

Monday, April 23, 2018

Greg Baker
212 Tar Kiln Trail
Fuquay Varina, NC 27526

Professional Structural Engineering Inspection, Evaluation, and Repair Recommendation Report JO 0529 – 212 Tar Kiln Trail Fuquay Varina NC

Greg Baker,

At your request on Friday, April 20, 2018, Mark G. Johnson, PE of JSM Engineering PLLC arrived at the subject residence to provide a professional structural engineering inspection, evaluation, and report of the following issues provided by the Harnett County Building Inspection Department on a new barn construction:

1. Item 1: "Headers supporting roof are not cut into post as shown on the approved plans. Lag bolts may not be used to support headers without engineering."
2. Item 2: "Headers at garage doors not full bearing on post, roof is not supported by the beam."

The following observations and analysis of the specific scope of work items are the professional engineering opinion of Mark G. Johnson, PE with JSM Engineering PLLC:

1. Item 1: At the time of the inspection the lag bolts connecting the roof headers to the 6 x 6 post have been replaced with through bolts. The current condition of the through bolts and roof header on the front and back of the 6 x 6 post is acceptable as installed.
2. Item 2: At the time of the inspection the garage door headers have been secured to the post with through bolts, which is an acceptable method of attachment. The beam is installed to carry the roof load.

Mark G. Johnson, PE with JSM Engineering PLLC, has determined that the existing framing condition of the roof header / post and the garage door header are structurally sound and do not require any additional modifications.

JSM Engineering PLLC's scope of work was limited to the visual inspection of the subject property's structural components. JSM Engineering PLLC did not perform any destructive or below grade / subsurface explorations for purposes of exposing concealed or hidden structural conditions. JSM Engineering PLLC immediate notification is required when uncovered concealed field conditions differ from the observations, analysis, and assumptions incorporated within this engineering inspection report. JSM Engineering PLLC does not warrant any future performance of the subject residential structure.

Sincerely,



Mark G. Johnson, PE
JSM Engineering PLLC
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NC PE License - 033168

