

# Professional Home Inspectors, LLC

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**Sample Report**  
Oakland, California  
October 18, 2006- 3:00 pm  
Report Number 200156

This Report Prepared for:  
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Member: American Society of Civil Engineers  
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*The terms "not accessible" and "inaccessible" when used in this report indicates uninspected components which may have hidden defects not observed or noted in this report. These areas are beyond the scope of this inspection and should be inspected after access is provided*



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## INTRODUCTION

### Property Description

We inspected the property at 1770 Arrowhead in Oakland on October 18, 2006. The building is a single-family residence. This is a one- and two-story structure.

This report describes the building as viewed from the street. The building site slopes steeply down to the front.

We recommend local slide maps be reviewed to determine if there have been any slides in the vicinity of the home.

The sky was clear at the time of our inspection.

Various modifications have been made to the building since its original construction. We recommend a permit history be obtained from the local building department to determine if modifications to the building were made with proper permits.

Several aspects of these modifications do not appear to comply with standard requirements and it does not appear likely they were approved by the local building department. We recommend the local building and zoning departments be contacted to determine if proper permits for these modifications have been obtained and if not, what steps are necessary to obtain any required permits or approvals.

We recommend the local building department be contacted to determine if proper permits for the building are on file.

### General Comments

*This report is a general overview of the structural components and major systems. It is not intended to be technically exhaustive in any one field. If further information is desired, specialists in the relevant fields should be retained to perform additional inspections.*

*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 that 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. An examination of every window, door, light switch, outlet, water valve, etc., was not made.*

*At the end of this report we will list the recommendations we believe to be the most important. These 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.*

## EXTERIOR

### Stucco Siding

There is stucco siding at the front.

*Stucco consists of cement and sand plaster, reinforced with wire mesh, and installed over a water-resistant membrane. New stucco is typically pigmented rather than painted, and the surface may show absorption of moisture from rains. Stucco cracking is common and may be caused by movement in the wall framing, foundation settling, seismic activity, or stucco shrinkage. Minor cracks usually do not need repair and are normally filled when the stucco is painted. Cracks large enough to allow water entry should be caulked or patched. In relatively new construction, the bottom of the stucco typically has a metal edge called a "drip screed." The soil surface should be maintained below this edge to prevent moisture and termite entry behind the stucco. In older buildings, the bottom of the stucco often extends below soil level and may conceal moisture or termite entry. These areas should be inspected regularly by a pest control firm.*

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

There is a potential for damaged wood framing and sheathing behind older stucco surfaces, especially in areas where excess water from the roof or downspouts flows over the surface. The bottom of the stucco often extends below the soil level and may conceal moisture or termite entry. We recommend periodic inspections be made by a qualified pest control firm. It may be necessary to make openings in the stucco to determine the condition of the wood framing behind.

There are several large cracks at the front that may indicate foundation settlement. We recommend these be checked periodically to determine the presence or rate of movement. We recommend the stucco cracking be repaired as needed to prevent water entry.

The stucco siding shows indications of previous cracking and subsequent repairs. We recommend a history of stucco crack repairs be obtained.

### Wood Shingle Siding

The building has wood shingle siding. It shows moderate wear.

### Paint

Portions of the building exterior appear recently painted.

### Window Exteriors – Right Front Addition

The horizontal trim over the windows does not have visible metal flashings, which may be necessary to prevent water entry behind the trim and into the wall. We recommend the windows be monitored periodically for leakage and exterior metal flashings be added if necessary.

### Decks and Stairways

There are wooden decks and staircases at the front and rear.

The decking boards are too close together. Ideally, decking should be installed so that there is a 1/8 to 3/16-inch gap between each board. This spacing allows for airflow between the boards, reducing the potential for decay.

Surfaces in these areas are painted and could be slippery when wet. We recommend self-adhering strips or non-slip paint be applied to provide safer walking surfaces.

The framing is close to the ground. This method of construction is conducive to wood-soil contact, insufficient ventilation, and decay. We recommend periodic inspections by a qualified pest control firm.

*Adequate clearance between soil and wood (typically six inches in new construction) should be maintained to prevent moisture or insect damage. It is important to avoid raising the soil level too close to the siding when gardening adjacent to the structure. Areas of potential wood-soil contact should be checked periodically as part of routine maintenance.*

There is wood-soil contact in several places and we recommend all wood-soil contact be eliminated.

The areas beneath these decks were inaccessible to our inspection and defects may be present that were obscured from view.

The framing at the right deck does not appear adequate and we recommend it be properly reinforced by a qualified contractor.

*Regular maintenance can substantially extend the life and serviceability of wooden decks and staircases. Debris that accumulates between the deck boards can trap moisture, and should be periodically removed. Treating the deck with a good quality wood preservative may improve its appearance and extend its service life. There are firms that specialize in power washing and treating decks with preservatives and fungicides.*

The horizontal wood boards or “ledgers” that support the building connections are nailed to the framing but are not bolted as typically required. We recommend the building connections be adequately bolted by a qualified contractor.

The attachments at the building do not appear to be provided with proper metal flashings to divert water away from the building. We recommend the building connections be properly flashed or periodically recaulked to prevent moisture and damage.

The support posts have been placed directly on a pre-existing concrete retaining wall below. The absence of footings may cause cracking in the concrete and movement in the deck or framing. We recommend the installation of adequate footings be considered.

The support posts are not braced.

## **Steps**

There are wooden staircases on grade at several places.

The wooden on-grade staircases are in poor condition and are potentially hazardous. We recommend they be repaired or replaced for safe use.

Several of the steps are uneven, creating potential trip hazards, and we recommend the steps be modified to provide consistent height at each step.

Individual steps in staircases should have a consistent height and depth for safe use. We recommend the steps be modified as needed to provide consistent height at each step.

*Individual steps in staircases should have a consistent height and depth for safe use. The difference between one step and any other step in the same staircase should not be more than 3/8 inch. Uneven steps are a potential trip hazard and should be corrected.*

## **Porch**

There is a concrete porch and staircases at the front. The concrete is supported by wood framing.

*Concrete, brick, tile, and other masonry stairs, landings, and decks are often supported by wood framing. A membrane is typically placed over the framing to prevent moisture entry and damage. The framing beneath should be regularly checked for signs of water penetration. Any cracks or openings in these surfaces should be caulked or filled to prevent water entry.*

We observed settling in these areas. Future settling and movement should be expected. We recommend periodic monitoring and repair if needed. It may be necessary to resupport the concrete these areas.

*Adjacent porches and walkways may tilt or settle away from the building, often because their footings or supports are not adequate. Rainwater may enter gaps created by the settling, resulting in additional movement or possible framing damage. Any gaps should be caulked or sealed to prevent water entry. Any substantial settling that creates a hazard to foot traffic should be repaired.*

## **Exterior Railings**

Handrails are not provided for several exterior staircases and we recommend proper railings be installed as needed for safety.

*Staircases with four or more steps (or risers) should have handrails that are between one and one-quarter and two 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.*

Several stair railing openings are too large according to modern safety standards. We recommend proper railings be installed as needed for safety.

The rear stairway does not have proper handgrip railings according to modern safety standards. We recommend proper railings be installed as needed for safety.

Guardrails are not installed at the in several places. Guardrails are typically required in new construction when there is a drop-off of more than 30 inches. We recommend proper railings be installed as needed for safety.

*Modern building standards call for guard railings at least 36 inches high at every deck, stair, or landing more than 30 inches above an adjacent surface, and for railing openings less than four*

*inches in diameter. Large railing openings, which may allow a child to fall through, should be modified for safety. This standard was recently changed from six inches to four inches as it was found that small children could slip through a six-inch opening.*

The railings are damaged in several places and we recommend they be repaired as needed.

We have provided an enclosure at the end of this report describing proper handrail and guardrail design.

## **Walkways**

There are several brick and concrete walkways at the sides and rear.

There are several cracks in the walkways indicating settlement or movement. Future movement in the walkways should be anticipated, eventually necessitating their replacement.

Several walking surfaces are uneven, creating potential trip hazards. We recommend the walkways be repaired as needed to provide for safe foot traffic.

The rear walkway surface does not have sufficient slope to drain properly and we recommend it be modified as needed to prevent significant amounts of standing water.

## **Driveway**

There is an asphalt-surfaced driveway at the front. It is in relatively new condition. The driveway surface shows typical cracking.

The driveway is steep and may need modification to avoid dragging on the undersides of some vehicles.

There is a drain opening in the driveway.

*Drains can be effective in reducing ponding and controlling surface water around the building. Drains can be clogged with debris, and care should be taken to prevent obstruction of the drain openings. All surface drains should be tested periodically by using a garden hose and observing the discharge location of the drains, if known. Testing drainage pipes is beyond the scope of this inspection. We can test subsurface drainage piping for an additional fee if desired.*

## **Grading and Drainage**

Concrete curbs have been added at the left front to prevent water entry onto the subarea framing. Exterior curbs are often used to eliminate a faulty grade condition.

*A faulty grade (where the exterior soil level is above the top of the concrete or masonry foundation) can allow moisture penetration, leading to decay and termite infestation. The standard in new construction is for the top of the foundation to be at least six inches above the soil level. Removal of soil adjacent to the foundation can eliminate a faulty grade condition, but it may also direct surface water toward the foundation. Typical repair methods include 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 wooden retaining wall to hold soil away from the foundation. A qualified contractor should be consulted as to the appropriate repair method.*

These curbs do not appear to be effective, and there are indications of water entry in several places. We recommend the curbs be properly flashed, sealed, or replaced as needed to prevent water entry.

The siding is too close to the ground in several places. We recommend special care be taken to provide adequate clearance (ideally six inches) to the adjacent soil as part of routine maintenance, to prevent moisture or insect pest entry.in several places

The property slopes steeply. A determination as to the stability of this slope or area soils is beyond the scope of our inspection. For this information, a qualified soils engineer should be retained.

There are several indications of previous soil movement. We recommend a qualified soils engineer be retained for information on site stability.

There are several area drains that apparently lead to a subsurface drainage system.

There appears to be an underground drainage system. We recommend any available information on the drainage system design be obtained for future reference.

There are indications of poor foundation area drainage at the rear. We recommend the drainage be modified as necessary to properly drain the foundation area. A qualified drainage contractor should be consulted to determine the type of improvements best suited for the building.

## **Retaining Walls**

There are concrete, wooden and concrete rubble retaining walls in several places. These walls show substantial displacement or leaning.

*Displacement indicates that a retaining wall has moved from its original position. Leaning may indicate that retaining walls are not adequate to support the soil behind them. Substantial leaning indicates there is a potential for failure and that the retaining walls should be replaced for safety. Generally, new walls higher than four feet must be designed by a qualified engineer.*

The walls do not appear to have been engineered and may not be adequate to support the soil behind.

A determination as to whether the retaining walls are adequate to support the weight of the soil is beyond the scope of our inspection.

These retaining walls may soon need replacement.

We recommend the retaining wall be replaced by a qualified contractor.

The walls are not provided with sufficient barriers or guardrails to prevent a fall. We recommend adequate safety barriers be installed as needed.

## **Landscaping**

Plants and trees are growing against the exterior in several places and we recommend they be removed or trimmed away from the building to prevent damage and insect entry.

*Vines, shrubs, or trees that touch the building should be removed or trimmed back periodically to prevent damage to the siding, eaves, or roof surfaces. Tree branches can damage the siding or roof, especially in high winds or stormy weather. Trees may also deposit substantial leaves and debris on the roof surface, resulting in poor drainage and roof damage.*

Portions of the building exterior were inaccessible to our inspection and unobserved defects may be present in areas obscured by plant growth. Front

There are several large trees at this property and we recommend they be examined by a tree surgeon. Regular care can extend the life of a tree and reduce the potential for falling branches.

### **Fencing**

There is wood fencing at the sides and rear.

The fencing is loose, leaning, and damaged in several places. We recommend the fencing be repaired, reinforced, or replaced as needed.

### **Exterior Structures**

There is a “garden room” at the right front. These rooms are considered temporary structures and are not usually required to meet codes for habitable structures. For information on building code requirements, the local building department should be consulted.

There is a decorative pond at the front. Special care should be taken to prevent access to this area by small children. We recommend the local building department be consulted on requirements for safety barriers at decorative ponds.

## ROOFING

### Composition Shingle Roofing

The building has a composition shingle roof. it shows moderate wear.

The framing is sagging noticeably in several places.

There are several exposed nails. We recommend the exposed nails be sealed, removed, covered, or otherwise properly repaired by a qualified roofer. With time, exposed nails will rust and loosen and may cause leakage.

A couple of shingles are damaged. We recommend it be repaired.

The shingles are not properly woven at the valleys. The valleys should be checked periodically and cleaned or modified if necessary to prevent debris accumulation and roof leaks.

### Roof Flashings

The roof flashings are primarily sheet metal.

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

The flashing materials were mostly inaccessible to our inspection.

Mastic has been used at several roof flashing connections.

*Mastic is a general term for fibered roofing cement, which is a thick roofing patching compound. Mastic is considered a temporary method to seal connections. Mastic dries out and cracks, typically requiring a new application every two to four years. Painting the mastic can help protect it from the sun and give a better appearance. The best procedure is to replace old metal flashings when a new roof is installed. It is common practice in some areas to leave old flashings in place and to cover them with mastic when applying new roofing over an existing roof surface.*

The mastic is worn in several areas. We recommend these areas be properly sealed to prevent leakage.

We recommend the exposed mastic be painted for solar protection.

### Roof Vents and Flues

An appliance roof vent is rusty and we recommend it be painted with a good quality rust-inhibiting paint.

### Roof Access

We inspected the visible roofing materials and components after obtaining access with a ladder.

The roof areas are easily accessible from the building interior and are not provided with adequate safety guardrails. We recommend the door to the roof areas be kept locked at all times.

### Roof Drainage

The rain gutters are sheet metal.

Debris has accumulated in several places. Rain gutters should be cleared periodically as part of routine maintenance.

Roof surfaces, rain gutters, downspouts, and subsurface drain lines should be checked regularly. Leaves and other debris should be removed as needed. Gutter joints and connections may need periodic caulking or sealing. Screens can be installed at downspout gutter connections to keep debris from blocking the downspouts.

The roof drainage downspouts are directed into subsurface drain lines.

*Roof drainage downspouts are sometimes connected to underground drainage systems to prevent water from ponding adjacent to the foundation where it could adversely affect the soils supporting the building. Catch basins or surface mounted drains may also be connected to this piping. Subsurface drain piping can become clogged with debris and should be checked periodically in rainy weather or by using water from a garden hose to be sure the drains are free flowing.*

Flexible corrugated plastic tubing has been used for subsurface drainage piping. This material, while common, is more susceptible to clogging and is more difficult to clean out than the preferred rigid smooth wall plastic piping.

We recommend periodic inspections be performed to assure roof drainage systems function properly. We advise walking around the building during or shortly after heavy rains to check for deficiencies in the roof and area drainage systems.

## **Roofing General**

*Roof surfaces, rain gutters, downspouts, and subsurface drain lines should be checked regularly. Leaves and other debris should be removed as needed. Gutter joints and connections may need periodic caulking or sealing. Screens can be installed at downspout gutter connections to keep debris from blocking the downspouts. We recommend periodic inspections be performed to be sure roof drainage systems function properly. We advise walking around the building during or shortly after heavy rains to check for deficiencies in the roof and area drainage systems.*

*This inspection addresses only the apparent visual condition of roofing materials, and does not include invasive testing or guarantee against present or future leakage. Annual examinations should be made by a qualified roofer for needed periodic maintenance and repair.*

## STRUCTURE

### Foundation

The building is a wood-framed structure.

The building has a raised perimeter and intermediate concrete foundation.

The foundation supporting this structure is outdated by modern standards. The concrete does not appear to be steel-reinforced and probably does not have footings that extend deeply into the soil. Foundations of this type are more susceptible to cracking, settlement, deterioration from moisture entry, and earthquake damage.

Left portions of the foundation show substantial concrete deterioration. Portions or all of the foundation may soon need replacement. We recommend a qualified engineer be consulted to determine the extent of concrete deterioration and which portions of the foundation will need replacement in the reasonably foreseeable future.

*Concrete deterioration and spalling are usually the result of prolonged moisture penetration. As moisture moves through the concrete and dries on the surface, mineral salts dissolved in the water form crystals, which expand and cause surface crumbling (spalling). Minor surface deterioration is common in older foundations. With continued moisture penetration over many years, the concrete may deteriorate to the point where replacement becomes necessary.*

The concrete used in this foundation is of a poor quality.

*Concrete is a mixture of sand, cement, and rocks (aggregate). Too much rock was used in many older foundations, making it porous and weak. Round beach sand was often used instead of sharp sand from a quarry. Old, poor quality concrete is susceptible to moisture entry and will often crumble and deteriorate with age, causing settlement. Some building departments will not permit the installation of earthquake bolts into poor quality concrete. In order to adequately reinforce these buildings against seismic activity it may be necessary to install new concrete foundation walls.*

We observed substantial efflorescence in the subarea, indicating an excessive moisture condition likely caused by defective drainage.

*Efflorescence is a white powdery deposit that occurs on masonry or concrete and indicates the presence of moisture in contact with the masonry or concrete. Minor efflorescence is common even in new construction. Substantial efflorescence indicates a defective drainage condition.*

We observed several large cracks, which may indicate a significant foundation defect. We recommend a qualified engineer be retained to determine the significance of the foundation movement.

*Cracking is common in concrete walls. Minor cracks caused by shrinkage or settling can be found in even relatively new foundations. Moderate or larger cracks may indicate ongoing settling or movement and the eventual need for underpinning or foundation repair. There is no way to determine if a crack will grow in size or if new cracks will form. Most large cracks were once small. The best way to estimate the likelihood of future movement may be to monitor the number and size of cracks over a period of time.*

We observed tilting or "rotation" in several of the foundation walls.

*Rotation or foundation leaning is not unusual in older foundations. The weight of the building on the outer portion of foundation wall causes the concrete foundation to lean or rotate. The amount of leaning can be influenced by damp soil beneath the foundation walls from poor drainage. Foundation movement may continue until repair, reinforcement, or replacement becomes necessary.*

We observed substantial unevenness in several of the building floors. We recommend a qualified engineer be retained to determine the significance of the foundation movement.

Additional movement may occur, eventually necessitating foundation repair.

Future movement in the foundation and structure should be expected.

This foundation shows indications of substantial previous movement. Future movement in the foundation and structure should be expected.

A common repair method for foundation settling is "underpinning," where steel pipes or concrete piers are placed deep into the soil under the concrete foundation walls. A qualified engineer should be consulted to determine if or when underpinning may be advisable.

### **Substructure Access**

The subfloor access is located left front.

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

Portions of the foundation were not accessible to our inspection.

*Access is often obstructed by insufficient clearance beneath the floor framing, by ducting, pipes, stored items, finished wall surfaces, or other obstructions to visual examination. Wherever possible, access should be provided to these areas so that an inspection can be made. With access and opportunity for inspection, defects may be found in the inaccessible areas.*

Approximately 30% of the foundation was visually accessible during our inspection.

The building foundation and structure were mostly inaccessible to our inspection.

Our ability to fully examine the foundation and substructure framing was limited by ducting, pipes, wall surfaces, insufficient clearance, floors, and other obstructions to our view.

There is no access below the lower floors and the foundation in this area was not accessible to our inspection.

Portions of the subfloor area and foundation were viewed from adjacent areas only, due to insufficient access. We recommend full substructure access be provided.

### **Framing**

The primary floor framing consists of one-inch thick (nominal) decking boards installed over two-inch thick (nominal) joisting,

Portions of the floor framing are too close to the subfloor soil. Proper clearance, necessary to allow ventilation and reduce the potential for decay, is 18 inches below the floor joists and twelve

inches clearance below the beams that support the floor framing. We recommend adequate clearance be provided below the floor framing.

Several aspects of the substructure framing are outdated and would be considered substandard according to modern construction practice. This framing may need modification during future seismic upgrading.

We observed several stains on the subarea framing, apparently indicating previous water entry or leakage. A current pest control report should be consulted concerning the presence of decay or other moisture-related damage.

*Moisture stains indicate previous water penetration. Stains are commonly found around bathroom and kitchen waste piping and at the building perimeter, and may indicate previous leakage that has since been repaired. Any indications of active leakage or moisture-related damage should be promptly repaired by a qualified contractor.*

The foundation is not equipped with anchor bolts.

*Anchor bolts and other devices are used to secure the framing to the foundation to resist displacement during earthquakes or high winds. The modern standard calls for bolting at least every six feet, with bolts within the last twelve inches of each piece of sill plate. Buildings greater than one story or on hillsides may require additional bolts and other seismic devices.*

We recommend anchor bolts, other seismic connectors such as hold-downs, and substructure wall bracing sufficient to provide a practical level of earthquake resistance be installed by a qualified contractor.

Portions of the foundation may be too soft to bolt into effectively and partial foundation replacement may be necessary to substantially improve the building's resistance to earthquakes.

The seismic components are outdated by modern standards and we recommend a qualified engineer be retained to design or specify seismic upgrades appropriate for the building.

### **Substructure**

The ventilation provided to the subfloor area beneath the building is not adequate. We recommend adequate subarea ventilation be provided.

*Under-floor areas should be provided with ventilation openings that have an area not less than one square foot for each 150 square feet of under-floor area. Openings should be provided close to the corners and should provide cross ventilation. The vent openings should be distributed equally along the length of at least two opposite sides and should be covered with ¼-inch wire mesh. Four by fourteen inch vents are typically installed every six to eight feet. There are many ways to provide ventilation and the best method should be decided after consulting a qualified contractor or the local building department. If natural cross-circulation is not obtainable with vent openings, it may be necessary to install a mechanical venting system with fans and ducts.*

The soil may be the expansive (adobe) type, which is a common soil condition.

*Expansive soils typically expand when wet and shrink upon drying, which can cause seasonal movement in the foundations, walls, and floors. Modern foundations designed for expansive soils*

*have piers that penetrate the soil to a deeper level where there is a more consistent moisture content. Maintaining a consistent soil moisture content by periodic watering of adjacent planted areas in summer and avoiding excessive subarea dampness in winter can help reduce seasonal movement. We are not qualified to determine soil types or conditions. For a determination of the soil type and conditions in this area, a geologist or soils engineer should be consulted.*

The subarea was damp in several places at the time of our inspection.

*Minor periodic moisture beneath many structures is common and should be expected. Substantial or continuous water entry, if it is found to occur, should be eliminated by installing an effective drainage system.*

Portions of the subarea soils are covered with sheet plastic, which may have been installed to reduce condensation on the framing from subarea moisture.

*Vapor barriers are sheets of plastic laid over damp soils in a crawlspace, and are intended to reduce the humidity of the crawlspace by trapping moisture against the soils.*

## **Foundation General**

We recommend this foundation be examined by a qualified engineer to determine the extent of foundation repair or replacement necessary to provide adequate structural support and earthquake resistance.

## **Below Grade Rooms**

The building has a full basement.

Floors that are below the exterior soil level may be subject to water or moisture entry, especially in very rainy weather. It is not unusual to find occasional or unexpected water entry in below grade areas that have been dry for years.

The lower level floors are carpeted and the walls are covered with framing and finished wall surfaces.

There are indications of previous moisture in the basement.

Concrete slab floors located below the exterior soil level tend to absorb moisture from damp soils below the concrete. Carpeting, especially wall to wall, placed on the slab floor will restrict evaporation and create a potentially attractive place for mold growth. These areas should be checked regularly for dampness, stains, visible mold, or musty odors. Applying a waterproof coating, such as Dryloc Masonry Sealer, to the concrete can prevent or reduce moisture entry. Carpet removal is sometimes the most effective solution. One alternative is to have the concrete painted and to use loose area rugs, which can be easily lifted and dried should moisture entry occur.

There are below grade wood floors. The areas beneath these floors were inaccessible to our inspection.

*There is a potential for hidden decay or termite damage beneath wooden floors when they are placed directly over concrete or soil. A destructive examination may be the only way to determine*

*the condition of the inaccessible areas. A qualified pest control firm should be retained to determine if there are indications of potential damage.*

There is a drain in the lower concrete floor near the furnace.

*We suggest the floor drains be tested for blockage and water be poured into floor drains periodically to prime any traps that may be present. We do not test floor drains, and recommend they be tested for blockage. If a floor drain emits an odor of sewer gas, it may be connected to plumbing drains and the drain trap may have dried out. The drain trap may be primed by pouring water into the drain, and the trap seal maintained by pouring a small amount of mineral oil into the trap on top of the water to prevent evaporation.*

# ELECTRICAL

## Electrical Service

The main service wires run overhead above ground to the building at the front.

The service wires are in contact with tree branches. We recommend the tree branches be trimmed away from the main wires by a qualified contractor. Tree trunks and branches can damage overhead electrical wiring. The wiring between the main power pole and building is often the property of the local utility provider who, in some cases, will trim trees away from the wires. Before working near these wires, the power company should be contacted to disconnect the power.

## Main Panel

The main breaker panel is at the front exterior. We estimate the capacity of this system to be 100 amps.

This capacity should be adequate for normal electrical use.

Both 120- and 240-volt service is provided.

The grounding system appears outdated and may not function effectively in some situations. We recommend a driven grounding rod be installed to upgrade the main panel grounding.

*Modern electrical services are typically grounded to the water piping, a driven rod in the earth, and/or steel rods embedded in the foundation. Older electrical services are typically grounded only to the water piping. A grounding conductor is often visible at the main panel, but it is not possible to locate the grounding connection. The gas piping and other metallic interior piping should be bonded to the grounding system.*

## Breaker Subpanel

There is a breaker subpanel located in the lower kitchen.

This panel is an outdated Federal Pacific Stab-Lok brand. There has been some recent concern that panels of this type, and other discontinued brands, may not operate safely in some conditions. We recommend the installation of a new panel be considered to eliminate potential risks associated with outdated panels.

We recommend subpanel replacement be considered for greater safety and convenience.

## Wiring

The building is wired primarily with knob and tube wiring, and Romex (nonmetallic sheathed cable or NMC).

*Most buildings prior to the 1950s were wired with knob and tube systems. In some building jurisdictions, knob and tube wiring with plastic insulation was used until the 1960s. Over time, the brittle insulation on older wire breaks down, especially at ceiling mounted light fixtures as these lights expose the wiring to heat over a long period of time. The splices in knob and tube systems are soldered, and overloads can melt the solder, causing loose connections and a possible fire hazard. Using only 15-amp fuses or breakers can reduce the potential for overloading.*

## **Light Fixtures**

Several closets have exposed bulb light fixtures. Incandescent light fixtures should be used in closets only when located over the door or on the ceiling and at least twelve inches from storage areas. Exposed bulbs and pendant lights should not be used. We recommend fluorescent lights be used in closets as they are cooler and require less clearance from storage areas.

## **Other Fixtures**

A ceiling fan has been installed in the upper room. Ceiling paddle fans typically require special boxes for support and should not be supported solely by a lighting receptacle box. In most installations, an inspector cannot directly view the box supporting the fan. To determine if a paddle fan is properly supported, it may be necessary to consult a qualified electrician.

## **Receptacles and Switches**

There are both two-hole and three-hole type receptacle outlets.

The number of outlets or receptacles available for use is fewer than required in new construction, which encourages the use of extension cords and can result in hazardous conditions. We recommend additional outlets be added as needed for convenience and safety.

We observed several ungrounded three-hole outlets. We recommend each three-hole outlet be examined by a qualified electrician and properly grounded as needed.

*Ungrounded three-hole outlets, also known as "open grounds," are common in older buildings and typically occur when two-hole outlets are replaced with three-hole types without adding a grounding wire. Properly installed three-hole outlets have a third grounding wire and are necessary for appliances with three-prong plugs. Using a three-prong plug in an ungrounded three-hole outlet is potentially hazardous. The accepted means of correcting this condition include replacement with a two-hole receptacle, installation of a proper grounding wire to the outlet, or replacement with a GFCI receptacle.*

An outlet in the upper level is wired in reverse polarity. The hot and neutral wires should be connected so the small slot is connected to the hot wire and the large slot to the neutral wire. We recommend the reverse polarity be corrected.

*Reverse polarity is a defect where the hot and neutral wires to an outlet are reversed (or cross wired). This is a potential safety hazard, but is usually easily corrected. The smaller outlet slot (brass terminal) should be connected to the hot wire (black) and the large slot (silver terminal) to the neutral wire (white). The standard since 1948 has been to provide electrical equipment with polarized plugs.*

We found only one GFCI-protected outlets. They are relatively inexpensive and provide an important margin of safety. We recommend they be installed as a safety upgrade. Defective in upper bath

*Ground fault circuit interrupters are breakers or receptacle outlets designed to protect against electrical shocks. In recent years, most jurisdictions have required ground fault protection for outlets in bathrooms, exteriors, basements, and garages (except those in a designated appliance location such as for laundry equipment). Recent regulations require GFCI protection at all kitchen countertop and wet bar receptacles. A single GFCI receptacle may be used to protect*

*other outlets downstream from it on the same circuit. GFCI outlets and breakers have test buttons that should be operated periodically to assure the devices are functioning properly.*

### **Exterior Electrical**

The exterior outlets are not GFCI-protected as required in new construction (see above). Rear patio

Nonmetallic sheathed cable (Romex) has been used in several places at the rear exterior. We recommend the improperly exposed Romex Cable be replaced with proper exterior wiring or conduit.

## **PLUMBING**

### **Main Water Supply**

The main shutoff valve for the water supply is at the right exterior.

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

We measured the water pressure at 70 pounds (PSI). Pressures between 40 and 80 pounds are considered to be in the normal range.

### **Interior Water Piping**

The water supply piping is mostly galvanized steel with some copper piping added. Mineral deposits and rust tend to accumulate in galvanized piping, resulting in reduced water flow. The extent to which this occurs depends on the type of water and the age of the piping. In the course of remodeling, it is generally best to replace older galvanized piping with copper, at least in the portions that are modified.

Portions of the water supply piping are in generally worn condition. The need to replace portions of the water supply piping in the near future should be anticipated.

We observed a noticeable drop in the water flow at several plumbing fixtures when two or more valves were operated at the same time.

The interior water supply and waste piping systems were mostly inaccessible to our inspection.

We recommend a history of any previous leaks or insufficient flow be obtained from the current residents.

### **Angle Stops**

*Angle stops are shutoff valves normally found beneath sinks and toilets in modern construction to provide a convenient disconnect in case of leakage, or to facilitate repairs. These shutoff valves are rarely used and may "freeze" in place or leak when operated. Angle stops should be operated periodically to keep the valves functional. We do not normally turn these valves during an inspection as this may cause them to leak.*

### **Exterior Piping**

The hose faucets are not equipped with anti-siphon valves as is required in new construction. We recommend anti-siphon devices be installed to prevent the accidental flow of waste water into the water supply piping.

The PVC plastic piping used in the irrigation system is exposed to sunlight in several places. Plastic piping breaks down from exposure to sunlight, and should be wrapped or painted for protection.

### **Waste Piping System**

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

The waste piping was mostly inaccessible to our inspection.

The underground waste piping that runs from the building to the main sewer may be original, and piping of this age is often worn or damaged in the underground portions. Old sewer piping is often

blocked or damaged by roots and other obstructions. We recommend a history of any previous drain blockages be obtained.

We recommend sewer laterals be examined for defects by a qualified plumber using special video equipment designed for this purpose.

There is a cleanout for the waste piping system at the right.

We recommend a history of any previous leaks, waste blockage, or overflow be obtained.

ABS waste piping at the right exterior is exposed to potential solar damage. We recommend all exposed ABS piping be painted or wrapped for solar protection.

The waste piping is not properly supported in the furnace room. We recommend proper waste pipe supports be installed as needed.

*Standard requirements for piping supports are as follows: ABS plastic every four feet, cast iron every five feet and at least within 18 inches of each hub, screwed steel-cast systems every twelve feet, and copper piping 1½ inches or larger in diameter should be supported at ten foot intervals.*

## **Gas**

The gas meter is at the left exterior.

The gas shutoff valve is on the vertical pipe to the left of the meter.

## **Plumbing General**

*Angle stops are shutoff valves normally found beneath sinks and toilets in modern construction. They provide a convenient disconnect in case of leakage and facilitate repairs. These shutoff valves are rarely used, and may “freeze” in place or leak when operated. Angle stops should be operated periodically to keep the valves functional. We do not normally turn these valves during an inspection as this may cause them to leak.*

*Waste piping should be cleaned out periodically to remove any accumulation of grease, hair, or dirt, and to help prevent future debris blockage and subsequent drainage failure. We do not inspect buried, or otherwise inaccessible, supply or waste piping.*

*The gas and water piping was not fully accessible and an examination of each connection was not made. The standard test for gas leakage is to have the piping pressure tested. This is sometimes required before the gas can be turned on after it has been disconnected. With testing and a close examination of all the piping, leaking or other defects may be found.*

*We recommend storing a large wrench near the main gas valve so the gas can be shut off quickly in an emergency. To shut off the gas, turn the valve 90 degrees so the handle is at a right angle to the pipe. Gas valves are often difficult to turn and the small earthquake wrenches sold at hardware stores may be too small to operate these valves easily. We recommend testing the valve periodically by turning it slightly to see if it moves. A plumber or the local utility company could adjust or lubricate this valve if necessary to allow for easy operation.*

*Plant watering and irrigation systems are not included in this inspection.*

## **WATER HEATING**

### **Water Heater**

There is a 40-gallon gas-fired water heater right exterior compartment. It shows moderate wear.

The gas connector is too short and could break in an earthquake. We recommend a longer gas connector be installed.

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

*A temperature and pressure relief (TPR) valve is a safety valve that releases excess pressure from the water heater in the event the regulator fails. It is an important safety device that can prevent a dangerous explosion. Hot water may occasionally drip or spray from the valve discharge pipe, triggered by changes in water pressure. Leaky valves may fail from encrusted mineral residue, and should be replaced. Most TPR valve manufacturers recommend the valve be tested once a year.*

The TPR valve discharge pipe terminates inside the compartment. We recommend the TPR discharge piping be routed to the exterior of the building to a readily observable location so that any valve leakage can be readily detected.

The water heater is equipped with seismic restraints to prevent movement during an earthquake. The restraints are loose and we recommend they be tightened.

### **Water Heater Maintenance**

*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. Attach a garden hose to the drain valve at the bottom and open the valve until the water runs clear. Drain valves commonly drip, and can be repaired by installing a plastic cap. The temperature adjustment control should be kept in the middle range; the water temperature should never be set hot enough to scald someone accidentally. The life of a water heater may also be extended by replacement of the sacrificial anode. These are generally designed to last only five years. Replacement anodes can be obtained at plumbing supply stores.*

## CENTRAL HEATING

### Furnace

There is a gas-fired, forced-air furnace in the lower level.

We operated the heating system and it appeared to function properly.

The furnace is in a bedroom closet, which is a potentially hazardous location. We recommend the furnace be moved to a safe location.

This area is not provided with adequate combustion air. We recommend this installation be modified as needed to provide the adequate fresh air supply necessary for safe operation.

*Inadequate air supply can cause incomplete fuel combustion and may produce hazardous byproducts of combustion, such as carbon monoxide. A furnace or water heater compartment should have two air openings leading to the outside, one near the floor and the other near the compartment ceiling. These openings should provide at least one square inch of ventilation for each 1000 BTUs input listed on the appliance rating plate. Combustion air openings should be screened, except for those terminating in an attic. Screening may require periodic cleaning to prevent blockage from dust buildup. Openings should not be blocked by personal property.*

We were unable to operate the lower thermostat and it appears to be nonfunctional. We recommend the thermostat be repaired. lower

The gas connector is too short and could break in an earthquake. We recommend a longer gas connector be installed.

Only a small portion of the heat exchanger in the furnace was accessible to visual inspection.

*A heat exchanger is a metal chamber that encloses the flame and transmits heat to the circulating air. With age and use, cracks or rust holes can develop in heat exchangers. Fumes from the burners may flow through the exchanger wall and enter the living area. We advise installing carbon monoxide detectors in several interior rooms to warn occupants if the exchanger produces hazardous gases. Heat exchangers should be carefully examined as part of routine servicing. Only a small portion of a typical heat exchanger is accessible to visual inspection and we cannot guarantee the absence of cracking.*

The furnace is equipped with a fan-powered, induced-draft, venting system.

*The purpose of the fan is to draw the exhaust fumes through the heat exchanger to increase furnace efficiency. Induced draft furnaces of this type are typically rated in the plus 80% efficiency range, and are often referred to as "Plus-80" systems. The heat from burning natural gas, and the noncombusted gases or fumes, are drawn through tube-like or serpentine heat exchangers that have a large surface area. More efficient furnaces tend to operate at higher internal temperatures and the heat exchangers are exposed to moisture created by natural gas combustion. These conditions have led to premature heat exchanger failure in some furnaces after only five or ten years of use. These heat exchangers are almost completely inaccessible to inspection without furnace disassembly. We recommend annual inspections of these furnaces be made by a qualified heating contractor. Some manufacturers are covering the cost of heat exchanger replacement and we suggest copies of any warranties be obtained for future reference.*

**Ducting**

Warm air is distributed to the conditioned spaces through a ducting system.

**Heating General**

This equipment does not appear to have been recently serviced. We recommend a qualified firm be retained to service this equipment. Servicing should be performed annually as part of routine maintenance. Significant defects may be found in this equipment during proper servicing.

## INTERIOR

### Walls and Ceilings

The interior wall and ceiling surfaces are primarily plaster.

Living room has open beam ceilings with exposed wood decking.

The ceilings are unusually low in several places . Rooms with ceilings that are less than seven feet six inches high may not be considered “habitable” by local building departments. These rooms should not be counted as bedrooms in a property description. There are exceptions to the general rule, which allows for sloping ceilings and low beams. The local building department should be consulted to determine their requirements as to proper room use.

There are several cracks in the interior surfaces. Surface cracking is common and periodic repair should be expected as part of routine maintenance.

The interior surfaces appear recently painted.

### Interior Moisture

We recommend the kitchen area be monitored periodically for future leakage and repairs be made if new leakage occurs.

The floors are stained in several places and we recommend they be monitored, repaired or replaced as needed.

### Floors

We observed sloping or unevenness in the floors, which is not unusual in buildings of this type and age. Future movement in the building floors should be expected.

The entry way has a ceramic tile floor at the lower level.

Several of the tiles are cracked and may soon need replacement.

### Stairs

The overhead clearance above the stairway is not sufficient and could cause injury. We suggest a sign be placed over the stairway to warn persons of impaired overhead clearance. The minimum overhead clearance in modern construction is six feet eight inches above a line drawn along the leading edge of the steps.

### Interior Railings

There are large openings in the upper room railings, creating a potentially unsafe condition. We recommend proper railings be installed as needed for safety.

*Railing Safety: Staircases with four or more steps should have handrails that are between 1½ inches and two inches wide and that are shaped so that the handrail can be grasped. This requirement, while often ignored, is important for safe stairway usage. Handrails should be installed so that they are 34 to 38 inches above the leading edge of the stairway treads. Handrails should return to the railing, post, or to the floor. They should not end in a projection that could be hooked by clothing or other items. Large railing openings, which may allow a child to fall through, should be modified for safety. Modern standards call for openings to be less than four inches in diameter. The standard has been recently changed to four inches as it is found that many children can easily slip through a five-inch opening.*

We have provided an enclosure at the end of this report describing proper handrail and guardrail design.

## **Windows**

The windows are primarily aluminum-framed sliders.

Several dual glazed or double pane energy efficient type windows have been installed.

*Dual glazed windows reduce energy loss and noise transmission. A common problem with dual glazed windows is a failure in the seals, which allows moisture entry and allows condensation or fog to form between the panes of glass. This condition is often not visible during our inspection and can occur at different times due to changes in temperature. It is possible to have each window tested for seal failure. This determination is beyond the scope of our inspection. The only effective repair is typically windowpane replacement. Newer windows may be covered by the manufacturer's warranty.*

Several windows do not operate and we recommend they be adjusted or repaired as needed for convenient operation. locked

There are several cracked windowpanes and we recommend they be replaced as needed.

Several window screens are missing and we recommend screens be installed as needed.

## **Doors**

Several doors stick and we recommend they be repaired to operate properly.

Several of the building doorframes are noticeably unsquare, which is usually caused by foundation settling or movement.

There are several low doorways. We recommend these doors be clearly marked and/or padding be installed to prevent head injuries.

## **Smoke Detectors**

We did not locate any smoke detectors. We recommend smoke detectors be installed as needed to comply with modern fire safety standards.

*We strongly urge all property residents to test smoke alarms by pressing the test button as soon they move into a new property and again each month. Most batteries should be changed every six months. This is easy to remember if you change batteries at the same time as you adjust your clocks for daylight savings time semi-annually. Smoke detectors should be installed on every floor and in hallways near sleeping areas. Most jurisdictions now require smoke detectors also be installed in each bedroom in new construction or when modifications exceeding \$1,000 in value are made. Direct-wired smoke detectors should also have backup batteries so they will function in a power outage. Fire extinguishers should be provided in kitchens and garages for emergency use. We also suggest carbon monoxide detectors be installed in buildings with gas-fired heating systems.*

We recommend carbon monoxide detectors also be considered as a safety improvement.

**Interior General**

*We operated a representative sampling of the windows. All windows were not checked for proper functioning, cracked or broken glass, or for the presence or condition of screens. This inspection does not include areas that are obscured by furniture, carpets, coverings, or any other items.*

*We do not perform a survey of the floors for slope or uniform elevation as part of our standard inspection. We can return with special equipment and provide a floor level survey to determine the extent of floor slope for an additional fee upon request.*

## FIREPLACE AND CHIMNEY

### Wood Burning Stove

There is a wood burning stove in the upper living room.

We recommend the operating manual for this unit be obtained and checked for proper clearances and operation procedures.

### Fireplace

There is a masonry fireplace in the upper bedroom.

The fireplace has a brick firebox.

*Fireplaces should be checked periodically by a licensed chimney sweep or qualified chimney contractor. This should be done annually if they are used regularly (once a week or more). They should also be inspected after any indications of movement from settling or earthquake activity. Determinations as to whether fireplaces or chimneys have adequate draw, or are subject to smoking, or as to the soundness of chimney flue tiles, brickwork, or sheet metal are beyond the scope of our inspection.*

There are several large cracks in the fireplace facing, probably from settlement or movement. We recommend the facing be examined and repaired as necessary by a qualified contractor.

The area above the firebox has not been fully "parged" or covered with mortar to provide a smooth transition between the firebox and the bottom of the chimney. The exposed brickwork in this area can trap soot or combustible creosote, creating a potential fire hazard. We suggest the throat area be fully parged as part of any future fireplace repairs.

There is no damper and we recommend one be installed. Installing glass fireplace doors could have the same effect as a damper.

*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.*

The portion of the hearth that extends into the room is too small by modern standards. Persons using the fireplace should take special care to keep burning materials well inside the fireplace.

### Chimney

The fireplace has a brick chimney.

*Most older masonry fireplaces and chimneys installed before 1970 do not have steel reinforcing and do not have the same strength or resistance to earthquakes, as do modern masonry or prefabricated chimneys. Older chimneys may have been subject to multiple seismic events and often have hidden cracks, breaks, damaged flue tiles, and other weaknesses not apparent during a general home inspection. The only way to determine if a fireplace and chimney are safe to use is to have a detailed inspection of the chimney and flue interior by a qualified specialist.*

There is a second chimney at the left. There are gaps at the chimneys siding connection and we recommend repair to prevent water or weather entry.

We observed looseness in the portion of the chimneys that extends above the roof. Loose chimneys can pose a seismic or fire-safety hazard. We recommend the chimneys be examined by a qualified contractor and braced, reinforced, or replaced as needed.

We recommend the chimneys and fireplace be examined by a qualified contractor.

We recommend replacement of the chimneys with a lightweight metal chimney be considered for earthquake safety.

The flue interiors were mostly inaccessible to our inspection.

The right chimney ash pit door is in the bedroom compartment and we recommend it be relocated to prevent the escape of hot ashes, which could be a fire hazard.

There appears to have been settlement in the hearth at the upper bedroom. Additional settlement should be expected and repair or reinforcement may eventually be necessary.

We observed indications of settling in the chimney. Settling and differential movement between the chimney and the rest of the building is common in older buildings. Minor settling can cause cracks between the chimney and building exterior, allowing rainwater entry. The chimney should be monitored periodically for indications of future movement.

*Minor settlement is not unusual in older masonry chimneys. Substantial settling may open cracks between the firebox and chimney, creating a potential fire hazard. Chimneys that have settled should be checked annually by a qualified chimney contractor to determine if they are safe to use. Small or moderate settling cracks in the firebox or chimney interior may be relatively simple to repair. Larger cracks or substantial settlement may require chimney replacement or removal.*

### **Fireplace and Chimney General**

We recommend a qualified fireplace contractor be retained to perform a safety inspection of the fireplace and chimney.

## KITCHEN

### Upper Kitchen

The kitchen has ceramic tile countertops. It shows moderate wear.

Outlets near the kitchen sink are not GFCI-protected. We recommend ground fault circuit interrupter protection be provided as an upgrade. The cabinets show moderate wear.

### Lower Kitchen

The kitchen has plastic laminate countertops. It shows moderate wear.

The kitchen has stainless steel sink. The sink drain is slow and we recommend it be cleared.

The kitchen has a gas range. It shows moderate wear.

The exhaust fan is noisy and we recommend it be repaired or replaced.

The exhaust fan is an unducted type that is not connected to the exterior. The fan returns the filtered air back into the living space.

Outlets near the kitchen sink are not GFCI-protected. We recommend ground fault circuit interrupter protection be provided as an upgrade.

There are several ungrounded two-hole receptacles. We recommend properly grounded GFCI-protected outlets be installed for safety.

The cabinets show moderate wear. The kitchen has ceramic tile flooring. Several of the floor tiles are cracked.

There is a flexible plastic water supply connector at the sink water supply. These connectors may fail and we recommend metal-sheathed, "burst proof" type connectors be installed to reduce the potential for leaks and water damage.

## LAUNDRY

### Laundry

There is a laundry area in the lower level.

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

We recommend a catch pan and drain be installed beneath the washer to prevent damage that could occur should the washer leak or the drain overflow.

We suggest the clothes washer hose connectors be upgraded with metal-sheathed “no-burst” types to reduce the potential for hose failure.

The clothes washer standpipe is too short. The minimum length is 18 inches. We recommend a proper washer standpipe be installed. Gas piping is provided for the clothes dryer.

## BATHROOMS

### Upper Bathroom

This bathroom has a combination bathtub and shower. The bathtub is cast iron.

The tub perimeter caulking is worn and we recommend it be carefully caulked to prevent water entry. The ceramic tile shower walls are in generally worn. Several shower tiles are cracked.

We recommend the installation of a new shower walls be considered.

The shower wall surface does not extend as high as the showerhead. The exposed wall surfaces above may be subject to water entry and damage. We recommend this area be kept well painted and caulked, or the shower surface be extended to cover the wall area that includes the showerhead.

There is a noticeable drop in water flow at the shower when more than one valve is operated at a time.

The sink stopper is defective and we recommend it be adjusted or repaired.

Ventilation is provided by a window.

A GFCI outlet does not disconnect properly when tested and we recommend it be repaired or replaced.

### Lower Bathroom

This bathroom has a shower. The plastic shower walls show moderate wear.

We recommend the shower wall connections be carefully cleaned and caulked as needed.

The shower has a glass enclosure.

The glass shower enclosure is an old untempered type and we recommend replacement with a tempered glass enclosure for safety.

*Tempered glass became commonly required in shower stalls and enclosures during the late 1960s. 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.*

The showerhead is loose in the wall and we recommend it be properly secured. There is a wall-mounted china sink.

The sink faucet leaks and we recommend it be repaired.

There is a flexible plastic water supply connector at the toilet water supply. These connectors may fail and we recommend metal-sheathed, "burst proof" type connectors be installed to reduce the potential for leaks and water damage.

The flooring is ceramic tile. Ventilation is provided by a window.

This room has three-hole receptacles. We recommend GFCI protection be added for greater electrical safety.

A GFCI outlet does not disconnect properly when tested and we recommend it be repaired or replaced.

### **General**

*Caulked joints should be checked frequently and recaulked as necessary. Proper caulking prevents water penetration and damage to walls and floors. Before caulk is applied, the surfaces should be cleaned carefully and any loose caulk should be removed. A good quality bathroom caulk, such as silicone, should be used. Bathrooms are areas of high humidity and special care should be exercised to keep them well ventilated. Windows should be left open when showering or bathing, and fan-powered vents should be used when available.*

## ENVIRONMENTAL

### **Hazardous Materials**

*Various potentially hazardous materials have been used in the construction of buildings over the years. Many naturally occurring materials and man-made building materials have been found to be hazardous or to have adverse environmental impact. These include but are not limited to asbestos, formaldehyde, molds, lead paint, electromagnetic radiation, and radon. Buried fuel tanks may pose an environmental hazard. Hazardous materials, product liability, and environmental hazards are not included in the scope of our inspection. For information about hazardous materials, call the Environmental Protection Agency in San Francisco at (415) 744-1500.*

### **Mold and Fungus**

A determination as to the presence of such organisms is beyond the scope of this inspection. We can return and collect samples for laboratory analysis for an additional fee upon request.

*Some people are sensitive to molds and can become ill or experience mold-related health problems when exposed to molds in the air. The elderly, infants, and people who are immune compromised (people on chemotherapy, AIDS patients, etc.) are particularly susceptible to allergenic and potentially toxic molds. Molds are a type of fungus. They grow everywhere and can be found in almost every room or space. The presence of elevated interior mold activity typically indicates excessive moisture from interior or exterior sources and insufficient ventilation. Mold conditions that you can see or smell should be corrected and the first step is to eliminate the source of moisture necessary for their growth. Mold growth can be prevented by keeping buildings dry. Molds can usually be removed easily from hard materials like glass or metal using a household cleaner. Softer materials, like sheet rock or wood, which contain cellulose, become food sources for mold, are difficult or impossible to clean effectively, and may need to be removed. A determination as to the presence of mold or conditions conducive to its presence is beyond the scope of this inspection.*

## **PRIMARY RECOMMENDATIONS**

### **Property Description**

We recommend local slide maps be reviewed to determine the proximity of this lot to areas of previous or active slides.

We recommend the local building and zoning departments be contacted to determine if proper permits for these modifications have been obtained and if not, what steps are necessary to obtain any required permits or approvals.

### **Stucco Siding**

We recommend the stucco cracking be repaired as needed to prevent water entry.

We recommend a history of stucco crack repairs be obtained.

### **Trim – Left front Addition**

We recommend the window, door, and other flashings be examined by a qualified contractor and proper flashings be installed as needed to provide a proper weather tight installation.

### **Decks**

We recommend self-adhering strips or non-slip paint be applied to provide safer walking surfaces.

There is wood-soil contact in several places and we recommend all wood-soil contact be eliminated.

The framing does not appear adequate at the right and we recommend it be properly reinforced by a qualified contractor.

We recommend the building connections be adequately bolted by a qualified contractor.

We recommend the building connections be properly flashed or periodically recaulked to prevent moisture and damage.

We recommend the installation of adequate footings be considered.

### **Exterior Railings**

Handrails are not provided for several exterior staircases and we recommend proper railings be installed as needed for safety.

We recommend proper railings be installed as needed for safety.

The railings are damaged in several places and we recommend they be repaired as needed.

### **Walkways**

There are several large cracks and we recommend they be repaired as needed for safe foot traffic.

The rear walkway surface does not have sufficient slope to drain properly and we recommend it be modified as needed to prevent significant amounts of standing water.

### **Steps**

The wooden on-grade staircases are in poor condition and are potentially hazardous. We recommend they be repaired or replaced for safe use.

Several of the steps are uneven, creating potential trip hazards, and we recommend the steps be modified to provide consistent height at each step.

### **Grading and Drainage**

We recommend the curbs at the left front addition be properly flashed, sealed, or replaced as needed to prevent water entry.

We recommend special care be taken to provide adequate clearance (ideally six inches) to the adjacent soil as part of routine maintenance, to prevent moisture or insect pest entry in several places

We recommend a qualified soils engineer be retained to provide a professional opinion as to the potential for soil movement in this area.

We recommend any available information on the drainage system design be obtained for future reference.

We recommend the drainage be modified as necessary to properly drain the foundation area.

### **Retaining Walls**

We recommend the retaining walls be replaced by a qualified contractor.

We recommend adequate safety barriers be installed as needed.

### **Landscaping**

Plants and trees are growing against the exterior in several places and we recommend they be removed or trimmed away from the building to prevent damage and insect entry.

There are several large trees at this property and we recommend they be examined by a tree surgeon.

### **Fencing**

We recommend the fencing be repaired, reinforced, or replaced as needed.

### **Exterior Structures**

We recommend the local building department be consulted on requirements for safety barriers at decorative ponds.

## **Roof Flashings**

The mastic is worn in several areas. We recommend these areas be properly sealed to prevent leakage.

We recommend the exposed mastic be painted for solar protection.

## **Foundation**

We recommend a qualified engineer be consulted to determine the extent of concrete deterioration and which portions of the foundation will need replacement in the reasonably foreseeable future.

## **Substructure Access**

We recommend full substructure access be provided.

## **Framing**

We recommend adequate clearance be provided below the floor framing.

We recommend anchor bolts, other seismic connectors such as hold-downs, and substructure wall bracing sufficient to provide a practical level of earthquake resistance be installed by a qualified contractor.

The seismic components are outdated by modern standards and we recommend a qualified engineer be retained to design or specify seismic upgrades appropriate for the building.

## **Substructure**

We recommend adequate subarea ventilation be provided.

## **Foundation General**

We recommend this foundation be examined by a qualified engineer to determine the extent of foundation repair or replacement necessary to provide adequate structural support and earthquake resistance.

## **Electrical Service**

We recommend the tree branches be trimmed away from the main wires by a qualified contractor.

## **Main Panel**

We recommend a driven grounding rod be installed to upgrade the main panel grounding.

### **Breaker Subpanel**

We recommend the installation of a new panel be considered to eliminate potential risks associated with outdated panels.

### **Light Fixtures**

We recommend fluorescent lights be used in closets as they are cooler and require less clearance from storage areas.

### **Receptacles and Switches**

We recommend additional outlets be added as needed for convenience and safety.

We recommend each three-hole outlet be examined by a qualified electrician and properly grounded as needed.

An outlet in the upper room is wired in reverse polarity. We recommend the reverse polarity be corrected.

### **Exterior Electrical**

Nonmetallic sheathed cable (Romex) has been used in several places at the rear exterior. We recommend the improperly exposed Romex Cable be replaced with proper exterior wiring or conduit.

### **Interior Water Piping**

The need to replace portions of the water supply piping in the future should be anticipated.

We recommend a history of any previous leaks or insufficient flow be obtained from the current residents.

### **Exterior Piping**

We recommend anti-siphon devices be installed to prevent the accidental flow of waste water into the water supply piping.

### **Waste Piping System**

We recommend a history of any previous drain blockages be obtained.

We recommend sewer laterals be examined for defects by a qualified plumber using special video equipment designed for this purpose.

We recommend all exposed ABS piping be painted or wrapped for solar protection.

We recommend proper waste pipe supports be installed as needed near the furnace.

### **Water Heater**

We recommend a longer gas connector be installed.

We recommend the TPR discharge piping be routed to the exterior of the compartment to a readily observable location so that any valve leakage can be readily detected.

The restraints are loose and we recommend they be tightened.

### **Furnace**

We recommend this installation be modified as needed to provide the adequate fresh air supply necessary for safe operation.

We recommend the lower level thermostat be repaired.

We recommend a longer gas connector be installed.

### **Floors**

The floors are stained in several places and we recommend they be repaired or replaced as needed.

### **Interior Railings**

We recommend proper railings be installed as needed for safety.

### **Windows**

Several windows do not operate and we recommend they be adjusted or repaired as needed for convenient operation.

There are several cracked windowpanes and we recommend they be replaced as needed.

Several window screens are missing and we recommend screens be installed as needed.

### **Doors**

Several doors stick and we recommend they be repaired to operate properly.

There are several low doorways. We recommend this door be clearly marked and/or padding be installed to prevent head injuries.

### **Smoke Detectors**

We recommend smoke detectors be installed as needed to comply with modern fire safety standards.

We recommend carbon monoxide detectors also be considered as a safety improvement.

### **Wood Burning Stove**

We recommend the operating manual for this unit be obtained and checked for proper clearances and operation procedures.

### **Upper Fireplace**

We recommend the facing be examined and repaired as necessary by a qualified contractor.

There is no damper and we recommend one be installed.

We recommend a proper, safe hearth be installed.

### **Chimneys**

There are gaps at the chimneys siding connection and we recommend repair to prevent water or weather entry.

We recommend the chimneys and fireplaces be examined by a qualified contractor.

We recommend replacement of the chimneys with a lightweight metal chimney be considered for earthquake safety.

The ash pit door is in the bedroom compartment and we recommend it be relocated to prevent the escape of hot ashes, which could be a fire hazard.

### **Fireplace and Chimney General**

We recommend a qualified fireplace contractor be retained to perform a safety inspection of the fireplace and chimney.

### **Kitchens**

The lower sink drain is slow and we recommend it be cleared.

The exhaust fan is noisy at the lower kitchen and we recommend it be repaired or replaced.

### **Laundry**

We recommend a catch pan and drain be installed beneath the washer to prevent damage that could occur should the washer leak or the drain overflow.

We recommend a proper washer standpipe be installed.

The sink stopper is defective and we recommend it be adjusted or repaired.

### **Lower Bathroom**

We recommend the shower wall connections be carefully cleaned and caulked as needed.

The glass shower enclosure is an old untempered type and we recommend replacement with a tempered glass enclosure for safety.

The showerhead is loose in the wall in the lower bathroom and we recommend it be properly secured.

The sink faucet leaks and we recommend it be repaired.

There is a flexible plastic water supply connector at the toilet water supply. These connectors may fail and we recommend metal-sheathed, "burst proof" type connectors be installed to reduce the potential for leaks and water damage.kitchen too

### **Upper Bathroom**

The tub perimeter caulking is worn and we recommend it be carefully caulked to prevent water entry.

## **ENCLOSURES**

We have enclosed the following additional information. Please read carefully.

- Railing Safety

**Thank you for using Professional Home Inspectors. If you have any questions or if we can be of further assistance, please do not hesitate to call us at (510) 332-7441.**

**For additional information please visit our website at  
[www.professional-home-inspector.com](http://www.professional-home-inspector.com)**