

February 19, 2016

Mr. Richard Sargent Royal Oaks Building Group, LLC 1210 Trinity Road, Suite 102 Raleigh, North Carolina 27607

Subject: Summary of Foundation Bearing Material Evaluation

Lot No. 13 – (164 Atkins Village Court)

Atkins Village Subdivision Fuquay-Varina, North Carolina

Permit Number: 37746

SUMMIT Project Number: 1852-10R (9880-00)

PO Number: 046000013018

Dear Mr. Sargent:

On February 18, 2016, 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 foundation. The following is a summary of our onsite observations and bearing material evaluation.

As requested, **SUMMIT**'s representative observed the over-excavations for the foundation areas for the lot referenced above. We observed the contractor over-excavate the footings to depths ranging from approximately 3 to 4.25 feet below the footing bearing elevation and 30 inches in width.

The materials exposed at the bottom of excavations generally consisted of tan, brown and orange, silty-sand (residual soils). As recommended, we observed the contractor line the over-excavated footings with a woven geotextile (Mirafi 500x) and backfilled with a clean #57 washed stone to the footing bearing elevation. If additional testing for the purpose of estimating volumetric change (shrink/swell) potential or to estimate consolidation is desired, **SUMMIT** can provide these services.

Based on the results of hand probing and observation of the recommended repairs that were completed, the soils encountered are suitable for support of the proposed residential structure utilizing a net allowable soil bearing pressure of **2,000 pounds-per-square-foot**. Additionally, it was observed that the exterior wall foundations are 30 inches wide and 12 inches thick which is in compliance with Chapter 4 of the 2012 North Carolina Residential code.

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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Jason B. Coble, P.E. Raleigh Branch Manager J. Elvey Thomas III, P.E. Senior Geotechnical Engineer