



030405000-2025



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 #: SS2025-2385

Owner & Property Information

Owner Name:	ANGELA LEDOUX	Site Address:	30644 ACORN LAKE RD
Mailing Address:	ANGELA LEDOUX 17469 INLAND LOOP LAKEVILLE MN 55044	Township - Sec/Twp/Rng:	BURLINGTON - 29/138/040
Parcel #:	030405000	Legal Description:	Lot 001 of ACORN BEACH 1ST ADD LOT 1, 2 ACORN BCH 1ST. PT LOT 3 BLK 1 WEGNER SHRS: COMM SLY COR LOT 1 BLK 1 ACORN BCH 1ST, NE 14.78' TO POB, SE 76.26', NE 266' TO ACORN LK, NW AL LK 81.11', SW 225.72' TO POB. (03.0406)
Secondary Parcel #:		Designer:	L & B Excavating Inc, L1158 (Lee Hendrickson)
		Installer:	L & B Excavating Inc, L1158 (Lee Hendrickson)

Inspector Verified Specifications

Insp- Effluent Screen Installed:	No	Insp- Tank Nbr/Size:	2/1060 Infiltrator + 500 infiltrator lift
Insp- Alarm Required:	Yes	Insp- Drainfield Type:	Pressure Bed
Insp- Lift Pump in System:	Yes	Insp- Drainfield Size:	10X38 ROCK BED
Insp- Number of Bedrooms:	3	Insp- Soil Verification:	#1:SEE ATTACHED #2:N/A #3:N/A

Inspector Verified Setbacks

Insp- Tank Dist to Road	10	Insp- Drainfield Dist to Road	10
Insp- Tank Dist to Nearest Prop Line	10	Insp- Drainfield Dist to Nearest Prop Line	10
Insp- Tank Dist to Nearest Structure	10	Insp- Drainfield Dist to Nearest Structure	20+
Insp- Tank Dist to Well	75+	Insp- Drainfield Dist to Well	75+
Insp- Tank Dist to OHW	75+	Insp- Drainfield Dist to OHW	75+
Insp- Tank Dist to Pond/Wetland	NA	Insp- Drainfield Dist to Pond/Wetland	NA
Insp- Tank Dist to Pressure Line		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: 06/23/2025

Zoning Office Signature:

Jeff Rusness - ISTS Inspector

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

Field Review Form

Permit # SS2025-2385

Property and Owner

Owner: **ANGELA LEDOUX** Parcel Number: **030405000**
 Site Address: **30644 ACORN LAKE RD** 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 (N) Dishwasher? (Y) N Grinder pump? Y (N) Lift pump in basement? Y (N)
Number of bedrooms: 3	Review - Number of bedrooms: 3	
Effluent screen	Effluent screen installed? Y (N) Mfr:	
Alarm: Yes Type: electric outdoor	Review - Alarm? (Y) N Type & Mfr: PS Patriot SJK	
Lift pump in system: Yes	Review - Lift pump in system? (Y) N Mfr: Zoeller BW 98	

Component Information

Tank size: 1060 Infiltrator + 500 infiltrator lift	Review - Tank nbr: 1 size: 1060/500 Mfr: INF Infiltrator
Drainfield type: Pressure Bed	Review - Drainfield type: Pressure Bed -
Drainfield size: Full size - 380 Reduced/warr. size -	Review - Drainfield status: none / (installed) next spring Review - Drainfield size: 10x38
Absorption area size: 1'	Review - Absorption area size: 10x38
Chamber type/num: Trench sqft/chamber -	Review - Chamber type: NA Num: Review - Trench sqft/chamber: NA
Drainfield rock depth: 1'	Review - Rock depth: 12"

Soil Verification

Vertical separation verified <i>see attached -</i>	Boring #1: Boring #2: Boring #3:
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Setback Verification

Distance to...	Designer submitted		Inspector verified	
	Tank	Drainfield	Tank	Drainfield
Road	56'	20'	10	10
Nearest prop line	60'	40'	10	10
Nearest structure	130'	40'	10	20
Well	100'	130'	75+	75+
OHW	112'	130'	75+	75+
Pond/Wetland	N/A	N/A	NA	NA
Pressure line			NA	NA

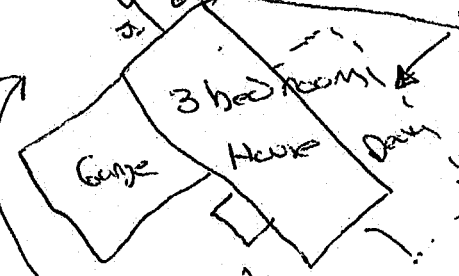
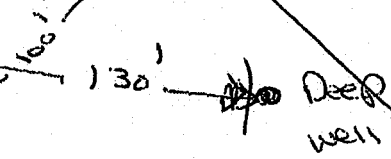
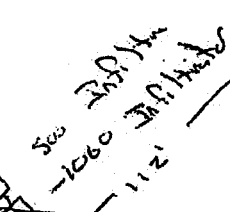
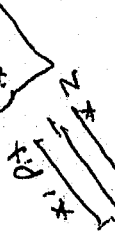
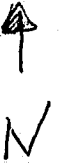
Date System Installed: *6-20-2025* Installer: *L.S.B. EPC* Inspector: *[Signature]*

30644 Alcorn Lake RD

Zak 6/14/25

Neighbor well 50' (Deep)

Alcorn Lake



Tank Area

[Signature]
R-531

[Signature]
1158 #

Management Plan

Date: 6/16/25 Parcel ID #: 030405 000

Property Owner at Time of Install: Angela Ledoux

Property Address: 30644 Acorn Lake Rd Frazer MN

Name, Address, License # of Designer: Lee A. Henderson PO Box 185 56464 03504 H 1158

Name, Address, License # of Installer (if different from Designer): LeB Excavating Inc 36710 141st Ave 56464

The site drawing for the location of the system in conjunction with the structure(s) it serves, as well as the secondary site location, is on file at the Wadena County Planning & Zoning Office.

The information provided below identifies operational and maintenance activities, and the intervals in which they should be performed, for both the homeowner and for the licensed septic service provider that will help to ensure long term performance of the septic system serving this property. Please read through each task and keep this plan available for review for yourself and for future property owners.

Homeowner: (every 6 months)

- **Leaks** - Check (look & listen) for leaky toilets, dripping faucets, and other water using appliances and repair immediately.
- **Surfacing Sewage** - Look for wet or spongy soil around your drainfield area - this is a sign of failure in the system.
- **Effluent Filter** - If you have a filter associated with your septic tank - inspect and clean.
- **Alarms** - Pump & Holding Tank - If you have an alarm, either manual or electric, associated with the septic system, contact a service provider if it signals an alert. The tank probably needs to be pumped or there is a failure in the operation of the pump.
- **Water Use Devices** - Review the readings on these devices and record them to monitor the amount of water going into the system. This can assist you in managing the flow to the system.
- **Secondary Site Location** - Ensure that the secondary site location remains undisturbed for future use.

Licensed Septic Service Provider: (every 2 years)

- Check for tank leaks.
- Check and clean tank filter, if applicable.
- Check sludge/scum layer levels in the tank.
- Check inlet/outlet baffles.
- Check pump and alarm system functions, if applicable.
- Check wiring for corrosion & function, if applicable.
- Check inspection pipe caps & replace, if necessary.
- Check security of manhole covers.
- Pump tank contents & dispose of appropriately.
- Check for effluent levels in drainfield rock layer.
- Provide recommendations to homeowner for action that may need to be taken.

I, the undersigned, understand that it is my responsibility to follow the requirements in this Management Plan to help ensure the performance and longevity of the septic system on the above listed property and to notify the Wadena County Planning and Zoning Office if plan requirements are not met.

Owner Signature: _____

Date: _____

Onsite Sewage Treatment Program Soil Observation Log



Client/ Address: 30644 Aboon Lk Rd France MN 55040
 Legal Description/GPS: 030405000
 Soil Parent Material(s): Till (circle all that apply)
 Landscape Position: Summit (circle one) Shoulder Back/Side Slope Toe Slope
 Vegetation: woods
 Weather conditions/Time of Day: Partly Cloudy
 Soil Survey Map Unit(s): 1196C
 Observation #/Location/Method: Cloudy 4:00 PM Elevation: 84'11"

Date: 6/14/25

Slope Shape: Convex / linear
 Slope (%): 5%

Depth (in)	Texture	Rock Frag %	Matrix Color(s)	Mottle Color(s)	Redox Kind(s)	Saturated Soil Indicator(s) (see back)	Structure			Consistence
							Shape	Grade	Grade	
0-9	LS	5	10R 3/2	none	Concentrations Depletions Gleyed None	none	Granular Platy Blocky Prismatic Single Grain Massive	Weak Moderate Strong Loose	Loose Friable Firm Extremely Firm Rigid	
9-20	SL	10	10R 4/4	none	Concentrations Depletions Gleyed None	none	Granular Platy Blocky Prismatic Single Grain Massive	Weak Moderate Strong Loose	Loose Friable Firm Extremely Firm Rigid	
20-36	Med Sand	25	10R 5/6	none	Concentrations Depletions Gleyed None	none	Granular Platy Blocky Prismatic Single Grain Massive	Weak Moderate Strong Loose	Loose Friable Firm Extremely Firm Rigid	
36-84	Med Sand	25	10R 7/3	none	Concentrations Depletions Gleyed None	none	Granular Platy Blocky Prismatic Single Grain Massive	Weak Moderate Strong Loose	Loose Friable Firm Extremely Firm Rigid	

Comments:

Onsite Sewage Treatment Program Soil Observation Log

Client/ Address: 30644 Alona Ln Rd, Franzer, MN 55034
 Legal Description/GPS: 030405000
 Date: 6/14/25
 Soil Parent Material(s): Till (circle all that apply)
 Landscape Position: Summit (circle one)
 Soil Survey Map Unit(s): 1196C
 Slope Shape: convex humus
 Slope (%): 5%
 Elevation: 8411
 Observation #/Location/Method: P.4

Depth (in)	Texture	Rock Frag %	Matrix Color(s)	Mottle Color(s)	Redox Kind(s)	Saturated Soil Indicator(s) (see back)	Soil		
							Shape	Structure	Consistence
0-8	LS	5	10R 3/2	none	Concentrations Depletions Gleyed none	none	Granular Platy Blocky Prismatic Single Grain Massive	Weak Moderate Strong Loose	Loose Friable Firm Extremely Firm Rigid
8-18	SL	10	10R 1/4	none	Concentrations Depletions Gleyed none	none	Granular Platy Blocky Prismatic Single Grain Massive	Weak Moderate Strong Loose	Loose Friable Firm Extremely Firm Rigid
18-30	med Sand	25	10R 5/6	none	Concentrations Depletions Gleyed none	none	Granular Platy Blocky Prismatic Single Grain Massive	Weak Moderate Strong Loose	Loose Friable Firm Extremely Firm Rigid
30-84	med Sand	25	10R 7/3	none	Concentrations Depletions Gleyed none	none	Granular Platy Blocky Prismatic Single Grain Massive	Weak Moderate Strong Loose	Loose Friable Firm Extremely Firm Rigid

Comments:

Onsite Sewage Treatment Program Soil Observation Log



#3

Client/ Address: 30644 Acorn Ln Rd, Frazee, MN 56405-0000
 Legal Description/GPS: Date: 6/14/25
 Soil Parent Material(s): Till (circle all that apply) Lacustrine Alluvium Loess Organic Matter Bedrock
 Landscape Position: Summit Shoulder Back/Side Slope Toe Slope
 Slope Shape: Concave / linear
 Vegetation: woods
 Slope (%): 5%
 Soil Survey Map Unit(s): 119c
 Elevation: 841'

Weather conditions/Time of Day: cloudy 4:30 PM Observation #/Location/Method: Q.7

Depth (in)	Texture	Rock Frag %	Matrix Color(s)	Mottle Color(s)	Redox Kind(s)	Saturated Soil Indicator(s) (see back)	Structure			Consistence
							Shape	Grade	Consistence	
0-8	LS	5	10R 3/2	none	Concentrations Depletions Gleyed none	none	Granular Platy Blocky Prismatic Single Grain Massive	Weak Moderate Strong Loose	Loose Friable Firm Extremely Firm Rigid	
8-20	SL	10	10R 4/4	none	Concentrations Depletions Gleyed none	none	Granular Platy Blocky Prismatic Single-Grain Massive	Weak Moderate Strong Loose	Loose Friable Firm Extremely Firm Rigid	
20-32	med sand	25	10R 5/6	none	Concentrations Depletions Gleyed none	none	Granular Platy Blocky Prismatic Single Grain Massive	Weak Moderate Strong Loose	Loose Friable Firm Extremely Firm Rigid	
32-84	med sand	25	10R 7/3	none	Concentrations Depletions Gleyed none	none	Granular Platy Blocky Prismatic Single Grain Massive	Weak Moderate Strong Loose	Loose Friable Firm Extremely Firm Rigid	
					Concentrations Depletions Gleyed		Granular Platy Blocky Prismatic Single Grain Massive	Weak Moderate Strong Loose	Loose Friable Firm Extremely Firm Rigid	
					Concentrations Depletions Gleyed		Granular Platy Blocky Prismatic Single Grain Massive	Weak Moderate Strong Loose	Loose Friable Firm Extremely Firm Rigid	

Comments:

PUMP SELECTION PROCEDURE

Determine Pump Capacity

1) Gravity Distribution
 a) Minimum is 10 GPM
 b) Maximum is 45 GPM

2) Pressure Distribution
 a) Number of perforated laterals 3
 b) Perforation spacing 3 ft
 c) Length of lateral
 rock layer length: 38 - 2 ft = 36 ft
 d) Number of spaces between perfs
 (2c): 36 / (2b): 3 = 12
 e) Perforations per lateral
 (2d): 12 + 1 = 13
 f) Total number of perforations
 (2e): 13 x (2a): 3 = 39
 g) Select perf discharge from table .74
 h) Pump capacity
 (2f): 39 x (2g): .74 = 29 GPM

Perforation Discharges (GPM)

Head (ft)	Perforation diameter (in)	
	7"	4"
* 1.0 ft	0.56	<u>0.74</u>
1.5 ft	0.89	0.90
** 2.0 ft	0.80	1.04

* Use 1.0 ft for single homes
 ** Use 2.0 ft for everything else

Friction Loss in Plastic Pipe

Flow Rate (GPM)	1.5"	2"	3"
20	2.47	0.73	0.11
25	3.73	1.11	0.16
30	5.23	<u>1.56</u>	0.23
35	6.98	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		4.78	0.70
60		5.60	0.82
65		6.48	0.95
70		7.44	1.08

Determine Head Requirements

1) Elevation difference
 a) Between pump and point of discharge 8 ft
 b) If system is pressure distribution (1a) + 5 ft
 if system is gravity distribution (1a) + 0 ft 5 ft

2) Friction loss
 a) Select value from table 1.55 ft/100 ft of pipe
 b) Total pipe length from pump to discharge point
 pipe length: 30 x 1.25 = 37.5 ft
 c) Total friction loss
 (2a): 1.55 x (2b): 37.5 / 100 = .6

3) Total head required
 (1a): 8 (1b): 5 + (2d): .6 = 14

Max number of 1/4" perfs per lateral

Perforation spacing	1 1/4"	1 1/2"	2"
2.5 ft	14	18	26
3.0 ft	13	17	26
3.3 ft	12	16	25
4.0 ft	11	15	23
5.0 ft	10	14	22

Select a pump that can deliver at least 30 GPM with at least 14 feet of total head.

1) Minimum lateral diameter
 a) Select the value from the bottom table
 c) Diameter if a center manifold system

Zeller BN 98

Becker County Restrictive Layer Verification

Client: Angela and Richer LeDoux Parcel: 03040500 Date: 6-17-2025
Address: 30644 A Corn Lake Rd.

Vegetation:

Weather Conditions/Time of Day: Morning Observation#/Location/Method: Pit

Depth (in)	Texture	Matrix Color(s)	Mottle Color(s)
84" LL	Medium Sand.		

Comments/Notes:

Certified Statement: I hereby certify that I have completed this work in accordance with all applicable ordinance, rules and laws.
(Designer): Lee Hendrickson (Inspector): [Signature] (License #): 2531 (Date): 6-17-2025