

FIELD EVALUATION SHEET

PRELIMINARY EVALUATION DATE 11-19-20, FIELD EVALUATION DATE 11-19-20
PROPERTY OWNER: Lowell Carlen PHONE
ADDRESS: 48570 173rd Place CITY, STATE, ZIP: McGregor 55760
LEGAL DESCRIPTION: Lot 25 Lakeshore Acres
PIN# 29-1-240600 SEC 23 T 49 R 23 TWP NAME Sham Rock Twp
FIRE# LAKE/RIVER Horse Shoe LAKE CLASS OHWL FT.

DESCRIPTION OF SOIL TREATMENT AREAS

AREA #1 AREA #2 REFERENCE BM ELEV. 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
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: Replacing 1350 broken tank with 1500 combo
See completion for mound ext.

LIC# 2028 SITE EVALUATOR SIGNATURE: Bob Bartel
SITE EVALUATOR NAME: Bob Bartel TELEPHONE# 218-831-6430

LUG REVIEW DATE

Comments:

SOIL BORING LOGS ON REVERSE SIDE

APPROVED
ONSITE INSPECTION
NO ONSITE INSPECTION
DATE 11/19/20

29-1-348600
MOUND DESIGN WORK SHEET (For Flows up to 1200 gpd)

A. Average Design FLOW

Estimated 1350 gpd (see figure A-1)
 or measured _____ x 1.5 (safety factor) = _____ gpd

A-1: Estimated Sewage Flows in Gallons per Day

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.

B. SEPTIC TANK Capacity

1500 comb gallons (see figure C-1) *Replac'g 1350 comb Broken*

C-1: Septic Tank Capacities (in gallons)

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

C. SOILS (refer to site evaluation)

- Depth to restricting layer = 15 feet
- Depth of percolation tests = 15 feet
- Texture _____
 Percolation rate _____ mpi
- Soil loading rate _____ gpd/sqft (see figure D-33)
- Percent land slope _____ %

D. ROCK LAYER DIMENSIONS

- Multiply average design flow (A) by 0.83 to obtain required rock layer area.
 _____ gpd x 0.83 sqft/gpd = _____ sqft
- Determine rock layer width = 0.83 sqft/gpd x linear Loading Rate (LLR)
 0.83 sqft/gpd x _____ gpd/sqft = _____ ft
- Length of rock layer = area ÷ width =
 _____ sqft (D1) ÷ _____ ft (D2) = _____ ft

Mound LLR	
< 120 MPI	≤ 12
≥ 120 MPI	≤ 6

E. ROCK VOLUME

- Multiply rock area (D1) by rock depth of 1 ft to get cubic feet of rock
 _____ sqft x 1 ft = _____ cuft
- Divide cuft by 27 cuft/cuyd to get cubic yards
 _____ cuft ÷ 27 cuft/cuyd = _____ cuyd
- Multiply cubic yards by 1.4 to get weight of rock in tons
 _____ cuyd x 1.4 ton/cuyd = _____ tons

F. SEWAGE ABSORPTION WIDTH

Absorption width equals absorption ratio (See Figure D-33) times rock layer width (D2)

_____ x _____ ft = _____ ft

D-33: Absorption Width Sizing Table

Percolation Rate in Minutes per Inch (MPI)	Soil Texture	Loading Rate Gallons per day per square foot	Absorption Ratio
Faster than 5	Coarse Sand Medium Sand Loamy Sand Fine Sand	1.20	1.00
6 to 15	Sandy Loam	0.79	1.50
16 to 30	Loam	0.60	2.00
31 to 45	Silt Loam Silt	0.50	2.40
46 to 60	Sandy Clay Loam Silty Clay Loam Clay Loam	0.45	2.67
61 to 120	Silty Clay Sandy Clay Clay	0.24	5.00
Slower than 120*			

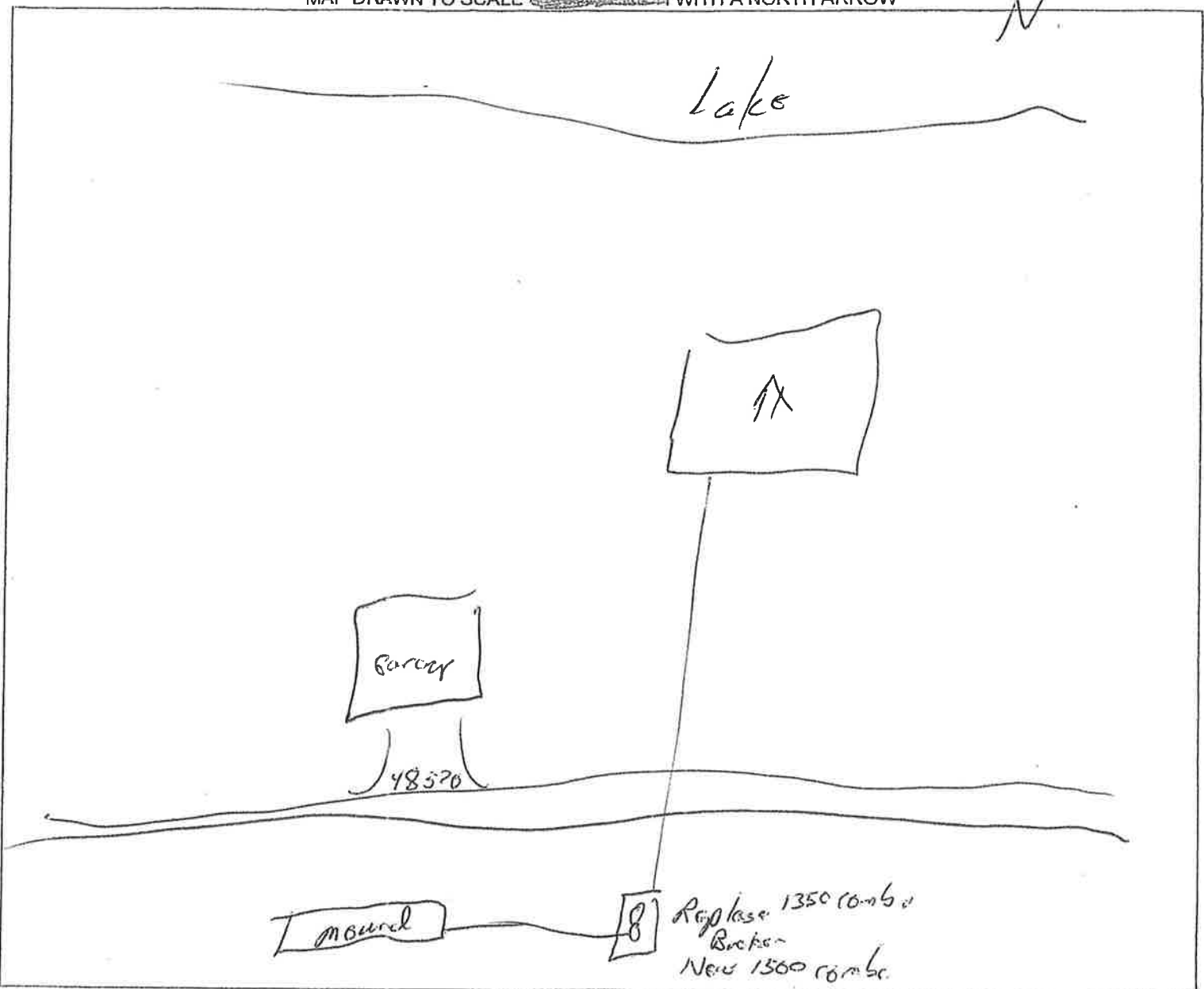
*System designed for these soils must be other of performance

CLIENT: Lowell Carlen

SKETCH SHEET

DATE: 11-19-20

MAP DRAWN TO SCALE 29-1-340600 WITH A NORTH ARROW



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
 - ALL SOIL TREATMENT AREAS
 - HORIZONTAL AND VERTICAL REFERENCE
 - POINT OF SOIL BORINGS
 - LOT EASEMENTS
 - DISTURBED/ COMPACTED AREAS
 - SITE PROTECTION--LATHE AND RIBBON EVERY 15 FT
 - ACCESS ROUTE FOR TANK MAINTENANCE

- LOT IMPROVEMENTS
- ALL ISTS COMPONENTS
- DIRECTION OF SLOPE
- ALL LOT DIMENSIONS

- REQUIRED SETBACKS
- STRUCTURES
 - OHWL
 - PROPERTY LINES

- 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

DESIGNER SIGNATURE Bob Burt
LICENSE# 2028

DATE 11-19-20

29-1-340600

Subsurface Sewage Treatment System Management Plan

Property Owner: Louise Carlson

Phone: _____

Date: 11-19-20

Mailing Address: 226 Oama Ave

City: Shoreview

Zip: 55126

Site Address: 48570 173rd Place

City: McGrath

Zip: 55760

This management plan will identify the operation and maintenance activities necessary to ensure long-term performance of your septic system. Some of these activities must be performed by you, the homeowner. Other tasks must be performed by a licensed septic service provider.

System Designer: check every _____ months.
Local Government: check every _____ months.
State Requirement: check every 36 months.

My System needs to be checked every _____ months.

(State requirements are based on MN Rules Chapter 7080.2450, Subp. 2 & 3)

Homeowner Management Tasks

- Leaks - Check (look, listen) for leaks in toilets and dripping faucets. Repair leaks promptly.
- Surfacing sewage - Regularly check for wet or spongy soil around your soil treatment area.
- Effluent filter - Inspect and clean twice a year or more.
- Alarms - Alarm signals when there is a problem. Contact a service provider any time an alarm signals.
- Event counter or water meter - Record your water use.

-recommend meter readings be conducted (circle one: DAILY WEEKLY MONTHLY)

Professional Management Tasks

- Check to make sure tank is not leaking
- Check and clean the in-tank effluent filter
- Check the sludge/scum layer levels in all septic tanks
- Recommend if tank should be pumped
- Check inlet and outlet baffles
- Check the drainfield effluent levels in the rock layer
- Check the pump and alarm system functions
- Check wiring for corrosion and function
- Check dissolved oxygen and effluent temperature in tank
- Provide homeowner with list of results and any action to be taken
- Flush and clean laterals if cleanouts exist

"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 the Management Plan are not met, I will promptly notify the permitting authority and take necessary corrective actions. If I have a new system, I agree to adequately protect the reserve area for future use as a soil treatment system."

Property Owner Signature: _____

Date: _____

Designer Signature: Bob Bald

Date: 11-19-20

See Reverse Side for Management Log

29-1-340600

Maintenance Log

Activity	Date Accomplished												
<i>Check frequently:</i>													
* Leaks: check for plumbing leaks													
* Soil treatment area check for surfacing													
* Lint filter: check, clean if needed													
* Effluent screen: if owner-maintained													
* Water usage rate (monitor frequency _____)													
<i>Check annually:</i>													
* Caps: inspect, replace if needed													
* Sludge & Scum/Pump													
* Inlet & Outlet baffles													
* Drainfield effluent leaks													
* Pump, alarm, wiring													
* Flush & clean laterals if cleanouts exists													
* Other:													
* Other:													

Notes: _____

Mitigation/corrective action plan: _____

