

March 24, 2024

Mr. Tony Wimberly
Wimberly Builders, LLC

Re: Deck Evaluation
132 Forest Manor Drive
Sanford, North Carolina

Mr. Wimberly,

OTG Consulting, PLLC (OTG) was requested to evaluate the back-facing existing wood deck at the above-referenced manufactured home. We understand that the deck was originally constructed without a permit and the building official has requested an evaluation of the deck and the canopy covering the deck.

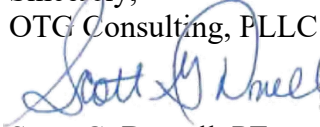
The deck currently measures approximately 25 feet long by 9 feet wide. The deck joists are 2-inch by 8-inch dimensional lumber, extend left-to-right (as you face the building), and are spaced approximately 16 inches on-center. The joists are supported by single-ply 2-inch by 10-inch girders on the left and right edges on a ledger. The middle supports consist of split girders, measuring 2-inch by 10-inch. The exterior girders were fastened to the 4-inch by 4-inch support posts with one galvanized bolt with nut and washer at each post. The handrails/guards were approximately 38 inches high with a balusters gap of approximately 3 ½ inches.

The deck meets 2018 NCRC, with the exception of the outer girders (left and right side). The girders need to be 2-ply instead of the single ply 2-inch by 10-inch. The second girder can be installed within the “crawl space” section beneath the deck, against the support column, creating a split girder support. In addition, a second galvanized bolt (5/8-inch diameter) with nut and washer should be installed at the outside girders at the column supports.

We understand that the canopy is currently attached to the exterior wall of the manufactured home. We analyzed the loads on the back-facing exterior wall as well as the foundation with the attachment of the deck canopy. The rafters were spaced at approximately 24 inches on center with joist hangers. Based on the analysis, the additional loading of the attached deck canopy is not structurally detrimental to the structure or foundation.

We appreciate the opportunity to help you with this. Should you have any questions or need additional information, please contact me at your earliest convenience. We can be reached at 336-414-1179 or at otgconsulting@protonmail.com.

Sincerely,
OTG Consulting, PLLC



Scott G. Dowell, PE
President
NC PE License No. 037387



24-Mar 2024