Conservation Plan

Nielsen Residence – 112 Moray Street, Port Moody

July 2021

McLEAN HERITAGE
PLANNING & CONSULTING

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1. INTRODUCTION

Address: 112 Moray Street, Port Moody
Legal Description: West ½ of Lot 23, Except Part Subdivided by Plan 84915, District Lot 233, Group 1, New Westminster District, Plan 1145
Neighbourhood: Moody Centre
Zoning: RS-1

Type of Resource: Building; Residential; Single Family Dwelling
Historic Name: Nielsen Residence
Original Owner: Axel Nielsen
Date of Construction: 1936, expanded c. 1943
Architect: None
Builder: Unknown
Heritage Status: Listed on Port Moody Heritage Register, Proposed HRA

The Nielsen Residence, located at 112 Moray Street, is listed on the Port Moody Heritage Register. It was constructed around 1936, and enlarged at least once in the early 1940s, and is characterized by its simple gable form and minimal detailing, with shingle cladding and a variety of wood windows and a modest front porch. It is representative of semi-rural working-class housing built in the Lower Mainland in that time period.

The proposed conservation strategy for the Nielsen Residence includes its retention on the property, with a slight relocation to the west, and the preservation and rehabilitation of the character defining elements along each elevation. It also includes the rehabilitation of the lower level by setting it on a new foundation and performing necessary seismic and structural upgrades that will not impact the character-defining elements. The remainder of the site is proposed to be developed with 28 townhouse units, with a respectful degree of open space at the rear of the heritage building to allow for both tree retention and distinguishability between the new and old.

This Conservation Plan is based on Parks Canada's *Standards and Guidelines for the Conservation of Historic Places in Canada*. It outlines the preservation, rehabilitation and restoration that will occur as part of the proposed development initiative.

2. HISTORIC CONTEXT

The property on which the Nielsen Residence is located, at 112 Moray Street, was one of a series of 5-acre parcels previously owned by Port Moody Steel Works Limited. It was repossessed during the Depression by the City of Port Moody and subdivided in 1934, with Axel Nielsen acquiring the west half (2.4 acres). The Nielsen Residence was constructed around 1936, and enlarged at least once in the early 1940s. It exemplifies a simple interwar era single family home for a modest working-class family.

It is one of only three buildings located in the Moody Centre area of Port Moody that has been formally listed on its Heritage Register – the other two being the Canadian Pacific Railway Station on Murray Street and the Siddall Residence on St. Johns Street. It is unusual that such a small and modestly styled and designed house would remain to this day, in an area that has seen significant redevelopment during the course of Port Moody's evolution in the last half of the 20th century. The early farm-based use of the site is illustrated on Figure 1. The site was large and comprised mostly fields and treed areas, with multiple buildings suggesting a small-scale farming use.

Figure 1a: Aerial Photograph of Burrard Inlet, 1963. Original parcel including 112 Moray Street outlined in red.
City of Burnaby Archives, BC Government Air Photograph. Photo ID 561-009.

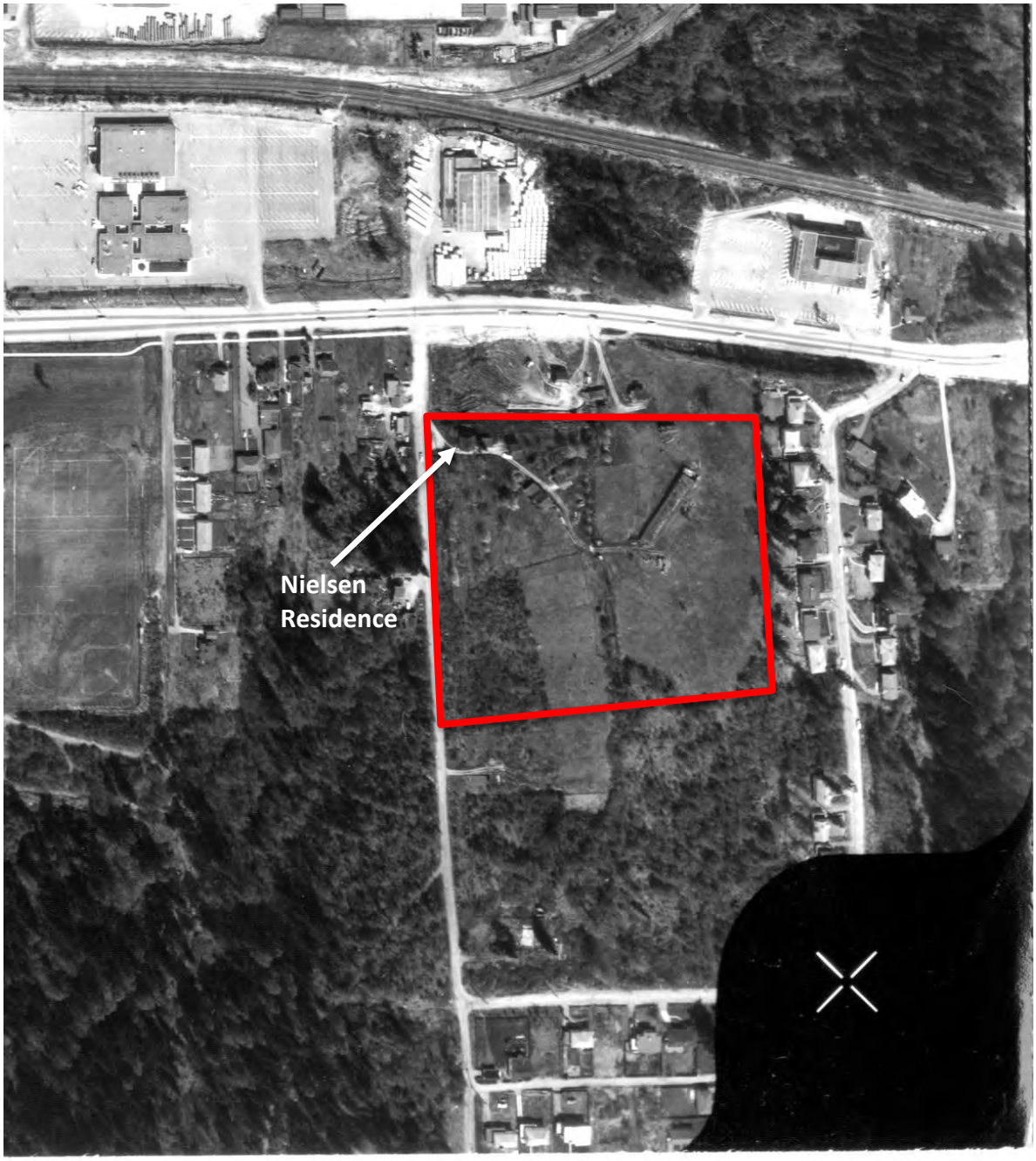


Figure 1b: Aerial Photograph of Burrard Inlet, 1963. Note: the photo is cropped and enlarged to illustrate detail on the property of Anton Pinda prior to its subdivision. The Nielsen Residence is located in the top left corner.
City of Burnaby Archives, BC Government Air Photograph. Photo ID 561-009.

Anastasia (d. 1949) and Anton Pinda (d. 1968) acquired ownership in 1938, and it was held in the family until very recently. The tract of land shown in Figure 1b strongly suggests that, despite the original section of land measuring 2.5 acres, the Pinda family acquired more property over time, to the point that the farm encompassed 10 acres by the early 1960s.

The evolution of the property is further illustrated in Figure 2 with an outline of what is assumed to be the original site, and its subdivision with subsequent developments to the south and east. The southern and easterly section comprises the largest subdivision in 1974, followed by a smaller remaining portion subdivided in 1991 immediately south of the existing site. What remains illustrates some of the last areas of farmed and open space area in the central section of Port Moody.

The property remains relatively intact primarily because of the length of ownership of the Pinda family. Interestingly, the first subdivision of the property that occurred around 1974, which includes a street named after Anton and Anastasia Pinda, reflecting their long-term ownership.

The building is clad in wood shingles and lap siding, and its Vernacular style and modest scale convey a sense of simplicity in an era when real estate was cheap and large parcels used for farming, set close to the centre of the city, were common.

Figure 2: Evolution of Development

- **Existing Site - red Outline**
- **Original site, Lot 23 - blue outline**
- **Subdivision 1 - orange dash outline, c. 1974**
- **Subdivision 2 - green dash outline, c. 1991**

Both Axel Nielsen and Anton Pinda were employed at the Thurson-Flavelle Mill (later named Flavelle Sawmill Co. Ltd. and later Flavelle Cedar). The Nielsen Residence illustrates the importance of the resource-based industry that was the foundation of Port Moody's development and the significance of this company as a local employer, as a simple working-class dwelling owned by those who worked at the Flavelle Sawmill. The mill remained a focus of employment and economic activity for 115 years. It began as Emerson Lumber in 1905, becoming the Flavelle Mill in 1926. In 1955 it was owned by Canadian Colleries Ltd. and Interfor until 1998 and then AP Group until 2020, when the announcement was made that it was to close.

Archival Material

Figures 3 and 4 are samples of newspaper taken from the upper floor of the Nielsen Residence during the site visit on July 8, 2021. Each provide clues as to the date of construction, since other records (such as Assessment) are not entirely clear.

The first is dated November 27, 1936 and appears to have been used extensively in the top floor where materials had been removed, suggesting it was used as insulation and would imply a date of construction in the fall of 1936. The second is dated October 16, 1944 and appears to have been used as insulation surrounding the south side upper floor window. This suggests that some substantial alterations were made around that date which may also have included the east side main floor expansion. This corresponds with the Assessment records that show a significant improvement in 1943.


THE VANCOUVER SUN—*Vancouver's Own Newspaper*— FRIDAY, NOVEMBER 27, 1936

Santa Coming to Spencer's By Plane

According to word received today from Santa Claus, he has decided to travel this year by plane instead of using his eight faithful reindeer. His visit to Vancouver, where his headquarters will be at Spencer's Toyland, will be made in the big United Air Lines transport plane shown in the photo above.

Officials of United Air Lines have confirmed his message, and say that he insists on having the pilots circle the big plane over the city before landing at Sea Island Airport, so that he can see where all his little friends live.

He is due to land at the Airport on Saturday afternoon at about 2:40, and he hopes to see as many of his little friends as possible out there to meet him as he steps off the plane.

Then, after being photographed, Santa will mount his specially decorated car and be driven right down Granville Street to Spencer's. He is due at Spencer's Toyland, on the Third Floor, at about 2.30

'GRADUATE STORE LIC

—Merchants' Plea

"BUTCHERS BEING DRIVEN OUT OF BUSINESS

Complaints against chain stores and applications for trade licensing reform were made Wednesday to the City Co... committee by the ... Section of the Meat Cutters' and ... Packing House Employees' Union ... the Retail Merchants' Association, respectively.

Declaring that independent butchers are being driven out of business by chain store competition and inability to pay high rentals that the chain stores offer, W. J. Matthews presented a petition signed by 28 ... tion members.

They asked that chain licenses be placed on a graduated scale based on the number of stores; that not more than 30 stores be permitted to a chain, and that not more than six new store licenses be issued to one company.

CHARTER CHANGE

Although aldermen said that the city charter now precludes such action, they agreed to ask a special committee on licenses to investigate and report on the possibility of asking for a charter change at the next session of the Legislature.

The finance committee also voted to ask civic law and license depart-

Vancouver Port News

SHIPS IN PORT

STRANGE CARGOES

Figure 3: *Vancouver Sun*, November 27, 1936


UN -- MONDAY, OCTOBER 16, 1944

A Vancouver-Owned Newspaper

Rupert Men on Goodwill Tour

PRINCE RUPERT, Oct. 16—(CP)—Eleven business and professional men, members of the Prince Rupert Chamber of Commerce, visited Ketchikan, Alaska, Saturday, their first stop in a good will tour of southeastern Alaska cities.

Those in the party include: E. T. Kerney of Terrace, B.C.; ... Coal, Skeenal; W. J. Scott, president of the Prince Rupert Chamber of Commerce; W. M. Watts, George C. Mitchell, Hector Cowie, W. F. Stone, G. A. Hunter, Arnold Flaten, Peter Lakie, George Ross, Dr. Jens Munthe.

Deputy Commissioner

NORTH VANCOUVER, Oct. 16 — (CP) — Appointment has been confirmed of D. G. Tate by the Provincial Government to be acting commissioner of the city and district of North Vancouver whenever ... recently appointed commissioner, may be absent.

Plaque Presentation At West Van. Tonight

WEST VANCOUVER, Oct. 16.—Mrs. W. T. Davies will receive the West Vancouver "Good Citizen" plaque at a presentation dinner in Inglewood Auditorium tonight. Rev. E. D. Braden will be principal speaker.

A program of entertainment has been arranged, including ... Matthews, Jack York, Dr. Max Parkin and Miss Beth Morrison.

Invasion Films Seen By Vancouver Firemen

Fierce fighting on the Canadian sector of the Normandy beachhead and battling for the city of Naples are shown in two movies which will be screened at Victory Loan rallies in industrial plants and business organizations throughout the city in the Seventh Victory Loan campaign.

Firemen from seven city fire halls saw the films.

Be Sure

A Bay Label

... your TOPCOAT

PAcific 6211

... Comfort ...

... Calf Balmorals

$7.95

... on comfort, appearance and good wearing ... these Balmorals as the choice for business ...

Figure 4: *Vancouver Sun*, October 16, 1944

3. STATEMENT OF SIGNIFICANCE

NIELSEN RESIDENCE

DESCRIPTION OF HISTORIC PLACE

The Nielsen Residence is a one and a half storey, wood frame Vernacular style cottage situated on the east side of Moray Street, east of the historic core of Port Moody, in the residential neighbourhood of Moody Centre. This modest dwelling is notable for its gabled roof and partial-width front porch.

HERITAGE VALUE

Built in 1936, the Nielsen Residence is valued as an example of the modest type of housing of the interwar era and is additionally valued for its vernacular style and design.

The Nielsen Residence is significant as a house that was constructed in the inter-war era for Port Moody's working population. It reflects the ongoing development of Moody Centre, the neighbourhood situated north of the historic area of commercial and institutional buildings located at the junction of the railway and the working waterfront. The property on which this house sits was one of a series of five-acre lots originally owned by Port Moody Steel Works Limited that was repossessed by the City of Port Moody for non-payment of taxes during the Depression. In 1933, the lot was subdivided and part was sold to Axel Nielsen (1901-1971), who was employed by the Flavelle Cedar Mills, one of the major local saw mills in the area. Nielsen constructed this modest house in stages, as his resources allowed. Its construction illustrates a gradual economic recovery and continued growth of trade and commerce. The subsequent family, Anastasia and Anton Pinda, purchased the house in 1938; Anton Pinda was also employed at that sawmill. This demonstrates the importance that local resource industries played in the economic development of Port Moody.

The Nielsen Residence is valued for its Vernacular style and modest scale, displaying references to the traditional Period Revival motifs that were popular during that era. The house is of modest Vernacular form, with basic massing and floor plan in the form of a primary gabled roof and shed extension, and a small front porch. True to its mill town origins, it is of wood-frame construction and clad entirely in wood.

CHARACTER DEFINING ELEMENTS

The elements that define the heritage character of the Nielsen Residence are its:

- Location close to the corner of Moray Street and St. Johns Street in Moody Centre;
- Continuous residential use;

- Main floor set nearly a full storey above grade at the front and at grade at the rear;
- Vernacular residential form, scale and massing as expressed by its one-and-a-half storey with a low basement, rectangular plan with gabled roof and partial-width verandah;
- Wood-frame construction set on concrete foundation with lapped wooden siding on the lower level, shingle siding on the main body of the house and a wood shingled roof;
- Partial-width shed roof porch on the north side with squared posts and simple balustrade with decorative angled brackets;
- Wide overhang on the south side with open soffit;
- Open soffit and exposed rafter tails on the west and east sides;
- Fenestration including single-set window openings on the front, sides and rear comprising double hung windows with wood top sash at front, some retaining original horns, awning operation windows at the east side; single-set wood frame doors at front and rear with decorative inlay and inset glazing at the front; simple trim board face on all openings;
- corner boards on the northwest and southwest corners
- Associated landscape features such as coniferous and deciduous trees.

4. CONSERVATION GUIDELINES

4.1. STANDARDS AND GUIDELINES

The Nielsen Residence is a building listed on the Port Moody Heritage Register and is a significant historic resource in the City of Port Moody. Parks Canada's *Standards and Guidelines for the Conservation of Historic Places in Canada* is the source used to assess the appropriate level of conservation and intervention. Under the Standards and Guidelines, the work proposed for the Nielsen Residence includes aspects of preservation, restoration and rehabilitation.

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

Restoration: 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.

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

Interventions to the historic buildings should be based upon the Standards outlined in the *Standards and Guidelines for the Conservation of Historic Places in Canada*, which are conservation principles of best practice. The following General Standards should be followed when carrying out any work to a historic property.

STANDARDS

Standards Relating to All Conservation Projects

1. Conserve the heritage value of a historic place. Do not remove, replace, or substantially alter its intact or repairable character-defining elements. Do not move a part of a historic place if its current location is a character-defining element.
2. Conserve changes to a historic place, which over time, have become character-defining elements in their own right.
3. Conserve heritage value by adopting an approach calling for minimal intervention.
4. Recognize each historic place as a physical record of its time, place and use. Do not create a false sense of historical development by adding elements from other historic places or other properties or by combining features of the same property that never coexisted.
5. Find a use for a historic place that requires minimal or no change to its character-defining elements.
6. Protect and, if necessary, stabilize a historic place until any subsequent intervention is undertaken. Protect and preserve archaeological resources in place. Where there is potential for disturbance of archaeological resources, take mitigation measures to limit damage and loss of information.
7. Evaluate the existing condition of character-defining elements to determine the appropriate intervention needed. Use the gentlest means possible for any intervention. Respect heritage value when undertaking an intervention.
8. Maintain character-defining elements on an on-going basis. Repair character-defining elements by reinforcing the materials using recognized conservation methods. Replace in kind any extensively deteriorated or missing parts of character-defining elements, where there are surviving prototypes.
9. Make any intervention needed to preserve character-defining elements physically and visually compatible with the historic place and identifiable upon close inspection. Document any intervention for future reference.

Additional Standards Relating to Rehabilitation

10. Repair rather than replace character-defining elements. Where character-defining elements are too severely deteriorated to repair, and where sufficient physical evidence exists, replace them with new elements that match the forms, materials and detailing of sound versions of the same elements. Where there is

insufficient physical evidence, make the form, material and detailing of the new elements compatible with the character of the historic place.

11. Conserve the heritage value and character-defining elements when creating any new additions to a historic place and any related new construction. Make the new work physically and visually compatible with, subordinate to and distinguishable from the historic place.
12. Create any new additions or related new construction so that the essential form and integrity of a historic place will not be impaired if the new work is removed in the future.

Additional Standards Relating to Restoration

13. Repair rather than replace character-defining elements from the restoration period. Where character-defining elements are too severely deteriorated to repair and where sufficient physical evidence exists, replace them with new elements that match the forms, materials and detailing of sound versions of the same elements.
14. Replace missing features from the restoration period with new features whose forms, materials and detailing are based on sufficient physical, documentary and/or oral evidence.

4.2. CONSERVATION REFERENCES

The proposed work entails the Preservation, Rehabilitation and Restoration of the Nielsen Residence. The following conservation resources should be referenced:

Standards and Guidelines for the Conservation of Historic Places in Canada, Parks Canada *http://www.historicplaces.ca/en/pages/standards-normes.aspx*

National Park Service, Technical Preservation Services, Preservation Briefs:

Preservation Brief 3: Improving Energy Efficiency in Historic Buildings
http://www.nps.gov/tps/how-to-preserve/briefs/3-improve-energy-efficiency.htm

Preservation Brief 4: Roofing for Historic Buildings
http://www.nps.gov/tps/how-to-preserve/briefs/4-roofing.htm

Preservation Brief 6: Dangers of Abrasive Cleaning to Historic Buildings
http://www.nps.gov/tps/how-to-preserve/briefs/6-dangers-abrasive-cleaning.htm

Preservation Brief 17: Architectural Character – Identifying the Visual Aspects of Historic Buildings as an Aid to Preserving their Character
http://www.nps.gov/tps/how-to-preserve/briefs/17-architectural-character.htm

Preservation Brief 35: Understanding Old Buildings: The Process of Architectural Investigation
http://www.nps.gov/tps/how-to-preserve/briefs/35-architectural-investigation.htm

Preservation Brief 36: Protecting Cultural Landscapes: Planning, Treatment and Management of Historic Landscapes
http://www.nps.gov/tps/how-to-preserve/briefs/36-cultural-landscapes.htm

Preservation Brief 39: Holding the Line: Controlling Unwanted Moisture in Historic Buildings
http://www.nps.gov/tps/how-to-preserve/briefs/39-control-unwanted-moisture.htm

Preservation Brief 41: The Seismic Rehabilitation of Historic Buildings. Keeping Preservation in the Forefront. https://www.nps.gov/tps/how-to-preserve/briefs/41-seismic-rehabilitation.htm

Preservation Brief 43: The Preparation and Use of Historic Structure Reports.
http://www.nps.gov/tps/how-to-preserve/briefs/43-historic-structure-reports.htm

4.3. GENERAL CONSERVATION STRATEGY

The primary intent is to preserve the existing historic structure, while undertaking a voluntary rehabilitation that will upgrade its structure and services to increase its functionality for continued residential use. As part of the scope of work, exterior character-defining elements will be preserved, while missing or deteriorated elements will be will be restored. As part of the relocation, the house will be left intact to ensure its stability during the move, and only after being set on a new foundation, will the interior undergo a voluntary seismic retrofit, structural upgrades and an interior reconfiguration. This will not affect the exterior, which will remain primarily intact and with a design in collaboration with the heritage consultant.

The major proposed interventions of the overall project are to:

- Construct a new foundation in close proximity to the current location.
- Relocate the house to the new foundation.

Site protection is an important component of the general conservation. It is the responsibility of the owner to ensure the heritage resource is protected from damage at all times. It must be protected against unauthorized access or damage with the securing of all doors, windows and any other openings, and with the use of fencing, lighting and other security measures.

4.4. SUSTAINABILITY

Heritage conservation works in conjunction with sustainable development as a realistic and critical goal of any rehabilitation project. The conservation, continued use and adaptive re-use of historic buildings and structures can attain a high level of retention that accordingly reduces the overall carbon footprint. The embodied energy in historic buildings is a measurement that is often ignored or discounted, yet is crucial to understanding the wider benefits of retention tied to reducing greenhouse gas emissions (GHG) and global warming. While new construction is touted as offering the benefit of the highest level of energy efficiency, it should be recognized that retaining a historic building can still achieve an excellent level of energy efficiency while avoiding the significant levels of GHGs by reducing solid waste, eliminating or at least minimizing the need for new structural components, conserving existing material rather than producing new, and overall saving a significant amount of embodied energy.

4.5. ALTERNATE COMPLIANCE

4.5.1. BC BUILDING CODE

The BC Building Code specifies minimum provisions relating to the overall safety of buildings, referencing public health, fire protection and structural sufficiency. There is the understanding that, on a number of levels, heritage buildings do not perform in the same way as new construction, and if they were brought up to code, it could compromise historic appearance or authenticity. As such, other options are available that will not compromise public safety objectives of the Code, commonly referred to as “alternate compliance methods”. These are typically considered on a case-by-case basis as individual circumstances can vary greatly, and their application is to balance the viable alternate methods with the highest degree of conservation possible under those site circumstances.

4.5.2. ENERGY EFFICIENCY ACT

The Energy Efficiency Act (EEA) is amended to February 2021. It exempts components such as doors, glazing for door slabs, sidelights and transoms, for a “designated heritage building”. This is defined by the province as either protected provincially under the Heritage Conservation Act, a municipal heritage designation by-law or included in a community heritage register under either the Local Government Act or Vancouver Charter, or Islands Trust Act. This allows a more sensitive approach by maintaining a higher degree of integrity for character-defining components that are often challenging, expensive, or impossible to replicate. The principle is that heritage buildings can be made more energy efficient through non-intrusive or alternate compliance methods, such as those that are “hidden” inside such as mechanical systems.

Various EEA regulatory bulletins pertaining to heritage are found at: https://www2.gov.bc.ca/gov/content/industry/electricity-alternative-energy/energy-efficiency-conservation/policy-regulations/standards/regulated-products

Energy efficiency considerations can also be found in *Standards and Guidelines for the Conservation of Historic Places*.

4.6. SITE PROTECTION AND STABILIZATION

The owner must ensure that the heritage resource is protected at all times. When left vacant, it should be secured against damage or unauthorized access. Fencing, electronic security and the covering of windows, doors and any other openings using materials and hardware that cannot be removed by any unauthorized persons. Protection of trees and any other significant landscape features is to be determined in conjunction with the arborist's report and further consultation with the arborist retained for this project. A site protection strategy will be developed through discussion with the owner, contractor, arborist and architect. After completion of the development, the location of the heritage building as a focal point of a 28-unit townhouse development, and its location abutting Moray Street, ensures that it will be highly visible at all times.

The heritage building is proposed to be relocated on the site. Given that the proposed new location slightly overlaps the area of the existing foundation, the heritage building may have to be placed on a temporary setting on a box crib or other industry-approved means, away from the new foundation. Its stabilization and secured envelope during this time is essential to a successful relocation.

5. CONSERVATION RECOMMENDATIONS

A condition review of the exterior and interior of the Nielsen Residence was completed as part of a site visit on **July 8, 2021**, where a comprehensive assessment was conducted and photo documentation completed. Recommendations for the preservation and rehabilitation of this heritage building are based on archival material and research, physical material samples, site review and an assessment of the original appearance of the heritage building in relation to how it relates to its current condition and integrity.

5.1. SITE

The Nielsen Residence is a Vernacular style 1½ storey building located on the east side of Moray Street, south of St. Johns Street in Port Moody. It is one of only three buildings in the Moody Centre neighbourhood that is listed on the Port Moody Heritage Register. The building is set close to the west and north lot lines: its

frontage is on Moray Street and there is a second (non-vehicular) access to the property from Flinn Court.

The site includes many mature trees, a small open garage on the east side of the house and a larger barn set further to the east that is open to the front on the lower level and enclosed on the upper level. However, the garage and barn will not be retained.

The Nielsen Residence, although not proposed to be retained in exactly the same location, is to be relocated a short distance to the west. This minor relocation will not compromise any of its character, as the context of its general siting will remain much the same, since there will be some overlap between the current foundation and the proposed new foundation.

The heritage building and other features (including landscape) should be protected from damage throughout the phases of rehabilitation work. For further information, please reference **Section 4.6: Site Protection and Stabilization**.

Conservation Strategy: Preservation

- Preserve the original general location of the building. All rehabilitation work should occur within the property line and building envelope.
- Preserve the historic street frontage along Moray Street
- Address drainage issues through the provision of adequate site drainage measures.

5.2. FORM, SCALE AND MASSING

The Nielsen Residence features a Vernacular style with its form, scale and massing expressed by gables at the front and rear, its modest scale and simple rooflines (Figures 6, 7, 8 and 9). The form, scale and massing of the house is a character-defining element and must be preserved. The exterior form will be retained and new minimally-invasive seismic interventions that might be required should not be visible from the exterior.

Conservation Strategy: Preservation

- Preserve the overall form, scale and massing.
- The historic exterior facades are to be preserved and rehabilitated.
- For the exterior, if seismic interventions should be required to be installed, these are to be as minimally intrusive to the appearance of the building as possible, and given the full alteration to the interior, with removal of original interior materials, should be achievable without any exterior alterations.

5.3. FOUNDATION

The foundation consists of a poured-in-place concrete wall on all sides. As entry to the lower (basement/crawlspace) was not available, it is not known if the floor is poured-in-place concrete floor slab or some other material. The proposed relocation of the house will result in it being lifted and set on the new foundation that will include a high-quality and structurally-sound living space at the lower level. This work will be undertaken with professionals who specialize in house relocation.

Conservation Strategy: Rehabilitation

- Ensure the heritage building is braced and protected during the lift and move. The building and fabric should not be damaged during this work.
- Appropriate foundation materials should be used, particularly reinforced concrete basement walls and slab.
- Provide underground utility installations: electric, communication and other services, if possible.

5.4. EXTERIOR WALLS

5.4.1. EXTERIOR WOOD FRAME WALLS

The exterior walls of the heritage building are traditional wood-frame, consisting of old-growth lumber. The framing type could not be determined during the site visit and requires further structural investigation.

Condition Assessment:

- Likewise, the condition of the exterior wood frame walls could not be assessed. The wood-frame construction itself may require structural and seismic upgrades to meet BC Building Code requirements.

Conservation Strategy: Preservation

- The historic wood-frame walls should be preserved, on the basis that they are in sound structural condition.
- Any structural and/or seismic upgrades should be designed from the inside without affecting the exterior appearance of the heritage building.
- Utilize alternative compliance methods, wherever applicable, in the BC Building Code for fire and spatial separations. The heritage consultant can review proposed interventions to meet code requirements.

5.4.2. EXTERIOR SIDING

Condition Assessment:

The overall condition of the cladding varies from one wall to another, ranging from fair to good. One noticeable variation in the cladding is found under

several window sills (esp. south side): while the shingles themselves are in good shape, they appear to have been re-applied due to either window repair or replacement and as such are do not quite follow the same pattern as the rest of the wall (Figures 8, 9, 12 and 14)

Conservation Strategy: Rehabilitation and Preservation

- The historic cladding should be preserved. Repair those shingles that are irregularly applied (esp. under sills) to be consistent with the rest or the wall.
- Any structural and/or seismic upgrades should be designed from the inside without affecting the exterior appearance of the heritage building.
- Utilize alternative compliance methods, wherever applicable, in the BC Building Code for fire and spatial separations. The heritage consultant can review proposed interventions to meet code requirements.

5.5. FRONT PORCH

The porch roof is clad in cedar shakes, similar to the remainder of the house. The rest of the porch comprises a set of three posts with decorative brackets, a low balustrade surrounding the front and west side. The east side at one time had stairs to access the porch, but these are no longer in place.

Condition Assessment:

The overall condition of the front porch is fair. Structurally the floor has deteriorated in parts while the balustrade, posts, brackets and overhang are generally good. The roofing material of the porch, similar to the rest of the roofing on the house, is poor (Figures 10 and 11).

Conservation Strategy: Rehabilitation and Restoration

- Restore the porch roof overhang with new roofing, in the form of asphalt shingles.
- Rehabilitate the balustrade, posts, brackets and rafter tails.
- Restore the stairs to the porch in wood, with the underside facing either enclosed or open, and restore a wood railing.

5.6. FENESTRATION

5.6.1. DOORS AND TRIM

The wood front door with inset glazing, which leads to the porch, is in place, and there is a door at the rear of the house leading on to a concrete pad at grade. Both doors have a full set of trim surrounds.

Condition Assessment:
The overall condition of the doors and trim is good. The front door in particular is in very good condition, although it is missing the inset glazing (Figure 9). The rear door is a plain faced door, no glazing, which is not original to the house.

Conservation Strategy: Preservation, Rehabilitation and Restoration

- Rehabilitate the front door and reinstate the glazing.
- Restore the rear door as a solid wood door, in a period-appropriate appearance, with or without inset glazing.
- Retain and repair all trim.

5.6.2. WINDOWS AND TRIM

The window type varies from one wall to another, ranging from double hung, casement, fixed and awning operation. The eclectic mix of window type is one of the unique characteristics of this heritage building. While there is some evidence that installation was done at different times without regard for consistency, the overall approach should be to retain and repair. The only window for which an alternate approach may be considered is the on the south side, adjacent the front door, which has a fixed window inserted next to the casement.

Condition Assessment:
The overall condition of the windows and trim is good. Windows on the west side are in good condition (Figure 6). Windows on the south side, main floor, are in good condition, while the upper centre-set window is in fair condition with damage to the trim. The small windows set in the crawlspace, on either side of the centre-set window, have unusually narrow sills which are not standard but are in good condition otherwise (Figure 7). Windows on the east side are each set at different heights but otherwise are in good condition, as are the trim and sills (Figures 8 and 9). On the north side, the windows and trim are in good condition, while the sills are in fair condition except for the most westerly of the north side windows, which is good (Figures 9 and 10).

Conservation Strategy: Preservation, Rehabilitation and Restoration

- All of the original wood frame windows of the house should be preserved. Repairs should be done where necessary, using the least intrusive method.
- All window trim is to be retained, repaired where necessary and reinstated.
- Windows on the basement level are expected to be new, as this will be an upgraded living space after the house is relocated. Therefore, this level should be restored with new wood windows in a style complementary to those on the main floor, in consultation with the heritage consultant.

5.7. ROOF, SOFFIT AND GUTTERS

The original design of the roof was as a gabled form, which was extended as part of the later addition on the east side creating a slightly different pitch on that side. It is covered with cedar shakes on the west side and with an additional layer of metal roofing on the east side. There is also a narrow roof overhang on a portion of the south side that is not connected to the ground, but rather is supported in its connection to the exterior wall and main roof system, and it is covered with cedar shakes. (The porch overhang/roof is mentioned in **Section 5.5.** above.) Soffits are open on all sides.

Gutters exist only on a short section of the east side.

Condition Assessment:

The overall condition of the cedar shakes is poor, with accumulated moss and decay, while the metal roofing appears to be fair. The structural integrity of the roof trusses is intact and the exposed rafter tails on the east side are in fair condition, while on the west side they are in good condition. However, the trusses most likely do not conform to current code. The soffit is in fair condition on the west side (Figure 6). The roofing material on the south side overhang is exhibiting advanced stages of deterioration, and there is some deterioration of the soffit framework (Figures 13, 14). The only existing gutter is in poor condition and has no downspout (Figure 8).

Conservation Strategy: Restoration (Roof and Gutters); Rehabilitation (Trusses and Rafter Tails)

- Replace all roofing material with new weathered wood asphalt shingles, with a colour and brand selected based on input from the heritage consultant.
- Structural reinforcement of the roof trusses will involve pairing with new material to bring it to current standards. The roof overhang on the south side will also require repair of the soffit and reinforcement in lieu of any posts to connect it to the ground.
- Preserve the exposed rafter tails.
- Install new gutters and downspouts on the west and east sides, and on the south overhang, and on the porch on the north side.

5.8. CHIMNEY

There is a single internal chimney located in the centre of the house.

Condition Assessment:

The condition of the chimney is fair but it is not considered a character-defining element. It was reconstructed using concrete blocks at some point, likely due to the deteriorating condition of the original chimney.

Conservation Strategy: None

- Remove the chimney to allow for reconfiguration of the interior space.

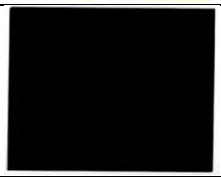
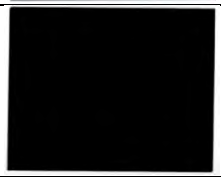
5.9. COLOUR SCHEME

An important part of the conservation process, and particularly for wood-clad buildings such as the Nielsen Residence, is the provision of a historically-accurate colour scheme. Many historical colours are available, but certain ones are more suited to particular styles and eras. One of the most appropriate colour selections is that devised by the Vancouver Heritage Foundation, commonly known as the "True Colours" palette. The recommended colours (Figure 5) are based on site examination of earlier applications (visible from exposed areas under the existing colour) and in cases where not visible, are based on historically-accurate colour settings.

Conservation Strategy: Restoration

- Restore a finish, hue and placement of colours that is historically appropriate to the heritage building (Figure 5).
- Substitutions or matching of custom colours are to be reviewed by the heritage consultant. Test samples can be applied to the heritage building in advance of painting which will allow a review and approval in the field. This will become part of the final report by the heritage consultant verifying that all conditions for the conservation have been met.

Figure 5: Proposed Colour Scheme

ELEMENT	COLOUR	CODE	SAMPLE	FINISH
Wood Shingles	Pendrell Red	VC-29		Matte
Alternative	*Hastings Red*	*VC-30*		*Matte*
Wood Horizontal Siding	Edwardian Pewter	VC-23		Matte
Alternative	*Pendrell Verdigris*	*VC-22*		*Matte*
Trim, Soffit, Fascia, Porch Columns, Balustrade	Pendrell Cream	VC-3		Semi-gloss
Window Sash and Frame	Gloss Black	VC-35		Semi-gloss
Porch Floor, Front Stair (Treads and Risers)	Edwardian Porch Grey	VC-26		Semi-gloss
Front Door	Gloss Black	VC-35		Semi-gloss
Roof Shingles	Weathered Wood (asphalt)	Brand to be determined		

6. MAINTENANCE PLAN

Given the proposal to protect the Nielsen Residence, a maintenance plan ensures that the objectives of long-term legal protection [or whatever other provision such as covenant] can be met and monitored. An overall maintenance plan should include provisions for:

- Terms of reference for maintaining the building through any management or maintenance contract(s);
- Regular scheduling of work, and clearly defining what components are repetitive (i.e. monthly or annual, for the same elements) or singular one-time focused or broad-based (i.e. throughout the building)
- Clarifying what work is required immediately and what work is planned further and under what timelines;
- Owner's records of all maintenance procedures;
- Drawings and photos of the building for either the owner or maintenance/ management contractor.

The owner should retain the plan for future reference. It will ensure the long-term integrity of the Nielsen Residence and in keeping with the legal protection. Regular upkeep combined with good standards of workmanship and materials is the guiding principle of a comprehensive and well-executed maintenance plan.

6.1. MAINTENANCE GUIDELINES

A maintenance schedule is critical to any Conservation Plan. Short-term and long-term targets need to be set for each element. A building that has undergone a higher degree of renovation, replication or repair is equally prone to the need for maintenance as compared to a building that has had more components retained and conserved. In particular, any errors or weaknesses in material or method should be identified in the early stages and corrected where necessary, so that accelerated deterioration does not take place.

Regularly scheduled maintenance ensures the longevity of any element, whether wood, stone, brick or other material. Water is essential to manage, as it is the singularly the most invasive and damaging to any building. Other forces such as sun-exposed wall faces, wind, ice and vermin affect building elements and the while the cost of maintenance on a regular basis may seem high, putting off this work inevitably leads to greater costs to restore, particularly for heritage buildings that often contain materials that are expensive, in short supply or need to be custom made.

6.2. REQUIRED PERMITS

The type and degree of permitting depends on the municipal requirements as commonly spelled out in general or heritage-specific requirements-of-maintenance by-laws, or in policy or other by-laws or guidelines. Exemptions for more minor work (i.e. repair, re-painting in existing colours) may be possible, but in most cases, a Heritage Alteration Permit, either stand-alone or in conjunction with another permit (e.g. Development, Sign, Building) may be required.

6.3. ROUTINE, CYCLICAL AND NON-INVASIVE CLEANING

By undertaking work on a routine basis, a sensitive approach to the cleaning treatment is the more likely outcome since dirt or other damage will not have had as much time to build up. The principle of any cleaning should be in accordance with *Standards and Guidelines for the Conservation of Historic Places* which specifies the gentlest means possible. In cases where the removal of dirt and other material is necessary on stucco, concrete or wood, a soft bristle brush without water is best, sweeping away the loosened material. The recommended approach for elements that require a more intensive cleaning is to use a soft bristle brush with warm water and a mild detergent. Pressure washing, sandblasting or any abrasive cleaning should not be used under any circumstances.

6.4. REPAIR AND REPLACEMENT OF COMPROMISED MATERIALS

Repairs and replacement of material on the heritage building must conform with those established under the *Standards and Guidelines for the Conservation of Historic Places in Canada*. The heritage building's character-defining elements, those characteristics that contribute to the tangible heritage value, such as materials, form and configuration, must be conserved. This draws from the following principles:

- Minimal intervention must be a goal, and any intervention must be the least intrusive and gentle means possible;
- Character-defining elements must be repaired, rather than replaced, wherever possible;
- Repair may involve anything from the removal and cleaning or simple refinishing to extracting extensively deteriorated, decayed or missing material and reinstalling the same but with in-kind material to match existing, and using recognized conservation methods;
- Repair or replaced material must be physically and visually compatible with the historic place.

6.5. INSPECTIONS

Inspections are a key element in the maintenance plan, and should be carried out by a qualified person or firm, preferably with experience in the assessment of heritage buildings. These inspections should be conducted on a regular and timely schedule, addressing all aspects of the building including exterior and site conditions. From this inspection, a report should be compiled that will include notes, sketches, and observations and to mark areas of concern, for example, cracks, staining and rot. The report need not be overly complicated, but must be thorough, clear and concise. Issues of concern, from the report, should be entered in a log book so that corrective action can be documented and tracked (see **Section 6.6. Information File**).

An appropriate schedule for regular, periodic inspections would be twice a year, preferably during spring and fall. Comprehensive inspections should occur at five-year periods, comparing records from previous inspections.

6.6. INFORMATION FILE

The owner(s) of the heritage building should retain an information file where inspection reports can be filed. This file should also contain the Log Book that itemizes problems and corrective action. Additionally, this file should contain building plans, building permits, heritage reports, photographs and other relevant documentation so that a complete understanding of the building and its evolution is readily available to the owner(s), which will aid in determining appropriate interventions when needed. This information file should be passed along to any subsequent owner(s).

The file would include a list outlining the finishes and materials used. The building owner should keep on hand a stock of spare materials for minor repairs.

The maintenance Log Book is an important maintenance tool that should be kept to record all maintenance activities, recurring problems and building observations and will assist in the overall maintenance planning of the building. Routine maintenance work should be noted in the maintenance log to keep track of past, and plan future activities. All items noted on the maintenance log should indicate the date, problem, type of repair, location and all other observations and information pertaining to each specific maintenance activity.

A full record of these activities will help to plan for future repairs and provide valuable information in the overall maintenance of the building and will provide essential information for the longer-term and serve as a reminder to amend the maintenance and inspection activities on an as-needed basis.

The Log Book should be kept in the information file along with other documentation noted in **Section 6.6 Information File.**

6.7. EXTERIOR MAINTENANCE

The most potentially damaging element to heritage buildings is water, including frost, freezing and thawing, and rain water runoff including pipes and ground water. Animal infestation is a secondary concern.

The most vulnerable part of any building is the roof, where water can enter in without warning. Roof repair and renewal is one of the more cost-effective strategies. Any leak, however minor it might be, needs to be taken seriously and may be a sign that other areas are experiencing the same, or that a more significant leak or water entry is imminent.

The following checklist contains a wide range of potential problems specific to [name of building] such as water/moisture penetration, material deterioration and structural deterioration. This does not include interior inspections.

Exterior Inspection

Site and Foundation

☒ Does water drain away from the foundation?
☒ Is there back-splash occurring?
☒ Is there movement or settlement of the foundation as illustrated by cracks or an uneven surface?
☒ Is there any evidence of rising damp?

Wooden Elements

☒ Are there moisture problems present?
☒ Is any wood in direct contact, or extremely close to, the ground?
☒ Is there any evidence of insect infestation?
☒ Is the any evidence of fungal spread or any other type of biological attack?
☒ Does any wood appear warped or cupped?
☒ Does any wood display splits or loose knots?
☒ Are nails visible, pulling loose or rusted?
☒ Do any wood elements show staining?

Exterior Painted Materials

☒ Is the paint blistering, peeling or wrinkling?
☒ Does the paint show any stains such as rust, mildew or bleeding through?

Windows

☒ Is any glass cracked or missing?

☒ Does the putty show any sign of brittleness or cracking, or has any fallen out?
☒ Does paint show damage by condensation or water?
☒ Do the sashes operate easily or if hinged do they swing freely?
☒ Does the frame exhibit any distortion?
☒ Do the sills show any deterioration?
☒ Is the flashing properly shedding water?
☒ Is the caulking connection between the frame and cladding in good shape?

Doors
☒ Are the hinges sprung or in need of lubrication?
☒ Are the latches and locks working freely?
☒ Is the sill in good shape?
☒ Is the caulking connection between the door frame and cladding in good shape?
☒ Is the glazing in good shape and held securely in place?
☒ Is the seal of the door in good shape?

Gutters and Downspouts
☒ Are any downspouts leaking or plugged?
☒ Do the gutters show signs of corrosion?
☒ Are there any missing sections of downspouts and are they securely connected to the gutters?
☒ Is the water being redirected away from the building to either in-ground drainage or rainwater catchment?

Roof
☒ Are there water blockage points?
☒ Is the leading edge of the roof wet?
☒ Is there any sign of fungus, moss, birds, vermin, insects, etc.?
☒ Are the shingles showing any advanced sign of weathering such as curling or exposure of sub-surface?
☒ Are any shingles loose or missing?
☒ Are the flashings well set?
☒ Are any metal joints or seams sound?
☒ Is there any water ponding present?

6.8. FINAL REPORT

The heritage consultant will submit a final report to the City of Port Moody as part of any necessary final clearance(s) on permit(s). The report will summarize how the work performed in conjunction with those permits corresponds to the direction given in the Conservation Plan and whether there are any deficiencies still to be addressed.

7. PHOTOGRAPH CATALOGUE

As the house was boarded up at the time of the site visit, photos of inside windows are provided to correspond with exterior photos.

Figure 6: West and Partial South Side, as seen from Moray Street, corresponding windows: fixed and double-hung. Note the corner boards, which do not exist on the east side.

Figure 7: South Side – corresponding windows: (left to right) casement with fixed centre, casement/fixed, fixed.

Figure 8: East Side – corresponding windows: all are awning operation. This is the only section of the house with a gutter remaining.

Figure 9: North Side – corresponding windows: fixed and double-hung; detail of original front door.

Figure 10: North Side (Front) Porch – corresponding double-hung window.

Figure 11: Full view of Front Porch along North Side, illustrating the deteriorated condition of the porch floor and sub-structure.

Figure 12: Example of Irregular Application of Cedar Shakes – north side (left), south side (right). The former illustrates the joining of the later addition to the original house while the latter illustrates either an enlargement or alteration to the original window and the siting of the sill.

Figure 13: Condition of Soffit and Roof Structure, South Side Overhang

Figure 14: Roofing Material, South Side Overhang. Also note the irregular (thin) window sill above, and the slightly off-set shingle pattern below the sill.

8. RESEARCH SUMMARY

HISTORIC NAME(S):	Nielsen Residence
LEGAL:	West ½ of Lot 23, Except Part Subdivided by Plan 84915, District Lot 233, Group 1, New Westminster District, Plan 1145
CIVIC ADDRESS:	112 Moray Street
OTHER ADDRESS:	N/A
ORIGINAL ADDRESS:	N/A
ORIGINAL OWNER:	Axel Nielsen
SUBSEQUENT OWNER:	Anastasia and Anton Pinda
SOURCE:	Assessment Records
CONSTRUCTION DATE:	1936, expanded c. 1943
SOURCE(S):	Assessment supported by materials found on site
ARCHITECT:	unknown
BUILDER:	Axel Nielsen

REFERENCES:

- City of Port Moody Assessment Records, 1919-1943
- Title Search: N/A
- City of Port Moody Plans: No plans available
- City of Port Moody Archives Plans: No plans available
- Maps: Fire Insurance Plans:
- City Directories: Wrigley's Greater Vancouver and New Westminster Directory (1933); Sun British Columbia Directory (1934); British Columbia and Yukon Directory (1935-1948); Vancouver and New Westminster City Directory (1949 - 1955)
- BC Vital Statistics – see background information provided by Donald Luxton and Associates, as held by City of Port Moody Planning Department
- BC Assessment Records - dating the housing in the three subdivisions set within the original property

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