



Soil & Environmental Consultants, PA

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July 28, 2006
Project #8714.S1

Pittman-Korbin, Inc.
Attn: Mr. Scott Pittman
208 Mibenhall Way
Cary, NC 27513

Re: Soil/Site Evaluation on Phase II Cottages at Stonegate (was Paul Shearin Tract), 66.23- Acre Site on Gilmore Road and Poytress Road, Chatham County, NC

Dear Mr. Pittman:

Soil & Environmental Consultants, PA (S&EC) performed a detailed soil and site evaluation on the above referenced tract. This was performed at your request as part of the preliminary planning process in order to determine areas of soil that have potential for subsurface wastewater disposal. Fieldwork was performed in November, 2005.

S&EC traversed the property and observed landforms (slope, drainage patterns, past use, etc.) as well as soil conditions (depth, texture, structure, seasonal wetness, restrictive horizons, etc.) through the use of hand auger borings. The site was evaluated during moist soil conditions. From these observations, an evaluation of the site was developed, relative to subsurface disposal of wastewater. Soil boundaries were flagged in the field and were located by S&EC using a GPS unit. The soil/site evaluation criteria used is that contained in 15 A NCAC 18A .1900 "Laws and Rules for Sewage Treatment and Disposal Systems".

FINDINGS

This site is located in the Piedmont region of Chatham County. The upland soils on this tract are similar to the Wedowee and Helena soil series. The Wedowee soil series has a sandy loam surface material over a clay subsoil. These soils are at least 24 inches deep to prohibitive soil characteristics and are generally useable for subsurface septic systems. The Helena soils have an expansive clay subsoil and soil wetness before 24 inches and are generally unsuitable for conventional subsurface septic systems.

The accompanying GPS/AutoCAD map indicates the areas with potential use for subsurface wastewater disposal. The "CONV." units indicate areas of soils which are at least 24 to 36 inches deep to prohibitive soil characteristics and these areas have potential for a conventional septic system, a modified conventional (shallow placed lines with no fill required over the disposal area) or a low pressure pipe system (LPP) and/or ultra-shallow conventional (shallow placed lines with fill required over the disposal field) system. Unit "UN" on the attached map indicates areas of soils that are less than 24 inches to prohibitive soil characteristics and are generally unsuitable for the type of systems mentioned above. However, they may be suitable for more expensive alternative septic systems, i.e. pretreatment drip or spray irrigation, etc. Such systems are expensive and, if requested, S&EC can provide additional information concerning these types of

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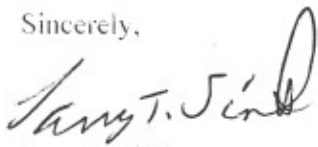
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guarantee that areas delineated and/or systems designed will be permitted by the governing agencies. As always, S&EC recommends that anyone making financial commitments on a tract be fully aware of individual permit requirements on that tract prior to final action.

An individual septic system permit will be required for each lot prior to obtaining a building permit. This will involve a detailed evaluation by the local health department to determine, among other things, system size and layout, well, drive and house location. Only after developing this information can a final determination be made concerning specifics of system design and site utilization.

Soil & Environmental Consultants, PA is pleased to be of service in this matter and we look forward to assisting in any site analysis needs you may have in the future. Please feel free to call with any questions or comments.

Sincerely,



Larry T. Sink
NC Licensed Soil Scientist #1054

Encl: Attachment 1
Soil Suitability Map



.1950 Location of Sanitary Sewage Systems

(c) (c) Every sanitary sewage treatment and disposal system shall be located at least the minimum horizontal distance from the following:

- | | |
|--|-------------------------------------|
| (1) any private water supply source including a well or spring | 100 feet |
| (2) any public water supply source | 100 feet |
| (3) streams classified as WS-I | 100 feet |
| (4) water classified as S.A. | 100 feet from mean high water mark |
| (5) Other coastal waters | 50 feet from mean high water mark |
| (6) any other stream, canal, marsh, or other surface waters | 50 feet |
| (7) any Class I or Class II reservoir | 100 feet from normal pool elevation |
| (8) any permanent storm water retention pond | 50 feet from flood pool elevation |
| (9) any other lake or pond | 50 feet from normal pool elevation |
| (10) any building foundation | 5 feet |
| (11) any basement | 15 feet |
| (12) any property line | 10 feet |
| (13) top of slope of embankments or cuts of 2 feet or more vertical height | 15 feet |
| (14) any water line | 10 feet |
| (15) drainage systems: | |
| (A) Interceptor drains, foundation drains and storm water diversions | |
| (i) upslope | 10 feet |
| (ii) sideslope | 15 feet |
| (iii) downslope | 25 feet |
| (B) Groundwater lowering ditched and devices | 25 feet |
| (16) any swimming pool | 15 feet |
| (17) any other nitrification field (except repair area) | 20 feet |
| (b) Ground absorption, sewage treatment and disposal systems may be located closer than 100 feet from a private well supply, except springs and uncased wells located downslope and used as a source of drinking water, repairs, space limitations and other site-planning considerations but shall be located the maximum feasible distance and, in no case, less than 50 feet. | |
| (c) (c) Nitrification fields and repair areas shall not be located under paved areas or areas subject to vehicular traffic. If effluent is to be conveyed under areas subject to vehicular traffic, ductile iron or its equivalent pipe shall be used. However, pipe specified in Rule .1955 (e) may be used if a minimum of 30 inches of compacted cover is provided over the pipe. | |

Note: Systems over 3000 GPD or an individual nitrification fields with a capacity of 1500 GPD or more have more restrictive setback requirements, see .1950 (a) (17) (d) for specifics.