

Architecture • Engineering • Forensic Analysis

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Texas Reg. (Eng.) #F-5659

December 23, 2019

Mr. Preston Haygood 1054 W. 43rd Street Houston, TX 77018

RE: 1054 W. 43rd CA File #I19-59

Dear Mr. Haygood:

At your request, I visited your to review the foundation and its performance. This inspection was conducted on December 17, 2019. The prime concern was the reported foundation movement that was reported to you by a foundation company. My inspection was a visual inspection only. There was no demolition or material removal to review within walls or inaccessible areas.

The home at 1054 W. 43rd Street is currently a two-story structure. The original home was a one-story, wood-framed home which appears to be 50-60 years old. This original structure has wood rafters, ceiling joists, and wall framing. The interior finishes include drywall for the walls and ceilings and hardwood floors. The foundation is a concrete slab-on-grade type. It is assumed there are no piers beneath this foundation. The roof is a composition shingle type and the exterior walls are vinyl siding on the original section of the home. In the last 20 +/- years, a two-story structure was added to the back of this original home. This new structure is built of similar construction as the original home with wood framing. The foundation is also a concrete slab-on-grade. The exterior of the addition is clad with a cementitious horizontal siding (Hardie). It is not known whether the slab/foundation for this addition was original to the home as a porch or whether the slab was added when the addition was built.

The review of the home found it to be in in good condition structurally, there was minimal evidence of foundation movement. No drywall cracks were found at doors and windows. Drywall cracks are common evidence of foundation movement. A few doors were slightly out of square but all worked well. The only door which showed any shifting is the door to the exterior at the back of the home. This door is slightly out of square but works well. The only minor drywall crack was a very small corner bead crack at the corner of the stairs. This is barely visible and not indicative of significant foundation movement.

On the exterior, the only signs of some movement was the minor gaps at joints of the Hardie siding of the addition along the east side. These were not indicative of significant movement.



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You did show me a copy of a floor elevation study which was done previously. This plan indicated that the high area of the home at the time of the study was located in the Kitchen/Dining area. The low zone was along the right (east) side of the home. Based upon my visual review, it is my belief this is still the general elevation differential for the foundation.

Based upon my review, it is my professional opinion that the foundation is performing as intended and I do not recommend foundation repairs. There is no interior evidence of foundation movement and the fact that this home is 50+ years old, it is my belief that the original foundation and addition are in very good condition.

The soil in this area of Houston is generally not very expansive. It is known as Gessner-Urban Land Complex. The expansive qualities are relatively low with a Plasticity Index (expansion indicator) of 5-20% in the upper 6-8 feet. In the Houston area, this is very low and indicates the soil will not excessively expand or contract depending upon the moisture content as is commonly found in most areas of the city.

The repairs which I do recommend would be to the windows. The windows in the home are not original. These replacement windows have weep holes at the bottom of the frame. The window frame easily traps leaves and debris if the screens are not in place. This was particularly noticed at the side window of the Master Bedroom. It is suspected this clogged weep hole is the cause of the water infiltration which has caused the damage to the interior (wall and floor). The window frame should be cleaned and weep holes kept clean.

In conclusion, it is my opinion that no foundation work is necessary. Drainage around the back of the home can be improved. All windows should be cleaned of debris. Also, the buildup of leaves on the roof at the junction of the addition should be removed and kept clean. This will help eliminate any water infiltration at the roof level.

Thank you for calling me about this inspection. Should you have any questions, please do not hesitate to call.

Yours very truly,

CHELSEA

Robert M. Taylor, Jr., AIA, P.E.

Principal

RMT:fs

Enclosure - Photos