

8600-D Jersey Court Raleigh, NC 27617 (919) 480-1075 info@idsconsulting.net

jdsconsulting.net

Date: 02/10/2022

To: Jacob Ayala

DR Horton - Raleigh Field - East Region 2000 Aerial Center Pkwy. Morrisville, NC 27560 jwayala@drhorton.com

919-306-1846

Re: Damaged Roof Trusses

Location: Lot 20 Lafayette Meadows – 74 Old Maple Ct. (Fuguay-Varina, NC)

JDS Project No.: RDU2201289 Date of Inspection: 02/10/2022

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 evaluation of the 2nd floor damaged roof trusses. The following was observed:

- 1. The 1st 'A' truss from the front-perimeter wall is damaged on the bottom chord above the 'loft/opt bedroom 5'. A 26" section is damaged 20" from the left-interior wall.
 - The right-side diagonal web member connecting to Joint 7 is completely severed within the top 1/3 of the member.
- 2. The 1st 'A1' truss from the front-perimeter wall at the HVAC platform, the 7th overall from the front wall, is broken on the bottom chord 17" from the right-interior wall of 'loft/opt bedroom 5'. (1) 2x4 scab has been inadequately nailed to the front-face of the broken bottom chord.
- 3. The 3rd 'A1' truss from the front-perimeter wall at the HVAC platform, the 9th overall from the front wall, is splintered on the bottom chord at the 'ATTIC PULL DOWN'. The wood splinter has caused gusset plate separation at the right-most gusset plate within the 'ATTIC PULL DOWN' opening, on the rear-face of the bottom chord.

Recommendations

Based upon our on-site observations and review, the following should be completed:

- 1. Install (1) 6' long 2x4 scab on both sides of the bottom chord, centered over the damaged area, attached with (2) rows of 10d nails 6" O.C.
 - Cleanly remove the severed web member in its entirety and tightly replace with a new 2x4 member. At Joint 7 and the supporting bottom joint, install (1) 24"x24"x½" OSB gusset to both sides with (3) rows of 6d nails 4" O.C. The OSB gussets at Joint 7 may be cut to match the roof pitch.
- 2. Remove the existing 2x4 scab. Install (1) 6' long 2x4 scab to both sides, centered over the damaged area, attached with (2) rows of 10d nails 6" O.C.
- 3. Install (1) 24"x24"x½" OSB gusset attached with (3) rows of 6d nails 4" O.C.

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

