WRIGHT, PADGETT & ASSOCIATES, INC.

FORENSIC • GEOTECHNICAL • MATERIALS • STRUCTURAL & ENVIRONMENTAL ENGINEERS

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September 2, 1998

Mrs. Barbara Bell
512 Kimberly Road
Warner Robins, GA 31088

RE: 10 Ashley Avenue; Charleston, SC
WPA Project #98-186

Dear Mrs. Bell:

As requested, I have inspected portions of the above residence. The purpose of my visit was to ascertain the general structural conditions. I have also received the August 31, 1998 report by Rosen and Associates, Inc. and the June 9, 1998 report by Building Inspection Services.

The structure is a two-story, brick veneer residence. The site is located at the west side of the peninsula of Charleston in an area known to be generally underlain by soft, marsh type soil deposits. Reportedly, the structure is approximately 60 years old.

In viewing the exterior brick veneer, the only area of foundation subsidence is the front, left (from the street) corner. It is probable that the subsequent construction and the added weight of the front stoop precipitated the movement. The total downward movement appeared to me to be on the order of ¼ to ½ inch. This settlement occurred quite some time back and it is probable that any future additional movement will be small. It is recommended, however, that the open brick cracks and open window joints be closed by repointing and resealing, respectively.

I also observed an outward bulge of the brick of the front elevation. Reportedly, this bulge occurred during Hugo. This represents a plausible explanation since this area was under considerable flood water during Hugo. In essence, the water would have filled the crawl space (and higher) but once the flood water receded, the crawl space would have retained water for a period of time. The resulting hydrostatic pressures are certainly sufficient to the cause this type of movement.

At this time this wall appears to be stable. I would recommend that it be tied back to the wood structure at the floor line. This could be accomplished by use of anchors epoxied into the brick.

In reviewing the crawl space area, two piers were observed which require reworking. They should be repaired by the addition of bricks, mortar and pressure treated wood plates. I would also recommend that maintenance be performed on the other piers and foundation walls where the weathering of the mortar has caused significant loss of bond strength. This can be remedied by simple tuck–pointing in most cases.

The slope in the floors are related to the piers mentioned above, a deflected girder adjacent to the dining room area, a minor amount of deterioration of the bearings for the wood framing system, and overall long term deflections of the wood framing members. I would also point out that the exterior brick has been maintained over the years as evidenced by the many ages and appearances of the mortar joints.

Otherwise, the general structural condition is good. Provided that the above repairs are adequately attended to and that future maintenance be consistent, I would expect the structure to perform well into the future.

Should we be able to assist further, please call.

Sincerely,

WRIGHT, PADGETT & ASSOCIATES, INC.

Theodore G. Padgett, Jr., PE
Senior Engineer