	Source:	N/A

D. Property Line Id / Source: ☐ Owner ☐ Survey ☑ County GIS ☐ Plat Map ☐ Other:

E. ID distance of relevant setbacks on map: ☑ Water ☑ Easements ☑ Well(s) ☑ Building(s) ☑ Property Lines ☐ OHWL ☐ Other:

4. Preliminary Soil Profile Information From Web Soil Survey (attach map & description)

Map Units: Slope Range: %

List landforms:

Landform position(s):

Parent materials:

Depth to Bedrock/Restrictive Feature: in Depth to Watertable: in

Map Unit Ratings

Septic Tank Absorption Field- At-grade:

Septic Tank Absorption Field- Mound:

Septic Tank Absorption Field- Trench:

5. Local Government Unit Information

Name of LGU: BECKER COUNTY

LGU Contact: KYLE VAREBERG

LGU-specific setbacks:

LGU-specific design requirements:

LGU-specific installation requirements:

Notes:

ONSITE SEWAGE TREATMENT PROGRAM

Field Evaluation Worksheet

MINNESOTA POLLUTION CONTROL AGENCY

1. Project Information

v 04.01.2020

Property Owner/Client: KURT JANKOWSKI & ANNETTE JANKOWSKI | Project ID:

Site Address: 23309 BASS LAKE RD, OSAGE, MN | Date Completed: 5/24/2021

2. Utility and Structure Information

Utility Locations Identified ☐ Gopher State One Call # ☐ Any Private Utilities:

Locate and Verify (*see Site Evaluation map*) ☑ Existing Buildings ☐ Improvements ☐ Easements ☑ Setbacks

3. Site Information

Vegetation type(s): Grass | Landscape position: Toe Slope

Percent slope: 3 % | Slope shape: Convex, Linear | Slope direction: east

Describe the flooding or run-on potential of site: NONE

Describe the need for Type III or Type IV system: NONE

Note:

Proposed soil treatment area protected? (Y/N): | If yes, describe:

4. General Soils Information

Filled, Compacted, Disturbed areas (Y/N):

If yes, describe:

Soil observations were conducted in the proposed system location (Y/N):

A soil observation in the most limiting area of the proposed system (Y/N):

Number of soil observations: | Soil observation logs attached (Y/N):

Percolation tests performed & attached (Y/N):

5. Phase I. Reporting Information

	Depth		Elevation		
Limiting Condition*:		in		ft	**Most Restrictive Depth Identified from List Below*
Periodically saturated soil:		in		ft	Soil Texture:
Standing water:		in		ft	Percolation Rate: min/inch
Bedrock:		in		ft	Soil Hyd Loading Rate: gpd/ft^2
Benchmark Elevation:	100.0	ft			Elevations and Benchmark on map? (Y/N): Yes

Benchmark Elevation Location: GARAGE SLAB

Differences between soil survey and field evaluation:

Site evaluation issues / comments:

Anticipated construction issues:

University of Minnesota Onsite Sewage Treatment Program

Design Summary Page

MINNESOTA POLLUTION CONTROL AGENCY

1. PROJECT INFORMATION

v 04.01.2020

Property Owner/Client:	KURT JANKOWSKI & ANNETTE JANKOWSKI	Project ID:	
Site Address:	23309 BASS LAKE RD, OSAGE, MN	Date:	06/07/21
Email Address:	kjankowski@unitedautotech.com	Phone:	

2. DESIGN FLOW & WASTE STRENGTH

Attach data / estimate basis for Other Establishments

Design Flow: 300 GPD Anticipated Waste Type: Residential

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

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

3. HOLDING TANK SIZING

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

Code Minimum **Holding Tank** Capacity: 1000 Gallons in 1 Tanks or Compartments

Recommended **Holding Tank** Capacity: 2000 Gallons in 1 Tanks or Compartments

Type of High Level Alarm: VISUAL (Set @ 75% tank capacity)

Comments:

4. SEPTIC TANK SIZING

A. Residential dwellings:

Number of Bedrooms (Residential): 2

Code Minimum **Septic Tank** Capacity: Gallons in Tanks or Compartments

Recommended **Septic Tank** Capacity: Gallons in Tanks or Compartments

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

B. Other Establishments:

Waste received by: GPD x Days Hyd. Retention Time

Code Minimum **Septic Tank** Capacity: Gallons In Tanks or Compartments

Recommended **Septic Tank** Capacity: Gallons In Tanks or Compartments

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

5. PUMP TANK SIZING

Pump Tank 1 Capacity (Minimum):	Gal	Pump Tank 2 Capacity (Minimum):	Gal
Pump Tank 1 Capacity (Recommended):	Gal	Pump Tank 2 Capacity (Recommended):	Gal
Pump 1 GPM Total Head	ft	Pump 2 GPM Total Head	ft
Supply Pipe Dia. in Dose Vol:	gal	Supply Pipe Dia. Dose Vol:	Gal

University of Minnesota Onsite Sewage Treatment Program

Design Summary Page

MINNESOTA POLLUTION CONTROL AGENCY

6. SYSTEM AND DISTRIBUTION TYPE

Project ID:

Soil Treatment Type:		Distribution Type:	
Elevation Benchmark:	100 ft	Benchmark Location:	GARAGE SLAB
MPCA System Type:	Type II	Distribution Media:	
Type III/IV Details:			

7. SITE EVALUATION SUMMARY:

Describe Limiting Condition:

Layers with >35% Rock Fragments? (yes/no) ____ If yes, describe below: % rock and layer thickness, amount of soil credit and any additional information for addressing the rock fragments in this design.

Note:

	Depth		Depth		Elevation of Limiting Condition
Limiting Condition:		inches		ft	ft
Minimum Req'd Separation:		inches		ft	
Code Max System Depth:		inches		ft	Elevation ft

Critical for system compliance

This is the maximimum depth to the bottom of the distribution media for required separation. Negative Depth (ft) means it must be a mound.

Soil Texture:			
Soil Hyd. Loading Rate:	GPD/ft^2	Percolation Rate:	MPI
Contour Loading Rate:		Note:	
Measured Land Slope:	3.0 %	Note:	
Comments:			

8. SOIL TREATMENT AREA DESIGN SUMMARY

Trench:

Dispersal Area	ft^2	Sidewall Depth	in	Trench Width	ft
Total Lineal Feet	ft	No. of Trenches		Code Max. Trench Depth	in
Contour Loading Rate	ft	Length	ft	Designed Trench Depth	in

Bed:

Dispersal Area	ft^2	Sidewall Depth	in	Maximum Bed Depth	in
Bed Width	ft	Bed Length	ft	Designed Bed Depth	in

Mound:

Dispersal Area	ft^2	Bed Length	ft	Bed Width	ft
Absorption Width	ft	Clean Sand Lift	ft	Berm Width (0-1%)	ft
Upslope Berm Width	ft	Downslope Berm	ft	Endslope Berm Width	ft
Total System Length	ft	System Width	ft	Contour Loading Rate	gal/ft

University of Minnesota Onsite Sewage Treatment Program

Design Summary Page

MINNESOTA POLLUTION CONTROL AGENCY

At-Grade:

Bed Width	ft	Bed Length	ft	Finished Height	ft
Contour Loading Rate	gal/ft	Upslope Berm	ft	Downslope Berm	ft
Endslope Berm	ft	System Length	ft	System Width	ft

Level & Equal Pressure Distribution

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

Non-Level and Unequal Pressure Distribution

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

Minimum Dose Volume: _____ gal

Maximum Dose Volume: _____ gal

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

A. Starting BOD Concentration = Design Flow X Starting BOD (mg/L) X 8.35 ÷ 1,000,000

_____ gpd X _____ mg/L X 8.35 ÷ 1,000,000 = _____ lbs. BOD/day

B. Target BOD Concentration = Design Flow X Target BOD (mg/L) X 8.35 ÷ 1,000,000

_____ gpd X _____ mg/L X 8.35 ÷ 1,000,000 = _____ lbs. BOD/day

Lbs. BOD To Be Removed: _____

PreTreatment Technology: _____ *Must Meet or Exceed Target

Disinfection Technology: _____ *Required for Levels A & B

C. Organic Loading to Soil Treatment Area:

_____ mg/L X _____ gpd x 8.35 ÷ 1,000,000 ÷ _____ ft^2 = _____ $lbs./day/ft^2$

10. Comments/Special Design Considerations:

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

JAMES PIPER		L4041	6/7/2021
(Designer)	(Signature)	(License #)	(Date)

Tank Buoyancy Worksheet

Onsite Sewage Treatment Program

MINNESOTA POLLUTION CONTROL AGENCY

1. Tank Specifications

Project ID:

v 04.01.2020

A. Tank Manufacturer: BROWN PRECAST

Tank Model: 2000 HT

B. Outside Tank Dimensions and Specifications:

Tank Use: Holding Tank

Length:	156	in	Width:	84	in	Height:	57.75	in
Length:	13.0	ft	Width:	7.0	ft	Height:	4.8	ft

Diameter: ____ in

Radius of Tank: ____ in

2. Outside Volume of Tank

Rectangular Tank

A. Area of Tank = Length (ft) X Width (ft)

13.0 ft X 7.0 ft = 91.0 ft^2

B. Volume of Tank = Area of Tank (2.A) X Height (ft)

91.0 ft X 4.8 ft = 437.9 ft^3

Circular Tank

A. Area of Tank = πr^2 (3.14 X (Radius of Tank)$^{2)}$

3.14 X ____ ft^2 = ____ ft^2

B. Volume of Tank = Area of Tank X Height (ft)

____ ft^2 X ____ ft = ____ ft^3

3. Force of Tank Weight (F_{TW})

Weight of Tank (provided by manufacturer) 16,800 lbs/ft^3

4. Force of Soil Weight Over Tank (F_{SW})

A. Depth of Cover Over Tank: 24 in 2.0 ft

B. Weight of Soil Per Cubic Foot: 120 lbs/ft^3

C. Volume of Soil Over Tank = Depth of Cover (ft) X Area of Tank (ft^2)

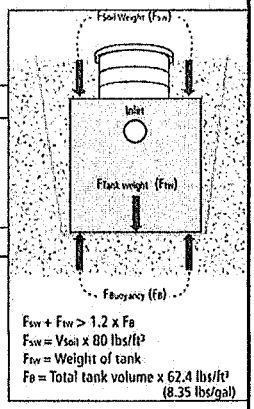
2.0 ft X 91.0 ft^2 = 182.0 ft^3

Soil Type	Weight of Soil (lbs/ft^3)
Sandy	120
Loamy	100
Clay	90

D. Weight of Soil Over Tank = Volume of Soil Over Tank X Weight of Soil Per Cubic Foot

182.0 ft^3 X 120 lbs/ft^3 21,840.0 lbs

Note: Assumes saturation does not get over the lid of the tank



$F_{SW} + F_{TW} > 1.2 \times F_B$
$F_{SW} = V_{soil} \times 80\ lbs/ft^3$
F_{TW} = Weight of tank
F_B = Total tank volume x 62.4 lbs/ft^3 (8.35 lbs/gal)

5. Buoyant Force (F_B)

Buoyant Force (F_B) = Outside Volume of Tank X Weight of Water Per Cubic Foot (62.4 lbs/ft^3) X 1.2 (Safety Fctr)

438 X 62.4 lbs/ft^3 X 1.2 = 32,792.8 lbs

6. Evaluation of Net Forces

A. Downward Force = Force of Tank Weight (F_{TW}) + Force of Soil Weight of Soil (F_{SW})

16800 lbs + 21840 lbs = 38,640.0 lbs

B. Net Difference = Downward Force - Buoyant Force Including Safety Factor

38640 lbs - 32793 lbs = 5,847.2 lbs

If the Net Difference is negative, countermeasures will need to be taken to prevent the tank from floating out of the ground.

Comments/Solution:

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

Septic Permit

Permit #: SS2021-958

Owner & Property Information

Owner Name:	KURT JANKOWSKI
Mailing Address:	KURT JANKOWSKI 1523 14 1/2 ST S FARGO ND 58103
Phone #:	UNKOWN
Lake/River(1000/300):	Yes
Lake/River Name:	Bass (Forest) [RD]
Pond/Wetland(50):	No

Parcel #:	280159000
Secondary Parcel #:	
Site Address:	23309 BASS LAKE RD
Township - Sec/Twp/Rng:	SHELL LAKE - 25/140/038
Designer:	JenCo Services, LLC, L4041 (James Piper)
Installer:	Jason Niemi, L3225 (Jason Niemi)

Specifications

Tank to be Installed:	Holding Tank
Total # Tanks Installed:	1
System Status:	No Existing System
System Serves:	Seasonal Dwelling
Number of Bedrooms:	2
Design Flow/GPD:	300
Garbage Disposal?	No
Size of Lift Pump:	
Size of Lift Line:	
Soil Sizing Factor:	

Type of Drainfield:	
Full Size of Drainfield:	
Reduced/Warrantied Size:	
Absorbtion Area Size:	
Rock Depth:	
Chamber Type and Number:	
Chamber Trench SqFt/Chamber:	
Is System Pressurized?	
Alarm?	Yes
Type of Alarm:	VISUAL

Setbacks

Road Type:	Public / Township
Tank Dist to Road:	+50'
Tank Dist to Closest Prop Line:	+20'
Tank Dist to Nearest Structure:	11'
Tank Dist to Well:	+50'
Tank Dist to OHW:	+100'
Tank Dist to Pond/Wetland:	
Tank Dist to Pressure Line:	+20'

Right of Way Marked:	No
Drainfied Dist to Road:	
Drainfied Dist to Closest Prop Line:	+20'
Drainfield Dist to Nearest Structure:	
Drainfield Dist to Well:	N/A
Drainfield Dist to OHW:	NA
Drainfield Dist to Pond/Wetland:	
Drainfield Dist to Pressure Line:	

Other Information

Date Approved:	6/7/2021
Permit Fee:	225.00
Receipt Number:	250214449
Date Paid:	6/9/2021

Notes: Install a 2000 gallon holding tank with a manual alarm

Zoning Office Signature:

Denise Gubrud

PERMIT MUST BE POSTED AT JOB SITE. PERMIT EXPIRES ONE YEAR FROM DATE PAID.
**** Please schedule for inspection prior to installation! ****