

## Brownfield Development Overview



Presentation to  
FCM  
08.31.05

## Introduction



### Vision

Windmill Group ("Windmill") is a visionary company focused on bringing into commercial application green building practices that deliver a competitive advantage over the traditional real estate model. **Green development programs encompass innovations in water, air, energy and waste management along with smart building technologies.** With a management team of proven leaders in the areas of construction, development and environmental technology, Windmill has under one umbrella the expertise, execution ability and market presence to capture a leadership position in this strategic growth industry.

### Founding Partners




Years in Business: 25  
Annual Volume Range: \$50-100M  
Number of Staff/Crew: 100  
Fully integrated developer, builder and property manager. Lead founder and driving force behind Windmill.  
[www.westeinde.ca](http://www.westeinde.ca)




Years in Business: 12  
Annual Volume Range: \$20-40M  
Number of Staff/Crew: 75  
Leading expert in environmental consulting, soil remediation and hazardous material abatement.  
[www.quantumgroup.ca](http://www.quantumgroup.ca)




Presentation FCM 03.02.06 **Brownfield Development Overview**

### Focus On Smart Growth Urban Infill Development Sites

- Environmentally contaminated sites (brownfield sites)
- Recycling of older urban assets into new vibrant green developments;
- Maximizing density of underutilized private or public urban real estate as a catalyst to urban renewal.

### Innovative "Whole System" Green Design

- Whole-system building design approach to maximize natural capital efficiency while maintaining capital budgets and minimizing long-term building life-cycle costs;
- Incorporation of latest green technologies and design principles.

*"Natural Capital" refers to the natural resources and ecosystem services—air and water purification, climatic stabilization, waste detoxification, and so on—that make possible all economic activity. Ecosystem services are of immense economic value; some are literally priceless, since they have no known substitutes. In the next century human population is expected to double and the natural resources available per person will drop by one-half to three-fourths. In the past three decades, one-third of the planet's resources, its "natural wealth" has been consumed. Social, political and scientific pressures are creating the conditions for the next Industrial Revolution, one of increased natural capital productivity.*

source: Natural Capitalism; Hawken, Lovins & Lovins



Presentation FCM 03.02.06 **Brownfield Development Overview**






### Pressures on Municipal Governments which brownfield and green development projects can help to relieve:

- ☐ Urban Intensification
- ☐ Fighting Urban Sprawl
- ☐ Diminishing Capital Budgets for Infrastructure
- ☐ Social Housing Requirements
- ☐ Kyoto Accord and other environmental initiatives



Presentation FCM 03.02.06 **Brownfield Development Overview**

### What is a Brownfield?

-  Lands on which industrial or commercial activity took place in the past
-  May be vacant, underused or abandoned
-  Soils and water typically are impacted by contaminants from past practices and uses
-  Usually located either close to downtown core, or in other strategic areas of communities (e.g., riverside or lakefront locations)
-  Usually located near existing transportation, infrastructure and facilities (e.g. roads, schools, parks, sewers, libraries, etc.)

*(Source: Government of Ontario Info Sheet for Brownfields, Showcase Series No. 1, Summer 2000).*



### Where are Brownfield Sites Located?





Reports indicate that there are approximately 500,000+ brownfield sites in the U.S. and that an estimated \$2 trillion of real estate is considered devalued due to the presence of environmental hazards. In Canada the number of brownfield sites has been estimated at approximately 25,000 sites when including sites with contained PCB waste, automotive fuel service stations, old dry cleaning sites and the like.

(source: NRTEE - Removing Barriers: Redeveloping Contaminated Sites for Housing (1997))

*Canada could obtain up to \$7 billion in public benefits – as well as strike a blow against urban sprawl – if we grasp the opportunity to clean up the contaminated "brownfield" properties that litter our inner cities.*









### How are Brownfields Quantified:

-  Phase 1 Environmental – identifies if problems exist and whether further investigation required;
-  Phase 2 Environmental – Intrusive investigation of location and amount of contamination that exists (test pits, water testing etc.). General \$ value of clean-up can be established;
-  Risk Assessment (sometimes skipped, more difficult process)
-  Phase 3 Environmental – Remediation Plan and activity.






### Brownfields are often avoided by developers due to:

-  Lack of knowledge of remediation techniques and technologies
-  General concerns regarding liability
-  Lack of government programs supporting redevelopment
-  Financing challenges
-  Market perception problems
-  No incentive, outside the box



### Financial Classification of Brownfield Sites:

-  **Viable –** Risk involved but the spread between as-is value and remediated value can provide market returns;
-  **Neutral -** Land likely has zero gain without financial assistance or incentives;
-  **Orphan -** Site value is underwater; lands will remain dormant without government assistance.




All the above can be moved from one category to the other depending on the real estate deal.



### Liability remains the biggest hurdle to brownfield redevelopment.

Various states, provinces and municipalities are adopting mechanisms to remove contingent liability risks of brownfields, but they still have a long way to go. Generally, the bigger the problem the more mechanisms are in place to choose from.

### Insurance products available for brownfield projects:

-  **Environmental remediation insurance** - For releases that occurred before the policy was written but were discovered after the policy was in place – more and more lenders are requiring environmental remediation insurance to give them some comfort and cover as a condition of lending;
-  **Stop-loss coverage** - also known as cleanup cost cap insurance, which protects against cost overruns during the cleanup or containment process once a cleanup plan is defined, or against additional costs resulting from changes in regulatory standards; and
-  **Pollution legal liability insurance** - offers protection – often over long periods of time and for successive owners – against problems stemming from, among other things, the migration of contamination to other sites.



### What is the Federal Government Doing?

#### Recommendations from the National RoundTable on the Environment and the Economy (NRTEE): (2002 report commissioned by federal gov't)

- Provide Federal and Provincial Tax Incentives;
- Remove federal and provincial liens against qualifying brownfield properties;
- Provide mortgage guarantees through Canadian Mortgage and Housing Corporation for residential, commercial and industrial brownfield developments;
- Establish a designated brownfield revolving fund program;
- Provide grants for qualifying projects.



### What are Municipal Governments Doing?

- Tax Incentive Financing (TIFS) – Hamilton, Waterloo, Kitchener, etc.;
- Development Fee Reductions, Postponements - Ottawa;
- Fast-Track Planning and Building Permit Approvals;
- Partnership approaches to seek FCM and other funds;

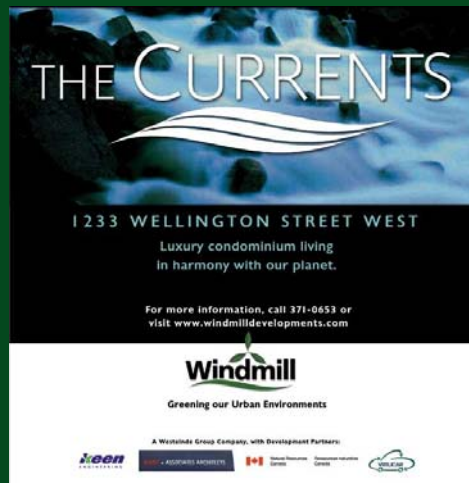


### How do Brownfields Affect Building Officials?

- ☐ Timing of Building Permit release is a big issue (financing etc.);
- ☐ In Ontario, requirement for consultant Record of Site Condition vs. MOE an issue;
- ☐ Brownfields that require long-term solutions (on-site water treatment, contained management, risk assessment etc.) need special attention;
- ☐ Coordination between planning and building code permitting and code review critical for many brownfields;



Presentation FCM 03.02.06 *Brownfield Development Overview*



Presentation FCM 03.02.06 *Brownfield Development Overview*

## The Currents – Development Examples



### Site Statistics

- Site Location 1233 Wellington St, Ottawa, ON
- Site area 1024 m<sup>2</sup>
- Building size 6533 m<sup>2</sup>
- Theatre 1815 m<sup>2</sup>
- Residential 4718 m<sup>2</sup>
- Floor Space Index 6.4
- Building height 10 storeys
- Residential suites 43



Presentation FCM 03.02.06 *Brownfield Development Overview*

## Dockside – Development Examples



### Dockside – North America's Greenest Urban Community

- Site Selection – should provide positive economics
- LEED certification commitments
  - Greenhouse gas neutral
  - Biomass energy cogeneration
  - On-site grey- & blackwater treatment
  - Wise Energy Co-op biodiesel facility
  - No potable water use in irrigation
  - Potable water reduction in buildings
  - Alternative modes of transportation
  - Other environmental commitments



Jonathan Wasth  
Windmill Development

Presentation FCM 03.02.06 *Brownfield Development Overview*

**Conceptual Design**



Overall Site Area	= 505,447 sq ft	Social Housing	= 48,331 sq ft
Commercial Area	= 71,044 sq ft	Industrial Housing	= 45,209 sq ft
Office Area	= 75,350 sq ft	Total Business Area	= 101,089 sq ft
Hotel Area	= 44,133 sq ft	Site FSR	= 2.0 FSR
Residential Area	= 671,926 sq ft	Amenity Area	= 9,149 sq ft
Seniors Res. Area	= 54,897 sq ft	Parking	= 1,285 Spaces



**Legend**

A	Esquamalt Plaza
B	Dockside Village
C	Industrial Courtyards
D	Greenway
E	Vista Park Pathway
F	Triangle Park Pathway
G	Dockside Wharf Plaza



Presentation FCM 03.02.06 *Brownfield Development Overview*

**Olympic Village Brownfield, Vancouver**



Presentation FCM 03.02.06 *Brownfield Development Overview*

**Toronto Waterfront Brownfield Redevelopment**



Presentation FCM 03.02.06 **Brownfield Development Overview**

**Le Breton Flats Brownfield, Ottawa**



Presentation FCM 03.02.06 **Brownfield Development Overview**

## Questions/Discussions

Contact:  
Jonathan Westeinde  
Managing Partner  
Windmill Development Group, Ltd.  
613-820-5600 x 158  
[jonathan@windmilldevelopments.com](mailto:jonathan@windmilldevelopments.com)



Presentation FCM  
03.02.06 *Brownfield  
Development Overview*