

# TRANSIT-ORIENTED DEVELOPMENT CASE STUDY THE BRIDGES, Calgary



**THE BRIDGES**

*Figure 1—View of one of the residential buildings in The Bridges, the Pontefino Building, a six-storey building facing Murdoch Park. Multiple entryways from the sidewalk and stepping the building back add to the human scale and attractiveness of The Bridges.*

Source: City of Calgary

## Project data

### Land Development Data—The Bridges

<b>Land developer</b>	City of Calgary—Corporate Properties and Buildings (CPB)
<b>Phasing dates</b>	2000–2011
<b>Gross Site Area</b>	14.9 ha (36.8 acres) with net saleable area of 5.5 ha (13.7 acres) and 16 sites
<b>Number, type of residential units</b>	1,575 multi-family units
<b>Other land uses</b>	Almost one-third, 4.7 ha (11.7 acres), of the gross site is open space, including a large central park, 2 public squares, 2 public plazas, and pathways. Approximately 15,600 m <sup>2</sup> (60,000 sq. ft.) of street level commercial/retail is located along the main street and adjacent to the Bridgeland LRT station. Live-work units are permitted throughout The Bridges
<b>Gross residential density</b>	Sites closer to the LRT station average 320 UPH (130 UPA) net, while those closer to existing residential average 210 UPH (85 UPA), net.
<b>Maximum height</b>	From 3–12 storeys depending on site location. Closer to the LRT station buildings are a maximum of 12 storeys (34 m [111 ft.]), while sites adjacent to existing residential are 3–6 storeys (11–20 m [37–66 ft.]). Minimum heights are established in a land-use bylaw to achieve maximum density.
<b>Type of transit</b>	Light Rail Transit (LRT) and buses
<b>Parking</b>	Residential parking is underground with 1.25 parking stalls per unit. One parking stall per 7m <sup>2</sup> (75 sq. ft.) of net floor area (excluding kitchen area) was required for ground floor restaurant/drinking establishments and restaurants-food services only. Commercial parking requirements were allowed to include on street parking. Bus Rapid Transit; implemented after Portland Hills was planned
<b>Distance to LRT station</b>	All residents will be within 600 m (1,900 ft.)
<b>Pedestrian connectivity</b>	Excellent

Project	data
<b>Builder Project Data—Acqua and Vento (two mixed-use buildings)</b>	
<b>Builder</b>	Windmill Development Group Ltd.
<b>Date completed</b>	2007 (Acqua) and 2005 (Vento)
<b>Site area</b>	0.2 ha (0.5 acres) each
<b>Number, type, size of residential units</b>	20 market townhouse units in each building, ranging in size from 77 to 117m <sup>2</sup> (830 to 1,260 sq. ft.) located above street level commercial units; and two affordable housing units in each building, on main level, approximately 42 m <sup>2</sup> (450 sq. ft.). Total of 44 townhouse units.
<b>Other land uses</b>	Six commercial units at grade, totalling 1,300 m <sup>2</sup> (14,000 sq. ft.) in each building
<b>Maximum height</b>	11 m (3 storeys)
<b>Parking</b>	1.25 stalls per residential unit (underground), plus nine commercial stalls in Vento and 19 commercial stalls in Acqua.
<b>Unit selling price</b>	For Vento, prices ranged from \$206,400 to \$302,400 (2004 prices). Prices for Acqua ranged from \$390,100 to \$590,000 (2006 prices). Market demand increased significantly in that two-year period.
<b>Distance to LRT station</b>	Approximately 575 m (1,800 ft.) or a 5–7 minute walk.

## PROJECT SUMMARY

### The Bridges

The Bridges, a City of Calgary-led project through its Corporate Properties and Buildings (CPB) department, is north of downtown, across the Bow River in the inner city neighbourhood of Bridgeland.

Approximately 4.9 ha (12 acres) of the total 14.9 ha (36.8 acres) were made available to the City when the Province of Alberta closed and demolished the Calgary General Hospital in 1997. The Bridges also includes public open space that was located south of the hospital and adjacent to the Bridgeland LRT station. The approved Bow Valley Centre (BVC) Concept Plan relocated the open space to allow these lands to be used for transit-supportive development and provide an opportunity to redesign the open space and community facilities to better meet the needs of local residents.

The Bridges was planned as a compact urban village that respects, enhances and takes cues from the surrounding neighbourhood, while creating a distinct environment on its own. It is pedestrian-friendly with landscape elements such as wide, tree-lined boulevards, distinctive lighting and pathways that make walking to public transit, work, shopping and recreational amenities more convenient, safe and pleasurable.

When complete, approximately 1,575 multi-family units will be built to accommodate up to 2,500 new residents. Land-use and design criteria ensure that height, massing and scale of new buildings relate well to the surrounding lower density environment. The predominant residential built form is a townhouse base with setbacks after the third floor, front doors on the street and reduced yard setbacks.

CPB obtained the planning approvals, built the infrastructure and is selling fully serviced sites to private sector builders in three phases. Windmill Development Ltd. was one of the builders in Phase I. Windmill purchased two sites where it built the Acqua and Vento mixed-use buildings.

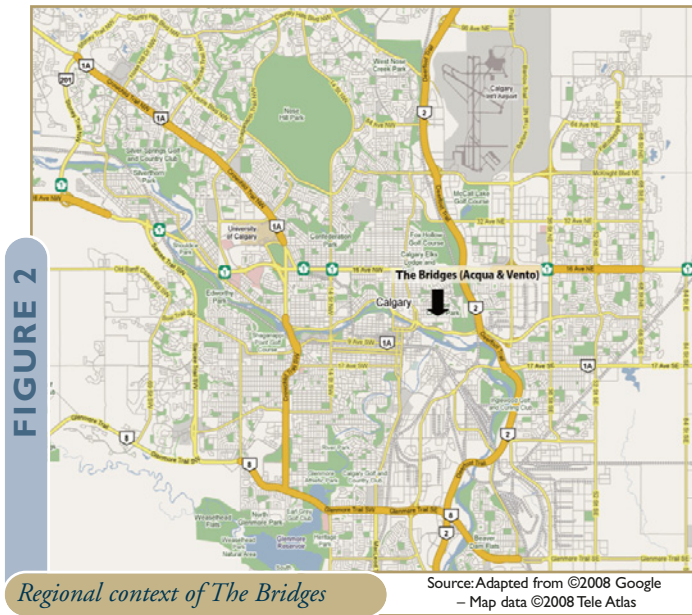
## BACKGROUND

This case study examines the roles of the City of Calgary as both the land developer and approving authority and one of the builders, Windmill Developments Ltd., which constructed two mixed-use commercial–residential buildings (the Acqua and Vento) in the first phase of the redevelopment.

## TRANSIT SYSTEM OVERVIEW AND PROJECT CONTEXT

In 1976 the City of Calgary decided to invest in light rail transit.<sup>1</sup> Prior to construction of Calgary’s three LRT lines, an express bus system was introduced along four main transportation corridors to promote the development of transit ridership to downtown. The service included park and ride facilities and supporting feeder buses.<sup>2</sup>

Since 1981, the City of Calgary has invested approximately \$1 billion in developing its three-leg radial LRT system. With 42 km (26 mi.) of double



track, the LRT system today carries over 220,000 passengers each weekday.<sup>3</sup> The system is closely integrated with an extensive local bus network. Calgary Transit, a division of the Transportation Department within the City of Calgary, operates and maintains the integrated system.

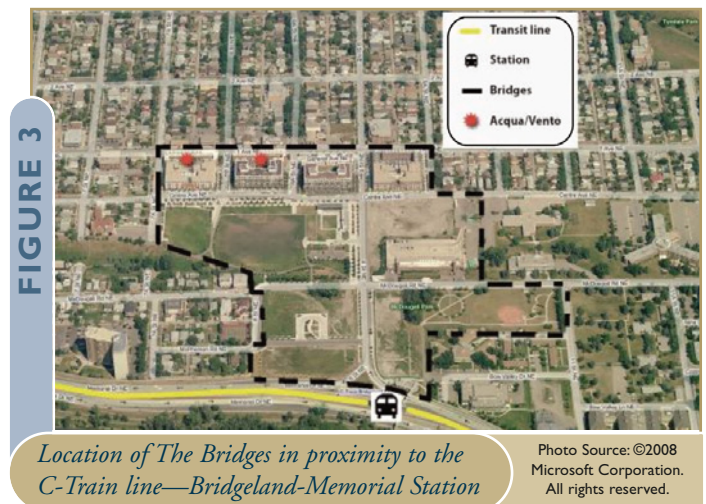
The Northeast (NE) LRT line was launched in 1985 with the Bridgeland Station being the first stop outside downtown Calgary along the line. Trains travel within a separate right of way in the median of major arterials protected by concrete barriers.

Originally developed to support the Calgary General Hospital, the station today will become a highly utilized transit node with the development of The Bridges. There is already a significant increase in ridership at this node. In 1991, when the hospital was in full operation, ridership at this station was 1,350 boarding trips per day. In 2003, before development in The Bridges and after closure of the hospital, 900 boarding trips per day were recorded. The most recent statistics are very encouraging; 2006 ridership statistics show 1,900 boarding trips per day.

During the same period, ridership on a major bus route running along the site through to downtown saw a decrease in ridership to 175 in 2006 from 279 in 2003. These figures imply that new boarding trips on the LRT can be attributed to new residents now living in The Bridges, riders who have shifted from bus to LRT and existing residents in the Bridgeland neighbourhood taking advantage of the improved pedestrian connections to the station. With more direct pedestrian connections, the walk to downtown is now only 10 minutes, and is safer and more pedestrian-friendly.

Since 1995, numerous policies and guidelines have been adopted to help achieve a vision of integrated land uses and transportation systems, including the *Sustainable Suburbs Study* (1995); the *Transit Friendly Design Guide* (1995); and the *Employment Centre Strategy* (1998). The City's *Transit Oriented Development Policy Guidelines* (2004) were developed to provide direction for the development of areas typically within 600 m (1,900 ft.) of a transit station.

Strategies in the guidelines focus on creating higher density, walkable, mixed-use environments within station areas to optimize use of existing transit infrastructure, create greater mobility options, and benefit local communities and city-wide transit riders alike.<sup>4</sup>



<sup>1</sup> McKendrick, N. (Coordinator, Strategic Transit Planning, Calgary Transit), D. Colquhoun (Manager, Transit Planning, Calgary Transit), B. Charles (Manager of LRT, Calgary Transit), J. Hubbell (Director, Calgary Transit), *Calgary's C Train—Effective Capital Utilization*, Presented at the 2006 Joint International Light Rail Conference, St. Louis, Mo., 2006 April 8–12

<sup>2</sup> Blue Arrow service still operates in the southwest sector of the city.

<sup>3</sup> Hubbell, J. (Director, Calgary Transit), D. Colquhoun (Manager, Transit Planning, Calgary Transit), *Light Rail Transit in Calgary: The First 25 Years*, Presented at the 2006 Joint International Light Rail Conference, St. Louis, Mo., 2006 April 8–12

Recently, there has been a modest amount of higher density residential development near a few LRT stations.<sup>5</sup> The Bridges is an exemplary project supporting this vision. Recognizing that the City has experienced dramatic changes in recent years, such as significant population and economic growth, the City has come to acknowledge the opportunities and constraints for achieving a more sustainable and livable city.

To address these opportunities and constraints, the City recently produced a long-range urban sustainability plan. Through this process, to ensure that land use, transportation and sustainability come together successfully, the City formed the Sustainable City Team. One of the primary goals of the team is to create an integrated Land Use and Mobility Plan for the next 30 years.<sup>6</sup>

## Transit-Oriented Design Considerations

Transit-Oriented Development Policy Guidelines were approved by Calgary City Council in December 2004 to provide land use, development polices and design guidelines for the development or redevelopment of properties within a transit station area. Though not specifically stated as such, the TOD principles were major objectives of The Bridges, including:

- **Appropriate land uses that take advantage of the LRT** through a variety of multi-family, mixed-use and live-work units.
- **Increased density around transit stations** transitioning to lower building heights along its interface edges with existing residential and institutional uses for better integration.
- **Pedestrian-friendly design** that provides direct, convenient and safe access to the LRT station from The Bridges and adjacent uses, including: a new pedestrian bridge; universal accessibility; underground rather than surface parking; narrowed street crossings; and other traffic calming measures.

- **Features that make the station “a place,”** including a new public plaza that connects with the adjacent development and pedestrian linkages and main level retail in adjacent buildings to provide services for pedestrians accessing transit.
- **Managing parking, bus and vehicular traffic** through reduced parking standards that permit on-street parking for shoppers, visitors and the community facility. Parking is “pay and display” and time-restricted. Goods movement and loading functions are accommodated in rear lanes. There is no park and ride or public parking at the Bridgeland LRT. Transit buses are fully integrated with the Bridgeland LRT station and the bus stop along 1 Ave. NE is integrated with the public plaza.
- **Planning in context with local communities** through an extensive public consultation process that helped residents understand how density and traffic could be accommodated in a way that enhanced their community and businesses. By establishing appropriate building scale, the interface and transition between the old and new was achieved.

## DEVELOPER’S PERSPECTIVE

In 1997, Calgary City Council directed two departments, Land Use and Policy Planning (LUPP) and CPB, to develop a public planning process and land-use policy plan to guide redevelopment. This resulted in approval of the Bow Valley Centre (BVC) Concept Plan in 2000.

Upon completion of the planning phase, the City had the option of either selling the lands to the private sector or assuming land development responsibilities. Upon review of the implications of both options, Council directed CPB to proceed as land developer. A major consideration in this decision was mitigating public costs. Had the City sold the un-serviced, un-zoned lands to the private sector to implement

<sup>4</sup> Calgary Transit, *Transit Oriented Development Policy Guidelines*,

<http://www.calgarytransit.com/pdf/Approved%20TODPG%20041206.pdf>, English, retrieved January, 2009

<sup>5</sup> For another case study, refer to “The Renaissance at North Hill—The Renaissance à North Hill” in CMHC’s *Residential Intensification Case Studies: Built Projects—La densification résidentielle étude de cas : Projets réalisés* at <http://www.cmhc.ca/en/inpt/su/sucopl/upload/The-Renaissance-at-North-Hill-Calgary-Alberta.pdf> English and French, retrieved January 2009.

<sup>6</sup> Calgary Plan Review Home Page,

[www.calgary.ca/portal/server.pt/gateway/PTARGS\\_0\\_0\\_780\\_237\\_0\\_43/http%3B/content.calgary.ca/CCA/City+Hall/Business+Units/Development+and+Building+Approvals+and+Land+Use+Planning+and+Policy/Land+Use+Planning/Current+Studies+and+Ongoing+Activities/Calgary+Plan+Review.htm](http://www.calgary.ca/portal/server.pt/gateway/PTARGS_0_0_780_237_0_43/http%3B/content.calgary.ca/CCA/City+Hall/Business+Units/Development+and+Building+Approvals+and+Land+Use+Planning+and+Policy/Land+Use+Planning/Current+Studies+and+Ongoing+Activities/Calgary+Plan+Review.htm), English, retrieved January 2009. Jan 24, 2007.

the BVC Concept Plan, the proceeds would not have covered the City's outstanding debt on the property and the cost of providing a suburban hospital site. In addition, as land developer, the City would be better positioned to achieve city-wide and local objectives, including inner city intensification, transit-oriented development, community integration, optimal open space distribution and main street revitalization.

As land developer, CPB obtained land use and subdivision approvals and developed architectural design guidelines that reflected the unique nature of The Bridges. They decided to build the infrastructure prior to selling the lands, which included:

- a new large central park (Murdoch Park);
- a pedestrian-friendly network (wide tree-lined boulevards, pathways and so on);
- new roads that connected into the surrounding grid-iron street network;
- a new pedestrian bridge and plaza at the LRT station;
- closing access from an expressway and building a new access from a more pedestrian-friendly street;
- installation of utilities.

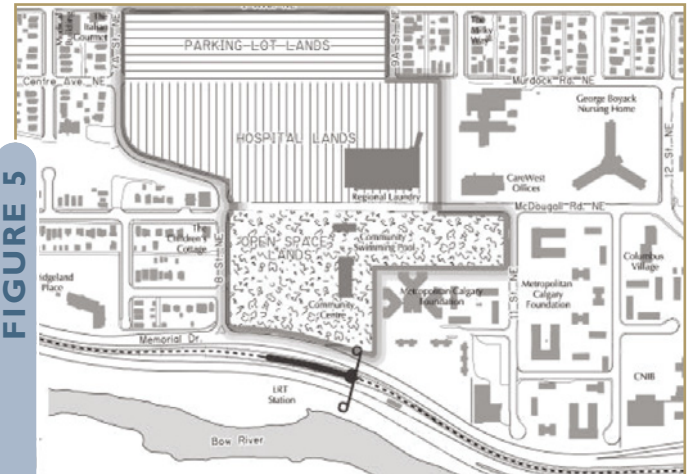


FIGURE 5

*Subject lands. As land developer, the City would be better positioned to achieve city-wide and local objectives including inner city intensification, transit-oriented development, community integration, optimal open space distribution and main street revitalization.*

Source:  
City of Calgary

To ensure that the vision was achieved, CPB implemented a land disposition process that took a broader perspective than just selling the lands based on the highest offered price. Instead the sale to the private sector of fully serviced, zoned parcels that are subject to architectural design guidelines is done through an Invitation to Offer.

Interested builders submit their information and sign an Agreement of Purchase and Sale, which details builder and City commitments. Selection criteria included: price (45 per cent), financial capacity (20 per cent), purchaser experience and expertise (20 per cent), and proposed project description (15 per cent).

### Parking and Bicycle Storage

Buildings in The Bridges are required to provide a minimum of 1.25 underground parking stalls (includes visitor parking) per unit and a minimum of 1 parking stall per 7 m<sup>2</sup> of net floor area of food services, excluding kitchens. On-street parking adjacent to the site was accepted as part of the parking requirement for ground-floor, non-residential uses. On-street parking reduced the need to include on site parking for these uses by 25 per cent.



FIGURE 4

*An extensive public consultation process helped residents understand how density and traffic could be accommodated in a way that enhanced their community and businesses.*

Source:  
City of Calgary

FIGURE 6



*There are high quality open space and pedestrian connections throughout The Bridges.*

### Project Success and Costs—Land Developer

The City of Calgary considers The Bridges very successful and profit expectations were exceeded. The responses to both Phase 1 and 2 from the private sector were very strong. Phase 1 was marketed in 2003 and Phase 2 in 2005. Marketing for Phase 3 started in 2008.

In 2002, The City approved a borrowing bylaw to cover project costs that included providing a suburban hospital site and assuming the outstanding debt, along with soft and hard development costs. To date projected revenues have been exceeded significantly while the project costs remain within the approved budget.

TABLE I

Summary of costs for The Bridges (Council-approved budget, 2002)

<b>Suburban Hospital Site</b>	\$ 3.2 million
<b>Outstanding debt</b>	\$ 2.4 million
<b>Hard costs*</b>	\$ 9.8 million
<b>Soft costs</b>	\$11.8 million
<b>TOTAL</b>	\$27.2 million
* The Province of Alberta demolished the hospital and cleared the site	

At the onset of the project, the City established the Calgary General Hospital Legacy Fund. The capital for this permanent endowment legacy fund is to be provided by the net proceeds accrued from sales or leases, or both, of the hospital lands and will be used for future initiatives that promote or contribute, or both, to the physical, mental and social health and well-being of all Calgarians.

### Municipal Support

As a result of the collaboration with LUPP during the conceptual planning process, CPB obtained the support of Council to proceed with development. CPB achieved this support by implementing the policies contained in the BVC Concept Plan. CPB understood and was committed to achieving the goals and objectives contained within the plan.

The City of Calgary does not offer financial incentives to builders in The Bridges. Windmill Development Group Ltd. received municipal support because it built in compliance with BVC Concept Plan, Direct Control Land Use Bylaw and other requirements contained in the Agreement of Purchase and Sale between them and the City.

This, along with the City’s extensive community consultation process, created a high degree of certainty for local residents regarding what would be built. As a result, none of the Phase 1 or 2 development permits was appealed by the local community association.

### Barriers and Obstacles—Land Developer

Introducing new development with significant densities into the established neighbourhood had its challenges, which included:

- approval of non-standard roads, streetscapes, open space, landscaping and parking;
- finding room for the shallow utilities with the wider boulevards and narrower streets; and
- provision of smaller open spaces in the form of public plazas and squares, which the parks department initially did not support.

To overcome these obstacles, a Customized Infrastructure Committee (CIC) was set up by the City to make decisions regarding the non-standard components. It was composed of senior level staff from the approving authority who had the ability to make decisions to deviate from the standards. The key to this committee's success was ensuring that decision makers are technical experts who understand the implications of implementing the deviations. Involving front-line staff in creating and accepting the new standards is critical.

The BVC Concept Plan and land use plan required a mid-rise (6–12 storey) building form that was initially criticized by the private sector builders. It was felt that this form of construction was costly given material requirements (concrete vs. wood frame, etc.). They voiced their reluctance to take the financial risk of expensive construction techniques in an uncertain market. However, despite the initial concerns, interest by the private sector has been strong and the built form is being achieved.

## Key Factors of Success and Lessons Learned —Land Developer

The City, in its role as the land developer, feels its success is the result of:

- setting clear strategic City objectives at the outset of the project;
- implementing an extensive public consultation process with a broad mix of stakeholders;
- approving authority being flexible and implementing the CIC; and
- combining public-sector skills with private-sector expertise and practices.

If the municipality is to act as the land developer to achieve strategic goals and objectives, it should incorporate private sector expertise and practices into the development and implementation of the plan. By doing so it is better able to balance environmental, social and economic goals.

## MUNICIPAL PROCESS AND PUBLIC CONSULTATION PROCESS

### Planning Objectives

When the site became available for redevelopment, it was quickly viewed by staff as a unique opportunity to achieve objectives that would benefit both the local neighbourhood and the City of Calgary as a whole. In 1997, Council directed staff to develop terms of reference for a public planning process leading to preparation of a land-use concept plan to guide the redevelopment of the lands. The Terms of Reference outlined a five-phase public planning process to be co-managed by LUPP and CPB, reflecting the City's dual roles in the project as both approving authority and the landowner.

Launched in 1998, the first phase of the public consultation process included the formation of a Planning Advisory Committee (PAC) to oversee the process and provide strategic direction and feedback. The PAC included local residents and business owners, city-wide representatives, volunteer professionals and the local alderman. Totalling 15 members, the PAC worked with City staff closely on the design of the public consultation process, selection of a preferred concept plan, the review of the final concept plan, and ensuring an appropriate balance between city-wide and local community objectives.

A vision for the site was developed by the City and PAC through a public Co-Design workshop. This inclusive two day workshop was felt to 'turn the tide' regarding community concerns for the redevelopment of the lands. It permitted residents to work together to share the qualities of the site they wished to preserve or improve. Residents were better able to visualize their ideas through on-hand expert artist/architects who sketched at their dictation.

A national design competition was also held and a concept plan that best met the established objectives was selected. Other public consultation and information dissemination tools included newsletters, surveys, websites, flyers, a 24-hour information phone line and a media strategy. The extensive consultation process enabled the residents to appreciate the

elements of community planning and design that contribute to sustainability, viability and vibrancy. They were then willing to accept the higher density to support the revitalization of the retail uses along 1<sup>st</sup> Ave.

Following the extensive planning process and completion of design, preliminary engineering, traffic, and open space studies, The BVC Concept Plan was approved in 2000. It established the policies that would guide the redevelopment of the lands. Specifically, planning objectives for the site included:<sup>7</sup>

- Sensitive housing intensification.
- Wider range of housing choices for different age and income levels.
- Transit-supportive development, including mixed-use development.
- Pedestrian and cycling supportive public systems that connect well with adjacent lands.
- An improved physical environment.
- Enhanced viability of 1<sup>st</sup> Avenue NE businesses.
- Exploration of opportunities for innovation in residential and mixed-use development, including special needs and affordable housing.

- Optimizing the distribution of open space and community facilities in relation to the needs of Bridgeland residents and ensuring that the quality of facilities and amount of open space is equal to or better than that in place prior to redevelopment.
- Providing a commemorative area that recognizes the contributions of the Calgary General Hospital and its role within the city.

To meet these objectives, CPB established an implementation team in the land development phase that included a development adviser from the private sector, architect, landscape architect, engineer, planner, transportation engineer, marketing professional and surveyor. The team's responsibilities included obtaining approval for subdivision, land use, building the infrastructure and marketing serviced parcels to the private sector.

To enable CPB to achieve the vision, the Approving Authority formed a Customized Infrastructure Committee (CIC) to address the non-standard design requirements for streets, open space, landscaping, parking and so on. Had the CIC not been formed and the existing standards (based on suburban development) been applied, the vision would not have been realized.

FIGURE 7



*The project was marketed to promote green building and lifestyle benefits that include close proximity to surrounding amenities, including transit.*

Source: City of Calgary

<sup>7</sup> Land Use Planning Division, March 2003. *Bow Valley Centre Concept Plan—Bridgeland–Riverside Area Redevelopment Plan.*



## Challenges

Initial public outcry over the loss of the hospital was a significant challenge to overcome. Essentially, the public did not distinguish between the provincial government's decision to demolish the hospital and the City of Calgary's new role as a landowner. To address this critical issue, an extensive public consultation process with a broad mix of stakeholders was implemented. As a result, community support was obtained.

Including the existing open space south of the former hospital within the plan was very contentious at first since there was a perceived risk that the parks and community facilities would be lost forever. As a result, the City created a new 3.5 ha. (8.7 acre) park in a more central location in Bridgeland, which the community accepted as a trade-off. It houses the new community facility, soccer fields, promenade and memorial wall built from bricks from the former hospital. The significance of the park's location is that no development will ever occur on the lands where the hospital buildings once stood.

## Success Factors

The plan was well received and widely supported when adopted due to the level of community involvement in its development and the quality of the final product. As much as the plan created a great community for new buyers, it also responded very respectfully to the surrounding context and created better connections for surrounding residents to the transit station, recreational amenities, and downtown. Also, even well before build-out, transit ridership at the station has increased considerably.

## BUILDER'S PERSPECTIVE

Windmill Development Group Ltd. began planning and designing the Acqua and Vento buildings in 2004 after being selected and acquiring two sites during the Phase 1 land disposition process. Both the Acqua and Vento are three-storey, mixed-use buildings that are each approximately 3,600 m<sup>2</sup> (18,750 sq. ft.). Each building features six main-floor retail spaces totalling approximately 1,300 m<sup>2</sup> (14,000 sq. ft.), underground parking, two affordable townhouse units



FIGURE 8

*The Vento, showing residential units above street-oriented retail*

on the ground level, and 20 two-storey (plus roof terrace) townhouse units with courtyard access. The courtyard is elevated above the retail floor. The Vento was completed and occupied in 2005 and the Acqua in 2007.

They chose these sites to bid on because their location was compatible with the project's green building concept including redevelopment of a former parking lot; easy access to public transit (max. 575 m from a transit station); good pedestrian connection to the LRT and bus routes; and proximity to many amenities. They were also situated in a new, master-planned community with significant density and an abundance of open space.

As part of the response to the City's Invitation to Offer, Windmill's submission included a commitment not only to satisfy the City's requirements to include energy efficiencies in the building, but also to achieve LEED<sup>®</sup> certification. At the time, this component did not gain Windmill additional points during the Phase 1 offering by the City. However, the land disposition process for Phase 2 awarded points to proposed projects that are built to a LEED standard. For Vento, Windmill achieved a LEED Canada-NC 1.0 Platinum rating. Windmill's projects also include two affordable units in each building, which were sold to the City at cost. The affordable units are owned and managed by Calgary Housing Company.

<sup>8</sup> The LEED system (Leadership in Energy and Environmental Design), grades buildings in areas such as energy and water consumption, indoor-air quality and use of renewable materials. Ratings for this sustainable design range from certified (26 to 32 points) to platinum (52 to 69 points).



*Parking in an interior courtyard at the Vento*

The townhouses in Vento sold from \$206,400 to \$302,400 in 2004 prices, which compares to the Calgary average new townhouse price of \$181,474 the same year.<sup>9</sup> The townhouses in Acqua ranged from \$390,100 to \$590,000 in 2006 prices, compared to the average new townhouse selling price in Calgary of \$273,082 in 2006.<sup>10</sup>

Windmill is increasingly being recognized for designing, developing and building green urban developments. The project was marketed to promote green building and lifestyle benefits that include close proximity to surrounding amenities including transit.

### **Parking and Bicycle Storage**

There are 1.25 parking stalls per residential unit (underground), plus nine commercial stalls in Vento and 19 commercial stalls in Acqua. Windmill Development Group Ltd. provided bike storage facilities as well as “end of trip” facilities for homeowners and retail tenants and employees. The secure end of trip facilities include a shower, lockers and changing room.

### **Key Factors of Success and Lessons Learned —Builders**

Windmill indicated that the projects met the company’s profit expectations. It attributed the success of the quick

sales to the fact that there was more demand for new homes and the green features in their projects compared to their competitors’ projects.

In most projects of this scale, where it is more typical to have only one developer involved, the developer is often competing with itself. The land disposition process and the limit on purchasing two lots per phase imposed by the City resulted in a positive environment for marketing in the neighbourhood. With two projects that came to market in two different calendar years, Windmill noticed an appreciable increase in sales and sale prices (as well as construction costs which ultimately determined price). The second project sold for much higher prices and much faster. This was attributed to the overall real estate market and market recognition that The Bridges is a great place to live.

### **RESIDENTS’ PERSPECTIVE**

Ten residents from Phase I buildings in The Bridges were interviewed in 2007; four of whom live of the Vento building. While the sample size is considered too small to be statistically significant, the results provide some indication of residents’ transportation preferences and reasons for choosing to live in The Bridges.

#### **Reason for Choosing that Location**

Proximity to amenities and work figured high in the list of four respondents’ main reasons for purchasing in this location. Seven said that proximity to transit had at least some influence on their purchasing decision. The most frequently cited main reason was the location’s proximity to amenities.

Overall, respondents were very satisfied with the quality of the project. Most reported being satisfied with the amount of parking provided for their personal use and eight were satisfied with the parking provided for visitor use. All respondents reported being very satisfied or somewhat satisfied with the character of the neighbourhood, that is, the style and type of housing, landscaping, shops and so on that contribute to the atmosphere of the area.

<sup>9</sup> CMHC, Prairie and Territories Market Analysis Centre, Calgary

<sup>10</sup> CMHC, Prairie and Territories Market Analysis Centre, Calgary

All were satisfied with the amenities in the neighbourhood, such as shopping, services, schools, and recreation. Eight were very or somewhat satisfied with the overall cost of living in this location even though the unit price was higher than that of their previous dwelling. This higher price was generally accepted mostly because of design features of the units. Transit proximity and neighbourhood amenities received equal responses but this was less of a factor for accepting a higher cost. The design and appearance of the buildings and size of the units were very well-liked by most residents, eight of whom said they were very or somewhat satisfied with these aspects of the project.



### Travel to Work, Shopping and School

Of the eight respondents still working every day, four said they cycled to work, two took transit, one walked and one drove alone. Seven drove to shopping whereas the remaining walked or cycled. For most respondents, travel choices had not changed significantly since moving to this location. Those using transit frequently rated the trip to the bus stop as somewhat pleasant and very convenient. Two reported changes to how they got around; one respondent walked more and one drove less.

## SUMMARY AND LESSONS LEARNED

### The Developer

The Bridges is an excellent example of a large scale, transit-oriented infill development. The project has provided a model for the City of Calgary and other municipalities to create successful transit-oriented developments. The key lessons learned include: having clear objectives and processes at the outset; undertaking an effective public consultation process with a broad mix of stakeholders; and intensifying densities with a built form that is pedestrian-oriented and integrates into the surrounding community. In order to realize the vision created through the planning process, the Approving Authority must be flexible and be prepared to adopt standards that achieve transit-oriented development.

The Bridges has also demonstrated that when a municipality has a strategic parcel of land that has the potential to meet city-wide or local objectives, or both, it is beneficial to assume both roles as approving authority and land developer. In order to be successful however, it must augment public sector skills and processes with private sector expertise and practices. By acting as land developer for The Bridges, not only were City objectives realized but the Calgary General Hospital Fund will provide funds for future projects that will benefit all Calgarians.

### The Builder

The Acqua and Vento are leading-edge green buildings that are highly suited for a transit-oriented community. Through the success of these projects, Windmill Development Group Ltd. showcased innovative green building design that realized the City's sustainability objectives. Through a strong relationship, Windmill and the City were able to demonstrate that such green innovation is not only possible, but very marketable.

The Vento is the first realization of Windmill's vision to create a landmark portfolio of green real estate developments. It is the first residential mixed use project in North America to be awarded a LEED® Canada-NC 1.0 Platinum rating. Seizing the opportunity of The Bridges offered the opportunity for Windmill to live up to the goals of the City. The success of the Acqua and Vento has the potential to inspire builders in future phases to do the same.

## CONTACT INFORMATION

Land Development	Acqua and Vento Builder	Planner	Transit authority
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FIGURE 11

The Bridges site plan.

Source: City of Calgary

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