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JANUARY 2, 2023

HARNETT COUNTY DEVELOPMENT SERVICES
420 MCKINNEY PARKWAY
LILLINGTON, NORTH CAROLINA 27546

RE: CONCRETE FOOTINGS AND MASONRY FOUNDATION WALLS
10 REMINGTON HILL DRIVE
BUNNLEVEL, NORTH CAROLINA 28323

DEAR SIR:

BASED UPON MY PREVIOUS SITE VISIT AND INSPECTIONS OF THIS PROJECT I OBSERVED THAT THE CONCRETE FOOTINGS WERE NOT PROPERLY PLACED AND DID NOT PROVIDE THE PROPER "OVER HANG" FOR THE EXTERIOR WALL'S MASONRY PIERS, SOME INTERIOR MASONRY PIERS AND SEVERAL LOCATIONS OF MASONRY WALLS.

I RECOMMENDED THAT THE CONTRACTOR WIDEN THE EXISTING CONCRETE FOOTINGS AT THE DEFICIENT LOCATIONS.

AT THE DEFICIENT LOCATIONS MY RECOMMENDATIONS WERE TO DRILL AND PLACE #4 REINFORCING STEEL DOWEL BARS AT 12 INCHES ON CENTER. THE DOWEL BARS WERE TO BE DRILLED 5 INCHES DEEP AND EPOXYED INTO THE EXISTING FOOTING ALONG THE CENTER LINE OF THE EXISTING FOOTING.

THE NEW DOWEL BARS WERE TO EXTEND 5 INCHES MINIMUM INTO THE NEW CONCRETE WIDENED FOOTING. THE WITH OF THE NEW WIDENED FOOTING WAS TO BE 8 INCHES WIDE MINIMUM.

SUBSEQUENTLY TO THESE RECOMMENDATIONS, I HAVE REVISITED THE PROJECT SITE AND OBSERVED THE PLACEMENT OF THE NEW 1/2 INCH DOWEL BARS.

IT IS MY OPINION THAT WHEN THE NEW "WIDEN FOOTINGS" HAVE BEEN PLACED THE FOUNDATION WALL'S FOOTINGS WILL COMPLY WITH ALL THE PRESCRIPTIVE REQUIREMENTS OF CHAPTER 4 OF THE NORTH CAROLINA STATE RESIDENTIAL BUILDING CODE, 2018 EDITION., AND CAN SUPPORT ALL STRUCTURAL LOADINGS REQUIRED BY THIS CODE.

I WOULD CLASSIFY THE WORKMANSHIP OF THE CONCRETE FOOTINGS AS BELOW AVERAGE.

THE FOUNDATION AND FOOTINGS ARE COMPATIBLE WITH THE SOIL, CLIMATE AND GEOLOGICAL CONDITIONS PRESENT AT THIS LOCATION.

SHOULD YOU HAVE ANY QUESTIONS PLEASE DO NOT HESITATE TO CONTACT ME.

SINCERELY,



WILBUR E. DEES, P.E., P.L.S.