

## Central Carolina Soil Consulting, PLLC

1900 South Main Street, Suite 110 Wake Forest, NC 27587 919-569-6704

> August 17, 2016 Job # 2020

Withers & Ravenel Attention: Andy Johnson 115 MacKenan Drive Cary, NC 27511

RE: Preliminary soil/site evaluation 67 Andrews Store Road, Chatham County, NC

Dear Mr. Johsnon:

Central Carolina Soil Consulting, PLLC conducted a preliminary soil evaluation on the parcel listed above to determine the areas of provisionally suitable soils that are suitable for subsurface wastewater disposal systems (conventional & LPP). The soil/site evaluation was performed with hand auger borings, under moist soil conditions, based on the criteria found in the State Subsurface Rules, 15ANCAC 18A .1900 "Laws and Rules for Sewage Treatment and Disposal Systems". From this evaluation, CCSC sketched the boundary between the provisionally suitable soils and unsuitable soils onto an aerial and topographic map of the property through ground truthing and GPS field location of soil borings to help increase mapping accuracy.

This area lies in the felsic crystalline geologic unit, where soils have formed from residual parent material such as gneiss or schist. The soils that have formed on this parcel are similar to the Wedeowee soil series. The attached soils map indicates the areas of provisionally suitable vs. unsuitable soils. The Wedowee soil series is generally suitable for subsurface wastewater systems. That is, the morphology of the soils contain suitable characteristics that would support subsurface septic systems such

as clay textured subsoils that are not considered expansive, blocky structure and no indicators of restrictive characteristics within 24 inches of the soil surface.

The proposed repair area for the existing house was found on the western side of the property greater than 50' from the existing well. There is enough provisionally suitable soils in this area to support a 4-bedroom repair septic system with a soil LTAR of 0.275 gal/day/ft2. Central Carolina Soil Consulting believes the existing house is only a 3-bedroom but an existing house plan has not been supplied by the client. The existing gravity septic system does not seem to be impacted by the proposed construction easements on the lot. According to the attached Chatham County Septic Permit the existing septic tank and drainfields are south and/or just east of the current house location. Central Carolina Soil Consulting was not able to probe out the entire drainfield due to the dry soil conditions and dense rock in the soil profile

This report discusses the location of suitable soils for subsurface wastewater disposal systems and does not guarantee any permits or approval required by the local health department. Central Carolina Soil Consulting, PLLC is a professional consulting firm specializing in soil delineations and design for on-site wastewater disposal systems. The rules governing on-site wastewater disposal systems are complex and the interpretation of the rules are based upon the opinions of regulators (state and county level). Due to the subjective nature of the permitting process and the variability of naturally occurring soils, CCSC cannot guarantee that areas delineated as suitable for on-site wastewater disposal systems will be permitted by the governing agencies. Central Carolina Soil Consulting does not guarantee that the areas shown as potentially suitable for septic systems will be granted septic permits by the local health department. These permitting considerations should be taken into account before a financial commitment is made on a tract of land.

If you have any questions regarding the findings on the attached map or in this report, please feel free contact me at anytime. Thank you allowing Central Carolina Soil Consulting to perform this site evaluation for you.

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Sincerely,

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Jason Hall NC Licensed Soil Scientist #1248



Encl: Soil Map

