

TORONTO PUTS THEIR URBAN FOREST FIRST

Silva Cells used for waterfront Toronto redevelopment



The revitalization of Toronto's waterfront is the largest urban redevelopment project currently underway in North America, and it is also one of the largest waterfront revitalization efforts ever undertaken in the world. Waterfront Toronto is a joint venture by the Federal, Provincial, and the City of Toronto governments.

DeepRoot's Silva Cell is being used on all Public Realm sites in the Central Waterfront and West Don Lands development areas. This includes Queen's Quay, East Bayfront Dockside, East Bayfront Bayside, Sugar Beach, and the West Don Lands. The construction of Sugar Beach began in the fall of 2009, and the site officially opened in August 2010.

Design firms Claude Cormier and The Planning Partnership specified the Silva Cells at the Sugar Beach site in order to achieve the City of Toronto's soil volume standards for street trees. In order to realize their vision of large mature trees and the associated canopy aesthetics, they needed to find a solution that would provide significant volumes of un-compacted soil for long-term tree growth.

There are 33 Maples at Sugar Beach, with a mix of Marmo, Jeffer's Red, and Autumn Blaze. The designers opted for a two-layer deep Silva Cell system because of the high water table.

Each of the tree has access to over 35 cubic meters, or 1,236 cubic feet, of soil in the Silva Cells. There is 300 mm of

aggregate cover on top of the Silva Cell decks, and sand-set pavers at the surface. In 2012, landscape architect Marc Hallé, with Claude Cormier, visited the trees. This is what he had to say about them:

"I recently visited the trees at Sugar Beach – they look like they are on steroids – phenomenal growth that I have never seen before for an urban tree!"

DeepRoot is involved with contributing to two of Waterfront Toronto's ambitious goals: making the water's edge along Lake Ontario an accessible, public amenity, and creating a more sustainable built environment through improved water quality, reducing flooding and bringing a green presence to parks, streets, and other public areas. As these trees mature, they will create a lush canopy over the plaza for those who wish to escape from the heat of the beach and relax in the cool shade. It will also serve as an enduring reminder of the City of Toronto's commitment to their urban forest.

Installation Summary:

Total soil per tree: 1,236 ft³ (35 m³)

Installation date: Winter 2010

Installation type: Trees

Project designers: Claude Cormier and The Planning Partnership

Owner: Waterfront Toronto

Contractor: Eastern Construction

