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**INSPECTION PROPERTY ADDRESS:** XXX Lane  
The Woodlands, Texas

**INSPECTION PERFORMED FOR:** Mr. Woodlands Buyer

**INSPECTION DATE:** XX/XX/XXXX

**INSPECTIONS ORDERED:**

- Structural
- Mechanical
- Electrical
- Plumbing
- Appliance

**LIMITATIONS AND DISCLAIMERS**

This Inspection Report reflects only the items listed and only the condition of those items at the time and date of inspection. This Report reflects only if the items inspected are observed to be "functional" or "nonfunctional" at the time of the inspection, that is, whether such items at this time are observed to serve the purpose for which they are ordinarily intended. THIS REPORT REFLECTS ONLY THOSE ITEMS THAT ARE REASONABLY OBSERVABLE AT THE TIME OF THE INSPECTION. NO REPRESENTATION IS MADE CONCERNING ANY LATENT DEFECTS OR DEFECTS NOT REASONABLY OBSERVABLE AT THE TIME OF THE INSPECTION OR OF ITEMS WHICH REQUIRE THE REMOVAL OF FURNITURE OR COVERINGS. For example, but without limitation, recent repairs, painting or coverings may conceal prior or present damage which is not reasonably observable by the inspector, and no representation or comment can be made. NO REPRESENTATION IS MADE CONCERNING ANY OTHER CONDITION OR THE FUTURE PERFORMANCE OF ANY ITEM. NO REPRESENTATION IS MADE AS TO ITEMS NOT SPECIFICALLY COMMENTED UPON. ALL WARRANTIES, EXPRESSED OR IMPLIED, ARE EXCLUDED AND DISCLAIMED. Any environmental hazards or toxic materials were not included as a part of this inspection. We have performed no inspections or tests for mold. This report is provided for the use of our client only, based on their specific needs. No representation is made to the use of this report by any other party. Opinions related to the compliance with specifications, legal and current code requirements, or restrictions of any kind are specifically excluded as being covered by this inspection. Repair costs vary from one contractor to the next. You should contact several qualified contractors to obtain firm quotes and defined scope of work on each repair item.

On XX/XX/XXXX, Harris Engineering Real Estate Inspections, Inc. performed a limited visual inspection on the house at XXX Lane, The Woodlands, Texas. The inspection was performed exclusively for Mr. Woodlands Buyer. We make no representation to the use of this report by any other party. By state law, inspections to determine the presence of, or damage by, wood destroying insects are to be conducted by individuals licensed for that purpose, therefore Harris Engineering Real Estate Inspections, Inc. advises that a licensed pest control inspector be contacted. No representation is made to any environmental aspects/hazards of this property. The purpose of this report is to render an opinion as to whether the items listed on this report were performing the function for which intended or were in need of repair at the time of the inspection.



The limited structural inspection consisted of interior and exterior visual observations as well as floor levelness measurements with a four foot spirit level. Since no formal engineering analysis or testing was performed, the conclusions of this report are based solely on this engineer's visual impressions as to the performance on this date. Should you desire a foundation level survey or other engineering evaluations such as geotechnical analysis, concrete testing, concrete moisture testing, plumbing testing, or post tension testing (if applicable), please contact this office. No geotechnical study has been made to determine the soil characteristics of this property. However, much of the greater Houston area is known to have an active type soil that can adversely affect the performance of the foundation. No representation is made to the location of any geological faults. For the purpose of this report, the terms front, rear, right, left are used when viewing the house from the front. No representation is made to any previous or future flooding.

A house of this age generally does not meet current code requirements. This report is not intended to identify all items that do not meet current code requirements.

No Seller's Disclosure Notice was observed. Please obtain this document from the seller and forward to our office for review. It is our understanding that there has been a recent inspection by another prospective purchaser. If the previous report is available, please forward it to our office for review.

### **FOUNDATION COMMENTS**

This is a two story residential structure with a concrete foundation. There were additions at the garage foundation. Exterior siding is brick veneer and hardboard materials.

Observations revealed signs of minor to moderate foundation movement. A few typical hairline cracks were observed at the perimeter of the foundation. There was a small brick veneer crack over the right exterior door at the porte cochere. It is recommended that you consult with the seller to determine whether there have been any previous wall repairs. There was some floor unlevelness. This was most evident at the left side of the house at the master bathroom area. There was floor unlevelness of approximately 3/8" in 4' at the master toilet area. Some of the floor unlevelness was attributed to original construction and some was attributed to minor to moderate foundation movement. There were signs of minor door misalignment.



No floor coverings were removed to determine locations of all cracks in the concrete foundation. Most, if not all, concrete foundations experience some cracks. Cracks do not necessarily indicate a need for foundation repair. Some cracks occur at the time of curing and some are a result of deflection. Cracks can be a source for moisture and insect penetration. Should you desire inspection of the concrete surface, floor coverings would need to be removed.

Based on the limited visual observations, it appeared that this foundation had experienced a minor to moderate amount of movement. Although there were some signs of foundation movement, it is our opinion that the foundation was performing a reasonable service at the time of the inspection. **No representation is made to future performance.** Should you desire, additional foundation evaluations could be performed. Additional evaluations could include, but not be limited to: floor level survey, underground plumbing leak-testing and geotechnical evaluation.

Although future performance is not predicted, a soil moisture maintenance program is recommended. Signs of distress should be monitored to determine if the maintenance program will be effective. The soil should be kept at a constant moisture content to avoid any inherent shrink/swell characteristics of the soil which can cause differential movement and damage to foundations. This can be achieved by diligent lawn watering. Without specific soil characteristics of this property, the moisture maintenance program will be somewhat by trial and error. Any signs of foundation distress should be closely monitored as inadequate or excessive soil moisture can cause problems under certain conditions. Trees and large shrubs can remove a large amount of soil moisture which can adversely affect the foundation. Areas of large vegetation should be given sufficient water so that they do not deplete the moisture content of the soil. Top soil should be at least four inches below the brick or siding and sloped away from the structure for drainage.

Grout had been applied around some parts of the perimeter of the foundation. This may have been applied at original construction.

## **ROOF COMMENTS**

The roof covering is composition shingles. The shingles had experienced minor weathering. It is recommended that you determine whether a contractor's warranty is applicable.

There is a low sloped rolled roof covering at the right side of the house. This low sloped roof covering was in poor condition. There were signs of leakage and deterioration. It is our opinion that the low sloped roof covering at the right side is in need of being replaced.

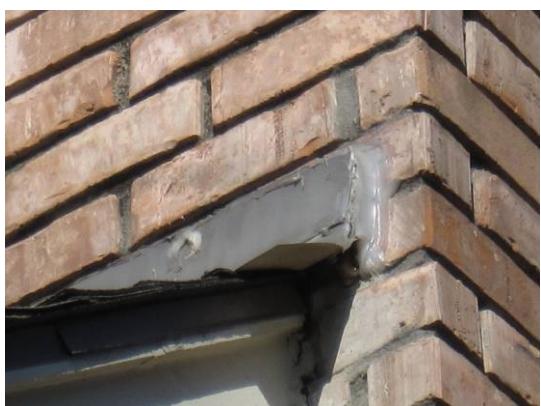




There was deteriorated siding and no kick-out flashing at the right rear. Repair is needed.



Much caulking had been applied at the right rear chimney flashing. There was a difference in ceiling texture. Please consult with the seller about any leakage. This amount of caulking would generally not be needed if there is adequate flashing. This should be monitored for any leakage.



There was some ceiling deflection at the carport. The exact reason for this was not determined.

There were various areas of apparent differences in texturing at walls and ceilings. Please consult with the seller to determine the extent of any previous repairs. Be advised that we make no representation to any concealed components. Should you desire, additional evaluations could be performed. An infrared camera survey and/or interior wall probe testing could be performed.

There were signs of apparent previous roof deck repairs at the front dormer area. This condition should be monitored.



There were some poor framing joints. Reinforcement could be performed.



## **OTHER STRUCTURAL COMMENTS**

Some areas of exterior siding and wood trim had been previously replaced. There were still various areas of deteriorated siding and trim that are in need of being replaced. Be advised that this type of original exterior siding has a history of deterioration.



There were some areas of siding that were improperly in contact with shingles. There should be proper clearances, in accordance with manufacturer's installation instructions.



There was inadequate caulking at various exterior details. Proper caulking is needed.



There were a lack of exposed metal head flashings above windows and doors. Metal flashings are the preferred method to help prevent water penetration. The house should be monitored for any water penetration during rains.

There were a lack of brick veneer weep holes over windows. Weep holes would generally be expected to help control moisture.

There was debris at gutters. There was a bent gutter at the rear. There were signs of apparent gutter overflow at the rear. Repairs are needed.



There were some damaged and missing window screens.

The wall was overhanging the perimeter of the foundation at the front left corner of the garage. Proper support is needed.



The garage exterior door appeared to be an interior type door. A proper exterior rated door is needed.

There was deterioration at the garage bathroom exterior door.



There was some deterioration at the yard fences.



There were some areas of mulch and soil that were above the lower siding. This was most evident at the rear and front right of the garage. Proper slab exposure is needed.

There was a missing elbow at a gutter downspout at the front right corner of the garage. Splash blocks are recommended under all downspouts.

Various components of the garage built-in areas do not meet current construction standards. The handrail/guardrail and garage attic stairs do not meet current standards.

It is recommended that the garage overhead door locks be disabled, since there are garage door electric operators.

A "musty odor" was noted at the garage bathroom. Be advised that we have performed no mold testing in any area. Please contact a qualified expert.

There were some loose and deteriorated plastic glazing strips at windows.

There were some unlevel components at the carport. This may be a result of original construction.



We understand that there has been a previous treatment for wood destroying insects. For your information, we make no representation to the location or extent of wood destroying insect damage. Concealed members were not observed as a part of the inspection.

Clips are needed at the fireplace dampers to provide air supplies to the gas logs.

There is a vaulted ceiling at the right rear family room. The outside wall was unplumb approximately  $\frac{1}{4}$ " in a 4' vertical measurement. This type of wall unplumbness is relatively common at a vaulted ceiling area.

There were bullet latches that did not fit properly at the master bathroom and master closet. Adjustments are needed.

There were a lack of nosings at stair treads. Current standards require nosings.

No safety glass label was observed at a window at the upstairs front right bathtub surround. Current standards require tempered glass for safety.

For your information, there was an average of approximately 6" of fiberglass insulation in the attic. It is recommended that additional insulation be added.

There was an inadequate fire block at a chimney in the attic. Repair is needed.



## **MECHANICAL COMMENTS**

The refrigerant line for the large air conditioner unit was not cold enough to condense moisture. Service is recommended. After service, it is recommended that the air conditioners be monitored during hot weather to determine whether they will cool the entire house properly.

There was rust at the two air conditioner drain pans. No leaks occurred in these areas at the time of the inspection. This should be monitored during warmer weather.



There was wiring in the downstairs return air at the dining room. This return air is in need of being properly sealed, since wiring is not allowed in a return air.

There were inadequate duct hangers in the attic. Repair is needed.

There were air leaks at the refrigerant line connections to the evaporators. These are in need of being sealed.



There were improperly sized breakers for the air conditioners, according to the air conditioner nameplate ratings. Properly sized circuits are needed.

The bathroom exhaust vents were not observed to terminate at the exterior. These should extend to the exterior.

The garage air conditioner was unlevel and deteriorated.



No representation is made to the cooling capacity of the air conditioner at the garage.

The garage air conditioner and water heater drain pans were improperly connected together. Repair is needed.

## **ELECTRICAL COMMENTS**

Note: Concealed wiring is not inspected. For your information, we have performed no electrical design analysis.

For your information, we performed no inspections of any security system equipment.

Smoke alarms do not conform with current standards. Current standards require these in each sleeping room, outside each sleeping area, and on each additional story. Smoke alarms are required to be interconnected, powered from building wiring, and also have battery power. Carbon monoxide detectors are recommended.

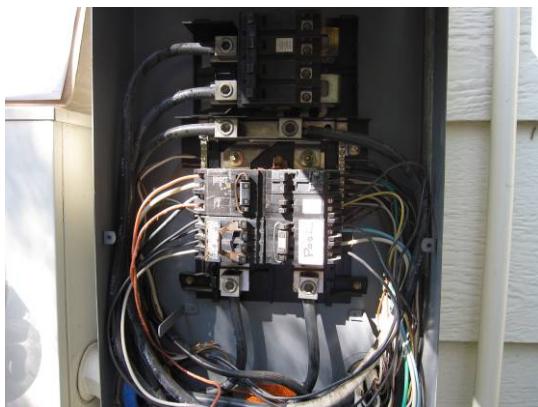
For your information, built-in speakers and media equipment were not included as a part of the inspection.

For your information, the yard lights were not included as a part of the inspection.

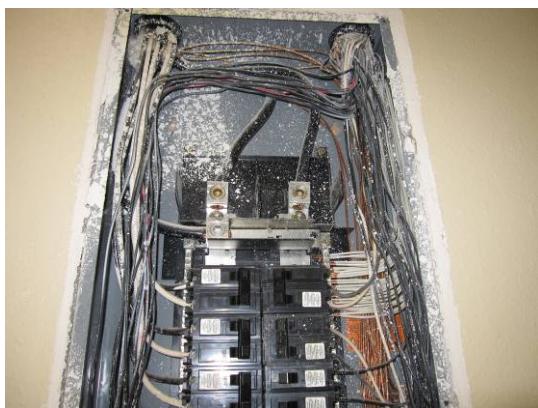
For your information, we performed no intercom/radio system inspection. This was apparently nonfunctional, since the speaker at the front door was taped over.

For your information, a house of this age generally does not meet current electrical code requirements. Among these items include: arc fault circuit interrupters, inadequate ground fault circuit interrupters, lack of tamper-resistant receptacles, and lack of concrete encased grounding electrode. Please consult with a licensed electrical contractor about modifying some or all of these items for safety reasons.

The electric panel at the rear of the garage had the following deficiencies: no main breaker for circuits at this panel, some circuits not labeled, improperly double lugged neutral wire connections, 40 amp breaker improperly protecting #10 AWG wire and no panel bond connection observed. Repairs are needed.



The following deficiencies were observed at the utility room subpanel: improperly double lugged neutral wire connections, missing common tie on multi-wire circuit breakers (red and black wire), and bundled wires at penetration through panel. Repairs are needed.



Repair is needed at the yard light controller plug-in connection at the rear of the garage.



The ground fault circuit interrupter for the swimming pool equipment would not trip with a test device. Repair is needed.

There were a lack of electric disconnect switches at the garage water heater and furnace. Repair is needed.

The garage attic power ventilator fan was nonfunctional. Repair is needed.

There were various items at the garage that do not meet current building code standards. Appropriate repairs are needed.



The garage door electric operator for the small overhead door would not go down without holding the button. Repair is needed.

There was a missing receptacle cover plate at the built-out area at the garage. Repair is needed.

The ceiling fan was out of balance at the built-out area at the garage. Repair is needed.

Electrical junction boxes were not flush to the edge of tile at kitchen receptacles and switches. Extension plates are needed.

There was inadequate ground fault circuit interrupter protection. There was a lack of arc fault circuit interrupter protection. These safety devices are recommended.

For your information, there was a three pronged 240V receptacle for the dryer in the utility room. Be advised that modern dryers require a four pronged electrical receptacle with appropriate wiring.

In some areas, there were less electrical receptacles than are recommended by current standards.

The right rear family room light and fan were improperly controlled by the same rheostat. Repair is needed.

The purpose of some switches was not determined. Please consult with the seller.

There were a few nonfunctional lights. These may be due to burned bulbs.

The upstairs front right bathroom ground fault circuit interrupter was improperly painted over. Replacement is needed.

There was inadequate clearance of the attic insulation around the recessed lights as observed from the attic. Adjustment is needed to obtain adequate clearance for heat dissipation.

No electrical bond wires were observed for the plumbing pipes. The plumbing system is in need of being electrically bonded. This is similar to a ground wire connection.

## **PLUMBING COMMENTS**

For your information, no representation is made to concealed and underground piping. Should you desire, additional evaluations could be performed.

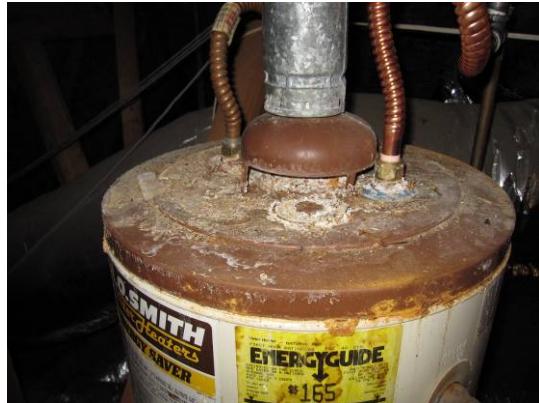
For your information, the water meter is located in the front yard. The main water shut-off valve was not located. Please consult with the seller. The static water pressure was measured to be 56 psi.

Most of the piping is copper material. There were a few areas of galvanized fittings improperly connected to copper piping. Repair is needed, due to the potential for corrosion at these dissimilar metals. This was observed at the left exterior and at the left attic water heater.



There was exposed PVC piping at some areas of the exterior. This was for the lawn sprinkler and swimming pool water supply. Insulation is needed.

There was leakage at an elbow at the left exterior. This was apparently for the water heater. The water heaters were deteriorated. It is recommended that you consider replacing the water heaters. There was only one drain to the exterior for each water heater. Water heaters should have independent drains to the exterior for the safety relief valves and drain pans.



The water heater vents were near or in contact with the wood roof deck. This is a potential fire hazard. Modifications are needed so that there is a minimum 1" clearance to combustibles.

There was piping without insulation in the attic. All piping should be properly insulated.

There were a lack of sediment traps at the gas piping connections to the appliances. Sediment traps are recommended.

There were missing vacuum breakers at some of the exterior faucets. Vacuum breakers are needed in order to prevent potential backflow and are required by current code. These are similar to small check valves that screw onto the exterior faucets.

The lawn sprinkler controller was improperly wired with an extension cord. Some of the lawn sprinkler heads improperly sprayed on the house. Zone five at the controller was turned off. There was leakage at zone six at the lawn sprinkler system. Appropriate repairs are needed.

The garage bathroom toilet was loose on the floor. Repair is needed.

There was some deteriorated grout at the garage bathroom shower. Repair is needed.

The hot and cold water were reversed at the garage shower faucet. Repair is needed.

There was a broken pipe at the front right exterior. Repair is needed.



There was copper piping that was used for the underground gas supply to the kitchen island. This is not allowed by current standards. Current standards require that proper piping be installed in a sealed and vented sleeve.

There were two flex connectors improperly used for the kitchen cook top. Only one flex connector is allowed.

There was flow at only one of the faucets at the wet bar sink faucet. Repair is needed.

Some of the sink drains "gurgled" when operated. This may be due to inadequate venting.

For your information, there were no inspection access openings under some bathtubs. It is recommended that access openings be provided. Due to the lack of access openings, the tub overflow drains were not included as a part of the inspection.

There was a dripping faucet at the left exterior. There was moisture at the exterior of this wall and perimeter of the foundation. The moisture may be a result of the dripping faucet or may be a result of some internal leakage. Appropriate repair is needed.



The master bathroom shower faucet valve turned off when turned all the way to hot.

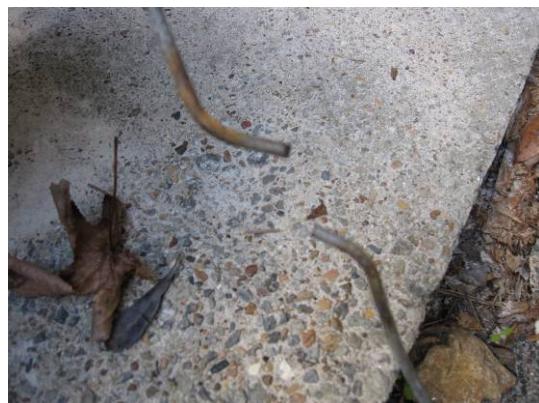
The upstairs front right bathtub drain stopper was missing. Repair is needed.

The upstairs left bathroom toilet was very loose on the floor. Due to this condition, this toilet was not flushed. Repair is needed.

For your information, the shower was operated briefly during the inspection. No signs of shower leakage were observed. Should you desire a more thorough evaluation, a 24 hour shower pan test could be performed to determine whether there is any leakage.

No pressure test of the gas lines was performed. No gas odor was smelled that would indicate any large gas line leaks. For your information, we performed no testing that would detect any small gas leaks.

The swimming pool and spa, as well as the associated equipment were visually inspected. Be advised that we have performed no leak-testing. The filter was not backwashed or drained as a part of this limited visual inspection. There was an inadequate safety barrier around the pool and spa. A proper safety barrier would include self-closing/self-latching gates and doors, etc. The swimming pool appeared to be constructed of gunite and plaster. The plaster was deteriorated. It is recommended that you obtain quotes for replastering. There was leakage at the water supply to the swimming pool at the left rear corner of the house. The equipment consisted of pool sweeper, lights, spa blower, three motors/pumps, three timers, filter, and gas heater. The switch for the lights was not found. Please consult with the seller. The ground fault circuit interrupter for the pool lights did not trip with a test device. This important safety device is in need of being repaired. There was no gas shut-off valve adjacent to the gas heater. There were disconnected electric bond wires at the equipment. There was disconnected conduit at the wiring to one of the pump motors. The on/off pins were missing at the fountain pump timer. The gas heater was rusted. There was some soil erosion under the concrete pad for the equipment. Service and appropriate repairs should be performed by qualified contractors.





## **APPLIANCE COMMENTS**

There was damage to the cook top vent at the right exterior. Repair is needed.



No drain loop or air gap was observed for the dishwasher drain line. A drain loop or air gap is needed in order to prevent potential backflow.

The cook top front right burner igniter improperly stayed on after the burner was lit. Repair is needed.

The cook top vent was binding when the vent fan was going down into the retracted position. Repair is needed.

Harris Engineering Real Estate Inspections, Inc. does not perform repairs. Should you desire, a reinspection can be performed to determine whether repairs have been properly made.

This report contains the opinions of Harris Engineering Real Estate Inspections, Inc. It is possible that differing conclusions could be obtained from other companies. It is a pleasure to have been of service. Please call should you have any questions or need future inspections.

Harris Engineering  
Real Estate Inspections, Inc.  
F-7281



David Harris, P.E.  
President



( A six page checklist is included at the end of the report.)