August 30, 2024

Mr. Donnie Bentley
Dan Ryan Builders – North Carolina, LLC
1101 Slater Road, Suite 300
Durham, North Carolina 27703

Subject: **Summary of Foundation Bearing Material Evaluation & 3rd Party Inspection**
Lot No. 25 – (417 Adams Pointe Court)
Honeycutt Hills Subdivision
Angier, North Carolina
Permit Number: 2405-0094
Project Number: 3241-14R (40954-00)
Order No.: 5281_001842, 5281_002173, 5281_002174

Dear Mr. Bentley:

On July 15, 2024, a representative of UES Professional Solutions 29, Inc. (**UES**) visited the subject site for the purpose of observing the near surface foundation bearing materials and to perform a third-party foundation inspection for the proposed residential structure. The following is a summary of our onsite observations and evaluation.

The residential footings were excavated approximately 16 inches wide and approximately 14 inches below the existing ground surface prior to our site visit. We observed that the exterior and interior wall foundations and lugs were prepared per the structural plans provided onsite.

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 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, **UES** can provide these services.

On July 22, 2024 we were informed that an area of the footing had experienced failure at the right rear of the garage. We visited the site and observed that a lug had previously been installed in the wrong location and improperly backfilled resulting in undermining of the poured footing. We provided recommendations to

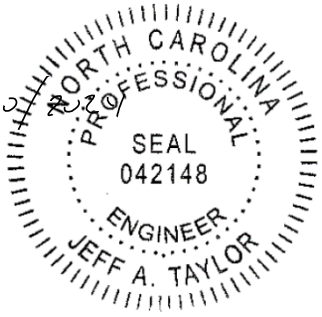
remove the undermined footing and 5 feet beyond, remove improperly backfilled soils and replacing with wrapped 57 stone. We returned July 31, 2024 and August 15, 16, & 19, 2024 to observe progress of the recommended repairs. On August 19, 2024 the repairs were completed and we approved to re-pour the footing and lugs at the right rear portion of the garage.

Based on the results of our DCP testing, the completed remedial measures, 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**. The foundation bearing soils are in accordance with the HUD requirements.

We appreciate the opportunity to assist you during this phase of the project. If you need further assistance or additional information please do not hesitate to contact us.

Sincerely,
UES Professional Solutions 29, Inc.

8/30/2024



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