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Interior design working hand
in glove with architecture

Any builder will tell you, it is more expensive, more complicated and more time-consuming to do a renovation than it is to start from scratch with a new structure.

Bunting Coady Architects was faced with that situation not once, but three times with additions and renovations to three buildings on Kwantlen University College's Surrey campus in Surrey, B.C.

The three buildings — designated A, C and D — are the renovated and expanded library, the new extension to the administration building and an expanded classroom building.

The new administration building is located in front of the existing administration building. It will serve as an expression of the expanded and enhanced Kwantlen University College Surrey Campus to students and visitors.

The prominent location and dramatic presence of the new administration building will provide Kwantlen with a new front door to the campus. Designed using Bunting Coady Architects' Integrated Design Process (IDP), all building systems and flexible modular internal layouts enhance Kwantlen's progressive, sustainable building mandate.

The expanded classroom building D, located at the east end of the existing building D, houses approximately 13,000 square feet of offices and classrooms in a three-storey addition.

As with the two other buildings, this structure incorporates sustainable principles wherever possible. These include high-performance glazing, formaldehyde-free engineered wood products and local wood products, acoustic tile with a high recycled content, formaldehyde-free batt insulation, radiant heating and cooling, steel columns and beams with a high recycled content and concrete floor slabs with fly-ash additive.

The library — building A — includes an expansion of about 56,000 square feet, bringing the total floor space to 89,308 square feet. The newly renovated and expanded facility creates a physical manifestation of the library's vision statement: "A dynamic centre dedicated to successful learning."

Planned around a central three-storey atrium intended as the main interior space for the campus, the library expansion provides a reading room core bathed in natural light and incorporating natural ventilation. This central space is envisioned as the new heart of the campus.

This building, like the administration building, is registered for LEED Platinum certification. This high level of performance is not surprising when one considers the approach of the principals at Bunting Coady Architects.

"These buildings will really transform the campus," says Teresa Coady. "We will likely get LEED Gold for the administration building and Platinum for the library. All three of the buildings are additions and very complicated.

"We renovated so there is a transition between the old and the new, a smooth flow from one to the other.

"We are really happy with what's been accomplished," says Coady. "We have met and exceeded our goals. They are beautiful buildings."

While Bunting Coady Architects has always tried to create environmentally responsible buildings, it has been a struggle at times to educate owners about the benefits of going green.

"I think we're still leading the charge," says Coady. "But now, at least people know what a green building is; they know what LEED certification means. These buildings are some of the best examples of their kind that we've ever been involved with."

The decision by Kwantlen to add on to existing buildings was made for very sensible reasons.

According to Karen Hearn, director of facilities for Kwantlen University College, "All three projects add on to existing buildings to reduce our impact on available land and minimize additional support requirements, such as elevators and washrooms.

"The facilities team brings Kwantlen's exceptional commitment to sustainability to the project design, ensuring that the project is leading edge in minimizing its environmental impact. Three of Kwantlen's facilities personnel are LEED-



accredited professionals. The approach to the project is to consider life-cycle costing, with additional investment to minimize future energy and material use."

Sheri Griffin was project manager for Ledcor Special Projects, a division of Ledcor Construction Limited of Vancouver. She came in fairly late in the process of constructing the classroom building.

Surrey Campus Expansion – Kwantlen University College

by Jerry Eberts



Exterior view at night, Kwantlen University College classroom building D. The three-storey extension provides approximately 13,000 square feet of additional office and classroom space.

PHOTOS COURTESY BUNTING COADY ARCHITECTS



and hopefully it will get LEED Platinum certification. It has a lot of great environmental features, including the integration of the building and space, and a passive heating and cooling system that uses trickle vents and geothermal.

"In the centre of the building is a three-storey atrium, with study tables around it. You can look from the atrium to the centre courtyard. There is a similar style to the administration building. You can see right through them."

These new buildings are completely modern. The renovated and expanded library, says Hoffart, "has a full complement of wireless services. It's really a higher tech version of a library. It's totally technically integrated."

Describing the exterior of the building, Hoffart says "it has every element: aluminum panels, a brick facade, existing concrete. It looks like it will be technologically modern inside."

Stewart Borrett, project manager for Bird Construction Company, says his company's work on expanding the administration building included work on the shell. "Kwantlen will complete a tenant improvement later to complete the interior," he says.

"This building ties into building C," says Borrett. "The exterior north wall of the existing building C forms the south elevation of the new atrium in the combined building C."

The project was not without its complications: "Challenges included tying into an operating college admin building and installation of a geothermal field and system. The admin building is to be LEED Gold certified."

Albert Bicol is a partner with Cobalt Engineering. "The target is Gold," he says, "but we're very close to Platinum on the library."

He praises the powers that be at Kwantlen University College, saying that "they are a most open-minded client. Most clients say, 'Calm down, be conservative,' but Kwantlen kept saying, 'Stretch the envelope.'"

"Karen Hearn said she wanted to be kept excited, that we should try something new, so we felt free to explore options."

"The library is a passively controlled design," says Bicol. "It uses the architecture to keep the interior comfortable. If you can reduce the temperature swings and get a building to self-perform, then you just have to tweak it afterwards. Even before it was finished and the systems up and running, the library was very comfortable inside; it adapts to its environment."

"We had a great design team," says Bicol. "Karen was at 90 per cent of the meetings. I was there. Tom [Bunting] or Teresa [Coady] was there. We could make decisions right at the moment — and that saves time, effort and money." ■

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