

DOUGLAS COUNTY LAND AND RESOURCE MANAGEMENT DEPARTMENT
305 8TH AVE W., ALEXANDRIA, MN 56308
(320) 762-3863

ONSITE SPETIC SYSTEM DESIGN DATA

Legal Property Owner _____ Parcel Number _____
Township _____ Section _____ Range _____
Mailing Address _____
Property Address _____
Number of Bedrooms _____ System Design Flow _____ GPD
Hot Tub Yes No Soil Treatment Area Size _____ sq. ft.
Garbage Disposal Yes No Tank Size _____
System is New Replacement Other NOTE: All systems to be sized as type I, II, or III
Well Depth _____ Homeowner Signature _____
Data Prepared by _____ Date _____ Certificate # _____
Signature _____ Address _____ Phone # _____

SITE PLAN

NOTE: Include existing and proposed buildings, easements, property lines, lot dimensions, applicable setbacks, direction and % of slope, OHW, second site option and access route for tank maintenance.

PERCOLATION TEST DATA

-TWO TESTS ARE REQUIRED-

	Perc test #1	Perc test #2
Diameter of hole		
Depth to bottom of hole		
Did the hole require presoaking?		

PERC TEST #1

PERC TEST #2

Time	Interval (minutes)	Water Depth	Water Drop	Perc Rate
_____	START	_____	_____	_____) _____ = _____ TIME DROP PERC
_____	_____	_____	_____	_____) _____ = _____ TIME DROP PERC
_____	START	_____	_____	_____) _____ = _____ TIME DROP PERC
_____	_____	_____	_____	_____) _____ = _____ TIME DROP PERC
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_____	START	_____	_____	_____) _____ = _____ TIME DROP PERC
_____	_____	_____	_____	_____) _____ = _____ TIME DROP PERC

PERCOLATION RATE _____ SSF _____

PERCOLATION RATE _____ SSF _____

Anticipated construction related concerns: _____

SOIL BORING LOG

Is the area disturbed or compacted? Yes No Is the area located within a floodplain? Yes No

What position? is the landscape

Vegetation type? Wet Dry Unknown Drainage? Good Poor

Recommendations

TEST HOLE #1				TEST HOLE #2			
DEPTH (INCHES)	TEXTURE	MUNSELL COLOR*	STRUCTURE	DEPTH (INCHES)	TEXTURE	MUNSELL COLOR*	STRUCTURE
			Blocky Platy Prismatic Granular				Blocky Platy Prismatic Granular
			Blocky Platy Prismatic Granular				Blocky Platy Prismatic Granular
			Blocky Platy Prismatic Granular				Blocky Platy Prismatic Granular
			Blocky Platy Prismatic Granular				Blocky Platy Prismatic Granular
			Blocky Platy Prismatic Granular				Blocky Platy Prismatic Granular
			Blocky Platy Prismatic Granular				Blocky Platy Prismatic Granular

Type of observation: boring pit probe Type of observation: boring pit probe

Soil map unit: _____ Soil map unit: _____

Elevation of boring: _____ Elevation of boring: _____

Depth to standing water: _____ Depth to standing water: _____

Depth to mottling: _____ Depth to mottling: _____

Depth of system: _____ Depth of system: _____

*Please note: Soil horizons in the moist condition that exhibit mottles that have chromas of 2 or less and a value of 4 or more according to the standard Munsell color notation, indicate that the horizon is or has been saturated.

DESIGN CALCULATIONS

TRENCH DESIGN

Design Flow _____ GPD

TYPE	TRENCH BOTTOM REQUIRED	LF REQUIRED	ROCK (CUBIC YDS REQUIRED)
9 Gravelless	[] sq. ft.	[] LF	
9 6" rock under pipe	[] sq. ft.	[] LF	[] cubic yards
9 12" rock under pipe	[] sq. ft.	[] LF	[] cubic yards
9 18" rock under pipe	[] sq. ft.	[] LF	[] cubic yards
9 24" rock under pipe	[] sq. ft.	[] LF	[] cubic yards

Please draw cross section of trench construction

Comments: _____

MOUND DESIGN

Design flow _____ GPD

Land slope _____ %

Rock layer length _____ feet

Rock layer width _____ feet

Cubic yards of rock required _____

Required absorption width _____ feet

Total mound width _____ feet

Total mound length _____ feet

Downslope dike width _____ feet

Upslope dike width _____ feet

Number of perforated laterals _____

Number of perforations _____

Header pipe size _____

Elevation difference between pump & point of discharge _____

Total pipe length from pump to discharge point _____

Selected pump capacity _____ GPM

Total head _____ Feet of total head _____

Please draw cross section of mound construction