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Confidential Home Inspection Report for:

123 Example Lane, St. Louis MO 12345

Inspection Date:

Inspector: Dan Sandweg

Client: The Homebuyers

Phone: 314-555-5555

Email:

Represented By: Your Agent Phone: 314-555-5555

Email:



Inspection Details:

You have contracted with us to perform a generalist inspection in accordance with the standards of practice established by the American Society of Home Inspectors (ASHI), a copy of which is available upon request, and which can be read or downloaded by visiting www.ashi.org. Generalist inspections are essentially visual, and distinct from those of specialists, inasmuch as they do not include the use of specialized instruments, the dismantling of equipment, or the sampling of air and inert materials. Consequently, a generalist inspection and the subsequent report will not be as comprehensive, nor as technically exhaustive, as that generated by specialists, and it is not intended to be.

The purpose of a generalist inspection is to identify defects or adverse conditions that would warrant a specialist evaluation. Therefore, you should be aware of the limitations of this type of inspection, which are indicated in the standards. However, as a courtesy, we are including some commonplace information about several of the environmental contaminants that could be of concern to you and your family.

There are many environmental contaminants that we do not have the expertise to test for, such as asbestos, methane, formaldehyde, termites and other wood-destroying organisms, pests and rodents, molds, microbes, bacterial organisms, and electromagnetic radiation, to name some of the better known ones. We will attempt to alert you to any suspicious substances that would warrant evaluation by a specialist. You should also be aware that our use of terminology like "mold," and "asbestos," is intentionally generic, and should not be construed as a statement of fact. Health, safety, and environmental hygiene is a deeply personal responsibility, and you should make sure that you are familiar with any contaminant that could affect your home environment.

Mold is one known contaminant. It is a microorganism that has been in existence throughout human history, and actually contributes to the life process. It takes many different forms. Some characterized as allergens are relatively benign but can provoke allergic reactions among sensitive people, and others characterized as pathogens can have adverse health effects on large segments of the population, such as the very young, the elderly, and people with suppressed immune systems. However, there are less common molds that are called toxigens that do represent a health threat. All molds flourish in the presence of moisture, and we make a concerted effort to look for any evidence of it wherever there could be a water source, including that from condensation. Interestingly, the molds that commonly appear on ceramic tiles in bathrooms do not usually constitute a health threat, but they should be removed. However, some visibly similar molds that form on cellulose materials, such as on drywall, plaster, and wood, are potentially toxigenic. If mold is to be found anywhere within a home, it will likely be in the area of tubs, showers, toilets, sinks, water heaters, evaporator coils, inside attics with unvented bathroom exhaust fans, and return-air compartments that draw outside air, all of which are areas that we look at very closely. Nevertheless, mold can appear as though spontaneously at any time, so you should be prepared to monitor your home, and particularly the areas that we have alluded to. Naturally, it is equally important to maintain clean air-supply



ducts and to change filters as soon as they become soiled, because contaminated ducts are a common breeding ground for dust mites, rust, and other contaminants. Regardless, the specific identification of molds can only be determined by specialists and laboratory analysis, and is absolutely beyond the scope of our inspection. Nonetheless, as a prudent investment in environmental hygiene, we recommend that you have your home tested for the presence of any such contaminants, and particularly if you or any member of your family suffers from allergies or asthma.

Asbestos is another notorious contaminant that could be present in any home built before 1978. It is a naturally occurring mineral fiber, and it has been widely used throughout the world in a variety of thermal insulators, including those in the form of paper wraps, batts, blocks, and blankets. It can also be found in a wide variety of other products, including duct insulation and acoustical materials, plasters, siding, floor tiles, heat vents, and roofing products. While recognized as being present in some documented forms, asbestos can only be specifically identified by laboratory analysis. The most common asbestos fiber that exists in residential products is chrysotile, which belongs to the serpentine or white-asbestos group, and was used in the clutches and brake shoes of automobiles for many years. A single asbestos fiber is said to be able to cause cancer, and is therefore a potential health threat. Significantly, asbestos fibers are only dangerous when they are released into the air and inhaled. For this reason authorities such as the Environmental Protection Agency (EPA) and the Consumer Product Safety Commission (CPSC) distinguish between asbestos that is in good condition, or non-friable, and that which is in poor condition, or friable, which means that its fibers could be easily crumbled and become airborne. We are not specialists and, regardless of the condition of any real or suspected asbestos-containing material (ACM), we recommend having it evaluated by a specialist. If asbestos is suspected to be present, a list of local specialists is provided for your use.

Radon is a gas that results from the natural decay of radioactive materials within the soil, and is identified as the second leading cause of lung cancer in the United States. The gas is able to enter homes through the voids around pipes in concrete floors or through the floorboards of poorly ventilated crawlspaces. It cannot be detected by the senses, and its existence can only be determined by sophisticated instruments and laboratory analysis. You can learn more about radon and other environmental contaminants and their affects on health, by contacting the EPA or a similar state agency, and it would be prudent for you to enquire about any high radon readings that might be prevalent in the region surrounding your home.

Lead poses an equally serious health threat. In the 1920's, it was commonly found in many plumbing systems. When in use as a component of a waste system, it does not constitute a viable health threat, but as a component of potable water pipes it would certainly be a health-hazard. Although rarely found in use, lead could be present in any home built as recently as the nineteen forties. For instance, lead was an active ingredient in many household paints, which can be released in the process of sanding, and could be ingested by small children and animals chewing on painted surfaces. Fortunately, industrial hygienists using sophisticated instruments can detect the lead in painted surfaces. If lead water supply piping is present at your selected home, we would be pleased to provide a water test to help you assess any potential issues.

There are other environmental contaminants, some of which we have already mentioned, and others that may be relatively benign. We are not environmental hygienists, and as we stated earlier we disclaim any responsibility for testing or establishing the presence of any environmental contaminant, (unless we have offered to perform this service based on our experience and qualifications and you have selected to have us perform such services for additional fees). We recommend that you schedule whatever specialist inspections you deem to be prudent before the close of escrow.

PLEASE NOTE:

The observations and opinions expressed within this report are those of the inspection company and supercede any alleged verbal comments. We inspect all of the systems, components, and conditions described in accordance with the standards of the inspection company's affiliations, and those that we do not inspect are clearly disclaimed in the contract and/or in the aforementioned standards. However, some components that are inspected and found to be functional may not necessarily appear in the report, simply because we do not wish to waste our client's time by having them read an unnecessarily lengthy report about components that do not need to be serviced. In accordance with the terms of the contract, the service recommendations that we make in this report should be completed well before the close of escrow by licensed specialists, who may well identify additional defects or recommend some upgrades that could affect your evaluation of the property.

GENERAL COMMENTS:

The soil was saturated at the time of the inspection.

The sky was clear.

The house faces northwest.

The house was vacant but was fully furnished at the time of the inspection.

In order to assist the client with prioritization, items are highlighted as indicated:

- Items highlighted in **GREEN** indicate items, which need service, or they are ongoing homeowner maintenance items and are considered to be minor "handyman" type repairs with an individual estimated cost up to several hundred dollars.
- Items in **BLUE** represent those items with a higher estimated cost, or may need the services of a licensed plumber, electrician or other specialized contractor.
- Items highlighted in **RED** represent repairs in excess of a thousand dollars or could be urgent life safety issues.



Structural Description

This residence has a basement. Such foundations should permit access, and provide a convenient area for the distribution of water pipes, drain pipes, vent pipes, electrical conduits, and ducts. Although raised foundations are far from uniform, most include concrete footings and walls that extend above the ground with anchor bolts that hold the house onto the foundation; the size and spacing of the bolts vary. In the absence of major defects, most structural engineers agree that the one critical issue with raised foundations is that they should be bolted. Our inspection of these foundations conforms to the ASHI standards. We do not use any specialized instruments to establish that the structure is level. We typically enter all accessible areas, to confirm that foundations are bolted and to look for any evidence of structural deformation or damage. We may not comment on minor deficiencies, such as commonplace settling cracks in the stem walls and slight deviations from plumb and level in the intermediate floor framing, which would have little structural significance. There is no absolute standard for evaluating cracks. Those that are less than 1/4" and which do not exhibit any vertical or horizontal displacement are generally not regarded as being structurally relevant. A specialist should evaluate all others. However, in the absence of any major defects, we may not recommend that you consult with a foundation contractor, a structural engineer, or a geologist, but this should not deter you from seeking the opinion of any such expert.

- The foundation is constructed with coursed rubble stone.
- The interior foundation walls are mostly visible.
- The house walls are brick.
- The basement floor is concrete.
- Metal columns support the beam. The beam is mostly visible. The floor joists are mostly visible.
- The attic is constructed with rafters.
- The visible portions of the home's structural components were evaluated. Finished areas
 that are not visible for inspection are spot checked for moisture with a moisture meter if
 warranted.

Structural Comments

Structures are not uniform, and unless modified or damaged, meet the standards of the year in which they were built. We describe and identify the various foundation types, and the floor, wall, ceiling, and roof structures in accordance the ASHI standards. If the foundation is a slab type, we examine the stem walls that extend beyond the footings. If it is a raised or basement foundation, we either enter the crawlspace/basement to inspect its structural components, or indicate in what manner it was evaluated. Similarly, we identify the structure of walls and the roof framing. We are generalists and not specialists. In the absence of any major defects, we may not recommend that you consult with a Professional Engineer. This should not deter you from seeking the opinion of any such expert. **All basement foundation walls and basement areas will eventually or occasionally seep or leak throughout the life of the structure. Routing downspouts away from the walls and creating drainage swales in the soil around the structure will minimize the occasion of water intrusion.**

- A surface drain was noted in the basement that appears to be in acceptable condition. However, because it is impossible to see inside it, the seller should provide assurance that the drain is functional, or it should be flushed through to the exit point before the close of escrow. The drain should be kept free of debris to provide adequate flow.
- The interior foundation walls were inspected, but the painted interior surface of the foundation walls can cover shrinkage cracks, and does not constitute waterproofing.
- Moisture stains and efflorescence (The white calcium or mineral deposits that are left when water evaporates) were noted on the interior of the southwest foundation wall.
 These stains showed some moisture when tested with a moisture meter. Moisture is not unusual for a stone foundation but the client may wish to have an evaluation by a qualified foundation contractor to determine if drain tiles are needed after the downspouts are properly connected and the landscaping is tapered away from the house.



 Moisture stains and efflorescence (The white calcium or mineral deposits that are left when water evaporates) were noted on the interior of the room under the front porch. The moisture is likely entering through the voids in the stone around the porch. The stone needs to be tuck pointed to discourage moisture from collecting in the openings.







• SAFETY CONCERN - An opening was noted below the bathtub drain where it passes through the sub floor. This could allow the spread of fire to the upper floors. A fire stop (1/2" drywall, 3/4" plywood, or 22 gauge metal) should be installed.



The visible portions of the concrete foundation appear to be in serviceable condition.
However, our service does not include any guarantee against leaks, future cracking or
future movement. For a guarantee, a structural contracting company would have to
perform a review and issue a foundation certification.

Exterior

With the exception of townhomes, condominiums, and residences that are part of a planned urban development, or PUD, we evaluate the following exterior features: driveways, walkways, fences, gates, handrails, guardrails, yard walls, carports, patio covers, decks, building walls, fascia and trim, balconies, doors, windows, lights, and outlets. However, we do not evaluate any detached structures, such as storage sheds and stables, and we do not water test or evaluate subterranean drainage systems or any mechanical or remotely controlled components, such as driveway gates. Also, we do not evaluate landscape components, such as trees, shrubs, fountains, ponds, statuary, pottery, fire pits, patio fans, heat lamps, and decorative or low-voltage lighting. In addition, we do not comment on coatings or cosmetic deficiencies and the wear and tear associated with the passage of time, which would be apparent to the average person. However, cracks in hard surfaces can imply the presence of expansive soils that can result in continuous movement, but this could only be confirmed by a geological evaluation of the soil.



It is important to maintain a property, including painting or sealing walkways, decks, and other hard surfaces, and it is particularly important to keep the house walls sealed, which provide the only barrier against deterioration. Unsealed cracks around windows, doors, and thresholds can permit moisture intrusion, which is the principle cause of the deterioration of any surface. Unfortunately, the evidence of such intrusion may only be obvious when it is raining. We have discovered leaking windows and doors while it was raining that may not have been apparent otherwise, and too often damage progresses to a point at which a window or door must be replaced. Such occurrences are not uncommon, and demonstrate why the cost of renovating a neglected home will always exceed that of having maintained it.

- The brick walls are in serviceable condition. Tuck pointing may be necessary as a part of ongoing homeowner maintenance with an older brick home.
- The exterior trim is in serviceable condition.
- The fascia and soffit covering near the north corner and near the east corner is loose or damaged and needs to be repaired.





- MAINTENANCE TIP: The exterior windows, doors, and trim should be kept sealed to prevent moisture intrusion.
- The stone around the front porch needs to be tuck pointed.



• The water stop box (the valve in the yard that the water company uses to turn off the water) was not visible in the front yard. The seller should be required to locate the stop box and bring it up to surface level.

Driveway and walkways:

- The driveway is made of asphalt and is in serviceable condition. The driveway will need to be coated in the near future.
- The walkways are in serviceable condition.

Vegetation:

• MAINTENANCE TIP - Ivy is growing on the southwest wall. This will result in eventual mortar deterioration if left to grow. The ivy needs to be removed.

Gutters and Downspouts:

- MAINTENANCE TIP The gutters are mostly covered with screens. The gutters will still
 need to be maintained on a frequent basis to prevent debris buildup and gutter overflow;
 which could damage the exterior components and allow moisture intrusion into the
 basement.
- The northeast downspout does not align with the underground drain and needs to be adjusted.



• The southwest downspouts do not appear to be tight to the underground drains which may allow moisture to bypass the drain and collect at the foundation walls. Recommend review of the underground drain and the connections to the downspouts.



- Underground drains were noted in the yard that appear to be in acceptable condition.
 However, because it is impossible to see inside them, the seller should provide assurance
 that the drains are functional, or they should be flushed through to the exit point before
 the close of escrow. The drains should be kept free of debris to provide adequate flow.
- The downspout from the rear porch should be re routed away from the house to prevent
 moisture intrusion overtaking the drain at the bottom of the basement stairs and causing
 moisture intrusion into the basement. The drain at the bottom of the steps needs to be
 cleared to allow moisture to escape.





Yard Grading and Drainage:

• The soil at the southwest foundation wall should be raised, and a swale created to divert water from the structure. A window well and cover may be necessary for the rear window closest to the south corner.

Retaining Wall:

• The stone retaining walls at the gardens are in serviceable condition.

• The retaining wall around the basement stairs is leaning. It is difficult to determine if the movement is ongoing. Recommend monitoring the wall for future movement and consulting a foundation professional if desired.



Rear covered porch:

 SAFETY CONCERN - The rear porch ledger board (The board that attaches to the house wall) does not appear to be attached with lag bolts. Lag bolts are recommended to properly support the porch where it attaches to the house and to prevent failure. The lag bolts should be offset and not in a straight line.



 The deck was constructed without joist hangers to reinforce the connection of the floor joists to the ledger boards. Recommend adding joist hangers for added support.



• The floor joists do not have a reinforced connection to the support columns. The floor structure appears to rest on shims placed in between the column without reinforcement. Brackets are recommended for the connections of the floor joists to the support columns.



Wood fence:

• The gate separating the yard from the driveway will not close and needs to be repaired.

Roof

There are a wide variety of composition shingle roofs, which are comprised of asphalt or fiberglass materials impregnated with mineral granules that are designed to deflect the deteriorating ultra-violet rays of the sun. The most common of these roofs are warranted by manufacturers to last from fifteen to twenty-five years, and are typically guaranteed against leaks by the installer for three to five years. The actual life of the roof will vary, depending on a number of interrelated factors besides the quality of the material and the method of installation. Poor maintenance is the most common cause of roof failure, but a southern exposure can cause a roof to deteriorate prematurely, as will the practice of layering over another roof. However, the first indication of significant wear occurs when the granules begin to separate and leave pockmarks or dark spots. This is referred to as primary decomposition, which means that the roof is in decline, and therefore susceptible to leakage. This typically begins with the hip and ridge shingles and to the field shingles on the south facing side. This does not mean that the roof is ready to be replaced, but that it should be serviced or monitored. Regular maintenance will certainly extend the life of any roof, and will usually avert most leaks that only become evident after they have caused other damage. This is important, because in accordance with industry standards our inspection service does not include a guarantee against leaks. For such a guarantee, you would need to have a roofing company perform an inspection and issue a roof certification. However, the sellers or the occupants will generally have the most intimate knowledge of the roof, and we recommend that you ask them about its history and then schedule a regular maintenance service.



- Due to the slope, the roof was viewed from the gutter line and from the ground.
- A Seller's Disclosure was not available and the age of roof is unknown. The inspector recommends that you request the installation permit from the sellers, which will reveal its exact age and any warranty or guarantee that might be applicable.
- The roof is covered by a 3-tab asphalt shingle, which is typically rated for 15-20 years.
- The roof has a single layer.
- Loose shingles were noted at the north section of the roof. The shingles need to be replaced.



• The northeast plumbing vent is too short. The vent should extend a minimum of 6 inches to avoid being overtaken by snow.



• Our service does not include any guarantee against leaks. For a guarantee, a roofing company would have to perform a water-test and issue a roof certification.

Roof Flashings:

• The southwest plumbing vent's neoprene gasket is split, which will allow moisture intrusion into the attic. Repair is needed.



Chimney

We evaluate chimneys and their components in accordance with the ASHI standards. There are a wide variety of chimneys, which represent an even wider variety of interrelated components that comprise them. There are three basic types, single-walled metal, masonry, and prefabricated metal ones that are commonly referred to as factory-built ones. Single-walled metal ones should not be confused with factory-built metal ones, and are rarely found in residential use. Masonry and factory-built ones are commonplace. Significant areas of all chimney flues cannot be adequately viewed during a field inspection, as has been documented by the Chimney Safety Institute of America, which reported in 1992: "The inner reaches of a flue are relatively inaccessible, and it should not be expected that the distant oblique view from the top or bottom is adequate to fully document damage even with a strong light." Our inspection of chimneys is limited to those areas that can be viewed without dismantling any portion of them, and does not include the use of specialized equipment, we do not guarantee their integrity and recommend that you consider having them video-scanned before the close of escrow or prior to placing them into service. Any roof that cannot be accessed will have the chimney viewed from the ground, windows, or ladder.

- The chimney was inspected from the gutter line and from the ground.
- From the inspectors limited perspective the chimney appears to be in serviceable condition.
- A liner cap is visible on the chimney.

Electrical Comments

We evaluate electrical systems in accordance with the ASHI standards, which include identifying the type and ampacity of the service, and evaluating panels, overload conductors, wires, panel grounds, and a representative number of switches and outlets. There are a wide variety of electrical systems with an equally wide variety of components, and any one particular system may not conform to current standards or provide the same degree of service and safety. We are not specialists and in compliance with the ASHI standards we do not perform load-calculations to determine if the supply meets the demand of the household. Therefore, it is essential that any service recommendations or upgrades that we make should be completed well before the close of escrow, because a specialist could reveal additional deficiencies or recommend some upgrades.

Service Entrance and Meter:

- The home is equipped with a 200A electrical service.
- The electrical service drop wires are too low over the driveway and need to be raised for safety. The wires measure approximately 6 feet from the top of the retaining wall. The wires should be a minimum of 10' above a walkway. Further review is recommended from the utility.



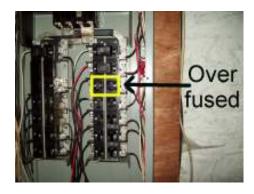
• The meter box has a proper tag.

Electrical service panel:

• The electrical service disconnect breaker is located at the top of the service panel in the basement.



- The main electrical panel uses Pushmatic circuit breakers. The Pushmatic does not use a magnetic trip mechanism; they are only a thermal breaker. Current technology uses both magnetic and thermal tripping mechanisms, which increase safety and the likelihood that they will function properly. It has been reported over time, the Pushmatic breakers become very stiff and difficult to operate or reset. The internal alert mechanism that indicates the position of the circuit breaker as "on", "Tripped", "off" fails inside of individual circuit breakers, which may be confusing for a homeowner to know the position of the breaker. This could be viewed as a significant potential shock hazard. Recommend review by a licensed electrician.
- There are no visible deficiencies with the circuit breakers in the main electrical panel. The circuit breakers were not removed for inspection.
- Over fusing was noted on the left side of the panel with a #15 wire on a 20A breaker. Over fusing is a condition where the size of the breaker is too large for the wire size and can be a potential fire hazard. Repair is needed by a licensed electrician.



• The electrical panel is bonded at the main water entrance.

• UPGRADE SUGGESTION - The jumper wire should be extended to bypass the Pressure Reducing Valve on the main water line.



General Wiring:

- The electrical receptacles are both 2 and 3 prong.
- The receptacles were tested with a basic three-prong circuit tester.
- Not all electrical receptacles and switches were tested.
- Active Knob and tube wiring is present in the basement. The knob and tube represents approximately 40 % of the visible wiring.
- There are several open splices made to the knob and tube wiring. Any alterations made to the knob and tube should be enclosed inside an electrical junction box. Repair is needed.







• SAFETY CONCERN - Ground Fault Circuit protection is recommended for electrical receptacles at the following locations:

All exterior receptacles
The basement receptacles

• Three prong receptacles did not test properly grounded at the following locations. Repair is needed.

Northwest wall of kitchen

Plumbing

We evaluate plumbing systems and their components in accordance with the ASHI standards, which include testing functional flow and pressure at one of the faucets, if visual inspection of the water pressure warrants it. Plumbing systems have common components but they are not uniform. In addition to fixtures, components typically consist of gas pipes, potable water pipes, drain and vent pipes, shut-off valves, which we do not test, pressure regulators, pressure relief valves, and water-heating devices. The best and most dependable water pipes are copper, because they are not subject to the build-up of minerals that bond to the inside of galvanized pipes and gradually reduce their inner diameter and restrict the volume of water. A water softener will remove most of these minerals, but not once they are bonded within the pipes, for which there would be no remedy other than a re-pipe.

The water pressure within pipes is commonly confused with water volume, but whereas high water volume is good, high water pressure is not. In fact, whenever the street pressure exceeds eighty pounds per square inch a regulator is recommended, which typically comes factory preset between forty-five and sixty-five pounds per square inch. However, regardless of the pressure, leaks will occur in any system, and particularly in one with older galvanized pipes, and commonly when the regulator fails and high pressure begins to stress the washers and diaphragms within the various components. The inspector recommends that you turn on all faucets at your final walk through and prior to escrow to test for leaks that may have occurred since the inspection.

Waste pipes are equally varied and are comprised of older ones, such as those made of clay, or others that are made of a material like cardboard coated with tar, and modern plastic ones referred to as ABS and PVC. Typically, the condition of these pipes is directly related to their age. ABS and PVC pipes, for instance, are virtually impervious to deterioration. Some ABS pipes are alleged to have manufacturing defects. As most drainpipes are concealed, we can only infer their condition by observing the draw at drains. Blockages may occur at some point in the life of any system, but blockages in the waste lines, and particularly in a main sewer line, can be costly. You may want to consider having the main sewer line video scanned. This would also confirm that the house is connected to the public sewer system.

Main Water Supply:

• The main water shut off is located in the basement, northwest wall. The main line is galvanized. The shut off valve was not tested.



- The visible portions of the water pipes are copper and galvanized.
- The water pressure appears to be within an acceptable range but was not tested with a gauge.
- No active leaks were noted at the time of the inspection.
- The handle on the southeast hose faucet was broken. The faucet appeared to be dripping. The hose was attached and was removed.

Waste and Drainage System

We attempt to evaluate drain pipes by flushing every drain that has an active fixture while observing its draw and watching for blockages or slow drains, but this is not a conclusive test and only a video-scan of the main line would confirm its actual condition. However, you can be sure that blockages will occur, usually relative in severity to the age of the system, and will range from minor ones in the branch lines, or at the traps beneath sinks, tubs, and showers, to major blockages in the main line. The minor ones are easily cleared, either by chemical means or by removing and cleaning the traps. However, if tree roots grow into the main drain that connects the house to the public sewer, repairs could become expensive and might include replacing the entire main line. For these reasons, we recommend that you ask the sellers if they have ever experienced any drainage problems, or you may wish to have the main waste line video-scanned before the close of escrow. Failing this, you should obtain an insurance policy that covers blockages and damage to the main line. However, most policies only cover plumbing repairs within the house, or the cost of rooter service, most of which are relatively inexpensive.

- The waste stacks are made of lead cast iron and PVC. The cast iron pipe typically has a 50 year expected life.
- Rust nodules and evidence of intermittent leaking were noted at the main waste stack in the basement. No active leakage was observed at the time of the inspection. The cast iron pipes are approaching their expected life span and this section needs further review by a licensed plumber to determine if repairs or replacement are needed.





• The kitchen drain waste stack is leaking at the connections and needs to be repaired.





• The drain for the bathtub is sloped incorrectly and runs uphill. This may not allow the tub to drain properly. Repair is needed.



Water Heater:

There are a wide variety of residential water heaters that range in capacity from fifteen to one hundred gallons. They can be expected to last at least as long as their warranty, or from five to eight years, but they will generally last longer. However, few of them last longer than fifteen or twenty years and many eventually leak. So it is always wise to have them installed over a drain pan plumbed to the exterior. Also, it is prudent to flush them annually to remove minerals that include the calcium chloride bi-product of many water-softening systems. The water temperature should be set at a minimum of 110 degrees Fahrenheit to kill microbes and a maximum of 120 degrees to prevent scalding. Also, water heaters can be dangerous if they are not seismically secured and equipped with either a pressure/temperature relief valve and discharge pipe plumbed to the exterior, or a Watts 210 gas shut-off valve.

- Ruud manufactured the water heater in 1987.
- The water heater is 24 years old. An average service life in the St. Louis area is 14 years. It is a 30-gallon unit. The tank shows no evidence of leaks. The unit was supplying hot water at 137 degrees. The burn chamber was clean for the age of the unit.
- The temperature setting was set at the maximum. Recommend reducing the water temperature to approximately 120 degrees to prevent scalding.
- Recommend budgeting for a new water heater as the life remaining is limited.
- The local gas service provider performs safety inspections for real estate transactions. Recommend including an inspection of the water heater.

Gas Service

The gas main shut-off is located on the northwest wall of the basement. The meter has a
proper union and cutoff for the gas service. You should be aware that gas leaks are not
uncommon, particularly underground ones, and that they can be difficult to detect
without the use of sophisticated instruments, which is why natural gas is odorized in the
manufacturing process. Therefore, we recommend that you request a recent gas bill
from the sellers, so that you can establish a norm and thereby be alerted to any potential
leak.

Interior

In accordance with ASHI standards, our inspection of the interior of the living space includes the visually accessible areas of walls, floors, cabinets and closets, and includes the testing of a representative number of windows and doors, switches and outlets. However, we do not evaluate intercom systems, window treatments, nor move furniture, lift carpets or rugs, empty closets or cabinets, and we do not comment on cosmetic deficiencies. Similarly, there are a number of environmental pollutants that can contaminate a home, such as asbestos, carbon monoxide, radon, and a variety of molds and fungi that require specialized testing equipment, which is beyond our expertise and the scope of our service. There are also lesser contaminants, such as odors that are typically caused by moisture penetrating concealed slabs, or those caused by household pets. And inasmuch as the sensitivity to such odors is not uniform, we recommend that you make this determination for yourself, and particularly if domestic pets are occupying the premises, and then schedule whatever service may be deemed appropriate before the close of escrow.

Bedrooms:

In accordance with the ASHI standards, our inspection of bedrooms includes the visually accessible areas of walls, floors, cabinets and closets, and includes the testing of a representative number of windows and doors, switches and outlets. We evaluate windows to ensure that they meet light and ventilation requirements and facilitate an emergency exit or egress, but we do not evaluate window treatments, nor move furniture, lift carpets or rugs, empty closets or cabinets, and we do not comment on cosmetic deficiencies.

Master Bedroom:

We have evaluated the bedroom, and found it to be in acceptable condition.

Bedroom #2:

We have evaluated the bedroom, and found it to be in acceptable condition.

Bedroom #3:

We have evaluated the bedroom, and found it to be in acceptable condition.

Bathrooms:

Our evaluation of bathrooms conforms to the ASHI standards. We do not comment on cosmetic deficiencies, and we do not evaluate window treatments, steam showers and saunas, nor do we leak-test shower pans. Shower pans frequently have hairline cracks that leak only when someone is standing in the shower and for this reason we don't guarantee that they will not leak under normal use. Outlets in bathrooms should be GFCI protected and serviceable. If GFCI protection is not provided it is recommended as a safety upgrade to avoid potential electrical shock.

Second floor half bath:

- The second floor half bathroom faucet, sink, and counter are in serviceable condition and functional.
- UPGRADE SUGGESTION The inspector recommends replacing the drain trap with plastic or PVC pipe.



- The half bathroom commode is tight to the floor and functional.
- The inspector could not see any plumbing connections due to surface finishes.
- The bathroom fan is functional; the vent termination point was not verified.

Main floor hallway bath:

- The main floor hall bathroom pedestal sink, faucet, drain and water connections are in serviceable condition and functional.
- The drain stopper is disconnected and needs to be re attached to operate.
- The cold water supply valve was turned off during the inspection. The inspector turned on the water for inspection and then returned the valve to the off position. No leaks were noted when the water supply was on.



- The hallway bathroom commode is functional and tight to the floor.
- The tub/shower faucet mechanism and the shower walls are in serviceable condition.
- MAINTENANCE SUGGESTION Add a second clear shower curtain to cover the window wall and avoid moisture collecting at the window sill.



Kitchen

We test kitchen appliances for their functionality, and cannot evaluate them for their performance nor for the variety of their settings or cycles. However, if they are older than ten years, they may well exhibit decreased efficiency. Regardless, we do not inspect the following items: free-standing appliances, refrigerators, trash-compactors, built-in toasters, coffee-makers, can-openers, blenders, water-purifiers, barbecues, grills, or rotisseries, timers, clocks, thermostats, the self-cleaning capacity of ovens, and concealed or countertop lighting, which is convenient but often installed after the initial construction and powered by extension cords or ungrounded conduits.

- The kitchen faucet, water supply valves and connections below the kitchen sink are functional.
- The dishwasher appears to be functioning properly.
- The disposal is functional.
- The gas supply to the range was turned off at the time of the inspection. The range was not tested.
- The kitchen cabinet doors and drawers are functional.



Laundry Area

- The laundry area is in serviceable condition. The appliances are in place.
- The appliances were not tested.
- A 240V electrical outlet provides power for the electric dryer.
- The washer drain stack is in serviceable condition.
- The water faucets appeared to be in serviceable condition with no leaks noted at the time of the inspection.
- The laundry tub was probably not permitted or approved by the local authority and is considered to be a temporary arrangement. You may have to remove the tub to be in compliance with current standards.



- The dryer vents to the exterior.
- There is a build up of lint on the interior walls around the dryer. Recommend cleaning the vent connection prior to use of the dryer.
- The inspector recommends that homeowners use smooth walled metal tube dryer vent pipe connections to discourage lint build up.

Doors and Windows

Doors:

Doors are inspected according to ASHI standards, which require inspection of a representative number of doors. Doors that are not accessible due to furniture or occupant's belongings are not tested. Not all doors are inspected or tested. Doors that were tested and not shown as needing repairs were in serviceable condition.

- The entrance door and locking mechanism are in serviceable condition.
- The rear entrance door and locking mechanism are in serviceable condition.
- The hallway bathroom linen closet door lock was loose and needs repair.



Windows:

The windows were inspected according to the American Society of Home Inspector's Standards of Practice, which requires a representative number of windows to be checked. Not all windows are accessible due to window coverings, location, furniture and occupant's belongings, but this inspector attempts to inspect and physically check as many windows as can be accessed. Thermal protection is not always evident due to temperature and humidity conditions.

- All windows tested were functional. The screens are not part of the inspection.
- The second floor southeast windows are locked with a nail. Part of the locking hardware has been removed.



Walls, Ceilings and Floor Coverings

Moisture is a perennial problem, with which you should be aware. It involves a host of interrelated factors, and can be unpredictable, intermittent, or constant. When moisture intrusion is not self evident, it can be inferred by musty odors, peeling paint or plaster, efflorescence, or salt crystal formations, rust on metal components, and wood rot. However, condensation and humidity can produce similar conditions if the temperature in an area is not maintained above the dew point. Regardless, if the interior floors are at the same elevation or lower than the exterior grade we could not rule out the potential for moisture intrusion and would not endorse any such areas. Nevertheless, is such conditions do exist, or if you or any member of your family are sensitive to allergens, you should schedule a specialist inspection.

• There are numerous cracks and patched cracks in the plaster walls which are common. The patched cracks do not appear to be the work of a professional.







Interior Stairs and Railings

- The basement stairs and railings are in serviceable condition.
- SAFETY CONCERN The second floor stair railings are loose and need to be secured.

General Interior Comments

- All ceiling fans tested are functional.
- Smoke detectors are present but were not tested.

Heat

We evaluate heating systems in accordance with state or industry standards, which includes identifying, testing, and evaluating systems and their components. However, there are a wide variety of systems, which range from older floor, wall, and gravity furnaces to newer forced-air furnaces. Older ones, such as gravity furnaces and most floor and wall furnaces, are the least energy-efficient and the most dangerous. Therefore, it would be prudent to consider replacing them with more economical and reliable forced-air units. However, if they are not replaced, you should be aware that many of them and their parts may no longer be available, and you should also be aware of common safety concerns associated with their use. We do test and describe each system, but we do not attempt to dismantle any portion of it, nor do we evaluate the following concealed components: the heat exchanger, or firebox, electronic air-cleaners, humidifiers, and in-line duct motors or dampers. Similarly, we do not check every register, at which the airflow may well be uneven and will decrease proportionate to its distance from the furnace. However, the airflow and the efficiency of any system can be compromised by poor maintenance, such as by the filters not being changed regularly, which will contaminate the ducts and have an adverse effect on air quality.

Regardless, the sellers or the occupants of a property are often the best judges of how well a system works, and it would be prudent to ask them about its maintenance history and if they have been satisfied with its performance, or you may wish to have a comprehensive evaluation by a specialist. Most heating systems have a design life of fifteen to twenty five years, but if any system is more than ten years old, or if poor maintenance is suspected, it would be wise to schedule a comprehensive service that includes cleaning motors, fans, and ducts. Then, change the filters every two to three months, and schedule biannual maintenance service. You should also be aware that we do not evaluate or endorse any heating device that utilizes fossil fuels and is not vented. The presence and use of these within a residence commonly indicates the inadequacy of the primary heating system or of its distribution. However, these and every other fuel burning appliances that are not vented are potentially hazardous. Such appliances include open flames or heated elements, which are capable of igniting any of the myriad flammable materials found in the average home. Also, even the most modern of these appliances can produce carbon monoxide, which in a tightly sealed modern home or a poorly ventilated room can result in sickness, debilitating injury, and even death. We perform a conscientious evaluation of heating systems, but we are not specialists and cannot see inside ducts. Therefore, it is imperative that any recommendation that we may make for service or a second opinion be scheduled well before the close of escrow, because a specialist could reveal additional defects or recommend further upgrades that could affect your evaluation of the property, and our service does not include any form of warranty or guarantee.



- Amana manufactured the furnace in approximately 2005. The furnace appeared to be functioning properly.
- The electronic filter was in place but was not tested.
- Return air vents are not present at the second floor. Air needs to be allowed past the
 door at the bottom of the stairs to reach the return vent at the main floor.
- The disconnect switch is located on the side of the furnace cabinet.



The condensate line for the flue pipe is leaking and needs to be repaired.



- The furnace cabinet is clean.
- The local gas service provider performs safety inspections for real estate transactions. Recommend including an inspection of the furnace.

Air Conditioning

We evaluate air-conditioning systems in accordance with the ASHI standards, including identifying and testing them and their components. However, there are a wide variety of heating and air-conditioning systems, which range from newer high-efficiency ones to older low efficiency ones. Also, there are an equally wide variety of factors besides the climate that can affect their performance, ranging from the size of the house, the number of its stories, its orientation to the sun, the type of its roofing material, its ventilation system, and the thermal



value of its insulation and window glazing. This is why our contract specifically disclaims the responsibility of evaluating the overall efficiency of any system, because only a specialist can credibly do so. You should also be aware that we do not evaluate or endorse any heating device that uses fossil fuels and is not vented. The presence and use of these within a residence commonly indicates the inadequacy of the primary heating system or its distribution. These and every other fuel-burning devices not vented are potentially hazardous. Such appliances include open flames or heated elements, which are capable of igniting any of the myriad flammable materials found in the average home. Even the most modern of these units can produce carbon monoxide, which in a sealed or poorly ventilated room can result in sickness, debilitating injuries, and even death.

We attempt to identify and test every component, but we do not attempt to determine tonnage or dismantle any portion of a system, and we do not evaluate the following concealed components: the heat exchanger, or firebox, the interior of ducts, electronic air-cleaners, humidifiers, and in-line duct motors or dampers. We do not check every register, at which the airflow may well be uneven and which will decrease proportionate to its distance from the blower fan on the furnace. The airflow and the efficiency of any system can be compromised by poor maintenance, such as by the filters not being changed regularly, which will contaminate components within the systems. Regardless, the sellers or the occupants of a property are often the best judges of how well a system works, and it is always a good idea to ask them about its maintenance history and if they have been satisfied with its performance, or you may wish to have a comprehensive evaluation by a specialist. Most systems have a design life of twenty years, but if any system is more than ten years old, or if poor maintenance is suspected, it would be wise to schedule a comprehensive service that includes cleaning motors, fans, ducts, and coils. Then, change the filters every two to three months, and schedule biannual maintenance service.

We perform a conscientious evaluation of heating and air-conditioning components, but we are not specialists. Therefore, it is imperative that any recommendation that we may make for service or a second opinion be completed well before the close of escrow, because a specialist could reveal additional defects or recommend further upgrades that could affect your evaluation of the property, and our service does not include any form of warranty or guarantee.

- Amana manufactured the condenser in 2005. The unit has a disconnect panel. The
 disconnect device was not tested.
- The outside air temperature was below 65 degrees at the time of the inspection. The inspector was unable to operate the A/C system. Operating the system at this temperature could damage the system.

MAINTENANCE TIP: The condenser fins are dirty and need to be cleaned. The build up could affect the efficiency of the cooling system.



UPGRADE SUGGESTION - The drain lines for the condensate and the humidifier do not have access to a floor drain in the utility room. The inspector recommends a condensate pump to direct the water to the exterior. See below:



Condensate is produced at a rate of up to a gallon per hour by a residential central air conditioning unit or gas condensing furnace. The installer will feed the condensate from the appliance drain into one of the pumps inlet ports. Condensate pumps are typically equipped to connect with 3/8" ID plastic tubing. The tubing is connected to the pump check valve, leading to a drain line, sump, French drain or laundry sink.

Attic

In accordance with industry safety standards, we will not attempt to enter an attic that has less than thirty-six inches of headroom, is restricted by ducts, or in which the insulation obscures the joists and thereby makes mobility hazardous, in which case we will inspect the attic as best we can from the access point. In evaluating the type and amount of insulation on the attic floor, we use only generic terms and approximate measurements, and do not sample or test its composition for a specific identification. Also, we do not move or disturb any portion of the insulation, which may well obscure water pipes, electrical conduits, junction boxes, exhaust fans, and other components.

- An attic hatch was not provided and the attic space was not inspected.
- The attic appears to be vented with gable and ridge vents.
- The whole house fan is operational.

Detached Garage

It is common for moisture to penetrate garages, because their slabs are on-grade. Evidence of this is typically apparent in the form of efflorescence, or salt crystal formations, that result when moisture penetrates the sidewalls or the slab. This is also quite common if a garage is below grade, and some sidewalls are even cored to relieve the pressure that can build up behind them, and which actually promotes drainage through the garage. Also, if there is living space above the garage, it will be seismically vulnerable. Ideally, the columns and beams around the garage door will be made of structural steel, but in many residences these components are made of wood but could include some structural accessories, such as post-straps and hold-downs, and plywood shear paneling. Garage door openings are not standard, and you may wish to measure the opening to ensure that there is sufficient clearance to accommodate your vehicles.

Structure:

• Cracks and movement were noted in the walls of the garage. The cracks have been patched and the patch material has re cracked.







• There is damage from wood destroying insects on the rear wall framing of the garage. A portion of the damage has been reinforced.







• The garage appears to be leaning to the northeast.



• Recommend further review of the garage structure by a qualified structural contractor.

Exterior:

- A gutters is not installed on the northeast roof.
- There is peeling paint on the rear exterior. The exterior needs to be scraped before recoating.



Roof:

- The garage roof appears to have a single layer of roofing with tar paper visible.
- The roof was viewed from the ground.
- The roof shingles appear to be in serviceable condition.

Congratulations on the purchase of your new home. We never know who will be occupying or visiting a property, whether it be children or the elderly. We therefore ask you to consider following these general safety recommendations: install (and/or maintain) smoke and carbon monoxide detectors; identify all escape and rescue ports; rehearse an emergency evacuation of the home; upgrade older electrical systems by at least adding ground-fault outlets; never service any electrical equipment without first disconnecting its power source; safety-film all non-tempered glass; ensure that every elevated window and the railings of stairs, landings, balconies, and decks are child-safe, meaning that barriers are in place or that the distance between the rails is not wider than three inches; regulate the temperature of water heaters to below 120 degrees F, to help prevent scalding; make sure that goods which contain caustic or poisonous compounds, such as bleach, drain cleaners, and nail polish removers be stored where small children cannot reach them; ensure that all garage doors are well balanced and have a safety device, particularly if they are the heavy wooden type; remove any double-cylinder deadbolts from exterior doors; and consider installing child-safe locks or alarms on the exterior doors of all pool or spa properties.

We are proud of our service, and trust that you will be happy with the quality of our report. We have made every effort to provide you with an accurate assessment of the condition of the property and its components and to alert you to any significant defects or adverse conditions. Due to conditions existing during the inspection; we may not have tested every outlet, and opened every window and door, or identified every minor defect. Also, because we are not specialists or because our inspection is essentially visual, latent defects could exist. You should not regard our inspection as conferring a guarantee or warranty. It does not. It is a report on the general condition of the referenced property at a given point in time. As a homeowner, you should expect problems to occur. Roofs may leak, drain lines may become blocked, and components and systems may fail without warning. For these reasons, you should take into consideration the age of the house and its components and keep a comprehensive insurance policy current. If you have been provided with a home protection policy, read it carefully. You may depend upon our company for any consultation that you may need.

If you have any questions, please feel free to contact us.

Thank you, **Dan Sandweg**

Inspections Complete, LLC 314-277-4982

