GARDINER EXPRESSWAY AND LAKE SHORE BOULEVARD EAST RECONFIGURATION

Environmental Assessment and Urban Design Study

Final - Chapter 1: Introduction

- Chapter 2: Purpose and Rationale of the Undertaking

January 2017



WATERFRONToronto







MORRISON HERSHFIELD

P E R K I N S + W I L L

Contents

1.0	Intr	roduction	<u> </u>
	1.1	Historical Background	1-1
	1.2	Project Proponent and Study Team	1-4
		1.2.1 Waterfront Toronto's Mission	1-5
		1.2.2 City of Toronto's Waterfront Objectives	1-5
	1.3	Ontario Environmental Assessment Act	1-5
	1.4	Other Approvals	1-13
	1.5	Consultation Process Overview	1-14
	1.6	Structure of this Report	1-17
<u>2.0</u>	Pur	pose and Rationale of the Undertaking	2-1
	2.1	Purpose of the Undertaking	2-1
	2.2	Rationale for the Undertaking	2-3
	2.3	Study Areas	2-9
	2.4	Temporal Boundaries	2-13
	2.5	Coordination with Other Studies	2-13

List of Figures

Figure 1-1: Individual EA Process Flowchart	.1-7
Figure 1-2: EA Study Timeline and Key Consultation Milestones1	15
Figure 2-1: Urban Design and Environmental Effects Study Area2	2-11
Figure 2-2: Transportation System Study Area2	2-12

List of Tables

Table 1-1: EA Terms of Reference Commitments 1	8
Table 1-2: Other Provincial Approvals Required 1-	14
Table 2-1: Key Plans and Studies Considered in the EA2-	14

1.0 Introduction

Waterfront Toronto (WT) and the City of Toronto (City), the project co-proponents, have jointly completed an Environmental Assessment (EA) study to determine the future of the elevated Gardiner Expressway and Lake Shore Boulevard East from approximately Lower Jarvis Street to approximately Leslie Street. The EA study was undertaken in a manner that fully integrated environmental, technical and urban design considerations.

The project co-proponents conducted the study as an Individual EA that involved the preparation of a Terms of Reference (ToR). The ToR set out the study process to be followed in conducting the EA study, including a description of how the public, stakeholders (interest groups), Aboriginal communities, and agencies were to be consulted. The ToR was completed in September 2009 and approved by the Ministry of Environment and Climate Change (MOECC) on November 30, 2009. A copy of the approved ToR is provided in **Appendix A**.

This EA was prepared in accordance with the Ontario *Environmental Assessment Act* as well as in accordance with the provincial *Code of Practice: Preparing and Reviewing Environmental Assessments in Ontario, January 2014*.

This EA Report represents a complete record of the Individual EA study that was completed for the Gardiner East Project and which led to the identification of a preferred undertaking.

1.1 Historical Background

The Frederick G. Gardiner Expressway was constructed at a time when Toronto's downtown waterfront was still considered a heavy industrial area, providing the City with goods and materials but not a civic waterfront destination. In 1955, after more than a decade of planning, construction began on the atgrade segments of the Gardiner Expressway west of the City. In 1958, construction began on the elevated segments from Dufferin Street through the central downtown area, reaching York Street by 1962, the DVP by 1964, and finally Leslie Street by 1966.



1958: Building of the Gardiner Expressway, routed through industrial waterfront.

The route of the Gardiner Expressway required the conversion of substantial amounts of parkland, including Sunnyside Amusement Park, removal of the Jameson Avenue portion of the Parkdale residential neighbourhood, and elimination of many local access routes to the waterfront. It also necessitated the complete reconfiguration of Lake Shore Boulevard through the central downtown to allow the Gardiner Expressway to be built above it. In the process, Lake Shore Boulevard changed from a tree–lined waterfront avenue to an expressway collector route.

The future of the Gardiner Expressway has been the subject of study since its inception in the 1950s. Since the late 1980s, the City of Toronto has taken interest in reducing the waterfront barrier effect associated with the alignment, footprint, and ramp locations of the Gardiner Expressway through the downtown area. In November, 1991 the Royal Commission on the Future of the Toronto Waterfront produced "Report 15: The Toronto Central Waterfront Transportation Corridor Study" that looked at three feasible, generic concepts for the treatment of the elevated Gardiner Expressway between Dufferin and Leslie Streets:

- 1. Retain (and ameliorate);
- 2. Remove (and add some additional at-grade road capacity), and/or
- 3. Bury (put the expressway in a tunnel).

The study recognized that combinations of the three alternatives are possible reflecting different conditions along the corridor. Report 15 did not immediately recommend a single, preferred option but proposed a phased implementation process in which Stage 1 would move towards the stated "vision" while "keeping open the option of retaining or removing the central section of the expressway" (p. 110). The Commission's final report, "Regeneration: Toronto's Waterfront and the Sustainable City" (1992), concluded that: "It is both feasible and desirable to relocate and redesign the expressway and Lake Shore Boulevard as part of an integrated and phased plan to improve the Central Waterfront". To this end, the Commission put forward Recommendation 65 that the Province and relevant municipalities negotiate a Waterfront Partnership Agreement to implement Stage 1 of the program to integrate environment, land use and transportation in the Central Waterfront.

As a first step, the need for the 1.3-kilometre elevated segment of the Gardiner from just west of the Don River to Leslie Street was assessed by the former Municipality of Metropolitan Toronto. Between 1999 to 2001, this segment was dismantled at a cost of approximately \$40 million. Public art and pedestrian and cycling trails were installed alongside the exposed section of Lake Shore Boulevard East.

In 2001, the Toronto Waterfront Revitalization Task Force ("Fung Task Force") proposed that the remainder of the elevated Gardiner Expressway be removed as far west as Strachan Avenue,

INTRODUCTION | FINAL JANUARY 2017

with the section between Strachan Avenue and Spadina Avenue being replaced in a tunnel. On August 1, 2000, Council considered the staff report "Our Toronto Waterfront – Building Momentum" and endorsed, in principle, the Task Force concept plan, and directed the City's Chief Administrative Officer to initiate a discussion with Federal and Provincial governments and report back on a preferred model for a new waterfront development governing body.

In considering an October 17, 2002 staff report entitled "Review of the Gardiner/Lake Shore Corridor Proposal Contained in the Central Waterfront Secondary Plan" in February 2003, City Council approved a "scoping study" to identify Terms of Reference limited to a "retain and ameliorate" strategy for the Gardiner/Lake Shore Corridor, endorsing a staff recommendation to undertake a full EA of three options related to the elevated Gardiner east of Strachan which suggested assessing options to Retain, Replace or Remove.

City Council approved the "Central Waterfront Secondary Plan: Making Waves" in April 2003. The Plan sets out the guiding principles for revitalizing a 10-kilometre designated waterfront area between Dowling Avenue and Coxwell Avenue, including key public priorities, opportunities and an implementation process. Reconfiguration of the Gardiner Expressway is one of 23 Big Moves identified in the plan.

In 2003, the City asked the Toronto Waterfront Revitalization Corporation (TWRC, now Waterfront Toronto) to examine opportunities for the redesign of the Gardiner/Lake Shore corridor in support of waterfront revitalization. TWRC reviewed three basic alternatives to the existing expressway: Replace, Transform and Great Street.

- 1. The Replace option involved the replacement of the entire elevated expressway with a combination of tunnels and at-grade roads;
- 2. The Transform option retained the elevated expressway, enhanced it with the removal of ramps, addition of architectural features and relocation of Lake Shore Boulevard from beneath it; and
- 3. The Great Street option called for the replacement of the elevated expressway east of Spadina Avenue with an at-grade street similar to University Avenue.

In 2004, TWRC selected the Great Street as the option worthy of further consideration. The proposal was for a 10-lane, two-way road between Spadina Avenue and Simcoe Street, a pair of five-lane, one-way roads between Simcoe Street and Jarvis Street and an eight-lane, two-way road east of Jarvis Street. TWRC conducted a detailed analysis of the Great Street.

A review of TWRC studies found the cost of the Great Street had increased significantly from earlier estimates, from \$780 million (2005) to \$1.2 billion (2007), in part because of the

additional costs for an underground portion of the Front Street Extension. In 2007, Waterfront Toronto and City staff collaborated to find a more affordable solution to the redesign of the Gardiner. It was found that the less-developed eastern waterfront area offered greater opportunity to both avoid constraints and shape new development patterns. On June 12, 2008, the Waterfront Toronto Board of Directors approved a resolution recommending to the City that an Individual Environmental Assessment (EA) be undertaken to examine options for the 2.4kilometre Gardiner East (east of Jarvis Street). In July 2008, City Council authorized the City and Waterfront Toronto to jointly undertake an Individual EA for the Gardiner East. This EA fulfills the Council authorization to complete an Individual EA for the Gardiner East.

1.2 Project Proponent and Study Team

The City of Toronto and Waterfront Toronto are co-proponents of this project, and this EA study was prepared under their direction. From the outset of the study process, the EA has been directed by a joint City and Waterfront Toronto Steering Committee co-chaired by the Deputy City Manager responsible for the Waterfront Initiative and Waterfront Toronto's President and Chief Executive Officer. The Committee has been supported by a City and Waterfront Toronto core project team consisting of project managers from Waterfront Toronto, Transportation Services, and City Planning. A Technical Advisory Committee made up of both City and Waterfront Toronto personnel has also reported to the core project team. Going forward, as the co-proponents do on all major waterfront planning, development and infrastructure initiatives, the City and Waterfront Toronto will continue to work collaboratively on fulfilling obligations of the undertaking.

In particular, the City of Toronto will play a lead role in managing the Gardiner Strategic Plan's capital works program; while both the City of Toronto and Waterfront Toronto will continue to collaborate on waterfront revitalization and public realm improvements intended to improve connectivity between the city and waterfront. In addition, the co-proponents will collaborate to execute the commitments to future work, and to complete additional agency approvals, as outlined in this report.

The consulting team was led by Dillon Consulting Limited and included the firms of Morrison Hershfield, Perkins+Will, Hargreaves Associates, HR&A Advisors, Archaeological Services Inc., CPCS, Sam Schwartz Engineering, and, Cushman & Wakefield. In addition, LURA acted as an independent consultant to Waterfront Toronto and the City to manage the public and stakeholder consultation program.

1.2.1 Waterfront Toronto's Mission

Waterfront Toronto was established by the Government of Canada, the Province of Ontario and the City of Toronto as the "Toronto Waterfront Revitalization Corporation" in 2001 to lead and oversee the renewal of Toronto's waterfront. Waterfront Toronto has jurisdiction over a portion of the lands that extend from Ontario Place in the west to Ashbridges Bay in the east. This area is about 810 ha in size, making it one of the largest urban redevelopment opportunities in North America.

Waterfront Toronto's mandate is to put Toronto at the forefront of global cities in the 21st century by transforming the waterfront into beautiful and sustainable communities, fostering economic growth in knowledge-based, creative industries, and ultimately redefining how Toronto, Ontario, and Canada are perceived by the world. A core part of that mission includes building high-quality public infrastructure, including parks, promenades, boulevards, and other amenities needed to generate vibrant urban activity.

1.2.2 City of Toronto's Waterfront Objectives

The vision in the City of Toronto's Official Plan is for a more liveable city created by integrating future growth with viable transportation and green space networks. The Central Waterfront area is guided by the policies and direction of the Official Plan, the Central Waterfront Secondary Plan, and numerous other reports, studies and precinct plans, which direct city staff to seek the improvement of the public realm and the pedestrian environment and to provide for improved physical and visual access to the waterfront. A reduction in auto dependency and a greater reliance on walking, cycling and transit is a key principle when considering modifications to roadways.

Multiple divisions and departments take carriage of implementing the City of Toronto's waterfront objectives, and have likewise provided leadership and strategic direction throughout the Gardiner East EA and Urban Design Study process to ensure alignment with broader waterfront revitalization goals. This interdivisional effort included City Planning (Waterfront Secretariat, Transportation Planning, Community Planning, and Urban Design), Transportation Services, Engineering and Construction Services, Financial Planning, and Parks, Forestry and Recreation.

1.3 Ontario Environmental Assessment Act

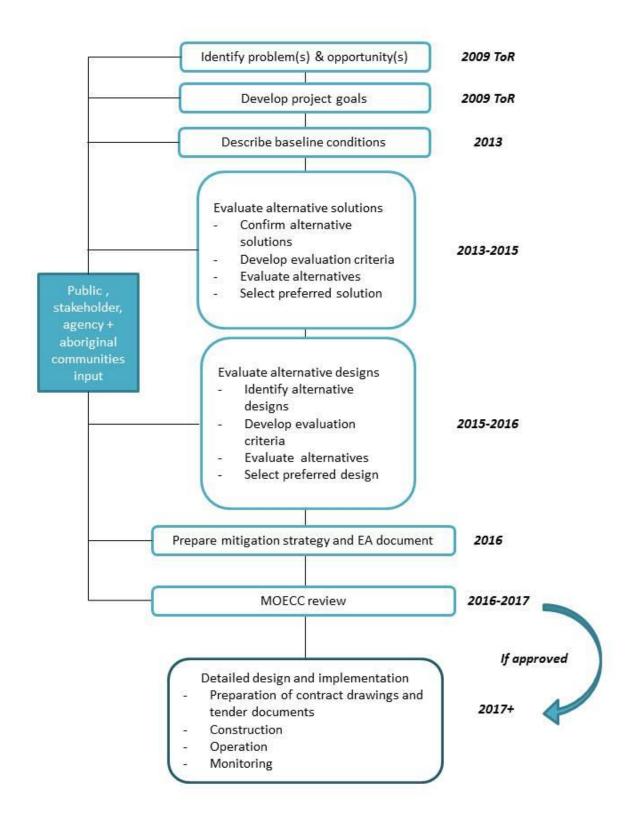
This project is subject to the Ontario EA Act and follows the Individual EA process identified in Part II of the Act. The EA Act requirements must be met in order to implement the preferred undertaking. An EA is a planning study that assesses potential environmental effects and benefits of an 'undertaking' (the intended project). The term 'environment' is broadly defined in the EA Act to include the natural environment, as well as, the social, cultural, built and economic aspects of the environment.

The project co-proponents have completed the EA study in accordance with all of the requirements of subsections 6(2)(a) and 6.1(2) of the Act including the following:

- A description of the purpose of the undertaking;
- A description and statement of the rationale for the proposed undertaking, alternatives to the undertaking, and alternative methods for carrying out the undertaking; and,
- A description of:
 - the environment that will be affected or that might reasonably be expected to be affected, directly or indirectly, by the undertaking, the alternatives to the undertaking, and the alternative methods of carrying out the undertaking;
 - the effects that will be caused or that might reasonably be expected to be caused to the environment, by the undertaking, the alternatives to the undertaking, and the alternative methods of carrying out the undertaking;
 - the actions necessary or that may reasonably be expected to be necessary to prevent, change, mitigate or remedy the effects upon or the effects that might reasonably be expected upon the environment, by the undertaking, the alternatives to the undertaking, and the alternative methods of carrying out the undertaking;
 - An evaluation of the advantages and disadvantages to the environment of the undertaking, the alternatives to the undertaking and the alternative methods of carrying out the undertaking; and,
 - A description of the consultation undertaken by the proponent and the results of the consultation.

The Individual EA process follows two primary stages: the ToR stage which sets the framework for the EA, and the EA stage, which must be completed in accordance with the ToR as approved by the MOECC. **Figure 1–1** provides an overview of the Individual EA process that was followed and the timing of the major steps.





DILLON CONSULTING LIMITED, MORRISON HERSHFIELD, PERKINS+WILL, HARGREAVES ASSOCIATES

INTRODUCTION | FINAL JANUARY 2017

During the ToR stage of the study, a series of commitments were identified and documented in the ToR that established what the EA needed to consider. The commitments were based on the requirements of the EA Act as well as input from the public, stakeholders and agencies received during ToR consultation activities. The EA Report is required to address these commitments prior to submission to the MOECC. **Table 1–1** identifies the commitments defined in the ToR and where they have been addressed in the EA Report.

Table 1–1: EA Terms of Reference Commitments

Commitment	Section Reference from the ToR	Corresponding Section of EA Report
Consideration will be given to potential opportunities to improve connections across the rail corridor to complement the recommended 'undertaking'.	Section 4.1	Section 3.2
The EA study will coordinate and seek opportunities of mutual benefit with existing planning initiatives and conclusions.	Section 4.2	Section 3.3
Reconfiguration of the Gardiner Expressway will need to include welcoming and accessible routes to the waterfront.	Section 4.2	Sections 4.2, 4.3
Any new configuration of the Gardiner Expressway will need to maintain an effective local and regional transportation system.	Section 4.2	Sections 4.2, 4.3
Reconfiguration alternatives will address the through-traffic function of the Gardiner Expressway and Lake Shore Boulevard.	Section 4.2	Sections 4.2, 4.3
The lands that extend from Dundas Street to Lake Ontario and from Spadina Avenue to Woodbine Avenue will be subject to a detailed level transportation assessment.	Section 5	Sections 3.2.4, 3.2.5, 4.3, 4.4
Transportation initiatives and traffic behaviours and modal splits at a city-wide or regional level will be considered in the transportation assessment.	Section 5.1	Sections 4.2, 4.3
A description of the existing and future environment (baseline conditions) in the study areas will be completed as part of the EA.	Section 5.1	Section 3
With the exception of transportation considerations, baseline conditions will be described for the Urban Design and Environmental Effects Study Area.	Section 5.2	Section 3

Commitment	Section Reference from the ToR	Corresponding Section of EA Report
Transportation conditions will be described for the larger Transportation System Study Area.	Section 5.2	Section 3
Potential environmental effects, including to the social and natural environment, of the alternatives and the proposed 'undertaking' will be identified and examined as part of the EA.	Section 5.3	Section 4 Section 5 Section 6
Both alternative solutions and alternative designs will be developed and evaluated in the EA study.	Section 6	Section 4 Section 5
The alternative solutions will be subject to evaluation and a preferred solution will be carried forward.	Section 6	Section 4
The alternative solutions and designs to be considered in the EA will be limited to "land based" travel modes and to those physically located within the study area. They will be developed to accommodate a transportation planning horizon year of 2031.	Section 6	Section 4 Section 5
The alternative solutions will include a description of the Gardiner Expressway and Lake Shore Boulevard reconfigurations to address both the previously outlined problems and opportunities.	Section 6.1	Section 4
Master plan land development layouts will be created for each alternative solution. The layouts will address how the surrounding areas react and respond to the proposed road configurations.	Section 6.1	Section 5
Infrastructure will be defined in sufficient detail to, for example, locate and position the new road elements and address conflicts with existing and proposed facilities.	Section 6.1	Section 3 Section 4 Section 5
Opportunities to encourage/improve other modes of transportation and manage changing traffic patterns will be considered.	Section 6.1	Section 4 Section 5
Opportunities to improve the local environment through reduction in ongoing effects (e.g., stormwater quality), flood protection, and naturalization initiatives will be considered. The development of the alternative designs will be guided	Section 6.1	Section 4 Section 5 Section 6
by the project goals and be developed to a higher level of detail than the alternative solutions.	Section 6.2	Section 5

Commitment	Section Reference from the ToR	Corresponding Section of EA Report
The alternative designs will include the reconfiguration of the Gardiner Expressway and Lake Shore Boulevard and be complemented with urban design/public realm designs and transportation solutions.	Section 6.2	Section 6
The alternatives will be evaluated in terms of their ability to address transportation considerations and city building opportunities along with environmental and economic considerations.	Section 7.1	Section 4 Section 5 Section 6
The decision-making process in the EA will consider opportunities for creating a new urban form and the creation of new public realm space along with transportation and infrastructure solutions and environmental and economic considerations.	Section 7.2	Section 4 Section 5 Section 6
The assessment and evaluation of the alternatives (solutions and designs) will be based on a set of evaluation criteria that represent the broad definition of the environment and consider both qualitative and quantitative (i.e., numerical) data.	Section 7.3	Section 4 Section 5
The potential effects of the alternatives (solutions and designs) will be identified. Both short-term construction effects and long-term operations effects will be considered.	Section 7.3	Section 4 Section 5 Section 6
Qualitative and quantitative data collected will be presented in a manner to allow the differences among the alternatives to be easily compared.	Section 7.3	Section 4 Section 5 Section 6
The project team will evaluate and determine the relative order of preference of the alternatives for each individual criterion/criteria group.	Section 7.3	Section 4 Section 5
For the preferred alternative, mitigation measures to reduce the effects and the residual or "net" effects of the undertaking will be described.	Section 7.3	Section 6
The transportation criteria group will address transit, pedestrian, cycling and automobile travel requirements and opportunities through the area. It will consider both local and through traffic needs.	Section 7.3	Section 3
Waterfront Toronto and the City will prepare a comprehensive list of commitments during the EA process.	Section 8	Section 6

Commitment	Section Reference from the ToR	Corresponding Section of EA Report
A monitoring plan will be developed during the EA process. The plan will consider all relevant phases of the proposed 'undertaking' including planning, detailed design, tendering, construction and operation. The plan will include compliance monitoring and effects monitoring.	Section 8	Section 6
Consultation will be undertaken in accordance with the Ontario EA Act.	Section 9.2	Section 7
The consultation program will engage the widest possible audience by offering multiple consultation opportunities and mechanisms for participation.	Section 9.2	Section 7
The program will offer early and ongoing opportunities for participation, well before decisions are made.	Section 9.2	Section 7
Opportunities for participation will be widely communicated through multiple communications channels.	Section 9.2	Section 7
The consultation program will provide opportunities for a diversity of perspectives and opinions to be raised and considered.	Section 9.2	Section 7
The consultation program will be adapted as required to meet the needs of consultation participants, Waterfront Toronto, the City of Toronto and the project team.	Section 9.2	Section 7
The impact of the consultation program and participant input on decision making will be clearly demonstrated.	Section 9.2	Section 7
With input from Aboriginal communities, consultation activities will be tailored to meet the particular needs of specific Aboriginal communities as these needs are communicated by the Aboriginal communities themselves.	Section 9.2.2	Section 7
At a minimum, each of the identified Aboriginal communities that may have an interest in the project will be contacted at the outset of the study to determine their interest in participating.	Section 9.2.2	Section 7
Individual meetings will be offered to each Aboriginal community.	Section 9.2.2	Section 7
Interested Aboriginal communities will be contacted and asked for feedback around each round of Public Forums.	Section 9.2.2	Section 7

Commitment	Section Reference from the ToR	Corresponding Section of EA Report
The consultation website (www.gardinereast.ca) established in the ToR phase will continue throughout the EA.	Section 9.2.2	Section 7
E-consultations will mirror the face-to-face consultations at Public Forums.	Section 9.2.2	Section 7
The web-portal will include any final published background reports, individual study reports and public notices as they are developed.	Section 9.2.2	Section 7
Interactive workshops will be convened to seek input from stakeholder representatives on key issues and opportunities during the project.	Section 9.2.2	Section 7
The project team will attend meetings when invited by specific organizations, as appropriate.	Section 9.2.2	Section 7
A "one-window" customer service centre (hot line) will provide basic information about the project and a focal point for receiving questions/comments and providing responses.	Section 9.2.2	Section 7
A notice will be issued when the EA study has been completed, documentation has been submitted to Government review agencies, and is available for public review.	Section 9.2.2	Section 7 Section 8
Summary reports of public comments will be available for review and feedback after workshops, public forums and other consultation events. Public comments, and the responses given, will be documented in a database by the independent facilitation team.	Section 9.3	Section 7 Appendix B
Additional required approvals will depend on the final 'undertaking' that is proposed and will be detailed in the EA.	Section 11	Section 8
The EA study will include all municipal infrastructure within the project area that is required to support the undertaking.	Appendix B	Section 3
The available ambient contaminant concentration data (from MOECC and/or EC) will be used in the assessment, in order to establish background levels. An ambient air monitoring program specific to this study will be undertaken, which will be extended to January 2010, in order to capture seasonal variability in ambient concentrations of relevant contaminants.	Appendix B	Section 3 Section 4

Commitment	Section Reference from the ToR	Corresponding Section of EA Report
Once the EA process is initiated (after ToR approval), detailed descriptions of the draft evaluation criteria will be developed and made available for the public and agencies to comment on.	Appendix B	Section 4 Section 5
The potential for impact on archaeological resources will be assessed as part of the EA study.	Appendix B	Section 3 Section 4 Section 5

1.4 Other Approvals

Additional agency approvals may be required for the project following an approval to proceed by the Minister of the Environment and Climate Change. These additional approvals would be identified and obtained during the detailed design phase of the project. The detailed design phase of work would include the preparation of more detailed engineering and landscaping plans (contract drawings) to confirm the construction of the preferred undertaking and feed into tender documents required for construction. **Table 1–2** presents a non-comprehensive list of other potential approvals required for the project that would be obtained during the detailed design phase.

Level of Government	Department/Ministry/ Municipality	Potential Authorizations/ Approvals
Provincial	MOECC	 Permit to Take Water (PTTW) under the Ontario Water Resources Act (TBC)
	Toronto and Region Conservation Authority (TRCA)	 Regulation of Development O. Reg. 166/06 Interference with Wetlands and Alterations to Shorelines and Watercourses Regulations
	Aquatic Habitat Toronto	Project Review
Municipal	City of Toronto	 Road Occupancy Permit Road Cut Permit Tree Removal Permits Permit for Installation/ Relocation of Public Utilities Local Hydro Utility Building Permit Toronto Sewer Use Bylaw Noise By-law exemption

Table 1-2: Other Provincial Approvals Required

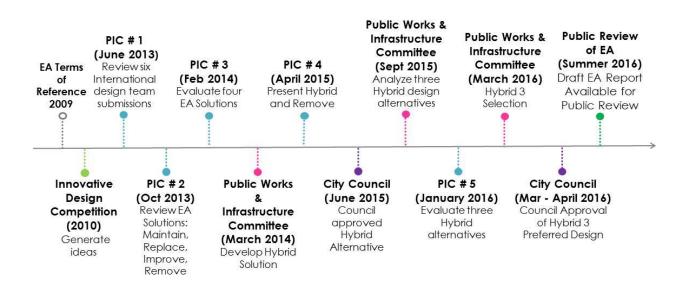
1.5 Consultation Process Overview

The involvement of community residents, stakeholders and those who may be potentially affected by a project is an integral part of the EA process. Consultation forms a key component of this EA study in keeping all stakeholders, agencies and the public informed and involved. The project co-proponents recognize the importance of engaging stakeholders and the public to provide multiple and ongoing opportunities for feedback throughout the EA.

The key consultation milestones during the EA study, following the approved ToR, included five rounds of public consultation. In addition there were stakeholder workshops, local and provincial agency meetings, aboriginal consultation, and individual landowner meetings. All of this consultation was held between spring 2013 and summer 2016. **Figure 1.2** outlines the key

milestones and consultation dates during the study process. Well over 7,000 individuals (26,958 individuals including website visits) were engaged during this process.





Throughout the EA study, the outcome of consultation events were summarized and made available for public review. A detailed log of questions and answers was stored in a database by LURA, the independent facilitation team. A detailed account of the content and results of project consultation is presented in **Chapter 7** of this report. The full Record of Consultation for the EA is provided in **Appendix B**.

Consultation for this EA was based on the following principles and objectives:

Guiding Principles

- *Inclusiveness* the consultation program will engage the widest possible audience by offering multiple consultation opportunities and mechanisms for participation.
- *Timeliness* The program will offer early and ongoing opportunities for participation, well before decisions are made.
- *Transparency* Opportunities for participation will be widely communicated through multiple communications channels.

- *Balance* The program will provide opportunities for a diversity of perspectives and opinions to be raised and considered.
- *Flexibility* The program will be adapted as required to meet the needs of consultation participants, Waterfront Toronto, the City of Toronto, and the Project Team.
- *Traceability* The impact of the consultation program and participant input on decision-making will be clearly demonstrated.

Objectives

- 1. To generate broad awareness of the project and opportunities for participation throughout the EA process.
- 2. To facilitate constructive input from consultation participants at key points in the EA process, well before decisions are made.
- 3. To provide ongoing opportunities for feedback and input, and for issues and concerns to be raised, discussed, and resolved to the extent possible.
- 4. To document input received through the consultation process and to demonstrate the impact of consultation on decision-making.

The following provides a summary of the key consultation activities that were undertaken during the EA Study.

Agency Consultation – A Technical Advisory Committee (TAC) was established to provide input at key milestones during the EA process. It included representatives from various City of Toronto departments, Toronto Transit Commission (TTC), GO Transit/Metrolinx, and TRCA.

Aboriginal Community Consultation – Waterfront Toronto and the City are committed to Aboriginal community consultation. Consultation activities were tailored to meet the particular needs of specific Aboriginal communities as they were communicated and requested by the Aboriginal communities themselves. Each of the identified Aboriginal communities were contacted at the outset of the study to determine their interest in the study.

Public Consultation – Public Information Centres (PIC) provided an opportunity for the public to give feedback and comments on study components, results, and ideas as they developed over the course of the project. The format included: panel displays, presentations, and small table discussions/ feedback on key questions.

A web-based portal (www.gardinerconsultation.ca) was set-up to enable online consultation as the study progressed. This consultation website was established in the EA ToR phase and continued throughout the EA. The e-consultations mirrored the face-to-face consultations that took place during PICs. The web-portal also included final published background reports, individual study reports, and public notices as they were developed.

A "One-window" point of contact for the project was established during the development of the ToR, with dedicated phone/fax/ email and a link to the web-portal. A "one-window" customer service centre (hot-line) provided basic information about the project and was a focal point for receiving questions/comments and providing responses.

Stakeholder Consultation – A Stakeholder Advisory Committee (SAC) was established to provide an ongoing forum for feedback, guidance and advice to the Project Team at ten points during the EA process. The SAC also provided valuable feedback on materials to be presented to the public. The SAC was made up of approximately 40 key interest groups and community associations including, but not limited to, local businesses, residents groups, property owners, and special interest groups (e.g., environmental organizations, cycling and walking advocates, goods movement / shipping industry advocates, etc.). Further information regarding SAC membership is provided in **Appendix B, Record of Consultation**.

City Council and Committees Consultation – At key points in the study process, presentations were made to City Councillors through Public Works and Infrastructure Committee meetings and City Council meetings. Feedback was received at these meetings and incorporated into the EA study.

1.6 Structure of this Report

This EA Report has been structured to provide the reader with a step-by-step overview of the EA study as it was completed. The following is covered in this EA Report:

- Purpose of the Undertaking;
- Existing and Future Conditions;
- Description and Evaluation of Alternative Solutions;
- Description and Evaluation of Alternative Designs;
- Preferred Undertaking Effects Assessment and Mitigation;
- Record of Consultation; and,
- Concluding Statements and Next Steps.

The appendices included in this report include supplementary reports and documentation, and a complete record of consultation for the EA.

2.0 Purpose and Rationale of the Undertaking

This chapter presents the purpose and rationale of the undertaking. Also described in this chapter are the study areas and temporary boundaries considered in the EA study and described other major studies and plans that the EA study was coordinated with.

2.1 Purpose of the Undertaking

The purpose of the undertaking is to address the deteriorating condition of the elevated sections of the Gardiner Expressway. The elevated Gardiner structure was constructed in sections between 1955 and 1966. The deck and concrete barriers are in poor condition and considered to be at the end of their service life. Since 2012, incidents of falling concrete have occurred along the corridor, including the area east of Jarvis Street. In advance of Council's 2013 decision to reallocate funding for the Gardiner East EA, a phased approach had been planned for the replacement of the deck and parapet (concrete barrier) walls from Jarvis Street to the Don Roadway for the period 2013 to 2018. Recognizing that work to implement a preferred EA option would not likely commence until 2020, Council authorized a series of interim repairs to make the structure safe and extend its service life to 2020. An estimated \$9 million has already been spent on emergency and interim repairs for this section of the Gardiner, and an additional estimated \$5 million will be required to complete the interim repairs. However, now nearing the end of the structure's service life, the City needs to incorporate the outcome of the EA into the approved Strategic Plan for the Rehabilitation of the F.G. Gardiner Expressway (Gardiner Strategic Plan) and advance the necessary planning, engineering design and procurement work for rehabilitation.

In addition to the deteriorating nature of the existing Gardiner purpose of the undertaking is also to address several opportunities as described below:

Revitalize the Waterfront

Reconfiguring the Gardiner Expressway and Lake Shore Boulevard presents opportunities to help re-shape the character of the urban environment, to create new connections between existing city neighbourhoods and new waterfront districts, and to make long-term quality infrastructure investments. What is now in need of repair and viewed as an obstacle between the city and its waterfront can become both a connector and place in its own right. This is an opportunity for city-building: the inherent strength of cities lies in their ability to create and facilitate connections. Connections are more than just high quality roadways and pedestrian routes between desired centres; they include visual corridors and markers, continuous active uses, vibrant civic and commercial destinations and spaces that foster communication and interactions.

Create a Sustainable Waterfront

Such large scale and long-term projects are an opportunity to apply sustainable practices at the social, economic and natural environment levels. The modified Gardiner Expressway/Lake Shore Boulevard, and the surrounding development it catalyzes, can be guided and evaluated by sustainable practices.

While environment conditions in the study area are degraded, there are a number of projects taking place within the waterfront area which will finally achieve the vision that the City of Toronto has for this area – green, healthy and energy efficient. Waterfront Toronto and TRCA have taken the lead in integrating many habitat improvement projects along the waterfront. Among these is the *Don Mouth Naturalization and Port Lands Flood Protection project*. This project provides a unique opportunity to support and build on these plans to create natural habitats around the study area.

Generate and Capture Economic Value

The project presents opportunities for positive net value creation in a local, regional, and global context. These may manifest through public and private investments that create value for the public sector and the community, in terms of streets, open space, and catalysts for private development, and can achieve regional competitiveness and global brand equity for Toronto. The combined value can globally position Toronto to attract investment capital, talent, and tourism.

Balance Transportation Modes

This project also creates an opportunity through the reconfiguration of transportation infrastructure to allow for a rebalancing of transportation modes from an automotive focus to one that has high reliance on pedestrian, cycling, and transit (local and regional) modes. In the coming decades it is expected that there will be decreased dependence on the private automobile and an increase in the use of active public modes and transit. The proposed 'undertaking' can assist in achieving balanced transportation opportunities.



Port Lands Acceleration Initiative, rendering of Don Roadway, view south

2.2 Rationale for the Undertaking

The preferred undertaking, as described in **Section 6.1** of this report, was rationalized through a multi-step evaluation process conducted in this EA study that considered both alternative solutions and alternative designs. The evaluation of alternative solutions is described in Chapter 4.0 whereas the evaluation of alternative designs is described in Chapter 5.0.

When compared to other alternative designs, the preferred undertaking emerged not only as compatible with the larger Strategic Plan for the expressway's rehabilitation, but also most capable of meeting a set of five project goals developed during the ToR phase of work in 2009. These goals provided guidance to the development of the alternative solutions and designs, the criteria used to evaluate the alternatives, and have influenced the concept design of the project or 'preferred undertaking'. These five project goals are discussed below. Further, **Section 6.7** in Chapter 6.0 describes the extent to which the undertaking meets these goals.



Goal 1: Revitalize the Waterfront

Water's edge Promenade, East Bayfront.

In its current form, the elevated east Gardiner Expressway is not visually appealing.. Its structural column grid, on- and off-ramp network, and architectural detailing were never intended to create a great public realm, but rather to carry vehicles past the waterfront area. A public realm that provides adequate access to open space, landscape, light and air, and contributes to the revitalization of the waterfront needs to be created. The project should:

- Prioritize urban design excellence, place-making, and quality of life as integral components of project design and evaluation;
- Contribute to the creation of the waterfront as a regional/tourist destination;
- Rejuvenate the underutilized and derelict lands under and adjacent to the expressway;
- Balance provision of new amenities for both local and regional users recognizing that local and regional stakeholders may value amenities and infrastructure in different ways;
- Build on existing planning initiatives and conclusions. The EA study will coordinate and seek opportunities of mutual benefit with those initiatives; and,
- Acknowledge this project as an opportunity for city-building. Evaluate city-building investments, outcomes, and benefits in local, regional and global contexts.



Goal 2: Reconnect the City with the Lake

East Bayfront redevelopment supports connections between the city and the lake.

The Gardiner Expressway and Lake Shore Boulevard pair have long been perceived as a barrier that disconnects the downtown from its waterfront. The railroad viaduct is a physical barrier, limiting waterfront area access to four underpasses. When combined these two facilities form a gap in the urban fabric. This gap needs to be addressed through street design, local transit, public realm, and mixed-use development strategies that enhance waterfront connections to downtown. Any reconfiguration of the Gardiner Expressway will need to include welcoming and accessible routes to the waterfront, breaking down the psychological and physical barriers that exist today and replacing them with inviting and engaging experiences. The project should:

- Create physical, visual and cognitive connections to the waterfront for downtown, the City, and region. The waterfront is an amenity that belongs to and should be accessible to the public;
- Design the public realm to be attractive, accessible and connected. The qualities of experience offered by streets, plazas, parks, promenades, pathways, bicycle routes and visual corridors will be major drivers of design decisions. Public spaces should be accessible and perceived as public; and,
- The new urban fabric should become a connector between the downtown and new waterfront communities, one that uses transit, street design and new mixed-use communities to stitch the city with its unique waterfront experience.



Goal 3: Balance Modes of Travel

Reconfiguration of Queens Quay Boulevard West.

Any new configuration of the Gardiner Expressway will need to maintain an effective local and regional transportation system, including commuters and freight, and minimize negative impacts by balancing alternative travel modes, including transit (local and regional), cycling and walking within the system. Further, over the coming decades it is expected that there will be decreased dependence on the private automobile and an increase in the use of active public modes and transit. This is due to a combination of factors, including lifestyle changes that are drawing people back downtown; increasing fuel prices; and climate change as people seek to reduce their "carbon footprint". The project should:

- Acknowledge transportation initiatives for their impact both positive and negative on regional economic competitiveness, land-use, development character, settlement patterns, and environmental issues such as air quality and ambient noise;
- Maintain reliable access to the City and its neighbourhoods for local residents, commuters, freight trucks and regional travellers. The corridor plays an important role in the movement of traffic through the City and larger region. The reconfiguration alternatives will address the through-traffic function of the Gardiner Expressway and Lake Shore Boulevard;
- Acknowledge and integrate other planned transit initiatives (local and regional) being proposed for the City; and,

• Consider a combination of supply, system and demand management measures. Creatively maximize the performance of infrastructure through management and operation.



Goal 4: Achieve Sustainability

Lower Don Lands and Don River Mouth revitalization.

This project should advance the City's and Waterfront Toronto's commitment to green, healthy and energy efficient development. Sustainable design solutions can improve environmental quality and biodiversity, and minimize public health risks. The project should:

- Consider Waterfront Toronto's and the City's sustainability policies and frameworks;
- Help contribute to development that has an overall positive impact. These benefits are to result in environmental enhancements, economic security and social/cultural gains.
- Contribute to the improvement of environmental quality and public health, including air quality;
- Complement if not enhance other waterfront environmental naturalization initiatives;
- Accommodate the plans for flood conveyance and flood protection to lands in the Don River mouth area, the Port Lands and south Riverdale community;
- Promote social engagement and interaction;
- Promote the City's initiatives to reduce greenhouse gas emissions;

- Promote public awareness and education on environmental issues through the physical design of infrastructure and public realm; and,
- Integrate ecology and natural systems with urbanism.

Goal 5: Create Value

The future reconfiguration of the Gardiner Expressway and Lake Shore Boulevard can act as a catalyst for good development and contribute to an integrated, vibrant and successful waterfront. Further, any changes to the Gardiner Expressway and Lake Shore Boulevard pair will require a significant public investment, whether in rehabilitation and enhancement of the existing structure or replacement with a new or alternative facility. That investment should be targeted to maximize opportunities for revitalization, and to leverage the economic benefits of the project, rather than simply preserving the single purpose Gardiner Expressway. The project should:

- Plan and design for positive net value creation in local, regional and global contexts;
- Define a public and private investment structure that creates and captures value for the public sector, through these city-



Monde Condominiums Development rendering, East Bayfront.

building initiatives, creates value for the community, in terms of streets, open space, and catalysts for private development; and,

• Maximize net economic and environmental benefits.

All five project goals have informed the generation and evaluation of both the alternative solutions and the alternative designs for the undertaking. The goals are reflected in the evaluation criteria and support the assessment of effects of the preferred undertaking.

2.3 Study Areas

The section of the Gardiner Expressway and Lake Shore Boulevard that is being examined for reconfiguration extends 2.4 km from approximately Lower Jarvis Street to just east of the DVP at Logan Avenue. Two study areas were considered in the EA:

- Urban Design and Environmental Effects Study Area includes the lands in the vicinity of the section of the Gardiner Expressway and Lake Shore Boulevard that is being considered for reconfiguration. These are the areas that could potentially experience disruption effects and be transformed through redevelopment opportunities. This is expected to include lands south of King Street to the waterfront, and from Lower Jarvis Street to approximately Leslie Street. This study area includes the precincts of East Bayfront, West Don Lands, and Keating Channel, as well as portions of the Port Lands and South of Eastern areas.
- 2. **Transportation System Study Area** includes the area that could be affected by changes in traffic patterns and volumes. The lands that extend from Dundas Street to Lake Ontario and from Spadina Avenue to Woodbine Avenue will be subject to a detailed level transportation assessment. The study area includes the transportation network of transit (subway, streetcar, and GO Transit service), and vehicular traffic including goods movement and emergency vehicles, and the pedestrian and cycling networks. Further, transportation initiatives, traffic behaviours and modal splits at a city–wide or regional level will also be considered in the transportation assessment. This study area is also referred to as the "Transportation Study Area" in this EA Report.

Figure 2–1 illustrates the Urban Design and Environmental Effects Study Area. The study area includes five emerging waterfront neighbourhoods: Lower Yonge, East Bayfront, Keating Channel Precinct, Port Lands and South of Eastern. The former Unilever Soap complex is also proposed as a significant new neighbourhood. North of the rail viaduct the study area also includes West Don Lands, Distillery District, Cork Town, Riverside, Leslieville, and the St. Lawrence neighbourhoods.

Figure 2–2 illustrates the Transportation System Study Area which includes lands that extend from Dundas Street to Lake Ontario and from Spadina Avenue to Woodbine Avenue.

For the alternatives evaluation and effects assessment, most environmental components considered the Urban Design and Environmental Effects Study Area. Criteria Groups that considered the Transportation System Study Area included: Automobiles, Transit, Movement of Goods, Social & Health (Noise and Air) and Global and Regional Economics. These criteria are

defined in Chapter 4 in Table 4.8. Unless otherwise noted, the term "*study area*" in this EA report refers to the Urban Design and Environmental Effects Study Area. The Transportation System Study Area is referred to separately where appropriate.

Figure 2-1: Urban Design and Environmental Effects Study Area

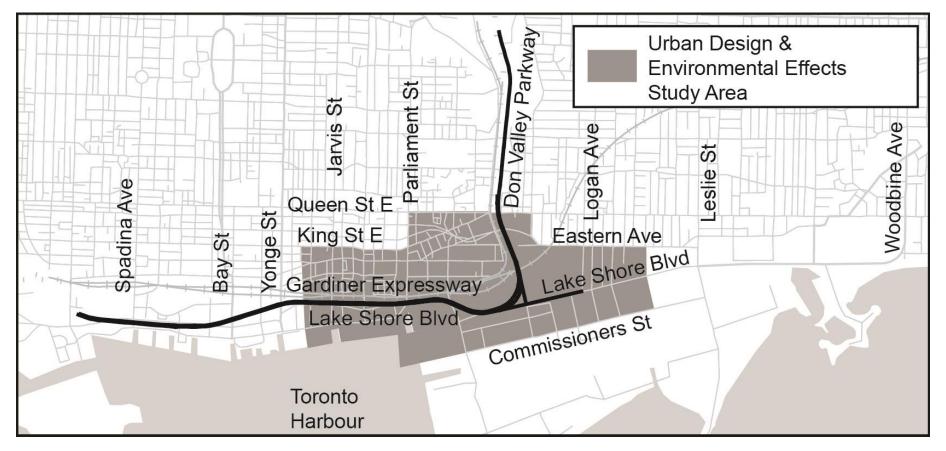
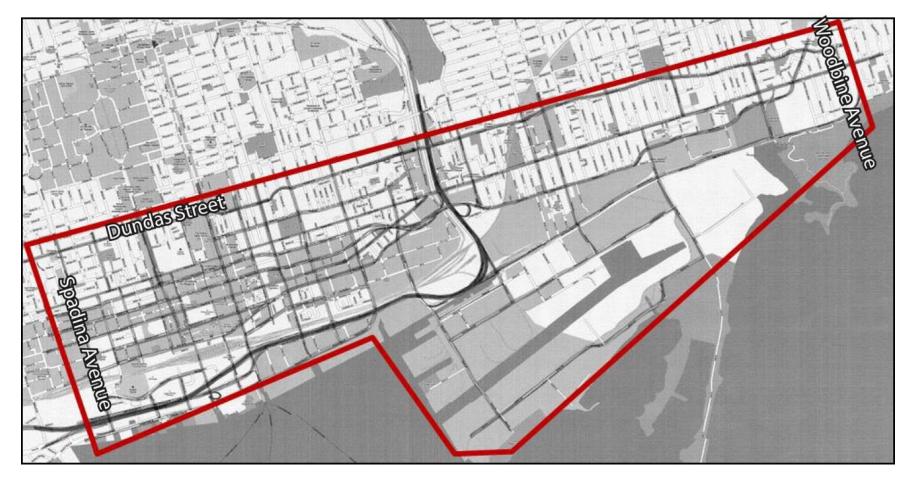


Figure 2-2: Transportation System Study Area



2.4 Temporal Boundaries

In completing the EA, both existing conditions (2013) and expected future conditions (2031) in the study area were considered. A 2031 full build-out date has been used for this study to assess the effects of the alternatives on the full development plans for the area, whether they are achieved by 2031 or at a later date. The potential construction impacts of the alternatives have been assessed on the basis of existing (2013) conditions although consideration was also given to developments expected in the short-term in the Study Area as per City approved precinct plans. For the purposes of the EA, it was assumed that project construction would occur over a six-year period commencing in 2020

2.5 Coordination with Other Studies

There are many other EAs, plans and studies that have been completed or are in the process of being completed in the study area. These include initiatives by several different agencies and private landowners. To the extent possible, these studies were considered in the completion of the EA study. A full description of the existing plans for the area is provided in **Appendix L**: Planning, Urban Design and Socio-economic Background Conditions Report. **Table 2–1** provides a summary of the most relevant current studies and describes how they were considered in the Gardiner East EA.

Plan/Study Name	Summary	Consideration for the EA
Lower Yonge Transportation Master Plan EA/Phase 3-4 Class EA	The Lower Yonge Precinct is bounded by Yonge Street to the west, Lower Jarvis Street to the east, Lake Shore Boulevard East to the north, and Queens Quay to the south. The TMP articulates a long-term vision and physical plans for the Precinct. The preferred alternative for the Lower Yonge TMP includes a more fine-grained local street network for the Precinct was created by extending the existing Harbour Street from Yonge Street to Lower Jarvis Street, adding a new local street east of Cooper Street, connecting Lake Shore Boulevard East to Queens Quay East, and providing a more permeable street grid for pedestrians, vehicles and cyclists. It also includes the relocation of the Jarvis west- bound off ramp. A Phase 2. 4 Class EA has	The new road network, including changes to the Gardiner ramps proposed in the Master Plan, was considered in the transportation modelling work for the Hybrid alternative.
Lower Don Lands Master Plan EA and Villiers Island Precinct Plan	 Includes the relocation of the Jarvis west- bound off ramp. A Phase 3–4 Class EA has been initiated to confirm the preferred design for these road changes. The LDL MP EA, which was led by Waterfront Toronto in cooperation with TRCA and the City, refines the location of road alignments and includes all of the critical infrastructure elements identified in the City of Toronto's Central Waterfront Secondary Plan. Recognizing that the site is a critical link between city and harbour, the LDL MP EA provides multiple connections to the surrounding neighbourhoods, existing and proposed, and to the harbour on all sides. The road and transit network has been shaped to frame the new (proposed) Don River alignment based on the standards for all the bridges set out in the Don Mouth Naturalization and Flood Protection EA 	Defines the revised local street network and established preliminary population and employment targets that were considered in the development of the alternatives and the transportation modelling.

Table 2-1: Key Plans and Studies Considered in the EA

Plan/Study Name	Summary	Consideration for the EA
	(DMNP EA). The LDL MP EA and the DMNP EA work in concert to transform the existing river mouth and western port area into the centrepiece of a series of new mixed-use waterfront communities, while delivering a healthier, more natural river outlet to the Toronto Inner Harbour and Lake Ontario.	
	The LDL MP EA includes the realignment of Queens Quay East, Lake Shore Boulevard East, and Cherry Street, and the location for bridges at the Keating Channel, Commissioners Street Bridge and Basin Street bridges over the Greenway.	
	The first phase of detailed planning for development stemming from the LDL MP is the Villiers Island Precinct Plan. The objectives of this Precinct Plan were considered in this EA. Details of the plan were not known at the time of the Gardiner East EA documentation; however, consideration for the growth and development being studied in the area has been made.	
Don Mouth Naturalization and Flood Protection Project EA	TRCA, in cooperation with Waterfront Toronto and the City, completed an Individual EA for the naturalization of the mouth of the Don River and larger Port Lands flood protection referred to as the DMNP EA. The study addressed lands encompassing approximately 290 hectares of urban land east and south of the Don River that was subject to risk of flooding including lands within the Study Area for the TSMP EA. The DMNP EA will transform the existing mouth of the Don River including the Keating Channel, into a healthier, more naturalized river outlet to Lake Ontario, while also removing the risk	Influenced the design of the alternatives in regards to Don River crossing locations for both the elevated expressway and for Lake Shore Boulevard.

Plan/Study Name	Summary	Consideration for the EA
	of flooding to 240 hectares of urban land to the east and south of the existing river. This includes providing flood protection for lands within the Gardiner EA study area. This project is a key component of Waterfront Toronto and the City's plans to renew and revitalize Toronto's waterfront, without it the Port Lands cannot be redeveloped because it is located within the Don River floodplain. The DMNP EA was approved by the MOECC in January 2015.	
	The conceptual design for the DMNP includes a new river valley system developed through a combination of cut and fill and an associated low-flow river channel that flows south and then west into the Inner Harbour, with an approximate location halfway between the Ship Channel and the Keating Channel. Waterfront Toronto, in coordination with TRCA and the City, is leading the next steps for implementation of this project in tandem with the Lower Don Lands and Villiers Island Precinct plans.	
Port Lands and South of Eastern Transportation and Servicing Master Plan (TSMP) EA	This TSMP EA has been undertaken as a coordinated infrastructure planning project that meets the requirements of both the Municipal Class EA, 2000 (amended 2007) (Class EA) process and the Planning Act, R.S.O. 1990 (Planning Act). The goal of the TSMP EA is to provide solutions in the Study Area with respect to the provision of sustainable transportation, employment, the environment, climate change and housing. The proponents of the EA include the City of Toronto, Waterfront Toronto and TRCA.	While this study is being undertaken in parallel with the Gardiner EA, the vision being proposed for Port Lands and South of Eastern has been reviewed as the project has unfolded. In particular, proposed changes to the road network and projections for population and employment have been considered including the planned Broadview extension realignment.

PURPOSE AND RATIONALE OF THE UNDERTAKING | FINAL JANUARY 2017

Plan/Study Name	Summary	Consideration for the EA
Metrolinx Expansion Plans/ Projects	Metrolinx has several projects underway that could have an effect on their use of land in the study area. Projects include the Regional Express Rail that will result in the need for a fourth track over the Don River rail bridge, possible train storage yard expansion and possible new GO Station west and/or east of the Don River.	Metrolinx was consulted on several occasions during the course of the EA. The alternatives were developed to avoid direct impact on Metrolinx rail property. During detailed design there will be the need for ongoing coordination to minimize impacts to both projects
First Gulf Development - Official Plan Amendment (OPA)	First Gulf is proposing a significant commercial/retail development on the former Unilever site located on the north- east corner of Lake Shore Boulevard and Don Roadway. This proposed project is of significant size (the developer has proposed up to 50,000 employees) and would serve as a major economic catalyst for the Port Lands, South of Eastern employment area and the larger City. In October 2015, First Gulf initiated an OPA application to commence a policy review and to begin comprehensive planning of the Unilever site and adjacent lands. Then on December 22, 2016, First Gulf submitted their rezoning and subdivision applications which also included materials intended to complete their OPA submission. The application is currently under review by the City.	The Gardiner EA study team has met with the First Gulf team on several occasions throughout the course of the EA study. The development and evaluation of the alternatives considered the First Gulf development proposal.