



National Home Inspection Ltd.  
1055 Woodbine Avenue  
Toronto, Ontario  
M4C 4C2  
T: 416 467-7809

June 25, 2013

## INSPECTION REPORT

PROPERTY: Sample, Toronto, Ontario

INSPECTOR: Richard Gaughan

### INTRODUCTION

The following report is for use by the above client only. Recommendations by the inspector are located below each paragraph heading and have been identified as one of the following:

P: priority repair/safety concern within the next 1 year. M: monitor. G: general recommendation/maintenance.
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- ESTIMATED AGE OF HOUSE: ninety to one hundred years
- BUILDING TYPE: two storey detached
- FRONT OF HOUSE FACES: west
- UTILITIES STATUS: all on
- SOIL CONDITIONS: wet
- WEATHER: cloudy
- HOUSE OCCUPIED: yes
- CLIENT PRESENT: yes
- WATER SOURCE: public
- SEWAGE DISPOSAL: public

## **STRUCTURE**

1.01 Foundation: The original foundation walls are constructed of brick masonry. From a structural standpoint, the foundation appears to be in acceptable condition. The structural components in the basement (ie. foundation and flooring system) could not be fully examined due to the finished nature of the walls and ceiling. An addition is located at the rear and it has foundation walls that are likely constructed of retrofitted concrete blocks.

1.02 Water penetration: The basement walls and floors were examined for evidence of water seepage. It is usually not possible to determine the severity and regularity of such problems without monitoring the walls over several months. Most water problems are a result of non functioning eavestroughs, downspouts, or poor surface drainage.

M: evidence of past water seepage was noted through the foundation walls on the north and south sides of the basement. The stains were found to be dry during the inspection and it could not be determined whether they are a product of an older problem (for example prior to past water-proofing repairs to the foundation) or if in fact there are seasonal water leakage problems. The seepage signs noted will be due in part to improper surface drainage on all sides. Grading improvements are recommended on the exterior. The poorly functioning eavestroughs and downspouts will allow excessive water accumulation near the foundation and repairs should be completed as discussed.

M: the raised grade in the backyard (and the hill in the adjacent properties to the north) may have the effect of directing a large amount of surface water towards the house during a heavy rain or with snow melting in the Spring months. This can result in hydrostatic pressure beneath the basement floor with water saturating the soil. Consequently, it may eventually be necessary to install an interior foundation drain system and a sump pump beneath the concrete floor at the rear of the basement to completely eliminate water seepage as a consequence of hydrostatic pressure. Nevertheless, all grading and eavestrough repairs should first be completed on the exterior as discussed.

(Further investigation req'd to determine accurate cost)

G: a dehumidifier should be operated in the basement during the summer months to minimize humidity and condensation problems on the basement walls and floor.

1.03 Exterior walls: The exterior walls are structurally supported by a wood framed structure. The brickwork at the front of the house is a veneer and it is not a structural support for the house.

1.04 Interior framing: Most of the floor joists supporting the main floor could not be inspected due to the finished nature of the basement. These joists are composed of 2" by 8" lumber. The built-up wood beams in the middle of the basement provide intermediate support for the floors and walls above these locations.

M: the built-up wood beam in the middle of the basement is undersized and it should be strengthened with future planned renovations. Alternatively, the installation of two columns to reduce the span of the beam may be considered.

M: floor joists in a couple of areas of the basement have been lightly notched to accommodate some utilities. This has weakened the lumber and localized strengthening of the joists may be necessary.

M: metal joist hangers may have to be installed to improve support for the ends of the floor joists at the basement stairwell framing header (with future planned renovations).

1.05 Crawl spaces: A crawl space is present at the rear. They are often poorly insulated and ventilated, which could result in high humidity levels that should be kept under control. Ensure that there are no wood/soil contacts as a precaution against any wood boring insects.

M: the crawl space beneath the rear addition could not be accessed and the condition of structural components could not be verified. There is the potential for the presence of high moisture levels in the crawl space. It is recommended that the space be accessed to complete ventilation and sealing repairs if necessary.

1.06 Termites: Due to the finished nature of the basement, few of the structural and non structural wood members were visible. Consequently, the presence or absence of termite activity or damage could not be determined.

1.07 Roof framing: The visible roof framing in the attic is intact with no evidence of any significant structural problems. The attic was viewed from the hatchway only. It is apparent that the pitched roof at the rear of the house was constructed at a later date.

G: some localized roof sheathing repairs can be expected when next reshingling the roof.

## **GENERAL EXTERIOR**

2.01 Surface drainage: The land should show a positive slope away from the house on all sides. This ensures good surface drainage and reduces the possibility of moisture problems in the basement. An exterior stairwell drain is provided at the bottom of the basement walkout. It must be kept clear of debris.

M: due to a lack of proper access under the deck at the rear, correct surface drainage in this location is unknown. This area should be accessed and grading improvements should be completed as

required to ensure that all surface water is directed away from the foundation wall. This will necessitate removing some of the deck boards to gain access and should be coordinated with replacement of the deck.

M: the landscaping should be improved at the northeast corner (on the neighbouring property) to ensure proper drainage away from the foundation wall on the north side of this house. All debris/rubbish adjacent to the foundation must first be removed. This will have to be coordinated with the neighbouring homeowner.

M: the cracked and improperly sloped concrete walkway sections at the northwest corner should eventually be broken up and repoured. This should be coordinated with the neighbouring homeowner.

(Approximate Cost: \$1,000 to \$2,000)

P: in the interim, the seal between the walkways on the north and south sides and the foundation walls should be improved to reduce moisture infiltration. The use of a flexible caulking is advisable and all cracks and gaps should be sealed.

P: all debris in the stairwell drain should be removed.

P: the cedar tree at the northeast corner should be removed as it is too close to the building. The tree roots and branches may interfere with the foundation wall, drain pipes and siding materials on the house.

(Approximate Cost: \$600 to \$750)

M: as there is a large tree on the neighbouring front lawn, there is the potential for roots to interfere with the drain pipes. If backup through the drains occurs in the future, the waste pipe under the front yard should be checked for blockage.

2.03A Asphalt roofing shingles: Typically, this type of roofing material will last 15 to 20 years, though some of the heavier grade shingles will last up to 30 years. All flashings around roof projections should be checked annually to ensure that there is a watertight seal. Slopes that face south and west receive more sunlight and generally wear faster. The shingles in all locations were likely installed about seven years ago. There is one layer of asphalt shingles present in all locations.

M: some sections of the roof (typically on the north and east sides) may be prone to ice-damming problems. Ice-damming typically occurs when heat escaping from the house melts snow on the roof. The resulting water flows down the roof to the colder eaves where it begins to re-freeze. As ice forms a dam develops and this can result in water backing up under the shingles and into the house. Most ice-damming problems can be eliminated by providing a well insulated and ventilated attic space to ensure a cold roof surface. Additional eave protection with a waterproof membrane below the shingles or the installation of heating cables on top of the shingles that may also be considered if ice damming proves to be a problem in the winter months.

P: the tree branches overhanging the roof at the rear should be trimmed well away from the house.

(Approximate Cost: \$400 to \$500)

M: raccoon scat was noted on the upper rear roof near the plumbing vent beneath the upper roof overhang. Further raccoon activity and access to the roof should be discouraged. This will necessitate trimming some of the tree branches at the rear.

2.07A Brick Chimneys: They provide protection and a chase for exhaust flues from fireplaces and heating systems. The chimney should be plumb and square. A cap normally protects the top of the chimney and sheds water away to minimize deterioration of the masonry. The flashings between the chimney and the roof should be checked on an annual basis for a watertight seal. The brick chimney at the rear contains one flue and it services the water heater. The water heater flue is fitted with a metal liner, which is beneficial in preventing deterioration to the chimney.

The chimney has had its brickwork covered in a cement parging. This is often done to restrengthen and protect deteriorated masonry. The parging should be checked periodically for cracks and localized repairs can be expected.

M: the cement parging covering the chimney has deteriorated in some locations and localized repairs are required. Localized tuckpointing of the mortar between bricks is required to the section of the chimney between the two roof surfaces (if the chimney is maintained).

(Approximate Cost: \$300 to \$500)

2.08 Eavestroughs: They provide roof drainage and help prevent water collection around the foundation. The system must be kept free of debris and checked regularly for loose sections and leaky seams. The eavestroughs on all sides are made of aluminum. The downspouts discharge onto the surrounding land.

P: due to the overall condition of the poorly sloped eavestrough on the front porch, immediate replacement is recommended.

(Approximate Cost: \$200 to \$250)

P: larger downspouts should be installed at the northeast and northwest corners of the house. All downspout extensions should be improved to prevent the discharging water from ponding near the foundation.

(Approximate Cost: \$250 to \$300)

M: the installation of an additional downspout at the upper southwest corner should be considered (this will allow for removal of the eavestrough beneath the upper front gable end).

(Approximate Cost: \$100 to \$125)

P: the debris which has accumulated in the eavestroughs should be removed. Due to the close proximity of large trees near the house, it will be necessary to clean out the eavestroughs at least twice a year to prevent clogging of the system and to ensure a proper flow of water to the downspouts.

2.09A Masonry walls: The exterior walls at the front are composed of brick masonry. Minor mortar deterioration is not uncommon and should gaps develop between bricks, they should be tuckpointed. The brickwork was found to be in acceptable condition.

G: some of the mortar between bricks is loose or missing at the upper front and localized tuckpointing is required.

2.09B Aluminum siding: This is a very durable siding and relatively maintenance free. It should however, be washed every five years to prevent pitting of the surface caused by air pollutants. Aluminum siding is present on the front gable and at the upper northeast corner and it was found to be in acceptable condition.

M: the loose and poorly installed small section of aluminum siding at the upper northeast corner (above the rear addition roof) and it should be replaced. The plumbing vent partially recessed inside the vinyl siding material at the upper southwest corner should be extended as required.

2.09F Vinyl siding: Located in most locations at the rear, this is a durable siding and is relatively maintenance free. Caulking around window and doors frames should be monitored and resealed if gaps develop.

2.09H Cement stucco finish: This siding material is normally applied over a wood or wire mesh base and when installed properly can last in excess of thirty or forty years. Stucco siding is present in many locations on the north and south sides and it was found to be in acceptable condition. It has been applied over an older insulbrick siding material.

G: there are gaps and some damage to the stucco siding near the Hydro conduit on the south side and localized repairs are required.

2.09M Cement Pargings: Usually installed at the base of the exterior walls, this cement coating is designed to protect the foundation or brickwork from water damage. It is best applied to a steel mesh to ensure that it does not separate from the wall. A parging is present over the foundation walls on the north and sides and it is for the most part intact.

2.10A Exterior trim: All major openings in the exterior walls include trim to cover frames and provide a place to seal and flash sidings. The trim should be kept well painted and caulked. The exterior window frames have been covered in aluminum trim in most locations to minimize deterioration and reduce maintenance.

2.10B Soffits & fascia: The soffit and fascia protect as well as seal the attic and roof framing. The soffit is the horizontal overhang on the roof and the fascia is the vertical board to which eavestroughs are secured. Both should be kept well painted and checked for holes created by squirrels or birds. The soffits and fascia in some locations are covered in aluminum.

M: the eavestrough on the addition at the upper rear of the house is located directly above the exterior wall as the roof surface lacks an overhanging eave. There is also a lack of a proper eave on the north side of the house. This increases the likelihood of water seepage as a consequence of a clogged eavestrough and/or failing drip flashing on the roofing membrane. Ideally, an eave extension should be constructed to create an overhang above the exterior wall and this should be considered when next replacing the roofing membranes.  
(Further investigation req'd to determine accurate cost)

2.11A Wooden decks: The wood deck in the backyard is in fairly poor condition. A periodic coat of preservative or paint is recommended to maximize its life. There should ideally be no wood in contact with the soil. All boards, rails, and steps should be checked for soundness and possible rot on an annual basis.

The enclosed wood porch located at the front was found to be in acceptable condition.

M: the poorly constructed and sloped deck at the lower rear should be replaced due to its overall poor condition. Grading improvements should be completed at this time.  
(Approximate Cost: \$2,000 to \$3,000)

M: the front porch decking has been resupported with poured concrete in many locations. However, some of the original wood skirting below the perimeter of the porch is in contact with the soil and is a potential entry point for wood boring insects. All wood/soil contacts should be severed (see adjacent to the steps and the southwest corner column).

P: a handrail should be provided on the front steps to prevent a falling hazard.  
(Approximate Cost: \$200 to \$300)

2.12 Retaining walls: The concrete retaining wall adjacent to the basement walkout at the rear is in generally good condition.

P: the railing above the retaining wall at the rear should be improved (to block a potential falling hazard) and a handrail should be installed adjacent to the stairs.  
(Approximate Cost: \$500 to \$750)

## **ELECTRICAL**

3.01 Electrical service & panel: This home is provided with an overhead 120/240-volt, 100-amp service. The size of the service is considered adequate for the electrical requirements of the house. The main distribution panel is located on the south side of the basement. The main distribution panel is rated at 125-amps. The panel rating is adequate for the existing service size.

P: much of the wiring in the main panel has been messily installed and there are openings in the panel that must be blocked. All wiring in and around the panel must be properly reinstalled. The installation of a larger circuit breaker panel is recommended. The Hydro meter inside the house is redundant and both it and the old disconnect switch box can be removed at this time.  
(Approximate Cost: \$1,000 to \$1,200)

P: the electrical service is not properly grounded to the supply plumbing. A properly sized cable must be installed from the panel to the main water supply pipe at the front of the basement to ensure that the electrical system is safely grounded.  
(Approximate Cost: \$100 to \$150)

3.02 Distribution wiring: The visible distribution wiring in the house is composed of copper wire. The wiring is a combination of the original knob-and-tube circuitry extending out of the panel to plugs and outlets on the first and second floors, and more modern grounded two conductor cable present in the basement, kitchen and in some locations elsewhere in the house. The older wiring is ungrounded and is not recommended in kitchens or areas of the house where grounded outlets are required. If interior re-finishing is planned in the future, the original wiring should be replaced at that time. Due to the finished nature of the basement, the overall condition of the knob-and-tube wiring could not be determined.

M: there is currently a problem with many homeowners obtaining an insurance policy for a home that contains knob-and-tube wiring. Some insurance companies have a blanket "NO" policy, others will accept a certain amount of original wiring, and others still may request an inspection and a report prepared by a local Hydro utility or an electrician. Many inspectors and electricians do not consider the presence of knob-and-tube wiring is necessarily an increased fire risk. However, as it may be difficult to obtain an insurance policy, perspective home owners should be aware of this situation and replacement of some or all of the knob-and-tube wiring may be necessary to appease your specific insurance company.  
(Approximate Cost: \$6,000 to \$7,500)

P: amateurish wiring was noted in some locations. It is recommended that an electrician review the wiring and make the necessary repairs. Some dangling electrical wires were noted in the basement and they should be properly secured to prevent mechanical damage.

M: wiring in some locations has been installed on the interior finish. The exposed wire is susceptible to mechanical damage and it should be relocated behind the wall finish. Alternatively, the wiring may be located in a conduit or it may be replaced with armoured cable.

There are two 240-volt circuits and they are protected by circuit breakers. A list of the appliances and the breaker ratings follows:

- kitchen stove            40-amps
- dryer                    40-amps



M: the wiring circuit for the dryer is not properly protected and the slightly oversized breaker should be replaced with a 30-amp breaker.

The remaining breakers service 120-volt circuits. These supply electricity to the outlets and light fixtures throughout the house. Each circuit should be protected by a 15-amp breaker. The breakers should be tripped twice a year to ensure that they are in good operating condition.

P: five oversized 20-amp breakers were noted in the panel. They should be replaced with a 15-amp breaker.

3.03 Supply of outlets: The location of outlets in each room was verified. Often, furnishings in the house impede the ability of the inspector to locate all outlets. Overall, the supply of outlets was found to be adequate throughout most areas of the house.

M: the installation of additional grounded outlets should be considered in several locations on the first and second floors (to coordinate with replacement of the original knob-and-tube wiring).

3.04 Operation of outlets & fixtures: Most of the outlets in the house were tested for continuity and grounding. The fixtures and switches were also checked for safe and proper operation. The ground fault circuit interrupter (G.F.I.) in the whirlpool wiring circuit was found to be operable.

M: the three pronged outlets in several locations are ungrounded. It appears as if the original two pronged plug has merely been replaced with a modern receptacle. Replacement of the wiring is often required if a functional three pronged outlet is desired.

P: all washroom outlets should be provided with a ground fault circuit interrupter (G.F.I.) device to provide the required level of safety from electrical shock in this area of the house. Replacement of the washroom outlets in the basement and on the second floor is recommended.  
(Approximate Cost: \$75 to \$100)

M: a floor mounted receptacle was noted in the enclosed front porch. This is potentially unsafe and should be removed or relocated into the wall cavity.

3.05 Exterior wiring: Grounded wire and exterior rated components are important safety features of the wiring system. All exterior outlets should be fitted with a ground fault circuit interrupter. The exterior outlet at the northeast corner is protected with a functional G.F.I. (ground fault circuit interrupter) to minimize the electrical shock hazard in this area.

G: a weatherproof cover is required on the outlet at the northeast corner to minimize potential shock hazard.

M: the exterior wiring servicing light fixtures in the backyard should be replaced.

M: the exterior G.F.I. outlet at the southwest corner should be rewired and connected directly to the main panel. The outlet is currently activated by plugging into an outlet in the front porch.

## **HEATING/COOLING**

4.01C Type of system: The house is heated by a gas-fired, hydronic hot water system. Based on the size of the home, the boiler heating capacity of 103,000 BTU'S per hour should be sufficient. The heating system appears to have been installed in 2008. The cast iron heat exchanger in this type of heating system typically lasts 25 to 30 years. The heat exchanger showed no excessive signs of severe wear. This is a critical component in the heating system and as the boiler ages, it becomes more susceptible to failure.

The heating system was found to be operable during the inspection. Having it inspected and cleaned annually is a wise practice and will help maintain an acceptable level of heating efficiency.

The circulating pump is operable. The pump is impedance protected and does not require annual oiling. An expansion tank is located near the boiler in the basement. These are installed to limit increases in pressure to the allowable working pressure. An automatic water regulating valve that controls the fresh water supply to the system is present. There is also a pressure release valve present that prevents the operating pressure from exceeding 30 psi.

P: a backflow preventer should be installed in the water supply pipe to the boiler to eliminate a cross connection. This device will prevent water from the heating system flowing "backwards" into the domestic water supply piping.  
(Approximate Cost: \$250 to \$350)

The stainless steel exhaust flue pipe that directly vents the boiler through an exterior wall is intact. It should be inspected annually for moisture seepage at the joints.

G: the condensate drain pipe connected to the exhaust flue pipe should be extended to discharge into the floor drain.

4.02B Heat distribution: The radiators were inspected for operation and location to ensure adequate heating of the building. Air build-up within the rads is a common problem and regular bleeding of the rads is required. Check all radiator valves annually for leakage. With the exception of those pipes that are visible in the boiler room, the hot water heating pipes in the basement could not be inspected. The location of radiators should provide a fairly even distribution of heat to most areas of the home. The thermostat for the central heating system is located in the dining room.

M: there is not a source of heat in the second floor washroom and either a radiator or an electric baseboard heater should be installed. The capped hot water heating supply pipes are still present and this should allow for the installation of a radiator.

M: asbestos material appears to be present around some of the distribution pipes in the middle and at the rear of the basement. The edges of some of the insulation are in a deteriorated state and they should either be removed or encapsulated to ensure that the fibres do not become airborne. Any broken or deteriorated sections should be sealed or removed.

(Approximate Cost: \$1,000 to \$2,500)

## **PLUMBING**

5.01 Supply plumbing: The visible water distribution pipes are made of copper and galvanized steel. Most of the hot and cold water pipes in the basement appear to have been replaced with copper. There are some small sections of galvanized steel piping that have yet to be replaced. The hot and cold water pipes from the basement to the kitchen have been upgraded with copper. However, the hot and cold water risers from the basement to the washroom on the second floor could not be inspected and it could not be determined whether they have been upgraded (some galvanized steel pipe elbows were noted behind the ceiling finish at the rear of the basement). The visible supply piping in the second floor washroom has been replaced with copper. The main water shutoff valve is located at the front of the basement.

M: unlike copper, galvanized steel piping has a finite lifespan of about forty years. It tends to rust from the inside out, which causes a reduction in water flow over the years. Hot water accelerates the rusting process, and horizontal pipes deteriorate more quickly than vertical ones. When water pressure becomes unacceptable, or if leakage develops from the pipes rusting, the remaining sections of galvanized steel piping should be replaced.

(Further investigation req'd to determine accurate cost)

M: the plumbing pipes in the south exterior wall at the rear of the basement may be at risk of freezing during the winter months. The pipes should be relocated away from cold air sources (ie. exterior walls) and into a heated space.

P: an inside shutoff valve (with a drain cock) should be provided in the supply pipe that services the outdoor garden tap on the south side. It should be installed in the boiler room to allow draining. Closure of the internal valve (and draining of the external section of pipe) will prevent the pipe from freezing during the winter months.

(Approximate Cost: \$150 to \$200)

G: the cold water pipes in the basement may be insulated to prevent condensation from forming in the summer months.

5.02 Water pressure: The pressure (and flow rate) was observed on the top floor when both the toilet was flushed and the shower or tub faucet was open. The pressure was found to be adequate.

M: replacement of the older galvanized steel piping fittings at the rear of the basement (small amount ?) is recommended to further improve water pressure.

5.03 Waste plumbing: The waste drainage plumbing is largely composed of cast iron, lead and copper fittings, though some sections have been upgraded with plastic. The drainage pipes beneath the basement floor and under the front lawn could not be examined and their condition is not known. Most of the basement waste drainage plumbing could not be viewed due to the finished nature of the basement. Water flow through all drains and toilets is acceptable. A floor drain was noted in the basement.

M: the drainage piping in some locations has been amateurishly installed and though functional, may cause problems in the future.

The main waste plumbing stack is vented through the roof to the exterior. However, it could not be determined whether the branch waste plumbing in all locations is connected and functional.

M: most of the branch waste plumbing in the basement does not appear to be properly vented. A mechanical vacuum relief vent was noted at the basement washroom sink drain pipe. Improper venting can cause drainage problems or sewer gas to back up through the drain. Although neither of these situations appears to exist at present, eventual repairs may be required.

M: the branch waste plumbing in the kitchen is not properly vented. The venting should be corrected with any planned renovations.

The gas-fired hot water heater appears to be a rental unit (to be verified). Its capacity of 189 litres should be adequate for the number of bathrooms and kitchens in the house.

5.04 Plumbing fixtures: All faucets, toilets and shower diverters were tested to ensure that they were in working condition. The plumbing fixtures throughout the house are functional. The vinyl shower stall in the basement washroom is intact. The seams should be kept well sealed with caulking.

M: the older plumbing fixtures in some locations are worn and will be more prone to breakdown and leakage; eventual replacement is advisable.  
(Further investigation req'd to determine accurate cost)

G: the second floor washroom lacks a bathtub and/or shower stall.

## **INSULATION**

6.01A Attic: There are about four to six inches of loose-fill vermiculite, mineral fibre and fibre-glass batt insulation present in the attic.

M: another ten inches of insulation should be added to the attic to minimize heat loss through the ceiling. The hatchway to the attic should also be insulated and fitted with weatherstripping to prevent heat loss.

(Approximate Cost: \$1,200 to \$1,500)

P: there has been some recent concern with the fact that some vermiculite insulation contains asbestos material and that this may represent a potential health hazard to people accessing or working in the attic. The vermiculite insulation should be tested to determine if it contains asbestos and it should be removed if deemed necessary.

(Further investigation req'd to determine accurate cost)

6.02 Venting: Attic ventilation is provided, and this should help keep the house cooler in the summer and alleviate condensation problems in the winter.

6.03 Exterior walls: As access could not be gained to the framed exterior wall cavities, the presence or absence of insulation could not be determined. There is a four inch wall cavity in which insulation may be placed.

The basement exterior wall cavities were not accessed and the presence of insulation is unknown.

6.05 Crawl space: The area below the main floor at the rear is known as a crawl space and can often be a major source of heat loss. As access could not be gained to the crawl space, the presence or levels of insulation could not be determined. If the floors above are found to be cold in the winter, additional insulation will likely be required.

6.06 Weatherstripping: Besides insulation, an effective means of controlling heat loss is by ensuring that the interior of the house is well sealed. There is considerable air movement between the interior and exterior walls in most houses. Interior losses occur beneath baseboards, around electrical outlets, above the foundation sill plate in the basement, around window frames and panes, and around doors. Significant savings can be gained by checking the above areas and making corrections where necessary. Storm and thermalpane windows are present throughout the house.

## **GENERAL INTERIOR**

7.01 Walls & Ceilings: The walls and ceilings are finished in a combination of original plaster and modern drywall. The wall and ceiling finishes were found to be in acceptable condition. Some of the ceilings have been refinished with acoustic tiles. These are often installed to cover cracked or sagging plaster.

7.02 Flooring: The floors were inspected for soundness where accessible. Squeaks are a common defect in floors and in most cases do not indicate a structural concern. As well, sags in the floors are most often the result of normal settlement. The floors throughout most of the house felt secure and are functional. Some of the floors have been covered with carpeting and the condition of the flooring beneath could not be determined. The staircases in the house are sound.

P: there is not a handrail in the staircase between the basement and main floor. One should be provided.

(Approximate Cost: \$150 to \$200)

M: the handrail in the stairwell to the second floor should be extended in length.

The door jambs are square throughout the house, allowing good closure of interior doors.

G: localized repairs are required to some of the doors and related hardware.

7.03 Windows: The following is a list of window types and any noted deficiencies. It is normal for the operation of wood windows to vary due to swelling and shrinking of the frames between the summer and winter months.

- + vinyl framed casement windows.
- + modern vinyl clad windows with a fixed thermalpane glass.
- + horizontal sliding windows mounted in an aluminum frame.
- + fixed wood framed windows.

Overall, the windows and exterior doors were found to be intact and functional.

P: the cracked panes of glass in the two fixed windows in the front bedroom will require replacement.

(Approximate Cost: \$450 to \$600)

M: a locking mechanism is required in at least one of the basement windows. A bolt lock should be installed in the basement exterior door.

7.04F Fireplaces: A prefabricated natural gas fireplace has been installed in the main floor living room. The fireplace was tested and found to be functional. Annual servicing and cleaning is advisable to ensure safe operation.

7.05 Ventilation: Moisture produced from cooking, showering and normal body perspiration, often result in unhealthy humidity levels in the house. Externally vented exhaust fans are recommended in each bathroom and kitchen. The use of an open window is acceptable where a fan is not present. The kitchen exhaust fan was found to be operable. The exhaust appears to be properly vented to the exterior. The bathroom exhaust fan located in the basement was found to be operable and vented to the exterior.

M: an exhaust fan should be installed in the second floor washroom and it should vent to the exterior.


M: it could not be determined whether the dryer in the basement is properly vented to the exterior and this should be verified.

## **SUMMARY**

The total cost for the repair estimates given in this report varies between approximately \$16,000 and \$23,000. A portion of these costs may represent future repairs to be expected over the next five years. Most of this expense is designated for completing grading and eavestrough repairs on the exterior to properly control all surface water flow, replacing the deteriorating deck in the backyard, replacing the main electrical distribution panel the remaining original wiring in the house, encapsulating or removing the insulation on the heating pipes in the basement, and upgrading the amount of insulation in the attic. Additional costs will be incurred where an estimate was not provided (for example all expenses associated with any planned renovations to the house and potential removal of the vermiculite insulation in the attic if it tests positive for asbestos).

If there are any further questions with regards to the report or inspection, please call.

Sincerely,

  
Richard Gaughan  
B.A. Sc. Mechanical Engineering  
Registered Home Inspector (R.H.I.)