

Feature

Our Library of Parliament

by Mary F. Soper

Shrouded in a white protective fabric, the Library of Parliament is undergoing its most extensive rehabilitation in 50 years. Public Works and Government Services Canada (PWGSC), who are leading and managing the project, began the planning in 1995. Completion is targeted for 2005. Today, an important chapter in the story of this remarkable building is being written.

The Library of Parliament building is more than 125 years old. Designed in 1859 as the library for the Legislature of the Province of Canada, by the time the building was completed in 1876 Confederation had occurred and it opened as the new home for the Library of Parliament of the Dominion of Canada.

The Library's collection is even older. It began in the 1790s as the legislative libraries of Upper and Lower Canada. For a time, the collection moved from Kingston to Montréal and then it was shunted back and forth between Toronto and Québec City. It was only when Queen Victoria chose Ottawa as the capital of the United Provinces of Canada in 1857 that the collection found its permanent home on Parliament Hill. The Library of Parliament is a Canadian icon. Situated on top of a steep cliff above the swirling waters of the Ottawa River, its brilliant Gothic Revival design was inspired by the great medieval buildings of England. Designed by Thomas Fuller and Chilian Jones in the typical manner of the period, it combined Romantic Revival style and superb decoration with new engineering. Its circular space, with an inner diameter of 27 metres (87.6 feet), was unprecedented for its size in Canada and required an imported, prefabricated iron dome from England. The pentagonal plan with its central, circular reference desk reflected the very latest in library design.

In recognition of the Library's great historic and architectural value, it has been designated a national historic site and a "classified" federal heritage building. The current rehabilitation will bring it up to building standards, ensuring it can continue to serve as a functioning library for generations to come. At the same time, its acknowledged heritage value is being respected and enhanced.

The Library of Parliament has undergone two previous renovations: the first followed the fire that burned down the Centre Block in 1916; the second was in 1952 when it suffered its own fire in the Lantern. The 1950s renovations were especially extensive. They included adding two new basements for book storage, fireproofing the iron dome by encasing it in plaster, rebuilding the Lantern, and introducing new furniture and lighting to the Reading Room. In the course of the renovations, the glass floors in the galleries and the glass end panels in the book stacks were removed, and many of the lighting fixtures' glass globes were substituted with plastic, causing the Reading Room to lose some of its sparkle.

Some 50 years later, the Library building was showing its age. Minor repairs were no longer adequate for PWGSC to deal with the accumulated wear and tear, the ravages of weather and pollution, and antiquated systems. For many years, water had been pouring off the roofs and down the walls, seeping into the masonry and causing it to deteriorate during seasonal freeze-thaw cycles. Mortar was crumbling. The interiors of the masonry walls were pocked with voids. Many stones required repair or replacement, and all needed to be cleaned. In addition, the old mechanical systems made it difficult to control temperature and humidity levels in the building, thereby putting the collections at risk and making working conditions uncomfortable. The roof was leaking. It lacked insulation, and air and vapour barriers. The windows leaked. Exterior iron work was deteriorating. The Reading Room floor was worn beyond repair. The building was falling behind with regard to meeting current codes and standards for fire and life safety and seismic protection. In short, the building was in danger of reaching a point of no return. Failure to address each and every problem immediately would have resulted in a permanent loss of the building's heritage fabric.

Of equal importance, the layout of offices and the Reading Room no longer supported the Library's operations. Inadequate lighting, cabling and security were ongoing issues. Over the years the Reading

Room became cluttered with office equipment. The facilities for public tours were cramped.

PWGSC began planning to address these problems in 1995. From the start, the Library organization and the Federal Heritage Buildings Review Office (FHBRO) were involved to ensure protection of the collection and the building's heritage character. Early investigations concluded that the Library building required such extensive work that it would have to be vacated for practical and safety reasons. Locating and fitting up suitable temporary space became part of the project, running in parallel with the design and tendering process. Moving the collections without disrupting Library operations was a logistical challenge. With assistance from the Canadian Conservation Institute, the collections were assessed and cleaned before the move.

With so much preliminary work, it was six years before the Library closed its doors on February 8, 2002. Over the next few weeks, the last of the Library staff vacated the building and collections were moved out. Last to go were the large reference desk and wonderful marble statue of a young Queen Victoria, which has stood in the centre of the Reading Room since the beginning. The Library's main operations are now located in a historic former bank building on Sparks Street, one block from Parliament Hill, while the bulk of the collections are housed at another historic building in Gatineau. On March 11, 2002, the building was turned over to the contractors, Thomas Fuller Construction Co. (1958) Ltd. of Ottawa, who won the competitive tender for most of the work. Interestingly, the Fullers are direct descendants of the building's architect.

The scope of the rehabilitation work involves all elements of the Library building, inside and out, from the foundation to the weathervane. The designers, Joint Venture [Note 1], a group of four Canadian architectural firms chosen through a competitive process, had to make many difficult decisions regarding the mechanical systems, the masonry, the roof, windows, and lighting in the Reading Room. All aspects of the project were vetted through numerous federal committees, including FHBRO, which advises federal government departments on the protection of the heritage character of their buildings. FHBRO also advises on how best to ensure that the project complies with the new Standards and Guidelines for the Conservation of Historic Places in Canada (<http://www.historicplaces.ca>).

The key to safeguarding the collections is improved temperature and humidity control. The Library also wanted to maintain the same size of collection—about 60% of the total. New mechanical systems are necessary, and to house them without displacing collections, a new basement level is required. Also, the ceiling heights of the existing two basements must be increased to accommodate the ductwork, necessitating removal of the existing basements and excavation of 8.75 metres (28.7 feet) of rock under the Library for three new basement levels (see model p. 5).

To protect the building structure from the increased humidity as well as from exterior weather, the entire building envelope (roofs, walls, foundations, windows) must be made weather-tight. New interior double windows are required everywhere. In addition, to safeguard the structural integrity of the masonry walls, consolidation with grouting is essential. As this is being completed, the exterior stone is being gently cleaned to remove dirt and soot, thus allowing the stone to breathe properly. In the interior, a new reference desk will once again grace the centre of the Reading Room. It will encircle a returned and cleaned Queen Victoria. The gallery glass floors, end panels and lamp globes will be reinstalled and once again add sparkle. New furniture, which will harmonize with the old, will be introduced. And, the arrangement will leave more room for visitors and those consulting the collections.

From the time the building opened in the 1870s, lighting was inadequate. Despite numerous improvements, lighting levels remained stubbornly low in many areas of the book stacks, making it difficult for Library staff to locate and use material. At the same time, direct sunlight from the large upper windows caused the opposite problem—too much glare. Many options were investigated by the designers before a solution was found. Indeed, the design of a sophisticated and functional lighting system has proven to be one of the most difficult challenges of balancing function and respect for the heritage elements.

The contractor's challenge is to carry on noisy, dusty, traffic-generating work without disrupting Parliament or its visitors, or causing damage to the nearby Centre Block. No blasting is allowed. A

staggering 4,800 cubic metres of rock has been removed by mechanical rock-breaking means. Vibration and displacement were monitored and strictly controlled. Noisy work is being done at night. Even so, the contractors must cope with the inevitable shutdowns for special events on Parliament Hill. Furthermore, they must continually adjust the construction logistics and sequencing of activities to cope with surprises—and there have been many—as previously hidden parts of the building are uncovered.

The contractors have creatively designed a scaffolding which reaches every area of the building without touching it and which, when shrouded in its white protective fabric, permits work to continue in all weather. It allows us to come up close to every part of the structure, inside and out. One can't help but be struck by the amazing craftsmanship of our ancestors, and pause to think about the urgency of preserving it for future generations. Alarming, inspection of the stonework at close quarters has revealed that the damage to the exterior stones was more extensive than anticipated, particularly in previously hidden areas around the windows and eaves. Another discovery, this time on the inside, concerns the historic cast iron dome. It has been freed of its 1950s plaster encasement, only to reveal that it is covered in lead paint, which has slowed the attachment of new seismic steel bracing. The list of discoveries could go on. In truth, there is a story about every aspect of the building, every aspect of the project.

It is regrettable that everyone cannot see what is happening at first hand. Because of the extent of the work, access during construction is not possible for visitors, and must be tightly controlled both for safety reasons and so as not to disrupt the progress of the work. To compensate the annual one million visitors to Parliament Hill, the Library staff has set up a temporary exhibit in the Hall of Honour of the Centre Block. A model shows what the Library will look like when all the work is completed. In addition, PWGSC is documenting the project on film and with still photos to record and communicate to others what is being done. PWGSC makes this material available to the media, and has made a short film explaining the project for inclusion in the National Capital Commission's Info Tent. For those outside Ottawa, the PWGSC Web site offers information on Parliament Hill buildings and is updated monthly with photos showing work in progress on the Library (<http://www.parliamenthill.gc.ca>).

At the time of writing (Heritage Day 2004), we are past the half-way point in the construction. Everything has been exposed now, and we are putting the building back together. It has been a long process from the start over eight years ago. We anxiously anticipate the day when Queen Victoria's statue is back in place and the Library reopens—a day when the sparkle is returned to one of the most beautiful buildings in Canada, a day that will recall the excitement of the grand ball of February 28, 1876, held prior to the opening of the Library.

Historic documents tell a story of each generation's struggles with the same problems—technology, finances, expectations and values of the times, availability of skilled workers, schedule, political shifts, and so on. The response to these challenges says a lot about the priorities of the time. The focus of the work in progress is to ensure that the Library of Parliament continues to work from the central location chosen for it at Confederation. In the process, we will be maintaining the core element of the Library building's heritage character, that of a functioning library. We sincerely hope that our efforts will be judged favourably.

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Note 1: *Joint Venture is a group of four architectural firms: Ogilvie and Hogg Architects of Ottawa, Desnoyers Mercure et associés of Montréal, Spencer Higgins Architects of Toronto, and Lundholm Associates of Toronto.*

Reference:

Graham, Michael. The Library of Parliament—La Bibliothèque du Parlement, Information and Documentation Branch, Library of Parliament. Ottawa: PWGSC, 2000. (<http://www.parl.gc.ca>)

