

**Clear Creek
Home Inspection Services
PO Box 565, Collins, NY 14034
716-864-1231**



**Inspection of 9322 State Road
Prepared for Mrs. Home Buyer
September 30, 2012
12:00-3:30 pm
61° F, Cloudy**

INTRODUCTION

This is my report of the visual inspection of the readily accessible areas of the building conducted on **September 30, 2012**, prepared for the exclusive use of **Mrs. Home Buyer**, and represents their interests only. It does not represent the interests of any other party, and may not be duplicated without permission. A separate Inspection Agreement contains terms and conditions critical to the use and understanding of this report. Do not use this report without understanding the terms and conditions of that Agreement. This report remains the property of Clear Creek Home Inspection Services.

The purpose of this report is to alert you to the condition of this property and any defects present at the time of the inspection. It in no way is a warranty or insurance of any kind. I assume no liability for the cost of repairing or replacing any unreported defects, either current or arising in the future, or for any property damage, consequential loss, or bodily injury.

Please carefully read the entire report. Contact me immediately if you have any questions or need further explanation of any part of this report you don't understand. I can be reached at 716-864-1231, or by email at info@clearcreekhomeinspection.com.

This report was prepared by Thomas M. Raymond, owner of Clear Creek Home Inspection Services, License # 16000033554, an Independent Inspector.

STRUCTURE

Description

Building Type: Single story wood platform frame, built in 1950. Tax data indicates 1218 SF, by my math that includes the c350 SF garage and the two unheated porches.

Foundation: Concrete block stemwalls.

Floor Construction: 2x8 joists and built up beam on concrete block piers, 2 1/2" T&G fir subfloor.

Exterior Walls: 2x4 studs, plank sheathing, with at least 2 layers of siding.

Interior Walls: 2x4 partitions with gypsum wall board.

Roof and Ceiling: 2x6 rafters mitered and gusseted, with 1x4 T&G sheathing, 2x4 ceiling joists.

Observations & Recommendations

The framing is a little bit light, even by 50's standards, but adequate and reasonably sound. A beam was added at about the center of the living room to stiffen the floor, and another more substantial one placed under the utility room to handle the weight of the well and water treatment equipment. There is some water damage in this area that will need to be addressed.

- 1. There are at least two joists with rotted ends, around 3' of band joist and almost as much sill plate that need to be repaired and/or replaced. These are located under the utility room. One joist has already been sistered in this area.**
- 2. The 'extra' beams are not permanently footed or attached to the joists, and the one under the utility room is on a concrete block that is oriented on its side. Make repairs so that these are no longer needed.**



BASEMENT & CRAWL

Description

Crawlspace Hatch: Approx. 32 x 16, located on South side behind porch.

Clearance Below Joists: Around 30", less than 20" at the beam.

Method of Inspection: Crawled.

Ventilation: One poorly fitting vent directly under the kitchen sink (and plumbing).

Vapor Barrier: 6 mil poly, around 70% coverage.

Observations & Recommendations

The crawl is reasonably clean and dry considering all the refitting that has gone on down there. There are a few spots where the dirt floor is soft and gives under pressure, and some dampness around a large rock outcrop. The perimeter walls have been insulated with ½" foam (approx. R-3) and the front and back band joist has fiberglass insulation, the sides have none. There is some small debris, a few pieces of drain pipe and some small scraps of wood that should be cleaned up while you are in there for repairs. The heat exchanger from the original floor furnace is down there and is far too large to remove.

There are dozens of defects located in the crawl that will be described in detail in each of the appropriate sections.

- 3. The vapor barrier on the crawl space floor should be continuous and cover 100% of the soil. The seams should overlap 6-12" and be glued or taped. The plastic should be at least 6 mils thick, and extend 4-6" up the walls and any piers or other objects that penetrate the floor. The vapor barrier should be corrected after all other repairs in the crawl are completed.**
- 4. Ventilation and insulation. What little insulation there is in the crawl is being defeated by the vent and a poorly fitting hatch cover. A crawl space should be either inside or outside the building envelope, the current configuration has it a little of both. I recommend sealing the vent, completing the perimeter insulation, and insulating and weather stripping the hatch.**



ELECTRICAL SYSTEM

Description

Capacity: 100 amps, 120/240 volt single phase.

Service: Overhead.

SEC Type: Aluminum.

Service Panel: A very full Square D QOC-20MW.

Subpanels: A very old Cutler Hammer fuse block in the garage, probably the original house panel.

Service Grounding: Copper electrode to two driven rods.

Branch Circuits: Copper.

Smoke Detectors: NONE.

CO detectors: NONE.

Observations & Recommendations

I opened the service and sub panels and examined the branch circuits and overcurrent protection. The main panel is full to capacity, and has several unused circuits terminated within it. The panel and all of the visible cables are far newer than the house. There is no evidence this upgrade was inspected.

5. **The panel is located above the water softener and water heater. The NEC requires at least 3' of clear working space in front of all electric panels.**
6. **There are several unprotected and poorly supported cables at the panel.**
7. **Although all of the visible cable provides an equipment grounding conductor, I located several receptacles with open grounds. Some of these circuits are on the original 2 wire cables and at least two are the result of loose connections. The 2 wire circuits present a shock hazard and should be GFCI protected and labeled. The loose connections can lead to overheating or arcing conditions and are a significant fire hazard.**
8. **There are several poorly supported and unprotected wires in the attic and crawl.**



- 9. There are multiple work boxes in the crawl space that are missing covers, and at least one abandoned cable.**



- 10. There is at least one receptacle mounted in remodeling fixture that is open to the wall cavity. The GFCI is in full contact with the cellulose insulation. Install a proper work box.**



- 11. The underground feeder for the garage is exposed and unprotected in 3 places. While the Type UF cable is rated for exposure to sunlight, it must be protected from physical damage. Also, given its bizarre routing -out the wall, back into the crawl and out the other side- it likely isn't buried to the correct depth either.**



- 12. The configuration of the sub panel with multiple branch circuits in the garage requires a driven ground rod and grounding electrode.**

- 13. Smoke and CO detectors are required by law, there were neither present. Install the best devices you can afford in the hall, utility room, and attic.**

HEATING AND COOLING SYSTEM

Description

Fuel: Natural gas.

Type: Category I forced air with induced draft.

Manufacturer: Luxaire

Age: Manufactured July, 1999. Gas furnaces tend to last about 20 years.

Disconnects: Gas valve in utility near the water heater, electrical via breaker.

Capacity: 40,000 btu/hour. 80% efficient.

Distribution: Insulated flex ducts.

Filter: Located at the central return grill in hall ceiling.

Fuel Storage: N/A

Cooling: N/A

Observations & Recommendations

The furnace malfunctioned. It lit when first turned on, but the fire went out before the house even got close to the set temperature. When the flame goes out the blower fan and the draft assist fans should shut off as well but both ran continuously the entire time I was there. I have located the tech guide, installation and owners manuals for this furnace for your convenience. The technician that comes to service it should check out all of the following defects as well.

14. Furnaces located in attics are required to have permanent access including a walkway from the hatch to the unit that is at least 24" wide and a platform in front of the unit no less than 30" square. The only way to access this furnace is by climbing on it.



15. Both the gas and electrical disconnects for this unit are located in the utility room. Remote shut-offs that are not within line of site of the unit are required to have lock-outs. Luxaire requires an individual gas shut off within 6' of the furnace.

16. Both the furnace and the water heater are supplied gas via a 3/8 copper tube. Have the technician verify there is adequate fuel supply for both. I suspect there isn't.

17. The B-vent is poorly supported, the whole stack moves when touched and one of the elbows is broken spilling lots of exhaust (read CO and water vapor) into the attic. It also is far too close to the roof deck where it exits the building, the label on each piece of vent pipe clearly states 1" clearance to combustibles.



PLUMBING SYSTEM

Description

Water Shut-Off: Below the service panel in the utility room.

Service Pipe: Poly Butylene from well

Supply Pressure: 30PSI.

Visible Distribution Pipe: Reinforced PVC food service tubing.

Visible DWV Pipe: PVC, ABS, PB, galvanized, and cast iron.

Functional Flow: Barely there.

Functional Drainage: Adequate except at kitchen sink.

Hose Bibs: Not tested.

Water Heater: Whirlpool 30 gallon gas FVIR. Model BFG1F3030S3 NOV Serial 0627112451

Safety Relief Valve: Watts TPR

Observations & Recommendations

The water system in this house is complicated. The supply is from a private well in the front yard with a submersible pump. Inside the utility room are two pressure tanks, a water softener, and a chlorination system. I did not see any manuals for any of this equipment on site. I highly recommend you obtain this information from the seller so you can familiarize yourself with it's operation.

17. The water softener is leaking, and is plugged enough to create a significant pressure drop upstream of the unit. Replace this unit as soon as possible.

18. The water supply and treatment equipment and the water heater should be sitting in a drain pan.

19. The water heater is a Flammable Vapor Ignition Resistant unit built in June of 2006. FIVR water heaters require greater clearance than older tank style units. If the burner senses flammable vapor or a lack of supply air it will permanently close the gas valve. These clearances have not been maintained. I have located the installation manual for this unit for your convenience.

20. The utility room is not large enough to supply adequate combustion or make up air for the water heater, adding a drier will further reduce the available air. Provide air intakes as outlined in the installation manual. Don't forget the drier requirements.

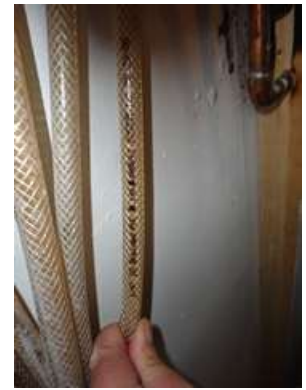


21. Reconfigure the water heater vent so that the horizontal section where it exits the building runs up hill rather than down. The specific pitch requirements are in the manual. Secure the vent with screws.



22. The TPR valve on the water heater has an inappropriate discharge tube. The pipe size has been reduced and the bottom is threaded. The restriction may prevent the relief valve from functioning in an emergency. A proper discharge tube can be purchased at almost any hardware store for around \$10.

23. The water distribution is via 1/4" reinforced PVC food service tubing. Water supply and distribution pipe must conform to (National Sanitation Foundation). NSF 61. Reinforced clear PVC tubing isn't on that list. All of this tubing should be replaced with an approved material of a suitable size with appropriate support.



24. The Drain Waste and Vent piping consists of multiple dissimilar materials with poor support and several sections are pitched in the wrong direction. None of the fixtures are vented. The riser for the washer doesn't have a trap. Replace all of the DWV piping up to the original cast iron stack, and provide proper ventilation.



INTERIOR

Description

Walls: Gypsum.

Ceilings: Gypsum, acoustic tile.

Floors: Mostly carpet, wood tiles in hall, laminate in utility room, tile in bath, vinyl sheet in kitchen.

Cabinets: Painted wood on North side, thermofoil over MDF on South side.

Countertops: Laminate.

Doors: Hollow core birch on interior, wood and steel on exterior.

Windows: Mid-grade vinyl replacements.

Insulation: Blown in cellulose with some fiberglass in attic.

Stairways and Handrail: N/A

Fireplace: None.

Appliances: Not tested

Exhaust Fans: Recirculating fan over range.

Observations & Recommendations

I opened and closed a representative sample of doors and windows, especially egress units, and all operated as expected. Both of the storm doors stick and the side door won't fully close. The interior is cute but the materials and workmanship are mid-grade.

- 25. All houses built prior to 1978 likely contain lead paint. As of 2010, any contractor or landlord doing work that disturbs more than 6 square feet of painted surface are required to comply with the Lead Renovation Remodeling and Repainting Rule. You should be aware that repairing and remodeling houses that contain lead paint may be more costly. Everything you ever wanted to know about lead based paint hazards can be found at <http://epa.gov/lead/>**

ATTIC & ROOF

Description

Main Roof Type: Gable.

Roof Covering: Asphalt, 3 tab on the South side, architectural on the North.

Flashing Material: Galvanized

Estimated Age: 5-7 years on the South, 1-2 on the North.

Layers: One.

Drainage: Some gutters.

Recent Weather: Cloudy with light rain during the inspection and overnight prior.

Ventilation: Gable vents, a small section of ridge vent, and an operable window.

Method of Inspection: Walked.

Observations & Recommendations

The attic has 3 ½" of fiberglass insulation with some loose cellulose and extra glass batts stacked around the perimeter to cover the heat registers for around an R-15. The roof is in good condition except for a few nail pops around a repair on the South side and two loose shingles on the North side.

26. The attic should have around R-40 insulation in our climate. Add insulation, preserving access to the furnace, and cover the attic hatch.



27. Remove and replace popped nails and patch with an appropriate mastic. Refasten the loose shingles.



28. There is moss on the front porch roof, and on the North slope of the garage roof. A solution of bleach and water will kill the moss and it will sweep off easily when it's dry. Removing the moss will extend the life of the cover.



EXTERIOR AND GROUNDS

Description

Siding: Vinyl.

Soffits: Vinyl.

Trim: Vinyl.

Grading: Flat around the house.

Walks: N/A

Driveway: Gravel.

Vegetation: A few trees that need removal at the back of the house.

Fences: N/A

Stairs: N/A

Decks: Two small decks on the front.

Patios: N/A

Observations & Recommendations

The grading around the house is pretty flat, but the house is sited high and dry. There is a dead tree in the back yard that needs to be removed and a small sapling has sprouted along the North wall near the back corner. The siding and trim is mid-grade like all the other improvements and applied with a similar level of competence. There are gaps at several locations around the eaves where it appears animals have tried to enter, and some dented and loose trim at the back corner near the dead tree. The wood skirting around the porches is sited too close the ground and will be a maintenance headache.

29. Repair the gaps in the siding and trim and touch up the exterior caulking.



30. There are a couple small gaps and cracks in the mortar on each side around the perimeter of the foundation that need pointing. Very minor stuff.

31. The downspout on the front corner dumps right onto the entry for both decks. This is too close to the foundation and has to be very icy in winter. Install a buried drain to get the water away from the house and the stairs.

32. Install gutters and downspouts where they are missing, and make sure to drain them well away from the house.



Garage

The garage is in reasonably good condition but was only given a brief once over. The furnace was not operated and I recommend having a technician look it over before firing it up. I did notice the vent is way too short, and should be extended. What insulation that is there is full of mice and should be replaced and covered with drywall. Repair the electrical issues noted.

Please Note:

The septic tank and the well were not inspected. Other than the components listed in this report, these systems are beyond the scope of a Home Inspection and are excluded by the NY SOP.

CLOSING COMMENTS

This house overall is in good condition with the exception of the plumbing. While you may be inclined to live with some of the conditions I've described, I will prioritize the more important issues for you here. Since my recommendations are clearly highlighted in each section this is *not* intended to be a complete summary.

Water Management

Replace all of the plumbing from the pressure tank to the cast iron drain stack, including the softener unit.

Install gutters and downspouts and fix the ones that are there.

Remove and replace all the rotted wood under the mechanical room.

Repair the vapor barrier in the crawl.

Electrical

Trace the 2 wire circuits and install GFCI receptacles or circuit breakers to improve safety.

Locate and repair the loose connections that are causing open grounds.

Remove abandoned circuits.

Install appropriate covers and work boxes where they are missing.

Mechanicals

Repair all of the exhaust defects on the furnace and the water heater.

Provide a means of combustion and make up air for the water heater and the drier.

Safety

-Install smoke and CO detectors.