

PROJECT NAME:	Whistle Bend Continuing Care
PROJECT LOCATION:	Whitehorse, YT
CLIENT:	Yukon Government
ENGINEER OF RECORD:	Clint Low, P. Eng., Struct. Eng., Bush Bohlman and Partners LLP
ARCHITECT:	HDR CEI Architecture Associates Inc
CONTRACTOR:	PCL Constructors Westcoast Inc

PROJECT DESCRIPTION

Whistle Bend Continuing Care (WBCC) located in Whitehorse, YT, is a new long-term care facility, valued at \$146 Million. The project construction started in the spring of 2016 and was substantially completed in fall 2018. This is the first phase of a two-phase project and one of the largest capital projects in Yukon, equaling to 200,000 ft² and can accommodate up to 150 beds.

The layout of the facility consists of four resident wings that are connected to a centrally located central core area. Two of the wings contain palliative care wing and mental health. Care stations, common areas, and the utility services are located in the central core area. Connected to the central core on the north side is the Village Center which is the main entrance to the facility. Village Center will be the connecting link between phase 1 and 2. The Village Center includes central services such as workshops, laundry, activity space, staff and administrative support, loading dock and stores, plant services and a healing room. Next to the Village Center on the east side is a one level underground parkade, with the main entry plaza and canopy above. Bush, Bohlman & Partners LLP has worked with PCL Constructors and HDR-CEI Architecture on many design build projects and the success of WBCC is a result of our excellent relationship.

NORTHERN INNOVATION AND ADAPTATION

Resident wings and the Village Center are three levels and the central core area is a four-level structure with steel being an obvious choice for a post disaster facility of this size that also required fire rating. Having a steel structure also helped expedite the construction by using offsite fabrication. Construction is very challenging in the winter in Whitehorse and we had to be innovative to make maximum use of the narrow window available for construction. Modularizing the resident wings helped expedite the erection of the super structure. Two of the resident wings had three-dimensional washroom modules that were fabricated at the shop and shipped to the site with the partition walls and services already installed. These were one level modules and each module had a floor and a ceiling beam. The modules were stacked together onsite and the spaces between the modules were filled in with prefabricated floor panels. A topping concrete was poured to tie the panels and modules together. Resident wings also had pre-fabricated roof panels that were shipped to the site with the roof deck already installed.



The substructure for the entire building was made of reinforced concrete including a crawl space below the resident wings and central core. A steel super structure and modularization of the resident wings helped the construction to continue throughout the winter. Steel was ready for erection on site by the time the foundation works were complete. PCL was able to erect the structural framing for part of the facility before the arrival of winter which provided them with a heated space for interior work to continue during the winter season.

The facility has also been designed to respect the existing built environment in Whitehorse, with elements such as bay windows, pitched roofs and gabled ends. The exterior incorporates materials that reflect the local climate, providing durability and ease of maintenance.

SUSTAINABILITY

Wood was featured in several common areas of the facility such as the main entry porte cochere, lobby, healing room, canopies and the bus shelter. Large exposed wood log posts and beams were used in the porte cochere and lobby area to provide a natural look and a welcoming first impression for the residents and the visitors. Extensive use of wood in the healing space provides a naturally calming effect and a sense of warmth in the space.

ENHANCEMENT OF THE QUALITY OF LIFE

The layout of WBCC creates a comfortable, welcoming and non-institutional environment that feels like home and helps the resident for a smooth transition from independent living to living with care. The small residential units and private bedrooms with ensuite bathrooms will provide a quieter and more home like family environment. The entire facility has also been designed to accommodate residents with dementia and support all levels of care. WBCC will be integrated into the community, exposing residents to a range of events and activities. Residents will have easy access to landscaped outdoor courtyards, gardens and ample daylight and views.

