GILES FLYTHE
ENGINEERS

Main Office:
5001 Weston Parkway
Suite 100
Cary, NC 27513
919.465.3801

Charlotte Office:
10400 Mallard Creek Road
Suite 320
Charlotte, NC 28262
704.810.1808

October 27, 2026

Matt Schultz

Re: Limited Structural Inspection
214 Madison Grove Place
Cary, NC

Dear Mr. Schultz,

At your request, a limited structural inspection of the above property was performed on October 26, 2026. The report that follows has been prepared based on that inspection. The inspection was performed by Collin Vaughan, EI of Giles Flythe Engineers. Our office performed a previous Limited Structural Inspection for this property, with associated report dated May 5, 2025.

The scope of this project was limited to inspection and evaluation of interior drywall cracks, interior floor slope, foundation cracks, and general structural concerns in the crawlspace framing/foundation components. The report is intended to cover only those premises that may be examined visually without excavation, removing surface materials, and disassembling components.

No tests, measurements, or calculations have been made except as described in this report. We have not investigated for toxic materials or wastes, or examined public records regarding this property. The scope of the inspection does not assure that the property conforms to any regulations, restrictions, or building codes that may be in effect at its location.

DESCRIPTION

The two-story, wood-framed townhome (with a crawlspace) is constructed on concrete masonry unit (CMU) perimeter foundation walls with CMU block piers supporting the floor girder. The townhouse was built in 1999 according to Wake County property records. For purposes of this report, all directions (left, right, rear, etc.) are taken from the viewpoint of an observer standing outside and facing the front door of the home.

Upon our arrival, access to the interior was provided via a lockbox access code. The items detailed above in the scope were subsequently inspected.

Note that the original builder was not interviewed and no plans for the construction of this home were provided. The information presented in this report is gathered from the conditions visible at the site, as they existed at the time of the inspection. A limited photo log is included with this report.

OBSERVATIONS

Attic:

1. The roof framing was generally comprised of prefabricated roof trusses spanning front-to-rear.
2. Visual inspection of the roof framing was limited due to the presence of blown insulation and the absence of a catwalk throughout the attic area. No significant damage or signs of distress were observed in the visible framing components.

Interior:

3. Minor cracks (less than 1/16" wide) and separations were noted in the finish materials as follows:
    a. A transverse ceiling crack was noted at the bottom of the staircase.
    b. A transverse ceiling crack was noted in the living room, near the fireplace and approximately 11'-9" from the right shared wall.
    c. Separation (up to 1/16" wide) was noted between the kitchen cabinetry and right shared wall, approximately 8'-6" from the front perimeter wall.
    d. Additional minor cracks were noted throughout the home.
4. Floor slope (up to 1/2" vertical over 4'-0" horizontal) was noted rear-to-front in the central transition area at the bottom of the staircase and sloping towards the flooring transition of the front foyer/kitchen areas (approximately 11'-6" from the right perimeter wall and 6'-9" from the front perimeter wall).

Exterior:

5. The front porch stoop was noted to be vertically displaced (approximately 1/2") adjacent to the home's perimeter siding.
6. What appears to be newly installed sealant was observed in the separation between the stoop slab and perimeter masonry walls with no further propagation.
    a. The sealed separation was measured to be up to 3/8" wide, which is unchanged as reported in the 2025 report.
7. A crack (up to 1/16" wide) was noted in the rear perimeter wall at the left edge of the crawlspace entry door (approximately 5'-6" from the right corner).
8. Gutters and downspouts (with and without drainage leaders) were noted installed on the home. Grade was noted with relatively neutral slope along the perimeter walls of the home.

Crawlspace:

9. The floor framing generally consisted of 14"-deep floor trusses, spanning left-to-right, spaced at 24" O.C. The trusses are supported by the foundation walls and a drop girder for a portion of the crawlspace.
    a. A 4-2x10 drop girder was noted spanning front-to-rear in the middle of the crawlspace approximately 12'-0" from the right foundation wall. The drop girder begins approximately 9'-0" from the front foundation wall and extends approximately 10'-0 rearward.
10. A crack (up to 1/16" wide) was noted in the left foundation wall, approximately 1'-10" from the front corner.
11. A crack (up to 1/8" wide) was noted in the rear foundation wall at the left edge of the crawlspace entry door (approximately 5'-6" from the right corner)
12. A full vapor barrier and dehumidification system was present at the time of our inspection. Multiple moisture readings were taken during the inspection with a General MMD4E moisture meter and measured lumber moisture contents of up to 5.7%.

DISCUSSION

The cracks in the foundation walls noted above are likely due to limited differential foundation settlement. The clay soils in this area are considered "expansive" type soils and will typically expand and contract with fluctuations in the moisture content. This expansion and contraction of load-bearing soil materials can lead to soil consolidation and foundation cracking/movement. The condition of the foundation wall does not appear to be a structural deficiency and improving exterior drainage and monitoring cracks for additional propagation is an acceptable approach at this time.

The displacement and separation of the front porch stoop are likely the result of a combination of possible limited differential settlement and consolidation of the underlying subgrade soil materials beneath the concrete slab. Soil settlement is typical depending on varying site-specific factors such as soil composition, density, etc. Additionally, if soils are not compacted to achieve the proper bearing capacity prior to being subject to substantial loads, differential settlement can occur resulting in displacement. Upon comparison of images from the 2025 inspection, the stoop displacement and separation appears relatively unchanged. We do not consider the front porch stoop displacement and separations noted above to be a structural concern at this time; however, we have provided a recommendation below to help lift/level the concrete slab, if desired. Note, these repairs would be considered cosmetic/serviceability repairs and are not considered to be structurally required. In addition, it is possible that continued soil consolidation will occur following the repair described below.

Positive grade away from the foundation should be maintained, where possible, to help reduce moisture infiltration under the foundation. Soil consolidation and settlement can occur due to water infiltration into soils and subsequent drought conditions which dry out the soils below foundations. Maintaining positive stormwater drainage away from the perimeter foundation walls is vital to the long-term structural integrity of the foundation. If future conditions around the foundation are kept relatively dry, the likelihood of future significant settlement will be reduced, but we cannot predict the extent of future settlement.

The floor slope noted above (Observation #4) is likely the result of the floor framing configuration noted in the crawlspace. The drop girder is likely installed to provide additional floor framing support below the interior staircase which in-turn provides more stiffness and less deflection than the adjacent floor framing spanning between foundation walls. The noted floor slope occurs forward of the drop girder extent. No significant damage was noted to the floor framing below the floor slope location. The floor slope is relatively unchanged since the 2025 inspection. We do not consider the floor slope to be indicative of a structural concern at this time.

The moisture content of the floor framing noted in the home at the time of the inspection is considered acceptable (less than 15.0%). Moisture levels of the framing can fluctuate based on weather conditions and seasonal changes in humidity. Prolonged elevated moisture content of the framing can lead to excessive deflection and structural damage. The vapor barrier and dehumidifier should be maintained.

The minor interior drywall cracks noted above are likely the result of a combination of the supporting members contracting/deflecting and limited foundation settlement discussed above. Minor drywall cracking and finish carpentry separations are typically associated with changes in weather, temperature, and humidity causing wood to shrink and swell with the seasons. When moisture is taken away from wood it has a tendency to contract thus resulting in deflection (or sagging). Any walls, windows or doors bearing on the deflected members will also move. We do not consider contracting and deflecting wood members and the cracking/separation noted in the interior finish materials to be a structural concern.

The recommendations presented in this report are based on our experience and understanding of the concerns to provide a reasonable solution based on the conditions that were visible and/or known to us on the date of inspection. As this report is based on the circumstances at one point in time, conditions may change which may result in additional repair recommendations. Further, the recommendations are the opinion of the Engineer to address significant structural-related concerns and may not rectify cosmetic issues.

RECOMMENDATIONS

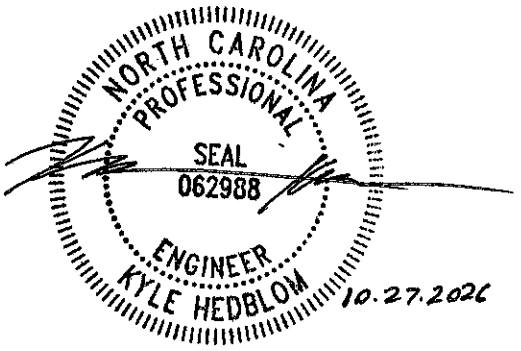
If there are any questions or concerns regarding location or method of repair contact the engineer prior to construction.

1. No structural repairs are required at this time.
2. The current vapor barrier and dehumidifier should be maintained in working order. Monitor the moisture levels through the seasons, if future moisture levels become elevated (greater than 15.0%), the dehumidifier settings shall be adjusted accordingly so as to achieve moisture levels between 9% to 14%.
3. Monitor the cracks in the foundation walls. If the cracks widen significantly (expand by an additional 1/8") or additional significant cracks (greater than 1/4" wide) propagate, then further evaluation by a structural engineer may be needed at that time.
4. We recommend ensuring that stormwater drains positively away from the home to minimize the risk of future water infiltration. This can be accomplished by installing non-perforated drainage leaders on downspouts (where missing) and ensuring gutters, downspouts, and leaders remain clear of debris and properly functioning to direct the drainage away from the home. Leaders should discharge a minimum of 10-feet away from the foundation (where possible). Also, maintaining a positive grade around the perimeter of the home, where possible, will aid in stormwater evacuation. Water infiltration can cause further consolidation of the soil and foundation settlement.
5. If desired, to help level displaced portions of the front stoop concrete slab, we recommend hiring an experienced foundation repair contractor to inject pressurized cementitious grout (or poly- foam injections) under the slab. Care should be taken not to over-grout or over-lift the slab. Note, this is not structurally required and would be considered a cosmetic or serviceability repair. We do not expect a fully level slab upon completion.
    a) Monitor the condition of the perimeter walls during this installation. If outward movement or other signs of distress are noted in the perimeter walls during installation. Work should be stopped immediately, and the structural engineer should be contacted to determine an adequate repair solution.

CONCLUSION

We trust that this report provides the information you require. Please contact us at 919-465-3801 if you have any questions. Thank you for the opportunity to be of assistance to you.

Sincerely,



Collin Vaughan

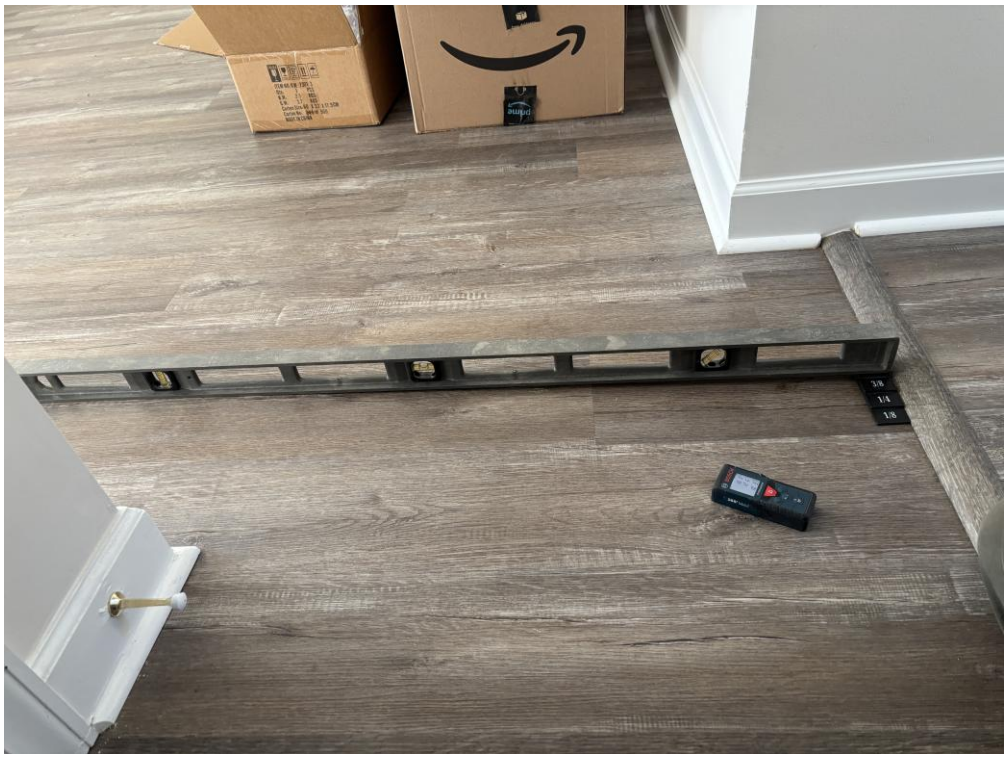
Collin Vaughan, EI
Project Engineer
Giles Flythe Engineers Inc.
NC Lic. No. C-2871

Kyle D. Hedblom, PE
Project Manager
Giles Flythe Engineers
NC Lic. No. C-2871

Enclosed: Limited Photo Log

Description General view of the front of the home (for reference).	
Photo No. **1**	

Description View of cabinetry separation.	
Photo No. **2**	

Description View of floor slope.	
Photo No. **3**	

Description View of foundation crack at the crawlspace door (from exterior).	
Photo No. **4**	

Description View of front stoop separation.	
Photo No. **5**	

Description View of front stoop separation sealant.	
Photo No. **6**	

Description View of foundation crack at the crawlspace door (from crawlspace).	
Photo No. **7**	

Description Overview of the crawlspace.	
Photo No. **8**	

Description View of foundation crack at the front-left corner.	
Photo No. **9**	