



From

Tucker Engineering, Inc.
1311 Chisholm Trail, Ste 303
Round Rock, Texas 78681
Registration F-8611

To

Victor Carrasco

Regarding

Reference Number 38155
Issued August 18, 2020
Inspected August 14, 2020
169 Elm Creek Road,
Rockdale, Texas 76567

Structural Inspection Report

Type of Structure

This is a one-story, wood frame, single family house with brick veneer around the exterior. The foundation is a monolithic concrete slab-on-grade reinforced with conventional steel bars. The roof structure is conventionally framed in gable configurations and is covered with asphalt shingles. The lot slopes from the right-rear down slightly to the left-front.

Observations

Foundation

Damages were observed around the house as follows:

1. Exterior
 - a. Front
 - i. A patched brick veneer crack between the archway and the garage door.
 - ii. A hairline brick veneer crack above the front door.
 - iii. A corner spall at the left side.
 - iv. A 1/32-inch brick veneer crack above the left living room window.
 - b. Left
 - i. A 1/64-inch brick veneer crack next to the garage A/C unit.
 - ii. A 1/64-inch brick veneer crack under the window near the middle.

- c. Right
 - i. A corner spall at the rear.
 - ii. A patched brick veneer crack at the rear corner of the fireplace.
 - d. Rear
 - i. A hairline brick veneer crack under the kitchen window.
- 2. Interior
 - a. Foyer
 - i. A hairline sheetrock crack in the ceiling.
 - ii. A 1/64-inch sheetrock crack above the door.
 - iii. A 1/64-inch tile crack near the door.
 - b. Living Room
 - i. A corner bead pop at the wall and ceiling intersection on the left and right sides.
 - ii. A corner bead pop at the right-rear corner.
 - iii. A 1/32-inch sheetrock crack above the right window.
 - iv. A 1/64-inch sheetrock crack below the left window.
 - v. A 1/64-inch sheetrock crack at the top right corner of the opening to the kitchen.
 - c. Kitchen/Dining Room
 - i. A patched crack above the back door.
 - d. Bedroom Hallway
 - i. A 1/64-inch sheetrock crack above the door.
 - ii. A hairline sheetrock crack in the ceiling near the front bedroom.
 - iii. A hairline sheetrock crack next to the closet door.
 - e. Master Bedroom
 - i. 1/64-inch sheetrock cracks above the bathroom opening.
 - ii. Hairline sheetrock cracks around the back window.
 - iii. A hairline sheetrock crack above the door.
 - iv. A hairline sheetrock crack above the closet door.
 - f. Master Bathroom
 - i. A 1/64-inch sheetrock crack above the water closet door.
 - g. Left-Rear Bedroom
 - i. A hairline sheetrock crack in the ceiling near the door.
 - ii. Hairline sheetrock cracks around the windows.
 - h. Front-Left Bedroom
 - i. A hairline sheetrock crack in the front wall.
 - ii. A hairline sheetrock crack below the window.
 - iii. A hairline sheetrock crack above the closet door.

- i. Hall Bathroom
 - i. A tile crack near the toilet.

Measurements were taken inside the house and it was determined that the foundation deflects downwards as follows:

1. From the left-rear corner of the left-rear bedroom down to the front-right corner of the same room with a deformation of 0.8 inches.
2. From the middle of the bedroom hallway down to the back of the garage with a deformation of 0.6 inches.
3. From the left-rear corner of the master bedroom down to the right-rear corner of the master bedroom with a deformation of 0.6 inches.
4. From the right-rear corner of the kitchen down to the left-rear corner of the master bedroom with a deformation of 0.7 inches.
5. From the left-rear corner of the living room down to the left-rear corner of the dining room with a deformation of 0.5 inches.

The soil on this lot was sandy clay loam.

Drainage

The drainage patterns around the house appeared to be satisfactory.

Superstructure

No excessive movements, deflections or any other evidence which would indicate a structural problem with the roof or wall framing of this house were observed.

Conclusions and Recommendations

Foundation

The foundation has experienced movements with deflections and damage as previously described. The magnitude of the deflections is within allowable tolerance, the damages have been fairly minor, the foundation is structurally intact, and the house is safe and livable.

The central Texas area has clay soil, which shrinks and swells with variations in the moisture content. This phenomenon can cause foundations to move and cracks to occur. The homeowner must maintain a constant moisture content in the soil around the foundation in order to reduce foundation movement in the future.

Drainage

No remedial work necessary.

It was dry during the time of the inspection and pooling of water and/or flow of water, which is not apparent at this time, may occur during heavy rains.

Superstructure

No remedial work necessary.

I certify that I (or my representative) made this inspection and have no interest, present or prospective, in this property or anyone involved with this property. I warrant that I (or my representative) visually inspected the components of this property as addressed in this report in a diligent manner and have honestly reported the findings of existing conditions and have made recommendations based on my experience and opinion. Neither Tucker Engineering nor I express or imply any guarantee of specific future structural performance with the limited scope of this inspection; rather, this is my best effort to interpret my observations and develop an opinion as to structural significance. There may be rotten or termite damaged wood that is not visible without destructive investigation. The conditions of the various components of this property described in this report are true as of the date of inspection. Changes may occur in this property after the inspection date, which could make null and void the contents of this report. No other warranty, either expressed or implied, is hereby made.

