

T 919 773-1200 = F 919 773-9658 250 Shipwash Drive, Suite 104 • Garner • North Carolina • 27529 www.tyndallengineering.com

July 31, 2024

Ken Moss PO Box 577 Lillington, NC 27546 Email: kenmoss@charter.net

Reference: Engineering Services 2402 South River Road Lillington, NC 27577

TE&D Project No.: 2401-020635

To Whom It May Concern;

As requested by the client, a representative of Tyndall Engineering & Design, PA (TE&D) was on-site to observe the following items per the home inspection report:

- 1. Assessment of cantilevered girders at left end of existing structure.
- Visual assessment of existing roof trusses at existing structure.

The following conclusions and recommendations were noted:

- 1. We observed the existing 4 x 6 girders as being cantilevered approximately 3'-3". Based on our observations and analysis, the cantilevered girders are inadequate to support the anticipated loading conditions. We recommend the following:
 - The front and rear exterior girders/rimjoists are inadequate to support the anticipated loading conditions. We recommend that these girders be blocked solid to the existing foundation wall below with "ripped-to-fit" pressure treated 2 x blocking. Wood or steel shims may be used to ensure a tighter fit; however, angled shims may not be used.
 - While the (3) center girders remain adequate, this is under the assumption that the the proposed addition is self-supporting and will not bear on the existing structure. Therefore, provided that the aforementioned criteria are met, the (3) cantilevered center girders will remain adequate to support the anticipated loading conditions.
- 2. We observed the roof of the existing structure as consisting of roof trusses at 16" o.c. TE&D was not provided with the roof truss drawings for the home; however, we did not visually observe any defects (i.e. cracks, damage, rot, deterioration) within the existing roof trusses during our inspection.

Upon completion of the above-mentioned recommendations, the repairs will provide the required support for the anticipated loading conditions. We appreciate being able to assist you during this phase of the project. If you need further assistance or require additional information, please do not hesitate to contact us.

Sincerely,

Tyndall Engineering & Design

Tripp Amos

PT III | 2401-020635

Prentice Tyndall Jr., P.



† 919 773-1200 * £ 919 773-9658 250 Shipwash Drive, Suite 104 * Garner * North Carolina * 27529 www.tyndallengineering.com





Item 1) Examples of cantilevered girders



t 919 773-1200 * £ 919 773-9658 250 Shipwash Drive, Suite 104 * Garner * North Carolina * 27529 www.tyndallengineering.com



Item 2) Example of existing roof trusses