PREPARED 6/06/17, 14:30:48 INSPECTION TICKET PAGE 32 Harnett County INSPECTOR: IVR DATE 6/07/17 ADDRESS . : 55 DOT CT SUBDIV: ATKINS VILLAGE PH 3 TENANT, NBR: ENV CALLED IN 5/4 021960* *** CONTRACTOR : ROYAL OAKS BUILDING GROUP LLC PHONE: (919) 233-3886 OWNER . . : ROYAL OAKS BUILDING GROUP PHONE : PARCEL . . : 04-0664- - -0020- -50-APPL NUMBER: 17-50040985 CP NEW RESIDENTIAL (SFD) DIRECTIONS : T/S: 03/21/2017 08:39 AM JBROCK ----ATKINS VILLAGE #47 STRUCTURE: 000 000 45X67 4BDR CRAWL W/ GARAGE & DECK FLOOD ZONE . . . : FLOOD ZONE X # BEDROOMS : 4000000.00 PROPOSED USE : SFD SEPTIC - EXISTING? . . . : NEW TANK WATER SUPPLY : COUNTY ------PERMIT: CPSF 00 CP * SFD REQUESTED INSP DESCRIPTION TYP/SQ COMPLETED RESULT RESULTS/COMMENTS A814 01 6/07/17 TI ADDRESS CONFIRMATION TIME: 17:00 VRU #: 002981348 T/S: 06/06/2017 12:33 PM LBENNETT -----T/S: 06/06/2017 12:34 PM LBENNETT -----

----- COMMENTS AND NOTES -----

Geotechnical Engineering Environmental Consulting Construction Materials Testing

June 5, 2017

Mr. Rich Sherman Royal Oaks Homes rsherman@royaloakshomes.com

> Report of Observations Atkins Village North, Lot 47 Fuquay Varina, North Carolina Our Project Number 121-15-78801

Gentlemen:

As requested, a representative of TerraTech Engineers, Inc. was present at the above referenced site on May 10, 2017 to perform testing on the crawl space footing excavations for the proposed residential home located in the area of Lot #47. The purpose of our testing was to verify that the design soil bearing pressure is available for the concrete foundations. We understand that an allowable soil bearing pressure of 2,000 pounds per square foot (psf) is required. Our services did not include surveying. Locations are based on the excavations performed by others.

Our field examinations consisted of visual observations, dynamic cone penetrometer testing in accordance with ASTM STP-399, and hand rod probing at selected locations. Dynamic cone penetrometer testing was performed at select locations and to a maximum depth of 3 feet below the over-excavated foundation bearing elevation. Our scope did not include mechanically drilled soil test borings to evaluate deeper subsurface soil conditions that could affect foundation support. Such services can be provided, if desired.

During our recent site visit, the footings had been over-excavated approximately 2 to 3 feet below the foundation bearing elevation and standing water was present in the footing excavations. After the footing excavations were mucked out, we recommended that the footing excavations be backfilled with consolidated #57 washed stone wrapped in geotextile fabric to re-establish the foundation bearing elevation.

After the recommended remedial measures were performed and prior to placement of geotextile fabric and #57 washed stone, the results of the footing examinations indicated that an allowable bearing capacity of 2,000 pounds per square foot (psf) was available at the locations and depths tested at the time of our investigation. Additionally, the foundation dimension met the plan minimum requirements.

Exposure to the environment, especially rainfall, may weaken the soils beneath the foundation bearing surface, if they are exposed for extended periods of time prior to concrete placement. If the over-excavated soils beneath the foundation bearing surface become softened due to exposure, the soft soils should be compacted or removed and replaced prior to placement of geotextile fabric, washed stone, and concrete.

If you have any questions concerning this information, please do not hesitate to call.

Sincerely, TerraTech Engineers

Monlas Thomas O. Helms, F

Project Engineer

TOH/sk

cc: rsargent@royaloaksho

Christopher S. Pilz, P.E.

Principal Geotechnical Engineer