WHISTLER

THE RESORT MUNICIPALITY OF WHISTLER

FALL 2009

RMOW FALL UPDATE

REVIEW OF MAJOR CAPITAL PROJECTS

With less than six months to go before the 2010 Olympic and Paralympic Winter Games, important municipal and Games milestones are now around every corner.

It's been an extremely busy and productive time for the Resort Municipality of Whistler as we have executed an unprecedented number of projects simultaneously. Projects that are being completed in time for the Games and in some cases have benefited from Games funding, while leaving lasting legacies for our community.

Two projects that will be front and centre during the Games—phase one of the Whistler Medals Plaza and upgrades to the Day Lots—are nearing completion. Substantial work will continue on the Medals Plaza post Games.

Less visible, but extremely important, the Debris Barrier and the upgraded Waste Water Treatment Plant will be completed this fall. Both projects will be renowned for their innovative design and operations.

Cheakamus Crossing neighbourhood is already being set up for the Games, while future residents anxiously wait to take possession of their new homes in 2010. The development is a model of all pillars of sustainability with features like the District Energy System, the resident housing provided for more than 800 locals, and the economic boost provided to the many contractors on the project.

These projects deliver on promises made to the community through engagement and move us closer to our Whistler2020 community vision.

I'd like to congratulate everyone involved in the successful completion of these important projects. Projects that Whistler can be proud of when we host the world this winter and for decades to come.

Ken Melamed,
Mayor of Whistler

WHISTLER MEDALS PLAZA AS IT IS ENVISIONED FOLLOWING THE 2010 WINTER GAMES

WHISTLER MEDALS PLAZA – CENTRE STAGE IN 2010

History will unfold at the Whistler Medals Plaza during the 2010 Winter Games as athletes realize dreams and Whistler celebrates along with them.

Whistler Medals Plaza will be the centre of the action in Whistler during the 2010 Winter Games, and following the Games it will be transformed into the public gathering and event space envisioned for this area as part of the community plan. It will be a lasting legacy for generations to come.

Phase I: Getting Ready for the Games

Leading up to 2010, crews have been busy preparing the site to accommodate the staging of Games-time events. For now, the RMOW's priority is getting this initial phase completed in order to provide a focal point for the 2010 Olympic and Paralympic Winter Games experience.

Phase one preparations have included preload, settlement and installation of permanent hydro, data and communications services for VANOC's use during the Winter Games. Site servicing for future buildings has also been installed.

Much of this infrastructure will be available as a permanent asset to support performances in the Medals Plaza following the Games.

To keep residents and visitors informed during construction, information signs are posted on the fencing surrounding Whistler Medals Plaza. The boards provide construction updates and information about the community-driven vision for the space.

Pre-Games preparations also include the construction of approximately 60 per cent of a brand new inclusive playground. Plans for the playground are extensive so only a portion of the new playground will be built prior to the Games, with the remaining portion immediately following the Games.

It won't be your average playground. It will be accessible to all children with added features for children with disabilities. The playground features a tree house structure, a wild wood playhouse, swings and other sensory and play equipment. Approximately 45 per cent of the funding for the playground is from charities.

November 2009 to April 2010

Once pre-Games construction is complete, it's show time. VANOC will set up temporary Games features prior to the Games; install performance spaces, seating and security fencing for the Games; and take down temporary features post-Games. This work will be funded by VANOC.

During the Games, after every Whistler-based sport event, the world will gather to watch athletes receive their medals at Whistler Medals Plaza. In fact, more

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Whistler Medals Plaza
Gets Ready for the Games

CHEAKAMUS CROSSING
WHISTLER'S NEWEST NEIGHBOURHOOD

Located six kilometres south of Whistler Village, and within Whistler municipal boundaries, Cheakamus Crossing will be home to more than 3,500 Olympic and Paralympic athletes and officials during the 2010 Olympic and Paralympic Winter Games.

What may have been a temporary athlete village, post Games will be home to more than 800 residents and the Athletes Centre will play an important in role in Whistler's sport hosting capacity for generations to come.

Construction on the development is nearly complete and "overlay", or temporary event infrastructure, for the 2010 Winter Games is in progress.

The Past

Decades ago, Whistler residents and businesses recognized that our community's long-term success, as a vibrant resort community, needed to retain a stable, resident workforce: people and families that lived, worked and played in Whistler. That's why, through the Whistler 2020 Comprehensive Sustainability Plan, the community recognized affordable housing as a key priority area. Cheakamus Crossing goes a long way in realizing that priority and maintaining our goal of having more than 75 per cent of our workforce living right here in Whistler.

In 2003, Whistler residents were asked: "Where do you think the Village and new Whistler neighbourhood should be located?" Following extensive engagement and community dialogue, Whistlerites chose the current site. It was chosen because it was within Whistler, close to existing trails and other facilities, accessible by transit and because of its beautiful views.

Today

The village is adjacent to an established network of walking, hiking and mountain biking trails. It also backs on to the Cheakamus River and is close to both Cheakamus and Logger's Lakes. With million-dollar views of Black Tusk, Whistler peak, Mount Fee and surrounding ranges, approximately 90 per cent of the homes in Cheakamus Crossing will be restricted to, and occupied by, Whistler's workforce. 97 per cent of units have already been sold and future home-owners are making plans to move in after the Games. The village features 20 townhomes and approximately 30 fully accessible condos which have been designed for use during the Paralympics, and to be home to locals with accessibility needs post-Games.

During the Olympic and Paralympic Games athletes and officials will be ideally located near the sport venues, broadcast and press centres and Whistler Medals Plaza. The beauty of the setting and quality of the facilities promises to make it an extraordinary experience for athletes from around the world.

The Future

After the Games, this neighbourhood will be home to a vibrant mix of residents, hostel visitors and athletes.

It will be a model for sustainable living. The village is one of only 20 Canadian developments designated as a pilot project for LEED-ND (Leadership in Energy & Environmental Design - Neighbourhood Development). The LEED-ND program currently sets the highest standards in green neighbourhood design practices. For example, Whistler's Waste Water Treatment Plant plays an important role in heating the neighbourhood. The inherent temperature of the wastewater actually provides space and water heating for the entire village; thereby, reducing greenhouse gas emissions by 90 to 95 per cent when compared to traditional methods.

The Whistler Housing Authority will operate the rental apartments, as well as the resale of resident-restricted units. Cheakamus Crossing, as well as the new Rainbow develoment, will add to the current inventory of more than 4,200 restricted beds. Today, approximately 38 per cent of the resort's Whistler-based workforce resides in resident-restricted housing. The housing helps support the community by allowing workforce to live close to work and ultimately supports business success and stability.

The Whistler Athletes Centre with its lodge and townhome accommodation and high performance centre will become the epicentre of athlete training and development in Whistler. Along with the new Whistler Olympic Park and The Whistler Sliding Centre venues, the facilities will build the capacity of sport in the region, the province and the country.

Organizations such as the Whistler Gymnastics Club and the Whistler Adaptive Sport Program will be permanently located in the centre post-Games. It is anticipated that some sport programming will be offered to the general public. After the handover from VANOC in 2010, the facilities will be operated by Whistler 2010 Sport Legacies, as will the Nordic and sliding venues.

Partnership

The development of Whistler's newest neighbourhood has been managed by the municipality's wholly owned subsidiary, Whistler 2020 Development Corporation and made possible by the support of the Province of British Columbia, the Government of Canada, and VANOC.

The project goals are the provision of housing anc cost recovery.

WHITEWATER AT CHEAKAMUS CROSSING

WHISTLER MEDALS PLAZA GETS READY FOR THE GAMES cont'd from pg 1

at Whistler Medals Plaza. In fact, more than half of the medals in 2010 will be awarded in Whistler. This marks the first time a mountain host venue has been given the honour of hosting victory ceremonies.

Along with medals presentations, the Whistler Medals Plaza will host nightly concerts as well as the Paralympic Closing Ceremony. In 2010, the plaza will also be Whistler's "hotspot," anchoring the network of six integrated *Whistler Live!* sites along Village Stroll. These public gathering spaces will feature jumbo screens and a variety of live entertainment daily during the Games.

Phase II: 2010 and Beyond

After the Games are completed, the plaza will be transformed into a lasting community amenity. It will be an outdoor gathering and festival performance space for residents and visitors, featuring an open grass lawn, amphitheatre seating, an expanded children's play area with a water feature, and a variety of outdoor performance spaces for 40 to 4,000.

The plaza will also include a Legacy Plaza, featuring Olympic and Paralympic memorabilia, such as the Olympic cauldron and installations to recognize the contributions of athletes, medal winners, volunteers, government agencies, and partner organizations involved in Whistler's journey to host the 2010 Winter Games.

The reopening of the plaza after the Games will include a community celebration and coincide with the first Whistler Medals Plaza performance series.

This project is the result of partnerships. Capital funding from the partners for the construction of the $13.67-million Whistler Medals Plaza includes $4.2 million from VANOC, $5 million from the Government of Canada, $4.02 million from the RMOW through the Resort Municipality Transfer Tax, and $450,000 from charitable organizations.

WHISTLER MEDALS PLAZA CENTERPIECE OF *WHISTLER LIVE!* PROGRAM

The Whistler Medals Plaza will be the centerpiece of the *Whistler Live!* Program – a unique Whistler experience created in partnership with the Government of Canada, Whistler Arts Council, RMOW and VANOC.

Whistler Live! is the network of integrated live sites along the Village Stroll that, throughout the 2010 Winter Games, will feature daily and nightly, family-friendly programming including live performances, interactive events and exhibitions across a broad spectrum of arts and entertainment.

During the Olympic and Paralympic Games, programming in Whistler Medals Plaza will be produced by VANOC.

Whistler Live! is modeled on similar, successful Olympic live sites in Sydney, Salt Lake City/Park City and Torino as well as equally exciting and successful live site programs at other major events such as the 2006 FIFA World Cup in Germany.

Together with the Whistler Arts Council, this integrated team will deliver programming every day during the 2010 Olympic and Paralympic Winter Games for locals and visitors alike. All entertainment will be free-of-charge with a wide variety of entertainment for everyone.

DEBRIS BARRIER PROJECT ON TRACK

A new state-of-the-art debris barrier, designed to protect Whistler Village and surrounding residential areas in the event of a flood, is expected to be complete by November.

This project provides Whistler with an innovative long-term solution to a potentially devastating debris flood hazard.

The debris barrier is a large steel grill (approximately eight metres tall and 12 metres wide) that spans Fitzsimmons Creek, 400 metres downstream from the Whistler Blackcomb snowmaking pond. It is anchored with concrete and reinforced earth abutments on either side of the creek.

All earthworks and construction of the structure itself was completed at the end of July and steel grate components will be installed in November, completing the project.

In the event of a flood, the barrier will prevent debris, including large quantities of sediment, rocks, and logs, from blocking Fitzsimmons Creek and potentially causing damage to infrastructure and private property adjacent to the creek.

The debris barrier is an important project. Whistler is currently protected by a diking system designed to protect the village from a 1:200 year flood event. At normal water levels, the debris barrier will not obstruct the flow of water through Fitzsimmons Creek. It will, however, provide an added level of flood protection to the municipality.

A team of UBC engineering researchers have been involved with the debris barrier project. They conducted hydrogeologic modeling to determine deposition profiles for debris and used powerful debris flood simulation software to demonstrate the potential impact of a 1:500 year debris flood on Fitzsimmons Creek.

Their first model showed the outcome of a major debris flood with Whistler's current level of flood protection. In this model, flooding exceeds the capacity of the current diking system and extends beyond the day skier parking lots into Whistler Village and residential areas.

With the debris barrier in place, the engineering researchers conducted a second test and determined that the impact of a 1:500 year flood would be considerably less.

DEBRIS BARRIER

CHEAKAMUS CROSSING BY THE NUMBERS

$161.3 million - Total project cost

$50.8 million - Amount invested by VANOC in Whistler Athletes Centre

$35.5 million - Amount contributed by the Province of BC and Gov't of Canada

$8 million - Amount invested by the Whistler Housing Authority

$7.2 million - Amount invested by the RMOW from Resort Municipality Transfer Tax. The remainder of the funding is coming from the sale of market and resident restricted homes.

$3.65 million - Amount contributed to the high performance centre by the RMOW to add gymnasium and landscaping

300 - Number of acres of land gifted to Whistler by the Province for local housing (on which the village is constructed)

97% of resident-restricted homes sold (Sept '09)

154 - townhomes/duplexes (resident-restricted)

67 - condominiums (resident-restricted)

55 - Whistler Housing Authority rental apartments

20 - Unrestricted market townhomes (not resident-restricted)

188 - Hostel Beds

23 unrestricted single family lots

95% of project completed by local contractors

GETTING SERIOUS ABOUT WATER

The Resort Municipality of Whistler (RMOW) is upgrading its current water system to increase capacity and safety.

The RMOW is no longer completely reliant on 21 Mile Creek for its primary supply of potable (drinking) water. A new groundwater source at Rainbow Park has been thrown into the mix to beef up Whistler's water supply.

While surface water sources such as 21 Mile Creek are an important component of a healthy water system, it is more susceptible than groundwater sources to contamination in which case, alternatives come in handy.

Adding new groundwater sources provides balance in Whistler's water system, which was confirmed through the RMOW's long-term water supply strategy. Additional water supply options also meet the community's build-out demands and ensures the ongoing quality and safety of Whistler's water. What's more, having more water capacity during periods of extreme fire hazard is also an important benefit.

The new Rainbow Park groundwater source meets this need and connects the existing Village water grid via the New Lorimer Road Pipeline and is now in service.

Other major upgrades to Whistler's water system include a new Ultraviolet (UV) treatment facility and the construction of the Rainbow Park Pump Station, which handles flows from both the existing 21 Mile surface source and the new groundwater wells.

Whistler currently treats water from 21 Mile Creek with chlorine, and the new UV treatment facility will provide an added level of protection. UV disinfection reduces chlorine levels, is cost-efficient, environmentally friendly and meets best practices set out in new provincial legislation for water treatment.

The UV disinfection facility, located adjacent to the Whistler cemetery, will be completed and in service this fall.

Whistler's water undergoes hundreds of manual quality tests each year and these projects will ensure Whistler continues to meet Canada's drinking water standards.

The central utilities computer continuously controls water supply and distribution equipment, and immediately alerts the municipality of any problems.

DAY PARKING LOT UPGRADES COMPLETED

In 2007, the Day Parking Lots (1 - 5) were transferred from the Province of British Columbia to the Resort Municipality of Whistler (RMOW), providing the opportunity for the community to manage them.

Upgrades for Day Lots 1, 2 and 3 are complete and include the following number of stalls:

- Lot 1 - 215 stalls
- Lots 2 - 259 stalls
- Lot 3 - 413 stalls
- Lot 4 - 680 stalls
- Lot 5 - capacity for approximately 350 vehicles will remain unpaved

The project includes paving the lots, and improving lighting, ramps and stairs and storm water management. The $11.5-million capital project includes both the debris barrier ($6.9 million) and upgrades to the parking lots.

The lots will be used by VANOC during the 2010 Winter Games.

CLOSING THE LOOP ON WHISTLER'S WASTE

Do you ever wonder what happens to the water you flush down your toilet everyday? Believe it or not, most of it ends up safely back in the Cheakamus River.

The flush is merely the beginning in Whistler, thanks to its sophisticated wastewater treatment plant (WWTP). All that water that goes down the drain is screened, munched, filtered and zapped with ultraviolet rays before returning to the river system.

At first glance, the WWTP seems like your average municipal system but take a closer look and you'll be surprised.

Did you know that during its journey, the inherent temperature of the wastewater actually provides space and water heating for the entire Athletes Village/ Cheakamus Crossing neighbourhood? Reducing greenhouse gas emissions by 90 to 95 per cent compared to traditional methods. It all starts with a flush.

From Landfill To Olympic Venue

In 2003 as crowds celebrated news that Whistler would host the 2010 Winter Games, folks at the RMOW were already thinking about waste.

Plans for the Games included the construction of the Whistler Athletes Village in the Cheakamus Valley, which also meant the Whistler landfill, which was nearing the end of its life, needed to close ahead of schedule. News of the Games got the ball rolling on projects that had been in the works for years.

The construction of the Whistler Athletes Village adjacent to the recently closed municipal landfill meant that plans for infrastructure upgrades were also bumped up. The infrastructure was an important piece of the puzzle because after 2010 the Whistler Athletes Village was destined to become much-needed affordable resident housing to help the resort achieve its goals to house at least 75 per cent of Whistler workforce locally.

In fact, plans to upgrade infrastructure such as the WWTP were already part of Whistler 2020, the resort's community vision and sustainability plan. The Whistler 2020 strategies developed by the Whistler community created the framework for a new state-of the-art waste management system.

Waste Water Treatment Plant Upgrades

The new system included a $51.5 million upgrade to Whistler's WWTP, including an industrial-sized composting facility. With construction complete, the RMOW now operates one of most advanced systems in the country.

Construction began in August 2008 on the wastewater treatment plant, and all of the upgrades were designed with sustainability in mind. Sustainable elements include changing the treatment process to eliminate the need for chemicals through the use of microbes. The project was funded by a combination of municipal reserves, contributions from the federal/ provincial infrastructure program and long-term financing.

"Instead of using chemicals we have a biological process that uses microbes that essentially chew up harmful nutrients in the plant," said James Hallisey, Manager, Environmental Projects, RMOW.

These microbes reduce nitrogen and ammonia toxicity, which in turn minimizes impacts to the Cheakamus River. Ultra violet disinfection is also used to reduce reliance on chemicals such as chlorine. UV disinfection delivers up to 1,000 times the level of protection over standard treatment against waterborne diseases such as Cryptosporidium and Giardia. The new system is not only better for the environment, but will also minimize odour.

"We actually blow bubbles into tanks full of wastewater because the microbes need oxygen. Bubbling smelly air through the waste water tanks effectively scrubs the odour," Hallisey said.

District Energy System

Before the treated water flows back into the Cheakamus River, it does something rather remarkable – it provides space and water heating for the Athletes Village Neighbourhood.

The District Energy System (DES) is one of the highest profile aspects of the RMOW's waste management system and earned the 2009 CAMA (Canadian Association of Municipal Administrators) Environmental Award as well as the 2008 Community Energy Association's Energy Action Award for Community Planning and Development.

The unique system was designed as part of the RMOW's strategy for applying sustainable principles to infrastructure. Led by the RMOW's Environmental Services department, and supported by Terasen and the Whistler 2020 Development Corporation for the Athletes Village, the project is the first innovative step in the larger aspiration to develop a renewable-energy (ground source heat pump-based) district energy system for the entire Whistler Village core.

"This is an innovative alternative energy system that effectively leverages all of the showers, toilets and hot water going into the sewers in Whistler," said Ted Battiston, Whistler Centre for Sustainability's Energy & Emissions Manager.

The Whistler system extracts low-temperature ambient heat from treated wastewater effluent, making the system flexible enough to provide both heating and cooling for approximately 2,200 users occupying 85,000 square meters of space.

The DES actually provides approximately 95 per cent of the space and water heating for the entire neighbourhood. It is estimated to reduce greenhouse gas emissions by 90 per cent compared to using standard baseboard electric heating and by 95 per cent compared to natural gas for space and water heating. Moreover, the financial feasibility assessments show that the project as planned saves money in the long run.

WHISTLER COMPOSTING SALES ARE GROWING

In less than a year, Whistler Composting has turned into a sustainable success story, attracting visits from around the country such as Federation of Canadian Municipalities conference-goers.

The reason for all the buzz? Not only is Whistler Composting a step in the right direction environmentally, it has proven to be a successful business model. Approximately 900 tonnes a month are now being diverted from a landfill facility, and sales of the highly fertile, nutrient rich, top grade compost are already exceeding projections.

The Resort Municipality of Whistler (RMOW) is one of a handful of municipalities to develop its own composting infrastructure. Carney's Waste Systems operates the facility as well as sales of the top grade compost.

"The compost passed all provincial standards with flying colours and you can use it on everything from your vegetable garden to the front lawn," said Jessica Reid, Carney's soil sales representative. "Our main clientele are landscapers and the demand for the compost has exceeded our expectations. We're selling everything we're making right now."

The RMOW began operation of the new municipal composting facility in December 2008. This facility composts biosolids from Whistler's wastewater treatment, residential and commercial organic waste, and wood waste. The closed system composter diverts waste from the landfill, effectively treats Whistler's biosolids, provides an opportunity for businesses and residents to compost organic waste, and produces a number of high quality soil amendments for sale.

For commercial customers, Carney's Waste Systems collects organic wastes directly. Residents can drop off separated organic waste at the garbage, recycling, and composting depots at 8001 Nester's Road and in Function Junction.

WHISTLER

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