

SYKES RESIDENCE

5616 WESTPORT PLACE, WEST VANCOUVER
CONSERVATION PLAN

NOVEMBER 2014



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AND ASSOCIATES INC

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South view of the elevated Sykes Residence

1.0 INTRODUCTION

SUBJECT PROPERTY:	SYKES RESIDENCE
ADDRESS:	5616 WESTPORT PLACE, WEST VANCOUVER
ORIGINAL OWNER:	MAJOR PAUL SYKES AND DOROTHY SYKES
ARCHITECT:	PETER KAFFKA
DATE OF CONSTRUCTION:	1964
HERITAGE STATUS:	PROPOSED LEGAL PROTECTION

The Sykes Residence, located at 5616 Westport Place in West Vancouver, is an exceptional example of the West Coast Style of architecture for which West Vancouver and North Vancouver have become renowned. The house was constructed in 1964 for original owner, Major Paul Sykes and his family; the house was designed by architect, Peter Kaffka.

As part of a proposed Heritage Revitalization Agreement (HRA), the Sykes Residence conservation strategy calls for the preservation of exterior and interior character-defining

elements of the original house. Future interventions to the house should comply with the conservation strategies outlined in this report. The house will be legally designated under the HRA and the lot will be subdivided in order to construct a second single-family home on the property. The new building, in compliance with the *Standards and Guidelines for the Conservation of Historic Places in Canada* (2010) will be compatible with, distinguishable from and subordinate to the 1964 Sykes Residence.

2.0 HISTORY

2.1 ARCHITECT: PETER KAFFKA

Peter Kaffka was born in 1899 in Budapest, Hungary. Kaffka graduated from the Royal Hungarian Joseph Polytechnical University in 1925 and worked for architectural firms in Budapest until 1936 when he founded his own practice. In 1939, Kaffka was the director of City Planning for the City of Budapest.

Following his service in the war from 1941-1945, Kaffka left for Canada where, between 1945 and 1948, he worked for the Ministry of Reconstruction in Ontario before joining the Toronto firm Marani & Morris. Moving to Vancouver in 1950, Kaffka was employed that year first by William K. Noppe, then the important office of Sharp & Thompson, Berwick, Pratt. He began his own practice in 1954 and became a member of the Architectural Institute of British Columbia in 1956.

Amongst the notable projects produced by Kaffka are the Grouse Mountain Chalet in North Vancouver, built in 1956, and the Thea Koerner Graduate Centre and House at the University of British Columbia, 1959-1961. With three stories of student centre and the top floor a residence, this building was chiefly conceived by architect Charles E. Pratt with the assistance of Kaffka, Zoltan Kiss and Roy Jessiman. It was awarded a gold Massey Medal for Architecture in 1962.

Kaffka designed the Sykes Residence for original owner Major Paul Sykes and his wife, Dorothy in 1964. When viewed from the street level, the house appears to be a single level bungalow with an open carport to the east and a unique circular room to the west. Upon entering the home and viewing the exterior from the back of the property however, is it clear how unusual and distinctive the Sykes Residence is in both form and innovation. The house features a distinguishable 'spiral helix' roof reflecting the shape of a seashell. This organic design echoes the marine environment that is visible from the house as well as the use of organic inspiration in the West Coast Style

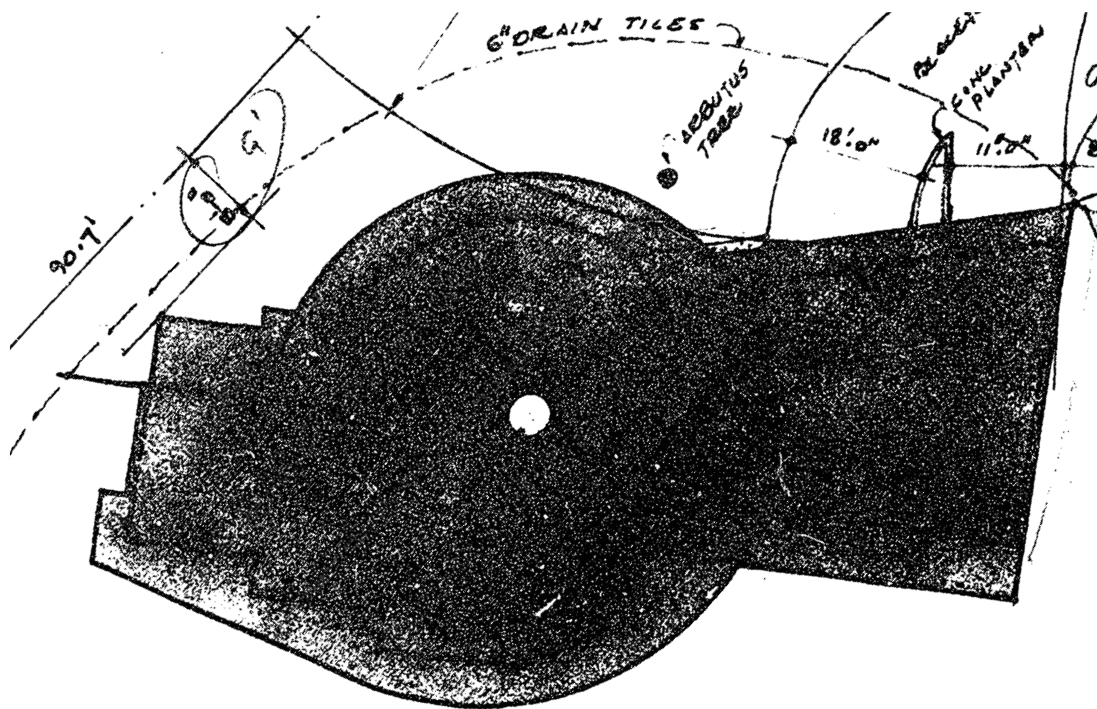
of architecture. With an elevated concrete floor and large floor-to-ceiling windows, the house appears to be floating in the trees, giving it a feeling of weightlessness.

The carport, also with a concrete floor, is located over living space, demonstrating the boldness, creativity and practicality of Kaffka as a designer. Through efficient use of space, Kaffka was able to functionally design all necessary components of the house into the natural environment and natural layout of the site.

Aside from the spectacular views offered from almost every south facing room in the house and the dramatic cliff top setting, much of the significance of the Sykes Residence is in the smaller details. The chimney acts as a source of heat, a staircase, and the principal support for the central roof structure, it also connects two unique and vastly different fireplaces; one, which is located in the original library, features a tall tapered column, while the other is clad in large, irregular granite stones, which, when burning, heats the moulded concrete staircase above. The unique circular design of the original library of the house reflects the shape of the Vancouver Observatory, which was often frequented by original owner Major Paul Sykes. From its unassuming front façade to its innovative design details, the Sykes Residence is an excellent example of an unusual and impressive West Coast Style home.

Due to his wide range of experience designing a variety of building types and using a variety of styles and technologies, Kaffka is remembered as an innovative and ambitious architect who created buildings that have become landmarks in both Vancouver and West Vancouver.

Peter Kaffka retired in the late 1970s and died in North Vancouver in 1992 at the age of 93.



Roof plan of Sykes Residence (architect Peter Kaffka, 1964)

2.2 ORIGINAL OWNER: MAJOR PAUL SYKES

Paul Sykes was born in Hummelston, Pennsylvania in 1918. Known later in life for his interest in astronomy, Sykes began pursuing his curiosity as a young age; during his teens he published his own monthly astronomical column and was known to give at least one lecture on the subject.

Sykes was an officer in the United States Air Force and served in the Pacific during WWII, attaining the rank of Captain. He was awarded a Presidential Unit Citation, the U.S. Air Medal, the Oak Leaf and Cluster and the Bronze Star for his service. Following the war Sykes attended UBC earning a degree in Physics graduating in 1948. He rejoined the United States Air Force and attended the Oak Ridge School of Reactor Technology (OSORT) in Tennessee, studying nuclear physics. He worked on the Nuclear Engine for Rocket Vehicle Application (NERVA) Project, a nuclear rocket development effort, and rose to the rank of Major within the Air Force.

Following his time with OSORT, Paul returned to Vancouver and commissioned architect Peter Kaffka to design his family home in West Vancouver. It was also during this time Sykes was appointed a lecturer and administrator in the Department of Physics at UBC; he remained there until his retirement in 1983.

Throughout his life, Paul actively pursued his interest in astronomy, attending conferences and joining the Royal Astronomical Society of Canada (R.A.S.C.), where he became a Life Member.

Paul Sykes passed away in 2005.

OBITUARY: Major Paul Jay Sykes passed away peacefully at home October 20, 2005, at age 87, his wife Dorothy having predeceased him in 2001. He is survived and deeply missed by his twin sisters, Virginia Reiffer (Mathew), Diana Belhouse (Henry), his nephew Randy Reiffer, his son Richard of Boulder, Colorado, 4 grandchildren, Rebecca, Amy, Jean and David, and many friends. Major Sykes served with distinction in the United States Air Corp. during WWII. He served in the 1st photo-mapping Squadron in the Amazon Basin and then as Squadron Navigator in many long range missions against Japan. After the war he returned to his studies at UBC and completed a degree in Physics. He rejoined the US Air Force and completed a Masters Degree in Physics. He subsequently attended the Oakridge School of Reactor Technology. Then he was appointed as a lecturer and administrator in Physics at UBC, where he remained until he retired in 1983. Throughout his life he was active in the Royal Astronomical Society (Life Member), involved in local and provincial politics, and remained a talented pianist. He was first published as a teenager when he wrote a monthly column on astronomy. His Memorial Service was held at West Vancouver United Church on October 29, 2005, attended by family and close friends. He will be interred with Dorothy at the Arlington National Cemetery in Washington, DC. A donation to the Canadian Cancer Society in his memory would be greatly appreciated. (Published in Vancouver Sun and The Province from Nov. 5 to Nov. 6, 2005)



Sykes Residence: Examples of original materials (f.l.t.r.): stucco render, exterior cedar panels, granite-faced fireplace, interior wood panelling and beams

2.3 THE WEST COAST STYLE

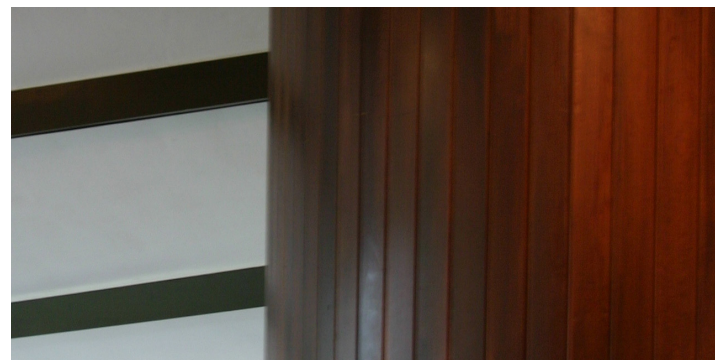
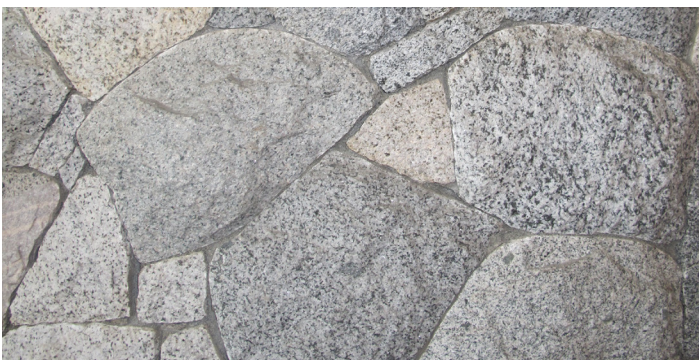
After 1945, the Greater Vancouver region became for approximately thirty years a centre of innovative residential designs in North America. Growing population and changes in lifestyle opened the door for new housing concepts, which were affordable for young families. Progressive and experimental architects developed the West Coast Style based on the principles of modern architecture: functionalism, simplicity, and flexibility.

Undeveloped and inexpensive land on the North Shore often comprised sloping and irregular sites with sometimes expansive views. Developing, and designing for such sites, offered a welcome opportunity for upcoming architects to experiment with new designs and building technology. The West Coast Style has several common features, which are also characteristic of the Sykes Residence. The style responded to the rough topography and climate conditions of then “unbuildable” sites on the North Shore with expansive vistas over the ocean, native forests and mountain views. The entrance and parking areas were commonly placed facing the street to allow the living areas to open at the rear with vistas over the ocean. The houses were designed in geometric forms and irregular layouts with local and prefabricated materials used in modular fashion for cost-efficient construction. Modern materials of glass, steel, concrete, and new technology were used, often with cantilevered forms, ceiling-height fenestration and open floor plans. Flat or low-pitched roofs were decked with asphalt roofing material, which replaced the traditional and increasingly expensive cedar shingles.

Walls were filled with modular windows and panels to create a rhythmic pattern of solid and voids. Natural light was considered a key design element in this new modern architecture. Floor-to-ceiling windows provided ample daylighting of the interior. The large window elements connected the interior and exterior spaces in an almost seamless fashion and provided easy access to outdoor decks, which extended the living area.

Traditional floor plans were replaced with flexible, multi-functional layouts to serve a new, more informal lifestyle. Interior spaces were not decorated with ornate features; contrasting natural materials such as wood, brick, stone and plaster were used to create interesting visual effects. In particular timber structural members were exposed and often stained. Interior and exterior spaces were integrated by creating lines of vision through transparent windows and doors to patios, private garden spaces, zones designed for special uses, and access to the surrounding nature. The arrangement of hedges, shrubbery and beds of low growing plants formed abstract geometrical patterns. These geometrical patterns reinforced the horizontal and vertical planes of the modern houses.

The functional and simple design of the West Coast Style homes responded to a new lifestyle. Open plan layouts with flowing interior open spaces and extensive glazing allowed flexible uses and interaction with the surrounding, and often scenic landscapes and native forests.



3.0 STATEMENT OF SIGNIFICANCE

REVISED OCTOBER 2014 (DLA)

Address: 5616 Westport Place,
West Vancouver
Historic Name: Sykes Residence
Original Owner: Major Paul Sykes and Dorothy Sykes
Architect: Peter Kaffka
Date of Construction: 1964

DESCRIPTION OF THE HISTORIC PLACE

The Sykes Residence, located at 5616 Westport Place in West Vancouver, is a two storey house, built into a steep and rugged cliffside. Designed in the West Coast Style of architecture, it features both a flat and round 'spiral helix' roof with wide flaring eaves and exposed beams, vertical V-joint cedar siding, and a curved concrete 'Denstone' block wall. Located on a 20,800 square foot residential lot with south facing views of the Strait of Georgia, Passage Island, and Bowen Island, the Sykes Residence is distinguished by its integration with the natural environment.

HERITAGE VALUE OF THE HISTORIC PLACE

Built in 1964, the Sykes Residence is valued as an outstanding representation of the West Coast Style of modern architecture in West Vancouver. Exemplified by design innovation, advancing architectural technologies, use of natural materials, and sensitive integration with the natural environment, the West Coast Style was prevalent between 1945 and 1970. This was an era of postwar optimism, prosperity, growth and pent-up demand for new housing. The Sykes Residence is a fine representation of this new modern architecture, and features exposed beams and a 'spiral helix' roof that emulates the shape of a seashell. Utilizing high-quality materials and progressive techniques, the house features sophisticated lines that give it an organic sense of flow while differentiating it from earlier, simplistic post-and-beam structures. The interior features floor-to-ceiling windows that offer unobstructed views and ceilings that follow the curve of the unique roofline and expose its structure. The central chimney, which functions as the heart of the house, connects two unique fireplaces and is formed into the main staircase, creates interior walls, and acts as the primary roof support.

Built on an expansive residential lot, the Sykes Residence is significant for its seamless blend with the natural environment, a hallmark feature of the West Coast Style. The living room

floor is constructed on an elevated slab of concrete supported by concrete pillars to permit the house's incorporation into the steep cliff with minimal disruption of the rugged landscape. This construction technique allows for maximum views and natural light, and by designing an elevated living room, Kaffka's design creates an infinite sense of space, which gives the impression that the house is hovering amidst the trees. With southwest-facing views to the Strait of Georgia, Passage and Bowen Islands, and surrounding vegetation, the Sykes Residence functions as an urban retreat.

This house is also valued for its association with the original owner, astronomer and educator Major Paul Sykes Jr. Born in Hummelston, Pennsylvania in 1918, Sykes was giving radio lectures on the subject of astronomy and publishing a monthly astronomical column by the age of fourteen. Sykes served in the Pacific in the United States Air Force during the Second World War and, after earning a Physics degree from the University of British Columbia in 1948 and studying nuclear physics, he rejoined the Air Force, achieving the rank of Major. He was a long-term lecturer and administrator in the Physics Department at UBC from the late 1940s until his retirement in 1983. Sykes was also a Life Member of the Royal Astronomical Society of Canada. He and his wife owned and occupied this residence upon its completion in 1964 until his passing in 2005.

The Sykes Residence is additionally significant for its association with prominent architect Peter Kaffka (1899-1992), who was born in Budapest, Hungary. After graduation in 1925, Kaffka worked for several Budapest firms before advancing to the position of director of the Budapest planning board. In the 1930s he was involved with the post-war reconstruction of Budapest before immigrating to Canada in 1945, and settled with his wife and son in Vancouver in 1950. Kaffka is attributed with the design of some of Vancouver's most iconic buildings, including Parkview Towers (1960), the Thea Koerner House (1961) at UBC, which was awarded a Gold Massey Medal for outstanding architecture in Canada, and the Imperial Tower (1962), which upon completion, was the tallest building in Western Canada. Kaffka designed several West Coast Style houses in both West and North Vancouver and was recognized for his experimental nature and his ability to combine design and function. Kaffka viewed each project as an opportunity to amalgamate the natural and built environments, while utilizing creative design, and the Sykes House remains as a testament to his exceptional design skills.

STATEMENT OF SIGNIFICANCE

CHARACTER-DEFINING ELEMENTS

Key elements that define the heritage character of the Sykes Residence include its:

Exterior Elements

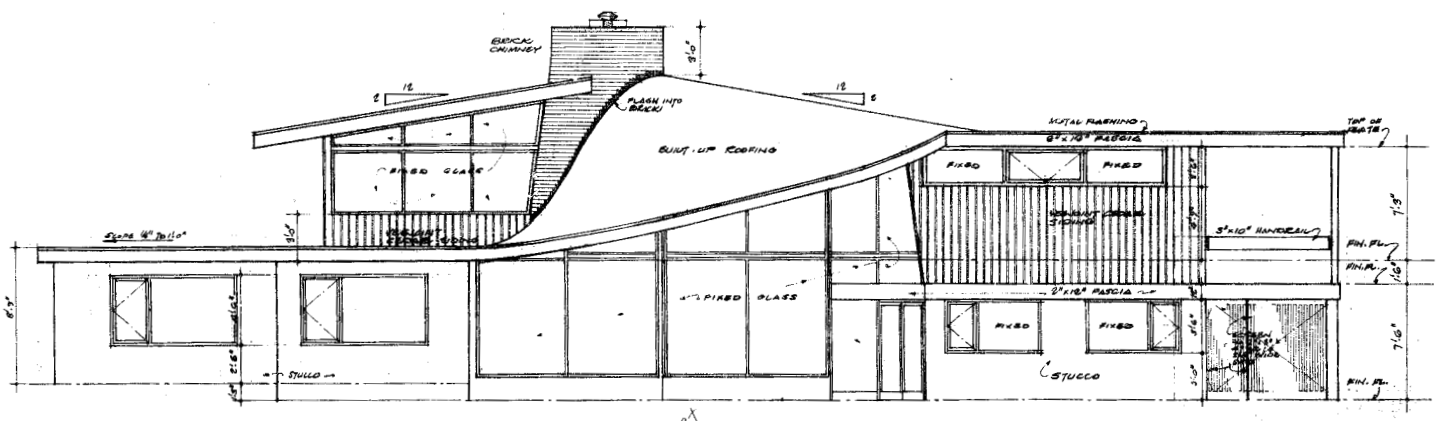
- setting amongst mature vegetation on a large lot, with expansive and unobstructed views southwest to the Strait of Georgia and Passage, and Bowen Islands;
- residential form, scale and massing as expressed by its two storey plan, one storey visible at the entry way and two storey height visible from the rear façade;
- flat and ‘spiral helix’ roof, exposed beams, and horizontal, asymmetrical massing;
- concrete construction with vertical V-joint cedar siding and curved concrete ‘Denstone’ block wall and chimney;
- West Coast Style details such as the use of local materials, the solid wood front door, the flat roof of the east façade and the ‘spiral helix’ roof of the west façade, all sides featuring wide flaring eaves and exposed wooden beams, smooth wall surfaces, windows set flush with the outer wall plane, and the relationship between the interior and exterior spaces;
- exterior architectural details such as exterior sections of original California stucco finish, poured concrete floors supported by concrete pillars, the ‘transom inspired’ angled wall of the second-storey spare bedroom, and the open car port of the east façade, which was constructed over living space;
- original windows such as its large two-storey fixed glass windows of the living room, small square reeded glass windows of the concrete block library wall, fixed-glass

windows throughout the house and the solid wood panel front door with reeded glass sidelights; and

- associated landscape features such as the mature trees and plants including cedars, arbutus trees, Douglas firs, rhododendrons, and ferns, the original stone steps and stone walls located at both the front and rear of the house, and the original stone light pillars.

Interior Elements

- open floor plan with split-level concept;
- elevated concrete floor of the lower level of the house, which is supported by concrete pillars;
- concrete floor of the upper split-level of the residence;
- original fireplace with round hearth and tapered form in the library, which is connected to the central chimney;
- original granite-faced fireplace, which is incorporated with the concrete staircase above, and connected to the central chimney;
- central chimney which supports the weight of the main roof structure;
- cast-in-place concrete staircase that spirals clockwise down from the upper level to the lower level of the house;
- banister and balusters of the staircase;
- curved wall formed by the location of the central chimney, which is clad in vertical tongue-and-groove cedar siding;
- exposed bedrock, which is visible in the storage area of the house; and
- exposed wood beams that follow the unique roofline of the house.



Sykes Residence: South elevation by architect Peter Kaffka (1964)

4.0 CONSERVATION GUIDELINES

4.1 NATIONAL STANDARDS AND GUIDELINES

The Sykes Residence is an exceptional example of the West Coast Style and a significant historic resource located at 5616 Westport Place in West Vancouver. The Parks Canada's *Standards and Guidelines for the Conservation of Historic Places in Canada* (2010) is the source used to assess the appropriate level of conservation. Under the *Guidelines*, appropriate conservation strategies to historic sites include 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.*

Future interventions to the Sykes Residence should be based upon the **Standards** outlined in the *Standards and Guidelines*, which are conservation principles of best practice. The following **General Standards** should be followed when carrying out any work to an 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 element 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 ongoing basis. Repair character-defining element 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.

CONSERVATION GUIDELINES

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

Recent interventions to the Sykes Residence addressed material deficiencies. The current condition of the exterior elevations and interior space are very good based on a visual review. Conservation work that may be carried out in the future should refer to the following conservation resources:

Parks Canada:

Standards and Guidelines for the Conservation of Historic Places in Canada, 2010.

U.S. National Park Service, Technical Preservation Services:

- *Preservation Brief 3: Improving Energy Efficiency in Historic Buildings.*
- *Preservation Brief 6: Dangers of Abrasive Cleaning to Historic Buildings.*

- *Preservation Brief 9: The Repair of Historic Wooden Windows.*
- *Preservation Brief 10: Exterior Paint Problems on Historic Woodwork.*
- *Preservation Brief 22: The Preservation and Repair of Historic Stucco.*
- *Preservation Brief 41: The Seismic Retrofit of Historic Buildings: Keeping Preservation in the Forefront.*
- *Preservation Brief 47: Maintaining the Exterior of Small and Medium Size Historic Buildings.*

4.3 GENERAL CONSERVATION STRATEGY

The Sykes Residence was designed by architect Peter Kaffka and constructed in 1964 for the original owner, Major Paul Sykes. After change of ownership, necessary exterior and interior rehabilitation work was carried out including the repair and replacement of deteriorated building materials. The overall heritage character and value of the Sykes Residence was retained. Based on a visual site review in October 2014, the general condition of the Sykes Residence appears to be very good. Only minimal maintenance work is recommended in order to preserve the heritage value and character of the historic house.

Proposed Design Scheme

The primary intent for the subject property is to preserve the Sykes Residence in situ, to legally designate the house under a proposed Heritage Revitalization Agreement, and to subdivide the lot in order to build a new single-family home. The development scheme for the new addition has been prepared by Synthesis Design Inc. and comprises a three-storey residential building plus subterranean parking level on the south side of the sloped lot.

New Additions to the Historic Site

The proposed design scheme considers the construction of a new residential home on the subdivided property. Parks Canada's *Standards and Guidelines* list the following recommendations for new additions to historic places.

- Designing a new addition in a manner that draws a clear distinction between what is historic and what is new.
- Design for the new work may be contemporary or may reference design motifs from the historic place. In either case, it should be compatible in terms of mass, materials, relationship of solids to voids, and colour, yet be distinguishable from the historic place.
- The new addition should be physically and visually compatible with, subordinate to and distinguishable from the preserved historic place.

The proposed design for the new home is expressed in a contemporary idiom and in the spirit of the West Coast Style:

- **Innovative** architectural design with complicated geometric forms;
- **Truth** in architecture and materials and rejecting false materials that mimic other materials qualities and/or appearance;
- **Space** with a sense of horizontal and vertical continuity in scale of the human need and function;
- **Light** in its daily and seasonal movements as an element of natural lighting.

The schematic design concept of the new home is respectful to the heritage character of the Sykes Residence and complies with Parks Canada's recommendations for new additions to historic sites.

4.4 SUSTAINABILITY STRATEGY

Sustainability is most commonly defined as “meeting the needs of the present without compromising the ability of future generations to meet their own needs” (*Common Future*. The Bruntland Commission). The four-pillar model of sustainability identifies four interlinked dimensions: **environmental, economic, social and cultural sustainability**, the latter including the built heritage environment.

Current research links sustainability considerations with the conservation of our built and natural environments. A competitive, sustainable economy requires the conservation of heritage buildings as an important component of a high quality urban environment.

“We need to use our cities, our cultural resources, and our memories in such a way that they are available for future generations to use as well. Historic preservation makes cities viable, makes cities liveable, makes cities equitable.” (*Economic Benefits of Preservation, Sustainability and Historic Preservation*)

Heritage conservation and sustainable development can go hand in hand with the mutual effort of all stakeholders. In a practical context, the conservation and re-use of historic and existing structures contributes to environmental sustainability by:

- Reducing solid waste disposal (reduced impact on landfills and their expansions);
- Saving embodied energy (defined as the total expenditure of energy involved in the creation of the building and its constituent materials);
- Conserving historic materials that are significantly less consumptive of energy than many new replacement materials (often local and regional materials, e.g. timber, brick, concrete, plaster, can be preserved and reduce the carbon footprint of manufacturing and transporting new materials).

The following considerations for energy efficiency in historic structures are recommended in the Parks Canada's *Standards and Guidelines for the Conservation of Historic Places in Canada* (2010) and can be utilized, if future interventions at the Sykes Residence are considered.

Sustainability Considerations

- Add new features to meet sustainability requirements in a manner that respects the exterior form and minimizes impact on character-defining elements.
- Work with sustainability and conservation specialists to determine the most appropriate solution to sustainability requirements with the least impact on the character-defining elements and overall heritage value of the historic building.
- Comply with energy efficiency objectives in a manner that minimizes impact on the character-defining elements and overall heritage value of the historic building.

CONSERVATION GUIDELINES

Energy Efficiency Considerations

- Identifying the historic place's heritage value and character-defining elements — materials, forms, location, spatial configurations, uses and cultural associations or meanings.
- Complying with energy efficiency objectives in such a manner that character-defining elements are conserved and the heritage value maintained.
- Working with energy efficiency and conservation specialists to determine the most appropriate solution to energy conservation problems that will have the least impact on character-defining elements and the overall heritage value.
- Weighing the total environmental cost of energy saving measures against the overall environmental costs of retaining the existing features or fabric, when deciding whether to proceed with energy saving measures.

Buildings: Insulation

- Exercising caution and foreseeing the potential effects of insulating the building on the envelope system so as to avoid damaging changes such as displacing the dew point and creating thermal bridges.
- Installing thermal insulation in attics and in unheated cellars to increase the efficiency of the existing mechanical systems unless this could adversely affect the building envelope.
- Installing insulating material on the inside of masonry and wood-frame walls to increase energy efficiency where there is no character-defining interior moulding around the windows or other character-defining interior architectural detailing.

Buildings: Windows

- Utilizing the inherent energy conserving features of a building by maintaining character-defining windows in good operating condition for natural ventilation.
- Improving thermal efficiency with weather-stripping, storm windows, interior shades and, if historically appropriate, blinds and awnings.
- Installing interior storm windows with airtight gaskets, ventilating holes and/or removable clips to ensure proper maintenance and to avoid condensation damage to character-defining windows.
- Installing exterior storm windows that do not damage or obscure character-defining windows and frames.

Buildings: Mechanical Systems

- Improving the energy efficiency of existing mechanical systems by installing insulation in attics and basements, unless this could adversely affect the building envelope.

The conservation recommendations for the Sykes Residence recognize the need for sustainable interventions and adhere to the **Standards and Guidelines** as outlined.

4.5 HERITAGE EQUIVALENCIES AND EXEMPTIONS

As a significant heritage resource, the Sykes Residence may be eligible for heritage variances that will enable a higher degree of heritage conservation and retention of original material during conservation work that may be contemplated in the future, including considerations available under the following provincial legislation.

4.5.1 BRITISH COLUMBIA BUILDING CODE

Building Code upgrading ensures life safety and long-term protection for historic resources. It is important to consider heritage buildings on a case-by-case basis, as the blanket application of Code requirements do not recognize the individual requirements and inherent strengths of each building. Over the past few years, a number of equivalencies have been developed and adopted in the British Columbia Building Code (2012) that enable more sensitive and appropriate heritage building upgrades. For example, the use of sprinklers in a heritage structure helps to satisfy fire separation and exiting requirements. Table A-1.1.1.1., found in Appendix A of the Code, outlines the "Alternative Compliance Methods for Heritage Buildings."

Given that Code compliance is such a significant factor in the conservation of heritage buildings, the most important consideration is to provide viable economic methods of achieving building upgrades. In addition to the equivalencies offered under the current Code, the District can also accept the report of a Building Code Engineer as to acceptable levels of code performance.

4.5.2 ENERGY EFFICIENCY ACT

The provincial Energy Efficiency Act (Energy Efficiency Standards Regulation) was amended in 2009 to exempt buildings protected through heritage designation or listed on a community heritage register from compliance with the regulations. Energy Efficiency standards therefore do not apply to windows, glazing products, door slabs or products installed in heritage buildings. This means that exemptions can be allowed to energy upgrading measures that would destroy heritage character-defining elements such as original windows and doors.

These provisions do not preclude that heritage buildings must be made more energy efficient, but they do allow a more sensitive approach of alternate compliance to individual situations and a higher degree of retained integrity. Increased energy performance can be provided through non-intrusive methods of alternate compliance, such as improved insulation and mechanical systems. Please refer to the *Standards and Guidelines for the Conservation of Historic Places in Canada* (2010) for further detail about “Energy Efficiency Considerations.”



Front facade with open carport and curved library wall

4.5.3 HOMEOWNER PROTECTION ACT

Amendments to the Homeowner Protection Act Regulation made in 2010 allow for exemptions for heritage sites from the need to fully conform to the BC Building Code under certain conditions, thus removing some of the barriers to compliance that previously conflicted with heritage conservation standards and guidelines. The changes comprised

1. an amendment to the Homeowner Protection Act Regulation, BC Reg. 29/99 that allows a warranty provider, in the case of a commercial to residential conversion, to exclude components of the building that have heritage value from the requirement for a warranty, and
2. clarification of the definition of 'substantial reconstruction.' The latter clarification explains that 75% of a home must be reconstructed for it to be considered a 'new home' under the Homeowner Protection Act, thus enabling single-family dwelling to multi-family and strata conversions without the Act now coming into play. The definition of a heritage building is consistent with that under the Energy Efficiency Act.

4.6 SITE PROTECTION

The Sykes Residence appears to be generally in very good condition. If future interventions are proposed to the historic house that require to temporarily vacate the building, it is the responsibility of the owner to ensure the historic structure is protected from potential risks such as physical or environmental damage or unauthorized access at all times. Therefore a range of precautionary measures for the protection of an historic resource is recommended while conservation work is being carried out.

The following checklist will ensure that future work items for the protection during the temporary vacancy of a historic structure are not inadvertently omitted and the heritage site secured.

Moisture

- Is the roof watertight? If not, repair or install temporary cover.
- Is exterior cladding in good condition to keep water out?
- Is the site of the temporary location properly graded for water run-off?

Ventilation

- Have steps been taken to ensure proper ventilation of the building?
- Have interior doors been left open for ventilation purposes?
- Has the secured building been checked within the last 3 months for interior dampness or excessive humidity?

Pests

- Have nests/pests been removed from the building's interior and eaves?
- Are adequate screens in place to guard against pests?
- Has the building been inspected and treated for termites, carpenter ants, rodents, etc.?

Security

- Are smoke and fire detectors in working order?
- Are wall openings boarded up and exterior doors securely fastened?
- Are plans in place to monitor the building on a regular basis?
- Are the keys to the building in a secure but accessible location?
- Are the grounds being kept from becoming overgrown?
- Have the following been removed from the interior: trash, hazardous materials such as inflammable liquids, poisons, and paints and canned goods that could freeze and burst?
- Is the site securely fenced and regularly patrolled?
- Is the building signed identifying it as a protected heritage building with a phone number for citizens to call with questions or concerns?



Original landscape features at the front of the house including original stone walls, steps and light pillars.

CONDITION REVIEW AND CONSERVATION RECOMMENDATIONS

5.0 CONDITION REVIEW AND CONSERVATION RECOMMENDATIONS

A visual condition review of the exterior elevations and interior space of the 1964 Sykes Residence was carried out during a site visit in October 2014. The historic house retains a high level of historic integrity and the existing materials are generally in very good condition. The proposed Heritage Revitalization Agreement considers a new residential home on the subject property and the preservation of the historic house in situ. The following chapter describes the materials, physical condition and recommended conservation strategy for the Sykes Residence. The conservation recommendations are based on Parks Canada's *Standard and Guidelines for the Conservation of Historic Places in Canada* (2010).

5.1 SITE

The Sykes Residence was built at 5616 Westport Place in West Vancouver on an irregular lot that principally stretches in north-south direction. The residential neighbourhood is characterized by low-rise family homes built into the cliffside with rugged and densely forested terrain. The topographic survey illustrates the steep slope of the subject lot, which drops from the upper level of the historic house at 371.60 feet above sea level approximately 100 feet to the lowest point of the property at the southeast corner. The significant changes in grade allow for expansive and unobstructed views from the Sykes Residence to the Strait of Georgia and Bowen Island. This is an important character-defining element of the historic site and should be preserved.

Access to the front entrance and carport is from a blacktop cul-de-sac. The landscape features at the front of the house include stone steps, low stone walls and stone light pillars. The natural setting at the rear of the house with mature trees and rugged

terrain was basically preserved except for retaining walls and concrete pillars to support the elevated home. A preliminary geotechnical site assessment suggests that rootwork of some mature trees on the south side of the house may have caused instability to sections of the bedrock and remedial work may be required.

It is proposed to subdivide the subject property and to construct a new three-storey home plus subterranean parking level on the south side of the sloping lot. This intervention is generally acceptable due to the topography of the site. The new construction should not diminish the unobstructed views from the Sykes Residence.

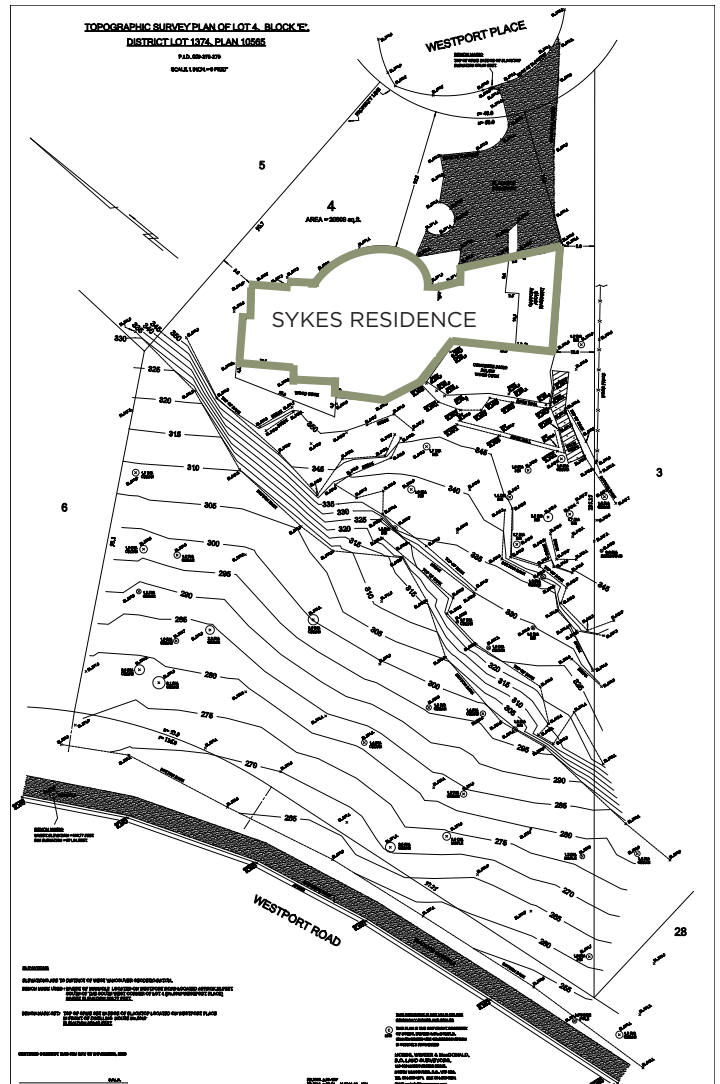
CONSERVATION RECOMMENDATION: PRESERVATION OF THE HISTORIC HOUSE

- Preserve the historic house in its original location.
- Future work should consider the retention of landscape features including stone walls and light pillars at the front of the house. Repair deteriorated elements with appropriate in-kind materials where necessary.
- Potential geotechnical instabilities caused by mature vegetation should be carefully mitigated and coordinated by a professional engineer.
- The new addition on the subdivided lot is adequately located on the site and preserves the expansive views from the historic house.
- The design of the new addition should be compatible with, distinguishable from and subordinate to the historic house. The design of the new addition should follow recommendations listed in the Parks Canada *Standards and Guidelines* (4.3 General Conservation Strategy).

TOPOGRAPHIC SURVEY AND PROPOSED SCHEMATIC DESIGN CONCEPT

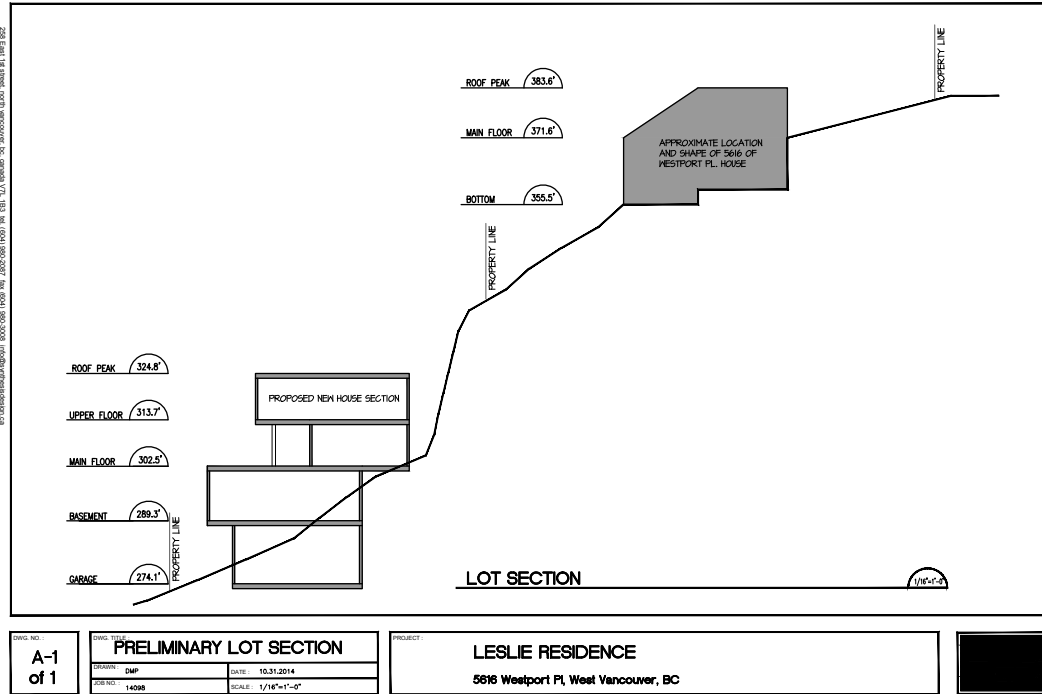


VIEW FROM LIVING ROOM OF THE SYKES RESIDENCE



TOPOGRAPHIC SURVEY
HOBBS, WINTER & MACDONALD, B.C. LAND SURVEYORS,
2009

CONDITION REVIEW AND CONSERVATION RECOMMENDATIONS



LOT SECTION WITH SCHEMATIC DESIGN CONCEPT
 SYKES RESIDENCE AT TOP, PROPOSED NEW CONSTRUCTION BELOW
 SYNTHESIS DESIGN INC. , 2014



VIEW FROM SOUTH DECK, SYKES RESIDENCE

5.2 FORM, SCALE AND MASSING

The two-storey Sykes Residence features a residential form and scale with one storey visible at the entry way and two-storey height visible from the rear façade. The asymmetrical massing is typical for the West Coast Style and was preserved at the subject property during later interventions. Alterations include the construction of two wooden decks on the south side, which are not original to the house but are reversible interventions. The overall form, scale and massing of the house is a character-defining element and should be preserved in the future. If additions or alterations to the original volume of the Sykes Residence are considered, the proposed design should be reviewed by a heritage consultant to ensure they follow good conservation practice and do not diminish the heritage value and character of the historic house.

CONSERVATION RECOMMENDATION: PRESERVATION

- Preserve the overall form, scale and massing of the original house.
- If interventions are proposed in the future, they should be assessed by a heritage consultant and comply with Parks Canada's *Standards and Guidelines*.

5.3 FOUNDATION

The Sykes Residence is built into the cliffside and the bedrock is incorporated into the poured-in-place concrete foundation along with the stone retaining walls on the south side that support the cantilevered house. The concrete foundation appears to be in good condition and subsidence was not observed during the visual review. In localized areas signs of efflorescence were noted on concrete surfaces, particular where material changes between concrete foundation walls and bedrock occur. It appears these are merely of aesthetic and not of structural concerns, but a structural review may be carried out. The cantilevered concrete slab of the lower floor is supported by structural concrete pillars, while the retaining wall below the carport was constructed with granite blocks. The granite retaining wall on the south side is covered with ivy, which is well adopted for living in woodlands and thrives well where light levels are low. It has its feeding roots anchored in the ground and climbs up trees or walls with strong adhesive to rough surfaces. This can lead to ivy stems penetrating the mortar of masonry walls and breaking up the structure. Ivy removal should be carefully undertaken without further structural damage to the mortar joints or waterproofing problems.



Concrete pillars support the cantilevered floor slab of the living room

CONDITION REVIEW AND CONSERVATION RECOMMENDATIONS

CONSERVATION RECOMMENDATION: PRESERVATION

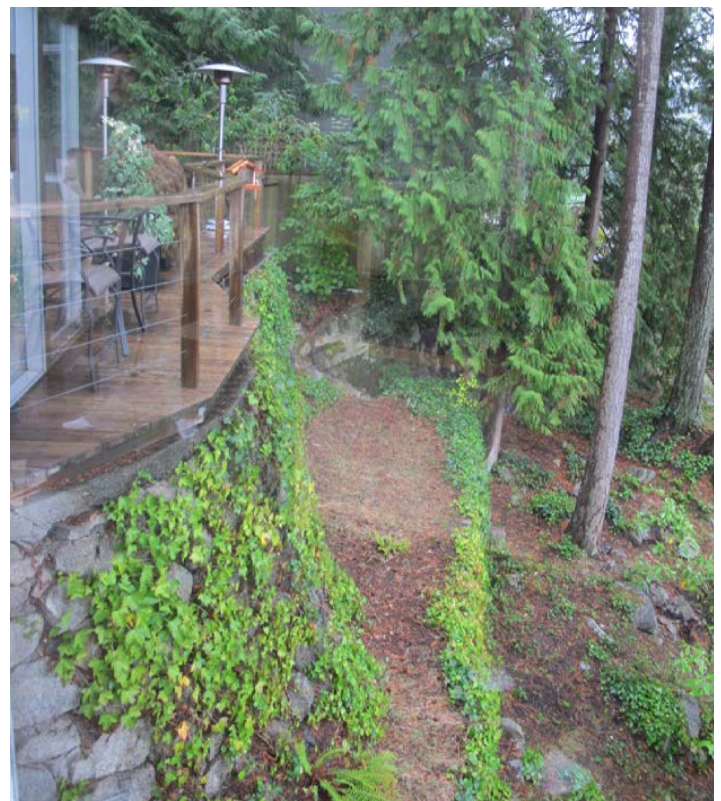
- Preserve the historic foundation walls, concrete pillars and stone retaining walls.
- Carefully remove ivy from the stone retaining wall. Rake loose mortar and repoint with suitable mortar of lower compressive strength than the existing granite blocks. Mortar colour to match existing.
- If future seismic upgrades or structural interventions are contemplated, the work should not diminish character-defining elements and the design should be sympathetic to the historic character of the house.



Concrete foundation wall built into bedrock



Granite retaining wall covered with ivy



Grade changes on the south side of Sykes Residence

5.4 EXTERIOR WALLS

5.4.1 CONCRETE BLOCKS

A significant architectural feature of the Sykes Residence is a curved cinder concrete block wall on the north side of the house and identified as 'Denstone' blocks on the original architectural drawings. The square shaped concrete blocks in medium grey colour and smooth surface are laid in stack bond pattern. The mortar joints feature a lighter grey colour and are almost flush with the concrete blocks. The curved concrete block wall and mortar joints are in good condition and signs of cracking, spalling, or other damage was not observed. The curved cinder block wall should be preserved as a character-defining element.

CONSERVATION RECOMMENDATION: PRESERVATION

- Preserve the curved concrete block wall.
- Cleaning should only be carried out only if necessary and with the mildest cleaning method possible, starting with a mild water rinse. High-pressure power washing, abrasive cleaning or sandblasting should not be allowed under any circumstances on any original building materials of the house.
- Repointing should only be undertaken if existing mortar shows signs of deterioration. New mortar to match existing in composition, colour and joint profile.

5.4.2 STUCCO RENDER

Originally sections of the exterior walls were finished with California stucco. Areas featuring the original finish are still extant on the southwest elevation of the upper floor. The render is in good condition and should be preserved as an important architectural feature.

In locations where prolonged water ingress severely damaged the original stucco render, for example at the southeast elevation near the kitchen, the original cladding was removed and replaced with cedar shingles. This substitute material is not original to the architectural design and if replacement is required in the future, the original California stucco finish should be reinstated.

CONSERVATION RECOMMENDATION: PRESERVATION

- Sections with original California stucco finish are in good condition and should be preserved. If future repair work is required, appropriate repair materials matching the original in material and surface finish should be used.
- Later shingle siding is not original to the house and if renewal is required in the future, remove the shingles and reinstate the California stucco finish to match original.



Original 'Denstone' block wall

CONDITION REVIEW AND CONSERVATION RECOMMENDATIONS

5.4.3 WOOD SIDING

The Sykes Residence features vertical V-jointed cedar siding on the angled upper bedroom floor, which is original to the house and an important architectural feature. Based on a visual review the original siding appears to be in good condition and is well protected by a wide roof overhang. The vertical cedar siding is also installed on the interior walls of the open carport and the staircase walls leading to the lower floor.

CONSERVATION RECOMMENDATION: PRESERVATION

- Original vertical cedar siding should be preserved as a character-defining element.
- If deterioration will be detected in the future, damaged material should be restored in place. Only severely damaged or deteriorated panels should be replaced with new siding to match original in material, size, profile and thickness.



Carport walls finished with original wood siding



Original stucco finish



Angled upper wall with original wood siding, lower level with new cedar shingles

5.5 EXTERIOR TRIM

Recent building repairs due to moisture damage required the replacement of some original wooden trim elements. This work included the installation of new wooden fascia boards around the house, and new wooden cornerboards and window trim in locations where new cedar shingle and replacement windows were installed. In particular the south-facing windows at the lower level experienced severe water damage from the open carport above. The new window trim is similar in design to the original elements, which are extant on the upper level and protected by wide roof overhangs, however the original sill detailing was not exactly replicated. In areas where repair work occurred, the newly installed white flashings do not match the colour of the surrounding materials, mostly dark painted trim elements. Future work should consider to repaint the new flashings to match the adjacent trim colour. The original front door trim appears to be extant. Original window trim elements that are still extant should be preserved and repaired in situ if necessary. Wood elements that are too deteriorated to be repaired should be replaced with replica to match the original design.

CONSERVATION STRATEGY: PRESERVATION

- Preserve and maintain original trim elements on the exterior elevations.
- If future replacement is required, install new material matching original in design, material, and profile in order to restore the original appearance.
- Combed and/or textured lumber, fibre cement and vinyl materials are not acceptable as replacement materials on the exterior elevations of the historic house.

5.6 FENESTRATION

Windows and doors are among the most conspicuous feature of any building. In addition to their function — providing light, views, fresh air and access to the building — their arrangement and design is fundamental to the building's appearance and heritage value. Each element of fenestration is, in itself, a complex assembly whose function and operation must be considered as part of its conservation.

Standards and Guidelines for the Conservation of Historic Places in Canada (2010).



East-facing carport wall now closed with shingle-clad wall to prevent water ingress

5.6.1 WINDOWS

Natural light was considered one of the key design elements of West Coast Style homes and the Sykes Residence features large floor-to-ceiling windows providing ample daylight of the two-storey living room. The single-pane fixed glass windows are installed in their original wood frames. They are important architectural elements and should be preserved. Additional windows original to the house are square reeded glass windows of the library block wall. They repeat the patterned semi-obscure glass design of the original front entry sidelights. Original aluminum windows located, for example, in the kitchen were in recent years replaced with new aluminum sliding units.

CONDITION REVIEW AND CONSERVATION RECOMMENDATIONS

CONSERVATION STRATEGY: PRESERVATION

- The original floor-to-ceiling windows in the living room, square reeded glass windows and other original window assemblies should be preserved as character-defining elements.
- Regularly inspect for condition and complete detailed window inventory to determine extent of recommended repairs. Repair as required using in-kind repair techniques where feasible.
- Retain historic glass. Where broken glass exists in historic wood-frame windows, the broken glass should be replaced with visually and physically compatible glazing. A contractor trained in the repair of historic sash windows and with experience in working on heritage buildings should be retained to carry out window restoration work if required in the future.
- Replacement windows should be sympathetic in their design and match the original in material, style, detailing, profile thickness and operating mechanism.

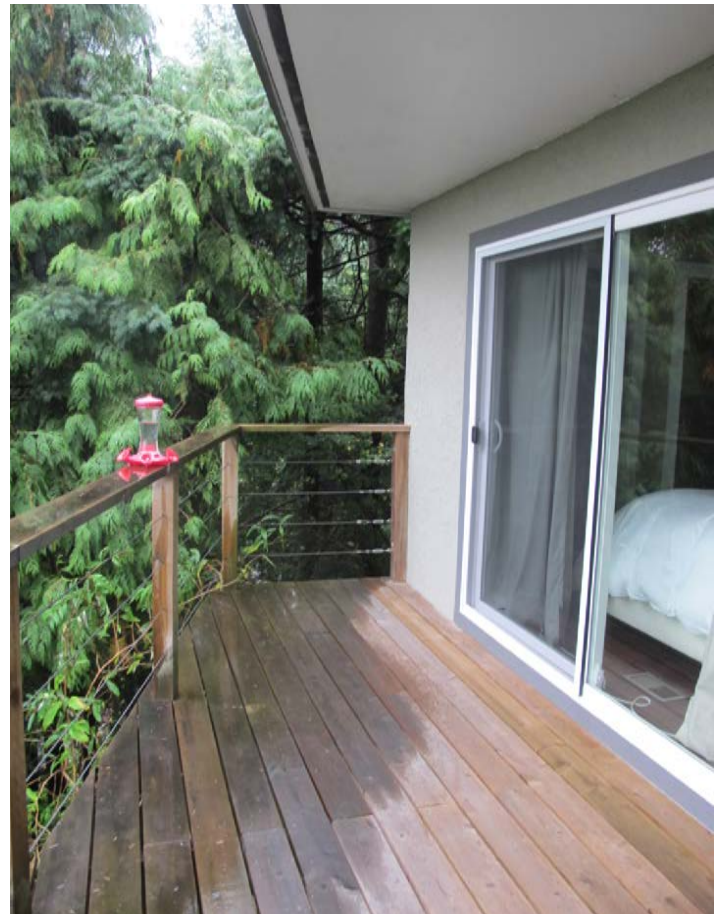
5.6.2 DOORS

The original solid wood front door with reeded glass sidelights in original wood frames are extant. The assembly is a character-defining element of the Sykes Residence. The recessed entry door is well protected from the environment and in very good condition.

A second wooden entrance door exists at the lower level and is accessed from the carport via a wooden staircase. Two pairs of new sliding glass doors were installed in the master bedroom and adjacent bedroom. They replaced original window openings and the doors provide access to the newly built exterior deck on the south side.

CONSERVATION STRATEGY: PRESERVATION

- The front door assembly with reeded glass sidelights is a character-defining element and should be preserved in situ.
- The original secondary door at the lower should be retained, if possible.
- Repairs should only be carried out if necessary and with appropriate conservation methods.



New south deck and new sliding doors



Original front door assembly with reeded sidelights

5.7 ROOF & CHIMNEY

The Sykes Residence features a 'spiral-helix' roof above the main body of the house and a flat roof over the carport. The roof structure is an expression of the innovative design typical for West Coast Style homes. The wide-flaring eaves are important features and protect the envelope from direct rainwater. The roofing materials and membranes were repaired with torch down roof in recent years that provides good waterproofing capabilities to the flat and sloped roofs. Additional metal flashings assist in shedding rainwater from the roof and protecting the envelope. New rainwater leaders and downspouts drain the water away from the building. During the recent site visit some standing water and accumulated organic debris on the flat carport roof was noted.

Regular inspections to detect damage of the roof membrane and removal of build-up debris and cleaning of clogged downspouts ensure that rainwater drains freely and prevents water penetration and material deterioration.

A central chimney built in 'Denstone' concrete blocks provides structural support to the main roof. The exterior face of the cinder blocks, laid in stack bond pattern, and flush mortar joints show signs of biological growth, which should be carefully removed. The new metal flashings appear to be in good condition. The roof design and chimney are important architectural features of the Sykes Residence and will be preserved.



Flat roof above carport and office

CONDITION REVIEW AND CONSERVATION RECOMMENDATIONS

5.8 EXTERIOR COLOUR SCHEDULE

CONSERVATION RECOMMENDATION: PRESERVATION

- The original 'spiral-helix' roof, flat roof and cinder block chimney will be preserved as character-defining elements.
- Regular inspection and cleaning of the roof and flashings should be carried out and repairs undertaken where necessary. If roof elements are deteriorated beyond repair, replace with new material that is physically and visually compatible.
- Investigate condition of cinder blocks and mortar joints. If required, masonry may be repointed and cleaned using a natural bristle brush and clean water rinse.
- The rainwater disposal system should be adequately designed and regularly maintained to ensure drainage from the site.
- Trimming of trees in close proximity to the house will help to reduce organic debris accumulating on the roof.

The existing paint on the exterior elevations will be retained. If repainting in the future is considered, a heritage consultant should develop an authentic colour schedule based on on-site investigations.

CONSERVATION RECOMMENDATION: PRESERVATION

- Retain the existing paint schedule.
- Future site investigation should determine the authentic finish, hue and placement of applied colour.



'Spiral-helix' roof with central chimney above library

5.9 INTERIOR ARCHITECTURAL ELEMENTS

The 1964 Sykes Residence retains a high level of historic integrity including interior architectural features that date to the original construction. They include the following character-defining elements listed in the Statement of Significance:

Interior Elements

- open floor plan with split-level concept;
- elevated concrete floor of the lower level of the house, which is supported by concrete pillars;
- concrete floor of the upper split-level of the residence;
- original fireplace with round hearth and tapered form in the library, which is connected to the central chimney;
- original granite-faced fireplace, which is incorporated with the concrete staircase above, and connected to the central chimney;
- central chimney which supports the weight of the main roof structure;
- cast-in-place concrete staircase that spirals clockwise down from the upper level to the lower level of the house;
- banister and balusters of the staircase;
- curved wall formed by the location of the central chimney, which is clad in vertical tongue-and-groove cedar siding;
- exposed bedrock, which is visible in the storage area of the house; and
- exposed wood beams that follow the unique roofline of the house.

These interior elements contribute to the historic character and heritage value of the 1964 Sykes Residence. In recent years some alterations to the interior were carried out including the replacement of historic carpeting with hardwood flooring, the installation of new floor tiles in the hallway, and the modernization of the kitchen and bathrooms. These interventions are sympathetic to the historic character of the house and meet modern user requirements.

Building Code upgrading is one of the most important aspects of heritage building rehabilitation, as it ensures life safety and long-term protection for the resource. However, the interior features of an historic property are often heavily altered in the process. The British Columbia Building Code offers equivalencies and exemptions to heritage buildings, which enable a higher degree of heritage conservation and retention of original material. The following guidelines pertaining to Health, Safety and Security Considerations from the *Standards and Guidelines* should be followed when faced with the conservation of interior character-defining elements:

- Upgrade interior features to meet health, safety and security requirements, if required and in a manner that preserves the existing feature and minimizes impact on its heritage value.
- Work with code specialists to determine the most appropriate solution to health, safety and security requirements with the least impact on the character-defining elements and overall heritage value of the historic building.
- Explore all options for modifications to existing interior features to meet functional requirements prior to considering removal or replacement.
- Remove or encapsulate hazardous materials, such as friable asbestos insulation, using the least-invasive abatement methods possible, and only after thorough testing has been conducted.
- Install sensitively designed fire-suppression systems that retain character-defining elements and respect heritage value.

The following conservation recommendations are applicable, if future interventions to the interior architectural elements of the Sykes Residence are considered.

CONSERVATION RECOMMENDATION: PRESERVATION

- Proposed interior alterations should aim to preserve or restore character-defining elements in their original locations.
- Preserve the original interior layout of the Sykes Residence, if possible.
- Only if interventions are required to satisfy structural, electrical, mechanical or code requirements or to meet modern user needs, they should be carefully designed and interior features salvaged and reinstated in their original locations.
- The primary conservation strategy should be to minimize interventions that could potentially damage character-defining elements and surviving interior features.
- Proposed alterations should be reviewed by a heritage consultant to ensure that the historic character and heritage value of the Sykes Residence are being preserved and work is being done in accordance with Parks Canada's *Standards and Guidelines for the Conservation of Historic Places in Canada*.

CONDITION REVIEW AND CONSERVATION RECOMMENDATIONS



Original floor-to-ceiling windows in living room



Original wood clad wall and beams



Concrete stair above granite-faced fireplace



Original concrete block fireplace.
Decorative pebbles are a later intervention.

6.0 MAINTENANCE PLAN

A Maintenance Plan should be adopted by the property owner, who is responsible for the long-term protection of the heritage features of the historic building. The Maintenance Plan should include provisions for:

- Copies of the Maintenance Plan and this Conservation Report to be incorporated into the terms of reference for the management and maintenance contract for the building;
- Cyclical maintenance procedures to be adopted as outlined below;
- Record drawings and photos of the building to be kept by the management / maintenance contractor; and
- Records of all maintenance procedures to be kept by the owner.

A thorough maintenance plan will ensure the integrity of Sykes Residence is preserved. If existing materials are regularly maintained and deterioration is significantly reduced or prevented, the integrity of materials and workmanship of the building will be protected. Proper maintenance is the most cost effective method of extending the life of a building, and preserving its character-defining elements. The survival of historic buildings in good condition is primarily due to regular upkeep and the preservation of historic materials.

6.1 MAINTENANCE GUIDELINES

A maintenance schedule should be formulated that adheres to the *Standards and Guidelines for the Conservation of Historic Places in Canada* (2010). As defined by the Standards and Guidelines, maintenance is defined as:

Routine, cyclical, non-destructive actions necessary to slow the deterioration of a historic place. It entails periodic inspection; routine, cyclical, non-destructive cleaning; minor repair and refinishing operations; replacement of damaged or deteriorated materials that are impractical to save.

The assumption that newly renovated buildings become immune to deterioration and require less maintenance is a falsehood. Rather, newly renovated buildings require heightened vigilance to spot errors in construction where previous problems had not occurred, and where deterioration may gain a foothold.

Routine maintenance keeps water out of the building, which is the single most damaging element to a heritage building. Maintenance also prevents damage by sun, wind, snow, frost and all weather; prevents damage by insects and vermin; and aids in protecting all parts of the building against deterioration. The effort and expense expended on an aggressive maintenance will not only lead to a higher degree of preservation, but also over time potentially save large amount of money otherwise required for later repairs.

6.2 PERMITTING

Once the proposed development is completed, any repair activities at the Sykes Residence, such as simple in-kind repair of materials, should be exempt from requiring municipal permits. Other more intensive activities will require the issuance of a Heritage Alteration Permit.

6.3 ROUTINE, CYCLICAL AND NON-DESTRUCTIVE CLEANING

Following the *Standards and Guidelines for the Conservation of Historic Places in Canada*, be mindful of the principle that recommends “using the gentlest means possible”. Any cleaning procedures should be undertaken on a routine basis and should use non-destructive methods. Exterior elements are usually easily cleaned, simply with a soft, natural bristle brush, without water, to remove dirt and other material. If a more intensive cleaning is required, this can be accomplished with warm water, mild detergent and a soft bristle brush. High-pressure washing, sandblasting or other abrasive cleaning should not be undertaken under any circumstances.

6.4 REPAIRS AND REPLACEMENT OF DETERIORATED MATERIALS

Interventions such as repairs and replacements must conform to the *Standards and Guidelines for the Conservation of Historic Places in Canada*. The building’s character-defining elements – characteristics of the building that contribute to its heritage value (and identified in the Statement of Significance) such as materials, form, configuration, etc. - must be conserved, referencing the following principles to guide interventions:

- An approach of minimal intervention must be adopted - where intervention is carried out it will be by the least intrusive and most gentle means possible.

- Repair rather than replace character-defining elements.
- Repair character-defining elements using recognized conservation methods.
- Replace 'in kind' extensively deteriorated or missing parts of character-defining elements.
- Make interventions 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. The inspection should address all aspects of the building including exterior, interior and site conditions. It makes good sense to inspect a building in wet weather, as well as in dry, in order to see how water runs off – or through – a building.

From this inspection, an inspection report should be compiled that will include notes, sketches and observations. It is helpful for the inspector to have copies of the building's elevation drawings on which to mark areas of concern such as cracks, staining and rot. These observations can then be included in the report. The report need not be overly complicated or formal, but must be thorough, clear and concise. Issues of concern, taken from the report should then be entered in a log book so that corrective action can be documented and tracked.

An appropriate schedule for regular, periodic inspections would be twice a year, preferably during spring and fall. The spring inspection should be more rigorous since in spring moisture-related deterioration is most visible, and because needed work, such as painting, can be completed during the good weather in summer. The fall inspection should focus on seasonal issues such as weather-sealants, mechanical (heating) systems and drainage issues. Comprehensive inspections should occur at five-year periods, comparing records from previous inspections and the original work, particularly in monitoring structural movement and durability of utilities. Inspections should also occur after major storms.

6.6 INFORMATION FILE

The building should have its own information file where an inspection report 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, which will aid in determining appropriate interventions when needed.

The file should also contain a list outlining the finishes and materials used, and information detailing where they are available (store, supplier). The building owner should keep on hand a stock of spare materials for minor repairs.

LOG BOOK

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. Each log should include the full list of recommended maintenance and inspection areas noted in this Maintenance Plan, to ensure a record of all activities is maintained. A full record of these activities will help in planning future repairs and provide valuable building information for all parties involved in the overall maintenance and operation of the building, and will provide essential information for long term programming and determining of future budgets. It will also serve as a reminder to amend the maintenance and inspection activities should new issues be discovered or previous recommendations prove inaccurate. The log book will also indicate unexpectedly repeated repairs, which may help in solving more serious problems that may arise in the historic building. The log book is a living document that will require constant adding to, and should be kept in the information file along with other documentation noted in section **6.6 Information File**.

6.7 EXTERIOR MAINTENANCE

Water, in all its forms and sources (rain, snow, frost, rising ground water, leaking pipes, back-splash, etc.) is the single most damaging element to historic buildings. The most common place for water to enter a building is through the roof. Keeping roofs repaired or renewed is the most cost-effective maintenance option. Evidence of a small interior leak should be viewed as a warning for a much larger and worrisome water damage problem elsewhere and should be fixed immediately.

6.7.1 INSPECTION CHECKLIST

The following checklist considers a wide range of potential problems specific to the Sykes Residence, such as water/moisture penetration, material deterioration and structural deterioration.

EXTERIOR INSPECTION

Site Inspection

Is the lot well drained? Is there pooling of water?
Does water drain away from foundation?

Foundation

Moisture: Is rising damp present?
Is there back splashing from ground to structure?
Is any moisture problem general or local?
Is spalling from freezing present? (Flakes or powder?)
Is efflorescence present?
Is spalling from sub-fluorescence present?
Is damp proof course present?
Are there shrinkage cracks in the foundation?
Are there movement cracks in the foundation?
Is crack monitoring required?
Is uneven foundation settlement evident?
Are foundation crawl space vents clear and working?

Wood Elements

Are there moisture problems present? (Rising damp, rain penetration, condensation moisture from plants, water run-off from roof, sills, or ledges?)
Is wood in direct contact with the ground?
Is there insect attack present? Where and probable source?

Is there fungal attack present? Where and probable source?
Are there any other forms of biological attack? (Moss, birds, etc.) Where and probable source?

Is any wood surface damaged from UV radiation? (bleached surface, loose surface fibre)

Is any wood warped, cupped or twisted?

Is any wood split? Are there loose knots?

Are nails pulling loose or rusted?

Is there any staining of wood elements? Source?

Condition of Exterior Painted Materials:

- Paint shows: blistering, sagging or wrinkling, alligatoring, peeling. Cause?
- Paint has the following stains: rust, bleeding knots, mildew, etc. Cause?
- Paint cleanliness, especially at air vents?

Windows

Is there glass cracked or missing?

Are the seals of double glazed units effective?

If the glazing is puttied has it gone brittle and cracked? Fallen out? Painted to shed water?

If the glass is secured by beading, are the beads in good condition?

Is there condensation or water damage to the paint?

Are the sashes easy to operate? If hinged, do they swing freely?

Is the frame free from distortion?

Do sills show weathering or deterioration?

Are drip mouldings/flashing above the windows properly shedding water?

Is the caulking between the frame and the cladding in good condition?

Doors

Do the doors create a good seal when closed?

Are the hinges sprung? In need of lubrication?

Do locks and latches work freely?

Are door frames wicking up water? Where? Why?

Are door frames caulked at the cladding? Is the caulking in good condition?

What is the condition of the sill?

Gutters and Downspouts

Are downspouts leaking? Clogged? Are there holes or corrosion? (Water against structure)

Are downspouts complete without any missing sections? Are they properly connected?

Is the water being effectively carried away from the downspout by a drainage system?

Do downspouts drain completely away?

Roof

Are there water blockage points?

Is the leading edge of the roof wet?

Is there evidence of biological attack? (Fungus, moss, birds, insects)

Are flashings well seated?

Are metal joints and seams sound?

Does the soffit show any signs of water damage? Insect or bird infestation?

Is there rubbish build-up on the roof?

Are there blisters or slits in the membrane?

Are the drain pipes plugged or standing proud?

Are flashings well positioned and sealed?

INTERIOR INSPECTION

Foundation

Are there signs of moisture damage to the walls? Is masonry cracked, discoloured, spalling?

Are there signs of past flooding, or leaks from the floor above? Is the floor damp?

Are walls even or buckling or cracked? Is the floor cracked or heaved?

Are there signs of insect or rodent infestation?

6.7.2 MAINTENANCE PROGRAMME

INSPECTION CYCLE:

Daily

- Observations noted during cleaning (cracks; damp, dripping pipes; malfunctioning hardware; etc.) to be noted in log book or building file.

Semi-annually

- Semi-annual inspection and report with special focus on seasonal issues.
- Thorough cleaning of drainage system to cope with winter rains and summer storms
- Check condition of weather sealants (Fall).
- Clean the exterior using a soft bristle broom/brush.

Annually (Spring)

- Inspect concrete for cracks, deterioration.
- Inspect metal elements, especially in areas that may trap water.
- Inspect windows for paint and glazing compound failure, corrosion and wood decay and proper operation.
- Complete annual inspection and report.
- Clean out of all perimeter drains and rainwater systems.
- Touch up worn paint on the building's exterior.
- Check for plant, insect or animal infestation.
- Routine cleaning, as required.

Five-Year Cycle

- A full inspection report should be undertaken every five years comparing records from previous inspections and the original work, particularly monitoring structural movement and durability of utilities.
- Repaint windows every five to fifteen years.

Ten-Year Cycle

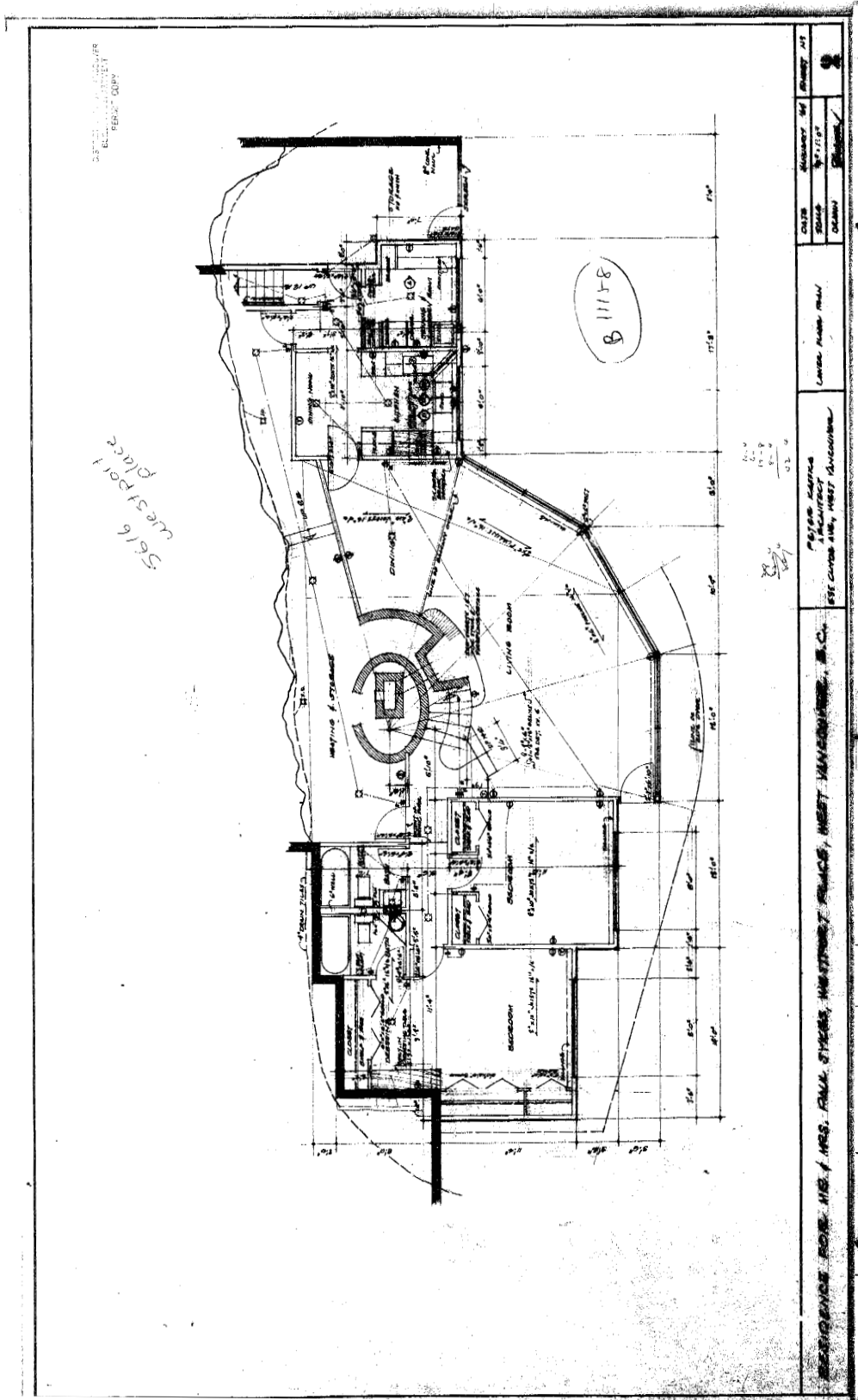
- Check condition of roof every ten years after last replacement.

Twenty-Year Cycle

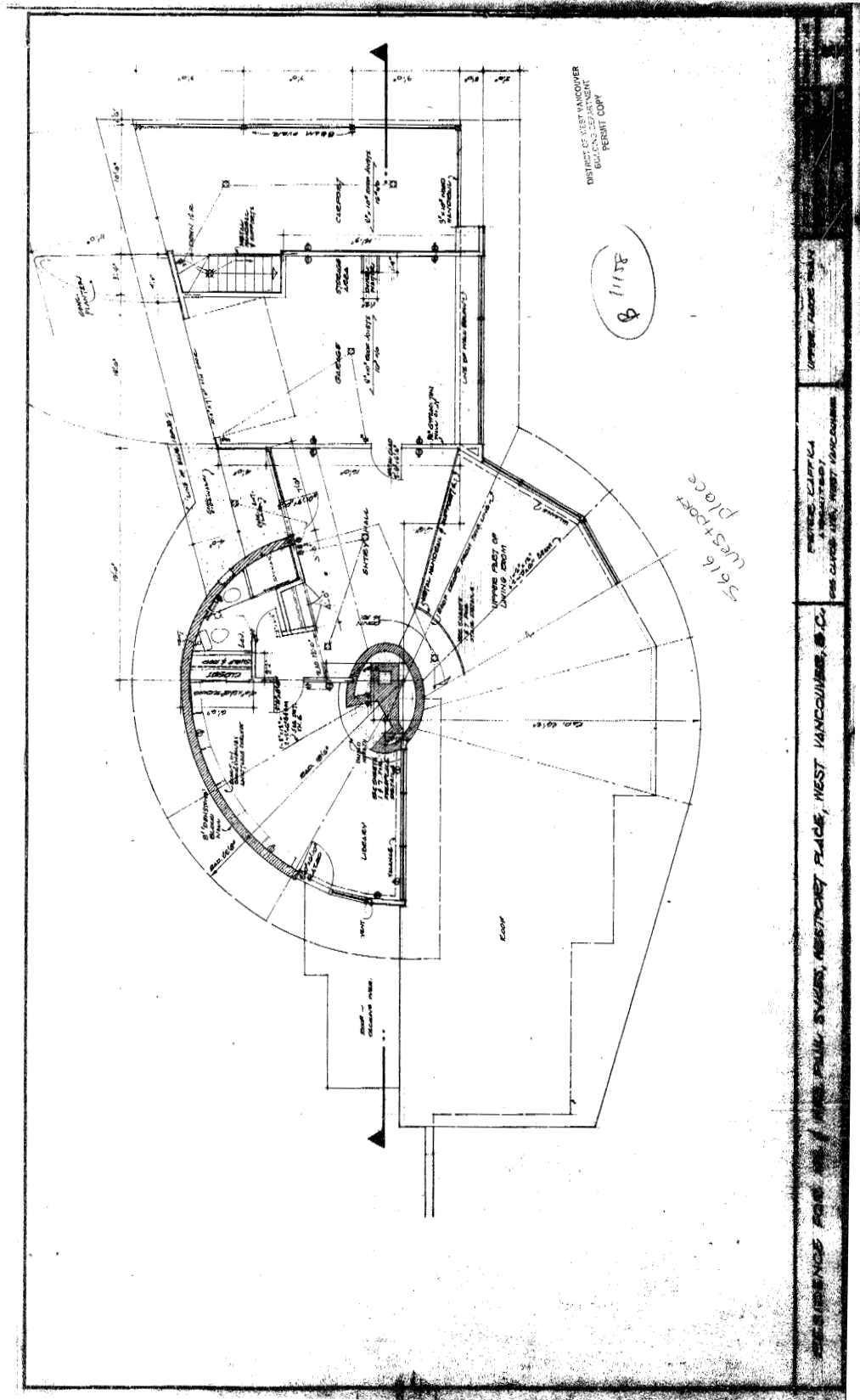
- Confirm condition of roof and estimate effective lifespan. Replace when required.

Major Maintenance Work (as required)

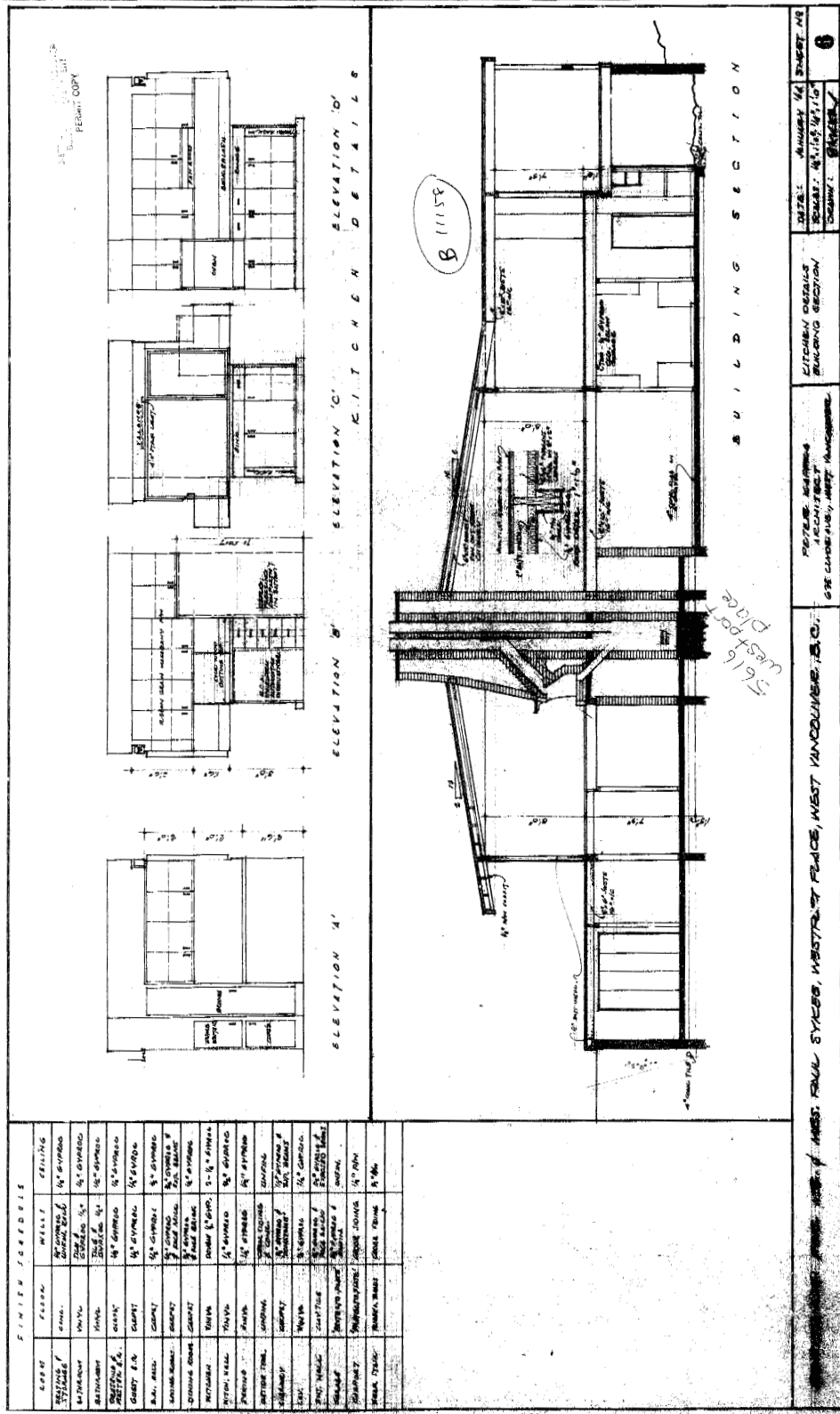
- Replacement of deteriorated building materials as required.



LOWER FLOOR PLAN, SYKES RESIDENCE, ARCHITECT PETER KAFFKA, 1964



UPPER FLOOR PLAN, SYKES RESIDENCE, ARCHITECT PETER KAFFKA, 1964



SECTION SYKES RESIDENCE, ARCHITECT PETER KAFFKA, 1964

RESEARCH SUMMARY

NAME: Sykes Residence
CIVIC ADDRESS: 5616 Westport Place, West Vancouver
ARCHITECT: Peter Kaffka
SOURCE: Building Plans for 5616 Westport Place and correspondence with Peter Kaffka's son, Martin Kaffka
ORIGINAL OWNER: Major Paul Sykes Jr.
SOURCE: Building Plans for 5616 Westport Place by Peter Kaffka and correspondence with Peter Kaffka's son, Martin Kaffka
ORIGINAL DATE OF CONSTRUCTION: 1964
SOURCE: Building Plans for 5616 Westport Place, Building Department, District of West Vancouver

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