



## HEDDERMAN ENGINEERING, INC.

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November 6, 2018

TO: Richard Price

REF: CONDITION OF PROPERTY SURVEY

Dear Mr. Price:

At your request, a visual survey of the house located at 8706 Lupton Lane, Houston, Texas, was made by Mr. Javier Almodovar and Mr. Daniel Koteles.

Transmitted herewith are the structural and mechanical inspection reports stating our professional opinions on whether the items of construction included in the survey are performing their intended function on the day of the inspection, or are in need of repair. The scope of our inspection and other important information, particularly in the area of dispute resolution should a question arise, is contained in our Service Agreement, which has been included at the end of this report.

Thank you for asking HEDDERMAN ENGINEERING, INC. to perform this important inspection work for you. If you have any questions after reviewing this report, please feel free to call me at my office.

At your service,

HEDDERMAN ENGINEERING, INC.  
Tim Hedderman, President



**8706 Lupton Lane**

## **INTRODUCTION**

The purpose and scope of the inspection are detailed below, as well as in the executed Service Agreement at the end of this report. Also included are the limitations of the inspection.

## **PURPOSE**

The purpose of the inspection was to view the components of the house included in the inspection and to give our opinions on whether or not these specific items were functioning at the time of the inspection, or were in need of repair. Although this report may include observations of some building code violations, total compliance with structural, mechanical, plumbing, electrical codes, specifications, and/or legal requirements is specifically excluded. This also applies to all non-code making bodies, including but not limited to, the Brick Institute of America and the Texas Lathing and Plastering Contractors Association and their respective recommendations of building construction details. **We do not perform “code” inspections**, and since building codes change every few years, our inspections are **not** done with the intention of

bringing every item in the house into compliance with current code requirements. Rather, the standard of our inspections is a performance standard to determine if the items inspected are functioning at the time of the inspection, or if they are in need of repair. This is particularly applicable to Home Warranty policies, where the standards of the Home Warranty service company may differ than the scope of our stated performance standard for judging whether a piece of equipment is functional or in need of repair. If you intend to rely on a Home Warranty policy, then it is recommended that you **contact the Home Warranty company of your choice for a more in-depth analysis of what may be required to meet their standards should a claim be made against their policy.** It has been our experience that Home Warranty companies may require the equipment to be in total compliance with current code (even if it was installed before the current code was adopted) to be covered under their policy, and if so, it is recommended that you contact the appropriate service companies for a code compliance certification inspection.

This report is provided solely for the use of the person to whom this report is addressed, and is in no way intended or authorized to be used by a third party, who may have different requirements, and to whom we have not contracted to perform the inspection. If a third party chooses to use this inspection report, they do so without HEDDERMAN ENGINEERING, INC. permission or authorization, and they do so at their own risk.

It is our purpose to provide information on the condition of the house on the day of the inspection. It is not our purpose to provide discussions or recommendations concerning the future maintenance of any part of the house, or to verify the adequacy and/or design of any component of the house. It is pointed out that other engineers/inspectors may have contrasting opinions to those given in this report.

Items that we find that in our opinion are in need of repair will typically include the recommendation to **Obtain a Cost Estimate** from qualified contractors. The scope and cost of the actual repairs can vary significantly from company to company, and it is your responsibility to see that the scope of work needed and actual cost of repairs is confirmed by contacting one or more qualified service companies **before your option period ends or before closing on the property.** This report may also contain informational items which are included as a courtesy to help you become more aware of the condition of the house.

In the performance of this inspection, HEDDERMAN ENGINEERING, INC. has acted as an engineering consultant subject to the standards of the State Board for Professional Engineers.

## **SCOPE**

The scope of the inspection included limited, visual observations at the interior and exterior of the structure. Only those items readily visible and accessible at the time of the inspection were viewed and are included in this report. Any items causing visual obstruction, including, but not limited to furniture, furnishings, floor or wall coverings,

pictures, foliage, registers and grills on HVAC ductwork, soil, appliances, insulation, etc., were not moved.

The basis of our opinions will be the apparent performance of that portion of the house readily visible at the time of the inspection. Disassembly or removal of any portion of the structure, mechanical equipment, plumbing equipment, or electrical equipment is beyond the scope of this inspection.

There is no warranty or guarantee, either expressed or implied, regarding the habitability, future performance, life, insurability, merchantability, workmanship, and/or need for repair of any item inspected.

The components of the house included in scope of the inspection, if present and applicable, include:

- Structural: Foundation, primary load-carrying framing members, roof surface, water penetration, and miscellaneous items related to the house.
- Mechanical: Air conditioning and heating systems, water heaters, built-in kitchen appliances, and garage door openers.
- Plumbing: Water and gas supply lines, sinks, toilets, tubs, showers, visible drain lines inside the house, and vents.
- Electrical: Service entrance conductors, electric meter, distribution panel, visible wiring, light fixtures, switches, and receptacle outlets.
- Sprinkler: Control panel, solenoid valves, backflow prevention device(s), piping, and sprayer heads.
- Pool: The basin, deck, pumps, filters, piping, heater, and electrical.

Items specifically excluded from our inspection include:

- Tainted and Corrosive sheetrock (Chinese Sheetrock),
- All pests, wood destroying insects, conducive conditions, ants, or rodents.
- All equipment related to mosquito control.
- All items related to major geological conditions such as faults or subsidence.
- All underground piping, including water, sewer, and gas piping.
- Water softening and water treatment systems.
- Identifying products that have been recalled.
- Pressure testing of gas system.
- All low voltage lighting systems and/or photocells.
- All low voltage data systems such as telephone, cable TV or data lines.
- All fire detection, carbon monoxide, smoke alarms and/or security alarm systems.
- All environmental hazards, or any toxic/hazardous materials including, but not

limited to: radon gas, lead, formaldehyde, electromagnetic, any and all items related to asbestos.

A backup generator and transfer switch panel.

Any electrical load analysis on the electrical system to determine adequacy of the service or any branch circuit.

If you desire information or inspections concerning the items listed above, or any other items, then it is recommended that you contact the appropriate service companies.

Also excluded from the scope of the inspection are any and all items related to mold and/or all microbial substances. Due to the current limitations of coverage on most homes by the insurance industry in Texas, where damages due to mold and/or other microbial substances may not be covered, we routinely recommend that you have a mold inspection by a qualified professional before you close on the house.

Built-in appliances and mechanical equipment were operated in at least one, but not all, of their operating modes, where possible. If you desire for every operating mode of each piece of equipment to be operationally checked, then it is recommended that you contact a service company. Equipment and materials that are not visible, including structural components, underground plumbing and gas lines, and all other items not normally available for ready viewing, are excluded from the scope of this inspection. If you desire an inspection on the underground plumbing pipes or a hydrostatic test to determine if the plumbing pipes are leaking under the house, then it is recommended that you contact a plumber. No electrical circuit or load analysis will be performed on the electrical system.

We make no representation regarding the condition of this house other than as contained in this written report. Any verbal discussions concerning this house that were made at the time of the inspection, and not contained in this written report, are not to be relied upon.

Although the structural portion of this inspection was made by an engineer, it cannot be considered to be a formal engineering study since no calculations, structural analysis, or physical material testing were performed. If engineering drawings/specifications have been made available during this inspection and, if they have been viewed, it is pointed out that all such viewing is strictly cursory, and in no way should our cursory examination be construed as providing engineering judgments concerning the adequacy or acceptability of the drawings/specifications.

It is pointed out that it is possible for latent defects to exist in the structure and its related equipment, underground piping, and systems that are not visible at the time of the inspection, and may not be able to be viewed during a limited visual inspection. This is particularly applicable in items relating to water, such as roof leak, water penetration conditions, etc., where the condition may exist, but not be visible at the time of the inspection (e.g. where it has not rained for a period of time, allowing materials time to dry out). HEDDERMAN ENGINEERING, INC. does not claim or warrant that the observations listed in this report represent every condition that may exist. In using the

information supplied by this inspection, one must recognize the limitations of a limited, visual inspection, and accept the inherent risk involved.

It is recommended that you obtain as much history as is available concerning this house. This historical information may include copies of any seller's disclosures, previous inspection or engineering reports, building drawings and/or specifications, bids to perform repair work on the house, knowledge of any drainage problems, receipts from repair work that has been performed, reports performed for or by relocation companies, municipal inspection departments, lenders, insurers, and appraisers. You should attempt to determine whether repairs, renovation, remodeling, additions or other such activities have taken place at this house.

## **DESCRIPTION OF HOUSE**

The house was a two story wood frame dwelling with brick veneer and hardcoat stucco veneer, a composition shingle roof, and was supported on a monolithic slab on grade concrete foundation. The house had a two car attached garage. The house was occupied at the time of the inspection, and the house, according to HCAD, was built in 2008.

**FOR THE PURPOSES OF THIS INSPECTION, NORTH WILL BE ASSUMED TO BE FROM THE FRONT OF THE HOUSE TOWARDS THE REAR.**

# **STRUCTURAL**

## **FOUNDATION**

### Description

The foundation was a concrete slab on grade, and appeared to be reinforced with steel reinforcing rods (rebar).

## **EVIDENCES OF DIFFERENTIAL MOVEMENT**

Note that it is not HEI's purpose to exhaustively document each and every evidence that may be related to foundation movement, but rather to document a representative sample and/or the most significant evidences of movement upon which we base our opinion on the condition of the foundation.

### Levelness

The floors were checked with an electronic level, and were observed to be acceptably level throughout the house. The difference in elevation between the high point and low

point was 1.6 inches on the first floor; and 2.1 inches on the second floor. The first floor high point was located at the dining room, and the low point was located at the study. The unlevelness takes place over a horizontal distance of approximately 50-60 feet.

Note also that elevation readings taken at the garage area are relatively large numbers relative to the reference point due to the step down into the garage area.

See our field sketch showing the elevation readings at the end of this report. Note that the "R" on the sketch is our randomly chosen starting reference point, where the elevation is 0, and all other elevation readings are taken relative to the reference point, and are measured in inches to the nearest 1/10 inch.

We typically point out that foundations are rarely constructed perfectly level, so most properties have some unlevelness (typically 3/4 to 1-1/2 inches) built into the foundation as part of original construction. We have no knowledge as to how much unlevelness was built into this house foundation during original construction.

### Veneer Cracks

Cracks in the exterior veneer were minimal in number and degree. It is recommended to repair all the visible cracks.



Front of the house



Front of the house



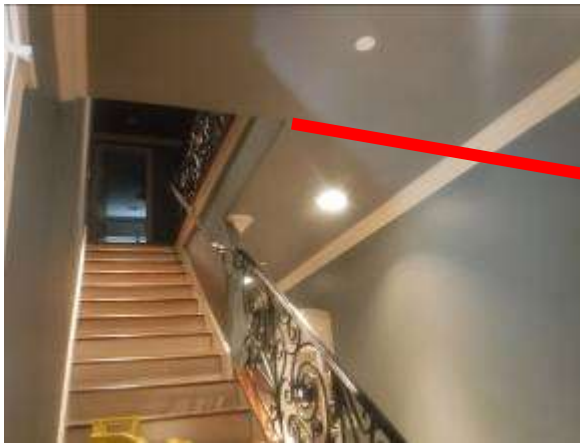


Rear of the house



### Sheetrock Cracks

Sheetrock cracks were observed, including at the 2<sup>nd</sup> floor southeast bedroom, stairs, game room, and the 2<sup>nd</sup> floor west bedroom. It is recommended to repair all the visible cracks.



Stairs



Game room







2<sup>nd</sup> floor west bedroom

### Concrete Cracks

Cracking of the foundation concrete exists in virtually all foundations. It is pointed out that cracking is a normal property of concrete and other brittle materials, and Hedderman Engineering, Inc. assumes no responsibility should cracks be found that are not mentioned in this report. Some cracking was observed in this concrete foundation, including at the garage floor.



The corner of the foundation was observed to be chipped at the southwest corner. This condition is typically caused by differences in thermal expansion between the brick veneer and the concrete foundation. Also, this condition can be caused by a lack of reinforcement in the corner of the foundation during original construction. In our opinion, this condition does not affect the overall structural integrity of the foundation.



### Separations of Materials

- \* Some separations and differential movement of materials due to differential foundation movement were observed, including the following:
  - Doors that would not latch due to misalignment of the striker plate and the locking mechanism were observed at the master closet, and the 2<sup>nd</sup> floor southwest bedroom closet.

### OTHER OBSERVATIONS

Trees and/or foliage were observed in the vicinity of the house which can contribute significantly to differential movement of the house foundation. Care should be taken to prevent the trees and foliage from removing an excessive amount of water from near the foundation of the house.

### FOUNDATION CONCLUSIONS

Most of the structures previously inspected by this firm have experienced some degree of differential foundation movement, and this structure was no exception. After careful examination, it is our opinion that the evidences of movement observed do not indicate excessive or unusual foundation settlement. However, the foundation showed evidences of some differential movement.

After careful examination, it is our opinion that the overall degree of the existing foundation movement for this structure is moderate, and is acceptable for a house of this age and type construction. The foundation is, in our opinion, performing its function, and is not in need of releveling.

As a routine recommendation, it is recommended that the evidences of differential movement be monitored in the future to determine if the condition is stabilized, or if the foundation is continuing to settle. It is pointed out for your information that, due to the nature of the soils in this area, it is reasonable to expect that some movement of the

foundation will happen in the future. It is also recommended that the soil around the foundation be kept moist by a regular watering program as the condition of the soil indicates.

### Perimeter Grading/Drainage

This inspection does not include determining if the property is in the 100 year flood plain. For further information regarding elevation of this lot check with your survey and/or an appraiser.

The perimeter drainage around the property appeared to generally be adequate. However, low areas were observed at the rear of the breakfast area where it is obvious that water pools after it rains. Have a service company provide a solution and cost estimate to eliminate the standing water.

**Obtain Cost Estimate**



### Underground Drainage

The underground drainage system at the rear of the house was checked by running water into the drain for approximately 15 minutes, and the system was observed to be draining properly to the street.

## **ROOF**

### Life expectancy

The roof surface was constructed of composition shingles. The life expectancy of a composition shingle roof has been observed to vary from 15 to 20 years, with most requiring replacement at about 17-20 years. We estimate that the age of the roof is approximately 10 years old.



### Observations

After observing the interior of the structure, evidences of roof leaks were not visible. The absence of evidences of roof leaks does not guarantee that roof leaks were not present; rather, that no evidences of leaking were visible at the time of the inspection.

### WEAR AND DETERIORATION

The composition roof surface was showing evidences of deterioration, including shingles that were discolored, and starting to lose their aggregate.



Other conditions observed during the course of the inspection related to the roof surface included the following:

- \* Tree limbs were observed to be touching the roof, and need to be trimmed back to prevent them from rubbing across the roof surface.  
**Obtain Cost Estimate**



- \* The roof decking was observed to be “Tech-Shield” which is a radiant barrier roof decking that has aluminum foil on the underside, which helps to prevent radiated heat from entering the attic. This will, in turn, keep the attic cooler.
- \* It was observed that spacer clips were installed at the joints between the roof decking to allow for expansion of the roof deck.
- \* We observed from the attic space that the shingles were nailed rather than stapled, and that the nails had an adequate penetration through the roof deck.
- \* One of the lead roof jacks at the roof penetrations was not properly folded into the top of the vent pipe since the vent pipe is longer than the roof jack. Have a roofer

make the repairs to the vent pipe and roof jack.

**Obtain Cost Estimate**



- \* The metal flashing at the junction of the low roof and a vertical wall was not secured properly, and can allow wind-blown water to enter the living space. The flashing needs to be resecured to the roof.

**Obtain Cost Estimate**



- \* The metal flashing at some of the roof jacks was not secured properly, and can allow wind-blown water to enter the living space. The flashing needs to be resecured to the roof.

**Obtain Cost Estimate**



- \* The flashing at the static roof vents was not secured properly, and can allow wind-blown water to enter the living space. The flashing needs to be resecured to the roof.

**Obtain Cost Estimate**



- \* The step flashing was not covered with counter flashing at the east side of the house. Contact a roofer to provide the needed repairs.  
**Obtain Cost Estimate**



### Roof Conclusions

The roof is in generally serviceable condition at this time with some repairs needed for the above item(s). Have a roofing contractor provide a cost estimate to make all necessary repairs to bring the roof into a completely serviceable condition.

**Obtain Cost Estimate**

## **STRUCTURAL FRAMING**

### Description

The house was observed to be a two story wood frame structure that includes standard major framing components, including wall studs, ceiling joists, floor joists, and roof



rafters with purlins and strut supports.



### Observations

No deficiencies were observed in the primary load carrying members of the structural framing that were accessible and viewed at the time of the inspection, including the roof framing, load bearing walls, ceilings, and floors. No significant deflections were observed in the roof framing as we were able to look up the plane of the roof from the different sides of the house.

The following item was observed in the primary load carrying members of the structural framing:

- \* Wind uplift or hurricane clips were observed to be installed at the bottom of the roof framing, connecting the roof rafters to the top of the wall framing. Also, we observed metal straps installed over the ridge beam to rafters on both sides of the ridge beam, and also at hip rafters. This provides a stronger structure and will be more resistant to wind uplift from hurricane and tornadoes.

### Conclusions

The primary load carrying members of the structural framing that were accessible and viewed at the time of the inspection were performing their intended function at the time of the inspection, and were not in need of repair.

## **WATER PENETRATION**

No visual evidences of water penetration to the interior of the structure were observed at the time of the inspection. It is pointed out that this statement is based upon the limitations of a visual inspection, without the moving or removal of items causing visual obstruction, including, but not limited to, furniture, furnishings, floor or wall coverings,

foliage, soil, etc.

We checked around all window and door openings with a moisture meter, and found no evidence of elevated moisture at the time of the inspection.

A substantial vulnerability to water penetration was observed at penetrations/openings through the exterior building envelope, and it is recommended that all penetrations/openings be sealed against water penetration. Below is a representative sample of locations and/or photographs showing some, but not necessarily all, locations where there is a vulnerability to water penetration. Have a contractor provide a cost estimate to seal all vulnerable areas against water penetration.

**Obtain Cost Estimate**

- Windows and doors where the caulking was cracked and/or missing.
- Piping penetrations.
- The brick veneer, where cracks were visible that can allow water penetration.





## **FIREPLACE/CHIMNEY**

### Description

The fireplace was a prefabricated metal fireplace with a metal flue pipe that extended through the roof. The firebox was equipped with a ceramic gas log, with a manually operated gas valve.



## Observations

No items requiring repair were observed at the time of the inspection to the operation of the fireplace. The smoke chamber and flue pipe were free from built-up soot, the damper was operational, the ceramic gas log was checked and was functional, and the firebox was properly sealed. While the draw of the chimney was not able to be checked, no evidences of poor draw were visible, such as soot on the front of the fireplace.

It was observed from the attic that the metal chimney flue pipe was in contact with insulation, which can be a fire hazard, and the insulation needs to be removed from the flue pipe, and a two inch air space provided around the vent pipe.

**Obtain Cost Estimate**



## ATTIC

The access ladder was observed to be rated at 350 pound capacity, and the assembly was listed as having been treated with a fire retardant.

The attic had adequate service decking to the equipment, with a walkway that was a minimum of 24 inches wide. In addition, the attic had adequate platform decking at the equipment, with a working platform that was a minimum of 30 inches wide.

The ventilation for the attic included continuous ridge vents at the top of the roof, static roof vents in the roof, one gable vent and continuous soffit vents on the eaves.

The insulation in the attic was average by today's standards. The normal amount of insulation for attics in this area is an R30 energy rating. This attic had 9-1/2 inches of fiberglass batt insulation in the ceiling, which was marked as being an R30.



The insulation in the attic was in contact with the recessed lights, which may be a fire hazard. We saw no evidence on the outside of the recessed cans to indicate that the cans were rated as “IC”, which is the manufacturer designation for “Insulation Contact”. Further investigation is recommended, including dismantling the trim kit in the ceiling below. If the recessed cans are NOT “IC” rated, then the insulation needs to be pulled back, and a three inch air space provided around the lights to prevent overheating and a possible fire hazard.

**Obtain Cost Estimate**



The insulation in the attic was missing from between some of the joists.

**Obtain Cost Estimate**



## **MISCELLANEOUS ITEMS**

### **Doors**

Non-latching doors were in need of adjustment to the striker plate on the door frame were observed.

Locations included: Master closet, and the 2<sup>nd</sup> floor southwest bedroom closet.

**Obtain Cost Estimate**

Doors that were loose weatherstripping were observed.

Locations included: Garage.

**Obtain Cost Estimate**

### **Windows**

Some double pane windows were observed where the seal has broken and allowed moisture between the two panes. Further investigation with a window specialist is recommended concerning the windows to determine the extent of the condition throughout the house.

Locations included: Game room.

**Obtain Cost Estimate**

Windows that were stuck and hard to open were observed.

Locations included: 2<sup>nd</sup> floor southwest bedroom.

**Obtain Cost Estimate**

### **Hardcoat Stucco Veneer**

Please note that our inspection is not a stucco certification, as such an inspection would be much more comprehensive with invasive testing, and would, therefore, cost much more. We do inspect the stucco for visible defects such as cracks and surface damage,

but we cannot see inside the walls or behind the stucco. Caulking around the window and door openings and other changes of materials is particularly important to maintain to prevent moisture intrusion into the walls. If you desire an in-depth stucco inspection, including invasive testing behind the stucco, it is recommended that you contact a stucco specialist.

The stucco veneer was a traditional hardcoat stucco that was approximately  $\frac{3}{4}$ -1 inch thick. Expansion joints were observed in the stucco at regular intervals, and the flashing at the bottom of the stucco walls was observed to be the older J-flashing, rather than the newer weepscreed flashing. A weepscreed has holes in the bottom to allow moisture in the wall a path to exit the wall, rather than being kept inside the wall, and possibly causing mold, mildew, or other moisture related problems.



**Expansion joints**

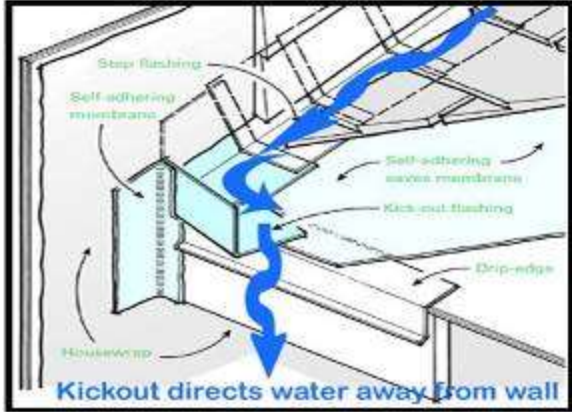


**J-flashing**

## OBSERVATIONS

No kickout flashing has been installed at the roof/wall intersections. A lack of kickout flashing can possibly allow water to be routed off the roof into the wall cavities, causing wood rot, damage from wood destroying insects, mold, etc. We saw no evidence at the time of the inspection of any water penetration at the flashings, and therefore, no repairs are indicated. However, as a routine recommendation, we recommend that a contractor be contacted to provide a cost estimate to install the kickout flashing at all roof/wall intersections to prevent the possibility of water penetration in the future.

**Obtain Cost Estimate**



**Schematic of kickout flashing**



**HEI file photo illustrating kickout flashing**



**Missing kickout flashing**

A possibility of water penetration exists at the stucco veneer at the back porch, where cracks and some rust were visible on the stucco covered beams under a roof section that was heavily coated with caulking. It is recommended that a stucco specialist be contacted to perform invasive inspections by drilling holes at appropriate locations to determine the scope of the damage. Have a contractor provide a cost estimate for any



needed repairs.

**Obtain Cost Estimate**



**Crack and visible rust**



**Crack and visible rust**



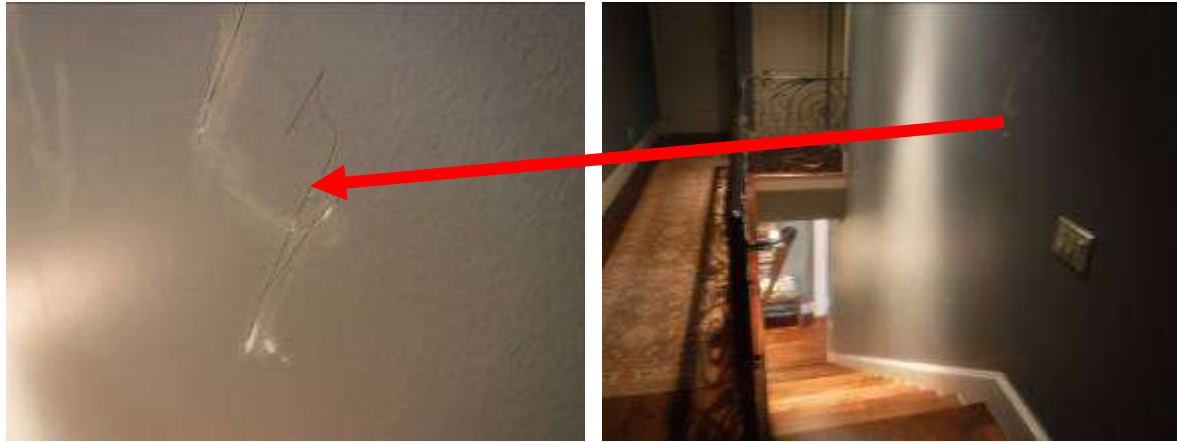
**Roof section covered with caulk**



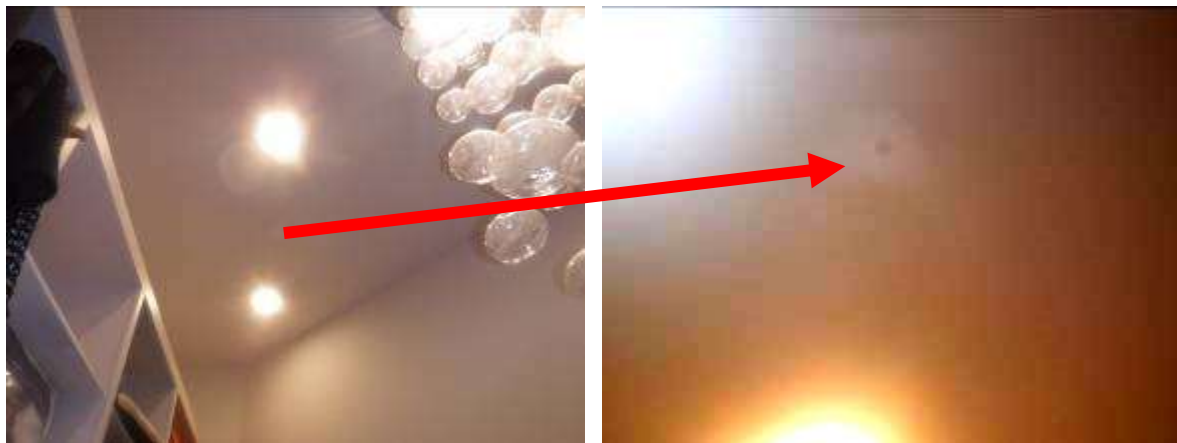
## Miscellaneous Interiors

The sheetrock was damaged and needs to be repaired at the stairs walls.

**Obtain Cost Estimate**

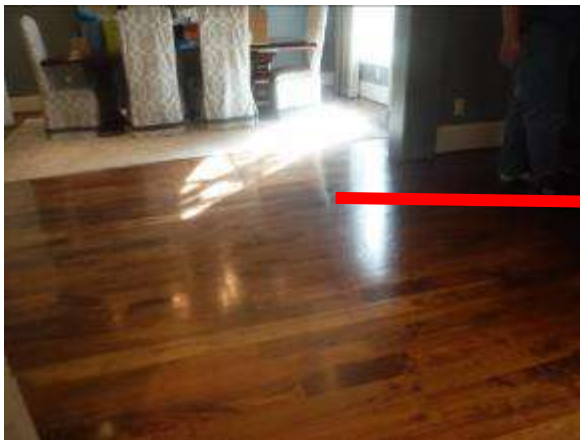


Patches in the sheetrock were seen at the ceiling of the master closet. The cause of the patching could not be determined at the time of the inspection, and further investigation into the cause of the patch with the homeowner is recommended.



The wood floor was scratched through the first floor. Further investigation with a wood floor specialist is recommended.

**Obtain Cost Estimate**



There were many separations at the joints and edges of the crown molding, baseboard, door trim, and window trim throughout the house. The separations appear to be related to drying and shrinking of the wood and caulking rather than to other causes. It is recommended to seal the separations.

**Obtain Cost Estimate**





Water stains were observed at some of the walls of the master bathroom. The stains were checked with a moisture meter, and no higher than normal moisture readings were found. Apparently, the stains are related to the previous use of hot water without the use of the bathroom extractor fan. Not using the extractor fan when using hot water can allow the steam from the hot water to condense on the walls and/or ceiling, leaving water stains on the surface. The fact that the walls and/or ceiling were not wet (no higher than normal moisture readings) at the time of the inspection indicates that the stains appear to be a cosmetic issue.



One of the doors under the master tub was not closing properly and needs to be adjusted.

**Obtain Cost Estimate**



Gaps were visible in between the tiles in front of the fireplace. It is recommended to seal the visible gaps.

**Obtain Cost Estimate**



Mildew was observed on the ceilings of the bathroom and closet at the 2<sup>nd</sup> floor southwest corner of the house. The area with mildew was checked with a moisture meter, and no higher than normal moisture readings were found. Consideration should be given to contact a mold inspector.

**Obtain Cost Estimate**



### **Smoke Detectors**

Smoke detectors were observed to be installed at all required locations in the house, including at all bedrooms, the upstairs hallway, and downstairs hallway. Since alarm systems are omitted from the scope of the inspection, we did not operationally check the smoke alarms.

**R313.2**

### **Garage**

The garage contained stored materials, and much of the floor was not visible.



### **Gutters and Downspouts**

The downspouts were connected to an underground drainage system, which was not checked for performance and/or adequacy.

### **Miscellaneous Exteriors**

Trees limbs and/or bush foliage were touching the house, and the limbs need to be trimmed.

**Obtain Cost Estimate**

Lose tiles were observed at the entrance of the house.

**Obtain Cost Estimate**



The wood fence had rotted boards. The fence is in need of repairs.

**Obtain Cost Estimate**





The rear patio had cracks in the concrete, but the patio is still functional.



The face of the foundation concrete was spalled, and the reinforcing steel used in the construction of the foundation was observed to be exposed. The rust should be removed from the rebar, and the rebar grouted to prevent further deterioration.

Locations included: East side of the house

**Obtain Cost Estimate**



Both of the side gates were in need of repairs since they are sticking.

**Obtain Cost Estimate**



Gaps and cracks were observed on the stone trim in front of the house. It is recommended to re-grout/repair the areas in need.

**Obtain Cost Estimate**





## CLOSE

Opinions and comments stated in this report are based on the apparent performance of the items included within the scope of the inspection, at the time of the inspection. Performance standards are based on the knowledge gained through the experience and professional studies of the inspector. There is no warranty or guarantee, either expressed or implied, regarding the habitability, future performance, life, merchantability, and/or need for repair of any item inspected. It is suggested that it would be a prudent thing to purchase a Home Warranty Policy to protect the appliances and equipment against unforeseen breakdowns during the first year and for preexisting conditions. It is recommended that you research the various options available and protect yourself with a policy. Check with your agent for details and please read our comments concerning Home Warranty policies on page 2 of this report.

As an additional service, we strongly recommend using a new tool we have on our website that can quickly turn your inspection report into an easy-to-read estimate of repairs for a nominal fee. These pricing reports from a third party company called **RepairPricer** not only make the inspection report easy to understand in terms of dollars and cents, but they are also useful negotiation tools. Just visit the page below on our website and upload your report into **RepairPricer**. If you have any questions when you receive your report, you can contact them at [info@repairpricer.com](mailto:info@repairpricer.com) <http://www.heddermanengineering.com/repair-cost-estimates>.

Thank you again for asking HEDDERMAN ENGINEERING, INC. to perform this inspection for you. If you have any questions after reviewing this report, please feel free to call the office. It is emphasized that the executed Service Agreement contract, which has been included at the end of this report, contains a provision under "Dispute Resolution" for you to contact HEI to resolve any disputes.

At your service,

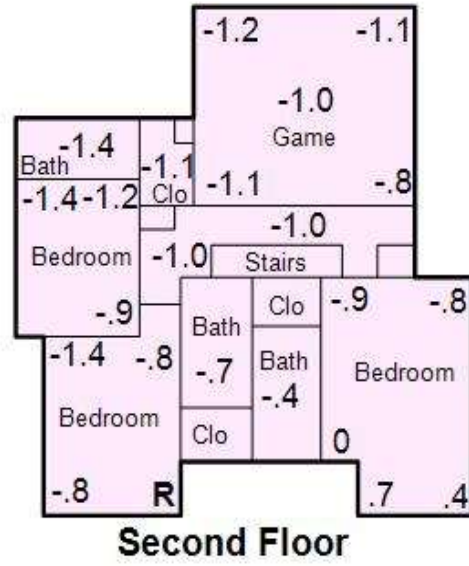
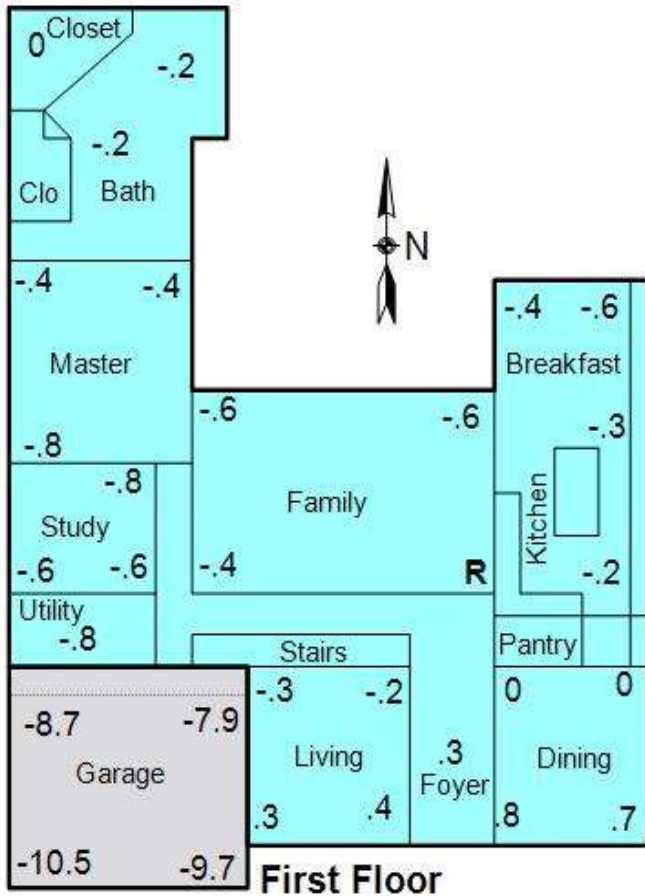


Tim Hedderman  
Registered Professional Engineer #51501  
Texas Firm Number: 7942

11.6.18

HEI

Price



Elevation Readings  
8706 Lupton Lane



# HEDDERMAN ENGINEERING, INC.

www.heddermanengineering.com Office 281-355-9911 Fax 281-355-9903 office@heddermanengineering.com

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## RECEIPT

November 6, 2018

TO: Richard Price

REF: Inspection of the house at 8706 Lupton Lane, Houston, Texas.

Total cost of inspection: \$1,350.00

Total Paid: \$1,350.00

Total Due: - 0 -

**For your records, following is the Service Agreement that you executed for this inspection.**

## **HEDDERMAN ENGINEERING, INC.**

Office: 281-355-9911 Fax: 281-355-9903

[office@heddermanengineering.com](mailto:office@heddermanengineering.com) [www.heddermanengineering.com](http://www.heddermanengineering.com)

### **Real Estate Inspection Service Agreement**

**NOTICE: THIS AGREEMENT IS INTENDED TO BE A LEGALLY BINDING CONTRACT - PLEASE READ IT CAREFULLY**

**DATE OF INSPECTION:** 11/6/2018

**CLIENT NAME:** Richard Price

**PROPERTY ADDRESS:** 8706 Lupton Lane

**COST OF INSPECTION:** \$1,350.00

#### Purpose of inspection

The purpose of the inspection is to view selected accessible components and/or systems, and to inform you, our client, of our observations and professional opinions from a NON-INVASIVE VISUAL SURVEY on whether or not those selected components and/or systems appear to be functioning on the day of the inspection, or appear to be in need of repair. Although this report may include observations of some building code violations, total compliance with structural, mechanical, plumbing, electrical codes, specifications, and/or legal requirements is specifically excluded. HEI does not perform Code inspections. Since building codes change every few years, our inspections are not done with the intention of bringing every item in the house into compliance with current code requirements. Rather, the standard of our inspections is a **PERFORMANCE STANDARD** to determine if the items inspected in the opinion of HEI appear to be functioning at the time of the inspection, or appear to be in need of repair. It is pointed out that other engineers/inspectors may have different opinions to those given in this report. It is also not our purpose to verify the adequacy and/or design of any component of the house.

It is also not within the purpose and/or scope of this report to determine the insurability, habitability, merchantability, future performance, suitability of use, economic life span, or deferred maintenance issues, and/or issues unnamed in this report. This report is not an insurance policy, neither is it an express or implied warranty or guarantee as to future life and/or continued performance of the items inspected. Our inspection and report are intended to express HEI's perceived impression of the apparent performance of the inspected components and systems viewed on the date of the inspection. HEI's intent is to reduce your risk associated with this transaction, however we cannot eliminate all risk, nor assume your risk. Any items pointed out as in need of repair or further investigation should be evaluated by a qualified repair specialist or service company who should provide estimated repair costs **PRIOR TO CLOSING ON THE PROPERTY**. By accepting this agreement, the Client understands that the services provided by HEI are the types of services described in the Professional Services Exemption of the Texas Deceptive Trade Practices-Consumer Protection Act ("DTPA) and agrees that no cause of action exists under the DTPA related to the services provided.

It is recommended that you obtain as much history as is available concerning this property. This historical information may include copies of any seller's disclosures, previous inspection or engineering reports, building drawings and/or specifications, bids to perform repair work on the property, receipts from repair work that has been performed, reports performed for or by relocation companies, municipal inspection departments, lenders, insurers, and appraisers. You should attempt to determine whether repairs, renovations, remodeling, additions or other such activities have taken place at this property.

#### Scope of inspection

The scope of the inspection includes limited, visual observations at the interior and exterior of the structure, the attic (if applicable) as viewed only from the areas determined by the inspector to be safely accessible, the underside of the house (if applicable) as viewed only from the crawlspace areas determined by the inspector to be safely accessible, and the roof as viewed from the ground and/or only from the locations on the roof **if the roof is determined by the inspector to be safely accessible**. Only those items readily accessible and visible at the time of the inspection will be viewed and included in this report. Any items causing visual obstruction, including, but not limited to, furniture, furnishings, floor or wall coverings, registers and grills on HVAC ductwork,, foliage, soil, appliances, stored items, insulation, etc., will not be moved or removed. Only those electrical outlets that are readily accessible will be operationally checked. Disassembly or removal of any portion of the structure, mechanical equipment, plumbing equipment, or electrical equipment is beyond the scope of this inspection.

The components of the property included, if applicable, in the scope of the inspection:

Structural:

Foundation, elevation survey including sketch of house and level readings, primary load-carrying framing members, roof surface, water penetration, grading and drainage, fireplace/chimney, and miscellaneous items related to the house.

Mechanical:

Air conditioning and heating systems, water heater, built-in appliances, and garage door opener.

Plumbing:

Water and gas supply lines that are visible, sinks, toilets, tubs, showers, visible drain lines, and vents.

Electrical:

Service entrance conductors, electric meter, distribution panel, visible wiring, light fixtures, switches, and accessible receptacle outlets.

Lawn Sprinkler:

Control panel, solenoid valves, backflow prevention device, visible piping, and sprayer heads.

Pool:

Basin, deck, tile, pumps, filters, piping, heater, timer, and electrical.

The following items, even if present in the subject property, are not inspected and do not constitute any part of the inspection services to be performed hereunder unless a specific notation is made on this report stating its condition.

Tainted and Corrosive drywall (Chinese Drywall), Clock Timers, Landscape Lighting, Sump Pumps, Wood Destroying Insects/Pests, Antennas, Environmental Hazards, Laundry Equipment, Water Filters, Geological faults/subsidence, Automatic Oven Cleaners, Fire Sprinklers System, Mold/Microbial, Water Wells, Mosquito Misting Systems, Buried/Concealed Plumbing, Fire/Smoke Alarm Systems, Septic Systems, Indoor Air Quality, Asbestos, Low Voltage and data Systems, Lights on Photo-cell/timers, Carbon Monoxide Alarms, and Water Softeners/water treatment systems/reverse osmosis systems with all related piping.

Reinspections:

HEI typically does not perform reinspections on the property. However, if we agree to return to the property, it is with the understanding that we are not certifying the adequacy of any repair work that has been done, and there will be an additional fee charged. This is also true for conditions that are beyond the control of the inspector and hinder the inspector during the inspection, such as inclement weather, lack of adequate access to attics, crawlspaces, or other areas, utilities that are off, non-functional equipment, etc. If a return trip to the house is requested to finish items that were not able to be completed at the time of the originally scheduled inspection, then an additional fee will be charged.

Limitations of Inspection

A visual inspection method will generally produce a competent first impression assessment of the apparent performance of the structural, mechanical, plumbing, and electrical components, provided repairs have not been performed which would cover distress patterns normally produced by problems. Because the inspection procedure is visual only, and is not intended to be diagnostic and/or technically exhaustive, an inherent residual risk remains that undiscovered problems exist and/or future problems will develop.

This report is provided solely for the use of the person to whom this report is addressed, and is in no way intended or authorized to be used by a third party, who may have different requirements, and to whom we have not contracted with to perform an inspection. If a third party chooses to use this inspection report, they do so without HEI's permission or authorization, and they do so at their own risk.

Dispute Resolution

In the event of a complaint concerning the inspection services provided pursuant to this agreement, Client must notify HEI in writing of such complaint within ten (10) business days of the date of Client's actual discovery and thereafter allow a prompt re-inspection of the item relating to the claimed condition. Client further agrees that client and he/she/it's agents, employees or independent contractors **will make no alterations, repairs or replacements to the item complained about prior to a re-inspection by HEI as agreed above. You agree that failure to comply with this procedure shall result in your express release of all claims Client may have against HEI, known and unknown, related to the item complained about and any related alleged act or omission by HEI.**



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**LIMITATION OF LIABILITY:**

In any event the inspector fails to fulfill the obligations under this agreement, CLIENTS EXCLUSIVE REMEDY AT LAW OR IN EQUITY AGAINST INSPECTOR IS LIMITED TO A MAXIMUM RECOVERY OF DAMAGES EQUAL TO THE INSPECTION FEE PAID HEREIN. CLIENT VOLUNTARILY AGREES TO WAIVE THEIR RIGHTS UNDER THE DECEPTIVE TRADE PRACTICES-CONSUMER PROTECTION ACT, SECTION 17.41 ET SEQ. BUSINESS & COMMERCE CODE. This limitation of liability applies to anyone, including client, who is damaged or has to pay expenses of any kind, including attorney fees and costs. Client assumes the risk of losses greater than the refund of the fee paid herein. Client acknowledges that this limitation of liability is reasonable in view of the relatively small fee that inspector charges for making the inspections when compared with the potential of exposure that inspector might otherwise incur in the absence of such limitation of liability, and that a much higher fee would be charged if the inspector were subject to greater liability.

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Statute of Limitations

The parties agree that no claim, demand, or action, whether sounding in contract or in tort, may be brought to recover damages against HEI, or its officers, agents, or employees MORE THAN TWO YEARS AND ONE DAY AFTER THE DATE OF THE INSPECTION OR THE DATE ANY PURPORTED CAUSE OF ACTION ARISING OUT OF THE INSPECTION ACCRUES. TIME IS EXPRESSLY OF THE ESSENCE HEREIN. Client understands that this time period may be shorter than otherwise provided by law.

Acceptance of Report

By signing I confirm that I have read, understood, and agree to the above pre-inspection service agreement, and that I agree to be bound by these terms and conditions. In the absence of Client signing this service agreement prior to or at the time of the inspection, then acceptance of the report and/or payment for the inspection shall constitute agreement with all of the terms of this agreement. The report to be prepared by HEI shall be considered the final and exclusive findings of HEI regarding the inspection of the property which is the subject of this agreement. Client shall not rely on any oral statements made by HEI or its representatives prior to issuance of the printed report.

***NOTE: IF THE INSPECTION IS CANCELLED LESS THAN ONE FULL BUSINESS DAY BEFORE THE SCHEDULED TIME, THE CLIENT WILL BE CHARGED ½ OF THE ORIGINAL INSPECTION FEE AND AGREES TO PAY SUCH PENALTY FEE.***



**I HAVE READ AND ACCEPT THIS AGREEMENT**