

Date: 10/10/2025

To: **David Gibson**
Davidson Homes
1903 N. Harrison Avenue
Cary, NC 27513
dgibson@davidsonhomesllc.com
919-356-4401

Re: **Framing Items and Slab Repair**
Location: Lot 43 Retreat at North Main (233 Tenure Ln. Lillington, NC)
JDS Project No.: RDU2510509
Date of Inspection: 10/10/25

A representative of JDS Consulting arrived on site to observe the issues reported to us by the client, which are presented, along with our recommendations, in this report.

Observations

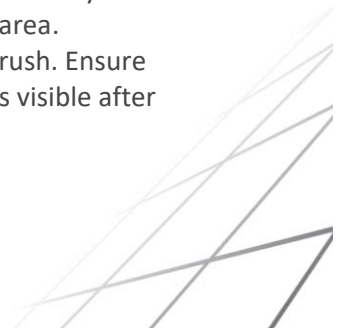
The client requests an evaluation of the following items:

1. Slab excavations at the pantry door wall, and the rear of the kitchen island. The excavation at the kitchen island is approximately 30"x16" the excavation is filled with some type of material. The excavation at the pantry door wall measures approximately 50"x15" the excavation is filled with some type of material.
2. The 5th left to right floor truss from the rear above the kitchen/family room at the right bearing end has a top flange/vertical web penetration.
3. The 1st and 3rd left to right floor trusses from the rear above the kitchen/family room have top chord penetrations near the right bearing ends.

Recommendations

Based on our on-site observations and review:

1. At both slab excavations:
 - a. Clean cut the existing slab on all sides of the excavation area to provide a smooth surface.
 - b. Remove all loose dirt and debris from the slab extension area.
 - c. The excavation may be brought up to the vapor barrier with clean washed #57 stone that is hand tamped or the contractor may choose to use full depth concrete.
 - d. Prepare a minimum 4" thick slab with 6 MIL vapor barrier. Tape the vapor barrier to the existing one where possible.
 - e. On all sides of the repair area, dowel and epoxy (1) row of 8" long #4 rebar horizontally at the mid depth of the slab spaced 16" o.c. The rebar is to embed approximately 4" into the existing slab and have approximately 4" projection into the new slab area.
 - f. Prior to epoxy, clean all dowel holes with compressed air and/or a wire brush. Ensure enough 2-part structural epoxy (Simpson SET or equivalent) is used so it is visible after rebar is installed for inspection.



- g. Before placing a minimum of 3,000 psi concrete, the client shall insure the repair preparation has been inspected and approved.**
2. Install a full depth by 2' long 3/4" OSB gusset on the front face starting at the right bearing end attached with (1) row of 10D nails spaced at 4" o.c. into every covered member. The OSB may be notched in a "U" shape around any penetrations as needed.
 3. At the top chord penetrations at both floor trusses:
 - a. Install a 2x4 flat block that spans from web to web against the top chord attached with 6D nails spaced at 4" o.c. Then install a full depth OSB pack out that spans from the right bearing end to the web where the flat 2x4 block ends on both sides attached with (1) row of 10D nails spaced at 4" o.c. into every covered member. The client may notch the OSB as needed to fit around any penetrations in a "U" shape.

If you have any questions or if I can be of further assistance to you on this project, please contact me at 984-344-4691.

Respectfully Submitted,
Patrick Ruff



Reviewing Engineer:
Maxwell C. Danskin, PE

