

# Coldstream Elementary School replacement meets the green challenge



SCHOOL DISTRICT #22  
COLDSTREAM ELEMENTARY SCHOOL

BY DEB SMITH



In July 2009, work began on the new Coldstream Elementary School replacement – a \$9.5 million project funded through the government of B.C.’s commitment of \$405 million to build and upgrade schools across the province. Under the mandate to reduce B.C.’s carbon footprint, the project will adhere to the Leadership in Energy and Environmental Design (LEED®) Gold standards.

Maple Reinders Inc. is running the project out of its Kelowna office, working with the design consultant MQN Architects in Vernon. “There’s a lot of coordination and sharing of information to fulfill with a LEED® project,” says Jason Moulton, project manager with Maple Reinders.

The LEED® Gold considerations involve building sustainability, innovation in design, energy, materials and resources, water efficiency and indoor environmental quality. From the low-flow water fixtures inside the school to the geothermal field for heating and cooling, to the use of interior finishes with recycled content wherever possible, the new Coldstream school will more than make the grade.

It was the challenge of the architect to design a school that not only fulfills the LEED® requirements, but also belongs in the community, a beautiful area surrounding the north end of Kalamalka Lake and extending through the Coldstream Valley.

“The colouring of the building – moss green and rustic red – is a reflectance of the natural background of the park and mountains to the south during the different seasons of the Okanagan,” explains Vicki Topping of MQN. The one-storey daylight basement design will offer views in all directions, as well as allow in sunlight.

Additionally, the new school will fit into the modern-day community plan with its proposed paved sidewalks, tree wells,

benches, lights and bike lane out front. School bus and parent drop-off zones will be on the school site to keep traffic off the busy Kalamalka Road. And the school playground has been designed to later become a park area for the entire community – all done within the vision of recycling, of making resources count in many different applications.

The new 35,000-square-foot building will be built with wood and concrete block veneer, using regional materials from within 800 km of the project. It is being constructed right beside the original Coldstream School, established in 1908, a virtual maze of corridors after ten additions and renovations over the past 100 years.

With young children attending school next door to the job site, Maple Reinders has added a few extra safety provisions. “The site is all fenced, with eight feet of chain link,” explains Moulton. “As well, we’ve done a criminal record check for all on-site personnel, and everyone wears their photo ID.” And once construction begins, careful attention will be given to recycling materials, as well as during the demolition of the existing school.

Geotility Geothermal Installation Corporation, out of Kelowna, is taking on the design and supply of the horizontal geothermal field, while Kal-West Building Systems Inc. will be the mechanical contractor to tie in the heat pumps/exchangers and complete the heating and cooling loop.

The work will continue throughout the year, whether or not school is in session next door, so that the new, open-plan facility will be ready to open its doors to the community and its some 400 students by the fall of 2010. ■