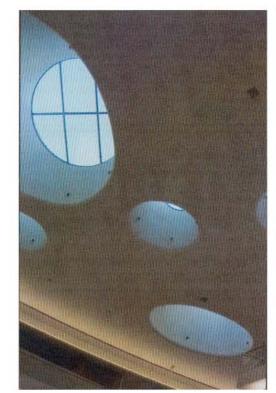
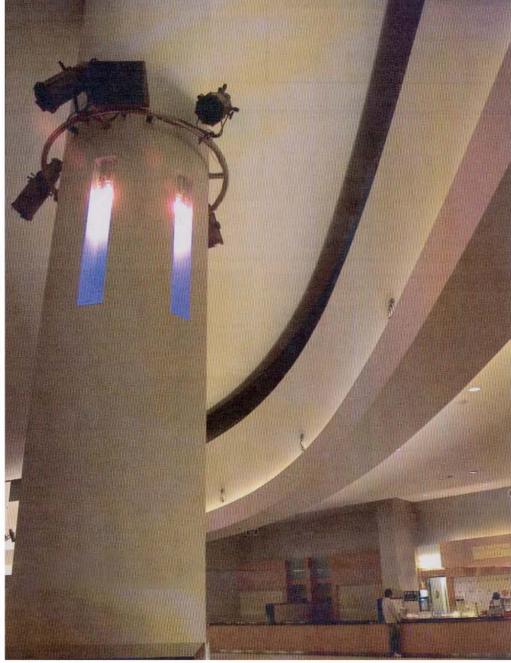


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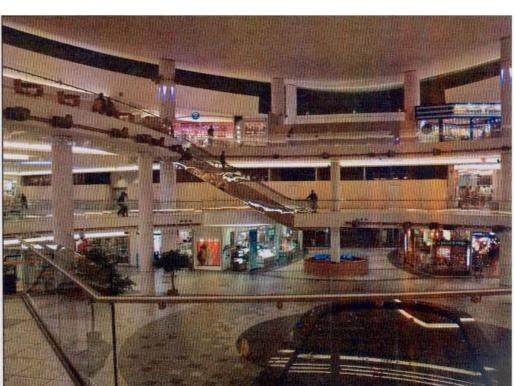






Aberdeen Centre: Left, the illuminated fountain in operation; left above, a cluster of the randomly sized circular skylights that provide natural light; above, a vista of the vast, curving theme that dominates the design of the facility; below, an overview. For further views visit www.journalofcommerce.com. (Photographs by James Craig.)





Aberdeen Centre

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by Cheryl MahThe \$130 million redeveloped Aberdeen Centre has not only set a number of benchmarks for shopping mall design, it is also a work of art.

The main exterior centerpiece – a sculptural glass wall that sweeps and curves its way around the 380,000 square foot mall – has been designated a public art project called Pixel.

The illuminated colour glass wall is just one of many features that lift the concept of a shopping mall to new heights. Designed by noted Vancouver architect, Bing Thom, the idea was for the mall to have a place in the community, creating a new form of retail and entertainment experience.

Opened in December, 2003, the mall located at the corner of Cambie Road and Hazelbridge Way in Richmond, B.C. is already attracting widespread

It most recently drew local attention when Dominion Fairmile Construction won the *Journal of Commerce* sponsored general contractor award for a project over \$40 million at this year's Vancouver Regional Construction Association Awards of Excellence.

"It was an extremely difficult project...very stressful," recalls project manager Mike Hartigan.

Building on a fast track schedule of 18 months, keeping to a tight budget and working while designs were still not finalized meant substantial pressure.

"All of these things impacted the timeliness of the project and the speed with which it needed to be done," says Hartigan. "We had some very experienced individuals on the team and it was that team relationship that kept the job running and kept it on track."

Relying on value engineering and creative thinking, Dominion brought the

project in on schedule and under budget. The contract was for \$70 million.

The state-of-the art shopping and entertainment complex – triple the size of the original – features 280 stores, an 800-seat international food court and the latest interactive technology.

Named after Hong Kong's famous tourist harbour, the original centre when it opened in 1989 garnered international recognition as the first and largest Asian themed mall in North America.

But after more than a decade, its success spawned similar Asian style malls in the area. No longer unique and old compared to the other malls, Aberdeen

Centre was set to undergo a big change.

The goal was to transform Aberdeen into the first Asian-Western centre of

For developer and owner Thomas Fung, chairman and CEO, Fairchild Group, the decision to rebuild and expand the mall made "business sense"

At the time, the economy was taking a downturn and sometimes that is when the best opportunities present themselves.

"I thought it was a good chance to rebuild it and take the lead again at a time when the economy was down and the cost of construction was much lower," says Fung, acknowledging it was a risk tearing down a profitable mall

but necessary to distinguish Aberdeen in the competitive retail market. The fluid design by Bing Thom accomplishes that by moving away from the traditional closed box shopping mall structure. In addition, rather than being typically surrounded by parking lots, the walls of the building come right to the

The undulating and luminous curtainwall of clear, translucent and opaque class, designed by award winning glass architect Stephanie Forsythe, gives the building a brighter more transparent appearance.

The mall encompasses six acres with three levels of retail in a curved central galleria and a five storey parkade. Building on soil with poor bearing required deep pile foundations by Griffiths Pile Driving.

Achieving Bing Thom's unique curving design from ceiling to floor posed many challenges for the construction team.

"There are very few straight lines in the building ... a lot of circles and ovals and ellipses. The design was forcing us to be very creative in what we did so the end result looks good. It was difficult to achieve ... coupled with the tight

schedule and still being under budget on completion," says Hartigan, citing the large "egg shaped" ceiling as being particularly difficult.

A 100,000 square foot elliptical ceiling with 20 randomly sized circular skylights dominates the interior. The skylights provide plenty of natural lighting and the floor plan offers open sight lines on every level.

"The concrete structure and drywall as far as the curvature were the most challenging," says Hartigan.

Gallager Bros. Contracting of Burnaby earned a VRCA President's Trade Contractor Merit Award for its work on the mall.

The roof steel work is also unique, he adds, and earned the steel contractor the 2003 VRCA trade award. Wesbridge Steelworks detailed, fabricated and erected 606 tons of structural steel for the complex roofing system

While the 135-metre glass mural is the centerpiece to making this building visually exciting, the actual installation was straightforward.

"We actually built all the windows off site - the frames off site, shipped them to site as a finished unit and just clipped them into place which again helped with the speed," says Hartigan.

A two-sided structural silicone glazed curtainwall system is used with specially curved aluminium caps to conform to the building's fluid shape.

Another special feature inside the main amphitheatre style central atrium is the province's first indoor musical water fountain with a programmable special effects light show. The \$3 million, 4.5 metre long fountain is based on the one at the Bellagio Hotel in Las Vegas.

"It has dancing jets that perform to music and it goes up to the full three floor height inside the mall. It's quite a unique feature for a mall," says

In conjunction with the water and light show, the atrium also features a projected dome ceiling, the first of its kind in Canada, where images and videos can be displayed to mirror the changing sky from day to night.

With Richmond in close proximity to the Vancouver International Airport (YVR), Dominion also had to contend with a height restriction of 120 feet

"YVR dictated exactly the requirements, including the craneage. We had to have two unique cranes - not your ordinary type of tower crane - so we were able to go right up with these unique cranes to the ceiling that YVR dictated, which was a very narrow area between the top of the building and this invisible ceiling," explains Hartigan.

Assembling enough qualified trades two years ago when the project broke ground was not a problem. At the peak, a crew of more than 500 men was on site a day, according to Hartigan, with close to 70 subcontractors.

Towards completion, however, it became more difficult to find people to

finish "We couldn't achieve that same schedule right now that we did then," says Hartigan. "The work scene in Vancouver has changed dramatically in the last year and the ability to get people and tradesmen is limited.'

Fung agrees, saying if he built the mall today, it would probably cost 50 per

Happy with the end result, Fung believes the mall has achieved his East meets West concept. He reports the building is now close to 80 per cent leased with some merchants already expressing interest in future Fairchild

Despite all the challenges on the project, Hartigan is proud of the work Dominion did.

"We achieved our goal, the owner achieved his objective and it's a very impressive building at the end of the day. So despite all the stress and the difficulty during it, you can sit back and appreciate it and it was one job that gives you a lot of satisfaction," he says.

Vision, financial daring, construction expertise, combine to produce a VRCA winner in the over \$40 million project category sponsored by the Journal of Commerce