



## Structural Inspection

July 29, 2015

For: Mr. Jeff Gatlin  
218 Jacqueline Dr.  
Slidell, LA 70458

### Construction:

Two-story, wood frame, vinyl siding veneer, composition shingle roof on a piling type foundation.

### Scope:

This inspection is limited to a visual inspection of the shell of the home, and 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:

Jeff Gatlin contacted Dammon Engineering requesting a structural inspection of the referenced residence due to apparent foundation settlement and bulkhead failure. This home is approximately 42 years of age and has been through several hurricanes. The home is supported on wood pilings with a concrete parking pad underneath the home.

### Findings:

The concrete parking pad under the home is lower than the street. Several places in the concrete pad were noted to have settled around the pilings from a ¼" to ½," which is likely due to rainwater runoff in front of the home draining under the concrete pad. Earth erosion was noted on all sides of the concrete pad.

Gutters and down spouts are installed on the home, which allow the water to drain off the roof. However, the water is only diverted from the roof to the ground surface (only two downspouts in the rear of the home drain into the bayou).

There is a storage shed on a concrete slab at the rear of the home, directly adjacent to the concrete parking pad. A piling in the storage room area has water damage from the top of the piling to approximately halfway down.

The branches from a tree on the left side of the home are hitting the roof and side of the home.

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.

Some of the vinyl siding was noted to be loose. The vinyl siding also has several open holes in it in areas where pipes run through the walls.

A half rotted post was noted in the rear of the concrete pad.

The front left corner concrete pad appears to have broken off.

A section of roof directly above the lift/elevator was missing, with damage to the surrounding area of the roof.

The bulkhead and dock are approximately 15 years old and have deteriorated at the water line.

Analysis:

There are several circumstances adversely affecting this foundation and causing erosion problems. The parking pad area below the home is lower than the surrounding areas, which is allowing all the water runoff from the street and down spouts to collect under the concrete pad. This runoff is eroding the fill all the way down to the bayou. This erosion will cause further settlement of the concrete and eventually rot the pilings out at the base.

The bulkhead is no longer functional for its purpose. It has rotted out at the water line and is now allowing fill, pushed in from the front of the home to the rear, to drain into the bayou.

Over the years, water runoff from various places has caused erosion near the edges of the concrete pad.

Gutters and down spouts are not installed correctly to the rear of the home. The lack of proper drainage has caused additional erosion under the concrete pad.

A water leak near the top of a piling in the storage area has rotted the piling.

The vinyl siding has several open holes in it where pipes run through the wall and are letting water run into the wall, causing rot.

The half rotten post in the rear of the home is letting water drain beneath the concrete pad, causing erosion.

Over the years of earth erosion the front left concrete pad has failed and broken off.

The shed in the rear of the home is blocking drainage.

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Conclusion:

The concrete pad will continue to settle with any ground movement and may experience adverse settlement if water runoff continues to accumulate and/or drain under the home.

Recommendations:

- 1) Remove the storage building in the rear of home.
- 2) Install French Drains on three sides of the home to keep the water shed away from the concrete pad and drain to the bayou.
- 3) Connect down spouts to subsurface drainage that allow the water to drain to the bayou.
- 4) Install a new sheet vinyl bulkhead and dock.
- 5) Seal off all holes in the concrete pad to keep water out.
- 6) Reattach and seal off all holes in vinyl siding to keep water out.
- 7) Backfill under the concrete pad to provide a solid base.
- 8) Repair any damaged concrete and seal around pilings to keep water out.
- 9) After removal of lift/elevator, repair/replace damaged roof over that area.
- 10) Remove the tree on the left side of the home to prevent damage to the roof and siding during storms.

Sincerely,

Brian A Mistich P.E.  
La License No. 30187

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