CRITERIUM®
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OUR 49TH YEAR

May 31, 2019

Will Gruber
745 Francis Avenue
Bexley, OH 43209

RE: Structural Inspection – May 29, 2019
Address: 745 Francis Avenue, Bexley, OH 43209

Dear Will:

At your request observations of the above property were performed by the writer on May 29, 2019. The report that follows has been prepared based on that inspection. The primary purpose of the observations and this report is to evaluate the house foundation.

INTRODUCTION

As you requested, this evaluation is limited in scope, focusing on the listed scope only. A detailed, room by room inspection, and our other, more comprehensive services are not included. These services are part of our standard inspection and are not included in this special evaluation.

This inspection and report do not include code compliance, mold investigations, environmental investigation, indoor air quality analysis, municipal regulatory compliance, subsurface investigation, or records research related to this building.

This inspection report is limited to observations made from visual evidence. No destructive or invasive testing was performed. The report is not to be considered a guarantee of condition and no warranty is implied.

Terms used in this report to describe the condition of observable components and systems are listed and defined below. It should be noted that a term applied to an overall system does not preclude that a part or a section of the system or component may be in different condition.

Excellent - Component or system is in "as new" condition, requiring no rehabilitation, and should perform in full accordance with expected performance.

Good - Component or system is sound and performing its function. Although it may show signs of normal wear and tear, some minor rehabilitation work may be required.

Fair - Component or system falls into one or more of the following categories: a) Evidence of previous repairs not in compliance with commonly accepted standards, b) Workmanship not in compliance with commonly accepted standards, c) Component or system is obsolete, d) Component or system approaching end of expected performance. Repair or replacement is required to prevent further deterioration or to prolong expected life.

Poor - Component or system has either failed or cannot be relied to continue performing its original function as a result of having exceeded its expected performance, excessive deferred maintenance, or state of disrepair. Present condition could contribute or cause the deterioration of other adjoining elements or systems. Repair or replacement is required.

All Ratings are determined by comparison to other buildings of similar age and construction type. Further, some details of workmanship and materials will be examined more closely in higher quality homes where such details of workmanship and materials typically become more relevant.

This inspection and report have been conducted in compliance with the standards of practice of Criterium-Liszkay Engineers and in a manner consistent with that level of care and skill that is ordinarily exercised by members of the profession practicing under similar conditions at the time the services are performed. A copy of the pre-inspection agreement associated with this inspection has been included with this report for your reference.

DESCRIPTION

This house is a one-story residence, consisting of aluminum exterior walls with an asphalt shingle roof surfacing. There is a basement under most of this building. There is a breezeway on a slab on the left side and an attached garage on the far left side.

For purposes of this report, all directions (left, right, rear, etc.) are taken from the viewpoint of an observer standing in front of the building and facing it. For purposes of this report, the building is assumed to face east.

DISCUSSION

The basic construction of this building consists of block foundation walls and a column-girder system for the support of the first floor level joist members. This is a standard method of construction.

Where visible, the foundation walls are generally in fair to poor condition. A number of foundation repairs are needed.

The rear basement wall was bowed inward about 1-3/4 inches. We recommend that steel "I" beams be installed to keep the wall from coming in any further. Typically, the beams are installed between four or five feet on center starting four feet in from the corners. At least nine steel "I" beams will be needed.

The right basement wall (rear section) is bowed inward 3/4 of an inch. The cracks should be patched and watched for future movement. If any future significant movement occurs, steel "I" beams would be recommended.

At the right side at the inner corner, the corner column has been pushed inward at least 1/4 inch. This corner needs to be stabilized and we suspect the wall running to the right of the corner will need to be stabilized (currently blocked by cabinets). We recommend that at least three steel "I" beams be installed.

On the right side (front section), the wall has bowed inward about 1-3/4 inches. The bottom mortar joint has cracked and wall has been pushed inward 1/16 inches (plus or minus). We recommend that at least three steel "I" beams be installed.

The front basement wall (far right section), is cracked. The bottom mortar joint has moved inward about 1/8 of an inch. We recommend that three steel "I" beams be installed.

The front basement wall, to the right of the chimney, is tilted inward about 1/2 inch. At this point in time, steel "I" beams are not needed. Cracks should be patched and watched for future movement.

The left side basement wall was covered with drywall. We saw connection in the floor joist space to indicate "I" beam installations. We cut one six inch square hole in the drywall and did see one "I" beam, however, the connection at the top is improper and needs to be repaired. Three of these connections will need to be repaired. In order to fully evaluate this wall, the drywall should be removed so this engineer can view the entire "I" beam installation and block.

The left basement (rear section), is tilted inward less than 1/4 inch. Any cracks should be patched and watched for future movement.

To conclude, a total of 15 steel "I" beams are needed and, at minimum, the connections at the top of three steel "I" beams need to be repaired.

BASEMENT WETNESS

There was active water seepage along the rear wall, the right wall, and the front wall.

It would be important to try and dry up this basement. We recommend that the gutters and downspouts be fully operational with the downspouts and the underground drains taking the water away from the foundation.

However, if this does not stop the leakage, an interior foundation drain should be considered which would include digging up the interior perimeter of the basement, installing perforated pipe, draining that to a sump pit, then, a sump pump would pump the water out to a proper location. This can be expensive.

CLOSING

A professional engineer's opinion of conditions comprises a declaration of his professional judgment. It does not constitute a warranty, express or implied, nor does it relieve any other party of their responsibility to abide by contract documents, applicable codes, standards, regulations and ordinances.

This report has been prepared in strict confidence with you as our client. No reproduction or re-use is permitted without express written consent. Further, we will not release this report to anyone without your permission.

We encourage you to call with any additional questions you may have.

Thank you for the opportunity to be of assistance to you.

Sincerely,

Donald W. Liszkay, P.E.
P.E. License #: E-45479 State of Ohio

DWL/mcf
Enclosures
Agreement for services