40401 SW Dixon Mill Road ■ Gaston, OR 97119 ■503 985-7543

BENCHMARK
INSPECTION SERVICES

Physical Inspection of 1234 Sample Street

c. 1907 *Aprox 900 Sq Ft*

April 16, 2008, 2:00 pm – 6:30 pm

Prepared For: Leslie Sample

Report Number: 080416P

Fax: 503 985-7569

Construction Contractors Board License # 94435
Oregon Certified Home Inspector #015

INTRODUCTION

This is my report of a visual inspection of the readily accessible areas of this building conducted on April 16, 2008. I prepared it for the exclusive use of Leslie Sample; it represents his interests only. It does not represent the interests of any other party. A separate inspection contract contains terms and conditions that are crucial to the understanding of this report. Don't use this report without considering the terms and conditions of that contract.

The purpose of this report is to alert you to major defects in the condition of the property. Please do not mistake this report for a warranty or any kind of insurance. I assume no liability or responsibility for the cost of repairing or replacing any unreported defects or deficiencies either current or arising in the future, or for any property damage, consequential damage or bodily injury of any nature.

Please review all parts of this report carefully and call me for an explanation of any part that you do not fully understand. You can call me anytime at 503 985-7543 or e-mail me at jim@benchmarkinspections.com

Conditions During The Inspection:

- The weather was partly sunny with an outdoor temperature of about 53 degrees at the beginning of the inspection. It rained at times.
- For the purpose of this inspection, consider that the front of the house faces east.

This report was prepared by James S. Katen, owner of Benchmark Inspection Services and partner in Associated Master Inspectors:

- Oregon Certified Home Inspector #15.
- American Society of Home Inspectors #109204.
- Oregon Construction Contractors Board #94435.
- Oregon Commercial Pesticide Operator #122541.
- A member in good standing of the Oregon Association of Home Inspectors-ASHI.

HOW TO READ THIS REPORT

Description

Each of the building's systems has a heading, like the one at the top of the page, followed by two sections. The first section is called "Description." This is where I'll describe the basics of that particular system in general terms. It's a short inventory of what things the building is made of and the methods I used to inspect it.

Observations & Recommendations

In this section I'll go into more detail about topics that I think are particularly important for you to understand about the given system. Most of these details will be formatted as follows:

Topic

Many of the topics will have their own headings followed by a short description of the problem or concern. If I have a recommendation for a specific action, I'll write it in bold below this paragraph, with a number before it, like this:

1. **This is where I'll put specific recommendations. They might suggest repairs, maintenance or the need for further evaluation by a specialist. Wherever I recommend repairs, you should have the work done by qualified, licensed contractors.**

STRUCTURE

Description

Building Type: Single story wood frame, circa 1907.

Foundation Type: Post & pier at the perimeter. There's a small partial basement with cast concrete walls at the mid north side.

Columns: Wood.

Floor Construction: 2x6 joist system.

Subfloor: Shiplap fir planks.

Exterior Wall Construction: Wood stud frame construction.

Interior Wall Construction: Wood stud partition walls.

Roof Construction: 2x4 rafter system.

Ceiling Support: Ceiling joists.

This home's design and structure are typical of many homes that were built in the early 1900s.

Observations and Recommendations

Post & Pier Foundation

This house doesn't sit on a traditional concrete stemwall and footing. Instead, it's supported by a series of posts that bear in individual footings. This type of foundation works fine as long as gravity is the only force acting on it. However, during earthquakes and during extremely high winds, the lack of lateral support may allow the house to shift and move. If it moves enough, the house could be damaged beyond repair. If you wish to improve the structure, there is a range of options (with a corresponding range of costs) to provide improved lateral support.

1. **If you wish to improve the lateral support of the foundation under this house, consult with a professional engineer who has experience with retrofitting old Portland residential foundations.**

Rotting Post

At the middle south side of the crawlspace, one of the perimeter support posts has begun to rot at its lower end.

2. **Replace the rotting post at the middle south crawlspace. Use pressure-treated wood for the replacement.**

CRAWLSPACE & BASEMENT

Description

Crawlspace Access: Hatch in the basement.

Clearance Below Joists: 16"-20". Adequate.

Method of Inspection: Crawled.

Ventilation: Perimeter foundation vents.

Vapor Barrier: Black plastic.

Under Floor Insulation: None.

Fungal Rot: None noted.

Wood Destroying Insects: None visible.

Signs of Water: Efflorescence on the basement walls suggests chronic water entry into the basement. Other than signs of past plumbing leaks, there are no signs of crawlspace water entry.

Sump Pump: None.

I looked for, but found no signs of, evidence of carpenter ants, termites and wood-boring beetles. This does not mean that the house is free of these insects. It only means that, if they are there, I couldn't find them today.

Observations and Recommendations

Underfloor Insulation
There's no insulation under the floor.

3. **Add insulation under the floor to save energy and improve comfort.**

Missing Vapor Barrier
In the crawlspace, the vapor barrier is a sheet of plastic that covers the soil and prevents moisture from evaporating up into the crawlspace air. In this crawlspace, the vapor barrier is missing from several areas.

4. **In the crawlspace, replace the missing sections of vapor barrier. Use 6 mil black poly and broadly overlap the seams to ensure that all of the soil is covered.**

ELECTRICAL SYSTEM

Description

Overall Service Capacity: 100-amp, 120/240-volt, single phase.

Service Type: Overhead.

Meter: Class 200 meter in a 100-amp round meter base at the north exterior.

SEC Type: #2 copper.

Service Location: North wall of basement.

Service Panel: 125-amp panel with a 100-amp main breaker.

Sub Panel: None.

Service Grounding & Bonding: Adequate.

Branch Wiring: Copper NM. I can't see any active knob & tube wiring.

Smoke Alarms: Hardwired and interconnected with hush buttons.

I opened the service panel to observe service and branch circuit conductors, their overcurrent devices, and the compatibility of their ampacities and voltages as well as grounding and bonding equipment.

I also tested a random selection of receptacle outlets for proper polarity and grounding.

I tested the smoke alarms. They worked today. They might not work tomorrow. That's why it's important for you to test them every month by pushing the test buttons.

Observations and Recommendations

Grounding Electrode Conductor Not Properly Secured

The grounding electrode conductor is the "main grounding wire" for the electrical service. It's connected to a ground rod at the north exterior and its purpose is to discharge surges to ground. This grounding electrode conductor is loose and floppy. It's strung across the air without any support or protection.

5. **Between the house and the ground rod, properly secure the grounding electrode conductor so that it closely follows the contours of the house and the soil and is well secured and well protected against damage.**

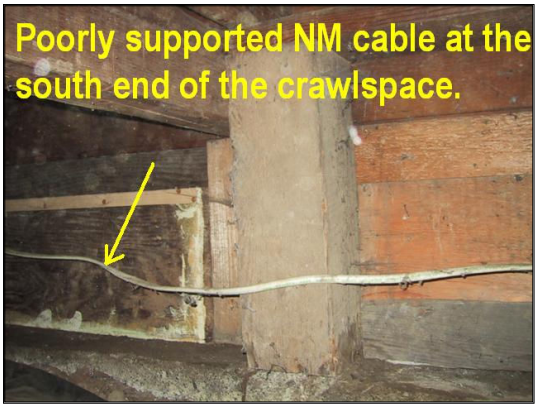
Backyard Fountain Wiring

The backyard fountain is wired with an NM cable that's exposed to damage at the house, buried in the ground, and connected to an appliance plug. NM cables shouldn't be used outside or underground and they shouldn't be exposed to damage.

6. **Provide proper wiring to the backyard fountain.**

Poorly Supported Cable in Crawlspace

At the south side of the crawlspace, a length of NM cable is swagged for a long distance without support.



7. **At the south end of the crawlspace, provide proper support to the presently unsupported length of NM cable.**

GFCI Protection

Ground fault circuit interrupters (GFCIs) are special electrical devices that protect people from being shocked by "ground faults" (electricity that moves through our bodies to grounded surfaces). The most common type of GFCI is an electrical receptacle that has two buttons, one for testing the device and one for resetting it. They first began to be required in the 1970s. It's best to have GFCIs at any location where people may be exposed to electricity and grounded surfaces at the same time, for instance, outdoors, in bathrooms, at kitchen counters, in laundry rooms and in garages and basements. In this house, I found GFCI protection at one exterior receptacle, the bathroom receptacle and the kitchen counter receptacles.

8. **For safety, install GFCI protection at all basement receptacles and all remaining exterior receptacles.**

HEATING & COOLING SYSTEM

Description

Fuel: Natural gas.

Type: Standard efficiency warm-air furnace.

Manufacturer: Carrier.

Age: ~1997.

Electrical Disconnect: Service panel in sight.

Gas Disconnect: Valve next to the furnace.

Heating Capacity: ~66,000 btu/hr.

Clearances: Adequate.

Distribution: Ducts. Heat in each room.

Filter: In the plenum next to the furnace.

Asbestos: None visible.

Auxiliary Heat: None.

Onsite Fuel Storage: Possible oil tank.

Cooling: None.

Differentials: N/A.

I ran the furnace through two complete cycles. It worked fine.

Gas furnaces tend to last about 20-25 years.

Observations and Recommendations

Oil Tank

There may once have been an underground oil tank on the property. I can see an abandoned chimney foundation under the living room and a pit where there might once have been an oil-fired floor furnace. If an underground tank has leaked, it can cost a lot of money to clean up.

9. **Have the yard scanned for an underground oil tank. If you find one, have the soil tested and the tank decommissioned.**

Carbon Monoxide Alarm

Carbon monoxide is an odorless poison gas that's produced by incomplete combustion. Possible sources of carbon monoxide in this house include the furnace, the water heater, the gas range and the gas stove. Carbon monoxide alarms are inexpensive and easy to install.

10. **Install a carbon monoxide alarm in the house.**

PLUMBING SYSTEM

Description

Water Shut-Off Location: At the meter in the east yard or at the ball valve in the crawlspace.

Service Pipe: Galvanized steel.

Supply Pressure: 70psi.

Visible Distribution Piping: Copper.

Visible DWV Piping: ABS plastic, galvanized steel, and cast iron.

Functional Flow: Adequate.

Functional Drainage: Adequate.

Hose Bibs: Working today.

Water Heater Fuel: Natural gas.

Water Heater: 1985, 40-gallon.

Safety Relief Valve: Present and properly plumbed.

Water Heater Seismic Support: None.

Sewage Ejector Pump: In the basement serving the washing machine.

I operated the plumbing fixtures to check for proper orientation of hot & cold, adequate flow and adequate drainage.

I can see only some of the water distribution pipes; I can't see the waste pipes once they go underground.

When I ran the washer, I observed the operation of the sewage ejector pump. It worked properly. Understand that these pumps need to be replaced about every 10 years or so.

Observations and Recommendations

Sewer Scope
I can't see the inside of the sewer line.

11. **Have the sewer line video scanned to determine its condition.**

Old Water Heater
Gas water heaters tend to last about 12-15 years. This one's 23 years old.

12. **Plan to replace the water heater soon.**

Water Heater Seismic Support
The water heater lacks seismic support.

13. **Add proper seismic support to the water heater to prevent it from moving during a moderate earthquake.**

INTERIOR

Description

Walls: Plaster over wood lath. Some drywall.

Ceilings: Plaster over wood lath. Some drywall.

Floors: Fir, carpet & ceramic tile.

Doors: Wood panel.

Cabinets: Hardwood faces particleboard cases.

Countertops: Plastic laminate.

Windows: Wood. Insulated sash windows.

Wall insulation: Unknown.

Ceiling Insulation: Blown in cellulose with fiberglass batts over it. About R-19 total.

Stairways and Handrail: None indoors.

Fireplace: None.

Gas Stove: 17,000 btu cast iron gas stove in the living room.

Kitchen Appliances: Gas range, refrigerator (no icemaker), microwave oven, dishwasher, disposal.

Laundry Appliances: Thin twin washer/dryer in basement.

Floor Moisture Content Near The Toilets: 14% -- normal for fir.

Exhaust Fans: Bathroom & kitchen.

I opened and closed all doors, all windows, and all cabinets.

I turned on the range top burners and the bake & broil burners. They all ignited. The refrigerator is cold. The dishwasher ran through its cycle, didn't leak, and made typical noises. The microwave heated up my towel. The disposal spun around. I can't tell how well any of these appliances work, only that they work.

I ran the washer & dryer through one cycle each. The washer filled with hot & cold water at the correct times, agitated & spun when it was supposed to, and drained when it was done. The dryer spun around and got hot. I can't tell you how well they wash and dry clothes.

Observations and Recommendations

Abandoned Chimney

There's an abandoned chimney that extends from the crawlspace to the attic. It's being used as a chase for the furnace/water heater vent, but it serves no other practical purpose. It can't ever be used as a chimney again. If there's a strong earthquake, the chimney might collapse.

14. **Consider dismantling the abandoned chimney to eliminate the risk of it collapsing during an earthquake.**

Loose Tile

There's one loose tile in front of the kitchen range.

15. **Repair the loose tile in front of the kitchen range.**

Missing Anti-Tip Bracket at Range

The kitchen range is missing its anti-tip bracket. If someone leans on the open oven door, the range can tip forward onto him or spill the contents of hot pots on him.

16. **Install the range's anti-tip bracket for safety per the range manufacturer's requirements.**

Doorknobs

The bedroom's west door doesn't latch shut and its east doorknob comes off of the door.

17. **Adjust the bedroom doors to work properly.**

Glass Doors

In the living room, the French doors are glazed with ordinary glass. If it breaks, someone could be severely injured.

18. **Reglaze the living room French doors with safety glass to reduce the risk of injury.**

ATTIC & ROOF

Description

Main Roof Type: Gable & shed.

Roof Covering: Three-tab composition shingles.

Flashing Materials: Galvanized steel.

Estimated Age: 2004.

Layers: One.

Drainage: Continuous aluminum gutter system.

Skylights: None.

Recent Weather: Wet and windy.

Method of Inspection: I walked across all of the roof planes. I walked through the central attic from west to east & back.

Ventilation: Vent jacks. Minor soffit vents.

Attic Access: There's a hatch in the bathroom ceiling.

Three-tab shingles tend to last about 15-25 years in our climate.

Observations and Recommendations

Gutters Hold Water

Some of the gutters hold water because they're pitched the wrong way. Mosquitoes can breed in the standing water and the weight of the water will tend to cause the gutters to sag.

19. Adjust the pitch of the gutters so that they drain fully.

Sagging Gutters

Some of the gutters area poorly attached to the house.

20. Thoroughly secure the gutters to the house.

Missing Downspout

The mid north downspout is missing. Water flowing out of the gutter will soak the siding.

21. Replace the missing downspout at the mid north side of the house.

EXTERIOR & GROUNDS

Description

Doors: Wood-frame with wood panels and glass panels.

Windows: Wood-framed sash replacement windows.

Siding: Milled cedar shakes over cedar shingles.

Soffits: Wood.

Trim: Wood.

Chimney: Abandoned brick chimney.

Grading: Level and negative grades. See below.

Walkways: Concrete.

Driveway: Concrete.

Vegetation: Under control for now.

Fences: Steel & bamboo.

Stairs: Concrete.

Deck: None.

Patio: None.

I inspected the exterior by walking around the grounds.

The vegetation around the house is under control now. You'll need to keep it that way by trimming it each year.

Observations and Recommendations

Glass in Kitchen & Basement Doors

The kitchen and basement doors are glazed with ordinary glass. If this glass breaks, it can severely injure someone. The front door is glazed with tempered safety glass.

22. **Reglaze the basement and kitchen doors with safety glass to reduce the risk of injuries.**

Front Stairs

The front walkway stairs have loose handrails. The front porch stairs and the exterior basement stairs lack handrails.

23. **Provide proper handrails at all exterior stairways for safety.**

Guardrail at Basement Stairway

Around the exterior basement stairway, the guardrail is inadequate. Small kids can fall through and be injured.

24. **Provide a proper guardrail around the exterior basement stairway opening.**

Rotting Porch Floorboards

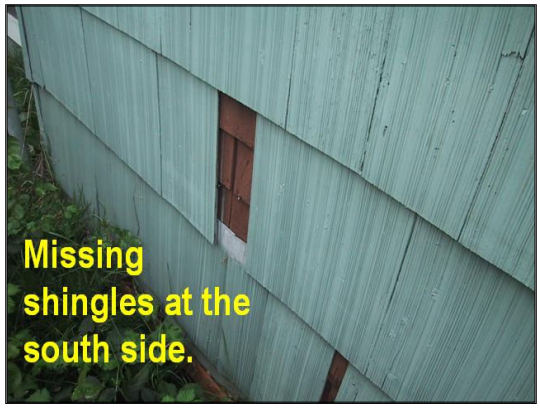
Some of the front porch's floorboards are rotting near the southeast corner of the front porch.

25. **Replace the rotting floorboards near the southeast corner of the front porch.**

Missing Siding

There are a couple of pieces of missing siding shingles at the south side of the house.

26. **Replace the missing siding shingles at the south side.**



Downspouts Discharge Next to The House

The downspouts discharge next to the house. Water from these downspouts can cause the foundation to settle and can enter the crawlspace and basement.

27. **Install an underground drain system to capture downspout water and direct it well away from the house.**

Stairwell Drain

At the basement stairwell, the drain is missing its cap. Someone's improvised a cap by placing hardware cloth and bricks over the drain. This is a tripping hazard.

28. **Install a proper heavy cast iron drain grate over the drain at the bottom of the basement stairway.**

Grading

Level and negative grades around the house can encourage rainwater to flow into the crawlspace and the basement and it can cause the post & pier foundation footings to settle.

29. Grade the yard to ensure that the soil slopes away from the house in all directions.

FYI – Headroom at Front Entry

There's limited headroom at the front porch stairway. Anyone over 6' tall is at risk of bumping his head.

FYI – Leaning Retaining Wall

At the front sidewalk, the short concrete retaining wall is leaning. This wall is considered to have failed now. It will probably remain upright for many years yet, though it's impossible to predict exactly how long.

FYI – Lead Paint

Be aware that the older layers of paint on this house almost certainly contain lead. Be aware of the hazards associated with lead paint. Visit the EPA and DEQ websites for more information.

SUMMARY OF RECOMMENDATIONS

This house is in good condition with some exceptions. Comparing it to other houses of the same age and type that I've recently inspected, the overall condition is above average and the number of repairs is below average. Bear in mind that all homes need repairs of one type or another, even if only minor. Some of the repairs are of the type that you might be inclined to live with under ordinary circumstances. Buyers and sellers of homes often have different perspectives on this issue.