

FIELD EVALUATION SHEET

PRELIMINARY EVALUATION DATE _____, FIELD EVALUATION DATE _____

PROPERTY OWNER: **JOHN + DEBBIE WICKLAND** PHONE _____

ADDRESS: _____ CITY, STATE, ZIP: _____

LEGAL DESCRIPTION: _____

PIN# **24-0-044301** SEC **23** T **46** R **26** TWP NAME **NORDLAND**

FIRE# _____ LAKE/RIVER **MONSON** LAKE CLASS **N.E. - OHWL** FT. _____

DESCRIPTION OF SOIL TREATMENT AREAS

	AREA #1	AREA #2	REFERENCE BM ELEV. 100 FT
DISTURBED AREAS	YES _____ NO X	YES _____ NO _____	REFERENCE BM DESCRIPTION _____
COMPACTED AREAS	YES _____ NO X	YES _____ NO _____	GROUND LEVEL WHERE
FLOODING	YES _____ NO X	YES _____ NO _____	TANK IS LOCATED
RUN ON POTENTIAL	YES _____ NO X	YES _____ NO _____	_____
SLOPE %	0	_____	_____
DIRECTION OF SLOPE	-	_____	_____
LANDSCAPE POSITION	_____	_____	_____
VEGETATION TYPES	WOODED / OPEN AREA		

DEPTH TO STANDING WATER OR MOTTLED SOIL: BORING# 1 **78"**, 1A **78"**, 2 _____, 2A _____

BOTTOM ELEVATION--FIRST TRENCH OR BOTTOM OF ROCK BED: #1 _____ FT., #2 _____ FT.

SOIL SIZING FACTOR: SITE # 1 **1.27**, SITE #2 _____

CONSTRUCTION RELATED ISSUES: **1000 GALLON SEPTIC TANK, GRAVITY INTO TRENCHES**

LIC# **127** SITE EVALUATOR SIGNATURE: **Larry Liljenquist**
SITE EVALUATOR NAME: **LARRY LILJENQUIST** TELEPHONE# **218-820-8886**

LOG REVIEW _____ DATE _____

Comments: _____

SOIL BORING LOGS ON REVERSE SIDE

TRENCH AND BED WORKSHEET

1. AVERAGE DESIGN FLOW

- A. Estimated 450 gpd (see figure A-1)
or measured x 1.5 (safety factor) = gpd
- B. Septic tank capacity 1000 gal (see figure C-1)

number of bedrooms	Class I	Class II	Class III	Class IV
2	300	225	180	60%
3	450	300	218	of the
4	600	375	256	values
5	750	450	294	in the
6	900	525	332	Class I,
7	1050	600	370	II, or III
8	1200	675	408	columns.

2. SOILS (Site evaluation data)

- C. Depth to restricting layer = 6 1/2 ft
- D. Max depth of system Item 2C - 3 ft = 6 1/2 ft - 3 ft = 3 1/2 ft
- E. Texture SAND Percolation rate 6-15 MPI
- F. Soil Sizing Factor (SSF) 1.27 sqft/gpd (see figure D-15)
- G. % Land Slope 0 %

Number of Bedrooms	Minimum Liquid Capacity	Liquid capacity with garbage disposal	Liquid capacity with disposal & lift inside
2 or less	750	1125	1500
3 or 4	1000	1500	2000
5 or 6	1500	2250	3000
7, 8 or 9	2000	3000	4000

3. TRENCH or BED BOTTOM AREA

- H. For trenches with 6 inches of rock below the pipe:
 $A \times F = \text{ } \text{gpd} \times \text{ } \text{sqft/gpd} = \text{ } \text{sqft}$
- I. For trenches with 12 inches of rock below the pipe:
 $A \times F \times 0.8 = \text{450} \text{gpd} \times \text{1.27} \text{sqft/gpd} \times 0.8 = \text{457} \text{sqft}$
- J. For trenches with 18 inches of rock below the pipe:
 $A \times F \times 0.66 = \text{ } \text{gpd} \times \text{ } \text{sqft/gpd} \times 0.66 = \text{ } \text{sqft}$
- K. For trenches with 24 inches of rock below the pipe:
 $A \times F \times 0.6 = \text{ } \text{gpd} \times \text{ } \text{sqft/gpd} \times 0.6 = \text{ } \text{sqft}$
- L. For gravity beds with 6 or 12 inches of rock below the pipe:
 $1.5 \times A \times F = 1.5 \times \text{ } \text{gpd} \times \text{ } \text{sqft/gpd} = \text{ } \text{sqft}$
For pressure beds with 6 or 12 inches of rock below the pipe:
 $A \times F = \text{ } \text{gpd} \times \text{ } \text{sqft/gpd} = \text{ } \text{sqft}$

Percolation Rate minutes per inch (mpi)	Soil Texture	Soil Sizing Factor square feet/gallon per day (sqft/gpd)
faster than 0.1*	Coarse sand	0.83
0.1 to 5	Medium sand	0.83
	Loamy sand	
0.1 to 5**	Fine sand	1.67
6 to 15	Sandy loam	1.27
16 to 30	Loam	1.67
31 to 45	Silt loam	2.00
	Silt	
46 to 60	Clay loam	2.20
	Sandy clay	
	Silty clay	
	Clay	
	Sandy clay	4.20
	Silty clay	
slower than 120***		

*Use systems for rapidly permeable soils: pressure distribution or serial distribution with no trench >25% of the total system.
**Soil having 50% or more fine sand plus very fine sand
***A mound must be used.
****An other or performance system must be used

4. DISTRIBUTION (Check all that apply)

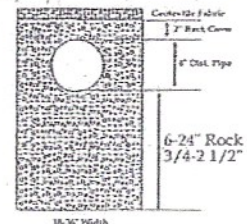
- Bed (< 6% slope) Drop boxes (any slope) Rock
- Trenches Distribution box (< 3%) Chamber
- Pressure Gravity Gravelless

5. SYSTEM WIDTH, LENGTH and VOLUME

- M. Select trench width = 3 ft
- N. If using rock, divide bottom area by width: (H, I, J, K or L) ÷ M =
 $\text{457} \text{sqft} \div \text{3} \text{ft} = \text{152} \text{lineal feet}$
Rock depth below distribution pipe plus 0.5 foot times bottom area:
Rock depth in feet + 0.5 feet x Area (H, I, J, K, or L)
 $(\text{1} \text{ft} + 0.5 \text{ft}) \times \text{457} \text{sqft} = \text{685} \text{cuft}$
Volume in cubic yards = cuft ÷ 27
 $\text{685} \text{cuft} \div 27 = \text{25} \text{cuyds}$
Weight of rock in tons = cubic yds x 1.4
 $\text{25} \text{cuyds} \times 1.4 = \text{35} \text{tons}$
- O. If using 10" Gravelless Pipe, Flow (A) x Gravelless SSF (see figure D-9)
 $\text{ } \text{gpd} \times \text{ } \text{lineal feet/gpd} = \text{ } \text{lineal feet}$
- P. If using Chambers, H, I, J, or K (based on height of chamber slats) ÷ width of chamber in feet (M)
 $\text{ } \text{sqft} \div \text{ } \text{ft} = \text{ } \text{lineal ft}$

percolation rate (minutes/inch)	soil texture	lineal feet/gallon/day
Faster than 0.1*	Coarse Sand	—
0.1 to 5	Medium Sand	0.28
	Loamy Sand	
0.1 to 5**	Fine Sand	0.6
6 to 15	Sandy Loam	0.42
16 to 30	Loam	0.56
31 to 45	Silt Loam	0.67
	Silt	
46 to 60	Clay Loam (CL)	0.74
	Sandy CL	
	Silty CL	
	Clay	
	Sandy Clay	
	Silty Clay	
slower than 60***		—

*Soil too coarse for sewage treatment.
Use systems for rapidly permeable soils.
**Soil having 50% or more fine sand + very fine sand.
***Soil with too high a percentage of clay for installation of a standard inground system.



6. LAWN AREA

- Q. Select trench spacing, center to center = 6 feet
- R. Multiply trench spacing by lineal feet R x Q = sqft of lawn area
 $\text{6} \text{ft} \times \text{152} \text{ft} = \text{912} \text{sqft}$

7. Include a drawing with scale (one inch = ft). Show pertinent boundaries, right of way, easements, location of house, garage, driveway, all other improvements, existing or proposed soil treatment system, well and dimensions of all elevations, setbacks and separation distances.

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

Deery Lyngard (signature)

(signature)

127 (license #)

(license #)

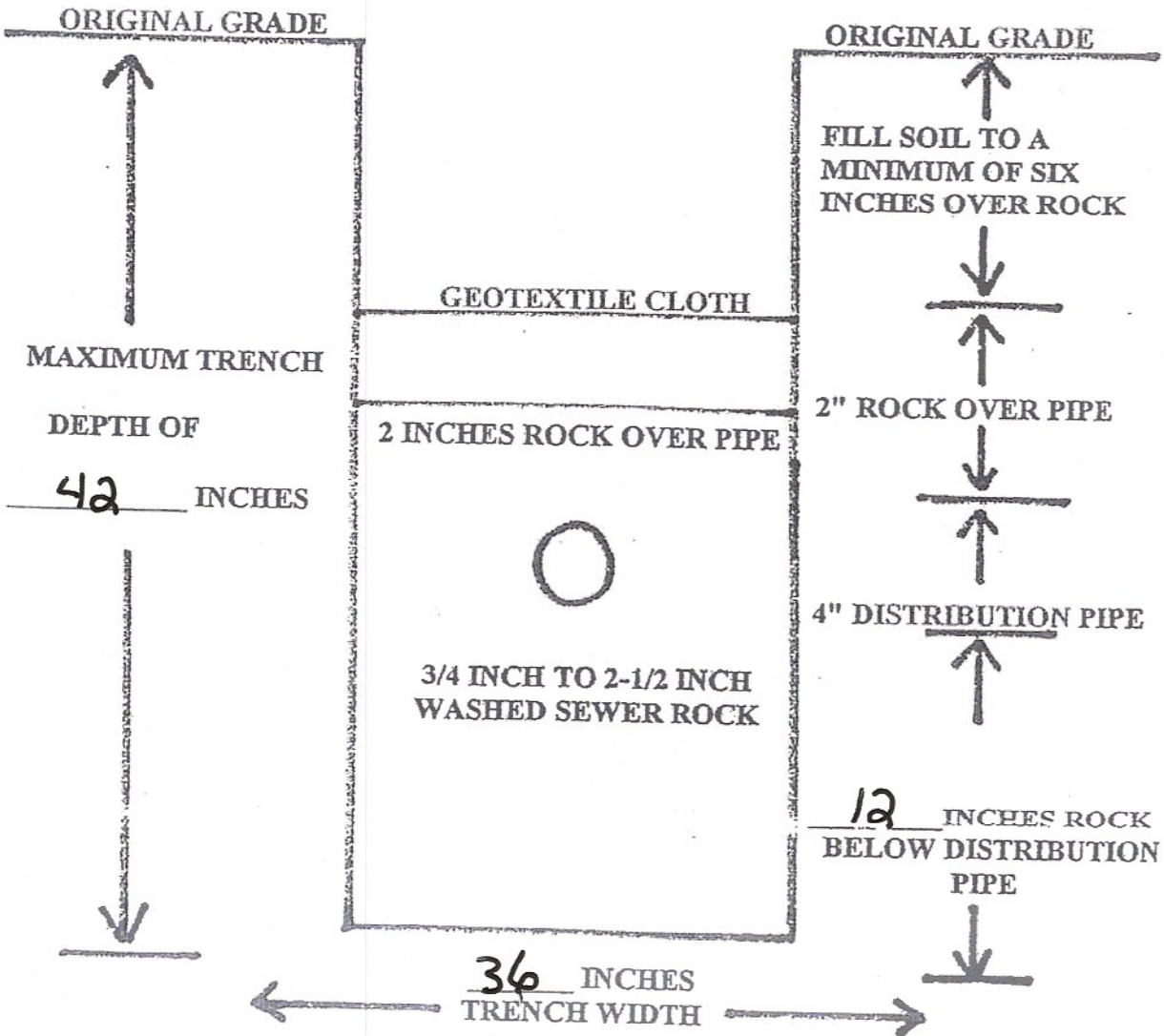
9-21-19 (date)

(date)

TRENCH CROSS-SECTION

FINISHED GRADE

24 INCHES OF BACKFILL OVER ROCK



SOILS CHARTS FOR BOTH PROPOSED AND ALTERNATE SITES

1 (PROPOSED) SOILS DATA

DEPTH (INCHES)	TEXTURE	MUNSELL COLOR
0-6	TOPSOIL	10 YR 4/4
6-48	SAND LOOSE STRUCTURE	
48-78	SAND GRAVEL	
NO MOTTLING		

2 (PROPOSED) SOILS DATA

DEPTH (INCHES)	TEXTURE	MUNSELL COLOR
0-6	TOPSOIL	10 YR 4/4
6-48	SAND LOOSE STRUCTURE	
48-78	SAND GRAVEL	
NO MOTTLING		

1 (ALTERNATE) SOILS DATA

DEPTH (INCHES)	TEXTURE	MUNSELL COLOR

2 (ALTERNATE) SOILS DATA

DEPTH (INCHES)	TEXTURE	MUNSELL COLOR

ADDITIONAL SOIL BORINGS MAY BE REQUIRED

1' = 40'

JOHN + DEBBIE WICKLAND



NO LOT LINES WITHIN 300'

SB1



- 3 - 5' TRENCHES

FUTURE WELL 4" DRILLED



70'±



25'

1000 GALLON

10'

SB2

FUTURE RV SITE

170'

200'

MONSON LAKE

