| Owned<br>Addr<br>Prope<br>Locar<br>Wate<br>Evalu<br>Type | for ON<br>for ON<br>for ON<br>er:<br>ess:<br>osed Facility<br>tion of Site:<br>s Supply;<br>ation Metho<br>of Wastewa | nvironmenta<br>ronmenta<br>ater Secti<br>SOIL/S<br>-SITE W<br>Applica<br>r: SFL<br>od:<br>iter: | ent, Health and<br>I Health<br>on<br>ITE EVALUA<br>ASTEWATE<br>nt:<br>Date<br>Desi<br>Prop<br>Public<br>Auger Bo<br>Sewage | ATION<br>R SYSTEM<br>B Evaluated: 2-16<br>gn Flow (.1949); 6<br>erty Recorded:<br>Individual<br>ring   Pi<br>Industrial I | Well<br>Well<br>t Cut<br>Process Mixe | Sheet:<br>Proper<br>Lot #:<br>File #:<br>Code:<br>Property Size: | rty ID:                  |                         | ι.                         |
|--|---|---|--|---|---------------------------------------|--|--------------------------|-------------------------|----------------------------|
| P<br>R<br>O<br>F<br>I<br>L                               | .1940   | Harizon   | SOIL MORPHOLOGY<br>.1941   |   | OTHER<br>PROFILE FACTORS              |  |                          |                         |                            |
| Ë<br>#   | Position/<br>Slope %  | Depths<br>(In.)   | .1941<br>Structure/<br>Texture   | . 1941<br>Consistence<br>Mineralogy   | , 1942<br>Soil<br>Wetness/<br>Color   | .1943<br>Soil<br>Depth (IN.)                                     | . 1956<br>Sapro<br>Class | .1944<br>Restr<br>Horiz | Profile<br>Class<br>& LTAR |
| 1  | L. 3%   | 0-10  | SL   | FR. CORNERP   |                                       |  |                          | Troug.                  |                            |
|  |   | 10-36   | St-CIMY  | missons. R  | 32" 10R                               |  |                          |                         | -35                        |
|  |   |   |  |   |                                       | entry is the second  |                          |                         |                            |
| 2  | L302  | 0-12  | 5L 1   | a CONNON?   |                                       |  |                          |                         |                            |
|  | 1   | 12-40   | Si-Ciny  | en Storis?  | 34" 104                               |  |                          |                         | 35                         |
|  |   |   |  |   |                                       |  |                          |                         |                            |
| 3  | 1.3%  | 0-8   | X.   | IN GROOMP   |                                       |  |                          |                         |                            |
|  |   | 8-32  | SC-CIAN 0  | Pro A Gal S P   | 20" JOR                               | · · · · ·  |                          |                         |                            |
|  |   |   | /  |   | 10. 47                                |  | ——                       |                         | . 3                        |
| 4  | L 5%  | 0-17  | <u>x</u>   | 1 ton wear  |                                       |  |                          |                         |                            |
|  |   | 10 3/0  |  | in o  | 2-1'IDR                               |  |                          |                         | ·                          |
|  | <sup>4</sup>  | 2- 20   | · · ·  | - 59×3 M  | 36 42                                 |  |                          |                         | - 35                       |
|  | 150%  |   |  |   |                                       |  |                          |                         |                            |
| -+   |   | -8 0  | n pi   | 1 GANSAR  |                                       |  |                          |                         |                            |
| -+   | 6   | ·30 50  | - CIAN C   | - Smus.P.   | 28" 102                               |  |                          |                         | <u>~ 3</u>                 |
|  | <u> </u>  |   |  |   |                                       |  |                          |                         |                            |
|  |   |   |  |   |                                       |  |                          |                         |                            |
|  |   |   |  |   |                                       |  |                          |                         |                            |
|  |   |   |  |   |                                       |  |                          |                         |                            |



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Central Carolina Soil Consulting, PLLC

329 South White Street Wake Forest, NC 27587 919-569-6704

> November 8, 2010 Project # 934

NC Custom Homes, LLC. David Dozier 1508 Mycenae Place Fuquay-Varina, NC 27526

RE: Soil/site evaluation and septic system layout on lot 5 in Regal Crest Subdivision, Harnett County.

Dear Mr. Dozier:

Central Carolina Soil Consulting completed a soils evaluation and septic system layout per your request on lot 5 in Regal Crest subdivision to determine soil suitability for a 5-bedroom septic system and repair area. The soil site evaluation was performed using 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". The soils on lot 5 in the back yard between the proposed house location and roughly 30-40' from the woods line are provisionally suitable for modified conventional type septic system and repair area for the proposed 5-bedroom home utilizing Accepted Status Product with a 25% area reduction. Please note that CCSC did layout enough proposed septic line to utilize a conventional stone drainfield if desired. The proposed primary system is a gravity system (Lines 2-4) requiring an 20" trench bottom on contour. The soils in this area had a sandy loam surface over a sandy clay loam subsoil suitable to at least 33-40"+ over the proposed drainfield area with a site LTAR of 0.35 gal/day/ft2. The repair area shall be a gravity septic system as well (lines 5-7) requiring a 20" trench bottom on contour. The soils were similar in the repair area to the soils in the proposed primary septic field location with a site LTAR of 0.35 gal/day/ft2. The specific septic system and loading rate for this lot will be permitted by the Harnett County Health Department. The area for the proposed septic fields shall not be impacted by home sites, pools, garages and shall not be mechanically altered from the natural lay of the land during construction of the house and should be fenced off to prevent compaction of the soil. The proposed pool location seems to meet the required 15' minimum setback but the house & pool locations should be clearly staked prior to a site evaluation by the Harnett County Health Department.

This lot will require a detailed soils evaluation by the Harnett County Health Department prior to issuance of any permits. 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 agency.

Please give me a call if you have any questions.

Sincerely,

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- Hall

Jason Hall NC Licensed Soil Scientist 1248



a 1988

## NC Custom Homes Regal Crest Subdivision, Lot 5 5-Bedroom House 600 gal/day)

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|                      |              |                  | m mouse or | )                  |                  |                         |                               |  |
|----------------------|--------------|------------------|------------|--------------------|------------------|-------------------------|-------------------------------|--|
| <u>line #</u><br>TBM | <u>COLOR</u> | <u>BS</u><br>0.0 | HI         | <u>FS</u><br>100.0 | <b>ELEVATION</b> | LINE LENGTH<br>in field | Design Length<br>installation |  |
| INST. I              |              |                  | 100.0      |                    |                  |                         |                               |  |
| 1                    | Orange       |                  |            | 5.1                | 94.9             | 227                     | Not Used                      |  |
| 2                    | Blue         |                  |            | 5.7                | 94.3             | 235                     | 150                           |  |
| 3                    | Yellow       |                  |            | 6.3                | <b>93.</b> 7     | 251                     | 150                           |  |
| 4                    | Red          |                  |            | 6,8                | 93.2             | 250                     | 150                           |  |
| 5                    | Pink         |                  |            | 7.4                | 92.6             | 251                     | 150                           |  |
| 6                    | Orange       |                  |            | 8.0                | 92.0             | 250                     | 150                           |  |
| 7                    | Blue         |                  |            | 8.4                | 91.6             | 250                     | 150                           |  |
|                      |              |                  |            |                    |                  |                         |                               |  |

| System Type                          | System<br>Lines 2-4<br>Accepted Status Product<br>EZ-Flow | Repair<br>Lines 5-7<br>Accepted Status Product<br>EZ-Flow |
|--------------------------------------|---|---|
| Suggested Soil LTAR<br>(eal/day/ft2) | 0.35  | 0.35  |
| System Installation LTAR             | 0.33  | 0.33  |
| Total Line Length                    | 450   | 450   |
| Square Footage                       | 1350  | 1350  |
| Proposed Trench Bottom               | 20"   | 20"   |

Distribution Method Notes:

Gravity to D-Box

Total

Gravity to D-Box

1714

900

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