Geotechnical • Consulting Engineers • Quality Control

NC Registered Engineering Firm P-1855

February 22, 2021

Marketplace Builders LLC Chris Roberts 3102 N Main Street Hope Mills, North Carolina 28348

> Re: Foundation Evaluation 155 Mockingbird Lane Spring Lake, North Carolina

Mr. Roberts,

OTG Consulting, PLLC (OTG) was requested to visit the subject site above to observe the CMU piers and footings for the property at 155 Mockingbird Lane. We understand that the building inspector had failed the foundation due to several piers that appeared not to be located within the middle third of the footing. Mr. Scott G. Dowell, P.E. was onsite on February 22, 2021 to evaluate the CMU piers and their location on the footings. Upon arrival, Mr. Roberts had already numbered the piers to allow for easier identification.

The piers of concern were 1, 2, 10, 22, and 23. Per the 2018 NC Residential Building Code, Table R403.1(2) Pier and Footing Sizes for Support of Girders, footnote c, "Centers of piers shall bear in the middle 1/3 of the footing." OTG reviewed the piers, as well as the ones in question. Piers 1, 2, 22, and 23 did not meet this requirement and the contractor had doweled into the footing to extend and allow for proper support. OTG verified the dowel placement and that the additional concrete would allow for the center of the pier to bear within the middle 1/3. The remaining piers met this requirement, and the eccentricity in loading will not impact the support of the girders or lead to excess bearing pressures beneath the footing.

We appreciate the opportunity to help you with this. Should you have any questions or need additional information, please contact me at your earliest convenience. We can be reached at 336-414-1179 or at otgconsulting37@gmail.com.

Sincerely,

OTG Consulting, PLLC

2 Feb 2021

Scott G. Dowell, F. NC PE License No.