

**FORMAL NOTICE OF ACTUAL KNOWLEDGE, STATUTORY VIOLATIONS, AND
DEMAND FOR IMMEDIATE ENFORCEMENT ACTION**

Re: Fraudulent Foundation Certifications
Property: 5055 Adagio Lane, Lakeland, Tennessee 38002
Parcel ID: L0150A F00006

NOTICE TO:

City of Lakeland
Shelby County Government
Shelby County Office of Construction Code Enforcement
Shelby County Board of Commissioners
Shelby County Attorney
State Fire Marshalls Office
All relevant City and County officials, employees, and agents

I. PURPOSE OF THIS NOTICE

This correspondence serves as formal notice of actual knowledge to the City of Lakeland, Shelby County, the Shelby County Board of Commissioners, the Shelby County Mayor, the State Fire Marshalls office and all responsible officials and employees of ongoing statutory, regulatory, and criminal violations involving:

- a. Fraudulent foundation inspection certifications issued under the name *AFA Engineering / AFA Consulting*;
- b. Illegal counter-signing and supervision practices by Linda Gail Prather, P.E.;
- c. Acceptance and processing of invalid engineering certifications by Shelby County after notice of illegality; and
- d. Ongoing risk to life, safety, and property resulting from continued reliance on these certifications.

This notice is issued to:

- e. Establish actual knowledge;
- f. Eliminate any claim of good-faith reliance, discretionary authority, or qualified immunity;
- g. Demand immediate corrective and enforcement action; and
- h. Preserve evidence for civil, administrative, and criminal review.

II. SUMMARY OF UNDISPUTED FACTS

- a. AFA Engineering has not been a licensed engineering firm in Tennessee since 2004, following the death of its Engineer in Responsible Charge, AF Al-Chockachi. No successor Engineer in Responsible Charge was appointed as required by T.C.A. §§ 62-2-601 and 62-2-602. Rather than ceasing operations, the firm continued to hold itself out as a licensed engineering entity and to perform regulated engineering services for more than twenty-one (21) years without lawful licensure.

- b. AFA Consulting was formed February 8, 2025, the same day a Facebook Post was made questioning the licensing status of AFA Engineering, and the same day AFA Engineering wiped their website clean.¹
- c. Despite this, David Al-Chockachi (not licensed as an engineer) and his brother continued for more than twenty (20) years to:
 - i. Hold AFA out as a licensed engineering firm;
 - ii. Offer and perform engineering services;
 - iii. Conduct pre-pour foundation “inspections”; and
 - iv. Provide engineering form letters relied upon by builders and local governments, including Regency Homebuilders LLC.

Home [Services](#) Clients

SERVICES

Our Services

AFA Engineering offers a wide variety of services resulting in not all being listed. If you do not see the type of service you are looking for, please visit the contact us page for any questions.

LAND SURVEYING

MORTGAGE LOAN SURVEY

CIVIL ENGINEERING CONSULTING

PRE-POUR FOUNDATION INSPECTION

NON-COMMENCEMENT CERTIFICATION



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- d. Linda Gail Prather, P.E. admitted to the State of Tennessee on March 16, 2025, that she did not inspect the foundation at 5055 Adagio Lane and instead “supervised” Mr. Al-Chockachi-an unlicensed individual-despite AFA being an unlicensed firm.
- e. Ms. Prather does not work for AFA Engineering and is not the Engineer in Responsible Charge, because AFA is not a licensed engineering firm capable of having one.²

¹ Historical records can be obtained on the wayback machine using the web address <https://afaengineers.com>

² Even if Ms. Prather was the ‘Responsible Charge’ she cannot delegate tasks that require licensure, to unlicensed individuals

- f. Shelby County was initially notified in April 2025 of AFA's lack of licensure, yet continues to accept foundation certification form letters associated with AFA Engineering and Ms. Prather.

III. VIOLATIONS OF ENGINEERING LAW AND PROFESSIONAL CONDUCT

- a. Under the Rules of the Tennessee State Board of Architectural and Engineering Examiners, Rule 0120-02-.04 Public Statements: Registrants must be completely objective and truthful and must include all relevant and pertinent information in professional reports.
Ms. Prather's foundation certification form letters:
 - i. Were not based on personal inspection;
 - ii. Failed to disclose that inspection was performed by a non-engineer;
 - iii. Failed to disclose that AFA Engineering was unlicensed; and
 - iv. Are fraudulent on their face, as an unlicensed individual may not inspect a foundation for purposes of certifying it to the City or State.
- b. Rule 0120-02-.07- Misconduct: A registrant (Ms. Prather) may not:
 - i. Knowingly associate with a business engaged in fraudulent practice;
 - ii. Enable unlicensed persons to evade licensure requirements; or
 - iii. Sign, seal, or approve work begun or performed by unlicensed persons.
- c. Ms. Prather's conduct violates each subsection of Rule .07 by allowing a non-engineer to:
 - i. Inspect foundations;
 - ii. Exercise independent professional judgment; and
 - iii. Determine placement and removal of footings and grade beams.

IV. CODE AND LIFE-SAFETY IMPLICATIONS

- a. Shelby County has adopted the 2015 International Residential Code (IRC) by ordinance, including mandatory foundation and footing requirements:
 - i. IRC R403.1.1- Minimum footing thickness (10 inches);
 - ii. IRC R403.1.4 - Minimum footing depth (13 inches below grade); and
 - iii. IRC R401.4.1 - Footings must bear on undisturbed or properly compacted soil.
- b. At 5055 Adagio Lane:
 - i. The slab was constructed on 4–6 feet of non-engineered fill;
 - ii. The 4-6 feet of non-engineered fill was not properly compacted;³
 - iii. Compaction testing of the 4-6 feet of non-engineered fill was not properly conducted as required by the IRC;
 - iv. Interior load-bearing walls lack compliant footing(s);
 - v. The foundation system lacks required continuity, with documented gaps in the footing system;
 - vi. Differential settlement, slab cracking, door misalignment, and patio separation are now severe and progressive; and

³ See attached engineering reports

- vii. Drainage failures and persistent moisture intrusion on the interior slab remain unresolved.

Allowing a non-engineer to make footing and grade-beam determinations is inherently unsafe, violates the IRC, and defeats the code's fundamental life-safety purpose.

Additionally, as admitted in *Regency Homebuilders, LLC's October 6, 2025 Disclosures of Retained Non-Party Experts for Issues on Which It Does Not Have the Burden of Proof*, David Al-Chockachi, **who is not a licensed engineer** and is not qualified to exercise engineering judgment, of information and belief, made the decision to remove a required 30-inch by 30-inch footing (also referred to as a grade beam) that was expressly called for in the approved architectural plans.

That unauthorized engineering decision contributed to the formation of an approximately 10- to 16-foot belly of standing water in the plumbing clean-out beneath the foundation, discovered approximately seven (7) months after closing, and necessitated the excavation of a 26-foot trench through the center of the home's concrete slab to attempt corrective action. To date we still experience extensive issues with our plumbing.

Additionally, the grade beam may be missing if it was eliminated or moved by an engineer pre-construction. An engineer inspecting a house's foundation during pre-construction is to use his or her independent professional judgment to determine where footings or grade beams beneath interior load bearing columns or walls should be located, which is not always the same location as shown on the construction plans.

V. COUNTY KNOWLEDGE AND CONTINUED ACCEPTANCE

Shelby County's Building Official has acknowledged:

- a. Reliance on engineer certification letters in lieu of County foundation inspections;
- b. Acceptance of Ms. Prather's certification for this property.
- c. Improper placement of welded wire reinforcement (WWR) within the foundation, as reflected in a written communication issued by the Building Official;
- d. Verbal acknowledgment during the August 2025 site visit that, based on visual observation, the exposed foundation did not appear to comply with applicable IRC provisions or Shelby County Building Code requirements.

As of April 2025, Shelby County had actual knowledge that:⁴

- e. AFA Engineering is unlicensed;
- f. Ms. Prather did not perform foundation inspections;

⁴ Of relevant note- On October 31, 2025, Shelby County was notified of Regency Homebuilders lack of current, valid liability insurance on file with the state. A request was made to stop work until such insurance was provided, but the County declined. The state currently has this for action under complaint 202506186.

- g. The certifications are legally invalid.
- h. The lack of proper inspection and reliance on fraudulent foundation certification form letters resulted in foreseeable, documented, and ongoing tangible financial damages.

Continued acceptance after this date is no longer discretionary, it is knowing.

VI. PRIVATE LITIGATION AND ARBITRATION ARE NOT A BAR TO ENFORCEMENT

Any assertion that private litigation or arbitration precludes enforcement action by Shelby County or the City of Lakeland is legally incorrect. (*See Gilmer v. Interstate/Johnson Lane Corp.*, 500 U.S. 20, 28–29 (1991)- Holding that private arbitration agreements do not bar governmental enforcement actions arising from the same underlying facts, and that arbitration binds private parties only and cannot divest the government of its independent statutory and sovereign enforcement authority))

Tennessee courts likewise recognize that private disputes do not preempt governmental enforcement. In *State v. Blackwell*, the Tennessee Supreme Court reaffirmed that the State's authority to enforce criminal statutes and protect the public welfare is independent of, and not constrained by, parallel private civil proceedings arising from the same underlying conduct. The Court recognized that governmental enforcement actions serve a fundamentally different purpose than private litigation, namely, the protection of public safety and the vindication of the State's police power.

Applied here, *Blackwell* confirms that the existence of private litigation or arbitration involving Regency Homebuilders does not limit or delay Shelby County, the City of Lakeland, the State of Tennessee or any other governmental Authority, nor does it excuse their duty to investigate, enforce building codes, and address unlicensed engineering practices that threaten life, safety, and property.

Once public officials are on notice of conduct that may violate criminal statutes, licensure laws, or safety regulations, enforcement obligations arise by operation of law, regardless of whether affected homeowners are pursuing private remedies.

Accordingly, reliance on private arbitration or civil litigation as a basis for governmental inaction is inconsistent with *Blackwell*, because it would improperly subordinate the State's police power to private contractual arrangements, an outcome Tennessee law expressly rejects. (*See State ex rel. Barrick v. City of Pigeon Forge*, 860 S.W.2d 59, 62–64 (Tenn. Ct. App. 1993) (holding that municipalities have an affirmative, non-discretionary duty to enforce adopted health and safety regulations and that failure to act after notice of ongoing violations may be compelled through judicial relief); *Tenn. Dep't of Commerce & Ins. v. First Trust Co.*, 937 S.W.2d 516, 519–21 (Tenn. Ct. App. 1996) (holding that regulatory enforcement actions are an exercise of the State's police power and are not limited, waived, or delayed by private contracts, agreements, or civil proceedings involving regulated parties)).

In *City of Chattanooga v. Davis*, the Tennessee Supreme Court held that when a municipality has actual notice of a dangerous or defective condition implicating public safety, a failure to take

corrective action may constitute willful non-enforcement, thereby removing the protections of discretionary immunity under the Tennessee Governmental Tort Liability Act. The Court drew a clear distinction between protected discretionary policymaking and operational failures to act after notice, emphasizing that once a governmental entity becomes aware of a specific hazard, its obligation shifts from discretion, to affirmative action to mitigate or correct the condition.

As applied here, *Davis* confirms that once Shelby County and the City of Lakeland were placed on actual notice of unlicensed engineering activity, invalid foundation certifications, and resulting structural hazards, any continued acceptance of those certifications or failure to intervene is no longer discretionary in nature. Such inaction constitutes an operational failure to respond to a known safety risk, eliminating discretionary immunity and exposing the responsible governmental entities and officials to potential liability.

VII. REQUEST FOR IMMEDIATE ACTION

Shelby County, the City of Lakeland and all other responsible governmental bodies must or should immediately:

- a. Cease accepting any foundation certifications from:
 - i. AFA Engineering
 - ii. AFA Consulting
 - iii. Linda Gail Prather, P.E.
- b. Issue stop-work orders on properties relying on such certifications pending independent review.
- c. Audit all permits since at least 2020 where AFA certifications were used.
- d. Preserve all records relating to:
 - i. Engineering certifications;
 - ii. Communications with AFA, Ms. Prather, Regency Homebuilders;
 - iii. Internal deliberations regarding licensure concerns.
- e. Refer this matter to appropriate regulatory and criminal authorities if not already done.

VIII. RESERVATION OF RIGHTS

Nothing in this notice constitutes a waiver of any civil, administrative, or criminal remedies. All rights are expressly reserved.

Failure to act after receipt of this notice will be documented as knowing and willful non-enforcement.



Respectfully,
Julie Pereira
5055 Adagio Lane
Lakeland, Tennessee 38002

← Details for AFA ENGINEERING

Sections

Sections

X

- Retrieved on 02/12/2025 01:29 PM

Summary

Contact Information

License details for the selected record.

Summary

| | |
|----------------------------|---------------------|
| License | Status |
| 441 | Closed |
| Engineering Firm - General | |
| A&E Engineering Firm | |
| Architects and Engineers | |
| Status Effective Date | Rank Effective Date |
| 04/06/2004 | 01/06/1987 |

Contact Information

| | |
|---|---|
| Main Address | Business Address |
| CORDOVA, Tennessee 38018 Shelby, United States | CORDOVA, Tennessee 38018 Shelby, United States |

Use of this system constitutes consent to monitoring, interception, recording, reading, copying, or capturing by authorized personnel of all activities. There is no right to privacy in this system. Unauthorized use of this system is prohibited and subject to criminal and civil penalties.

Department of Commerce & Insurance
State of Tennessee



To Visit Us
500 James Robertson Pkwy
Nashville, TN 37243-0565
Contact Us
(615) 741-2241

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Version release 2.1.0



J P <juliedelgado816@gmail.com>

RE: PRR-2172588-Julie Pereira

Glenn Kopchak <Glenn.Kopchak@tn.gov>
To: J P <juliedelgado816@gmail.com>

Thu, Feb 13, 2025 at 10:59 AM

Hello Julie,

Based on the license overview, it does appear that Engineering Firm #441 has been closed since 04/06/2004. Their last licensee who was in responsible charge was License #5901 who was declared deceased resulting in subsequent firm closure of firm license #441 on 04/06/2004. If upon review of Rules 0120-06 attached which articulate the firm disclosure requirements, you believe a violation has occurred and would like to open a complaint, you may do so [here](#). Please let me know if I may be of further assistance.

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[Quoted text hidden]

2 attachments

 [Licensee Overview_Redacted.pdf](#)
624K

 [Rules 0120-06.pdf](#)
73K

Iriani C. Ortiz

From: Linda Prather <lindagprather@gmail.com>
Sent: Sunday, March 16, 2025 1:52 PM
To: RB Complaints
Subject: [EXTERNAL] Complaint 202500606

This Message Is From an Untrusted Sender

You have not previously corresponded with this sender.

Please exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email - STS-Security

Complaint # 202500606

I received your letter on Friday 3/14/25.

On 10/12/20, David Al-Chokhachi, under my supervision, made the pre-pour inspection of the foundation at 5055 Adagio Lane in Shelby County. Shelby County Code Enforcement requires this letter prior to the framing inspection, and it is not uncommon for a builder to delay informing us of the building permit number (required to be on the letter) until the letter is needed. That is why the letter was sent later, on 12/22/20.

Mrs. Pereira is correct that helical piers were not utilized in the foundation construction. Cast-in-place (post-hole) piers were constructed where needed.

The B&W Engineering report was not included, so I cannot comment on that.

Mrs. Pereira is correct that the foundation was poured monolithically without vibration. This is typical for residential construction.

Concerning issues with the plumbing, we do not inspect plumbing construction.

Multiple plumbing & water issues over the last few years most likely have contributed to the foundation problems. Water intrusion under the slab is the number one cause for foundation issues.

You included correspondence concerning trees. I have no responsibility for tree removal.

Linda Prather
901-870-2700

August 29, 2025

Via Email Transmittal
bryan@meredithlegal.com

SUBMITTED TO:

Mr. Bryan Meredith
Meredith Law Firm PLLC
1715 Aaron Brenner Drive, Suite 450
Memphis, Tennessee 38120

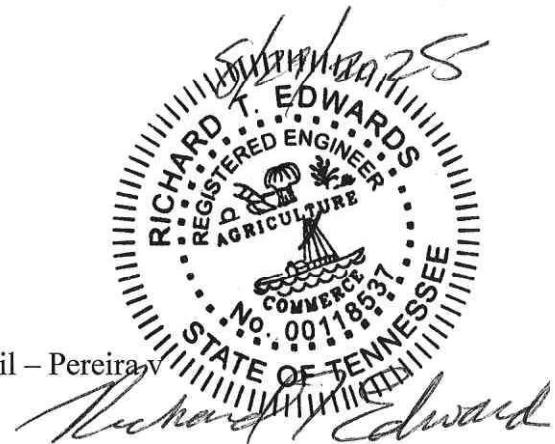
Report



Richard T. Edwards, P. E., BSMatSci
Mechanical Engineer
E redwards@edtengineers.com

Birmingham District Office
P 205.838.1040
2748 Alton Road, Suite 104
Birmingham, Alabama 35210
Certificate of Authorization: 7074

August 29, 2025



REFERENCE: Evaluation of Foundation and Supporting Soil – Pereira v Regency Homebuilders
Location of Incident: Lakeland, Tennessee
EDT Case Number: BHM11338

Engineering Design & Testing Corp. (EDT) was asked to perform soil testing at the subject residence. Testing was performed on August 7, 2025 to determine the soil bearing capacity at four locations around the residence foundation footings. In addition, some of the available information from the construction of the residence was reviewed in the interest of this narrative. Figures 1–4 and two appendices are included to enhance the narrative of this seven-page report.

The conclusions and opinions stated herein are based on information available to the investigation as of this writing. It is conceivable that additional information may be forthcoming which bears on these conclusions and opinions. Therefore, the right is reserved to review and modify all conclusions and opinions at any future point in time should, in fact, additional information become available. Any repair recommendations provided in this report are general in nature and the preparation of detailed plans and specifications is beyond the scope of this project and report. All repairs shall be completed in accordance with manufacturer's specifications and the applicable building code(s), including modifications by governing jurisdictions.

For ease of reading and convenience in presentation, this report has been divided into the following sections:

- A. Background Information and Work of Investigation
- B. Observations
- C. Discussion
- D. Conclusions

Figures 1-4 are included to amplify and clarify the following narrative.

Appendices

- I. B&W Engineering Geotechnical Report
- II. Spreadsheet of Foundation Fill Test Results, August 7, 2025

A. Background Information and Work of Investigation

Fill dirt and foundation for the home was performed in 2020. Shelby County, Tennessee requires that the foundation footings extend at least 13 inches into undisturbed soil or properly compacted soil. Geotechnical testing was performed on September 2, 2020 prior to foundation placement (Appendix I).

EDT tested the soils at the foundation footings on August 7, 2025 in three locations at the footing and one spot about five feet away from the footing. A dynamic cone penetrometer was used in accordance with the manufacturer's instructions. Plastic limits were performed on the fill material beneath the slab. Cracks in the slab and veneer were examined. Moisture content on the interior slab was also tested.

A previous excavation beneath the interior slab (between the foyer and kitchen) was performed to repair a drainage line that had developed a downward curvature from settling. The trap effect of the curvature prevented the proper function of the drain line.

The undersigned has been examined and passed the NCEES Civil Engineering P.E. examination in North Carolina, in addition to the P.E. metallurgical examination. Practicing as an engineer in metallurgical, mechanical and civil engineering since 1980 upon graduation from North Carolina State University, he has had many opportunities to assess foundation soils for homes and subdivision roadways. In this matter, dynamic cone penetrometer, moisture content and Atterberg plastic limits were evaluated to assess the condition of the client's sub-foundation soils. As a materials scientist, he has evaluated the soils as an engineering material for the support of the foundation of a two-story, brick veneer home that belongs to the Pereiras family. Primarily, soil bearing capacity was tested.

B. Observations

Testing results are summarized in the attached Appendix II. The tests show that the soil is loose and below the required bearing capacity of 1500 pounds per square foot (PSF). The upper 6 to 12 inches of soil exhibited adequate strength in some locations away from the foundation footings, but below 12 inches the bearing capacity deteriorated, sometimes to zero bearing capacity. Values of 260 PSF and 660 PSF were common below the foundation footings (Appendix II).

Plastic limits for soil samples from the site were evaluated at 21 percent (%), 24%, and 21% on three tests from the same area. These values roughly agree with Proctor optimum water content of 17.5 percent for compaction as determined by B&W Engineering (Appendix I).

Observations of footing depth found that the edges of the slab were 12 inches, 12.5 inches, and 13 inches at the three locations where the footing had been revealed by prior excavation.

The homeowner informed this investigation that a creek ran some distance behind their property line. An estimate from satellite images finds a possible watercourse at about 1000 feet or less to the west of the property.

According to the 2020 geotechnical report, fill to the original grade elevation was tested for the support of plumbing lines only. Blow counts were recorded as “12+” and bearing capacity was not reported. This report does not include testing information for the soil under the foundation footings but is limited to those locations expected to receive plumbing lines.

As tested in August 2025 by this investigation, the low bearing capacities were measured below the 12 inch depth and the footings extended to about 12 inches below grade, so the footings were affected.

The soil at the footings lacked the necessary bearing capacity or strength to support the house and patio. The soil beneath the footings does not show the necessary characteristics that

indicate proper compaction.

The plastic limit was checked on three samples from the foundation excavations at the residence. The plastic limit for the samples was 22 % +/- 1 %. This agreed with the test results by the preconstruction geotechnical crew.

Interior slab moisture was tested and found high out of range in most locations. Only the location above a previous postconstruction excavation found moisture contents within the instrument's limits of 50% saturation. The source of moisture may be presumed, to a reasonable degree of engineering certainty, to originate from under the slab. Figures 1-4 show the instrument results.

A 16-inch depth excavation next to the footing on the north side of the house exhibited a soft lean, gray clay with standing water on top. The clay in this spot did not exhibit an acceptable amount of bearing capacity at the footing.

C. Discussion

The presumptive minimum bearing capacity is 1500 PSF, according to chapter 4 of the International Residential Code. Tables in Chapter 4 of the code give the footing dimensions for a two-story, brick veneer house on soil exhibiting at least 1500 PSF. Soils under the foundation tested at 260-660 PSF. The original grade's bearing capacity was higher and met the presumptive bearing capacity requirement (Appendix II).

Prevailing high moisture content in the fill soil and interior slab is likely a major contributing factor of the low bearing capacity and high floor moisture. Clay has low permeability, and water cannot escape the confined space beneath the slab once the fill soil becomes saturated.

D. Conclusions

1. Based on dynamic cone penetrometer measurements of August 7, 2025, the house's foundation footings rest on fill that lacks a sufficient bearing capacity to prevent differential settlement. The current soil bearing capacity does not meet the minimum requirements of the International Residential Code.
2. Based on the soil capacity testing results, the residence will continue to experience differential settlement, causing further cracking in the slab and brick veneer.
3. Based on the history and life of the residence structure, high moisture levels under the slab will continue to prevent the installation of proper flooring on the residence's interior concrete slab.
4. The current report is limited to testing in the available areas.
5. Given the existence of an elevated water table, additional support for the slab foundation was and is warranted. Such support could consist of driven pilings, helical piers, or extended depth footings.

FIGURES



Figure 1 Concrete moisture reading inside



Figure 2 Concrete moisture reading at previous repair location



Figure 3 Concrete moisture reading at previous repair location

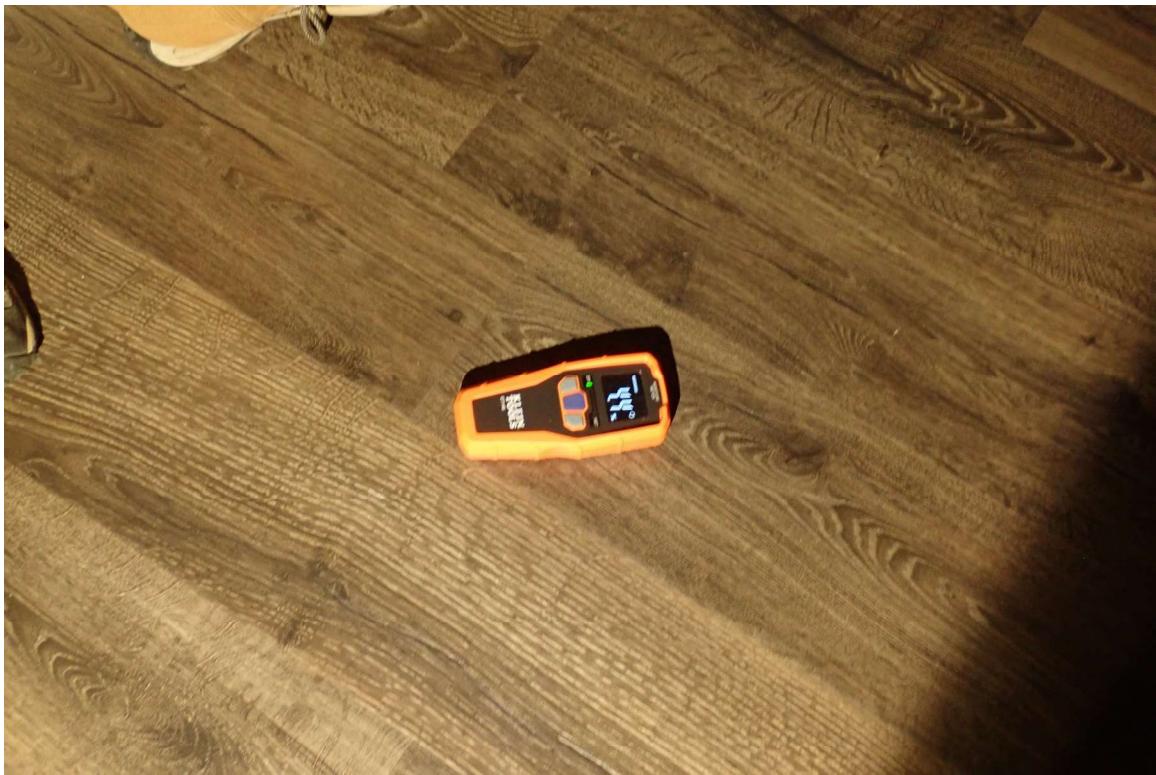


Figure 4 Concrete moisture reading at previous repair location

APPENDIX I

B&W Engineering Geotechnical Report

B & W Engineering Laboratories, Inc.

P.O. Box 341091

Memphis, Tennessee 38184-1091

(901) 373-7957

SOIL COMPACTION TEST REPORT

Project: 5055 Adagio Lane, Lakeland, TN

Job No.: 9709

Report Ser. No.: D-2952

Technician: J. Carter

Client: Regency Homebuilders

Date Tested: 02 September 2020

In - Place Density Test Results ASTM D-2922, ASTM D-3017

| Test No. | Test Location and Elevation | Material Mark | Moisture Content (%) | Dry Density (pcf) | Percent Compaction Required | Percent Compaction Actual |
|----------|---|---------------|----------------------|-------------------|-----------------------------|---------------------------|
| 1 | Master Bath, SG - 0.5' | A | 17.6 | 104.0 | 90 | 97 |
| 2 | Master Bath, SG - 1.0' Previous Ground Surface 2.0' below SG, See Boring Log P-1 | A | 18.9 | 103.6 | 90 | 97 |
| 3 | Half Bath, SG - 0.5' | A | 18.9 | 103.4 | 90 | 97 |
| 4 | Half Bath, SG - 1.0' Previous Ground Surface 2.0' below SG, See Boring Log P-2 | A | 18.8 | 103.9 | 90 | 97 |
| 5 | Laundry, SG - 0.5' | A | 18.1 | 102.9 | 90 | 96 |
| 6 | Laundry, SG - 0.5' Previous Ground Surface 1.0' below SG, See Boring Log P-3 | A | 18.4 | 103.7 | 90 | 97 |
| 7 | Kitchen, SG - 0.5' | A | 23.0 | 98.8 | 90 | 93 |
| 8 | Kitchen, SG - 0.5' Previous Ground Surface 3.0' below SG, See Boring Log P-4 | A | 22.1 | 99.0 | 90 | 93 |
| 9 | Bath #2, SG - 0.5' | A | 14.7 | 99.8 | 90 | 94 |
| 10 | Bath #2, SG - 0.5' Previous Ground Surface 2.5' below SG, See Boring Log P-5 | A | 15.6 | 102.0 | 90 | 96 |

Laboratory Compaction Characteristics of Soil ASTM D-698

| Material Mark | Soil Description and Source | Maximum Density (pcf) | Optimum Moisture (%) |
|---------------|----------------------------------|-----------------------|----------------------|
| A | Brown Silty Clay w/Trace of Sand | 106.7 | 17.5 |

Note: SG=Graded Subgrade at time of testing. These density tests were performed to provide an indication of the adequacy of existing material for support of plumbing lines only.

Respectfully Submitted,

B & W Engineering Laboratories, Inc.



John L. Walton, Sr., P.E.

B & W Engineering Laboratories, Inc.

P.O. Box 341091

Memphis, Tennessee 38184-1091

(901) 373-7957

Log of Borings

Project: 5055 Adagio Lane, Lakeland, TN

Client: Regency Homebuilders

Date Tested: 02 September 2020

Job No.: 9709

Report Ser. No.: D-2952

Technician: J. Berryhill

Boring P-1, Master Bath Area

| Sample Number | Sample Interval feet | N Value | Water Content Percent | Sample Description |
|---------------|----------------------|---------|-----------------------|--|
| 1 | 0.0 - 0.5 | 9 | 18 | Stiff Brown Silty Clay w/Trace of Sand |
| 2 | 0.5 - 1.0 | 12+ | 19 | Stiff Brown Silty Clay w/Trace of Sand |
| 3 | 1.0 - 1.5 | 12+ | 17 | Stiff Brown Silty Clay w/Trace of Sand |
| 4 | 1.5 - 2.0 | 12+ | 16 | Stiff Brown Silty Clay w/Trace of Sand |
| | 2.0 | | | Previous Ground |

Boring P-2, Half Bath Area

| Sample Number | Sample Interval feet | N Value | Water Content Percent | Sample Description |
|---------------|----------------------|---------|-----------------------|--|
| 1 | 0.0 - 0.5 | 12+ | 19 | Stiff Brown Silty Clay w/Trace of Sand |
| 2 | 0.5 - 1.0 | 12+ | 19 | Stiff Brown Silty Clay w/Trace of Sand |
| 3 | 1.0 - 1.5 | 12+ | 17 | Stiff Brown Silty Clay w/Trace of Sand |
| 4 | 1.5 - 2.0 | 12+ | 15 | Stiff Brown Silty Clay w/Trace of Sand |
| | 2.0 | | | Previous Ground |

Boring P-3, Laundry Area

| Sample Number | Sample Interval feet | N Value | Water Content Percent | Sample Description |
|---------------|----------------------|---------|-----------------------|--|
| 1 | 0.0 - 0.5 | 10 | 18 | Stiff Brown Silty Clay w/Trace of Sand |
| 2 | 0.5 - 1.0 | 12+ | 18 | Stiff Brown Silty Clay w/Trace of Sand |
| | 1.0 | | | Previous Ground |

Boring P-4, Kitchen Area

| Sample Number | Sample Interval feet | N Value | Water Content Percent | Sample Description |
|---------------|----------------------|---------|-----------------------|---|
| 1 | 0.0 - 0.5 | 9 | 23 | Stiff Brown Silty Clay w/Trace of Sand |
| 2 | 0.5 - 1.0 | 11 | 22 | Stiff Brown Silty Clay w/Trace of Sand |
| 3 | 1.0 - 1.5 | 12+ | 20 | Stiff Brown Silty Clay w/Trace of Sand |
| 4 | 1.5 - 2.0 | 12+ | 17 | Stiff Brown Silty Clay w/Trace of Sand |
| 5 | 2.0 - 2.5 | 12+ | 17 | Stiff Brown Silty Clay w/Trace of Sand and Gravel |
| 6 | 2.5 - 3.0 | 12+ | 14 | Stiff Brown Silty Clay w/Trace of Sand and Gravel |
| | 3.0 | | | Previous Ground |

B & W Engineering Laboratories, Inc.

P.O. Box 341091

Memphis, Tennessee 38184-1091

(901) 373-7957

Log of Borings

Project: 5055 Adagio Lane, Lakeland, TN

Client: Regency Homebuilders

Date Tested: 02 September 2020

Job No.: 9709

Report Ser. No.: D-2952

Technician: J. Berryhill

Boring P-5, Bath #2 Area

| Sample Number | Sample Interval feet | N Value | Water Content Percent | Sample Description |
|---------------|----------------------|---------|-----------------------|--|
| 1 | 0.0 - 0.5 | 12+ | 15 | Stiff Brown Silty Clay w/Trace of Sand |
| 2 | 0.5 - 1.0 | 12+ | 16 | Stiff Brown Silty Clay w/Trace of Sand |
| 3 | 1.0 - 1.5 | 12+ | 15 | Stiff Brown Silty Clay w/Trace of Sand |
| 4 | 1.5 - 2.0 | 12+ | 15 | Stiff Brown Silty Clay w/Trace of Sand |
| 5 | 2.0 - 2.5 | 12+ | 15 | Stiff Brown Silty Clay w/Trace of Sand |
| | 2.5 | | | Previous Ground |

Note: These tests, together with the results of moisture/density tests presented on the first page of this report, indicate that the degree of fill compaction within the planned building area exceeds the 90% requirement of the Shelby County plumbing code.

Respectfully Submitted,

B & W Engineering Laboratories, Inc.



John L. Walton, Sr., P.E.

APPENDIX II

Spreadsheet of Foundation Fill Test Results, August 7, 2025

BHM11338 Dynamic Cone Testing of under slab fill

Test 1 at south side of residence

| starting depth | 1.95 (23.4") | Blows | Soil strength (PSF) | |
|----------------|--------------|-------|---------------------|-------------------|
| plus 2 inches | 25.4 | 2 | 660 | |
| +2 | 27.4 | 1 | 260 | Footing depth 12" |
| +2 | 29.4 | 2 | 660 | |
| "+2 | 31.4 | 2 | 660 | |
| | 33.4 | 3 | 1130 | |
| | 36.4 | 4 | 1660 | |
| | 38.4 | 4 | 1660 | |

Test 2 North Side of residence

| | | | |
|----------------|----|-----|-------------|
| Starting depth | 9 | | |
| | 11 | 1 | 260 |
| | 13 | 1 | 260 |
| | 15 | 1 | 260 |
| | 17 | 1 | 260 |
| | 19 | 1 | 260 |
| | 21 | 1 | 260 |
| | 23 | 3 | 1130 |
| | 25 | 0.5 | 0 <1 per 2" |
| | 27 | 0.5 | 0 <1 per 2" |
| | 31 | 1 | 260 |
| | 33 | 1 | 260 |
| | 37 | 1 | 0 <1 |

Test 3 Northwest corner

| | | | |
|----------------|----|---|------|
| Starting Depth | 14 | | |
| | 16 | 1 | 260 |
| | 18 | 2 | 660 |
| | 20 | 2 | 660 |
| | 22 | 2 | 660 |
| | 24 | 2 | 660 |
| | 26 | 3 | 1130 |
| | 28 | 3 | 1130 |
| | 30 | 4 | 1660 |
| | 32 | 5 | 2230 |

West side away from foundation

| | | | |
|----------------|---|----|------|
| Starting depth | 6 | | |
| | 8 | 10 | 4220 |

very dry

more sandy than the deeper samples



8420 Wolf Lake Drive, Suite 110
Bartlett, TN 38133
(855) 782-4228

Report of Findings

Pereira v. Regency Homebuilders, LLC Construction Evaluation

Cause No: 6016378

Julie Pereira v. Regency Homebuilders, LLC

Rimkus Matter No: 100314106

Prepared For:

Meredith Law Firm, PLC

1715 Aaron Brenner Drive, Suite 450

Memphis, TN 38120

Attention:

Mr. Bryan Meredith

Digitally signed by: Bobby

Kendall

Date: 2025.09.05 12:38:29 -
05'00'

Bobby G. Kendall, P.E.
Tennessee Professional Engineer No. 119257
Senior Consultant

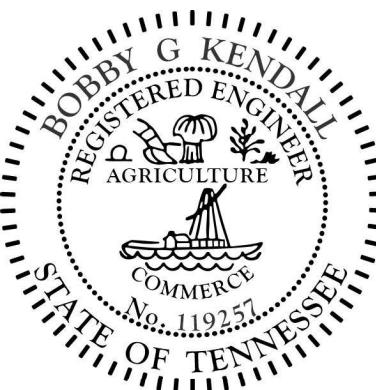




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Section I

INTRODUCTION

Ms. Julie Pereira reported that there were construction defects to her residence, which was constructed from 2020-2021 by Regency Homebuilders, LLC. The Pereira residence was located at 5055 Adagio Lane in Lakeland, Tennessee.

Rimkus was retained to evaluate the reported deficiencies, including footings and Outdoor Living Area (OLA) porch and patio concrete, and to opine on previous documentation regarding the suitability of the soils on which the residence was constructed. Bobby G. Kendall, P.E., Senior Consultant, performed our inspection on August 29, 2025, and prepared this **Report of Findings**. All measurements and dimensions are approximate unless otherwise noted.

This report was prepared for the exclusive use of Meredith Law Firm, PLC, and is not intended for any other purpose. Our report is based on the information available to us at this time, as described in the **Basis of Report**. The opinions and conclusions herein are based on sufficient facts or data; they are the product of our analysis utilizing reliable, generally accepted principles and methods in our applicable professional field; and they reflect a reliable application of these principles and methods to the facts of this matter. Should additional information become available, we reserve the right to determine the impact, if any, the new information may have on our opinions and conclusions and to revise our opinions and conclusions if necessary and warranted. This report was reviewed by Mr. Kurt A. Bergman, Construction Practice Leader.

Section II

CONCLUSIONS

1. The footings of the Pereira residence were not constructed as indicated on the construction drawings.
2. The placed fill and portions of the concrete slab and footings did not comply with minimum requirements of the 2015 IRC as adopted by the Board of Commissioners of Shelby County, Tennessee, and in effect at the time of construction.
3. Cracks in the Outdoor Living Area (OLA) concrete were a result of the improper placement of reinforcing steel during the placement of the slab and/or the lack of contraction joints in the slab. The differential vertical movements of slab sections were further exacerbated by the inadequate compaction and subsequent consolidation of placed fill.
4. The deficiencies noted resulted in strength capacities lower than designed and/or specified by the IRC.

Section III

DISCUSSION

Background Information

The Pereira residence was a two-story, single-family house built on a concrete slab-on-grade foundation. The exterior walls were covered with brick veneer and composite siding. The roof was overlain with asphalt shingles (**Photographs 1 through 4**). The interior walls and ceiling were covered with painted gypsum board. The interior floors were covered with wood laminate, ceramic tile, and carpet. According to the Shelby County Assessor of Property, the 3,910 square feet (sf) house was constructed in 2021. A purchase agreement was signed by Julie Pereira and Joseph Pereira (buyers) with Regency Homebuilders, LLC on March 8, 2020. A construction permit was issued on September 2, 2020. The home was substantially completed in May of 2021 with a Certificate of Occupancy issued by the Memphis and Shelby County Office of Construction Code Enforcement on June 2, 2021. Sticking interior doors, uneven floors in the Great Room and Kitchen, cracks in patio concrete and brick veneer were observed beginning in July of 2021 and have continued through the summer of 2025. Throughout this report, the residence is referenced to face east (**Figure 1**).

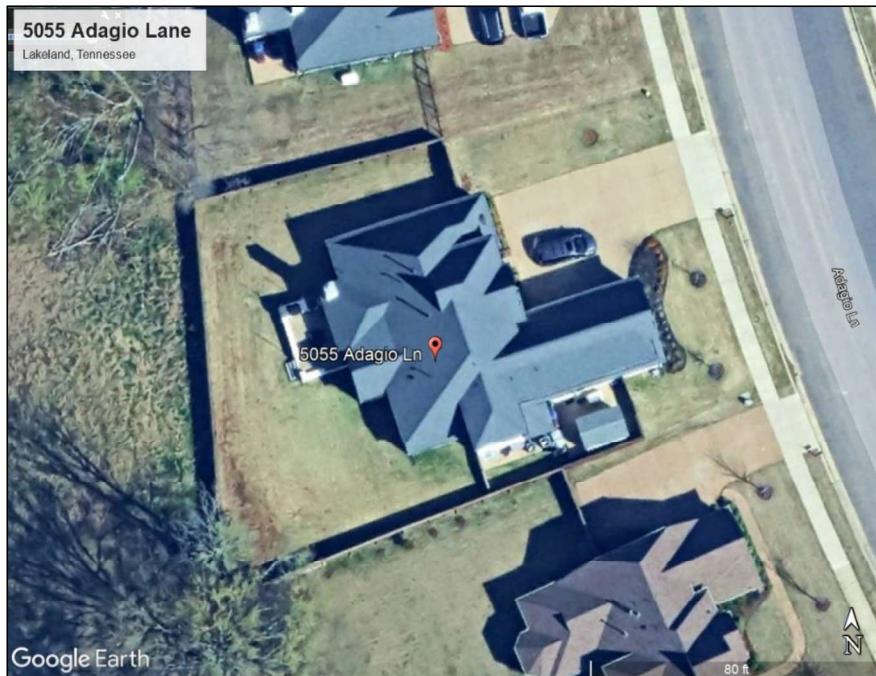


Figure 1—Aerial view of the Pereira residence. Imagery by Google Earth. Image date of March 10, 2024.

Document Review

Mr. Bryan Meredith provided documents for review and evaluation. Upon review, we noted the following:

- Plans and Permits (70-page document):
 - Memphis and Shelby County Building Permit No. 1116613 approved on September 2, 2020, with 2015 IRC referenced as code in force.
 - City of Lakeland Building Permit No. 59358 approved on August 21, 2020.
 - B&W Engineering Laboratories, Inc. Soil Compaction Test Report No. D-2952 for support of plumbing lines only. Concluded that the degree of fill compaction within the planned building area exceeds the 90% requirement of the Shelby County plumbing code.
 - Memphis and Shelby County Code Enforcement Footing/Foundation Form Letter. This was a third-party pre-pour inspection conducted by AFA Engineering on October 12, 2020, and stamped and signed on December 22, 2020.
 - Building Plans by Gardo Design Group included Foundation Plan, 1st and 2nd Floor Plans, 1st and 2nd Floor Framing Plans, Roof Plan, Elevations, Sections. Additional details for slab and continuous footing were not provided. These were requested at the time of our inspection and were available at the time of this report.
- Poe Engineering Inspection Reports—Poe Engineering, Inc. performed five inspections of the property. Dates, purpose, and conclusions of each follows:
 - May 22, 2021: Asked to determine if any signs of settlement or structural concerns. The report concluded that the residence is structurally sound and there was no evidence of foundation settlement.
 - February 14, 2022: Asked to determine if slab was properly repaired following repair of sewer line. The report concluded that the repaired slab was structurally sound.

- February 17, 2022: Asked to determine if foundation settlement had occurred. The report concluded that the residence was structurally sound and that there was no evidence of any foundation settlement.
- January 10, 2023: Asked to determine the cause of cracks in brick veneer, exterior rear patio, and binding doors. The report concluded that all observations were cosmetic in nature and not indicative of foundation failure.
- June 2, 2025: Asked to determine if the residence is structurally sound. The report concluded that cracks in brick veneer and interior sheetrock are cosmetic in nature and not indicative of foundation failure. The report concluded that rear patio has significant cracks that increased since previous inspection. Recommended repairs.
- Engineering Design & Testing Corp. (EDT) Foundation and Supporting Soil report dated August 29, 2025. On August 7, 2025, EDT performed soil sampling, and the report concluded that the current soil bearing capacity does not meet the minimum requirements of the IRC.
- Photographs and videos taken by the homeowner during construction, during plumbing/slab repairs, and others since occupancy, and include:



Figure 2 - Photograph taken by homeowner during plumbing repairs, which required demolition of main slab. Tape measure is inserted in area of required 30-inch by 30-inch footing.



Figure 3—Photograph taken by homeowner during plumbing repairs, which required partial demolition of main slab. The Welded Wire Reinforcement (WWR) is observed to be lying directly on top of vapor retarder.



Figure 4—Photograph taken by homeowner during placement of OLA patio slab. Steel reinforcement is observed to be lying on the ground.

Observations

Photographs of typical (representative) observed conditions and damage are contained in **Attachment A, Photographs**. These photographs, along with the following narrative, are considered sufficient to describe the general condition of the residence. However, the photographs are not intended to show all conditions and/or damage that may exist. The following observations were made at the Pereira residence on August 29, 2025:

- The concrete slab in the great room was exposed due to a previous plumbing repair and elevated moisture content, preventing the installation of flooring. The slab had cracks up to 1/8 inch in width (**Photographs 5 and 6**). The moisture content of the main slab was elevated (**Photographs 7 and 8**).

- There were isolated hairline-width cracks in the gypsum board ceiling in the great room. There was a nail pop and a hairline-width crack in the gypsum board ceiling in the northwest bedroom on the ground floor (**Photographs 9 and 10**). A second-story closet door was difficult to close and open. There was evidence of previous repair attempts (**Photographs 11 and 12**).
- A relative elevation of the Outside Living Area (OLA) concrete deck was conducted during our inspection. The southwest corner of the patio was approximately 2 inches lower than the northwest corner (**Photographs 13 and 14**). There were cracks in the mortar and cracked bricks in the veneer of the porch and patio outdoor kitchen. (**Photographs 15 through 17**).
- A relative elevation survey of the backyard was conducted during our inspection. The finished floor elevation of the residence was 3 to 5 feet higher than the apparently undisturbed soil along the west fence line (**Photographs 18 and 19**).
- The exterior brick veneer had both stair-step cracks and cracked brick on the north, east, and west elevations (**Photographs 20 and 21**).
- Three areas around the footings of the residence had been excavated prior to our inspection. There were voids and honeycombing of the concrete visible. (**Photographs 22 and 23**).

Analysis

Put simply, footings are the structural components of a building system that distribute all structural loads to the ground. A typical footing in modern residential construction, and that at the Pereira residence, is a thickened portion of the concrete slab, with additional reinforcement, along the exterior walls and under interior load-bearing walls. The proper design and construction of footings is a critical component of any building system. Therefore, codes related to the construction of footings contain specific requirements that are widely adopted as statute by local authorities.

The 2015 International Residential Code (IRC) was adopted by the Board of Commissioners of Shelby County, Tennessee, and was in effect at the time of the construction of the Pereira residence. We noted the following regarding Sections of the IRC that were applicable to the construction of the footings and main slab of the building:

- Section R401.2 *Requirements* states “Fill soils that support footings and foundations shall be designed, installed, and tested in accordance with accepted engineering practice”.

Note: An estimated 3-5 feet of fill was placed at the property prior to the construction of the footings. There was no documented design, nor testing subsequent to the placement of fill soils.

- Section R401.4 *Soil tests* includes Table R401.4.1, which provides the presumptive load-bearing pressure of the different soil classes. For clays, this value is 1,500 pounds per square foot (psf). Note b. of the table further states, “Where the building official determines that in-place soils with an allowable bearing capacity of less than 1,500 psf are likely to be present at the site, the allowable bearing capacity shall be determined by a soils investigation”.

Note: There was no indication that the soils had undergone review by building official(s). However, limited testing at the site demonstrated soil strengths less than those of the IRC design values.

- Section R403.1 *General* states “all exterior walls shall be supported on continuous solid or fully grouted masonry or concrete footings...” and that the “footings shall be supported on undisturbed soil or engineered fill”. Section R403.1.4 as adopted by the Board of Commissioners of Shelby County, further states, “All footings shall bear on undisturbed or properly compacted soils”.

Note: The documentation supporting design or testing at the time that the fill was placed is limited to testing to confirm support beneath plumbing lines, and was not considered design/testing for the footings. In lieu of such, the placed fill at the site would not be considered “engineered fill” as required by R403.1 or “properly compacted soils” as required by R403.1.4.

An additional consideration in the placement of concrete slabs, such as those at the Pereira residence, is cracking. The curing of concrete is a chemical reaction whereby the cement is hydrated by joining with water molecules in the concrete mix. During this hydration process, the concrete shrinks, causing what is referred to as shrinkage cracking. While shrinkage cracking is unavoidable in concrete, there are ways to mitigate

the impact. Most common among these is the use of steel reinforcement for crack-width control. The IRC includes guidelines for the use of steel reinforcement as follows:

- Section R506.2.4 *Reinforcement Support* states that the “reinforcement shall be supported to remain in place from the center to upper one-third of the slab for the duration of the concrete placement”.

Note: Photos of the slab assembly during the plumbing repair show Welded Wire Reinforcement (WWR) located at the bottom of the slab, which would not comply with the requirements of R506.2.4.

At the Pereira residence, a relative elevation survey conducted during our inspection showed that the site was built up above the undisturbed soil prior to placement of the foundation. This is also consistent with fill values estimated by B&G in September 2020, indicating up to 2.5 feet of fill. Without any design, compaction, and testing related to the foundations, the placement of fill would not be in accordance with the requirements of IRC Section R401.2 and R403.1. Soil sampling and analysis occurred on September 2, 2020, and reported the soils to be “stiff brown silty clay w/ trace of sand”. Though the testing indicated compaction of between 93 and 97 percent, it was acknowledged that the initial report was to determine the “adequacy of existing material for the support of plumbing lines only” and was not intended for the determination of suitability for the placement of a foundation. Additional sampling and analysis conducted on August 7, 2025, reported the soils to be “soft, lean gray clay”. The 2025 EDT report included tests for bearing capacity completed with a Dynamic Cone Penetrometer, with calculated values between 260 psf and 660 psf. The latter report concluded that the bearing capacities were below the required IRC design values of 1,500 psf. This demonstrated that the fill material placed on or around October 20, 2020, prior to the foundation, did not meet the criteria required by the IRC and Table R401.4.1. An engineered fill plan for the site, properly executed, would have ensured that the placed fill met the minimum requirements of the IRC and/or those specified by the Engineer of Record for the design of the building. The infill soil characteristics revealed by bearing capacity tests, and omitted interior footing resulted in maximum strength capacities lower than designed and/or specified by IRC. The building plans reviewed did not specify loading or minimum bearing capacities for the foundation/footings in lieu of the IRC minimum requirements.

Three excavations at the footings of the residence had been performed prior to our inspection, which allowed a visible inspection of the footings at these areas. The footing details were not made available at the time of this report for comparison. However, the following observations were made. The footing thickness ranged from 14 to 17 inches. The vertical surface of the footings below the brick ledge was not uniform and had voids at the bottom. At two of the three locations, non-continuous concrete was observed with voids near the top of the footing at/near the bearing of the brick veneer. This indicated that portions of the designed section of the footing were discontinuous. Photographs and measurements taken by the homeowner during the plumbing and slab repair in February of 2020 and reviewed as part of our investigation, revealed the absence of a required (per the drawings) footing under a load-bearing wall near the center of the residence. Additionally, the main slab reinforcement required by the plans was observed to be lying directly on the vapor retarder and not installed in accordance with IRC Section R506.2.4.

This analysis, our observations, and review of available documents led to our conclusion that the footings of the Pereira residence were not constructed as indicated on the construction drawings; and the placed fill and portions of the concrete slab and footings did not comply with minimum requirements of the 2015 IRC as adopted by the Board of Commissioners of Shelby County, Tennessee, and in effect at the time of construction; and the deficiencies noted resulted in strength capacities lower than designed and/or specified by IRC.

The Outdoor Living Area (OLA) at the Pereira residence included a covered porch approximately 19 feet x 12 feet with an uncovered patio extending approximately 12 feet off the porch. The original concrete in this area was demolished and replaced following a finishing error by the builder (washed instead of stamped concrete). Photographs and videos taken by the homeowner show that the concrete was observed to have cracks within a week after the second placement. Additionally, the cracks were observed to be widening on subsequent visits by Poe Engineering. Cracks up to 0.2 inches with differential heights in the concrete were observed during our inspection. Relative elevations taken during our inspection show approximately 2 inches of fall from the northeast corner of the porch to the southwest corner of the patio. These movements were attributable, in part, to differential movement (e.g., settlement) correlating to the consolidation of the placed fill, as well as the lack of control joints and/or reinforcement.

As outlined in earlier analysis, the IRC includes guidelines for the use of steel reinforcement. Additionally, the American Concrete Institute (ACI) Residential Code Requirements 332-14 includes guidelines for the use of contraction (control) joints to reduce cracking in these slabs as follows:

- ACI 332-14 Table 10.5.2 specifies the maximum contraction joint spacing to be between 8 and 15 feet, depending on the slab thickness and maximum aggregate size.

At the Pereira residence, photographs taken during the construction of the rear porch and patio show steel reinforcement lying on the ground without proper support in accordance with the IRC provisions outlined above. Additional photographs and videos showed control joints in the original concrete, but no control joints were placed in the slab when the patio was re-poured. Although the slab details were not fully indicated in the building plans, the 24-foot dimension of the slab would have required at least one, if not two, contraction joints to control the cracking of the concrete during the hydration process to comply with ACI 332-14. A review of NAHB construction performance standards indicates that cracks in finished/exposed slabs should be limited to 0.1875 inches. The measured cracks of up to 0.2 inches did not comply with the expected NAHB performance criteria. This analysis, our observations, and review of the provided documents, photographs, and videos led to our conclusion that the cracks in the Outdoor Living Area (OLA) concrete were the result of improper placement of reinforcing steel during the placement of the slab and/or the lack of contraction joints in the slab. The differential vertical movements of slab sections were further exacerbated by the inadequate compaction and subsequent consolidation of placed fill.

Section IV

BASIS OF REPORT

1. Inspection of the Pereira residence located at 5055 Adagio Lane in Lakeland, Tennessee, by Bobby G. Kendall, P.E., on August 29, 2025. The inspection included photographs, measurements, and observations.
2. Aerial imagery by Google Earth. Image date of March 10, 2024.
3. International Residential Code, 2015.
4. American Concrete Institute Code Requirements for Residential Concrete, ACI 332, 2014.
5. Moisture content measurements were taken using a Moisture Encounter Plus surface moisture meter by Tramex.
6. Relative elevation measurements were taken using a ZipLevel High Precision Altimeter Pro-2000 by Technidea.
7. Photographs of the great room main slab excavation taken by Ms. Julie Pereira, February 10, 2022, provided to Rimkus by Mr. Bryan Merdith.
8. Photographs of the OLA concrete slab placement taken by Ms. Julie Pereira, date unknown, and provided to Rimkus by Mr. Bryan Merdith.
9. "Wood Handbook: Wood as an Engineered Material," Forestry Products Laboratory, U.S. Department of Agriculture, April 2010.
10. "Wood Flooring Installation Guidelines," National Hardwood Flooring Association, 2019.
11. National Association of Home Builders "Residential Construction Performance Guidelines", 5th Edition.
12. We reviewed the following documents:
 - a. Regency Purchase Agreement, dated March 8, 2020, with amendments 1 through 2-9.

- b. Building Permit with attachments, dated September 2, 2020.
- c. Building plans by Gardo Design Group, dated July 2020.
- d. B&W Engineering Laboratories, Inc. Soil Compaction Test Report No. D-2952, dated September 2, 2020.
- e. Brewer Landscaping fill dirt invoice, dated June 29, 2020.
- f. Memphis and Shelby County Code Enforcement Footing/Foundation Form Letter, dated December 22, 2020.
- g. Memphis and Shelby County Office of Construction Code Enforcement Final Inspection, dated June 2, 2021.
- h. Poe Engineering Inc. Inspection Reports, dated: May 22, 2021, February 14, 2022, February 17, 2022, January 10, 2023, June 2, 2025.
- i. Brough & Stephens Inc. Inspection Report, dated November 22, 2021.
- j. Memphis and Shelby County Division of Planning and Development site inspection results, dated April 1, 2025.
- k. Engineering Design & Testing Corp. Foundation and Supporting Soil report, dated August 29, 2025.
- l. Photographs and videos taken by Ms. Julie Pereira, dated 2020 through 2025.
- m. Arbitration Respondent Answers and Counter-Claim for Regency Homebuilders, LLC v. Julie Pereira, date of document not provided.

Section V

ATTACHMENTS

A. Photographs

B. Curriculum Vitae

Section V
ATTACHMENT A

Photographs

Photographs taken during our inspection, including photographs that were not included in this report, were retained in our files and are available to you upon request.

Photograph 1

Northeast view of the Pereira residence.



Photograph 2

Southeast view of the Pereira residence.



Photograph 3

Northwest view of the Pereira residence.



Photograph 4

Southwest view of the Pereira residence.



Photograph 5

The main slab in the great room of the residence was exposed due to previous plumbing repairs. The slab had cracks up to 1/8 inch in width.



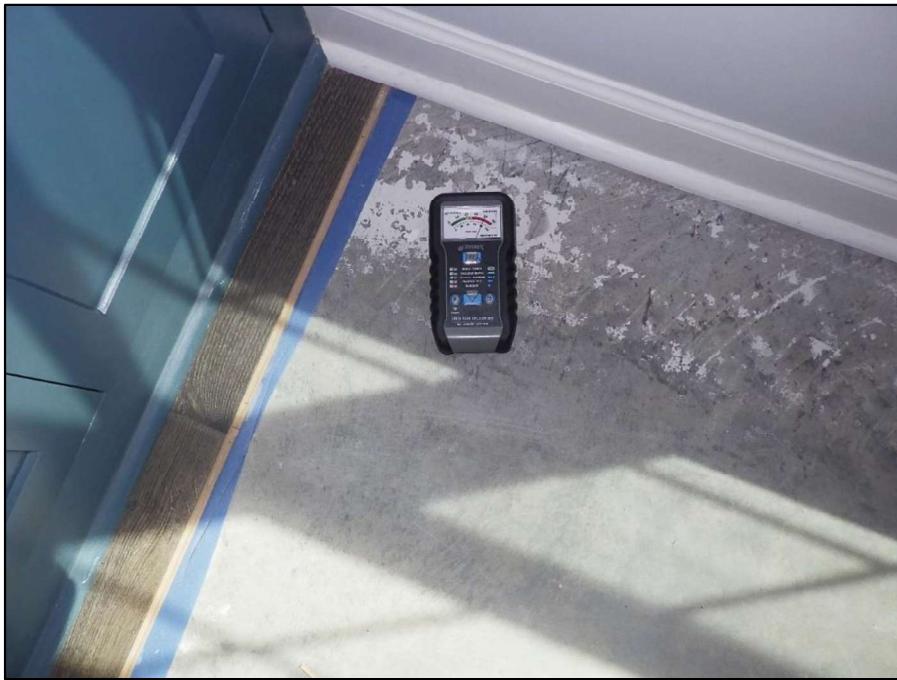
Photograph 6

The cracks in the main slab extended to the edges of the slab on the east and west sides of the interior.



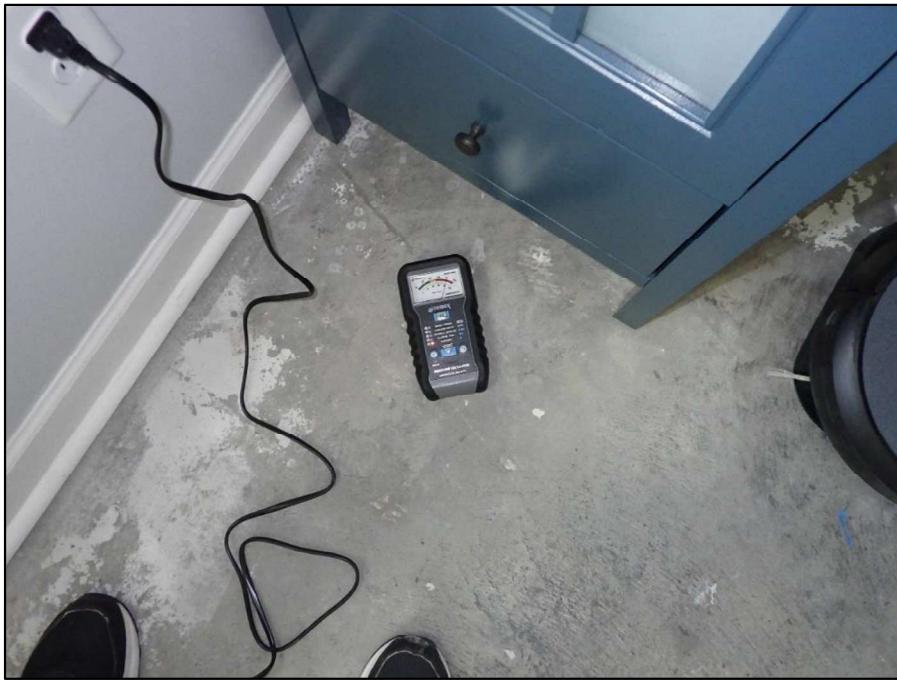
Photograph 7

The moisture content levels were elevated in the exposed portions of the main slab. The readings were above the NWFA maximum allowed for the installation of engineered wood flooring.



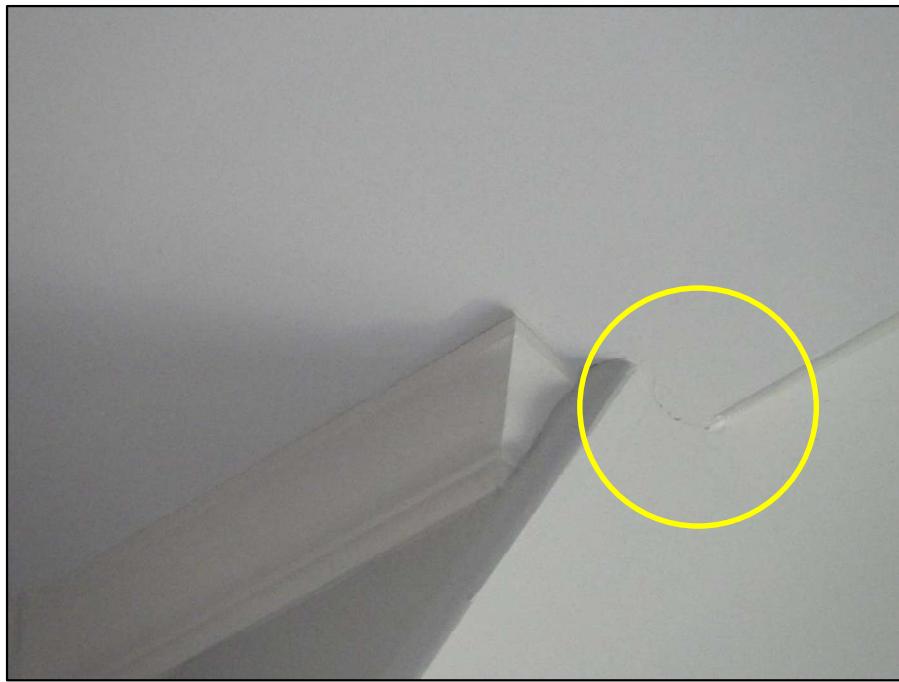
Photograph 8

Example of elevated moisture content reading in dining room. The readings were above the NWFA maximum allowed for the installation of engineered wood flooring.



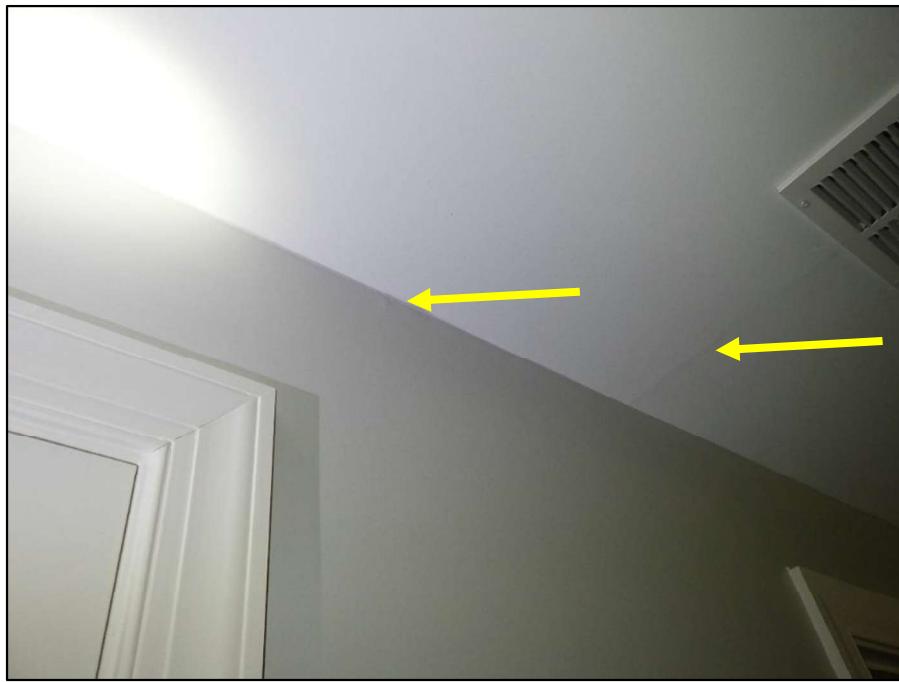
Photograph 9

There were isolated hairline-width cracks in the gypsum board ceiling in the great room and northeast bedroom on the ground floor.



Photograph 10

Example of hairline-width crack and nail pop in gypsum board ceiling and wall in northeast bedroom on the ground floor.



Photograph 11

A closet door on the second floor was difficult to open and close. The door and door frame were making contact in the upper right corner.



Photograph 12

The closet door from **Photograph 11** had evidence of previous repairs to the hinges.



Photograph 13

The OLA patio deck was sloped to the southwest approximately 2 to 3 inches.



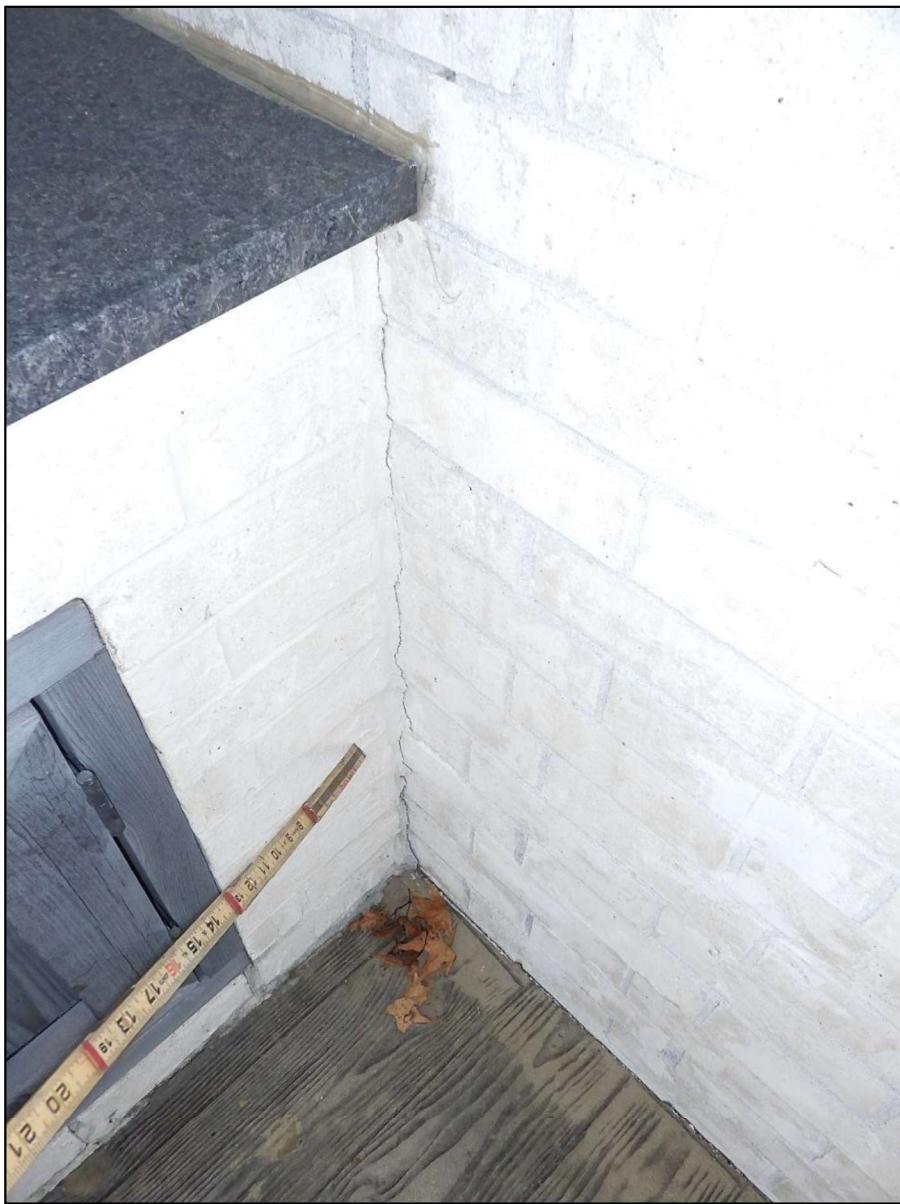
Photograph 14

The OLA patio deck was sloped to the southwest approximately 2 to 3 inches.



Photograph 15

There were cracks in the brick veneer wall where the OLA kitchen area joined the west wall of the porch.



Photograph 16

The brick veneer wall on the OLA was cracked at the north side of the porch.



Photograph 17

There was a crack in the mortar of the soldier brick course above north door lintel of the OLA porch.



Photograph 18

A relative elevation survey of the back yard was performed with the finished floor used as a benchmark.



Photograph 19

A relative elevation survey of the back yard showed the undisturbed (native) soil along the west fence line to be 3 to 5 feet below the finished floor elevation.



Photograph 20

There were isolated stair-step cracks in the mortar of the brick veneer on the north, east, and west sides of the residence.



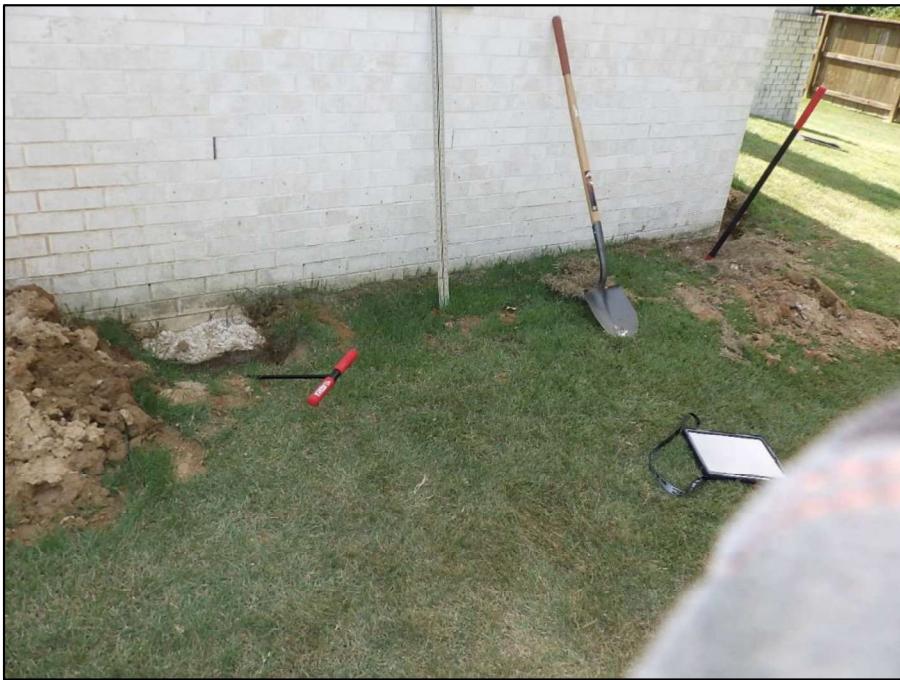
Photograph 21

There were isolated vertical cracks in the brick veneer on the north, east, and west sides of the residence.



Photograph 22

There were three excavations at the footings around the perimeter of the residence.



Photograph 23

Two of the three excavations had visible voids and/or honeycombing concrete.



Section V
ATTACHMENT B

Curriculum Vitae



Bob Kendall, P.E.

Senior Consultant

8420 Wolf Lake Drive, Suite #110
Bartlett, TN 38133



Background

(901) 573-5515

bobby.kendall@rimkus.com

Mr. Bob Kendall holds B.S. and M.S. degrees in Civil Engineering and is a registered professional engineer in Alabama, Arkansas, Florida, Kentucky, Louisiana, Mississippi, Missouri, Tennessee, and Texas. He has an extensive background in facilities planning, design, and construction management services and has combined this expertise with structural and building envelope failure analysis.

Mr. Kendall's extensive professional engineering experience includes assignments as project engineer, construction project manager, and construction administration. He has served on and led project teams for small and large construction projects in higher education, healthcare, municipal, public, and private settings.

Forensic Engagements

• Forensic Assignments

- Various Locations, Damage assessment and analysis of tornadoes, wind, hail, moisture intrusion, structural impacts, blasting/vibration, and construction defects.

Professional Experience

• Rimkus

2025 – Present

- Senior Consultant

Perform property loss consulting for residential, commercial, and industrial structures; structural engineering consulting; and catastrophe services.

• Kendall Brothers Trucking, LLC

2019 – 2025

- Founder and President

Founded and led operations for a small, upstart over-the-road trucking company.

• Methodist LeBonheur Healthcare

2017 – 2019

- Corporate Director, Construction Management

Directed construction of healthcare facilities ranging from interior renovations to new construction of a multi-story hospital tower.

- **Town of Arlington, Tennessee** 2016 – 2017
 - Public Works Director
Directed all Public Works and Engineering operations of the municipality, including roads maintenance; wastewater collection and treatment; stormwater compliance; code enforcement; and construction inspection.
- **Naval Facilities Engineering Command** 2012 – 2016
 - Executive Director, Construction and Facilities
Directed all facilities operations and construction for U.S. Government facilities, including building maintenance; grounds maintenance; water treatment and distribution; high and medium voltage electrical distribution; environmental services and compliance; and renovations and new construction.
- **U.S. Naval Mobile Construction Battalion** 2009 – 2011
 - Project Engineer and Construction Project Manager
Performed project management and project engineer services for various expeditionary and long-term construction projects across the globe including North America, Africa, Europe, and Southwest Asia.
- **U.S. Naval Academy** 2006 – 2009
 - Project Manager and Branch Head
Performed project management and project engineer services for various construction projects at the Navy's Flagship Higher Education Institution, including a \$15 million library renovation; \$22 million dining hall renovation; and \$55 million new construction of NCAA certified athletic fieldhouse.

Education and Certifications

- **Civil Engineering, M.S.:** University of Texas at Austin (2012)
- **Civil Engineering, B.S.:** University of North Florida (2003)
- **Licensed Professional Engineer:** Alabama, Arkansas, Florida, Kentucky, Louisiana, Missouri, Mississippi, Tennessee, and Texas
- **Level I Authorized Person** Association for Certified Rope Accessed Building Assessment Technicians
- **Organizations:** American Society of Civil Engineers (ASCE); Tennessee Society of Professional Engineers (TSPE); Memphis-Area Joint Engineers Council (MJECC) Past Chairman; Society of American Military Engineers (SAME) Past Post-President

Continuing Education

- **Association for Certified Rope Accessed Building Assessment Technicians:** 16 Hours Steep Roof Access Course

Invoice #WSF6

8/16/20

A.F.A. ENGINEERING
P.O. Box 1775, Cordova, TN 38088-1775
(901) 751-2330 e-mail: ahab@bellsouth.net

TO: REGENCY HOMES

RE: Winstead Farms

Acct. No. Lot & Job Description

| | | |
|----------------|----------------------------------|------------------|
| 20-1825 | Lot 6 – Foundation Survey | \$ 250.00 |
| | Finished Floor Elevation | \$ 225.00 |
| | Foundation Inspection | \$ 300.00 |
| | Set Property Corners | \$ 250.00 |

INVOICE TOTAL

\$ 1,025.00

*JW
08/26/2020*

THANK YOU.



REG_001481

AFA CONSULTING LLC

Entity Type: Limited Liability Company (LLC)

Formed in: TENNESSEE

Term of Duration: Perpetual

Managed By: Manager Managed

Series LLC: No

Number of Members: 6 or less

Status: Active

Control Number: 001623148

Initial Filing Date: 2/8/2025 8:46:11 PM

Fiscal Ending Month: December

AR Due Date: 04/01/2026

Obligated Member Entity: No

Registered Agent

UNITED STATES CORPORATION AGENTS, INC. 11285 HIGHWAY 57
5865 RIDGEWAY CENTER PKWY STE 384 MOSCOW, TN 38057
MEMPHIS, TN 38120-4032

Principal Office Address

Mailing Address

11285 HIGHWAY 57
MOSCOW, TN 38057

AR Standing: Good

RA Standing: Good

Other Standing: Good

Revenue Standing: Good

History (1) ^

| Type | Date | Tracking Number | Change History |
|---------------------------------------|---------------------|-----------------|----------------|
| Initial Filing for AFA Consulting LLC | 2/8/2025 8:46:11 PM | B1681-0196 | |

Memphis and Shelby County Code Enforcement Engineered Footing/Foundation Form Letter

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|----------|---------|-------|----|-------------|--------------|
| Permit # | 25-0359 | Lot # | 33 | Subdivision | SUNSET DOWNS |
|----------|---------|-------|----|-------------|--------------|

| | | |
|---------|-------------------|----------|
| Address | 8675 COLLETON WAY | Map Page |
|---------|-------------------|----------|

This is to certify that this firm made a pre-pour inspection of the foundation system at the above location, and that, to the best of my knowledge and belief, said foundation has been built in substantial conformance with the provisions of the minimum design criteria of the adopted codes of Memphis and Shelby County Code Enforcement. Proper grading and drainage is to be constructed and maintained.

Category "C" (Av=.199 or less) OR Category "D" (Av=.20 or more)

The following conditions were observed. Investigation of subsoil conditions is outside the scope of this inspection.

| |
|---|
| <input checked="" type="checkbox"/> The footing is supported on soil that appears to be undisturbed and/or capable of supporting the intended load; however, soil conditions have not been tested by this firm and are not guaranteed. OR The footing is supported on filled ground and is designed to support the intended load. The footing is reinforced with <u>3</u> lines of # <u>4</u> horizontal <input checked="" type="checkbox"/> reinforcing steel <input type="checkbox"/> fiber-reinforced polymer bar Number <u> </u> rebars are placed on <u> </u> inch centers. Termite Treatment was performed by <u>INMAN-MURPHY</u> <input checked="" type="checkbox"/> Post-holes or grade beams were installed. <input checked="" type="checkbox"/> The slab subgrade was covered with a vapor barrier. <input checked="" type="checkbox"/> Welded reinforcing wire 6x6 10/10 was placed over the slab area. OR Fibermesh concrete was used. <input checked="" type="checkbox"/> Finish floor 10 inches, minimum, above the exterior perimeter grades. AM <u> </u> PM <u> </u> on <u> </u> the weather conditions were <u> </u> degrees F +/-. <input type="checkbox"/> clear <input type="checkbox"/> cloudy <input type="checkbox"/> raining <input type="checkbox"/> snowing <input type="checkbox"/> other <u> </u> |
|---|

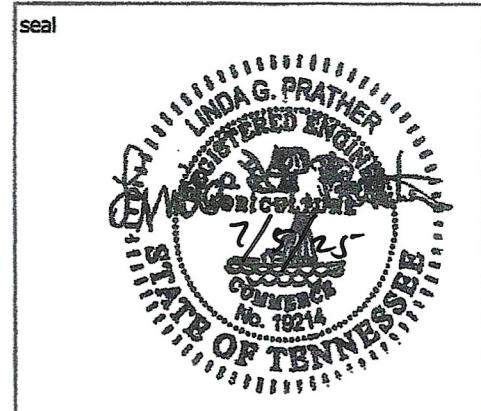
| |
|--|
| <input checked="" type="checkbox"/> monolithic <input checked="" type="checkbox"/> brick ledge AM <input checked="" type="checkbox"/> PM <u>6/16/25</u> on <u> </u> the weather conditions were <u>85</u> degrees F +/-. <input type="checkbox"/> clear <input checked="" type="checkbox"/> cloudy <input type="checkbox"/> raining <input type="checkbox"/> snowing <input type="checkbox"/> other <u> </u> |
|--|

This report is based on observations and information available, known and declared at the date of the inspection. This report is not a warranty of the performance of the foundation or the soils upon which it is built.

AFA Consulting LLC
PO Box 129
Rossville, TN 38066
(901) 553-0291

Linda G. Prather, P.E.

7/5/25
Date



Memphis and Shelby County Code Enforcement Engineered Footing/Foundation Form Letter

| | | | | | |
|----------|---------|-------|-----|-------------|-------------------------|
| Permit # | 25-0171 | Lot # | 143 | Subdivision | GARDENS OF GRAYS HOLLOW |
|----------|---------|-------|-----|-------------|-------------------------|

| | | |
|---------|--------------------------|----------|
| Address | 9606 GRAYS Hollow Dr. S. | Map Page |
|---------|--------------------------|----------|

This is to certify that this firm made a pre-pour inspection of the foundation system at the above location, and that, to the best of my knowledge and belief, said foundation has been built in substantial conformance with the provisions of the minimum design criteria of the adopted codes of Memphis and Shelby County Code Enforcement. Proper grading and drainage is to be constructed and maintained.

Category "C" (Av=.199 or less) OR Category "D" (Av=.20 or more)

The following conditions were observed. Investigation of subsoil conditions is outside the scope of this inspection.

| |
|--|
| <input checked="" type="checkbox"/> The footing is supported on soil that appears to be undisturbed and/or capable of supporting the intended load; however, soil conditions have not been tested by this firm and are not guaranteed. OR <input type="checkbox"/> The footing is supported on filled ground and is designed to support the intended load. The footing is reinforced with <u>3</u> lines of # <u>4</u> horizontal <input checked="" type="checkbox"/> reinforcing steel <input type="checkbox"/> fiber-reinforced polymer bar Number <u> </u> rebars are placed on <u> </u> inch centers. |
| Termite Treatment was performed by <u>Inman-Murphy</u> |
| <input checked="" type="checkbox"/> Post-holes or grade beams were installed. <input checked="" type="checkbox"/> The slab subgrade was covered with a vapor barrier. <input checked="" type="checkbox"/> Welded reinforcing wire 6x6 10/10 was placed over the slab area. OR <input type="checkbox"/> Fibermesh concrete was used. <input checked="" type="checkbox"/> Finish floor 10 inches, minimum, above the exterior perimeter grades. <input type="checkbox"/> AM <u> </u> PM on <u> </u> the weather conditions were <u> </u> degrees F +/-. clear <input type="checkbox"/> cloudy <input type="checkbox"/> raining <input type="checkbox"/> snowing <input type="checkbox"/> other <u> </u> |

| |
|--|
| <input checked="" type="checkbox"/> monolithic <input checked="" type="checkbox"/> brick ledge <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM on <u>5/5/25</u> the weather conditions were <u>69</u> degrees F +/-. <input type="checkbox"/> clear <input checked="" type="checkbox"/> cloudy <input type="checkbox"/> raining <input type="checkbox"/> snowing <input type="checkbox"/> other <u> </u> |
|--|

This report is based on observations and information available, known and declared at the date of the inspection. This report is not a warranty of the performance of the foundation or the soils upon which it is built.

AFA Engineering
PO Box 129
Rossville, TN 38066
(901) 553-0291

Linda G. Prather, P.E.

5/26/25
Date

