RJB, P.E., P.A.

C-0269

ROBERT J. BRACKEN ENGINEER + SURVEYOR

July 25, 2017

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Harnett County Building Inspections P.O. Box 65 Lillington, NC 27546

REF: Ricky Holland, Owner 554 Homestead Lane Angier, NC 27501

Dear Sir/Madam,

I made an onsite visit to the referenced commercial building site on or about June 15, 2017. The purpose of the visit was to examine the recently placed pole shed and attached shop area. Below is my comments and or recommendations:

- Item 1: The pole shed was built using used manufactured trusses set 5 foot on center spanning 42'. The original use on a chicken house was 5 foot on center spanning 42 feet. I did not observe any cracks or damage to the trusses. The trusses are acceptable. Hurricane ties are required at each truss.
- Item 2: The columns 8x8 pressure treated 12' on center, were notched to receive the double 2x12 with ½" plywood band/support beam with 5/8" thru bolts. The 8x8 columns buried several feet in the ground and will support the live and dead loads associated with this area..
- Item 3: The angle braces at the columns are adequate but need to be either bolted with ½" dia bolts or use Simpson type structural plates. See Sketch #2
- Item 4: The 28x42' shop area has a monolithic concrete floor with drop edges. The edges were 12 inches or more and thickness of the slab was in excess of 4 inches. The owner used 3x3x1/4" steel tube for the support columns and 3x3x1/4" steel angles for the truss bearing. The steel tubes were 7 foot on center which was excessive for the 3x3x1/4"angles. I recommended that an additional 3x3 tube be placed between the existing 3x3x1/4 tube columns. See Sketch #1
- Item 5: The 12 foot opening at the shop area is excessive for the single 3x3 header angle. I recommended that an additional angle be placed adjacent to the existing angle.

Summary: The building is safe and not a threat to the welfare of the public and meets or exceeds the requirements of the N.C. State Building Code 2012 Edition.

If you have any questions please feel free to call me at 919-774-6074.

Sincerely,

Robert J. Bracken, PE

RJB:jeb

