



HEDDERMAN SERVICES

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## MECHANICAL INSPECTION

9231 Fordshire Dr  
Houston, TX 77025



Inspector

**Gary Atherton**

TREC#24236

281-355-9911

[office@hedderman.com](mailto:office@hedderman.com)



# PROPERTY INSPECTION REPORT FORM

Robert & Patricia Pando c/o Katy Pando <i>Name of Client</i>	01/06/2023 12:00 pm <i>Date of Inspection</i>
9231 Fordshire Dr, Houston, TX 77025 <i>Address of Inspected Property</i>	
Gary Atherton <i>Name of Inspector</i>	TREC#24236 <i>TREC License #</i>
<i>Name of Sponsor (if applicable)</i>	<i>TREC License #</i>

### PURPOSE OF INSPECTION

A real estate inspection is a visual survey of a structure and a basic performance evaluation of the systems and components of a building. It provides information regarding the general condition of a residence at the time the inspection was conducted. *It is important* that you carefully read ALL of this information. Ask the inspector to clarify any items or comments that are unclear.

### RESPONSIBILITY OF THE INSPECTOR

This inspection is governed by the Texas Real Estate Commission (TREC) Standards of Practice (SOPs), which dictates the minimum requirements for a real estate inspection.

The inspector IS required to:

- use this Property Inspection Report form for the inspection;
- inspect only those components and conditions that are present, visible, and accessible at the time of the inspection;
- indicate whether each item was inspected, not inspected, or not present;
- indicate an item as Deficient (D) 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 SOPs; and
- explain the inspector’s findings in the corresponding section in the body of the report form.

The inspector IS NOT required to:

- identify all potential hazards;
- turn on decommissioned equipment, systems, utilities, or apply an open flame or light a pilot to operate any appliance;
- climb over obstacles, move furnishings or stored items;
- prioritize or emphasize the importance of one deficiency over another;
- provide follow-up services to verify that proper repairs have been made; or
- inspect system or component listed under the optional section of the SOPs (22 TAC 535.233).

### RESPONSIBILITY OF THE CLIENT

While items identified as Deficient (D) in an inspection report DO NOT obligate any party to make repairs or take other actions, in the event that any further evaluations are needed, it is the responsibility of the client to obtain further evaluations and/or cost estimates from qualified service professionals regarding any items reported as Deficient (D). It is recommended that any further evaluations and/or cost estimates take place prior to the expiration of any contractual time limitations, such as option periods.

**Please Note:** Evaluations performed by service professionals in response to items reported as Deficient (D) on the report may lead to the discovery of additional deficiencies that were not present, visible, or accessible at the time of the inspection. Any repairs made after the date of the inspection may render information contained in this report obsolete or invalid.

### REPORT LIMITATIONS

This report is provided for the benefit of the named client and is based on observations made by the named inspector on the date the inspection was performed (indicated above).

ONLY those items specifically noted as being inspected on the report were inspected.

This inspection IS NOT:

- a technically exhaustive inspection of the structure, its systems, or its components and may not reveal all deficiencies;
- an inspection to verify compliance with any building codes;
- an inspection to verify compliance with manufacturer’s installation instructions for any system or component and DOES NOT imply insurability or warrantability of the structure or its components.

## NOTICE CONCERNING HAZARDOUS CONDITIONS, DEFICIENCIES, AND CONTRACTUAL AGREEMENTS

**Conditions may be present in your home that did not violate building codes or common practices in effect when the home was constructed but are considered hazardous by today's standards. Such conditions that were part of the home prior to the adoption of any current codes prohibiting them may not be required to be updated to meet current code requirements. However, if it can be reasonably determined that they are present at the time of the inspection, the potential for injury or property loss from these conditions is significant enough to require inspectors to report them as Deficient (D). Examples of such hazardous conditions include:**

- malfunctioning, improperly installed, or missing ground fault circuit protection (GFCI) devices and arc-fault (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;
- lack of electrical bonding and grounding; and
- lack of bonding on gas piping, including corrugated stainless steel tubing (CSST).

Please Note: items identified as Deficient (D) in an inspection report DO NOT obligate any party to make repairs or take other actions. The decision to correct a hazard or any deficiency identified in an inspection report is left up to the parties to the contract for the sale or purchase of the home.

This property inspection report may include an inspection agreement (contract), addenda, and other information related to property conditions.

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.

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### **ADDITIONAL INFORMATION PROVIDED BY INSPECTOR**

*Hedderman Engineering Inc.:*

>It is the purpose of this report to give our client my educated and experienced opinion of the condition and function of the stated property as visually inspected by Hedderman Engineering, Inc. The inspection performed on this property 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: structural systems, mold, audio/visual components, lighting control systems, hazardous materials and gases, rated walls, lead paint, destructive insects or pest, security items, water or air treatment systems, etc. This inspection is limited to those components which were visible and readily accessible at the time of the inspection, without disassembling or removal of any portion of the structure, mechanical equipment, plumbing equipment, or electrical wiring and equipment is beyond the scope of this inspection. It is noted that this report contains the opinions 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 our client purchase a home warranty policy to protect oneself from both unexpected and anticipated problems that may occur in the future.

>It is noted that Hedderman Engineering Inc. is not responsible for any problems found in the house during or after components are opened up, disassembled, uncovered, made visible, or made accessible by another entity after the inspection is completed.

>If a builder or service contractor examines 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, and 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 inspection is not a "code inspection", but rather an inspection of the condition and function of the stated property.

>Although this report may include observations of some building code violations, total compliance with mechanical, plumbing, electrical codes, specifications, and/or legal requirements are specifically excluded. We do not perform "code" inspections, and since building codes change every few years, our inspections are not performed with the intention of bringing every item in the

property 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 are in need of repair. This is particularly applicable to Home Warranty policies, where the standards of the Home Warranty service company are often different than 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 appropriate service companies for a more in-depth analysis of what may be required to meet their standards should a claim be made against the policy.

>If there are any questions or concerns please contact Hedderman Engineering, Inc. at 281-355-9911 or Office@HeddermanEngineering.com.

## I. STRUCTURAL SYSTEMS

- A. Foundation**  
*Comments:*
- B. Grading and Drainage**  
*Comments:*
- C. Roof Covering Materials**  
*Comments:*
- D. Roof Structures & Attics**  
*Comments:*
- E. Walls (Interior and Exterior)**  
*Comments:*
- F. Ceilings and Floors**  
*Comments:*
- G. Doors (Interior and Exterior)**  
*Comments:*
- H. Windows**  
*Comments:*
- I. Stairways (Interior and Exterior)**  
*Comments:*
- J. Fireplaces and Chimneys**  
*Comments:*
- K. Porches, Balconies, Decks and Carports**  
*Comments:*

The structural portions of this property were inspected by an engineer from Hedderman Engineering Inc. per the inspection agreement between this firm and our client. All comments regarding the structure and property grade are found in the structure report that is created and provided by the engineers at Hedderman Engineering Inc.

According to HAR, the house was built in 1956.

*Orientation - House Facing West:*

For the purpose of the inspection, North is considered to be the left side of the house.

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I   NI   NP   D

## II. ELECTRICAL SYSTEMS

**A. Service Entrance and Panels**

*Electrical System Description:*

The electrical service is provided by a 120/240 volt, single-phase, 200-ampere service to an electric meter located at the north side of the house.

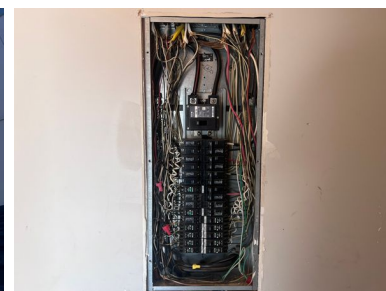
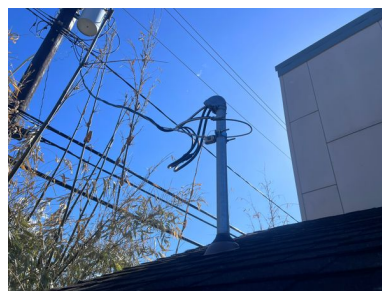
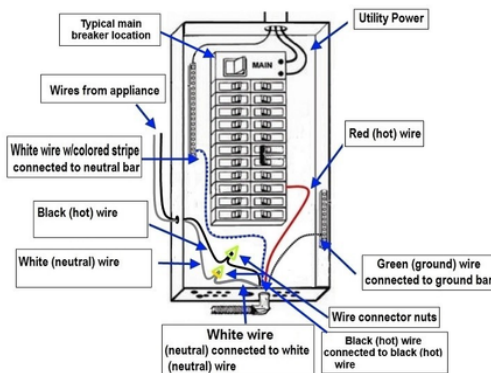
**Electrical Wiring Information**

<u>Service Wires</u>	<u>Branch Circuit Wires</u>	<u>Grounded or Ungrounded System</u>
4/0 Aluminum	Copper	Grounded

**Breaker Panel Information**

<u>Location</u>	<u>Manufacturer</u>	<u>Rating - Amps</u>
Exterior Storage Closet	Eaton	200 Amps

Circuit Breaker Wiring Diagram



*Breakers - Routine Check:*

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I	NI	NP	D
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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.

*AFCI Breakers Functional - All required locations:*

Arc Fault Circuit Interrupters (AFCI) were installed in the breaker panel(s). The AFCI devices properly tripped off the power to their circuits when the test buttons were pressed at the time of the inspection. An AFCI device is intended to shut off the power to a 120-volt circuit should an electrical arc be detected in the circuit. All of the required circuits appeared to be protected by AFCI devices according to the breaker panel legend.

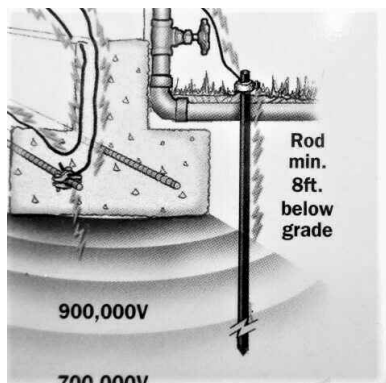
*Breaker panel legend:*

The circuit breakers were labeled to identify the circuits they were protecting. We did not trip off every breaker and trace out every circuit and, therefore, could not verify the accuracy of the labeling. If further investigation is desired, it is recommended that an electrician be contacted.

**1: Ground Rod - Not flush with grading**

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. The clamp on the rod should be an acorn clamp is approved for direct burial in the ground.

**Obtain Cost Estimate**



**B. Branch Circuits, Connected Devices, and Fixtures**

*Type of Wiring:* Copper -

*Comments:*

*GFCI Outlet - Functional :* Kitchen counter tops, Kitchen sink area, All bathrooms, Utility room, Exterior of house, Apartment - Kitchen -

Outlets that were protected by ground fault circuit interrupt (GFCI) devices were present and functioning properly at the time of the inspection. The GFCI devices were checked and the power to the outlets turned off when the test buttons were pressed. It is pointed out that GFCI devices can stop tripping and/or resetting properly at any point. The devices should be tested periodically and replaced when necessary.

*Ceiling Fans - Functional :*

No items that were in need of repair were observed for the operation of the ceiling fan(s) at the time of the inspection.

*Light Fixtures - Functional:*

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I NI NP D

The light fixtures throughout the house were operated and were observed to be functional at the time of the inspection.

*Limited visibility of electrical wiring* : At attic, Insulation cover - Visibility of the electrical wiring was very limited at the time of the inspection and some portions of the wiring that are typically accessible were concealed. If further investigation is desired, it is recommended that a service company be contacted.

*Exterior Light Fixtures - Sensors/Timers:*

Several of the exterior lights appeared to be on a daylight sensor or timer, and will not come on until it gets dark. Since it was not dark, the lights were not checked at the time of the inspection. Further investigation is recommended.



*Low Voltage Systems - Not inspected:*

It is pointed out that low voltage systems, low voltage wiring, and low voltage connections were not included in the scope of the inspection and were not checked, including: audio/visual systems, alarm systems, data lines, and phone lines. If further investigation is desired, it is recommended that a service company be contacted.

*Smoke and Carbon Monoxide Detectors:*

We could not determine if the smoke and/or carbon monoxide detectors are connected to the security alarm system as is common practice, therefore, to avoid triggering the security alarm we did not operationally check each device. Further investigation is recommended with a service company who specializes in this field to determine if the devices are interconnected as currently required and functioning properly. For safety purposes, it is recommended that smoke detectors and carbon monoxide detectors be replaced every ten years. Further investigation is recommended.

**1: GFCI - Missing at outlet**

Washing machine, Garbage disposal outlet, Dishwasher outlet -

A GFCI device was not installed at one or more locations that are currently required to have GFCI protection. It is recommended that an electrician install GFCI devices at all of the currently required locations.

**Obtain Cost Estimate**

Recommendation: Contact a qualified professional.

**2: Exterior Outlet - No water tight cover**

Rear of the house

An exterior outlet that was not protected by a water tight cover plate was observed.

**Obtain cost estimate**

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HEI File Photo

### 3: Light Fixture - Nonfunctional

Apartment Bathroom

A light fixture that was non-functional when the switch was on was observed. The problem may be a burned out bulb, defective light fixture, or defective switch.

**Further investigation is recommended**

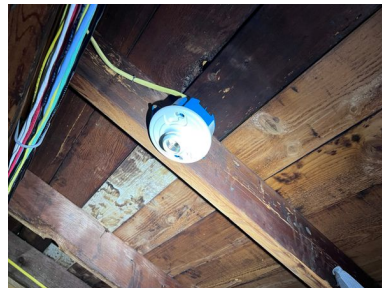


### 4: Light Fixture - Missing bulb

Attic

A light fixture had a missing bulb.

**Obtain Cost Estimate**



### 5: Carbon Monoxide Detectors - Current standards not met

Carbon monoxide detectors were not installed at all of the currently required locations and it is recommended that approved carbon monoxide detectors be installed. Currently, carbon monoxide detectors are required outside each sleeping area.

**Obtain Cost Estimate**

Recommendation: Contact a qualified professional.



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**6: Smoke detector missing**

Living Room & Apartment

One or more of the smoke detectors was missing.

**Obtain Cost Estimate**

Recommendation: Contact a qualified professional.

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**7: Smoke Detectors- Replace batteries**

Master Bedroom

The smoke detectors were chirping indicating that the batteries at one or more of the devices need to be replaced.

**Obtain Cost Estimate**

Recommendation: Contact a qualified professional.

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### III. HEATING, VENTILATION AND AIR CONDITIONING SYSTEMS

**A. Heating Equipment**

Comments:

Type of System: Forced Air

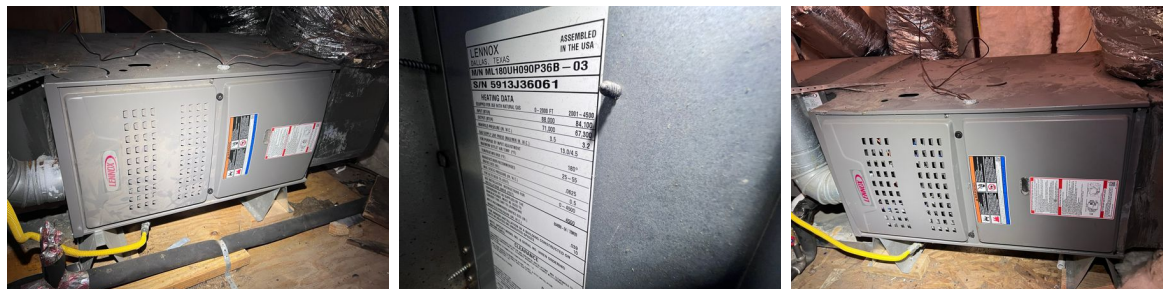
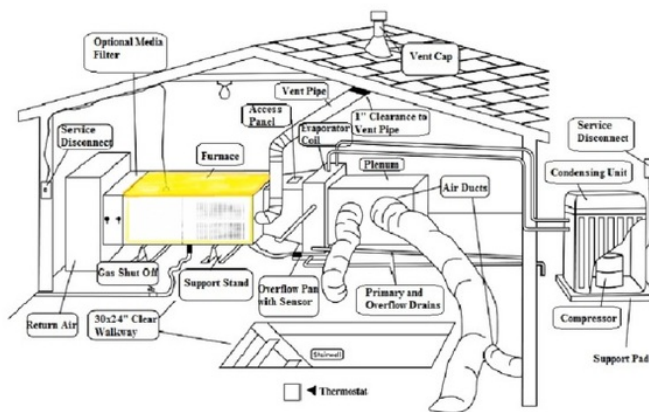
Energy Sources: Natural Gas & Electric

It is pointed out that our inspection of the air conditioning and heating system(s) is a limited, visual inspection in accordance with the TREC SOP, 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 a cursory inspection of the apparent function, 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) by a qualified service technician using specialized diagnostic equipment, 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.

Gas Furnace Description:

The heating for the property was provided the following natural gas-fired equipment:

<u>ZONE</u>	<u>BRAND</u>	<u>BTU</u>	<u>DATE</u>	<u>LOCATION</u>
Living Room	Lennox	88k	2013	Attic
Bedrooms	Lennox	88k	2013	Attic



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I NI NP D

Living Room

Living Room

Bedrooms

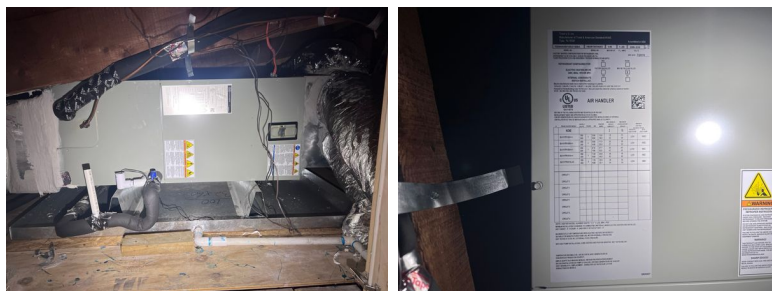
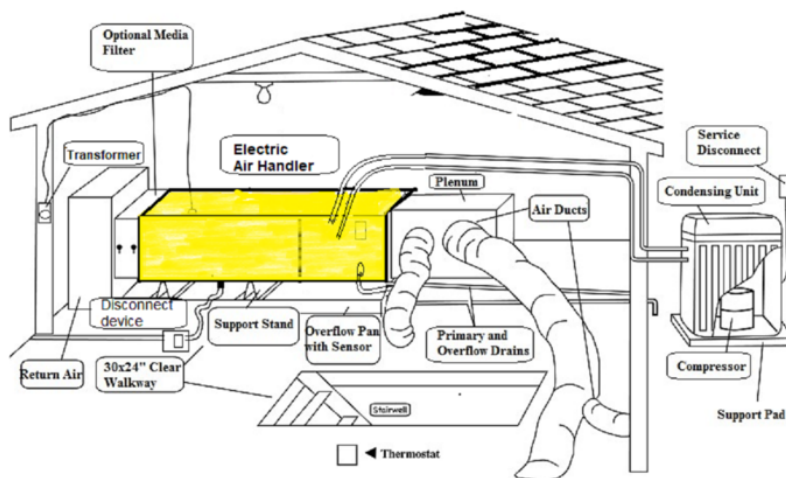


Bedrooms

**Electric Air Handler Description:**

The heating for the property was provided by the following electric heating equipment:

<u>ZONE</u>	<u>BRAND</u>	<u>DATE</u>	<u>LOCATION</u>
Apartment	Trane	2019	Loft Attic



**Electric Heat - Functional:**

The electric heating equipment was observed to be operating and functional at the time of the inspection. The electric heating equipment was heating the air 25+ degrees, which is adequate.

**Limited life:**

Due to the age and/or condition of the equipment, it is our opinion that the equipment has only a limited amount of remaining life.

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Living Room & Bedrooms

*Heat Exchanger - Information:*

Gas furnaces are constructed in such a way that the units must be dismantled in order to view the entire heat exchanger inside. The equipment was not dismantled, and the heat exchanger was not able to be viewed for evidences of cracks. If further investigation is desired, it is recommended that a service company be contacted to dismantle the equipment. It is pointed out, for safety purposes, the heat exchanger should be inspected by an HVAC service company once a year.

**1: Gas Service - Not present**

The gas service was not on at the time of the inspection, and the gas fired equipment was not operationally checked. It is recommended that all components of the gas fired equipment be checked by a service company when the gas service is turned on.

**Further investigation is recommended.**

**B. Cooling Equipment**

*Comments:*

*Type of System: Split system*

*The inspection of the HVAC system is cursory in nature in accordance with the TREC SOP. We measure the temperature drop ( $\Delta T$ ) across the indoor coil(s) at the time of the inspection and our observations have been recorded in this report. 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. It is pointed out that an HVAC license is required to check the refrigerant pressures for the A/C equipment, therefore the refrigerant pressure was not checked during the inspection.*

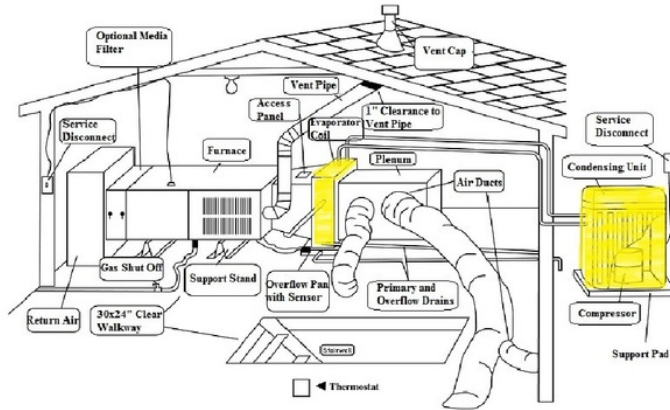
*A/C Equipment Description:*

The type of air conditioning for the property is a forced air split system. The cooling equipment for the property was as follows:

Zone	Brand	Size/Age Condenser	Size/Age Coil	Temp Drop Degrees
Living Room	Lennox	3-ton 2014	3-ton 2013	20.3
Bedrooms	Lennox	3-ton 2014	3-ton 2013	17.5
Apartment	American Standard	1.5-ton 2020	1.5-ton 2019	20.5

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I NI NP D



Living Room



Living Room



Living Room



Bedrooms



Bedrooms



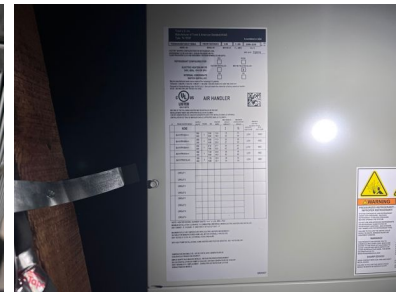
Bedrooms



Apartment



Apartment



Apartment

**Condensing Unit Equipment - Functional:**

The condensing unit equipment was functional at the time of the inspection. The equipment responded to the corresponding thermostat, and the compressor components and fan motor components appeared to be operating as evidenced by the cooling performance of the system.

**Coil Equipment - Functional:**

The coil equipment was operating and was providing a degree of cooling at the time of the inspection.

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*Cooling Performance - Acceptable:*

The cooling performance of the equipment was observed to be adequate according to industry standards. The air conditioning equipment was observed to be cooling between 16-20 degrees across the indoor coil at the time of the inspection.

All 3 Units

*Limited Life:*

Due to the age and/or condition of the equipment, it is our opinion that the equipment has only a limited amount of life remaining. It would be a prudent to have the equipment thoroughly checked by a licensed air conditioning service company and further investigation is recommended.

Living Room & Bedrooms

*Primary Drain - Terminated properly:*

The primary condensate drain line was properly terminated into the P-trap at a plumbing fixture drain at the interior of the property.

All 3 Units



*Cooling Performance:*

We measure the temperature drop ( $\Delta T$ ) across the indoor coil(s) at the time of the inspection and our observations have been recorded in this report. 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.

**1: A/C Equipment - Possibly oversized**

The total tonnage of the cooling equipment was 7.5-tons. As a ballpark method of estimation, approximately one ton of air conditioning can cool approximately 500-600 square feet of living area. By this standard, 7.5-tons of air conditioning can cool approximately 3,750-4,500 square feet of living area. It is pointed out that a house that has an oversized air conditioning system cannot be expected to properly remove the humidity from the air. Further investigation is recommended by an air conditioning service company to determine if the existing equipment is sized properly to adequately and efficiently cool this house.

**Obtain Cost Estimate**

**2: Overflow Pan - Rust**

Living Room & Bedrooms

Rust was observed in the overflow pan under the coil, apparently due to water backing up at the primary drain line and overflowing into the pan. No water was observed in the overflow pan at the time of the inspection. However, since the equipment was only operated for a short time during the inspection, it is recommended that the primary drain line and the coil be checked by an air conditioning service company.

**Obtain Cost Estimate**

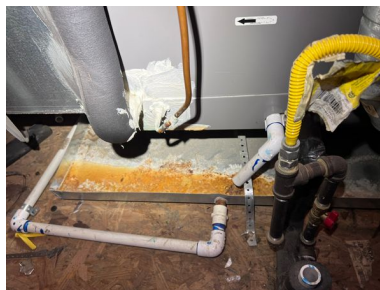
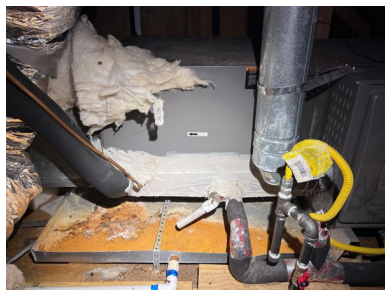
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**3: Overflow Pan - Debris in pan**

Living Room

Insulation and/or debris was observed in the overflow pan. The pan needs to be cleaned out to prevent clogging of the drain line.

**Obtain Cost Estimate**



**4: Overflow Pan - Water sensor not present**

All 3 Units

The overflow pan under the coil was not equipped with a water sensor nor was a sensor installed in the primary drain line. The sensor is intended to turn off the air conditioning system should the pan fill with water. It is recommended that you consider having an overflow pan water sensor installed.

**Obtain cost estimate**

**C. Duct Systems, Chases, and Vents**

*Type of ducts:* Flex ducts -

*Comments:*

*Duct Work - Acceptable:*

The ductwork appeared to be in good condition at the time of the inspection and air was blowing out of each of the registers. The airflow may need to be adjusted in each room to meet your specific needs.

*Return Air - Acceptable :*

The return air system in the house had no visible items that were in need of repair and appeared to be performing as intended at the time of the inspection.

**1: Ducts - No clearance between ducts**

We observed that some of the air ducts in the attic were in contact with each other, which can cause condensation to form on the outside of the ductwork. It is recommended that the ducts that are touching be separated. Typically, this is done by inserting a piece of fiberglass batt insulation or duct board between the

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I	NI	NP	D
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ducts.

**Obtain Cost Estimate**



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### 2: Registers - Microbial growth observed

Living Room

Some of the registers were covered with mildew/debris. It is recommended that a service company be contacted to check the inside a of the duct work to determine if there is a build-up of debris/mold/mildew inside, and make any needed repairs. Further investigation is recommended.

**Obtain Cost Estimate**



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### 3: Register - Water stains

Living Room

Water stains were observed next to the air register on the ceiling indicating excessive sweating/condensation. Further investigation is recommended.

**Obtain Cost Estimate**

Recommendation: Contact a qualified professional.



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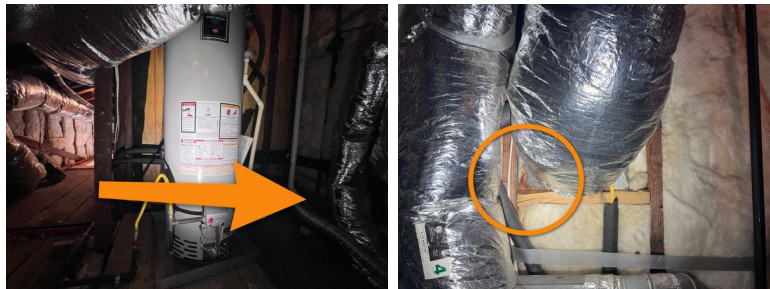
**4: Rigid Ducts - Exterior rusting**

Attic

The box of the duct work was beginning rust. It is recommended that the rust be removed to prevent further deterioration.

**Obtain Cost Estimate**

Recommendation: Contact a qualified professional.



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I NI NP D

### IV. PLUMBING SYSTEMS

**A. Plumbing Supply, Distribution Systems, and Fixtures**

*Comments:*

Location of water meter: The street curb

Location of main water supply valve: North side of the house

Static water pressure reading: 60 PSI

Water Supply Material: PEX

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 property. The water distribution system is under pressure, usually from 40 psi to 70 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 flow characteristics 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.

*Main Water Shut Off Valve Location:* North side -

The main shut-off valve for the water line service piping is intended to provide a means to disconnect the water service to the structure/property.



*Static Water Pressure:* 55-60 PSI -

The static water pressure at the property was measured with a water pressure gauge at the hose bibb nearest to the shut off valve at the time of the inspection.



*Limited visibility of plumbing lines:* At attic, Insulation cover -

Visibility of the plumbing lines was very limited at the time of the inspection and some portions of the plumbing that are typically accessible were concealed. If further investigation is desired, it is recommended that a service company be contacted.

*Shower - No evidence of shower pan leak:*

No evidence of a current shower pan leak were visible at the time of the inspection for the shower(s). It is pointed out, our shower inspection is limited to a visual inspection and we did not perform a shower pan leak

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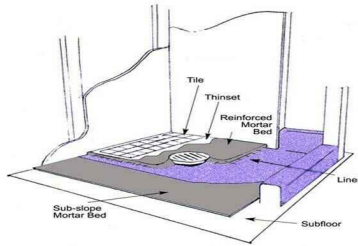
NI=Not Inspected

NP=Not Present

D=Deficient

I NI NP D

test. It is recommended that a plumber be contacted to perform a shower pan leak test to determine if any water is leaking past the shower pan.



*Tub trap - No access:* No access opening -

The plumbing for the tub was not visible for inspection due to a lack of access. As a routine, we recommend that access to the plumbing be provided for inspection and repair purposes.

### 1: Drain Stopper - Nonfunctional

Hall Bath, Master Bath & Master Closet Half Bath

The drain stopper was not operating properly and needs to be repaired.

**Obtain cost estimate**

Recommendation: Contact a qualified professional.



Hall Bath



Master Bath



Master Bath



Master Closet Half Bath

### 2: Sink Drain - Leaking

Apartment

The drain line for the kitchen sink was leaking behind the wall to the exterior.

**Obtain Cost Estimate**

I=Inspected

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I NI NP D



**3: Toilet - Flush handle needs repair**

Master Closet Half Bath

The flush handle was damaged and/or not operating properly and needs to be replaced.

**Obtain Cost Estimate**



**4: Tub - Caulk needed**

Hall Bath

The tub needs to be caulked.

**Obtain Cost Estimate**



**5: Tub - Chipped Finish**

Hall Bath

The surface of the bathtub was chipped. The chip was cosmetic in our opinion and did not affect the ability of the tub to perform its function, and no leaks were observed at the time of the inspection. However, if this condition concerns you, then further investigation with a service company is recommended.

**Obtain Cost Estimate**

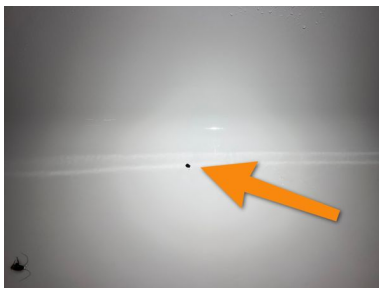
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**6: Shower - Caulking needed**

Master Bath & Apartment

The shower needs to be caulked.

**Obtain Cost Estimate**



Master Bath



Master Bath



Master Bath



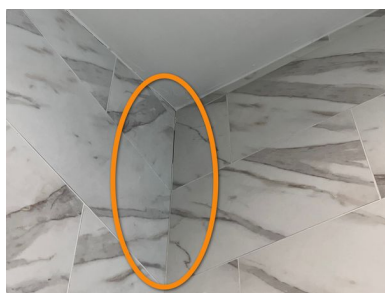
Master Bath



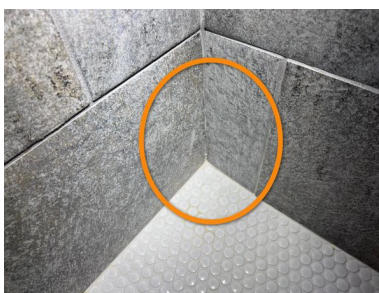
Master Bath



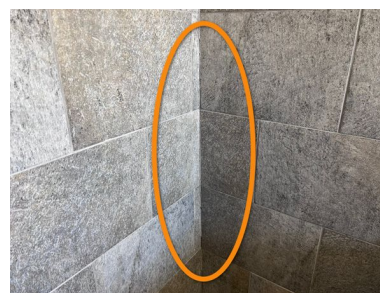
Master Bath



Master Bath



Apartment



Apartment

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NI=Not Inspected

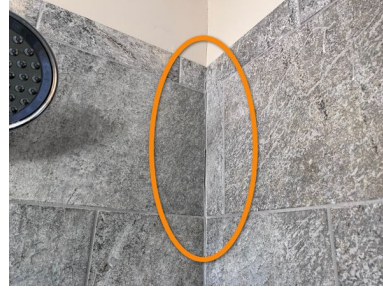
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Apartment



Apartment

**7: Shower/Tub - Rubber door seal loose**

Master Bath

The rubber threshold/seal strip for the shower door is leaking water and needs to be repaired.

**Obtain Cost Estimate**



**8: Shower/Tub - Shower head leak**

Master Bath

The shower head was leaking at the connection and needs to be repaired.

**Obtain Cost Estimate**



**9: Shower/Tub - Caulk valves**

Throughout the house

The tub and/or shower valves and/or faucet needs to be caulked to prevent water from entering the wall cavity behind the valves/faucet.

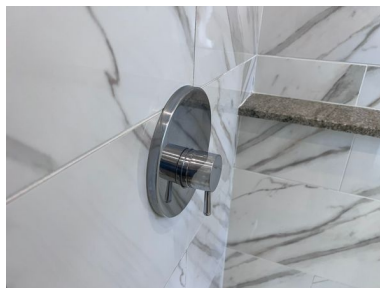
**Obtain Cost Estimate**

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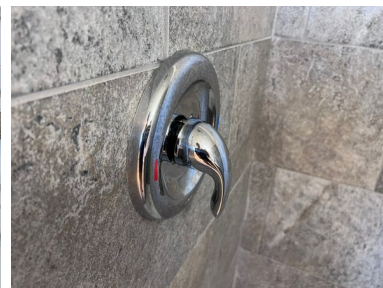
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Hall Bath



Master Bath



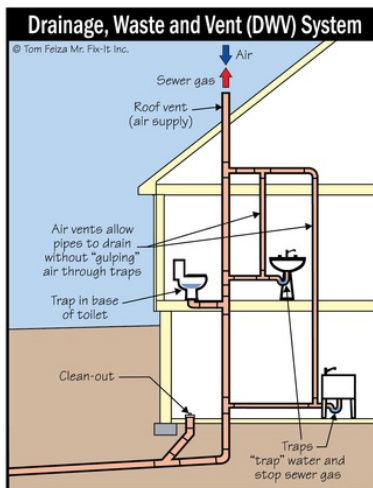
Apartment

**B. Drains, Wastes, and Vents**

*Sewer Piping Material: PVC & Possible Cast Iron -  
Comments:*

*Sewer System - Functional:*

No evidences of a system wide problem were observed when the system was operationally checked by running water through each of the plumbing fixtures during the duration of the inspection. It is noted that most of the drain waste system in the walls, under the floors, and in the ceilings is not visible. If further investigation is desired, it is recommended that a plumber be contacted to perform an in depth survey with a camera or hydrostatic test.



*Sewer Clean Out - Not visible:*

A clean out for the sewer line was not visible. It is recommended that you check with the owner to determine if a clean out is present, and if so, to determine the location of the clean out. This is needed for access to the sewer line should the sewer line become clogged and need to have a sewer snake run down the line to clean it out.

**C. Water Heating Equipment**

*Comments:*

*Energy Source: Natural Gas  
Capacity: 50 Gallons*

*Gas Water Heater Description:*

The hot water for the property was provided by the following natural gas fired gas water heater(s):

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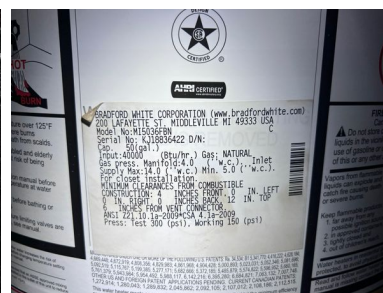
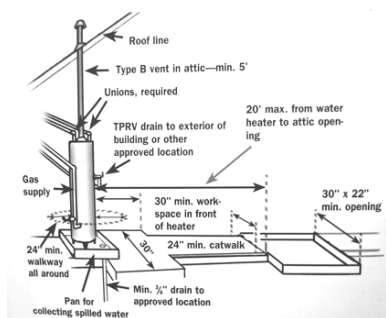
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Location	Brand	Capacity	Age	Energy Type
Attic	Bradford White	50 Gallons	2013	Gas



**Water Heater Equipment - limited life:**

Due to the age and/or condition of the equipment, it is our opinion that the equipment has only a limited amount of life remaining. Normal life expectancy for a water heater in the Houston area is approximately 10-12 years.

**Temp/Pressure Relief Valve - Information:**

Temperature/pressure relief valves are not operationally checked by this firm during the inspection. Valves typically do not reseat properly when they are operated, which causes the valves to leak. It is best to replace the temperature/pressure relief valves for water heaters every 2-3 years to prevent them from getting clogged with mineral deposits.

**1: Gas Service - Not present**

The gas service was not on at the time of the inspection, and the water heater was not operationally checked. The equipment should be operationally checked when the gas service is reinstated.

**Further investigation is recommended.**

**2: Water Heater - Tank rusted**

The bottom of the water heater tank is beginning to rust. This indicates that the bottom of the heat exchanger has been rusting. Further investigation is recommended with a service company to determine the extent of the rust and make any necessary repairs.

**Obtain Cost Estimate**





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I NI NP D

**3: Relief Valve - Water dripping from drain line**

House Unit

Water was dripping from the relief valve drain line indicating that the temperature/pressure relief valve was leaking.

**Obtain Cost Estimate**



**D. Hydro-Massage Therapy Equipment**

*Hydro-Therapy Equipment Not present:*

Hydro-therapy equipment was not present at the time of the inspection.

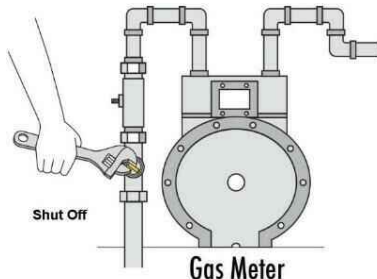
**E. Gas Distribution Systems and Gas Appliances**

*Location of Gas Meter: Rear of house -*

*Type of gas distribution piping material: Steel piping with flexible appliance connectors*

*Comments:*

A cursory visual inspection was performed on the gas supply piping. The inspection was limited to the gas pipes that were visible and accessible at the time of the inspection, without digging to uncover gas lines. The underground gas line is typically galvanized steel, which can and does rust. However, viewing the underground gas line(s) would require digging, and HEI does not do any digging around the gas lines to determine their condition or the degree of rusting at the underground piping. Also, the use of specialized equipment to detect leaks is not included in the scope of this inspection, nor is determining the gas supply pressure or adequacy. If further investigation is desired to know the condition of the underground gas line(s), it is recommended that a plumber be contacted.



**1: Gas service turned off**

Gas service was not provided to the house at the time of the inspection, therefore the gas fired equipment could not be operationally checked. It is recommended that the gas fired equipment be operationally checked

I=Inspected

NI=Not Inspected

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D=Deficient

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by a service company when the gas service is reinstated.

**Further investigation is recommended.**



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## V. APPLIANCES

**A. Dishwashers**

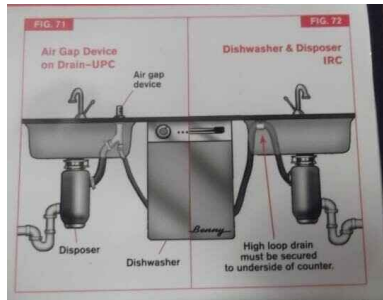
*Functional:*

The dishwasher was functioning and responded to the controls. The unit was run through a cycle at the time of the inspection and appeared to be operating properly.



*Drain Line Loop Present:*

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 Disposers**

*Functional:*

The disposal was operating and responded to the controls at the time of the inspection.



**C. Range Hood and Exhaust Systems**

*Range Vent - Functional:*

I=Inspected

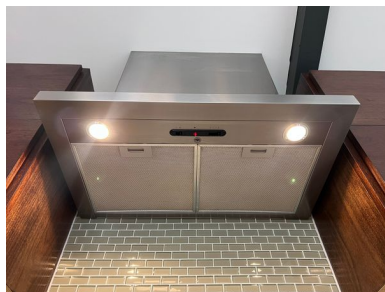
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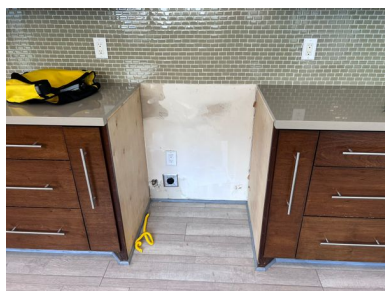
No items requiring repair were visible at the time of the inspection to the operation of the range vent. The vent fan was observed to be venting properly at the time of the inspection.



- D. Ranges, Cooktops, and Ovens**

*Not Present:*

The equipment was not present at the time of the inspection.



- E. Microwave Ovens**

*Functional:*

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. Mechanical Exhaust Vents and Bathroom Heaters**

*Mechanical Vents - Functional:*

The mechanical vent fans were functional at the time of the inspection. The bath vent fans responded to the switches and were functional at all the bathrooms.

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

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**G. Garage Door Operators**

*Not Present:*

A garage door opener was not present at the time of the inspection.

**H. Dryer Exhaust Systems**

*Dryer Vent:*

The dryer vent appeared to be properly installed at the time of the inspection. It is pointed out that a portion of the dryer pipe was not visible where it entered the wall/ceiling. Also, dryer vents need to be cleaned periodically for safety reasons and to allow the dryer to operate properly.

*Vent - Check for lint:*

It is recommended that the vent be checked periodically for an excess of lint and that it be cleaned if necessary. (Information)

**I. Other**

*Non Built-in Equipment - Not inspected:*

It is pointed out that non built-in refrigerators, wine coolers, small refrigerators, clothes washers, and clothes dryers are not included in the scope of this inspection and were not checked. If further investigation is desired, it is recommended that a service company be contacted.

**Further investigation is recommended**

*Dryer Connections- Electric 4 prong and Gas:*

The 240-volt outlet for the electric dryer connections was observed to be the newer style 4-prong outlet rather than the older 3-prong outlet. You may want to check your clothes dryer to determine if you have the correct power cord for this outlet. A gas connection was installed. It is pointed out that the gas valve was not operationally checked.

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## VI. OPTIONAL SYSTEMS

**A. Landscape Irrigation (Sprinkler) Systems**

*Sprinkler System:* Rainbird, Located at south side of house, 8 zones -

An automatic sprinkler system was installed. The system included a control panel, one or more solenoid valves, underground water lines and with sprinkler heads.



*Backflow Prevention Device - present:*

A backflow prevention device was present and was equipped with the two water shut off valves on the water supply line to the sprinkler system.

North



*Rain Sensor:* Rain Sensor - Present -

It is currently required for automatic sprinkler systems to be equipped with a rain sensor device that will prevent the sprinkler system from operating during and shortly after a significant rain.



**1: Adjust sprinkler head spray**

Spraying Walk Way, Spraying driveway, Spraying street -  
The sprinkler head spray was in need of adjustment/repair.

**Obtain cost estimate**

Recommendation: Contact a qualified professional.

I=Inspected

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I NI NP D



Zone 2



Zone 3



Zone 5

## 2: Broken water pipe

Zone 7 -

A broken water pipe was observed and needs to be repaired.

**Obtain cost estimate**

Recommendation: Contact a qualified professional.



## 3: Zones not labeled

The individual zones were not labeled at the sprinkler system control panel.

**Obtain cost estimate**

Recommendation: Contact a qualified professional.

I=Inspected

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NP=Not Present

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I NI NP D

### INFORMATION FROM HEDDERMAN ENGINEERING INC.

*Closing Comments :*

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 recommended that a Home Warranty Policy be provided to protect the appliances and mechanical equipment against unforeseen breakdowns during the first year. Check with your agent for details.

**Items identified in the report as Deficient and our Recommendations are provided in the above report. Many, but not all, recommendations are highlighted in bold red text. It is our intention, and your responsibility, that you follow up on these deficiencies and recommendations as part of your due diligence by contacting the appropriate service contractor(s) for Further Investigation, Obtain cost estimate, and/or Contact the builder. It is pointed out that other related and/or underlying conditions may be present, and which may not be apparent in our limited, visual inspection without further investigation by qualified service companies. It is emphasized how important it is for you if you intend to rely on our report(s), to continue to gather the in-depth information that will be obtained by further investigation with appropriate service technicians who will use their specialized knowledge of the component(s) and the related building codes along with their specialized diagnostic equipment to give you the TOTAL PICTURE of the condition of the property. Failure on your part to do your due diligence will constitute negligence on your part and will result in an incomplete body of knowledge upon which you base your decisions regarding this property. We recommend that your further investigations be done before the expiration of your option period and before closing on the property.**

As an additional service, we 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 Repair Pricer 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 Repair Pricer. 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>