

Laurier Brantford YMCA Athletic and Recreation Centre

by ROBIN BRUNET



The ideal partnership is one in which close collaboration benefits multiple parties, and this is certainly the case with the Laurier Brantford YMCA Athletic and Recreation Centre, which is the outcome of the City of Brantford teaming with Wilfred Laurier University in 2012 to create a new recreation complex for university students as well as the entire community.

Located between two parallel streets running east/west that have a 35-foot height differential, the massive 118,000-square-foot facility consists of an elevated rectangular two-storey “Bar-Building” on Colborne Street. The remainder of the complex then steps down and is nestled into the slope separating Water from Colborne Street just below the Bar Building.

Within the sloped site is a sports and recreation facility housing an aquatic centre with its 25-metre pool, a community gym, and a varsity sport centre. Encompassing 90 percent of the entire complex, this 445-foot-long structure is merged into the hillside and visually interconnects the complex with interior glazing from a double-height lobby space. It also has a green roof system that is separated by a pedestrian outdoor plaza and bridge, connecting Colborne Street to a public parking parkade on the south of Water Street.

There’s more: multi-purpose spaces for fitness classes and social, educational and cultural programming; teaching spaces for community education; cardio, strength and weight areas for individual fitness and community-based health-care programs; a large gymnasium (with retractable seating for 1,200 spectators); and multi-purpose studios.

The Centre represents an architectural landmark in the revitalization of Brantford’s downtown core; and as Max Blouw, former president and vice-chancellor of Wilfrid Laurier University remarked when construction began

three years ago, “This project is vitally important to Laurier’s expansion plans in downtown Brantford. With this new facility, Laurier students will have access to one of the finest athletic centres in the country.”

But as with any project of this magnitude, bringing Laurier Brantford YMCA to life wasn’t easy. “Construction was very challenging due to the unique site conditions discovered after ground was broken,” says James Lai, associate VP with CannonDesign. “We were up to the challenge and worked closely with

to the block and city as a whole (as well as allowing for magnificent views across to the nearby Grand River). The design focused on three themes: memory, movement, and landscape – drawing upon the rhythms and patterns of buildings that previously filled the location.

Lai explains, “At the Colborne street level at the top of the sloped site, over 40 old buildings, including row homes, were demolished before the first phase of the facility’s construction, and even though our two-storey Bar Building

on Water Street, and sewer work on Colborne Street. Unfortunately, it was discovered that methane gas had permeated the soil, requiring its costly disposal as well as the creation and installation of a sub-slab vapour extraction system. Given the steep grade into which the facility would be built, an underground dewatering system was also developed.

Although CannonDesign envisioned the facility having an elaborate landscaped roof with walkways and links between Water and Colborne streets,



the contractors and the clients to provide a building within budget that met all the program requirements and that we can all be proud of.”

The design team engaged the city and university as well as the greater community in a highly collaborative process to ensure that all ideas and possibilities were covered and needs best met. From this, CannonDesign conceived the facility as something that would offer the public a cohesive experience, asserting a new identity

structure is distinctly modern, we studied the appearance of the row homes and developed a pattern reminiscent of their skyline that would be borne via frittering and other elements in our curtain wall glazing system.”

D. Grant Construction Limited, which had previously built the Laurier Brantford Research and Academic Centre East and West for the University, began construction on the new Laurier Brantford YMCA in May of 2015 with excavation, lagging, shoring

“the budget dictated that this be transformed into a green roof for viewing only,” says Lai.

A unique aspect of the project came about when an archaeological dig of the site uncovered nearly 400,000 pottery shards, coins, and other artifacts, some dating as far back as 500 BC. The quantity and calibre of the objects found reportedly rank this as the most significant archeological discovery in Ontario since the construction of the Rogers Centre in the 1980s.



This facility required the fabrication and erection of 585 tonnes of steel comprising of seven 115-foot span AESS trusses, eight girders, and two cantilever trusses each 140-foot long and 22-foot wide, which would be exposed to view in the fitness centre – and which necessitated a full closure of Colborne Street to ensure safe delivery and installation.

As of March, the Laurier Brantford YMCA Athletic and Recreation Centre was about 80 percent complete and a grand opening is expected in June 2018. Still pending was landscaping courtesy of Vertechs Design Inc.: that company's principal, Viive Kittask, says hardscaping (benches, bike rings, and other elements in the vicinity of the Bar Building) and work on the green roof will commence this spring, with the final task being seeding of native wildflowers in the fall.

The wildflowers will be located on the steeply sloped banks on either side of the facility, with multi-stemmed maple trees acting as bookends. Vertechs' design includes native shade trees along Colborne Street as well as ornamental grasses between the street's lookout space and the slope. One of many interesting touches will be evident in the green roof: "its

LOCATION
100 Water Street, Brantford, Ontario

OWNER/DEVELOPER
Wilfrid Laurier University/City of Brantford

ARCHITECT
CannonDesign

GENERAL CONTRACTOR
D. Grant Construction Limited

STRUCTURAL CONSULTANT
RJC Engineers

MECHANICAL/ELECTRICAL CONSULTANT
Crossey Engineering Ltd.

LANDSCAPE ARCHITECT
Vertechs Design Inc.

POOL/AQUATIC CONSULTANT
AquaPro Aquatic Design Inc.

TOTAL SIZE
118,000 square feet

TOTAL COST
\$60 million

riverstone ballasts will align with historic lot lines," says Kittask.

Lai concludes, "Considering all the challenges, we're very pleased to see this project finally come to fruition. All of us worked very closely with the clients to maintain programs and impart a true sense of visual esthetic, and the result is remarkable." **A**