



Featured Projects

Library and Archives Canada: Constructing the Americas' First Carbon-Neutral Archival Preservation Facility

Gatineau, Quebec

Project Duration: 2018 – 2020
Project Budget: \$330 million
Client: Library and Archives Canada
Services: [Advisory](#)



LAC Preservation Storage Facility

Library and Archives Canada’s state-of-the-art Preservation Storage Facility is the largest automated archival facility in the world.

Library and Archives Canada (LAC), and by extension this facility, was established to preserve Canada’s documentary heritage; serve as a source of enduring knowledge; facilitate the acquisition, preservation, and diffusion of knowledge; and function as the continuing memory of the Government of Canada.

As part of its mandate, LAC recognized a need to expand its collection storage facilities in 2011. Then, in 2015, the organization received Treasury Board approval to build a new 13,000 m² Preservation Storage Facility, referred to as the Gatineau 2 project, adjacent to the existing Preservation Centre in Quebec.

In 2016, LAC became the custodian of its six special-purpose facilities, enabling the organization to make decisions regarding the retention, recapitalization, replacement, or divestment of its real property assets.

The Gatineau 2 project was designed to provide purpose-built infrastructure to preserve cultural, social, and historical records for future generations, enhance the existing Preservation Centre’s storage capacity, and enable LAC to maintain and manage both these facilities for the next 30 years.

Scope

Tiree partnered with LAC to provide [Advisory](#) services supporting the transfer of asset custody, funding approvals, materials and services procurement, and the development of a real property and capital plan between 2018 and 2020.

The goals of the Gatineau 2 project were to:

- Construct a purpose-built archival Preservation Storage Facility that supports the long-term preservation of and access to LAC’s growing collection of documentary heritage assets
- Expedite project delivery through a public-private partnership model that delivers value throughout the asset lifecycle
- Enable LAC to effectively manage its special-purpose real property portfolio

In alignment with Canada’s Greening Government Strategy, the facility was built to a LEED Gold standard—making it the first special-purpose federal facility to meet these requirements. The Preservation Storage Facility is directly connected to the adjacent Preservation Centre to minimize ground transport of archival materials, further reducing LAC’s environmental footprint while setting a new benchmark for archival infrastructure in Canada.

This groundbreaking facility increases storage capacity, improves preservation infrastructure, and reduces greenhouse gas emissions, allowing LAC to meet its program objectives in a cost-effective and sustainable manner.

Approach

Tiree provided strategic guidance on LAC’s long-term accommodation needs, financial requirements, and collection management strategies to support the creation of a facility that sets a new global standard for archival material preservation and access.

Our approach to enhancing the accessibility and long-term preservation of Canada’s documentary heritage included:

- Leading overall project planning and delivery, including strategic advisory, quality assurance, and financial oversight
- Assessing LAC’s current portfolio, space requirements, and compliance gaps
- Conducting consultations to confirm scope, goals, and key assumptions with internal and external stakeholders, including LAC specialists
- Recommending strategies to align the portfolio with LAC’s goals, accommodation needs, environmental mandates, and custodial responsibilities
- Completing accommodation options analysis to enhance or generate value from existing assets
- Developing building and space accommodation standards aligned with Government of Canada workplace standards
- Supporting the preparation and analysis of land use studies and development initiatives
- Evaluating strategies to mitigate demand uncertainty and planning risks
- Creating a long-range Real Property Master Plan to guide LAC’s collections and facilities across Canada to 2050
- Producing reports, presentations, and documentation to support senior-level approvals and decision-making
- Interpreting Treasury Board policies and applied local and community policies, plans, and by-laws
- Authoring capital plans and financial models, including lifecycle costing and market trend analysis
- Preparing business and financial plans, including budgeting, forecasting, and reporting for LAC management

Outcomes

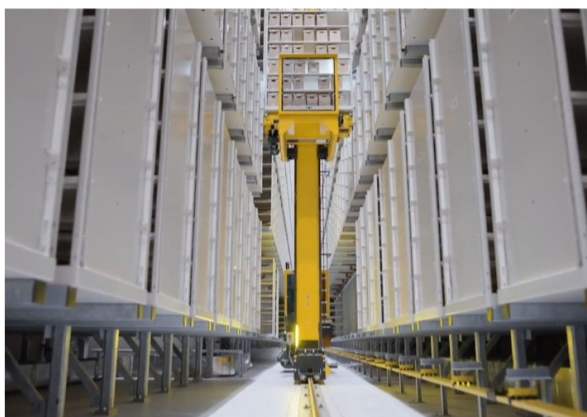
The Preservation Storage Facility, completed in 2022, is the first carbon-neutral archival preservation facility in the Americas.

The facility features a high-density automated storage system with a crane and lift to retrieve and return requested items from a central staging area, maximizing capacity while improving access to heritage assets.

Each of the building’s six vaults has extensive temperature and humidity controls, fire detection and suppression systems, and advanced security infrastructure to preserve 590,000 containers of archival materials, microfilms, and motion-picture films for the next 500 years.

Support spaces, including offices and meeting rooms, were incorporated into the design to enable individual and group consultations of original documents without impacting security or preservation.

Through purpose-built capital and real property plans, financial oversight, and tailored portfolio optimization strategies, Tiree supported LAC in the delivery of the Gatineau 2 project—reinforcing its role as a global leader in documentary heritage and preserving Canada’s growing collection for future generations.



Automated storage and retrieval system



Central staging area