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11 March 2016

To: Ted Goodnight
Cc: Medlin Excavation

Re: 548 Rollins Mill Harnett, NC
Permit# 16-50037971 Jampe Job Number 1503-16

The following design and recommendation is based on the latest edition of the North Carolina State Building Code and any local codes that may be in effect at the time of this letter.
Live Loads: Roof/Limited Storage- 20 psf Upper Floors- 40 psf Main floors- 40 psf
Dead loads as applicable. Allowable Soil Pressure- 2000psf Wind load- 27 psf.
Allowable Stress: #2 SPF- 875 psi #2 SYP- 850 psi *New SFPA SYP values* LVL- 2900 psi

Builder has requested verification of the following issues:

11 March 2016
Third Party Review of Engineering Recommendations
Soils over excavated up to three foot to native clay silts and silty clays Areas of up to 30 percent sandy silts and silty sands Soils are in uncompacted or unverifiable compaction fills. Fill soils appear native and may have been cut from surrounding areas Soils bearing at base of over excavated footings in excess of 2000 pounds per square foot and are adequate for expected loads and conditions.
Plan calls for 20 inch footing at areas of brick veneers
Wall Footings excavated to 24 inch minimum width, pier footings minimum of 30 inches with most wall and pier footings oversize due to minor wall cave-in or clean-out

Builder may backfill with 57 / 67 stone to provide drainage path and to reduce and equalize footing depth and reduce concrete volume. Stone also serves to stabilize walls of excavation
Stone Placement to my recommendations minimum of 16 inch depth or to base of footing

Reinforce ALL wall footings with two # 4 bars Lap bars ten inches minimum and tie Support on chairs
Reinforcement per my recommendations. All bars properly lapped, tied and supported for required concrete cover and clearance

Wall and pier footings properly sized and located including point load or oversize footings. Footing preparation meets or exceeds plan and code requirements and my recommendations.

Respectfully,

John A. McRae
NCPE 20081
Questions or Comments John A McRae
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NORTH CAROLINA PROFESSIONAL SEAL 20081 ENGINEER JOHN ALEXANDER McRAE

11 MAR 2016