

JS CONSULTING & DESIGN  
ENGINEERING AND CONSULTING  
11703 DURANT RD  
RALEIGH, NC 27614  
P (919) 675-1680  
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Certificate Number: P-1513

**Date:** June 5, 2024

**To:** Raleigh Reborn, LLC  
7501 Topsy Square  
Wake Forest, NC 27587

**Re:** Structural Evaluation  
395 Antioch Church Rd  
Dunn, NC 28334  
Project Number: 2401-211

To whom it may concern:

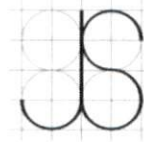
The structure is a one story wood framed residence with brick veneer supported on a crawl space foundation. For the purpose of this document all directions listed are from the perspective of an observer facing the structure looking from Antioch Church Rd.

JS Consulting & Design, PLLC (JSCD) visited the above referenced project on 6/04/24 regarding the following issues:

1. Evaluation of the as found crawl space framing.

The structure was visually evaluated from the interior, exterior, and crawl space below. Based on our analysis of the above issues the following was noted:

1. The accessible crawl space framing was visually evaluated. The following items were observed at the time of the inspection:
  - a. The floor joists in the left rear corner of the structure were previously replaced. The replaced joists were observed to span from the central girder to the rear wall approximately 0' to 12'-6" from the left side wall. The front of the joists were observed to have a small gap between the bottom of the joists and the top of the ledger. It is recommended to move the ledger to provide full bearing for the joists.
  - b. The central girder was observed to be a (3) 2x10 located approximately 14' from the front wall. The majority of the girder was observed to have severe termite damage. The affected area was observed to be from the left most pier, approximately 7'-4" from the left side wall, to the far right wall of the structure. The decayed girder should be removed and replaced. The new girder should consist of (3) 2x10s that span continuously from pier to pier/foundation wall.
  - c. The original joists were observed to show signs of prolonged exposure to elevated moisture levels. At the time of the inspection the joists were randomly probed. The probed joists were found to be firm at the time of the inspection. It is recommended to take steps to lower the moisture level in the crawl space. The as found condition may result in excessive deflection of the joists and/or future decay. When the joists



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are returned to a normal moisture level minor shrinkage of the wood framing may occur.

- d. The crawl space was observed to have no vapor barrier. The soils in the crawl space were observed to be near or at the optimal moisture content for the in-situ soils. The as found condition is most likely contributing to the moisture exposure in item (c) above. It is recommended to install a full coverage vapor barrier to limit moisture migrating from the soil into the crawl space.

All new work shall conform to the 2018 NC Residential Building Code.

Once the repairs are completed the structure should be monitored for any future signs of movement.

JSCD's scope of services was limited to a visual evaluation of the structure and did not include subsurface exploration or exposing any concealed elements of the structure. JSCD's scope of services was limited to the items discussed above and should not be considered an evaluation of any items not explicitly discussed above. Please contact JSCD immediately if conditions are different than those indicated or encountered during future observation or implementation of the recommended repairs.

Please contact us if you have any further questions.

Sincerely,

James Sutton, P.E.

