



ENGINEERING & ENVIRONMENTAL SCIENCE COMPANY

3008 ANDERSON DRIVE, SUITE 102

RALEIGH, NC 27609

(919) 781-7798

August 11, 2020

Mr. Brett Matthews

RE: Foundation Subgrade Observations  
Greater Light Baptist Church  
2028 Matthews Road  
Lillington, NC

Dear Mr. Matthews:

On August 10, 2020, a Professional Engineer observed the foundation subgrade support conditions at the above referenced site. Per the plans and specification, design soil bearing pressure for the footings is 2,000 pounds per square foot (psf).

A 3 inch diameter hand auger was used to evaluate the foundation soils. A dynamic cone penetrometer was also used to aid in evaluation of the soil bearing capacity. The dynamic cone penetrometer consists of rod with a cone that is driven using a 15 lb weight dropped 20 inches. The number of blows to drive the rod 1-3/4 inches provides an estimate of the foundation soil bearing capacity.

The exposed soils consisted of a brown silty CLAY (CL) fill soil underlain by light grayish-brown silty SAND (SM) altering to a silty sandy CLAY (CL). The fill soil was less than 0.5 ft. thick. These soils had dynamic cone penetrometer blow counts ranging from 5 to 11 blows per increment. Based on the site observations and testing, the foundation soils have an allowable bearing capacity of at least 2,000 psf. The observed foundation soils meet or exceed the project requirements for structural support of the building foundation.

We appreciate serving you on this project. Please contact us if you have any questions.

Sincerely,

  
T. Patrick Shillington, P.E.  
President

