Mound Design Notes - Aitkin county

Property Owner:	Peter Brown	Date:	9/18/18	
Site Address:	41427 390th St. Aitkin MN 56431	PID:	01-0-015600	
Comments:	Mound design may not follow Aitkin co. Auto fill form for mound design.			

- 1 This is a type III mound , (Soil Separation 7") sized for a 2 bedroom house.
- 2 Existing deep well location is 32ft. North and 13ft. East of SE corner of house, buried in yard. Owner stated it is a deep well that is a flowing well.
- 3 There is a buried power lines to cross approx. 6 ft. South of house all the way along South side of house.
- 4 Existing septic tank to be pumped, collapsed, filled, or removed. Existing drainfield to be Abandon.
- 5 Install clean-out near house, install 1650 tank for gravity flow from house, must meet well setback. Lot is Flat, install 1650 Jacobson compartment tank low enough for drainback from mound. Install effluent filter in septic tank outlet. Install alarm on Effluent filter. Insulate tank tops.
- 6 The shed on East end of mound will meet the 20ft. Setback to the absorption area. The old chicken coop /shed is to be removed. Mound berm slopes at 4:1.
- 7 Elevation contour of rock bed upslope edge is Elv.=1200.6'. South berm is approx. 40 ft. from property line. The area size of the rock bed is 10' x 25'. Absorption area is 25' x 44'. Sand absorption area is 13 ft. up slope + 10 ft. rockbed + 21 downslope = approx. 44 ft. wide sand base. Berms are 17ft. Upslope, 26ft. Down slope, 10ft. Rock bed = approx. 53ft. Wide. End Berms are 22 ft. Overall mound size is approx. 53' wide x 69' long and approx. 5' high.
- 8 The bench mark is the spike on the power pole near garage BM = Elv. 1202.8'. 100 year flood is 1202.7'
- 9 The 10 year is at 1199.8'. The nail on the tree South of the garage is at Elv.= 1203.6' Installer to double check bench mark. Installer should confirm bench mark and sand height Elv. with inspector. Installer should record bench mark Elv. and sand height on installation inspection form.
- 10 The top of the sand and bottom of rock bed is Elv. 1203.6'.
- 11 It is important that the soils do not get compacted, and that clean Washed Sand is used.
- 12 The Jacobson 1650 tank will be gravity flow from dwelling. Install the pump for 7 demand doses per day, approx. 53 gallons per dose, 4.2 inches of tank level. Install alarm at 3 inches from pump on level. Install all manholes, inspection pipes and clean-outs to grade or above. (Recommend 1202.8') Install a 2" supply pipe from tank to end manifold in rock bed, install so pipe drains back to tank. Install 1.5" laterals with 9" of rock under them. Install clean-outs at far end of laterals. Drill 1/4" perf holes spaced 3 ft. on center.

Install inspection pipe to bottom of rock bed, secure in rock bed and raise to above final grade.

- 13 Installer will pressure test and squirt height laterals when finished.
- 14 Install Event counter on Effluent pump, calibrate pump and give gallons per event to Owner.
- 15 Designer does not guarantee or warranty any Type III systems. Designed to Aitkin Co. and MPCA recommendations and requirements.

Brummer Septic LLC. **Design Company**

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