



PHOTOS: MIKE STOBBS

Moose Jaw Multiplex

by Bill Armstrong

When Moose Jaw's new arena and curling rink facility opens to the general public it will mark the beginning of a new era and the end of another in Saskatchewan's fourth-largest city. The new downtown facility, located in the heart of the city, replaces the 52-year-old Civic Centre arena, an iconic structure built with a cost-effective and distinctive cable-structure roof that was quickly dubbed the "Crushed Can."

To be clear, the downtown facility is one part of an ambitious Multiplex project, which includes the arena and eight sheets of curling ice, with a lounge and viewing area, plus an indoor soccer and field house located a few blocks west. Because this is hockey-mad Canada, attention has naturally focused on the arena and its principal tenant, the Moose Jaw Warriors of the Western Hockey League.

The new arena and curling rink has a convex roof form, giving it a very different look and feel than the old Crushed Can, inside and out. Dean Huggins, the lead architect on the Multiplex project for MQN Architects of Vernon, British Columbia, says the open space above the arena bowl structure "... allows for a clear visual connection for all seated spectators at any given event. We believe it will lead to a more energized atmosphere, especially in the case of sporting events."

The curling space also offers an unobstructed view of all eight sheets. Initial plans called for a central pillar, but after MQN consulted with structural engineers John Bryson & Associates, a delta truss design solved the problem.

"The arena bowl will seat 4,004 spectators," says Moose Jaw parks and recreation director Jody Hauta, "with another 500 in the upper level corporate and media boxes. Everything

is designed to be user-friendly, so we expect to see people getting involved with sporting events, concerts and community programming in ways that weren't possible before."

It wouldn't be a Saskatchewan construction project without talking about the influence of the weather. An uncommonly rainy 2010, followed by a snow-laden winter, may affect the schedule for completing the outdoor site work. What stands out in Hauta's mind, however, is the perseverance of the workers who erected the building's steel frame during the winter of 2009-2010. "We had some severe wind chill numbers," he recalls.

The project was something of a departure for the City, which usually employs the traditional design-bid-build process. In this case, the combined project was design-build with a total price tag of \$61.2 million. The City engaged MHPM Project Managers to oversee the project on its behalf.

"Having a project manager on site meant the technical expertise was available to work through the details on a daily basis," Hauta says. "The City still had to make the final decisions, but it was good to have its advice."

Alexsandor Pozsonyi, the project manager assigned to the development, notes that MHPM's cross-functional team was engaged from the pre-planning phase for the Multiplex project, through the solutions development process, the

creation of a formal business case and day-to-day project management. "The design and development of the downtown facility is leading edge," Pozsonyi says, "and incorporates many of the latest principles in arena design. From the dropped arena to the cantilevered, private boxes, every seat in this facility is a prime seat. And, it is a fine example of a multiple-use facility."

Two features of the new building stand out for Maurice Creagh, director of projects for Ventana Construction





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Corporation, the general contractor. Downtown Moose Jaw has capitalized on its many distinctive brick and masonry heritage buildings to attract tourists and history buffs. Mingling with the distinctive look of downtown was a challenge that the designers and builders put a lot of thought into. The metal sandwich panels used for the walls of the new facility blend in with the colours of its surroundings, particularly with the tones and textures of the elaborate cornices along the roof line of the nearby heritage buildings.

The second feature is less visible, unless you're responsible for paying the energy bills. The facility is designed so the heat from the ice-making plant is captured and stored. It's the reverse of the ice battery concept used in some southern U.S. states to cool buildings. In this case, the stored energy will be released over eight to 12 hours to heat the building through

an in-floor radiant heating system, what Creagh calls a well-thought-out, interesting design concept.

The heating system will be a significant contributor to the design objective to certify the facility as LEED Silver. Hauta expects the system will be a major factor in setting the standard for other new municipal and private recreational and sporting facilities. "I expect we will get visitors coming to see what we've done," he adds. Dean Huggins of MQN Architects affirms that LEED Silver certification is quickly becoming the industry norm for projects of this scale.

During the construction phase an average of about 100 workers were on site, peaking at approximately 200 in late summer 2010. Despite Saskatchewan's hot construction scene, Ventana was able to stay on schedule and on budget, and hire most of the contractors and trades it needed in the province, with the exception of roofers. "We finally had to bring in roofers from Vancouver," Creagh states. "There was just nothing competitive in Saskatchewan, or southern Alberta, for that matter."

The completion of the downtown facility puts an end to years of debate in the community; first, about whether a new facility should be built, and then later over the scope and cost of a proposed facility, which was finally only resolved by a plebiscite of Moose Jaw ratepayers. There may still be varying opinions, Pozsonyi observes, but he's confident the future benefits are only now beginning to materialize. Indeed, it appears that the new arena is already drawing attention to the

LOCATION
River Street and First Avenue West
Moose Jaw, Sask.

OWNER/DEVELOPER
City of Moose Jaw

PROJECT MANAGER
MHPM Project Managers Inc.

ARCHITECT
MQN Architects

CONSTRUCTION MANAGER
Ventana Construction Corp.

STRUCTURAL CONSULTANT
John Bryson & Partners

MECHANICAL CONSULTANT
Sterling, Cooper & Associates

ELECTRICAL CONSULTANT
Falcon Engineering Ltd.

INTERIOR DESIGN
PSW Architecture and Interior Design

TOTAL AREA
28,000 square feet (Arena and curling complex)

CONSTRUCTION COST
\$61.2 million (Multiplex and soccer/fieldhouse)

tourism-minded city. In November of 2011, the facility will host a nationally televised Super Series game between the Russian Selects and a team of WHL All-Stars. The game, a city official concedes, would not have made business sense in the 3,100-seat Civic Centre. No doubt everyone involved in the design and construction of the downtown facility will be watching how it looks in HD. ■

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