

**Central Carolina Soil Consulting, PLLC**  
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March 17, 2008  
Project # 602

Winter Custom Yachts  
Attention: Will Copeland  
2551 Hollands Chapel Road  
Apex, NC 27523

RE: Preliminary soils evaluation for proposed Yacht building facility in Chatham County, NC.

Dear Mr. Copeland:

Central Carolina Soil Consulting, PLLC conducted a preliminary soil evaluation on the above referenced parcels to determine the areas of soils which are suitable for subsurface and mound wastewater disposal systems. The soil/site evaluation was performed using hand auger borings during 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". This preliminary evaluation was completed to determine if the site contained suitable soil areas for a wastewater system with a maximum daily flow of 320 gallons from a proposed yacht building facility.

The above referenced parcel located in eastern Chatham County north of Hollands Chapel Road and west of NC Highway 751. This area lies in the Triassic Basin geologic unit, where soils have formed from sedimentary parent material such as mudstone and sandstone. The soils that were encountered on the lot for the most part contained expansive clay mineralogy less than 24 inches and would not be suitable for traditional conventional or low pressure pipe septic system. Central Carolina Soil Consulting personnel did encounter soils over most of the site evaluated that contained 18 inches or more suitable material before restrictive soil horizons such as expansive clays and/or soil indicators of a perched water table. According to Rule .1957 (b) of the Laws and Rules for Sewage Treatment and Disposal systems the area shown on the attached map with 18 inches of suitable soil material is provisionally suitable for a mound type septic system. The site also contains an existing house, well and a septic field and tank.

The proposed use for the property is a yacht building facility with 8 full-time employees and a small retail space. According to the State wastewater regulations the estimated wastewater flow for this facility would be around 320 gallons/day, (25 gallons/day/employee and 120 gallons/day/1000 ft<sup>2</sup> of retail area). The soil types encountered during the initial evaluation suggest that the overall site LTAR would be

maximum of 0.3 gallons/day/ft<sup>2</sup>. The estimated area of suitable soils required for the primary system and repair drainfield for this facility is around 9,000 ft<sup>2</sup>. This amount could be more or less depending on topographic irregularities encountered during installation. From the initial review of the site it appears there are sufficient areas of suitable soils to support a mound primary and repair wastewater system for the intended flow of 320 gallons/day. Please note that the soils on-site could also support a subsurface drip septic system, but a mound is proposed due to the on-site availability of screened topsoil required to construct the mound.

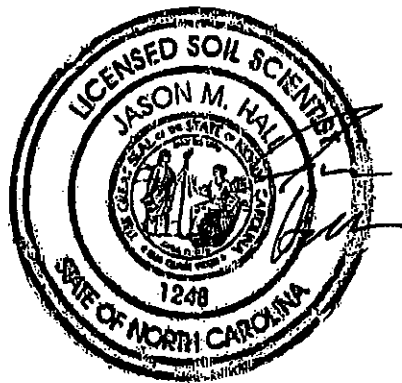
This report discusses the location of suitable soils for subsurface wastewater disposal systems and does not guarantee any permits or approval required by the local health department. Central Carolina Soil Consulting, PLLC is a professional consulting firm specializing in soil delineations and design 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. 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 in this report, please feel free to contact me at anytime. Thank you for allowing Central Carolina Soil Consulting to perform this site evaluation for you.

Sincerely,



Jason Hall  
NC Licensed Soil Scientist #1248



Encl: Soil Map

