

Mark E. Jones, PE
Structural Engineering and Design

June 28, 2023

Phil and Jo Ann Wilson
3008 Rawls Church Rd.
Fuquay-Varina, NC 27526

Ref: Site Observations and Analysis
3008 Rawls Church Rd.
Fuquay-Varina, NC
Project No: 23-124

To Whom it may concern;

The above referenced site was visited on June 9, 2023 to address the following structural condition(s);

1. Engineer to evaluate sunroom and deck completed without permit.
2. Engineer to evaluate garage completed without permit.

Based on observations and analysis, the conclusions regarding the structure are:

1. The referenced project was the conversion of an existing 14'x12' deck to a sunroom. A new deck, 10' deep off the rear of the existing and 5' to the left side of the existing was constructed.
The sunroom consists of components from Champion Windows. The components include lightweight insulated roof panels and extruded aluminum framing for the windows and doors. The Champion components are structurally adequate to support/resist all imposed loads. No structural repairs or enhancements are required.
The new deck area was constructed as a free-standing structure and was structurally adequate to support all loads with one exception that needs enhancement. A 3-2x12 girder was utilized to support the new floor joists along the rear of the existing deck and is cantilevered 5' at the left end to avoid existing septic components. The owner was instructed to provide additional support at the approximate center of the cantilevered span. This support will not interfere with the septic system and shall consist of a 6x6 treated post resting on a 16"x16"x8" deep footing.
2. A single car garage, approximately 16'x20' was constructed on a concrete slab and attached to the main house. The framed components (walls, ceilings, and roof) were all adequate to support all imposed design loads required. By Code. However, the concrete slab was only 4" thick and placed on top the grade. A footing should be installed to adequately support the perimeter walls. For the footing, the adjacent soils shall be excavated down 12" and under the edge of the slab at least 6" and concrete placed to support the slab.

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Note that subsequent observations were made on June 27 and 28, 2023 and all repairs and enhancements had been completed as specified.

Thank you for this opportunity to assist you. If you have any questions or need any further assistance, please do not hesitate to call.

Respectfully,

Mark E. Jones

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