

### Rock Properties

The rock on the project consists of Triassic Basin sedimentary rocks from the beginning to approximately -L- Sta. 42+30. The area from approximately -L- Sta. 42+30 to the end of the project primarily consists of felsic meta-volcanic rocks of the Carolina Slate Belt.

Soft weathered rock was encountered in most borings that extended to depths of 4 meters or more. Hard rock, which yielded auger refusal, was encountered intermittently throughout the project. In some areas the rock has an irregular surface boundary. Soft weathered rock is visible in the existing cut slopes at -L- Sta. 21+80 to Sta. 23+20, Sta. 33+60 to Sta. 35+40, Sta. 60+10 to Sta. 62+20 and Sta. 64+90 to Sta. 65+10. Hard rock is present in the proposed unclassified excavation limits at -L- Sta. 33+60 to Sta. 35+40 and Sta. 60+10 to Sta. 62+20 and blasting will be required to remove this rock.

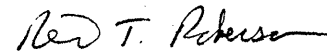
### Groundwater

Groundwater was encountered intermittently in borings throughout the project. Generally, the water table is fairly shallow in the relatively low-lying areas. Groundwater was encountered in the cut sections at -L- Sta. 21+80 to Sta. 23+20, Sta. 33+60 to Sta. 36+80, Sta. 53+80 to Sta. 55+00 and Sta. 69+30 to -L- Sta. 70+50. The existing roadway ditches along these cuts were wet. No other water seeps were observed in the existing cut slopes.

### Geotechnical Descriptive Analysis

This project will not be divided into segments for further description. Specific areas of concern have been addressed where conditions necessitate.

Respectfully submitted,



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Project Geologist