

East Bay Inspection

Craig McCaleb

2625 Alcatraz Ave., #155, Berkeley, CA 94705 510.848.1022
California Licensed General Contractor #515330
Certified ASHI Inspector: American Society of Home Inspectors

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This Report Prepared for
Billie Holiday

Preface:

The following report is a summary of the visual, general overview inspection which was performed on the above date. It is not intended to be technically exhaustive nor to provide an itemized list of cosmetic and nuisance conditions. The verbal commentary during the on-site observations is essential to the home inspection process. Therefore, this summary report should not be relied upon by any third parties without the benefit of an additional on-site inspection and verbal commentary.

Persons who wish to use this report, other than the original client named above, are urged to retain Craig McCaleb for an on-site inspection. We will return and review the building and report for an amount equal to 50% of the original fee. An updated report will be issued in your name. This offer is good for 6 months from the date of the original inspection, after which a complete re-inspection should be performed.

City and County records for this property may reveal additional information regarding past construction work or conditions which are not apparent from a visual inspection. A review of these records is recommended.

This inspection was performed and this report produced according to the Standards of Practice of the American Society of Home Inspectors. A copy of these standards is available upon request. Additional limitations and exclusions are specified in the enclosed contract. This report does not provide substitute disclosure for any party.

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INTRODUCTION

Property Description

This house was reportedly built in the 1940's.

It is a split-level, wood-frame structure.

There is a 2 story portion at the rear.

The sky was partly cloudy at the time of our inspection.

The house was partially furnished at the time of the inspection.

In recent years, more information has become available regarding soils and geologic conditions in the East Bay Hills. Some areas in this vicinity have been designated as active or potentially active slide zones. Earthquake faults have been mapped and the area within 1/8 mile on each side of a major fault has been designated as a "special studies zone". Maps are available which show the location of historical creeks, some of which have been but culverted. Other maps indicate the potential severity of shaking likely to occur during a major earthquake which depends not only upon proximity to the earthquake fault also upon the type of soils that underlay the area. These maps and surveys are available through municipal and regional public agencies (eg. the Association of Bay Area Governments), and from geological engineering firms. A determination of this property's location in relation to such zones is beyond the scope of this inspection. For further information, we recommend consultation with a geotechnical engineer.

General Comments

A determination as to the presence of animal pests, rodents, termites, decay, or other wood destroying organisms is beyond the scope of this inspection. A qualified pest control firm should be contacted with any questions concerning the presence or treatment of these organisms. We are not qualified in these fields. Periodic examinations should be made by a licensed pest control firm as part of routine property maintenance.

We may make recommendations or suggestions in this report which differ from requirements by the local building department. For determinations as to what is permitted in this jurisdiction, the local building department should be consulted.

This report includes only those areas that are visually accessible and not areas that are made inaccessible by walls, concrete, earth, or any other obstacle to physical access or visual inspection, such as furniture or stored items. Defects in mechanical equipment not disclosed by our functional operation or visual inspection are not included. Items or conditions not mentioned in this report are not within the scope of this inspection. We do not examine every window, door, light switch, outlet, water valve, etc.

At the end this report we will list the recommendations we believe to be the most important. Those recommendations should not be considered the only significant items. You should establish your own priorities after thoroughly studying this report, reviewing all the recommendations in the report, and consulting experts or specialists as desired.

SITE AND DRAINAGE

Slope and Soils

The site slopes approximately 15 feet from the front down to the rear of the house. Analysis of soils conditions is beyond the scope of this inspection. For further information on the stability of the site, we advise contacting a geotechnical engineer.

Foliage and Plantings

There are branches overhanging the roof. Branches rubbing on the roof can damage the surface and falling leaves can clog gutters. We advise regular pruning to maintain clearance from the roof.

There is a large tree on the neighboring property and we recommend contacting a tree surgeon for review and recommendations. Regular pruning and maintenance will maintain the health of a tree and reduce the potential for falling branches.

Paved Surfaces

The driveway displays significant cracking and uneven surfaces which could pose a trip hazard to pedestrian traffic. We recommend repair of walking surfaces for improved safety.

Retaining Wall

There is a concrete retaining wall at the rear of-the garage.

Masonry retaining walls often display cracking, leaning or displacement due to pressure from the soils behind the walls. These forces are greatest during the rainy season when soils absorb water and expand. Minor cracking is common. A visual inspection cannot determine if a wall was designed and built with adequate footings and reinforcing steel. All retaining walls should be monitored for signs of significant leaning or cracking.

This wall displays some cracking but no significant displacement.

This wall is still performing its intended function at present, but we advise monitoring any movement to determine the need for future repairs.

Roof and Surface Drainage

The roof has sheet metal rain gutters. They are in satisfactory condition.

Some sections of the rain gutters are clogged with debris from nearby trees. We recommend cleaning gutters regularly to ensure that they drain properly.

We observed standing water in the gutters at the rear of the upper level. Gutters should be sloped 1/8" per foot toward the downspout and we recommend modifications so that they drain properly.

At the right side the downspouts empty onto paved surfaces which appear to be sloped adequately to divert rain runoff away from the foundation.

Several downspouts are directed into buried drain lines.

Subsurface drain piping should extend downhill to a location where the outflow water will not seep back toward the foundation. The end of the pipe should extend out to daylight so that debris can wash out. Piping should be tested and flushed annually with water from the garden hose to be sure that it flows freely. Testing each and every drainage pipe is beyond the scope of this inspection.

EXTERIOR

Siding

The exterior is surfaced with stucco, horizontal wood, wood shakes, and cement asbestos shingle siding.

We observed typical stucco cracking in several places. Periodic repair of stucco cracking should be expected as part of routine maintenance.

Stucco is a cement-based material which is somewhat brittle and therefore, some cracking should be expected. The water proof integrity of the stucco system depends upon the proper installation of a moisture barrier, flashings and water-proofing details (particularly at door and window openings) that are hidden from view. Cracks greater than 1/16 inch in width may allow water intrusion and they should be sealed with an exterior grade caulking compound as part of regular homeowner maintenance. Additional caulking, patching and stucco repairs are part of routine prep work before painting.

The stucco siding shows indications of previous cracking and subsequent repairs. We recommend obtaining information regarding previous stucco crack repairs.

There is cement asbestos shingle siding at the upper level front. It is in satisfactory condition.

This material is not considered to be particularly hazardous by many specialists. The asbestos is in a rigid form and is not normally friable. It should not be sanded or drilled as this could create a hazardous dust. If disposal or removal is considered, this should only be done by a qualified asbestos abatement contractor.

At the entry way adjacent to the garage and around the main entry door there is brick veneer siding which exceeds 6 feet in height. Occasional cracking can be expected to occur at mortar joints. Cracks which exceed 1/16" in width should be repaired with mortar patch to prevent moisture intrusion. Unreinforced masonry is likely to suffer damage in the event of a significant earthquake. This wall could pose a hazard since bricks could fall during a seismic event.

Portions of the building appear recently painted.

The paint is blistered and peeling in several places including, under the eaves. We recommend thorough prep and re-painting as needed.

Windows

The house is primarily equipped with wood sash windows.

Right Side Porch

This is a wood-frame porch and stair with exposed wood decking. It is in satisfactory condition.

Exposed decks, porches and stairs that are constructed of moisture resistant wood have an expected service life of 12 to 18 years, depending upon exposure to the weather and how well they are maintained. Regular maintenance will improve appearance and provide resistance to moisture damage. We recommend periodic applications of wood preservative and regular cleaning to prevent a buildup of debris between deck boards.

Railings

The right side stairway handrails do not have a proper hand grip nor sufficient cross members to meet current standards for the safety of small children. New construction requires a graspable handrail and intermediate rails that are no more than 4 inches apart. We recommend modifying the stair railings for improved safety.

Staircases with two or more steps (or risers) should have handrails that are between 1¼ and 2 inches wide. Handrails should be placed and shaped so they can be readily grasped for safety. Handrails should be 34 to 38 inches above the leading edge of the stairway treads. Handrails should return to the railing or post or to the ground. Handrails should not end in a projection that could be hooked by clothing.

Soils/Foundation Level

We observed faulty grade conditions along the left side of the garage. We recommend regrading the soil as needed to provide proper clearance (preferably 6 inches) from wood members. We recommend further examination of faulty and marginal grade conditions by a qualified structural pest control firm.

“Marginal grade” or “faulty grade” occurs when there is inadequate clearance between the soil and the base of the wood frame walls. It may be due the original construction or to a buildup of soils adjacent to the wall. Modern construction standards require the top of the foundation to be at least 6 inches above the soil level (grade line) in order to provide clearance from moisture and insects in the soil. In some cases, re-grading soil adjacent to the foundation can eliminate a faulty grade condition. This is not a viable solution in situations where it will allow surface water to accumulate near the foundation. Typical modifications to alleviate this condition include: installation of a concrete cap on top of the foundation to raise it above the exterior soil level; a concrete curb outside the foundation to act as a moisture barrier; or a low concrete or wood retaining wall to hold soil away from the foundation. A qualified contractor should be consulted as to the appropriate repair method.

ROOFING

We were able to walk upon this roof after obtaining access with a ladder.

Composition Shingles

The roof is covered with composition shingles. They are in satisfactory condition.

Roof Flashings

The roof flashings are primarily sheet metal.

Sheet metal, rolled roofing materials, and sealing compounds, such as mastic, are the typical flashing materials used to prevent water intrusion at roof surface connections and penetrations. Flashings need periodic maintenance and should be inspected annually.

There is a mast head for the telephone wiring that appears to be cracked and it is covered with duct tape. We recommend review and repair or resealing to prevent leaks.

ATTIC SPACES

Attic

There is an access opening to the attic in the main floor hall closet.

There is an additional attic access opening in the garage.

Our inspection of the attic was limited to a visual examination from the access openings to prevent damage to ceilings below.

Portions of the attic areas are not accessible to inspection due to heating ducts.

Roof rafters are 2x4's and 2x6's spaced 24" apart.

The rafters are overlaid with board sheathing.

The attic is insulated with loose cellulose that is approximately 6 to 8 inches thick.

FOUNDATION AND SUBSTRUCTURE

Foundation

The foundation consists of a continuous concrete perimeter wall; and several intersecting concrete walls within the subarea.

There are also concrete piers supporting posts and beams that provide additional support to the floor joists.

The foundation appears to be relatively modern in design. Foundations of this type typically have internal steel reinforcing. (A determination as to the presence or extent of steel reinforcing is beyond the scope of this inspection.)

We observed several small cracks in the foundation walls that are not unusual for a building of this type and age.

It is common see a few cracks in the range of 1/8" to 1/4" in older concrete foundations. Cracks that are larger than 1/4", those that are displaced, or a greater number of cracks are signs of more substantial settlement or movement. They may indicate the need for eventual underpinning or foundation upgrading. We suggest making a diagram of the location and size of cracks so that they can be observed and monitored over time.

Substructure Access

There is an access opening to the subarea at the basement utility area.

There is also a subarea access located at the upper right side.

We inspected the subfloor areas by walking and crawling beneath the accessible portions of the building floors.

Substructure Framing

The foundation supports wood substructure framing (known as the "cripple wall") that in turn supports the floor.

Floor joists are 2x8's spaced 16" apart.

The subfloor consists of 1 inch thick (nominal) decking boards.

Seismic Reinforcement

Portions of the foundation and substructure framing at the lower rear are hidden by finished walls and we could not determine if there are any seismic reinforcements in these areas.

We recommend obtaining the construction drawings for the renovations if they are available. A qualified contractor or engineer can review these plans to determine if an adequate system of seismic restraints was installed.

Anchor bolts and "hold-down brackets" are used to secure the substructure framing to the foundation to resist displacement during earthquakes. Modern standards require bolts no more than six feet apart for a single story house; two-story portions of the house require bolts no more than four feet apart. Engineers will sometimes specify bolts that are as close as 1 or two feet apart as components of a "shear-wall" system. Heavier "bearing plate washers" are an important component that replaces the typical small round washers that were used until recently.

Visible sections of the foundation are equipped with anchor bolts.

Several of the anchor bolt nuts are loose or missing. We recommend checking and tightening anchor bolts as needed.

We observed diagonal sheathing on the exterior walls at several locations. This was considered a superior method of construction in the era when this house was built. The diagonal sheathing will provide some resistance to movement from an earthquake, but many engineers suspect the old nails may be too corroded to provide a strong attachment to the building.

There are a number of windows and doors at the lower rear wall of the house. The large proportion of openings reduces the rigidity of this wall. This condition is sometimes called a "soft-story" and makes it more vulnerable to movement and swaying during a significant earthquake. Reinforcements can be added to improve the strength of these walls. We recommend contacting a qualified engineer regarding seismic reinforcement of the soft-story area.

The seismic upgrading is considered incomplete by modern standards. We recommend contacting a qualified contractor and/or engineer regarding installation of additional components to create a system of bolts, brackets, seismic ties and plywood bracing panels that will secure the structure to the foundation and provide adequate resistance to lateral forces.

Hillside homes often require specialized seismic upgrading work and we recommend contacting a qualified engineer to design such reinforcements for this building.

Subarea Soils and Moisture

Soils were dry at the time of the inspection.

There is evidence that moisture infiltration has occurred during previous rainy seasons. It is not possible to determine the extent or frequency of moisture or water infiltration in the subarea from a single observation. Therefore we advise consulting the disclosure statement and the owner regarding these conditions. Drainage upgrading has already been discussed in this report, but further surveillance over time may demonstrate the need for additional drainage measures.

Damp or wet soils and standing water in the subarea produce elevated moisture conditions that can extend into the living area. Moist air, water vapor and condensation can provide an environment that is suitable for the growth of molds, fungi and mildew. In some cases these organisms have been found to adversely affect the health of the occupants of the buildings. A determination of their presence or toxicity is beyond the scope of this inspection. Specialists in the field of toxicology should be consulted for further information.

Due to the slope of the site the soils in the upper subarea are eroding from beneath one corner of the foundation. If continual sloughage occurs then bearing soils beneath the foundation could become unstable. We recommend installation of a retainer to prevent further soil sloughing.

Foundation General

This inspection and report can only comment on the visible indications of the structural performance of this house. These might include visible cracks in the foundation and walls, sloping of the floors, etc. An engineering analysis of structural conditions may involve exploratory excavations, destructive testing, laboratory observations and mathematical calculations by qualified professional engineers. Such procedures are beyond the scope of this inspection.

ELECTRICAL

Electrical Service

The main service cables run overhead from the power pole to the house.

Main Electrical Panel

At the front right corner there is a 110/220 volt main circuit breaker panel.

This panel does not have a single main disconnect and it is necessary to switch off all the breakers in the panel to shut off power to the house. Therefore, the capacity of the system is estimated from the size of the service entrance cables. These appear capable of delivering 100 amps.

This capacity should be adequate for normal electrical use.

The configuration of the main panel may limit electrical capacity in parts of the building. Therefore, eventual upgrading of the main service may be necessary.

In addition to the main disconnect switch, this panel is equipped with two 220 volt circuits.

The main panel is grounded to the main water line as it enters the house, but it is not provided with a ground rod which is driven 8 feet into the soil and is required by modern standards. We recommend contacting a qualified electrician for proper installation of a grounding rod to complete the system.

Modern electrical standards prescribe grounding the main panel to the main water line as it enters the house, as well as to a copper coated rod that is driven 8 feet into the soil. In addition, the hot and cold water piping and the gas pipe should be bonded near the water heater. Older electrical services are typically grounded only to a nearby water pipe. It is often difficult to locate the grounding connection without a more thorough electrical inspection. Upgrading the grounding system on an older home consists of several inexpensive modifications that add an extra margin of safety to the electrical system.

Main Floor Hall Closet Electrical Subpanel

This panel is equipped with circuit breakers for overload protection.

This panel is relatively new and the wiring appears properly installed.

Since the early 1980s, the installation of electrical panels in clothes closets has not been permitted by most building departments due to the limited access and the proximity of combustible materials. We suggest eventual removal of this panel from the closet.

It is equipped with twelve 110 volt household circuits.

Basement Utility Area Electrical Subpanel

This panel is equipped with circuit breakers for overload protection.

This panel is relatively new and the wiring appears properly installed.

It is equipped with four 110 volt household circuits.

Electrical Wiring

We observed Romex (nonmetallic sheathed cable or NMC) and armored cable in this building.

Most of the wiring is hidden behind finished walls and ceilings and is not visible for inspection.

Electrical Outlets and Switches

The building is equipped with a combination of 2-prong outlets which are part of the original ungrounded system and 3-prong outlets that have been added at a later date. Properly grounded outlets should be installed at locations where appliances requiring grounding are to be used.

PLUMBING

Main Water Supply

At the front right corner there is a main shutoff valve for the water supply.

The supply piping leading to the main valve is ¾ -inch diameter copper.

Water pressure at the hose bib at the rear tested at 60 pounds. (PSI). This is within the normal range of 40 to 80 pounds.

Interior Water Piping

Domestic water is supplied through copper pipes. Copper piping is considered an asset due to its resistance to corrosion and long service life.

Drain Waste and Vent Piping

The waste piping system has cast iron, galvanized steel, ABS plastic, and copper piping.

A visual inspection cannot evaluate the condition of underground sewer pipes. On older homes we recommend an evaluation of the main lateral sewer line with a video scan.

Lateral sewer lines in older homes were usually made of terra cotta pipe. This type of pipe generally has a long service life, but it can fail due to cracks, separations or intrusion by tree roots. Consult the current owners and their disclosure statement as to whether the lateral sewer line has needed repair or cleaning in recent years. A thorough evaluation can only be provided by a "sewer scan", in which a special video camera is introduced into the line. Eventual replacement of old sewer piping should be anticipated.

Gas

At the front right corner there is a gas meter with the shutoff valve located on the vertical section of the incoming main gas pipe which is nearby. We suggest storing a 12" wrench nearby to facilitate shutoff of the system in case of a severe earthquake or other emergency. Shutoff is accomplished by turning the valve 1/4 turn until it is perpendicular to the supply line.

Gas valves are now available that will close automatically when they sense a significant earthquake. This type of valve can be installed near the gas meter to prevent ruptured gas lines and fires that can occur as the result of an earthquake. This device will provide an extra margin of safety for the building and must be installed by a qualified plumber.

WATER HEATING

Water Heater

In the basement utility area there is a gas-fired water heater. It is in serviceable condition.

The average expected service life for a tank-type water heater is approximately 8 to 12 years. Eventual failure occurs when a rust hole develops in the tank and it begins to drip or spray water.

The nomenclature plate is hidden from view and we were unable to determine the size and age of the water heater.

The burner ignited properly when the hot water was turned on in the house.

Hot and cold water pipes and the gas pipe at the water heater are properly bonded. Bonding is now required in new installations as part of the electrical grounding system.

This unit has an outdated brass gas connector. This type of thin metal connector has been found to crack and leak. We recommend installation of a new, flexible, stainless steel gas supply for improved safety.

The water heater has a temperature and pressure relief (TPR) valve.

The temperature pressure relief valve (TPR) is a safety device that allows release of a buildup of excessive pressure or hot water that could occur due to a malfunction of the temperature control valve.

The water heater is equipped with seismic restraints to prevent it from rolling over during an earthquake.

This water heater vents into an old transite (cement asbestos) flue. When a new water heater is installed, the manufacturer or the building department may require replacement with a modern B vent flue pipe.

Maintenance

We advise keeping the temperature adjustment control at the low to middle range to avoid scalding temperatures. Tub and shower valves with anti-scalding devices are now required in most new and remodel construction work and they can be retrofitted into older installations for improved safety. Consult a qualified plumber for further information.

It is important to avoid storing combustible items near water heaters and other gas-fired appliances.

The life of a water heater may be extended by periodically removing the sediment that builds up in the tank. This can be done by connecting a garden hose to the drain valve at the bottom and drawing water until it runs clear.

We advise periodic inspection and servicing of the water heater by a qualified plumbing and heating contractor.

CENTRAL HEATING

Furnace

In the basement utility area there is a gas fired, forced air furnace which is equipped with a standing pilot light. This older furnace is considered inefficient by modern standards.

This furnace is well beyond its expected service life.

The heat exchanger in this furnace was only partially accessible to visual inspection.

The heat exchanger is the metal chamber that encloses the burner and flame. When the furnace is serviced, the heat exchanger should be inspected carefully. It will eventually develop cracks or small rust holes that can allow some of the waste products of combustion to enter the air-stream that circulates through the house. This signals the end of the service life for the furnace. Only a small portion of a typical heat exchanger is accessible to visual inspection and we can not guarantee the absence of cracking. A thorough evaluation requires the partial disassembly of the furnace and is beyond the scope of this inspection.

The heat exchanger is old and corroded.

The furnace ignited properly when the thermostat was turned up.

Furnace Venting

This furnace has a natural draft venting system. The flue gases rise through the vent because they are hotter than the surrounding air. Furnaces with natural draft venting are generally less efficient than modern induced draft furnaces.

The furnace and the water heater vent into an old transite (cement asbestos) flue. This is an outdated material that is not approved for modern installations. When a new furnace is installed, the manufacturer or the building department will probably require replacement with a modern B vent flue pipe.

Masonry flues for gas appliances are considered outdated since they can precipitate cooling and condensation of the flue gases and impede the proper venting of the products of combustion. Newer gas appliances are often required to be vented into double-wall, metal (B-Vent) flues.

The vent connector for the furnace and the water heater is single-wall pipe which is no longer approved for use in an unheated space because cool temperatures may impede the proper venting of the products of combustion. We recommend contacting a qualified heating contractor to replace the single-wall vent connector to double-wall (B-Vent) piping.

Furnace Ducting

This system uses a combination of sheet metal ducting and insulated, flexible ducting to distribute warm air to various rooms in the house.

The ducting insulation is damaged and missing in several places. We recommend repair or replacement of the ducting insulation as needed.

The filter is located within the fan compartment of the furnace.

Air filters prevent the accumulation of dust and dirt on the blower fan blades which can significantly reduce efficiency. Air filters should be checked monthly and changed or cleaned,

depending on type, as necessary. A clogged air filter can lead to reduced air flow over a furnace heat exchanger, resulting in premature heat exchanger cracking or failure.

There is no safety disconnect switch on the blower compartment door. Care should be made to turn off the furnace at the service switch when opening the compartment door.

There is a buildup of dust and dirt on the blower motor. This reduces the efficiency of the system and indicates that the furnace has not been serviced recently.

Forced-Air Heating General

All furnaces should be periodically reviewed by the local utility company and regularly serviced. Occasional repairs and adjustments will be necessary to provide continued safe and efficient operation. A determination as to whether adequate heating is provided to all the interior spaces is beyond the scope of this inspection.

We recommend contacting a qualified heating contractor for a review of the system and recommendations regarding servicing, repairing or replacing the furnace.

INTERIOR

Walls and Ceilings

The interior wall and ceiling surfaces are primarily plaster and sheet rock (gypsum board).

Above the fireplace there is a wall with a brick facing. The attachment of the brick to the wall may not be adequate to withstand a significant earthquake and bricks could fall.

The interior surfaces appear recently painted and no significant cracks were noted.

Floors

Wood floors have been recently refinished and are in good condition.

Sections of the floors in the lower level rear are below the exterior grade level. Therefore, they are vulnerable to water or moisture entry due to an inadequate drainage system or during heavy rains. Floors should be monitored during the rainy seasons to determine if additional drainage measures should be installed.

The floors were gauged with a laser level and mild sloping was found in various locations.

Carpeting and furniture prevented complete inspection of the floor surfaces and limited our ability to measure sloping in some areas.

The floors in the lower level rear are concrete. Occasional gaps around the perimeter appear to be typical at the junctions between the perimeter foundation and the concrete slab floor. We suggest monitoring the gaps to determine if there is any ongoing foundation movement.

Stairs

The headroom above the stair to the upper level front does not meet the modern safety standard of 6'8". This may pose a safety hazard to tall persons.

Window Interiors

The windows we operated functioned properly.

There are several large windows near the floor of the living room that do not appear to have tempered safety glass. Modern construction standards usually require safety glass on windows that are less than eighteen inches from a walking surface. We recommend contacting a qualified glazing contractor regarding replacement with tempered glass.

Modern construction standards require safety glass in a number of locations that are vulnerable to breakage and potential injury. While there is no requirement to change existing glass, we advise installing tempered glass for improved safety.

The glazing in the entry door at the lower level right side is not tempered safety glass. Modern construction standards usually require safety glass on glazing in and around a door. We suggest replacement for improved safety.

The glass in the windows next to the front entry door does not appear to be safety glass. Modern construction standards usually require safety glass on glazing in and around a door.

Fire Safety

Smoke detectors have proven to be an effective means of saving lives and property. At a minimum, they should be located within 15 feet of each bedroom door. Updated standards for new construction require smoke detectors to be hard-wired with one in each bedroom. Smoke detectors are not tested as part of this inspection. They should be installed and tested regularly according

to the manufacturers instructions. The enclosed pamphlet from the National Fire Protection Association discusses proper installation and maintenance of smoke detectors.

Fire Safety experts encourage homeowners to maintain an approved fire extinguisher in the kitchen. We also recommend installation of a carbon monoxide detector that is centrally located within the house.

Security System

We observed several components of a security system. We do not test security systems and we did not determine if the system is functional. We recommend contacting the system installer or a security company as to the proper operation of this system.

Interior General

Our inspection includes a representative sampling of the windows, doors and electrical outlets. We do not open and examine each and every window and door, nor test every plug. This inspection does not include areas which are obscured by furniture, carpets, coverings, or any other items.

BATHROOMS

Bathrooms

The fixtures and surfaces in the bathrooms are in satisfactory condition.

The shower walls are surfaced with ceramic tile.

There is a section of tile on the shower wall in the master bathroom that appears to have been patched. These tiles appear firm and serviceable at present. We recommend monitoring the shower walls to determine the need for future repairs.

The shower doors in the hall bathroom and the master bathroom do not have clearly visible safety glass labels and we assume they are not tempered glass. We recommend contacting a qualified contractor regarding installation of tempered glass shower doors that meet modern standards.

Tempered glass became commonly required in shower stalls and enclosures during the late 1960's. Older tempered glass was not always labeled. Sometimes tempered glass labels are very faint or are obscured by soap film. Many untempered shower doors have been installed even after the requirements for tempered glass went into effect. Untempered shower doors, enclosures, and windows should be replaced with modern tempered glass for safety.

Each bathroom has ceramic tile flooring.

Each bathroom has GFCI protected electrical outlets.

We tested the electric wall heater in the main floor hall bathroom and it was found to be functional.

General

Joints around the tub and shower must be kept well sealed. Moisture intrusion can also occur at the base of the toilet, tub and vanity and around faucet handles and the water spout. Caulking will eventually dry and crack and should be re-applied as necessary. Moisture intrusion can result in damage as well as unpleasant odors. Caulks made specifically for Kitchen and Bathrooms have an anti-fungal agent in them. When bathing, an open window or exhaust fan should be used to reduce indoor moisture that can stimulate the growth of mildew or mold.

KITCHEN

Kitchen

The fixtures and surfaces in this kitchen are in satisfactory condition.

This kitchen has ceramic tile countertops.

The sink is cast iron with a porcelain finish.

This sink is equipped with a disposer.

The kitchen is equipped with a dishwasher. We did not test the dishwasher and we advise contacting the owner for further information regarding the operability of this appliance.

This kitchen has a gas range.

The kitchen is equipped with an exhaust fan.

The kitchen has wood flooring.

LAUNDRY

Laundry

There is a laundry area in the guest bedroom closed.

Operation and inspection of laundry equipment is beyond the scope of our inspection.

Washing machine hoses are continually under pressure and the rubber degrades with age. We suggest installing metal-sheathed, "no-burst" hose connectors for the clothes washer to reduce the potential for failure.

Gas piping is provided for the clothes dryer.

The dryer vent piping rises vertically upward which may be conducive to lint accumulation and clogging. This vent should be checked regularly as a clogged dryer vent can be a fire hazard. Ideally the vent should be rerouted to flow in a more horizontal direction.

The clothes dryer vent piping is too long and may reduce dryer efficiency or possibly accumulate lint, creating a fire hazard. We recommend proper dryer vent piping be installed.

The general rule for dryer venting is the piping should be no longer than 14 feet with a maximum of two 90 degree bends. For each extra 90 degrees the length must be reduced by two feet. The manufacturer's instructions should be reviewed and followed if different from the standard rule.

The clothes washer drain line is 1-1/2 inches in diameter. Some newer high capacity washers may overflow this outdated drain line. We recommend contacting a qualified plumber to determine if it is necessary to install a 2" drain line.

FIREPLACE AND CHIMNEY

Fireplace

There are two masonry fireplaces.

The fireboxes are constructed of brick. They are in satisfactory condition.

In the living room fireplace the mortar between the firebox bricks is soft in several places. Repointing mortar should be anticipated.

In the living room fireplace there are several bricks missing in the smoke shelf above the firebox. We recommend contacting a qualified chimney mason for review and repair.

The living room and guest suite fireplaces have dampers.

The purpose of a damper is to block the flow of warm room air up the chimney when the fireplace is not in use. An open flue is comparable to an open window and will substantially reduce heating system efficiency. Dampers should be kept closed when fireplaces are not in use. Glass doors can also be used to serve the same function.

In the guest suite fireplace the damper is difficult to operate. We recommend the damper be adjusted or repaired to operate easily.

Chimney

The fireplace chimney is constructed of brick.

Brick chimneys that date from the period when this house was built had little or no reinforcing steel and were not adequately connected to the building. Therefore they are vulnerable to significant damage and collapse in the event of a substantial earthquake.

There are two flues.

The flues do not have spark screens or rain caps. We recommend proper screens and caps be installed.

A proper rain cap and spark arrester screen should be provided for each fireplace flue to prevent water entry. Water entry can damage the fireplace or chimney masonry. A screen will prevent the escape of flaming embers, which can be a fire hazard. Manufactured rain cap spark arresters are available in building supply stores or can be installed by a qualified chimney sweep.

Each flue is lined with clay tile.

Modern brick or concrete block chimneys are lined with clay tile or concrete sections mortared together. The purpose of the liner is to contain a potential chimney fire. Liners and the mortar which join them together may deteriorate with age and use, reducing their effectiveness. Flue liners are not typically accessible to visual examination. Tall chimneys which extend above the roof line may need to be braced to prevent movement which can break the mortar, bricks, or liner. All older chimneys should be carefully checked by a qualified chimney contractor before building a fire (or before the close of escrow). Any flue which is inaccessible may contain a defective flue liner or the liner may have been omitted.

Fireplaces General

We do not perform an operational test of the fireplace nor an evaluation of the draw of the flue. Problems with the draw should be directed to a qualified chimney mason. The inside of the flue should be checked periodically for cleaning since a buildup of creosote poses a potential fire hazard. The inside of the flue is not fully visible and is usually coated with soot. Therefore, a thorough checkup on the condition of the flue can only be done after cleaning. The National Fire Protection Association (NFPA) recommends a video scan of the flue upon resale of a home to ensure that it is in serviceable condition.. The video scan is beyond the scope of our inspection and we advise contacting a qualified contractor for this service.. Many jurisdictions are attempting to phase out wood-burning fireplaces because of their contribution to air pollution.

ENVIRONMENTAL

Hazardous Materials

Potentially hazardous materials have been used in various components of residential construction. Several of the more common occurrences are asbestos in heating systems and floor coverings, lead in paint and soldered pipe joints, and formaldehyde in foam insulation and paneling. Naturally occurring substances such as molds, mildews, funguses and radon gases have also been found to produce adverse health effects to the occupants of some homes. These substances are usually undetectable without dismantling parts of the house and/or laboratory testing. A determination of the presence or toxicity of such materials is beyond the scope of this inspection. Companies that perform surveys for toxic and hazardous substances can be found in the yellow pages under "Environmental and Ecological Services".

We observed apparent asbestos materials on the ducting.

Asbestos is found on most gas heating systems installed before 1978. Exposure to asbestos may be a health hazard and should be avoided. It may be possible to significantly reduce or eliminate the dispersal of asbestos fibers by painting the material. Removal or containment of these materials should only be done by properly trained and equipped professionals. Contractors in various trades such as flooring, roofing, heating, plumbing, or electrical may require asbestos abatement at additional expense prior to performing repairs, replacements, or modifications. For a determination as to the need for, or costs of abatement, a qualified asbestos abatement contractor should be retained. The presence of asbestos can only be determined by laboratory analysis, which is beyond the scope of our inspection.

GARAGE

Garage

The garage is semi-attached to the house.

Portions of the garage interior were not accessible to inspection due to stored personal belongings. We recommend further inspection of the garage when it is cleared of storage.

The garage floor is concrete. We observed typical cracking.

This garage has a roll-up style vehicle door.

The garage door is the largest piece of moving equipment in the home. There is a risk of injury when doors close too quickly or with too much force, particularly if springs, hinges or other components loosen or break. A closing door can also pose dangers by pinching fingers or extremities to persons standing too close.

The vehicle door has an automatic opener.

Modern standards require automatic door openers to have reversing mechanisms that are activated by both a pressure sensor as well as electric eyes to prevent the door from striking persons or property. These safety devices can go out of adjustment and they should be tested periodically. We advise reading the owner's manual for the automatic garage door opener for safety precautions. Most manufacturers provide manuals and safety instructions at their web sites.

We tested both the electric eyes and the pressure-sensitive reversing mechanisms and found them to be functioning properly.

Fire Separation

The door to the attic from the garage is not fire-rated and we recommend it be upgraded for fire safety.

There should be a fire-rated, solid core, door installed on any passageway between the garage and the house, attic, or subarea crawlspaces. The door should be weather-stripped and equipped with a self-closing device.

PRIMARY RECOMMENDATIONS

Foliage and Plantings

There is a large tree on the neighboring property and we recommend contacting a tree surgeon for review and recommendations.

Paved Surfaces

We recommend repair of walking surfaces for improved safety.

Roof and Surface Drainage

We recommend cleaning gutters regularly to ensure that they drain properly.

Gutters should be sloped 1/8" per foot toward the downspout and we recommend modifications so that they drain properly.

Siding

We recommend obtaining information regarding previous stucco crack repairs.

We recommend thorough prep and re-painting as needed.

Railings

We recommend modifying the stair railings for improved safety.

Soils/Foundation Level

We recommend regrading the soil as needed to provide proper clearance (preferably 6 inches) from wood members.

We recommend further examination of faulty and marginal grade conditions by a qualified structural pest control firm.

Roof Flashings

There is a mast head for the telephone wiring that appears to be cracked and it is covered with duct tape. We recommend review and repair or resealing to prevent leaks.

Seismic Reinforcement

We recommend obtaining the construction drawings for the renovations if they are available.

Several of the anchor bolt nuts are loose or missing. We recommend checking and tightening anchor bolts as needed.

We recommend contacting a qualified engineer regarding seismic reinforcement of the soft-story area.

We recommend contacting a qualified contractor and/or engineer regarding installation of additional components to create a system of bolts, brackets, seismic ties and plywood bracing panels that will secure the structure to the foundation and provide adequate resistance to lateral forces.

Hillside homes often require specialized seismic upgrading work and we recommend contacting a qualified engineer to design such reinforcements for this building.

Subarea Soils and Moisture

We recommend installation of a retainer to prevent further soil sloughing.

Main Electrical Panel

We recommend contacting a qualified electrician for proper installation of a grounding rod to complete the system.

Drain Waste and Vent Piping

On older homes we recommend an evaluation of the main lateral sewer line with a video scan.

Water Heater

We recommend installation of a new, flexible, stainless steel gas supply for improved safety.

Furnace Venting

We recommend contacting a qualified heating contractor to replace the single-wall vent connector to double-wall (B-Vent) piping.

Furnace Ducting

We recommend repair or replacement of the ducting insulation as needed.

Forced-Air Heating General

We recommend contacting a qualified heating contractor for a review of the system and recommendations regarding servicing, repairing or replacing the furnace.

Window Interiors

We recommend contacting a qualified glazing contractor regarding replacement with tempered glass.

Security System

We recommend contacting the system installer or a security company as to the proper operation of this system.

Bathrooms

We recommend monitoring the shower walls to determine the need for future repairs.

We recommend contacting a qualified contractor regarding installation of tempered glass shower doors that meet modern standards.

Laundry

We recommend proper dryer vent piping be installed.

We recommend contacting a qualified plumber to determine if it is necessary to install a 2" drain line.

Fireplace

We recommend contacting a qualified chimney mason for review and repair.

We recommend the damper be adjusted or repaired to operate easily.

Chimney

We recommend proper screens and caps be installed.

Fireplaces General

The National Fire Protection Association (NFPA) recommends a video scan of the flue upon resale of a home to ensure that it is in serviceable condition..

Garage

We recommend further inspection of the garage when it is cleared of storage.

Fire Separation

The door to the attic from the garage is not fire-rated and we recommend it be upgraded for fire safety.