



June 7, 2016

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

**Subject: Summary of Foundation Bearing Material Evaluation
Lot No. 12 – (188 Atkins Village Court)
Atkins Village Subdivision
Fuquay-Varina, North Carolina
Permit Number: N/A
SUMMIT Project Number: 1852-10R
PO Number: 046000012017**

Dear Mr. Sargent:

On May 31, 2016 and June 1 and 2, 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 approximate depths ranging from 5 to 6 feet below the footing bearing elevation and 36 to 60 inches in width because of cave in.

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 backfill 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 a minimum of 36 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.



Jason B. Coble, P.E.
Raleigh Branch Manager

J. Elvey Thomas, P.E.
Geotechnical Engineer