

# SOIL ANALYSIS FOR DRIP ADVANCED TREATMENT SYSTEM

August 6, 2023

For: Geoff Roesch  
Parcel ID: 094-012.00  
Wilson, TN

## Total Bedroom Availability in System Design: 36 Bedrooms

### **Ta1 A: Total SF = 56,158 = 21 Bedrooms**

**Area 1 = S2 Pit 4 = 19,000 SF @ .2/gpd Silty Clay Loam Moderate Structure**

**11 Bedrooms** = 1,650 gpd/.2 = 8,250 SF  
plus 15% allowance for topography fluctuations & trees =  
1238 SF + 8,250 SF = 9,488 SF Primary & 9,488 SF Reserve  
**16,500 SF Required**

**Area 2 = S2 Pits 1&3, S3 Pit 3 = 37,158 SF @ .1/gpd Silty Clay Moderate Structure**

**10 Bedrooms** = 1500 gpd/.1 = 15,000 SF  
plus 15% allowance for topography fluctuations & trees =  
2,250 SF + 15,000 SF = 17,250 SF Primary & 17,250 Reserve  
**34,500 SF Required**

### **Ta1 B: Total SF = 11,232 SF = 3 Bedrooms**

**Area 1 = S3 Pit 1 @ .1/gpd Silty Clay Moderate Structure**

**3 Bedrooms** = 450 gpd/.1 = 4,500 SF  
plus 15% allowance for topography fluctuations & trees =  
675 SF + 4,500 SF = 5,175 SF Primary & 5,175 SF Reserve  
**10,350 SF Required**

### **Ta2: Total SF = 35,779 SF = 10 Bedrooms**

**Area 1 = S1 Pits 1,2&3 @ .1/gpd Silty Clay Moderate Structure**

**10 Bedrooms** = 1500 gpd/.1 = 15,000 SF  
plus 15% allowance for topography fluctuations & trees =  
2,250 SF + 15,000 SF = 17,250 Primary & 17,250 Reserve  
**34,500 SF Required**

### **In: Total SF = 35,004 SF = 2 Bedrooms \*see below**

**Area 1 = S2 Pit 2 (Clay Platy Structure Not Used) = Not Supported**

**Area 2 = S3 Pit 2 @ .075/gpd Clay Weak Structure (Total Area = 9,284 SF)**

**2 Bedrooms** = 300 gpd/.075 = 4,000 SF  
plus 15% allowance for topography fluctuations & trees =  
600 SF + 4,000 SF = 4,600 SF Primary & 4,600 SF Reserve  
**9,200 SF Required**

### **Gu: Soil Structure Not Supported for Drip System**

*\* Actual bedroom count approval will be subject to local permitting office.*

**ANALYSIS PROVIDED BY: A1 SEPTIC INSTALLERS**  
**CONTACT: DAVE PAULSON P: 865.308.7909**