PORT LANDS PROFILE

NOVEMBER 2013







PORT LANDS TABLE OF CONTENTS PROFILE

CHAPTER	ONE: INTRODUCTION	1
1.1	STUDY AREAS	4
CHAPTER	TWO: AREA HISTORY	6
CHAPTER	THREE: AREA PROFILE	11
3.1	OWNERSHIP	12
3.2	EMPLOYMENT PROFILE	12
3.3	EXISTING LAND USES AND BUILT FORM	14
3.4	HERITAGE RESOURCES	20
3.5	PARKS AND OPEN SPACES	28
3.6	NATURAL ENVIRONMENT	31
3.7	COMMUNITY SERVICES AND FACILITIES	34
3.8	MUNICIPAL YARDS	35
3.9	TRANSPORTATION NETWORK	37
3.10	PORT ACTIVITY AND BOATING	43
3.11	MUNICIPAL SERVICING	45
3.12	ENVIRONMENTAL CONDITIONS	47
CHAPTER	FOUR: CURRENT PLANNING FRAMEWORK	49
4.1	SUMMARY OF PAST PLANNING EXERCISES	50
4.2	SUMMARY OF CURRENT PLANNING EXERCISES	57
4.3	POLICY FRAMEWORK	60
CHAPTER	FIVE: PRECEDENTS	69
CHAPTER	SIX: CONCLUSIONS AND NEXT STEPS	77

PORT LANDS LIST OF FIGURES PROFILE Figure 1: Key Map.....

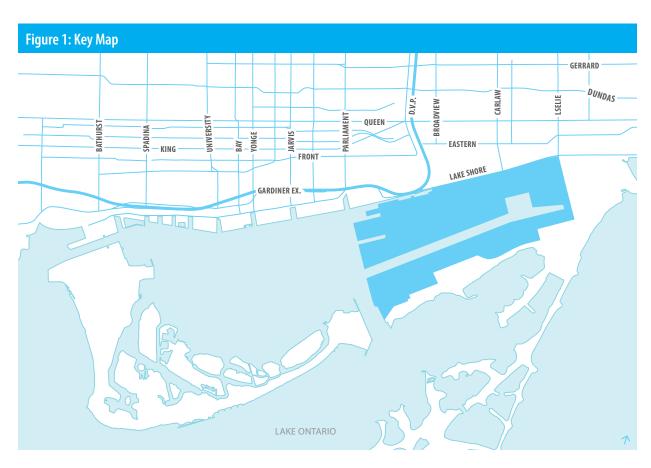
Figure 1: Key Map	1
Figure 2: Port Lands Acceleration Initiative Plan (2012)	2
Figure 3: Study Areas	5
Figure 4: Ownership and Lease Map	13
Figure 5: Figure Ground	14
Figure 6: Existing Land Uses	19
Figure 7: Cultural Heritage Resources	21
Figure 8: Views and Vistas	25
Figure 9: Archaeological Resources	27
Figure 10: Existing and Planned Parks and Open Spaces	29
Figure 11: Official Plan Natural Heritage System	31
Figure 12: Environmentally Significant Areas	33
Figure 13: City of Toronto Municipal Yards	35
Figure 14: Street Network	37
Figure 15: Transit Network	40
Figure 16: Pedestrian and Cycling Network	41
Figure 17: Rail Network	42
Figure 18: Port Activity, Dockwalls and Boating	43
Figure 18: Port Activity, Dockwalls and Boating Figure 19: Municipal Servicing	43 45
Figure 19: Municipal Servicing	45
Figure 19: Municipal ServicingFigure 20: Preferred DMNP EA Alternative (2013)	45 57
Figure 19: Municipal Servicing Figure 20: Preferred DMNP EA Alternative (2013) Figure 21: DMNP EA and Lower Don Lands Phasing	45 57 59
Figure 19: Municipal Servicing Figure 20: Preferred DMNP EA Alternative (2013) Figure 21: DMNP EA and Lower Don Lands Phasing Figure 22: CWSP: Roads Plan	45 57 59 61
Figure 19: Municipal Servicing Figure 20: Preferred DMNP EA Alternative (2013) Figure 21: DMNP EA and Lower Don Lands Phasing Figure 22: CWSP: Roads Plan Figure 23: CWSP: Parks and Open Space Plan	45 57 59 61 62

PROFILE CHAPTER ONE: INTRODUCTION

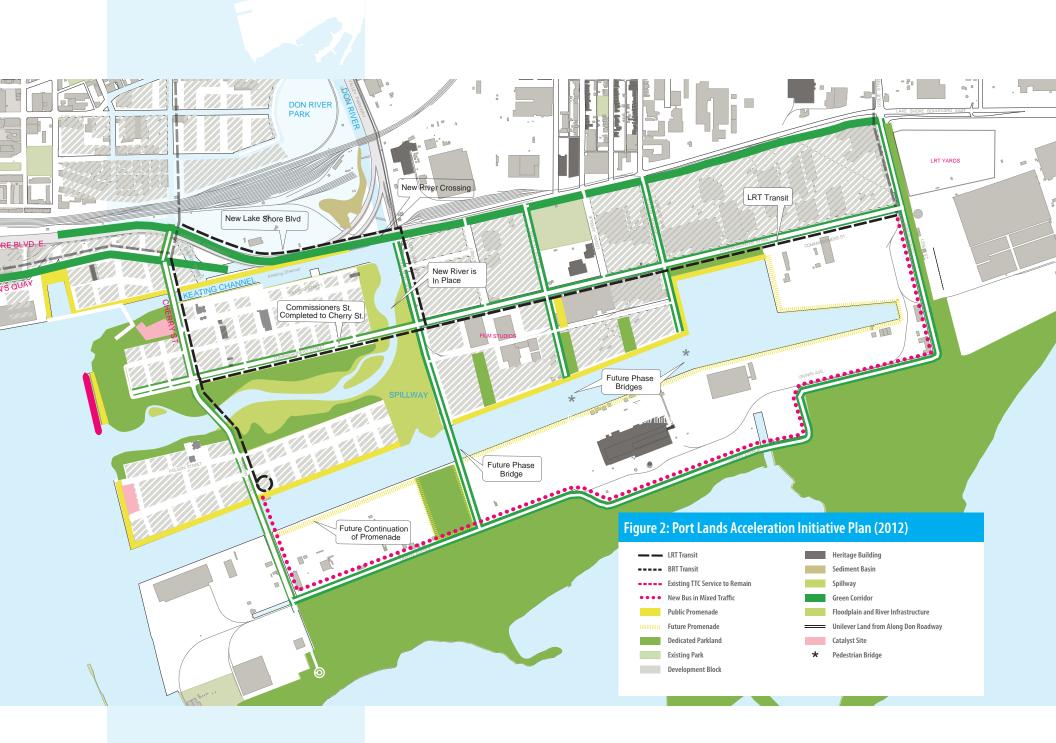


1.0 INTRODUCTION





The Port Lands are located east of Toronto's downtown area between the Inner Harbour and Leslie Street, south of Lake Shore Boulevard. The lands are the result of filling in the Ashbridges Bay in the early 20th century to serve the city's growing industrial sector. At approximately 356 hectares (880 acres) in area, the Port Lands are an unparalleled redevelopment opportunity for Toronto.





While still used for industrial and port purposes today, the lands are generally underutilized. They were identified for revitalization through the efforts of the Toronto Waterfront Revitalization Task Force in the early 2000s, leading to the adoption of *Making Waves – Central Waterfront Plan* in 2003 and now known as the Central Waterfront Secondary Plan.

Since Council's adoption of *Making Waves*, a significant amount of detailed planning has occurred in the Port Lands area, primarily centred on the Lower Don Lands and the creation of a new river mouth for the Don River. The most recent initiative was the Port Lands Acceleration Initiative (PLAI) which investigated approaches to expedite and accelerate development in the area. City Council adopted the direction developed during the PLAI in October 2012 (Figure 2), and directed City and Waterfront Toronto staff to develop a high-level planning framework for the Port Lands.

The result of the Port Lands Planning Framework will be the establishment of a coordinated and comprehensive framework to guide investment and future revitalization of this area. As part of the study, the City of Toronto is undertaking a Municipal Class Environmental Assessment (EA) to identify the streets, transit and servicing (water, stormwater and sanitary sewers) required to support city building. The study area for the EA (see Figure 3) is the balance of the Port Lands (east of the Don Roadway and south of the Ship Channel) and the South of Eastern area.

The Port Lands Planning Framework will set out the steps required to achieve appropriate revitalization in the Port Lands over the short-, mid- and long-term. It will provide the foundations for updating

and refining, as appropriate, the vision in the Central Waterfront Secondary Plan for the Port Lands, and will establish the planning context to guide development in this key redevelopment area of the city.

The Port Lands Planning Framework will knit together more detailed planning work that has occurred to date for the Port Lands, and will incorporate the outcomes of studies in the Lower Don Lands. It will also incorporate the outcomes of precinct planning that is underway for the Cousins Quay and Film Studio Precincts.

This is a profile of the Port Lands, documenting existing conditions. This profile will be used to understand existing conditions and provides background information for the development of the Port Lands Planning Framework. The profile summarizes background materials prepared for the Port Lands through various planning initiatives undertaken to date. An inventory of area land uses was also undertaken and a number of precedents were studied to investigate how other jurisdictions have approached revitalizing their port areas.

This profile includes:

- an overview of the history of the Port Lands;
- a review of employment, ownership and land uses;
- a review of the existing built form, heritage resources and natural heritage resources;
- an inventory of existing/planned parks and open spaces, and planned community facilities;
- an overview of the existing transportation network, servicing and environmental considerations;
- a summary of port and boating activity;
- a summary of existing planning policies and zoning regulations for the study area; and
- a review of similar Toronto districts and international precedents.



Comparison of the Port Lands with Downtown Toronto

1.1 STUDY AREAS

The study area for the Port Lands Planning Framework is bounded by Lake Shore Boulevard East to the north, Leslie Street to the east, Unwin Avenue to the south and the Inner Harbour to the west. At 356 hectares (880 acres), the area is roughly the same size as downtown Toronto. The map to the left gives a sense of the scale of the Port Lands overlayed on downtown Toronto.

The Port Lands are bordered by Clarke/Cherry Beach Park, the Cherry Beach Sports Fields and Tommy Thompson Park to the south. To the east of the Port Lands is the Ashbridges Bay Treatment Plant, allotment gardens and the Leslie Barns Streetcar Yard, currently under construction. The South of Eastern employment area is located north of the study area, across Lake Shore Boulevard East and east of the Don Roadway/Don Valley Parkway. North of the Keating Channel west of the Don Roadway/Don Valley Parkway is the Keating Channel Precinct, rail corridor, Distillery District and the West Don Lands.



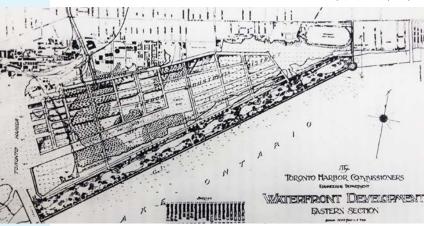
PROFILE CHAPTER TWO: AREA HISTORY

1912 Map of the Port Lands (Source: City of Toronto Archives)



1912 Toronto Harbour Comission Plan

(Source: Stinson, 1990)



1920s Cherry Street Bridge (North Bascule) (Source: City of Toronto Archives)



1930s Oil and Coal Refineries (Source: City of Toronto Archives)



1950s City Incinerator

(Source: City of Toronto Archives)



1977 Aerial of the Port Lands



2.0 AREA HISTORY



The rich cultural landscape of the Port Lands is rooted in a synthesis of human intervention and natural landscape. The Port Lands were created in the early 20th century as a new district to serve the city's growing industrial sector. Its canals, docks, basin, generational industrial use and recreational facilities are important facets of the City's industrial heritage.

Originally a marsh, known as Ashbridges Bay, dotted with cottages and fishing huts on a sand spit and peninsula. The nascence of the Port Lands began in the late 1800s. At the time, the Don River consisted of two main channels through the delta along the west side of the marsh. The first channel exited into the marsh, while the second shorter high-water channel turned west prior to reaching the marsh. A breakwater was constructed in the 1880s along the western side of Ashbridges Bay. This was followed by the construction of the Keating Channel along the north of the marsh in the late 1890s.

During the late 1800s and early 1900s, unchecked industrial and municipal discharges into the Don River and Ashbridges Bay contributed to the marsh's general decay. In 1911, the Toronto Harbour Commission was formed and in 1912, the Harbour Commission developed the *Waterfront Development Eastern Section Plan* to transform Ashbridges Bay into a new industrial district. The plan included docks, and industrial,

SEE PLATE N ARD 3 WARD 2 WARD 3 WARD 2 WARD 3 WARD 3 WARD 4 WARD 3 WARD 4 WARD 3 WARD 4 WARD

commercial and park lands. As part of the plan, further refinements to the Keating Channel were undertaken, including diverting the Don River's two channels into the Keating Channel.

In 1916, the Port Lands began to take shape through the efforts of the Harbour Commission. Approximately 8.23 million cubic metres fill was dredged from the Inner Harbour of Lake Ontario and dockwalls were constructed. It was during this time that the Ship Channel and Turning Basin were built. The Port Lands, as we know it today, were largely complete by the 1920s, with some additional filling occurring in the 1930s to create what is now known as Cousins Quay.

The design of the industrial district provided a network of streets and deep water docking along the new Ship Channel. Industries had moved to the area by 1925, the largest uses consisting of storage for coal and oil. The Canada Cement Company, now Lafarge Cement, began their operations off the Polson Slip in 1929. By 1931, just over 40 industries were operating in the Port Lands. In 1949, Ontario Hydro began construction of the R.L. Hearn Generating Station. Soon after, the incinerator at 400 Commissioners Street was constructed in 1953. Oil companies continued to operate their storage facilities and tank farms dominated the Port Lands landscape well into the late 1970s and early 1980s (Stinson, The Heritage of the Port Industrial District).

Goad's Atlas 1924

PROFILE CHAPTER THREE: AREA PROFILE

3.1 OWNERSHIP

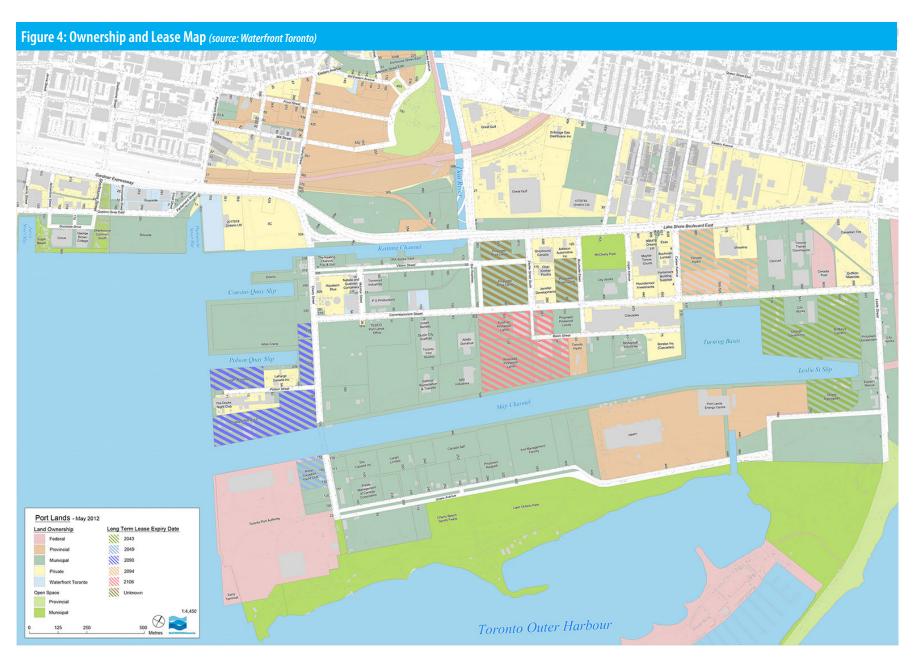
Property within the Port Lands is mostly held by public agencies. Excluding streets, the City of Toronto through the Toronto Port Lands Company (TPLC) own approximately 236 hectares (584 acres), including all parkland. The Federal Government owns approximately 25 hectares (63 acres), which includes Toronto Port Authority lands. The Province of Ontario (through Ontario Power Generation) owns 25 hectares (62 acres), and Waterfront Toronto owns 1.5 hectares (3 acres). The remaining 28 hectares (69 acres) of land are held by private interests. There are a number of long-term leases on City owned land, as well as a lease of the provincially owned Hearn building to Studios of America. Figure 4 identifies land ownership within the Port Lands and leases.

3.2 EMPLOYMENT PROFILE

Today's Port Lands are home to approximately 100 establishments that employ a total of 4,100 people. Existing businesses largely consist of manufacturing, warehousing, office and government-related uses. There is a growing media and film production sector primarily concentrated east of the Don Roadway. Many of the existing uses within the Port Lands also provide essential services and commodities for the broader city, such as bulk storage, industrial and material processing and shipping.

3.0 AREA PROFILE





3.3 EXISTING LAND USES AND BUILT FORM

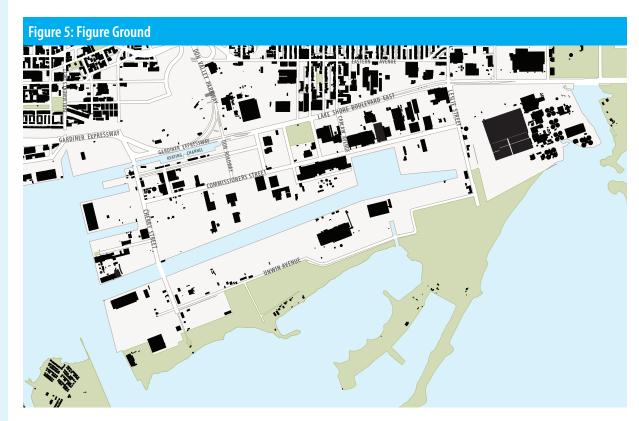


Essroc Silos

Existing land uses in the Port Lands generally consist of a mix industrial and commercial uses, as well as vacant lands. Figure 6 provides a summary of the existing land uses. Buildings are primarily one to

two-storeys in height, with some taller elements, such as the Essroc silos and the chimney stacks of the Hearn and City's former Incinerator, which is now a waste transfer station. The lot fabric is varied with some smaller lots in the vicinity of Cherry and Commissioners Streets, and east of the Don Roadway to Carlaw Avenue, north of Commissioners Street.





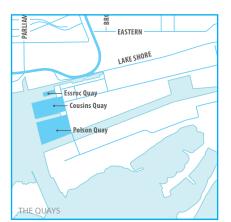


LOWER DON LANDS

Within the Port Lands, the Lower Don Lands area consists of the lands bounded by the Keating Channel to the north, the Inner Harbour to the west, the Ship Channel to the south and the Don Roadway to the east. Current land uses are primarily one to two-storey commercial/industrial with some recreational, entertainment, food, transportation, telecommunications, finance and internet technology services.

Cousins and Essroc Quays

Essroc Italcementi Group's concrete distribution facility is currently located on Essroc Quay. As part of revitalization efforts, Essroc is currently in the process of relocating its operation to the East Port. Green For Life Environmental is currently operating a recycling facility and transfer station out of the Marine Terminal 35 building on Cousins Quay. A boat dry dock and Toronto Port Lands Company's Atlas Crane are also located on Cousins Quay.





Atlas Crane on Cousins Quay



Lafarge Silos on Polson Quay

Polson Quay

Lafarge Canada Incorporated has a concrete distribution facility located along the south side of the Polson Slip on lands owned by the company. The facility consists of a small office building, a series of silos and a warehouse building converted to a concrete product development laboratory. Lafarge utilizes its access to the dock wall to ship concrete powder by boat.

Other lands which are privately owned in the area include the Sound Academy (formerly known as the Docks Entertainment Complex) and driving range. There are also telecommunications, finance and internet technology services clustered on Polson Street, including Tower's Production Inc., Club Finance Corporation and Live Wire. The T&T Supermarket is located on the west side of Cherry Street between Cousins and Polson Quay.

Lands East of Cherry Street and West of the Don Roadway

The Toronto Port Authority harbour operations yard and the Keating Channel Pub and Grill are located off the Keating Channel north of Villiers Street.

Between Villiers Street and Commissioners Street, there is a mix of industrial, commercial and vacant lands. A development application has been submitted to rezone the lands at 309 Cherry Street. The application is for phase one of a two-phased development. Phase one is located on the north portion of the site. The application proposes:

 a 26-storey residential tower on an eightstorey base building with commercial uses at grade;

- conserving the one-storey former Bank of Montreal building at the corner of Cherry Street and Villiers Street; and
- rehabilitating the former William McGill and Company building and constructing an addition to the building. The building is proposed to be used for commercial purposes.

South of Commissioners Street, there are some industrial uses, such as NRI Industries. However, the majority of the lands are vacant and/or underutilized. Cirque de Soleil leases lands annually at the southeast corner of Commissioners Street and Cherry Street just east of the Lafarge site and on the west side of Cherry Street.

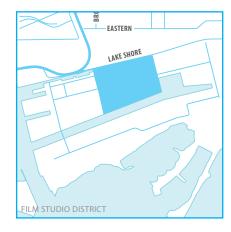


FILM STUDIO DISTRICT

The Film Studio District is bounded by the Don Roadway to the west, Lake Shore Boulevard East to the north, Carlaw Avenue to the east and the Ship Channel to the south. The area has a mix of private and public ownership, with long-term leases on public lands.

The most significant recent development in the area is the Pinewood Film Studios, an anchor for the area and a world-class facility with two special effects stages and 11 purpose built soundstages on 4.9 hectares (12 acres) of land. The studio complex includes the largest soundstage in North America, offices that can accommodate several productions simultaneously and a variety of support facilities. The studio has the ability to expand, with 7.3 hectares (18 acres) of additional lands held under option. The studio lands are secure and access is restricted. The larger sound stages have barrel-vaulted roofs and steel buttresses. Surface parking with perimeter landscaping surrounds the studios.

The Cascades building at the southwest corner of Carlaw Avenue and Commissioners Street was recently demolished and the lands are currently being risk assessed in preparation for redevelopment. The District also has commercial, private recreation facilities (Mayfair), industrial uses and vacant lands.





Pinewood Film Studio Soundstage





EAST PORT

The East Port consists of the balance of the lands north of the Ship Channel and east of Carlaw Avenue. Existing uses north of Commissioners Street consist of government-related facilities, such as the Toronto Hydro building, the TTC Wheel Trans facility and Canada Post, industrial uses (concrete batching and roofing) and film studios. A large commercial complex, with Canadian Tire, Shoppers Drug Mart and a Boston Pizza, among others, is located at the southwest corner of Lake Shore Boulevard and Leslie Street.

The lands south of Commissioners Street are primarily used for concrete batching/recycling facilities. Lafarge and St. Mary's have operations in this area. Currently under construction is Essroc's new facility. Once completed, cement will be delivered by boat and stored in silos for distribution across the Greater Toronto Area via truck. At approximately 60 metres in height, the new silos will be a new prominent feature in the Port Lands.

In February 2004, TEDCO (now known as TPLC) submitted an application to amend the City's Zoning By-law in order to facilitate the consolidation and relocation of concrete facilities to the East Port area. Both St. Mary's and Essroc have been relocated to this area from other areas of the city. St. Mary's was relocated to the Port Lands in 2005 from the Fort York Neighbourhood. Essroc is being relocated from its current site in the Lower Don Lands, in efforts by Waterfront Toronto to assist with the revitalization of the lands adjacent to the inner harbour.









LANE SHOPE LANE SHOPE SOUTH OF THE SHIP CHANNEL

SOUTH OF THE SHIP CHANNEL

Lands south of the Ship Channel are utilized by the Toronto Port Authority, Royal Canadian Yacht Club, bulk storage operations, Waterfront Toronto's Port Lands Soil Recycling Facility, the decommissioned Hearn Generating Plant, the Port Lands Energy Centre and Strada Aggregates.

The Toronto Port Authority (TPA) was established in 1998 as the Toronto Harbour Commission's successor for the purpose of operating the Port of Toronto. The TPA has legislated responsibility for all port activities related to shipping, navigation, transportation of passengers and goods, and the handling and storage of cargo. The TPA occupies the lands along the inner harbour, south of the Ship Channel. The TPA site in the Port Lands

is approximately 8.1 hectares (20 acres) with approximately one kilometer of deep water wharfage. The site includes the International Marine Terminal Facility, which is currently utilized by the cruise ship industry. The site also includes two warehouses – Marine Terminal 51 and Warehouse 52 – for a total of 21,000 m² of warehousing space.

Open-air bulk storage of road salt for road operations occurs east of Cherry Street. The salt is delivered by boat and is utilized by a number of municipalities in the Greater Toronto Area, including the City of Toronto.

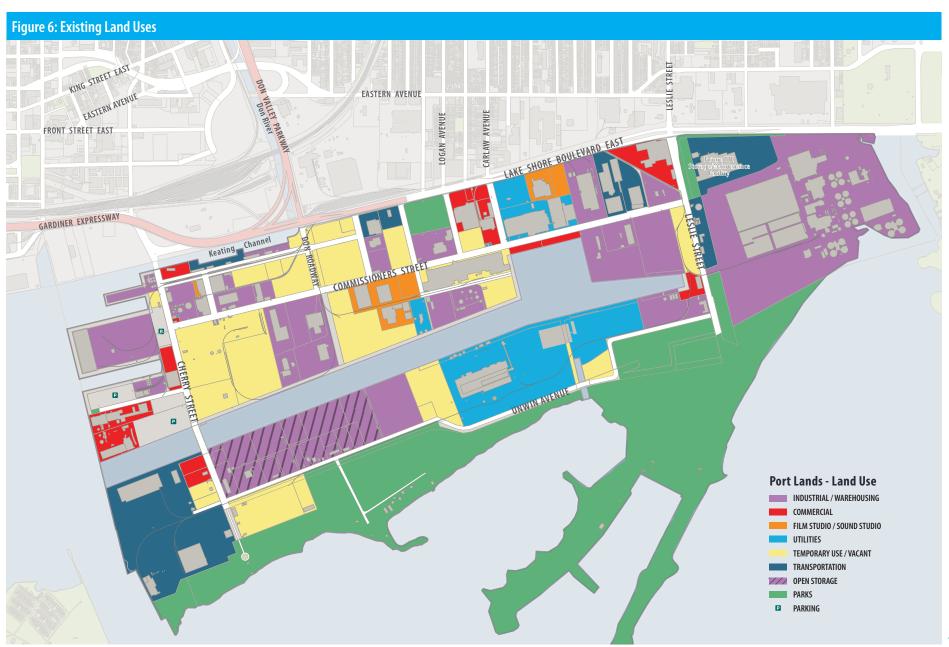
The decommissioned Hearn Generating Plant at 440 Unwin Avenue currently lies vacant. It is under long-term lease to Studios of America. Hydro One maintains a switching yard on-site adjacent to the Ship Channel. This facility will be decommissioned once a new switching yard is completed just to the east of the existing yard. The Port Lands Energy Centre is a 550-megawatt natural gas-fired, cogeneration facility located immediately east of the Hearn on provincial lands. This facility provides power to the downtown Toronto area. The site is 11.3 hectares and fronts on both the Ship Channel and Unwin Avenue. A stormwater management pond servicing the site is located on the north side of Unwin Avenue west of the Bailey Bridge.

Within the context area, recreational facilities south of Ship Channel include the Martin Goodman Trail (MGT), Clarke/Cherry Beach Park, the Cherry Beach Sports Fields, Tommy Thompson Park, the Leslie Spit and the Outer Harbour Marina.



3.4 HERITAGE RESOURCES







The industrial heritage of the Port Lands represent a range of interventions to the built environment that are important elements to the history of Toronto's waterfront. As noted previously, the Port Lands were created in the early 20th century as a new industrial district to serve the growing metropolis.

3.4.1 BUILT HERITAGE

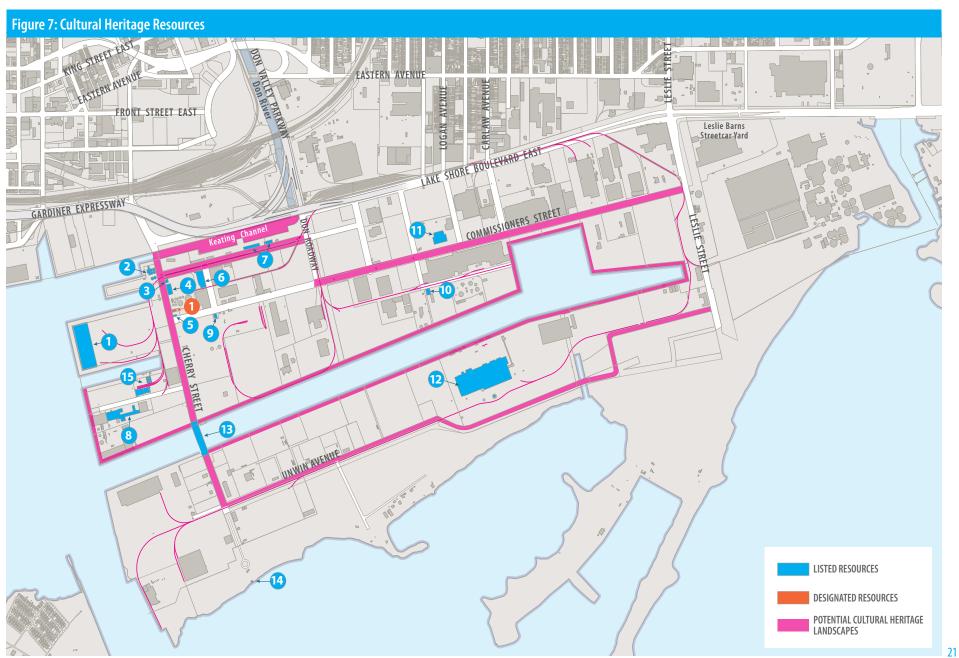
The Port Lands contain a number of buildings and structures that are listed on the City's Inventory of Heritage Properties, as well as one building designated under the *Ontario Heritage Act*.

"Listed" is a term used for properties that City Council has adopted a recommendation to include on the City's Inventory of Heritage Properties. Their inclusion on the Inventory is a clear statement that the City would like to see the heritage attributes of these properties preserved. Properties that have been individually designated under Part IV of the Ontario Heritage Act, or are located within a Heritage Conservation District designated under Part V of the Ontario Heritage Act, are referred to as "designated".

Listed Buildings And Structures

- 1 Marine Terminal 35 and Atlas Crane on Cousins Quay;
- The Century Coal Company building at 312 Cherry Street, currently in use by Essroc Italcementi Group. The silos are prominent landmarks, marking the entrance to the Port Lands. They also terminate the view westward on Villiers Street;
- 3-4 There are two listed buildings William McGill and Company Building and the Bank of Montreal building on the 309 Cherry Street site. The Bank of Montreal building, designed in the neo-classical style, is documented to have been constructed in 1920 and was part of the first phase of building construction in the Port Lands:
- 5 The Dominion Bank Branch at 275 Cherry Street constructed in 1920 provided financial services to the expanding industrial users in the area until the 1930s when it was converted to a restaurant:
- The Queen's City Foundry at 16 Munition Street dates to the 1910s and was one of the original industrial buildings constructed in the Port Lands following the 1912 plan by the Toronto Harbour Commission. It is now used by Cherry Beach Sound/The Factory;





- The Toronto Harbour Commissioners Storage Buildings at 62 Villiers Street were built in 1916, as the Harbour Commissioner's office and a workshop, and are the first buildings completed by the Toronto Harbour Commission;
- The Dominion Boxboards Building on Polson Quay at 15 Polson Street;
- 9 Fire Hall No. 30 on the south side of Commissioners Street at Munition Street was completed in 1928 and was originally known as the Toronto Firefighters Association, Local 113. The building exterior is characteristic of the early twentieth century and includes design elements evocative of Edwardian Classicism;
- The Sun Oil Company Building at 29 Basin Street;
- The City of Toronto Incinerator at 400 Commissioners Street, constructed in 1953, is an example of civic infrastructure building in the postwar period. It is a dominant landmark within the Commissioners Street streetscape;
- The Hearn Generating Station at 440 Unwin Avenue, construction for which began in 1949, was a coal-fired plant and is a dominant visual element in the Port Lands;

- The Cherry Street bascule bridge across the Ship Channel was opened in 1931. The bridge is owned and operated by the Toronto Port Authority and is currently undergoing repairs. The bridge is open to pedestrian and cyclists and there is one-lane available for vehicular traffic;
- 14 The Cherry Beach Life Saving Station dating to 1933; and
- 15 The LaFarge site (previously Canada Cement Company) at 54 Polson Street.

Designated Buildings And Structures

The Toronto Hydro Substation building at 281 Cherry Street was listed on the City's Inventory of Heritage Properties in May 2003, and was designated on November 7, 2012. The two-storey building was constructed in 1928 to provide power to the Port Industrial District. It is currently vacant.



3.4.2 CULTURAL HERITAGE LANDSCAPES

The Port Lands are a potentially significant cultural heritage landscape. A cultural heritage landscape is a defined geographical area of heritage significance which has been modified by human activities and is valued by a community.

The creation of the Port Lands through the implementation of the Toronto Harbour Commission's 1912 *Waterfront Development Eastern Section Plan* and its continued evolution have contributed to the formation of an industrial landscape that offers tremendous opportunities to emphasize the legacy of Toronto's working harbor.

Other notable interventions (see Figure 7) contributing to the cultural heritage landscape of the Port Lands include:

- The Keating Channel edged by concrete walls and large metal ship moorings;
- The formation of the Ship Channel and Turning Basin;
- The original street network established to service the industrial users, including older street plantings as are found on Commissioners Street; and
- The network of rail in the Port Lands which is evidence of the Toronto Harbour Commission's efforts to link rail and water transportation in the district.







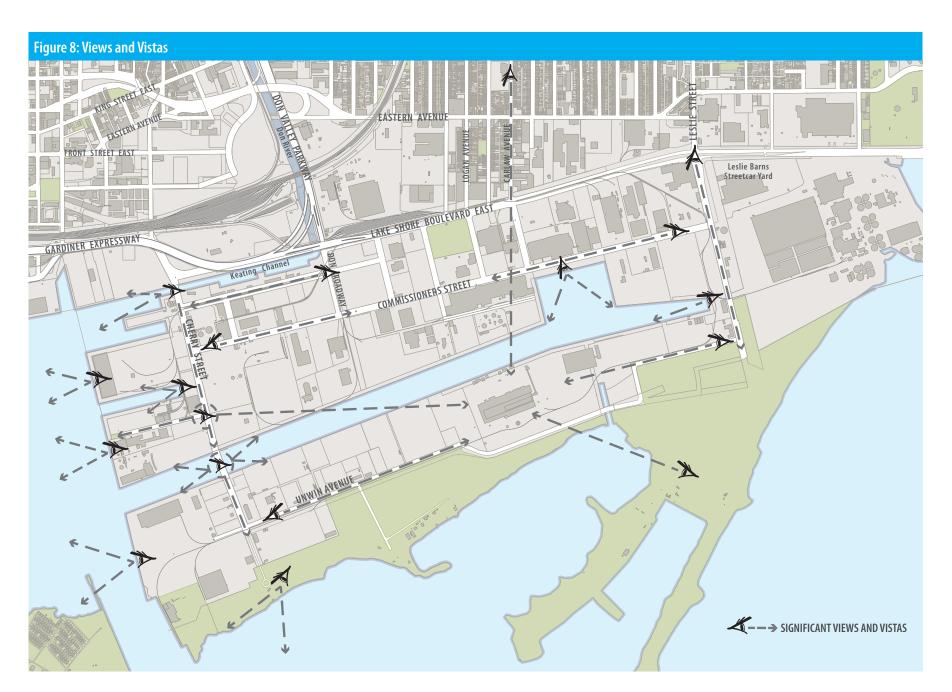
3.4.3 **VIEWS**

There are a number of important views both within and from the Port Lands that merit protection (Figure 8). They can be classified as:

- Views to the Inner Harbour and the city's skyline;
- Views to iconic structures, including the Essroc and Lafarge silos and the Hearn;
- Views to natural areas such as the Base Lands, the Leslie Street Spit and Clarke/ Cherry Beach; and
- Views to the Toronto Islands and Outer Harbour.







3.4.4 ARCHAEOLOGICAL RESOURCES

In 2003, the City of Toronto prepared a master plan identifying known and potential archaeological resources within the City's Central Waterfront area.

Included in the master plan as areas with archaeological potential within the Port Lands are:

- the natural sandspit which connected the waterfront to a peninsula south of the shore;
- the peninsula itself (known as Fisherman's Island); and
- the Government Breakwater which was constructed along the line of the sandspit in the 1880s.

Also of interest are the early dock walls and cribbing to be found near the northeast corner of the site. The Archaeological Master Plan identifies areas constituting natural features of the sandbar as having pre-contact aboriginal potential.

In 2008, Waterfront Toronto, in partnership with the City of Toronto, completed an Archaeological Conservation and Management Strategy (ACMS) for the Central Waterfront. The ACMS provided additional analysis on areas with archaeological potential and determined the archaeological significance of potential resources. The ACMS identifies resources as Grade 1, 2 3 or 4. Grade 1 resources are those that would require additional field work. Grade 2 resources are historically important features for which limited archaeological fieldwork, typically monitoring, is recommended. Grade 3 resources have little historical significance and no mitigation or monitoring is required. Grade 4 resources consist of lake-filled areas in the waterfront where there is little archaeological interest, but would assist in gaining a better understanding of development occurring in Toronto in the nineteenth century.

The ACMS (Figure 9) serves as the basis for future planning decisions with respect to the archaeological assessment process.

Within the Port Lands, the following resources have been identified as Grade 2 resources requiring monitoring during construction, and are to be commemorated and interpreted:

- LDP-1 Don Breakwater Archaeological;
- LDP-2 Government Breakwater Archaeological;
- LDP-3 Toronto Dry Dock Archaeological; and

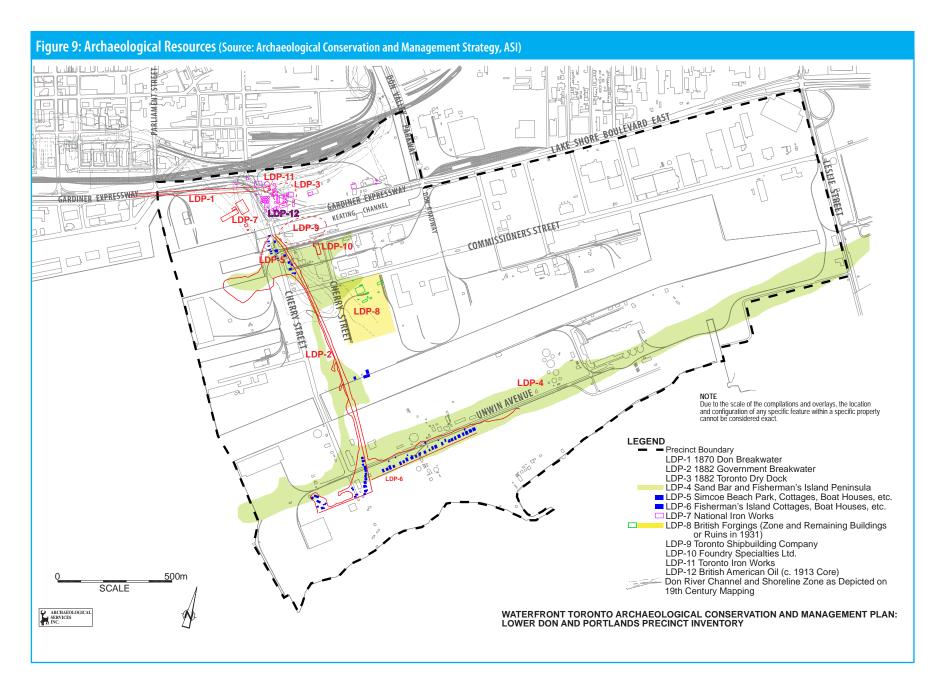
■ LDP-4 Sand Bar and Fisherman's Island Peninsula Archaeological.

Grade 3 archaeological resources that require no further archaeological work, but would be required to be commemorated and interpreted are:

- LDP-5 Simcoe Beach Park Cottages, Boat Houses, etc.;
- LDP-6 Fisherman's Island Cottages, Boat Houses, etc.;
- LDP-7 National Iron Works;
- LDP-8 British Forgings;
- LDP-9 Toronto Shipbuilding Company;
- LDP-10 Foundry Specialties Ltd.;
- LDP-11 Toronto Iron Works Ltd.; and
- LDP-12 British American Oil.

An Archaeological Assessment is required on lands that hold archaeological potential to ascertain the presence or absence of archaeological resources as part of the Municipal Class EA process. A Stage 1 Archaeological Assessment is being undertaken as part of the Port Lands and South of Eastern Transportation and Servicing Municipal Class EA. Stage 1 assessments consist of background research. The Stage 1 assessment will build upon the previous archaeological work undertaken for the Port Lands.







There are two municipal parks and other open spaces in the study area. Within the context area, there are a number of parks and open spaces (Figure 10).

3.5.1 PARKS AND OPEN SPACES IN THE STUDY AREA

JENNIFER KATERYNA KOVAL'S'KYJ PARK

This small parkette is located at the terminus of Polson Street and overlooks the Lake Ontario.

McCLEARY PARK

McCleary Park is a 2.8-hectare park on Lake Shore Boulevard East to the north of the City's waste transfer station at 400 Commissioners Street. The park features two lighted ball diamonds and a cricket pitch.

LESLIE STREET GREENING

The Leslie Street Greening project created a green corridor from Lake Shore Boulevard East to Tommy Thompson Park. The purpose of the project was to connect the neighbourhoods north of Lake Shore Boulevard to the Port Lands and its emerging park system.



Jennifer Kateryna Koval's'kyj Park

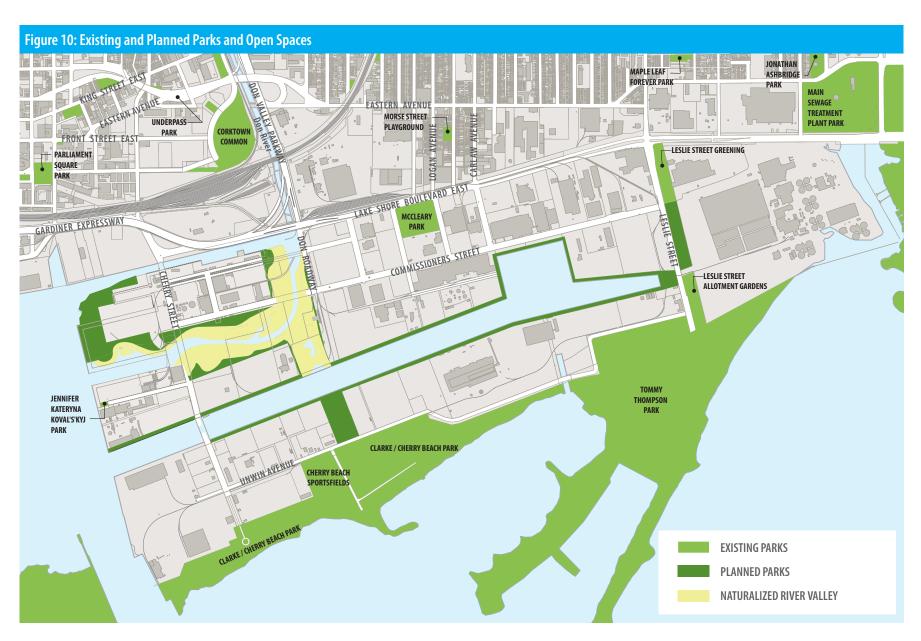


Leslie Street Greening (Source: Waterfront Toronto)



McCleary Park looking south





Cherry Beach Sports Fields (Source: Waterfront Toronto)



3.5.2 PARKS AND OPEN SPACES IN THE CONTEXT AREA

TOMMY THOMPSON PARK

Since the late 1950s, millions of additional cubic metres of concrete, earth fill and dredged sand have been added creating the Leslie Street Spit and Tommy Thompson Park. The park now extends about five kilometres into Lake Ontario and is more than 250 hectares (620 acres) in size.

The Toronto and Region Conservation Authority currently owns the land and water bodies included in Tommy Thompson Park. The park represents some of the largest existing natural habitat on the Toronto waterfront. Wildflower meadows,

cottonwood forests, coastal marshes, cobble beaches and sand dunes are just some of the habitats at Tommy Thompson Park. Wildlife, especially birds, flourish at the park, which provides one of the best nature watching areas in the GTA. Other recreational opportunities include hiking, cycling, rollerblading and fishing.

CLARKE/CHERRY BEACH PARK

Clarke Beach Park, or Cherry Beach as it is more commonly referred to, is located on the north shore of the Outer Harbor at the foot of Cherry Street. The west side of the beach is popular with kiteboarders and there is also an off-leash dog area.

CHERRY BEACH SPORTS FIELDS AND PLAYGROUND

The Cherry Beach Sports Fields, opened in 2008, consist of two regulation-sized elite soccer and lacrosse fields. These fields were developed to assist in meeting the high demand for playing fields in Toronto. The state-of-the-art fields can accommodate numerous recreational activities such as field hockey and ultimate Frisbee, in addition to soccer and lacrosse. Adjacent to the fields is an adventure playground and a permanent washroom facility which opened in 2012.

OTHER PARKS AND OPEN SPACES

There are a number of parks and open spaces located north of Lake Shore Boulevard, including new West Don Lands parks - Corktown Common and Underpass Park.





3.6 NATURAL ENVIRONMENT

The Port Lands and surrounding lands, while man made, support a rich natural environment, with the Leslie Street Spit and Tommy Thompson Park, well-known as sites for migratory birds. The existing and planned natural features are significant and will contribute to the character of the Port Lands revitalization and broader city.

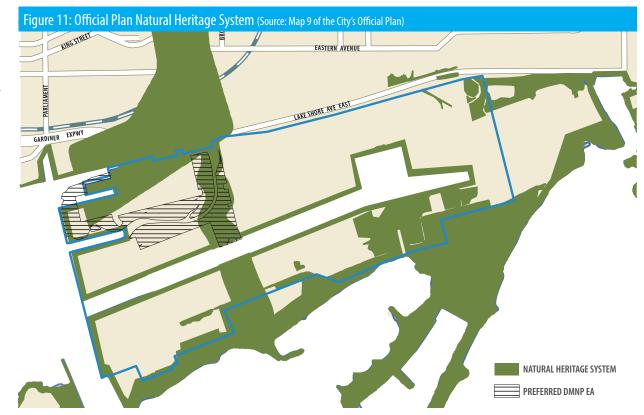
Information collected by North-South
Environmental Inc. for the City of Toronto in June
2012 titled *Environmentally Significant Areas (ESAs)*In The City of Toronto has been used to inform this section. Additional sources include the Lake Ontario
Park Master Plan prepared on behalf of Waterfront
Toronto and the report Migratory Birds in the City of
Toronto prepared in 2009 for the City of Toronto.

3.6.1 NATURAL HERITAGE SYSTEM

The natural heritage system in the Port Lands is made up of both existing and planned natural areas. Map 9 of the City's Official Plan (Figure 11) identifies the existing and future system. However, the City's Official Plan is not in effect for the Port Lands. Moreover, the mapping needs to be updated to reflect more recent initiatives such as the Lower Don Lands Framework Plan (2010), the Don Mouth Naturalization and Port Lands Flood Protection Project (DMNP EA), the Lower Don Lands Municipal Class EA and the Port Lands Acceleration Initiative (PLAI).

The existing natural areas are described in more detail in Section 3.5.2. The planned natural areas or features include the new river mouth, Promontory Park, the Don Greenway and the future water's edge promenades. These planned natural areas will provide the missing link needed to complete the natural heritage system between the Don Valley River system and the city's waterfront.

The TRCA, Waterfront Toronto and the City of Toronto are in the process of amending and finalizing the DMNP EA and the Lower Don Lands Class EA. The DMNP EA will transform the existing mouth of the Don River into a healthier, more naturalized river outlet directed south toward Polson Slip and out to the lake, while at the same time, removing the risk of flooding to 240 hectares (595 acres) of urban land to the east and south of the existing river. New aquatic habitat (13 hectares) and terrestrial/wetland areas (16 hectares) will be created.





3.6.2 ENVIRONMENTALLY SIGNIFICANT AREAS (ESAs)

ESAs are areas of land or water within the natural heritage system that are particularly sensitive and require additional protection to preserve their environmentally significant qualities. There is one ESA – North Shore Park - located within the Port Lands study area. The remaining ESAs are located within the broader context area and are concentrated to the south of the Port Lands (Figure 12).

NORTH SHORE PARK

North Shore Park is a 3.5 hectare (9 acre) site bound by Villiers Street on the south, by Commissioners Street to the north by the Don Roadway to the west, and Saulter Street South to the east. It was identified by the TRCA in 2008 as an Environmentally Significant Area and is protected as a reserve for butterflies. The site contains cultural meadow, with a small area of cultural woodland, including a successional area that is periodically mowed. The area is small, open and isolated by urban habitat. Bird species observed are those typically found in urban areas including northern cardinal, red-winged blackbird and song sparrow.

This ESA is in poor to fair condition based on the lower diversity of flora, high abundance of non-native species, and general lack of diversity of wildlife habitat. The lands are owned by the TPLC, but are under option to Rose Corporation. As part of the Don Mouth Naturalization and Port Lands Flood Protection Project (DMNP EA), filling to create a Valley Wall Feature will be required on this site.

BASE LANDS

The Base Lands are a 42.7 hectare site (105 acre) that lies along the north shore of the Toronto Outer Harbour at the base of the Leslie Street Spit. It is bounded to the north by Unwin Avenue. This area's significance stems primarily from its diversity of habitat, its location next to the lake and proximity to other significant natural areas like the Leslie Street Spit and Cherry Beach. It supports a notable abundance and diversity of migrating songbirds, and a high diversity of birds breed here.



North Shore Park



THE SPIT

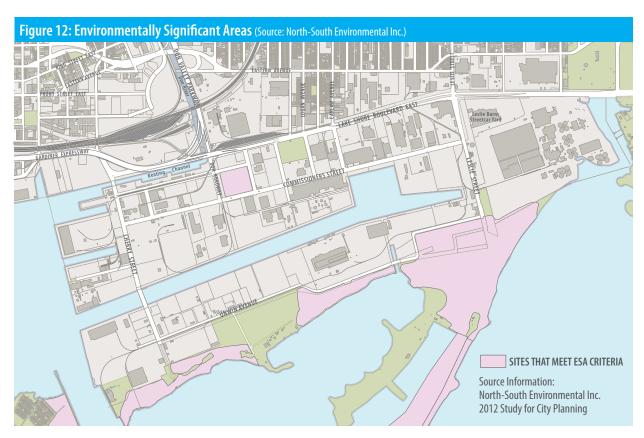
The Spit is made up of two ESAs: The Leslie Street Spit and Tommy Thompson Park. The Spit was created from large rubble deposited into Lake Ontario from building sites. Since the late 1950s, these deposits have formed a series of fingers, with intervening embayments, which have since become vegetated with successional herbaceous species, shrubs and trees.

Tommy Thompson Park

Tommy Thompson Park is a 191.3 hectare (105 acre) man-made promontory consisting of landfill. A high diversity of sensitive species breed at Tommy Thompson Park and vegetation in the park is in varying stages of early to mid-succession. The TRCA recorded approximately 96 fauna species in 2009. There are also approximately 64 species of birds (with breeding evidence), six snakes, five frogs, five turtles and 17 mammals.

Leslie Street Spit

The Leslie Street Spit is a 63 hectare (155 acre) man-made projection jutting out into Lake Ontario, running south and west from the foot of Leslie Street. The Leslie Street Spit is actively being extended by the addition of rubble from building sites. As a result, many areas of the Leslie Street Spit are unvegetated. The Leslie Street Spit has 18 vegetation communities with some areas of open wetlands, 71 species of flora, with 12 significant species, 53 species of fauna with four significant fauna species, 41 species of birds, six mammals, three snakes, one turtle and two amphibians.



CHERRY BEACH ESAs

The Cherry Beach and Cherry Beach Extension ESAs comprise a total area of 19.7 hectares (49 acres). The Cherry Beach ESA, at 8.4 hectares, lies along the north shore of the Toronto Outer Harbour at the foot of Cherry Beach. The area has been colonized by a diversity of native and non-native species, providing habitat for wildlife. There are 11 vegetation communities, 121 species of flora, 28 species of fauna, 24 species of birds, 17 of which are breeding, and four mammals. The abundance and diversity of breeding birds is very high for such a small area.

The Cherry Beach Extension is 11.3 hectares (28 acres) in area and has 11 vegetation communities; 129 species of flora and 34 species of fauna recorded: 30 species of birds (25 with breeding evidence) and four mammals.



3.7 COMMUNITY SERVICES AND FACILITIES

The Port Lands, being an industrial district, have no community services and facilities like community centres, schools or child care centres. In order to realize the revitalization objectives for the Port Lands, a range of community services and facilities for the future new residential communities and employment uses will be required. As part of the development of the Central Waterfront Secondary Plan, a community services and facilities strategy was developed for the entire Central Waterfront area, including the Port Lands. A further community services and facilities strategy was developed as part of the Lower Don Lands Framework Plan.

The initial study - Community and Emergency Facilities Required in Conjunction with Waterfront Redevelopment (2001) - complemented the work undertaken by the Toronto Waterfront Revitalization Task Force. The study was based on population projections and unit counts for sub areas within the Central Waterfront area. The study identified a potential 26,429 residential units within the Port Lands, yielding a population of 45,000. The study recognized that the actual buildout of the Port Lands may vary, and as such, it provided initial guidance on the possible facilities required. It was intended that precinct planning would further articulate the type and amount of facilities required within a particular area.

The study identified the need for the following facilities within the Port Lands based on the projected residential population:

- Six school sites;
- One ambulance station;
- One to two libraries:
- Eight child care centres; and
- Two community centres.

The study also identified the need for approximately 41 hectares of parkland based on a parkland provision rate of 0.91 hectares per 1,000 residents. The study encouraged the co-location of community facilities with park sites, provided each use is provided with sufficient programming space. Additionally, the following recreation uses were identified:

- Four soccer pitches;
- Six ball diamonds;
- 15 tennis courts; and
- 15 playgrounds.

A subsequent study, the *Lower Don Lands Framework Plan* (2010), identifies a projected unit count of 12,500 units, yielding an approximate population of 21,250. The following facilities were identified:

- Two school sites:
- One ambulance station;
- One to two libraries;
- Eight day care centres; and
- Two community centres.

A new community services and facilities strategy that updates the 2001 and 2010 studies will be developed as part of the Port Lands Planning Framework. This will ensure that revitalization as part of this study to ensure that appropriate facilities are provided for the new communities based on forecasted development, including optimizing where certain types of facilities should be located and ensuring their timely provision.



3.8 MUNICIPAL YARDS

A number of City of Toronto yards in or near the Port Lands (Figure 13) provide necessary services for Toronto residents and businesses.

3.8.1 YARDS IN THE STUDY AREA

400 COMMISSIONERS STREET TRANSFER STATION

Constructed as an incinerator in 1953, this 2.4 hectare (6.1 acre) yard now functions as a transfer station for residential waste, a yard compost facility, a household hazardous waste depot and electronic goods dropoff.

The main building has offices and a small tipping floor, used to store and compact waste before it is transferred to trucks destined for the Green Lane Landfill. Its office and administrative floors are underutilized. The other building on site, with a large garage and office component, is vacant.



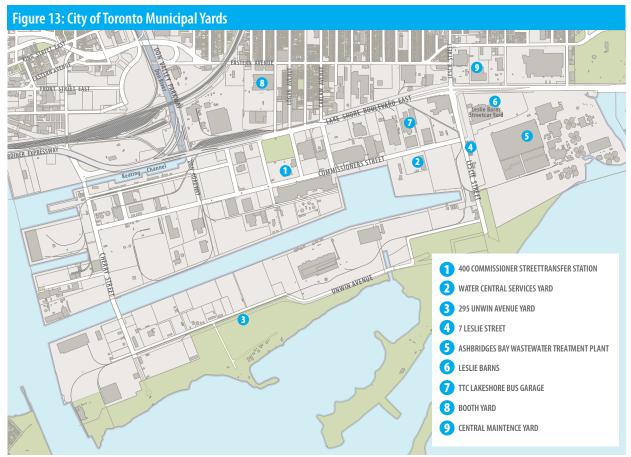
400 Commissioners Street Transfer Station

545 COMMISSIONERS AVENUE — WATER CENTRAL SERVICES YARD

This Water Central Services Yard is located on a 1.8 hectare (4.4 acre) site and has a two-storey administrative building used exclusively by Toronto Water, a fueling depot, storage yard and surface parking. The 2,800 square metre Toronto Water building was constructed in 1985 and houses laboratories and office space.

295 UNWIN AVENUE YARD

Urban Forestry utilizes this 7.2 hectare (18 acre) site as a tree nursery and wood storage compound. The nursery was relocated from the Garrison Nursery Yard.



580 COMMISSIONERS STREET — TTC LAKESHORE BUS GARAGE

The TTC acquired this building in the 1980s from Grey Coach Lines. In 1988, the Lakeshore Garage was converted from a conventional bus maintenance facility to one that could service and maintain the TTC's Wheel-Trans buses. The facility is located on the north side of Commissioners Street, just west of Leslie Street.



3.8.2 YARDS IN THE CONTEXT AREA

There are five municipal yards in the larger context area.

LESLIE BARNS

Currently under construction, the Leslie Barns will be the TTC's fleet maintenance and storage facility for the new, accessible streetcars. The 7.3 hectare (18 acre) site is located at the southeast corner of Leslie Street and Lake Shore Boulevard East. Streetcar tracks from Queen Street East down Leslie Street to Commissioners Street are also under construction.

7 LESLIE STREET

This 2.8 hectare (6.8 acre) site is an expressway operations yard and winter maintenance depot for Transportation Services.



The Ashbridges Bay Treatment Plant is the largest of the City of Toronto's four wastewater treatment plants. The facility is located on a 40.5 hectare (100 acre) site south of Lake Shore Boulevard East and east of Leslie Street. Original construction of the facility was in 1910, with continued expansion through the years.

843 EASTERN AVENUE — CENTRAL MAINTENANCE YARD

This 2.4 hectare (6 acre) maintenance yard east of Leslie Street and north of Lake Shore Boulevard East consists of two buildings that is utilized by Fleet and Municipal Licensing and Standards for taxi inspections.

433 EASTERN AVENUE – BOOTH YARD

The Booth Yard is located on a 5.7 hectare (14 acre) site north of Lake Shore Boulevard, east of the Don Roadway/Don Valley Parkway. The site has three buildings, including two heritage structures and is utilized by Transportation Services and Parks, Forestry and Recreation.





3.9 TRANSPORTATION NETWORK

The transportation network in the Port Lands was designed to serve an industrial district and some streets include rail spurs within the right-of-ways. The roads are generally in poor condition and the street network lacks a fine grain of connections needed to support revitalization and a mix of uses. There are also limited connections to the rest of the city and pedestrian amenities are lacking. Transit is limited, with only one bus route servicing the area. The Martin Goodman Trail (MGT), the only cycling facility in the study area, provides access to the recreational areas along the water's edge. There is also a well-used cycling trail on the north side of Lake Shore Boulevard. Both the MGT and the north of Lake Shore Trail act as vital connections for the heavily used Don Valley Bike Trail.



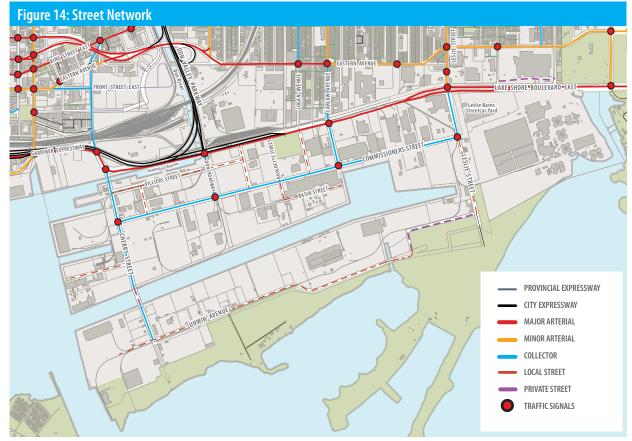
F. G. Gardiner Expressway and Lake Shore Boulevard East looking westward at Saulter Ave

3.9.1 STREET NETWORK

The primary streets within the study and context areas include: Don Valley Parkway; F. G. Gardiner Expressway; Lake Shore Boulevard; Cherry Street; Commissioners Street; Don Roadway; Carlaw Avenue and Leslie Street.

REGIONAL TRANSPORTATION

The F. G. Gardiner Expressway (Gardiner Expressway) is a major east-west transportation artery within the Toronto Central Waterfront and is aligned along the north limit of the study area. It is a controlled access expressway which connects the Queen Elizabeth Way (QEW) and Highway 427 in the west with the Don Valley Parkway (DVP) and Lake Shore Boulevard in the east through downtown Toronto.





Lake Shore Boulevard is aligned on the north limit of the study area. From Etobicoke, it follows a similar route to the Gardiner Expressway into the Central Waterfront where it provides access to downtown arterials. Lake Shore Boulevard east of the Don Valley Parkway provides access to the eastern Port Lands, South of Eastern and neighbourhoods to the north, Ashbridges Bay and the Beach community before ending at Woodbine Avenue.

The City of Toronto and Waterfront Toronto are currently exploring options for the future of 2.4 kilometres of the elevated Gardiner Expressway east of Jarvis Street through the Gardiner Expressway and Lake Shore Boulevard Reconfiguration Environmental Assessment (EA) and Integrated Urban Design Study.

The Don Valley Parkway is a north-south expressway aligned on the east side of the Don River that ends just north of the study area. It provides regional connections to the west via the Gardiner Expressway and connects the study area to Highways 401 and 404.

COLLECTOR STREETS

The Don Roadway is a north-south collector street with a four-lane cross-section. A TPLC owned boulevard on the eastern edge of the street with a multi-use trail connects the Lower Don River Trail. The Don Roadway extends from the base of the Don Valley Parkway to Commissioners Street and provides access from the site to the Don Valley Parkway.

At the Lake Shore Boulevard intersection, eastbound and westbound lefthand turns are prohibited to and from the Don Roadway.

Commissioners Street was one of the earliest Port Lands streets established by the Toronto Harbour Commissioners. It is an east-west collector street with a four-lane cross-section. It has a 30 metre right-of-way width extending from Cherry Street to Leslie Street and is the main east-west collector street within the Port Lands. In the western portion of Commissioners Street, central medians with three steel pylons carrying overhead transmission wires run down the centre of the street between the Don Roadway and Bouchette Street. Sidewalks are discontinuous and in some locations there are mature trees dating to the 1920s.





Cherry Street is a north-south collector street that extends south from King Street to Cherry Beach. The width of Cherry Street varies from 22.5 metres to 27.5 metres between Villiers Street and the Keating Channel. It widens to approximately 35 metres south of Polson Street. In 2008, streetscape improvements were undertaken along Cherry Street as part of a tri-government effort funded by the Port Lands Beautification Program and implemented by Waterfront Toronto. The Bascule Bridge across the Ship Channel is owned and operated by the Toronto Port Authority. It is currently undergoing repairs.



Carlaw Avenue is a north-south collector street that runs from Danforth Avenue to Commissioners Street. South of Lake Shore Boulevard East. It features a four-lane cross-section with a landscaped boulevard and a continuous sidewalk on the east side of the street. Sidewalks are discontinuous on the west side of the street. A signalized intersection at Lake Shore Boulevard permits full moves to/from Lake Shore Boulevard.

Leslie Street is a four-lane, north-south collector street that runs north of Queen Street East to Commissioners Street. At Commissioners Street, the pavement width remains the same, but acts as one wide lane in each direction and generally functions as a local street. The intersection at Lake Shore Boulevard East and Leslie Street is signalized. From 2007 to 2010, a greening initiative was undertaken on Leslie Street as part of the Port Lands Beautification Program. The initiative created a generous green corridor linking the neighbourhoods to the north to Tommy Thompson Park and Leslie Street Spit to the south. As part of the Leslie Barns project, streetcar tracks are being introduced in the centre two lanes between Oueen Street East and Commissioners Street. This will be a non-service route on Leslie Street. Additional landscaping and streetscaping along Leslie will be undertaken following construction of the Leslie Barns.

LOCAL STREETS

Villiers Street is an east-west street with a typical right-of-way width of 36-metres west of the Don Roadway. It consists of two roadways with travel lanes in each direction separated by a railway right-of-way. The location of the tracks are representative of the efforts of the Toronto Harbour

Commissioners to link rail and water transportation in the Port Lands. Villiers Street offers a vista westward to the important concrete silos of the former Century Coal Company (now the Essroc Cement Company) and the Inner Harbour beyond.

East of the Don Roadway, Villiers Street reverts to a standard two-lane cross-section with on-street parking, approximately 24 metres in width. The street terminates at Saulter Street South and lacks sidewalks.

Basin Street is an east-west street with a two-lane crosssection. It begins at Saulter Street and dead-ends east of Bouchette Street at the Turning Basin.

Saulter Street South is a two-lane north-south street between Lake Shore Boulevard East and Basin Street with on-street parking located on either side of the street. The right-of-way width is approximately 30 metres and there are no sidewalks. There is right-in/right-out access to/from Lake Shore Boulevard East.

Bouchette Street is a north-south street with a 26 metre right-of-way width between Lake Shore Boulevard East and Basin Street. Similar to Saulter Street South, on-street parking is provided on either side of the street, and there are no sidewalks. There is right-in/right-out access to/from Lake Shore Boulevard East.

Logan Avenue is a north-south street with a 26 metre right-of-way width between Lake Shore Boulevard East and Commissioners. Similar to Saulter Street South and Bouchette Street, on-street parking is provided on either side of the street, and there are no sidewalks. There is right-in/right-out access to/from Lake Shore Boulevard East.

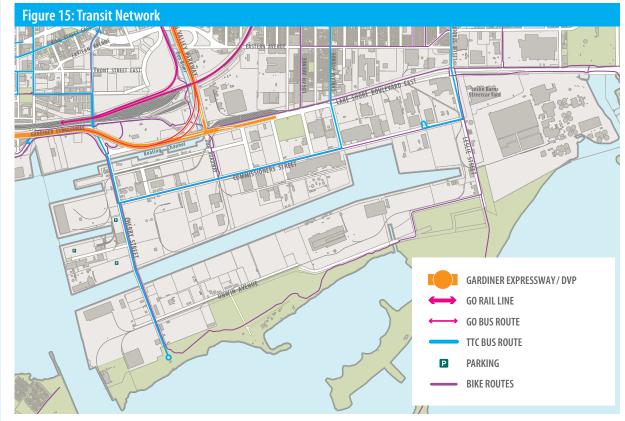
Unwin Avenue is a two-lane east-west street south of the Ship Channel. It was established after 1930 when the Cherry Street Bascule Bridge was constructed to provide access to the south portion of the Port Lands Industrial District. Originally the street was conceived as a grand boulevard, but this never materialized. The section of Unwin Avenue east of the Hearn Generation Station is a private street owned by TPLC. A one-lane bailey bridge provides access across the Hearn's Discharge Channel. West of the Hearn, there are railway tracks, utilized by the Toronto Port Authority, that run through the middle of the right-of-way.



3.9.2 TRANSIT

Existing transit service (Figure 15) is limited in the Port Lands to two TTC bus routes:

- The Pape 72 bus runs between Pape Station on the Bloor-Danforth Subway line and Union Station on the Yonge-University-Spadina Subway line via Carlaw, Commissioner's and Cherry).
 The Pape 72 also provides an extended route option to the Cherry Beach loop during the summer months; and
- The Jones 83 bus runs from Donlands Station on the Bloor-Danforth subway line to a turnaround in the area of Leslie Street and Commissioners Street.





3.9.3 PEDESTRIAN AND CYCLING NETWORK

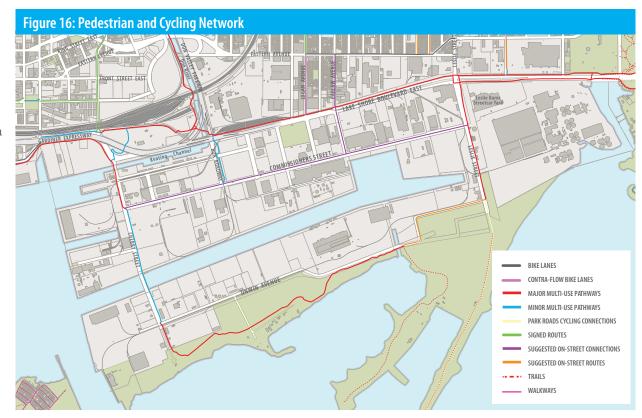
PEDESTRIAN FACILITIES

The existing transportation network in the study area was planned to serve industrial uses, and pedestrian amenities are generally lacking. Many streets do not have sidewalks or they are only located on one side. Sections of main collector streets, such as Commissioners Street, have discontinuous sidewalks in certain areas.

CYCLING FACILITIES

The Martin Goodman Trail (MGT) runs along Queens Quay Boulevard and Lake Shore Boulevard and connects into the Port Lands at two points – Cherry Street and Leslie Street – and back north to the city via the Don Valley Bike Trail. The Cherry Street portion of the trail is located on the west side of Cherry Street north of Commissioners Street and then switches to the east side of the street south of Commissioners Street. The Cherry Street trail is generally substandard in width. The Leslie Street portion of the trail located on the east side of Leslie Street is integrated into the Leslie Street Greening. The trail connects between Cherry Street and Leslie Street through a predominantly off-street connection south of Unwin Avenue.

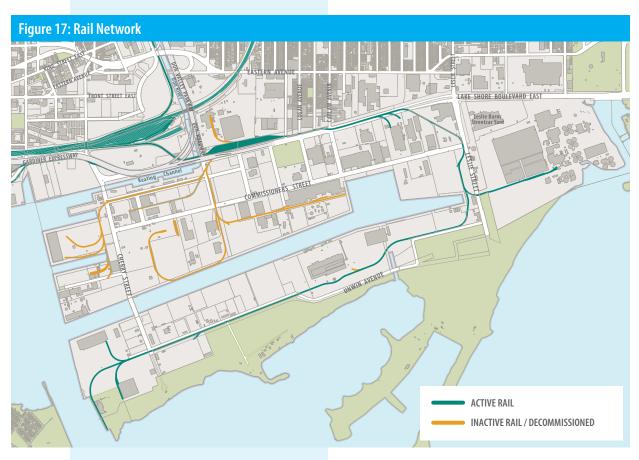
On the east side of the Don Roadway, there is a multi-use trail on lands owned by the TPLC which connects to the Lower Don River Trail and to Commissioners Street.



The MGT connects to the Don Valley Bike Trail north of the Keating Channel. There are bicycle signals installed for east-west bicycle movements across the north leg of the Lake Shore Boulevard/ Don Roadway intersection, as well as north-south and east-west movements across the Lake Shore Boulevard and Leslie Street intersection.



The Martin Goodman Trail on Cherry Street



3.9.4 RAIL

A heavy rail yard and rail corridor is located to the north of the Port Lands. The rail yard is located north of Lake Shore Boulevard East, between Cherry Street and the Don Valley Parkway. The rail corridor is utilized by GO Transit, CN and Via Rail. Additionally there is a rail corridor and small yard running east of the Don Roadway to the north of Lake Shore Boulevard. This rail corridor and yard present challenges to providing connections from the Port Lands north of Lake Shore Boulevard.

This smaller corridor is the main rail access into the Port Lands, which is still utilized by Toronto Water, CanRoof and the Toronto Port Authority. This rail line has been in continuous use since the 1940s to deliver process chemicals and other supplies for wastewater treatment to Ashbridges Bay Treatment Plant. The Toronto Port Authority also utilizes the rail corridor for bringing specialized bulk goods manufactured in Ontario to the Port to be loaded onto ships. The DMNP EA contemplates using the railway spur on the west side of Don River for transporting sand dredged from the Don River.



3.10 PORT ACTIVITY AND BOATING

PORT ACTIVITY

The Port Lands are still an active port. Notable users of the port include Lafarge Cement Inc., Essroc Italcementi Group and three bulk storage users south of the Ship Channel. RedPath has historically stored its sugar over the winter months in ships moored in the Port, although in 2012, they stored their sugar in Marine Terminal 51. The Toronto Port Authority also utilizes the International Marine Terminal Facility for cruise vessels.

According to the Toronto Port Authority, total port tonnage in 2011 was 1,775,762 tonnes. The top three domestic cargoes were salt, cement and stone. The amount of cargo has increased since the most recent recession, but has not fully recovered from 2007 volumes of 2,068,665 tonnes (TPA, 2009).

Domestic Tonnage Breakdown for 2011

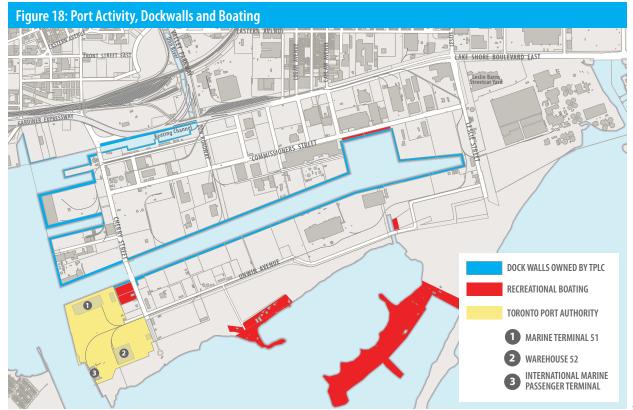
Salt: 620,336 tonnes
Cement: 486,423 tonnes
Stone: 72,660 tonnes
Aggregate: 26,063 tonnes
Asphalt: 17,959 tonnes

Source: Toronto Port Authority website

RECREATIONAL BOATING

There are a number of recreational boating facilities located within the Port Lands. The Bayside Rowing Club operates out of 525 Commissioners Street, the Great White North Dragon Boat Club and the Royal Canadian Yacht Club which has a new facility off Cherry Street, both operate south of the Ship Channel. The Great White North Dragon Boat Club utilizes the Hearn's Discharge Channel to launch boats.

Within the last 30 years a number of sailing clubs have established themselves in the Outer Harbour. The Outer Harbour Sailing Federation (OHSF) consists of eight member clubs located on the north shore of Lake Ontario, south of Unwin Avenue off Regatta Road. The Outer Harbour Marina, located on the Leslie Street Spit and operated by the Toronto Port Authority, offers berthing of over 636 slips.



DOCKWALL FACILITIES

There are 8,670 metres of dockwalls in the Port Lands, excluding dockwalls owned by the Toronto Port Authority. These are located along the Keating Channel, Cousins and Polson Quays, the Ship Channel, Turning Basin and the Leslie Street Slip. The dockwalls are owned and maintained by Toronto Port Lands Company (TPLC). Some dockwalls are leased to private interests. Some of the dockwalls require maintenance or reconstruction according to a survey undertaken for TEDCO (now TPLC) in 2009. Not all of the dockwalls are currently utilized for mooring of ships.

The implementation of the DMNP EA will result in the loss of 2,140 metres of dockwalls. In phase one of the DMNP, 1,340 metres of dockwall along Essroc and Cousins Quay would be removed. In phase two, 400 metres of dockwall would be removed along the Keating Channel and Ship Channel for the construction of the Don Greenway. In phase four, 400 metres of dockwall along the south side of the Polson Slip would be removed after Lafarge opts to cease it's operation in the Port Lands. Once the DMNP is completed, a total of 6,529 metres of dockwall would remain.

DOCKWALL	YEAR CONSTRUCTED	LENGTH
Keating Channel (South)	1912	690 metres
Essroc Pier (North)		182 metres
Essroc Pier (South)	1914	182 metres
Essroc Pier (West)		53 metres
Cousins Quay (North)		385 metres
Cousins Quay (West)	1935/1936	240 metres
Cousins Quay (South)		385 metres
Polson Quay (West)	1020/1027	337 metres
Polson Quay (North)	1929/1936	374 metres
North Ship Channel (from Inner Harbour to Cascades)	P-t 1017 11021	1,918 metres
North Ship Channel (Cascades)	Between 1917 and 1921	166 metres
Turning Basin (Cascades)		212 metres
Turning Basin (North)	Between 1917 and 1921	335 metres
Turning Basin (East)		213 metres
Leslie Street Spit (N)	1961/1962	418 metres
Leslie Street Spit (E)	10(1/10(2	123 metres
Leslie Street Spit (S)	1961/1962	406 metres
South Ship Channel	Between 1917 and 1921	2,050 metres

Source: Toronto East Harbour Dockwall Condition Inspection Report by SHAL Consulting Engineers Limited, 2004



3.11 MUNICIPAL SERVICING

The existing servicing infrastructure is limited in the Port Lands. There is

- A network of distribution water mains ranging in size from 150-300 mm diameter;
- A network of local sanitary sewers ranging in size from 300-675 mm diameter; and
- A network of local storm sewers ranging in size from 300-900 mm diameter. The storm sewers discharge to adjacent water bodies.

The majority of the network of distribution water mains are located north of the Ship Channel. Some capacity is available to provide the necessary fire protection flows for interim or commercial development.

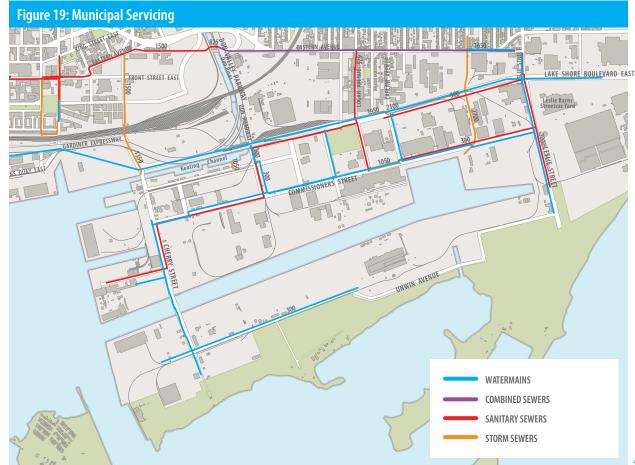
Existing sanitary sewers in the Port Lands area west of Carlaw Avenue drain to a 675 mm diameter sewer on Lake Shore, while areas east of Carlaw Avenue drain to a 600 mm diameter sewer on Leslie Street. These two sewers join together into a 675 mm diameter sewer on Logan Avenue which then discharges to the Low Level Interceptor (LLI) at Eastern Avenue.

The Lake Shore and Leslie sewers were constructed between 1928-1931 to serve the industrial district of the Port Lands and the sewer systems have limited theoretical capacities of 150 L/s each, when accounting for infiltration and inflow from a two-year storm event.

Some water/wastewater service capacity is available to accommodate development north of the Ship Channel. However, utilizing this existing capacity may limit continued interim developments or the expansion of key uses like the film studios.

The area south of the Ship Channel lacks the necessary network of watermains needed to support development. Storm drainage in this area consists of open ditches, informal ponding, infiltration and overland flow discharging directly into the lake.

Given the limited servicing capacity, growth in the Port Lands will require new services with a well-distributed storm servicing network that is integrated with the DMNP EA flood protection works.





A number of Environmental Assessments (EAs) have been undertaken which will inform future servicing within the Port Lands.

LOWER DON LANDS CLASS ENVIRONMENTAL ASSESSMENT (EA)

The City of Toronto with the Toronto Transit Commission and Waterfront Toronto completed the Lower Don Lands Infrastructure Master Plan and Keating Channel Precinct Environmental Study Report in 2010. An amendment to the Municipal Class EA to implement the outcomes of the PLAI is now nearing completion. The EA outlines the municipal servicing and transportation connections needed to support revitalization of the Lower Don Lands. This EA is discussed in more detail in Section 4.2.

WATERFRONT SANITARY SERVICING MASTER PLAN

The City of Toronto completed a Municipal Class Environmental Assessment (EA) Study in 2012 for a comprehensive Sanitary Servicing Master Plan for the Central Waterfront area. The Master Plan identifies the necessary sanitary sewer infrastructure to service the intense development growth along Toronto's waterfront.

Within the Port Lands, the preferred solution includes a new gravity trunk sewer constructed along Commissioners Street east of the Don Roadway to Leslie Street. The sewer would continue south down Leslie Street to Unwin Avenue and then across Unwin Avenue south of the Ship Channel. To the west of Commissioners Street, the new sewer would jog north between Villiers Street and Commissioners Street. The new sewer would connect to an existing, unused sewer on Carlaw Avenue just north of Eastern Avenue.

DON RIVER AND CENTRAL WATERFRONT EA

The City of Toronto has completed a Municipal Class Environmental Assessment (EA) Study to advance the recommendations of the City's Wet Weather Flow Master Plan (approved by City Council in 2003) to capture and treat polluted stormwater and combined sewer overflows (CSO's) that are discharged to the Don River and Central Waterfront.



3.12 ENVIRONMENTAL CONDITIONS

3.12.1 SOIL CONTAMINATION

The combination of more than a century of industrial activity and extensive lake filling in the area has resulted in soil and groundwater contamination. Elevated contaminant concentrations are typically found at shallow depths and groundwater issues are generally localized for inorganic type contaminants. However, organic contaminants resulting from certain industrial uses and disposal activities could be more widespread and may be present to and within bedrock.

The Brownfields Statue Law Amendment Act, 2001 and associated regulations came into force on October 1, 2004. Brownfield properties are lands that are potentially contaminated due to previous uses are typically underutilized or vacant, and require remediation prior to redevelopment. The provincial legislation facilitates the reuse of brownfield areas. Where lands are proposed to be reused for more sensitive uses, such as a change in land use from industrial to residential, the legislation requires assessment and remediation, or the implementation of a risk management process.

Various studies have been undertaken over the years documenting soil contamination in the Port Lands, either on a site-by-site basis or more comprehensively. Initiatives include the *Area Wide Initiative* and the *Preliminary Environmental Liability Assessment: Toronto Port Area*.

In 1997, TEDCO (now TPLC) implemented the *Area Wide Initiative* (AWI). The purpose of the AWI was to generate a framework for soil and groundwater monitoring across the Port Lands to support regeneration and redevelopment opportunities. Monitoring is undertaken on an annual basis over a current network of 40 monitoring wells located within the Port Lands. The AWI includes three components:

- Ground water monitoring;
- Ecological monitoring to assess baseline conditions; and
- Free product recovery.

In 2001, TEDCO (now TPLC) completed the *Preliminary Environmental Liability Assessment: Toronto Port Area.* This study concluded that although the nature of contamination is casespecific, properties throughout the area have been shown to exhibit contamination by heavy metals, non-metal inorganic parameters, petroleum hydrocarbons, volatile organic compounds and semi-volatile aromatic hydrocarbons (*Waterfront Scan and Environmental Improvement Strategy Study* (2003), SENES Consultants Limited).

Further investigation will be needed for any potential redevelopment to more sensitive land uses or infrastructure-related activities, such as new streets and servicing infrastructure identified through the Port Lands and South of Eastern Transportation and Servicing Environmental

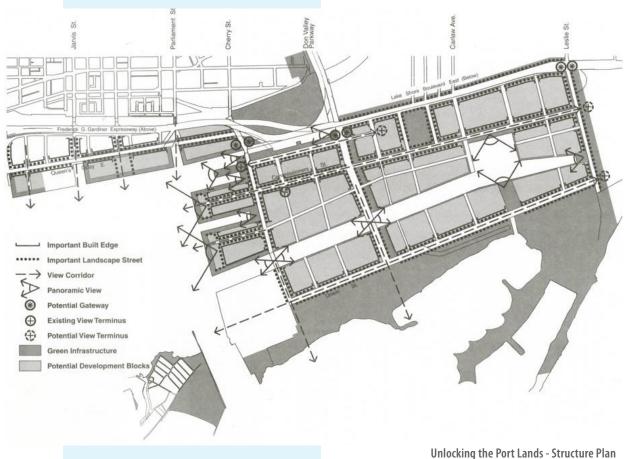
Assessment. These studies will delineate and further characterize the soil and groundwater contamination that is present and provide further recommendations to satisfy environmental regulations.

3.12.2 OTHER ENVIRONMENTAL CONSIDERATIONS

Revitalizing the Port Lands is generally known to be challenging from a geotechnical and hydrogeological standpoint. Some of the subsoils consist of varying types and depth of fill material over former lakebed or organic material that is a consequence of filling of the Ashbridges Bay marsh in the early 20th century. Fill and organic material is generally not suitable for carrying development, infrastructure loads and special provisions, such as excavation and removal or deep foundations, which would require further investigation. The groundwater table is also generally high due to the Port Lands being in close proximity to Lake Ontario and the perviousness of the subsoil.

PROFILE CHAPTER FOUR: PLANNING FRAMEWORK

4.0 PLANNING FRAMEWORK



SUMMARY OF PAST PLANNING 4.1 **EXERCISES**

Since the 1990s, the Port Lands have been the subject of numerous area-wide and site specific planning studies. From the Task Force to Bring Back the Don to the Port Lands Acceleration Initiative, there are more than 20 years of planning history for the Port Lands. The summary of planning initiatives below represents those that led to the adoption of the Central Waterfront Secondary Plan (CWSP) or its implementation.

UNLOCKING THE PORT LANDS

Unlocking the Toronto Port Lands: Directions for the Future provided a broad, yet comprehensive, vision for the Port Lands that recognized the need for a diversity of uses. It acted as a discussion paper intended to focus comments and build consensus on the future vision for the Port Lands. Presented to City Council in 1998, City staff were then directed to undertake a Secondary Plan exercise for the Port Lands.



Unlocking the Toronto Port Lands: Directions for the Future focused on three organizing principles:

- A Structure Plan which provided a framework of green corridors, natural areas and parks, streets, views and gateways around which land uses and new development would be organized;
- Placemaking, including the identification of character areas and important views; and
- Transportation directions including options for improving access to the Port Lands, road capacity and circulation, and the introduction of a new bridge connection across the Ship Channel at the Don Roadway.

OUR TORONTO WATERFRONT: GATEWAY TO THE NEW CANADA

On November 3rd, 1999, the Toronto Waterfront Revitalization Task Force, chaired by Robert Fung, was created by the three levels of government with a mandate to develop a business plan and make recommendations for the revitalization of Toronto's waterfront. In March 2000, the Task Force released its report - *Our Toronto Waterfront: Gateway to the New Canada.* In August 2000, Toronto City Council approved the Task Force's report. All three levels of government also pledged their financial support to revitalizing Toronto's waterfront.

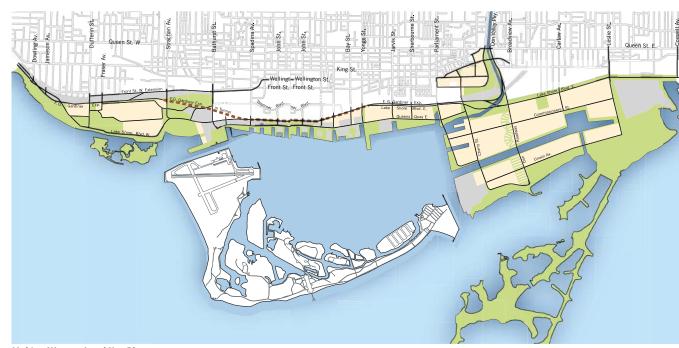
The plan developed by the Task Force was a strategic master plan that envisioned open space, recreational, residential, commercial and entertainment uses for the Port Lands and examined infrastructure requirements.

MAKING WAVES – CENTRAL WATERFRONT PLAN

In 2003, City Council approved *Making Waves*: *Central Waterfront Plan Part II*, now known as the Central Waterfront Secondary Plan (CWSP). The Plan focuses on core principles and big public moves, leaving area-specific details to precinct development strategies to be completed later.

The CWSP is based on four core principles that apply across the waterfront:

- Removing Barriers and Making Connections;
- Building a Network of Spectacular Waterfront Parks and Public Spaces;
- Promoting a Clean and Green Environment; and
- Creating Dynamic and Diverse New Communities.



Making Waves - Land Use Plan

PORT LANDS IMPLEMENTATION STRATEGY

In 2005, Waterfront Toronto undertook a planning exercise to develop a comprehensive Port Lands-wide implementation strategy.

The draft strategy was not endorsed by City Council, but the plan that emerged through the exercise consisted of identifying:

- A series of 10 individual precincts and general timeframes (near- and longterm) for revitalization;
- Potential land uses within the precincts and population projections;
- Possible sites for parks and open spaces, including regional playing fields;
- A more fine-grained network of streets integrated with transit and rationalizing connections across the Ship Channel;
- Ideas for upgrading servicing as development proceeds; and
- Potential interim land uses.

LAKE ONTARIO PARK MASTER PLAN

Identified as a "Big Move" in the Central Waterfront Secondary Plan, the creation of the Lake Ontario Park would provide an enhanced continuous urban park system along the waterfront. In 2006, Waterfront Toronto and their lead design team, Field Operations, began preparing the *Lake Ontario Park Master Plan* to guide the future implementation of this important regional park.

The park site would stretch along the south edge of the Port Lands between the Eastern Gap and Ashbridges Bay, extend south of Unwin Avenue across the Base Lands to the tip of Tommy Thompson Park, and includes Ashbridges Bay Park, Coatsworth Cut and the Eastern Beaches. The *Lake Ontario Park Master Plan* was defined by a series of transects and outposts. Transects are the principle elements in the park design which would create a connected network of paths to unify the park. Outposts are both new and existing elements such



Lake Ontario Park Master Plan (Source: Waterfront Toronto)



as overlooks, frog ponds, picnic promontories, earthwork outlooks, unique plant colonies, water landings, seating and other amenities.

The Lake Ontario Park Master Plan has not received Council endorsement with some elements since proving to be challenging to implement. As part of the directions received from City Council on the Port Lands Acceleration Initiative in 2012, however, quick starts to implementing and enhancing Lake Ontario Park and Tommy Thompson Park are currently being investigated.

LOWER DON LANDS

In the absence of an implemented flood protection solution, the Port Lands cannot be developed to its full mixed-use potential. Since 2004, a number of planning initiatives have been undertaken for the Lower Don Lands. In 2004, the Toronto and Region Conservation Agency, on behalf of Waterfront Toronto, initiated the Don Mouth Naturalization and Port Lands Flood Protection Environmental Assessment (DMNP EA). Implementing the EA will lead to the transformation of the existing mouth of the Don River into a naturalized river channel. Upon completion, the new river channel, valley and associated flood protection work will remove the risk of flooding to over 240 hectares of land.

In 2007, in order to integrate the river with an urban context, Waterfront Toronto held an urban design competition for the Lower Don Lands. The winning design concept, the *Port Lands Estuary* by Michael Van Valkenburgh Associates (MVVA), formed the basis for an alternative assessed by TRCA during

the DMNP EA. The design concept was refined and subjected to a rigorous review process within the DMNP EA before it was selected as the preferred alternative. Waterfront Toronto subsequently prepared a framework plan for the Lower Don Lands which identified the naturalized river mouth as a key focal point for the area.

Waterfront Toronto and the City also undertook and completed:

- The first two phases of the Municipal Class EA process for streets and servicing for the entire Lower Don Lands:
- Phases three (alternative designs) and four (documentation in an Environmental Study Report) of the Class EA process for the Keating Channel Precinct; and
- A Precinct Plan for the Keating Channel Precinct.

Toronto City Council endorsed the DMNP EA preferred alternative, and the final DMNP EA document was submitted to the Ministry of the Environment (MOE) for approval in December 2010. At the same time, Council also endorsed the Lower Don Lands Framework Plan, the precinct plan for the Keating Channel Precinct and Class EA Infrastructure Master Plan for the Lower Don Lands, and approved amendments to the City's Central Waterfront Secondary Plan (OPA 388). A Zoning By-law amendment was also adopted for the lands west of Cherry Street in the Keating Channel Precinct. The DMNP EA approval process was paused in 2011 to allow for additional considerations.

Amendments and refinements of the DMNP EA through current work to amend and refine the DMNP, as well as current work to amend and complete the Lower Don Lands Class EA, are discussed in Section 4.2 – Summary of Current Planning Initiatives.



Rendering of the Keating Bridge on Cherry Street (Source: Waterfront Toronto)



LOWER DON LANDS FRAMEWORK PLAN

Developed with extensive community consultation, the *Lower Don Lands Framework Plan* was intended to demonstrate the broader objectives and elements for the Lower Don Lands to coordinate and inform more detailed planning, including Environment Assessments, precinct plans and planning approvals. It provides a vision for the lands structured on the new river mouth, which envisions integrated, vibrant new neighbourhood precincts, water's edge green spaces and innovative infrastructure and services.

Key elements of the Plan include:

- Creation of the promontories on the Quays;
- Creation of the river valley, with mixeduse neighbourhoods developed in the surrounding lands;
- Creation of compact development blocks to facilitate access to the water's edge and transit facilities:
- Retention, relocation and/or repurposing of heritage resources like the Keating Channel, Essroc silos, Atlas Crane and Fire Hall 30;
- Relocation of Cherry Street to create a high-quality street environment that is activated and enlivened by a mix of uses along its edge; and
- Establishment of a major east-west spine using Villiers Street and Commissioners Street.

In 2009, the Lower Don Lands Framework Plan was recognized by the Clinton Climate Initiative because of its progressive policy framework around sustainable design and C40 group. It has been selected as one of 16 founding pilot projects of the Climate Positive Development Program.



Lower Don Lands Framework Plan: Naturalization and Recreation

(Source: Waterfront Toronto)

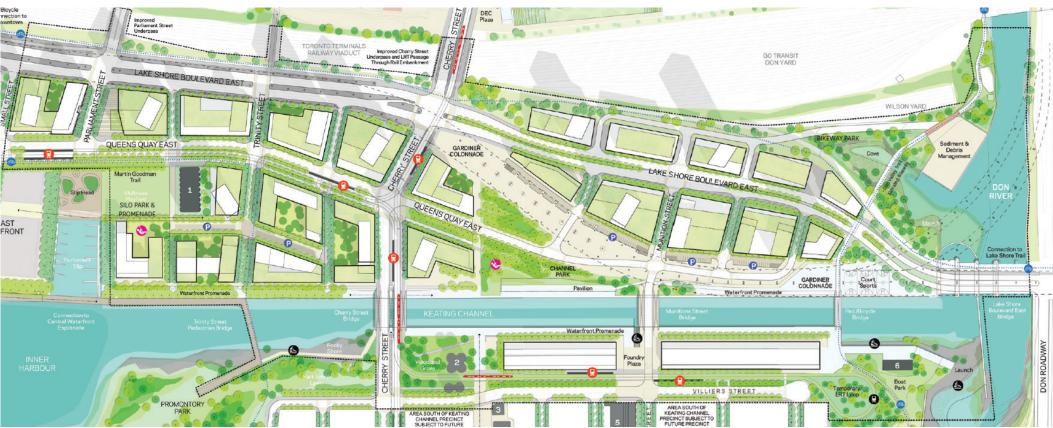


KEATING CHANNEL PRECINCT PLAN AND ZONING BY-LAW

The Keating Channel Precinct Plan, developed by Waterfront Toronto with the City of Toronto, was endorsed by City Council in 2010. The Precinct area is comprised of the lands north of Villiers Street, west of the Don Roadway with the Inner Harbour and East Bayfront forming the western boundary, and the Gardiner Expressway and rail corridor forming the northern boundary.

A key feature of the Precinct Plan is the Keating Channel, which is planned as the major, central public space for the precinct as it would be a signature feature due to its canal-like setting. The plan also proposes to realign Lake Shore Boulevard between the Don Roadway and Cherry Street. Reuse of heritage and cultural resources including the Victory Soya Mills Silos, Essroc Silos and various structures at the Toronto Port Authority Works Yard are identified to give distinct identity to the precinct.

An implementing Zoning By-law for the lands north of the Keating Channel and west of the existing Cherry Street was adopted by City Council. The By-law permits mixed-use developments, with at-grade retail along Queens Quay, Lake Shore and Cherry Streets. Mid-rise buildings are permitted with some limited towers of up to a maximum height of 125 metres at specific locations. The City initiated By-law is under appeal at the Ontario Municipal Board.



Keating Channel Precinct Plan (Source: Waterfront Toronto)

PORT LANDS ACCELERATION INITIATIVE

The Port Lands Acceleration Initiative (PLAI) was initiated in October 2011 to refine the DMNP EA and develop a business and implementation plan with the objective of accelerating development opportunities in the Port Lands. The PLAI focused on optimizing investment in flood protection and municipal infrastructure in order to release lands for development and to engage the private sector in the revitalization of the lands.

The Port Lands Acceleration Initiative (PLAI) was endorsed by City Council in October 2012. The PLAI envisioned the development over time of new mixed-use urban districts featuring:

- Phasing of development related to flood protection and major/local infrastructure requirements;
- Phasing of transit with bus rapid transit in initial phases with full light rail transit achieved through full build-out;
- Identification of catalyst uses and sites along Cousins and Polson Quays to support the area becoming an international centre for creativity and innovation as identified in the CWSP, lending distinction to the Port Lands;
- Green corridors along Cherry Street, Don Roadway, Bouchette Street, Carlaw Avenue and Leslie Street;

- Streets would be spines linking the Port Lands with the rest of the city;
- The development of spectacular waterfront parks and plazas including the re-naturalized mouth of the Don River, Promontory Park, Don Greenway Park, Lake Ontario Park and waterfront promenades; and
- Maintaining industrial and port uses.



Port Lands Acceleration Initiative Plan (Source: Waterfront Toronto)



4.2 SUMMARY OF CURRENT PLANNING EXERCISES

In addition to the Port Lands Planning Framework, Waterfront Toronto, the City of Toronto and the TRCA are completing additional planning for the Port Lands as part of a second phase of the Port Lands Acceleration initiative (PLAI), including:

- Amending and finalizing the Don Mouth Naturalization and Port Lands Flood Protection Project EA (DMNP EA);
- Amending and completing the Municipal Class Environmental Assessment for the Lower Don Lands; and
- Completing precinct planning for Cousins Quay and the Film Studio District. Precinct planning for Polson Quay is currently on hold.

Amending and completing the DMNP and Lower Don Lands EAs are nearing completion and outcomes of these processes are described further below.

DON MOUTH NATURALIZATION AND PORT LANDS FLOOD PROTECTION PROJECT ENVIRONMENT ASSESSMENT (DMNP EA)

Toronto and Region Conservation (TRCA), Waterfront Toronto and the City of Toronto are finalizing amendments to the DMNP EA following direction from City Council on the PLAI.



This project will transform the existing mouth of the Don River including the Keating Channel, into a healthier, more naturalized river outlet to the lake, while at the same time, removing the risk of flooding to 240 hectares of urban land to the east and south of the existing river. The goal of the DMNP Project is to establish and sustain the form, features, and functions of a natural river mouth within the context of a revitalized city environment while providing necessary flood protection for a Hurricane Hazel magnitude storm event.

First completed and submitted to the Ministry of Environment for approval in December 2010, and as noted the DMNP EA was placed on hold in July 2011. Through the Port Lands Acceleration Initiative refinements to the preferred alternative were identified that provided greater phasing opportunities and cost efficiencies. Additional analysis and modelling has been undertaken to refine the outcomes of the PLAL.

LOWER DON LANDS INFRASTRUCTURE MASTER PLAN

The Lower Don Lands Infrastructure Master Plan is the process of being amended to reflect changes resulting from the PLAI. Additionally, phases 3 and 4 of the Municipal Class EA process are being completed for all lands south of the Keating Channel.

The EA will establish the streets, bridges, transit and servicing (water, sanitary and stormwater management) required to facility revitalization in the Lower Don Lands and the process is informing, and is informed by, the DMNP EA.

Key features and phasing of the preferred alternatives for the DMNP EA and Lower Don Lands Infrastructure Master Plan emerging from the PLAI and as refined through continued analysis and modeling are illustrated in Figures 20 and 21.



Artistic rendering of the future Don Roadway Streetscape
(Source: Waterfront Toronto)

Figure 21: DMNP EA and Lower Don Lands Phasing

PHASE 1



FLOOD PROTECTION REQUIREMENTS

Phase 1 Greenway not required Construct new Keating Channel bridge Remove old Keating Channel bridge and abutments

ADDITIONAL WORKS TO FACILITATE DEVELOPMENT

Raise and fill Cousins and Polson Quay Precincts (including 309 Cherry, excluding Lafarge)
Realign and reconstruct Cherry Street
Fill Essroc Quay

PHASE 2



FLOOD PROTECTION REQUIREMENTS

Construct Greenway
Construct flood protection landform on First Gulf site
Construct valley wall feature on east side of Don Roadway
Modify Eastern Avenue underpass
Construct sediment and debris management area
including lengthening of Lake Shore Boulevard bridge

ADDITIONAL WORKS TO FACILITATE DEVELOPMENT

Construct Commissioners Street bridge

PHASE 3



FLOOD PROTECTION REQUIREMENTS

Construct Polson Slip bridge Construct river valley system, including the low flow channel and flood control weirs

ADDITIONAL WORKS TO FACILITATE DEVELOPMENT

Construct Basin Street bridge Raise and fill north and south of river valley

PHASE 4



FLOOD PROTECTION REQUIREMENTS

None required

ADDITIONAL WORKS TO FACILITATE DEVELOPMENT

Naturalize Polson Quay south dockwall

4.2 POLICY FRAMEWORK

The section summarizes the current legislation, plans, policies and guidelines that apply when considering new development in the Port Lands.

4.2.1 PROVINCIAL PLANS AND POLICIES

Provincial Policy Statement

Issued under the authority of Section 3 of the *Planning Act*, the Provincial Policy Statement (PPS) provides policy direction on matters of provincial interest related to land use planning and development in Ontario. The PPS ensures appropriate development while protecting resources of provincial interest, public health and safety and the quality of the natural environment. Land use planning decisions are required to be consistent with the PPS.

The PPS supports, among others:

- Land use patterns that are based on densities and a mix of land uses which efficiently use land and resources;
- Opportunities for intensification in appropriate locations, taking into account the existing building stock, and the availability of suitable infrastructure and public service facilities;
- An appropriate range of housing types and densities, including minimum targets for affordable housing;
- A full range of publicly accessible built and natural settings for recreation;
- The conservation of heritage resources;
- Safe public streets, spaces and facilities that meet the needs of pedestrians and facilitate both pedestrian and nonmotorized movement; and
- Energy efficiency and improved air quality supported by planning for compact urban form and promotion of public transit, and design and orientation that maximizes the use of alternative/renewable energy.

Places to Grow Growth Plan

The Places to Grow Growth Plan for the Greater Golden Horseshoe guides decisions on a wide range of issues including transportation, infrastructure, urban form, housing, natural heritage and resource protection. It also clarifies and strengthens the application of the Provincial Policy Statement. Land use planning decisions are required to conform to the Plan.

Key policies of the Plan that apply in the Port Lands include:

- Reducing automobile dependency through the development of mixed-use, transit supportive, pedestrian friendly urban environments;
- Providing convenient access to intra- and inter-city transit;
- Intensifying existing urban areas to accommodate growth and around major transit stations;
- Encouraging a range and mix of housing, including affordable housing within intensification areas, providing a diverse and compatible mix of land uses, and ensuring there are high quality public open spaces; and
- Conserving cultural heritage and archaeological resources as intensification occurs.



4.2.2 OFFICIAL PLAN POLICY

Official Plans are long-term visions for how a city should grow and are the most important vehicles for implementing provincial policies and plans. The former City of Toronto Official Plan is in effect in the Port Lands and designates the lands *Industrial*. However, the Central Waterfront Secondary Plan, represents Council policy to guide revitalization in the *Central Waterfront*. The CWSP was amended, through Official Plan 388, for the Port Lands in 2010. Additional amendments are anticipated to implement the outcomes of the PLAI and current planning in the Port Lands.

CENTRAL WATERFRONT SECONDARY PLAN

The Central Waterfront Secondary Plan (CWSP) was adopted by City Council in 2003 as an amendment to the former City of Toronto Official Plan. The CWSP, while not in force in the Port Lands due to appeals to the Ontario Municipal Board, represents Council policy to guide the revitalization of the lands and is based on four key principles:

- Removing Barriers and Making Connections;
- Building a Network of Spectacular Waterfront Parks and Public Spaces;
- Promoting a Clean and Green Environment; and
- Creating Dynamic and Diverse New Communities.

The CWSP contains a mixed-use policy direction for the Central Waterfront area as a whole, including the Port Lands. The Port Lands are largely designated *Regeneration Areas* and the Plan envisions a range of different activities occurring in the Port Lands.

The Port Lands are envisioned to:

- Undergo transformation to become a number of new, urban districts and neighbourhoods set amid Toronto's ongoing port activities;
- Develop with new media, knowledge-based businesses and "green" industries;
- Be a location for downtown-serving and marine-related industries; and

 Be supported by recreational, cultural and tourist amenities.

When the CWSP was adopted, the notion of creating a "Convergence Centre" east of the Don Roadway was developed. The "Convergence Centre" was to consist of the new media and knowledge-based industries within a live-work environment.

The CWSP identifies that the Port Lands will generally be developed at a medium-scale with some taller buildings at appropriate locations. Lower buildings are to be located along the water's edge, with retail and community activities concentrated at accessible locations to form a focus for the area.



Removing Barriers and Making Connections

Key policies from the first core principle of the CWSP that apply to the Port Lands include:

- Transforming Lake Shore
 Boulevard into an urban avenue
 that is generously landscaped with
 pedestrian and cycling facilities;
- Accommodating all transportation modes and high-quality urban design elements within rights-ofways;
- Operating new streetcar and some bus routes in exclusive rightsof-way to ensure efficient transit movement; and
- Laying out new streets to reinforce visual connections between the city and waterfront.

The CWSP identifies the major public streets required to accommodate revitalization in the Port Lands, including key connections which would serve to better connect the Port Lands with the rest of the city, like Broadview Avenue.

Basin Street would become an important east-west connection. Through minor modification to its current alignment, the CWSP envisions the street becoming the main street of the Port Lands.

Building a Network of Spectacular Waterfront Parks and Public Spaces

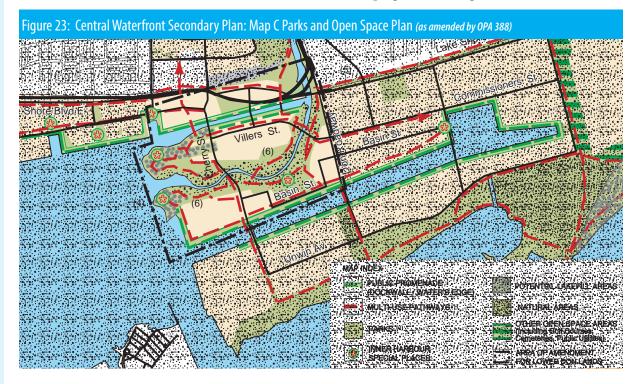
The second core principle of the CWSP is building a network of spectacular waterfront parks and public spaces, in recognition of the significance and role that high-quality public places have in creating destinations and "places" for people.

A number of "big moves" and major public spaces are identified for the Port Lands, such as the creation of the Don Greenway, renaturalized Don Mouth and creation of Lake Ontario Park. The Ship Channel is viewed as a powerful focal point and unique amenity for the Port Lands.

Parks and public plazas are to be strategically located along the water's edge and will be centres of public activity. The termination of streets within the Port Lands are to be celebrated by creating a series of unique public places, providing focal points for neighbourhoods.

Promoting a Clean and Green Environment

The third principle of the CWSP focuses on achieving a high level of environmental health in the Central Waterfront. A wide variety of environmental strategies will help shape sustainable waterfront communities and showcase the City's commitment to developing a clean and green waterfront.



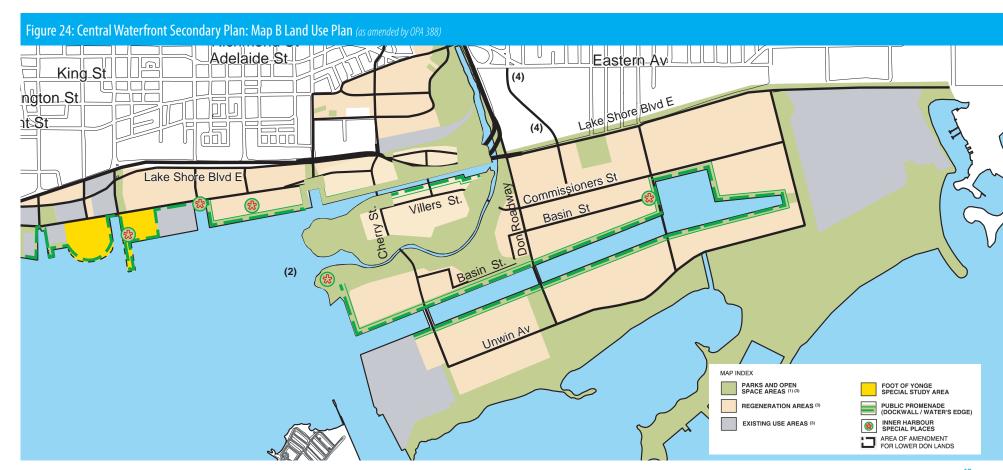


Creating Dynamic and Diverse New Communities

The fourth core principle of the CWSP is creating dynamic and diverse new communities. Building on the mixed-use vision for the *Central Waterfront* area and the unique features of the waterfront, like the Ship Channel and the Hearn, the CWSP identifies that the treatment of development sites requires ensuring a public front is created along the water's edge, future public promenade and dockwall. The

policies further reinforce the mid-rise direction that applies across the *Central Waterfron*t area for the Port Lands and that development is located, organized and massed to protect view corridors and to frame and support the public realm.

The Plan is predicated on creating complete communities. Schools and other community facilities are identified as integral components that will be provided in conjunction with new development. Innovative approaches are to be explored for the provisions of community infrastructure such as integrating community facilities into private developments.



SPECIAL POLICY AREA

The Provincial Policy Statement (PPS) regulates development in floodplains and generally prohibits development in areas that could be affected by natural hazards, with the exception of lands located within a Special Policy Area (SPA) that are identified in a municipality's Official Plan. The SPA policies of the City's Official Plan have not been approved by the Province. As such, the Lower Don SPA policies of the former City of Toronto Official Plan remain in effect and apply to the study area and regulate development.

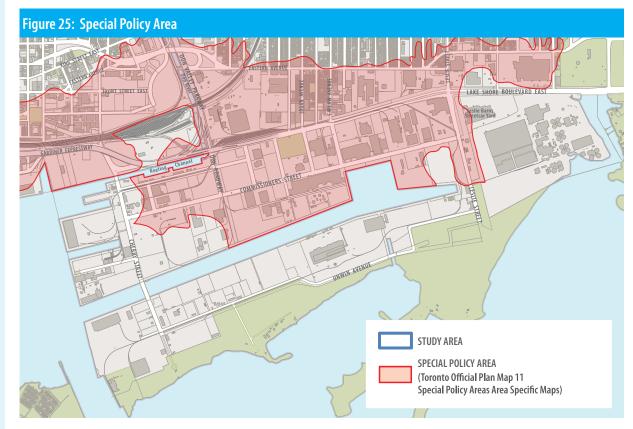
For lands generally east of Cherry Street and north of the Ship Channel, development may be permitted on the condition that the proposed development is flood proofed and provided the land uses are permitted in the Zoning Bylaw. The TRCA regulates permitted development in the SPA.

Development of new uses, like residential uses, including all buildings and structures and associated uses, would require amending the SPA. This municipally initiated amendment is subject to provincial approval and requires the lands be flood protected. The Province generally will not consider one-off amendments to the SPA.

An area wide amendment to a portion of the SPA was adopted by City Council on August 27, 2010 (OPA 388) which implemented a two-zone flood concept based on the Don Mouth Naturalization and Flood Protection Environmental Assessment (DMNP EA) for the lands west of the Don Roadway. This was appealed to the Ontario Municipal Board and is not in effect.

Area Subject to Flooding (Source: TRCA)





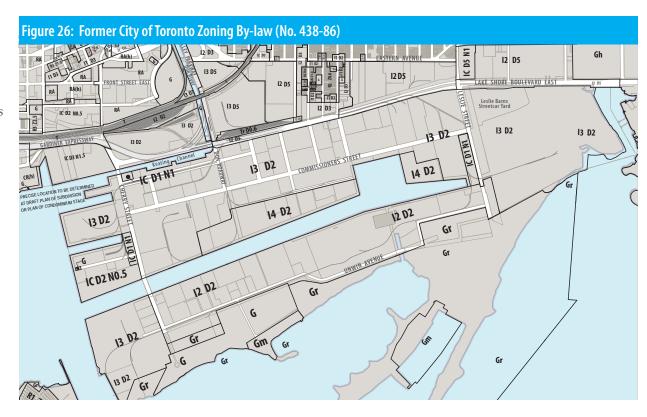


4.2.3 ZONING

Where Official Plan's provide the vision for how a city grows, Zoning By-laws provide the precision to implement the respective visions. They control the use of the land and how tall and dense buildings can be. They also provide detailed performance measures such as parking provisions, setback requirements, and open space and amenity area requirements, among others. Zoning By-laws are required to conform to a city's Official Plan.

City Council enacted a city-wide, harmonized Zoning Bylaw (By-law No. 569-2013) at its meeting on May 9, 2013. The By-law regulates the use of land across the city and provides performance standards (height limits, parking standards etc.) that buildings and structures must comply with. There are a number of areas/properties within the City of Toronto that the new By-law does not apply to, including the Port Lands. In these instances the former By-law continues to apply.

The former City of Toronto Zoning By-law (No. 438-86) is the in force By-law for the Port Lands. The majority of the lands in the study area are zoned Industrial, allowing for a mix of industrial uses including warehousing and storage, transportation and manufacturing uses. The area west of Cherry Street and Polson Quay is zoned Industrial Commercial allowing for a mix of industrial and commercial uses. A small property on Polson Street close to the Inner Harbour is zoned 'G' for Park District. Residential uses are not permitted.



Parks District	I 1	Industrial District
Parks District	12	Industrial District
Parks District	13	Industrial District
Residential District	14	Industrial District
Residential District	T	Industrial District
Residential District	Tr	Industrial District
Residential District	IC	Industrial District
Mixed Use District	(h)	Holding District
Mixed Use District		<u> </u>
	Parks District Parks District Residential District Residential District Residential District Residential District Residential District Mixed Use District	Parks District 12 Parks District 13 Residential District 14 Residential District T Residential District Tr Residential District IC Mixed Use District (h)

4.2.4 WATERFRONT COMMUNITY IMPROVEMENT PLAN

Section 28 of the *Planning Act* authorizes municipalities to designate a Community Improvement Project Area (CIPA) where there is an Official Plan in effect that contains provisions relating to community improvement in the municipality. The *Planning Act* further authorizes Council to prepare a plan suitable for adoption as a Community Improvement Plan (CIP) for the CIPA.

The Waterfront CIP was developed in 2008 and applies to certain lands within the East Bayfront, West Don Lands and the Port Lands. In the Port Lands, the area covered by the CIP includes the Film Studio District and East Port area. The CIP provides financial incentives to encourage brownfield remediation and/or the development of specific employment uses to assist in the revitalization of the waterfront.

4.2.5 URBAN DESIGN GUIDELINES

TALL BUILDINGS DESIGN GUIDELINES

The city-wide *Tall Building Design Guidelines* were approved by City Council in May 2013. The Design Guidelines are a consolidated set of performance measures for all tall building development applications city-wide.

A tall building is generally defined as a building that is taller than the adjacent street right-of-way. The design guidelines provide policy recommendations for tall buildings on issues including: building placement and orientation; entrances; heritage conservation; massing of base buildings; tower floor plates; tower separation distances; pedestrian realm; sustainable design; and transition. The intent of the city-wide urban design guidelines is to ensure that tall buildings fit within their existing and/or planned context and limit local impacts.

AVENUES & MID-RISE DESIGN GUIDELINES

In 2010, Council adopted the *Avenues and Mid-Rise Buildings Study*. The study includes guidelines which are intended to encourage the construction of better designed mid-rise buildings on the City's Avenues where growth is expected and desirable.

The guidelines typically apply to the *Avenues* which are designated *Mixed Use Areas* in the Official Plan.

The guidelines exclude areas that are within a Secondary Plan area since a finer level of detail may be included in the Secondary Plan's policies. However, the Central Waterfront Secondary Plan does not contain specific performance criteria for mid-rise buildings, and as such, the guidelines will be considered in the development of the Port Lands Planning Framework and ongoing precinct planning.



4.2.6 ENVIRONMENTAL PERFORMANCE

TORONTO GREEN STANDARD

The Toronto Green Standard (TGS) is a set of performance measures related to sustainable site and building design for new developments in the City of Toronto. There are two tiers of performance measures. Tier 1 standards are mandatory requirements that all development, excluding low-rise residential development, must comply with. Tier 2 standards are voluntary and provide a higher level of environmental performance for new buildings. Incentives are provided for new developments that incorporate the Tier 2 measures.

While the Toronto Green Standard is applied through the review of development applications, applicable standards are utilized in planning studies as a means of evaluating environmental performance on an area-wide basis.

GREEN ROOF BY-LAW

Green roofs offer the potential to enhance biodiversity in urban areas. In May, 2009, the City of Toronto adopted a Green Roof By-law. The Bylaw requires green roofs on new commercial, institutional and residential development with a minimum Gross Floor Area of 2,000m². The green roof requirement, referred to as coverage of

available roof space, varies depending on the size of the building. Coverage requirements also vary depending on whether the development includes renewable energy generation such as solar panels.

WATERFRONT TORONTO SUSTAINABILITY FRAMEWORK

Waterfront Toronto developed a Sustainability Framework to ensure that sustainability principles are integrated in all aspects of waterfront revitalization. The Sustainability Framework sets out a series of goals, actions, and targets grouped in key theme areas. Waterfront Toronto has also developed other implementation tools to ensure that sustainability principles are embedded in all waterfront projects.



An example of a green street

Green Roof By-law Coverage Requirements

GROSS FLOOR AREA (SIZE OF BUILDING)	COVERAGE OF AVAILABLE ROOF SPACE (SIZE OF GREEN ROOF)
2,000 - 4,999 m ²	20%
5,000-9,999 m ²	30%
10,000-14,999 m ²	40%
15,000-19,999 m ²	50%
20,000 m ² or greater	60%

PROFILE CHAPTER FIVE: PRECEDENTS



5.0 PRECEDENTS



Refining and reaffirming the vision for the Port Lands and establishing a high-level planning framework can benefit from the lessons learned from the many precedents of revitalized industrial and port districts that have been realized worldwide and in the City of Toronto over the last 30 years.

5.1 TORONTO PRECEDENTS

WEST DON LANDS

The West Don Lands is a 32 hectare (80 acre) former industrial area to the east of the city's downtown core. The lands are currently being transformed into a new mixed-use community. Once completed, the West Don Lands will have over 9 hectares of parks and public spaces, approximately 6,000 new residential units, employment and commercial space and community facilities. Owned by the Province of Ontario, the West Don Lands are a brownfield site in the flood plain of the Don River that required remediation and flood protection before any development could occur.

The Lower Don River West Remedial Flood Protection Class EA (LDRW Class EA) was approved in 2005. It identified the preferred flood protection alternative to remove 210 hectares of land west of the Don River. Two key elements were identified for the flood protection:

■ The creation of a Flood Protection Landform which was incorporated into the landscape design of the Don River park, now known as Corktown Common; and ■ The lengthening of the CN railway crossing of the Don River to ensure that water could be conveyed south of the railway crossing without increasing the risk of flooding to the north and east of the river.

The area is being redeveloped in phases. Phase I includes a Toronto Community Housing Development and the River City Development. Phase II includes the Pan Am Athlete's Village. The area is being redeveloped at a relatively high density but with the majority of buildings being mid-rise buildings with some three to four-storey buildings fronting on north-south streets. A few taller buildings located at strategic locations to a maximum of 24 storeys are permitted.

A key feature and early success is Corktown Common, which in addition to being a formative public space and unique public amenity for the city, also serves as a flood protection landform as noted above. Maintaining the structural integrity of the flood protection landform is necessary to prevent flooding in the downtown.

Another iconic public space recently completed is Underpass Park, located below the Richmond and Adelaide overpasses. The design of the park utilized the unused space beneath the overpasses and was transformed into a unique community park.



5.2 PORT DISTRICTS

A number of municipalities world-wide have been redeveloping underutilized port districts. Precedents reviewed in more detail as part of the profile document were selected for inclusion because they utilized different approaches for revitalization and/or were similar in scale, form to the Port Lands and with similar challenges.

HAFENCITY, HAMBURG

HafenCity is a former port industrial area in Hamburg, Germany. It spans an area of 157 hectares (382 acres) with 127 hectares of developable land. It is situated between the city's historic warehousing district and the River Elbe. Redevelopment of the district received approval in 1998 and in 2000 a Master Plan was developed to guide its transformation. The key objective of the Master Plan is to expand opportunities for development in the city centre, while also integrating the port, and by extension the city, with the River Elbe. Significant public investment (€2.4 billion) is required to realize the vision.

The Master Plan was revisited in 2010 to provide additional direction for the eastern section of the district. Additionally Hamburg's transit authority has constructed an extension of its subway system into HafenCity. Currently there are two subway stations servicing the new district, with a third planned. This subway was not originally contemplated in the Master Plan.

Revitalization is anticipated to be completed in 2025, with a total of 19.5 million square feet of floor space, including 10 million square feet for office uses, 5,500 new residential units and range of commercial, cultural and recreational facilities. Generally building heights will be six to eight storeys, but developed compactly, achieving an average floor space index of 2.5.

The port district, often referred to as a city within a city, has been divided into a series a sub areas and revitalization is occurring in phases. The sub areas are envisioned to be self-contained with each area having its own individual character, while still connected and integrated with its surroundings. Redevelopment is complete in three of the subareas, with redevelopment in process or nearing completion in five other areas. Key public spaces have also been developed.

Flood protection measures are required to address the tidal flooding that occurs within the lands. The solution that has been adopted as a feasible solution for HafenCity includes elevating the buildings on plinths that raise buildings eight metres above sea level. Likewise, all municipal streets are elevated to ensure continued emergency access in the event of a flood. The plinths serve a dual purpose of providing space for underground parking. In earlier phases, animated, active ground floor uses, like restaurants and retail stores, were not provided. These types of uses are now included in later phases and are equipped with flood secure glass in the event of flooding.

The first sub area that underwent transformation was the Am Sandtorkai quarter. This area, at one hectare and located adjacent to an existing historic warehouse district, was developed with six to eightstorey residential and office buildings in a compact form on smaller development parcels. Dalmannkai Quarter was developed similar to Am Sandtorkai

PORT LANDS PROFILE

and includes residential buildings that all face the water, but differ in size, location and architecture. A concert hall, hotel and conference centre is under construction at the western terminus of the Quarter.

Uberseequartier is a 7.9 hectare area that is being developed as a mixed-use neighbourhood. It is still under construction and will include a new cruise terminal located on the waterfront. Most buildings are six or seven stories in height with a few taller buildings strategically located. Blocks are larger than Am Sandtorkai/Dalmannkai with internal courtyards and publicly accessible private open spaces.









Photos of HafenCity, Hamburg

CITYPORTS, ROTTERDAM

Rotterdam is a major port city in northern Europe with an extensive network of historic port facilities in the city centre and newer port facilities, like the Maasvlakte ports, developed outside the city centre that are able to accommodate large vessels. Shipping activities in the older port areas started moving westward towards the sea in the 1950s following WWII and the older inner city ports became obsolete.

Starting in the 1980s, the municipality of Rotterdam engaged in master planning exercises geared towards revitalizing the city's older port areas. These exercises focused on restoring the link between river Maas and the city. The older ports were seen as a barrier to achieving this restoration. Three areas have successfully been redeveloped, each with their own unique character. A fourth, the Kop van Zuid, is in progress and is slated to be completed in 2020.

Despite these successes and the large, modern port areas available to the west of the city, perspectives on the further revitalization of older port areas shifted in the early 2000s. The port authority

wanted to maintain their competitive position in the shipping industry, while at the same time the municipality wanted to continue with city building and bolstering other, new economic sectors.

However, in 2007 with the recession and the inability to leverage large-scale public investments as had been done in earlier revitalization efforts, an alternative approach was adopted for other port areas, including those not necessarily located within the inner city, whereby highly adaptive strategies, known as "wild cards" were developed. These strategies are intended to allow the port and city to "co-evolve" and target synergistic relationships between port functions and new industries/economic sectors, explore new types of urban living, like "floating communities", and capitalize on Rotterdam's expansive quay for water-based transportation options.

One project developed between 2007 and 2010 using the new approach is Port City in Rotterdam's Waalhaven area which consists of four office buildings at 8,000 m² each. This redevelopment's solution for the provision of parking given the high water table in the area consisted of a half-submerged multi-storey car park covered with a wooden deck/public space.



Port City Waalhaven Rotterdam (Source: http://www.ectorhoogstad.com/nl/projecten/port-city-waalhaven-rotterdam)



PORT VELL, BARCELONA

Port Vell, the oldest port area in Barcelona, is recognized worldwide for the transformation it underwent. The area now includes wide pedestrian promenades, public plazas, business and commercial centres, cultural facilities and other recreational uses.

The port area, at 55.6 hectares, became obsolete in the 1970s as it was no longer capable of handling evolving shipping needs. As a result, port functions moved westward and the derelict Port Vell area was seen as a physical barrier to connecting the city with the water.

The first project credited with propelling Port Vell's transformation was the Moll de Bosch i Alsina (or Moll de la Fusta), completed in 1981. There is a wide pedestrian promenade/public space adjacent to the water's edge. This project was in part possible because of political aspirations to achieve a renaissance through the development of new public spaces across the city (Garcia, 2008).

Revitalization of the area gained further momentum in 1986 when Barcelona was announced as the host of the 1992 Olympic Games. Barcelona's port functions to the west of Port Vell continues to expand with the most recent completion of the South Seawall (3,700 metres) as seen in the 2011 aerial.



PROFILE CHAPTER SIX: CONCLUSIONS AND NEXT STEPS

6.0 CONCLUSIONS AND NEXT STEPS

The Port Lands are a tremendous revitalization opportunity for the city – from its spectacular views being situated on the city's waterfront to its rich cultural heritage and its natural resources. However, revitalization the area is not without its challenges, given the size of the area, its creation through filling in the Ashbridges Bay, the lack of adequate infrastructure and its industrial heritage.

6.1 SUMMARY OF KEY OPPORTUNITIES AND CHALLENGES

■ The sheer size of the Port Lands is both an opportunity and a challenge. A revitalized Port Lands with a mix of uses and new, complete residential communities is an unparalleled opportunity from a city building perspective, providing new housing and employment choices for people in close proximity to the city's downtown area. However, given its size, close to three times the size of HafenCity for instance, achieving the full revitalization potential of the lands is a challenge and is a long-term initiative. A solid, cohesive vision is required for the Port Lands that is practical, implementable, adaptable and sustainable.

Port Lands Planning Framework Process





- Many existing uses/operations in the Port Lands, such as the concrete facilities in the East Port and the transfer station at 400 Commissioners Street, would not be compatible with the introduction of more sensitive land uses. However, these existing uses and operations provide important services to the broader city and region. Likewise, bulk storage of road salts south of the Ship Channel is an underutilization of the Port Lands. Nonetheless, the road salts are necessary to maintain the City's streets, parks and trails in the winter. Strategies to address these uses over the long-term are required.
- The Port Lands is bounded to the south by a rich natural fabric that provides recreational opportunities for people across the city and region and provides natural habitat for wildlife and fauna. Much work has been completed for the Lower Don Lands to renaturalize the Don River and connect it with the proposed Lake Ontario Park. Providing additional open or greenspace connections through the remaining lands to the west and south of the Lower Don Lands would be beneficial and desired. These additional connections will need to be balanced with other objectives for the Port Lands.
- Integrating the existing port functions of the Port Lands within a revitalization framework requires careful consideration. Ships docking in the Port would add interest to the area, however, they also occupy space identified for important public realm objectives like water's edge promenades. Moreover, cargo unloading activities may not be compatible with more sensitive land uses. Rationalizing the shipping activities, including compatibility with future land uses should be explored to optimize the port's industrial and revitalized city environment relationship.
- Connections within and to the rest of the Port Lands are needed to realize revitalization and to better connect the Port Lands with the rest of the city. While there are opportunities to provide these enhanced connections, some of these connections are more challenging then others given constraints and impediments in the surrounding area, including the existing Gardiner Expressway ramps which terminate at Bouchette Street and the rail corridor and yard on the north side of Lake Shore Boulevard East. Morevoer, there is a need to assess the number and location of connections across the Ship Channel and determine whether new bridges should be provided. Providing the necessary connections will be determined through the Port Lands and South of Eastern Transportation and Servicing Master Plan EA.

The industrial heritage of the area is something that is to be celebrated and commemorated, while also posing challenges for the redevelopment of the area to the mixed-use neighbourhoods envisioned by the Central Waterfront Secondary. Moreover, given the lands were created through filling the Ashbridges Bay, the Port Lands are geotecnically and hydrogeologically challenged.

6.2 NEXT STEPS

The Port Lands Planning Framework study is being undertaken in three phases. This profile report provides a comprehensive overview of the Port Lands area based on existing information sources and additional fieldwork and will inform Phase 1 of the study. More detailed technical studies are required in certain areas and these additional studies are being completed. Phase 2 of the study will involve developing a cohesive and comprehensive vision for the Port Lands and developing alternatives to test and analyze. The final phase will involve developing recommendations.

REFERENCES

The Heritage of the Port Industrial District, by Jeffrey Stinson (1990)

The Archaeological Master Plan of the Central Waterfront (2003)

Waterfront Toronto's Archaeological Conservation and Management Strategy (2010)

Environmentally Significant Areas (ESAs) In The City of Toronto, by North-South Environmental Inc., (2012)

Lake Ontario Park Master Plan (2008)

Migratory Birds in the City of Toronto (2009)

Community and Emergency Facilities Required in Conjunction with Waterfront Redevelopment (2001)

Lower Don Lands Framework Plan (2010)

West Don Lands Precinct Plan (2005)

Keating Channel Precinct Plan (2010)

Lower Don Lands Infrastructure Master Plan and Keating Channel Precinct Environmental Study Report (2010)

Don Mouth Naturalization and Port Lands Flood Protection Project Environmental Assessment (2010)

Toronto Port Authority Website (http://www.torontoport.com/)

Toronto East Harbour Dockwall Condition Inspection Report, by SHAL Consulting Engirneers Limited, 2004

TPLC Dockwall Report, by SHAL Consulting Engirneers Limited, 2009

Waterfront Scan and Environmental Improvement Strategy Study (2003), SENES Consultants Limited

HafenCity, Hamburg Website (http://www.hafencity.com/en/home.html)

Essentials Quarters Projects, Hafencuty Hamburg, March 2013

City of Opportunity Hamburg, by Doug Morrison, Urban Land, May 2007

Urban history and cultural resources in urban regeneration: a case of creative waterfront renewal, Marichela Sepe, Planning Perspective, 2013

Hafencity Hamburg Der Masterplan (2010)

The Competitiveness of Global Port-Cities: The Case of Rotterdam/Amsterdam – the Netherlands, OECD

Port-city development in Rotterdam: a true love story, Martin Aarts et al. Spring 2012

Port of Rotterdam Website (http://www.portofrotterdam.com/en/Port/port-development/Pages/port-city.aspx)

The role of the port authority and the municipality in port transformation: Barcelona, San Francisco and Lison, Pedro Ressana Garcia, Planning Perspectives, January 2008.

