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### **Older homes and foreclosures – watch out for deferred maintenance**

Denver has many fine older homes, large and small. The craftsmanship, details and materials are hard to match today. From the mansions of Five Points to the Washington Park Denver Square you can find unexpected beauty. These houses can be a joy, if you understand, and are prepared for, the investment of time, money and energy to properly maintain them.

Foreclosures and older homes offer great opportunities for home owners looking for fixer-uppers and investors with the resources and knowledge to professionally renovate properties. With so many foreclosures available, banks are beginning to accept lower offers. The craftsmanship, materials and detail of work on some older houses are very expensive to match today. Older homes are often in established neighborhoods that are more stable than newly developing neighborhoods. Older homes also depreciate slower.

Older homes, and foreclosures, have their own special issues. Age proves the integrity and strength of a home, and the forgivingness of the soil they are built on. Denver's mild climate and dry air cause houses to deteriorate more slowly than in most of the world, but in most homes there is at least one area of maintenance that is overlooked.

The longer maintenance is deferred, the more damage is likely to result. A dripping hose bib can put thousands of gallons of water into the soil next to the foundation. The more saturated the ground becomes, the more likely foundation movement or damage becomes. When more water reaches the foundation, more water will penetrate the concrete, more rust is likely to weaken the rebar that holds the concrete together, mold is more likely to grow inside from moisture that has migrated through the foundation, insects and rodents are more likely to find your home hospitable, structural rot accelerates, and on and on. A leaking roof can have similar dynamics involving walls, ceilings and floors.

Common reasons for deferred maintenance include ignorance, apathy, lack of resources and physical inability to discover problems or do repairs. Foreclosures may add reasons that have to do with anger and fear. A desire for revenge, and an attitude of, "If I can't have it, no one can", may compound problems for people who buy foreclosures. The problems that can be caused may not be easily found. Plaster of Paris in main drains, or other passive/aggressive sabotage is not meant to be found until the saboteur can longer

be held responsible. Some people even believe that the misery, fear, anger and anguish, that often goes with losing your home, lingers making the house hard to sell and hard to be happy in.

Vacant properties may deteriorate quickly. Older, vacant properties deteriorate even faster. The damage of deferred maintenance accelerates. Empty houses are appealing targets for vandals. A small problem left undetected can grow large if there is no one to intervene quickly. Defects may be hidden by turned off utilities. One foreclosure I inspected spewed water from a broken pipe in the wall as soon as the main valve was turned on. Rodents and insects find vacant houses inviting.

Before you buy an older home or a foreclosure, have it thoroughly inspected. Make certain your inspector will go into crawl spaces and attics. These are areas that will show signs of major damage and must be inspected. Have the property inspected regardless of if you have a refusal on inspection clause. Know what you're facing.

The best return financially, and in enjoyment of your home, will usually come from a house that has no major defects and requires no additions. Cosmetic repairs can pay back well, while a new foundation doesn't add value, but adds significantly to the cost. Unexpected costs can blow budgets and profits.

Buyers today demand better kitchens and bathrooms. They want storage and office space. Houses with small room laid out like a maze aren't conducive to today's living. Pleasant outdoor living space and curb appeal increase value.

If you are planning on reselling the property make sure all repairs are done in a professional manner. Amateur workmanship raises warnings for inspectors and buyers. If one outlet is improperly wired, the whole system becomes suspect.

One house I inspected had a gas water heater crammed into an attic space. The vent was covered with a piece of sheet metal to protect the roof sheathing it was shove against. The tank leaked, it had no drip pan and a sewer exhaust vented next to the burner. The buyers were so frightened by the potential danger that resulted from the poor workmanship that they balked on buying the house.

Bright, or dark colors, can look great, but can give an amateurish look if poorly done. It is not uncommon for clients to grimace and shake their heads on entering a room painted in this manner. It doesn't make them feel good and that diminishes the value for them. It also puts me on alert, as an inspector, to look very closely for poor quality work.

There are additional environmental concerns with older houses. Homes were built with little insulation or regard for heating and cooling efficiency. Single pane windows provide only an R-1 insulation factor. Metal frames make them even worse.

There are environmental dangers as well. Asbestos insulation was manufactured in Denver until 1994 and used in area homes in attics. In the 1940s and 50s asbestos was

used for siding, roofing, insulation, flooring and ceiling covering. There are still many post war, cracker box houses around the Denver area with asbestos siding. Lead may be found in plumbing and paint. Lead can be filtered out of water easily, but removing lead paint poses greater problems. Abandoned fuel tank and cisterns can be expensive to remediate.

Electrical service is often a problem with older houses. Knob and tube wiring, ungrounded circuits and outdated fuse boxes maybe found. The main service to the house may be inadequate for modern living. Two hundred amp service is normal these days. Older service boxes can be as small as 50 amp.

Upgrading the basic service is usually fairly easy. A basic service upgrade can run \$700-1200 according to Freddie Mac estimates. The bigger problem is often in the rewiring. Two strand wiring must be replaced with three to provide a ground for the circuit. Some wiring can be accessed through attics and basements. Other replacement requires putting holes in the walls and/or ceiling.

Plumbing in homes where maintenance has been deferred, or poorly done, can reveal surprises. Car parts, duct tape and wire are some of the repair materials you might find holding together leaking plumbing systems. Even a small leak left for any amount of time will cause big damage and may attract insects and rodents, or grow mold.

In some homes you may find galvanized steel, polybutylene or lead pipes. In most cases these will have to be replaced. Lead drain pipes are still usable sometimes. Galvanized steel and polybutylene pipes may be functional, but they will eventually need replacement. Polybutylene pipes are expected to last about 10 years when used with a community water system containing chlorine. Galvanized pipes can last 40-50 years. Both corrode from the inside out.

Heating systems in older homes are probably obsolete unless recently replaced. Many older systems are dangerous and no longer allowed. Asbestos was a favorite insulation wrap for heating ducts. Some systems had burn hazards and/or fire or explosion danger. Even well designed systems that are functioning properly are no where near as energy efficient as those built after 1994. The same is true for cooling systems.

Venting for heating systems and fireplaces was commonly done through unlined chimneys. Current code requires chimneys to be lined. Unlined chimneys can allow CO to leak into the living areas. Exhaust from modern heating systems vented into unlined chimneys can condense acid on the inside walls that can eat away the mortar. This can allow CO to enter living spaces and eventually crumble the chimney itself.

A great appeal of older homes is often the landscape. Huge, old trees sometimes canopy the yard and house. These trees are often magnificent, beautiful and doomed. Trees planted too close to the house can crumble foundations as roots grow outward. Overhanging trees are a threat to the roof and possibly overhead electrical lines. A 40'

tree 8' from a house will have to come down at an expense of around \$2000. Roots can also lift and break driveways, sidewalks and fences.

Tree roots can be a menace to old tile sewer lines. Sifting soil can open gaps at joints where tiles meet. Root seeking water will penetrate the sewer line, clog it and possibly break it. The problem is never solved until the sewer line is replaced, or relined with plastic pipe.

Over time soil settles and may cause drainage patterns to change to channel water toward the house. Water meant for plants in the yard, and storm runoff from roof and landscape, can migrate to beneath the house. Foundation movement, wood rot, mold and termites can result. If the soil has settled enough next to the foundation to drain toward the house, you can expect that some long term damage has occurred.

Crawl spaces in older homes may be unlined and unvented. Crawl spaces are now fitted with plastic water barriers that prevent moisture from migrating from the ground into the house. Until recently, vents were placed at each end of a crawlspace to allow moisture to be dried with air flow. The new thinking is that the vapor barrier should extend to the top of the foundation, with foundation walls insulated, to bring the entire crawlspace within the thermal envelope. Plan on updating crawlspaces.

Roofs on older houses may have up to 4 layers of roofing. Only three layers are allowed now. To replace a roof with too many layers requires a complete tear off of the roof. Some houses will have a mixture of roofing materials, such as shingles over wood shakes. The more layers and more kinds of materials, the more likely it is to leak. Unless the roof has been completely replaced recently, plan on a complete rebuild. Half way measures will cost in the long run.

Brick and block work can last for thousands of years. Unfortunately, the mortar that holds them together needs to be maintained and replaced when it crumbles. Replacing the mortar is called tuck pointing. It is expensive, about \$35-50 a linear foot.

Older homes and foreclosures can provide great values, but you must understand that maintenance will need to be caught up and kept up. This requires a real commitment in time and money. Maintaining the woodwork in a Victorian mansion may be the equivalent of a part time job.

#### **How Long Should Things Last in Your Home? Estimates by Freddie Mac Appliances Life Estimate in Years**

Dishwashers 5 to 12

Disposals 5 to 12

Washers and dryers 8 to 12

Water heaters 8 to 12

Refrigerators 15 to 20

Stoves 15 to 20

#### **Gutters and Downspouts Life Estimate in Years**

Galvanized 15 to 20

Copper Life of home if well-maintained

**Heating and Air Conditioning Life Estimate in Years**

Warm air furnace 8 to 12

Heat pumps 8 to 12

Air conditioning compressors 8 to 15

Gas chillers 8 to 15

Hot water boilers 30 to 50

**Plumbing Life Estimate in Years**

Gas hot water heater 8 to 12

Electric hot water heater 10-15

Private disposal systems (septic) 15 to 25

Galvanized water pipes 30 to 50

**Roofs Life Estimate in Years**

Selvage or asphalt roll 12 to 20

Wood shake and shingle 15 to 20

Asphalt 15 to 20

Fiberglass 15 to 20

Asbestos shingle 30-50

Slate 40-75

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**How much do things cost? - Estimates from Freddie Mac.**

**Additions Costs**

Build addition \$70 to 120 per square foot

Enclose porch \$5,500 to 15,000

Drywall ceiling over plaster \$1.50 to 2.00 per square foot

**Basement Costs**

Convert basement to legal rental unit \$30,000 to 50,000

**Bathroom Costs**

Remodel bathroom \$7,000 to 12,000

Add half bathroom \$3,500 to 5,000

Add full bathroom \$7,000 to 12,000

**Electrical Service Costs**

Increase service to 200 amps \$700 to 1,200

Run separate electrical lines \$150 to 300

Install connectors on outlets

(of aluminum wired homes)

\$15 to 20 per connection/

\$2,000 to 3,000 (whole house)

**Exterior Costs**

Regrade lawn \$500 to 1,500

New gutters and downspouts \$2.50 to 3.50 per linear foot

**Fireplaces Costs**

Build masonry fireplace \$3,300 to 4,800

Install prefabricated fireplace \$1,800 to 2,300

Reline chimney with terra cotta \$2,000

**Floors Costs**

Sand and finish wood floors \$1.50 to 3.30 per square foot

Install ceramic tile floor \$11 to 22 per square foot

Install vinyl tile floor \$2.64 to 5.34 per square foot

Install wall-to-wall carpet \$3.38 to 6.61 per square foot

**Garages Costs**

Build single car garage \$6,000 to 9,500

Build double car garage \$8,000 to 12,000

**Heating and Air Conditioning Costs**

Replace warm air furnace \$1,500 to 3,800  
Replace electric heat pump \$2,200 to 3,600  
Replace central air conditioning system (electric) \$1,500 to 3,000  
Replace central air conditioning system (gas) \$2,600 to 3,500  
Install humidifier \$300 to 550  
Install electrostatic air cleaner \$500 to 750  
Replace hot water boiler \$2,500 to 3,500  
Install attic ventilation \$250 to 450

**Insulation Costs**

Insulate attic / basement \$.75 to 1.20 per square foot

**Kitchen Costs**

Remodel kitchen \$8,000 and up

**Plumbing Costs**

Hot water heater

(40-gallon capacity) \$400 to 650

(40-gallon capacity) \$300 to 550

Install new well \$3,000 to 5,000

Install new septic system \$3,000 to 5,000

Install sump pump \$400 to 500

Install French drain and sump pump \$2,000 to 3,500

**Roofs Costs**

Asphalt / fiberglass shingles-

Install over existing shingles \$1 to 1.20 per square foot

Remove existing shingles and install new \$1.30 to 1.75 per square foot

**Windows Costs**

Install storm windows \$60 to 100 each

Replace existing windows \$250 to 500 each

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