

# SALT RIVER FIRST NATION MULTIPURPOSE FACILITY

Fort Smith, NWT | Completed 2019

Role of the firm: Structural Engineer of Record

Area: 32,292 ft<sup>2</sup> (3,000 m<sup>2</sup>)

Budget: CA \$16.0 Million

Architect: Reimagine Architects

Client: Salt River First Nation

Nestled in the heart of Fort Smith in the Northwest Territories in Canada, the Salt River First Nation Multipurpose Facility is much more than just a community center. After its completion in 2019, this 3000 square meter building has become a bustling hub where locals gather to connect, engage, and partake in recreational, cultural and social activities. The building houses administration offices, a courthouse, a 400-seat community hall, a cultural center used for education and events, a commercial kitchen and a leasable space, providing both economic and community engagement opportunities.

Constructed as part of a design-build contract, mass timber framing was chosen for the second floor and roof structure. Timber was used because it could accommodate several long span conditions, varying roof slopes, and an irregular building layout. Douglas Fir laminated glulam panels were supported by glulam beams and columns and for the council chambers, a series of inclined circular glulam columns were used to support radial glulam beams. The use of prefabricated steel connectors and self-drilling screws allowed for rapid site installation time.

Exposed glulam components are used extensively in the building's structure and architectural detailing, which lessens the building's environmental impact while enhancing the interior's natural and warm look. Seen from above, the shape is inspired by the Oxbow River form found on the original lands of the Salt River First Nation, integrating old-world heritage themes with contemporary design.

