May 20, 2022

Mr. Terry Deguisne
KB Homes
4506 South Miami Boulevard, Suite 100A
Durham, North Carolina 27703

Subject: **Summary of Foundation Bearing Material Evaluation**
Lot No. 76 – (155 Saint Claire Drive)
Birchwood Grove Subdivision
Fuquay-Varina, North Carolina
Permit Number: N/A
SUMMIT Project Number: 9372.F0017 (35777-00)

Dear Mr. Deguisne:

On May 16, 2022, a representative of SUMMIT Engineering, Laboratory and Testing, Inc. (**SUMMIT**) visited the subject site for the purpose of observing the near surface foundation bearing materials for the proposed residential structure. The following is a summary our onsite observations and evaluations.

Our work included testing and bearing grade evaluations of the in-place soil at the bottom of the foundation excavations. Hand auger borings were incrementally advanced by manually twisting a sharpened steel auger into the soil at selected locations along the footing excavation. The soil consistency in the bottom of the excavation and at selected intervals below the bearing grade was evaluated by Dynamic Cone Penetrometer (DCP) testing. The conical point of the DCP was first seated to penetrate any loose cuttings and then driven three additional 1-3/4 inch increments with blows from a 15-pound hammer falling 20 inches. The soil's strength characteristics and foundation support capability was determined based on the average blows per increment (bpi) over the last two increments to achieve this penetration. Additionally, the entire excavated foundation was evaluated by hand probing using a ½ inch diameter steel probe rod to check for soft areas at the surface intermediate of our hand auger boring locations.

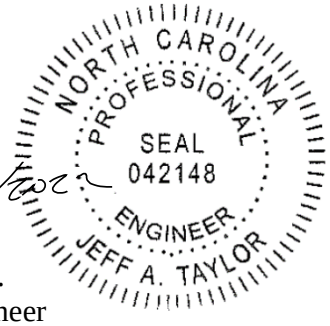
The materials exposed at the bottom of the foundation excavations generally consisted of brown-orange, sandy-clay (residual soils) and were free of significant quantities of organics and debris. If additional testing for the purpose of estimating volumetric change (shrink/swell) potential or to estimate consolidation of the tested soils is desired, **SUMMIT** can provide these services.

Based on the results of our DCP testing, hand probing, and our site observations, the soils encountered are suitable for support of the residential structure utilizing a net allowable soil bearing pressure of **2,000 pounds-per-square-foot**.

If foundation bearing materials are exposed to inclement weather or adverse construction activities, **SUMMIT** should be contacted to re-evaluate the foundation bearing materials prior to concrete placement.

SUMMIT appreciates the opportunity to provide our professional services to you on this project. If you have any questions concerning the information in this report or if we can be of further service, please contact us.

Sincerely,
SUMMIT Engineering, Laboratory and Testing, Inc.



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