

May 24, 2024

Family Building Company
c/o John Szalecki

Re: Limited Footing Evaluation
782 Jasmine Road
Fuquay Varina, NC

Dear Mr. Szalecki,

At your request, we performed an inspection of the subject property limited to the items explicitly described below on February 2, 2024. The scope of this inspection is to investigate and evaluate soil conditions of previously excavated footings during construction.

Below, we have provided commentary regarding the items described within the scope. Note that a full analysis of the existing structure was not completed as a part of this inspection. All directions (left, right, rear, etc.) are taken from the viewpoint of an observer standing and facing the front door of the home. If the contractor has any questions or concerns regarding the method of construction or if conditions vary from what is described above, the engineer should be consulted. Likewise, if any changes to sizes or modifications to the structure are desired other than what is explicitly described below, the engineer should be consulted. Note we have reviewed plans for the new construction dated January 28, 2024.

Please note that this inspection was visual only and did not include other forms of testing such as destructive, environmental, etc. As such, there were likely aspects of the structure that may not have been visibly available for inspection. Measurements were taken and observations were made by the engineer based on what was readily visible for inspection and within the aforementioned scope as directed by the client and described above. Beyond the time of the inspection, conditions can change which could result in additional structural modifications or repairs being required. The opinions and recommendations below are that of the engineer based on experience, existing site conditions, constructability, etc. which are intended to address specific concerns.

Footing Evaluation

The footings had been excavated in accordance with the reviewed design plans (overburden material along sides of excavated footing). The existing soil conditions were probed with a ½" steel probe which yielded firm resistance to penetration except for the back perimeter of the footings. Further, soils were tested using a Dynamic Cone Penetrometer (DCP). The existing soils which yielded less than firm resistance to probing were subjected to DCP testing yielding resistance values of 3-4 blows per increment (BPI) or more. We provided information regarding removal of additional soils (approximately 4" deep and 4" in width) at these locations. Additional soils were removed on site and rebar was placed in accordance with the design plans.

The existing soils are considered to meet or exceed requirements for bearing capacity as set out in original design plans. No further excavation is required prior to concrete placement.

This letter has been intended to address the scope of concerns described above. Should any questions regarding this report arise, please contact the engineer for additional information. We thank you for the opportunity to assist you with this matter.

Sincerely,

Harrison N. Luttman, PE
Principal Engineer
Bare Engineering, PLLC
NC License No. P-2679

