The Home Inspection Company

AAD Inspection Corp.

6-Plex Apartment Report

614 N. 5th Street
Boise, Idaho

Inspection Date: 01/05/2007

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OVERVIEW

Dear Eve-Marie Bergren,

Thank you for choosing me as your inspector.

This building appears to have originally been built as a single family dwelling in 1930 and converted to a 6-plex only 24 years later, in 1954 (according to the assessor's records.

The building, itself, remains structurally sound. Its walls, ceilings, and floor coverings are in good condition, as are the appliances. However, although many improvements have been made to this property through the years, its electrical systems and roof coverings will need replacement in the near future. Additionally, some major repairs need to be done to the plumbing drains at this time.

Please review this report carefully before releasing your contingency.

If you need further explanation regarding this home's conditions, please don't hesitate to call:

Our 24-hour, 7-day office number is: (208) 338-9144.

Sincerely,

Stan Audette, inspector

APPROXIMATE YEAR OF CONSTRUCTION: 1930

CURRENT WEATHER:	Cold (35°F), partly cloudy, calm, and dry.
RECENT WEATHER:	Similar.
CLIENT(s):	Eve-Marie Bergren
BUYERS' AGENT:	Brooke Seidl
AGENCY:	Group One R.E.
LISTING AGENT:	Tony Drost
AGENCY:	Swope Investment Properties
THOSE PRESENT:	Brooke Seidl, Eve-Marie Bergren Bryan McLaughlin, electrician (and crew) Stan Audette and Jim Severine (inspectors)

Suggestions for Understanding and Using This Report

No property is perfect.

Every building has imperfections or items that are ready for maintenance. It's the inspector's task to discover and report these so you can make informed decisions. This report should not be used as a tool to demean property, but rather as a way to illuminate the realities of ownership.

Maintenance costs are normal.

Homeowners should plan to spend around 1% of the total value of a property in maintenance costs, annually. (Annual costs of rental property maintenance are often 2%, or more.)
If considerably less than this percentage has been invested during several years preceding an inspection, the property will usually show the telltale signs of neglect; and the new homeowner may have to play "catch up" with large sums of money and time.

This report is not an appraisal.

When an appraiser determines worth, only the most obvious conditions of a property are taken into account to establish a safe loan amount. In effect, the appraiser is representing the interests of the lender. Home inspectors focus more on the interests of the prospective buyer; and, although inspectors must be careful not to make any statements relating to property value, their findings can help buyers more completely understand the true costs of ownership.

This report may include (upon specific request) cost estimates for repair or replacement of certain items.

Where estimates are given, they may appear as a range of possible costs. The low figure of the range is the inspector's best guess of current material costs, alone – the higher figure of the range includes reasonable retail profits on the materials, together with reasonable labor costs, overhead, and profit for qualified contractors. The client is encouraged to obtain several bids from licensed contractors before agreeing to any work, however.

This report may include estimates of normal useful lives for certain items.

Where estimates of normal, useful life for any components or appliances are offered in the report, the inspector is relying upon widely published data for similar items or systems. When these data are compared to known or estimated ages given in the report, the client may form his or her own opinions as to likely remaining life.

We offer future assistance at no cost.

If you find yourself needing a second opinion regarding repairs or renovation at any time in the future, please give us a call. Most of the time, we should be able to help you avoid high-pressure marketing tactics or costly errors in judgment. Consultation by telephone costs you nothing.

If You Have Any Questions please feel free to contact us at any time. We will be happy to discuss your report or provide further maintenance tips.

(Master copies of all reports are kept in our files for future reference.)

Good Luck! We wish you the best!

SERVICE AGREEMENT

(PLEASE READ CAREFULLY)

Between: **AAD INSPECTION CORP.** (Company)

And: ***Eve-Marie Bergren*** (Customer)

Re: ***614 N. 5th Street, Boise, Idaho*** (Subject Property)

The Company agrees to perform an inspection and prepare a report to enhance the Customer's knowledge of major systems and aspects of the Subject Property. Information conveyed will consist of professional opinions, only, and will be based upon the Company's customary efforts to maintain accuracy.

While the Company strives to discover and report in a manner that can significantly reduce the Customer's future possible health, safety, and financial risks, the Customer agrees that it is not reasonably possible to eliminate all such risks through the procurement of this inspection service. It is further understood and agreed that the inspection may be limited to readily accessible areas of the property and that the report will be based upon observations of apparent conditions existing at the time of the inspection. The Company shall not be required to dismantle items or systems, move, remove, or lift personal property, debris, or snow in order to perform the inspection, but may do so at its option. The Company is not responsible for the discovery or reporting of latent or concealed defects or deficiencies. (The Company cannot perform a functional inspection on a system if its respective public utility has been shut off.)

The inspection and report might not address and are not responsible to address the possible presence of, or danger from, any potentially harmful substances or environmental hazards including (but not limited to) radon gas, lead paint, asbestos, urea formaldehyde, toxic or flammable chemicals, or water and airborne hazards. Any information that may be conveyed by the Company for the benefit of the Customer with regard to such hazards is not to be construed as being in compliance with inspection or reporting protocols of any regulatory bodies unless such compliance is specifically claimed in the report.

This company and its inspectors are not licensed or insured as pest, fungus, or mold/mildew inspectors. Any information that may be conveyed by the Company for the benefit of the Customer with regard to pests or bio growths, or conditions conducive to their attraction or proliferation is made without warranty. These services are available from others licensed or certified in their respective fields.

The inspection and report do not address compliance or certification regarding past or present governmental codes or regulations of any kind. We are not code inspectors.

THE COMPANY IS NOT AN INSURING AGENT IN ANY RESPECT. The inspection and report are not intended as (or to be used as) a guarantee or warranty (express or implied) regarding the adequacy, performance, or condition of any structure, item, or system. All warranties (both express and implied) are disclaimed, including any warranty of merchantability or of fitness for a particular purpose.

In no case shall the Company be liable to the Customer for any special, incidental, or consequential damages. In no event shall the Company's total liability to the Customer for damages, losses, and causes of action, whether in contract, tort (including negligence and malpractice), or otherwise exceed the amount actually paid by the Customer for the Company's inspection and report.

If legal action is brought against the Company for any reason, the Customer agrees to pay reasonable expenses for pro se defense or representation by an attorney if the Company prevails.

The Customer agrees to hold *Brooke Seidl & Group One R.E.* forever harmless regarding liabilities for any or all consequences arising from the inspection and report.

The report is provided for the exclusive and confidential use of the Customer.

The use of any information conveyed through the inspection and report by any party shall be deemed as a contractual understanding, acknowledgment, and acceptance of all terms of this agreement.

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INSPECTION FINDINGS

(Defects, Imperfections, Etc.)

Common Areas and Features

1. Knob and tube electrical cabling is still in place and in use throughout the building. (Please refer to further discussions regarding this issue, which I have included in the section titled "OWNERSHIP TIPS FOR THIS PARTICULAR HOUSE" near the end of this report.) The photo immediately below shows the older wiring in the crawl space. The next photo shows the older wiring in the attic. (Both instances were tested with a voltage wand to verify that they were still energized.)

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2. The three electric water heaters in the cellar are labeled as “A”, “B”, and “C”; however, there is no mention as to which apartments they serve. I suggest labeling them with respect to their appropriate living units at this time.
3. I was not able to access or visually inspect the crawl space under the floor at the right rear corner of the building. This is an approximate 12x12-foot area under the smaller bedroom of the rear apartment. However, this particular area has no plumbing. Therefore, I suspect that it typically remains very dry.

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4. A number of electrical boxes are open and some connections are made with wire nuts in open air under the floors in the cellar and crawl spaces. The following two photos show a couple of such instances.

5. The sump pump in the cellar floor appears to be jammed. When I raised the float, the switch operated and I could hear the motor "humming"; however, no water was pumped. I suggest having a qualified electrician or plumber address this issue.

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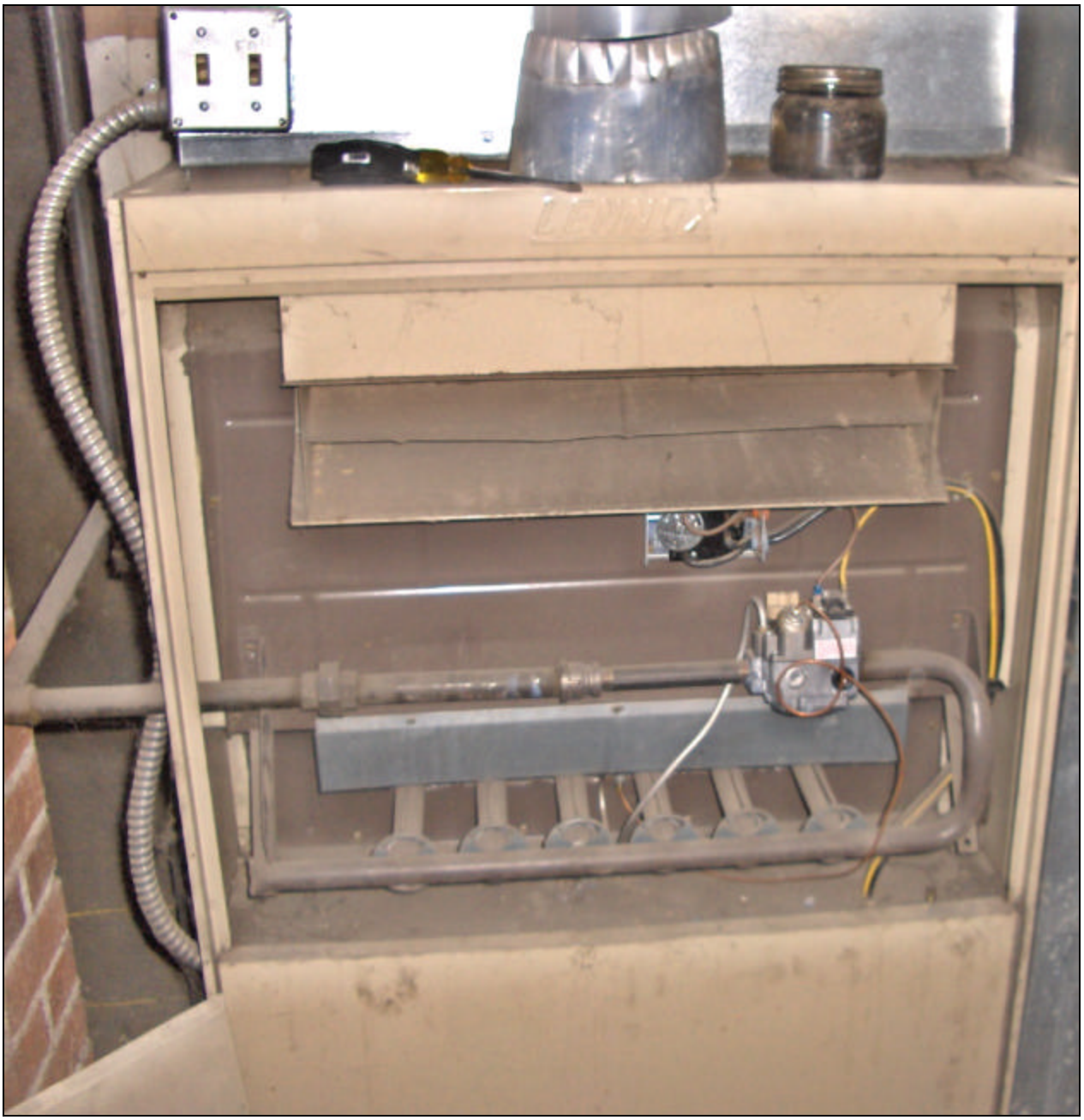
6. The 1970's vintage natural gas furnace in the cellar is not currently used. I verified that this is the only gas appliance associated with this building. However, the valve at the gas meter is turned off. (All living units are currently heated with separate baseboard heaters—probably since the mid-1970's, when the last new wiring was pulled into each apartment.)



3288 Sweetwater Dr.
Boise, ID 83716

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7. It appears that the six-foot-tall field stone wall at the rear of the cellar is moving slowly inward, as evidenced by the separation pattern in the stones. This is depicted in the following photo.

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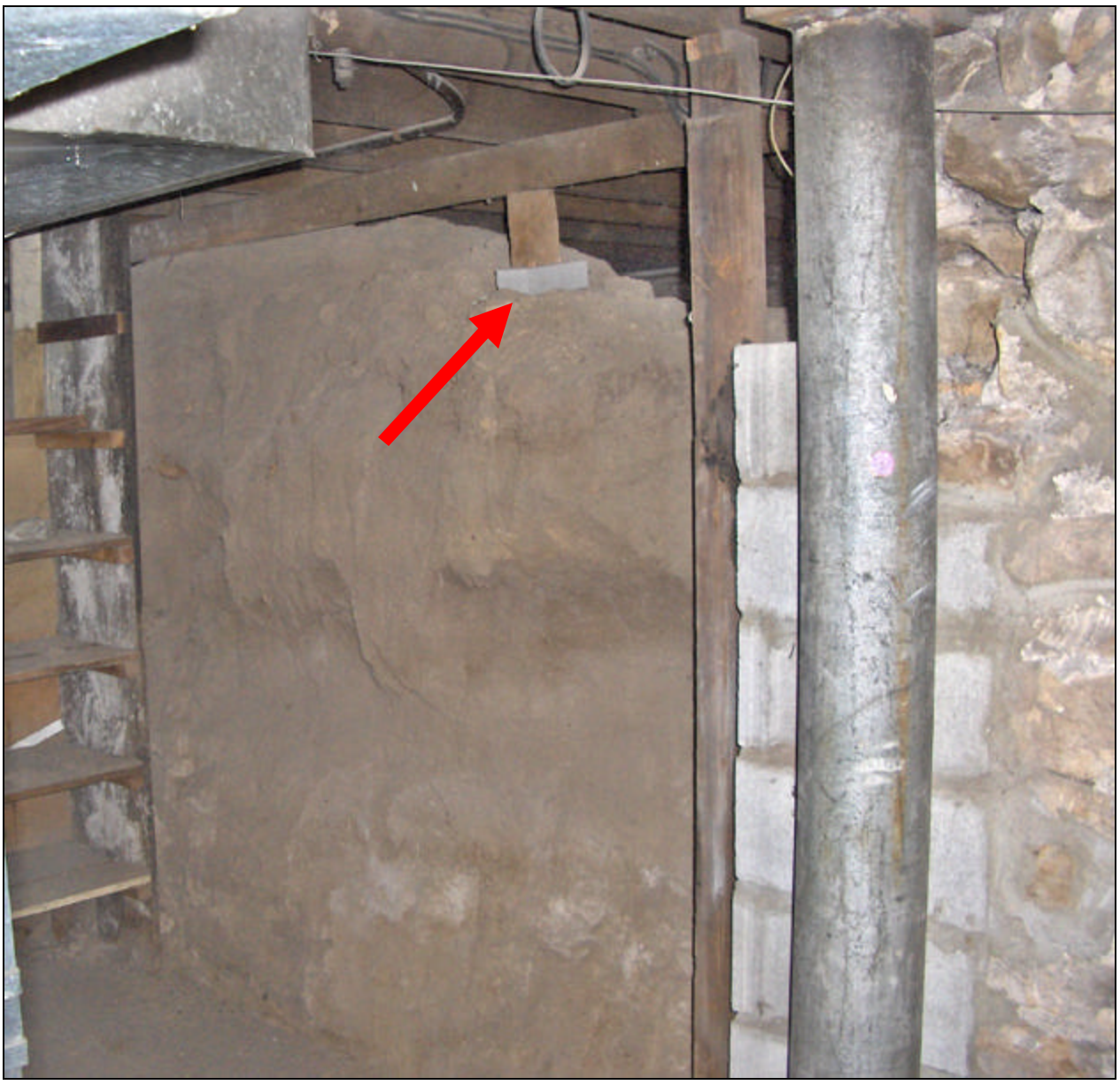
Likewise, some similar movement appears to have occurred in the north-facing fieldstone wall, as well. (Generally, the maximum desirable height of earth behind a field-stone wall should be no more than about 4 feet.)

8. The earthen wall along the north face of the cellar is too steep and tall to stand permanently. Furthermore, some bearing load from the floor framing is placed directly on it (as pointed to by the red arrow in the photo, below). If water should happen to permeate this soil, it may collapse.



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9. The roof covering over this apartment has about four courses in place, already. The original cedar shingles are still in place, along with three courses of composition roof shingles, as can be seen in the following photo.

Furthermore, the current roof covering appears to be more than 20 years old. This current roof covering has reached the end of its useful life, as can be seen in the following photo. I suggest having one or more qualified roofing contractors prepare bids for a complete tear-off of existing roofing materials, down to the spaced pine "skip sheathing". I suggest installing architectural-style shingles in their place.

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10. The current roof-to-wall flashings along the rear of the building are inappropriately applied in two places. (The flashings should have been placed up and under the adjacent siding, rather than only against it.) Both instances are shown in the following two photos.

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11. The older brick chimney at the rooftop has crumbling mortar between its upper rows of bricks. Furthermore, its mortar crown needs some repair work. (Since this chimney is no longer being used, I suggest removing it at the time of next reroofing.)

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12. The incoming overhead power cables from the alley to the building are too low above the ground. The minimum height over parking areas should be 16 feet. (The masthead for the meter grouping should be raised.)

13. The meter grouping at the south exterior of the building near the southeast corner has only 6 meters. Since common area lighting is employed, this means that one or more of the tenants must pay for the electricity enjoyed by other tenants. This situation should be rectified when the electrical systems are next upgraded.

Furthermore, considering the fact that each the apartments have only about 60 amps of capacity even though they are electrically heated, there is not enough ampacity to serve each of the living units.

Additionally, the general count of electrical outlets in each apartment is very low. This promotes the overuse of extension cords, which further leads to the risks of fires.

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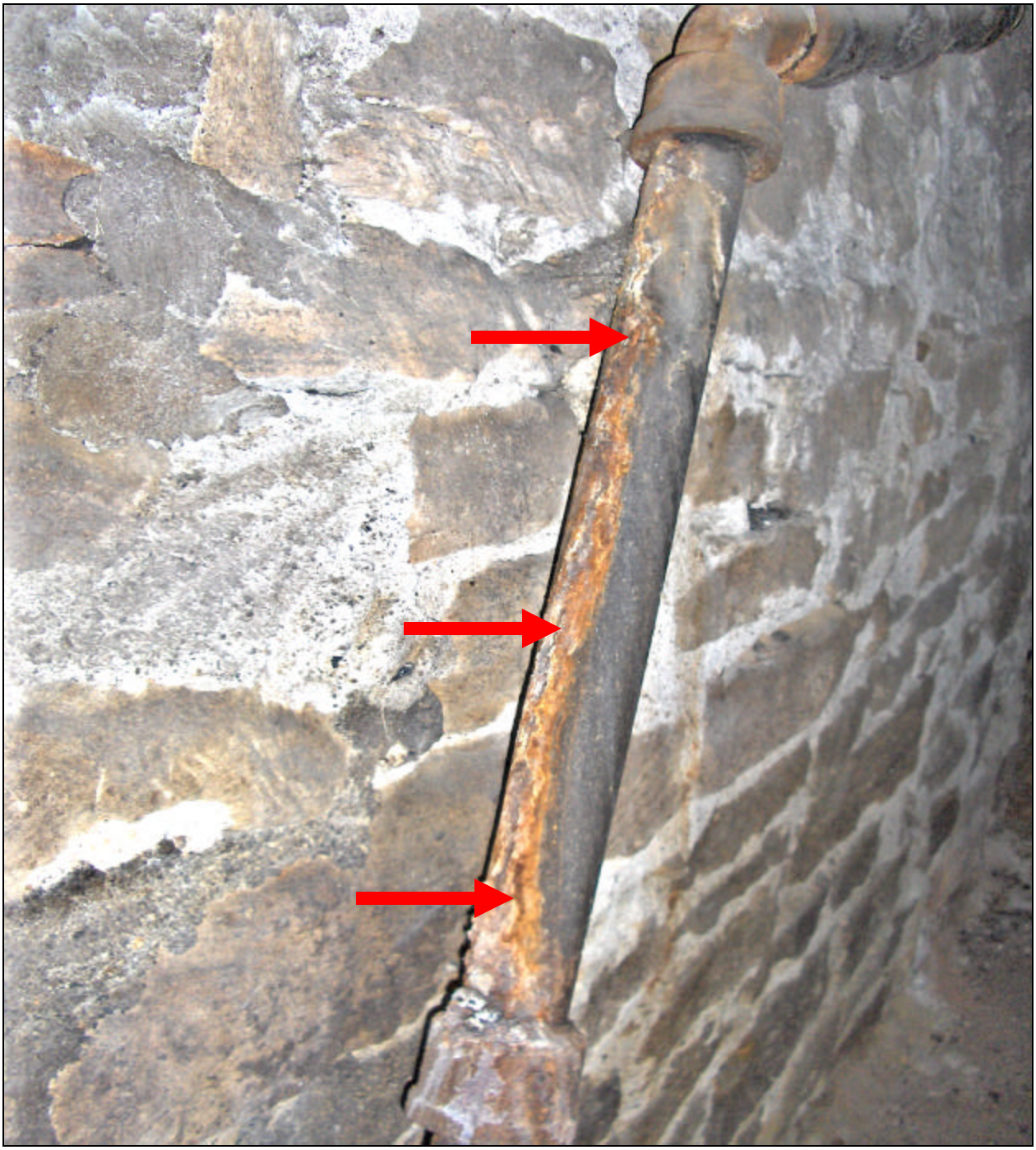
14. One of the older cast iron drain pipes at the south interior of the former coal bin in the cellar is rusting through, as show in the following photo. A qualified plumber should address and/or correct this issue, as necessary.



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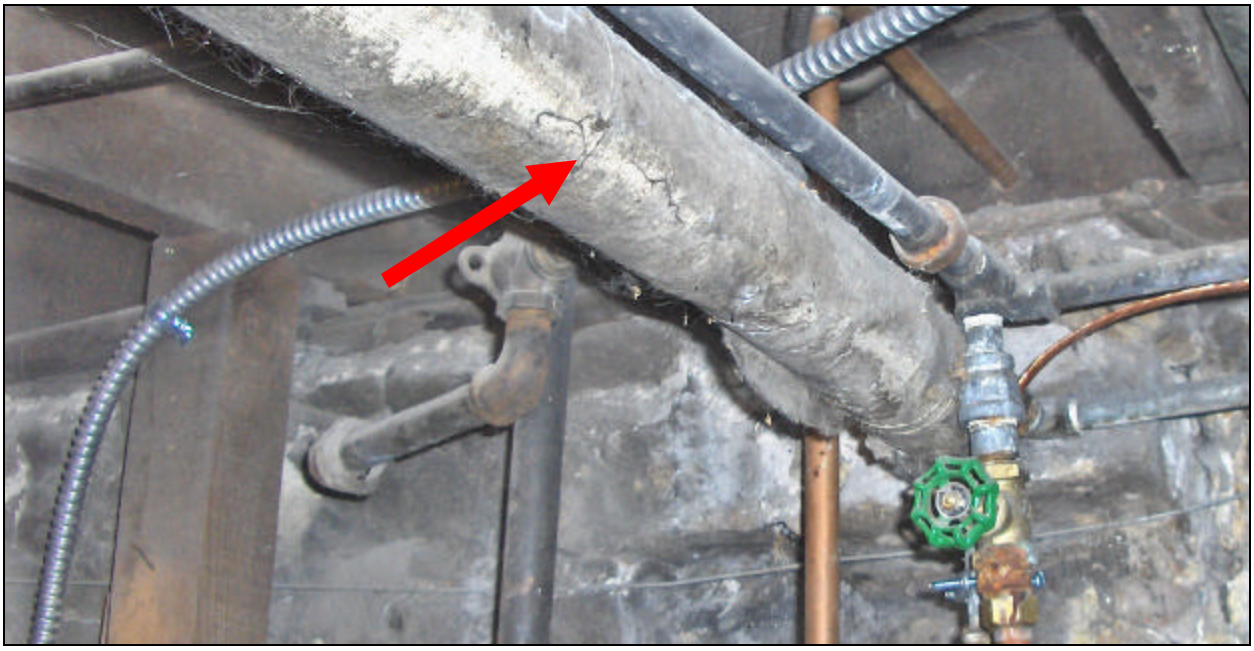
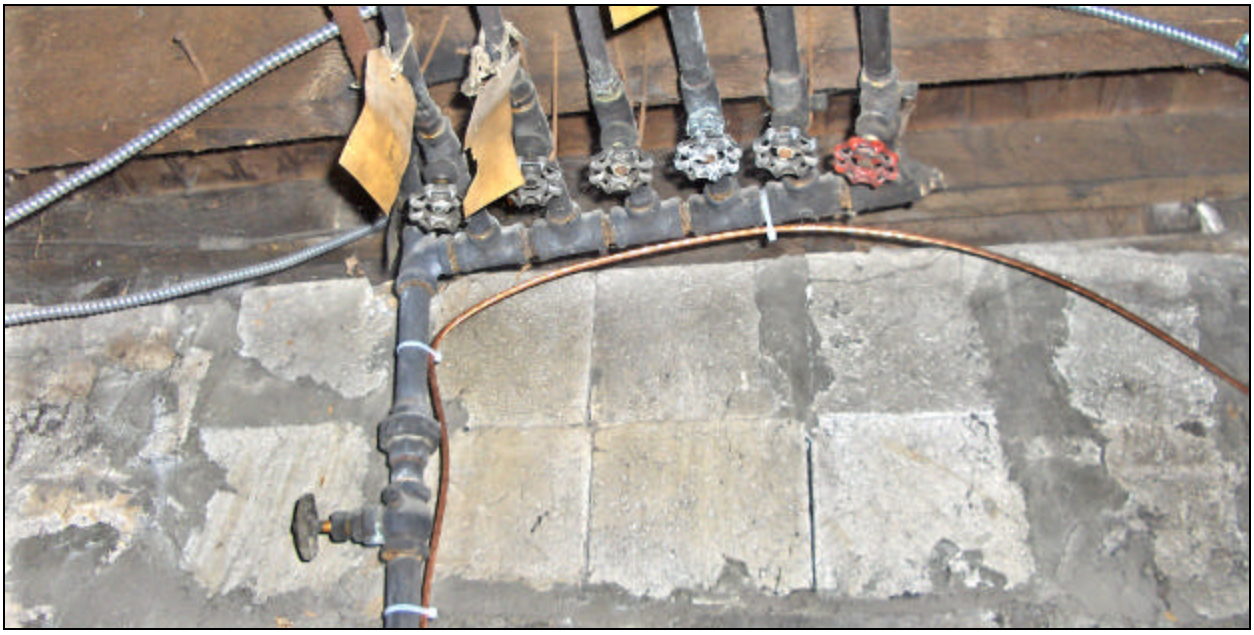
15. Some of the older pressurized water supply piping under the main floor still has insulation in place over it that contains asbestos. I suggest removing these materials from the site.



16. The shut-off valves for each of the living unit's water supplies are in the cellar at the east interior wall of the former coal bin, as seen below.



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17. When the west portion of the cellar was enlarged from its original size, the earth was simply thrown up onto the crawl space floor to the north, as shown in the following photo. This allows soils to touch some of the floor joists. I suggest removing these soils.

18. The sidewalk in front of the stoop for Apartment #3 at the rear of the building is rather broken up, presenting possible tripping hazards.

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19. The tree growing near the northeast corner of the building is too close to the foundation to be allowed to mature. I suggest having it removed in the near future.

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20. A plumbing vent pipe was found open in the attic a few feet south and west of the access hatch in the ceiling of the upper common hallway. A qualified plumber should address and/or correct this issue, as necessary.

21. The paint is peeling and missing in places at the exterior. Repainting will need to be done in the near future.

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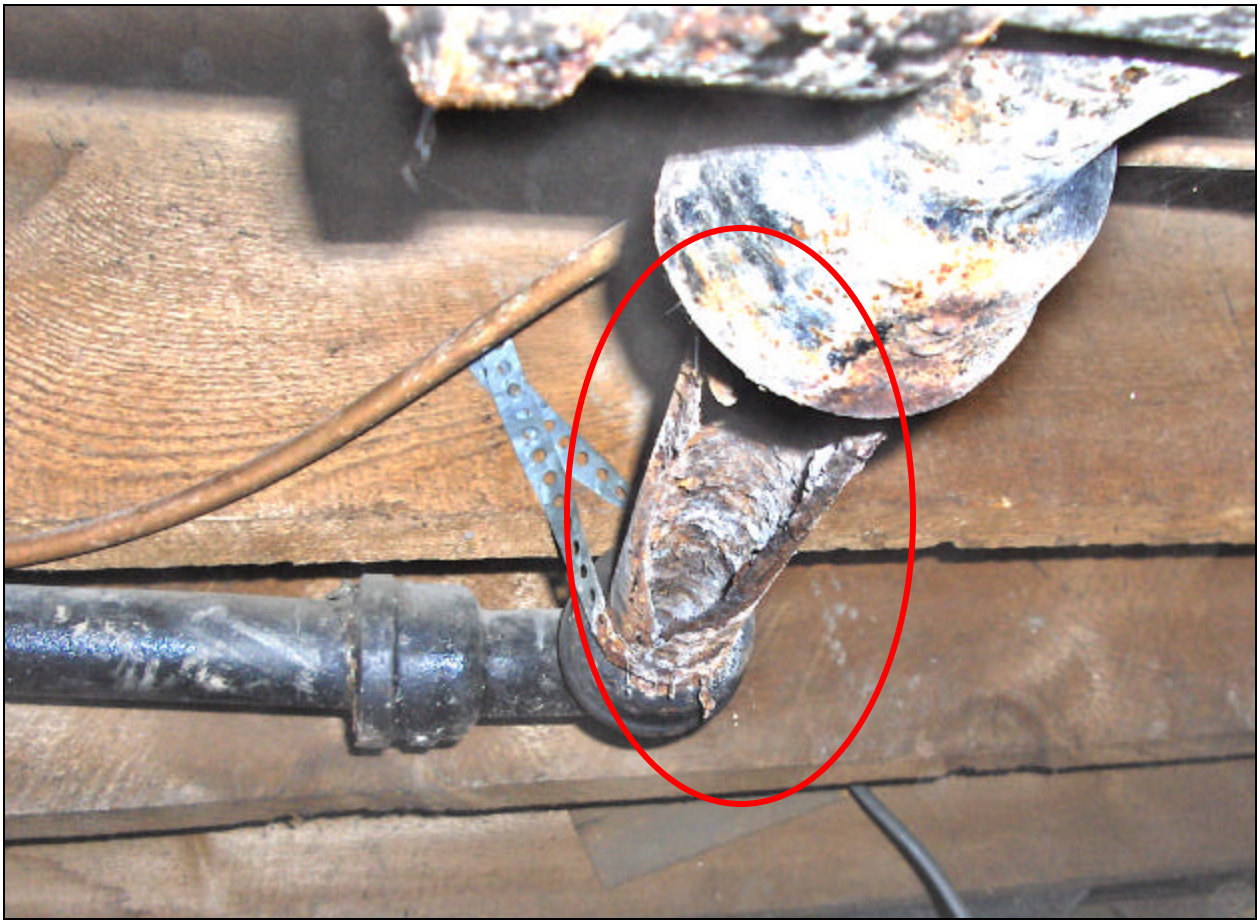
Apartment #1 (Main Floor Right Front)

22. The electrical outlets in this apartment have primarily two holes, each; however, it appears that ground wires have been run in the walls. Therefore, it may be easily possible to upgrade these to fully grounded outlets.
23. The GFCI (Ground Fault Circuit Interrupting) electrical outlet above the vanity in the bathroom is not grounded. However, this is "kosher", electrically.
24. The floor coverings in this apartment are in good condition.
25. The paint in this apartment is in decent condition.
26. The cast iron drain piping under this apartment, in the crawl space has completely rusted through in one large place, as seen in the following photo.



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Apartment #2 (Main Level Left Front)

27. Both windows at the front of the apartment are paint-bridged.
28. Both plastic pop-in buttons for the tops of the vanity faucets in the bathroom are missing. (This is very minor.)
29. The drain fittings below the vanity sink are wrapped with duct tape. However, they are not leaking at this time.

30. The vanity sink in the bathroom drains rather slowly. Its trap may be partially plugged.
31. The overflow drain hole for the ceramic vanity sink in the bathroom may be too small to allow water out as fast the faucet can fill the basin. There is some danger of overflow.

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32. I suggest sealing the inlaid vinyl floor covering where it meets the shower stall.

33. The tenant has covered the exhaust fan inlet grill in the bathroom wall.

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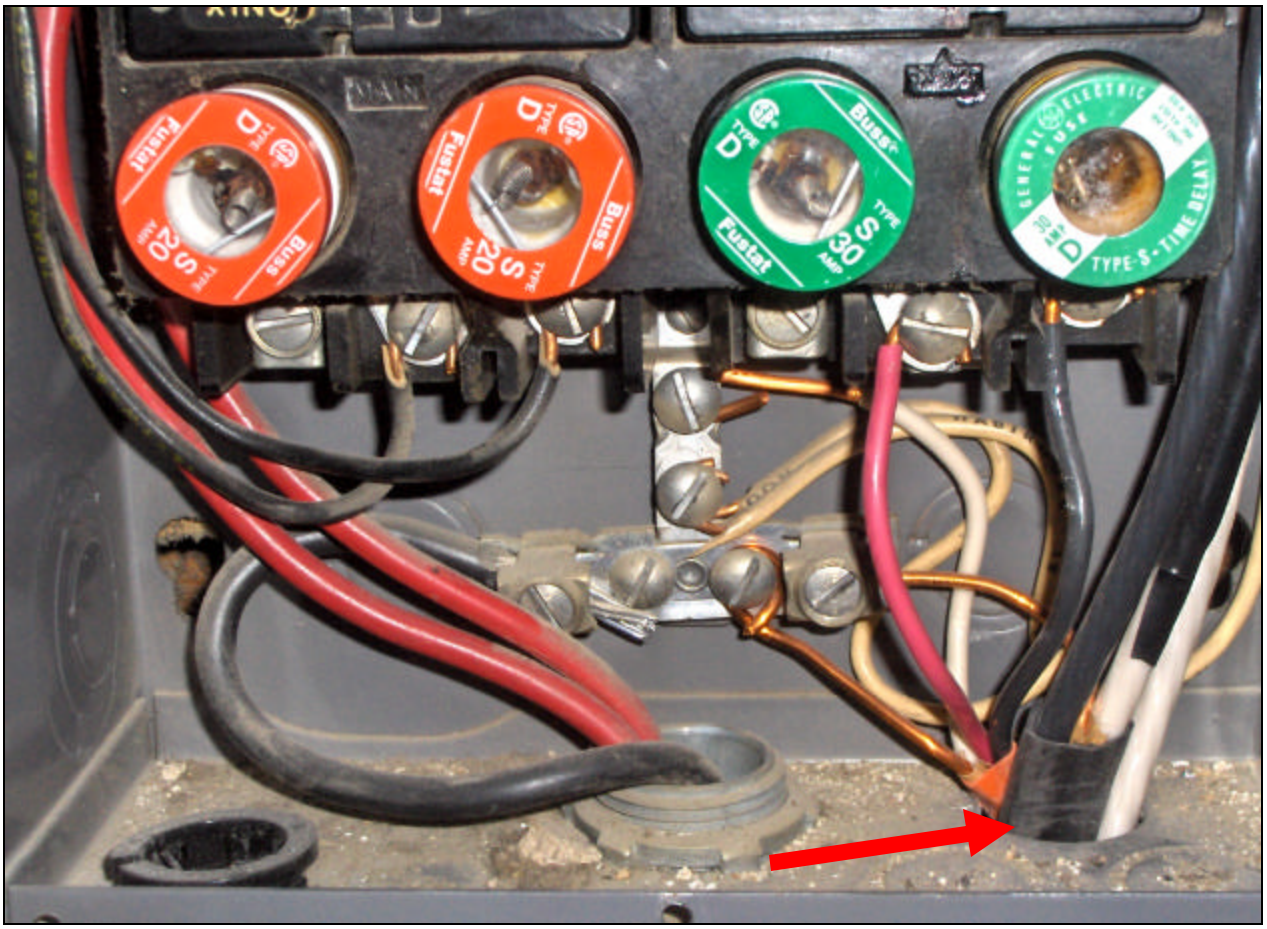
34. The two rightmost screw-in fuses in the fuse panel at the rear interior of this apartment have 30-amp ratings. I suggest reducing these to no larger than 20-amp ratings.

35. Newer cables in the fuse panel exit the bottom interior without the benefit of a strain relief clamp bushing. Furthermore, both ground and neutral conductors are terminated to the same bus. (In modern wiring configurations, the neutral bus would be isolated.) A qualified electrician should address and/or correct this issue, as necessary.



36. The entrance door to this apartment rubs heavily at its top. I suggest shaving some wood from the door slab and repainting it to match.

37. NOTE: The north-facing window of this apartment is covered with blankets. Therefore I did not inspect it from the interior.

38. The north-facing window of this apartment has a window mounted air conditioner sitting upon its sill. This has caused the screen fabric to be loosened from its frame. I was not able to functionally test the air conditioning unit because of the cold outside air.

39. NOTE: The electrical outlets in this apartment are all grounded ☺.

Apartment #3 (Main Level Rear Central)

40. The bathroom's door does not latch, nor does its deadbolt engage.
41. The window at the front of this apartment raises only several inches.
42. The conditions of the floor coverings in this apartment seem excellent.
43. All of the painting seems good.

44. The 16x32-inch fiber ceiling tiles in the smaller southeast bedroom are hanging down in places.

45. Both windows in the smaller bedroom are a little difficult to open for full egress. However, they do move and latch for security.
46. Both three-hole electrical outlets above the kitchen sink countertops have open ground conditions.
47. NOTE: The electrical outlets through most of this apartment are ungrounded, but seem to have ground wires in the walls.
48. The GFCI (Ground Fault Circuit Interrupting) electrical outlet in the bathroom seems to be somehow miswired. A qualified electrician should address and/or correct this issue, as necessary.
49. The bathroom ceiling in this apartment has only a passive vent.

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50. The motion controlled photo sensor at the exterior of this apartment was not verified during this inspection.

Apartment #4 (Main Level Right Rear)

51. The tenant of the apartment keeps the place a complete mess and is very defiant. She complains that the toilet flushes only part of the time and says that the vanity sink drains slowly. However, I saw no issues with either fixture.
52. NOTE: The electrical outlets in this apartment are all ungrounded.
53. The left rear surface burner on the electric range/oven is not working at this time.

54. The faucet handle for the kitchen sink is disconnected.

55. The wooden drawer sides and runners throughout the building may be rubbed with paraffin wax to help them glide easier. (Don't paint the sides of these drawer boxes, as paint will reduce the important clearances built into them. If the sides of the drawer boxes appear soiled, sand them or bleach them with oxalic acid, instead.)

56. The ceiling light fixture base in the sleeping area is hanging partially away from the ceiling and is missing light bulbs.

57. There is a non-frost-free-style refrigerator in this apartment that needs to be defrosted. (I suggest providing a written instruction sheet for tenants when this type of appliance is provided.)

58. The weather stripping at the front entry door allows light to shine through and air to pass through.

Apartment #5 (Upper Level Rear)

59. Nathan, who has lived here for about a half a week, says that the light in the closet is missing its pull cord. He has to turn the bulb on and off. I suggest replacing the light fixture.
60. The water heater in this apartment has a 2005 date. It is a 50-gallon, and electric appliance. It is located in the closet.
61. The carpet in the bedroom has a red spot underneath its bed, according to the tenant. Otherwise, the floor coverings look in very good condition.
62. There is a spare shelf in the medicine cabinet that has no adjustable pins to rest upon.
63. The window in the bedroom opens, but does not stay raised by itself.
64. The latch bolt for the bedroom door is sticky in its latch tunnel.
65. NOTE: The electrical outlets in this apartment are all grounded.

Apartment #6 (Upper Level Front)

66. This apartment is vacant.
67. NOTE: The two-hole electrical outlets on the east and north walls of this apartment appear to have ground wires connected to them. These could be rather easily upgraded to fully grounded outlets, if desired. A qualified electrician should address and/or correct this issue, as necessary.
68. The kitchen outlets are grounded, but not GFI-protected. I suggest considering upgrading these with GFCI (Ground Fault Circuit Interrupting) outlets even though not required by codes in effect at the time of construction.
69. The base cabinet door across from the electric range/oven in the kitchen area needs adjustment to latch.
70. The deadbolt for this apartment's door from the common-area hallway does not align well with its strike hole. I found that I had to pull the door closed very tightly in order to engage it. I suggest having someone reposition the strike plate accordingly.

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71. The guard wall for the upper front exterior balcony off this apartment has much peeling paint. Considering the age of this building, the paint is likely to contain lead. If children are to be present, I suggest considering removing all unsound paint, repriming all bare wood, and repainting to reasonably match other trim. The balcony wall is only about 22 to 24 inches high. I suggest considering adding additional height up to at least 36 inches to provide greater protection.

72. The double-hung window at the front of this apartment is not currently lockable. Its upper sash is paint-bridged in a slightly lowered position. This upper sash should be freed and moved upward. (Please refer to further discussion regarding paint bridged windows, which I have included in the section titled "OWNERSHIP TIPS FOR THIS PARTICULAR HOUSE" near the end of this report.)

73. The floor just inside the bedroom squeaks. (This is rather typical for the age and style of building.)

74. The double-hung window at the front of the bedroom does not lock. Its upper sash is paint-bridged in a somewhat lowered position.
75. The vanity sink in the bathroom drains very slowly. Its drain trap may be partially plugged. A qualified plumber should address and/or correct this issue, as necessary.
76. The exhaust fan on the ceiling above the shower stall in this apartment is not working (or simply has no fan). This bathroom currently has no effective means of exhausting moisture laden air.

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DESCRIPTIONS OF MAJOR SYSTEMS & FEATURES

Foundation

Description of foundation system: Field stones stacked then mortared from the exterior form the perimeter foundation. Intermediate support is provided by posts and beams resting upon concrete pier pads in the crawl spaces.

Comments: The foundation was observed from both outside and inside. No signs of significant movement since original construction were observed. The foundation system appears adequately sound for its age and type. However, some further movement could occur if too much water happened to saturate the soils behind the taller field-stone and hand-dug earthen walls around the basement cellar.

Crawl Space

Method of inspection: Crawled to most areas.
Location(s) of access points: Over the tops of the basement walls.
Type and thickness of perimeter insulation: None.
Type and thickness of flooring insulation: None.

Comments: The crawl spaces were dry at the time of this inspection, except for a standing water puddle under the failed drain piping of Apartment #2..

Grading & Drainage

Types of systems in place: Metal gutters and downspouts are installed at most eaves.

Comments: The grading around the perimeter of the building is rather flat.

Roof Covering

Method of roof inspection: Viewed from the ground, only.

Current top roof covering: 3-tab composition shingles. Some stamped sheet metal over the right rear corner of the first story.
Estimated age: More than 20 years.
Number courses in place: It appears that 3 courses of composition shingles have been installed over the original cedar shingles.
Estimated "Remaining Functional Life"*: 2 to 5, or less.
Estimated "Remaining Economic Life"+: None.

* **"Remaining Functional Life"** is the amount of time left before an average homeowner would choose to replace a roof because of leaks occurring that are too numerous or expensive to simply repair.

+ **"Remaining Economic Life"** is the amount of time left before a roof would most likely need to be replaced in order to satisfy a prospective buyer who may be receiving advice from a roofing repair contractor or other inspector. (Most prospective buyers and some lenders like to be assured that at least 3 to 5 years of "useful life" remain.)

Comments: The roof coverings should be professionally replaced at this time.

Roof Structure & Attic

Accessibility and/or method of inspecting attic: I entered and viewed most areas.
Roof Framing: Hand-stacked dimensional-lumber rafters.
Roof sheathing (decking): Spaced pine "skip sheathing".
Type and thickness of insulation: About 12 inches of blown-in yellow fiberglass over original Rockwool® batting.

Comments: The attic spaces appeared dry and well ventilated at the time of this inspection. No structural problems were noted.

Walls (Interior & Exterior)

Perimeter wall structures: Stud wall construction.
Partition wall structures: Stud wall construction.
Exterior surfaces: Painted wood siding and trim.
Interior surfaces: Some sheetrock, taped, textured, and painted. Some plaster over wood lath.

Comments: The interior wall surfaces are in generally satisfactory condition. However, some exterior painting is needed at this time.

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Ceilings & Floors

Ceiling structures: Bottom cords of trusses.
Floor structures: Lapped pine subflooring and 1"x4" tongue-and-groove fir subflooring over dimensional lumber joists and post-and-beam supports.

Comments: The floor and ceiling surfaces are generally in good condition throughout this building.

Doors

General descriptions: Interior passage doors have solid fir rail-and-stile frames and fir plywood panels. Some doors are hollow-core, with paint-grade veneers.

Comments: The doors on this property were in generally good condition.

Windows

General descriptions: Single-paned. Wood-framed.

Stairway

Description: Wood treads.

Comments: This stairway does not meet today's standards, but is typical of the period of construction.

Cabinets & Closets

Comments: The cabinets and closets were in generally good order. All cabinet doors, drawers, rollout shelves, and closet doors are operated (unless personal property prohibits).

Service & Entrance Panels

Service type: Overhead service.
Service amperage and voltage: 200 amps is brought to the building; but each apartment has only about 60 amps for its service.
Service entry conductor materials: Stranded copper.

Locations of meter, main, and sub-panels: The meters are located at the right-rear building exterior. The main distribution panels is located at the meter grouping, except for Apartment #2, which is inside the apartment.

Comments: Only a couple of the main panel covers were removed and replaced during the inspection. It appears that major upgrades are needed.

Branch Circuits

Types of overcurrent protection: Both circuit breakers and fuses.
240-volt conductor materials: Stranded copper. Solid copper.
120-volt conductor materials: Solid copper. Tinned solid copper.

Comments: The branch circuits of this property are both grounded and ungrounded. "Knob-and-tube" cabling is still active in the home. The older-style knob-and-tube wiring was designed to dissipate its heat to free air. If the wall or ceiling cavities containing this wiring are subsequently insulated, the wiring will tend to operate at higher temperatures than designed – even with correct fusing.

Lighting

Comments: The lighting is generally in good order.

Receptacles & Switches

Comments: A representative sampling of outlets were tested … usually all that can be easily reached.

Heating Equipment

Energy source: Electricity.
Type: Baseboard wall heaters.
Location: In every major room.
Method of heat distribution: Radiant and convection.
Filter types and locations, if applicable: N/A

Comments: The baseboard heaters were all tested to verify that they would work. However, the accuracy or the repeatability of their thermostats were not verified.

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Cooling Equipment

Energy source: Electricity.
Type: Refrigerative window-mounted room air conditioners are supplied with each apartment, I believe.
Method of cool-air distribution: Central forced-air, integral with the heating system.

Comments: Due to the extremely cold outside air temperatures, I was not able to test the appliances.

Ducts & Vents

Descriptions: Insulated in the attic spaces. Uninsulated in the crawl spaces.

Comments: The ductwork is abandoned in place—no longer in use..

Water Supply Systems & Fixtures

Source of domestic water: Public water system.
Location of main shut-off valve: At the rear wall of the former coal bin in the cellar.
Supply piping: The buried potable water service line from the public system to the building is of ¾-inch galvanized iron pipe. The supply piping throughout the building is mostly of ¾-inch and ½-inch galvanized iron pipe with threaded fittings. Some soft copper piping is also noted.

Comments: All visible supply piping appeared in good order. No leaks in the pressurized piping were found.

Drains, Wastes, & Vents

Type of collection system (if known): Public collection system.
Visible house drain piping materials: Cast iron. Black plastic. Copper. Brass.

Comments: There appear to be numerous leaks in the older cast iron drain plumbing—especially under the floors.

Water Heating Equipment Labeled "A"

Energy Source: Electricity.
Capacity: 50-gallon.

Model year (or date of installation): 2004
Location: In the cellar.

Comments: The water heater has no visible corrosion or leaks.

Water Heating Equipment Labeled "B"

Energy Source: Electricity.
Capacity: 50-gallon.
Model year (or date of installation): 2004
Location: In the cellar.

Comments: The flame chamber appeared reasonably clean and dry. No leaks or signs of excessive corrosion were noted.

Water Heating Equipment Labeled "C"

Energy Source: Electricity.
Capacity: 50-gallon.
Model year (or date of installation): 2002
Location: In the cellar.

Comments: The flame chamber appeared reasonably clean and dry. No leaks or signs of excessive corrosion were noted.

Major Cooking Appliances

Descriptions: Free-standing electric range/ovens.

Comments: All heating and control functions appeared to be working correctly at the time of this inspection, except as other noted.

Fire Protection Equipment

Description: Older-style, hard-wired smoke detectors, only.

Comments: I suggest replacing smoke detectors at least every 5 to 7 years, as their sensors will often begin failing after that period (even though their alarms will continue to sound when their test buttons are pressed).

Smoke detectors may be periodically checked for response to actual smoke by homeowners. (Try using a short candle at the bottom of a tall glass jar. The candle will tend to produce a lot of smoke due to lack of oxygen, and the jar will keep hot wax off hands and carpeting.) (If such testing is done too frequently, however, the smoke may prematurely coat the sensors with a film that could block their sensitivity.)

I also suggest the installation of carbon monoxide detectors to protect all sleeping areas whenever combustion appliances are present in the home.

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OWNERSHIP TIPS FOR THIS PARTICULAR HOUSE

Each of the following subjects was included in this report because it pertains directly to this particular property. Each short article is written by Stan Audette for the benefit of his customers in hopes that their ownership experience will be enhanced.

Crawl Space Conditions

The spaces under this home should be kept relatively clean and dry. It's wise to keep all wood or paper debris or personal property removed from the crawl spaces … especially from resting in direct contact with the soils. (Any type of cellulose-containing material can become an attractor for wood-destroying organisms such as molds, mildews, wood-rot fungus, wood-boring beetles, or termites, etc.)

I suggest inspecting crawl spaces at least twice each year. Someone should at least peer into its access with a flashlight. This will help detect water flooding that might develop due to an unnoticed leak in the supply or drain plumbing. An occasional peek into the crawl space will also let you know how the gutters and downspouts are performing, as well as tip you off to possible exterior grading and drainage problems.

Guarding Against Molds, Mildews, and Other Fungi.

Molds and mildews (recently so often referred to as "toxic molds") can grow anywhere in and around our homes where the conditions are right. Molds need darkness, relative humidity above 50%, and organic food sources.

Sunlight will kill mold rather quickly. One way to kill mold or stop it from getting a "foothold" is to periodically let as much sunlight as possible into the areas where it might otherwise thrive.

Dry environments will not allow mold to grow. Even though mold spores may be present in almost any air, the spores must land on surfaces that can provide enough food and moisture for them to live. Otherwise they become dormant and eventually die. Surfaces that are being continually wetted or which never dry out can support mold colonies even when the surrounding air is relatively dry. However, if the air, itself, is continually above 50% relative humidity, the mold can thrive on otherwise dry surfaces.

Food sources can include even fine dust or lint that collects on otherwise indigestible materials. (This is how mold colonies are sometimes found on windows.) Wood, paper, or any other material containing cellulose can be a food source to molds. The significance of this is that most building materials contain these nutrients.

All these molds, mildews, and fungi produce spores that have been floating around in our daily environment for all our lives without causing much trouble for anyone. It's the unique confinement of living spaces that lends itself to possibly harmful concentrations of these micro-organisms. That's why we are learning to become more educated and more responsible with respect to mold.

Many types of molds typically found in today's living environments may contain allergens that cause a wide variety of symptoms in individuals. These symptoms are most often related to the respiratory system, but may also involve rashes or dizziness. Not all people are allergic to these types of molds. Typically, people with compromised immune systems will be more likely to have allergic reactions. People suffering from asthma are particularly sensitive.

Some types of black molds have been identified as neurotoxins. These can cause severe, long-term damage to the nervous system. People can be hurt by these molds without ever developing outward allergenic systems. Although this type of injury is rather rare, it should make us more cautious with respect to threats from molds, in general.

Allergy doctors can usually identify which of the known molds may cause allergic reactions in any individual, but the doctors are not equipped to tell that individual whether he or she may be exposed to those molds in their daily environment. Fortunately, Southern Idaho now has mold specialists who can survey a home and identify any molds or mildews that may be present (along with other possible airborne contaminants). Slide samples of molds or other fungi can be sent off to microbiologists for analysis. Air samples can be taken.

Southern Idaho also has several mold mitigation contractors trained in removing or treating mold and reducing the conditions that may be conducive to their proliferation. However, the EPA currently recommends involving certified remediation contractors only if the affected area of mold exceeds 10 square feet. (For areas less than that, homeowners can usually feel confident in their ability to scrub away any mold with a 10% bleach solution.)

Regardless of the type or extent of mold remediation that might be required, the most important strategy is to remove the source of invasive moisture and to take steps to ensure that moisture does not return.

Lime Efflorescence (White Powdery Build-up on Masonry Surfaces)

The white powdery crystalline growths often seen on the interior sides of masonry walls are simply free lime crystals deposited by the process of efflorescence. This process does not damage or threaten the integrity of the concrete, itself; but can cause paint or plaster to release.

When moisture from soils in contact with masonry walls manages to slowly seep through, it can dissolve free lime from the unwashed sands that were typically used in concrete or mortar before pre-mixed concrete became popular. Once in solution, the lime is carried to the exposed surfaces where the water evaporates, leaving the calcium of the lime to form slow growing crystals. It's the pressures from these expanding crystals that tend to separate finishes from concrete, pumice, or mortar. (Sometimes

free lime or other minerals in the soils against the walls can also be carried through to create the same effects.)

There are several products on the market that can be applied directly to the problem surfaces that may be effective in bonding to the wall—thereby stopping the migration of moisture through the concrete by not allowing it to reach dry air. The application of these materials is usually rather labor intensive, if correctly done, though—making their success less likely.

Sometimes the best method for dealing with efflorescence is to encapsulate it with new wood framing and wall sheathing. However, it's a good idea to install a 6-mil vapor barrier between the concrete and the new wooden wall to help protect the wood from unwanted moisture.

Mineral Efflorescence on Earthen Floors of Crawl Spaces

Earthen floors in crawl spaces often display white, orange, brown, or yellow growths that are sometimes confused with molds or other types of fungi. If these "growths" are noted only in areas not covered by vapor barrier, they are simply the result of crystalline growths formed by the buildup of minerals that have leached up through the soils in solution with water. As the water evaporates, the minerals are left behind to form crystals. The types of minerals that were brought to the surfaces determine the colors of the crystals. (If these "growths" were fungal in nature, they would be more prevalent under the vapor barriers, as those conditions would be more conducive to fungal growths.) The crystals grow because the water is evaporated away from the surfaces. Wherever the surfaces are covered by vapor barrier sheeting, the moisture cannot evaporate away.

While there is no inherent harm done by the crystals of mineral efflorescence, the process indicates that moisture is slowly migrating from the soils into the air of the crawl spaces. Therefore, it would be prudent to ensure full coverage of the earth with 6-mil plastic vapor barrier sheeting to reduce overall moisture levels under the house. (Elevated moisture levels are conducive to the proliferation of all sorts of pests and wood destroying organisms.)

Older, Screened Foundation Vents

The older-style perimeter vents in the concrete walls of the foundation are fixed—not operable from the exterior. Some people prefer to cover these vents during the colder months. However, it's important to keep them open at least 6 to 9 months during each year to ensure adequate ventilation of the crawl spaces. (Crawl spaces that have a history of high humidity should probably be kept ventilated year round.)

I suggest periodic inspection of these vents to ensure that their screening has not become blocked with debris. The proper screen mesh size for this purpose is ¼-inch. Window-screen fabric is too tightly woven and will tend to plug with wind-blown debris and spider webs too quickly. Conversely, mesh sizes larger than ¼-inch will tend to allow too many pests into the crawl spaces.

Inlaid Vinyl Floor Coverings in Bathrooms or Laundry Rooms

Bathrooms and laundry rooms are often subject to inadvertent water spills onto the flooring. Even though most contractors carefully seal the joints between the fronts of tub curbs and adjacent inlaid vinyl floors, water spills can run to the nearby walls. For this reason, I suggest applying silicone sealant along the bottoms of all painted wooden baseboard moldings around the entire perimeters of bathrooms or laundry rooms that have inlaid vinyl floors.

Without this precaution, water that manages to get to the edges of vinyl floor coverings can be absorbed into their particleboard underlayments to cause swelling and eventual discoloration of the vinyl flooring from underneath. Once this happens, the underlayment and the vinyl floor covering will both need to be replaced. Therefore, it's must cheaper to protect the underlayment by sealing all possible water entry points.

Newer Freeze-Proof Garden Hose Valves

The freeze-proof sill cocks (exterior garden hose valves) associated with this property are of a newer, improved style that allows garden hoses to remain attached during the winter without threat of freeze damage to the valve, itself, or its adjacent piping. However, in order for the valves to remain protected during the winter months, their valve handles must be turned closed (clockwise) a few more turns than are needed to simply shut off the flow of water. When the extra turns are applied, water should be seen falling through a gap created to let water out of their freeze-proof barrels just behind the hose attachment. It is important to apply the extra turns to the valve handles whenever freezing weather might occur before next use of the sill cock.

Roof Valleys and Gutters Over Sloped Shingled Roofs.

Since the roof of this house is prone to collect tree debris, I suggest that the valleys and gutters be cleaned seasonally. If too much tree debris is allowed to stand in the valleys, the shingles may let water through into the attic or living spaces. If the gutters become too full of tree debris, water may leak back under the shingles along the eaves to damage the fascia, soffits, or living spaces.

Tree Pruning Near Roof Surfaces.

This property has trees with branches that will need to be pruned on a regular basis to avoid long-term damage from wind action of their branches upon the roof surfaces.

Small Shrinkage or Settling Cracks in Plaster Surfaces

It is completely normal for older houses to acquire small cracks here and there in plaster surfaces due to settling and shrinkage. Usually, these cracks will appear within the first few years; and 90 percent of their total eventual movement will have occurred within the first 5 to 10 years.

Homeowners can usually very satisfactorily fill these cracks with matching painters caulking. (Elmers® makes painters caulking in several colors that may match some of today's typical wall colors.) The matching caulking should be pressed as deeply as possible into the cracks, but all excess caulking should be immediately wiped from the surrounding surfaces with a damp towel. In this manner, the visibly contrasting black shadows of the cracks are eliminated. (CAUTION: If excess caulking is left on the wall or ceiling surfaces next to the filled cracks, it will be too visible. Even a closely matching caulking color will appear very different if enough surface area is in view. Additionally, it won't reflect light the same as the adjacent paint; and its texture won't match, either. The patch would appear "over-worked".)

Draw-String Window Coverings

Any of the popular window coverings that incorporate drawstrings to raise and lower them can be operated in a manner that will greatly extend their expected lives. Rather than using only the tension of the draw strings for raising the window coverings, one may do most of the lifting by placing one hand under the center of the window covering's bottom rail to support most of the weight while simultaneously keeping only mild tension on the draw strings. In this manner, the window coverings are not raised by the strings, but only held in place by the strings.

Conversely, when wishing to lower the coverings, one may hold the drawstrings in their "release" positions with only very slight tension. Then, rather than applying enough downward tension on the strings to cause the locking cams to release, one can gently lift the center of the bottom of the window coverings to release the cams. In this manner very little actual tension is required on the drawstrings to release the cam.

By following the procedures outlined above, very little wear occurs on the draw strings as they follow around their pulleys, and very little "tugging" is done on the window covering's attachment hardware to the window casings or walls. The window coverings will last much longer. I suggest teaching all occupants in a home to use these techniques.

"Knob-and-Tube" Wiring Heat Dissipation Considerations

Any type of wiring is expected to generate a certain amount of heat as electrical current runs through it. "Knob-and-tube" wiring was originally designed to dissipate its heat to free air. Now that insulation in walls and attics has become more popular, there is increased concern about overheating this type of wiring. Although I can suggest that homeowners choose to reduce fuse sizes by one step

whenever circuits having this older style of wiring are discovered to have building insulation around them, the National Electrical Code refuses to publish this prudent precaution.

If one plans to add insulation to either the wall cavities or the attic(s) of this structure, I would strongly consider upgrading the wiring first.

When to Upgrade from "Knob-and-Tube" Wiring

Fire insurance companies are rapidly becoming more reluctant to insure buildings that are still wired with this older style of cabling. Fires are being all-to-often unfairly blamed on this type of wiring because it's been around long enough to have greater chances that rats or squirrels may have chewed its insulation off, or that someone may have made improper modifications or connections, or that the wrong sizes of fuses (or worse yet, pennies) have been installed in place of the correct sizes and types of fuses.

Although it is usually possible to find companies still willing to insure structures wired having "knob-and tube" cabling, I predict that it will be nearly impossible to find willing insurance underwriters only several years from now. For this reason, I suggest planning to change out this type of wiring in the near future.

However, as long as the basic systems are well maintained and in fairly safe condition, I suggest leaving them in place until suitable, reasonably priced fire insurance can no longer be procured. (The current real estate market seems to have no way of acknowledging the increased value of a property with upgraded wiring until it becomes mandatory to upgrade the wiring in order to sell it. However, the time for this recognition is rapidly approaching.)

Insurance Industry's C.L.U.E. Reports

The insurance industry maintains a database of risk factors associated with individual clients and with certain properties. The database functions much like a credit report. Most of the risk factors are associated with the financial habits of individuals; but some important data stays with the house. For instance: If a house has had a water damage claim, the insurance underwriters may be afraid of future claims deriving from molds or mildews.

This database is known as the C.L.U.E. (Comprehensive Loss Underwriting Exchange). The acronym is a clever play on words, as it pertains to giving insurance companies a "clue" regarding risks that could lower their profits.

Homeowners should know that whenever they file a claim (or even call their insurance company to inquire as to whether they should file a claim) the information they give over the phone is most likely being entered into the C.L.U.E. database. This information can have grave and lasting negative effects on future insurability. For this reason, the insurance departments and commissioners of many states are taking proactive roles in educating consumers and in protecting them from misuse of these

data. However, Idaho has not yet taken such action … leaving consumers to protect themselves through self-education.

Therefore, I strongly urge homeowners, buyers, and sellers to think twice about disclosing any water damage to their insurance companies. (This includes fire damage, as many fires are put out with water … which, of course, often leads to associated water damage.)

Avoiding Baked-on Food Soils in Oven Door Viewing Panels

I often see brown streaks of baked-on food soils deposited on the inner layers of glass-paneled oven doors. Once food soils get inside the oven doors, disassembly of the doors is required to access the surfaces to remove the stains.

To avoid this problem, I suggest being aware that cleaning fluids can easily enter the interior of oven doors through their edge seams and especially through their latch lever holes which are provided for the "self-cleaning" functions. Since the "self-cleaning" processes do not reach any food soils deposited beyond the oven door's flexible seals, homeowners usually need to clean these perimeter surfaces separately with a strong detergent. I encourage the homeowners to wring all excess moisture from their cleaning rags before attempting to scrub these surfaces. Any water or detergents that get into the oven door may look clear at first (as they run down the inner glass surfaces), but any organic soils dissolved or suspended in the water will eventually darken and become baked on.

Tripping Hazards on Right-of-Way Sidewalks

Sidewalks installed along public streets are part of the public's property, but the individual property owners have the responsibility for their maintenance. Likewise, if anyone is injured due to a tripping hazard anywhere in the right-of-way areas bordering their property, the individual owner(s) are usually liable. However, although this liability can be very great, most people simply rely upon their homeowners insurance to cover these risks.

There is one very important exception to the above-mentioned strategy, however! Local government agencies (such as the Ada County Highway District, ACHD) have the legal responsibility of ensuring that hazards along their rights-of-way are being addressed. If their department is made aware of a possible tripping hazard, they are legally obligated to investigate further. If their inspector finds that any hazard exists, then the property owner adjacent to the hazard will be contacted and be given instructions for repair as an ultimatum. ACHD, for instance, will consider any abrupt vertical irregularity greater than 5/8 of an inch to be a tripping hazard. (The arbitrary 5/8-inch standard is a measure that the attorneys for the county feel they can reasonably defend themselves against for not taking corrective action. However, any hazard—no matter how small—may still end up in court if someone trips and injures themselves.)

If the property owners fail to accomplish the directed repairs in a timely manner, the department will have the work done and will invoice the property owners. If the property owners fail to pay the

invoice, a tax lien or other remedy will be placed against their title. (NOTE: All work done in the public rights-of way must be done only by contractors who have been approved by the agencies having jurisdiction. This usually increases expenses far above those that the homeowners would choose to incur on their own.)

The ACHD does not actively inspect sidewalks for hazards. They respond only to people who call in to complain about sidewalk conditions or to people who call to inquire about regulations. (This explains why most citizens can point to obviously hazardous areas in public sidewalks that have remained unaddressed for years.)

If the person receiving a phone inquiry regarding sidewalks at the ACHD is given a street address, then they are obligated to send an inspector to that address. This could trigger a very expensive chain of events for some property owners. Most of the people answering the phones at those offices will try to warn the callers not to give a specific address unless they wish to make a complaint.

My advice to homeowners inquiring about the sidewalks, curbs, or driveways in front of their own property is to ask about general advice regarding sidewalk regulations without giving out their specific addresses.

Importance of GFI Devices

Over the past 40 or so years, the electrical code authors have begun to recognize the importance of increased protection against inadvertent small electrical shocks due to ground faults. Physiologists have discovered that electrical currents as small as 30 to 60 milliamps per square centimeter passing through a heart muscle can cause fibrillation. This is probably the most serious condition that electrical currents can produce. Once a heart goes into fibrillation, it usually requires a defibrillator to save the patient. (Most of us don't have this type of equipment nearby.) Ironically, if greater amounts of current pass through the heart muscle, it's far more likely that the heart will simply spasm in response to the shock and then regain its normal rhythm.

Research has found that older people and persons with unsound hearts are much more susceptible to small shocks that might be below the threshold of perception of younger, healthier people. For this reason, it's quite possible that a malfunctioning appliance in a home could be creating small shocks that don't bother one user, but which could kill another user.

The electrical industry has addressed this danger by requiring the installation of protective devices (commonly known as GFI's, for Ground Fault Interrupters) to serve all outlets that are within six feet of plumbing fixtures or major appliances likely to have exposed surfaces directly connected to ground. Outside outlets and outlets over bare concrete surfaces are also required to have this type of protection.

These GFI devices are usually set to open (trip) a circuit if an imbalance of current flow between the "hot" and "neutral" conductors greater than 10 milliamps is measured. While some of these devices are incorporated into GFI-type circuit breakers, the more modern implementation is the use of GFCI (Ground Fault Circuit Interrupting) duplex receptacles … the outlets having special "test" and "reset" buttons.

The GFCI outlets were originally designed for use on fully grounded circuits, i.e., circuits having a black, white, and a bare ground conductor. However, these outlets can also be appropriately applied

to ungrounded circuits. (This is a little-known fact within much of the industry, which otherwise appears to be in conflict with the general rule about allowing only 2-hole outlets ungrounded circuits.)

NOTE: The locations and degree of implementation of GFI-type devices has changed dramatically over the past 30 or so years, according to codes adopted by various authorities. (One cannot expect all older houses to be in compliance with today's codes.)

Making Incandescent Light Bulbs Last Longer

Have you ever noticed that light bulbs seem to burn out just when you turn them on? That's because their frail filaments are hit hard and suddenly by a large burst of voltage and current every time conventional switches turn them on. Those forces actually cause them to be "jarred" physically. (Sometimes, in a quiet room, you can actually hear the filaments sound like a released spring in response to the sudden energy put to them.)

To reduce the amount of unnecessary stresses that switches can place on light bulb filaments, I suggest considering the incorporation of what some people call "soft switches". These are any number of solid-state dimmer devices that allow the lights to be turned on gradually, instead of simply "slamming" them with the sudden forces that most contacts create. Any dimmer switch that forces the user to move a dial or toggle through a continuously increasing range of voltage or current in order to get the fixture to its fully "on" position each and every time the light is turned on could be considered as a "soft switch". (Any style of rotating-dial dimmer switch with a push-push on/off action, or a slide control in combination with a rocker switch that allows the dimming level to be set, but yet also allows a separate "on/off" action does not qualify as a "soft switch".)

I suggest incorporating soft switches especially wherever expensive light bulbs are used, or where light bulbs are exceedingly difficult to access (such as at high ceilings or over stairways). The use of soft switches can extend bulb life by as much as a factor of 5 or 10.

Loose Door Knobs and Door Pulls

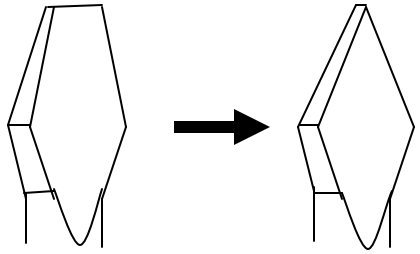
When the surface plates (escutcheons) of doorknobs and closet door pulls are allowed to slide loosely around on finished surfaces, the surfaces are often damaged. Therefore, I suggest keeping all hardware tightly secured to avoid such damage.

Curing "Paint-Bridged" Double Hung Windows

The clearances built into the wooden sashes and frames of older-style double-hung windows do not allow for more than one or two coats of carefully applied paint before the freedom of the sashes is severely impaired. If this condition is found, I make the following recommendations for regaining operability of the windows.

First, if paint is "bridging" the joints between the wooden window frames and their adjacent moveable sashes, I suggest making a custom scraping tool that can remove a "V"-shaped wedge of paint uniformly along these joints, rather than simply attempting to free the joints with a knife or razor blade. (The narrow slices made through the paint with a knife blade may separate the sash from the frame, but the typical waviness of the cut line usually creates interlocking shapes that still prevent the sashes from moving as freely as they should. By removing a "V"-shaped wedge of paint, most of the interfering paint is actually removed.

A scraping tool can be rather easily made by bending the shank of an inexpensive slotted screwdriver at 90 degrees about one inch from its end, then grinding its end to a point, as shown in the adjacent diagram.



(Before) (After)

Keeping Wooden Drawer Glides Working Smoothly

Many older cabinets and closets have drawer boxes that depend upon wooden drawer glides, rather than any type of hardware. These drawers and their associated face frames and spreaders were typically made with very tight clearances as a mark of good craftsmanship. But, after years of paint thicknesses inappropriately applied, many of the drawers no longer work very well (if at all).

First of all, I suggest never painting the outer sides of wooden drawer boxes unless they are designed to rely upon separate rollers or metal or plastic guide hardware. If too much paint has already been applied, it may be necessary to strip the coatings away to obtain satisfactory clearances for good drawer operation.

If the bare wood sides of drawer boxes become unsightly with soils, they can usually be lightly sanded and/or bleached with a mixture of 1 tablespoon of oxalic acid crystals dissolved in a quart of water.

Once acceptable clearances are obtained between drawer boxes and their face frames and spreaders, etc., I suggest rubbing all gliding surfaces thoroughly with clear paraffin wax to lubricate them. (Do not use beeswax or soap, as the beeswax collects dirt and eventually becomes very gummy, and the soap doesn't last very long.) (CAUTION: Once the paraffin is applied, paints and stains won't adhere well to these surfaces in the future.)

By keeping paraffin wax on older-style drawers, they can be filled with heavy personal property and still glide more smoothly than many of today's hardware-based systems.

Subject Property: ***614 N. 5th Street, Boise, Idaho***

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How to Find Contractors to Replace Failed Buried Water Service Lines

When galvanized iron or copper pipes are buried directly in the ground, they often corrode over time. Corrosion can occur along any portion of the buried pipe, but usually requires many years to become a problem. When corrosion finally causes a leak, it's sometimes possible to locate the leak and make temporary repairs; but, most often, it's necessary to replace the whole line.

The costs of replacing buried pipelines can vary greatly depending not only upon their length, but upon how much concrete, landscaping, or lawn (and even sometimes other buildings) happen to lay over them.

Traditional methods of excavating new trenches can be very disruptive and can lead to extremely high costs when concrete, landscaping, sprinkler system piping, etc. become involved in the trenching. However, some contractors are able to use more modern methods.

One such method uses the old pipe to pull a new pipe into place … without any need of trenching. This method still requires the digging of one or more access holes, however.

Another, newer method uses a directional boring machine. This enables the contractor to choose essentially any path from point to point underground. Only one entrance pit needs to be dug with this type of equipment.

If and when it becomes necessary to replace a failed buried water service line, I strongly recommend that several contractors with varied means available to them be contacted for bids. There will usually be great differences in their quotes, depending upon the types of equipment and methods available to each contractor.

Remember, also, to avoid reacting to the feeling of an "emergency" situation as much as possible. When contractors are responding to "emergency" situations, the costs can easily skyrocket above what is necessary.

If a basement is flooding uncontrollably due to a failed line, quick action may be necessary; but if only a slow leak is found, it can probably be managed for a few days or weeks until an orderly analysis and bid process can be diligently followed.

One way to "manage" a service line leak is to turn the water on and off at the water meter to allow water into the plumbing fixtures only when needed: e.g., for washing, bathing, toilet-bowl refill, etc. Another way of cutting costs might be to temporarily install a pump to remove unwanted water from a collection pit until a more orderly and cost-effective repair method can be determined.