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August 22, 2007

Ms. Carla Carlton  
6158 Kingsley Drive  
Indianapolis, IN  
46220

Property Inspected:  
6526 North 300 East  
Leesburg, IN 46538

### INSPECTION REPORT

On August 18, 2007, I conducted the lion's share of an inspection of the home located at the above address, as requested by the homeowner. I had one preliminary walk through with the owner, and two follow-up quick checks. The inspection was an "existing homeowner" inspection and not a complete State Licensed Home Inspection that would be required in a buyer/seller real estate transaction. So in lieu of "describing, identifying, and inspecting" all the systems and components in the home, and also knowing that the homeowner is already aware of, for instance, that the house has shingles on the roof, vinyl siding, no garage, vinyl windows, gas forced air furnace and a plethora of other items, I conducted an inspection for "inadequacies" of various kinds from the whole house interior renovation project that has been occurring recently. This is really what the homeowner wanted, and is also more cost effective this way. This inspection was also not a complete code inspection. This was a visible and accessible inspection and much cannot be seen. Loads were not calculated on roofs, walls, floors, plumbing, electrical, or HVAC systems. It would take many days to do as much as you could for a code inspection on an existing home and would cost a considerable amount more, and still could not be a complete code inspection.

Code inspections are best performed during the renovation project, doing a minimum of 10-12 inspections, and at least 2-3 hours each. [A home inspection for a real estate transaction is not a code inspection, but outdated safety "standards" due to a change in residential "requirements", (that pose a safety hazard on a day to day basis), must be reported. So as you can imagine, the older a home gets, the longer and longer it takes to perform a State Licensed Home Inspection.] By the way, I have not seen the renovation contract (or the home inspection report that was conducted in October of 2006), and I prefer it that way, so I can do my own inspection and call it like I see it. That does come with some disadvantages, as what I call out in this report may not be associated with the renovation project. I already know there are several areas, and other ones will need to be

sorted out by the parties involved. Some may go back to the October home inspection, and this I don't know either.

I have seven different "types" of home inspections that I perform. I pride myself as being an unbiased inspector and simply reporting what I see. I always use as much detail as is reasonable, to pass on a clear understanding. This was an extensive project, involving 14-1/2 hours actually on the site, and with 216 pictures, and 4 trips to the job. What I have done here, is to observe and document as many errors and omissions on the renovation project as practical and possible based on my 31 years as a remodelor and inspector, and my constant continuing education required by my licenses.

The renovation project was conducted by Anderson Property Management Solutions, Inc., as I have been told. I do not know the Anderson's, but had they contracted me to do the inspection, the results would have been identical. I am an unbiased, independent, third party inspector, who does NOT do remediation work. A little off the subject, I am currently Indiana's ONLY independent home inspector, a member of IHINA, (Independent Home Inspectors of North America), which means I do not solicit work from realtors. We believe at times, THAT relationship could become too "cozy", for the purchaser of real estate to get an unbiased inspection and report.

As I personally have made oversights during the last 31 years, I have always corrected them, or had them corrected, at no charge to make a happy customer, and preserve my business reputation in the area. I have faith and believe that as long as the Anderson's have been in business, they would want to do the same as well. In order to save costs, I have not attached the code papers addressing some of the items in the report. If someone needs these, for this size project, it would be an additional fee of \$475.00 to look these up, copy them, and highlight them. Many of the items are also just generally accepted building practices too. I trust for the peace of mind for all involved, this can be settled without going to court and racking up more time and cost. Also, my fee as an expert witness AND the pre-trial paperwork, does not come cheap! ☺

By using the detailed report, and 216 custom marked pictures, estimates can be made for completion of the work, as this will save some time and cost. However, further evaluation will probably be needed on each trade area. For one example, I did not inspect every one of the 39 can lights, or inspect the size or connections of every new water line in the attic, or determine what is connected on every electrical branch circuit.

Also, as I mentioned previously, some items may have been existing and were not addressed as part of the renovation project. For one example, I will mention the sagging double 2x6 beam for the joists in the living room ceiling, and the sagging ridge board above it, that I recommend to be corrected. More on this later.

Also, there are some items that were maybe not part of the renovation project that should have been addressed in the bid, or at least in the course of construction. For one example, all of the receptacles in all three bedrooms (and a smattering of others), are not



supplied with groundING (the bare wire) capabilities. Were these included in the bid or would they be an extra charge? It depends on the contract. More on this electrical later. Most of the time with remodeling especially, charges come up along the way as the project progresses, because you find hidden things. Many times other items are deleted and credits are given or returned too. As extensive as this project is/was, some items should have been addressed further, and may or may not have resulted in extra charges. It depends on the wording in the contract. I say this because I think all new drywall was hung everywhere and most anything could have been changed behind the old wall coverings (I'm talking about exterior walls and the interior walls that remained as original), before the new drywall was hung. Viewing the homeowner's pictures, it looks like all wall coverings were removed, except possibly on both sides of the fireplace and some in the south hall. Now it will be more difficult to change the items since the walls are finished.

Also, the gas was shut off at the meter and I did not turn it on. So I did not test the furnace, dryer, water heater, gas log or range. The plumber will want to do a pressure test for leakage, or at least monitor the meter dials for a few hours.

Another thought I have, which is also a concern, is about the original existing water lines in the attic freezing. (I will address the new ones later). They are on top of the joists with 6" of insulation below them and 6" of insulation over them. I would recommend to inquire with the seller if they used the home on a year round basis, or if they blew out the water lines for the 5 winter months, or at least the months of December, January, and February. The water lines over the north bath lav in the attic are even hard to view, let alone get to, to make sure they are properly insulated. I recommend to inquire with a plumber and also with further evaluation. I don't recommend turning down the heat at all. This often is the difference in them freezing, and when going away always shut down the water system and bleed off the pressure too. You may need to add even more insulation in the attic, or at least over the water line areas, depending on what you learn from others. (The new water lines and all attic work needs addressed before freezing temperatures arrive – October 1?)

I have broken down the report into several areas for convenience. I have also numbered the pictures. Many pictures overlap different areas and show multiple problems.

Following are my observations that need repairs, replacements, improvements, additional work to be done, etc., as required, by qualified personnel, and with some areas requiring further evaluation. (I didn't take the time to write "Correction Needed" behind each and every bullet point).

## EXTERIOR ITEMS

- #1-7 show exterior views of the home.
- #8-17 show damage to the vinyl siding products that need replaced with new material. I noted 12 areas of damage.
- #18-19 show the old cable box and satellite dish that needs removed.
- #20 shows the roof ridge line sagging because of the double 2x6 beam in the attic that carries the weight of the ceiling joists in the living room is sagging. More later.
- #21 shows a hole in the metal valley on the roof.
- #22 shows the resulting leaks from picture #21 through the vinyl soffit over the front door walkway area. (I used a hose. It was not raining).
- #23 shows watering down the roof to try and determine why the concrete slab, with the crack in it, to the left of the front door, shows dampness from time to time. It did not show the dampness 8 hours after watering down the roof. When I arrived that morning of the 18<sup>th</sup>, it was dry, #24. It showed dampness on the 16<sup>th</sup> during the walk through with the homeowner. I turned the water on during the early morning of the 18<sup>th</sup> and it was still dry at the time of departure of 7:20 p.m. There are water lines in the wall right by this spot and also a drain line for the north bath lav in the floor right here too. I turned the water off to the whole house at the time of departure and bled off the pressure. In the same early morning, I ran water in the drain for the lav and it promptly filled up (maybe a quart?) and stayed plugged the whole day. In fact, when I came back on the morning of the 20<sup>th</sup>, it still had not gone down a bit. (This plugged drain situation needs corrected as well). When I came back on the 20<sup>th</sup>, it was raining and the spot showed dampness, #25. The paver tiles from the new walkway, were wet from the rain and leaks in the soffit within 2-1/2" or so of the spot. Is there any tiling system under the pavers somehow causing this? There may be a long "lag effect" to the dampness showing up. Now that I think about it, picture #135 appears to show a drip on the new water line and a loose clamp too. This is a very difficult place to get to and I had to use my zoom on my camera to get the shot. At this point, I can't really rule out anything from my trouble shooting. Further evaluation will be needed. Start by confirming or ruling out the water lines up in the attic above the north bath lav. That's my first hunch.
- #26 shows the location of the valley rafter that was cut off and cut in two to install the can lights over the north bath lav. More later. Also the flatter (2-1/2" in 12" pitch) roof may or may not have the proper underlayment under the shingles to prevent



leakage, especially in the winter. Further evaluation is needed. The shingles were lapped 4" instead of 5" to help, but I know this doesn't always work.

- #27 shows a slashed window screen.
- #28 shows a vinyl window extrusion that is broken.
- #29-30 shows fish mouthed aluminum capping on two posts. There are ways to do this different, so this doesn't happen.
- #31 shows no closer on the storm door.
- #32-33 show no "Z" type flashing above the tops of the windows that are not protected by the overhangs of the roof – not even any caulking.
- #34 shows a gulley forming in the steep driveway before heavy rain (8/18/07).
- #35 shows the gulley now worse after the heavy rain (8/20/07).
- #36 shows the soil too high against the house. This is just one "sample" area. In this picture it shows the vinyl siding J-channel is above the slab floor about 1". It shows the sill plate is rotten too. Soil needs lowered to expose the slab around the house – you can't get the 6" required by the code, but get what you can – and then the dirt has to slope away (by the code 6" in the first 10'). Get what you can and use swails if necessary. Then install flashing up behind the siding, down over the slab. Further evaluation is needed to determine if sill plate(s) need replaced.
- #37 shows too little slope away from the house towards the ravine.
- #38-39 show the ravine and it should be cut deeper to keep water away from the house (and because of what was mentioned under picture #36-37) and even cut all the way to the lake if possible.
- #40 shows the wash out from the ravine and that probably top soil and sod should line the ravine.
- #41 shows a hand rail is needed on the steps coming down from the parking area.
- #42 shows the parking area draining to the modular block retaining wall system. I am assuming there is adequate drainage? See pictures #43-46.
- #43-46 show water running past the corners of the top step and washing out the dirt and stone piled up beside the steps. This will eventually undermine the steps and cause settling.

- #47-48 show stone and gravel to be removed before top soil can be added.
- #49 shows how the drain in the limestone area will need cleaned out after most every rain to remove silt. It's 3" deep now in the box with ½" of silt in the exit pipes.
- #50-51 show that leaves will plug the grates very quickly and stop the surface drainage. Will installing "domes" on top be enough to keep the flow going when all the oak leaves fall for six months? No matter what, these grate drains will be high maintenance. Maybe better swales can be formed to shed the water flow around the north and south sides of the house?

### INTERIOR DRYWALL

- #51A-54 show drywall imperfections needing repairs – there may be other spots too.
- #55-58 show drywall areas that need primed and painted – there may be other spots too. Other pictures too.

### INTERIOR HEATING

- #59 shows the return air grill needing to be installed in the hallway. You don't need a filter here.
- #60 shows a missing supply register in the south bathroom.
- #61 shows two supply registers in the north bathroom. Remove the one by the door. There used to be a wall running between these that previously formed two rooms.
- #62 shows the return air in the ceiling in the back south hallway. This used to be in the west bedroom before the walls were relocated. It is not needed in the hall and it is needed in the west bedroom.
- #63 shows gaps where the return air duct is attached to the furnace.
- #64 shows the return air duct sections beside the furnace offset and not properly connected together with "S-Lock".
- #65 shows a plugged furnace filter. It also needs raised up to seal the 1" gap at the top, and the metal flange at the bottom and sides(s) of the opening need bent back flat so the filter will rest flush against the opening.
- #66 shows a very dirty blower compartment, motor, and squirrel cage fins from drywall dust. Return air duct also needs cleaned, at least from the opening in the hallway down to the filter.



- #67 shows the furnace cover is missing, and the components need cleaned from drywall dust, including the induced draft fan motor, especially.
- No picture. I recommend installing a return air pipe into the room that used to be the garage.

### ATTIC HEATING

- #68-72 show ductwork that is now missing the insulation from the attic work that was performed. #70 & 71 also show flex pipes pulled loose and/or gaps from the ductwork. Some of this appears to have been that way originally.
- #73 shows a pipe disconnected completely.
- #74-79 shows a conglomeration of problems. I am focusing mostly on the smashed flex ducts. These are smashed from crawling on them and from gas lines, water lines, wiring, and a plumbing vent being installed OVER them instead of UNDER them. #74, 75, 78 & 79 really shows this latter situation. Also note the open junction box that is not elevated above the insulation, when that gets put back into place. Every flex pipe and connection needs checked, for both smashing and proper connections.

### FLOORING

- #80-83 show black water staining in the end grains of the bamboo flooring, from when outside surface water ran in on the slab floor.
- #84-88 show three boards that are split, one board dented, one board with an end gap, one board with a chip/nick missing, and one board that is "raised"/thicker than the rest.
- #88-90 show that some boards are milled narrower than others and create gaps on the sides because they can't line up.
- #91 shows where the new sprayed-on urethane goes up to the base of the refrigerator and stops. The feet are sprayed to the floor. Might be okay until you get a shallower refrigerator?
- #92 shows one of several spots where the urethane got up onto the baseboard, and also paint damage to the drywall in two or more spots.

### MISSING RECEPTACLES

- #93-102 show where receptacles should have been added to meet code spacing since the walls were gutted and this was a whole house renovation project. The areas include, but are not limited to, the wall where the kitchen peninsula is attached, to the right of the kitchen sink, to the right of the stove, in the back south hallway, in the front north hallway, on the east walls of what was the old garage, in the southeast bedroom on the north wall by the closet, in the southwest bedroom on the wall to the left of the closet door, on the west wall of the southwest bedroom, on the south wall of the main front door foyer entrance, and on the west wall of the living room.

### MISCELLANEOUS INTERIOR

- #103 shows that either louvered doors or the appropriate size and number of wall grills are needed for combustion air in both the laundry room for the gas dryer and the utility room for the water heater.
- #104 shows that an anti-tip bracket has not been installed on the stove/range.
- #105 shows "scuff marks" on the support column in the living room that I couldn't get washed off. Try 409. If that doesn't work, try something else. If all fails, then re-paint this column.
- #106 shows a loose hinge on the lazy susan kitchen cabinet door.
- #107 shows the handles are missing on the bypass closet doors in the old garage room.
- #108 shows the wood inside the strike plate needs chiseled out so that the "tongues" on the storm door locks can engage. (Front main door).
- #109 Just looking.

### MISCELLANEOUS ATTIC

- #110 shows south bath vent fan is not exhausted at all. It can be vented out the gable end using flex insulated pipe. The fan unit itself will also need insulated.
- #111 shows the load bearing valley rafter has been cut off to install the can lights over the north bath lav. Right now the BOTTOM end of the UPPER piece is bearing on a ceiling joist which is not designed to carry the load. The UPPER end of the BOTTOM piece may be bearing on the wall, which would be good, but I can't tell for sure. This is that "mean" area to get to. Further evaluation needed on this latter part and then correction is needed for the whole situation in general.



- #112 shows the vent pipe from the north bath fan unit is crushed and needs replaced and also needs replaced with insulated pipe to avoid condensation from occurring.
- #113-115 shows the original struts and purlins coming apart because the 2x6 double beam that is spanning from the fireplace to the new post is sinking over the years. Sometimes we get “lulled” into thinking that since it’s been here like this since 1957, it will be okay for the next 50 years. I’m 50 and I doubt I will live to be 100! ☹ Things get “tired”, broken, worn out, and eventually “die”. I recommend installing a new LVL or laminated beam in the attic to get the ceiling and roof back up to where it belongs.
- #116-121 shows areas of missing insulation and also jumbled up and dislodged insulation from the renovation project.
- #122 shows four joist cavities clear at the south end of the attic, with the original insulation installed upside down. The vapor barrier needs to be against the warm side of the house, so just flip it all over.

#### BEAM SITUATIONS

- #123-125 shows a SOLID 6”x 6” wood beam in the attic that was installed to help prop up the rafter span on the east half of the living room. This beam is about half way between the fireplace and the east wall of the living room, running north and south. The north end is bearing on the north wall, and the south end was bearing on the east/west kitchen wall that was torn out and is now above where the peninsula is roughly. Now the south end of the beam is resting on about 3 ceiling joists and the roof weight is concentrated on these 3 (the other ceiling joists have sagged) and these 3 will sag too since the wall is gone. So (this is going to get kind of involved, but...), you could “temporarily” shim under the beam down to all the other joists to spread the load out, so as not to “punch” down the 3 joists. Ultimately, it comes back to the center, double 2x6 sagging beam which is holding the joists. Once this gets “beefed up”, then new purlins and struts could be installed onto the new center beam or straight down individually to each joist (on top of a new running 2x4 joist tie), and you could throw out the 6x6 solid beam into the burn pile! Correction needed temporarily and permanently.
- #126-130 show the double 2x6 center sagging beam in the attic, the south end of this beam being supported on the column in the kitchen, and the sagging drywall/ceiling joists in the living room. (This is all over and above the fact that the whole house slab has settled significantly and has “tipped” towards the lake side.)

### ATTIC AND INTERIOR PLUMBING

- #131 shows a black coupling in the hose bib line, behind the bladder tank. These are not made for water lines. They produce a shot of rust after sitting idle for awhile. Also, the hose bib is sloped the wrong way to drain out and prevent freezing. After corrections, then add drywall.
- #132 shows the water heater storm collar needs lowered and caulked to the roof boot/flushing.
- #133 shows the plumbing vent not lined up going out the roof and not glued together.
- #134 shows the furnace and a.c. condensate drain line now exposed to freezing temperatures in the attic.
- #135 shows the “mean” area to get to above the north bath lav. It shows what appears to be a leaking fitting and a non-crimped ring, all on the new water lines. If that ring is not crimped, the water line will blow off, and what looks like a drip above that area, could be causing the damp concrete to the left of the front door I previously mentioned. Further evaluation needed.
- #136 shows the end of the water line (among many other problems) that is not connected yet for the toilet in the north bath.
- By the way, when the water heater gets fired up, make sure hot and cold are proper at each fixture.
- #137 shows water lines above the kitchen sink that will freeze if not kept low to the joists and then insulated properly.
- #138 shows water lines and gas lines and wiring on top of ductwork when it needs to be just on top of the joists. It also shows another supply pipe pulled out of the sheet metal ductwork (which is also not insulated yet).
- #139-141 show multiple problems. What I am focusing on here mainly are the gas lines, water lines, (wiring too) and plumbing vent line that are run over the ductwork and flex pipe. Everything needs to be down low on top of the joists, so that the flex pipes aren’t smashed, the water lines can be insulated, and the gas lines supported, and the ductwork properly insulated (we’ll get to the wiring later). Also, it’s very difficult to navigate through the attic with the utilities so high and nothing run neatly without so much “extra footage” and nothing strapped, stapled or supported.
- #142 shows the plugged tight lav drain in the north bathroom.



- #143-144 shows me early on in the day trying to troubleshoot why the toilet had no water. North bathroom.
- #145 shows the toilet tank loose in the north bathroom.
- #146 shows the lav needs hooked up yet in the north bathroom.
- #147 shows the dishwasher drain line needs elevated up to the bottom of the countertop yet, to achieve a proper drain line air gap.
- #148-149 show that the kitchen sink is not vented. Also (no picture) the washing machine drain line is not vented either. Also a Studor vent will need to be installed on the north bath lav drain line too.
- #150 shows the water softener has not been placed in service yet – electrical – water – drain. It is on bypass so we can at least get hard water. It will also need to be chlorinated when placing in service.
- Note: The original water lines back to the kitchen and south bath are undersized and volume loss is noted using more than one fixture. While at this project, I recommend increasing these.

### **ELECTRICAL**

- #151 shows electrical riser pipe is bent and compromised. There is no roof/flashing boot either.
- #152 shows branches rubbing on the overhead wires.
- ✓ • #153 shows danger. Split bolts are not taped at overhead wire connections. Don't touch. Call REMC.
- ✓ • #154 shows loose ground clamp on ground rod. Correct ASAP. As an upgrade for improved grounding/safety, I recommend a ground wire from inside the panel to a pair of ground rods. This is a new improved safety requirement by today's standards.
- #155 shows a post light knocked over with no power that I could find. I tried the switch by patio door, but couldn't determine what that goes to, unless the switch is bad. The receptacle on the post is broken, and dead, and is not GFCI protected.
- #156 shows the outer vinyl box cover is missing that snaps on over the top, and then the receptacle cover is missing too.

- #157 shows the outside receptacle, on the house, on the lake side is not GFCI protected.
- #158 shows a battery combo smoke/CO alarm in the utility room. According to the code, "if a permit is required", then hard wired smoke alarms are to be installed if there is attic access, etc. Kosciusko County does not require a permit for interior renovations. But, because of the magnitude of this renovation project, it would certainly be a generally accepted building practice to install these. I don't know if these were included in the contract or not, but I certainly recommend them. I haven't found a homeowner yet who said they didn't want any.
- #159 shows the access to the attic which is supposed to 22'x30". It is 6" too short. Also it needs to have 30" free space/clearance above it and it does not. Do you want to move it? Also, wires are draping over the hole. Wires within 6' of the hole need protection or need relocated now.
- #160 shows a wire connector is needed on the pressure switch, for the wires that go to the well. I also highly recommend a pressure relief valve to be installed on the system as well.
- #161 shows a TC1R can light. Four of these are installed over the south bath sink. These cannot have insulation within 3" of the top or the sides. They cannot have wood beside them within ½". There is wood on the sides within ½" of one or more of these four. Further evaluation and correction needed. The other 6 small can lights in the house – IC1 style – are okay for wood and insulation contact. The 29, 6" can lights – IC22 – are also okay for wood and insulation contact. **JUST DON'T LET THE PAPER VAPOR BARRIER THAT IS ON THE INSULATION GET WITHIN 3" OF ANY CAN LIGHT.** I've seen this start, and nearly start, fires. (They don't tell you this in the fine print)! I believe it mentions a fire hazard on the insulation.
- #162 shows a wire not tied in yet to the breaker panel. Maybe this is for the heat in the floor in the south bathroom??
- #163 shows the electric panel cover now needs relabeled.
- #164 shows a double tapped breaker and the grounded (neutral) wires need separated, one per screw. There is a 12 and 14 gauge wire on this 20 amp breaker.
- #165 shows a large wire connector needs installed at the top of the panel.
- #166 shows two more breakers that are double tapped and more grounded (neutral) wires that need separated, one per screw.



- #167 shows a wire connector is needed in the bottom of the panel and also the cluster of 3 groundING (bare) wires are loose under the screw. You can't team up different sized wires under the same screw as the case is here.
- #168 shows a new piece of wire hanging down by the furnace. Maybe to put the furnace on its own breaker? (As it should be, and it is not). More later.
- #169 shows live wires not connected yet for the gas log down under the unit in the access panel.
- #170 shows the third hanging light over the peninsula is not installed yet.
- #171 shows a light switch by the patio door that I cannot determine what it operates?
- #172 shows the wire to the dishwasher needs a connector.
- #173-175 show two countertop receptacles and the garbage disposal receptacle with weak grounding. They did not trip with my external GFCI tester. Further evaluation needed.
- #176-177 show the electric floor heat for the south bath is not functioning yet. It also needs to be installed on a GFCI circuit, if it isn't. Also #176 shows a corner of the left countertop GFCI receptacle on the sink wall that is wired backwards –reverse polarity.
- #178-185 show locations with receptacles that are either not wired with or fed with groundING capabilities. This is the bare wire (the third wire) I am talking about. These may still be tied into the old two wire system. As extensive as this project is/was, the remaining old wiring should have been removed and updated to wiring with groundING capabilities. Also, all the wall coverings were removed, as far as I can tell, except for part of the south hall and each side of the fireplace. It is not allowed to install "3-prong" receptacles on a two wire system. The receptacles that I found that are not grounded are: All of them in all three bedrooms, three on the north wall of the living room, one in the laundry room under the shelf, one right below the electric panel, one beside the furnace for the condensate pump, and one behind the drawer for the wine chiller in the peninsula.

Any electrical piece of equipment that has a "3-prong" cord, needs grounding capabilities. This is called an equipment ground. For instance, any computer installed in any of the bedrooms, won't have a grounding source.

- #186 shows a bedroom receptacle that is new, with new wiring, a new box, but is not grounded. It is probably tied into some old remaining two wire system in the attic.

- #187 shows the cable/phone box behind the west bedroom door. This was probably existing, but should have been moved to a better location, since the “door wall” was moved and “pushed into” the bedroom farther. There needs to also be one installed yet in the southwest bedroom.
- #188-190 shows a newly wired ceiling box that was mudded over in the old garage room, in front of the closet, on the ceiling. This is not allowed to bury electrical boxes.
- #191 shows a switch box that was mudded over, with buried splices, beside the switch where you come into the old garage room, from the exterior door.
- #192-194 show three locations where electrical boxes may also be buried in the wall. The “hanging of the drywall” pictures taken by the owner show boxes in these areas, but upon my inspection, they are not there. The three areas that need further evaluation are, right behind the kitchen sink faucet, below the left corner of the wall mirror in the north bath, and between the doorways (on the north wall) into the laundry room and the utility room.
- #195-200 show a sampling of can lights that do not have wire connectors and/or lids to the junction box. ALL 39 can lights need to be checked for proper wiring. Photo #199 also shows one of these four cans I previously mentioned (that have to have ½” clearance from wood) in direct contact with wood on both sides. Check all four for wood contact.
- #201 shows a junction box on the side of the rafter (which is good), but one wire is pulling out of the plastic box. Wires in plastic boxes need to be stapled down within 8” of the box.
- #202 shows a junction box that needs elevated up out of the insulation and nailed to a rafter, for example, or a strut.
- #203 shows the south bath fan without a wire connector. I also just noticed in this picture that it looks like the strut(s) were removed from the double 2x4 joist tie (to cut out the piece of double 2x4 to make room for the bath fan), but needs to be re-installed yet on the end of the double 2x4 joist tie. In fact, there are several places where this double 2x4 joist tie was cut, mostly for can lights, and a piece of 2x4 now needs installed to tie the cut ends back together, to make one continuous tie again from the north wall of the attic, to the south wall. This is called bracing.
- #204-205 show snarled wiring, and excess wire, both electrical and cable/phone. They are also draped across framing and insulation and heating ducts and pipes. These all need “cleaned up”, shortened, and installed on the joists, down low, and the



electrical wires need stapled every 4-1/2' per code. (See more wiring photos under Attic Heating and Attic and Interior Plumbing.)

- #206 shows a wire coming from the panel coiled up and going nowhere, and another wire heading to the panel but coiled up. What are these for?
- #207-208 show some of the old wiring that is left, with exposed live ends, that need installed in the one box, and removed from the other box. The one box then needs a lid. The old metal octagon box should be elevated above the insulation level. Anyway, all the rest of the old wiring should be replaced, as I previously mentioned.
- #209 shows a loose lid on a 6" can light above the side entry "foyer" area.
- #210 shows another 6" can light that needs a wire connector.
- #211-212 show a receptacle (1 sample) with a gap between the wall and the cover plate. If the receptacle devices are mounted on a plastic remodelor box, then break off the four ears on the device, flex the receptacle back, with the palm of your hand, farther into the box, and re-install cover. Do the rest in the house as needed. Gap gone.
- #213-215 show the same scenario with the switches that I just mentioned with the receptacles. Everything holds true, except that there are problems with this style of switch cover. There are 6 round "nubs" and 2 oval nubs that cause the covers to stick out. Some nubs are thicker than others and are flawed covers. I've had to grind the nubs off before. Better yet, find a different brand (but the same color) of cover, or get the covers from a different company.
- Now as far as some of the wiring circuitry goes, I will explain what I found as best I can. I'll start with what we have and then go into how it should be. All three bedrooms (lights and receptacles), back south bath lights and receptacles, furnace, south hallway light, front door foyer light, front door closet light, two fireplace lights, two lights on west end of living room, and condensate pump receptacle are all on one circuit. The furnace needs to be on a separate circuit. The back south bathroom lights, vent fan and receptacles (but not electric floor heat) can, and need to be, on their own separate circuit. The remainder can stay as is.

The microwave, gas range, and the one (first) receptacle to the left of the stove are on one circuit. The microwave just needs to be changed to its own circuit.

The washer/dryer receptacle, north hall can lights (3), laundry room lights (2), north hall/north closet fluorescent light, at least, are on one circuit. The washer/dryer receptacle needs to be on its own circuit.

The refrigerator, wine chiller, dishwasher, garbage disposal, 4 can lights in kitchen, 3 hanging lights over peninsula, 2 kitchen sink wall receptacles, 4 can lights in the east living room, 3 north wall receptacles in the living room, 2 receptacles in north bathroom, and north hall/south closet fluorescent light, at least, are all on one circuit. The two receptacles in the north bathroom, at this point, need to be on a separate circuit. The two kitchen sink wall receptacles and just the refrigerator can be on one circuit. Often times, the refrigerator is put on its own circuit. At any rate, you do not want the refrigerator wired "downstream" of the two kitchen sink wall receptacles, because these are on a GFCI, and you don't want the refrigerator going off with nuisance tripping of the GFCI's. The wine chiller, I don't know about, I couldn't find the wattage/ampereage sticker. Electrician can figure this one out if it needs its own circuit. The lights and other three receptacles are okay on the circuit, but the dishwasher and garbage disposal need pulled off of it. Each one of these is best to be on their own separate 20 amp circuit. Based on the load calculations of these two, there is only .65 amps to spare. If a slightly larger dishwasher was put in some day, it wouldn't work. I most always see them on separate circuits anyway as a generally accepted building practice.

All of this circuitry mentioned is based on 12 gauge wire on 20 amp breakers. This will have to be verified in the panel, but I believe it was.

- Homeowner also wants a phone jack in the wall by the peninsula in the kitchen.
- There may be capabilities for an electric range too, based on the fact I see a double blank cover behind the stove, and there is a wire and 50 amp breaker in the panel.

I possibly may have missed something, somewhere along the line, but if I did, it will probably surface along the way during completion of the project. It was a visible, accessible, non-invasive inspection on a home that originally took 2-3 months to build, and even longer to renovate. I felt that in a "mere" 14-1/2 hours on the site that I covered a lot of ground. When I left the site the final time, I felt "satisfied" that I covered the bases pretty good.

Thank you for allowing me to serve you with this inspection and report. If you have any questions, please call.

Calvin Bolt  
Inspector

Indiana State Licensed Home Inspector #: HI00500015

International Code Council Certified Member #5295883

ICC Residential Combination Code Inspector-Building, Plumb. Elect. Mech.

American Society of Home Inspectors #243752



Ms. Carla Carlton

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Member Independent Home Inspectors of North America

Member Better Business Bureau

Member Kosciusko-Fulton County Builder's Association

Indiana State Licensed Pest Inspector #F212457

Indiana State Department of Health Primary Radon Tester Certification #00375

IDEM Asbestos Inspector License #IN199223075

IDEM Lead Inspector License #IN7316077

IDEM Lead Risk Assessor License #IN0129107

Septic Inspections, Wells/Pumps Testing, Water Quality Testing, Well Chlorinations

Indoor Air Quality: Mold, CO, Gas Leaks, Odors, and Noises and Moisture Intrusion