

CONDITIONING DEVELOPMENT ON WATER AND ENERGY CONSERVATION

A CASE STUDY DOCKSIDE GREEN VICTORIA, BRITISH COLUMBIA

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THE SITE – CITY OF VICTORIA HARBOUR



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- 15 acre – City owned land
- Formerly Harbour Marine Industrial Lands
 - Brownsfield
 - potential redevelopment to 1.6 million sq. ft.
Mixed use development
 - single ownership/consolidated lands
 - Remediation pre-approvals in place
 - use of public and private land use controls



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- City sale by conditioned competition
 - RFEI, RFP and public presentations
- Triple bottom line evaluation
 - Business Case
 - return to the City
 - civic infrastructure costs and impacts

- Environmental impact
 - silver to platinum LEED
- Social benefits
 - mix in housing types/affordable housing
 - amenity provision – streetscape open space
 - design context

- Public competition and sale
 - Belt and suspenders
 - Public land use controls
 - Zoning
 - Permitting
 - Subdivision
 - Infrastructure standards
 - Private land use control
 - Master development agreement
 - Restrictive covenant

COVENANT CONTROL

- ▣ Water – 60% reduction of water use from comparable developments
 - limit impact on and reduce cost of public infrastructure
 - ▣ on-site sewage treatment
 - stormwater reuse and management
 - ▣ rooftop storage
 - ▣ green roofs
 - ▣ rainwater parcels and cisterns
 - ▣ reduce impervious run to less than 50%

- Landscaping
 - indigenous planting
 - water re-use – no potable water for irrigation

- Building Appliances
 - low flush toilets/waterless urinals
 - low impact showerheads
 - Water efficient dishwashers and washing machines
 - Read friendly water consumption meters on every dwelling unit

■ Energy

- target reduction of at least 45% from Natural Energy Code
- waste wood to energy/electricity for 100% of the heating requirements/GHG Neutral
- solar water heating
- energy star appliances
- compact fluorescent lighting
- solar lighting in landscape areas
- designed to maximum daylight

CURRENT STATUS

- Centralized biomass heat generation plant completed - the entire project will be “greenhouse gas positive”
- sewage treatment plant is capable of operating to treat 100% of all on-site sewage
- municipal sewer and storm drainage services not used

CURRENT STATUS

- reused water is used for all toilets and other water features
- municipal storm water infrastructure not used
- potable water savings are 66.5% below baseline LEED water targets

FOR MORE INFORMATION:

www.victoria.ca/cityhall/currentprojects_dockside.shtml

As of February 2011, Dockside Green Has The Highest LEED Scoring Building In The World



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