

# NEW BRUNSWICK MUSEUM

Saint John, NB | Design Phase

**Role of the firm: Structural Engineer of Record**

**Area: 134,000 sq.ft**

**Budget: CAD \$140 M**

**Architect: Diamond Schmitt with EXP**

**Client: New Brunswick Museum**

The renovated New Brunswick Museum (NBM) will offer a modernized space for Canada's oldest continuing museum. Once completed, this facility will seamlessly integrate the museum's research endeavors and exhibitions within one sustainable, decarbonized facility, aligning perfectly with the museum's core mission of preserving, studying, interpreting, and showcasing the rich natural and cultural legacy of New Brunswick.

The design seamlessly incorporates the east wing of the museum's historic Collections and Research Centre, built in 1934, while significantly expanding the museum's footprint with five new wings to the north. The building's gravity system elegantly combines mass timber and steel framing to support the floors and roof. The mass timber solution features a prefabricated 'double tee' concept, inspired by precast concrete structures. CLT panels with double glulam ribs will clear the common 12.0m (40') span across all gallery and exhibition spaces, with the goal of integrating acoustics, mechanical, and electrical into the coffer spaces between the ribs. What will result is a clean ceiling expression, bringing the warmth of timber into the building. To accommodate essential programming, the existing basement will be underpinned and lowered as part of the expansion. Preservation efforts will maintain the original building facade and floors wherever feasible, facilitating the reuse of the structure.

The design captures views of both the urban center and Harbour of Saint John, as well as the stunning natural landscape and river to the west. The new, accessible street-level entrance welcomes visitors into a multi-story, public great room—a central nexus within the museum. The second floor will boast 30,000 square feet of exhibition area stretching across the building's length, housing six permanent galleries and a flexible space for visiting and special exhibits, ensuring seamless circulation throughout.

