



# Sun Centre – St. Michaels University School

by LAURA WALKER

Victoria, B.C.'s St. Michaels University School describes the latest addition to its campus, the Sun Centre, as a one-stop-shop for students. "It's the ultimate student centre," says Andy Rodford, deputy head of school. "The space was designed so well and it's all very functional as a student commons, dining hall, and as a place for students to meet with academic and personal counsellors."

Named after lead donor and alumni, Cliff Sun, the new facility is located at the east end of a site-wide pedestrian pathway that connects staff and students directly – visually and physically – from classrooms, into the new building and up the main feature stair to a formal upper level dining hall and kitchen.

Students can also gather and relax in the building's grade-level student commons, adjacent to the new Academic and Personal Counselling Centre. "The Sun Centre acts as the fulcrum between the day and night educational, recreational, and lifestyle activities on campus," says Gary Smith of Merrick Architecture – Borowski Sakumoto Fligg McIntyre Ltd.

Smith explains that the building is designed in a respectful West Coast homage to the original Edwardian school facility constructed in 1906.

"It's an intentional seamless transition from all the other brick buildings on site; style-wise, it looks like a building that has been on campus for years."

The centre's welcoming entrance is adorned with stained glass, framing the sky with washes of yellow, red, blue, and green shades over the interior finishes, while Norman brick with a variegated and warm patterning is used for both the exterior and interior to connect inside with the outside.

"The standout material on the interiors is the wood. Douglas Fir to be specific. From the stile and rail doors in the counselling offices, to the wainscoting through levels one and two

and on to the exposed glulam beams high above the dining hall, the warmth of the Douglas Fir really gives the Sun Centre a comfortable and inviting feel," comments Lorne Meadows of Campbell Construction Ltd.

Metal clad wood doors and windows were selected for openings in the brick facade, with an aluminum curtain wall system completing the level two building envelope, all framed in a warm grey finish.

Precast and cast-in-place concrete is also employed in robust door and window headers and sills, main beams above the dining hall interior and as mantels and hearths at each fireplace. Smith explains that the concrete colour and finish are natural and warm, durable, and a continuation of the tradition of craft present in the original School House building.

"Custom designed wood chairs, dining tables, light fixtures, millwork, and the intricate wood and steel connected trusses above, tell a story of mindful attention to the details of one's environment," says Shaun McIntyre, partner in charge of Merrick Architecture's Victoria Studio. "All of the carefully designed and crafted elements of the project successfully came together in a completed building that is even greater than the sum of its individual parts."

The glazing scope of the Centre envelope includes a custom-coloured curtain wall, Thermawall 2600 from Alumicor Limited, and a custom Alumicor Skyview 2300 Skylight system, explains Brandon North of North Glass & Aluminum Ltd.

"Both systems were site measured and then fabricated here at our shop in Victoria to integrate with site conditions," says North, adding, "both products were chosen for their resiliency and adaptability to the design intent, as well as for their superior thermal

performance. They have resulted in a breathtaking finished product."

The timber wood roof deck and wood and glulam trusses provide the majority of the support for the roof and skylight system, allowing continuous glazing to wrap the perimeter of the room, so that the roof appears to float above.

Structurally, the building is two-storey plus an underground parkade, primarily concrete slab and columns with concrete shear walls for seismic loads. However, "the level of architectural detailing was greater than we normally see on projects. This, coupled with the mix and interaction of multiple construction materials, made for some unique structural solutions," says Bain.

"The presence and feeling of space and light makes the building stand out," says Douglas Bain of RJC Engineers.

To get maximum light into the hall and give a spacious feeling, while exposing the structural components and mixed materials, Bain explains that a space frame strut and tie system was provided. The system comprises of heavy timber struts forming an arch-like support to the glulam timber rafters with more discreet HHS steel tubes and small diameter rod tie components.

The building employs a green roof system above each lowered dining hall wing to help regulate building heat gains and losses, in addition to delaying the release of stormwater to the municipal system, explains Smith.

"Natural ventilation is achieved by means of operable awnings along each side and high above the dining hall floor area, mechanically controlled to alleviate warm season overheating, saving energy expenditure and physical duct space requirements typical of those found in a conventional ventilation approach," says Smith. The new facility has been energy modelled, with occupant thermal comfort quantified using ASHRAE Standard 55.1 2013



– Thermal Environmental Conditions for Human Occupancy.

"From a design standpoint, all the wood, glass, and stonework in a contemporary space really exemplifies the feeling of the West Coast. I haven't been in a building that looks like it before; it's uniquely different," concludes Rodford of the completed building. **A**

**LOCATION**  
3400 Richmond Road, Victoria, B.C.

**OWNER/DEVELOPER**  
St. Michaels University School

**ARCHITECT**  
Merrick Architecture - Borowski Sakumoto Fligg McIntyre Ltd.

**GENERAL CONTRACTOR**  
Campbell Construction Ltd.

**STRUCTURAL CONSULTANT**  
RJC Engineers

**MECHANICAL CONSULTANT**  
AME Consulting Group Ltd.

**ELECTRICAL CONSULTANT**  
AES Engineering

**TOTAL SIZE**  
27,730 square feet

**TOTAL COST**  
\$14.8 million

PHOTOGRAPHY COURTESY OF ST. MICHAELS UNIVERSITY SCHOOL; EXTERIOR SKETCH COURTESY MERRICK ARCHITECTURE