PROPERTY INSPECTION REPORT

Prepared For: **CLIENTS NAME**

(Name of Client)

Concerning: **PROPERTY ADDRESS**

(Address or Other Identification of Inspected Property)

By: **INSPECTOR / LICENSE NUMBER** **DATE**

(Name and License Number of Inspector) (Date)

PURPOSE, LIMITATIONS AND INSPECTOR / CLIENT RESPONSIBILITIES

This property inspection report may include an inspection agreement (contract), addenda, and other information related to property conditions. If any item or comment is unclear, you should ask the inspector to clarify the findings. It is important that you carefully read ALL of this information.

This inspection is subject to the rules ("Rules") of the Texas Real Estate Commission ("TREC"), which can be found at www.trec.texas.gov.

The TREC Standards of Practice (Sections 535.227-535.233 of the Rules) are the minimum standards for inspections by TREC licensed inspectors. An inspection addresses only those components and conditions that are present, visible, and accessible at the time of the inspection. While there may be other parts, components or systems present, only those items specifically noted as being inspected were inspected. The inspector is NOT required to turn on decommissioned equipment, systems, utility services or apply an open flame or light a pilot to operate any appliance. The inspector is NOT required to climb over obstacles, move furnishings or stored items. The inspection report may address issues that are code-based or may refer to a particular code; however, this is NOT a code compliance inspection and does NOT verify compliance with manufacturer's installation instructions. The inspection does NOT imply insurability or warranty ability of the structure or its components. Although some safety issues may be addressed in this report, this inspection is NOT a safety/code inspection, and the inspector is NOT required to identify all potential hazards.

In this report, the inspector shall indicate, by checking the appropriate boxes on the form, whether each item was inspected, not inspected, not present or deficient and explain the findings in the corresponding section in the body of the report form. The inspector must check the Deficient (D) box if a condition exists that adversely and materially affects the performance of a system or component or constitutes a hazard to life, limb or property as specified by the TREC Standards of Practice. General deficiencies include inoperability, material distress, water penetration, damage, deterioration, missing components, and unsuitable installation. Comments may be provided by the inspector whether or not an item is deemed deficient. The inspector is not required to prioritize or emphasize the importance of one deficiency over another.

Some items reported may be considered life-safety upgrades to the property. For more information, refer to Texas Real Estate Consumer Notice Concerning Recognized Hazards or Deficiencies below.

THIS PROPERTY INSPECTION IS NOT A TECHNICALLY EXHAUSTIVE INSPECTION OF THE STRUCTURE, SYSTEMS OR COMPONENTS. The inspection may not reveal all deficiencies. A real estate inspection helps to reduce some of the risk involved in purchasing a home, but it cannot eliminate these risks, nor can the inspection anticipate future events or changes in performance due to changes in use or occupancy. It is recommended that you obtain as much information as is available about this property, including any seller's disclosures, previous inspection reports, engineering reports, building/remodeling

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I NI NP D

permits, and reports performed for or by relocation companies, municipal inspection departments, lenders, insurers, and appraisers. You should also attempt to determine whether repairs, renovation, remodeling, additions, or other such activities have taken place at this property. It is not the inspector's responsibility to confirm that information obtained from these sources is complete or accurate or that this inspection is consistent with the opinions expressed in previous or future reports.

ITEMS IDENTIFIED IN THE REPORT DO NOT OBLIGATE ANY PARTY TO MAKE REPAIRS OR TAKE OTHER ACTIONS, NOR IS THE PURCHASER REQUIRED TO REQUEST THAT THE SELLER TAKE ANY ACTION. When a deficiency is reported, it is the client's responsibility to obtain further evaluations and/or cost estimates from qualified service professionals. Any such follow-up should take place prior to the expiration of any time limitations such as option periods.

Evaluations by qualified tradesmen may lead to the discovery of additional deficiencies which may involve additional repair costs. Failure to address deficiencies or comments noted in this report may lead to further damage of the structure or systems and add to the original repair costs. The inspector is not required to provide follow-up services to verify that proper repairs have been made. Property conditions change with time and use. For example, mechanical devices can fail at any time, plumbing gaskets and seals may crack if the appliance or plumbing fixture is not used often, roof leaks can occur at any time regardless of the apparent condition of the roof, and the performance of the structure and the systems may change due to changes in use or occupancy, effects of weather, etc. These changes or repairs made to the structure after the inspection may render information contained herein obsolete or invalid. This report is provided for the specific benefit of the client named above and is based on observations at the time of the inspection. If you did not hire the inspector yourself, reliance on this report may provide incomplete or outdated information. Repairs, professional opinions or additional inspection reports may affect the meaning of the information in this report. It is recommended that you hire a licensed inspector to perform an inspection to meet your specific needs and to provide you with current information concerning this property.

TEXAS REAL ESTATE CONSUMER NOTICE CONCERNING HAZARDS OR DEFICIENCIES

Each year, Texans sustain property damage and are injured by accidents in the home. While some accidents may not be avoidable, many other accidents, injuries, and deaths may be avoided through the identification and repair of certain hazardous conditions. Examples of such hazards include:

- malfunctioning, improperly installed, or missing ground fault circuit protection (GFCI) devices for electrical receptacles in garages, bathrooms, kitchens, and exterior areas;
- malfunctioning arc fault protection (AFCI) devices;
- ordinary glass in locations where modern construction techniques call for safety glass;
- malfunctioning or lack of fire safety features such as smoke alarms, fire-rated doors in certain locations, and functional emergency escape and rescue openings in bedrooms;
- malfunctioning carbon monoxide alarms;
- excessive spacing between balusters on stairways and porches;
- improperly installed appliances;
- improperly installed or defective safety devices; and
- lack of electrical bonding and grounding.
- lack of bonding on gas piping, including corrugated stainless steel tubing (CSST).

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I	NI	NP	D

To ensure that consumers are informed of hazards such as these, the Texas Real Estate Commission (TREC) has adopted Standards of Practice requiring licensed inspectors to report these conditions as "Deficient" when performing an inspection for a buyer or seller, if they can be reasonably determined.

These conditions may not have violated building codes or common practices at the time of the construction of the home, or they may have been "grandfathered" because they were present prior to the adoption of codes prohibiting such conditions. While the TREC Standards of Practice do not require inspectors to perform a code compliance inspection, TREC considers the potential for injury or property loss from the hazards addressed in the Standards of Practice to be significant enough to warrant this notice.

Contract forms developed by TREC for use by its real estate licensees also inform the buyer of the right to have the home inspected and can provide an option clause permitting the buyer to terminate the contract within a specified time. Neither the Standards of Practice nor the TREC contract forms require a seller to remedy conditions revealed by an inspection. The decision to correct a hazard or any deficiency identified in an inspection report is left to the parties to the contract for the sale or purchase of the home.

INFORMATION INCLUDED UNDER "ADDITIONAL INFORMATION PROVIDED BY INSPECTOR", OR PROVIDED AS AN ATTACHMENT WITH THE STANDARD FORM, IS NOT REQUIRED BY THE COMMISSION AND MAY CONTAIN CONTRACTUAL TERMS BETWEEN THE INSPECTOR AND YOU, AS THE CLIENT. THE COMMISSION DOES NOT REGULATE CONTRACTUAL TERMS BETWEEN PARTIES. IF YOU DO NOT UNDERSTAND THE EFFECT OF ANY CONTRACTUAL TERM CONTAINED IN THIS SECTION OR ANY ATTACHMENTS, CONSULT AN ATTORNEY.

ADDITIONAL INFORMATION PROVIDED BY INSPECTOR

It is the purpose of this report to give the prospective buyer my educated and experienced opinion of the condition and function of the stated property as visually inspected. The inspection performed on this house is of a general nature and includes the following systems: electrical, mechanical, and plumbing. This does not include any specialized inspections and/or inspections of any hazardous materials (such as done in environmental inspections) or any of the following; structure, mold, led, pest, security, smoke detectors, water treatment systems, etc. The inspection is limited to those components which were visible and accessible at the time of the inspection. It is noted that this report contains the opinion of this Inspector of the stated property as it appeared on the day of the inspection and is in no way a warranty of any component in the days and future following the inspection. All mechanical components are judged on the basis of age, condition, and the function of those items as they appeared on the day of the inspection and are not guaranteed to continue functioning in that manner in the future. It is recommended that the buyer purchase a home warranty policy to protect oneself from both unexpected and anticipated problems that may occur in the future. It is noted that the inspector is not responsible for any problems found in the house during or after components are opened up, disassembled, uncovered, made visible, or made accessible after the inspection is completed.
If a service company is contacted to examine an area of question and comes to the conclusion that there is no repair needed; have them present to you in writing that the item is in compliance with a prevailing code and is functioning properly, not in need of repair.
It is the intent of this inspector to work in compliance with the Standards Of Practice For Real Estate Inspectors. It is not required of this company to exceed these standards. You may obtain a copy of the document referred to above by contacting the Texas Real Estate Commission. It is also noted that this is not a "code inspection" but rather an inspection of the condition and function of the stated property.

Thank you,
INSPECTOR NAME

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It is noted that when this house was built, it was built to previous codes and standards that may or may not still be applicable. Many revisions to the code may have come into effect since the time when this house was built. Therefore the inspection on this house is not a “code” inspection, but rather an inspection to determine the functional state of the property on the day of the inspection.

I. STRUCTURAL SYSTEMS

❑ ☒ ❑ ❑

II. ELECTRICAL SYSTEMS

☒ ❑ ❑ ☒ **A. Service Entrance and Panels**

*Comment*s:

ELECTRICAL SERVICE
Type: Underground
Voltage: 120/240
Phase: Singe Phase
Amps: 150 -Amps
Meter: Rear side of the House

BREAKER PANELS
Manufacturer: Square-D
Rated Capacity: 150 Amps
Main Breaker: 150 -Amps
Location: Family room gun closet

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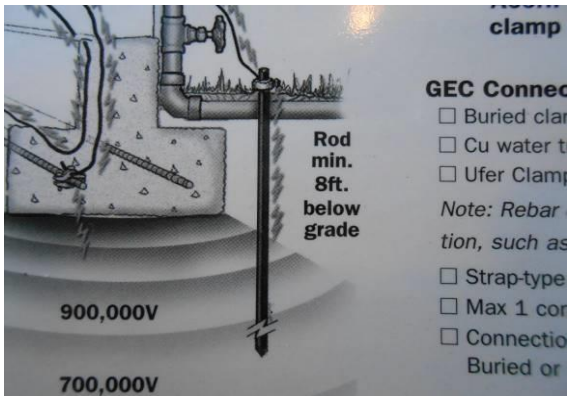
WIRING

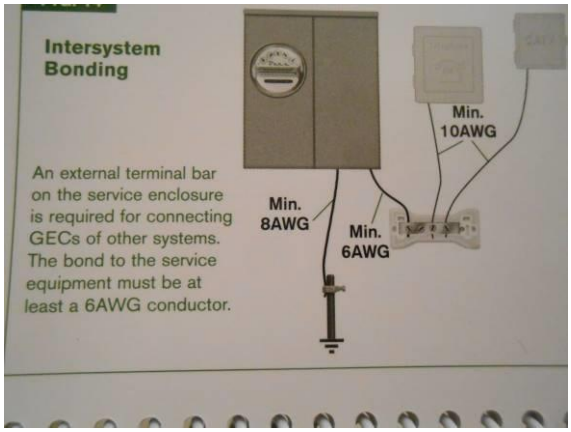
Service Entrance Conductors: Copper
Branch Circuit Wiring: Copper
Type of Wiring: Romex and Original NM
Type of System: 3-wire grounded system and 2-wire ungrounded system

Grounding and Bonding

The ground rod was sticking out of the ground a few inches, and, since ground rods are typically 8 feet long and all 8 feet of the rod are required to be in the ground, it is recommended that the ground rod be pounded down flush with the top of the ground.
Obtain Cost Estimate



The grounding conductor to the ground rod was not equipped with the grounding block for the low voltage service.
Obtain Cost Estimate



HEI file photo of low voltage block

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The water piping and gas piping were not properly bonded to the grounding electrode to prevent the metal piping from becoming energized, and repair is needed. Usually the gas piping will be bonded with a grounding electrode at the exterior and then the gas piping, cold water and hot water piping will be bonded together at the water heater. Contact an electrician to make the needed repairs.

Obtain Cost Estimate

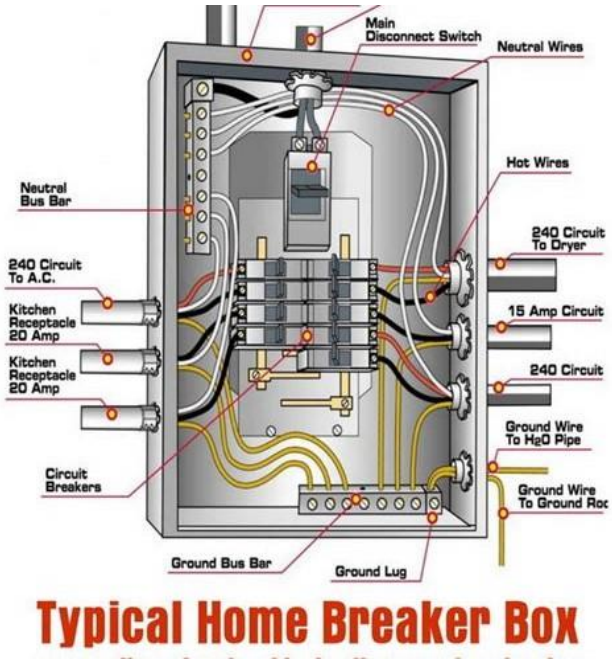
E3609.6 Metal water piping bonding.

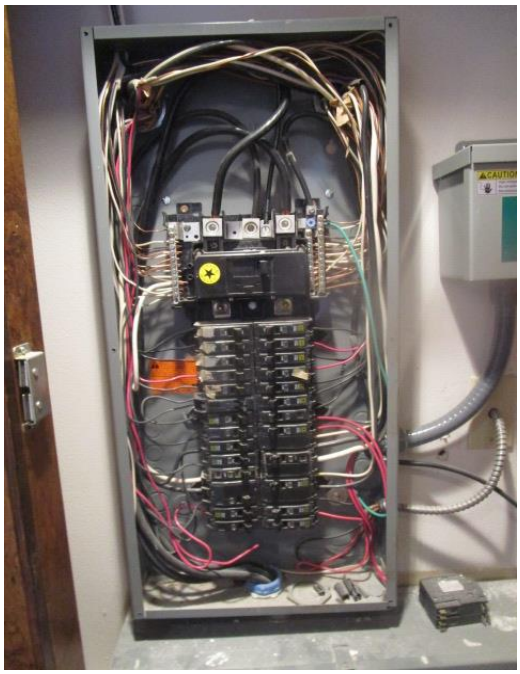
The metal water piping system shall be bonded to the service equipment enclosure, the grounded conductor at the service, the grounding electrode conductor where of sufficient size, or to the one or more grounding electrodes used. The bonding jumper shall be sized in accordance with Table E3603.1. The points of attachment of the bonding jumper(s) shall be accessible.

E3609.7 Bonding other metal piping.

Where installed in or attached to a building or structure, metal piping systems, including gas piping, capable of becoming energized shall be bonded to the service equipment enclosure, the grounded conductor at the service, the grounding electrode conductor where of sufficient size, or to the one or more grounding electrodes used. The bonding conductor(s) or jumper(s) shall be sized in accordance with Table E3908.12 using the rating of the circuit capable of energizing the piping. The equipment grounding conductor for the circuit that is capable of energizing the piping shall be permitted to serve as the bonding means. The points of attachment of the bonding jumper(s) shall be accessible.

Breaker Panel Box





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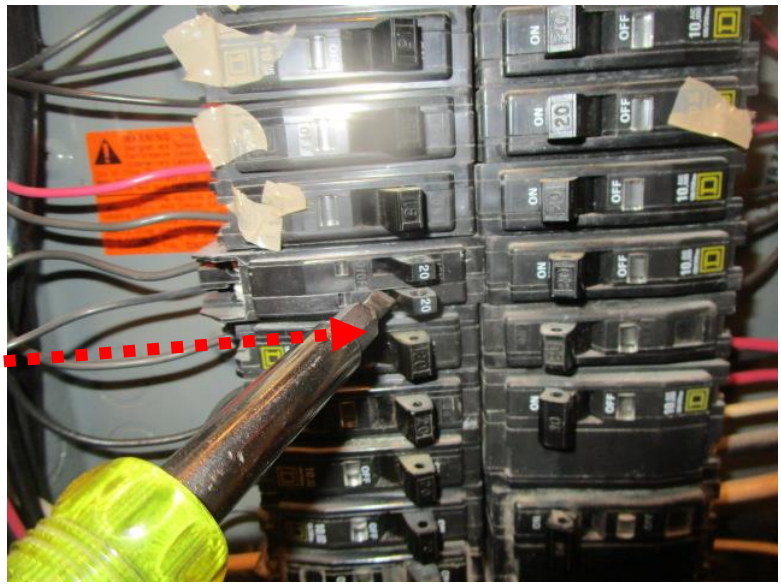
It is a general recommendation that all circuit breakers be tripped off and on at least once a year to ensure that they are still physically able to trip off. Occasionally, the points on a breaker will fuse to the main bus in the panel, preventing the breaker from tripping off, even if there is an overload on the circuit. If this condition occurs, it can be a fire hazard.

The legend in the breaker panel was not completely labeled to identify each circuit in the panel. It is recommended that an electrician be contacted to specifically identify each circuit.
Obtain Cost Estimate

The circuit breakers for both air conditioning condensing units were rated higher than the maximum size allowed by the manufacturer of the condensing units. The breakers should be replaced by the size listed on the manufacturers nameplates located on the condensing units.
Obtain Cost Estimate

One 20-ampere circuit breaker was observed that was rated higher than the wire that it was protecting. This condition can be a fire hazard, and the oversized breaker should be replaced with a breaker that is sized in accordance with the allowable ampacity of the wire.
Obtain Cost Estimate



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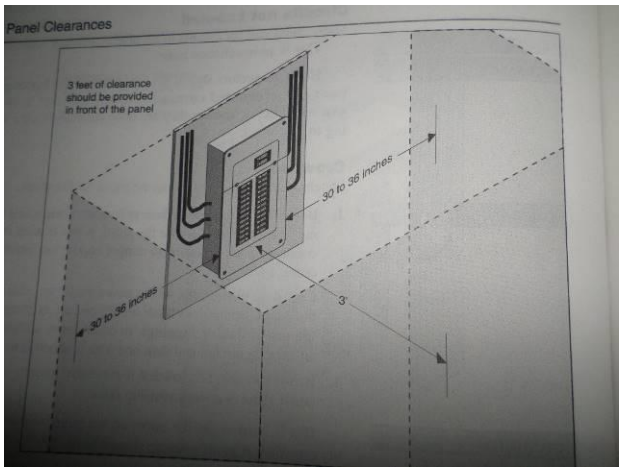
We observed one or more white wires that were used as a “hot” wire, and were connected to a circuit breaker. Typically, the white wires are the grounded conductors, and if they are used as a “hot” wire, they must be wrapped with black or red tape to identify them as a “hot” wire.

Obtain Cost Estimate

The breaker panel was not located in a readily accessible area, and did not allow proper access to the equipment. A three foot working space needs to be provided and maintained about the equipment.



The breaker panel(s) did not contain any Arc Fault Circuit Interrupters (AFCI’s). AFCI’s devices are intended to protect against fires caused by electrical arcing in the wiring, by shutting off the power to the circuit when an electrical arc is detected in the circuit. Homes built prior to 2002 were not required by the National Electrical Code (NEC) to be protected by AFCI’s. Between 2002 and 2008, the National Electrical Code required the electrical circuits in bedrooms to be protected by an AFCI. Since September 1, 2014, the State of Texas has adopted the 2014 National Electrical Code, and the circuits in the locations listed in the NEC reference below are now required to be protected. Since this house was built prior to 2002 and 2014, the breaker panel is not required by the NEC to be equipped with AFCI’s. It is pointed out that this house is grandfathered against these new requirements in the 2014 NEC, and the NEC does not require retrofitting for grandfathered houses. However, you may want to consult with an electrician and consider having AFCI’s installed for safety purposes.

NEC 2014 210.12 Arc-Fault Circuit-Interrupter Protection.

210.12 Arc-Fault Circuit-Interrupter Protection. Arc fault circuit-interrupter protection shall be provided as required in 210.12(A) (B), and (C). The arc-fault circuit interrupter shall be installed in a readily accessible location.

(A) Dwelling Units. All 120-volt, single phase, 15- and 20-ampere branch circuits supplying outlets or devices installed in dwelling unit kitchens, family rooms, dining rooms, living

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rooms, parlors, libraries, dens, bedrooms, sunrooms, recreation rooms, closets, hallways, laundry areas, or similar rooms or areas shall be protected by any of the means described in 210.12(A)(1) through (6).
(1) A listed combination type arc-fault circuit interrupter, installed to provide protection of the entire branch circuit.

ARTICLE 100 Definitions
Outlet. A point on the wiring system at which current is taken to supply utilization equipment.

☒ ❑ ❑ ☒ **B. Branch Circuits - Connected Devices and Fixtures**

Type of wiring:
Comments:

Wall Switches

A switch(es) whose function we could not determine was observed. Further investigation with the homeowner and/or a service company is recommended.
Locations included: family room and hall
Obtain Cost Estimate

Wall Outlets

It was observed that the house and garage were not equipped with Ground Fault Circuit Interrupt devices as specified by the National Electrical Code. Have an electrician install the devices at the locations specified in the National Electric Code.

Some outlets were protected by ground fault circuit interrupt (GFCI) devices, and the devices were operating properly at the time of the inspection.
Locations included: kitchen counter, bathrooms, wet bar

Outlet(s) were not protected by a ground fault circuit interrupt (GFCI) device.
Locations included: garage and exterior,
Obtain Cost Estimate

A three prong outlet(s) was not grounded properly and needs to be repaired. It is recommended that an electrician be contacted, and the necessary repairs made to the outlet(s).
Locations included: middle study/room, master bedroom, master bathroom and exterior
Obtain Cost Estimate

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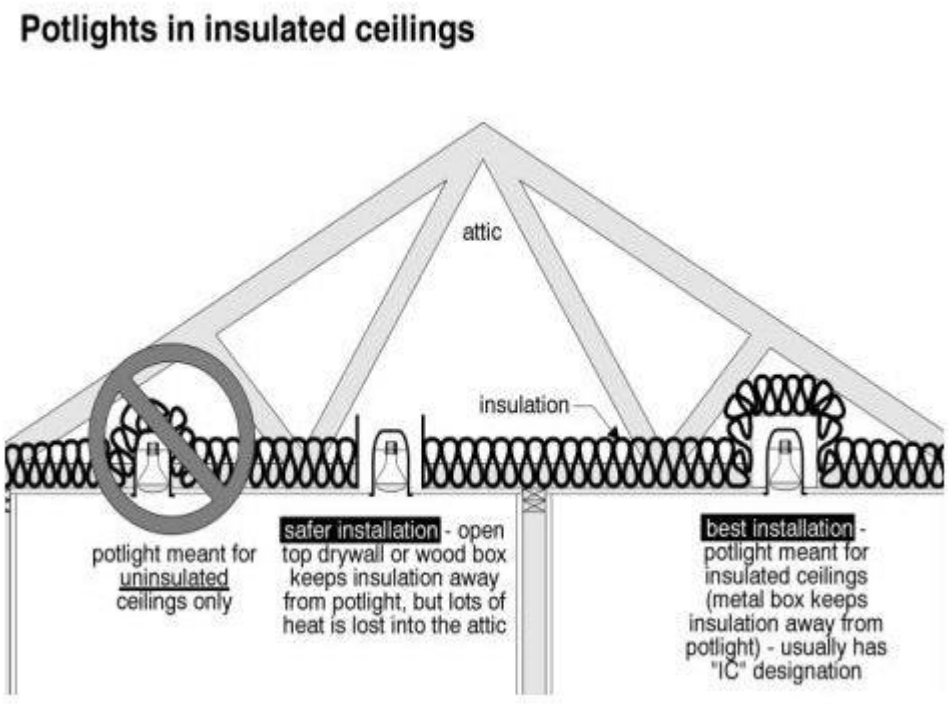
Light Fixtures

A light fixture(s) was observed that was non-functional when the switch was turned on. The problem may be a burned out bulb, a defective light fixture, or defective switch. Locations included: exterior of the garage
Obtain Cost Estimate

The insulation was in contact with the recessed lights, which can be a fire hazard and shorten the life of the light bulbs. The recessed cans were specifically marked with a warning of a risk of fire if the recessed light was in contact with insulation. It is recommended that the insulation be pulled back to provide a three inch air space.
Obtain Cost Estimate



The light fixture(s) in closets were located within 18 inches of a shelving. It is pointed out that this could be a fire hazard, and the caution should be used when storing combustible materials near the fixture(s).

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The landscape, tree lights and exterior flood lights on the house appeared to be on a photo cell, and will not come on until it gets dark. Therefore, the lights were not checked at the time of the inspection.

Visible Wiring

An open junction box(es) was observed.
Locations included: attic
Obtain Cost Estimate

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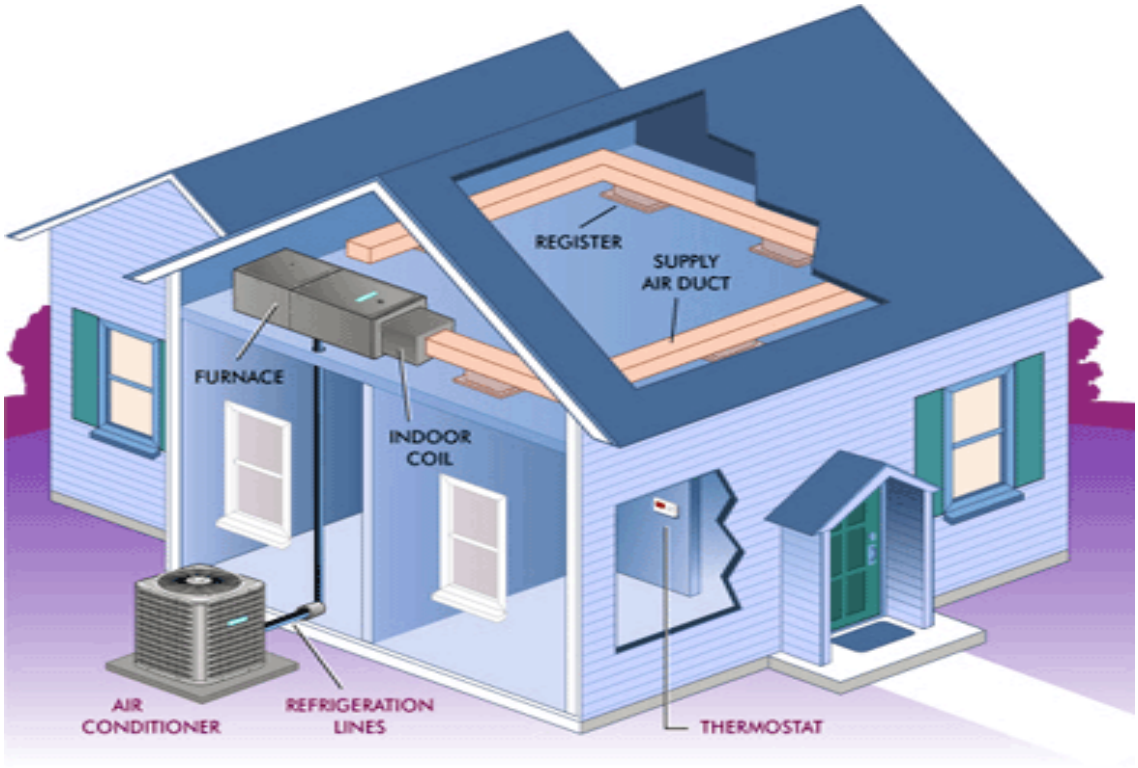
Smoke Detectors

The house does not meet the current code concerning smoke detectors. This house is an older home and if bringing the house into current standards is desired the section below is the current requirements for smoke detectors in a home.

R313.2 Location.
Smoke alarms shall be installed in the following locations:
1.In each sleeping room.
2.Outside each separate sleeping area in the immediate vicinity of the bedrooms.
3.On each additional story of the dwelling, including basements but not including crawl spaces and uninhabitable attics. In dwellings or dwelling units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.
When more than one smoke alarm is required to be installed within an individual dwelling unit the alarm devices shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms in the individual unit.

III. HEATING, VENTILATION AND AIR CONDITIONING SYSTEMS



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☒ ❑ ❑ ☒ **A. Heating Equipment**

Type and Energy Source: Forced Air/ Natural Gas
Comments:

The heating for the house was provided by one gas-fired horizontal furnace and one electric furnace located in the attic. The equipment for the individual zones was as follows:

Zone	Size	Manufact.	Date	Location
Family Room	Electric	Lennox	2009	Attic
House	100,000-BTU	Trane	2012	Attic

The furnaces were operationally checked at the time of the inspection, and no repairs were indicated to the operation of the furnaces.

Heating Performance - Electric Furnace

No items requiring repair were observed at the time of the inspection for the heating performance of the electric furnace. The electric furnace was heating the air 24 degrees, which is adequate.

No disconnecting device has been provided for the power supply at the electric furnace. Have a service company install the proper device to be able to disconnect the electric power supply at the unit.
Obtain Cost Estimate

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Furnace Burner Compartments

The furnace is constructed such that the unit must be dismantled in order to view the entire heat exchanger. The unit was not dismantled, and the heat exchanger was not able to be viewed for evidences of a crack. If further investigations are desired, then it is recommended that a service company be contacted to dismantle the unit.

☒ ❑ ❑ ❑ **B. Cooling Equipment:**

Type and Energy Source: Electric
Comments:

The air conditioning for the house was provided by one forced air split system. The equipment included the following:

Zone	Condensing Unit		Date	Evap. Coil	Date	ΔT(degrees)
Family Room	2-ton	Trane	2014	2-ton	2009	21
House	5-ton	Lennox	2011	4-ton	2010	25

It is pointed out that our inspection of the air conditioning and heating system(s) is a limited, visual inspection where we check the equipment as it has been installed to determine whether or not the system(s) is cooling and/or heating at the time of the inspection. Our inspection is necessarily a cursory inspection, as we do not determine the sizing, adequacy, or design of any component in the system, or the compatibility of the individual components, nor the installation of the system(s) to be in conformity to the latest building code requirements. If you desire an in-depth analysis of the HVAC system(s), then it is recommended that a service company be contacted to analyze the system(s). This is particularly important if the system(s) is an older system and has only a limited amount of remaining life due to its age and/or condition.

Cooling Performance

We measure the temperature drop (ΔT) across the coil(s) at each unit at the time of the inspection and our observations have been recorded above in the description of each zone. It is pointed out that our measurements of the cooling performance of the equipment is only at a “point in time”, and cannot reflect whether the equipment has been recently serviced, or what the future performance of the equipment will be after the day of the inspection. Further investigation with the homeowner is recommended to determine when the equipment was last serviced.

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No items requiring repair were visible at the time of the inspection for the cooling performance of the 2-ton system. The air conditioning equipment was observed to be cooling 20 degrees across the evaporator coil at the time of the inspection.

The 5-ton system had a greater than normal temperature differential across the evaporator coils (25 degrees). Normally, we see a temperature drop of 16-20 degrees. Have the unit checked by a service company, and any necessary repairs made.
Obtain Cost Estimate

Evaporator Coil

The overflow pan under the 2-ton evaporator coil had rust in the pan, apparently from water overflowing the condensate drain line into the overflow pan. No water was in the pan at the time of the inspection, but, since we only ran the unit for a few minutes, it is recommended that the drain line be checked by an air conditioning service company.

Standing water was observed in the auxiliary drain pan under the evaporator coil for the 5-ton unit. This can indicate a clogged primary drain line, or some other problem with the evaporator coil. Have a service company find the source of the water in the pan, and make any necessary repairs.
Obtain Cost Estimate

The primary condensate drain lines do not terminate at a visible location. It is recommended that the primary drain lines be routed to a bathroom sink, and connected into the trap.

Float switches have been installed on the overflow pans under the coils. These switches are a newer requirement that will shut off the air conditioning units should water build up in the overflow pans.

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The evaporator coils were visible and were clogged with debris. Have a service company clean the coils for proper operation.
Location Include: 5-ton system
Obtain Cost Estimate

The evaporator coil for the 5-ton condensing unit was observed to be a 5-ton coil. Normally the coil should not be smaller than the condensing unit, as it can affect the condensing unit, and make it work harder. It is recommended that the system be checked by a service company, who should determine if the two components are compatible, or if the coil will need to be replaced.
Obtain Cost Estimate

☒ ❑ ❑ ☒ **C. Ducts and Vents**
Comments

Ducts/Registers
Duct type –Flexible Duct and Fiberglass Ductboard

Some of the ductwork appeared to be the original installation ductwork. It is recommended that further investigation be done with the homeowner to determine if the ductwork has been cleaned recently.

IV. PLUMBING SYSTEM

☒ ❑ ❑ ☒ **A. Water Supply System and Fixtures**
Meter Location: Front
Shut Off Valve Location: Front side of the house
Water Pressure: 50 psi
Piping Type: Galvanized steel, Copper and PEX
Comments:

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A plumbing system typically consists of three major components, including the potable water supply piping; the waste or drain piping; and the plumbing fixtures. The distribution piping brings the water from the public water main or a private well to the individual fixtures throughout the house. The water distribution system is under pressure, usually from 40 psi to 80 psi. The waste or drain piping carries the waste water and products underground to the sewer system or septic tank, and the waste piping is not under pressure, but operates by gravity flow. We typically run water down the drains from the sinks, tubs, showers, and toilets, but this cannot simulate the waste flows characteristic of full occupancy. There may be partial blockage of the underground waste lines from debris, broken pipes, or tree roots that cannot be detected by a visual inspection. If you desire a more in-depth inspection, it is recommended that you contact a qualified plumber.

Water Service

The water pressure to the house at the time of the inspection was checked with a pressure gauge at the hose bibb nearest the shut off valve, and the pressure was observed to be

The shut-off valve for the main inlet water line was located at the exterior of the house at the front side of the house.

Galvanized Piping

The galvanized piping at the attic was observed to be rusted. No leaks in the piping were visible at the time of the inspection.

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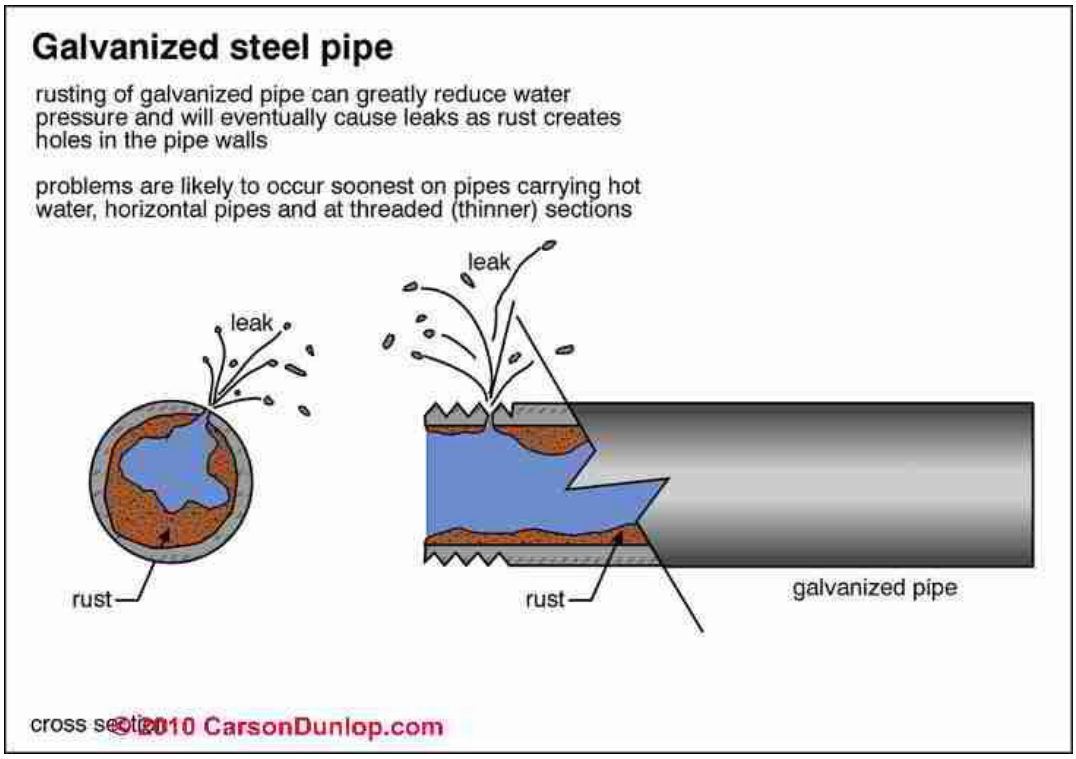
Some of the water piping inside the house was observed to be the original galvanized piping. Due to the age of the house, it is pointed out that the galvanized piping will deteriorate with time, and will corrode on the inside of the piping, thereby reducing the inside diameter of the pipe, and restricting the flow of the water through the pipe. In addition, the piping will corrode through to the outside wall of the pipe, and will eventually deteriorate to where the pipe will start leaking. It can be anticipated that the galvanized water piping throughout the house will need to be replaced or re-lined when it deteriorates to where it is restricting the flow of the water, and/or is corroded enough to start leaking. (Information)



The vacuum breaker devices were missing at one or more of the hose bibbs, and it is recommended that they be installed to prevent cross connections, which can allow contaminated water to enter the potable water supply.

I=Inspected NI=Not Inspected NP=Not Present D=Deficient

I	NI	NP	D

Sinks & Lavatories

The drain line was leaking under the sink when the sink was filled with water and allowed to drain.
Locations included: hall bathroom
Obtain Cost Estimate

Toilets

The toilet(s) was loose on the floor and needs to be secured to the floor.
Locations included: hall bathroom
Obtain Cost Estimate

The toilet(s) was not flushing properly. Have a service company find the source of the problem, and make any necessary repairs.
Locations included: half bathroom
Obtain Cost Estimate

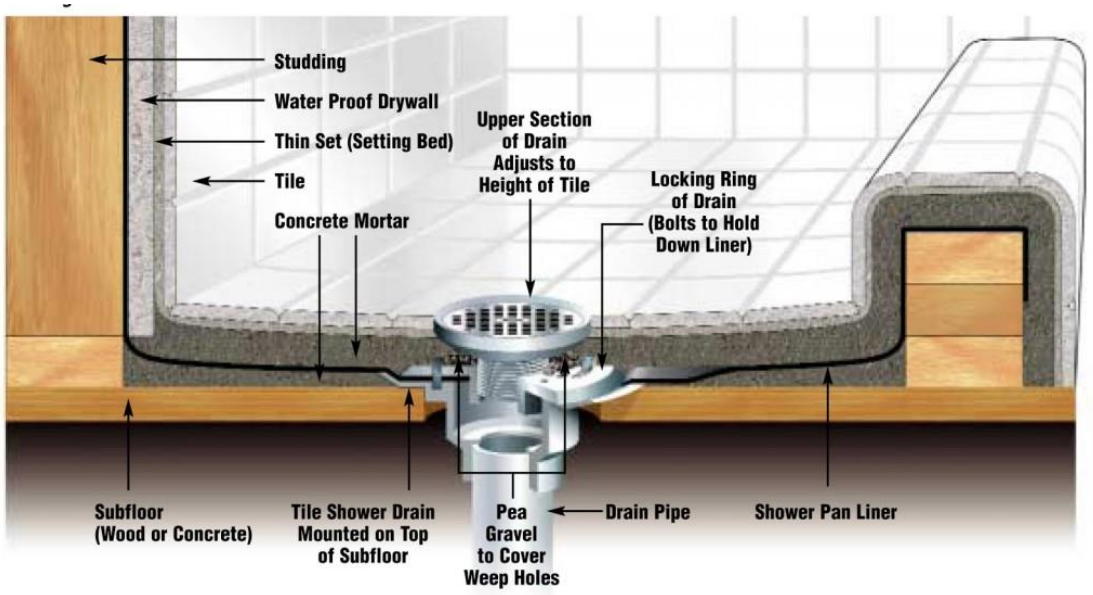
I=Inspected NI=Not Inspected NP=Not Present D=Deficient

I	NI	NP	D

Tubs/Showers

The tub had a long trap arm that was about three feet long and did not appear to be sloped properly.
Have a plumber make the necessary repairs.
Obtain Cost Estimate

No evidences of a current shower pan leak were visible at the time of the inspection for the showers in the house. It is pointed out that the duration of our shower pan leak check is only for a portion of the time spent during the inspection. If you desire a comprehensive shower pan leak check, then it is recommended that a plumber be contacted to perform a shower pan leak check.



The hot water shut-off valve was leaking around the valve stem.
Locations included: master bathroom tub
Obtain Cost Estimate

The shower stall(s) was constructed with a seat in the shower. It has been our experience that builders many times do not extend the shower pan material from the bottom of the shower up over the seat area to make a watertight detail. It can be anticipated that the caulking and/or grout around the seat will deteriorate, and, if there is not a shower pan installed under the seat, water will enter the wall cavity under and around the shower seat. This can cause wood rot, toxic mold, and other water related problems.

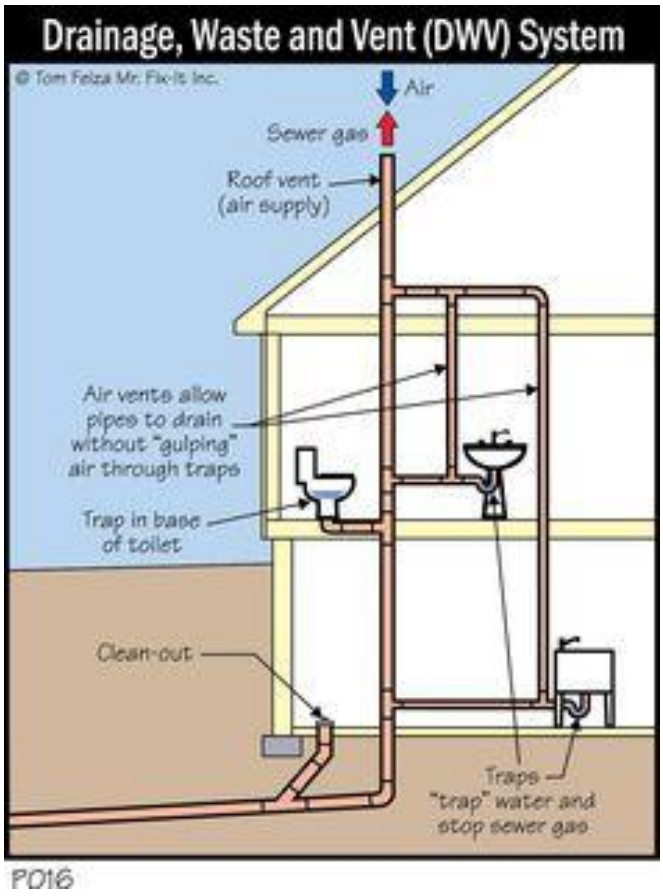
I=Inspected NI=Not Inspected NP=Not Present D=Deficient

I	NI	NP	D

It is recommended that you monitor the sealant around the seat on a regular periodic basis to ensure that the joints remain watertight.
Locations included: the master bathroom and hall bathroom

☒ ❑ ❑ ❑ **B. Drains, Wastes, Vents**

*Comment*s:



The water in the house was run for approximately 30 minutes at the sinks and tubs. In addition, the toilets were flushed three or four times each, and the sinks and tubs were filled, and allowed to drain. No evidences of slow drains were visible. If you desire a hydrostatic test to determine if the underground piping is leaking or clogged, then it is recommended that you contact a plumber. (Information)

The clean out for the main sewer line was not visible, and it is recommended that you check with the owner for the location. This is needed for access to the sewer line should the line become clogged, and need to have a snake run down the line to clean it. (Information)

The sewer piping under the house is most likely still the original cast iron piping. It can be anticipated that the cast iron underground piping will rust out at some point, and will need to be replaced at that time.

I=Inspected NI=Not Inspected NP=Not Present D=Deficient

I	NI	NP	D

Due to the age and condition of the house, it is recommended that a static pressure test be done on the underground sewer piping by a plumber, to determine if the underground sewer piping is leaking. The settlement of the foundation at the interior of the house could be related to plumbing leaks under the house.

Obtain Cost Estimate

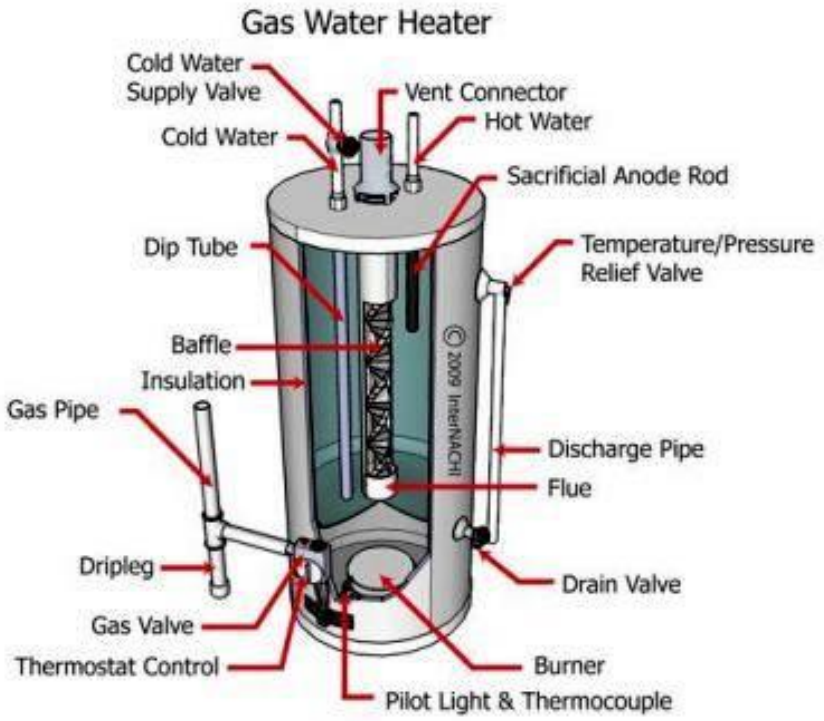
☒ ❑ ❑ ☒ **C. Water Heating Equipment**

Energy Source:
Capacity:
Comments:

The hot water for the house was provided by two natural gas fired water heaters, one a 50-gallon unit manufactured by American in 2012 and located in the attic, and the other a 50-gallon unit manufactured by Bradford White in 2002 and located in attic. The water piping from the water heaters was observed to be galvanized steel.

I=Inspected NI=Not Inspected NP=Not Present D=Deficient

I NI NP D



The temperature of the hot water was measured to be **139** degrees at the kitchen sink at the time of the inspection. Normally, 120 degrees is the recommended maximum temperature of hot water to prevent accidental scalding. It takes approximately 1/2 second of exposure to 160 degree water to cause a second or third degree burn. See the link below for more information about hot water burns and a scalding graph.
http://www.accuratebuilding.com/services/legal/charts/hot_water_burn_scalding_graph.html

I=Inspected NI=Not Inspected NP=Not Present D=Deficient

I	NI	NP	D

Both water heaters were functional at the time of the inspection. However, due to the age and/or condition of the 2002 equipment, it is the opinion of the inspector that the unit has only a limited amount of life remaining. Normal life expectancy of a water heater in the Houston area is approximately 7 to 10 years.

The attic did not have adequate service decking to all the equipment in the attic. The service decking should be a continuous deck that is a minimum of 24 inches wide that extends from the attic access opening to all equipment in the attic. In addition, the decking should be free from any obstructions, such as gas lines, electrical wiring, ductwork, framing members, etc.

M1305.1.3 Appliances in attics
Attics containing appliances requiring access shall be provided with a pull down stairway with a clear opening not less than 22 inches in width and a load capacity of not less than 350 pounds and a clear and unobstructed passageway large enough to allow removal of the largest appliance, but not less than 30 inches (762 mm) high and 22 inches (559 mm) wide and not more than 20 feet (6096 mm) in length when measured along the centerline of the passageway from the opening to the appliance. The passageway shall have continuous solid flooring in accordance with Chapter 5 not less than 24 inches (610 mm) wide.
A level service space at least 30 inches (762 mm) deep and 30 inches (762 mm) wide shall be present along all sides of the appliance where access is required. The clear access opening dimensions shall be a minimum of 20 inches by 30 inches (508 mm by 762 mm), where such dimensions are large enough to allow removal of the largest appliance.

Temperature/Pressure Relief Valve

The temperature/pressure relief valves were not operationally checked at the time of the inspection. Valves typically do not reseat properly when they are operated, which causes the valves to leak. It is best to replace a temperature/pressure relief valve every two years to prevent it from getting clogged with mineral deposits.

I=Inspected NI=Not Inspected NP=Not Present D=Deficient

I	NI	NP	D

Water Heater Vent Pipe

The vent pipe had a long horizontal run (approximately seven feet), and very little vertical rise (approximately two foot). The vent pipe is not installed properly, and can allow hazardous combustion gases to vent into the attic. Have a service company provide a cost estimate to replace the vent pipe.
Obtain Cost Estimate

I=Inspected NI=Not Inspected NP=Not Present D=Deficient

I	NI	NP	D

Double wall vent pipes require a minimum of one inch clearance to any material that is combustible. The vent pipe was located too close to a combustible material, which is a fire hazard.
Obtain Cost Estimate

Water Heater Plumbing

The piping at the top of the water heater was severely corroded at the fittings, and is in need of repair.
Obtain Cost Estimate

The hot water discharge line had a seepage leak.
Obtain Cost Estimate

❑ ❑ ☒ ❑ **D. Hydro-Therapy Equipment**
Comments:

V. APPLIANCES

A continuity check was made of the exterior metal casings of the built-in kitchen appliances, and it showed that the metal casings were grounded for the built-in kitchen countertop appliances.

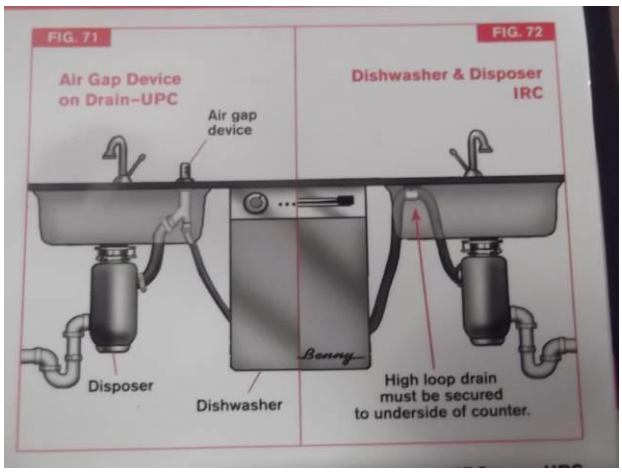
I=Inspected NI=Not Inspected NP=Not Present D=Deficient

I	NI	NP	D

☒ ❑ ❑ ❑ **A. Dishwasher**

Comments:

No items requiring repair were visible at the time of the inspection for the operation of the dishwasher. The drain line under the sink was looped up so that the top of the loop was higher than the point where the drain line connected to the disposal. This will help to prevent garbage from running down the drain line into the dishwasher.



☒ ❑ ❑ ☒ **B. Food Waste Disposer**

Comments

The electrical wiring for the disposal was not properly connected at the bottom of the unit.

Obtain Cost Estimate

I=Inspected NI=Not Inspected NP=Not Present D=Deficient

I	NI	NP	D

☒ ❑ ❑ ☒ **C. Range Hood and Exhaust System**

Comments:

A portion of the vent pipe was flex duct, rather than solid ducting. The flex duct is not an approved material, and it is recommended that it be replaced.

Obtain Cost Estimate

☒ ❑ ❑ ☒ **D. Ranges/Cooktops/Ovens**

Comments:

Gas Cooktop

The electronic igniter for the right front burner was non-functional and needs to be repaired/replaced.

Obtain Cost Estimate

I=Inspected NI=Not Inspected NP=Not Present D=Deficient

I	NI	NP	D

Electric Oven

Both oven thermostats were checked, and were properly calibrated. The thermostats were set at 350 degrees, and the ovens heated to within the allowable ±25 degrees. The ovens were checked with an oven thermometer, and found to heat to 350 for the upper oven, and 350 degrees for the lower oven.

☒ ❑ ❑ ❑ **E. Microwave Cooking Equipment**
*Comment*s:

No items requiring repair were visible at the time of the inspection for the heating operation of the microwave. A cup of water was placed in the unit, and the microwave heated the water adequately. It is pointed out that the unit was not checked for microwave leakage.

☒ ❑ ❑ ❑ **F. Bathroom Exhaust Fans and Space Heaters**
*Comment*s:

☒ ❑ ❑ ❑ **G. Garage Door Operators**
*Comment*s:

No items requiring repair were visible at the time of the inspection for the opener. The auto-reverse mechanism was operational, and the sensitivity setting on the mechanism was adequate. Also, the infrared auto reverse mechanism was functional.

☒ ❑ ❑ ❑ **H. Dryer Vents**
Comments:

The dryer vent was observed to the vent through the west exterior wall.

☒ ❑ ❑ ❑ **I. Other**
*Comment*s:

Refrigerator

No items requiring repair were visible at the time of the inspection for the refrigerator/freezer in the kitchen. It is pointed out that our inspection of the refrigerator is only cursory to see if the refrigerator compartment is cooling, and the freezer compartment is freezing. The refrigerator was cooling to 40 degrees and the freezer to 6 degrees at the time of the inspection, according to our infrared thermometer.

I=Inspected NI=Not Inspected NP=Not Present D=Deficient

I	NI	NP	D

The refrigerator was functional at the time of the inspection. However, due to the age and/or condition of the equipment, it is the opinion of the inspector that it has only a limited amount of life remaining.

Wine Cooler

The wine cooler was functional at the time of the inspection, and no repairs are indicated. The unit was on, and showed an operating temperature of 55 degrees, according to the digital display in the cooler.

Utility Room

The utility room contained a washing machine and dryer. Neither the washing machine nor dryer were operationally checked at the time of the inspection. No water was run down the drain line for the washing machine.

The 240-volt outlet for an electric dryer was the old style 3-prong outlet, rather than the new style 4-prong outlet. If your electric dryer has a 4-prong plug, then it will not be compatible, and either the outlet will need to be changed to a 4-prong outlet, or the plug will need to be changed to a 3-prong plug.

VI. OPTIONAL SYSTEMS

☒ ❑ ❑ ☒ **A. Lawn Sprinklers**

*Comment*s

Control Panel
Manufacturer: Hydro Rain
# of Zones: 7
Location: Inside Garage

Back Flow Prevention Device
Manufacturer: Febco
Location: West side of House

I=Inspected NI=Not Inspected NP=Not Present D=Deficient

I	NI	NP	D

Zone 7 of the system was non-functional at the time of the inspection and water was coming up through the ground at the east side of the house. Have a service company find the source of the problem, and make any necessary repairs.
Obtain Cost Estimate

Heads were spraying the house, and need to be adjusted.
Obtain Cost Estimate

A sprinkler head that was leaking water around the head was observed at zone 6.
Obtain Cost Estimate

Sprinkler heads that were not spraying properly, and appeared to be clogged were located at zones 2 and 4.
Obtain Cost Estimate

It is pointed out that there is a rain gauge attached to the sprinkler system that prevents the system from coming on if it had rained recently. The control was located at the west side of the garage roof.

❑ ❑ ☒ ❑ **B. Swimming Pools and Equipment**
*Comment*s:

☒ ❑ ❑ ☒ **C. Gas Lines**
Comments:

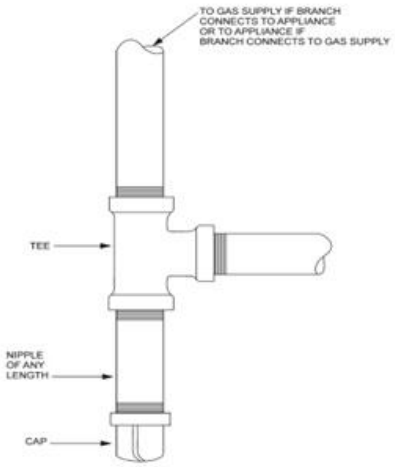
The gas meter, with the main shut off valve for the gas to the house, was located at the west side of the garage.

I=Inspected NI=Not Inspected NP=Not Present D=Deficient

I	NI	NP	D

Moisture/Sediment traps were not installed at the gas supply lines for the gas fired equipment as currently required. A moisture/sediment trap is intended to catch moisture and debris in the gas supply lines before they can enter into the equipment. Obtain cost estimate for any needed repairs.

HEI file photo showing sediment trap



Clip art showing a sediment trap in gas line

❑ ☒ ❑ ❑ **D. Security Systems**

Comments:

Security systems are not included in the scope of this inspection.

❑ ☒ ❑ ❑ **E. Fire Protection Equipment**

Comments:

Fire protection equipment is not included in the scope of this inspection. It is recommended that a service company who specializes in this field check the system. This includes smoke detectors, sprinkler systems, heat detectors, etc...