ADDENDUM TO

EAST BAYFRONT CLASS ENVIRONMENTAL ASSESSMENT MASTER PLAN

FOR STORMWATER QUALITY

City of Toronto
Waterfront Toronto

July 2013

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RVA 071345
July 2013

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FINAL REPORT

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1.0 INTRODUCTION

1.1 Completed Class EA Documents

The East Bayfront Class Environmental Assessment (Class EA) Master Plan (LEA Consulting Ltd. et al., January 2006) was completed on March 29, 2006. The Class EA was undertaken to support the redevelopment of the East Bayfront Precinct (EBF) with respect to storm, sanitary, water and transportation aspects. In particular, it was recommended that stormwater be treated by an end-of-pipe facility at two locations. This facility was to treat stormwater from the EBF catchment area, nominally 22 ha. The treatment process was to consist of sedimentation tanks, pumps, filters and ultra-violet (UV) disinfection. Refer to Figure 1-1.

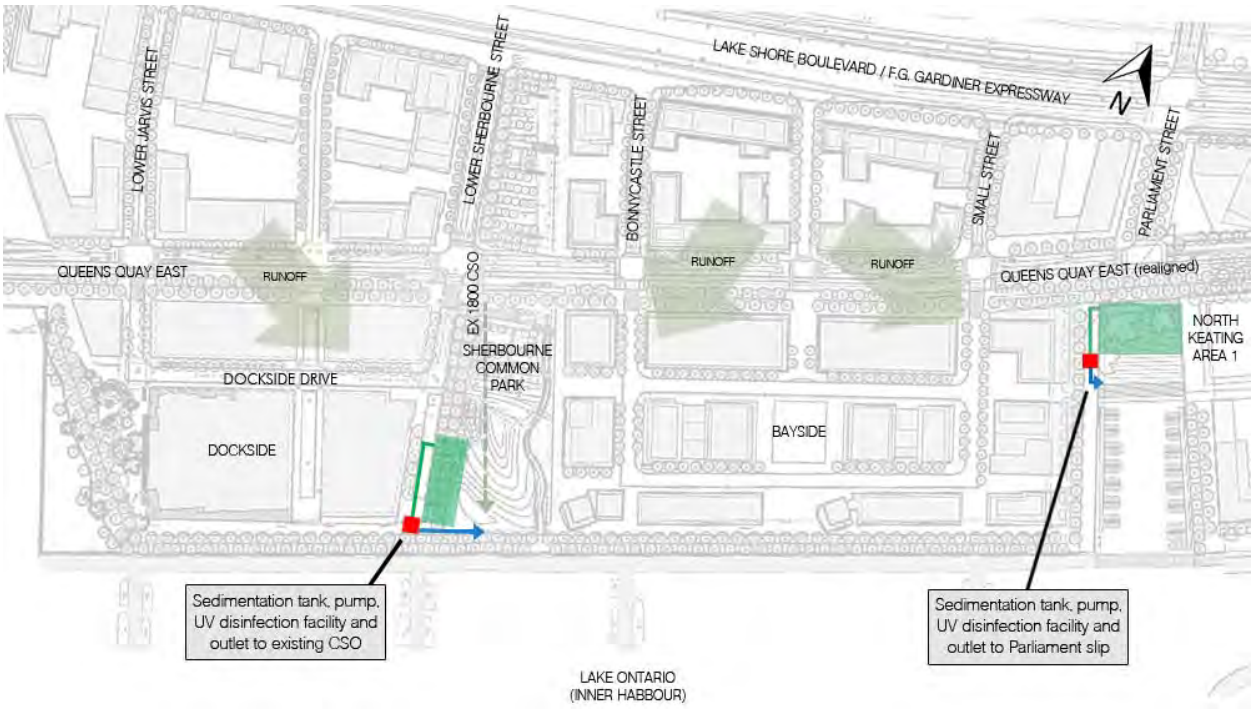

Figure 1-1: Proposed Stormwater Quality Concept for EBF by Previous Class EA (2006)

An Addendum to EBF Class EA (Dillon Consulting Limited et al., November 2009) was completed on December 31, 2009 in efforts to accommodate the consolidation of the sedimentation tanks into one large linear tank located inside the lake beneath the boardwalk. The Addendum also provided an opportunity for a centralized UV disinfection facility in the EBF to include flows from the westerly portion of the North Keating area (NK1 – west of Cherry Street) of the Lower Don Lands (LDL) Precinct, an additional nominal area of 14 ha, via pumping and forcemain. The treatment process was revised to consist of oil-grit separators, one large sedimentation tank along the 'dockwall', a wetland and UV disinfection. Refer to Figures 1-2 and 1-3.

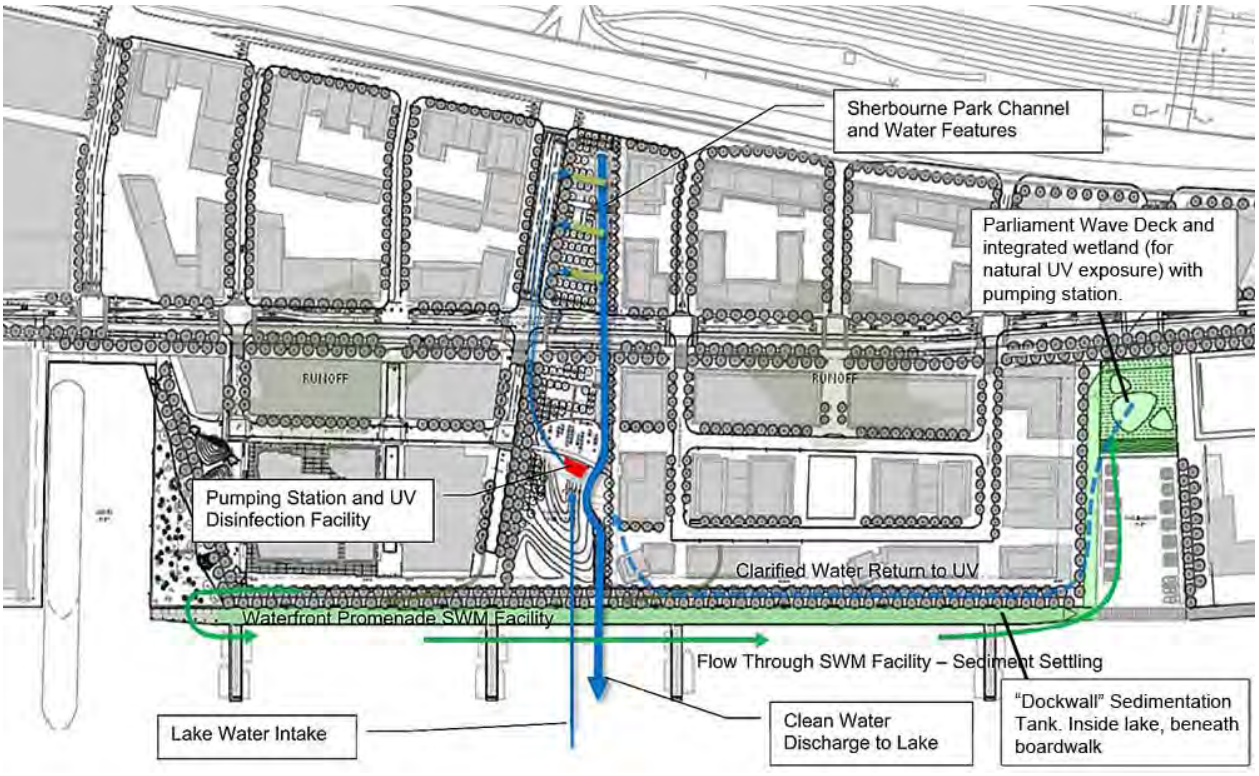

Figure 1-2: Proposed Stormwater Quality Concept for EBF by Previous Class EA Addendum (2009)

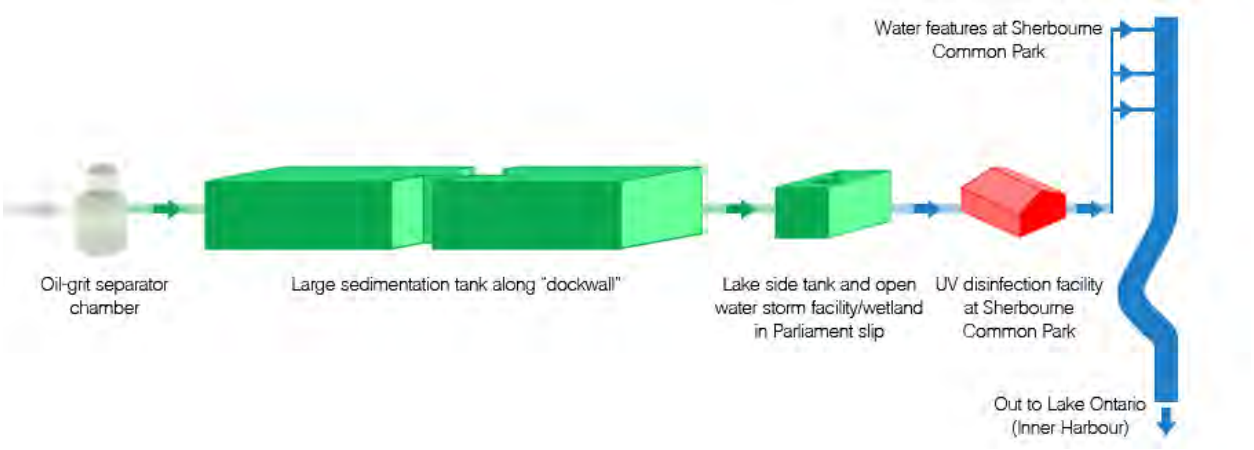

Figure 1-3: Simplified Representation of the Stormwater Quality Concept for EBF by Previous Class EA Addendum (2009)

1.2 Installed Stormwater Quality Components

By mid-2011, Sherbourne Common Park was completed in conjunction with the Dockside development. The following stormwater quality features were installed:

- Water channel (urban river) to the Lake
- 'Light Showers' landscape art water features
- Interim connection to the existing combined sewer overflow (CSO) to the Lake
- UV disinfection facility located inside the park's Pavilion
- Oil-grit separator chamber
- Lake water intake

Refer to Figure 1-4.

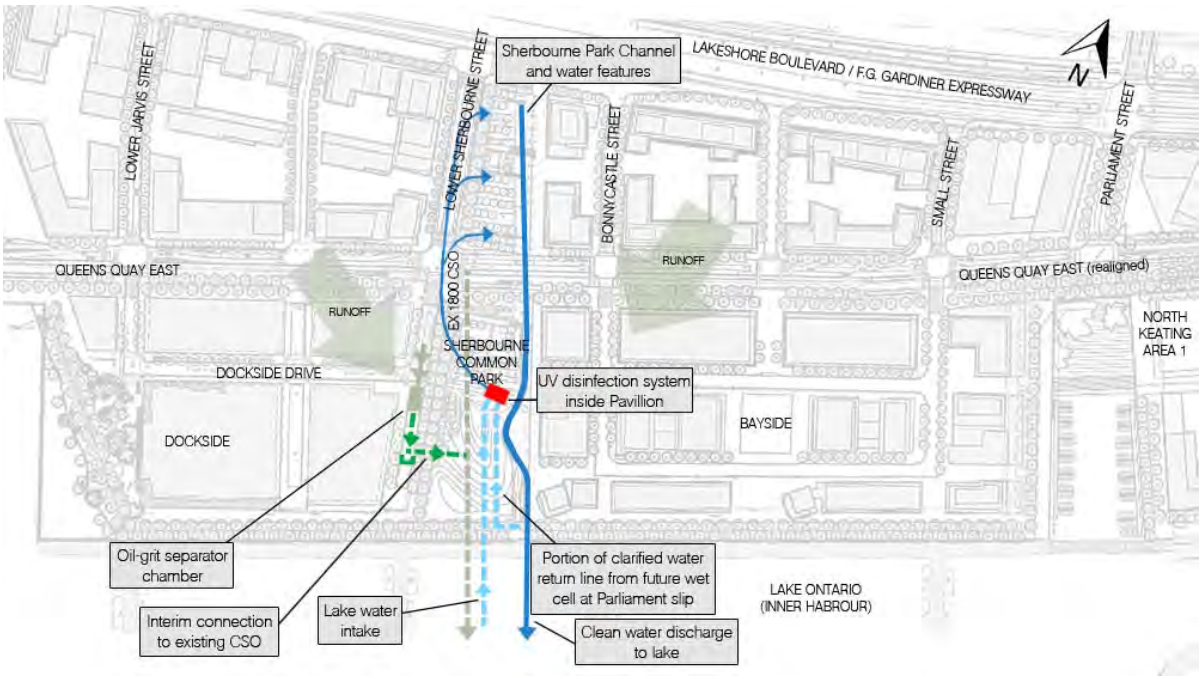

Figure 1-4: Existing Stormwater Quality Components Installed at EBF as of 2012

1.3 Problem Statement

During the design stages of the 'dockwall' sedimentation tank fronting the Dockside and Bayside developments (to be situated inside the Lake beneath the boardwalk) and the integrated wetland at the Parliament WaveDeck became no longer feasible due to:

- Phasing of implementation (difficult to stage as development proceeded easterly)
- Escalation of costs
- Complex construction (within the Lake)

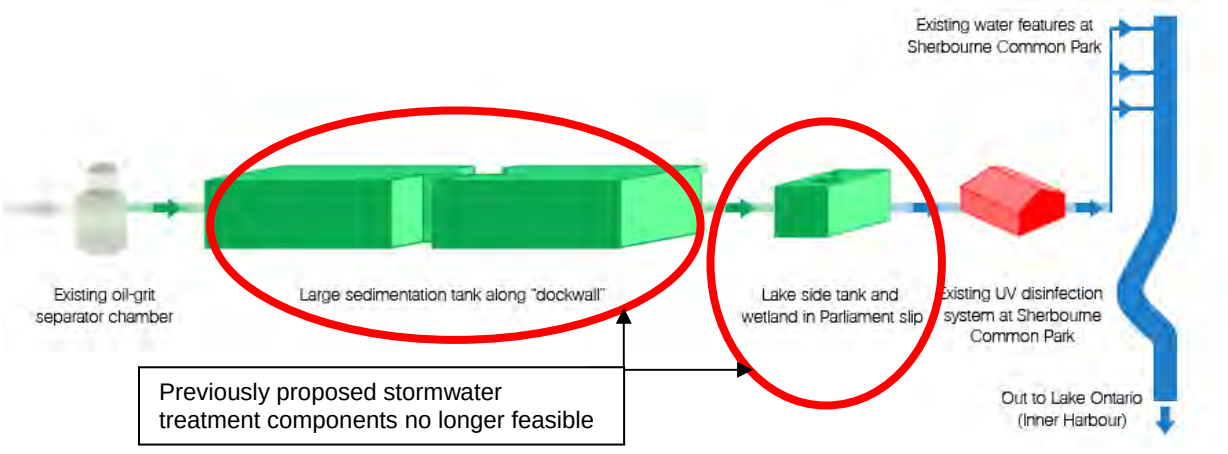

Figure 1-5: Simplified Representation of the Previous Stormwater Quality Concept for EBF (emphasizing stormwater treatment components that are no longer feasible – subject of this EA Addendum)

To resolve the problem, an addendum is required to re-evaluate stormwater treatment options with consideration of the following stormwater management systems recently constructed:

- Stormwater quality features in Sherbourne Common Park (refer to Section 1.2)
- Stormwater quantity and quality features in the West Don Lands (WDL) (refer to Section 1.4).

This addendum will review opportunities to provide consolidated / consistent approaches to stormwater treatment at the waterfront.

1.4 Opportunities

There are stormwater management components existing in the East Bayfront as identified in Section 1.2. These components, along with the components in the West Don Lands, provide opportunities to achieve an integrated system.

The West Don Lands Precinct is currently being developed to consist of new municipal infrastructure, parkland, residential high-rises and housing, and an athletes' village to support the 2015 Pan / Parapan AM Games. The recent commissioning of Phase 1 of the new stormwater management facility (outfall tunnels and OGS) along with the ongoing planning for Phase 2 provides an opportunity to integrate the West Don Lands and East Bayfront systems.

1.4.1 Stormwater Management Components (Phase 1)

By late 2012, Phase 1 of a new stormwater management facility was commissioned to convey and treat stormwater for the West Don Lands (WDL), primarily consisting of the following features[1]:

- Minor system inlet (for local storm sewers) from the WDL
- Oil-grit separator in the WDL
- Major system inlet (for overland flow) from the low point at Cherry Street
- Stormwater storage shaft at 480 Lake Shore Boulevard
- Outfall tunnel to Keating Channel

[1] These features were constructed with reference to the following:

- West Don Lands Class EA Master Plan completed on May 31, 2005.
- Addendum to West Don Lands Class EA completed on June 8, 2010.

Refer to Figure 1-6.

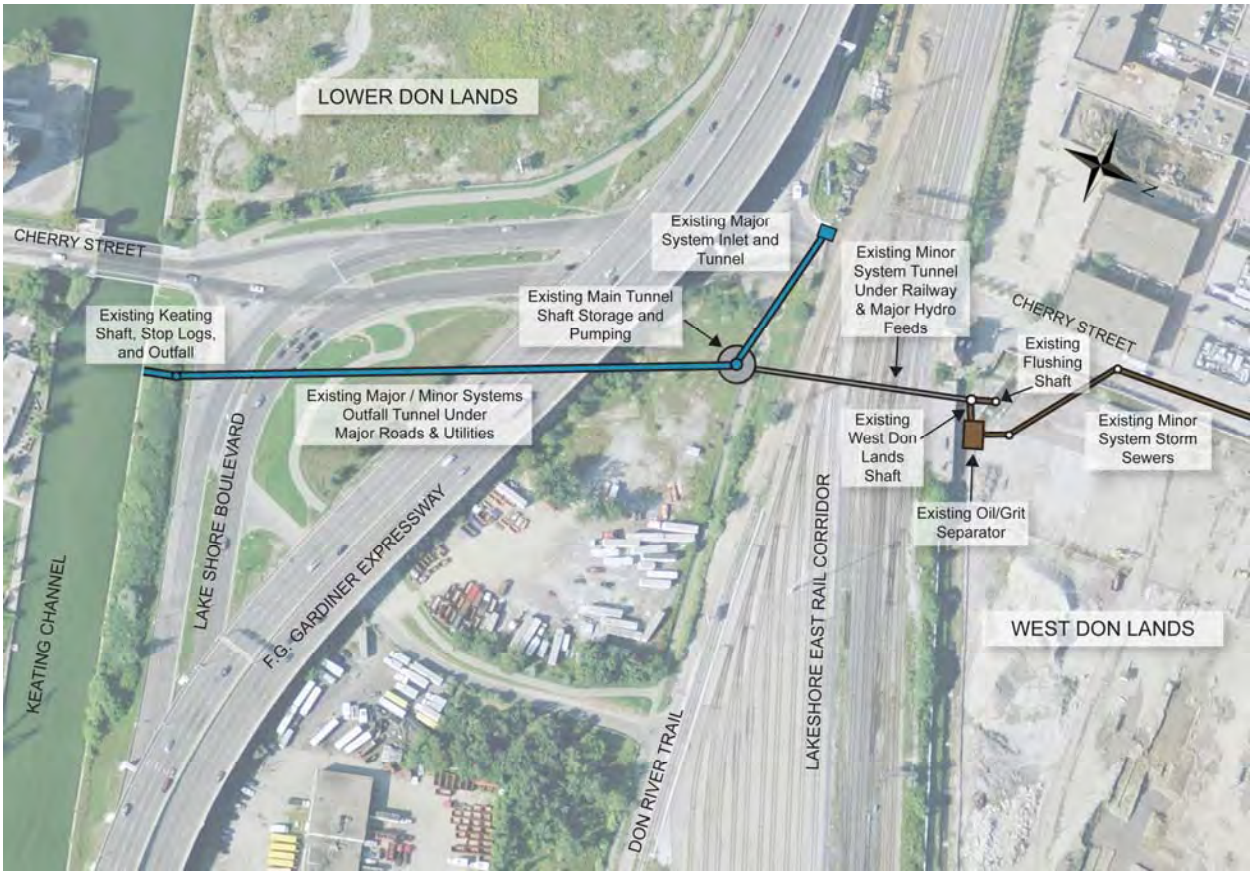

Figure 1-6: Existing Stormwater Management Components Installed at WDL as of 2012

1.4.2 West Don Lands - Future Stormwater Management Components (Phase 2)

The 2010 Addendum to the WDL Class EA considered phasing to implement the preferred stormwater management option for the WDL. Phase 2 involves the implementation of the treatment building (sedimentation tank and UV disinfection system).

1.4.3 West Don Lands – 2013 (Concurrent) Addendum for Stormwater Quality

Stormwater treatment technology for the sediment removal is being updated to reflect the City's experience gained with treatment technologies. As a result, the 2013 Addendum to the WDL Class EA considers a new treatment process to replace the sedimentation tank with a ballasted flocculation clarifier.

The 2013 Addendum to the WDL Class EA is also considering expansion the SWQF at 480 Lake Shore Boulevard to treat stormwater from other precincts such as the East Bayfront. These additional service (storm drainage) areas would need to implement flow equalization (tanks) prior to conveying flows to the proposed stormwater quality facility at 480 Lake Shore Boulevard.

1.5 Need for the Addendum for Stormwater Quality for the East Bayfront Precinct

Due to the difficulties in implementing the 'dockwall' sedimentation tank and the wetland (refer to Section 1.3), an addendum is required to re-evaluate stormwater treatment options with consideration of the stormwater management systems already installed and / or proposed within the area. The revised stormwater quality concept includes:

- Elimination of the large sediment tank along the 'dockwall';
- Elimination of the wetland integrated into the Parliament WaveDeck;
- Implementation of an equalization tank to attenuate the peak flows;
- Implementation of pumping and forcemain to convey stormwater to a stormwater quality treatment facility;
- Modifications to sewers to convey flows to the equalization tank; and
- Implementation of piping to return clarified stormwater to the existing UV disinfection system located in Sherbourne Common Park.

In order to implement a new integrated stormwater quality concept which is also conducive to staging as development proceeds, various locations for a tank and treatment facility needs to be identified and evaluated. In addition, a consistent technology to treat the range of stormwater quality coming from the storage tank is required in order to meet the stringent influent requirements of both the Wet Weather Flow Management Guidelines (November 2009 (WWFMG) and the existing UV disinfection system located in Sherbourne Common Park.

An Addendum is required to facilitate changes that are proposed in the Stormwater Quality since filing of the East Bayfront Class EA Master Plan (January 2006) and Addendum (November 2009).

1.6 Process to Amend the East Bayfront Class EA Master Plan

The 2006 Class EA Master Plan outlines the process to amend the Master Plan. The process was followed and involved the following:

- Waterfront Toronto and the City of Toronto will review the planning and design process to ensure that the project and the mitigation measures are still valid given the current planning context;
- Documentation of the circumstances necessitating the change, the environmental implications of the change, and the mitigation measures that can be implemented to minimize negative environmental effects;
- Notification to interested stakeholders and agencies of the amendments;
- Public issuing of a Notice of Filing Addendum and providing a 30-day review period and the opportunity to request a Part II order (elevation request) under the EA Act.

This Addendum documents:

- The baseline environmental conditions in the study area;
- An assessment and evaluation of alternatives;
- A description of the proposed undertaking;
- A description of potential project effects and mitigation measures that will be implemented to minimize or reduce these effects; and
- The advantages and disadvantages of the undertaking.

The recommended undertaking for stormwater management that has been identified through this addendum process is considered to be a Schedule ‘C’ project under the MEA Class EA as it involves a revised stormwater quality control where biological treatment / disinfection is included. This project has therefore been planned in accordance with the requirements for Schedule ‘C’ projects, as described in the Municipal Engineers Association’s Municipal Class Environmental Assessment document (October 2000, as amended in 2007 and 2011).

1.7 Study Area

The Study Area reviewed under this addendum consists of the East Bayfront Precinct and a portion of the North Keating Area 1 of the Lower Don Lands Precinct as shown in Figure 1-7. The southern boundary of the Study Area within the North Keating Area 1 generally follows the future Queen’s Quay realignment.

Figure 1-7: Study Area

1.8 Project Definitions

Abbreviations and acronyms have been used extensively in this report. A list of abbreviations used follows:

CSO – Combined Sewer Overflow
City – City of Toronto
EA – Environmental Assessment
EBF – East Bay Front
HGL – Hydraulic Grade Line
LDL – Lower Don Lands
MH – Maintenance Hole
OGS – Oil/Grit Separator
SWQF – Stormwater Quality Facilities

TSS – Total Suspended Solids

UV – Ultraviolet

WDL – West Don Lands

WT – Waterfront Toronto

WWFMG –Wet Weather Flow Management Guidelines (November 2006)

WWFMP –Wet Weather Flow Master Plan

2.0 DESCRIPTION OF ENVIRONMENT

This Addendum notes that the environment has not changed significantly since the November 2009 EBF Class EA Master Plan Addendum. Therefore, the following sections are cited from the November 2009 Addendum and are considered suitable since this Addendum reduces the footprint of environmental impact as shown in Figure 2-1.

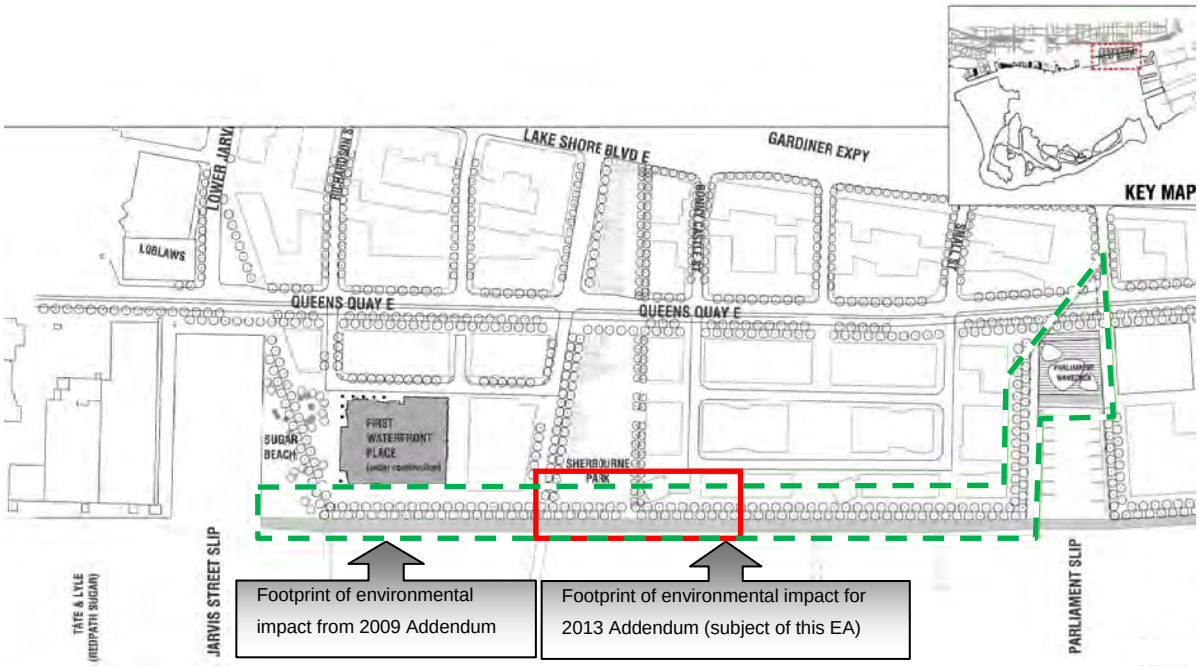

Figure 2-1: Comparison of Footprints of Environmental Impacts from the 2009 Addendum and the 2013 Addendum

2.1 Description of Biophysical Environment

The East Bayfront Precinct has been extensively developed for commercial and industrial uses. It is considered a brownfield site with large areas of underused, disturbed lands. There are no features of natural environmental significance (East Bayfront Class EA Master Plan, 2006). The following sections describe the existing biophysical habitat on the lands and in the adjacent portions of the Inner Harbour.

2.1.1 Aquatic Habitat and Fish Community

An assessment of the existing aquatic habitat conditions for East Bayfront was undertaken in the Class EA Master Plan in January 2006 and the subsequent addendum November 2009. The reports note that there is limited diversity of aquatic habitat along the East Bayfront Precinct as a result of urbanization and shoreline alteration. Additionally, high sediment loads which flow westerly from the Don River and the Keating Channel have a direct effect on water clarity and habitat quality in the East Bayfront area. High sediment loads, concrete dockwalls, and the lack of shallow or littoral zones to support aquatic vegetation and provide quality habitat / spawning areas are considered as the limiting factors to the health and diversity of the aquatic environment in this area (East Bayfront Class EA, 2006).

The Toronto and Region Conservation Authority (TRCA) staff completed an Environmental Monitoring program for the East Bayfront Precinct in 2007 and 2008. This assessment which included water chemistry, fisheries analysis and sediment sampling further substantiated the results described in the Class EA Master Plan. Figure 2-2 shows area bathymetry and Figure 2-3 shows locations of fish sampling conducted by the TRCA.

No fish species were found along the dockwall between Jarvis and Parliament Slips.

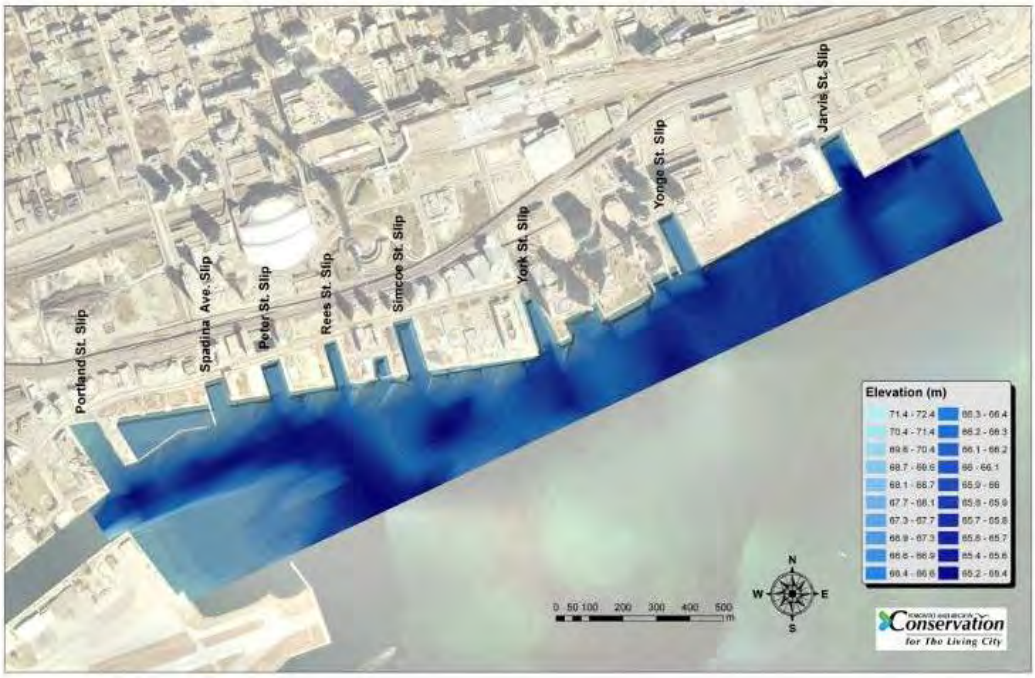

Figure 2-2: Bathymetry

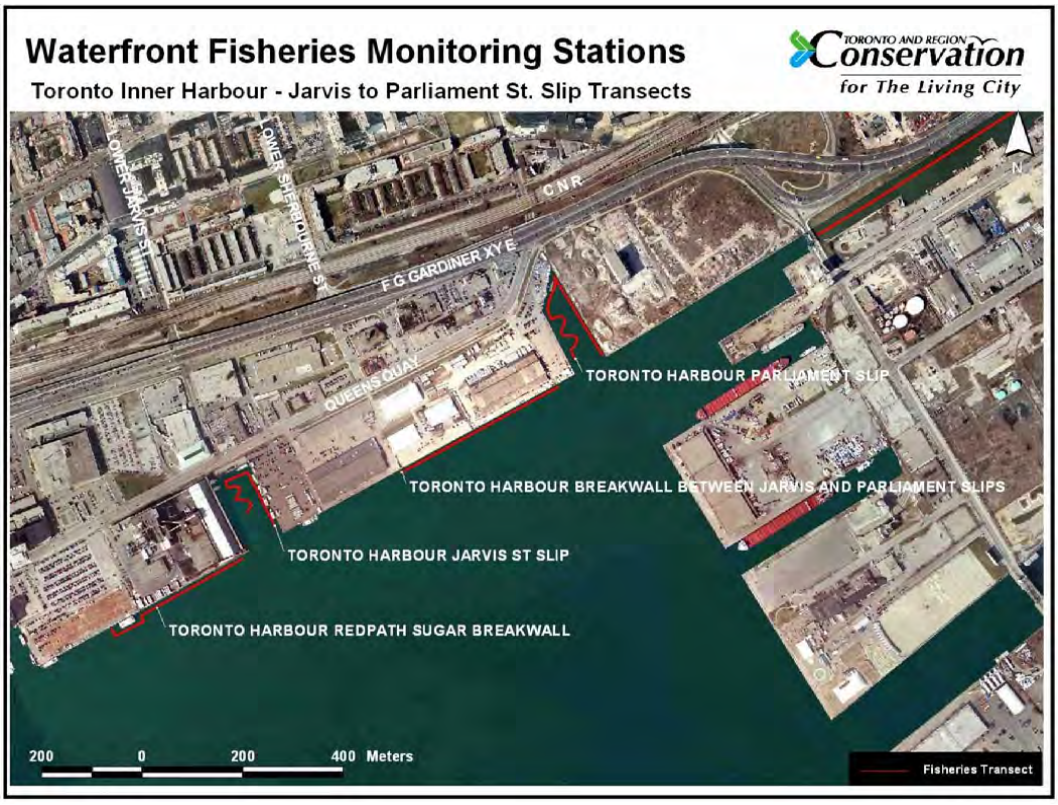

Figure 2-3: Waterfront Fisheries Monitoring Stations

2.1.2 Vegetation, Wildlife and Birds

Although there are nodes of good quality habitat for wildlife scattered throughout the Toronto Harbour, most of these habitats are concentrated along the north shore of the outer harbour, on Toronto Island and Tommy Thompson Park.

Continuous habitat linkages or isolated habitats for terrestrial movement are absent from the project site due to its built-up nature. The East Bayfront Precinct area is comprised mainly of warehouse facilities and vacant lots consisting of concrete debris with sparse vegetation. There are no species at risk present at the site, as defined under the Species at Risk Act. The project site is located within an important migratory zone, which encompasses both the Atlantic and the Mississippi flyways. Toronto Island, the Lower Don River and Tommy Thompson Park provide habitat for local and migrating wildlife species. Over 290 species of birds have been observed (East Bayfront Class EA, 2006) in the Toronto Port area and the harbour supports a robust winter waterfowl population. Migratory birds observed by the TRCA include bufflehead, long-tailed duck, ring-billed gull and Canada goose. Wildlife observations made during the preparation of the Class EA Master Plan consisted of species commonly spotted in urban landscapes and migratory species, which likely use the areas as stopover habitat. Species observed included common grackle, European Starling, rock dove, house sparrow and American Robin. The aquatic habitat located within the harbour adjacent to East Bayfront provides a suitable habitat all year round for urban species such as Canada goose and the ring-billed gull.

2.1.3 Air and Water Quality

Background air quality levels in the study area are influenced by local and long-range (cross border) contaminants. Currently, the dominant local source of air pollution in the Central Waterfront is vehicle traffic on the Gardiner Expressway and Lake Shore Boulevard, which cause elevated levels of carbon monoxide and total suspended particulates. Other contributors to air pollution include marine activity such as the Island ferries and various recreation and commercial vessels.

The water quality in the Inner Harbour is generally poor. The Toronto Remedial Action Plan Stage 1 Report indicates that there have been exceedances of Provincial Water Quality Objectives for nutrients and fecal coliform bacteria along the entire Toronto Waterfront. Within

the harbour, heavy metal and organic exceedances are particularly common. The water quality is negatively impacted by the highly contaminated waters from the combined loadings of the Don River and the numerous storms and combined sewer outfalls.

2.2 Description of Socio-Economic and Cultural Environment

2.2.1 Land Use and Economic Activity

The economic activity in East Bayfront is currently in transition as part of the East Bayfront precinct revitalization. Lands currently and previously used for a range of commercial and industrial uses, including auto dealerships, recreational sport tents, distribution centres and a film studio, are being transformed into a mixed-use precinct featuring residential, commercial, institutional, office and cultural activities. Sherbourne Common Park has been developed east of Lower Sherbourne Street, both north and south of Queens Quay Boulevard East ("Queens Quay"). The Dockside area, south of Queens Quay, between Jarvis Slip and the Sherbourne Common Park, has largely been redeveloped and it includes Canada's Sugar Beach Park, the Corus Quay office building and George Brown College's new Waterfront Campus / Centre for Health Sciences. The northeast corner of Lower Jarvis and Queens Quay has a concentration of nightclubs and lounges and some retail stores remain north of Queens Quay, east of Bonnycastle Street. Certain businesses located in the study area have either been relocated or are expected to be relocated prior to redevelopment of the remaining portions of the East Bayfront.

2.2.2 Zoning

The East Bayfront Zoning By-law (By-law 1049-2006) was enacted by Toronto City Council on September 27, 2006. The By-law is under appeal but was approved by the Ontario Municipal Board for the lands south of Queens Quay and for publicly owned lands north of Queens Quay (those lands east of Lower Sherbourne Street) and is in force and effect as it applies to those lands. The By-law changed the land use permissions from an industrial designation to permit CR (mixed commercial and residential) uses, as well as district energy and vacuum waste facilities. An 'h' holding symbol will remain on some lands until certain conditions are satisfied. In addition, the By-law also designated certain areas as G and Gm, which allow for park and marine-related uses.

2.2.3 Cultural Environment

A review of historic maps of the Toronto waterfront indicates that the original shoreline is located several hundred metres north of the project site. As such, the project site was developed on material used to infill this portion of Lake Ontario.

Much of the present land area of Toronto's Central Waterfront is the result of human construction, including lakefill operations linked to industrial development and transportation. Between the 1830s and the 1930s the shoreline changed dramatically, and subsequent development has further altered the form and character of the landscape. As a result, many of the area's heritage resources—particularly those of an archaeological nature—lie buried in fill or encased in concrete (Archaeological Services Inc. 2003).

2.2.4 Land Claims by Aboriginal Person

The Mississaugas of the New Credit currently reside on the New Credit reserve 35 km southwest of Hamilton, Ontario. Their ancestors lived on the shores of Lake Ontario, at the mouth of the Credit River before the settlement of Toronto. The First Nations are in preliminary discussions with government for claims on the Toronto Islands and other matters related to the Toronto Purchase. The specific claim is likely to be outside the project sites. Given the urban nature of the project sites, there is unlikely to be current use of the sites for traditional purposes.

2.2.5 Recreational Boating, Commercial Vessels and Navigation

There are multiple companies that operate charter and tour boats in the Toronto Harbour with an approximate capacity of 8,000 passengers. These operations are primarily located along the dockwall and marine slips of the Central Waterfront, from Bathurst Quay to Parliament Street Slip. There is an Island Ferry, operated by the Royal Canadian Yacht Club (RCYC) at the Parliament Street Slip, which carries approximately 200,000 passengers across the harbour every year. The RCYC have signed a lease with the Toronto Port Authority and TEDCO providing for the relocation of the Island Ferry launch with the redevelopment of the Parliament Street Slip. Yankee Lady Yacht Charters of Toronto operates two yacht charters from the East Bayfront Terminal 29. Their main offices are located in 261 Queens Quay East. Each boat has capacity for up to 300 passengers.

3.0 UPDATE OF STORMWATER QUALITY CONCEPT

3.1 Background

3.1.1 2006 East Bayfront Class EA Master Plan

The 2006 Class EA Master Plan for the East Bayfront Precinct considered stormwater management in two parts. First, alternative stormwater management systems were considered, yielding a recommendation that included a combination of source, conveyance, and end-of-pipe controls.

Secondly, the Class EA Master Plan assessed alternative end-of-pipe facilities. The recommended alternative was described as 'sub-surface sedimentation tanks with filters and ultra-violet (UV) disinfection'. Dirty (surface) runoff generated by a 50 mm event was to be captured within the two spatially separate tanks for sedimentation and subsequent UV treatment. The UV treated runoff was then to be combined with the clean (rooftop) runoff, filtered, and discharged to Lake Ontario. A total sedimentation tank volume of approximately 8,300 m^3 was established, with the first tank to be located within Sherbourne Common Park, and the second tank to be located at the north end of Parliament Street Slip. The Parliament Street Slip tank was sized to allow the capture of dirty stormwater from an area of approximately 1.6 ha from the east side of Parliament Street (i.e. North Keating Area 1 of the Lower Don Lands Precinct).

Appendix A contains relevant excerpts from 2006 Class EA Master Plan for additional background information.

To summarize, the process selected to treat stormwater in the 2006 Class EA Master Plan consisted of the follows elements:

- Stormwater storage with sedimentation, followed by
- Filtration (pretreatment before UV), followed by
- UV disinfection

Refer to Figure 1-1 located in Section 1.1.

3.1.2 2009 East Bayfront Class EA Master Plan Addendum for Stormwater Collection and Management System

The 2009 Addendum to the Class EA Master Plan for the East Bayfront Precinct considered revising the treatment process to consist of oil-grit separators, one large sedimentation tank, a constructed wetland and UV disinfection. Refer to Figure 1-2 located in Section 1.1. Refer to Appendix B, which contains relevant excerpts from 2009 Class EA Master Plan Addendum for additional background information.

The Addendum also provided an opportunity for a centralized UV disinfection facility in the EBF to include flows from the westerly portion of the North Keating area (NK1) of the Lower Don Lands (LDL) Precinct, an additional nominal area of 14 ha, via pumping and forcemain.

As indicated in the Problem Statement (Section 1.3), the stormwater storage and filtration elements (i.e. sedimentation tank and wetland) are no longer feasible.

Therefore, a re-evaluation of stormwater treatment options should be considered (subject of this Class EA Addendum). The re-evaluation should also consider the recently constructed stormwater quality features in Sherbourne Common Park (refer to Section 1.2) as well as the opportunities to be consistent (or consolidate) with the planned and existing facilities in the West Don Lands Precinct (refer to Section 1.4).

3.2 Preferred Pretreatment Option

The stormwater treatment technology for sediment removal is being updated to reflect the City's experience gained with treatment technologies. As a result, the 2013 Addendum to the WDL Class EA has considered a treatment process to replace the sedimentation tank with other forms of treatment including the preferred ballasted flocculation clarifier. The ballasted flocculation process was preferred since this treatment process, typically used in water and wastewater treatment applications, could provide reliable results from varying degrees of quality of stormwater coming from the storage tank(s) within a small footprint.

As part of the integration goal of this amendment, and assessment of the location of the ballasted flocculation clarifier is presented in Section 6.

Given that the actual influent parameters are not known and therefore the effluent results not predictable, the ballasted flocculation process can be modified to provide the effluent quality level required for treatment at the UV disinfection system located in Sherbourne Common Park.

3.3 Revised Stormwater Quality Concept

Based on the preferred pretreatment option (i.e. ballasted flocculation) and the need for a flow equalization tank, the stormwater quality concept can be revised as illustrated in Figure 3-1. The location of the ballasted flocculation clarifier and flow equalization tank is subject to further analysis and evaluation as presented in the forthcoming Sections.

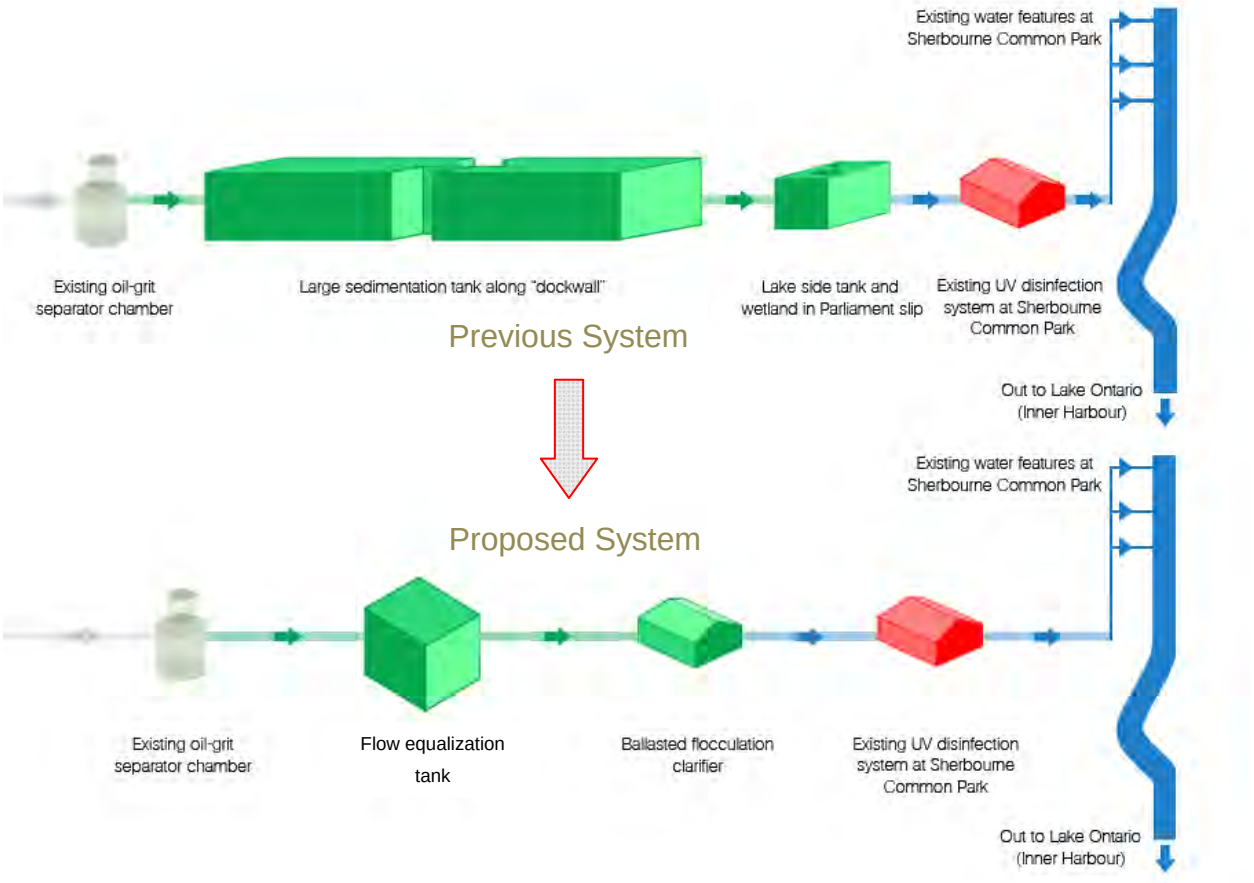

Figure 3-1: Simplified Representation of the Technically Preferred Stormwater Quality Concept

3.4 Flow Equalization Tank Description

The purpose of the flow equalization tank is to attenuate the storm flows and mitigate the size of the downstream treatment facilities. The tank would be equipped with pumps which would convey the stormwater via a forcemain to the ballasted flocculation clarifier. During large storms, a portion of the flow would overflow from the tank and discharge directly to Lake Ontario (Inner Harbour) via an outfall. The size of the tank depends on the feed rate to the ballasted flocculation clarifier and the required volume for tank to meet the City Wet Weather Flow Management Guidelines. However, it is estimated that the size of the tank will be approximately 1,800 m^3 with a pumping rate of approximately 180 L/s.

4.0 OPTIONS FOR LOCATION OF THE FLOW EQUALIZATION TANK

This section reviews the options for the location of the flow equalization / storage tank.

The criteria for analyzing and evaluating the tank options include:

1) Compatible with timing / staging of development
2) Accessible location for Toronto Water Operations;
3) Centrally located for storm sewer connections;
4) Close to lake for overflow;
5) Close to 480 Lakeshore treatment site;
6) Technical complexity of construction; and
7) Opportunity to take stormwater flows from NK1 lands.

Figure 4-1 presents seven locations followed by an evaluation in Figure 4-2.

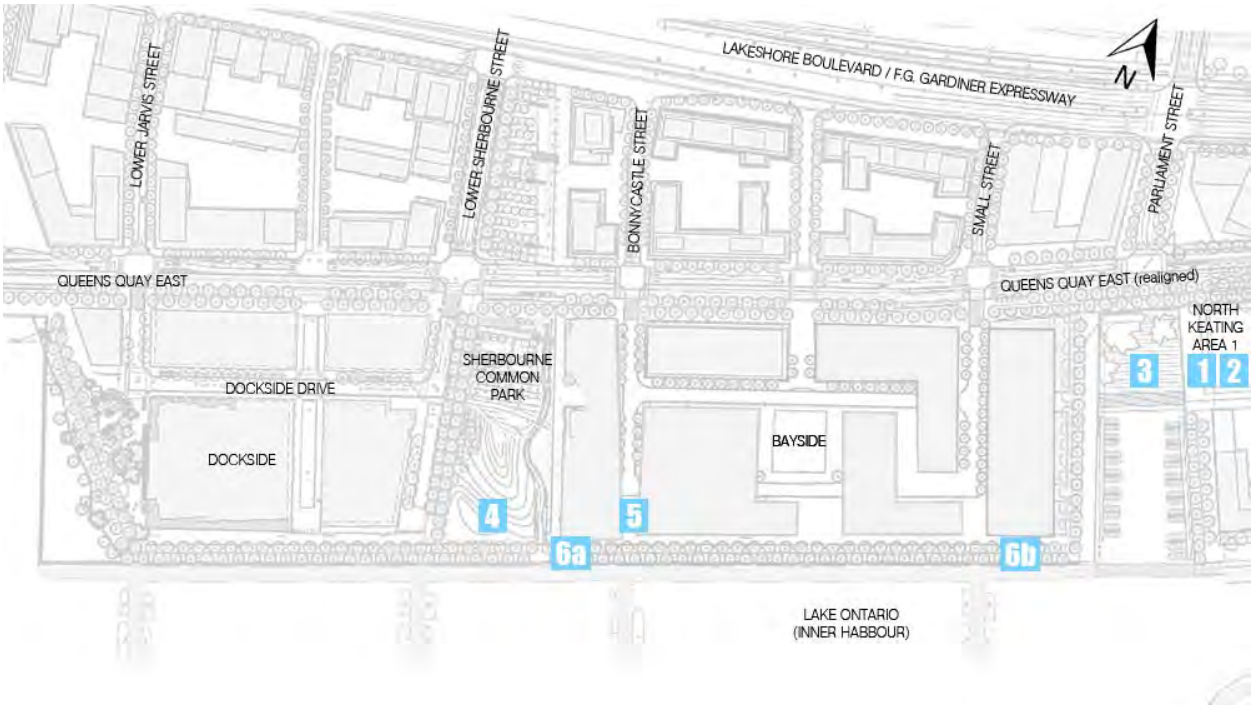

Figure 4-1: Options for Location of the Flow Equalization Tank

Criteria / Option	Option 1 & 2: East of Parliament Slip	Option 3: within Parliament Slip (beneath WaveDeck)	Option 4: Sherbourne Common Park	Option 5: Foot of Bonnycastle St. (Bayside)	Options 6a & 6b: within Lake (beneath boardwalk)
1) Compatible with timing / staging of development in the EBF Precinct	0 – not compatible since the development of North Keating Area 1 is less advanced than the EBF	4 – compatible with planned development	0 – not compatible since Sherbourne Common Park was constructed in 2011	4 – compatible with planned development	4 – compatible with planned development
2) Accessible location for Toronto Water Operations	3 – accessible location	2 – limited accessible location (busy area)	1 – limited accessible location since nearest municipal right-of-way is 50m away	4 – accessible location	1 – limited accessible location
3) Centrally located for storm sewer connections (east-west bench mark being Bonnycastle St.)	1 – greater than 300m away	1 – greater than 300m away	3 – between 50m and 100m away	4 – less than 50m away	4 – 6a: less than 50m away 1 – 6b: between 100m and 300m away
4) Close to existing 1200mmø storm pipe from Dockside development	1 – greater than 400m away	1 – greater than 400m away	4 – between 50m and 100m away	3 – between 100m and 200m away	3 – 6a: between 100m and 200m away 2 – 6b: between 300m and 400m away
5) Close to lake for overflow	3 –10m long outfall	4 – 0m long outfall	2 – 50m long outfall	2 – 50m long outfall	4 – 0m long outfall
6) Close to SWQF treatment site at 480 Lake Shore Blvd.	4 – between 250m and 500m away	4 – between 250m and 500m away	1 – greater than 900m away	2 – between 750m and 900m away	2 – 6a: between 750m and 900m away 3 – 6b: between 500m and 750m away
7) Technical complexity of construction	4 – not complex due to in-land construction in a undeveloped area	2 – very complex due to in-water construction in slip	3 –complex due to in-land construction in existing park	4 – not complex due to in-land construction in a undeveloped area	1 – extremely complex due to in-water construction in lake
8) Opportunity to take stormwater flows from NK1 lands	4 – provides opportunity to take flows from NK1	4 – provides opportunity to take flows from NK1	0 – does not provide opportunity to take flows from NK1	0 – does not provide opportunity to take flows from NK1	0 – does not provide opportunity to take flows from NK1
Ranking	20 points	22 points	14 points	**23 points - PREFERRED**	6a – 19 points 6b – 16 points

Note: Point assignment has not been weighted for relative importance of evaluation criteria.

Distances are approximate.

Maximum possible score for each criteria is 4 points.

Figure 4-2: Evaluation of Options for Location of the Flow Equalization Tank

Option 5 is preferred due to its compatibility with planned development; central and accessible location; short extension of the 1200 mmø storm pipe; close to lake for overflow; less complexity that in-water construction; and no disturbance to Sherbourne Common Park.

5.0 OPTIONS FOR ROUTING OF DOCKSIDE STORM PIPE

5.1 Background

All stormwater flows were to be conveyed into a large sedimentation tank located along the 'dockwall' and beneath the boardwalk as indicated in Figure 1-2.

5.2 Routing Options and Analysis for Dockside Storm Pipe

This section reviews the options for the routing of the 1200 mmø storm pipe from the Dockside development to the flow equalization / storage tank in the East Bayfront.

Three options were considered as indicated in Figure 5-1.

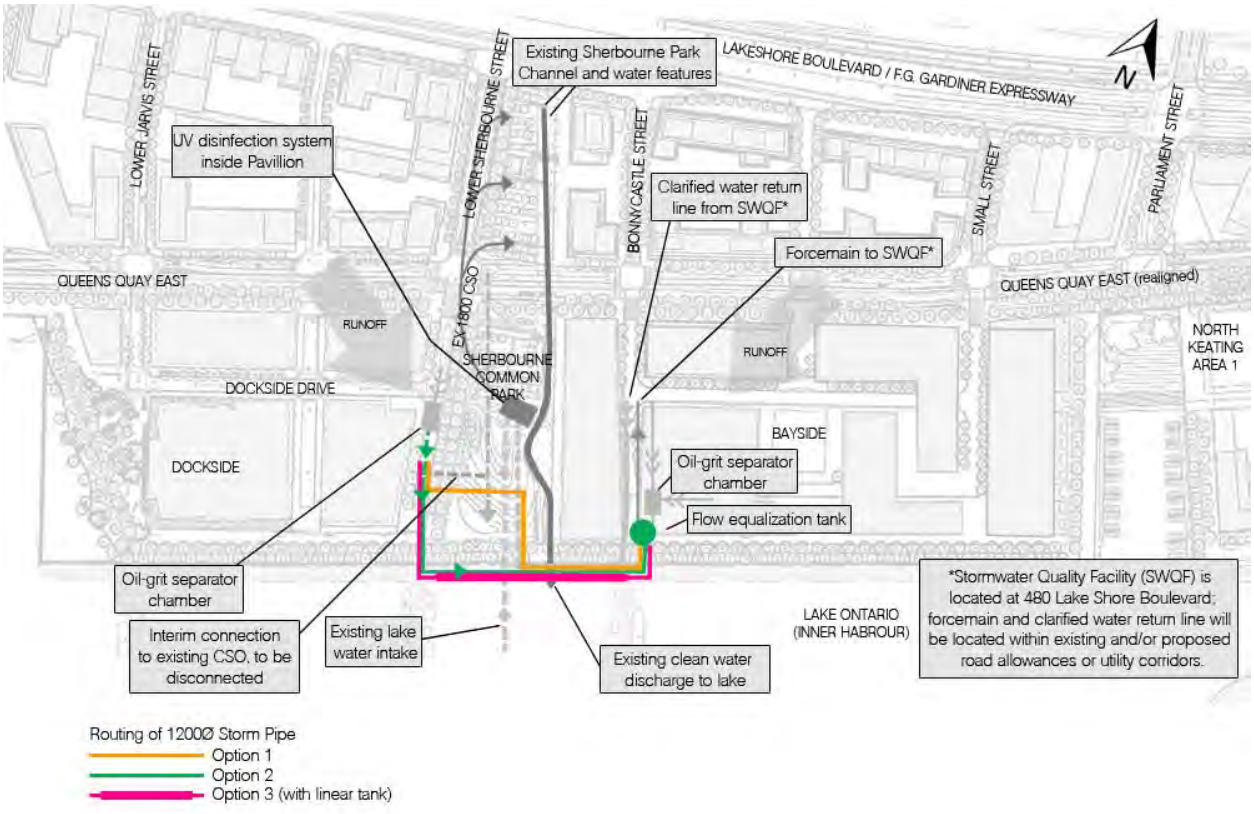

Figure 5-1: Options for Routing the Dockside Storm Pipe

All options consist of constructing a portion of the 1200 mmø storm pipe along the 'dockwall' and beneath the boardwalk. Option 1 consists of constructing a portion of the 1200 mmø storm pipe through the existing Sherbourne Common Park. Option 2 and 3 minimizes construction within Sherbourne Common Park by utilizing the area around the park's perimeter. Option 2 consists of a 1200 mmø storm pipe whereas Option 3 consists of a larger size storm pipe or storm tank. A plan and sections of the storm pipe and storm tank are shown in Figure 5-2.

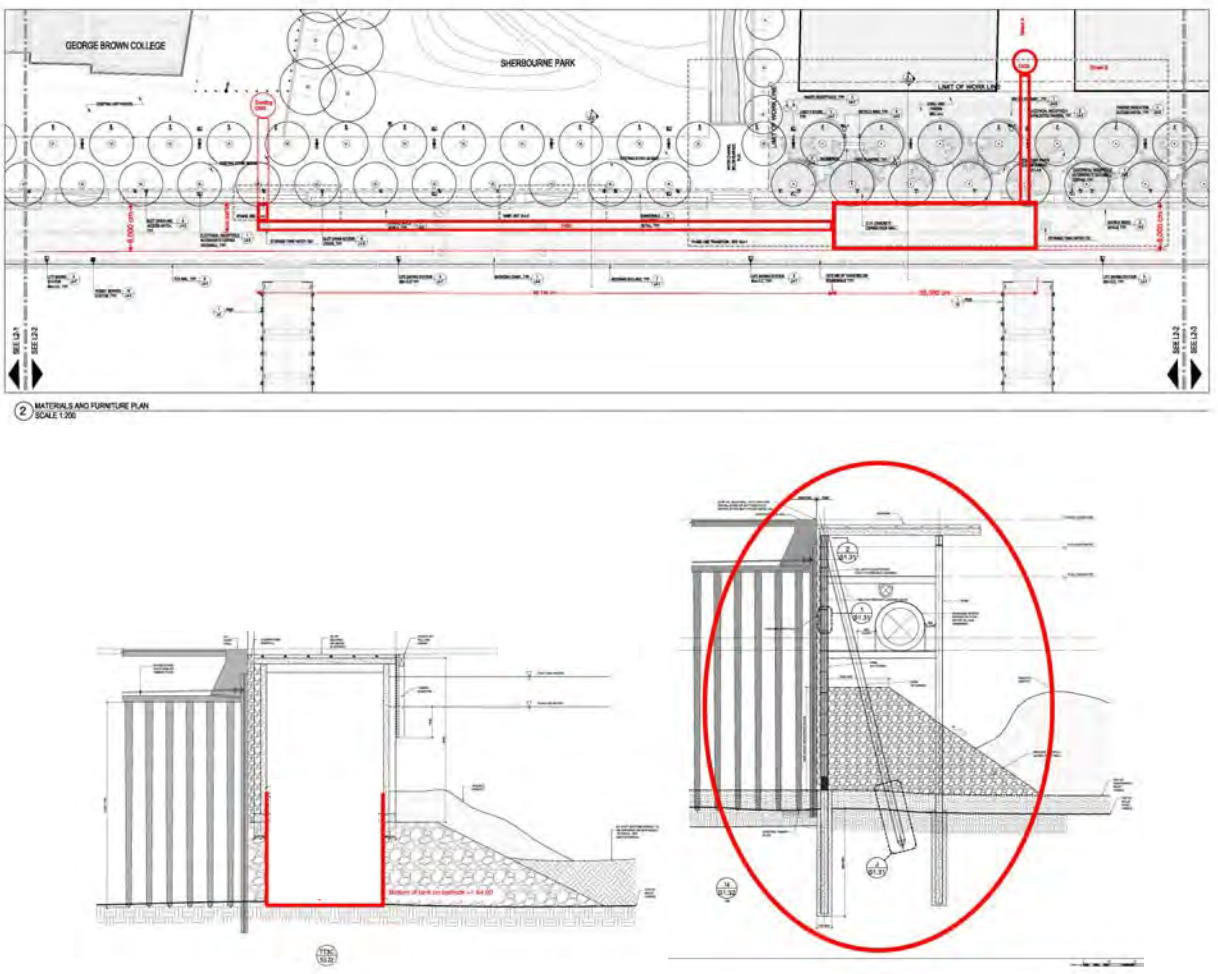

Figure 5-2: Plan and Sections for Dockside Storm Pipe / Tank

The criteria for analyzing and evaluating the tank options include:

1) Compatible with timing / staging of development;
2) Length of storm pipe;
3) Close to lake for overflow; and
4) Technical complexity of construction.

An evaluation is shown in Figure 5-3.

Criteria / Option	Option 1: thru Sherbourne Common Park	Option 2 within Lake (beneath boardwalk)	Option 3: within Lake combined with linear tank
1) Compatible with timing / staging of development in the EBF Precinct	0 – not compatible since Sherbourne Common Park was constructed in 2011	4 – compatible since storm pipe can be integrated with boardwalk construction	4 – compatible since storm pipe can be constructed within existing / proposed municipal right-of-ways
2) Length of pipe	3 - 250m	4 - 150m	4 - 150m
3) Close to lake for overflow	3 –20m away	4 - 0m away	4 –0m away
4) Technical complexity of construction	2 –complex due to in-land construction in existing park	3 – storm pipe can be supported on the dockwall	1 – extremely complex in-water construction of tank
Ranking	8 points	**15 points - PREFERRED**	13 points

Note: Point assignment has not been weighted for relative importance of evaluation criteria.
Distances are approximate.
Maximum possible score for each criteria is 4 points.

Figure 5-3: Evaluation of Options for Routing of the Storm Pipe from Existing Dockside Development to Proposed Flow Equalization Tank

Option 2 is preferred due to its compatibility with planned development and integration with boardwalk construction; close to lake for overflow; shortest distance of the storm pipe; and no disturbance to Sherbourne Common Park or surrounding roads.

6.0 OPTIONS FOR LOCATION OF THE BALLASTED FLOCCULATION CLARIFIER

This section reviews the options for the location of the ballasted flocculation clarifier (BFC).

The criteria for analyzing and evaluating the tank options include:

1) Accessible location for Toronto Water Operations;
2) Centrally located for storm sewer connections; and
3) Close to lake for overflow.

Figure 6-1 presents five locations followed by an evaluation in Figure 6-2.

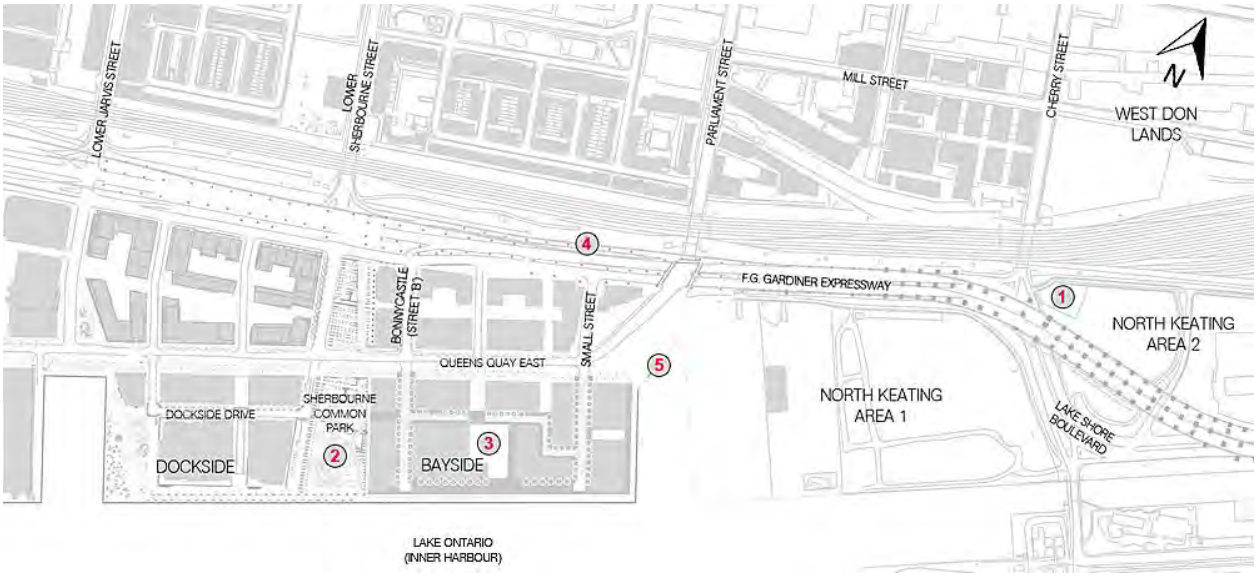

Figure 6-1: Options for Location of the Ballasted Flocculation Clarifier (BFC)

Criteria / Option	Option 1: 480 Lake Shore Blvd.	Option 2: Sherbourne Common Park	Option 3: Proposed City park in Bayside	Option 4: Between Lake Shore Blvd. and railway corridor, north of Small St.	Option 5: Parliament Slip
1) Compatible with timing / staging of development in the EBF Precinct	4 – compatible with planned development since BFC can be integrated with proposed SWQF	0 – not compatible with planned development since Sherbourne Common Park was constructed in 2011	3 – compatible with planned development since BFC can be integrated with proposed City park; however the building may occupy most of the small park	3 – compatible with planned development, but requires approval from Metrolinx	4 – compatible with planned development; however the building may occupy most of the proposed WaveDeck
2) Accessible location for Toronto Water Operations	4 – accessible location	2 – limited accessible location since nearest municipal right-of-way is 50m away	4 – accessible location	1 – limited accessible location (busy area)	2 – accessible location (busy area)
3) Close to existing WDL flow equalization / storage tank	4 – same location	0 –900m away	1 - 750m away	2 - 600m away	3 - 500m away
4) Close to proposed NK1 flow equalization / storage tank	4 – between 300m and 350m away	1 - 650m away	2 - 500m away	3 - 450m away	4 – between 300m and 350m away
5) Close to proposed NK2 flow equalization / storage tank	4 - 50m away	1 - 950m away	2 - 750m away	3 – between 500m and 600m away	3 – between 500m and 600m away
6) Close to proposed EBF flow equalization / storage tank	1 - 900m away	4 – between 100m and 150m away	4 – between 100m and 150m away	3 – between 400m and 500m away	3 – between 400m and 500m away
7) Close to existing UV disinfection system in Sherbourne Common Park	1 - 900m away	4 - 50m away	3 - 200m away	2 - 400m away	2 - 400m away
8) Technical complexity of construction	4 – not complex due to undeveloped parcel of land	3 –complex due to construction in existing park	2 – not complex due to undeveloped parcel of land; however limited space due to small site	1 – complex due to railway embankment and limited space due to small site	1 – complex due to building on the proposed WaveDeck
Ranking	**26 points - PREFERRED**	13 points	21 points	18 points	22 points

Note: Point assignment has not been weighted for relative importance of evaluation criteria.

Distances are approximate.

Maximum possible score for each criteria is 4 points.

Figure 6-2: Evaluation of Options for Location of the Ballasted Flocculation Clarifier (BFC)

Option 1 is preferred due to the efficiency of consolidating the ballasted flocculation clarifier at one location achieving the integration goal of the amendment.

7.0 PROPOSED STORMWATER QUALITY CONCEPT

The proposed stormwater quality concept is shown in Figure 7-1.

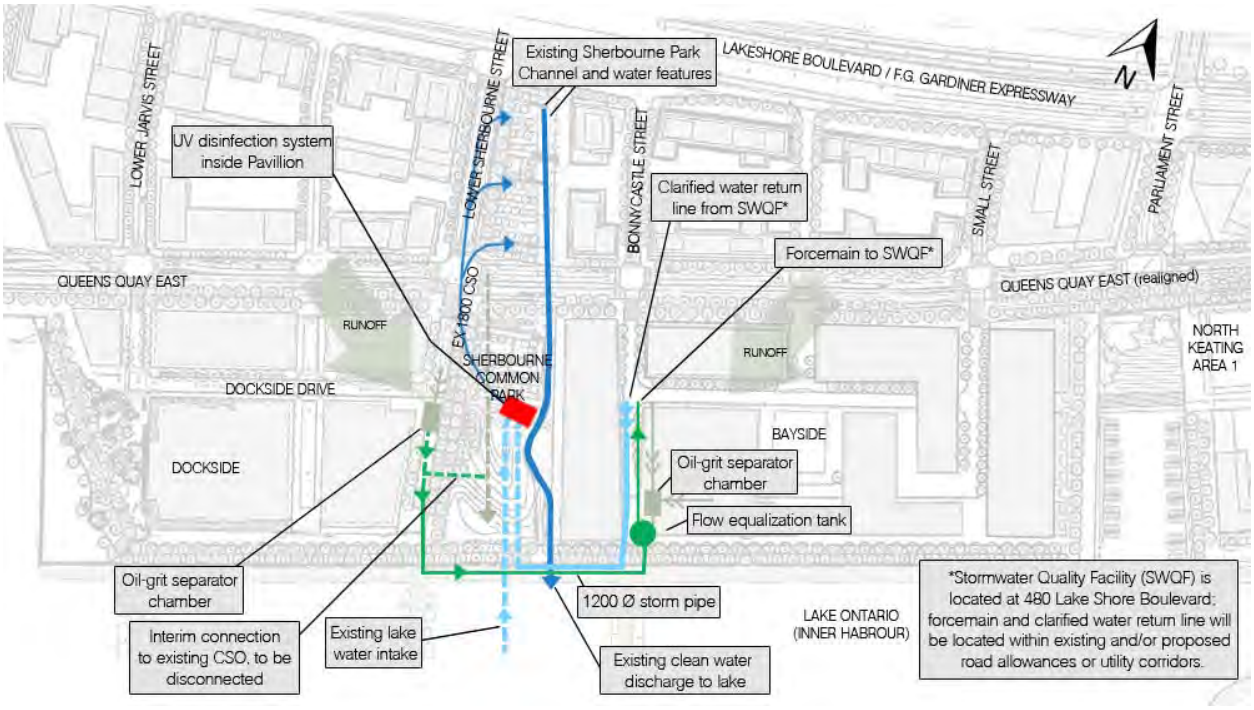

Figure 7-1: Proposed Stormwater Quality Concept

7.1 Conceptual Outline of Proposed Facilities

One way to describe the project is to trace the path of the stormwater, from rainfall through to the system outfall. The stormwater will fall directly onto the EBF precinct streets and on development blocks. The blocks themselves are planned to be developed with built-in storm mitigation measures primarily for quantity control of stormwater, but eventually stormwater would find its way into storm sewers on the streets. The storm sewers (minor system) in the EBF are designed for the 2-year storm.

The balance of the stormwater captured on the streets will flow along the municipal right-of-ways (major system). The major system will flow generally in a northerly direction towards Queens Quay, where it would then be directed towards the Parliament slip.

External areas to the north of the EBF are currently independently serviced by storm sewers, of which Sherbourne CSO and Small Street CSO cross through EBF enroute to Lake Ontario. The overland flow from the external areas are not considered in this report.

The two main conveyance systems that form the minor system are:

- from the Bayside development area, a 0.9 m diameter storm sewer running along Street 'A' and a 0.6 m diameter storm sewer running along Street 'B'. Each of these storm sewers would directly feed the stormwater attenuation / equalization tank
- from the easterly Dockside development area, a 1.8 m diameter storm sewer running south along lower Sherbourne Street to the lake via an oil-grit separator (OGS). This pipe will be intercepted by a 1.2 m diameter submerged pipe, and would connect to the stormwater attenuation / equalization tank beneath the boardwalk.

The first form of treatment for each of these minor system sewers would take place in end-of-pipe OGS units.

The North Keating Area 1 (NK1) of the Lower Don Lands (LDL), west of Cherry Street (9 ha) will, in time, be developed along the same basis, with a minor system designed for the 2-year storm, and the major system for the balance. As per the WWFMG, the major system is defined as the overland flow system. The minor system of NK1 would similarly include OGS treatment prior to the stormwater attenuation / equalization tank.

Downstream of the Dockside and Bayside OGS unit(s), the EBF stormwater would be conveyed to a shaft storage tank ("the stormwater attenuation / equalization tank") located within the municipal right-of-way at the intersection of Street 'A' and Street 'B'. The purpose of this storage will be to attenuate the storm flows and mitigate the size of the downstream treatment facilities. The tank is intended to be operated by emptying after each storm cycle, along with the Bayside storm sewer; however, the Dockside portion of the storm sewer would remain submerged as it runs below the boardwalk to avoid buoyancy forces. The design of the submerged sewer should include provisions for dewatering for maintenance purposes. The portion of the Dockside storm sewer north of the lake, and the Bayside storm sewers would be dewatered when the storage tank is emptied.

The stormwater attenuation tank would be equipped with pumps which would convey the stormwater to an above grade, centralized Stormwater Quality Facility (SWQF) at 480 Lake Shore Boulevard. This facility would be designed to remove suspended solids. As per the 2013 WDL Class EA Addendum, the SWQF would be sized to accommodate attenuated minor system flows from the 32 ha WDL area, the 11 ha North Keating Area 2 (NK2) of the LDL east of Cherry Street, the 23 ha EBF area and the 9 ha North Keating Area 1 (NK1) of the LDL west of Cherry Street. This centralized stormwater treatment facility would be equipped with gravity screens, ballasted flocculation tanks, UV disinfection units, space to store and handle facility settling sand, chemical storage and a service room housing electrical and mechanical equipment.

A portion of the treated stormwater equivalent to flows originating from the East Bayfront would flow via gravity forcemain to the UV treatment system located in Sherbourne Common Park for use in the water features. The remainder of the treated stormwater would then flow by gravity via the WDL UV channel and stormwater outfall to the Keating Channel.

The EBF stormwater attenuation / equalization tank would feed the SWQF via pumps located at the bottom of the storage tank; however, during large storms, a portion of the flow would bypass the SWQF and overflow from the stormwater attenuation / equalization tank directly to Lake Ontario via the tank outfall. The WWFMG require removal of 80% Total Suspended Solids (TSS) on an annual basis. The storage capacity of the SQWF is such that the WWFMG would be met by removing 80% of TSS on an annual basis when taking into account the occasional bypass events. The design is based on 1991 annual rainfall data series provided by the City of Toronto.

7.2 Stormwater Flow Attenuation / Equalization Tank

The stormwater attenuation / equalization tank function is to dampen the flow from the EBF minor system. Submersible pumps located at the base of the tank would be used to convey stormwater to the above grade centralized SWQF, via a 450 mm diameter forcemain. The EBF minor system flow, in excess of the flow to treatment, would be allowed to overflow a weir and discharge to Lake Ontario (Inner Harbour). This weir is required to separate the Lake Ontario water level from the storage side of the stormwater tank. Prior to the connection of the Dockside pipe to the EBF tank, the overflow weir would be located within the tank, however

when the Dockside pipe is connected to the EBF tank, the overflow weir would be located within the Bayside MH at the water's edge.

The Bayside storm sewer would have a free outlet into the stormwater tank while the Dockside portion of the storm sewer along the dockwall (under the boardwalk) would be submerged to avoid buoyancy forces on the pipe. The Dockside MH would also have an overflow weir to allow for Dockside flows to overflow to the lake at the Dockside MH.

The height and length of the stormwater tank overflow weir would be determined by lake levels and flow.

Lake Ontario Levels converted to City of Toronto Datum

Lake Ontario Historical High Water Level	75.80 m
Long term average during summer months	75.04 m
Winter long term average low	74.54 m

A height of 75.8 m would be used for the weir height calculations. It is assumed that this level would include any effects from a strong southerly wind pushing water towards the north shore of Lake Ontario. A backwater valve should also be incorporated into the design to mitigate wave action or unexpected high lake levels.

With a weir height of 75.8 m in the EBF stormwater attenuation / equalization tank, the EBF storm sewers would be surcharged to approximately 76.0 m at the tank during tank overflow conditions. Therefore all sub-grade storm sewer connections within the Dockside and Bayside development blocks must be pumped to avoid basement flooding.

A system of flushing nozzles will be incorporated to suspend and flush out sediment from the stormwater tank.

7.3 Pumps and Forcemain to the SWQF

The stormwater in the EBF stormwater attenuation / equalization tank would be pumped via duplex pumps through a 450 mm diameter forcemain to feed the centralized SWQF at a flow

rate of approximately 180 L/s. This forcemain will be located within existing roads (including roads created by the overall redevelopment project).

7.4 Forcemain from SWQF

A portion of the treated stormwater from the centralized SWQF would feed the Sherbourne Commons UV Facility via a gravity forcemain. This forcemain has been preliminarily sized at 500mm diameter for a flow of 140 L/s which is the capacity of the UV system at Sherbourne Common Park. This forcemain will be located within existing roads (including roads created by the overall redevelopment project).

7.5 Forcemain from Stormwater Attenuation / Equalization Tank to Lake

For the interim condition where the EBF attenuation / equalization tank has been constructed but the SWQF has not, a short length 300 mm diameter forcemain is proposed to be run from the tank and discharge into the lake. This smaller forcemain would allow the submersible pumps to dewater the tank after storm events, thus keeping upstream storm sewers dry most of the time.

7.6 Notice to Developers, Building Owners and Designers of Plumbing / Drainage and Stormwater Management Systems for Buildings in the East Bayfront Precinct.

The stormwater management system in the East Bayfront Precinct incorporates a large stormwater attenuation / equalization tank that fills during a storm and is pumped down (emptied) after a storm. This tank attenuates the flows to a downstream stormwater treatment facility. Frequently, the attenuation / equalization tank will fill to a point where the storm sewers in the Precinct will surcharge. The tank fills to an overflow level of approximately 76.50 m, which is the high Lake Ontario level plus allowance for flow over the discharge weir. Developers, Building Owners and Designers of plumbing / drainage and stormwater management systems for buildings in the Precinct shall account for storm sewer surcharge and are recommended to account for surcharge to grade elevation.

Methods to account for this condition include use of protective techniques such backwater valves, pumping below grade drainage and use of pressure-tight storm drainage piping in

basements and underground garages, as required. All of these techniques are pragmatic ways to prevent basement flooding some of which are typically required by the City of Toronto, through the Site Plan Approval. Furthermore, Designers of such system are encouraged to consider how to protect buildings from flooding in worse case scenarios (severe storm events combined with pump and / or power failures) by providing required volumes of storage and / or overflows that direct drainage safely to the overland flow route if permitted.

8.0 UPDATE OF PHASING

The implementation plan would be determined by Waterfront Toronto in cooperation with the City. The implementation plan has been discussed with the City and has considered the changes in the stormwater quality facility location and the UV pretreatment sedimentation process.

The EBF SWQF project is divided into three phases:

- Phase1: construction of the EBF stormwater attenuation / equalization tank, installation of the pumps and installation of associated control equipment, at this time only the Bayside storm sewers would feed the EBF stormwater attenuation / equalization tank. At the completion of Phase 1, there will be OGS treatment, and the storage tank will discharge flow to the lake via pumps and the overflow pipe. A backwater valve at the lake side of the overflow will prevent backflow into the tank. The connection of the Dockside pipe to the storage tank will be done when the boardwalk is constructed (to support the dockside pipe). At that time, the overflow pipe will also serve as an inlet pipe.
- Phase 2: construction of the centralized SWQF at 480 Lake Shore Boulevard and construction of the forcemains to and from the centralized SWQF.
- Phase 3: construction of the Dockside and Bayside MHs, and the 1.2 m submerged pipe from Dockside MH to Bayside MH.

Phase 1 work will proceed upon approval of the addendum. Timing of construction of Phases 2 and 3 will be subject to funding and pace of development along the Waterfront.

9.0 ENVIRONMENTAL EFFECTS AND MITIGATION

9.1 Overview

The changes to the stormwater management concept proposed in this addendum results in less in-water work, hence a reduced impact to the environment since the 2009 Addendum. Notwithstanding, the potential environmental effects and mitigation are presented in the following sections as cited from the November 2009 Addendum.

It is noted that the boardwalk project is unaffected by the current Addendum.

9.2 Potential Environmental Effects

As part of this EA addendum process, an assessment of effects of the proposed project was conducted. This assessment examined the potential for effects that are expected to result from both short-term construction and long-term operations activities. Through this assessment, recommendations for mitigation and monitoring were made to avoid or minimize the anticipated effects. Waterfront Toronto is committed to the implementation of these mitigation measures.

This assessment considered effects with respect to the following components of the environment:

- Fish Habitat
- Surface Water
- Wildlife (Migratory Birds)
- Air Quality
- Noise / Vibration
- Socio-Economics (Including recreation)
- Future Land Use
- Cultural Resources
- Impacted Soils and Site Development
- Construction Dewatering

9.2.1 Fish Habitat

Description of Effect

Potential impacts to fish associated with the noise / vibration originating from pile driving / drilling activity include injury or death to fish. It is anticipated that fish will likely avoid the area when construction activity is underway. However, in the event that fish are immediately adjacent to pile driving they may sustain injury or death.

Pre-cast concrete and cast-in-place concrete (i.e. from the concrete pipes and dock wall repairs) has the potential to affect fish through the introduction of deleterious substances including alkaline leachate from uncured concrete as well as dust and chips from cured cement. Portland cement, the active ingredient in concrete, mortar and grout is highly alkaline when introduced into water; this resulting high alkalinity can be harmful or deadly to aquatic organisms. Furthermore, Portland cement consists of very fine particles and as a result its introduction into the water can increase turbidity. Concrete washwater also has the potential to be highly alkaline and has a very high content of suspended sediments. This project is anticipated to result in the harmful alteration, disruption or destruction (HADD) of fish habitat due to the loss of lakebed area associated with installation of the SWM system and pile construction to support the various structures (i.e. dockwall repairs and finger piers).

The loss of lakebed substrate is not anticipated to have a considerable adverse effect on fish or fish/aquatic habitat as the lakebed consists primarily of silt and there is a limited presence of fish community in the immediate area.

Description of Mitigation

For all in-water works to be conducted outside of the fisheries spawning window, an adaptive management approach will be taken. An adaptive management plan will be implemented in order to minimize impacts to fish associated with the proposed construction activities including but not limited to storm sewer installation, pile driving and the use of pre-cast and cast in place concrete. If deemed necessary through the adaptive management plan, the work area will be isolated by a sediment/silt curtain. If necessary due to the presence of fish, fish will be salvaged and relocated outside of the work area. The isolated work area will be inspected during construction to ensure that any fish that re-enter the work area are identified and relocated.

Any in-water construction activities required to occur during the TRCA / DFO identified spawning window (March 31-July 1) is subject to Agency review and approval.

Impacts associated with vibration / noise from pile driving /drilling, in-water construction will adhere to the permissible in-water timing window set forth by the TRCA to avoid impacts to fish during sensitive spawning, incubation and emergence periods unless otherwise approved by the appropriate Agencies (i.e. TRCA, DFO).

As a condition of the *Fisheries Act* authorization and as a part of the adaptive management plan, monitoring will be undertaken to assess the effectiveness of the silt curtain and adjustments will be made as necessary.

In order to mitigate the loss of fish habitat, fish habitat installation measures will be provided consistent with the DFO's guiding principle to achieve a "net gain" of the productive capacity of fish habitat. An Aquatic Habitat Enhancement Plan is being developed through discussions with the regulatory agencies (i.e., DFO, TRCA, etc.) and the incorporation of techniques identified in the Toronto Waterfront Aquatic Habitat Restoration Strategy (TWAHRS) to produce a net gain in fish and aquatic habitat for the project. The proposed Habitat Enhancement Plan along the East Bayfront dockwall (route of the 1200 mmø storm pipe) consists of constructing features to provide shelter and create forage habitat.

Monitoring of the habitat will be undertaken as per the monitoring plan that has been developed from the larger Central Waterfront Project (which is to occur for a 5 year period following the completion of the EBF-SWS Project).

Net Effect

A net positive effect is anticipated to result from the fish / aquatic habitat enhancement measures.

9.2.2 Surface Water

Description of Effect

During pile driving / drilling, impacts to water quality may result from suspended sediments and noise / vibration. Associated with the disturbance of lake sediments, there is also the potential for increased nutrient levels and trace metals related to the re-suspension of settled fines.

During placement of granular foundation for concrete maintenance holes, impacts to water quality may result from suspended sediments and noise / vibration. Associated with the disturbance of lake sediments, there is also the potential for increased nutrient levels and trace metals related to the re-suspension of settled fines.

There is a potential for accidental release of fuels or lubricants.

There is a potential for reduced water quality and clarity due to fine debris entering the water.

Description of Mitigation

Install and maintain silt and sediment controls as required according to the adaptive management plan (i.e. sediment curtain to be located close to the construction site), and monitor these controls to ensure they function effectively for the duration of the work phase.

Refuel vehicles and equipment away from shoreline.

Store all oils, lubricants, fuels and chemical products in secure areas to prevent their accidental release into the environment.

Capture, contain and clean up any spills and leaks immediately and report spills, as required, to the Ministry of the Environment's 24-hour spills hotline. Ensure that there is an adequate supply of clean-up materials on site as well as crews fully trained on their use.

Secure stockpiled materials where there is a risk that loose materials could be washed or floated away and enter the lake.

Ensure all equipment that comes into contact with surface water is free of leaks and is sufficiently cleaned and degreased.

Construction equipment must not be cleaned or stored within 30m of the Inner Harbour.

Where possible, conduct in-water work during calm conditions.

Ensure all materials placed below the high water mark are clean and free of silt and clay sized particles.

All materials must meet provincial guidelines governing placement of fill in water bodies. (The fill will consist of clean stone and concrete around the base related to habitat enhancement).

In order to minimize impacts associated with the installation of pre-cast concrete, the contractor shall physically remove (i.e., sweeping, water spray, etc.) all loose material (i.e., chips, dust) from pre-cast sections prior to installation. This will minimize the introduction of fine sediment that can potentially increase turbidity and alkalinity. Impacts to the aquatic community associated with cast-in-place concrete, placement of cement or grout below the high water mark will be minimized, where possible, through the implementation of construction methods to isolate the work area allowing work to occur in the dry. The work areas will remain isolated from the lake for a minimum of 48 hours prior to allowing contact with water to allow for concrete curing and minimize the potential for the introduction of alkaline leachate. Furthermore, all concrete construction works (i.e. installation of pre-cast concrete structures, cast-in place) at / below the high watermark will occur within the permissible in-water timing window as directed by the TRCA, unless otherwise approved.

Waste material associated with concrete construction including but not limited to concrete dust, concrete chips, concrete wash water will not be disposed of into the water and must be collected and disposed of off-site at an approved disposal site.

Net Effects

No net effects provided mitigation measures implemented.

Implementation of the stormwater management system will have a net positive and ongoing effect by improving water quality discharging to Lake Ontario.

9.2.3 Wildlife (Migratory Birds)

Description of Effect

Even though there is a lack of terrestrial habitat along the waterfront, there is still potential for minor disturbances to migratory birds during construction due to noise.

Description of Mitigation

See proposed mitigation for noise.

Net Effects

No net effects provided mitigation measures implemented.

9.2.4 Air Quality

Description of Effect

Some minimal release of dust will occur due to the construction activities.

Description of Mitigation

- Ensure emission control devices on equipment are functional and effective.
- Monitor dust levels during construction activities, and when dust levels become visually apparent spray water to minimize the release of dust. Use chemical dust suppressants only where necessary on problem areas.
- Use new or well-maintained heavy equipment and machinery, preferably fitted with muffler/exhaust system baffles, and engine covers.
- Comply with operating specifications for heavy equipment and machinery.
- Position portable emission sources (e.g., portable diesel engines) as far as practical from sensitive receptors.

- Minimize vehicle idling.

- Avoid construction activities with potential to release airborne particulates, during windy and prolonged dry periods.

- Cover or otherwise contain loose construction materials that have potential to release airborne particulates during their transport, installation or removal.

Net Effects

No net effects provided mitigation measures implemented.

9.2.5 Noise and Vibration

Description of Effect

- Short-term and intermittent noise associated with construction vehicles and activities. There are no residents in the immediate vicinity of the project site.

- Noise levels will be at nuisance (approximately 75-90 dBA) levels.

- Noise and vibration is expected to be generated during the pile driving / drilling activity.

Description of Mitigation

- Restrict construction activities to hours prescribed by local noise by-law.

- Ensure equipment is in sound working order.

- Workers will use appropriate noise protective equipment.

Net Effects

No net effects provided mitigation measures implemented.

9.2.6 Socio-Economics (Including Recreation)

Description of Effect

Noise and vibration during the construction period could disturb individuals involved in recreation activity in the area (e.g. boaters).

Description of Mitigation

Measures required during construction with respect to boating activity in the area include notices and signs to ensure that boats remain clear of the area.

Net Effects

No net effects provided mitigation measures implemented.

9.2.7 Future Land Use

Description of Effect

The proposed stormwater management system will facilitate future development in East Bayfront.

Description of Mitigation

None required.

Net Effects

Positive effect through the facility supporting future development plans for East Bayfront.

9.2.8 Cultural Resources

Description of Effect

No effect on cultural resources is anticipated as the area of disturbance is either on lands created by lakefill and / or has been heavily disturbed by previous commercial / industrial land use activity.

Description of Mitigation

None required.

Net Effects

No effects.

9.2.9 Impacted Soils and Site Development.

Description of Effect

The soils within the site are impacted through the previous use, requiring appropriate mitigation.

Description of Mitigation

Appropriate handling and disposal of excavated materials to meet provincial and municipal requirements will be undertaken. Backfilling underground services and structures with clean material will improve soil conditions.

The site will be developed respecting the surrounding uses including maintaining drainage.

Net Effects

Positive effect through removal of impacted materials and backfilling underground services and structures with clean material will improve soil conditions.

9.2.10 Construction Dewatering.

Description of Effect

During construction, it is expected that dewatering to facilitate excavation would be required. Given the soil and groundwater conditions of the area, the dewatering discharge will require mitigation.

Description of Mitigation

Obtain a Permit To Take Water (PTTW) for dewatering and City approval for dewatering and disposal during construction. Discharge will be compliant with the City's Sewer-Use By-Law.

Net Effects

No effects.

10.0 AGENCY AND STAKEHOLDER COMMUNICATION

The following list of agencies were part of the listed agencies and stakeholders in the East Bayfront Class EA Master Plan completed in January 2006, and were included as part of the circulation to review information provided on this addendum and were requested to provide comments:

- Canadian Environmental Assessment Agency
- Environment Canada
- Fisheries and Oceans Canada
- Toronto Port Authority
- Transport Canada
- Infrastructure Ontario
- Metrolinx
- Ontario Ministry of Aboriginal Affairs
- Ontario Ministry of the Attorney General
- Ontario Ministry of Citizenship and Immigration
- Ontario Ministry of the Environment
- Ontario Ministry of Health and Long-Term Care
- Ontario Ministry of Infrastructure
- Ontario Ministry of Municipal Affairs and Housing
- Ontario Ministry of Natural Resources
- Ontario Realty Corporation
- Ontario Ministry of Tourism, Culture and Sport
- Ontario Ministry of Transportation
- Aquatic Habitat Toronto
- Councillor Vaughan's Office
- Councillor McConnell's Office
- Emergency Medical Services Toronto
- Toronto Catholic District School Board
- Toronto District School Board
- Toronto Fire Services Headquarters
- Toronto Police Service
- Toronto Port Lands Company

- Toronto Public Health
- Toronto Public Library
- Toronto Region Conservation Authority
- Toronto Transit Commission
- Bell Canada
- Enbridge
- Enersource Corporation
- Hydro One, Land Building Services and Security
- Toronto Hydro Corporation
- Union Gas
- Anishinabek Nation: Union of Ontario Indians
- Association of Iroquois and Allied Indians
- Mississaugas of New Credit First Nation
- Cityzen
- Cityscape Holdings Inc c/o The Distillery Historic District
- Citizens for the Old Town
- CN
- Corus Entertainment
- Council of Commodores
- Fedex
- George Brown College
- Gooderham Worts Neighbourhood Association
- Hines
- Loblaws
- Nuko Investments - The Guvernment
- Port Lands Action Committee/Waterfront Action
- Redpath
- Royal Canadian Yacht Club
- St Lawrence Neighbourhood Association
- Toronto Passenger Vessel Association
- Waterfront BIA
- City of Toronto - Transportation Services
- City of Toronto - Toronto Water
- City of Toronto - Engineering and Construction Services

- City of Toronto – Community Planning
- City of Toronto - Toronto Water
- City of Toronto – Major Capital Infrastructure
- City of Toronto - Toronto Environment Office
- Waterfront Toronto
- West Don Lands Committee
- 3C Lakeshore Inc.
- Westin
- York Quay Neighbourhood Association
- Great Gulf Group of Companies
- Castlepoint Investments Inc. - FedEx
- Kintork Ontario - Parcel 208
- Daniels for 132 Queens Quay

The information package for the addendum which was forwarded to each of the above listed stakeholders has been included in Appendix, along with the form letter sent to each agency.

As part of this addendum, the stormwater quality facility updates were presented at a Stakeholder Meeting March 19, 2013 at a meeting held at the offices of Waterfront Toronto. Comments received from the stakeholders and agencies are summarized and addressed below.

Source	Comment:	Response:
TRCA	**For the long-term operation of the Keating Channel, drainage should be directed as far to the east end as technically feasible to provide circulation and avoid stagnation.**	**The clarified stormwater will be generally redirected back to the precinct where it came from. In the case of the EBF, drainage will outlet into the Lake via the existing Sherbourne Park Channel and water features.**

Additional correspondence from Agencies and Stakeholders has been included in Appendix C.

11.0 CONCLUSION

This addendum has considered the existing stormwater management infrastructure along the Waterfront, implemented under previous Class EA's, with a view to implementing a consistent and integrated solution across this area of the waterfront. The preferred option of integrating facilities via expansion minimizes initial construction costs as well as annual operational and lifecycle costs for the City.

This addendum has reviewed several options for the various components of the infrastructure and assessed and selected preferred options which are presented in the proposed design concept.

Stakeholders were consulted and attended a stakeholder presentation/meeting.

Infrastructure phasing includes components that will be constructed immediately following the 30-day review period and components that will be implemented as development proceeds and funding permits.

All flows discharging to the lake will have as a minimum oil-grit separator treatment prior to release, which in itself is an improvement over the status quo. Ultimately, all flows will have treatment to remove 80% total suspended solids and E.Coli to 100/100ml during the swimming season to achieve the City of Toronto criteria for design of such facilities.

From our review of environmental impacts we have concluded that there was no significant change over the previously approved designs with some reduction due to the reduced amount of in-water works needed. The project may be incorporated using mitigation measures that are normally incorporated into projects of this nature.

This addendum re-evaluated the stormwater quality options with consideration of the stormwater treatment systems already installed and / or proposed within the area. The revised stormwater management concept includes:

- Elimination of the large sediment tank along the 'dockwall';
- Elimination of the wetland integrated into the Parliament WaveDeck;
- Implementation of an equalization tank to attenuate the peak flows;

- Implementation of pumping and forcemain to convey stormwater to a stormwater quality treatment facility;
- Modifications to sewers to convey flows to the equalization tank; and
- Implementation of piping to return clarified stormwater to the existing UV disinfection system located in Sherbourne Common Park.

In order to implement a new integrated stormwater management concept which is also conducive to staging as development proceeds, various locations for a tank and treatment facility needs were identified and evaluated. In addition, a consistent technology to treat the range of stormwater quality coming from the storage tank was established to meet the stringent influent requirements of both the Wet Weather Flow Management Guidelines (November 2009 (WWFMG) and the existing UV disinfection system located in Sherbourne Common Park.

This Addendum facilitates the changes that are proposed in Stormwater Quality since filing of the East Bayfront Class EA Master Plan (January 2006) and Addendum (November 2009).

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APPENDIX A

Background Information on the Previously Proposed End-of-Pipe Measures per the 2006 Class EA Master Plan

Excerpts from:

East Bayfront Class Environmental Assessment Master Plan, dated January 2006, prepared by LEA Consulting Ltd., et al.

Throughout Appendix A, refer to Exhibit 7-9

The existing stormwater conveyance system within the East Bayfront consists of two combined sewer overflows (CSO's) traversing through the site, with lake discharges near Lower Sherbourne Street and at Parliament Slip.

The existing conveyance system would be intercepted via new storm sewers which will provide an opportunity for treatment prior to being re-introduced into the CSO pipe and discharged into the lake. The new storm sewers would also convey stormwater drainage from the redeveloped areas for common treatment. Treatment would consist of sedimentation, filtration and disinfection. Ultimately, combined sewer overflows will be collected in the new CSO interceptor, and treated.

Separate conveyance systems were recommended to differentiate between clean (rooftop) and dirty (surface) runoff. Clean runoff was to be treated and utilized at source as much as possible, with the remainder conveyed via sewers and surface features to the end-of-pipe facility to accommodate a 5-year design storm.

Lower Sherbourne Street CSO & End-of-Pipe Facility

Where the westerly conveyance system discharges into the Lower Sherbourne Street CSO on Queens Quay East, it will be disconnected and redirected via a new storm sewer to a sedimentation tank proposed at the south end of Sherbourne Common Park. Dirty (surface) runoff generated by a 50 mm rain event will be conveyed via new and existing storm sewers to the sedimentation tank with a size of approximately 4,000 m^3 (500 m^3/ha @ 100% imperviousness). Flows in excess of a 50 mm rain event will be directed to the filters and UV disinfection unit also located in Sherbourne Common Park.

Clean (rooftop) runoff would be conveyed via depressed / conventional sewers to the filter and UV disinfection unit in Sherbourne Common Park, bypassing the sedimentation tank. After treatment, together with the settled-out dirty water, all stormwater would then be discharged into the Lower Sherbourne Street CSO.

Parliament Street / Small Street CSO & End-of-Pipe Facility

Where the easterly conveyance system discharges into the Parliament Street / Small Street CSO on Queens Quay East, it will be disconnected and redirected via a new sewer to a sedimentation tank proposed at the north end of the Parliament Street Slip. Dirty (surface) runoff generated by a 50 mm rain event will be conveyed via new and existing storm sewers to the sedimentation tank with a size of approximately 3,300 m^3 (500 m^3/ha @ 100% imperviousness)[2]. Flows in excess of a 50 mm rain event will be directed to the filters and UV disinfection unit also located in the Parliament Street Slip.

Clean (rooftop) runoff would be conveyed via storm sewers to the filter and UV disinfection unit in Parliament Street Slip, bypassing the sedimentation tank. After treatment, together with the settled-out dirty water, all stormwater would then be discharged into the Parliament Street / Small Street CSO.

[2] The volume of the 3,300m^3 sedimentation tank includes an allowance of 800m^3 of storage for a 50 mm rain event representing an area of dirty stormwater collection of 1.6 ha east of Parliament Street at 100% imperviousness. This represents the area east of Parliament Street which is expected to be too low for gravity delivery to a stormwater management quality pond.


East Bayfront
Stormwater System EA Classification
TORONTO WATERFRONT
Exhibit 7-9: Stormwater System EA Classification

APPENDIX B

Background Information on the Previously Proposed End-of-Pipe Measures per the 2009 Class EA Addendum

Excerpts from:

East Bayfront Class Environmental Assessment Master Plan Addendum for Stormwater Collection and Management System, dated November 2009, prepared by Dillon Consulting Limited and The Municipal Infrastructure Group Ltd.

The 2009 Addendum to the Class EA Master Plan for the East Bayfront Precinct considered consolidation of the sedimentation tanks into one large linear tank located inside the lake beneath the boardwalk.

The sedimentation tank would be installed along the existing dockwall from a point just east of the Jarvis Street Slip to and along the western wall of the Parliament Street Slip, then crossing the Parliament Street Slip creating a wetland isolated from the Inner Harbour.

An evaluation of the end-of-pipe volume requirements yielded a desired permanent pool volume of 9,700 m^3, consistent with that required to achieve a 95% suspended solid reduction, along with an active storage component of 4,200 m^3 that provides for the capture and attenuation of runoff generated by all rainfall events up to and including a 25 mm (first flush) event. Based on the height of the linear tank, the available permanent pool would be approximately 60,000 m^3 (Note: Although a permanent pool volume in excess of the desired 9,700 m^3 is not strictly required to achieve the water quality and clarity objectives, the additional volume represented an ancillary benefit resulting from the active volume and footprint requirements, and suggested that the facility will provide treatment for quality, sediment, and *E. coli* to the maximum extent possible).

The tank system will culminate in a wetland that would be installed at the north end of Parliament Slip, beneath the proposed WaveDeck[3]. Openings within the overlying WaveDeck would provide opportunities for vegetated elements to grow in the wetland for potential phytoremediation of contaminants and exposure of clarified stormwater to sunlight for potential natural UV disinfection (Exhibit 4-2).

Treatment via the 'passive' components of the stormwater management system yields clarified stormwater of sufficient quality and clarity for effective UV disinfection. Clarified stormwater would be conveyed to the proposed UV system in Sherbourne Common Park via pumping.

[3] The WaveDeck was not assessed as part of the 2009 Addendum, since it was assessed by Waterfront Toronto as part of a separate CEAA screening process.

Exhibit 4-1: Waters Edge Promenade and Stormwater Management –Site Context Plan

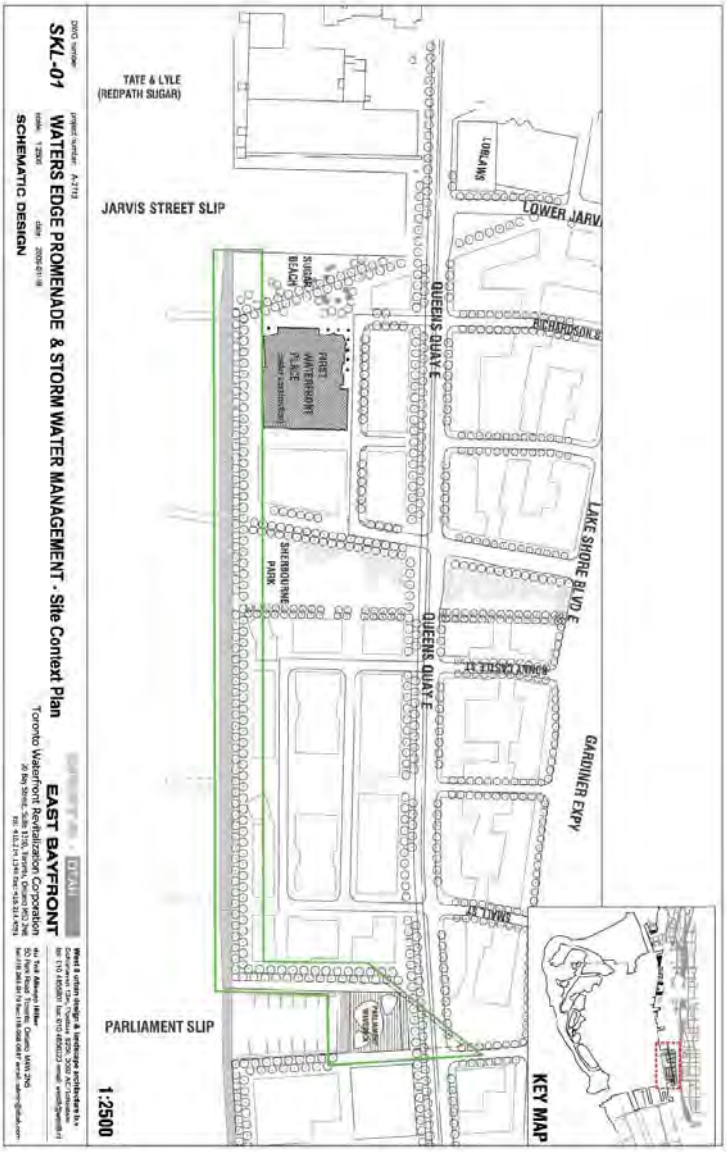

Exhibit 4-2: Waters Edge Promenade and Stormwater Management - Concept Drawing

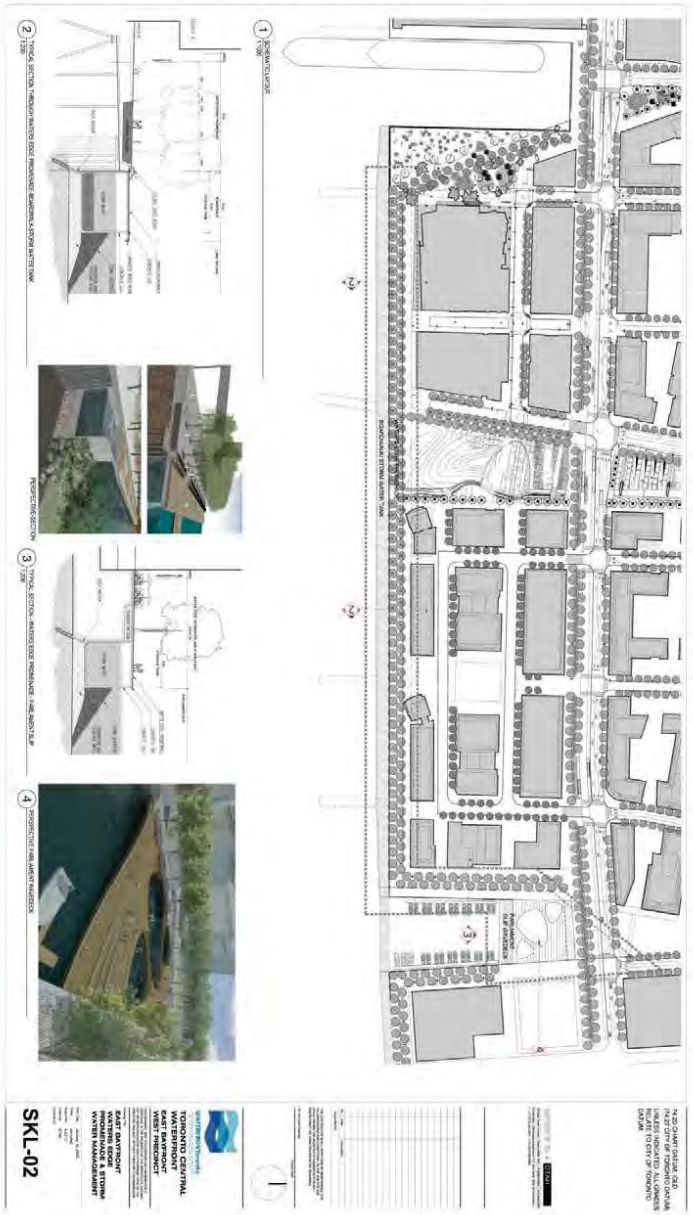

Exhibit 4-3: Waters Edge Promenade and Stormwater Management System

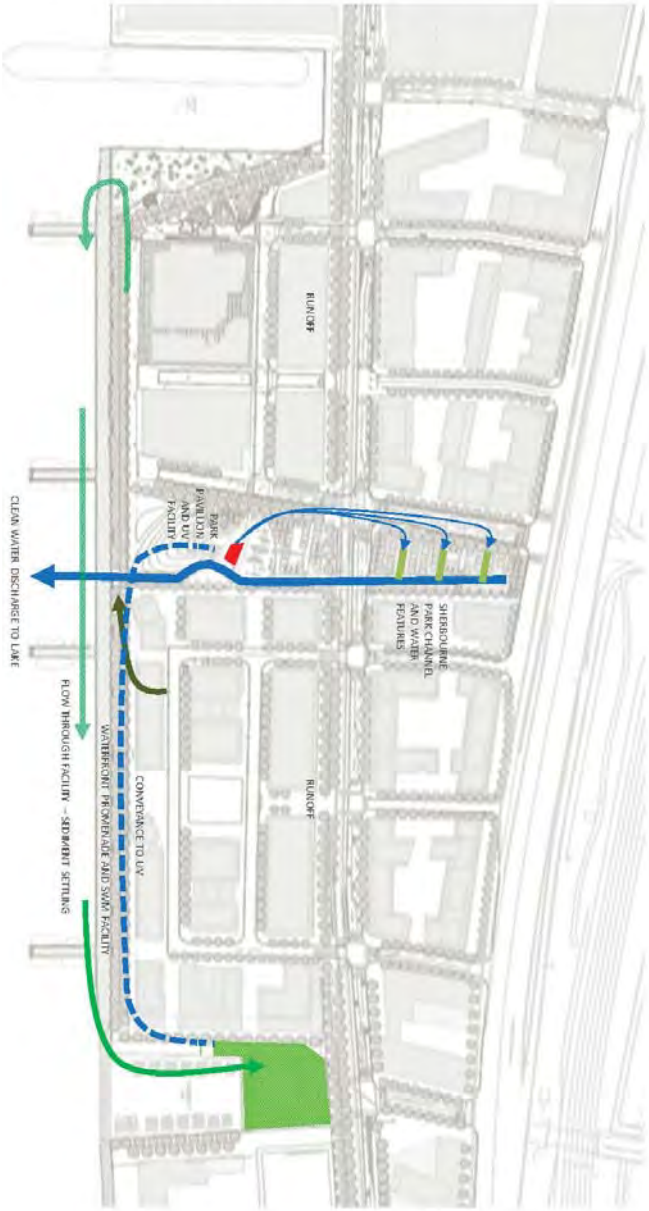

Exhibit 4-4: Waters Edge Promenade and Stormwater Management – Public Realm

APPENDIX C

Information Packages and Responses from Agencies and Stakeholders

Centralized Stormwater Quality Facility Class EA Addendum - Stakeholder List

Affiliation	Full Name	First Name1	Last Name	Job Title	Street Address 1	Street Address 2	City	Province	Postal Code	Email Address
Canadian Environmental Assessment Agency	Anjala Puvananathan	Anjala	Puvananathan	Toronto & East York District	55 St Clair Ave E	Room 907	Toronto	ON	M4T 1M2	
Environment Canada	Jennifer McKay	Jennifer	McKay	Manager - Great Lakes Environment Office	4905 Dufferin St		Downsview	ON	M5H 5T4	
Fisheries and Oceans Canada	Sara Eddy	Sara	Eddy	Fish Habitat Biologist - OGLA - Program Services	867 Lakeshore Rd		Burlington	ON	L7R 4A6	Sara.eddy@dfo-mpo.gc.ca
Fisheries and Oceans Canada	Susan Doka	Susan	Doka		867 Lakeshore Rd		Burlington	ON	L7R 4A6	
Toronto Port Authority	Ken Lundy	Ken	Lundy	Director of Infrastructure, Planning & Environment	60 Harbour St		Toronto	ON	M5J 1B7	
Transport Canada				Environmental Coordinator	4900 Yonge St		North York	ON	M2N 6A5	
Infrastructure Ontario	Trevor Dauphinee	Trevor	Dauphinee	Director, Capital Planning	7 Queen's Park Cres.	6th Flr	Toronto	ON	M7A 1Y7	
Metrolinx	Leslie Woo	Leslie	Woo	Vice President, Policy, Planning & Innovation	20 Bay St	Suite 600	Toronto	ON	M5J 2W3	
Metrolinx	Dan Francey	Dan	Francey	Manager of Transportation Planning and Development	20 Bay St	Suite 600	Toronto	ON	M5J 2W3	
Ontario Ministry of Aboriginal Affairs	David Pickles	David	Pickles	Team Lead - Consultation Unit	160 Bloor St E	4th Flr	Toronto	ON	M7A 2E6	david.pickles@ontario.ca
Ontario Ministry of the Attorney General	The Honourable John Gerretsen	John	Gerretsen	Attorney General	720 Bay St	11th Flr, McMurtry-Scott Building	Toronto	ON	M7A 2S9	attorneygeneral@ontario.ca
Ontario Ministry of Citizenship and Immigration	The Honourable Michael Coteau	Michael	Coteau	Minister of Citizenship and Immigration	400 University Ave	6th Flr	Toronto	ON	M7A 2R9	info.mci@ontario.ca
Ontario Ministry of the Environment	The Honourable Jim Bradley	Jim	Bradley	Minister of the Environment	77 Wellesley Street West	11th Floor, Ferguson Block	Toronto	ON	M7A 2T5	minister.moe@ontario.ca
Ontario Ministry of the Environment	Kathleen Brown	Kathleen	Brown		5775 Yonge St.	9th Flr	Toronto	ON	M2M 4J1	
Ontario Ministry of the Environment	Dan Delaquis	Dan	Delaquis	Environmental Resource Planner & Environmental Assessment C	5775 Yonge St.	8th Flr	Toronto	ON	M2M 4J1	Dan.Delaquis@ontario.ca
Ontario Ministry of the Environment	Kelly Brown	Kelly	Brown	Manager - Water Policy	135 St Clair Ave W	6th Flr	Toronto	ON	M4V 1P5	kelly.brown@ontario.ca
Ontario Ministry of the Environment	George Karlos	George	Karlos	Manager (Acting) - Environmental Assessment Services	2 St Clair Ave W	12A	Toronto	ON	M4V 1L5	george.karlos@ontario.ca
Ontario Ministry of Health and Long-Term Care	The Honourable Deb Matthews	Deb	Matthews	Minister of Health and Long-Term Care	900 Bay Street	M-1B114, Macdonald Block	Toronto	ON	M7A 1N3	
Ontario Ministry of Infrastructure	Derek Goring	Derek	Goring	Vice-President, Land Development - Ontario Lands	1 Dundas St W	20th Flr	Toronto	ON	M5G 2L5	derek.goring@infrastructureontario.ca
Ontario Ministry of Infrastructure	Joseph Lin	Joseph	Lin	Manager, Surveys & Geomatics - Real Estate Management	1 Dundas St W	20th Flr	Toronto	ON	M5G 2L5	joseph.lin@infrastructureontario.ca
Ontario Ministry of Municipal Affairs and Housing	David Sit	David	Sit	Manager - Planning Projects	777 Bay St	2nd Flr	Toronto	ON	M5G 2E5	david.sit@ontario.ca
Ontario Ministry of Municipal Affairs and Housing	Heather Gardiner	Heather	Gardiner		777 Bay St	2nd Flr	Toronto	ON	M5G 2E5	
Ontario Ministry of Municipal Affairs and Housing	Audrey Bennett	Audrey	Bennett	Director - Provincial Planning Policy Branch	777 Bay St	14th Flr	Toronto	ON	M5G 2E5	audrey.bennett@ontario.ca
Ontario Ministry of Natural Resources	Ray Pichette	Ray	Pichette	Director - Natural Heritage, Lands and Protected Spaces Branch	300 Water St	5th Flr N	Peterborough	ON	K9J 8M5	ray.pichette@ontario.ca
Ontario Realty Corporation	Serge Chukseev	Serge	Chukseev		1 Dundas St W	Suite 200	Toronto	ON	M5G 2L5	
Ontario Ministry of Tourism, Culture and Sport	Laura Hatcher	Laura	Hatcher	Heritage Planner - Cultural Services Unit	401 Bay St	Suite 1700	Toronto	ON	M7A 0A7	laura.hatcher2@ontario.ca
Ontario Ministry of Tourism, Culture and Sport	Michael Johnson	Michael	Johnson	Manager	400 University Ave	4th Floor	Toronto	ON	M7A 2R9	
Ontario Ministry of Tourism, Culture and Sport	Winston Wong	Winston	Wong		900 Bay St	5th Floor, Mowat Block	Toronto	ON	M7A 1L2	
Ontario Ministry of Transportation	The Honourable Glen Murray	Glen	Murray	Minister of Transportation	77 Wellesley Street West	3rd Floor, Ferguson Block	Toronto	ON	M7A 1Z8	minister.moe@ontario.ca
Aquatic Habitat Toronto	Meg St. John (TRCA)	Meg	St. John (TRCA)	Coordinator Aquatic Habitat Toronto	5 Shoreham Drive		Downsview	ON	M3N 1S4	mstjohn@trca.on.ca
Councillor Vaughan's Office	Councillor Adam Vaughan	Adam	Vaughan		100 Queen St W	Suite C50	Toronto	ON	M5H 2N2	
Councillor McConnell's Office	Councillor Pam McConnell	Pam	McConnell		100 Queen St W	Suite A7	Toronto	ON	M5H 2N2	
Emergency Medical Services Toronto	Garrie Wright	Garrie	Wright	Deputy Chief	4330 Dufferin St		Toronto	ON	M3H 5R9	
Emergency Medical Services Toronto	Ric Rangel-Bron	Ric	Rangel-Bron		4330 Dufferin St		Toronto	ON	M3H 5R9	
Toronto Catholic District School Board	Bruce Rodrigues	Bruce	Rodrigues	Director of Education	80 Sheppard Ave E		Toronto	ON	M2N 6E8	
Toronto Catholic District School Board	John Volek	John	Volek	Manager of Planning	80 Sheppard Ave E		Toronto	ON	M2N 6E8	
Toronto District School Board	Chris Spence	Chris	Spence	Director of Education	5050 Yonge St		Toronto	ON	M2N 5N8	chris.spence@tdsb.on.ca
Toronto Fire Services Headquarters	Mike McCoy	Mike	McCoy	Acting Deputy Fire Chief/Director, Operations Command	4330 Dufferin St		Toronto	ON	M3H 5R9	
Toronto Police Service	Staff Superintendent Jane Wilcox	Jane	Wilcox	Unit Commander - Operational Services	40 College St		Toronto	ON	M5G 2J3	
Toronto Port Lands Company	Michael Kreljevic	Michael	Kreljevic	President & CEO	123 Front St W	Suite 1610	Toronto	ON	M5J 2M2	
Toronto Public Health	David McKeown	David	McKeown	Medical Officer of Health	277 Victoria St	5th Flr	Toronto	ON	M5B 1W2	
Toronto Public Health	Reg Ayre	Reg	Ayre		44Victoria St	18th Flr	Toronto	ON	M5C 1V2	
Toronto Public Library	Leesa Tossios	Leesa	Tossios	Library Service Manager	789 Yonge St		Toronto	ON	M4W 2G8	
Toronto Region Conservation Authority	Steve Heuchert	Steve	Heuchert	Manager, Development, Planning and Regulation	5 Shoreham Drive		Downsview	ON	M3N 1S4	
Toronto Region Conservation Authority	Brian Denney	Brian	Denney	Chief Administrative Officer	5 Shoreham Drive		Downsview	ON	M3N 1S4	
Toronto Region Conservation Authority	Don Haley	Don	Haley		5 Shoreham Drive		Downsview	ON	M3N 1S4	
Toronto Transit Commission	Bill Dawson	Bill	Dawson	Manager, Service Planning	1900 Yonge St		Toronto	ON	M4S 1Z2	
Bell Canada	John La Chapelle	John	La Chapelle	Manager - Right of Way	100 Borough Dr	Floor 5 Blue	Scarborough	ON	M1P 4W2	
Bell Canada	Ellen Hyde	Ellen	Hyde	Implementation Manager	100 Borough Dr	Floor 5 Blue	Scarborough	ON	M1P 4W2	
Bell Canada	Sandra Kofani	Sandra	Kofani		76 Adelaide St W	Flr 7	Toronto	ON	M5H 1P6	
Enbridge	Edwin Makkinga	Edwin	Makkinga		500 Consumers Rd		North York	ON	M2J 1P8	
Enersource Corporation	Raymond Rauber	Raymond	Rauber	Vice President, Engineering and Operations	3240 Mavis Rd		Mississauga	ON	L5C 3K1	
Enersource Corporation	Sabrina Scott	Sabrina	Scott		3240 Mavis Rd		Mississauga	ON	L5C 3K1	
Hydro One, Land Building Services and Security	Mike Sheehan	Mike	Sheehan	Vice-President	483 Bay St		Toronto	ON	M5G 2P5	
Hydro One, Land Building Services and Security	Anthony Lerullo	Anthony	Lerullo		483 Bay St		Toronto	ON	M5G 2P5	
Toronto Hydro Corporation	Ivano Labricciosa	Ivano	Ivano Labricciosa	Senior Vice President, Asset Management	14 Carlton St		Toronto	ON	M5B 1K5	
Toronto Hydro Corporation	Dan Stanoev	Dan	Stanoev		14 Carlton St		Toronto	ON	M5B 1K5	
Union Gas	Enzo Greco	Enzo	Greco	Construction Project Manager	360 Strathearne Avenue N.	P.O. Box 10	Hamilton	ON	L8N 3A5	
Anishinabek Nation: Union of Ontario Indians	Grand Council Chief Patrick Madahbee	Patrick	Madahbee		1 Migizi Mikan		North Bay	ON	P1B 8J8	
Association of Iroquois and Allied Indians	Grand Chief Gord Peters	Gord	Peters		387 Princess Ave		London	ON	N6B 2A7	
Mississaugas of New Credit First Nation	Chief M. Brian LaForme	M. Brian	LaForme		8545 Townline Rd	RR 1	Hagersville	ON	N0A 1H0	bryanlaforme@newcreditfirstnation.com
Cityzen	Paulo Stellato	Paulo	Stellato		56 The Esplanade	Suite 308	Toronto	ON	M5E 1A7	pstellato@cityzen.ca
Cityscape Holdings Inc c/o The Distillery Historic District	David Jackson	David	Jackson	Partner	9 Trinity Street	Suite 200	Toronto	ON	M5A 3C4	dj@thedistillerydistrict.com
Citizens for the Old Town	Rollo Myers	Rollo	Myers		159 King St E		Toronto	ON	M5C 1G9	rollomyers@sympatico.ca
Citizens for the Old Town	Michael Comstock	Michael	Comstock		159 King St E		Toronto	ON	M5C 1G9	michael.comstock@rogers.com
Clockwork Productions Inc	To Whom It May Concern	To Whom It May Concern			~~162 Queens Quay E~~		~~Toronto~~	~~ON~~	~~M5A 3Y5~~	
CN	John MacTaggart	John	MacTaggart		4 Welding Way		Concord	ON	L4K 1B9	
Corus Entertainment	Julie Edwards	Julie	Edwards	Vice-President, Facilities and Administration	Corus Quay	25 Dockside Dr	Toronto	ON	M5A 0B5	julie.edwards@corusent.com
Council of Commodores	Ron Merideth-Jones	Ron	Merideth-Jones							rm-jcommcouncil@bell.net
Docke Shoppe	To Whom It May Concern	To Whom It May Concern			~~162 Queens Quay E~~		~~Toronto~~	~~ON~~	~~M5A 3Y5~~	
Fedex	To Whom It May Concern	To Whom It May Concern			215 Lakeshore Blvd E		Toronto	ON	M5A 1E7	
George Brown College	Eugene Harrigan	Eugene	Harrigan	Vice-President, Corporate Services	PO Box 1015	Station B	Toronto	ON	M5T 2T9	eharriga@georgebrown.ca
Gooderham Worts Neighbourhood Association	Julie Beddoes	Julie	Beddoes							jbeddoes0507@rogers.com
Hines	Avi Tesciuba	Avi	Tesciuba	Managing Director	1 Dundas St W	Suite 2108	Toronto	ON	M5G 1Z3	avi.tesciuba@hines.com
Loblaws	Mario Fatica	Mario	Fatica	VP, Planning Development and Approvals	1 President's Choice Circle		Brampton	ON	L6Y 5S5	mario.fatica@loblaw.ca
Nuko Investments - The Guvernment	Murray Blankstein	Murray	Blankstein		132 Queens Quay East		Toronto	ON	M5A 1B6	mb.nuko@bell.net
Port Lands Action Committee/Waterfront Action	Dennis Findlay	Dennis	Findlay							dennisfindlay@rogers.com
Redpath	Andrew Judge	Andrew	Judge		95 Queens Quay East		Toronto	ON	M5E 1A3	andrew.judge@redpathsugar.com
Royal Canadian Yacht Club	Rodney Smith	Rodney	Smith		141 St George St		Toronto	ON	M5R 2L8	rksmith l@sympatico.ca
Royal Canadian Yacht Club	Carson Woods	Carson	Woods				Toronto	ON		cwoods@cwal.ca
St Lawrence Neighbourhood Association	Robert Sherrin	Robert	Sherrin		230 The Esplanade		Toronto	ON	M5A 4J6	rsherrin@sympatico.ca
St Lawrence Neighbourhood Association	Sylvia Pellmen	Sylvia	Pellmen		230 The Esplanade		Toronto	ON	M5A 4J6	slyviapellman@sympatico.ca
Toronto Passenger Vessel Association	Jill Richardson-Hicks	Jill	Richardson-Hicks	President	390 Queens Quay W	Suite 814	Toronto	ON	M5V 3A6	jill@yankeelady.ca
Waterfront BIA	Kevin Currie	Kevin	Currie	Chairman	207 Queens Quay W	PO Box 100	Toronto	ON	M5J 1A7	kevin@wheelexcitement.ca
Waterfront BIA	Carol Jolly	Carol	Jolly	Executive Director	207 Queens Quay W	PO Box 100	Toronto	ON	M5J 1A7	info@waterfrontbia.com
City of Toronto	Angus Cranston	Angus	Cranston	Project Manager, Waterfront	100 Queens St W	18th Flr. E	Toronto	ON	M5H 2N2	
City of Toronto - Transportation Services	John Mende	John	Mende	Director, Transportation Infrastructure Management	100 Queen St W	22th Flr. E	Toronto	ON	M5H 2N2	
City of Toronto - Toronto Water	Lou Di Gironimo	Lou	Di Gironimo	General Manager	100 Queen St W	24th Flr. E	Toronto	ON	M5H 2N2	
City of Toronto	Stephen Schijns	Stephen	Schijns	Manager, Infrastructure Planning	100 Queen St W	22nd Flr. E	Toronto	ON	M5H 2N2	
City of Toronto - Engineering and Construction Services	John Kelly	John	Kelly	Director (Acting)	55 John St	16th Flr	Toronto	ON	M5V 3C6	
City of Toronto - Engineering and Construction Services	Greg Horgan	Greg	Horgan	Senior Engineer, Toronto & East York District	55 John St	16th Flr	Toronto	ON	M5V 3C6	
City of Toronto - Toronto Water	Michael D'Andrea	Michael	D'Andrea	Director, Water Infrastructure Management	55 John St	18th Flr	Toronto	ON	M5V 3C6	
City of Toronto - Toronto Water	Les Arishenkoff	Les	Arishenkoff	Engineer, Water Infrastructure Management	55 John St	18th Flr	Toronto	ON	M5V 3C6	
City of Toronto - Toronto Water	Ted Bowering	Ted	Bowering	Manager, Water Infrastructure Management	55 John St	18th Flr	Toronto	ON	M5V 3C6	

Centralized Stormwater Quality Facility Class EA Addendum - Stakeholder List

Affiliation	Full Name	First Name1	Last Name	Job Title	Street Address 1	Street Address 2	City	Province	Postal Code	Email Address
City of Toronto	Jeffrey Climans	Jeffrey	Climans	Director, Major Capital Infrastructure Coordination Office	100 Queen St W	21st Flr. E	Toronto	ON	M5H 2N2	
City of Toronto	Lawson Oates	Lawson	Oates	Director, Toronto Environment Office	100 Queen St W	21st Flr. E	Toronto	ON	M5H 2N2	
City of Toronto	Gwen McIntosh	Gwen	McIntosh	Director (Acting), Waterfront Secretariat	100 Queen St W	12th Flr. E	Toronto	ON	M5H 2N2	
City of Toronto	Kyle Knoeck	Kyle	Knoeck	Senior Planner, Community Planning, Toronto & East York Distric	100 Queens St W	18th Flr. E	Toronto	ON	M5H 2N2	kknoeck@toronto.ca
Waterfront Toronto	Christopher Glaisek	Christopher	Glaisek	VP, Planning and Design	20 Bay St	Suite 1310	Toronto	ON	M5J 2N8	
Waterfront Toronto	Tony Medeiros	Tony	Medeiros		20 Bay St	Suite 1310	Toronto	ON	M5J 2N8	
Waterfront Toronto	Dave Madeira	Dave	Madeira		20 Bay St	Suite 1310	Toronto	ON	M5J 2N8	
Waterfront Toronto	Amanda Santo	Amanda	Santo		20 Bay St	Suite 1310	Toronto	ON	M5J 2N8	
Waterfront Toronto	Simon Karam	Simon	Karam		20 Bay St	Suite 1310	Toronto	ON	M5J 2N8	
Waterfront Toronto	Meg Davis	Meg	Davis		20 Bay St	Suite 1310	Toronto	ON	M5J 2N8	
Waterfront Toronto	David Kusturin	David	Kusturin		20 Bay St	Suite 1310	Toronto	ON	M5J 2N8	
West Don Lands Committee	Cindy Wilkey	Cindy	Wilkey							wilkeyc@lao.on.ca
West Don Lands Committee	George Hume	George	Hume							george.hume@rogers.com
3C Lakeshore Inc.	Elsa Fancello	Elsa	Fancello							elsafancello@gmail.com
Westin	Kevin Kierstead	Kevin	Kierstead							kevinkeirstead@westin.com
York Quay Neighbourhood Association	Braz Menezes	Braz	Menezes							bmenezes@sympatico.ca
York Quay Neighbourhood Association	James Russell	James	Russell							russell.communicate@gmail.com
York Quay Neighbourhood Association	Ulla Colgrass	Ulla	Colgrass							colgrass@sympatico.ca
Great Gulf Group of Companies	Geoff Matthews	Geoff	Matthews							geoff@greatgulfhomes.com
Castlepoint Investments Inc. - FedEx	Alfredo Romano	Alfredo	Romano							alfredoromano@gmail.com
Kintork Ontario - Parcel 208	Larry Torkin	Larry	Torkin							ltorkin@bellnet.ca
Daniels for 132 Queens Quay	Neil Pattison (on behalf of Blankstein and	Neil	Pattison							npattison@danielscorp.com
Daniels for 132 Queens Quay	Niall Haggart, EVP	Niall	Haggart, EVP							nhaggart@danielscorp.com

R.V. Anderson Associates Limited
engineering · environment · infrastructure

2001 Sheppard Avenue East Suite 400
Toronto Ontario M2J 4Z8 Canada
Tel 416 497 8600 Fax 416 497 0342
www.rvanderson.com

March 5, 2013 RVA 071345

STAKEHOLDER MAILING LIST

Attention:

Dear :

Re: Addendum to East Bayfront Class Environmental Assessment Master Plan
to Update Stormwater Management Facilities

Waterfront Toronto is undertaking an addendum to the East Bayfront Class Environmental Assessment Master Plan (2006) to update the stormwater management aspects. Refer to the map showing the Study Area (on reverse side). This addendum is being done in accordance with the requirements of the Municipal Class Environmental Assessment, October 2006, as amended in 2007 and 2011.

A stakeholder meeting will be held on Tuesday, March 19, 2013 at 4:00 p.m. at the offices of Waterfront Toronto, 20 Bay Street, Suite 1310, Toronto, Ontario. Personnel will be available to discuss the updated plans.

If you are unable to attend, the information package from the meeting may be obtained by contacting:

R.V. Anderson Associates Limited
Ken Wallace, P.Eng., PMP
kwallace@rvanderson.com
(416) 497-8600 ext. 336

Comments are requested to be provided within the first two weeks following the meeting (by April 2, 2013).

Yours very truly,

R.V. ANDERSON ASSOCIATES LIMITED

Ken Wallace, P.Eng., PMP
Associate

KPW:bgm

Encls.

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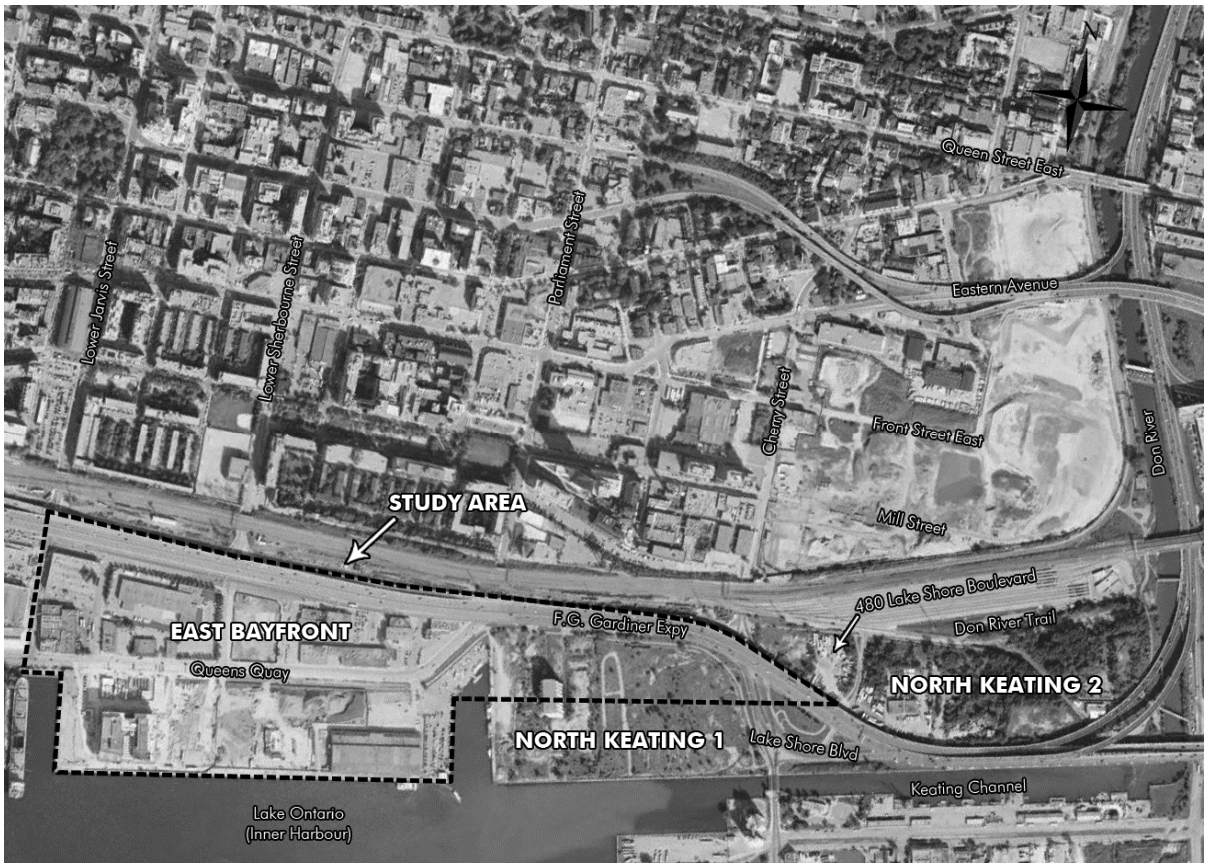

N
Queen Street East
Eastern Avenue
Lower Jarvis Street
Lower Sherbourne Street
Parliament Street
Cherry Street
Front Street East
Don River
STUDY AREA
Mill Street
480 Lake Shore Boulevard
F.G. Gardiner Expy
Don River Trail
EAST BAYFRONT
Queens Quay
NORTH KEATING 2
NORTH KEATING 1
Lake Shore Blvd
Keating Channel
Lake Ontario
(Inner Harbour)

Ken P. Wallace

From: EnviroOnt <EnviroOnt@tc.gc.ca>
Sent: Tuesday, April 16, 2013 10:06 AM
To: Ken P. Wallace
Subject: West Don Lands and East Bayfront Class EA Master Plan NEATS 35302
Attachments: RDIMS-#6077714-v2-NWP_APP_GUIDE_EN.PDF; Application Form June 2012.pdf

Thank you for the information regarding the above referenced project. We have reviewed the information, and note the following:

Please update your correspondence list – Please remove Jennifer Hughes and Monique Mousseau and replace with:
Environmental Coordinator
Transport Canada - Ontario Region
4900 Yonge Street 4th Floor (PHE)
North York, ON
M2N 6A5

Transport Canada is responsible for the administration of the *Navigable Waters Protection Act* (NWPA), which prohibits the construction or placement of any "works" in navigable waters without first obtaining approval. If any of the related project undertakings cross or affect a potentially navigable waterway, the proponent should prepare and submit an application in accordance with the requirements as outlined in the attached Application Guide and Form. Any questions about the NWPA application process should be directed to the Navigable Waters Protection Program at **(519) 383-1863** or NWPontario-PENontario@tc.gc.ca.

Please review the *Minor Works and Waters (Navigable Waters Protection Act) Order*, established to outline the specific standards and criteria under which Transport Canada considers a work as a minor and does not require an application under the NWPA. It is the responsibility of the applicant, prior to submitting an application to the Navigable Waters Protection Program for review, to assess whether their work meets the criteria, as described, and, therefore, falls within one of the excluded classes. An application will only be required if it is determined that the work cannot meet the criteria established for that particular "class" of excluded work**.**

Transport Canada is also responsible for inspecting and auditing federally regulated railway companies that are subject to the *Railway Safety Act.* Transport Canada also regulates some provincial shortlines from the Province of Ontario that are part of an Agreement between the Federal Government and the Province of Ontario. The *Railway Safety Act*, with related regulations and rules, provides the legislative and regulatory framework for safe railway operations in Canada. The rail safety program develops, implements and promotes safety policy, regulations, standards and research, and in the case of railway grade crossings, subsidizes safety improvements. A list of all the Rail Safety legislations (the *Act*, Regulations, Rules, Guidelines, Policies and Standards) that applies to the federally regulated railways, can be found here:

http://www.tc.gc.ca/eng/railsafety/legislation.htm

The *Act* also addresses the construction and alteration of railway works, the operation and maintenance of railway equipment and certain non-railway operations that may affect the safety of federally regulated railways. If a proposed railway work is of a prescribed kind, pursuant to the *Notice of Railway Works Regulations*, the proponent shall not undertake the work unless it has first given notice of the work in accordance with the regulation. More information related to railway works is available at the following internet sites:

· *Railway Safety Act*: http://www.tc.gc.ca/acts-regulations/acts/1985s4-32/menu.htm

- *Notice of Railway Works Regulations*: http://laws.justice.gc.ca/en/SOR-91-103/
- *Standards Respecting Pipeline Crossings Under Railways*: http://www.tc.gc.ca/eng/railsafety/standards-tce10-236.htm
- *Guideline on Requesting Approval to Undertake Certain Railway Works*: http://www.tc.gc.ca/eng/railsafety/guideline-283.htm

General inquiries about the Rail Safety Program can be directed to RailSafety@tc.gc.ca or by calling 613-998-2985.

Please address future correspondence to the Environment and Engineering group to the undersigned address:

Thank you,

Environmental Coordinator, Transport Canada - Ontario Region (PHE)
4900 Yonge Street, North York, ON M2N 6A5 EnviroOnt@tc.gc.ca

Introduction

The ***Navigable Waters Protection Act (Act)*** protects the public right to boat freely on waterways in Canada. The Act and its regulations:

- Require the pre-approval of structures (known as ***works***) to be placed in, on, over, under, through, or across any navigable waters; and
- Provide a legal framework for dealing with obstacles and obstructions to navigation.

The Act was updated on March 12, 2009. You can find the Act and its regulations online at: http://laws.justice.gc.ca/en/N-22/

Transport Canada's (TC) **Marine Safety, Navigable Waters Protection Program** works to:

- Protect the public right of navigation
- Ensure safety for the shared use of Canada's waterways; and
- Consider any impacts proposed works might have on the environment.

Navigable Waterways are any natural or man-made bodies of water (rivers, lakes, canals, etc.) that can be used by vessels to work, move freight, travel or enjoy pleasure activities – even if they were created for purposes other than navigation.

Get the Facts

What is a Minor Water?

Before starting construction, repairs or changes, owners should find out if their work is on a minor water or a navigable waterway. To determine if the waterway is minor you may refer to the *Minor Works and Waters (Navigable Waters Protection Act) Order* at http://www.tc.gc.ca/marinesafety/oep/nwpp/minorworks/menu.htm.

What is a work?

A work includes:

- Any man-made structure, devise or thing, temporary or permanent, that may limit or prevent boating; and
- Any fill dumped into, or materials being dug from, the bed of navigable water that may limit or prevent boating.

What is a minor work?

Some works, called minor works, that **will not limit or prevent boating**, do not require TC approval. However, they must be placed, built and maintained according to the Minor Works and Waters (NWPA) Order. If they aren't, owners may be fined.

Minor works include:

- Winter Crossings
- Water Intakes
- Pipeline Crossings
- Docks & Boathouses
- Submarine (underwater) Cables
- Aerial Cables
- Erosion Protection Works
- Dredging

Canada

Get Your Project Approved

All works, except those listed as minor works under the *Order*, must be approved by Transport Canada. TC approval is proof that your planned work will not limit or prevent boating.

Contact TC for approval **well before your desired start date**. This will give us time to review your project and respond.

Remember: You must request and get any local building or other permits you may need **before** you begin your work.

Approval process

Step One: Apply.

1. Prepare a letter or application form that includes the information set out in Table 1, below;
2. Include a map and directions indicating the exact location of the worksite;
3. Include onsite, upstream and downstream photos of the waterway.
4. Mail your letter and supporting documents to:

Transport Canada, Navigable Waters Protection Office
100 Front Street South,
Sarnia, Ontario N7T 2M4

Table 1 - Information and Application Requirements

Please provide as much of the following information as possible as missing information may delay your review. Pay particular attention to the mandatory information listed in Section D - Summary of Supporting Documents.

Application Section A:	• Your name and address, phone, number, fax and email address. • Contractor/consultant/agent (if any) address, phone, number, fax and email addresses
Application Section B **Work Site Location and Description:**	• Legal site description (lot, concession, county/township or city/town, etc) and 911 address (if any). • Name of the owner(s) of property immediately upland to the work site (note that you may require written consent to do the work). • Six copies of a key map showing the exact location of the work site. • One copy of written directions to the site. • The latitude and longitude of the work site, if known. • Legal and/or local name of waterway. • Photos taken at, upstream and downstream of the work site. • Canadian Hydrographic Service (CHS) navigation chart number (if known). • National Traffic System (NTS) topographic map numbers (if known). • A photocopy of your water lot lease or permit. • The ordinary high water mark, the normal summer water elevation or chart datum at the work site (if known). • Average width and depth of the waterway at the work site. • Known boating uses of the waterway, i.e. traveling, moving freight, work or pleasure.

Application Section C
 	
Description of Work:
	• A detailed description of the work, including:
	  ○ method of construction;
	  ○ equipment and material used;
	  ○ operating plans;
	  ○ debris management plans; and
	  ○ any temporary works (berm, cofferdam, road, signage, portage, etc) required for the project.
	• Six copies of drawings of the work (top-down plan view and side-on profile view) including:
	  ○ structure dimensions;
	  ○ shoreline shape;
	  ○ water depths; and
	  ○ near by structures.
	• Any Environmental Assessment documents and information you have.
	• Your proposed building or project schedule (with start and end dates).
	• Status of the work at the time of application (existing, proposed, rebuilding, repairs, etc).
	• Original date the existing work was constructed, if this is a repair or rebuild, and the date of any previous approvals.
	• Name of any other agencies you have submitted these plans to.

NOTE	Transport Canada must receive at minimum the following information to process your application. **Missing information may lead to delays.**

(Continued)

Table 1 - Information and Application Requirements

Application Section D **Summary of Supporting Documents:**	❑ Your name, address, phone, number, fax and email address. ❑ If an agency is acting on your behalf, provide Agency Applicant and name, address, phone, number, fax and email address. ❑ Legal site description (lot, concession, county/township or city/town, etc). If the work site has been assigned a 911 address, provide this as well. ❑ Six copies of a key map showing the exact location of the work site. ❑ A photocopy of your water lot lease or permit. ❑ Photos taken at, upstream and downstream of the work site. ❑ The ordinary high water mark, the normal summer water elevation or chart datum at the work site. ❑ A detailed description of the work, including method of construction, equipment and material used, operating plans, debris management plans and any temporary works (berm, cofferdam, road, signage, portage, etc) required for the project. ❑ Six copies of drawings of the work (top-down plan view and side-on profile view) including structure dimensions, shoreline shape, water depths and near by structures.

Step Two: Wait for a response.

Transport Canada reviews proposed works based on information you provide, on-site assessment of the waterway and potential impacts to navigation. Once its review is complete, TC may issue an approval if the impacts to navigation can be lessened. The approval may include conditions you must meet.

The complete Transport Canada review can take some time because you may be asked to:

- Provide more information;
- Meet a Transport Canada official on site;
- Deposit plans after confirmation to proceed,
- Notify the public of the proposed work and allow one month for comments, and
- Support an environmental assessment of the work as per the under *Canadian Environmental Assessment Act (CEAA)*.

Step Three: Receive a response.

If / When you receive an Approval Document, you must:

- Read it carefully. It may include conditions that you must meet or time limits you must respect.
- Keep a copy of the Approval Document on the work site at all times.
- Meet all conditions of approval.
- Expect a TC official inspect your site to make sure you are meeting all conditions of approval.
- Write to TC when your work is done.

Table 2 – The Approval Process – Step by Step

1. Verify if the waterway is subject to the *Minor Works and Waters (Navigable Waters Protection Act) Order* or is a navigable waterway.

2. Verify if the work is subject to the *Minor Works and Waters (Navigable Waters Protection Act) Order* or is subject to application and review under the Act.

3. Complete and sign the application form and send it to Transport Canada with supporting documents listed in Table 1 (above) to the following address:

Transport Canada, Navigable Waters Protection Office
100 Front Street South,Sarnia, Ontario N7T 2M4

Include six copies of the drawings and key map showing location of the work site.

4. Be prepared to attend an on-site meeting with Transport Canada officials, or if asked, to provide more information.

5. If notified by Transport Canada, deposit one set of drawings and the supporting documents at the nearest Land Registry or Land Titles Office. Have one set of drawings certified by the Registrar and return it to Transport Canada with the Registrar's certificate, signature and deposit number.

6. If notified by Transport Canada, advertise your work project in the legal section, if possible. We will send you a sample ad, complete instructions and a blank Statutory Declaration of Advertising. When you have advertised your project:

- Have the "Statutory Declaration of Advertising" witnessed by a Commissioner of Oaths and return it to Transport Canada with 1 copy of the advertisements.
- Allow one month for comments from the public before starting to build.

NOTE: The advertising process may have to be repeated if done too soon, if information is missing or if project plans change.

7. If asked, provide Transport Canada with any additional information needed for the environmental assessment.

8. When you receive your Approval from Transport Canada, read it carefully and note any conditions of approval. Also, look for any time limits for starting and completing the work as well as how long the Approval Document is valid.

9. Build your work, fulfilling all conditions of the Approval Document. Keep a copy of the Approval on the work site at all times during construction. Transport Canada officials may conduct on-site inspection(s) to ensure conditions are being met.

10. Notify Transport Canada in writing when the work is completed.

11. TC officials may inspect your finished work to make sure that it is built according to plan and meets the conditions of approval. **You** must:

- Meet all conditions of approval;
- Take any measures required by the environmental assessment.
- Make sure to keep the work up to the standard of its approved plans.

Notes: You are responsible to:
a. Complete the work according to plans approved by Transport Canada;
b. Fulfill conditions of approval, as set out in the Approval Document issued by Transport Canada;
c. Implement any environmental protection measures identified under *Canadian Environmental Assessment Act.*

NOTE: ***This guide explains the Navigable Waters Protection Act application and approval process. If anything in this Guide differs from the Act, comply with the Act.***

For further information about Transport Canada's Navigable Waters Protection Program please feel free to visit us at http://www.tc.gc.ca/eng/marinesafety/oep-nwpp-menu-1978.htm.

Canada

NAVIGABLE WATERS PROTECTION ACT
REQUEST FOR WORK APPROVAL

File no. (if known):
This is my first request for Transport Canada to review this project. ☐ Yes ☐ No

Failure to complete all the requested sections of this form and to provide mandatory documentation will result in your application being returned. (*) Indicates a mandatory field.

WARNING to all applicants and agents – any false or misleading statement on this form or relating to any document in support of this application, including concealment of any material fact, may lead to refusal to issue an Approval or suspension or cancellation of an Approval and be grounds for criminal prosecution.

NOTE: Prior to completing this form, self-assess your project against the ***Minor Works and Waters (Navigable Waters Protection Act) Order*** to determine if an application is required. http://canadagazette.gc.ca/rp-pr/p1/2009/2009-05-09/html/notice-avis-eng.html#d103

I am the upland property owner * ☐ Yes ☐ No

Will your work be located 30m or less from shore? ☐ Yes ☐ No If yes, an affidavit from upland property owner is required (see guide for details)

OWNER CONTACT INFORMATION

Full name/company *		Contact name	
Address *			
City/Town *		Province/Territory *	Postal code *
Telephone no. (primary) *	Telephone no. (other)	E-mail	

AGENT (contractor/consultant/representative if any)

Name		Contact name	
Address			
City/Town		Province/Territory	Postal code
Telephone no. (primary)	Telephone no. (other)	E-mail	

WORK SITE LOCATION

Municipality/District/County *	Province/Territory *

Site description * "(lot, concession, section, county/township, range, city/town, meridian, 911 address etc.)"

Coordinates

Work site: Latitude _____ ° _____ ' _____ " N Longitude _____ ° _____ ' _____ " W

Source of coordinates: ☐ Topo(s) ☐ Chart(s) ☐ GPS ☐ Other (describe): _____

Chart Number	Topographical Map Number

Official and/or local name of waterway *

Description of waterway details (width, depth, etc.) and known waterway use *

Vessel type(s)	Maximum vessel size Length _____ Width _____ Draft _____

Day/Night use	Amount of vessel traffic	Navigation Season
☐ Day ☐ Night ☐ Both	☐ Low ☐ Medium ☐ High	☐ Winter ☐ Spring ☐ Summer ☐ Fall

BASIC PROJECT DESCRIPTION (for large and more complex projects, detailed information may be required as an annex to your application)

Type of work (bridge, boom, dam, marina, etc.) *

Brief description of your project, including how you are going to build or place the work (or attach) *

Proposed start date (dd-mm-yyyy) *	Proposed end date (dd-mm-yyyy) *	Date of original construction (dd-mm-yyyy)	Date of original NWPA Approval (dd-mm-yyyy)

DOCUMENTATION REQUIREMENTS

Mandatory Documentation [1] (incomplete applications will be returned)	**Recommended Documentation** (may expedite review)
☐ The completed signed application form	☐ Photographs of work site
☐ Map and/or chart to show location of the project	☐ Environmental Assessment documents (if any)
☐ Detailed Top/Plan view of the project (with dimensions)	☐ Aboriginal consultation results (if any)
☐ Detailed Side/Profile view of the project (with dimensions)	☐ Executive summary of large project description
[1] See NWPP website for more information www.tc.gc.ca/navigablewaters-eauxnavigables	☐ Water lot lease information
	☐ Other agency submissions prepared/received

SUBMISSION REQUIREMENTS

- All plans and drawings must be legible when printed on 11” x 17” paper
- For email submissions: Provide a scan of all **Supporting Documentation**
- For hard copy submissions: Provide **Supporting Documentation** along with **six(6)** copies of each map, plan and profile drawing printed on 11” x 17” paper.
- Application package should be sent to appropriate regional NWPP office

AUTHORIZATION OF AGENT BY OWNER

I hereby authorize _____, located at _____ to act on my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this application.

I hereby certify that the information contained herein is complete, true and accurate to the best of my knowledge and that I am authorized to submit this application.

Signature * _____ Date (dd-mm-yyyy) *: _____

For office use	Date stamp:

The personal information provided on this form is collected under the authority of ***Navigable Waters Protection Act***, sections 4, 5, 6, 8, 10 and 11. This information is required for the purpose of processing applications made under the above-noted sections for proposed, commenced or existing works that are or will be built or placed in, on, over, under, through or across any navigable water in Canada. The personal information collected is described in a personal information bank entitled Navigable Waters Protection Program (bank number TC PPU 086). Under the provisions of the ***Privacy Act,*** individuals have the right of access to, correction of and protection of their personal information. Instructions for obtaining personal information are provided in Info Source, a copy of which is available in major public and academic libraries or online at http://www.infosource.gc.ca

[1] Not all regions accept e-mail applications, please refer to the next page of this form for details.

Canada

CONTACT INFORMATION

OFFICES CURRENTLY ACCEPTING E-MAIL AND/OR HARD COPY SUBMISSION OF APPLICATION		
Atlantic Region	**Quebec Region**	**Pacific Region**
Transport Canada Queen Square P.O. Box 1013 45 Alderney Drive, 14th Floor Dartmouth NS B2Y 4K2 Tel: 902-426-2726 E-mail: NWPDAR@tc.gc.ca	Transport Canada 1550 d'Estimauville Ave; 4th Floor Quebec QC G1J 0C8 Tel: 418-648-4549 E-mail: pen-nwp-quebec@tc.gc.ca	Transport Canada Pacific Regional Office 820-800 Burrard Street Vancouver BC V6Z 2J8 Tel: 604-775-8867 E-mail: PacNWP-PENPac@tc.gc.ca

OFFICES CURRENTLY ACCEPTING ONLY HARD COPY SUBMISSION OF APPLICATION	
Ontario Region	**Prairie and Northern Region**
Transport Canada, Marine Office 100 S Front Street, 1st Floor Sarnia ON N7T 2M4 Tel: 519-383-1863	Transport Canada Canada Place 1100-9700 Jasper Avenue Edmonton AB T5J 4E6 Tel: 780-495-8215

Canada

April 25, 2013 CFN 35278/35022

BY E-MAIL ONLY (kwallace@rvanderson.com)

Ken Wallace
R.V Anderson Associate Limited
2001 Sheppard Avenue East, Suite 400
Toronto, ON M2J 4Z8

Dear Mr. Wallace,

Re: Response to Notice to EA Addendum and Notice of Public Information Centre for the East Bayfront Class Environmental Assessment Master Plan (2006) and West Don Lands Class Environmental Assessment Master Plan (2005)
Lake Ontario/ Don River Watershed; City Toronto – Toronto and East York

Toronto and Region Conservation Authority (TRCA) staff received notice of the addenda and upcoming Stakeholder Meeting scheduled for March 19, 2013 to update stormwater management aspects of these Environmental Assessments. Further to TRCA's previous correspondence for the West Don Lands and East Bayfront EA's, staff has expressed interest in these projects. While staff was unable to attend the meeting, please forward one copy of any handouts or display materials from this meeting for our files. Please include a PDF copy of all materials as part of your submission, with drawings pre-scaled to print on 11"x17" pages. Materials may be submitted on discs, via e-mail (if less than 2.5 MB), or through file transfer protocol (FTP) sites (if posted for a minimum of two weeks).

Should you have any questions, please contact me at extension 5**304** or at **jpounder**@trca.on.ca.

Yours truly,

Jonathan Pounder, B.Sc. Env., LEED Green Assoc.
Acting Planner II, Environmental Assessment Planning
Planning and Development

BY E-MAIL
TRCA: Beth Williston, Senior Manager, Environmental Assessment Planning
Nancy Gaffney, Waterfront Specialist, Watershed Management

C:\Users\TRCA\Documents\Sent Letters\35278-35022 - Waterfront Toronto EA Adeenda.Docx

July 8, 2013 CFN 35278, 35022

BY E-MAIL ONLY (kwallace@rvanderson.com)

Mr. Ken Wallace
R.V. Anderson Associates Limited
2001 Sheppard Avenue East, Sutie 400
Toronto, ON M2J 4Z8

Dear Mr. Wallace:

Re: Response and Review of Public Information Centre (PIC) Boards
West Don Lands Precinct Plan & East Bayfront Precinct
Infrastructure Class Environmental Assessment Master Plan - Addendum
Don River Watershed; City of Toronto – Toronto and East York

Toronto and Region Conservation Authority (TRCA) received the PIC boards for the above projects on May 2, 2013.

TRCA staff understands that this addendum involves expansion of the stormwater quality facility at 480 Lake Shore Boulevard. It is our understanding that the purpose of this facility expansion is to allow for centralization of stormwater treatment infrastructure to facilitate the treatment of additional stormwater from East Bayfront Precinct area and the Lower Don Lands Area. These improvements are being implemented to address the increased development of these areas.

Staff has reviewed the display materials and offers the following comment:

1. For the long-term operation of the Keating Channel, drainage should be directed as far to the east end of the Keating as technically feasible to provide circulation and avoid stagnation during long term build out.

Should you have any questions or require any additional information, please contact me at extension 5304 or at jpounder@trca.on.ca.

Yours truly,

Jonathan Pounder, B.Sc. Env., LEED Green Assoc.
Acting Planner II, Environmental Assessment Planning
Planning and Development

JP/tl

BY E-MAIL
cc:
TRCA: Beth Williston, Senior Manager, Environmental Assessment Planning
Ken Dion, Senior Project Manager, Lower Don and Don Mouth Naturalization EA
Nancy Gaffney, Lake Ontario Waterfront Specialist, Watershed Management

WATERFRONTToronto

TORONTO

Revisions to Class Environmental Assessment Master Plan

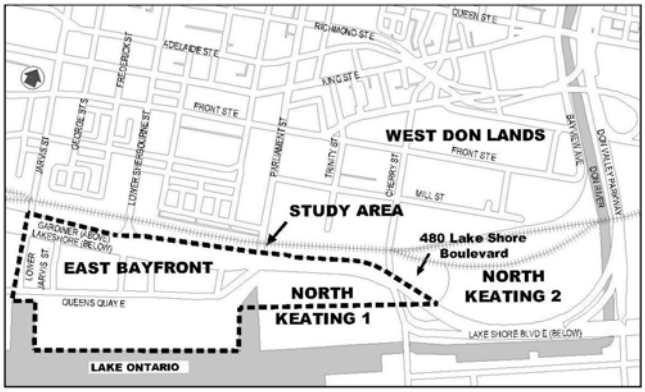
Notice of Filing Addendum
East Bayfront Class Environmental Assessment Master Plan
Stormwater Quality Revision

Waterfront Toronto and the City of Toronto completed in 2006 the East Bayfront Class Environmental Assessment Master Plan that identified a preferred stormwater collection and management system.

In 2009, an Addendum was completed to accommodate the re-sizing and consolidation of the stormwater management system to include flows from the westerly portion of the North Keating area and to provide for a centralized UV disinfection facility.

This Addendum Document contains a description of the process that led to proposed changes to the stormwater treatment system and a description of the system.

By this Notice, the Addendum Document is being placed on the public record for review in accordance with the requirements of the Municipal Class EA. Please note that only the changes proposed in the Addendum Document are open for review.



The Addendum Document is available for review at the following locations and on Waterfront Toronto's website: www.waterfrontoronto.ca.

Waterfront Toronto
20 Bay Street, Suite 1310
Toronto, Ontario, M5J 2N8
Hours of Operation:
8:30 a.m. – 5 p.m. (Mon-Fri)
Telephone: 416-214-1344

Toronto Public Library
City Hall Branch
Nathan Phillips Square
100 Queen Street West
Toronto, Ontario, M5H 2N3
Hours of Operation:
Please call 416-393-7650

Toronto Public Library
St. Lawrence Branch
171 Front St. East
Toronto, Ontario, M5A 4H3
Hours of Operation:
Call 416-393-7655

Please provide written comments within 30 days of the date of this notice to Waterfront Toronto at the following address:

Waterfront Toronto, 20 Bay Street, Suite 1310, Toronto, Ontario, M5J 2N8
Attention: Raffi Bedrosyan, Director, Civil Infrastructure
Email: RBedrosyan@waterfrontoronto.ca Fax: 416-214-4591

If concerns regarding the revisions to the East Bayfront Class Environmental Assessment Master Plan (Stormwater Quality Revisions) cannot be resolved through discussion with Waterfront Toronto, a person may request that the Minister of the Environment make an order for the project to comply with Part II of the EA Act (referred to as a Part II Order), which addresses individual environmental assessments. Requests must be received by the Minister at the address below by **August 22, 2013**. A copy of the request must also be sent to Waterfront Toronto. If no request is received by **August 22, 2013**, Waterfront Toronto will be able to proceed with construction.

Minister of the Environment
135 St. Clair Avenue West, 10th Floor
Toronto, Ontario, M4V 1P5

This Notice issued on July 24, 2013.

Information will be collected in accordance with the Municipal Freedom of Information and Protection of Privacy Act. With the exception of personal information, all comments will become part of the public record.

building our new blue edge

R.V. Anderson Associates Limited
engineering · environment · infrastructure

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