



## **FRED D. SMITH SOIL CONSULTING**

July 2, 2018

Daniel Guin  
Guin Construction  
2593 Poplar Creek Rd  
Henderson, NC 27537

Subject: Subdivision Design and Report  
Plum Nutty Rd  
Vance County

Dear Mr. Guin,

This letter concerns the tract of land on Plum Nutty Rd that you asked me to provide a soil evaluation for suitability (previous report 12/15/2017) and a subdivision report that shows septic drainfield locations and proposed well locations on each lot.

My previous work on the tract showed that each lot has suitable soils for conventional septic system designs.

You indicated to me that if the soils are suitable for conventional septic systems, you want me to show house, septic, and well locations on each lot.

The attached drawing shows the proposed well and drainfield locations on each lot at the subdivision. These are only a proposed location and may be changed by the health department when they perform their detailed evaluation for permitting on each lot. They may find topographic considerations that modify the position of the drainfield or find small areas that might have been damaged by clearing that they wish to avoid.

I propose installing wells along the road frontage to each lot because these locations are generally upslope of the drainfield locations. The proposed drainfield locations are generally along the rear of each lot and will probably be at a lower elevation than the house. Therefore each lot should be able to have a gravity flow septic system and not need a pump.

The well locations would, therefore be at least 100 feet from any drainfield and upgradient from those locations.

House locations will be in the central areas of each lot between well and drainfields.

In my previous work, I did not find any unsuitable soils on any lot. However, when the lot is cleared of vegetation, use care that soils are not disturbed. If you dig stumps or grade too deep, then a soil may be rendered to shallow for conventional designs.

Please contact me if you have questions about this preliminary soil report.

Cordially,  
  
Fred D. Smith  
Licensed Soil Scientist



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