

Report Prepared For:

Joe Sample**Property Address:**xxxx Old St. James Road
Rolla, MO 65401**INSPECTION CERTIFICATION**

The undersigned hereby certifies that this inspection was conducted pursuant to accepted and applicable NACHI home inspection standards. Furthermore, neither the undersigned nor the inspection company has any interest, present or contemplated, in this property and neither the retention of the inspection company nor compensation paid is contingent on report findings.

Randy L. Mayo, P.E.

NOTICE: By relying on this inspection report you have agreed to be bound by the terms, conditions and limitations as set forth in the HOME INSPECTION AGREEMENT, which was presented to you prior to the time of the inspection. If you do not agree to be bound by this HOME INSPECTION AGREEMENT in its entirety, you must contact RLM & Associates, LLC immediately upon receipt of this completed report. In addition, all electronic and paper copies of the inspection report must be deleted and destroyed, and may not be used in whole or in part for consideration in a real estate transaction. The information contained in this report was prepared exclusively for the named clients. This report is not transferable without the expressed consent of RLM & Associates, LLC and is not intended for third party use.

LICENSESNACHI: 10042110
IAC2: 01 9577
MDHSS: 50806
PE: 20856
HUD: 0801

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GENERAL INFORMATION

CLIENT:

Joe Sample

PROPERTY ADDRESS:

 xxxx Old St. James Road
 Rolla MO 65401

INSPECTION DATE/TIME:

5/2/2012 - 12:30 PM

INSPECTOR:

Randy Mayo

INSPECTION COMPANY:

 RLM & Associates, LLC
 10503 CR 5180
 Rolla, MO

INSPECTION DETAILS

In Attendance:

Customer, Inspector

Type of building:

Single Family (Split-Level)

Approximate age:

10 Years

Home Faces:

North

Temperature:

Over 80

Weather:

Clear

Soil surface condition:

Dry

Rain in last 3 days:

Yes

Occupation Status:

Vacant

GENERAL COMMENT KEY DEFINITIONS

INSPECTED - Exceptions may be listed. I visually inspected these items, system, or components and, if no other comment is made, then they were functioning as intended. **Note:** Some serviceable items show normal wear and tear.

NOT INSPECTED - Reasons are listed below. I did not inspect these items, system, or components and make no representation of whether or not they were functioning as intended and I will usually state a reason for not inspecting.

NOT PRESENT - Item or system not present. These items, system, or components are not in or on the subject property.

REPAIR / REPLACE - Special attention needed. I recommend the items, system, or components be repaired or replaced and suggest a second opinion or further inspection by a qualified contractor or individual.

INFORMATIONAL - Reference/Other Information. This item or information is included to assist in the overall understanding of this report and is provided as a courtesy.

PHOTOGRAPHS - Selected photos from inspection. Photos shown in this report are a sample of all the photos taken and are for illustrative purposes only and may not depict all the defects or areas of concern listed in the report. All the included photos are considered part of this inspection report and should be viewed.

SPECIFIC LINE ITEM COMMENT KEY DEFINITIONS

COMMENT - Comment included to assist in the overall understanding of this report.

DEFERRED COST - Denotes a system or component that is near or has reached its normal service life expectancy and you should budget for its eventual replacement.

IMPROVE - Denotes improvements which are recommended. These may be items identified for upgrade to modern construction and safety standards.

MAINTENANCE - Recommendations for the proper operation and routine maintenance of the home.

MICROBIAL ACTIVITY - There was a mold-like substance or growth seen on the surface that would suggest the presence of mold, fungi or microbial activity (past or present).

REPAIR AS NEEDED - I recommend a qualified person inspect this item, system, or component and repair or replace as needed.

SAFETY - A condition, system or component that is considered harmful or dangerous due to its presence or absence.

SAFETY IMPROVEMENT- A system or component that is considered harmful or dangerous by today's standards, but was not available or required when the home was constructed.

WORD DEFINITIONS

Satisfactory - Indicates component or system is functioning as intended (sometimes stated as "functional"). It does not necessarily mean that the item is in good condition, only that no serious deficiency has been observed that prevents the system or component from performing as intended.

Serviceable Condition - Systems or components inspected in the report that appear to be in *serviceable condition* are defined as capable of being used, or serving the purpose for which they were intended. Serviceable systems or components may however, show some wear or deterioration consistent with their age.

INSPECTION SUMMARY

This summary report is intended to provide the client and those individuals directly involved in this transaction a convenient and cursory preview of some of the conditions and components that we have identified within our report as being in need of further evaluation or service by an appropriately qualified specialist or that pose a potential health and safety risk. It is not intended to be comprehensive, and should not be used as a substitute for reading the entire inspection report or lessen the value of features that do not appear in this summary. **Note: There may be items in the report not shown in the summary you may wish to include in your negotiations.**

--- PLEASE READ THE ENTIRE REPORT ---

General Summary

3.1 DOORS

REPAIR / REPLACE - Special attention needed

(1) The rear patio door has a hole in the screen. This is a maintenance issue for your consideration. **(See Picture 8, Appendix A)**

3.6 DECKS, STEPS, PORCHES AND PATIOS

REPAIR / REPLACE - Special attention needed

(1) The rear deck ledger board is bolted to or through the brick veneer, which is not acceptable by current building codes. When this house was built very few guidelines existed concerning deck construction specifically on acceptable methods of attachment to the house. The most current 2009 building codes have addressed this issue by specifying the minimum requirements for connecting a deck to the house. It states in Section R502.2.2.2 "**Deck ledgers shall not be supported on stone or masonry veneer.**" Brick veneer is not allowed to support any weight other than itself. The best retrofit solution is to add support posts next to the house with a horizontal beam attached to support the vertical load of the deck. Also the outer ends of the floor joist are attached to the rim joist with only nails. These joists should be attached with metal joist hangers like the ones used at the opposite end. I recommend you consider these upgrades for safety. **(See Pictures 6, 7, Appendix A)**

4.2 FLOOR STRUCTURE

REPAIR / REPLACE - Special attention needed

(1) There were some variations in floor elevations with noticeable humps in some rooms associated with cantilevered floor joists. From observations made the cantilevered joists in the dining room/kitchen area were built by extending the original floor joists, as shown in the left diagram below. This is the most preferred method because of the simplicity and cantilevered forces are distributed better into the house. The floor joists over the garage were oriented perpendicular to the other floor joists in the house, which required framing cantilevered joists for the two front bedrooms using the method shown on the right diagram below. This method is the least desirable because the cantilevered forces are carried by one beam at the end. The garage ceiling was covered with drywall making direct observation of the floor joist details impossible without cutting a hole in the drywall. For verification of the orientation and configuration of the cantilevered joists an infrared camera was used. The infrared camera indicated the cantilevered joists do not meet the 3:1 minimum requirements required by acceptable building practices. **(See Picture 38, Appendix A)**

These shorter joists create larger uplift forces which caused the noticeable hump in the two bedroom floors. Providing support under the extended cantilevered rooms on the outside would be the most cost effective solution. Addition blocking over the support walls was also missing from the visible cantilevered areas under the dining and kitchen areas and may be missing from bedroom cantilevered framing as well. There are two factors that need to be considered; one is the long term deflection or creep associated with constant load of the house on the cantilevered floor joists and beam, second is the method used to connect the cantilevered floor joist to the supporting beam. The deflection associated with

long term creep will increase over time and can reasonably be expected surpass the initial deflection, when the house was built, by a factor of two. I recommend further investigation of the connection details, requiring cutting holes in the garage ceiling drywall, if no external support is provided at the bedrooms.

(3) The main support beam over the garage door has sagged approximately 1/2 inch causing a crack in the brick veneer and in some interior drywall. It appears the beam may be undersized for the load, however verification the beam size and material was not visible due to drywall. I recommend a more in-depth inspection requiring some drywall removal in order to verify the beams capacity. **(See Pictures 18, 19, Appendix A)**

5.1 SKYLIGHTS, CHIMNEYS AND ROOF PENETRATIONS

REPAIR / REPLACE - Special attention needed

The rubber flange on the sewer vent pipes have failed. A qualified person should repair or replace as needed. **(See Pictures 12, 13, 35, 36 Appendix A)**

9.0 CEILINGS

REPAIR / REPLACE - Special attention needed

(1) There were multiple stains on the ceiling tiles in the basement. All stained tiles were moved and the source of the water was identified as one or more of the following:

- Water supply line leak
- Waste water drain line leak **(See Picture 27, Appendix A)**
- Toilet leak **(See Picture 26, Appendix A)**
- Condensation from dryer vent pipe **(See Picture 20, Appendix A)**

Most of these leaks may have been repaired. Drain line leaks are slow to develop and typically only become visible after continuous use over an extended period of time. The only active leak on the day of this inspection was a drain leak under the hydro-tub. I recommend you monitor these areas to determine which ones may still be active. This is a maintenance issue for your consideration.

10.0 BATHROOM SINKS, TOILETS, TUBS AND SHOWERS

REPAIR / REPLACE - Special attention needed

(1) The toilet in the master bathroom is not properly secured to the floor. I recommend a qualified plumber make the necessary repairs. **(See Picture 30, Appendix A)**

(2) The float in the basement toilet rubs on the tank and prevents the toilet from filling up properly. I recommend a qualified plumber repair or replace as needed. **(See Picture 21, Appendix A)**

11.0 DISHWASHER

REPAIR / REPLACE - Special attention needed

The dishwasher was not fully operation at the time of this inspection. I recommend having this unit serviced or replaced. **(See Picture 32, Appendix A)**

11.1 RANGES / OVENS / COOKTOPS

REPAIR / REPLACE - Special attention needed

The stove was functional except for the left front burner. I recommend having this unit serviced or replaced. **(See Picture 33, Appendix A)**

11.4 MICROWAVE COOKING EQUIPMENT

REPAIR / REPLACE - Special attention needed

There was power to the microwave, however I was unable to operate the microwave with the controls. If this unit is to remain I suggest you consult with the current owner on its operation. **(See Picture 34, Appendix A)**

----- **END OF SUMMARY** -----

Purpose and Scope

Reported Items

1.0 Purpose

General Comments: [IMPORTANT INFORMATION - Please read carefully](#)

This inspection is intended to add to the Client's knowledge of the house and to help the Client understand the risk of owning it. RLM & Associates, LLC will help you assess the risk, however we do not assume them for you. Warranty programs for appliance and mechanical failure and homeowner's insurance are the traditional avenues available to manage the risk of property ownership.

1.1 Scope

General Comments: [IMPORTANT INFORMATION - Please read carefully](#)

The scope of this inspection and report is a **LIMITED VISUAL INSPECTION** of the general systems and components of the home to identify any system or component listed in the report which may be in need of immediate major repair. The inspection will be performed in compliance with National Association of Certified Home Inspectors standards of practice. Scope of the inspection is limited to the items in the report and conditions outlined in the **HOME INSPECTION AGREEMENT** available online at:www.rlmengineers.com. This report is provided for the specific benefit of the client named and is based on observations at the time of the inspection. Reliance on this report, by persons other than the client, may provide incomplete or outdated information. Repairs, professional opinions or additional inspection reports may affect the meaning of the information in this report. We reserve the right to supplement this report if and when additional information becomes available.

1.2 Outside of Scope

General Comments: [IMPORTANT INFORMATION - Please read carefully](#)

Any area which is not exposed to view, is concealed, or is inaccessible because of soil, walls, floors, carpets, ceilings, furnishings, or any other thing is not included in this inspection. The inspection does not include any destructive testing or dismantling. Client agrees to assume all the risk for all conditions which are concealed from view at the time of the inspection. This is not a home warranty, guarantee, insurance policy or substitute for real estate disclosures.

Whether or not they are concealed, the following **ARE OUTSIDE THE SCOPE OF THIS INSPECTION:**

- Building code or zoning ordinance violations.
- Geological or structural stability, soils condition or engineering analysis.
- Termites, pests or other wood destroying organisms.
- Asbestos, radon, mold, formaldehyde, lead, water or air quality, electromagnetic radiation or any environmental hazards unless contracted for under a separate agreement.
- Building value appraisal or cost estimates.
- Condition of detached buildings unless contracted for under a separate agreement.
- Pools or spas bodies and underground piping.
- Private water or private sewage systems unless contracted for under a separate agreement.
- Saunas, steam baths, or fixtures and equipment, radio-controlled devices, automatic gates, elevators, lifts, dumb-waiters and thermostatic or time clock controls.
- Water softener / purifier systems or solar heating systems.
- Furnace heat exchangers, freestanding appliances, security alarms or personal property.

Comment Key

Reported Items

2.0 Comment Key Definitions

General Comments: [IMPORTANT INFORMATION - Please read carefully](#)

[APPEARS SERVICEABLE - Exceptions may be listed.](#) I visually inspected these items, system, or components and, if no other comment is made, then they appeared to be functioning as intended. Note: Some serviceable items show normal wear and tear.

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[IMPORTANT INFORMATION - Please read carefully.](#) This item or information is considered essential to the overall understanding of this report and should be read in its entirety.

[PHOTOGRAPHS - Selected photos from inspection.](#) Photos shown in this report are a sample of all the photos taken and are for illustrative purposes only and may not depict all the defects or areas of concern listed in the report. All the included photos are considered part of this inspection report and should be viewed.

[GENERAL INFORMATION - Reference/Other Information.](#) This item or information is included to assist in the overall understanding of this report and is provided as a courtesy.

Exterior

Styles & Materials

Siding Style:

Lap
Veneered

Siding Material:

Brick
Vinyl

Fascia/Soffit Material:

Aluminum

Exterior Entry Doors:

Steel

Retaining walls:

Concrete
Wood

Grading:

Moderate Slope

Driveway:

Concrete

Sidewalks:

Concrete

Decks:

Wood

Reported Items

3.0 WALL CLADDING, FLASHING, TRIM AND PENETRATIONS

General Comments: [APPEARS SERVICEABLE - Exceptions may be listed](#)

(1) The majority of the brick veneer was in good condition, however there are two locations with notable cracks or open joints:

- The open joint near the right front corner of the house needs caulked to prevent water infiltration. **(See Picture 4, Appendix A)**
- There is a crack that starts at the center of the garage door and progresses upward for a few feet. This crack is the result of excessive deflection of the wall above the garage door. At the time of this inspection the deflection was approximately 1/2 inch. This issue is discussed in more detail in Section 4.2. **(See Pictures 18, 19, Appendix A)**

(2) Several windows need caulked along the joint where the window meets the brick veneer. This is a maintenance issue for your consideration. **(See Picture 11, Appendix A)**

3.1 DOORS

General Comments: [REPAIR / REPLACE - Special attention needed](#)

(1) The rear patio door has a hole in the screen. This is a maintenance issue for your consideration. **(See Picture 8, Appendix A)**

(2) The rear patio door needs caulking applied along the brick at the bottom. Water leaks around patio doors have caused significant damage to subflooring and wall materials on many of the houses we have inspected. This is a maintenance issue for your consideration. **(See Picture 14, Appendix A)**

3.2 DOORBELL

General Comments: [APPEARS SERVICEABLE - Exceptions may be listed](#)

The doorbell responded to the switch at the time of the inspection.

3.3 WINDOWS AND SCREENS

General Comments: [APPEARS SERVICEABLE - Exceptions may be listed](#)

The screen on the basement window located at the lower right when facing the back of the house is damaged. This is a maintenance issue for your consideration. **(See Picture 2, Appendix A)**

3.4 GRADING, DRAINAGE AND VEGETATION

General Comments: [APPEARS SERVICEABLE - Exceptions may be listed](#)

The area right of the front entrance between the sidewalk and house has no apparent method of draining rain water that falls within this area. This area will retain water and will seep into any foundation cracks. If you make any landscaping changes in this area I recommend adding some method of draining or diverting water. **(See Picture 15, Appendix A)**

Note: There is a small foundation crack in the garage wall that has seeped water from this area. **(See Picture 17, Appendix A)**

3.5 DRIVEWAYS, SIDEWALKS AND RETAINING WALLS

General Comments: [APPEARS SERVICEABLE](#) - Exceptions may be listed

The timber retaining wall was sounded revealing a few rotten spots. Sounding a solid timber has a clear ring when tapped with a small hammer but you will hear a dull thump if you tap a rotted timber in the same way. Eventually some or all of these timbers will need replacement. This is a maintenance issue for your consideration. **(See Picture 1, Appendix A)**

3.6 DECKS, STEPS, PORCHES AND PATIOS

General Comments: [REPAIR / REPLACE](#) - Special attention needed

(1) The rear deck ledger board is bolted to or through the brick veneer, which is not acceptable by current building codes. When this house was built very few guidelines existed concerning deck construction specifically on acceptable methods of attachment to the house. The most current 2009 building codes have addressed this issue by specifying the minimum requirements for connecting a deck to the house. It states in Section R502.2.2.2 "[Deck ledgers shall not be supported on stone or masonry veneer.](#)" Brick veneer is not allowed to support any weight other than itself. The best retrofit solution is to add support posts next to the house with a horizontal beam attached to support the vertical load of the deck. Also the outer ends of the floor joist are attached to the rim joist with only nails. These joists should be attached with metal joist hangers like the ones used at the opposite end. I recommend you consider these upgrades for safety. **(See Pictures 6, 7, Appendix A)**

(2) The concrete steps next to the driveway should have a handrail installed for safety. This is a maintenance issue for your consideration. **(See Picture 10, Appendix A)**

3.7 EXTERIOR ELECTRIC / GFCI

General Comments: [APPEARS SERVICEABLE](#) - Exceptions may be listed

The exterior GFCI protected receptacle outlets responded correctly when tested.

3.8 HOSE BIBS

General Comments: [APPEARS SERVICEABLE](#) - Exceptions may be listed

All tested hose bibs were functional.

 **NOTE:** All surfaces of the exterior envelope of the house should be inspected at least semi-annually, and maintained as needed. Any exterior element defect can result in leakage and/or subsequent damage. Exterior wood elements and wood composites are particularly susceptible to water-related damage, including decay, insect infestation, or mold. The use of properly treated lumber or alternative products help minimize these concerns, but will not eliminate them altogether. While some areas of decay or damage may be reported, additional areas of concern may become apparent as they occur, spread, or are discovered during repair or maintenance work.

Structure

Styles & Materials

Foundation Material:

Poured concrete

Foundation Type:

Basement

Floor Structure:

Wood joists

Wall Structure:

Wood

Columns or Piers:

Not Visible

Ceiling Structure:

2x6 Rafter/Joists

Reported Items

4.0 FOUNDATIONS WALLS, BASEMENTS, SLABS AND CRAWLSPACES

General Comments: [APPEARS SERVICEABLE](#) - Exceptions may be listed

The foundation on this house has a few typical shrinkage cracks. **(See Picture 16, Appendix A)**

Note: Most if not all concrete foundations will have cracks develop during the life span of the house. Most are harmless shrinkage cracks that have no significant structural implications. However if foundation settlement does occur these cracks will usually widen indicating a need for further inspection.

4.1 SUPPORT COLUMNS OR PIERS

General Comments: [NOT INSPECTED](#) - Reasons are listed below

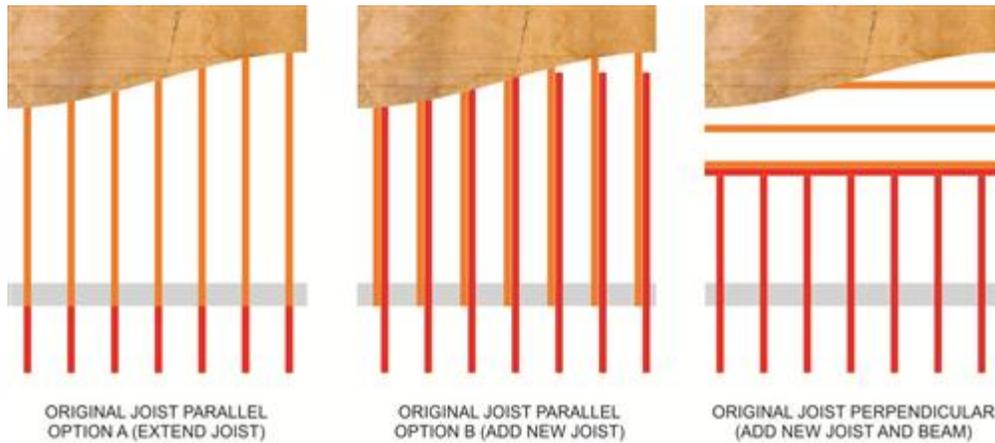
The finished basement prevented any observation of any supporting columns.

4.2 FLOOR STRUCTURE

General Comments: [REPAIR / REPLACE](#) - Special attention needed

(1) There were some variations in floor elevations with noticeable humps in some rooms associated with cantilevered floor joists. From observations made the cantilevered joists in the dining room/kitchen area were built by extending the original floor joists, as shown in the left diagram below. This is the most preferred method because of the simplicity and cantilevered forces are distributed better into the house. The floor joists over the garage were oriented perpendicular to the other floor joists in the house, which required framing cantilevered joists for the two front bedrooms using the method shown on the right diagram below. This method is the least desirable because the cantilevered forces are carried by one beam at the end. The garage ceiling was covered with drywall making direct observation of the floor joist details impossible without cutting a hole in the drywall. For verification of the orientation and configuration of the cantilevered joists an infrared camera was used. The infrared camera indicated the cantilevered joists do not meet the 3:1 minimum requirements required by acceptable building practices. **(See Picture 38, Appendix A)**

These shorter joists create larger uplift forces which caused the noticeable hump in the two bedroom floors. Providing support under the extended cantilevered rooms on the outside would be the most cost effective solution. Addition blocking over the support walls was also missing from the visible cantilevered areas under the dining and kitchen areas and may be missing from bedroom cantilevered framing as well. There are two factors that need to be considered; one is the long term deflection or creep associated with constant load of the house on the cantilevered floor joists and beam, second is the method used to connect the cantilevered floor joist to the supporting beam. The deflection associated with long term creep will increase over time and can reasonably be expected surpass the initial deflection, when the house was built, by a factor of two. I recommend further investigation of the connection details, requiring cutting holes in the garage ceiling drywall, if no external support is provided at the bedrooms.



TYPICAL CANTILEVERED FLOOR CONSTRUCTION METHODS

4.2 Picture 1

(2) Where visible, the basement floor appeared in good condition with one noticeable crack found in the room where the electrical panel is located. I recommend caulking this crack and monitor for further movement. **(See Picture 25, Appendix A)**

(3) The main support beam over the garage door has sagged approximately 1/2 inch causing a crack in the brick veneer and in some interior drywall. It appears the beam may be undersized for the load, however verification the beam size and material was not visible due to drywall. I recommend a more in-depth inspection requiring some drywall removal in order to verify the beams capacity. **(See Pictures 18, 19, Appendix A)**

! **NOTE:** All foundations are subject to settlement and movement. Improper/inadequate grading or drainage can cause or contribute to foundation damage and/or failure. Deficiencies must be corrected and proper grading/drainage conditions must be maintained to minimize foundation and water penetration concerns. If significant foundation movement or cracking is indicated, evaluation by an engineer or qualified foundation specialist is recommended.

Roof / Attic

Styles & Materials

Roof Covering:

3-Tab fiberglass

Roof Layers:

One

Roof viewed from:

Walked

Roof-Type:

Gable

Roof Structure:

Stick-built

Roof Drainage:

Full guttering

Attic Insulation:

Blown

Attic viewed from:

Walked Accessible Areas

Attic Access:

Laundry Room

Reported Items

5.0 ROOF COVERINGS

General Comments: [APPEARS SERVICEABLE - Exceptions may be listed](#)

The roofing material appeared to be in satisfactory condition relative to its age. However there was one small area under a valley where water had leaked in the past. I recommend a qualified roofer investigate and correct as needed. **(See Pictures 39, 40, Appendix A)**

5.1 SKYLIGHTS, CHIMNEYS AND ROOF PENETRATIONS

General Comments: [REPAIR / REPLACE - Special attention needed](#)

The rubber flange on the sewer vent pipes have failed. A qualified person should repair or replace as needed. **(See Pictures 12, 13, 35, 36 Appendix A)**

5.2 ROOF DRAINAGE SYSTEMS

General Comments: [APPEARS SERVICEABLE - Exceptions may be listed](#)

The discharge point for one or more downspouts was observed to be near the foundation wall. Water discharge should be as far from the foundation wall as practical to prevent soil erosion and water saturation near the foundation. Downspouts are a key component in the controlling roof drainage away from the home's exterior foundation. If the surrounding soil slopes away from the foundation installing downspout extensions would be sufficient. In low areas or areas where the soil slopes toward the foundation gutter extensions will not work therefore piping the water underground may be a better solution. This is a maintenance issue for your consideration. **(See Picture 3, Appendix A)**

5.3 EAVES, SOFFITS AND FASCIAS

General Comments: [APPEARS SERVICEABLE - Exceptions may be listed](#)

The visible areas of the eaves, soffits and fascia are in satisfactory condition.

5.4 ROOF STRUCTURE AND ATTIC

General Comments: [APPEARS SERVICEABLE - Exceptions may be listed](#)

The ceiling and roof structure appeared functional.

5.5 ATTIC ACCESS

General Comments: [APPEARS SERVICEABLE - Exceptions may be listed](#)

The attic access located in the laundry room is satisfactory.

5.6 ATTIC INSULATION

General Comments: [APPEARS SERVICEABLE - Exceptions may be listed](#)

Based upon the insulation installation certificate at the attic access door the insulation was initially installed at an R38 value, which should be adequate.

5.7 ATTIC VENTILATION

General Comments: APPEARS SERVICEABLE - Exceptions may be listed

Ventilation within the attic appears to be adequate and the accessible vents appear properly screened.



NOTE: Our evaluation of the roof is to determine if surface areas are missing and/or damaged and therefore subject to possible leaking. Portions of the roof, including underlayment, some fascia boards, decking and some flashing are hidden from view and cannot be evaluated by our visual inspection; therefore, our review is not a guarantee against roof leaks or a certification. Some areas are not visible when we are unable to mount the roof due to weather conditions, height, pitch, etc. Areas most vulnerable to leaks are low slope areas, areas pitched toward walls, through-roof projections (chimneys, vents, skylights, etc.) roof slopes that change pitch or direction, and intersecting roof/wall lines. Flashing and shingle defects can cause hidden leaks and deterioration and should be immediately addressed. We advise qualified contractor estimates and review of the full roof system when defects are reported. Factors such as shingle quality, weather, ventilation, and installation methods can affect wear rate. As maintenance can be needed at any time, roofs should be professionally inspected annually.

Plumbing

Styles & Materials

Water Source:

Public

Supply Lines:

Copper

Plumbing Waste:

PVC

Main Water Valve Location:

Basement

Outside Faucets:

Frost Proof

Water Pressure:

50 psi to 60 psi

Water Heater Power Source:

Electric

Water Heater Capacity:

40 Gallon (1-2 people)

Water Heater Manufacturer:

STATE

Water Heater Location:

Basement

Water Heater Age:

10 yr

Reported Items

6.0 PLUMBING DRAIN, WASTE AND VENT SYSTEMS

General Comments: [APPEARS SERVICEABLE - Exceptions may be listed](#)

The fixture drain and vent pipes within the home were functional at the time of the inspection, except for issues noted in other sections of this report.

6.1 PLUMBING SUPPLY AND DISTRIBUTION

General Comments: [GENERAL INFORMATION - Reference/Other Information](#)

The internal water pressure measured at the rear of home was 52 psi at the time of the inspection, which is within the normal range. **(See Picture 9, Appendix A)**

6.2 WATER HEATER, FLUES AND VENTS

General Comments: [APPEARS SERVICEABLE - Exceptions may be listed](#)

The supply line to the water heater has some corrosion visible at the valve and at the dielectric union from past water leaks. These areas were dry at the time of this inspection but should be monitored. This is a maintenance issue for your consideration. **(See Picture 24, Appendix A)**

6.3 MAIN WATER SHUT-OFF DEVICE

General Comments: [APPEARS SERVICEABLE - Exceptions may be listed](#)

The main shut off is located inside the basement wall behind the white plastic door. **(See Picture 41, Appendix A)**



Note: Our focus in the plumbing portion of the inspection is directed at identifying visible water damage and/or problems. Shut-off valves and angle stops under the kitchen or bathroom sinks and toilets are not turned or tested during the inspection due to the possibility of leaking. The water supply system is typically tested for its ability to deliver functional water pressure to installed plumbing fixtures and the condition of connected piping that was visible.

Heating / Cooling

Styles & Materials

Heat Type:

Forced Air

Energy Source:

Electric

No. of Heat Systems:

One

Heat System Age:

10 yr

Filter Type:

Disposable

Cooling Type:

Central air conditioner unit

Cooling Energy Source:

Electricity

Cooling System Brand:

YORK

Cooling System Age:

12 yr

Number of AC Units:

One

AC Unit Size:

3.0 Ton

Reported Items

7.0 HEATING EQUIPMENT

General Comments: [APPEARS SERVICEABLE - Exceptions may be listed](#)

The 10 year old electric furnace unit located in the basement responded to normal user controls at the time of the inspection.

7.1 THERMOSTAT

General Comments: [APPEARS SERVICEABLE - Exceptions may be listed](#)

The furnace/air conditioner thermostat responded to normal user controls at the time of the inspection.

7.2 AIR HANDLER / DUCTWORK

General Comments: [APPEARS SERVICEABLE - Exceptions may be listed](#)

Where visible and accessible, the supply ducts were in satisfactory condition.

7.3 FILTERS

General Comments: [APPEARS SERVICEABLE - Exceptions may be listed](#)

The disposable type filter was clean at the time of the inspection.

7.4 COOLING EQUIPMENT

General Comments: [APPEARS SERVICEABLE - Exceptions may be listed](#)

The split-system central cooling responded to normal user controls at the time of the inspection, with an average differential temperature split of approximately 18° F between the air entering the return and that coming out of the registers.

7.5 CONDENSATION PIPING

General Comments: [APPEARS SERVICEABLE - Exceptions may be listed](#)

Condensate produced by the operation of the air-conditioning system evaporator coils was properly routed and discharged at the time of the inspection.

NOTE: Regular cooling system maintenance is important. The older the unit the greater the probability of system deficiencies or failure. Do not assume inadequate cooling or other system problems are related to an inadequate refrigerant charge, as more significant concerns may exist. Condensate lines and pumps, if present, should be checked regularly for proper flow; backup or leakage can lead to mold growth and structural damage. All condensate drains must be properly discharged to the exterior or a suitable drain using an air gap. Cooling comfort will vary throughout most houses due to house or system design or other factors. Filters need to be replaced/cleaned on a regular basis; periodic duct cleaning may also be required. Cooling systems cannot be safely or properly evaluated at low exterior temperatures. Arrange for an inspection when temperatures are at moderate levels for several days. Servicing or repair of cooling systems should be made by a qualified specialist.

 **NOTE:** Regular heating system maintenance is important. The older the unit the greater the probability of system deficiencies or failure. Combustion air provisions, clearances to combustibles, and venting system integrity must be maintained for safe operation. Any actual or potential concerns require immediate attention, as health and safety hazards may exist, including the potential for carbon monoxide poisoning. A thorough inspection of heat exchangers by a qualified heating specialist is recommended to determine heat exchanger conditions, particularly if the unit is beyond 5+ years old or any wear is indicated. Heating comfort will vary throughout most houses due to house or system design or other factors. Filters need to be replaced/cleaned on a regular basis; periodic duct cleaning may be required. Insulation on older heating systems may contain asbestos. Independent evaluation is required to address any possible asbestos or buried fuel tank concerns. Servicing or repair of heating systems should be made by a qualified specialist.

Electrical

Styles & Materials

Service Conductors:

Below ground

Panel capacity:

200 AMP

Panel Type:

Circuit breakers

Panel Manufacturer:

GENERAL ELECTRIC

Branch Wiring:

Copper

Wiring Methods:

Romex

Reported Items

8.0 SERVICE ENTRANCE CONDUCTORS

General Comments: [APPEARS SERVICEABLE - Exceptions may be listed](#)

The visible portion of the underground service lines, meter base and service disconnect, if present, were in satisfactory condition.

8.1 SERVICE, GROUNDING, MAIN AND DISTRIBUTION PANELS

General Comments: [APPEARS SERVICEABLE - Exceptions may be listed](#)

The main panel and its components have no visible deficiencies.

8.2 BRANCH CIRCUIT CONDUCTORS

General Comments: [APPEARS SERVICEABLE - Exceptions may be listed](#)

We observed no deficiencies with the visible and accessible branch circuit wiring at the time of the inspection.

8.3 CONNECTED DEVICES AND FIXTURES

General Comments: [APPEARS SERVICEABLE - Exceptions may be listed](#)

All tested interior receptacle outlets and fixtures were functional.

8.4 POLARITY AND GROUNDING OF RECEPTACLES

General Comments: [APPEARS SERVICEABLE - Exceptions may be listed](#)

A representative number of outlets were tested and found to have the correct polarity and were grounded at the time of the inspection.

8.5 LOCATION OF MAIN AND DISTRIBUTION PANELS

General Comments: [APPEARS SERVICEABLE - Exceptions may be listed](#)

The main panel box is located at the downstairs room next to the garage.

 **NOTE:** Our electrical inspection meets the NACHI standards of practice and is done by sampling visibly accessible wiring and fixtures. Determining the actual capacity of the system requires load calculations, which are not within the scope of this report. Underground circuits and concealed components of the system are not inspected. While age is one factor, most homes have electrical issues created by amateur electricians. We do not move belongings and do not examine every fixture, outlet, wiring run, etc., nor do we remove insulation, or wall coverings. Covers are not removed, with the exception of the cover of the main electrical panel, when this can be done safely and without risking damage to finish. The regular testing of GFCIs and AFCIs using the built-in test function is recommended.

Interior

Styles & Materials

Ceiling Materials:

Drywall

Wall Material:

Drywall

Floor Covering(s):

Carpet

Tile

Vinyl

Interior Doors:

Hollow core

Window Types:

Thermal/Insulated

Window Material:

Vinyl

Reported Items

9.0 CEILINGS

General Comments: REPAIR / REPLACE - Special attention needed

(1) There were multiple stains on the ceiling tiles in the basement. All stained tiles were moved and the source of the water was identified as one or more of the following:

- Water supply line leak
- Waste water drain line leak **(See Picture 27, Appendix A)**
- Toilet leak **(See Picture 26, Appendix A)**
- Condensation from dryer vent pipe **(See Picture 20, Appendix A)**

Most of these leaks may have been repaired. Drain line leaks are slow to develop and typically only become visible after continuous use over an extended period of time. The only active leak on the day of this inspection was a drain leak under the hydro-tub. I recommend you monitor these areas to determine which ones may still be active. This is a maintenance issue for your consideration.

(2) There were two ceiling stains found on the upper floor, one in each bathroom. They are both associated with the same roof leak due to a failed sewer vent boot discussed in Section 5.2 of this report. **(See Picture 29, Appendix A)**

9.1 WALLS

General Comments: APPEARS SERVICEABLE - Exceptions may be listed

(1) A few small cracks were visible in the wall separating the kitchen from the living room, which has been repaired but not painted. This crack is most likely associated with some floor movement, however a more detailed structural investigation would be needed to isolate the exact cause. **(See Picture 31, Appendix A)**

(2) A few small cracks were visible above the window in the bedroom wall located over the garage door. These cracks are associated with the wall settlement associated with the sagging of the support beam over the garage door. See Section 4.2 for more information.

9.2 FLOORS

General Comments: APPEARS SERVICEABLE - Exceptions may be listed

(1) There was a small corner broken on the floor tile in the basement bathroom. This is a maintenance issue for your consideration. **(See Picture 23, Appendix A)**

(2) There were noticeable humps in two bedroom floors associated with the cantilevered floor joist, see Section 4.2 for more details.

9.3 DOORS

General Comments: APPEARS SERVICEABLE - Exceptions may be listed

All tested doors operated and latched properly.

9.4 WINDOWS (REPRESENTATIVE NUMBER)

General Comments: APPEARS SERVICEABLE - Exceptions may be listed

All tested windows operated properly.

9.5 ELECTRIC LIGHTS, OUTLETS AND FIXTURES

General Comments: APPEARS SERVICEABLE - Exceptions may be listed

A representative number of items in this section were inspected and found to be in satisfactory condition at the time of the inspection.

9.6 STEPS, STAIRWAYS AND RAILINGS

General Comments: APPEARS SERVICEABLE - Exceptions may be listed

The stairs and landing appeared to be in satisfactory condition.

9.7 CLOSETS AND CABINETS

General Comments: APPEARS SERVICEABLE - Exceptions may be listed

The bedroom closets were in satisfactory condition.

9.8 LAUNDRY

General Comments: APPEARS SERVICEABLE - Exceptions may be listed

The upper floor laundry room is not currently useable. The power for the dryer has been disconnected and the dryer vent has been removed. Currently the laundry room in the basement is the only one in operable condition. **(See Picture 28, appendix A)**

9.9 SMOKE DETECTORS

General Comments: APPEARS SERVICEABLE - Exceptions may be listed

Smoke detectors were present at the time of the inspection. Like all electronic devices smoke detectors are subject to sudden failure and should be tested by you the day you move in and monthly thereafter.



Note: Section 29.8.1.4 of the NFPA 72-2010 National Fire Alarm and Signaling Code states "*Smoke alarms installed in one and two-family dwellings shall be replaced when they fail to respond to tests and shall not remain in service longer than 10 years from the date of manufacture.*"

NOTE: Evaluation of wall, ceiling or floor components is generally limited to readily visible structural conditions. Aesthetic or cosmetic factors, (e.g., paint, wallpaper) or the condition of finish materials or coverings are not considered unless specifically noted. Furthermore, it is not possible to determine the wall insulation, type or condition of surfaces or hidden structural concerns that may exist under floor cover, carpeting, paneling, drop ceilings, etc. If the type flooring is a concern, it should be confirmed before closing.

NOTE: Insulated (double or triple glaze) windows and doors are subject to hard-to-detect failure of the airtight seal between panes. This failure can result in moisture and/or staining of the unit that can vary seasonally and increase with time. While actual/suspect seal failure may be noted, it is not within the scope of a standard inspection to assess the seal integrity of these type units. A pre-closing check of all units when house is clear of drapes, window coverings, etc. and the view of the windows is unobstructed is advised.

Bathrooms

Styles & Materials

Ceiling Materials:

Drywall

Wall Material:

Drywall

Floor Covering(s):

Tile

Cabinetry:

Wood

Ventilation:

Fan

Reported Items

10.0 BATHROOM SINKS, TOILETS, TUBS AND SHOWERS

General Comments: [REPAIR / REPLACE - Special attention needed](#)

(1) The toilet in the master bathroom is not properly secured to the floor. I recommend a qualified plumber make the necessary repairs. **(See Picture 30, Appendix A)**

(2) The float in the basement toilet rubs on the tank and prevents the toilet from filling up properly. I recommend a qualified plumber repair or replace as needed. **(See Picture 21, Appendix A)**

10.1 WALL, FLOORS AND CEILINGS

General Comments: [APPEARS SERVICEABLE - Exceptions may be listed](#)

Where visible and accessible, the ceilings, walls and floor coverings were in satisfactory condition for their age, except as noted elsewhere in this report.

10.2 PLUMBING SUPPLY, DISTRIBUTION AND FIXTURES

General Comments: [APPEARS SERVICEABLE - Exceptions may be listed](#)

The potable water pipes, where visible appear to be in satisfactory condition, however underground pipes or pipes inside walls cannot be judged for sizing, leaks or corrosion.

10.3 VENTING / HEATING SYSTEMS

General Comments: [APPEARS SERVICEABLE - Exceptions may be listed](#)

The exhaust fans in the bathrooms were functional, however they vent into the attic area. Current building codes require these to be vented to the outside, typically through the wall. Moisture from bathroom exhaust pipes can damaged roof sheathing and created some localized mold issues. This is a maintenance issue for your consideration. **(See Picture 37, Appendix A)**

10.4 OPERATION OF GFCI

General Comments: [APPEARS SERVICEABLE - Exceptions may be listed](#)

The GFCI protected receptacle outlets in the bathrooms responded correctly when tested.

10.5 MIRRORS

General Comments: [APPEARS SERVICEABLE - Exceptions may be listed](#)

The bathroom mirrors were in satisfactory condition.

Kitchen

Styles & Materials

Dishwasher Brand:

KENMORE

Disposer Brand:

BADGER

Exhaust/Range hood:

BROAN

Range/Oven:

KENMORE

Cabinetry:

Wood

Countertop:

Laminate

Reported Items

11.0 DISHWASHER

General Comments: [REPAIR / REPLACE - Special attention needed](#)

The dishwasher was not fully operation at the time of this inspection. I recommend having this unit serviced or replaced. **(See Picture 32, Appendix A)**

11.1 RANGES / OVENS / COOKTOPS

General Comments: [REPAIR / REPLACE - Special attention needed](#)

The stove was functional except for the left front burner. I recommend having this unit serviced or replaced. **(See Picture 33, Appendix A)**

11.2 RANGE HOOD

General Comments: [APPEARS SERVICEABLE - Exceptions may be listed](#)

The range hood exhaust fan and lights appeared to be in serviceable condition at the time of the inspection. However the exhaust duct from the range hood terminated in the attic. Moisture from this exhaust can damaged roof sheathing and created some localized mold issues. This is a maintenance issue for your consideration.

11.3 GARBAGE DISPOSAL

General Comments: [APPEARS SERVICEABLE - Exceptions may be listed](#)

The garbage disposal responded to normal user controls.

11.4 MICROWAVE COOKING EQUIPMENT

General Comments: [REPAIR / REPLACE - Special attention needed](#)

There was power to the microwave, however I was unable to operate the microwave with the controls. If this unit is to remain I suggest you consult with the current owner on its operation. **(See Picture 34, Appendix A)**

11.5 COUNTERS AND CABINETS

General Comments: [APPEARS SERVICEABLE - Exceptions may be listed](#)

The kitchen cabinetry and countertops were found to be in satisfactory condition.

11.6 PLUMBING DRAIN, WASTE AND VENT SYSTEMS

General Comments: [APPEARS SERVICEABLE - Exceptions may be listed](#)

The fixture drain and vent pipes within the kitchen were functional at the time of the inspection, except as noted elsewhere in this report.

11.7 PLUMBING SUPPLY, DISTRIBUTION AND FIXTURES

General Comments: [APPEARS SERVICEABLE - Exceptions may be listed](#)

The potable water pipes, where visible appear to be in satisfactory condition, however underground pipes or pipes inside walls cannot be judged for sizing, leaks or corrosion.

11.8 OPERATION OF GFCI

General Comments: APPEARS SERVICEABLE - Exceptions may be listed

The GFCI protected receptacle outlets in the kitchen responded correctly when tested.

Garage

Styles & Materials

Garage Type:

Basement

Garage Doors:

One automatic

Garage Door Material:

Metal

Door Opener Brand:

LIFT-MASTER

Garage Floor:

Concrete

Garage Ventilation:

None

Reported Items

12.0 GARAGE CEILINGS

General Comments: [APPEARS SERVICEABLE - Exceptions may be listed](#)

The ceiling coverings are functional.

12.1 GARAGE WALLS

General Comments: [APPEARS SERVICEABLE - Exceptions may be listed](#)

The wall coverings are functional.

12.2 GARAGE FLOOR AND FOUNDATION

General Comments: [APPEARS SERVICEABLE - Exceptions may be listed](#)

The garage floor has a few typical shrinkage/settlement cracks. **(See Picture 5, Appendix A)**

12.3 GARAGE DOOR(S)

General Comments: [APPEARS SERVICEABLE - Exceptions may be listed](#)

The infrared sensors are in place for the garage door and reversed the door when activated.

12.4 INTERIOR FIRE DOOR

General Comments: [APPEARS SERVICEABLE - Exceptions may be listed](#)

The interior door accessing the garage appears to be solid core, or fire-rated, and latches as needed to maintain the fire separation barrier between the living areas of the home and garage.

12.5 GARAGE DOOR OPERATORS

General Comments: [APPEARS SERVICEABLE - Exceptions may be listed](#)

The automatic garage vehicle door opener and auto reversing feature functioned satisfactorily when tested.

! **NOTE:** Any areas obstructed at the time of inspection should be cleared and checked prior to closing. The integrity of the fire-separation wall/ceiling assemblies generally required between the house and garage, including any house-to-garage doors and attic hatches, must be maintained for proper protection. Review manufacturer use and safety instructions for garage doors and automatic door operators. All doors and door operators should be tested and serviced on a regular basis to prevent personal injury or equipment damage. Any malfunctioning doors or door operators should be repaired prior to using. Any door operators without auto-reverse capabilities should be repaired or upgraded for safety. The storage of combustibles in a garage creates a potential hazard, including the possible ignition of vapors, and should be restricted.

Appendix A

Reported Items

13.0 Inspection Photos

General Comments: [PHOTOGRAPHS](#) - Selected photos from inspection

Your report includes many photographs. Some pictures are intended as a courtesy and are added for your information only. Some are to help clarify where the inspector has been, what was looked at, and the condition of the system or component at the time of the inspection. Some of the pictures may be of deficiencies or problem areas. These are to help you better understand what is documented in this report and may allow you to see areas or items that you normally would not see. Some issues may be difficult to photograph so not all problem areas or conditions will be supported with photos.



13.0 Picture 1 - Retaining wall



13.0 Picture 2 - Screen damaged at back of house



13.0 Picture 3 - Downspout discharges next to the foundation



13.0 Picture 4 - Open joint needs caulked



13.0 Picture 5 - Typical settlement/shrinkage cracks



13.0 Picture 6 - Deck bolted to brick veneer



13.0 Picture 7 - Missing metal joist hangers



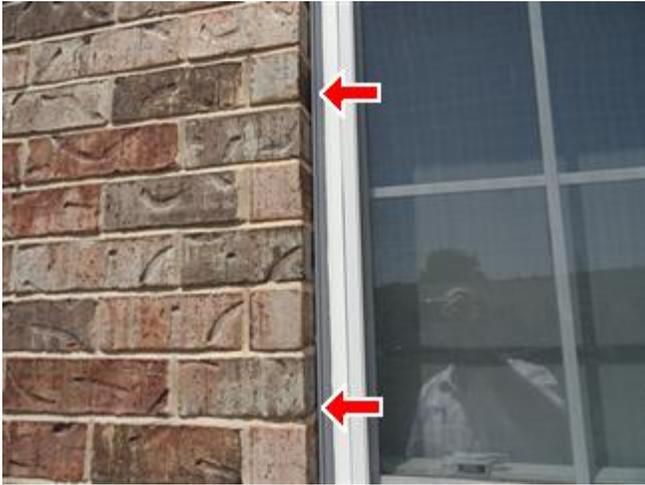
13.0 Picture 8 - Hole in patio door screen



13.0 Picture 9 - Water pressure 52 psi



13.0 Picture 10 - No handrail on steps



13.0 Picture 11 - Some windows need caulked



13.0 Picture 12 - Sewer vent boot needs replaced



13.0 Picture 13 - Sewer vent boot needs replaced



13.0 Picture 14 - Caulking needed at bottom of patio door



13.0 Picture 15 - Area of poor drainage



13.0 Picture 16 - Typical shrinkage crack



13.0 Picture 17 - Water stains from seepage at wall crack



13.0 Picture 18 - Brick cracked over garage door



13.0 Picture 19 - Wall/beam over garage door has sagged 1/2 inch



13.0 Picture 20 - Water stained tile from dryer vent condensation



13.0 Picture 21 - Float in basement toilet needs adjusted



13.0 Picture 22 - Appears to be a sticker on the tub surface



13.0 Picture 23 - Small tile crack



13.0 Picture 24 - Evidence of past leaks



13.0 Picture 25 - Basement floor crack



13.0 Picture 26 - Water stained tile from master bath toilet leak



13.0 Picture 27 - Water stained tile from hydro tub drain leak (active)



13.0 Picture 28 - 1st floor laundry disconnected



13.0 Picture 29 - Water stain master bath ceiling



13.0 Picture 30 - Master bath toilet not secured to floor



13.0 Picture 31 - Wall crack at dining room



13.0 Picture 32 - Dishwasher not operational



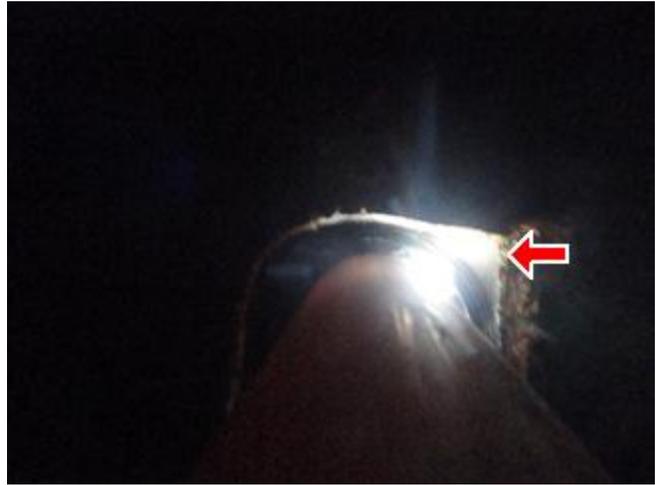
13.0 Picture 33 - Left front burner does not work



13.0 Picture 34 - Microwave would not respond to control buttons



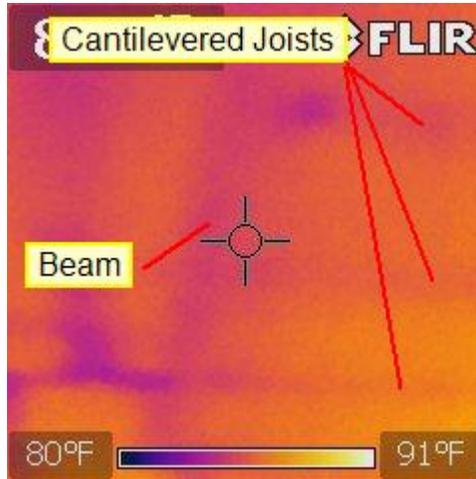
13.0 Picture 35 - Evidence of water leak at sewer vent pipe



13.0 Picture 36 - Daylight showing at sewer vent boot



13.0 Picture 37 - Bathrooms vent into the attic



13.0 Picture 38 - Infrared photo of cantilevered joists



13.0 Picture 39 - Evidence of past leak at valley



13.0 Picture 40 - Location where roof had leaked



13.0 Picture 41 - Location of main water shut-off

References

Reported Items

14.0 Contractors / Service Providers

General Comments: [GENERAL INFORMATION - Reference/Other Information](#)

Listed below are contractors and services RLM & Associates, LLC is providing as a resource to aid you in narrowing your search when looking for trades, and not as a warranted referral service. Always do your own research and ask for references before you hire a contractor, even if they are found here.

Shawn O'Neal Builders - General Contractor, Residential/Commercial (573) 368-3907

Mike Hall Builders LLC - General Contractor, Residential/Commercial (573) 364-0870

Stratman Construction - Building Remodeling & Repair, Residential/Commercial (573) 578-4839

PRO Turf Excavating LLC - Landscaping, Retaining Walls, Concrete Sidewalks/Driveways, Residential/Commercial (573) 578-1705

Wilson Electric - Electrical Contractor, Residential/Commercial (573) 364-3105

Garner Refrigeration & Heating, Inc. - HVAC Contractor, Residential/Commercial (573) 341-2064

James Construction & Backhoe - Septic Tanks & Wasterwater Treatment, Residential/Commercial (573) 364-0184

Miller Door Co - Garage Doors Installation/Repair, Residential/Commercial (573) 364-4027

Wisdom Roofing - New Roof Installation and Repair, Residential/Commercial (573)341-5823

Phelps County Pest Control - Pest Control, Residential/Commercial (573) 364-7374

R&D Cleaning - Carpet Cleaning, Residential/Commercial (573) 364-5913

Nu-Way Plumbing - Plumbing & Drain Cleaning, Residential/Commercial (573) 364-0613

A+ Chimney Services - Chimney Sweep, Residential/Commercial (573) 426-3669

Logan's Lawn Care & More - Lawn Care, Residential/Commercial (573) 201-8816

Hughes Well Drilling - Water Wells & Pump Service, Residential/Commercial (573) 265-7862

Rolla Asphalt - Asphalt Driveways & Sealing, Residential/Commercial (573) 364-3992