



Structural Inspection

December 4, 2012

For: June Whitehead
2018 6th Street
Slidell, LA 70458

Construction:

Single-story, wood frame with brick veneer and composition shingle roof on a conventional foundation

Scope:

This inspection is limited to a visual inspection of the shell of the home, including the interior and exterior foundation of the residence. No inspection of the mechanical or electrical systems was performed. This report is as outlined by the National Academy of Building Inspection Engineers Standards and Practices for Residential and Small Building Property Condition Surveys. This report is not an explanation of cause, effect, or engineering.

History:

Christine Barnhill with BillBar Construction contacted Dammon Engineering requesting a structural inspection of the referenced home due to cracks in the foundation and brick veneer noted after hurricane Isaac.

Findings:

There is a wide crack that runs from the front of the home to the rear of the home. The crack has separated the slab approximately large enough to fit the thickness of a quarter inside the crack. Other spider, minor stress cracks were found in the slab but without separation. A visual inspection outside of the residence did reveal cracks in the mortar between the bricks. The exterior foundation, above grade, at the ends of the crack, displays surface cracks in the concrete beam from the top of the beam to ground level; the grade beam could not be inspected below the surface of the ground. These cracks extend into the mortar directly above and around the crack.

Several trees with extensive root systems were noted around the perimeter of the foundation.

Analysis:

There are several circumstances adversely affecting this foundation.

This inspection is limited to the apparent visual conditions of the structural components of this building. It does not cover, nor attempts to cover, any components, items, and/or conditions which, by their nature or location, are concealed or are difficult or hazardous to inspect, or which require the moving of furniture, flooring materials, rugs, fixtures, appliances, or any component-part nailed, bolted, or screwed down or shut. No opinions are expressed regarding conditions which could be discovered only by the disassembly of any component parts, special testing, or removal of any concealing objects.

Inspections are made under normal weather conditions, and are not opinions of the conditions of the property and/or structure which may exist under unusual weather conditions, such as, but not limited to floods, heavy rains or snows, high winds, temperature extremes, or any act of God. Specific hazardous wastes, toxic substances, toxic mold, air and water quality, communicable diseases, asbestos, soil, environmental, radon, carbon monoxide, formaldehyde, building code and termite conditions are not included in this report unless otherwise stipulated.

This report is not a warranty or guarantee of the property inspected, but it is our opinion of its condition at the time inspected. Our liability shall be limited to reimbursement of the total cost of inspection.

This foundation has been subjected to several floods in the last seven years. When a foundation is flooded and water gets beneath the slab, the water causes additional soil compaction and the subsequent receding floodwater often leaves a void between the soil and the foundation. Over time the foundation settles until it hits the lower level of the soil, often resulting in cracking of the foundation.

In addition to the several major floods to which this foundation has been subjected, there also appear to be numerous low areas in the soil around the home. These low areas trap rain water and prevent it from draining away from the foundation.

Structures typically show signs of settlement in the sheetrock at the heads of doorframes and windows; this is due to the fact that they offer minimal structural support. During the inspection no stress cracks were found around these areas and it did not appear that they were patched/fixed to cover-up settlement at the time of the inspection.

Conclusion:

Houses foundations all settle. Usually everything settles together, and the fastest rate of settlement occurs in the first year after construction. By the fifth or sixth year the settlement has exponentially slowed to where there is little danger that something will happen unless caused by weather, expansion & contraction, tree roots, improper drainage, etc.

The cracks in the slab do not appear to have compromised the structural integrity of the home. It is my opinion that the structural integrity of this slab is currently sound but will expand and contract with the ground movement and any additional flooding. It is recommended that a house leveling company be hired to support the foundation and prevent any further movement.

Any tree with a root system that approaches the slab should be removed to prevent any future damage. A concrete contractor should be hired to repair the crack in the slab; the crack in the slab should be sealed with a non-shrinking grout, to prevent insects from entering the home.

The yard should also be re-graded to allow for proper drainage of rainwater away from the foundation.

Sincerely,



Emmett G. (Pete) Dammon, P.E.

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DAMMON ENGINEERING, INC.

Architects & Engineers
554 Old Spanish Trail Slidell, LA 70458 985-649-5832

Invoice

| Date | Invoice # |
|------------|-----------|
| 12/18/2012 | 6279 |

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| Ship To | |
| Ms. June Whitehead 2018 6th Street Slidell, LA 70458 | |
| RE: | 2018 6th Street |

| Description | Qty | Rate | Amount |
|---|--------------|--------|-----------------|
| Structural Inspection & Report for Referenced Project | | 500.00 | 500.00 |
| Happy Holidays! | Total | | \$500.00 |