

# KWANLIN DÜN COMMUNITY BUILDING

Whitehorse, YT | Completed 2021

Role of the firm: Structural Engineer of Record

Area: 40,365 sq.ft. (3,750 sq.m.)

Budget: CAD \$21.0 million

Architect: Reimagine Architects

Client: Kwanlin Dün First Nation

The Kwanlin Dün Community Hub is a 3,750 sq mt 2-storey building located in Whitehorse, Yukon, serving as a gathering space for the Kwanlin Dün First Nation citizens to come together and celebrate their culture. Seen from above the building is shaped like a leaping fish, symbolizing the First Nation's connection to the Yukon River.

Inside the community hub are several gathering areas for meetings and events, a Healing Room and KDFN's council chambers. The basalt columns found at Miles Canyon have served as inspiration for the project, highly influencing the spatial narratives of the building. As a result, places of special importance such as the Elders' Lounge and the Healing Room have a hexagonal floor plan, while the shape is also present with the columns that conform to the edge of the building.

The project embraces innovative structural components such as the glulam wall panel that fold over at the roof level to become a V-shaped king post truss while showing support for the community by using locally sourced materials to bring them to life. The circular council chambers feature an expressive steel king post and cables supporting a mass timber roof. Post and beam mass timber framing was utilized at the second floor and roof levels to effectively accommodate the irregular building layout and sloping roof.

The unique visual language of the design creates a warm, inviting, and calm ambiance which results from the imaginative use of wood and clever play with light. Sustainability plays an important role in the design, as features such as maximizing daylight, passive ventilation, energy-efficient envelope, high-efficiency LED lighting and rainwater collection are integrated.

