

# Pason Centennial Arena Expansion Project

by SUSAN PEDERSON



Seamless. That's how people are describing phase II of the Pason Centennial Arena expansion project, which wrapped in early January of this year. The first phase – a 1,500-seat, 2,000-person capacity arena – was already one of the premier facilities within the Alberta Junior Hockey League. This final phase includes one NHL-sized ice surface, a leisure ice surface, five dressing rooms, three multi-purpose rooms, and bumps the 4,500-square-metre original build up to 8,500 square metres.

Not only is the addition to this design-build project visually seamless, but the process of bringing it to fruition also went off without a hitch. In fact, the existing facility didn't have any closures due to construction, which is a good thing, because ice time here is in high demand.

"We have a young demographic and they like their kids to be in sports," explains Doug Robson, recreation facilities manager for the Town of Okotoks. "We could build another facility just like it tomorrow, and we could fill it."

Although two new NHL sheets were on the original wish list for the site, a parking analysis revealed there was inadequate parking capacity for three NHL-sized rinks. But the leisure ice surface that was created instead of the NHL sheet is hardly a consolation prize; it was created with uneven borders to replicate a natural pond, the touchstone of which is a gas fireplace to serve as a cozy indoor gathering space.

With a skating area for over 75 people, tables and hard/soft seating around the fireplace, and a projector to broadcast sporting events and movies for family skate nights, the space provides a unique destination point, with or without blades on.

Robson notes, "The leisure ice surface will provide public skating opportunities without taking time away from hockey and figure skating groups, or having to crunch into a schedule around those premium hockey ice times."

Jason Dolha, architectural technologist, S2 Architecture says, "The

leisure ice surface is very nice, and we approached this area with some attractive finishes that include a curved brick facade with stained wood mantel and wall mounted acoustic fabric panels throughout. It provides a welcoming space to everyone, whether you are participating in activities at the arena or not.

"Patron comfort was top of mind throughout phase II, including adequate heating for the bleacher seating area, glass guard rails to maximize visibility to the ice surfaces, expansive windows in viewing areas, and an interior link corridor to the Foothills Centennial Centre next door," says Dolha. "We did want to blend with the existing facility as much as possible, particularly the roof line and exterior finishes. We have heard numerous comments that it is very seamless between old and new, and you can't tell it's an addition."

One departure from the original build was the use of a partially pre-engineered structure, creating a sort of hybrid build, that posed a few challenges as far as detailing as well as keeping the engineering team on their toes.

"The expansion involved installing new pile foundations in close proximity to the original building," says Kyle Schonknecht, project engineer with RJC Engineers. "Working collaboratively, the team of contractors and designers was able to optimally locate new columns and foundations as close to the existing structure as practically possible without impacting the original building."

The new structure is effectively isolated from the original building, and was designed to avoid adding any additional load to the existing structure.

The new building structure makes use of traditional structural steel, combined with precast hollowcore concrete floor panels. A pre-engineered long-span steel "Butler" frame building spans the NHL ice surface.

Mike Wood, project manager with Scott Builders Inc. explains, "We've done quite a few arenas and our experience allows us to give the

client this type of hybrid structure. Understanding the advantages of a pre-engineered metal building for the NHL portion, and melding that with a conventional steel structure was the best construction approach for this build, and we were able to economize construction. The integrated design-build delivery method allowed collaborations with the client and consultants that are more appealing, and enhanced functionality of the end product."

That functional and practical approach was evident from day one, when the project was first conceptualized. This forward-thinking approach paid off throughout the phase II construction process.

Oversizing the water services also meant that the new system went in without incident, once the main system was moved to a different location.

"Expanding on existing buildings can be an interesting challenge, but this project had few surprises and went quite smoothly. Working collaboratively with the team was critical to success on this front, and having the contractor heavily involved during design helped significantly in co-ordinating optimal design solutions," says Schonknecht.

"It was a really smooth process from design all the way through to construction. It will be one of the projects that will be a highlight for me," adds Dolha. **A**



Keith Rogers, electrical consultant, WSP Group, explains: "The electrical utility company needed to increase its transformer size but the distribution equipment within the building was designed for the future expansion, which made it a seamless integration for us and a cost advantage to phase II. We were also able to reduce the overall energy footprint by taking advantage of things like energy efficient lighting and occupancy sensors."

Interior arena walls are all white to facilitate optimal lighting efficiency, and the lack of exterior windows in the arena area and high R-value walls provide an easier to control lighting and heating/cooling environment.

**LOCATION**  
204 Community Way, Okotoks, Alberta

**OWNER/DEVELOPER**  
Town of Okotoks

**ARCHITECT**  
S2 Architecture

**DESIGN/BUILD CONTRACTOR**  
Scott Builders Inc.

**STRUCTURAL CONSULTANT**  
RJC Engineers

**MECHANICAL/  
ELECTRICAL CONSULTANT**  
WSP Canada

**TOTAL SIZE**  
8,500 square metres

**TOTAL COST**  
\$15 million