



Engineered Building Inspections Ltd.

INSPECTION REPORT

INSPECTED PROPERTY		CLIENT INFORMATION	
Address:	53__ Manor Street, Burnaby, B.C.	Name / Address:	
Date of Inspection:	09 DECEMBER 2003		
Time Started:	13:30		
Weather Conditions:	Cloudy, Cold	Home Phone:	
Ground Conditions:	Damp	Work Phone:	
Those Present:	Realtor & Buyer	E-mail or Fax # :	
Occupancy:	Vacant	Referred By:	Realtor

INTRODUCTION AND SCOPE

The on-site inspection consists primarily of visual observations of accessible areas of the property. No attempt is made to penetrate sealed surfaces unless authorization has been obtained from the vendor. Moving of obstructing articles such as furniture, carpets and stored articles is not carried out as part of the inspection. Removal of snow, exterior landscaping or excavations of soil are not carried out. Gaining access to areas where there is a risk of injury or damage to the building is also not attempted. Because of the foregoing, it should be understood that complete identification of all building problems is, in many instances, impractical to achieve. Familiarity with the wide range of disciplines required for complete inspection of a home does not permit the inspecting engineer to be an expert in all fields. With these and other constraints in mind, additional repair costs beyond those noted in the report should be assumed for budgetary purposes. No attempt is made to identify foundation leakage problems and other moisture penetration problems associated with the achieved integrity of the exterior envelope seal. These types of problems often materialize and become more pronounced with prolonged heavy rainfall or unusual wind/weather conditions that are not present during our inspection. The Property Disclosure Statement should be carefully reviewed for possible evidence of these types of problems. Direct owner inquiries in this respect are also recommended. Structures that have received poor maintenance are more likely to contain underlying problems that could remain undetected.

Inspection of smoke alarms, intercom systems, and household appliances is beyond the scope of our inspection. Smoke and/or heat detectors should be positioned throughout the house as a fire safety consideration. Positive identification of insect infestations, which become more readily apparent during specific



Engineered Building Inspections Ltd.

parts of their seasonal life cycle is also beyond the scope of our inspection. No obvious evidence of an active infestation problem was found during our inspection, and no specific areas of concern were identified.

The inspection and report are not intended to reflect the market value of the premises and at no time does the inspector make any recommendation as to the advisability of purchase. No opinion is offered as to whether or not the dwelling inspected satisfies any of the prevailing or applicable municipal or national building codes. The time involved in a review of building department records places that task beyond the scope of the inspection. Further information may be available from that source.

All statements made in this report regarding the inspected property are the opinion of the inspecting engineer, reached after a visual inspection of the property. The report does not include an inspection for the presence of materials that may be hazardous to health and/or inspection for the presence of on-site materials or equipment that could require removal for environmental protection reasons. Detailed inspections for UFFI are not conducted without specific request. Air quality testing is also not carried out. This work can be performed by a specialist company at additional expense.

The opinion does not constitute or imply a guarantee or warranty of the condition of the equipment and/or structure(s) inspected. No responsibility or liability is accepted for any claim for loss, damage, or injury to life or limb, howsoever or whensoever occurring, due to any defect or inaccuracy in the information herein contained.

PROPERTY AND BUILDING DESCRIPTION

ROAD FRONTAGE		PROPERTY	
Road Surface:	Asphalt	Location:	South side of the road
Traffic and Noise:	Quiet street	Topography:	Sloped gradually towards the north
Curb/sidewalk:	None	Drainage:	Surface Drainage
Hydro/Tel/Cable:	Overhead from pole		
Potable Water:	Municipal underground		
Sanitary Sewer:	Municipal underground		
Storm Sewer:	Municipal underground		



Engineered Building Inspections Ltd.

BUILDING	
Age of Building:	16 Years
Type of Building:	Single Family Home
Style:	Bungalow
Number of Levels:	Two

DETAILS OF PROPERTY

	Description	Condition
Fences:	Wood fencing	No problems were noted with the fencing
Garden Walls:	Concrete walls	The retaining walls were well aligned
Driveway:	Asphalt	The driveway was in poor condition
Driveway Drainage:	A catch basin was installed at the base of the driveway	The catch basin requires cleaning and the broken lid should be replaced
Walkways & Patios:	Concrete	Shrinkage cracks were noted
Vegetation:	Landscaped	The property was poorly maintained

ADDITIONAL INFORMATION

The asphalt driveway surface was in poor repair. The surface does, however, still provide reasonable utility for near-term use. Future replacement over an improved, well-drained gravel base should be an assumed requirement. Drainage for the driveway surface was collected by a catch basin with a collecting sump. The sump requires cleaning at present and will require periodic maintenance thereafter to remove interfering silt accumulations and to prevent silt entry into the drain system. The broken sump lid should also be replaced to remove that present walking hazard.

The wood fencing was in reasonable alignment as determined from limited visual inspection. Detailed inspection for subsurface conditions of the fence posts and overall stability of the fencing was not conducted. The wood posts and other fencing components, which will be susceptible to decay, will require future replacement. The cost of fence maintenance is often shared with adjacent property owners. This may help with future repair expenditures associated with fences along common boundaries.



Engineered Building Inspections Ltd.

BUILDING EXTERIOR

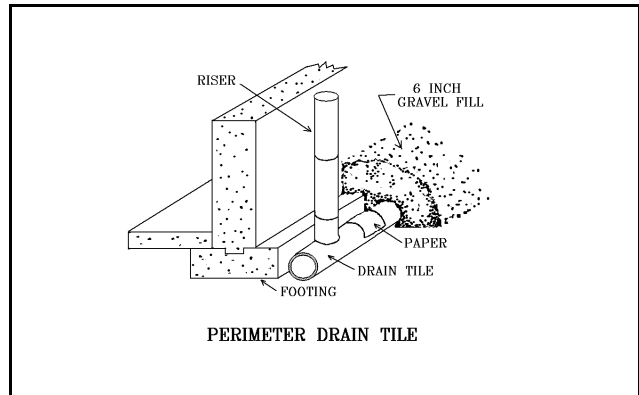
FOUNDATION, CLADDING AND DECKS

	Description	Comments
Foundation:	Concrete perimeter foundation	Cracks were found at several locations
Draintile:	Buried pipe not inspected	Draintile system was not tested
Wall Cladding:	Stucco, Vinyl siding and brick	No problems were found with siding
Exterior Doors:	Solid core wood	No problems were noted with the exterior doors
Decks:	Located at front and rear of house	The decks were in reasonable condition
Surface Type:	Fiberglass	Some delamination was observed at the rear deck
Railing Type:	Aluminum railings	Leakage at the base fasteners is common

ADDITIONAL INFORMATION

The building is supported by a concrete perimeter foundation, with interior bearing-wall supports. Assessment of the foundation is based on visual indications of performance to-date. Most of the foundation was obscured by exterior landscaping and interior finishes, which limited visual information. An inspection from the house interior was not conducted. No sub-surface investigations were undertaken to establish local characteristics of the underlying soil base. Cracks were observed in the north, east and west foundation walls. Other cracks could also be present. Although this is evidence of previous foundation movement, there were no obvious distortions in the supported structure above to generate concern for consequential differential settlement of the structure. Similarly, no evidence of recent movement was found to suggest an ongoing settlement problem. Successful performance over numerous previous years provides confidence in the foundation's capability.

The draintile risers that are used to accommodate collected roof water are typically connected to a draintile system installed at the base of the perimeter foundation (see sketch). This draintile is designed to protect below-grade areas from moisture penetration problems. Silt accumulations and root penetrations, which may obstruct the system to varying degrees, could exist. Sub-surface investigations which would provide information on the condition of the draintile system are beyond the scope of our inspection. Draintile system repairs are a labour-intensive, potentially costly proposition. No problems were found in this instance. Further direct enquiries to the owners regarding their knowledge of



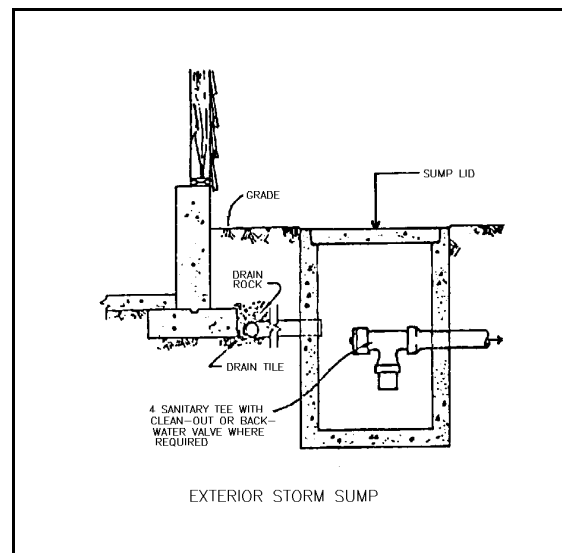


Engineered Building Inspections Ltd.

possible past moisture penetration problems are, nevertheless, recommended.

If a problem is identified or if one materializes at some later date and flushing or other measures fail to resolve the problem, the peak roof water loads on the draitile system can be reduced by diverting the collected roof water away from the foundation. This is typically achieved with downpipe extensions and splash pans. Re-positioning of the gutter drains to less problematic locations is sometimes also possible. With diversions, a reduction in peak volume is achieved by forcing the collected roof water to percolate through the soil before reaching what remains of the draitile system.

Installation of a storm sump (see sketch) is required for most modern residential construction. The sump was located at the northwest corner of the property. Inspection of the interior indicated silt accumulations that require present removal. The sump is designed to protect the city drains from silt entry associated with gutter accumulations and soil fines that invariably enter the draitile system. Access via the sump lid permits removal of those accumulations. Water flowing into the sump exits via a protective elbow to the city sewer. The elbow extending down into the sump water is fitted to provide an air seal and to prevent direct silt entry into the city drains. The sump should be inspected periodically to permit timely removal of interfering silt accumulations. Blockage of the exit elbow can result in water back-up into the draitile system and possible associated flooding of surrounding areas.



The house was clad with vinyl siding and stucco, which was well applied and in good physical condition. Integrity of the deck surface membranes was not reviewed in detail but appeared to be in reasonable condition based on non-intrusive visual observation. Some delamination was however, observed at the rear deck membrane. Maintenance of weather protection that will reduce the risk of decay problems in the deck sheathing and underlying structure is important. Minor leakage and/or a lack of adequate ventilation can result in undetected problems that can involve the primary structure. Required repairs can be an expensive proposition. Identification of the existence of such hidden problems is beyond the scope of our inspection.

The deck access stairway, which was in poor condition, should be replaced. Access to the stairway should be limited pending its replacement. The use of treated wood in the replacement structure is recommended.



Engineered Building Inspections Ltd.

ROOF

	Description	Comments
Method of Inspection:	Inspected by walking on roof	No roof access problems were encountered
Type of roofing:	Torch-on membrane	Patches and open seams were observed at several locations
Approximate Age:	Two years	The owner should be questioned regarding the availability of a roofing warranty
Roof Design:	Gable roof	Roof drains should be clear of any obstructing material
Slope of roof:	Gradual slope	An adequate drainage slope appears to be provided
Eaves:	2 ft. Overhang	The eaves will provide some protection to the walls and windows below

ADDITIONAL ROOF INFORMATION

The roofing material appeared to be a modern single-ply membrane. The specifications of membrane type and associated application were not identified. Synthetic roofing materials commonly described as single-ply membranes were introduced in Canada during the early 1960s as an alternative to conventional built-up roofing. Synthetic roofing materials are made from different combinations of bitumens, polymers, fillers, plasticizers, and other additives. A polyester or glass-fibre mat is typically used as reinforcing for the base.

Long-term durability is quoted for most single-ply membrane materials. The overall success of the roofing is, however, susceptible to application problems because of the limited number of plies, typically one ply over an underlying base sheet. The presence of an underlying base sheet cannot be determined with confidence from non-intrusive visual examination of the roof surface. Long-term serviceability is difficult to predict because of possible undetected application problems. We do not profess to be experts in the wide range of application problems that could exist. The open seams and surface patching reduces confidence in the application. The present owner should be questioned about the possible availability of a warranty for the roofing.

CHIMNEYS AND GUTTERS

	Description	Comments
Chimney Material:	Brick	Moss growth on mortar should be removed
Flashings / skylights:	Roof perimeter flashings	Original flashings appear to have been re-used
Vents on Roof:	Plumbing vents, attic vents, metal B-vent	Patches were observed at some of the vents



Engineered Building Inspections Ltd.

INTERIOR OF HOME

INTERIOR FINISHES, DOORS AND WINDOWS

	Description	Comments
Wall and Ceiling Finishes:	Gyproc	Interior finishes were in reasonable condition
Ceiling Structure:	Ceiling structure was not inspected due to installed finishes	No comments are made about the ceiling structure.
Floor Coverings:	Carpet, linoleum and tile flooring	Floor squeaks were noted at many locations on the upper level
Type of Doors:	Hollow core wood	The doors were generally in reasonable condition
Hardware:	Standard door hardware	No problems were noted with the door hardware
Fit:		The doors that were tested were well fit in their frames
Garage Door Type:	Aluminum doors	The garage doors were in good condition
Electric Overhead Opener:	Home Builder	Door was locked and opener was not tested
Style of Window Frame:	Aluminum frame	No visible problems were noted with the window frames
Window Operation:		The windows which were tested functioned without difficulty
Glazing:	Double-glazed	The failed double-glazed unit found at the en-suite bathroom requires replacement
Interior Stairways:	A stairway was noted between the lower and main floor of the house	No problems were noted with the installed stairway

ADDITIONAL INFORMATION

The interior surfaces were in average condition for their age, indicating a reasonable quality of care and maintenance over recent years. There was however, some possible water damage, patching observed on the lower level ceiling. Past plumbing leakage appears to have caused the damage. The stained areas were dry at the time of inspection. The present owners should be questioned in an attempt to obtain clarification.

Floor squeaks were noted at several locations. This is a problem with many residential structures. Most of the floor squeaks are suspected to be associated with loose floor sheathing. The floor sheathing should be re-nailed or screwed to the floor joists as the opportunity arises with future application of replacement floor coverings.



Engineered Building Inspections Ltd.

The home was fitted with double-glazed aluminum sash windows. The window frames were in good condition, consistent with their age. When a sample of window vents was tested, they operated with comparative ease. Lubrication should be maintained on the push-out window hinges to avoid excessive opening/closing pressures that can damage the window hinge and handle attachment points. Silicone lubricants are available for that application.

The front deck patio door rollers were rough when the door was tested. Replacement of the rollers may be required if a simple adjustment fails to improve its operation.

The perimeter seals in permanently sealed double-glazed window units are susceptible to failure. This failure is related to cyclic movement of the glazing and, to some extent, to breakdown of the glazing seal from ultra-violet exposure. The seal in the en-suite bathroom window unit was noted to have failed. Manufacturer warranties, which are limited, typically vary from 1 to 7 years. Life expectancies in the order of 10 years are generally accepted as an industry standard. These are exceeded in most instances. Simple repair of the window seal is impractical. The dates on the window spacer bars that were checked indicated 1986 production. No failed window seals were identified during limited inspection of the units.

Defective seals are often difficult to detect, since fogging between the glazing is a function of ambient temperatures, and other signs of a faulty seal are easily mistaken for a cleaning maintenance requirement. Visibility is also often obscured by window blinds and draperies. Specific assessment of window seal condition is, as a consequence, beyond the scope of our inspection. Failure of the window seals does not significantly affect the insulating value of the glazing. Staining of failed units does, however, increase with time.

There was a build-up of mildew deposits on the window frames and peeling paint at some of the skylights. Removal of any mildew with a proper cleaner is recommended for health reasons. A migration of the moisture into the covered areas below the window is possible. The existence or extent of a covered problem of this type was not established during this visual inspection.

The above symptoms are an indication of condensation from excessive interior moisture levels. High interior moisture has become an increasing problem over recent years with construction methods designed to achieve a tighter seal of the building envelope. This has resulted in a decreased rate of building air change. Interior moisture levels can be reduced both by controlling the contributing sources and by improving ventilation of the structure.

Some of the common controllable moisture sources found in residential construction are: interior air-drying of laundry, improperly vented clothes dryers, poor ventilation of bathtub/shower areas, cooking moisture, and watering associated with an excessive number of interior plants. The amount of moisture produced by some of these sources is a function of lifestyle, which may change with your occupancy. In any event, contributing sources should be controlled where possible. Ventilation of excessive moisture can be achieved by installing timer-controlled switches for the bathroom fans. Opening of exterior doors and windows during dry weather conditions will also help discharge damp interior air to the outdoors.



Engineered Building Inspections Ltd.

KITCHEN CABINETS AND COUNTERS

	Description	Comments
Type of Cabinets:	Wood door and drawer fronts with particle board cabinets	The cabinets were in reasonable condition for their age, some water damage was observed below the kitchen and bathroom sinks
Door Hinges:	Standard Hinges	No problems were noted with the hinges
Type of Countertop:	Formica	The countertops were in reasonable condition
Ventilation:	An exterior venting fan was installed above the stove	No ventilation problems were noted within the kitchen

FIREPLACES

	Description	Comments
Fireplace location:	Wood Burning: living room, basement	Not tested

ADDITIONAL FIREPLACE INFORMATION

The wood burning fireplaces were not tested as part of the inspection. The sizes of the frontal openings do however, appear to be adequate for the sizes and heights of the flues. When the lower fireplace damper was actuated it operated with reasonable freedom. The damper did, however, achieve a poor seal to the chimney throat. This will result in heat loss through the chimney flue when the fireplace is not in use. Replacement of the missing bricks is recommended to provide an improved seal. Several other corrective means are available: improve the present seal with mortar additions or damper adjustments, replace the damper, install glass firescreen doors, or install a chimney-top damper.



Engineered Building Inspections Ltd.

PLUMBING

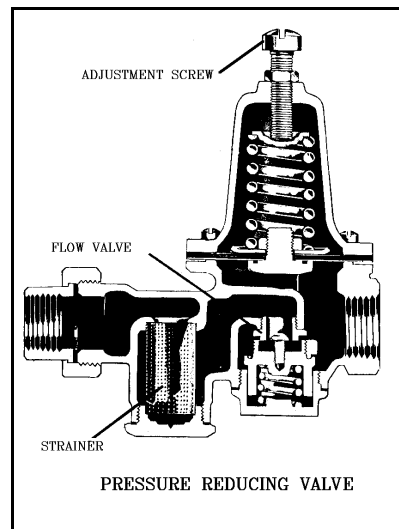
WATER DISTRIBUTION SYSTEM

	Description	Comments
Water service entry and shut off valve location:	In utility room near boiler	No problems were noted with water service entry
Water service pipe material:	Plastic piping	Underground piping was not inspected
Pressure Reducing Valve:	Standard Watts valve (see sketch below)	No problems were noted with valve
Static Water Pressure:	90 psi	Pressure was too high and should be reduced
Pressure Under Flow:	75 psi @ 3 imperial gallons per minute	Pressure drop of this size is normal
Supply Piping:	¾"and ½" Copper pipe	Leakage was noted at a section of pipe above the hot water tank
Cross Connections:	Found at the hot water tank, heating boiler	Vacuum break and / or backflow preventors were observed at above locations

ADDITIONAL INFORMATION

Available pressures from the district water mains and local distribution systems have wide variations, depending upon elevation differences between property locations and the water distribution source. In most instances, these pressures exceed the 40 to 80 psi pressure range considered to be desirable for residential use. High water pressures can result in persistent problems with shut-off valves in appliances and other installed plumbing fixtures. Pressure reducing valves are available to allow a downward regulation. There are a number of different designs. The more common model is shown in the sketch. On the valve shown, the pressure can be increased by releasing the locking nut and turning the adjusting screw in the clockwise direction. A pressure reducing valve of a similar design has been installed.

Supply plumbing was copper pipe. Past news releases warn of previous use of substandard copper pipe. We have not detected any related pipe leakage problems associated with newer residential structures or where older pipe sections have been replaced. The problem appears to be confined to warm-water systems in larger apartment or commercial buildings where high-velocity continuously circulating warm-water systems are incorporated. The life expectancy





Engineered Building Inspections Ltd.

of copper supply piping in residential installations without circulating systems is between 40 and 50 years. Leakage was observed in a section of pipe located above the hot water tank. Immediate repair of the leakage is required.

The interior shut-off valves for the outside hose taps should be shut off and the outside taps drained during sub-zero temperatures to prevent freezing of the water in the supply piping and potential pipe damage. The supply valves were open at the time of the inspection. The southeast hose bib interior shut off valve has been partially covered during wall surfacing. Appropriate access should be provided to allow control of this valve

HOT WATER SYSTEM

	Description	Comments
Type of Tank:	Gas-fired hot water tank	Moderate heat recovery is typical for this type of tank
Make of Tank:	GSW	
Date of Production:	1986	The tank was leaking and requires replacement
Capacity:	33.3 Imperial gallons	Tank appears to be adequately sized for normal use of the fixtures
Recovery:	25.5 Imperial gallons per hour	
Drip Pan / Floor Drain:	A floor drain is located near the hot water tank	

ADDITIONAL HOT WATER SYSTEM INFORMATION

Hot water was provided by a gas-fired hot-water tank. The capacity of the tank is considered to be adequate for normal usage of the connected fixtures. Hot-water tanks achieve typical life times in the order of 10 years. The leakage found at the base of the tank indicates a current replacement requirement.

The temperature of the hot water was not measured. Tank hot-water settings of 120° F. to 140° F. are typical. Settings as low as 110° F. have been recommended by BC Hydro for energy conservation. Excessively high settings should be avoided because of the risk of scalding. Specially-designed pressure-balancing valves, also known as anti-scald valves, are available to replace standard single-lever mixing valves. Young children, invalids, and the infirm should be supervised when using hot-water fixtures.



Engineered Building Inspections Ltd.

WASTE PLUMBING AND FIXTURES

Type of pipe:	ABS
Condition of System:	No problems found
Toilet Flush Valves:	No problems were noted with the toilet flush valves
Bathroom Ventilation:	Exterior venting fans and/or windows were noted in all bathrooms
INSTALLED FIXTURES	
MAIN FLOOR:	Kitchen sink, two-three piece bathrooms, washer hookup, laundry sink, bar sink
UPPER FLOOR:	Four piece bathroom, three piece en-suite bathroom, kitchen sink

ADDITIONAL WASTE PLUMBING INFORMATION

When the fixtures were tested (washer hook-up excepted) they were found to operate within reason for their age. Bathroom walls and floor areas are always a potential problem, depending upon the achieved seal in the plumbing and finished surfaces. Moisture entering the wall or floor cavities can lead to moisture-related decay of the underlying wood structure. Identification of the existence or possible extent of these types of hidden problems is beyond the scope of our inspection. In this case, however, no surface indications too indicate underlying problem were observed at the time of our inspection. Replacement of the caulking in the shower areas should however, be carried out.

The en-suite bathroom bathtub was fitted with a jetted-water circulating (jacuzzi) system. The jacuzzi equipment is not included as an inspection item. Recent reported cases of ailments such as Legionnaire's Disease and "PA" or "splash rash" (*Pseudomonas Aeruginas A*) confirm the importance of maintaining an effective cleaning and disinfecting procedure for the jacuzzi system. The tub circulating system should be flushed and sterilized prior to your occupancy as a health protection measure. This process involves filling the tub with water, pouring in a cup of bleach or other disinfectant, then running the jets for 30 minutes. The broken timer switch will require repair or replacement to allow for the operation of the jacuzzi system.



Engineered Building Inspections Ltd.

HEATING

	Description	Comments
Type of Heating:	Gas-fired hot water heat	Zoning of heat is provided, however, proper ventilation in house should be maintained
Make / Model:	Super Hot	
Input / Bonnet Capacity:	135,000 / 108,000 BTU per hour	Heating system appears to be adequately sized to heat the home
Thermostat:	Mercury Switch	
Latest Servicing Sticker:	No record	Servicing of the heating system is recommended
Flue Gas Exhaust:	Metal B-vent chimney	No problems noted
Combustion Air:	6 " diameter duct through outside wall	No combustion problems were noted
Operating Temperature:	160°F to 180°F	The operating temperature are near correct
Operating Pressure:	20 psi	The operating pressure was in the recommended range
Heat Distribution:	Baseboard convectors	Heat was detected at the various convectors
Number of Zones:	Four	
Distribution Piping:	Polybutylene and copper	Past failure of this type of plastic tubing has been a problem
Mixing Valve:	No mixing valve was found in the system	
Air Conditioning:	No air conditioning system was found in the home	

ADDITIONAL HEATING INFORMATION

The house was heated by a four-zone gas-fired hot water boiler system having a 135,000 BTU per hour input capacity. This is reasonable compared to the generally accepted 25 to 35 BTU/sq.ft. guidelines for mid-aged Lower Mainland residential structures. Over-capacity is undesirable because it results in some efficiency loss as a result of cool-down periods between heating cycles. When each of the thermostats was actuated, the boiler and various zone valves responded correctly to the demand for heat.

Polybutylene pipe has been used for the lower level of the heating circulating system. Polybutylene pipe is not suitable for this type of heating system, which operates at high temperatures. Pipe failure has been a common problem in similar installations. Replacement of the piping should be an assumed requirement. A further review and cost estimate for the replacement should be obtained from a Heating Contractor for budgetary purposes.

Heat was detected at the various system convectors, providing some confidence in the circulating piping and system convectors.



Engineered Building Inspections Ltd.

ELECTRICAL

DESCRIPTION OF ELECTRICAL SYSTEM

	Description	Comments
Meter Location:	At northeast corner of house	No problems were noted with the meter
Voltage:	240/120 volt	
Service Conductors:	Copper	No visible problems were noted with the service conductors
Grounding:	Ground rods were noted	No visible problems with the grounding were noted
Main Disconnect (type / amperage):	Modern breaker / 100-amp	The capacity of the electrical service appears to be adequate
Interior Panel Locations:	Located in utility room	Unobstructed access to panels should be maintained
Wiring in Panel:	Copper wiring	No problems were noted with the visible wiring within the panel
Wiring Style:	Modern grounded wiring	
Outlets:	3-pronged grounded	All outlets that were tested functioned without problem
Ground Fault Circuit Interrupters:	For bathrooms + jacuzzi tub	All GFCI's responded to their test buttons

ADDITIONAL ELECTRICAL INFORMATION

The electrical service is a 240-volt system. Over-current protection is provided by a 100-amp breaker, which is consistent with most modern residential installation capacities. The panel was wired with reasonable wiring practice using copper conductors. No visual evidence of overheating was found to indicate a thermal problem with the panel connections. There were three vacant breaker positions within the panel for minor future wiring additions.

The lights, outlets, and switches that were tested at random throughout the home were energized and operated correctly. The ground fault breakers similarly responded correctly to their test buttons.



Engineered Building Inspections Ltd.

ATTIC SPACE

	Description	Comments
Location of Access:	In master bedroom closet	Attic was viewed from access hatch
Roof Structure:	2x6 rafters @ 16" centers	No roof structural problems were noted
Insulation:	6-8" of fibreglass batts	The level of installed insulation was up to modern standards
Vapor Retarder:	Polyethylene was noted under the installed insulation	The installed insulation prevented a detailed inspection of the installed vapor retarder
Ventilation:	Soffit vents + Roof mounted vents	The condensation staining on the roof sheathing is an indication of inadequate attic ventilation

ADDITIONAL ATTIC INFORMATION

The attic-space was visually inspected from the access opening. Detailed inspections with the often associated hazard of damaging ceiling surfaces obscured by insulation fill are beyond the scope of our inspection. The attic-space was insulated with 6-8" of fibreglass batt insulation, which is adequate by modern insulation standards.

The lack of adequate ventilation to accommodate past moisture concentrations has obviously been a problem, as evidenced by the dark condensation-related staining on the roof sheathing. Additional ventilation should be provided for the space. Contributing moisture sources, which are, to some extent, a function of life-style, should also be reviewed. Major contributing sources can include interior air-drying of laundry, an improperly vented clothes dryer, poor ventilation of cooking vapours, and poor ventilation of bathtub/shower spaces.

The upper four piece bathroom fan ducting was separated and was exhausting into the attic-space at the time of inspection. Connection of the ducting is recommended to remove that interior moisture source.



Engineered Building Inspections Ltd.

SUMMARY OF INSPECTION

The house is a mid-aged Burnaby structure. The overall design of the house would be considered to be well suited for the damp climate conditions in the Lower Mainland. The quality of construction would be considered to be average on a relative scale. Past maintenance of the house appears to have been below average over recent years. Repair and maintenance of items discussed in the report should be carried out as soon as practicable. Further hidden problems which could not be detected during our visual inspection should also be expected.

1. Repair and maintenance items based on the inspection, with limitations as noted throughout the report, and listed in the general order of the report sequence are:
2. Review the Property Disclosure Statement in detail, with particular attention paid to possible moisture penetration or other problems that could be difficult to detect as part of our inspection.
3. Budget for future replacement of the asphalt driveway surface over an improved well-drained soil base.
4. Replace the broken lid for the driveway drain.
5. Remove any silt accumulations from the exterior sump and provide periodic future maintenance.
6. Replace the deck access stairway using treated wood material. Support the stairway stringer bases on moisture-free footings.
7. Note the poor quality application of the roofing membrane. Question the present owners regarding the possible existence and transferability of a roofing warranty. Expect a decreased life expectancy based on the poor quality of the application.
8. Re-nail or screw any loose floor sheathing as opportunities arise with future application of replacement floor coverings.
9. Note the rough operation of the front patio door rollers and requirement for their servicing or replacement.
10. Schedule future replacement of the failed en-suite bathroom window glazing unit.
11. Note the window condensation and mildew problems. Remove any mildew deposits for health reasons. Identify and control contributing moisture sources as necessary to resolve the problem. Consider installing timer-controlled switches for the bathroom fans.
12. Modify the lower fireplace to reduce cold air drafts.
13. Adjust the installed pressure reducing valve to a more tolerable level.
14. Repair the minor supply pipe leakage near the hot water tank.
15. Provide improved access to the southwest hose bib interior shut-off valve.



Engineered Building Inspections Ltd.

16. Replace the leaking hot-water tank.
17. Flush and sterilize the jacuzzi circulating system prior to your occupancy as a health protection measure. Repair or replace the broken timer switch in the en-suite bathroom.
18. Replace the damage thermostat in the main living room.
19. Note the use of polybutylene pipe for the heating system and failure of this type of piping in similar installations. Hire a heating contractor to inspect the system and make recommendations for necessary upgrades and associated costs.
20. Conduct a further review of the attic-space for winter condensation-related problems after control of the major contributing moisture sources has been achieved.
21. Connect the separated four piece bathroom fan ducting in the attic.

This report is the sole property of **ENGINEERED BUILDING INSPECTIONS LTD.**, prepared for the exclusive use of the noted client, and may not be reproduced in any form without the written permission of **ENGINEERED BUILDING INSPECTIONS LTD.**

If you discover any significant items in the home, which are inconsistent with the information discussed on site or in the report, please do not hesitate to contact our office at 604-926-6666. We will gladly provide any necessary clarification and re-visit the home to check the item of concern if necessary.

Yours truly,

Matthew A. Foxall, P.Eng.,C.H.I.

MAF/maf