

Date: 03/16/2023

To: **Jacob Davis**
Builders First Source
2512 Yonkers Road
Raleigh, NC 27604
jacob.davis@bldr.com
910-506-9932

Re: **Framing Issues**
Location: Lot 1 Griffon Pointe – 17 Drathaar Ct. (Lillington, NC)
JDS Project No.: RDU2301880
Date of Inspection: 03/16/2023

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

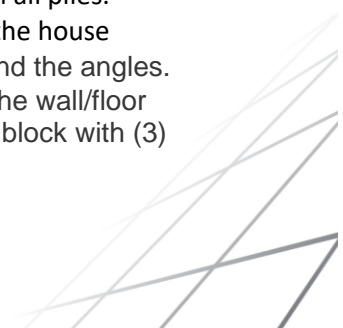
The client requested an evaluation of the following items:

1. The (2) 1-3/4" x 9-1/4" LVL header above the rear door has been installed beneath the double top plate of the wall instead of providing direct bearing for the (3) 1-3/4"x16" LVL beam spanning left to right.
2. The (3) 1-3/4" x 24" LVL beam above 'Bedroom #4' has been installed with (4) 2x4 jack stud columns on both ends and LVL plies attached with nails, in lieu of (2) 2x10 stud columns on both ends and LVL plies attached with screws per page 'S4' and details '11/SD2' and '12/SD2' of the house plans.
3. Concerns regarding the water table attachment at the exterior front garage. The water table has been framed with 2x6 rafters at 16" O.C. nailed directly to the house framing.

Recommendations

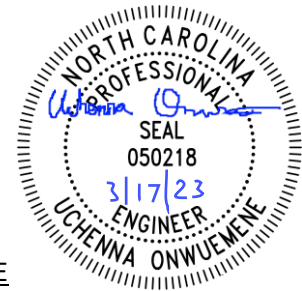
Based upon our on-site observations and review:

1. The calculated reaction at the left end of the (3) 1-3/4"x16" LVL beam is within the top plate's perpendicular compression capacity. The (3) 1-3/4"x16" LVL beam bearing condition at the left end is adequate as installed.
2. The calculated reaction at the left and right end of the (3) 1-3/4"x24" LVL beam is **NOT** within the top plate's perpendicular compression capacity. The contractor shall install a full-depth vertical 2x8 block at each end of the beam. Attach with (4) equally spaced 1/4"x6" SDS screws, ensuring a minimum 4" end distance and 1-1/2" edge distance. The block shall bear fully over the top plates. Finally, ensure the beam plies are attached together per detail 11/SD2. The beam is side loaded and requires the fasteners specified to distribute the loads through all plies.
3. The contractor shall install (1) L30 angle on the rafter and joist where they abut the house framing. Attach with SD9112 screws. Ensure solid 2x framing is installed behind the angles. The contractor shall install horizontal 2x6 blocking extending tightly between the wall/floor framing to support the SD9112 screws. Attach each end of the horizontal 2x6 block with (3) 10d toe nails.



If you have any questions or if I can be of further assistance to you on this project,
please contact me at 919-609-4626.

Respectfully Submitted,
Anthony White



Reviewing Engineer: Uchenna Onwuemene, PE

