



# Alberta Schools Alternative Procurement (ASAP) Phase 1



PHOTO: AARON PARKER

A K-9 school building, shown under construction in February, was finished in time for the 2010-11 school year. It was 1 of 18 buildings that was part of the ASAP Schools Phase 1 project.

## At a glance

- PROJECT:**  
ASAP Schools, Phase I
- COST:**  
\$411,892,351
- LOCATION:**  
Calgary, Edmonton
- PROJECT DELIVERY METHOD:**  
Public-private partnership
- PROJECT OWNER:**  
BBPP Alberta Schools Ltd.
- ARCHITECTS:**  
Barr Ryder Architects, GEC (Graham Edmunds Cartier) Architecture
- GENERAL CONTRACTOR:**  
Bird-Graham Schools
- STRUCTURAL ENGINEER:**  
Protostatix Engineering Consultants Inc.
- MECHANICAL & ELECTRICAL ENGINEER:**  
Williams Engineering Canada Inc.
- CIVIL ENGINEER:**  
Terrain Group Inc.

**WITH ALBERTA'S EXPLOSIVE GROWTH** over the past decade came the need for additional schools in its two largest cities, Calgary and Edmonton. But, as you can imagine, new schools aren't cheap. In a bid to get more schools built at the best possible price, the Government of Alberta used the innovative public-private partnership model to deliver 18 elementary and junior high schools. BBPP Alberta Schools Ltd., a consortium, took on the responsibility to design,

build, finance and maintain the schools. Graham Design Build Services and Bird Design Build Ltd. partnered in a joint venture to design and build nine schools in Calgary and nine in Edmonton. The state-of-the-art schools consist of cores containing essential facilities such as washrooms, classrooms, gyms and administration offices. Modular classrooms are then added and removed as needed to accommodate the ebb and flow of student capacity. It's a flexible design that will

allow the province to adjust school sizes as necessary and helped to create efficiencies that contributed to lowering the cost of the project. Due to the short schedule and pressure to meet deadlines, the consortium substantially redesigned the core schools. By replacing load-bearing masonry with structural steel and infill block, and by decreasing foundation work through the use of piles and grade beams, the team managed to increase constructability,

decrease cost and improve the schedule. Throughout the design process, the team used life-cycle costing to ensure value and longevity. Three basic designs were used to create eight two-storey K-9 schools, two single-storey K-9 schools, two single-storey K-6 schools and six single-storey K-4 schools. Each school was built using piling, grade beams and slab on grade foundation, structural steel, masonry and a flat PVC roof. The exteriors consist of

metal cladding and brick while the interiors are made of masonry and drywall. All 18 schools were built to achieve Leadership in Energy and Environmental Design (LEED) Silver certification. The project was completed one month ahead of schedule and the schools were handed to the school boards in time to open for the current school year. Collectively, the schools, costing more than \$400 million, add 12,000 K-9 spaces to the province. ●

