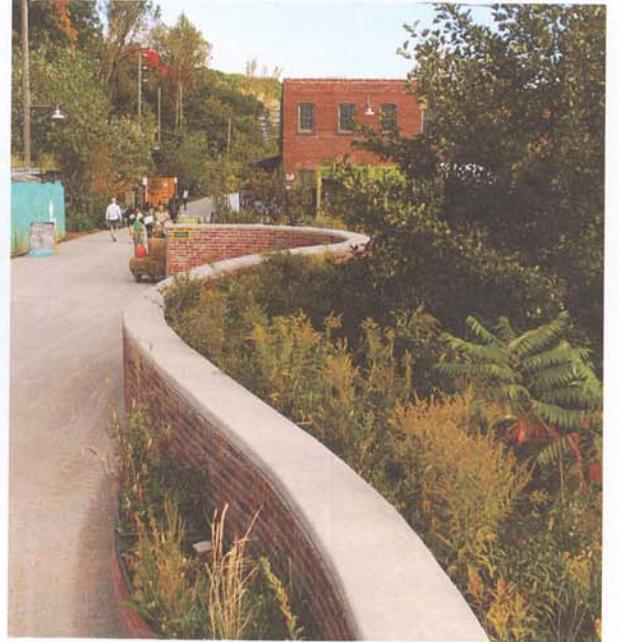


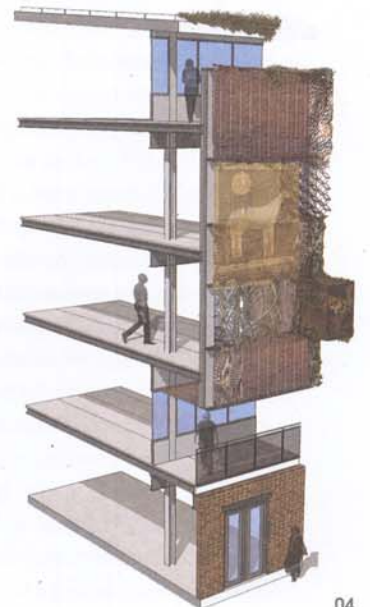
- 01/ The flow of engineered and natural systems at the Brick Works.
- IMAGE/ Claude Cormier Architectes Paysagistes Inc.
- 02/ The site was an active brick manufacturing facility for decades.
- IMAGE/ City of Toronto Archives
- 03/ The Brick Works is now an award-winning environmental education and activity centre.
- IMAGE/ Casey Morris
- 04/ Evergreen, an environmental organization whose mandate is to bring nature to cities, is headquartered at the site.
- IMAGE/ Diamond + Schmitt Architects
- 05/ The heritage industrial buildings have been repurposed and integrated into the natural features of the site.
- IMAGE/ DTAH



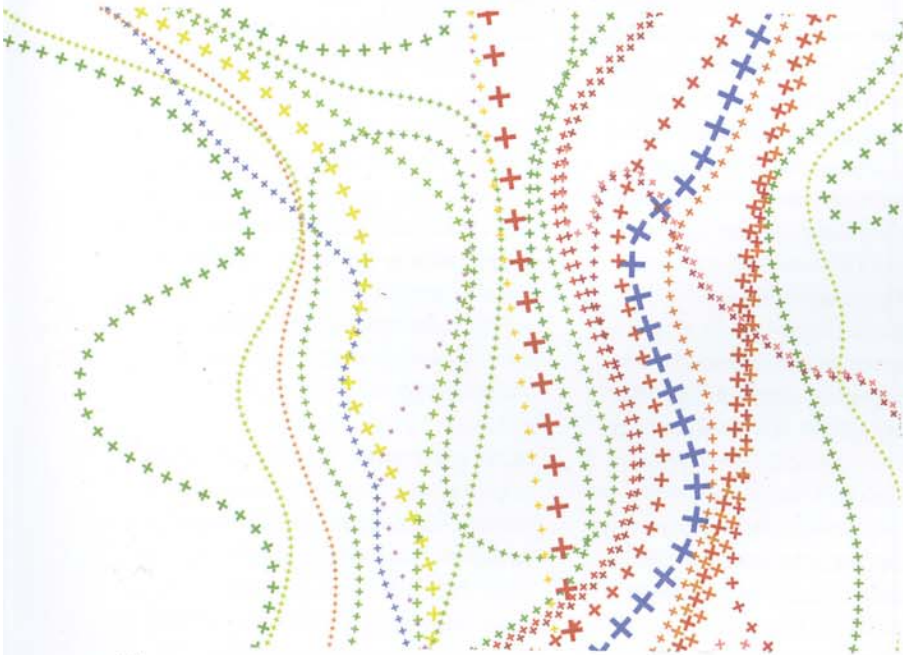
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CITY BUILDING, BRICK BY BRICK

Transforming a heritage industrial site

TEXT BY BRYCE MIRANDA, OALA

How do you reuse a post-industrial brick manufacturing site in the heart of Toronto? That was the question raised in the early 1990s by the Toronto and Region Conservation Authority (TRCA), owner of the Don Valley Brick Works, and the City of Toronto, which manages the land. Fortunately for the TRCA and the City of Toronto, Evergreen, a non-profit organization whose mandate is to bring nature into cities, came along with the proposal to house their national headquarters on the site.

With a master plan originally prepared in 2006 by planningAlliance in partnership with gh3, Evergreen chose a team led by architect Joe Lobko of du Toit Allsopp Hillier to revisit the master plan and turn Evergreen's ideas—a community environmental centre with programs that celebrate the site's unique geological, industrial, and natural heritage—into reality. From the beginning, the team—con-

sisting of two landscape architecture firms, three architecture firms, three engineering firms, an ecological consultant, and an artist, with other consultants joining along the way—envisioned a sustainable site-driven response for the 4.9-hectare industrial pad within the Don Valley.

The original quarry north of the factory was filled and its native habitats restored in the early 1990s with a community of Carolinian trees and plants on the west side and a large wildflower meadow in the central area. The industrial pad remained a paved, impermeable barrier between the larger ravine network and the Don River, interrupting the natural and man-made network of flows that define the personality of the site.





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Key to removing these physical and ecological barriers was the core idea of transforming an amalgam of existing large old buildings into sixteen smaller buildings on site as a “village,” and the introduction of water, planting, and outdoor open spaces flowing within this cluster of buildings to improve the site’s relationship to its surroundings. Becoming porous in urban form, the integration of landscape and architecture re-established the natural flows through the site and created a circulation network connecting the Weston Quarry Garden to the Brick Works industrial pad.

Working closely with the TRCA and the City of Toronto, ecologist Jim Dougan gave direction to the rehabilitation and restoration of the natural and cultural vegetation communities to the east, west, and north woodlands neighbouring the industrial pad. Dougan & Associates’ 2008 Natural Heritage Impact Study, Tree Preservation Plan and Ravine Stewardship Plan saw the addition of thousands of native trees, shrubs, and groundcovers combined with the removal of invasive and exotic species in an effort to reconnect the industrial pad to the surrounding meadow, thicket, deciduous forest, and wetland habitats.

The most dramatic of the flows that impact the site are the frequently occurring floods, as witnessed with Hurricane Hazel in 1954. Geographically located in one of the lowest elevations in the city of Toronto, it is not uncommon (sometimes up to three times a year) that the site is blanketed with a foot or more of water. Referred to as “nuisance floods,” these natural occurrences are managed through a series of greenways that carry storm water between the buildings and connect the industrial pad to the watercourses of the Quarry Garden to the north and the Don River to the south. These greenways collect storm and flood waters, directing them into the 2000m² storm-water management pond at the southern edge of the site where the water is filtered before entering the Don River system through Mud Creek.

John Hillier, OALA, lead landscape architect on the project, summarizes the design philosophy: “We wanted to visually tell the story of how the water flows through the site.” Instead of hiding all of the storm water in underground pipes, the design encourages visitors to trace the flow of water above grade, where the entire storm-water management system is exposed and celebrated. Visitors can get up close to the greenways by crossing them on a series of large wooden bridges spanning the different buildings, and watch rain water drain within the industrial-sized drainage trenches that demarcate the central parking lot, and then watch as it exits the concrete spillways into the storm-water management pond.

Not all of the storm water collected on site makes its way to the storm-water management pond. Roof water from many of the buildings is captured in fifteen 20,000L cisterns positioned across the site. Massive in size, these cisterns will not only be used to irrigate the vegetation but will also demonstrate how rain water can be stored and used to maintain landscapes of any scale.

Demonstration is a common theme throughout the landscape of the Brick Works. This is most evident within Evergreen Gardens, a previously enclosed metal shed that has been repurposed. With its roof removed, the shed has been transformed into a demonstration garden with three large vegetated mounds positioned within a concrete pad, which converts into an artificial skating rink in the winter months. Repurposing was a strong idea from the very beginning of the design process, as Claude Cormier, AAPQ, contributing landscape architect on the project, expresses: “[It’s] about taking something and giving it a new use or new meaning with a slight reconfiguration.” At the Brick Works, repurposing took the form of creative adaptive reuse of buildings and the innovative distribution of programme among them.

A strategy was established for protecting and recording the evolving footprint of the Brick Works since 1889. The vast system of masonry flues, chimney foundations, and kiln floors are still present beneath the paved surface of the industrial pad. During construction, below-grade monitoring was executed by a licensed archaeologist. After below-grade construction was complete, archaeological resources were recorded, then backfilled and capped with concrete to protect them from future disturbance. Revealing the layers of history, footprints of the historical kilns and chimneys will be etched in concrete where possible.

Transforming the former Don Valley Brick Works from a collection of deteriorating heritage buildings into an international showcase for urban sustainability and green design, Evergreen will have a flexible home base to accommodate their changing programming, business, and educational ambitions. Opened on September 25, 2010, the Brick Works site will foster the relationship between nature, culture, and community through experiential learning, collaboration, and fun.

BIO/ BRYCE MIRANDA, OALA, WORKS FOR DU TOIT ALLSOPP HILLIER, AND WAS PROJECT MANAGER FOR DTAH’S DESIGN FOR THE BRICK WORKS INDUSTRIAL PAD.

List of Landscape Consultants
Don Valley Brick Works

COMPILED BY JENNIFER MAHONEY



07

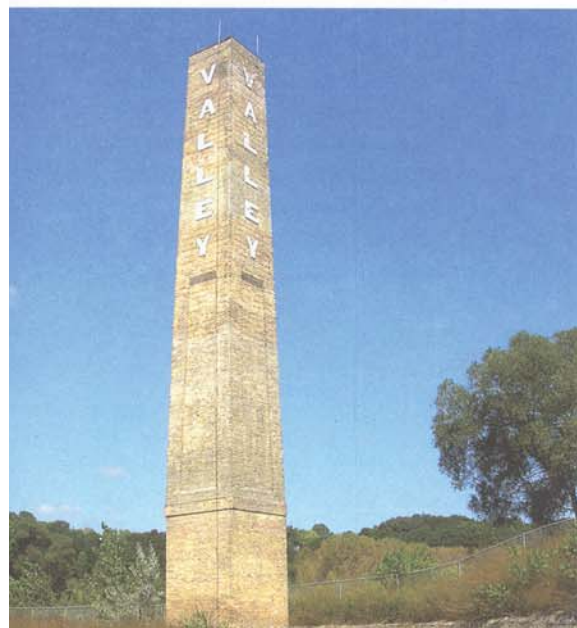


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- 06/ The site's trails lead through meadows, forests, and wetlands.
IMAGE/ Peter Thomson

- 07-08/ The design encourages active engagement with the Brick Works' natural and cultural features.
IMAGES/ Claude Cormier Architectes Paysagistes Inc. and Ferruccio Sardella

- 09/ One of the original chimneys has been retained.
IMAGE/ DTAH



09

1989—Present

Coordination and implementation of various park improvements:
City of Toronto Parks, Forestry and Recreation Division Department
(Garth Armour—Coordinator, Natural Environment and Community Programs)

1990

Original Master Plan Concept:
Hough Woodland Naylor Dance Leinster
(Managing principal: Michael Hough)

1995

Quarry and Garden Park Redevelopment and First Phase Master Plan:
The Landplan Collaborative Ltd.
(Managing principal: Rod MacDonald)

1997

Detailed Planting Plans for First Phase of Development:
Garden Club of Toronto
(Lead: Mary Anne Miller)

1998

Mud Creek Reconnection Project:
Schollen and Company Inc.
(Managing principal: Mark Schollen)

1999

Don Valley Brick Works Stewardship Guide Book
Lorraine Johnson

2001

Primary Consultants for Brick Works Management Plan:
Management Plan for the Don Valley Brick Works—A story of Connections and Commitments
Hough Woodland Naylor Dance Leinster
(Managing principal: David Leinster)

2004

Phase Two Park Development:
Hough Woodland Naylor Dance Leinster
(Managing principal: Michael Hough;
Project manager: David Leinster)

2004-2006

Woodbridge Foundation Donation and Improvements:
The Hough Group
(Michael Hough, David Leinster and Peter Heyblom)

2006

Evergreen at the Brick Works Master Plan:
planningAlliance in partnership with gh3
(planningAlliance—Managing principal: John Van Nostrand)
(gh3—Managing principal: Diana Gerrard)

2006—present

Lead Landscape Architects—Industrial Pad:
du Toit Allsopp Hillier in partnership with Claude Cormier Architectes Paysagistes
(DTAH—Managing principal: John Hillier;
Project manager: Bryce Miranda)
(Claude Cormier Architectes Paysagistes—
Managing principal: Claude Cormier;
Project manager: Marc Hallé)

2007

Don Valley Brick Works Park: Natural Heritage Impact Study and Enhancement Strategy:
The Planning Partnership—Michael Hough—
AMEC Earth & Environmental
(Managing principal: David Leinster)

2008

Evergreen Brick Works: Natural Heritage Impact Study, Tree Preservation Plan and Ravine Stewardship Plan:
Dougan & Associates
(Managing principal: Jim Dougan;
Project manager: Julia Murnaghan)

2009

Mud Creek Regeneration Concept:
Schollen and Company Inc.
(Managing principal: Mark Schollen)

2009

Don Valley Brick Works Circulation and Linkages Analysis:
The Planning Partnership
(Managing principal: David Leinster;
Project manager: Peter Heyblom)

2010

Chimney Court Play Area:
Forrec Ltd.
(Managing director: Linda Hung;
Project manager: Richard Bondi)

2010

Weston Quarry Garden Entrance Feature:
The Planning Partnership
(Managing principal: David Leinster;
Project manager: Peter Heyblom)

2010

Recreational Access Between Brick Works and Beltline Trail:
Scott Torrance Landscape Architect Inc.
(Managing principal: Scott Torrance;
Project manager: Caroline Tomlin)