

January 2, 2023

Glenn Jones

Subject: 3140 Brick Mill Rd, Lillington, NC 27546

Mr. Jones.

At your request, I have home located at the above address. Specifically, I reviewed the structural adequacy of the back room (utility room) and review the proposed bathrooms being remodeled.

As we discussed, the utility room has walls constructed directly on a 4" slab. As we discussed, the outer portion of the slab is not structurally adequate to provide support for the wall which apports the roof section in this area. I suggest that the wall be temporarily supported and the ground under the edge of the slab be excavated so that an adequate footing can be poured under the slab (12"x12" minimum), to ensure that the 12" minimum depth is met. This should be done for the sides to the extent possible. In addition to the slab, I reviewed the roof section. Currently the 2x6 rafters are fastened to the existing overhang of the home (which has 2x6 rafters as well). This does not provide adequate support for the roof of the utility room. The 2x6 rafters should be supported by a beam (2-1.75"x9.25" LVL) with 2SC on each end, rather than supported solely the overhang. The LVL should span from left to right and may be adjacent to or in place of the current fascia board.

Also, please see the attached drawing showing the configuration of the bathrooms. I have confirmed that the floor sections of the bathrooms (2x8 FJ) are adequate as constructed to support the bathroom remodels.

The above changes are in accordance with the 2018 NC Residential Building Code. If you need additional information or have other questions, please let us know.

Sincerely,

Randy K. Wise, PE

Scale: 1/4" - 1'0"

Bathroom Plan

5ft-7in

Sft-7in

WIC

2-6 BD

4ft-10in

9ft-0in

Both

2-6



These plans conform to North Carolina

State Residential Building Code 2018

Wise Engineering

WISE ENGINEERING 3915 OLD FAIRGROUND RD. ANGIER, NC 27501 *919*754-7907 G. Jones 3140 Brick Mill