Community Success Story Building Community: BC Indigenous Housing Society's Chief Leonard George Building

About the BC Indigenous Housing Society

The BC Indigenous Housing Society (BCIHS) is a registered charity governed by an all-Indigenous Board of Directors. BCIHS was founded in 1984 and currently manages 21 buildings and over 900 units, supporting over 1,300 Indigenous individuals and families. BCIHS works with government agencies to subsidize rent and achieve affordability for its tenants.



The BC Indigenous Housing Society's Chief Leonard George Building aims to achieve Passive House designation. **Photo: Alwyn Rutherford**

Since 2022, BCIHS has gone through a major transformation to focus on cultural sensitivity. They now develop programming for tenants that goes beyond just being a housing provider. Their goal is to deliver a similar level of services and support to those provided in a First Nations community. This includes focusing on good governance, community services, improved communications, and providing economic opportunities. BCIHS advertises employment opportunities, provides training for tenants on how to set up their own businesses, and has installed TVs in all its buildings to communicate important information. They also have a major focus on bringing cultural activities to urban Indigenous tenants by organizing activities such as singing, drumming, beading, weaving, and Indigenous ceremonies. BCIHS recently received an award from the BC Non-Profit Housing Association focused on equity, diversity, inclusion and Indigenous relations.



Collaborators:

- BC Indigenous Housing Society
- Colliers Canada
- Intelligent City
- Ventana Construction Corporation

Funding Provider:

BC Housing

Project Leads:

 Brenda Knights, Executive Director of the BC Indigenous Housing Society



The building will include amenities like a daycare and a community garden. **Photo: Alwyn Rutherford**







The building's façade is envisioned as a woven cedar basket. **Photo: Kristopher Grunert** / © **Intelligent City**

Project Description

The new building, named for the late Chief Leonard George of the Tsleil-Waututh Nation, is a nine-story social housing building for First Nations residents. The building integrates prefabricated cross-laminated timber floors and mass timber envelope panels, with a concrete core and parkade. The panels were produced off-site, which helped to reduce the project's environmental and community impact during construction.

The building's facade is designed to evoke a woven cedar basket. The original supplier for these panels had to back out due to the COVID-19 pandemic, so a local company from Delta, BC was able to step up and provide a madein-Canada solution. The project also incorporates commissioned Indigenous artworks both inside and outside the building, which helps create a sense of belonging and celebration of Indigenous culture.

The building contains 81 units: 40 studios, 9 one-bedroom units, 5 one-bedroom accessible units, 14 two-bedroom units, 6 three-bedroom units, and 10 four-bedroom units. This is an increase in the number of units from the previous building, which will allow BCIHS to house more people from its long waiting lists. Over 35% of the units can accommodate large families who were displaced by the 2017 fire. Twenty tenants from the previous building will be coming home to the new building, with the move-in date scheduled for September 2025. All units are deeply subsidized, based on tenant income.

Project Background

In December 2017, a fire broke out at the BCIHS building located at 1766 Frances Street in Vancouver. The building was damaged, and all its residents were displaced. It was very challenging to find new homes for the families in the tight Vancouver housing market, but the community came together to provide help and support.

After BCIHS dealt with the clean-up and ensured the tenants were taken care of, they began planning for reconstruction. At that time, there was a lot of interest in mass timber construction, especially from funders such as BC Housing. Building the project with cross-laminated timber was possible due to a new code provision in Canada that allows for mass timber construction up to twelve stories. BCIHS was able to receive funding through BC Housing's Indigenous Housing Fund to construct the new building.



The 81-unit building will feature prefabricated cross-laminated timber floors and Intelligent City's mass timber envelope panels, along with a concrete core and a parkade. **Photo: Kristopher Grunert** / © **Intelligent City**

BCIHS will also be considering intergenerational families when inviting tenants into the building; they are always looking for opportunities to keep families together so they can be successful. For example, grandparents could live in a one-bedroom unit while the children and grandchildren could live in a 2-bedroom unit in the same building. The building's amenities will include an on-site daycare with before- and after-school care, with priority for daycare spaces to be given to the building's tenants.

Other amenities include a sweat lodge, community gathering areas, and spaces for children to play and for residents to grow food. Since housing units have trended smaller over time, it's important that amenity spaces are pleasant and purposeful. The building's amenity space is on the seventh floor and extends across the whole exterior of the building, with views of the North Shore mountains. Both indoor and outdoor spaces are provided, and residents will be able to book them for special events.



A number of commissioned Indigenous artworks will be showcased in and outside the building. **Photo: Fast+Epp**

Energy Efficiency Features

BCHIS aims to achieve Passive House certification for the Chief Leonard George Building to align with Indigenous worldviews on respectfully using natural resources. The building incorporates more windows on the south side to take advantage of passive heating during the winter months, and fewer windows on the east and west sides to prevent overheating during the summer. It also includes a green roof, an airtight and thermal-bridge-free envelope design, and externally supported balconies to further reduce thermal bridging.

BCIHS uses heat pumps to heat all its buildings, and this one is no exception. It will also incorporate high-efficiency heat recovery ventilators. As part of the tenant onboarding process, BCIHS will be educating residents about keeping windows closed for proper temperature control. BCIHS hopes that tenants will use the outdoor amenity spaces rather than opening their windows.

BCIHS has also spoken to Metro Vancouver's Zero Emissions Innovation Centre about expectations for and maintenance of the new technology in the building. It's important that the maintenance team, building manager and the tenants all understand the systems to maximize the energy performance of the building. BCIHS will also be required to report data to the City of Vancouver on how the building is performing.



The building is designed to maximize energy efficiency, comfort, and sustainability. **Photo: Kristopher Grunert** / © **Intelligent City**



The building will be move-in ready by September 2025. Photo: Alwyn Rutherford

What's Next for BCIHS?

Among other projects, BCIHS will soon be working on the largest Indigenous housing building ever constructed in Vancouver. The project will be a 29-story, 299-unit building in Yaletown. BCIHS is working with Musqueam artist Debra Sparrow to honour the history of the local Indigenous peoples.



The 96-foot-tall wooden structure is expected to be built quickly, as the panels will be manufactured off-site and fit together seamlessly. **Photo: Alwyn Rutherford**

Participant Quote

"We should be building Passive in any case. We're going to pay for it one way or another. Personally, as an Indigenous person, I don't want to leave that responsibility for future generations. We need to leave this earth better when we leave than when we arrived."

- Brenda Knights, Executive Director of the BC Indigenous Housing Society

We are thankful to Brenda Knights for sharing her experience for this case study.

Lessons Learned:

- Moisture management was the biggest challenge for the project. Mass timber involves a lot of exposed wood during construction, which must be dry before putting up drywall to prevent issues with moisture or mold in the future. Some options to manage moisture include timing construction for favourable times of year, using tarps to protect the wood from rain, or using dryers to dry out the wood before drywall installation.
- Mass timber is still relatively new to Vancouver, so it's important to find an architect and general contractor who are familiar with mass timber construction. For this project, it was also important that they be familiar with Passive House construction.
- The performance of a building affects overall costs in the long term. Just evaluating construction costs per square foot doesn't include the value of the Passive House design when it comes to reduced energy costs. Significant data to prove this out over the long run doesn't often exist yet. BCIHS looks forward to the future when they can provide data to show the value of these energy savings not just for financial reasons but also to help take care of the Earth and future generations.
- During uncertain times, there is pressure on the government to provide housing units at any cost. It's important to continue to push and advocate for energy-efficient technologies even during a housing crisis.

Timeline:

- 2017: Previous BCIHS building at 1766 Frances Street was damaged by fire and residents were displaced.
- 2018: Start of project development.
- 2023: Broke ground on the project site.
- Sept 2025: Tenants will be moving into their new suites.

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