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August 31, 1998

Mrs. Angela H. Chakeris c/o Hewitt & Hewitt P.O. Box 492 Charleston, SC 29402

> in re: 10 Ashley Avenue Structural Inspection

Dear Mrs. Chakeris,

Confirming our conversations:

On the morning of August 29, 1998, I inspected portions of 10 Ashley Avenue. The purpose of that inspection was to provide information on the structural characteristics of the house.

The inspection included the exterior, portions of the interior, portions of the attic and the crawl space.

10 Ashley Avenue is a brick veneer house, approximately 60 years old.

Exterior

The brick veneer is damaged in many places. The brick veneer has many cracks, etc. There is a bulge at the north wall near the front. There is a separation at the area over the package unit at the rear (this corresponds to a separation at the rear porch door).

Many of the steel window lintels are rusted causing the brick veneer to crack.

The mortar has failed in many places. The mortar has been pointed up is many places.

Please note that the ground has settled from around the house. See drive way slab next to side steps. This type of subsidence is common in the landfill areas on the west side of Charleston.

<u>Interior</u>

The floors are uneven.

There is efflorescence at the wall behind the piano. Mrs. Hamrick explained that the substrate is a brick wall from when the porch was enclosed. This condition is caused from water or moisture "wicking" through the masonry foundations and brick wall to the plaster. The moisture is seeking to balance the low humidity typically found in a building's interior. I do not know of a solution to this problem.

Attic

The attic insulation is poor. The cellulose insulation varies from non-existent to perhaps 4". The attic should be cleaned out and contemporary insulation installed.

Crawl Space

Based on my experience, I anticipated seeing exposed grade beams under the house. Fill has been installed covering the concrete foundations. I am concerned that the concrete grade beams are damaged due to rusting reinforcement.

The spacing of the floor joists is 24" on center. This is unusual. Furthermore the diagonal bridging was never fastened off.

The crawl space is subject to flooding. There are high water marks on the ductwork and the brick skirt wall.

My opinion is that there has been widespread termite damage. I found replacements at the subfloor, wiped down shelter tubes, etc.

My perception is that the center girder, especially at the front, has settled more than the side girders. There is a crack in the skirt wall at the former front porch.

There is a pier under the opening from the foyer to the Living Room that has the top portion removed and replaced with 4x4 construction. This is not a workmanlike repair.

There is a gap between the pier under the Foyer/Kitchen wall and the house framing.

A floor joist at the Living Room (#5 from band girder) needs to be reinforced. The adjacent subfloor needs to be checked and repaired as needed.

There appears to be water entry at the side girder (the one with the sunglasses on top) at the Dining Room. I think this girder was replaced once before and is already suffering from some fiber crushing.

The center girder behind the flue foundation is broken.

The ductwork gets partially flooded from time to time.

The vapor barrier should be removed.

Check girder at north side for termite damage.

My opinion is that the foundation system needs to be uncovered (grade beams) and a comprehensive engineering evaluation be made of the entire grade beam, piers, and wood framing; and necessary repairs made.

Should you have any questions, please call.

Russell A. Rosen, P.E.

RAR/rar

Very truly ye

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