FIELD EVALUATION SHEET

PRELIMINARY EVALUATION DATE _8-4-19_ , FIELD EVALUATION DATE _8-4-19_
PROPERTY OWNER: _Frank Przybilla_   PHONE _763-229-3145_
ADDRESS: ~~little 157th Ave NE~~ CITY,STATE,ZIP: _63827 199th Pl Jacobson, Mn 5575_
LEGAL DESCRIPTION: _____
PIN# _06-0-006405_   SEC _4_ T _51_ R_23_ TWP NAME _____
FIRE#_____ LAKE/RIVER _Little Ball Bluff_   LAKE CLASS _NE_   OHWL_____ FT.

DESCRIPTION OF SOIL TREATMENT AREAS

	AREA #1	AREA #2	
			REFERENCE BM ELEV. _LAKE=100_ ___FT.
DISTURBED AREAS	YES__ NO__	YES__ NO__	REFERENCE BM DESCRIPTION___
COMPACTED AREAS	YES__ NO__	YES__ NO__	_____
FLOODING	YES__ NO__	YES__ NO__	_____
RUN ON POTENTIAL	YES__ NO__	YES NO__	_____
SLOPE %	___	___	_____
DIRECTION OF SLOPE	___	___	
LANDSCAPE POSITION	___	___	_Holding tank_
VEGETATION TYPES	___	___	

DEPTH TO STANDING WATER OR MOTTLED SOIL: BORING# 1____, 1A____, 2____, 2A____

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

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

CONSTRUCTION RELATED ISSUES: _Holding tank with Solid Lift_ _____

LIC# _1054_   SITE EVALUATOR SIGNATURE: _Tom Antonsen_

SITE EVALUATOR NAME: _Tom Antonsen_   TELEPHONE# _218-838-8062_

LUG REVIEW _____   DATE _8-13-19_

Comments: _____
_____
_____
_____

SOIL BORING LOGS ON REVERSE SIDE

Form des 2/20/98

PUMP SELECTION PROCEDURE

1. Determine pump capacity:
   - **(A.)** Gravity distribution
     1. Minimum required discharge is 10 gpm
     2. Maximum suggested discharge is 45 gpm. For other establishments at least 10% greater than the water supply rate, but no faster than the rate at which effluent will flow out of the distribution device.
   - B. Pressure distribution
     See pressure distribution work sheet

From A or B Selected pump capacity: __40__ gpm

2. Determine pump head requirements:
   A. Elevation difference between pump and point of discharge?
   __19__ feet

   B. Special head requirement? *(See Figure at right - Special Head Requirements)*
   _____ feet

   C. Calculate Friction loss
      1. Select pipe diameter __2__ in
      2. Enter *Figure E-9* with gpm (1A or B) and pipe diameter (C1).
         Read friction loss in feet per 100 feet from Figure E-9
         Friction Loss = __2.64__ ft/100ft of pipe
      3. Determine total pipe length from pump discharge to soil treatment discharge point. Estimate by adding 25 percent to pipe length for fitting loss. Total pipe length times 1.25 = equivalent pipe length
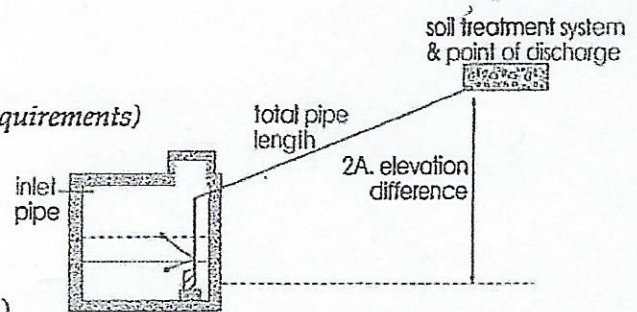   __100__ feet x 1.25 = __125__ feet
      4. Calculate total friction loss by multiplying friction loss (C2) in ft/100 ft by the equivalent pipe length (C3) and divide by 100.
         = __2.64__ ft/100ft x __125__ ÷100 = __3.3__ ft

   D. Total head required is the sum of elevation difference (A), special head requirements (B), and total friction loss (C4)
      __19__ ft + __3.3__ ft+ __22.3__ ft =

   Total head: __22.3__ feet

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3. Pump selection

A pump must be selected to deliver at least __40__ gpm (1A or B) with at least __22.3__ feet of total head (2D)

Liberty LE-71A

Special Head Requirements

Gravity Distribution	0 ft
Pressure Distribution	5 ft

E-9: Friction Loss in Plastic Pipe Per 100 feet

flow rate gpm	nominal pipe diameter 1.5"	2"	3"
20	2.47	0.73	0.11
25	3.73	1.11	0.16
30	5.23	1.55	0.23
35	6.96	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		4.76	0.70
60		5.60	0.82
65		6.48	0.95
70		7.44	1.09

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

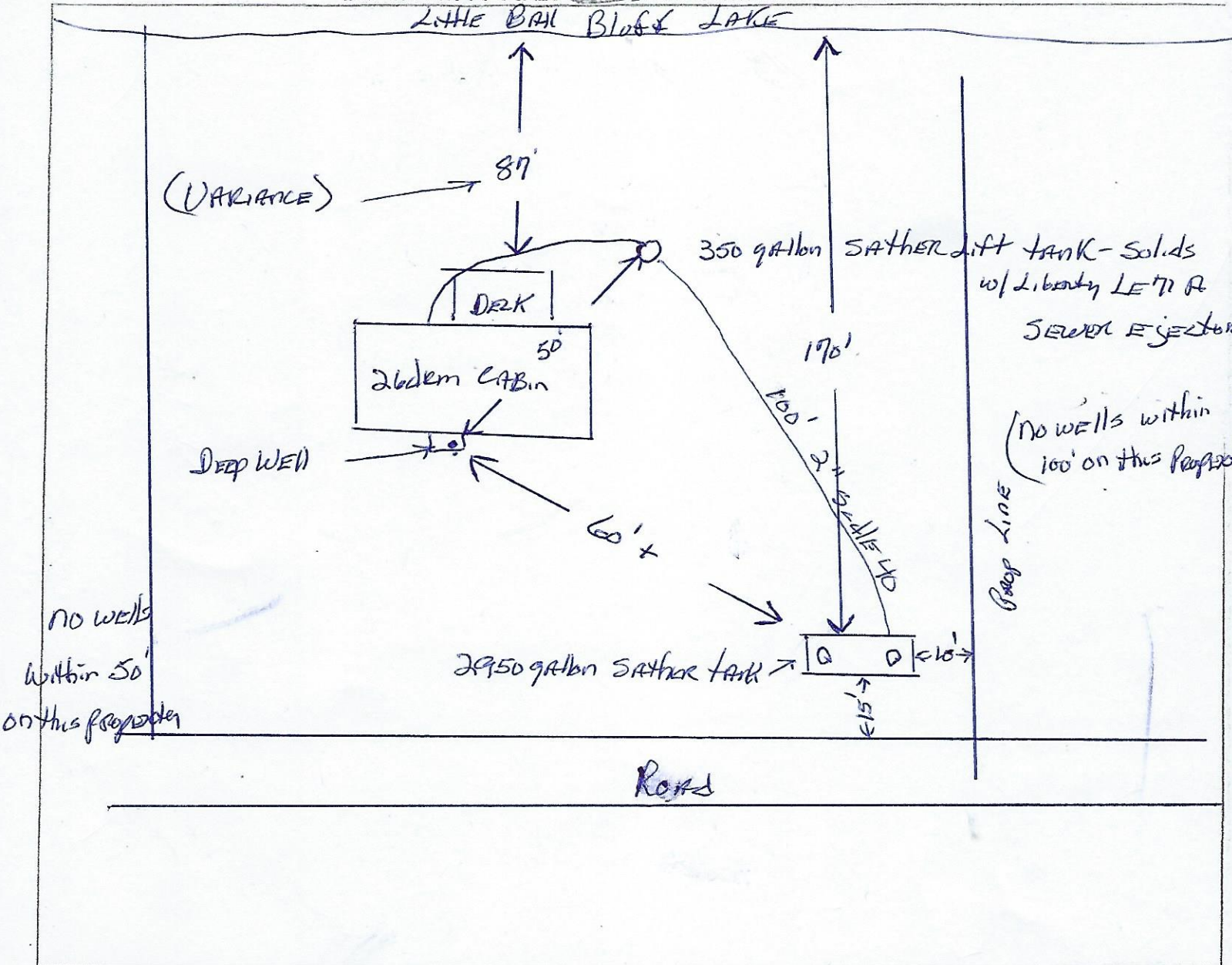_Tom Anderson_ (signature) __1054__ (license #) __8-21-19__ (date)

SKETCH SHEET

CLIENT: _Frank Przybilla_   DATE: _8-21-19_

MAP DRAWN TO SCALE ~~____~~ WITH A NORTH ARROW

Little Bah Bluff Lake

(VARIANCE) → 87'

350 gallon Sather Lift tank- Solids
w/ Liberty LE 71 A
Sewer Ejector

170'

DECK

26dem CABIN   5°

Deep Well

no wells within
100' on this Property

100' ↓ 2 pueller 40'

60' ±

Grop Line

no wells
within 50'
on this property

2950 gallon Sather tank → □   □ ←10'→

←15'→

Road

CHECK OFF LIST--HAVE ALL OF THE FOLLOWING BEEN DRAWN ON THE MAP??

SHOW EXISTING OR PROPOSED

☐ WATER WELLS WITHIN 100 FT OF TREATMENT AREAS
☐ PRESSURE WATER LINES WITHIN 10 FT OF TREATMENT AREAS
☐ STRUCTURES   ☐ LOT IMPROVEMENTS
☐ ALL SOIL TREATMENT AREAS   ☐ ALL ISTS COMPONENTS
☐ HORIZONTAL AND VERTICALREFERENCE
☐ POINT OF SOIL BORINGS   ☐ DIRECTION OF SLOPE
☐ LOT EASEMENTS   ☐ ALL LOT DIMENSIONS
☐ DISTURBED/ COMPACTED AREAS
☐ SITE PROTECTION--LATHE AND RIBBON EVERY 15 FT
☐ ACCESS ROUTE FOR TANK MAINTENANCE

REQUIRED SETBACKS

☐ STRUCTURES   ☐ PROPERTY LINES
☐ OHWL

COMMENTS:

DESIGNER SIGNATURE _Tom Christenson_

LICENSE# _1054_

INDICATE ELEVATIONS

BENCHMARK
ELEVATION OF SEWER LINE @ HOUSE
ELEVATION @ TANK INLET
ELEVATION @ BOTTOM OF ROCK LAYER
ELEVATION @ BOTTOM OF BORING OR
RESTRICTIVE LAYER
ELEVATION OF PUMP
ELEVATION OF DISTRIBUTION DEVICE

DATE _8-21-19_