The proposed residence will be a three-bedroom residence for which the County requires a wastewater flow of 450 gallons per day to be used for a septic system design. The perk test holes used for this system are shown on the plan as P101-P106, and the perk rate achieved was 46 minutes per inch. This excludes the failing rate of P102 and the area around P102 is therefore not used for leach trenches. The corresponding application rate for this perk test result is .4 gallons per day per square foot of infiltrative area.

Two leach fields each with 1,125 square feet of infiltrative area are required for this system (450 gpd/.4 gpd/sqft = 1125 square feet of infiltrative area). Since I used a 1 foot separation between tubes and between emitters for this drip system each emitter is equivalent to 1 square foot of infiltrative area and enough tubing must be installed to provide two separate leach areas each with 1,125 emitters as shown. The septic tank and pump chamber are both required to have a volume of 1500 gallons as shown here and on page 4 of this plan. The treatment system is a Multi-flo FTB .075 unit, large enough to serve up to 750 gallons a day.