

softer zones and zones with very close and wide fracture spacing are present across the site. In general, strata recovery values range between 89 and 100 percent in the crystalline rock. RQD values in the crystalline rock range between 0 and 100 percent. Two specimens were tested for unconfined compressive strength. The B1-A specimen from 35.6 feet had a strength of 6,780 psi, while the B2-A specimen from 42.7 feet had a strength of 3,420 psi. All of the borings were terminated in crystalline rock.

**Groundwater:**

After completion of each boring, temporary piezometers (slotted PVC pipe) were installed in the boreholes. Piezometers were used to measure stabilized groundwater levels at least 24 hours after the completion of drilling. Groundwater elevations range between 859 and 860 feet. Due to the existing creek, we do not anticipate groundwater to fluctuate more than 1 foot seasonally, except during high water stages.

**Closure:**

The geotechnical foundation investigation is based on the Preliminary General Drawing dated July, 2004. If any significant changes are made in the design or location of the proposed structure, the subsurface information will have to be reviewed and modified as necessary. For soil descriptions and general stratification at a particular boring location, the respective Boring Log should be reviewed. Cross-sections and profiles are a generalized interpretation of soil conditions between borings and should not be considered accurate other than at the boring locations. Subsurface conditions between boring locations or elsewhere on the site may vary, and subsurface anomalies may exist which were not detected.

Geoscience Group, Inc. appreciates the opportunity to be of service to the NCDOT on this project. Should you have any questions concerning this report, please feel free to contact the undersigned.

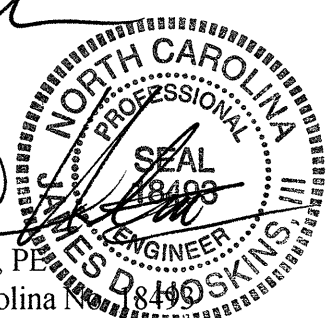
Respectfully,  
GEOSCIENCE GROUP, INC.



Dean Hardister, PE  
Project Manager



James D. Hoskins, III, PE  
Registered North Carolina



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Enclosures