SOIL TEXTURE CLASSIFICATION MATRIX

Soil Type	Type of System	Minimum Requirements	Intent
>60 – 100% heavy clay	• holding tank • package sewage treatment plant to aboveground field • peat system • pressurized sand treatment mound • sand filter • modified aboveground total area field	• NO SUBSURFACE SYSTEMS • 80% clay – sand treatment mound – pressure distribution 70% clay – minimum 150 yd^3 stone (2538 sq. ft.) minimum 200 yd^3 sand 60% clay – minimum 250 yd^3 stone (2538 sq. ft.) minimum 100 yd^3 sand (effluent must be pumped to the distribution box or laterals) • perforated distribution pipe must be equally distributed over the total area of the field • loamy material to be used as cover (based on 330 gal/day – 3 bedroom home)	• to provide alternative systems in heavy clay soils as subsurface systems have insufficient evapotransporation and absorption qualities • field sizing shall increase per each additional bedroom • Note: modified aboveground total area fields may be an alternative to sand treatment mounds
40 – 60% clay	• modified total area (MTA) • modified trenches - stone (MTS) - chamber (MTC) • holding tank • package sewage treatment plant to a modified field • peat system • pressurized sand treatment mound • sand filter • modified aboveground total area field	• MTA - 190 yd^3 stone (1941 sq. ft.) - 72 yd^3 sand (high quality, clean, graded sand) - maximum depth 12” • MTS - maximum depth 24” - minimum amount of stone under pipe is 14” (using - 24/36” bucket) - length of trench in tables for 0.17 app. rate - 555’ for 24” W x 18” H - 431’ for 36” W x 18” H • MTC - maximum depth 12” - minimum amount of chamber 555’ EQ 36/Bio3 • loamy material to be used as cover (based on 330 gal/day – 3 bedroom home)	• to allow for shallow depth subsurface system installations in clay soils • to minimize the depth of the subsurface system to allow for adequate evapotransporation and infiltration in these types of soils • to use application rate of 0.17 • high quality, clean, graded sand with less than 5% No. 200 and must pass the jar test for fines
<40% clay <85% sand	• traditional subsurface systems	• minimum requirements as set out in regulation • application rates vary from 0.18 - 0.60 • loamy material to be used as cover	• Note: the base of all fields must be 3.25 feet above the bedrock or high water table
85 - 100% sand	• holding tank • modified subsurface systems - lined trenches - stone - chamber - lined total area field - pressurized sand treatment mound - peat system - package plant to modified aboveground field	• application rate 0.60 • the base of fields must be 3.25 feet above bedrock or high water table • all systems must be pressurized • lined trenches (stone) - 12” minimum layer of loamy material • lined trenches (chamber) - 12” minimum layer of loamy material on bottom and sides • lined total area field - 12” minimum layer of loamy material - minimum of 110 $yard^3$ of stone (1100 sq. ft.) • loamy material to be used as cover • saturated zones - sand treatment mounds – pressurized	• to provide alternative systems in coarse grained soils • to protect ground water sources • to slow the percolation rate and to facilitate treatment, lined trenches and total area fields are to be used • to provide alternate system in saturated soil conditions