

# Appendix C Heritage Conservation Plan and Statement of Significance

## Heritage Conservation Plan

328 Second Street, New Westminster BC :: H.H. & Jane Mackenzie House - 1889



Prepared by Elana Zysblat, CAHP :: Ance Building Services :: February 2021

#### Contents

Statement of Significance	3
Current Photographs	4
Research Findings	8
Archival Photographs	10
Historic Brief.	11
Conservation Objectives	12
Site Plan	13
Condition Assessment	15
Recommended Conservation Treatments	18
Maintenance Plan	23
Research Resources	26

#### **Description of Historic Place**

The H. & Jane Mackenzie House is a two-storey, wood-framed house with a gabled roof and an enclosed front porch located in the middle of the western side of the 300 Block of Second Street in the Queen's Park neighbourhood of New Westminster, BC.

#### **Heritage Values**

Constructed in 1889, the H. H. & Jane Mackenzie House is is associated with the late 1880s development boom in New Westminster, sparked in response to the announcement of the arrival of the Canadian Pacific Railway to the area.

It is further valued for its historical connection to two pioneer British Columbia families – the Mackenzie and Jennings families. For 50 years, it was home to Hugh Henry & Jane Mackenzie - H. H. Mackenzie's family were early pioneers in Clover Valley in Langley, and his wife Jane's family (née Jennings), were pioneers in Victoria in the 1860s. Built on land owned by Jane's mother, Mrs. A.M. Johnson, the house is valued for its local connections to the properties between it and the corner of 4th Avenue, where Mrs. Johnson ran a grocery store, later to be known as the Mackenzie Brothers Grocery. This house is remembered as a 50-year home to Hugh Henry and Jane Mackenzie where in 1939 they celebrated their 'at home' 50th anniversary and residence in the house, just shortly before they both passed away.

Physically, the H. H. & Jane Mackenzie House is important historically for the contribution it makes to the integrity of the Queen's Park neighbourhood, which encompasses one of the oldest collections of residential buildings in Western Canada. Its form, siting and architectural details provide an illustration of a typical, vernacular working-class family home of the Victorianera. The house can also been seen as a being an embodiment of the social, cultural, and demographic changes of the neighbourhood over the last 130 years. Its shift from being the single-family home of a pioneer family for 50 years, to shorter-term accommodations and even its division into suites for a series of working-class couples and families, to becoming a valued and important heritage resource in the community is a direct reflection of the historical changes and developments of the Queen's Park neighbourhood since its earliest establishment.

#### **Character-Defining Elements**

- Continuous residential use since 1889
- Original location on Second Street in the Queen's Park neighbourhood
- Original siting in line with other historic homes on the block
- Residential design, scale and massing as expressed in its two storey height (plus basement)
- Steep pitch gable roof with overhang
- Full width front porch with hip roof (recently partially enclosed with glazing)
- Original window openings on side elevations with projecting wood sills

#### **Current Photos**



Above: front elevation. Below: rear elevation





Left: side (southeast) elevation.

**Below:** side (northwest) elevation



Ance Building Services :: 739 Campbell Avenue, Vancouver BC V6A 3K7 :: tel: 604.722.3074 :: Page 5





Surviving elements from 1889

**Above:** the original exterior wood cladding within the enclosed porch, which likely survives underneath the stucco.

**Left:** the original 1889 banister leading upstairs.



Google satellite 3D view

**above:** from southeast **below:** from northeast.

Subject house marked with an arrow



Heritage Conservation Plan:: 328 Second Street, New Westminster:: February 2021

#### **Research Findings**

Civic Address: 328 Second Street (known as 340 Second Street until 1905)

Source: NWPL Fire insurance maps 1897-1915

**Legal Description:** Parcel C Lot 44 Sub Block 6 Plan NWP2620 Land District 36 (529635E)

**Date of Construction: 1899** 

Source: City of New Westminster 1890 tax roll and 1939 Vancouver Sun newspaper article

Original Owner: Mrs. A.M. Johnson

Source: City of New Westminster 1890 and 1892 tax rolls

Architect: n/a

Builder: unknown

#### Owners\* and residents over the years:

Source: City directories, tax rolls

1889-1892: Mrs. A.M. Johnson\* with daughter and son in law - H.H. & Jane Mackenzie

**1892-1894:** Neil Nicholson, stone mason (renter)

**1895-1939:** Hugh Henry McKenzie/MacKenzie (canneryman, 1909; carpenter, 1911; proprietor Royal City Rabbitry, 1927; retired, 1928; laborer, 1929; retired, 1931), married to Jane R.

McKenzie\*

1940-1947: W. Powell, painter at the Provincial Mental Hospital, married to Clara E. Powell

**1948:** Tom Aidsworth, logger, married to Muriel C. Aidsworth

1949: Robert J. Morton [no occupation mentioned], married to Violet G. Morton

1950: Walter Radomske, salesman at Black & Co, married to Lonnie

**1951-1954:** Paul Fossen, carpenter, married to Marie Fossen

**1955:** MacFloyd/MacCloud[?]

**1956-1957:** Ernest Dahling, retired; Thos Spearing welder at Premier Mines, married to Irene Spearing

**1958-1966:** Paul I. Engum, carpenter, married to Kristine Engum

**1958-1961:** Julius Javor\*, carpenter, married to Anna Javor; Albert Bloser, cook at Aristocratic, married to Lydia Bloser (reside)

**1962-1963:** Mrs. Marie A. Schneider\*, widow to R.M. Schneider, maid at G Derby H&O Centre (reside)

**1965-1966:** Arthur W. Penney\*, clerk at CNR (resides)

1967-1968: Doug V. Turner, laborer at Domtar Chemicals, married to Sheila M. Turner

**1967:** Theo G. Grainger\*, apprentice at Lamb Cargate Ind, married to Bonita Grainger (reside)

1968: Tony MacMillan\*, mill worker MB Ltd, married to Sandra MacMillan (reside)

**1969:** Occupied

### 50 Years in One House for Royal City Pair

In celebration of the fiftieth anniversary of their wedding, Mr. and Mrs. H. H. MacKenzie were "at home" at their residence, 328 Second Street, New Westminster, today from 3 to 6.

Mr. and Mrs. MacKenzie were the first couple to be married in the historic Christ Church in Surrey Centre, March 18, 1889, and have lived in their Second Street home in New Westminster ever since.

Mr. MacKenzie was born in Kincardine, County of Bruce, Ontario, and came to British Columbia in 1882 by way of San Francisco. He is a son of the late Duncan and Isabella MacKenzie, one of the first pioneer families to take up a homestead in Surrey.

Mrs. MacKenzie was born in Victoria, and is a grand-daughter of the late William Holmes, one of the first citizens of New Westminster.

Mrs. R. L. Reid, Vancouver, a sister of the groom, was bridesmaid, and is the only surviving attendant of the wedding party.

Mr. MacKenzie was well known in connection with the salmon canning industry on the Fraser River for many years in the '80's and '90's, and was at one time an active member of the commercial firm of MacKenzie Brothers, with his brother, D. E. MacKenzie, New Westminster.

Mr. and Mrs. MacKenzie had four children, three of whom are living, a son, W. E. (Ted), in Detroit; another son, J. H. (Jack), in Los Angeles, and one daughter, Mrs. J. (Jean) Ellis, in Cranbrook, B.C.

**1970:** No return

**1971:** Victor Chandar, mechanic at ABC Muffler, married

to Joyce Chandar **1972:** No return

**1973:** S. Smiley [no occupation mentioned]; Orval G. Smiley, laborer at Bby Corp; Antoni Gouglas, employee

at Alcan, married to Brenda Gouglas

**1974:** Vacant

**1975-1981:** Dennis A. Broughton, shipper at Jan Eden's

Ltd, married to B. Joan Broughton

**1982:** Vacant

1983-1984: Don Bayard, roofer at Sears, married to Jo-

Ann Bayard

1985: Bio Force Can Ltd

1986-1998: Norman Rev Baugh, pastor, married to

Kathy Baugh

\*1994: Peggy A. Schmitz, student (resides)

The Vancouver Sun newspaper - March 18, 1939. Source: newspapers.com

#### **Archival Photos**



The subject house in 1982. Source: NWMA IHP14365



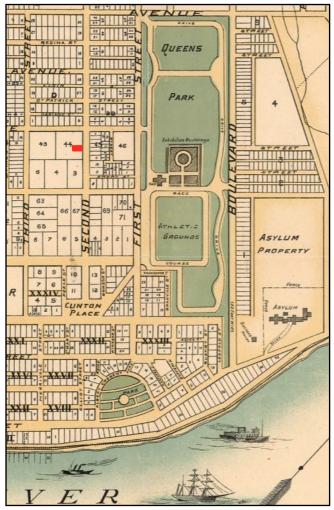
Interior of Mackenzie Brothers Grocery circa 1900. This store was founded by H.H. Mackenzie's mother-in-law, Mrs. A. M. Johnson in 1893, and operated at the corner of Second and 4th Avenue under multiple owners and names (last remembered as Mel-Gordon Grocery) until 1969. Source: NWMA IHP7599-013

#### **Historic Brief**

Although parks and public plazas were allocated in New Westminster's first plan drawn by the Royal Engineers in the early 1860s, there was almost no development beyond the Royal City's original northern boundary of Royal Avenue until the 1880s. The announcement of the arrival of the CPR to Vancouver, with a branch line to New Westminster caused a huge building boom between 1887-1898, transforming the small town into a real city.

At the time this map (right) was drawn in 1892, New Westminster had not only a train station but a streetcar system, electric street lights, and expanded boundaries well beyond Royal Avenue to include suburbs such as Queen's Park, Sapperton and Queensborough. Queen's Park was refined and designed with public gardens, walkways and sports fields.

It was during this Victorian-era growth and investments in infrastructure that residential development really began in the streets around Queen's Park which would become a neighbourhood named after the park. Numerous late 1880s and early 1890s grand homes were built in the Queen's Park neighbourhood, establishing its reputation as a prestigious area located at a commanding distance from the industrial riverfront and busy downtown core.



City of New Westminster map, by R.J. Williams, Ottawa. 1892. Source: City of Vancouver Archives Map 617

The subject house is directly linked to this development period. The blocks in the vicinity of the subject property (marked in red) were fully subdivided at this time, although this map doesn't yet illustrate the individual lots. These blocks were desired for being close to the streetcar line which came from downtown along Columbia, Leopold, Royal, Park Row, up 1st Street, 3rd Avenue, Pine Street, 4th Avenue and then out along 6th Street. Built on land owned by Jane's mother, Mrs. A.M. Johnson, the house also has connections to the properties between it and the corner of 4th Avenue, where once a grocery store stood for many decades. The store was initially operated by Mrs. Johnson and a brother of Hugh Mackenzie, and eventually became known as the Mackenzie Brothers grocery in the 1890s when Hugh joined the business in place of his mother-in-law. Queen's Park was spotted with corner businesses until mid 20th century.

#### **Conservation Objectives**

**Restoration** is the overall conservation objective for the historic house, except at the rear elevation where the objective is **Rehabilitation**.

**Rehabilitation** is the overall conservation objective for the property.

The H.H. & Jane Mackenzie House will be conserved on its original site, with its detached residential use, and restored to an 1889 exterior appearance.

To meet the development potential of the property without impacting the heritage values and Character Defining Element of the historic building, the allowable FSR will be added in the from of an infill house at the rear of this longer and wider than average neighbourhood lot. The infill house design (which meets the Queen's Park Design Guidelines) as well as its low visibility siting, do not detract from the prominence and character of the H.H. & Jane Mackenzie House. It fits in with the surrounding homes's scale and materials while being subtly distinguishable as a contemporary building. The property will be reconfigured so that each of the two buildings will have its own lot to avoid strata act warranty requirements that could impede the application of conservation treatments as per the Canadian Standards & Guidelines for Conservation.

Two low-visibility changes to the heritage house will be introduced to improve its viability and liveability in the context of contemporary living standards and costs:

- A one-bedroom rental suite will be introduced in the rear half of the basement
- Existing dormers will be extended.

<u>Preservation:</u> The action or process of protecting, maintaining and/or stabilizing the existing materials, form and integrity of an historic place or of an individual component, while protecting its heritage value.

<u>Restoration:</u> The action or process of accurately revealing, recovering or representing the state of a historic place or of an individual component, as it appeared at a particular period in its history, while protecting its heritage value.

<u>Rehabilitation:</u> The action or process of making possible a continuing or compatible contemporary use of an historic place or of an individual component, through repair, alterations, and/or additions, while protecting its heritage value.

The above conservation treatment definitions are taken from the Standards & Guidelines for the Conservation of Historic Places in Canada (2nd edition).

#### Site Plan



The relatively large lot can comfortably accommodate two separate dwellings and three families (with a small rental unit in the basement level of the heritage house). The Heritage house area and location will not be changed.



The subdivision of the property into two freehold lots rather than two strata titles, to avoid Strata Act warranty requirements that could impede the application of conservation treatments for the heritage house as per the Canadian Standards & Guidelines for Conservation. The proposed subdivision line is pink. The existing heritage house footprint is teal. The proposed heritage house and infill building are black.

Site plan source: D3 Dimension Drafting Design Inc. with nextdoor house added by author based on aerial imagery.

The infill house design (which meets the Queen's Park Design Guidelines) as well as its low visibility siting, do not detract from the prominence and character of the H.H. & Jane Mackenzie House. See below renders of the relocated and conserved heritage house with the proposed infill house at the rear. Source: D3 Dimension Drafting and Design Inc.



#### **Condition Assessment**

Overall the building is in *fair to good* condition.

#### a. Structure

The building lines are true to the eye - there is no visual evidence of structural distortion. The structural heavy timber posts in the basement show no damage, deterioration or distortion.

#### b. Foundation

The visible portions of the concrete foundation on the interior appear in **good** condition, but a full assessment of the foundation is not possible as the basement walls are finished to the ground as is the exterior cladding.

#### c. Exterior Wood Elements

The facia boards at the roof are in fair condition, showing areas of moisture damage and failing paint. The soffits have been clad in plywood, likely at the time the building was stuccoed in mid-century. The plywood soffits are in good condition but are not original to the building. The window and front porch sills are mostly in good condition, but beginning to show signs of paint failure. A section of original 1889 wood drop siding (installed at a 4" exposure) survives in good condition on the interior of the front porch. The condition of the wood shingles likely cladding the gable, and the wood front porch columns are not known as they are covered in stucco.

#### d. Stucco cladding

The bottle-dash, unpainted stucco cladding, which was likely introduced



in mid-century (the earliest documentation of its presence is in 1967, in a City field inspection report) is showing signs of moisture ingress at various points around the building and is thus considered to be in *fair* condition. The spot deterioration of the stucco will have allowed

moisture into the wood siding and shingles below, in certain areas, so it is assumed the earliest wood cladding will likely exhibit *fair* condition when exposed.

#### e. Roofing and gutters

The roof shingles and rainworks are all in *fair* condition and appear to be towards the end of their life cycle.

#### f. Chimney

One interior brick chimney which survives in the rear single-storey kitchen area, is in **poor** condition, showing evidence of moisture in the mortar joints, the use of incompatible mortar and structural failure. This chimney has never been visible from the street.



#### g. Windows and Doors

All of the window and door openings appear to be original or early (tall vertical openings in Victorian-era dimensions), except for the front gable window and the front porch windows which are not of 1889 proportions and were likely altered at the time the stucco was applied to the house. Wood windows sills survive throughout, but the window sashes themselves have been replaced either with aluminum or vinyl sashes. All the windows sashes are in *fair* condition, towards the end of their life expectancy. The glazed wood enclosure of the front porch dates from post 1982 and is in *good* condition. The front, side and back door openings are early or original but all the doors themselves are replacement doors from recent decades.



#### h. Front porch

The front porch is original in its layout but has been cosmetically altered through the application of stucco which hides any evidence of Victorian-era details such as wood columns and brackets (which an 1889 porch would have had). The glazed enclosure also hides the fact that this porch was used a full-width open porch for over 100 years of its life until recently.

#### h. Finishes

An inspection of the never-stuccoed wood siding and trim piece in the front porch area, revealed that the earliest paint layers on the house were a mid-tone grey body colour and a cream trim.

#### **Recommended Conservation Treatments**

#### a. Structure - Rehabilitation

Lift the wood frame structure off of its existing foundation and place it on top of a new seismic foundation as per architectural plans. Expand structure height at basement level as per architectural plans. Selected areas of the wood framing to be repaired, upgraded and adapted for improved integrity and Code compliance <u>only wherereconnecting to the new foundation at the basement level</u> to complete the work as defined on the Building Permit drawings.

#### b. Foundation - Rehabilitation

Demolish existing concrete foundation, and excavate for a new in-situ foundation. Install a new insulated, seismic concrete foundation on which to position the conserved timber structure.

#### c. Exterior Wood Elements - Preservation and Restoration

Preserve the facia boards in situ, unless certain boards are determined by a finishing carpenter to be damaged beyond repair. Boards that cannot be preserved are to be restored (replaced in-kind relocating the same dimension and profile in smooth finish wood).

Remove the plywood from the roofline soffits to expose and preserve (or restore) the earliest wood soffits, likely tongue & groove boards, depending on the conditions observed during construction. Consult with heritage consultant once plywood is removed to determine how to proceed.

#### d. Stucco removal and exterior wood elements (continued from above)

Stucco to be removed entirely from the building. Heritage consultant to meet on site with contractor BEFORE stucco removal begins to inspect together test removal areas to understand and document how the stucco was applied (with or without mesh for example) and how thick it is. Whether the removal process is to be conducted by a demolition crew or by experienced carpenters, on-site guidance of the trades by heritage consultant must happen first to determine the appropriate tools and removal process. Stucco removal is to be conducted with extreme caution so that the wood cladding below is not damaged. Part of the removal process will involve the documentation, assessment and measuring of the original wood cladding below, whether it is siding or shingles. Look for and document evidence of trim board widths and trim board design, likely visible in the form of shadows on the wood cladding under the stucco. Consult again with heritage consultant once all stucco is removed to determine the final conservation treatment (preservation or restoration) for the surviving 1889 wood drop siding, any wood shingles the gable, front porch columns and front porch ceiling and to finalize the design and dimensions for trim boards, water table board, brackets and other exterior wood details identified for restoration.

#### e. Roof and gutters - Rehabilitation

Reroof in duroid roofing shingles (an acceptable alternative for cedar shakes). Install new rainworks system.

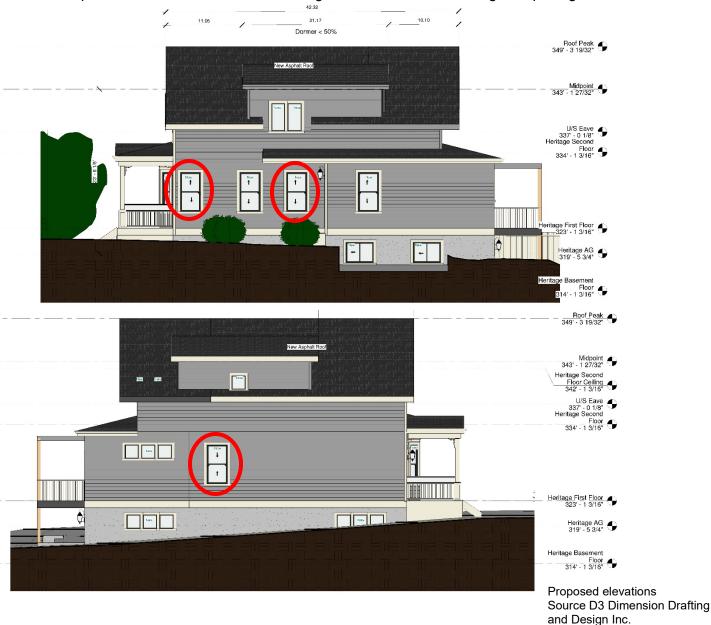
#### f. Chimney

Remove surviving rear chimney for its deteriorated condition and obsolete function.

#### g. Windows and Doors - Restoration and Rehabilitation

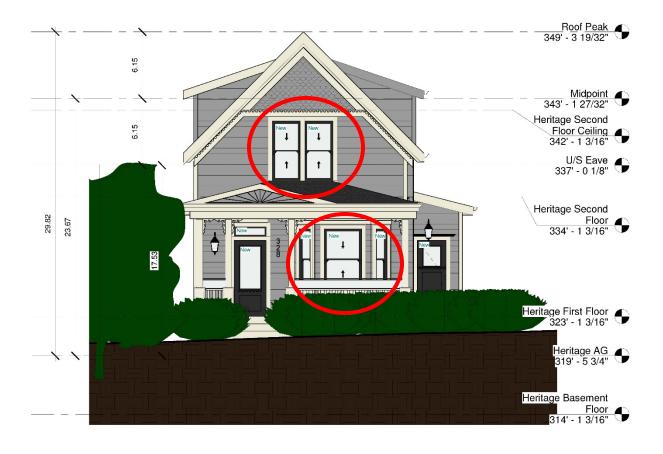
#### Windows:

Restore replica wood sash horned double-hung windows in the below original openings:



Ance Building Services :: 739 Campbell Avenue, Vancouver BC V6A 3K7 :: tel: 604.722.3074 :: Page 19

Restore replica wood sash horned double-hung windows in the below restored openings:



Heritage Proposed Front
3/16" = 1'-0"

Proposed front elevation Source D3 Dimension Drafting and Design Inc.

Install new (Rehabilitation) wood windows, matching the sash profile and style of the original windows, in all the remaining new openings, as per the proposed architectural elevations and window schedule in the D3 Dimension Drafting and Design HRA package.

#### Front door:

Restore a replica solid wood glazed door in a design and glazing proportion appropriate to the late 1880s early 1890s with a large light that takes up 2/3 or 3/4 of the door surface. Install replica Victorian-era door hardware such as the (right) pictured Fenwick set by Baldwin Hardware, either in bronze or black.

All other doors as per D3 Dimension Drafting and Design HRA package door schedule.

#### h. Front porch

Restore front porch to a full-width open porch (remove glazed enclosure). Restore porch window to a canted bay as typical of picture windows on late 1880 homes in proper Victorian-era proportions (tall vertical windows). Expose columns and porch ceiling beneath stucco and restore correct finishing details for this style and age using wood porch balustrades and decorative brackets (as per architectural drawings) and any other evidence of moulding or frieze shadows that may be found underneath the stucco, in consultation with heritage consultant after stucco removal.



Render of proposed front porch. Source: D3 Dimension Drafting and Design Inc.

#### h. Finishes

The current colour scheme is dominated by the bottle-dash stucco and texture which is in contrast to the dark, glossy and smooth painted finish an 1889 house would have featured.

The below proposed colour scheme is based on spot-scraping of original siding and trim elements.

Building area	<u>Historic Colour</u>	<u>Sheen</u>
body (horizontal siding gable shingles, porch gable)	Harris Grey VC-25	Low luster
All trim boards and facia, porch columns, brackets, railing, porch ceiling, soffits, Stairs and porch floors	Harris Cream VC-4	Semi-gloss or satin pearl
Window sashes and doors	Gloss Black VC-135	High gloss

#### **Maintenance Plan**

Following completion of the conservation works, the owner must maintain the building and land in good repair and in accordance with generally accepted maintenance standards. All work should follow *The Standards and Guidelines for the Conservation of Historic Places in Canada (2nd Edition)*. The local government determines an acceptable level or condition to which the heritage building is maintained through the Heritage Maintenance Bylaw. As with the Heritage Conservation Plan, such maintenance standards apply only to the building exterior.

As general upkeep is frequently overlooked and will lead to deterioration of heritage resources, maintenance standards warrant special attention. Any building should be kept in a reasonable condition so it continues to function properly without incurring major expenses to repair deterioration from neglect. The most frequent source of deterioration problems are from poorly maintained roofs, rainwater works and destructive pests.

Establish a maintenance plan using the information below:

#### **Maintenance Checklist**

#### a. Site

- Ensure site runoff drainage is directed away from buildings.
- It is recommended to maintain min. 2 foot clearance between vegetation and building face and a 12 inch wide gravel strip against the foundation in planted areas.
- Constantly manage vegetation (vines, etc.) that is ornamentally attached to the building.

#### b. Foundation

- Review exterior, and interior where visible, for signs of undue settlement, deformation or cracking of foundation and if encountered seek advice from Professional Engineer.
- Ensure perimeter drainage piping is functioning satisfactorily.
- Inspect basement interior for signs of moisture migrating through foundation walls in the form of efflorescence (a white powder on concrete) or staining of finishes. A "smell test" for musty air can indicate a moisture problem.

#### d. Wood Elements

- In the wet coastal climate of British Columbia maintaining integrity of exterior wood elements is critical in preventing water ingress into buildings.
- Annually inspect wood elements for signs of deterioration, identify source of problem and take corrective repair/replacement action:

o wood in contact with ground or plantings;

o excessive cupping, loose knots, cracks or splits;

o open wood-to-wood joints or loose/missing fasteners;

o attack from biological growth (moss, moulds, etc.) or infestations (carpenter ants, etc.);

o animal damage or accumulations (chewed holes, nesting, bird/rodent droppings) USE HAZARDOUS MATERIALS PROCEDURES;

o signs of water ingress (rot, staining, mould, infestation).

- Closely inspect highly exposed wood elements such as porches, railings and stairs for deterioration. Anticipate replacement in-kind of portions of these elements every 10-15 years.
- Inspect visible caulking joints for continuity and shrinkage. Expect to redo caulking every 3-5 years.
- Repainting shall be in historic colours as approved in this plan <u>or</u> with a Heritage Alteration Permit (HAP) issued by the Local Authority.

#### e. Windows and Doors

- Replace cracked or broken glass as it occurs.
- Check satisfactory operation of windows and doors.
- Check condition and operation of hardware for rust or breakage. Lubricate hardware annually.
- Inspect weather stripping for excessive wear and integrity.

#### f. Roofing and Rainwater Works

- Inspect roof condition every 5 years, looking for:
- o loose, split or missing shingles, especially at edges, ridges and hips;
- o excessive moss growth and/or accumulation of debris from adjacent trees;
- o flashings functioning properly to shed water down slope.
- Remove roof debris and moss with gentle sweeping and low-pressure hose.
- Plan for roof replacement every 18-22.
- Annually inspect and clean gutters, flush out downpipes. Ensure gutters positively slope to downpipes, there are no leaks or water splashing onto building.
- Ensure gutter hangers and rainwater system elements intact and secure.
- Ensure downpipes inserted into collection piping stub-outs at grade and/or directed away from building onto concrete splash pads.

#### g. General Cleaning

- Building exterior should be regularly cleaned depending on build up of atmospheric soot, biological growth and/or dirt up-splash from ground.
- Cleaning prevents buildup of deleterious materials which can lead to premature and avoidable maintenance problems.
- Windows, doors and rainwater works should be cleaned annually.
- When cleaning always use gentlest means possible such as soft bristle brush and lowpressure hose. Use mild cleaner if necessary such as diluted TSP or Simple Green©.
- Do not use high-pressure washing as it will lead to excessive damage to finishes, seals, caulking and wood elements, and it will drive water into wall assemblies and lead to bigger problems.

#### **Research Resources**

Ancestry.ca

**BC** and National Archives

Indexes to births (1854-1903), marriages (1872-1938), deaths (1872-1993), colonial marriages (1859-1872) and baptisms (1836-1888). Archival photographs. Government of Canada Censuses for BC

City of New Westminster

Building permit records - CityViews database, City of New Westminster. Barman, Burton & Cook. 2009. Queen's Park Historical Context Statement prepared for the City of New Westminster.

**New Westminster Archives** 

Field Inspection card 1962-1977, building file, tax rolls, 1931-1947 Fire Insurance map, archival photographs.

New Westminster Public Library Historic directories, Fire insurance maps, Municipal Voters Lists Columbian Daily newspaper - 1880s-1890s

Freund-Hainsworth, Katherine & Hainsworth, Gavin. 2005. A New Westminster Album: Glimpses of the City As It Was. Dundurn. pages 46-47

Gottfried, Herbert & Jennings, Jan. 1985. American Vernacular Building and Interiors 1870-1960. Norton & Co. New York.

Hayes, Derek. 2005. Historical Atlas of Vancouver and the Lower Fraser Valley. Douglas & McIntyre.

Roy, Patricia E. 1989. A White Man's Province: BC Politicians and Chinese and Japanese Immigrants 1858-1914. UBC Press. pages 111-112

Vancouver Daily World Newspaper. various archival editions 1888-1924

Vancouver Archives and Vancouver Public Library - archival photographs

Wolf, Jim. 2005. Royal City: A Photographic History of New Westminster. Heritage House.