



encountered in our borings consist of phyllite of the Eastern Slate Belt. In addition, the residual soils encountered beneath the alluvial soil have retained the texture of the underlying phyllite.

STRATIGRAPHY

Existing roadway embankment was encountered at the ground surface in all of the borings. The embankment extends to a depth of approximately 7.0 feet (elevation 103.5 to 104.1 feet) and consists of very loose to loose, fine to coarse sand with some clay (A-2-4, A-2-6) and soft to medium stiff, fine to coarse sandy clay (A-6). Beneath the embankment, all of the borings encountered alluvial soil consisting of very loose to medium dense, fine to coarse sand (A-2-4, A-2-6) and very soft to soft, fine sandy silt (A-4) and clay (A-6). The alluvium extends to depths of 16.0 to 18.5 feet (elevation 92.0 to 95.1 feet) in borings advanced across the site. The alluvium is underlain by residual soil consisting of very stiff to hard, saprolitic, micaceous, fine to coarse sandy silt (A-4). The residual soil extends to depths of 23.5 to 34.0 feet (elevation 77.1 to 87.0 feet). The residual soil is underlain by weathered rock and/or non-crystalline rock (phyllite) to the boring termination depths of 33.5 to 43.6 feet (elevation 66.9 to 77.5 feet) except boring EB1-B which encountered a zone of hard residual silt within the weathered rock from a depth of 28.5 to 33.5 feet (elevation 77.0 to 82.0 feet).

GROUND WATER

Ground water was measured in the end bent borings immediately after drilling and after a stabilization period of 24 hours. Immediately after drilling, groundwater was encountered at elevations ranging from 83.5 to 89.5 feet. After a stabilization period of 24 hours, water levels were measured at elevations of 84.0 to 89.5 feet. The water surface of Great Swamp was measured at elevation 104.8 feet during our field investigation

NOTES TO THE DESIGNER

None noted.



QUALIFICATIONS OF REPORT

This report has been prepared for the exclusive use of the North Carolina Department of Transportation and their assignees for specific application to the referenced property in accordance with generally accepted soil and foundation engineering practices. No other warranty, expressed or implied, is made. The conclusions provided in this report do not reflect variations in subsurface conditions, which could exist intermediate of the boring locations, or in unexplored areas of the site. Should such variations become apparent during construction, we reserve the right to re-evaluate our conclusions based upon an on-site observation of the conditions. In the event that changes are made in the proposed construction plans, the findings presented in this report shall not be considered valid unless reviewed by our firm and conclusions of this report modified or verified in writing.