



National Home Inspection Ltd.
1055 Woodbine Avenue
Toronto, Ontario
M4C 4C2

December 19, 2005

INSPECTION REPORT

PROPERTY: 1 Toronto Street, Toronto, Ontario

Inspector: Richard Gaughan Client:

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>P: priority repair/safety concern within the next 1 year. M: monitor. G: general recommendation/maintenance.</p>
--

- ESTIMATED AGE OF HOUSE: 100 years
- BUILDING TYPE: three storey detached
- FRONT OF HOUSE FACES: south
- UTILITIES STATUS: all on
- SOIL CONDITIONS: snow covered
- WEATHER: clear
- HOUSE OCCUPIED: yes
- CLIENT PRESENT: yes
- WATER SOURCE: public
- SEWAGE DISPOSAL: public

STRUCTURE

1.01 Foundation: The foundation walls are constructed of stone and mortar. From a structural standpoint, the foundation appears to be in good condition. The structural components in the basement (ie. foundation and flooring system) could not be fully examined due to the finished walls and ceiling.

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.

P: evidence of water seepage was noted through the foundation on the south, north and west sides. The source of the seepage could not be readily determined during the inspection and it may be related to ground water flow. Consequently, excavation and exterior water-proofing of the foundation walls may be necessary to completely eliminate the current seepage problem. A less expensive, although not as desirable method may be to consider the installation of interior foundation drain tile around the inside perimeter of the affected basement walls.

(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 constructed of solid masonry. The masonry is a structural component and supports some of the load of 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.

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. Check for termites in the immediate area (contact a local pest control company).

1.07 Roof framing: The sheathing and framing below the roof structure could not be examined due to a lack of proper access. There is no indication from the exterior that any major structural deficiencies exist with the roof sheathing or structure.

GENERAL EXTERIOR

2.01 Surface Drainage: Drainage adjacent to the house was difficult to determine due to snow coverage. In the spring, grading should be checked to ensure that there is a positive slope away from the house on all sides. This will ensure good surface drainage and reduce the possibility of moisture problems in the basement. The walkway along the north side of the house has been recently redone with concrete. This may alleviate seepage in the basement along this wall and thus waterproofing may not be required along the north wall.

2.03A Asphalt roofing shingles: Typically, this type of roofing material will last 20 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 on all sides were likely installed less than three years ago. There is one layer of asphalt shingles present on all sides.

2.03F Single ply membrane roof: There are a number of different products on the market for this relatively new roofing system. As the name suggests, they are a single layer of roofing material that is either burned or glued onto the wood sheathing. They are a reliable roof cover and last from 10-20 years depending on the product. The roofs above the front porch and east sunroom appear to be less than 10 years old. Both flat roofs were covered in snow and could not be inspected.

2.05 Skylights: As these are often a source of leaks, they should be checked on an annual basis for deteriorated flashings and caulking. The skylights appear functional and are watertight.

G: water stains were noted below the east skylight. The stains appear old (apparently due to seepage caused when the skylight was left open).

2.07A Brick Chimneys: They provide protection and a chase for exhaust flues from fireplaces and heating systems. The flashings between the masonry and roof should be examined periodically to ensure that there is a good seal to prevent water seepage. This area is a common source of water seepage through the roof. The chimney on the south side contains three flues. One services the boiler; the 2nd flue services the 2nd floor fireplace. The chimney at the northwest corner contains two flues. One services the gas fireplace; the other flue is no longer in use. The metal flashing detail at the base of the chimneys appears to be intact and functional. The boiler and fireplace flues are equipped with a continuous metal liner which is beneficial in preventing deterioration to the chimney.

G: localized tuckpointing of the mortar joints between bricks is required on the south chimney.

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 into the sewers and onto the surrounding land. The underground downspout pipes were not visible and as a result their condition is unknown. The eavestroughs and downspouts were found to be intact.

G: some of the metal spikes that secure the eavestrough to the fascia have popped and should be nailed into place.

2.09A Masonry walls: The exterior walls on most sides 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 generally good condition.

G: one of the south facing stone lintels is cracked. Patch crack with mortar.

2.09E Insulbrick siding: The exterior wall at the northeast corner is covered in insulbrick siding.

G: the lower portion of insulbrick siding at the northeast corner shows signs of severe wear. Resurface this side with aluminum or vinyl.

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

2.09G Solid wood siding: A clapboard wood finish was noted in several locations. The wood is in generally good condition.

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. It is often covered with metal or vinyl. The exterior window and door frames are largely intact.

G: repaint frames where necessary.

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. It is common to have the wood flashed with aluminum. The soffits and fascia on all sides are covered in aluminum.

2.11A Wooden decks: The wood decks at the front and rear are functional. A coat of preservative or paint is recommended to maximize its life. All boards, rails, and steps should be checked for

soundness and possible rot on an annual basis. The lower porch deck surface is a concrete slab. The slab appears intact.

M: the rails surrounding the upper porch deck are too low. If the deck is used, the rails should ideally be raised.

G: the west main floor bathroom has been built over a concrete slab deck. There is evidence of past seepage through the concrete at the north end.

ELECTRICAL

3.01 Electrical service & panel: This home is equipped with an overhead 120/240-volt, 200-amp service. The main distribution panel is located on the east side of the basement. The size of the service is considered adequate for the electrical requirements of the house. The distribution panel is rated at 200-amps. The panel rating is adequate for the existing service size. Due to limited access, it could not be determined whether or not the electrical service is grounded to the supply plumbing.

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, located primarily on the first and second floors (in lighting circuits and a handful of outlets), and modern grounded two conductor cable present throughout the house (including basement, most of the main floor, 2nd floor kitchen/bathroom, and 3rd floor). There may be as much as thirty to forty percent original wire still in use. 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.

P: There may be some difficulty in securing property insurance due to the amount of original wire still in use. This has become an issue in the last couple of years within the insurance industry and is not necessarily safety related. Your insurer may require that any remaining knob-and-tube be removed.

(Further investigation req'd to determine accurate cost)

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

- basement stove 40-amps
- dryer 30-amps
- air conditioner 30-amps
- electric heating 15-amps
- 2nd floor stove 40-amps (not in use)

These appliances have their wiring circuits properly protected. 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. None of the 120-volt circuits was overfused at the time of the inspection.

3.03 Supply of outlets: The location of outlets in each room was verified.

G: additional outlets may be desired on the 2nd floor and in the main floor kitchen.

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. Most outlets and light fixtures were found to be operable. Minor repairs are required. The electrical outlet in the main floor washroom is protected by a ground fault circuit interrupter (G.F.I.) device. It was tested and found to be operable. This type of outlet provides a high level of safety in bathrooms where electrical shock is a possibility. The ground fault circuit interrupter (G.F.I.) in the whirlpool wiring circuit was found to be operable.

G: the ground fault circuit interrupter (G.F.I.) in the second floor washroom is inoperable and should be correctly rewired or replaced if faulty.

(Approximate Cost: \$40 to \$50)

G: an outlet is recommended in the basement bathroom. The jacuzzi is not functional.

(Further investigation req'd to determine accurate cost)

3.05 Exterior wiring: Grounded wire and exterior rated components are important safety features of the wiring system. All exterior outlets should be equipped with a ground fault circuit interrupter. The exterior outlet off the east deck is equipped with a G.F.I. to minimize the electrical shock hazard in this area.

G: replace GFCI on east deck as it is inoperable.

(Approximate Cost: \$40 to \$50)

HEATING/COOLING

4.01C Type of system: The house is heated by a gas-fired, hydronic hot water system. The heating system was installed in 1989. The cast iron heat exchanger in this type of heating system typically lasts in excess of thirty 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 gas burner and related equipment was found to be operable. The circulating pump operates well. 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.

The metal exhaust flue that connects the heating system to the chimney flue is functional. It should be inspected annually for perforations, blockage, or loose connections.

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 rad 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. Supplemental electric baseboard heaters are used on the first and second floors. All were found to be operable. The thermostat for the main heating system is located in the front hallway.

G: the under floor electric radiant heat in the main floor bathroom is not functional.

4.03D Central air conditioning: The system could not be operated due to the low outdoor temperature. The exterior and interior units are intact. The system was installed within the last ten years.

PLUMBING

5.01 Supply plumbing: The visible water distribution pipes throughout the house are made of copper. The main water shutoff valve is located below the basement stairs. The incoming water main has been upgraded to a 7/8 inch feed.

5.02 Water pressure: The pressure (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.

5.03 Waste plumbing: The main waste drainage plumbing components are composed of cast iron (vertical stacks), clay (below basement floor and front lawn) and upgraded plastic (west bathroom

and kitchens). 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 could not be located in the basement due to the floor covering.

The main waste plumbing stack is properly vented through the roof to the exterior. However, it could not be determined whether the branch waste plumbing in the basement and main floor washrooms are connected and functional.

M: the main floor bathroom plumbing is situated over a crawl space. Pipe freeze is a potential issue. Ensure that the interior of the bathroom is kept warm.

The gas-fired hot water heater is a rental unit and is the property of the local utility company or provider. It has a capacity of 40 gallons and this 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 fixtures throughout the house are for the most part, functional. Minor repairs to leaky faucets, etc. are required. The bathtub tiles in the basement washroom are intact. The tile grout and seal around the tub should be checked periodically and if necessary, resealed with silicone to prevent tile deterioration. The tiled shower stall in the main floor washroom is intact. The corner joints should be kept well sealed with silicone.

M: the 2nd floor tub is corroded around the drain. Monitor for further wear.

INSULATION

6.01A Attic;/Knee wall cavities: This area was not accessed during the inspection and as a result, the amount of insulation above the top floor ceiling could not be determined. The recommended thermal resistance level (R value) for this area is R-32, which corresponds to about ten inches of fiberglass batts or eight inches of loose-fill cellulose fibre insulation.

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

G: if the 3rd floor is more extensively renovated, additional ventilation may be desired.

6.03 Exterior walls: Insulation could not be found in the exterior walls. The small gap within the wall cavities of solid masonry homes normally prohibits the placement of insulation there. This

type of wall construction usually has a thermal rating of R-4 to R-6. The main floor bathroom exterior walls are likely insulated with fiberglass insulation. There may also be insulation in the east addition walls. Most of the basement exterior walls appear to be insulated with fiberglass insulation.

6.05 Crawl space: The area below the main floor bathroom is known as a crawl space and can often be a major source of heat loss.

G: the amount of insulation present in the crawl space is limiting and the floor is cool during the winter. Ideally, the perimeter walls of the crawl space could be insulated with rigid board insulation. This will create a "heated" crawl space, and usually results in warmer floors. This would greatly reduce the risk of pipe freeze in this area.

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.

G: there is air leakage around the exterior doors on the south side, 2nd floor. The weatherstripping is inadequate and should be repaired.

G: storm windows, thermal glass, and tightly sealed windows are beneficial in reducing heat loss and drafts through window openings. The installation of storm windows on the north side is recommended. They are apparently stored in the shed.

GENERAL INTERIOR

7.01 Walls & Ceilings: The walls and ceilings are finished in a combination of original plaster and modern drywall. Water stains were noted in the main floor kitchen ceiling. The stains were dry during the inspection and are likely a result of an old problem.

G: the deteriorated plaster (fibreboard on 3rd floor ??) wall and ceiling finish on the second and third floors should be repaired or replaced with drywall in future.

(Further investigation req'd to determine accurate cost)

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. Floor repairs were noted and are detailed below. The staircases in the house are sound. The door jambs are no longer square. This is the result of

normal settlement in the floor joists and load bearing walls and does not indicate a structural problem.

**G: some of the hardwood floors on the second floor is worn and should be replaced in future.
G: minor 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. The upgraded windows and exterior doors were found to be intact and functional, thereby minimizing heat loss. The original windows require storms where missing.

- + upgraded quality wood framed casement windows.
- + double hung wood windows; they require periodic caulking, painting and putty repairs.
- + double horizontal windows mounted in an aluminum frame.

G: the sash cords that control the vertical movement of the double hung windows are broken or missing. These are repairable.

7.04C Fireplaces: An original coal burning fireplace is present on the second floor. The condition of the firewall and hearth behind the insert is unknown and repairs to the brickwork or the installation of firebrick may be required if the fireplace is to be used on a regular basis.

G: If you would like to use the fireplace as is, have the flue scoped by a WETT certified contractor to ensure that the interior of the flue is intact. It is often possible to remove the insert and create a conventional wood burning fireplace. This would require reconstruction of the firebox.

(Further investigation req'd to determine accurate cost)

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

G: the blower does not appear to function.

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 vent is not present. The kitchen exhaust fan on the main floor was found to be operable. The exhaust appears to be vented to the exterior, though the exhaust vent on the north wall likely has to be upgraded. The bathroom exhaust fans located in the basement and on the first floors were found to be operable and appear to be vented to the exterior. The dryer in the basement is properly vented

to the exterior. All exterior vent covers are intact and functional. The perimeter of the exhaust covers should be kept well caulked to reduce heat loss.

SUMMARY

The inspectors assessment of the overall condition of the building is based on a similar home of similar age and construction. The quality and quantity of upgrades, as well as anticipated repairs or upgrades as discussed in the report are factored into our assessment.

OVERALL CONDITION: Typical. The exterior has seen a high level of upgrade over the years and as a result is in good condition. The roofs, sidings and trim are in an overall good state of repair. Decks and porches are also in good shape. The majority of windows have been upgraded. Mechanical upgrades include a 200-amp service, an oversized incoming water main and a modern, quality hot water boiler. All three bathrooms are functional.

MAJOR PRIORITY REPAIRS: The following areas require more immediate attention and are likely to cost in excess of \$2,000.

- WATER SEEPAGE CONTROL IN BASEMENT
- ELECTRICAL

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

Sincerely,

Richard Gaughan
National Home Inspection Ltd.