



Low Impact Development (LID) on Multi-Residential Properties

By: Credit Valley Conservation (CVC)

Presentation Outline

- What is Low Impact Development (LID)?
- Grey to Green Guide – 8 Step Process
- Case Studies
- Greening Corporate Grounds



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LID

*low impact development
is a green infrastructure
approach to stormwater
management that uses
simple cost-effective
landscaped features and
other techniques to filter,
store, infiltrate and use
rainfall where it falls.*





Pollution Prevention



Pollution Prevention – Waste Management



Grey to Green Business & Multi-Residential Retrofits:

Optimizing Your Bottom Line through Low Impact Development



Business and Multi-Residential

LID options for high-rise and mid-rise sites

Source area	Permeable pavement	Bioretention	Bioswales	Soakaways	Perforated pipe systems	Rainwater harvesting	Landscape alternatives	Prefabricated modules	Green roofs	Pollution prevention
Roof area	○	○	○	○	○	●	○	○	●	○
Pedestrian / landscaped / common areas	●	●	○	○	○	○	●	●	○	○
Parking area	●	○	○	○	○	○	○	●	○	●

● common option ○ possible option ○ unlikely



Parking area Landscaped area Building area Pedestrian area Driveway area Other

This landscaped area is in a high-profile location that visitors and residents will pass on their way to the building. It is also adjacent to a well-traveled driveway that likely contributes significant pollutant loads to the site runoff. A bioretention practice in this location will enhance site aesthetics and provide water quality and water balance benefits. Also, these high value landscapes already receive frequent maintenance and converting them to bioretention would add few additional tasks.

This tennis court represents a significant impervious percentage on this site. A infiltration chamber located below would encourage groundwater recharge.

This unused green space is ideal for a bioretention or bioswale retrofit to provide stormwater management for parking lot runoff.

1.0 Upfront Requirements



2.0 Site Screening of LID Options



3.0 Pre-design



4.0 Detailed Design



5.0 Approvals



6.0 Tender and Contract Documents



7.0 Construction Supervision and Administration



8.0 Life-cycle Activities



Examples of Low Impact Development Sites



Past – Pre-retrofit



Today -
Bioretention
Swales



Pre-treatment - Jellyfish

Regent Park







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Rainwater Harvesting System

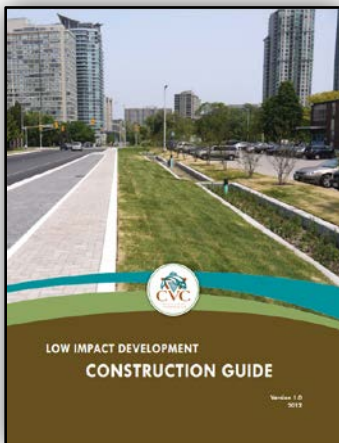




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For more Information visit:

<http://www.creditvalleyca.ca/low-impact-development/>





GREENING CORPORATE GROUNDS

Deborah Kenley, Program Coordinator

PROGRAM DESCRIPTION



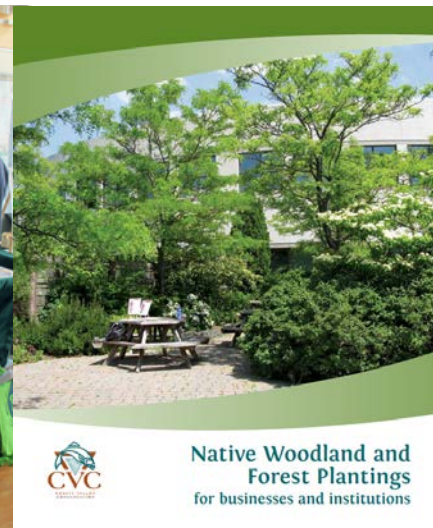
Greening Corporate Grounds (GCG):

- Helps corporations, institutions and places of worship green their grounds
- Provides hands-on guidance and technical expertise throughout the life of projects
- A voluntary program structured to help participants achieve ecological goals on their property

PROGRAM SERVICES

GCG Provides:

- A custom “green” concept plan for participant sites
- Site assessment that includes plant and soil identification
- Educational resources, presentations and workshops for staff and volunteers
- Coordination of planting or other events for participants
- Estimates for plant materials and can phase projects to work with budgets and resources
- Fee-for-service maintenance through establishment phase (1-3yrs)





CONCEPT PLAN: IMAX CORPORATION

SUPPORT SERVICES

Additional Support Includes:

- Technical advice to landscape consultants or in-house personnel
- Long-term maintenance plan for your site
- Sourcing native plants and materials
- Coordination with other program providers such as Partners in Project Green



Mary Kay Cosmetics: Parking Lot Planting



Residential Project: Pollinator Garden

HOW TO PARTICIPATE

Minimum Requirements:

- Demonstrate a commitment to improving the environment on your grounds over time
- Complete one Land or Water project such as:
 - Convert a portion of existing lawn and/or hardscape feature to a native woodland, forest, meadow, prairie or bioretention etc...



UCM Land Project: Pollinator Garden



UCM Water Project: Bioretention Cell

PROGRAM STRUCTURE

Program Costs:

- There are no fees to participate in the program
- Participants cover all construction costs for projects such as: plants, mulch and materials
- We advise of funding opportunities that may be available through foundations and our partners like Partners in Project Green





We have a variety of resources on ecological landscaping and stormwater management available for you to take at the end of the presentation or visit:
www.creditvalleyca.ca/landscaping

Questions



*Together, it's our nature to conserve
and our future to shape.*
