



180283000-2023



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 #: SS2023-1888

Owner & Property Information

Owner Name:	KEITH FISCHER	Site Address:	17421 BIJOU CIR
Mailing Address:	KEITH FISCHER 17421 BIJOU CIR LAKE PARK MN 56554	Township - Sec/Twp/Rng:	LAKE PARK - 29/139/043
Parcel #:	180283000	Legal Description:	Lot Block 001 of BIJOU HEIGHTS 139 43 LOTS 49, 50.
Secondary Parcel #:		Designer:	Cubed B LLC, L4142 (Brant Bigger)
		Installer:	Stenger Excavating LLC, L553 (Timothy Stenger)

Inspector Verified Specifications

Insp- Effluent Screen Installed:	No	Insp- Tank Nbr/Size:	2/2250
Insp- Alarm Required:	Yes	Insp- Drainfield Type:	No Drainfield
Insp- Lift Pump in System:	No	Insp- Drainfield Size:	NA
Insp- Number of Bedrooms:	2	Insp- Soil Verification:	#1:N/A #2:N/A #3:N/A

Inspector Verified Setbacks

Insp- Tank Dist to Road	ROW AGREEMENT	Insp- Drainfield Dist to Road	NA
Insp- Tank Dist to Nearest Prop Line	5' PLA	Insp- Drainfield Dist to Nearest Prop Line	NA
Insp- Tank Dist to Nearest Structure	10+	Insp- Drainfield Dist to Nearest Structure	NA
Insp- Tank Dist to Well	50'	Insp- Drainfield Dist to Well	NA
Insp- Tank Dist to OHW	100+	Insp- Drainfield Dist to OHW	NA
Insp- Tank Dist to Pond/Wetland	NA	Insp- Drainfield Dist to Pond/Wetland	NA
Insp- Tank Dist to Pressure Line	NA	Insp- Drainfield Dist to Pressure Line	NA

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: 10/23/2023

Zoning Office Signature:

Jeff Rusness - ISTS Inspector

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

Field Review Form

Permit # SS2023-1888

Property and Owner

Owner: KEITH FISCHER	Parcel Number: 180283000
Site Address: 17421 BIJOU CIR	Secondary Parcel:

Home Information

Does the structure contain any of the following elements?	Designer submitted	Inspector verified
	Garbage disposal: No Dishwasher: Grinder pump: Lift pump in bsmt:	Garbage disposal? Y <input checked="" type="checkbox"/> N <input checked="" type="checkbox"/> Dishwasher? Y <input checked="" type="checkbox"/> N <input checked="" type="checkbox"/> Grinder pump? Y <input checked="" type="checkbox"/> N <input checked="" type="checkbox"/> Lift pump in basement? Y <input checked="" type="checkbox"/> N <input checked="" type="checkbox"/>
Number of bedrooms: 2	Review - Number of bedrooms: 2	
Effluent screen	Effluent screen installed? Y <input checked="" type="checkbox"/> N <input checked="" type="checkbox"/> Mfr:	
Alarm: Yes Type: manual	Review - Alarm? Y <input checked="" type="checkbox"/> N <input checked="" type="checkbox"/> Type & Mfr: Manual Floo	
Lift pump in system: No	Review - Lift pump in system? Y N Mfr: NA	

Component Information

Tank size: two 2,250 gallon holding tanks	Review - Tank nbr: 2 size: 2250 Mfr: Brown/Wilbert
Drainfield type:	Review - Drainfield type: NA
Drainfield size: Full size - Reduced/warr. size -	Review - Drainfield status: none / installed / next spring Review - Drainfield size: NA
Absorption area size:	Review - Absorption area size:
Chamber type/num: Trench sqft/chamber -	Review - Chamber type: Review - Trench sqft/chamber: Num:
Drainfield rock depth:	Review - Rock depth:

Soil Verification

Vertical separation verified	Boring #1: NA Boring #2: Boring #3:
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Setback Verification

Distance to...	Designer submitted		Inspector verified	
	Tank	Drainfield	Tank	Drainfield
Road	up to the ROW	N/A	ROW 9' from 5' PLR	NA
Nearest prop line	5'	N/A	10'	
Nearest structure	>20'	N/A	50'	
Well	>50'	N/A	100'	
OHW	>100'	N/A	NA	
Pond/Wetland	N/A	N/A	NA	
Pressure line	>50'	N/A	NA	

Date System Installed: **10-11-2023** Installer: **[Signature]** Inspector: **[Signature]**



Cubed B LLC
SEPTIC SYSTEM DESIGN
& INSPECTION

BRANT B. BIGGER
Owner
13248 US Hwy 10
Lake Park, MN 56554
218-234-6906
brant.bigger@gmail.com
cubedblc.com

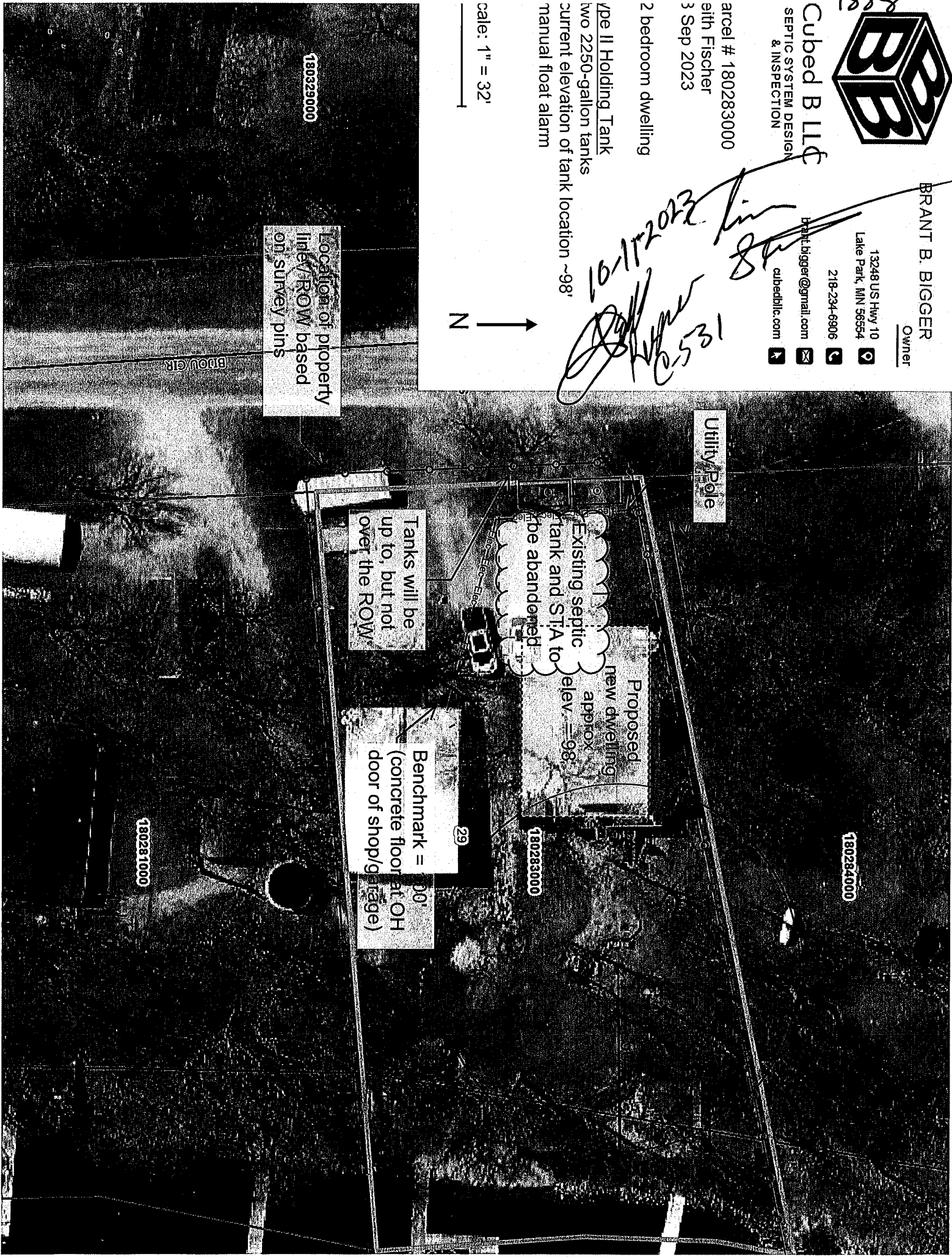
Parcel # 180283000
with Fischer
3 Sep 2023

2 bedroom dwelling

Type II Holding Tank
two 2250-gallon tanks
current elevation of tank location ~98'

Scale: 1" = 32'

10-11-2023
Jim
Stu
0531



Location of property
line/ROW based
on survey pins

Utility Pole

Existing septic
tank and STA to
be abandoned

Proposed
new dwelling
approx
elev. = 98'

Tanks will be
up to, but not
over the ROW.

Benchmark = 90'
(concrete floor at OH
door of shop/garage)

180329000

180284000

180283000

180281000



Preliminary Evaluation Worksheet



v 03.15.2023

Property Owner/Client: Date Completed:

Site Address: Project ID:

Email: Phone:

Mailing Address: Alt Phone:

Legal Description:

Parcel ID: SEC: TWP: RNG:

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: Dwelling sq.ft.: Unfinished sq.ft.:

Adults: # Children: # Teenagers:

In-home business (Y/N): If yes, describe:

Water-using devices: (check all that apply)

<input type="checkbox"/> Garbage Disposal/Grinder	<input checked="" type="checkbox"/> Dishwasher	<input type="checkbox"/> Hot Tub*
<input type="checkbox"/> Sewage pump in basement	<input type="checkbox"/> Water Softener*	<input type="checkbox"/> Sump Pump*
<input type="checkbox"/> Large Bathtub >40 gallons	<input type="checkbox"/> Iron Filter*	<input type="checkbox"/> Self-Cleaning Humidifier*
<input checked="" type="checkbox"/> Clothes Washing Machine	<input type="checkbox"/> High Eff. Furnace*	<input type="checkbox"/> Other: <input type="text"/>

* Clear water source - should not go into system

Additional current or future uses:

Anticipated non-domestic waste:

The above is complete & accurate:

Client signature & date

B. Designer-determined Flow and Anticipated Waste Strength Information

Attach additional information as necessary.

Design Flow: GPD Anticipated Waste Type:

Maximum Concentration BOD: mg/L TSS mg/L Oil & Grease 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:



Preliminary Evaluation Worksheet

Site within 200' of noncommunity transient well (Y/N)	<input type="text" value="No"/>	Yes, source: <input style="width: 80%;" type="text"/>
Site within a drinking water supply management area (Y/N)	<input type="text" value="No"/>	Yes, source: <input style="width: 80%;" type="text"/>
Site in Well Head Protection inner wellhead management zone (Y/N)	<input type="text" value="No"/>	Yes, source: <input style="width: 80%;" type="text"/>
Buried water supply pipes within 50 ft of proposed system (Y/N)	<input type="text" value="No"/>	
B. Site located in a shoreland district/area?	<input type="text" value="Yes"/>	Yes, name: <input style="width: 80%;" type="text" value="BIJOU"/>
Elevation of ordinary high water level:	<input style="width: 50%;" type="text"/> ft	Source: <input style="width: 80%;" type="text"/>
Classification: <input style="width: 150%;" type="text" value="Lake- Recreational"/>	Tank Setback: <input style="width: 50%;" type="text" value="75"/> ft.	STA Setback: <input style="width: 50%;" type="text" value="75"/> ft.
C. Site located in a floodplain?	<input type="text" value="No"/>	Yes, Type(s): <input style="width: 80%;" type="text" value="N/A"/>
Floodplain designation/elevation (10 Year):	<input style="width: 50%;" type="text" value="N/A"/> ft	Source: <input style="width: 80%;" type="text" value="N/A"/>
Floodplain designation/elevation (100 Year):	<input style="width: 50%;" type="text" value="N/A"/> ft	Source: <input style="width: 80%;" type="text" value="N/A"/>
D. Property Line Id / Source:	<input checked="" type="checkbox"/> Owner	<input checked="" type="checkbox"/> Survey
	<input checked="" type="checkbox"/> County GIS	<input type="checkbox"/> Plat Map
	<input type="checkbox"/> Other: <input style="width: 80%;" type="text"/>	
E. ID distance of relevant setbacks on map:	<input checked="" type="checkbox"/> Water	<input checked="" type="checkbox"/> Easements
	<input checked="" type="checkbox"/> Well(s)	<input checked="" type="checkbox"/> Building(s)
	<input checked="" type="checkbox"/> Property Lines	<input type="checkbox"/> OHWL
	<input type="checkbox"/> Other: <input style="width: 80%;" type="text"/>	

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

Map Units:	<input style="width: 95%;" type="text" value="422B--Bygland silty clay loam"/>	Slope Range:	<input style="width: 90%;" type="text" value="1-6"/> %
List landforms:	<input style="width: 95%;" type="text" value="Hillslopes on moraines"/>		
Landform position(s):	<input style="width: 95%;" type="text" value="Summit, shoulder, backslope"/>		
Parent materials:	<input style="width: 95%;" type="text" value="Silty and clayey glaciolacustrine sediments"/>		
Depth to Bedrock/Restrictive Feature:	<input style="width: 50%;" type="text" value=">80"/> in	Depth to Watertable:	<input style="width: 50%;" type="text" value="30-47"/> in
Map Unit Ratings	Septic Tank Absorption Field- At-grade:	<input style="width: 95%;" type="text" value="Extremely Limited"/>	
	Septic Tank Absorption Field- Mound:	<input style="width: 95%;" type="text" value="Extremely Limited"/>	
	Septic Tank Absorption Field- Trench:	<input style="width: 95%;" type="text" value="Extremely Limited"/>	

5. Local Government Unit Information

Name of LGU:	<input style="width: 95%;" type="text" value="Becker County"/>
LGU Contact:	<input style="width: 95%;" type="text" value="Kyle Vareberg"/>
LGU-specific setbacks:	<input style="width: 95%;" type="text"/>
LGU-specific design requirements:	<input style="width: 95%;" type="text"/>
LGU-specific installation requirements:	<input style="width: 95%;" type="text"/>
Notes:	<input style="width: 95%; height: 40px;" type="text"/>



Design Summary Page



1. PROJECT INFORMATION		v 03.15.2023
Property Owner/Client:	Keith Fischer	Project ID: <input style="width: 100%;" type="text"/>
Site Address:	17421 BIJOU CIR, LAKE PARK MN 56554	Date: 09/09/23
Email Address:	kthfischer@yahoo.com	Phone: 701-238-6429
2. DESIGN FLOW & WASTE STRENGTH <i>Attach waste strength data/estimated strength for Other Establishments</i>		
Design Flow:	<input type="text" value="300"/> GPD	Anticipated Waste Type: <input type="text" value="Residential"/>
BOD:	<input type="text" value="170"/> mg/L	TSS: <input type="text" value="60"/> mg/L
Oil & Grease:	<input type="text" value="25"/> mg/L	
Treatment Level:	<input type="text"/> <i>Select Treatment Level C for residential septic tank effluent</i>	
3. HOLDING TANK SIZING		
Minimum Capacity: Residential =1000 gal or 400 gal/bedroom, Other Establishment = Design Flow x 5.0, Minimum size 1000 gallons		
Code Minimum Holding Tank Capacity:	<input type="text" value="1000"/> Gallons	with <input type="text" value="1"/> Tanks or Compartments
Recommended Holding Tank Capacity:	<input type="text" value="4500"/> Gallons	with <input type="text" value="2"/> Tanks or Compartments
Type of High Level Alarm:	<input type="text" value="manual float"/> (Set @ 75% tank capacity)	
Comments:	<input style="width: 100%;" type="text"/>	
4. SEPTIC TANK SIZING		
A. Residential dwellings:		
Number of Bedrooms (Residential):	<input type="text" value="2"/>	
Code Minimum Septic Tank Capacity:	<input type="text"/> Gallons	with <input type="text"/> Tanks or Compartments
Recommended Septic Tank Capacity:	<input type="text"/> Gallons	with <input type="text"/> Tanks or Compartments
Effluent Screen & Alarm (Y/N):	<input type="text"/> Model/Type: <input style="width: 100%;" type="text"/>	
B. Other Establishments:		
Waste received by:	<input type="text"/> <input type="text"/> GPD x <input type="text"/> Days Hyd. Retention Time	
Code Minimum Septic Tank Capacity:	<input type="text"/> Gallons	with <input type="text"/> Tanks or Compartments
Recommended Septic Tank Capacity:	<input type="text"/> Gallons	with <input type="text"/> Tanks or Compartments
Effluent Screen & Alarm (Y/N):	<input type="text"/> Model/Type: <input style="width: 100%;" type="text"/>	
* Other Establishments Require Department of Labor and Industry Approval and Inspection for Building Sewer *		
5. PUMP TANK SIZING		
Soil Treatment Dosing Tank		Other Component Dosing Tank:
Pump Tank Capacity (Minimum):	<input type="text"/> Gal	Pump Tank Capacity (Minimum): <input type="text"/> Gal
Pump Tank Capacity (Recommended):	<input type="text"/> Gal	Pump Tank Capacity (Recommended): <input type="text"/> Gal
Pump Req: <input type="text"/> GPM	Total Head <input type="text"/> ft	Pump Req: <input type="text"/> GPM
Supply Pipe Dia. <input type="text"/> in	Dose Vol: <input type="text"/> gal	Total Head <input type="text"/> ft
		Supply Pipe Dia. <input type="text"/> in
		Dose Vol: <input type="text"/> Gal
* Flow measurement device must be incorporated for any system with a pump: Elapsed Time Meter and/or Event Counter *		

6. SYSTEM AND DISTRIBUTION TYPE		Project ID: <input style="width: 150px;" type="text"/>
Soil Treatment Type: <input style="width: 100px;" type="text"/>	Distribution Type: <input style="width: 150px;" type="text"/>	
Elevation Benchmark: <input style="width: 50px;" type="text"/> 100.0 ft	Benchmark Location: <input style="width: 200px;" type="text"/> concrete floor at overhead door	
MPCA System Type: <input style="width: 100px;" type="text"/>	Distribution Media: <input style="width: 150px;" type="text"/>	
Type III/IV/V Details: <input style="width: 200px;" type="text"/>	<input style="width: 150px;" type="text"/>	

7. SITE EVALUATION SUMMARY:		
Describe Limiting Condition: <input style="width: 500px;" type="text"/>		
Layers with >35% Rock Fragments? (yes/no) <input type="checkbox"/> 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: <input style="width: 600px;" type="text"/>		
	Depth	Elevation of Limiting Condition
Limiting Condition: <input style="width: 50px;" type="text"/> inches	<input style="width: 30px;" type="text"/> ft	<input style="width: 50px;" type="text"/> ft Critical for system compliance
Minimum Req'd Separation: <input style="width: 50px;" type="text"/> inches	<input style="width: 30px;" type="text"/> ft	Distribution Elevation >Code Max Depth
Code Max System Depth*: <input style="width: 50px;" type="text"/> inches	<input style="width: 30px;" type="text"/> ft	Elevation
*This is the maximum depth to the bottom of the distribution media for required separation. Negative Depth (ft) requires a mound.		
Designed Distribution Elevation: <input style="width: 50px;" type="text"/> ft	Minimum Sand Depth: <input style="width: 50px;" type="text"/> inches	
A. Soil Texture: <input style="width: 150px;" type="text"/>	B. Organic Loading Rate (optional): <input style="width: 50px;" type="text"/> lbs/sq.ft/day	0
C. Soil Hyd. Loading Rate: <input style="width: 50px;" type="text"/> GPD/ft ²	D. Percolation Rate: <input style="width: 50px;" type="text"/> MPI	
E. Contour Loading Rate: <input style="width: 50px;" type="text"/>	Note: <input style="width: 300px;" type="text"/>	
F. Measured Land Slope: <input style="width: 50px;" type="text"/> 5.0 %	Note: <input style="width: 300px;" type="text"/>	
Comments: <input style="width: 500px;" type="text"/>		

8. SOIL TREATMENT AREA DESIGN SUMMARY					
Trench:					
Dispersal Area <input style="width: 50px;" type="text"/> sq.ft	Sidewall Depth <input style="width: 50px;" type="text"/> in	Trench Width <input style="width: 50px;" type="text"/> ft			
Total Lineal Feet <input style="width: 50px;" type="text"/> ft	No. of Trenches <input style="width: 50px;" type="text"/>	Code Max. Trench Depth <input style="width: 50px;" type="text"/> in			
Contour Loading Rate <input style="width: 50px;" type="text"/> ft	Minimum Length <input style="width: 50px;" type="text"/> ft	Designed Trench Depth <input style="width: 50px;" type="text"/> in			
Bed:					
Dispersal Area <input style="width: 50px;" type="text"/> sq.ft	Sidewall Depth <input style="width: 50px;" type="text"/> in	Maximum Bed Depth <input style="width: 50px;" type="text"/> in			
Bed Width <input style="width: 50px;" type="text"/> ft	Bed Length <input style="width: 50px;" type="text"/> ft	Designed Bed Depth <input style="width: 50px;" type="text"/> in			
Mound:					
Dispersal Area <input style="width: 50px;" type="text"/> sq.ft	Bed Length <input style="width: 50px;" type="text"/> ft	Bed Width <input style="width: 50px;" type="text"/> ft			
Absorption Width <input style="width: 50px;" type="text"/> ft	Clean Sand Lift <input style="width: 50px;" type="text"/> ft	Berm Width (0-1%) <input style="width: 50px;" type="text"/> ft			
Upslope Berm Width <input style="width: 50px;" type="text"/> ft	Downslope Berm <input style="width: 50px;" type="text"/> ft	Endslope Berm Width <input style="width: 50px;" type="text"/> ft			
Total System Length <input style="width: 50px;" type="text"/> ft	System Width <input style="width: 50px;" type="text"/> ft	Contour Loading Rate <input style="width: 50px;" type="text"/> gal/ft			



Design Summary Page



Project ID: _____

At-Grade:

Dispersal Area sq.ft Bed Length ft Bed Width ft
 Upslope Berm ft Downslope Berm ft Finished Height ft
 System Length ft Endslope Berm ft System Width ft

Level & Equal Pressure Distribution Soil Treatment Area

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

Non-Level and Unequal Pressure Distribution Soil Treatment Area

	Elevation (ft)	Pipe Size (in)	Pipe Volume (gal/ft)	Pipe Length (ft)	Perf Size (in)	Spacing (ft)	Spacing (in)	Minimum Dose Volume <input type="text"/> gal
Lateral 1	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Lateral 2	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Lateral 3	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Lateral 4	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Lateral 5	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Lateral 6	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

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

Organic Loading to Soil Treatment

A. Starting BOD Concentration = Design Flow X 0.7 X Starting BOD (mg/L) X 8.35 ÷ 1,000,000
 gpd X mg/L X 8.35 ÷ 1,000,000 = lbs. BOD/day (Organic Loading Design)

B. Organic Loading to Soil Treatment Area: (enter loading value in 7B)
 mg/L X gpd X 0.7 X 8.35 ÷ 1,000,000 ÷ sq.ft = lbs./day/sqft

HSW Technology Strength Reduction

A. Starting BOD Concentration = Design Flow X Starting BOD (mg/L) X 8.35 ÷ 1,000,000
 0 gpd X 1000 mg/L X 8.35 ÷ 1,000,000 = 0.00000 lbs. BOD/day (HSW Technology Design)

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 (HSW Technology Design)
 Lbs. BOD To Be Removed: lbs. BOD/day (HSW Technology Design)

Pretreatment Technology: *Must Meet or Exceed Target

Disinfection Technology: *Required for Levels A & B

10. Comments/Special Design Considerations:

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

Brant Bigger		L4142	9-Sep-23
(Designer)	(Signature)	(License #)	(Date)

Township Right-of-Way Encroachment

The Lake Park Township hereby grants permission to:

NAME: KEITH FISCHER

ADDRESS: 17421 BIJOU CIR, LAKE PARK MN 56554

PROPERTY ID #: 180283000

LOCATION DESCRIPTION: BIJOU HEIGHTS Block 1 LOTS 49 & 50

X Place holding tanks up to the Township road right-of-way

OR

_____ To extend the drainfield for the septic no more than _____ feet into the Township right-of-way.

The Lake Park Township will not be liable for any damages to said septic system due to road construction.

PERMIT NUMBER: SS2023-169531

SIGNATURES:

Landowner:	<u>Keith Fischer</u>	Date: <u>9/10/23</u>
Township:	<u>Bradley A. Hendrickson</u>	Date: <u>9/11/23</u>
Township:	<u>Tyler B. ...</u>	Date: <u>9/11/23</u>
Township:	<u>John M. ...</u>	Date: <u>9-11-23</u>

PARCEL	
APP	
YEAR	
SCANNED	

PROPERTY LINE AGREEMENT

NATHAN DEBBY

owner of the property described as:

BLVD HEIGHTS Block 11 LOTS 51, 52 BLK A PT LOT 53

Parcel Number: 160284000 give

KEITH FISCHER

owner of the property described as:

BLVD HEIGHTS Block 11 LOTS 49 & 50

Parcel Number: 160283000

permission to have their tower system closer than the required 10 feet to the lot line.

Signed: [Signature]

Dated: 9/18/23

Subscribed and sworn to before me this 18th day of September, 2023

Notary [Signature]

JOSH CAHN
 Notary Public
 State of North Dakota
 My Commission Expires April 27, 2024



Septic System Management Plan for Holding Tank Systems

The goal of a septic system is to protect human health and the environment by properly treating wastewater before returning it to the environment. Your holding tank system is designed to store your used water before it is recycled back into our lakes, streams and groundwater.

This **management plan** will identify the operation and maintenance activities necessary to ensure compliance with applicable rules and regulations. Some of these activities must be performed by you, the homeowner. Other tasks must be performed by a licensed septic maintainer. However, it is YOUR responsibility to make sure all tasks get accomplished in a timely manner.

The University of Minnesota's *Septic System Owner's Guide* contains additional tips and recommendations designed to extend the effective life of your system and save you money over time.

Proper septic system design, installation, operation and maintenance means safe and clean water!

Property Owner: **Keith Fischer**

Property Address: 17421 BIJOU CIR, LAKE PARK MN 56554 Property ID: **180283000**

System Designer: **Cubed B LLC**

License #: **L4142**

System Installer: **Stenger Excavating LLC**

License #: **L553**

Service Provider/Maintainer:

Phone:

Permitting Authority: **Becker County**

Phone: **218-846-7314**

Permit #: **SS2023-173704**

Date Inspected:

Keep this Management Plan with your Septic System Owner's Guide. The Septic System Owner's Guide includes a folder to hold maintenance records including pumping, inspection and evaluation reports. Ask your septic professional to also:

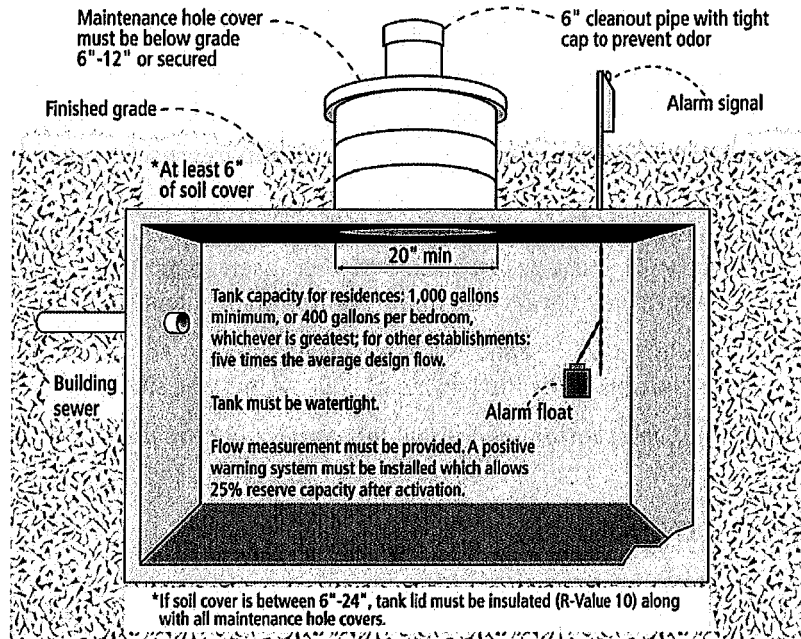
- Attach permit information, designer drawings and as-builts of your system, if they are available.
- Keep copies of all pumping records and other maintenance and repair invoices with this document.
- Review this document with your maintenance professional at each visit; discuss any changes in product use, activities, or water-use appliances.

For a copy of the *Septic System Owner's Guide*, call 1-800-876-8636 or go to <http://shop.extension.umn.edu/>

<http://septic.umn.edu>



Your Holding Tank



Dwelling Type	Well Construction
Number of bedrooms: <u>2</u>	Well depth (ft): <u>deep</u>
System capacity/ design flow (gpd): <u>300</u>	<input type="checkbox"/> Cased well Casing depth: _____
Anticipated average daily flow (gpd): _____	<input type="checkbox"/> Other (specify): _____
Comments _____	Distance from septic (ft): <u>>50</u>
In-home business? <input type="checkbox"/> What type? _____	Is the well on the design drawing? <input checked="" type="radio"/> Y <input type="radio"/> N
Number of occupants <u>2</u>	

Holding Tank	
<input type="radio"/> One tank: Tank volume: <u>2250</u> gallons	<input type="checkbox"/> Flow measurement device: <u>no</u>
<input checked="" type="radio"/> Two tanks: Tank volume: <u>2250</u> gallons	<input type="checkbox"/> Location: <u>west of house near road</u>
<input type="checkbox"/> Tank is constructed of <u>concrete</u>	<input type="checkbox"/> Alarm <input checked="" type="checkbox"/> visual <input type="checkbox"/> audible
	<input type="checkbox"/> Reserve %: <u>25</u>
<input type="checkbox"/> Service contract held by: _____	
<input type="checkbox"/> Service contract is attached to this management plan	



Homeowner Management Tasks

These *operation and maintenance* activities are your responsibility. Use the chart on page 6 to track your activities.

Identify the service intervals recommended by your system designer and your local government. The tank assessment for your system will be the **shortest interval of these three intervals**. Your pumper/maintainer will determine if your tank needs to be pumped.

Tank capacity ÷ (# of occupants X 50 Gallons/day) = # of days between cleaning

OR

Within 24 hours of alarm signal

System Designer: check every 45 days

Local Government: check every _____ days

<p>My tank needs to be emptied every <u>365</u> days</p>
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Seasonally

- Monitor alarm daily – make sure the alarm has not signaled.* Alarms signal when your holding tank is nearly full; contact your maintainer.
- Measure* and note your average daily water usage on page 5. Conserving water saves you money!
- Leaks.* Check (listen, look) for leaks in toilets and dripping faucets. Repair leaks promptly.

Annually

- Establish a contract for tank cleaning services with a state licensed maintenance business.
- Caps.* Make sure that all caps and lids are intact and in place. Inspect for damaged caps at least every fall. Fix or replace damaged caps before winter to help prevent freezing issues.
- Water conditioning devices.* See Page 5 for a list of devices. When possible, discharge clear water sources to another location. Program the recharge frequency based on *water demand (gallons)* rather than *time (days)*. Recharging too frequently will result in increased pumping costs.
- Review your water usage rate.* Review the Water Use Appliance chart on Page 5. Discuss any major changes with your pumper/maintainer.

During each visit by a pumper/maintainer

- Ask if your pumper/maintainer is licensed in Minnesota.
- Make sure that your pumper/maintainer has clear access to the holding tank and completely empties the tank
- Ask your pumper/maintainer to accomplish the tasks listed on the Professional Tasks on Page 4.



Professional Management Tasks

These are the operation and maintenance activities that a pumper/maintainer performs to help ensure long-term performance of your system. Professionals should refer to the O/M Manual for detailed checklists for tanks, pumps, alarms and other components. Call 800-322-8642 for more details.

- Written record provided to homeowner after each visit.

Plumbing/Source of Wastewater

- Review the Water Use Appliance Chart on Page 5 with homeowner. Discuss any changes in water use and the impact those changes may have on the frequency of maintenance.
- Review and document water usage rates with homeowner.

Holding Tanks

- Maintenance hole lid.* A riser is recommended if the lid is not accessible from the ground surface. Insulate the riser cover for frost protection.
- Liquid level.* Check to make sure the tank is not leaking.
- Inspection pipes.* Replace damaged caps.
- Alarm.* Verify that the alarm works and that there is at least 25% reserve capacity.
- End of year seasonal property pumping.* Remind homeowner of most frequent causes of tank and building sewer freeze-ups. Ensure that there are no "micro-sources" of water such as a high efficiency furnace or other dripping devices. Determine a logical winter water use plan that will not result in need for emergency visit(s).

All other components – inspect as listed here:



Water-Use Appliances and Equipment in the Home

Appliance	Impacts on Holding Tank	Management Tips
Garbage disposal	<ul style="list-style-type: none"> • Uses water and increases pumping frequency and expense. 	<ul style="list-style-type: none"> • Use of a garbage disposal is not recommended. • Minimize garbage disposal use. Compost instead.
Washing machine	<ul style="list-style-type: none"> • Uses water and increases pumping frequency and expense. 	<ul style="list-style-type: none"> • Choose a front-loader or water-saving top-loader, these units use less water than older models. • Wash only full loads. • Do laundry off site.
Dishwasher	<ul style="list-style-type: none"> • Uses water and increases pumping frequency and expense. 	<ul style="list-style-type: none"> • Wash only full loads.
Large bathtub (whirlpool)	<ul style="list-style-type: none"> • Uses water and increases pumping frequency and expense. 	<ul style="list-style-type: none"> • Take short showers to conserve water.
Clear Water Uses	Impacts on Holding Tank	Management Tips
High-efficiency furnace	<ul style="list-style-type: none"> • Drip may result in frozen pipes during cold weather. 	<ul style="list-style-type: none"> • Re-route water into a sump pump or directly out of the house. Do not route furnace recharge to your holding tank.
Water softener Iron filter Reverse osmosis	<ul style="list-style-type: none"> • Uses water and increases pumping frequency and expense. 	<ul style="list-style-type: none"> • These sources produce water that is not sewage and should not go into your holding tank. • Reroute water from these sources to another outlet, such as a dry well, drain tile or old drainfield.
Surface drainage Footing drains	<ul style="list-style-type: none"> • Uses water and increases pumping frequency and expense. 	<ul style="list-style-type: none"> • When replacing, consider using a demand-based recharge vs. a time-based recharge. • Check valves to ensure proper operation; have unit serviced per manufacturer directions

Maintenance Log

Track maintenance activities here for easy reference. See list of management tasks on pages 3 and 4.

Activity	Date accomplished/measured water usage									
Check daily for a period of time and weekly once average use is determined:										
Water usage rate (gallons per day)										
Leaks: check for plumbing leaks										
Annually:										
Establish and maintain contract for holding tank pumping services										
Water use appliances – review use										



Water Meter Reading and Tank Evacuation Schedule			
Date	Water Meter Reading (in gallons)	Tank Contents Removed?	Total Gallons Removed

Notes:

Mitigation/corrective action plan:

"As the owner of this SSTS, 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 this Management Plan are not met, I will promptly notify the permitting authority and take necessary corrective actions.

Property Owner Signature: _____ Date _____

Management Plan Prepared By: **Brant Bigger** Certification # **C1835**

Permitting Authority: **Becker County**

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