PARCEL	
APP	SEPTIC
YEAR	
SCANNED	
LAKE	

Onsite Septic System Application

Becker County Planning & Zoning
915 Lake Ave, Detroit Lakes, MN 56501
Phone (218)-846-7314; Fax (218)-846-7266

RECEIVED
AUG 26 2016
ZONING

1. PROPERTY DATA (as it appears on the tax statement, purchase agreement or deed)

Parcel Number(s) of property where the system will be installed: 010101000

Is this a split of an existing property? Yes (No — circled)

(If yes and a parcel number has not yet been assigned, indicate the main parcel number from which the new parcel was split.)

Section 28 Township 141 Range 43 Township Name Atlanta

Lake Name Non Shoreland Lake Classification ______

Legal Description: ______

Project Address: 12299 300 St

2. PROPERTY OWNER INFORMATION (as it appears on the tax statement, purchase agreement or deed)

Owner's First Name Elaine Owner's Last Name Jensen

Mailing Address 12299 300th St City, State, Zip Hitterdal, Mn 56552

Phone Number 218 238 5960

3. DESIGNER/INSTALLER INFORMATION

Designer Name ______ Company Name Larry's Excavating Inc. License # 1096

Address LARRY WOLD Phone Number 319 4th Street

Installer Name PO BOX 565 FELTON MN 56536 Company Name PO Box 565 Felton, MN 56536-0565 License # 1096

Address ______ Phone Number ______

4. SYSTEM DESIGN INFORMATION

System Status

- ______ Vacant Lot-No existing system-new structure
- ______ Replacement – structure removed and being rebuilt
- ✓ Failing –Replacement- cesspool/seepage pit or other
- ______ Enlargement of system-Undersized
- ______ Repairs Needed to existing
- ______ Additional system on property

What will new system serve? Check one

- ✓ Dwelling
- ______ Resort/Commercial
- ______ Commercial (Non-resort)
- ______ Other – explain below

8/12/16 Date of site evaluation

Design Flow 450 Gallons Per Day
Number of Bedrooms 3
Garbage Disposal ___ Yes ✓ No
Dishwasher ✓ Yes ___ No
Lift station in House ___ Yes ✓ No
Grinder pump in House ___ Yes ✓ No

Well Depth 65'
Depth of other wells within 100 ft of system N/E

Original Soil ✓ Compacted Soil ______
Type of Soil Observation
✓ Pit ___ Probe ___ Boring
Depth to Restricting Layer 4'
Maximum Depth of System 1'

Size of All Tanks to be installed

- ______ gal Single Compartment Septic Tank
- 1500 2C gal Compartmented Tank 500 lift
- ______ Pit Privy
- ______ gal Separate Lift Station
- ______ gal Holding Tank
- ______ Existing Tank to be used
- ______ Existing tank w/new Additional Tank
- ______ Existing tank w/new Lift Station
- ______ Holding Tank with Privy

Total Number of tanks to be installed in this system 1 (This # will be reported to MPCA at end of year.)

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Type of Drainfield	Full Size of Drainfield	Reduced/Warrantied size
____ Chamber Trench	____ sq ft	____ sq ft
____ Rock Trench	____ sq ft	____ sq ft
____ Gravelless	____ sq ft	____ sq ft
____ Mound	____ sq ft ***	
____ Pressure Bed	____ sq ft ***	
____ Seepage Bed	____ sq ft ***	
✓ At-grade	900 sq ft ***	
____ Alternative / Performance	____ sq ft ***	

***Attach Worksheets

Type of chamber ____
Depth of Rock ____

Alarm? Yes ✓ No ____
Type of Alarm inside & outside Trunk & Motor
Size of Lift Pump ½ HP
Size of Lift Line 2"

PROPOSED SETBACKS

	TANK	DRAINFIELD
Distance to Well	100+	70+
Distance to Building	15'	30'
Distance to Property Line	N/R	N/R
Distance to OHW of Lake		
Distance to Pressure Line		
Distance to Wetland/Protected Water		

Perc Rate 45 Soil Sizing Factor 2.40 *If SSF other than .83, attach Perc Test Data

Soil Borings (three are required) Pit #1 Probe

Depth	Texture	Color	Structure	Depth	Texture	Color	Structure
0-12"	Sandy Loam	Black		Same as Pit #2			
12-48"	Wet old drainfield						
	Wet						

Pit #2

Depth	Texture	Color	Structure	Depth	Texture	Color	Structure
0-16"	Sandy Loam	Black					
16 to 48"	Loam Clay Sand	2.5Y 5/4					
48 to 60"	Clay	Water on hole at 60"					
after 24hrs Restricting Layer 48"							

5. REQUIRED DOCUMENTS

U of MN worksheets are required for mounds, pressure beds, seepage beds, at-grades or Type IV or Type V systems. Are the required worksheets attached? ✓ Yes ____ No

6. DESIGNER'S CERTIFIED STATEMENT

I, LARRY WOLD (Print Name of Designer) certify that I have completed the preceding design work in accordance with all applicable requirements (including, but not limited to Minnesota Chapter 7080 and the Becker County Individual Sewage Treatment System Ordinance)

PO BOX 565
FELTON, MN 56536

Larry W. Wold
Signature of Designer

8/26/16
Date

ATGRADE DESIGN WORKSHEET
(For Flows up to 1200 gpd)

Estimated Sewage Flow in Gallons per Day (gpd)				
Number of Bedrooms	Type I	Type II	Type III	Type IV
2	300	225	180	[illegible]
3	450	300	218	
4	600	375	256	
5	750	450	294	
6	900	525	332	
7	1050	600	370	
8	1200	675	408	

A. FLOW

Estimated 450 gpd

or measured ______ x 1.5 = ______ gpd.

B. SEPTIC TANK LIQUID VOLUMES

1000 gallons 500 lift

Number of Bedrooms	Minimum Septic Tank Liquid Capacity (gallons)	Minimum Capacity with Garbage Disposal (gallons)
2 or less	750	1,125
3 or 4	1,000	1,500
5 or 6	1,500	2,250
7 or 8	2,000	3,000
over 9	See fig. C-6	(x 1.5)

C. SOILS (refer to site evaluation)

1. Depth to restricting layer = 48" inches
2. Depth of percolation tests = ________ inches
3. Percolation rate 45 mpi
4. Absorption Ratio .50 gpd/ft²
5. Linear Loading Rate: 8 6 (4) 3 2 gpd/ft
6. Land slope 0-1 %

Absorption Width Sizing Table			
Percolation Rate Minutes per Inch (mpi)	Soil Texture	[illegible]	[illegible]
Faster than 0.1	Coarse Sand	1.20	1.00
0.1 to 5	Sand	1.20	1.00
0.1 to 5	Fine Sand**	0.60	2.00
6 to 15	Sandy Loam	0.79	1.52
16 to 30	Loam	0.60	2.00
31 to 45	Silt Loam	0.50	2.40
46 to 60	Clay Loam	0.45	2.67
61 to 120	Clay	0.24	5.00
Slower than 120	Clay	—	—

**Soil having 50% or more of fine or very fine sand

D. ROCK WIDTH

1. Percolation rate in top 12 inches of soil is 45 mpi
2. Select allowable soil loading rate from table;
   .50 gpd/ft²
3. Calculate adsorption width of the rock by dividing rock layer loading rate by allowable soil loading rate;
   4 gpd/ft ÷ .50 gpd/ft² = 8 ft.

E. SYSTEM SIZE

a. The Height of the System is ____ feet (2')

b. Enter table with landslope andupslope dike ratio.
   Select dike multiplier of ________.

c. Multiply upslope dike multiplier by height to find upslope dike width:
   2 ft x ____ = ____ feet

d. Enter table with landslope and downslope dike ratio.
   Select dike multiplier of ________.

e. Multiply downslope dike multiplier by height to get downslope dike width:
   ____ ft x ____ = ____ feet

MPI	Soil Texture	Other characteristics in the Install 48"	Linear Loading Rate (gpd/ft)
Faster than 0.1	Coarse Sand	For the entire depth	6
0.1 to 5	Sand	No Bedding	8
		Layers with no Mottles	4
		Layers with Mottles	2
0.1 to 5	Fine sand	No change in texture	6
6 to 15	Sandy Loam	Layers of other textures	4
16 to 30	Loam	No change in texture	4
31 to 45	Silt Loam	Layers of other textures	3
46 to 60	Clay Loam		
60 to 120	Clay	For the entire depth or encountered in the boring	2
> 120	Bedrock		

f. The System width is the sum of upslope dike width plus downslope dike width:
   ____ ft + ____ ft = ____ feet

g. The rock layer length is the flow divided by LLR: 450 ÷ 4 = 112.5 feet 16x56

I. Total length is the sum of upslope dike width plus rock layer length plus upslope dike width: ____ ft + ____ ft + ____ ft = ____ feet 2 lats 4 Holes 22 x 24 - 16, 28

F. ROCK VOLUME

1. Multiply rock area by rock depth to get cubic feet of rock; ____ sq. ft. x ____ ft.+2 = ____ cu. ft.
2. Divide cu. ft. by 27 cu. ft./cu. yd. to get cubic yards; ____ cu. ft. ÷ 27 = ____ cu. yd.
3. Multiply cubic yards by 1.4 to get weight of rock in tons; ____ cu. yd. x 1.4 = 24 tons.

SKETCH OF PROPERTY

Please sketch all structures and septic systems on the property; Include setbacks and wells within 100 feet of the property.

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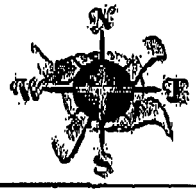

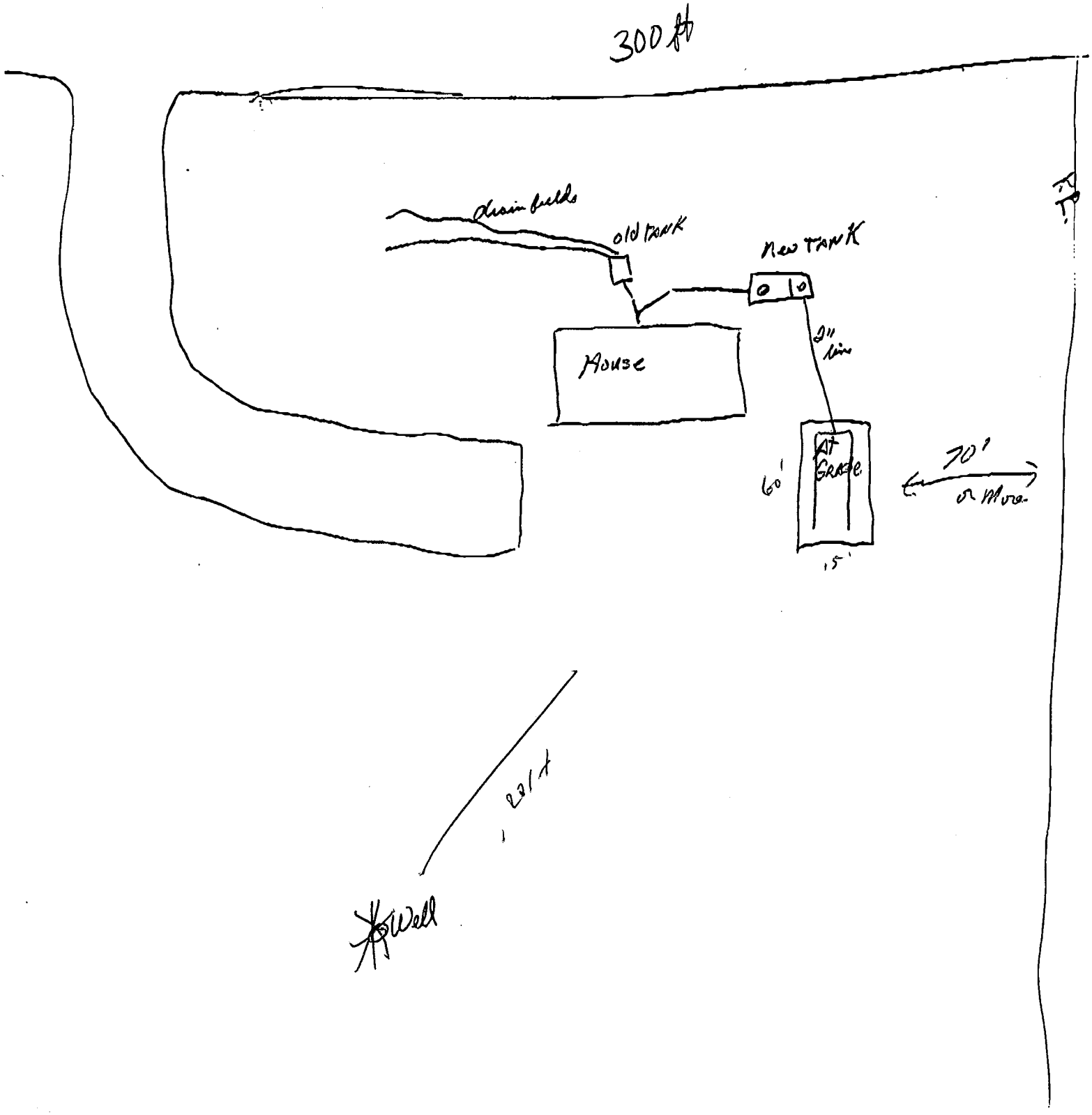

APP YEAR	SEPTIC

********** FOR OFFICE USE ONLY **********

Application Approved by: David A Stoll Date: 8/30/16

Amount Paid $150.00 Receipt Number 2156770-628162 Permit Number 8/30/16

NOTES: _____

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INSPECTION REPORT

Home Information

Does the structure contain any of the following elements?

Garbage disposer ____ Yes ✓ No Dishwasher ✓ Yes ____ No

Grinder pump ____ Yes ✓ No Lift pump in basement ____ Yes ✓ No

Effluent screen installed? ____ Yes ✓ No Effluent screen manufacturer _____

Alarm required? ✓ Yes ____ No Alarm Type Inside & outside Alarm manufacturer _____

Lift pump in system? ✓ Yes ____ No Pump manufacturer 1/3 hp

Number of bedrooms 3

Component Information

Tank size 1500 g/c Tank manufacturer Brown

Drainfield size 900 sq. ft.

Drainfield medium _____ Medium manufacturer 15' x 60'

Drainfield medium size/depth _____

Soil Verification

Vertical separation verified for Boring #1 on _____ Depth +36"

Vertical separation verified for Boring #2 on _____ Depth _____

Vertical separation verified for Boring #3 on _____ Depth _____

Setback Verification

	TANK	DRAINFIELD
Distance to Well	+100'	+70'
Distance to Building	+10	+20
Distance to Property Line	+10	+10
Distance to OHWof Lake	N/A	N/A
Distance to Pressure Line		
Distance to Wetland/Protected Water		

Date System Installed 9/13/16 **Installer** Wold Exc. **Inspector** David A Stoll

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CERTIFICATE OF COMPLIANCE

( ) Certificate Is Hereby Denied

(X) Certificate is Hereby Granted Based upon the Application, addendum from, plans, specifications and all other supporting data. With property maintenance, this system can be expected to function satisfactory, however, this is not a guarantee.

David A Stoll — Signature

IST/Inspector — Title

9/13/16 — Date

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