

# Brownfield Redevelopment in the Toronto Port Lands

## The Keating Channel Pub & Grill – 2 Villiers Street

The site at 2 Villiers Street had been contaminated through the deposit of contaminated fill material when the land was reclaimed and regraded during the late 1800s and early 1900s. The soil and groundwater conditions were impacted from being used for coal storage up until World War II and then later used for a petroleum and molasses tank farm.

The contamination found on the 0.8 hectares site included heavy metals such as lead, copper, arsenic, and zinc in a layer of fill located approximately 0.1 to 2 metres below the surface. Elevated levels of PAHs (Polycyclic Aromatic Hydrocarbons), associated with heavy oils, residual fuels, coal and coal by-products were also found in this layer. The quality of groundwater on the site did not appear to be adversely affected.

The property at the northeast corner of Villiers Street and Cherry Street was redeveloped as the former Irish Rover Pub and a water's edge public promenade. Initial estimates indicated that a volume of 10,500 cubic metres of fill was contaminated. Removal and replacement of this fill would have cost over a million dollars. A risk assessment prepared for the project concluded that the concrete building floors, clean top soil, and pavement overlying the contaminated layers were sufficient to protect future restaurant workers, patrons, and park users from adverse effects.

By using a risk-based approach to managing the contaminated site, redevelopment was made possible. During construction, the coal and clinker material was re-used on site as rough grading below the parking lot. In other

areas, it was covered by a geotextile layer and over a half metre of fill to prevent plant/lawn growth or water drainage from intruding into the contaminated fill. At the boardwalk, 15 centimetres of crushed stone was placed above the contaminated fill, with 62 mm boardwalk decking above.

The intersection continues to be improved with the renovation of an existing storage building and the landscaping of the site for new commercial activity and public space.

In July 2006, 25 Sakura trees were planted on The Keating Channel Pub & Grill's site overlooking the Keating Channel and the Toronto skyline. This location offered the most space and also marked a prominent visual gateway for Cherry Street. A small parkette was constructed and supported by special pavement, seating, an overhead trellis structure, and educational panel/display on the Sakura Project.

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TPLC is the largest property-owner in the port lands area of Toronto with roughly 400 acres in its portfolio. The lands reclaimed from Lake Ontario were used for a number of heavy industrial activities since 1917 which have contaminated the soil and groundwater. Environmental stewardship is a key undertaking of TPLC as part of the City of Toronto's redevelopment vision for the port lands area.



**2 Villiers Street**