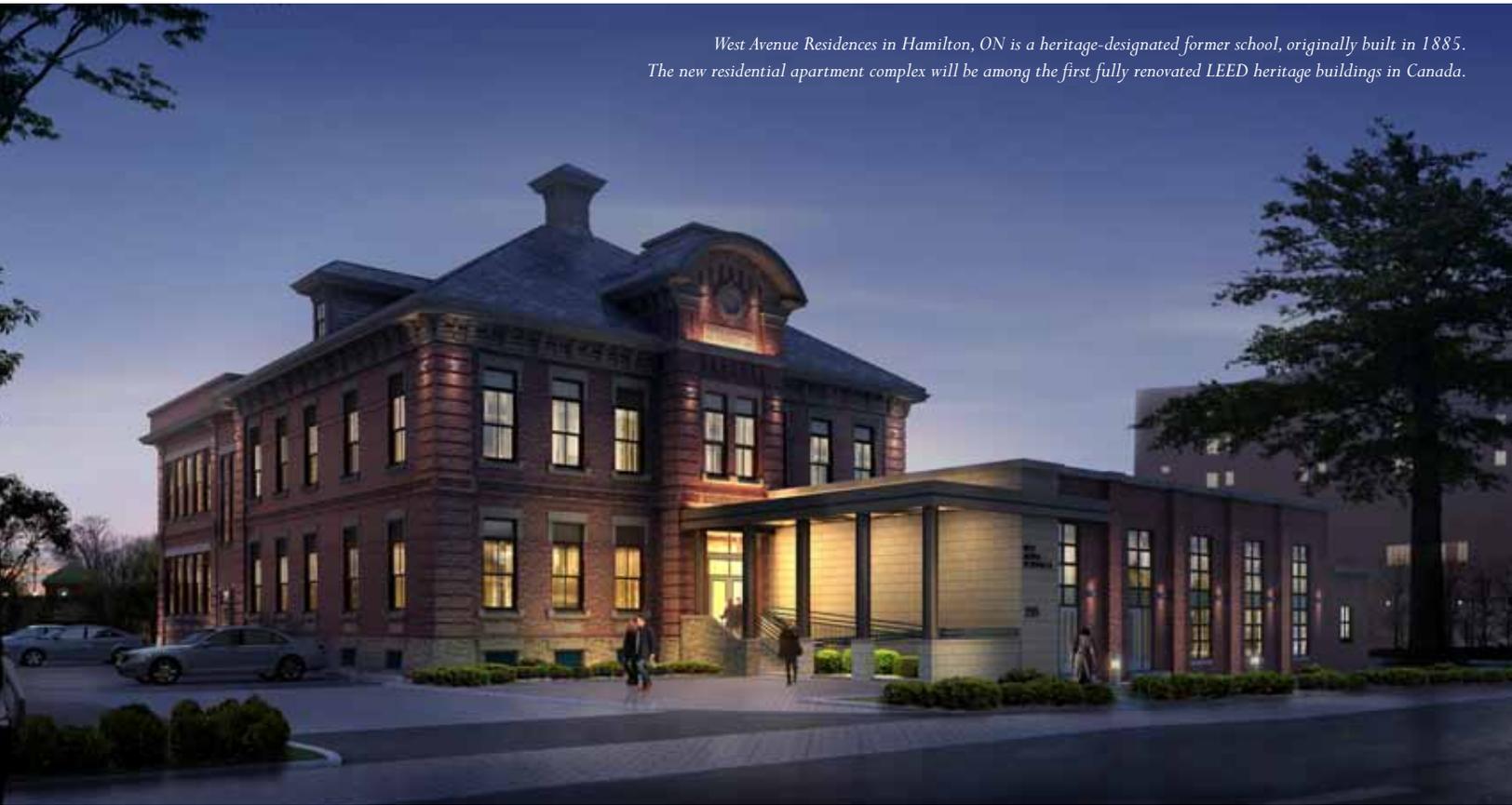


West Avenue Residences in Hamilton, ON is a heritage-designated former school, originally built in 1885. The new residential apartment complex will be among the first fully renovated LEED heritage buildings in Canada.



CYNTHIA ZAHORUK ARCHITECT INC.

A leader in the rehabilitation of Canada's architectural history

BY KELLY MATLOCK

AT A GLANCE

LOCATION:
BURLINGTON, ON

FOUNDED:
1996

EMPLOYEES:
4

AREAS OF SPECIALTY:
RESIDENTIAL, COM-
MERCIAL, AND OF-
FICE RENOVATION

TWO DISTINCT CHALLENGES BECAME A LARGER, singular demand when a building conversion is included in a restoration or renovation project. For Cynthia Zahoruk, founding principal of Cynthia Zahoruk Architect Inc. in Burlington, Ontario, these are her projects of choice.

"I really do seem to be intrigued by renovations and adaptive reuse of old buildings," Zahoruk says. "I guess it satisfies a very natural human instinct—that of improving one's environment."

Zahoruk finds visual satisfaction in the before-and-after aspects of renovation and takes pride in her firm's contribution to historic preservation. "Often in a renovation we are helping to rehabilitate an important piece of architectural history, and that is certainly worth the chal-

lenge," she says. "Structural systems can be inadequate, asbestos and lead are usually present, and insulation is nonexistent. Through many of these renovation projects, we have undertaken fairly substantial research and [we] understand the most cost-effective solutions for modernizing a building."

The company has completed many recent projects that reflect a commitment to mastering renovation and adaptive reuse. The West Avenue Townhouse, a 27-unit affordable housing project, included the restoration and conversion of an 1885 heritage school building in Hamilton, Ontario.

West Avenue Townhouse is the firm's first LEED project and is a candidate for LEED Gold certification. It also is in the running to become the first LEED-certified heritage

building in Canada that features a full renovation. Its green highlights include:

- passive heating and cooling by exposure of original interior masonry walls;
- rainwater-collection cisterns for toilet flushing;
- all low-energy light fixtures and appliances;
- the reuse of more than 75 percent of the existing walls;
- the reuse of existing interior wood floors and trim;
- recycled wood and building materials; and
- reflective roofing.

“The exterior fabric of the building was in an advanced state of disrepair,” Zahoruk explains. “Mortar was missing, water damage was prevalent, caulking was missing, and the slate roof was falling apart. The client undertook a risk, not only to adapt the former school into apartments, but also to comply with the restrictive requirements in the repair of a heritage-designated building.”

Some of the original details had to be altered in order to convert the school to housing. “We had to replace the original 1885 irreparable wood windows with aluminum windows,” Zahoruk says. “The aluminum windows, although more modern and less detailed than the old wood windows, is the element that pulls the contrasting Victorian and utilitarian styles of the whole building together.”

The school’s gymnasium was converted to six loft-style units that feature exposed steel joists and two-storey windows and living spaces. The residential units in the 1885 portion of the building have 13-foot ceilings and massive windows, allowing ample natural light in. The original main floor corridor—with large 48” x 8’ classroom doors and wood floors—was maintained, and the woodwork and trim on the walls were repaired.

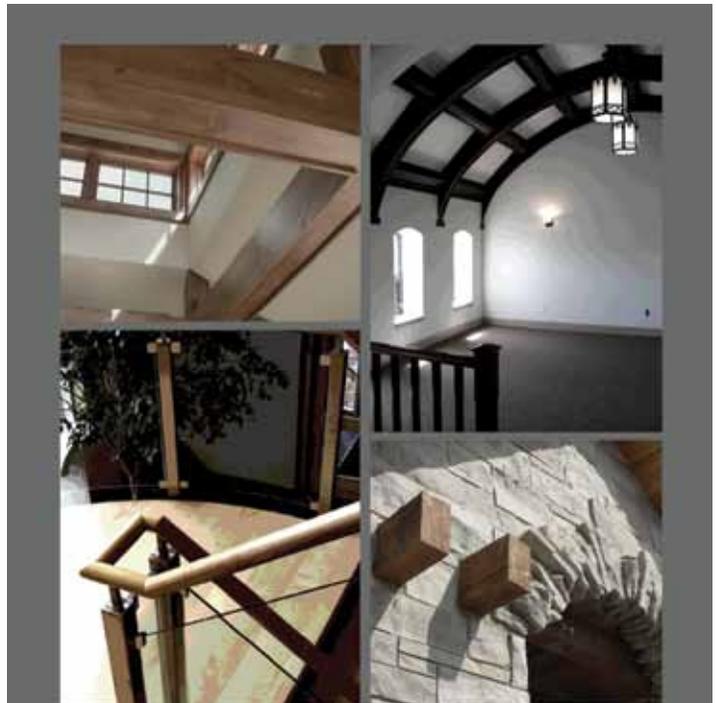
“The attic is by far my favourite space,” Zahoruk says. “When we first measured the abandoned building, only the pigeons occupied this space.”

Designers created a central access stair through structural modification to allow occupants to use an open, attic-level office space. The office features exposed timber trusses and original dormer windows. At the center of the space, the design team retained the school’s original passive ventilation system—a century-old wood-duct structure that allows hot air to rise from the lower levels to vent from the original rooftop cupola.

“The greatest challenge in this building is the heritage designation,” Zahoruk explains. “Trying to adapt and reuse an old building with modern heating and cooling technologies and insulation requirements that meets the budget for an affordable residential building is tough in this extremely restrictive building regulation.”



The adaptive reuse of St. Thomas Church in Waterdown, ON required a new second floor inserted at the upper level of the original nave. The firm maintained the original wood arches and refurbished the original light fixtures.



CYNTHIA
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ARCHITECT Inc.

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—Cynthia Zahoruk, Founding Principal



Zahoruk says she understands, having experienced the difficulties related to updating old buildings with new infrastructure, why some owners choose not to pursue heritage designations. “I can appreciate why people do not want to designate their historically significant buildings,” Zahoruk says. “I think the Canadian government needs to address this issue by providing incentives to owners so that there is desire to restore and maintain old buildings.”

Cynthia Zahoruk Architect benefitted from similar support in the adaptive reuse of St. Thomas Lofts, a Catholic church that was converted to affordable housing in Waterdown, Ontario, with the help of a federal- and provincial-government-sponsored affordable-housing program.

The firm repurposed the church into a three-storey, seven-unit residence while preserving its original details. A new third-floor structure was inserted within the original two-storey-high nave area. This solution allowed the existing high windows to remain within the multistorey framework without costly disturbances to the exterior walls.

“It was tricky trying to plan window and door heights in the upper levels and, at the same time, accommodate the

ornamental arches of the ceiling within a functional floor plan,” Zahoruk explains. “We ended up with units with wonderful 10-foot-high ceilings and huge windows.”

The firm’s renovation and adaptive reuse portfolio also includes many single-family residential renovations and custom houses, which Zahoruk calls the company’s “bread and butter.” Zahoruk finds it important to accommodate people with a variety of needs and budgets, and so the firm takes on a large amount of small and varied residential projects. “We pride ourselves on the fact that we will help people in projects of all sizes, in an effort to advance our profession,” she says. “In Canada, probably less than one percent of residential design is done by architects. Why is that? Architects need to be more approachable on many levels.”

Cynthia Zahoruk Architect Inc.’s all-inclusive design philosophy and mission complements its dedication to beautifying, restoring, and converting old buildings without sacrificing practicality. “We appreciate that people do not have time or money to repair poorly detailed buildings for the sake of a design statement, and we are always making sure our detailing is appropriate, constructible, and sustainable.” CBQ